

# Chapitre 10. Conclusions générales

Deux définitions de l'eutrophisation ont été proposées à partir de l'analyse de la littérature : l'une traitant de l'eutrophisation dite « naturelle » ou géologique, et l'autre de **l'eutrophisation anthropique**. Il est apparu important de les dissocier car la description de l'eutrophisation naturelle ne doit pas occulter la menace que font peser les activités humaines sur les cycles du phosphore et de l'azote, au même titre que sur celui du carbone. Aujourd'hui, c'est bien le développement accéléré de l'eutrophisation d'origine anthropique qui concentre l'essentiel des inquiétudes sociétales et des préoccupations de gestion. C'est donc de l'eutrophisation d'origine anthropique qu'il s'agit dans cette expertise scientifique collective.

## 10.1. Les constats

Les écosystèmes aquatiques sont des systèmes complexes, dont le fonctionnement est régi par des équilibres dynamiques. L'eutrophisation est un déséquilibre de fonctionnement, déclenché par un changement dans les quantités, les proportions relatives ou les formes d'azote et de phosphore entrant dans les systèmes. La nature et l'intensité des réponses dépendent également de facteurs environnementaux tels que la lumière, le temps de résidence de l'eau et la température.

Le **mécanisme général** de réponse des écosystèmes à ces changements d'apports de nutriments est commun aux écosystèmes d'eaux continentales et marines : une augmentation de l'azote et du phosphore entraîne une **augmentation de la biomasse végétale**, générant progressivement une diminution de la pénétration de la **lumière** dans la colonne d'eau. Les écosystèmes aquatiques passent ainsi d'un système avec des apports limités de nutriments à un système progressivement saturé en nutriments, dans lequel le nouveau facteur limitant devient la lumière. Ce mécanisme induit une cascade de réactions en chaîne, avec notamment une modification de la structure des communautés biologiques et des réseaux trophiques, ainsi que des changements dans les cycles biogéochimiques. Ces changements peuvent s'opérer de manière progressive, proportionnellement aux forçages, ou au contraire de manière brutale. Les effets les plus notables de l'eutrophisation sont les **proliférations végétales**, parfois **toxiques**, la **perte de biodiversité** et les **anoxies** qui peuvent se traduire par la mort massive d'organismes aquatiques.

Chaque écosystème est unique et possède son histoire et sa dynamique propre, elle-même liée aux conditions géologiques, géomorphologiques, hydrologiques, écologiques et climatiques locales, mais aussi aux pressions anthropiques passées et présentes et à leur nature, ainsi qu'aux contextes sociologiques et économiques dans lesquelles elles se sont inscrites. Ainsi, si les mécanismes sont génériques, les **trajectoires de l'eutrophisation sont diverses**, en lien avec la diversité des situations locales, avec des effets de seuils très dépendants des contextes passés et présents. Des **conditions aggravantes** existent : des liens sont ainsi suspectés entre eutrophisation, **toxicité et invasions biologiques**. Les apports d'éléments toxiques modifient les chaînes trophiques, ceci pouvant créer des conditions plus favorables à l'eutrophisation. Les modifications des chaînes trophiques peuvent offrir des conditions favorables aux invasions biologiques. La **vulnérabilité** à l'eutrophisation varie avec ces propriétés intrinsèques de l'écosystème aquatique récepteur. La vulnérabilité est donc à définir en prenant en compte toute la chaîne de causalités directes et indirectes qui les relie.

Il résulte de cette complexité qu'il est très difficile de prédire l'évolution écologique et biogéochimique des écosystèmes aquatiques. Il est ainsi très difficile d'extrapoler avec précision des résultats obtenus sur un type d'écosystème à d'autres. Par ailleurs, les **changements climatiques** vont probablement aussi jouer un rôle favorisant l'eutrophisation. Si le rôle du climat sur les flux de nutriments semble encore en

débat dans la littérature scientifique, car il dépend de l'interaction avec les usages des sols et les activités humaines, l'effet sur les communautés biologiques fait l'objet de plus de consensus : l'élévation de la température est clairement un facteur aggravant le développement de la biomasse végétale. L'allongement du temps de stratification des milieux lents, la consommation plus précoce des nutriments par le phytoplancton et la modification induite des équilibres stœchiométriques favoriseraient en outre la fréquence de développement des proliférations algales nocives, en particulier à cyanobactéries.

**Les usages du sol et les activités humaines** (urbanisation, industrialisation, agriculture) de ces cent dernières années ont radicalement amplifié les pressions et transformé les paysages. Ils ont impacté la qualité des sols, des eaux de surface et des eaux souterraines. La majorité des nappes phréatiques est polluée par les nitrates tandis que les sols et les sédiments sont souvent enrichis en phosphore. Le temps de transfert de l'azote depuis les bassins-versants vers les écosystèmes aquatiques se chiffre en dizaines d'années et la biodisponibilité en phosphore des sols et des sédiments s'est accrue. Cela explique en partie la faible diminution des flux d'azote, et, dans une moindre mesure, de phosphore aux exutoires des bassins-versants malgré les efforts engagés de diminution des intrants. Les trajectoires de restauration doivent donc se construire en fonction de leurs contextes locaux.

**Un consensus croissant existe sur la nécessaire réduction conjointe des apports en azote et en phosphore**, même si certains écosystèmes sont plus sensibles à l'azote ou au phosphore. En effet, tous les systèmes (traitement des eaux, des déchets, systèmes agricoles), les données biologiques, et les approches économiques soulignent l'importance de considérer ensemble N et P dans la remédiation et la prévention. Les stratégies de limitation des flux d'azote et de phosphore passent par différents niveaux d'action selon la vulnérabilité des écosystèmes aquatiques :

(i) Une **utilisation raisonnée des intrants**, fonction des milieux (sol, nappe) ; des gains d'efficacité de l'utilisation de l'azote et du phosphore semblent en effet encore possibles. Ces gains sont à rechercher tant dans le traitement des déchets et des eaux usées que dans la gestion agricole des fertilisants (composition, outils de pilotage et de contrôle dans les sols, la plante, etc.) et de l'alimentation animale (composition adaptée, etc.). Des marges de manœuvre existent à ce niveau et doivent être mises en œuvre. Cependant, dans un certain nombre de cas, elles ne suffiront pas, et d'autres leviers, touchant à la **conception même des systèmes** (par exemple un changement de type de production), devront être envisagés.

(ii) Une **couverture végétale** des sols la plus continue possible, dans l'espace et le temps, qu'il s'agisse d'interculture, de cultures associées, de prairies, d'agroforesterie, etc. qui permette l'assimilation, en continu, des nutriments par la biomasse végétale terrestre. Cette biomasse contribuera à la séquestration du carbone dans les sols, renforçant par là même celle de l'azote et du phosphore. Les **densités animales** doivent être revues et limitées à la capacité des sols à recevoir des effluents (directement ou après traitement). Un maintien des **conditions aérées des sols**, des nappes, des sédiments favorisera l'adsorption du phosphore.

(iii) Le **maintien ou la restauration de la diversité des paysages** (haies, zones humides, ripisylves, etc.) qui limitent les fuites des nutriments vers les écosystèmes aquatiques par différents processus (adsorption, dénitification, etc.). À l'inverse, il faut éviter toute transformation augmentant la vitesse d'écoulement de l'eau, comme le drainage, la rectification, l'endiguement et le dragage des cours d'eau, l'imperméabilisation des sols (urbanisation, dégradation et tassement des sols).

L'action publique en matière de gestion de la qualité de l'eau s'est organisée en **trois périodes** : celle de **l'assainissement**, en grande partie réalisée dans les pays industrialisés, mais qui demeure une urgence dans les pays à fort développement ; celle, toujours actuelle, du **traitement des pollutions industrielles et domestiques** ; et celle désormais prioritaire du **traitement des pollutions diffuses agricoles**. Dans les pays industrialisés, les évolutions observées en eau douce ont été plutôt positives depuis quelques décennies, plus fortement sur le phosphore que sur l'azote, tandis qu'en milieu marin les phénomènes d'eutrophisation semblent peu diminuer depuis le début du xx<sup>e</sup> siècle.

L'eutrophisation est un processus encadré par plusieurs **textes réglementaires** aux logiques différentes. Ainsi coexistent des directives « usages » morcelées, datant des années 1980, ciblées sur l'encadrement d'un domaine, avec des directives à ambition plus globale comme la DCE ou la DCSMM des années 2000 : la **Directive Nitrates** est axée sur l'origine agricole des nitrates, avec un seuil de 50 mg/L défini par rapport à la norme de potabilité ; la sensibilité des écosystèmes doit être explicitement prise en compte dans la caractérisation des masses d'eau pour la définition des zones vulnérables, sachant que le processus d'eutrophisation en milieu aquatique continental dépend également fortement du phosphore assimilable et des rapports relatifs entre nutriments ; la **DERU** encadre la collecte, le traitement et les rejets d'eaux résiduaires, avec des normes d'émission ponctuelle, mais pas de norme pour le milieu récepteur ; la **DCE et la DCSMM** exigent, quant à elles, la mise en place des mesures nécessaires pour maintenir ou atteindre l'objectif de bon état écologique des masses d'eau, via notamment un recensement régulier de l'état de santé général intégré des hydrosystèmes. À l'exception de la DCSMM, les directives ne donnent pas de préconisation précise concernant l'eutrophisation, considérée dans un ensemble de pressions potentiellement dégradantes. À chacun de ces textes répondent des dispositifs de suivi ciblés, qui sont essentiellement utilisés pour vérifier la conformité aux normes de leur domaine et qui sont insuffisamment mis en relation.

Dans le domaine de la **caractérisation de l'eutrophisation**, deux considérations fortes ressortent : d'une part, **des dispositifs mis en place antérieurement à la DCE** étaient plus ciblés pour encadrer le processus d'eutrophisation (par exemple diagnose rapide des plans d'eau ; suivi eutrophisation de l'Agence de l'eau Rhône-Méditerranée-Corse) : certaines variables, la fréquence de leurs relevés ou leur spatialisation étaient riches d'enseignement (cycles de 24 heures pour l'oxygène et le pH, à différentes hauteurs de la colonne d'eau pour les milieux profonds, successions saisonnières des communautés de phytoplancton ou de macrophytes, etc.). Cette assertion doit être nuancée pour le milieu marin, souvent régi par des conventions internationales et pour lequel des protocoles dédiés à l'eutrophisation ont été conservés. D'autre part, **les indices biologiques** de chaque élément de qualité de la DCE rendent compte d'un état général des masses d'eau sous l'effet de multiples pressions ; c'est cette propriété qui a été optimisée lors de leurs récentes mises en conformité (indices multimétriques répondant à la variété des dégradations possibles). L'examen conjoint des différents indices renforce l'ambition portée par la DCE de réaliser une évaluation plus holistique et lisible du grand public et des gestionnaires ; en revanche, cela rend plus difficile l'extraction d'un signal individualisé, comme l'eutrophisation et plus encore l'information relative à certains symptômes susceptibles de survenir (proliférations algales ou anoxies temporaires).

La quasi-absence de **modèles bioéconomiques** rend difficile l'accompagnement de la remédiolation. Ces modélisations seraient à construire très tôt dans le processus de restauration pour intégrer dès le départ des aspects biophysiques, écologiques et économiques. Les études existantes indiquent que les coûts associés aux impacts qui ont pu être évalués sont élevés, renforçant l'importance de la remédiolation et de la prévention. Les études concernant les plans de remédiolation indiquent qu'il n'existe pas de solution idéale, mais seulement des politiques ciblées, conçues pour des situations particulières, avec des instruments développés de manière souvent *ad hoc*, une fois les problèmes correctement identifiés, analysés et les différentes solutions possibles évaluées.

De même, **la sociologie en environnement** est actuellement peu développée en France. Des pans entiers ne sont pas étudiés, tels que les mobilisations environnementales et les représentations des milieux. Le cas des marées vertes fait exception. Les transformations des territoires ne sont plus uniquement perçues comme d'ordre biophysique. Les dimensions sociologiques commencent à être prises en compte, appelant à une gestion différenciée selon les socioécosystèmes et leurs différentes échelles spatiales, mettant en jeu des acteurs différents autour de l'eutrophisation.

## 10.2. Les verrous et les pistes d'investigations futures

### 10.2.1. Vers des approches de recherche systémiques

Les travaux de recherche très intégrateurs, à l'échelle territoriale, sont encore peu présents pour répondre à des enjeux de gestion différenciée des têtes de bassin-versant, du corridor fluvial, des espaces côtiers. La remédiation de l'eutrophisation doit donc aller vers des **approches systémiques** intégrant les hydrosystèmes, les espaces urbains et agricoles, les modes de production, d'alimentation et de recyclage. La question des transitions agricoles est de manière générale étroitement liée à celle de l'eutrophisation. Les modèles mêlant simultanément les aspects biophysiques et économiques devraient être développés pour servir de base de discussion pour la définition de programmes de remédiation, malgré les incertitudes liées à une connaissance imparfaite mais en constante progression des phénomènes biophysiques, écologiques et socio-économiques. L'évolution de l'eutrophisation doit également être mieux mise en regard avec les évolutions des socioécosystèmes, dépassant des focalisations sectorielles comme celle sur l'agriculture de ces dernières décennies, le partage de savoir pouvant recréer du lien entre des groupes sociaux et des secteurs d'activité s'inscrivant dans des mondes sociaux aujourd'hui disjoints.

Des **sites d'investigations interdisciplinaires**, où s'étudieraient sur le **long terme** les dynamiques biophysiques et sociétales doivent donc être plus nombreux et plus divers (lacs, rivières, littoral), et ceux existants pérennisés. Le renforcement des coopérations entre sciences biophysiques et sciences humaines et sociales doit se faire en prêtant une attention particulière à la bonne intégration des disciplines travaillant à partir de données quantitatives et qualitatives.

### 10.2.2. Utilisation des données existantes et pistes d'amélioration des cadres et réseaux de suivi

Les résultats d'expériences françaises de remédiation, pourtant nombreuses et anciennes, restent souvent enfouis dans une littérature grise difficile d'accès et de qualité inégale. Elles risquent de sortir de la mémoire collective si on n'y prête pas intérêt rapidement. Un enjeu est d'analyser ces expériences et d'en **publier des synthèses** dans des revues internationales. Il faut aussi encourager la numérisation des données anciennes, leur bancarisation et leur mise à disposition, compte tenu de l'importance des séries de longue durée. **L'analyse des trajectoires des problèmes publics**, selon la diversité des systèmes, les gouvernances mises en place, notamment à l'échelle européenne et internationales font partie intégrante des analyses de ces expériences. Enfin, il faut tirer parti des séries ayant pu être constituées et les interpréter (par exemple les données de proliférations de cyanobactéries mesurées à l'échelle nationale au sein des réseaux santé, etc.).

La réflexion sur le **champ réglementaire**, ses limites d'efficacité et d'applicabilité et sa possible harmonisation entre milieux, mais aussi entre pays voisins, constitue un axe de recherche pour des investigations futures : comment mieux tenir compte du continuum terre-mer dans lequel le processus d'eutrophisation se manifeste à différents degrés ? Mais aussi comment mieux tirer parti de l'information recueillie au sein des **réseaux de surveillance**, tout en distinguant bien **quatre fonctions distinctes pour l'utilisation des données** : (1) conformité aux normes en vigueur, (2) états statistiques réguliers des milieux et de leurs évolutions spatiales et temporelles, (3) approfondissement des connaissances pour un thème donné et (4) suivi de l'efficacité des actions de remédiation. Il est possible que certaines confusions et incompréhensions perdurent quand les trois premières fonctions sont assignées aux mêmes jeux de données. La qualité des données mobilisées (nature, précision, représentativité spatiale et temporelle), tant pour les variables d'état chimique que pour les variables biologiques est essentielle : données de pressions (passées et actuelles), données chimiques et leur contextualisation géographique. Ces réflexions permettront de dépasser les approches actuelles définissant des **seuils d'eutrophisation** sur une base essentiellement physicochimique. S'agissant de la norme de 50 mg/L de nitrates, elle est clairement relative à la potabilité de l'eau et non à la prévention

des milieux vis-à-vis du processus d'eutrophisation. Avant la mise en œuvre de la DCE, une grille de consensus avait été proposée avec différentes valeurs guides dans la gamme de 2 à 50 mg/L de nitrates. Il serait intéressant d'analyser la trajectoire historique de ces valeurs et leur déclinaison territoriale. Dans tous les cas, la transparence sur les critères de jugement et la pédagogie qui y est associée sont primordiales pour établir des gammes de valeurs seuils. Des **conseils scientifiques, des interfaces sciences-société** doivent être mis en place de manière à créer des espaces de discussion dans la mise en place de ces démarches de diagnostic et de remédiation. Si des démarches normatives peuvent encadrer les problèmes d'eutrophisation, leur adaptabilité aux caractéristiques des bassins-versants doit aussi être pensée dans une démarche de progression des connaissances et des diagnostics et de gestion adaptive. Les **sciences citoyennes** sont encore peu visibles dans le domaine de l'eau en France à l'heure actuelle. Ces initiatives pourraient représenter un apport supplémentaire de connaissances, notamment pour des crises fugaces qui échappent à la surveillance actuelle des réseaux, mais pourraient aussi renfermer des vertus pédagogiques, ouvrant et dynamisant le dialogue entre spécialistes et observateurs potentiels.

L'analyse des impacts sociaux, sanitaires et culturels de l'eutrophisation appelle la réalisation d'études de cas et la production de connaissances très contextualisées, aujourd'hui presque inexistantes. Du point de vue des sciences sociales, il s'agit de prendre en compte les **mobilisations sociales, les conflits et les formes de problématisation multiples** qui accompagnent l'émergence de l'eutrophisation comme problème public, au travers d'une part de ses conséquences les plus dommageables, d'autre part des transformations profondes des représentations sociales associées aux écosystèmes qui caractérisent nos sociétés contemporaines. Les travaux existants montrent en effet que le spectre des instruments d'action possibles et l'efficacité des politiques en dépendent.

L'**évaluation monétaire des impacts** de l'eutrophisation reste encore une vraie question de recherche. Peu de références sont disponibles, et les impacts à long terme sont difficiles à évaluer.

### 10.2.3. Vers une méthodologie d'analyse du risque d'eutrophisation

Concernant les dispositifs d'étude et de suivi, une réflexion devrait s'engager pour dégager les espaces à risques de demain et définir quels devraient être leurs accompagnements opérationnels et scientifiques, complémentaires des dispositifs existants. Cela devient de plus en plus nécessaire compte tenu d'une possible exacerbation des phénomènes d'eutrophisation dans le futur sous l'effet conjugué des changements globaux. L'analyse de la littérature préconise qu'une **méthodologie d'analyse de risque** devrait combiner 1) les transferts et les transformations hydrobiogéochimiques le long du continuum terre-mer, 2) les facteurs de vulnérabilité des écosystèmes, ainsi que 3) les aléas climatiques.

La prise en compte de la variabilité des apports, des temps de résidence et des transferts de nutriments dans les têtes de bassins-versants et plus généralement le long du **continuum terre-mer** est un enjeu à la fois théorique et appliqué. Cela nécessite de renforcer la surveillance des sols et des nappes phréatiques, de développer pour cela des indicateurs de la mobilité du phosphore et des transferts d'azote dans les têtes de bassins-versants. Le suivi des évolutions des sols et des eaux, au plus près des actions, est une nécessité pour s'assurer de leur efficacité. Le renforcement des méthodologies de surveillance et d'estimation des flux, en analysant l'effet des fréquences, des périodes et zones optimales de mesures, des incertitudes, en combinant des acquisitions par des capteurs haute fréquence, constitue également un enjeu. Les futures technologies *in situ* ou aériennes ouvrent des champs d'investigation par rapport aux situations actuelles, soit à la haute fréquence temporelle, soit à une plus large emprise spatiale, qu'il s'agisse des sols ou des eaux. Il s'agira de les intégrer à de nouvelles stratégies de suivi, et de revoir la stratégie d'échantillonnage des eaux. Par sa prise en compte de plus en plus réaliste des facteurs physiques, chimiques et biologiques et l'enchaînement possible d'amont en aval de modèles de l'eutrophisation de divers milieux aquatiques allant des têtes de bassins jusqu'à l'océan, la modélisation déterministe restera un outil clé pour l'exploration de scénarios d'apports nutritifs et climatiques, et devra assortir ses prévisions d'intervalles de confiance.

La **vulnérabilité** est à définir en prenant en compte toute la chaîne de causalités directes et indirectes qui influencent les propriétés intrinsèques de l'écosystème aquatique récepteur, en lien avec la diversité des situations locales, des contextes passés et présents. Les voies de progrès pour caractériser cette vulnérabilité portent sur plusieurs points. D'une part, à partie de l'extraction et de la calibration de l'information portée par les indicateurs biologiques : (1) mieux comprendre comment certaines métriques déjà utilisées dans les indicateurs biologiques ou des nouvelles métriques, signent des basculements significatifs vers des situations eutrophes, (2) repérer ces basculements dans les trajectoires de situations suivies de façon approfondie dans le temps et les interpréter en termes fonctionnels (flux et concentrations de nutriments versus relations entre les groupes biologiques). En parallèle, certains paradigmes doivent être revisités, notamment la relation entre nutriments C et Si et la production de biomasse végétale, qui semble plus complexe quand on cherche à mieux comprendre le déterminisme des proliférations algales, les changements de communautés et les ajustements trophiques. Pour ce faire, des travaux couplés en hydrologie, en géochimie, en physiologie et en écologie seront nécessaires.

Les changements globaux impliquent des changements dans les dynamiques hydrologiques, sédimentaires et thermiques ainsi que des changements d'usage des sols et des activités humaines. La prise en compte de l'**aléa climatique** est donc essentielle dans une méthodologie de caractérisation du risque d'eutrophisation. Déterminer les rôles respectifs du climat et des activités humaines est une question de recherche centrale que la modélisation peut contribuer à instruire, en complément et à partie de l'observation long terme. Les interactions entre le climat et les processus écophysiologiques, biogéochimiques (biotransformations dans les sols, les zones humides de transition et les milieux aquatiques), hydrologiques (connectivité, distribution des temps de résidence et transferts) et écologiques (réseaux trophiques) devront être éclairées. L'augmentation des concentrations en CO<sub>2</sub> atmosphérique devra être prise en compte, celle-ci pouvant par exemple favoriser la productivité des écosystèmes terrestres et aquatiques, et dans le même temps, intensifier les proliférations de cyanobactéries. Ces éléments créent une grande incertitude, dans les pays de l'hémisphère nord en particulier, sur les évolutions futures des écosystèmes aquatiques. Le **rôle des espèces invasives** vis-à-vis de l'eutrophisation en eau douce devrait être intégré aux investigations ; à titre d'exemple, la Loire, mais aussi d'autres cours d'eau de l'ouest de la France, sujets à ces invasions, sont des sites d'études à privilégier, dès lors qu'ils bénéficient de séries suffisamment riches (flux de nutriments, autres compartiments biotiques) pour y réaliser une étude systémique fonctionnelle.

# Annexe : Cahier des charges de

## l'ESCo eutrophisation

### I - Contexte et enjeu

Les phénomènes d'eutrophisation et le rôle qu'y jouent notamment les apports de nutriments et leur interaction avec d'autres facteurs sont actuellement peu ou mal perçus, leurs connaissances ne sont ni consolidées et encore moins partagées. C'est pourquoi, les ministères en charge de l'environnement et de l'agriculture, ont demandé une expertise scientifique collective (ESCo)<sup>1</sup>.

Le besoin de réaliser cette expertise scientifique collective sur l'eutrophisation se situe dans un contexte réglementaire large comprenant la *Directive cadre sur l'eau (DCE)* (directive 2000/60/CE), la *Directive cadre stratégie pour le milieu marin (DCSMM)* (directive [2008/56/CE](#)), qui intègrent la notion d'eutrophisation dans les critères de bon état écologique respectivement des masses d'eau continentales, de transition et marines (descripteur 5 pour l'eutrophisation), la *Directive nitrates* (directive 91/676/CEE) dans les critères de classement en zones vulnérables, ainsi que la *Directive pour les Eaux résiduaires urbaines (DERU)* (directive 91/271/CEE) pour la délimitation des zones sensibles.

Compte-tenu de ces enjeux et en raison des délais impartis liés aux calendriers de mise en œuvre des directives, l'expertise scientifique collective apportera des informations validées, permettant d'éclairer ces politiques publiques.

### II - Objet et champ de l'Expertise Scientifique collective

L'eutrophisation a pour particularité qu'il s'agit d'une notion utilisée à la fois par la communauté scientifique et par les politiques publiques, dont les définitions sont multiples. L'expertise clarifiera la définition de l'eutrophisation en prenant en compte les besoins et enjeux opérationnels pour l'action publique. L'analyse produira un état des lieux critique des connaissances scientifiques certifiées au plan européen et mondial sur les causes et mécanismes d'eutrophisation des eaux et identifiera les verrous scientifiques nécessitant l'acquisition de nouvelles connaissances qui pourraient faire l'objet de recherches supplémentaires.

Elle prendra en compte le continuum terrestre-aquatique, c'est à dire le système de transfert des bassins versants aux écosystèmes aquatiques inclus dans la notion de bassin versant dans la mesure où ils permettent de caractériser le risque d'eutrophisation. Sont exclus du champ de l'ESCo l'analyse détaillée de l'impact des activités humaines (systèmes agricoles, modalités de traitements de l'eau, ...) sur l'eutrophisation.

L'expertise servira de base scientifique en vue d'améliorer la cohérence des modalités de mise en œuvre des différentes directives concernées (Directive nitrates, DCE, DCSMM et DERU).

### III – Questions et thématiques scientifiques

#### **1-Etat des lieux**

Sur la base des publications scientifiques, il sera dressé un état des lieux dans le monde des formes et manifestations d'eutrophisation, des enjeux associés pour se recentrer sur le cas de la France (métropolitaine et DOM). Ce constat permettra de poser le contexte et de relier l'analyse théorique avec les enjeux identifiés en France. Sur la base de l'analyse de la littérature scientifique, l'ESCo dressera, sur la base des connaissances disponibles :

- a) Un état des lieux des formes d'eutrophisation
  - Les formes de manifestations de l'eutrophisation

<sup>1</sup> Cette expertise a notamment été annoncée lors d'une réunion avec les représentants de la profession agricole le 24 juillet 2014 dans le cadre de la directive nitrate.

- Le recensement et la description des impacts environnementaux, économiques et sociaux
  - o Impacts environnementaux (approches ACV et multicritères)
  - o Impacts économiques et sociaux des phénomènes d'eutrophisation et politiques de lutte contre l'eutrophisation (coûts des dommages, analyse coûts-bénéfices, ...)
- b) Un état des lieux en France
  - Les formes d'eutrophisation observées en France : les manifestations de l'eutrophisation (lieux et périodes, conditions, ...) et les enjeux associés (toxicité, déséquilibres trophiques, ...)
  - Les modalités de surveillance de l'eutrophisation en France : état des programmes de surveillances, données disponibles, degré de connaissance concernant l'état d'eutrophisation des eaux et critères utilisés.
    - o Données mobilisables (nationales, régionales et locales), sur la qualité de l'eau, les suivis biologiques, la structure des réseaux hydrographiques, l'occupation du sol..., leur pertinence et leur qualité. Analyse des lacunes et difficultés, y compris spatiales et temporelles.

## **2- Définition de l'eutrophisation, causes et symptômes**

L'expertise fera une analyse des mécanismes biotiques et abiotiques responsables de l'eutrophisation et identifiera les facteurs qui lui sont liés. L'expertise donnera une définition scientifique de l'eutrophisation en soulignant le caractère complexe et multiforme de ce processus et de ses manifestations dans les grands types d'écosystèmes aquatiques continentaux et marins. Cette analyse sera mise en parallèle d'une analyse juridique sur la définition de l'eutrophisation dans les directives. Cette analyse devra permettre aux pouvoirs publics de proposer une définition de l'eutrophisation pertinente d'un point de vue scientifique, adaptée aux enjeux identifiés et permettant de répondre aux exigences réglementaires liées à l'application des directives européennes.

### **a. Définition scientifique**

- Définitions scientifiques de l'eutrophisation : les différentes formes d'eutrophisation (marées vertes à ulves ; phytoplancton ; ...), description des mécanismes associés, critères (communautés d'algues, facteurs abiotiques, ...) caractérisant les perturbations écologiques
- Facteurs à l'origine de l'eutrophisation : identification des facteurs du milieu prédominants, variation en fonction du contexte
- Symptômes et manifestations de l'eutrophisation : conséquences sur les différents écosystèmes aquatiques et risques associés

### **b. Cadre réglementaire ou juridique**

Sur la base des documents réglementaires qui seront notamment fournis par les Ministères en charge de l'Ecologie et de l'Agriculture, l'ESCo analysera le(s) cadre(s) juridiques relatif(s) à l'eutrophisation : à partir des publications, comment la notion d'eutrophisation est définie dans les réglementations, quelle est leur complémentarité, et quels sont les critères pris en compte.

## **3 - Caractérisation de la vulnérabilité des milieux à l'eutrophisation : outils et méthodes pertinents**

L'objectif est d'éclairer les pouvoirs publics dans la définition des critères permettant de caractériser la vulnérabilité des milieux aquatiques à l'eutrophisation et dans le choix des méthodes appropriées. Ces questions scientifiques seront traitées séparément pour les cas particuliers de l'eutrophisation continentale et de l'eutrophisation littorale et marine.

### **3-1 Vulnérabilité des milieux aquatiques**

- a) Etat des lieux des connaissances scientifiques relatives aux critères les plus pertinents pour caractériser la vulnérabilité des milieux aquatiques vis-à-vis de l'eutrophisation (eutrophisation continentale, littorale et marine)
- b) Etat des lieux des méthodes ou modèles existants pour évaluer la vulnérabilité des milieux à l'eutrophisation, domaine de validité et pertinence
- c) Identification des critères et méthodes pertinents pour caractériser la vulnérabilité des milieux continentaux et marins à l'eutrophisation en relation avec la richesse des milieux en nutriments

- Rôle des nutriments dans les phénomènes d'eutrophisation, notion de risque lié aux nutriments présents dans le milieu et de gradation du risque, prise en compte des flux de nutriments dans le réseau hydrographique et dans le milieu marin
- Changements et évolutions probables avec le changement climatique
- Etudes et modèles existants, seuils proposés par la littérature : analyse des variabilités et pertinence
- Identification des critères les plus adaptés pour mesurer les teneurs en nutriments dans le milieu (quand et où mesurer, à quelle fréquence, ...), en lien avec le fonctionnement biologique des écosystèmes et le comportement des nutriments dans le milieu

### 3-2 Risques liés aux transferts dans les bassins versants

Comment caractériser le risque d'eutrophisation des milieux en lien avec les propriétés des bassins versants vis-à-vis des transferts de nutriments ?

Estimation des stocks et des temps de résidence des nutriments dans les bassins versants.

Analyse critique des modèles couplés et non couplés de carbone, azote et phosphore selon différentes échelles et contextes.

## 4 – Bilan et identification des besoins en termes de connaissances

# Références bibliographiques

- Aarnio, K.; Mattila, J., 2000. Predation by juvenile *Platichthys flesus* (L.) on shelled prey species in a bare sand and a drift algae habitat. *Hydrobiologia*, 440 (1-3): 347-355. 10.1023/a:1004112304096
- Abakumov, A.; Izrailevsky, Y.; Park, S., 2015. Functioning of the phytoplankton in seas and estimates of primary production for aquatic ecosystems. *Advanced Modelling Techniques Studying Global Changes in Environmental Sciences*, 27: 339-349. 10.1016/b978-0-444-63536-5.00015-6
- Abbedou, S.; Diekmann, J.; Rischkowsky, B.; Kreuzer, M.; Oberson, A., 2013. Unconventional feeds for small ruminants in dry areas have a minor effect on manure nitrogen flow in the soil-plant system. *Nutrient Cycling in Agroecosystems*, 95 (1): 87-101. 10.1007/s10705-013-9550-4
- Abbott, M.B.; Bathurst, J.C.; Cunge, J.A.; O'Connell, P.E.; Rasmussen, J., 1986. An introduction to the european hydrological system - systeme hydrologique européen - SHE: 1 history and philosophy of a physically-based , distributed modeling system. *Journal of Hydrology*, 87 (1-2): 45-59. 10.1016/0022-1694(86)90114-9
- Abbott, M.B.; Bathurst, J.C.; Cunge, J.A.; O'Connell, P.E.; Rasmussen, J., 1986. An introduction to the European Hydrological System — Systeme Hydrologique Europeen, "SHE", 2: Structure of a physically-based, distributed modelling system. *Journal of Hydrology*, 87 (1-2): 61-77. 10.1016/0022-1694(86)90115-0
- Abdenadher, M.; Hamza, A.; Fekih, W.; Hannachi, I.; Bellaaj, A.Z.; Bradai, M.N.; Aleya, L., 2012. Factors determining the dynamics of toxic blooms of *Alexandrium minutum* during a 10-year study along the shallow southwestern Mediterranean coasts. *Estuarine Coastal and Shelf Science*, 106: 102-111. 10.1016/j.ecss.2012.04.029
- Abed, S.N.; Mahmoud, N.; Sharma, S.K., 2016. Potential of Horizontal Subsurface-Flow Constructed Wetlands for Polishing of Treated Sewages. *Journal of Environmental Engineering*, 142 (6). 10.1061/(asce)ee.1943-7870.0001091
- Abreu, M.H.; Pereira, R.; Buschmann, A.H.; Sousa-Pinto, I.; Yarish, C., 2011. Nitrogen uptake responses of *Gracilaria vermiculophylla* (Ohmi) Papenfuss under combined and single addition of nitrate and ammonium. *Journal of Experimental Marine Biology and Ecology*, 407: 190–199
- Abril, G.; Commarieu, M.V.; Etcheber, H.; Deborde, J.; Deflandre, B.; Zivadinovic, M.K.; Chaillou, G.; Anschutz, P., 2010. In vitro simulation of oxic/suboxic diagenesis in an estuarine fluid mud subjected to redox oscillations. *Estuarine Coastal and Shelf Science*, 88 (2): 279-291. 10.1016/j.ecss.2010.04.003
- Adamack, A.T.; Rose, K.A.; Breitburg, D.L.; Nice, A.J.; Lung, W.S., 2012. Simulating the effect of hypoxia on bay anchovy egg and larval mortality using coupled watershed, water quality, and individual-based predation models. *Marine Ecology Progress Series*, 445: 141-160. 10.3354/meps09438
- Adams, A.J.; Locascio, J.V.; Robbins, B.D., 2004. Microhabitat use by a post-settlement stage estuarine fish: evidence from relative abundance and predation among habitats. *Journal of Experimental Marine Biology and Ecology*, 299 (1): 17-33. 10.1016/j.jembe.2003.08.013
- Adams, R.; Quinn, P.F.; Bowes, M.J., 2015. The Catchment Runoff Attenuation Flux Tool, a minimum information requirement nutrient pollution model. *Hydrology and Earth System Sciences*, 19 (4): 1641-1657. 10.5194/hess-19-1641-2015
- Adams, W.M.; Brockington, D.; Dyson, J.; Vira, B., 2003. Managing Tragedies: Understanding Conflict over Common Pool Resources. *Science*, 302 (5652): 1915-1916. 10.1126/science.1087771
- Adkins, S.C.; Marsden, I.D.; Pirker, J.G., 2016. Reproduction, growth and size of a burrowing intertidal clam exposed to varying environmental conditions in estuaries. *Invertebrate Reproduction & Development*, 60 (3): 223-237. 10.1080/07924259.2016.1198833
- Adviento-Borbe, M.A.A.; Wheeler, E.F.; Brown, N.E.; Topper, P.A.; Graves, R.E.; Ishler, V.A.; Varga, G.A., 2010. Ammonia and greenhouse gas flux from manure in freestall barn with dairy cows on precision fed rations. *Transactions of the Asabe*, 53 (4): 1251-1266
- Ærtebjerg, G.; Leader, T.; Carstensen, J.; Nygaard, K.; Sørensen, K.; Casartelli, S.; Schiller, C.; Druon, J.N., 2001. Eutrophication in Europe's coastal waters.
- Aftab, A.; Hanley, N.; Kampas, A., 2007. Coordinated Environmental Regulation: Controlling Non-Point Nitrate Pollution while Maintaining River Flows. *Environmental and Resource Economics*, 38 (4): 573-593. 10.1007/s10640-007-9090-y
- Agence de l'Eau Rhône Méditerranée Corse (R.M.C.), 2003. Réseau d'observation de l'eutrophisation des cours d'eau. Résultats en 1998-1999 et tendances en 2002: Agence de l'Eau Rhône Méditerranée Corse (R.M.C.), 46 p.
- Agence de l'eau Rhône-Méditerranée-Corse, 1992. *Plans d'eau, de l'autre côté du miroir*. Institut de l'environnement international
- Agence de l'eau Rhône-Méditerranée-Corse, 1996. *EUTROPHISATION DES MILIEUX AQUATIQUES : BILAN DES CONNAISSANCES ET STRATEGIES DE LUTTE. NOTE TECHNIQUE SDAGE N ° 2*.
- Agence des aires marines protégées, 2012. Glossaire: eutrophisation.<http://www.aires-marines.fr/Glossaire/Eutrophisation> [consulté: 16/01/2017]
- Agency, E.E., 2012. *Climate change, impacts and vulnerability in Europe 2012*: European Environment Agency. Publication
- Aguado, D.; Montoya, T.; Borras, L.; Seco, A.; Ferrer, J., 2008. Using SOM and PCA for analysing and interpreting data from a P-removal SBR. *Engineering Applications of Artificial Intelligence*, 21 (6): 919-930. 10.1016/j.engappai.2007.08.001

- Aguado, D.; Ribes, J.; Montoya, T.; Ferrer, J.; Seco, A., 2009. A methodology for sequencing batch reactor identification with artificial neural networks: A case study. *Computers & Chemical Engineering*, 33 (2): 465-472. 10.1016/j.compchemeng.2008.10.018
- Aguilera, N.H.; Jackson, M.L., 1953. Iron Oxide Removal from Soils and Clays1. *Soil Science Society of America Journal*, 17 (4): 359-364. 10.2136/sssaj1953.03615995001700040015x
- Aherne, J.; Posch, M.; Forsius, M.; Lehtonen, A.; Harkonen, K., 2012. Impacts of forest biomass removal on soil nutrient status under climate change: a catchment-based modelling study for Finland. *Biogeochemistry*, 107 (1-3): 471-488. 10.1007/s10533-010-9569-4
- Ahlroth, S., 2014. The use of valuation and weighting sets in environmental impact assessment. *Resources, Conservation and Recycling*, 85: 34-41. 10.1016/j.resconrec.2013.11.012
- Ahlvik, L.; Ekholm, P.; Hyttiainen, K.; Pitkanen, H., 2014. An economic-ecological model to evaluate impacts of nutrient abatement in the Baltic Sea. *Environmental Modelling & Software*, 55: 164-175. 10.1016/j.envsoft.2014.01.027
- Ahlvik, L.; Ekholm, P.; Hyttiainen, K.; Pitkänen, H., 2014. An economic-ecological model to evaluate impacts of nutrient abatement in the Baltic Sea. *Environmental Modelling and Software*, 55 (C): 164-175. 10.1016/j.envsoft.2014.01.027
- Ahlvik, L.; Ekholm, P.; Hyttiainen, K.; Pitkänen, H., 2014. An economic-ecological model to evaluate impacts of nutrient abatement in the Baltic Sea. *Environmental Modelling and Software*, 55: 164-175. 10.1016/j.envsoft.2014.01.027
- Ahlvik, L.; Hyttiainen, K., 2015. Value of adaptation in water protection - Economic impacts of uncertain climate change in the Baltic Sea. *Ecological Economics*, 116: 231-240. 10.1016/j.ecolecon.2015.04.027
- Ahlvik, L.; Hyttiainen, K., 2015. Value of adaptation in water protection — Economic impacts of uncertain climate change in the Baltic Sea. *Ecological Economics*, 116 (Supplement C): 231-240. 10.1016/j.ecolecon.2015.04.027
- Ahlvik, L.; Pavlova, Y., 2013. A Strategic Analysis of Eutrophication Abatement in the Baltic Sea. *Environmental and Resource Economics*, 56 (3): 353-378. 10.1007/s10640-013-9651-1
- Ahmad, A.A.; Idris, A., 2013. Release and recovery of phosphorus from wastewater treatment sludge via struvite precipitation. *Desalination and Water Treatment*, 52 (28-30): 5696-5703. 10.1016/S0043-1354(02)00526-2
- Ahmad, A.A.; Idris, A., 2014. Release and recovery of phosphorus from wastewater treatment sludge via struvite precipitation. *Desalination and Water Treatment*, 52 (28-30): 5696-5703
- Ahsan, D.A.; Roth, E.V.A., 2010. Farmers' perceived risks and risk management strategies in an emerging mussel aquaculture industry in Denmark. *Marine Resource Economics*, 25 (3): 14. 10.5950/0738-1360-25.3.309
- Ahtiainen, H.; Pouta, E.; Artell, J., 2015. Modelling Asymmetric Preferences for Water Quality in Choice Experiments with Individual-Specific Status Quo Alternatives. *Water Resources and Economics*, 12: 1-13. 10.1016/j.wre.2015.10.003
- Ahtiainen, H.; Vanhatalo, J., 2012. The Value of Reducing Eutrophication in European Marine Areas. A Bayesian Meta-analysis. *Ecological Economics*, 83 (1): 1-10. 10.1016/j.ecolecon.2012.08.010
- Akao, K.-I.; Managi, S., 2013. A Tradable Permit System in an Intertemporal Economy. *Environmental and Resource Economics*, 55 (3): 309-336. 10.1007/s10640-012-9628-5
- Akdeniz, S.; Karaer, F.; Katip, A., 2011. A Gis-based method for shallow lake eutrophication assessment. *Journal of Biological ...*: Akdogan, Z.; Guven, B.; Balcioglu, I., 2016. Modeling nutrient and heavy metal transport at selected catchments in the Marmara region. *Fresenius Environmental Bulletin*, 25 (4): 969-980
- Aksoy, H.; Kavvas, M.L., 2005. A review of hillslope and watershed scale erosion and sediment transport models. *Catena*, 64 (2-3): 247-271. 10.1016/j.catena.2005.08.008
- Alahuhta, J.; Hokka, V.; Saarikoski, H.; Hellsten, S., 2010. Practical integration of river basin and land use planning: lessons learned from two Finnish case studies. *Geographical Journal*, 176 (4): 319-333. 10.1111/j.1475-4959.2010.00365.x
- Alam, M.J.; Goodall, J.L.; Bowes, B.D.; Girvetz, E.H., 2017. The Impact of Projected Climate Change Scenarios on Nitrogen Yield at a Regional Scale for the Contiguous United States. *JAWRA Journal of the American Water Resources Association*, 53 (4): 854-870
- Alaouze, C.M., 1999. An Economic Analysis of the Eutrophication Problem of the Barwon and Darling Rivers in New South Wales. *Australian Economic Papers*, 38 (1): 51-63. 10.1111/1467-8454.00041
- Alber, M., 2002. A conceptual model of estuarine freshwater inflow management. *Estuaries*, 25 (6): 1246-1261. 10.1007/BF02692222
- Ale, M.T.; Mikkelsen, J.D.; Meyer, A.S., 2011. Differential growth response of *Ulva lactuca* to ammonium and nitrate assimilation. *Journal of Applied Phycology*, 23 (3, SI): 345–351. 10.1007/s10811-010-9546-2
- Alejandro, D.J., 2006. A hillslope erosion submodel for use with rainfall-runoff models in GIS. In: Demuth, S.; Gustard, A.; Planos, E.; Scatena, F.; Servat, E., eds. *Climate Variability and Change - Hydrological Impacts*. Wallingford: Int Assoc Hydrological Sciences (Iahs Publication), Vol.308, 86-90
- Alestra, T.; Schiel, D.R., 2014. Effects of opportunistic algae on the early life history of a habitat-forming fucoid: influence of temperature, nutrient enrichment and grazing pressure. *Marine Ecology Progress Series*, 508: 105–115. 10.3354/meps10838
- Alestra, T.; Schiel, D.R., 2015. Non-trophic responses of algal communities to nutrient enrichment: interactions among coralline turfs, ephemeral algae and perennial fucoids. *Marine Ecology Progress Series*, 538: 145–156. 10.3354/meps11462
- Alexander, R.B.; Smith, R.A.; Schwarz, G.E., 2000. Effect of stream channel size on the delivery of nitrogen to the Gulf of Mexico. *Nature*, 403 (6771): 758-761. 10.1038/35001562
- Alexander, R.B.; Smith, R.A.; Schwarz, G.E., 2004. Estimates of diffuse phosphorus sources in surface waters of the United States using a spatially referenced Watershed model. *Water Science and Technology*, 49 (3): 1-10

- Alexandre, A.; Silva, J.; Bouma, T.J.; Santos, R., 2011. Inorganic nitrogen uptake kinetics and whole-plant nitrogen budget in the seagrass *Zostera noltii*. *Journal of Experimental Marine Biology and Ecology*, 401 (1-2): 7-12. 10.1016/j.jembe.2011.03.008
- Alheit, J.; Mollmann, C.; Dutz, J.; Kornilovs, G.; Loewe, P.; Mohrholz, V.; Wasmund, N., 2005. Synchronous ecological regime shifts in the central Baltic and the North Sea in the late 1980s. *Ices Journal of Marine Science*, 62 (7): 1205-1215. 10.1016/j.icejms.2005.04.024
- Ali, A., 1996. A concise review of chironomid midges (Diptera: Chironomidae) as pests and their management. *Journal of Vector Ecology*, 21 (2): 105-121
- Allan, J.D.; Yuan, L.L.; Black, P.; Stockton, T.O.M.; Davies, P.E.; Magierowski, R.H.; Read, S.M., 2012. Investigating the relationships between environmental stressors and stream condition using Bayesian belief networks. *Freshwater Biology*, 57: 58-73. 10.1111/j.1365-2427.2011.02683.x
- Allegretto, W.; Papini, D., 2008. Analysis of a lagoon ecological model with anoxic crises and impulsive harvesting. *Mathematical and Computer Modelling*, 47 (7-8): 675-686. 10.1016/j.mcm.2007.06.002
- Aller, R.C., 1982. The Effects of Macrofauna on Chemical Properties of Marine Sediment and Overlying Water. In: McCall, P.L.; Tevesz, M.J.S., eds. *Animal-Sediment Relations: The Biogenic Alteration of Sediments*. Boston, MA: Springer US, 53-102. 10.1007/978-1-4757-1317-6\_2
- Aller, R.C., 1994. Bioturbation and remineralization of sedimentary organic-matter - effects of redox oscillation. *Chemical Geology*, 114 (3-4): 331-345. 10.1016/0009-2541(94)90062-0
- Aller, R.C., 2014. 8.11 - Sedimentary Diagenesis, Depositional Environments, and Benthic Fluxes A2 - Holland, Heinrich D. In: Turekian, K.K., ed. *Treatise on Geochemistry (Second Edition)*. Oxford: Elsevier, 293-334. <http://dx.doi.org/10.1016/B978-0-08-095975-7.00611-2>
- Aller, R.C.; Hall, P.O.J.; Rude, P.D.; Aller, J.Y., 1998. Biogeochemical heterogeneity and suboxic diagenesis in hemipelagic sediments of the Panama Basin. *Deep-Sea Research Part I-Oceanographic Research Papers*, 45 (1): 133-165. 10.1016/s0967-0637(97)00049-6
- Aller, R.C.; Rude, P.D., 1988. Complete oxidation of solid-phase sulfides by manganese and bacteria in anoxic marine-sediments. *Geochimica Et Cosmochimica Acta*, 52 (3): 751-765. 10.1016/0016-7037(88)90335-3
- Aller, R.C.; Yingst, J.Y., 1985. Effects of the marine deposit-feeders heteromastus-filiformis (polychaeta), macoma-balthica (bivalvia), and tellina-texana (bivalvia) on averaged sedimentary solute transport, reaction-rates, and microbial distributions. *Journal of Marine Research*, 43 (3): 615-645
- Allinger, L.; Reavie, E., 2013. *The ecological history of Lake Erie as recorded by the phytoplankton community*. 10.1016/j.jglr.2013.06.014
- Almasri, M.N.; Kaluarachchi, J.J., 2007. Modeling nitrate contamination of groundwater in agricultural watersheds. *Journal of Hydrology*, 343 (3-4): 211-229. 10.1016/j.jhydrol.2007.06.016
- Almroth, E.; Skogen, M.D., 2010. A North Sea and Baltic Sea Model Ensemble Eutrophication Assessment. *Ambio*, 39 (1): 59-69. 10.1007/s13280-009-0006-7
- Almroth-Rosell, E.; Eilola, K.; Kuznetsov, I.; Hall, P.O.J.; Meier, H.E.M., 2015. A new approach to model oxygen dependent benthic phosphate fluxes in the Baltic Sea. *Journal of Marine Systems*, 144: 127-141. 10.1016/j.jmarsys.2014.11.007
- Alonso Fernandez, J.R.; Garcia Nieto, P.J.; Diaz Muniz, C.; Alvarez Anton, J.C., 2014. Modeling eutrophication and risk prevention in a reservoir in the Northwest of Spain by using multivariate adaptive regression splines analysis. *Ecological Engineering*, 68: 80-89. 10.1016/j.ecoleng.2014.03.094
- Alström-Rapaport, C.; Leskinen, E.; Pamilo, P., 2010. Seasonal variation in the mode of reproduction of *Ulva intestinalis* in a brackish water environment. *Aquatic Botany*, 93 (4): 244-249
- Altamirano, M.; Flores-Moya, A.; Conde, F.; Figueroa, F.L., 2000. Growth seasonality, photosynthetic pigments, and carbon and nitrogen content in relation to environmental factors: a field study of *Ulva olivascens* (Ulvales, Chlorophyta). *Phycologia*, 39 (1): 50-58. 10.2216/i0031-8884-39-1-50.1
- Altieri, A.H., 2008. DEAD ZONES ENHANCE KEY FISHERIES SPECIES BY PROVIDING PREDATION REFUGE. *Ecology*, 89 (10): 2808-2818. 10.1890/07-0994.1
- Altieri, A.H.; Gedan, K.B., 2015. Climate change and dead zones. *Global Change Biology*, 21 (4): 1395-1406. 10.1111/gcb.12754
- Altieri, A.H.; Witman, J.D., 2006. Local extinction of a foundation species in a hypoxic estuary: Integrating individuals to ecosystem. *Ecology*, 87 (3): 717-730. 10.1890/05-0226
- Alvarez, R.; Steinbach, H.S., 2009. A review of the effects of tillage systems on some soil physical properties, water content, nitrate availability and crops yield in the Argentine Pampas. *Soil and Tillage Research*, 104 (1): 1-15. 10.1016/j.still.2009.02.005
- Alvarez-Fuentes, G.; Appuhamy, J.; Kebreab, E., 2016. Prediction of phosphorus output in manure and milk by lactating dairy cows. *Journal of Dairy Science*, 99 (1): 771-782. 10.3168/jds.2015-10092
- Alvera-Azcarate, A.; Ferreira, J.G.; Nunes, J.P., 2003. Modelling eutrophication in mesotidal and macrotidal estuaries. The role of intertidal seaweeds. *Estuarine Coastal and Shelf Science*, 57 (4): 715-724. 10.1016/s0272-7714(02)00413-4
- Alwyn, T.; Rees, V., 2007. Metabolic and ecological constraints imposed by similar rates of ammonium and nitrate uptake per unit surface area at low substrate concentrations in marine phytoplankton and macroalgae. *Journal of Phycology*, 43: 197-207
- Amara, R.; Filipuci, I.; Vincent, D.; Goularda, F.; Breton, E., 2013. Do transparent exopolymeric particles (TEP) derived from *Phaeocystis globosa* bloom impact the physiological performances of European sea bass juveniles. *Aquaculture*, 414: 149-154. 10.1016/j.aquaculture.2013.07.048

- Ambrose, R.B.; Wool, T.A.; Connolly, J.P., 1988. *WASP4, A Hydrodynamic and Water Quality Model-Model Theory, User's Manual and Programmer's Guide*: US Environmental Protection Agency, Athens, Ga, USA.
- Ambrose, R.B.; Wool, T.A.; Martin, J.L., 1993. *WASP5, A Hydrodynamic and Water Quality Model-Model Theory, User's Manual and Programmer's Guide*: US Environmental Protection Agency, Athens, Ga, USA.
- Amemiya, T.; Enomoto, T.; Rossberg, A.G.; Takamura, N.; Itoh, K., 2005. Lake restoration in terms of ecological resilience: a numerical study of biomanipulations under bistable conditions. *Ecology and Society*, 10 (2):
- Aminot, A.; Andrieux, F., 1996. Concept and determination of exchangeable phosphate in aquatic sediments. *Water Research*, 30 (11): 2805-2811. 10.1016/s0043-1354(96)00192-3
- Ammar, M.; Comte, K.; Tran, T.D.C.; El Bour, M., 2014. Initial growth phases of two bloom-forming cyanobacteria (*Cylindrospermopsis raciborskii* and *Planktothrix agardhii*) in monocultures and mixed cultures depending on light and nutrient conditions. *Annales de Limnologie-International Journal of Limnology*. EDP Sciences, 231-240
- Amon, B.; Kryvoruchko, V.; Frohlich, M.; Amon, T.; Pollinger, A.; Mosenbacher, I.; Hausleitner, A., 2007. Ammonia and greenhouse gas emissions from a straw flow system for fattening pigs: Housing and manure storage. *Livestock Science*, 112 (3): 199-207. 10.1016/j.livsci.2007.09.003
- Amore, E.; Modica, C.; Nearing, M.A.; Santoro, V.C., 2004. Scale effect in USLE and WEPP application for soil erosion computation from three Sicilian basins. *Journal of Hydrology*, 293 (1-4): 100-114. 10.1016/j.jhydrol.2004.01.018
- Amosu, A.O.; Robertson-Andersson, D.V.; Kean, E.; Maneveldt, G.W.; Cyster, L., 2016. Biofiltering and Uptake of Dissolved Nutrients by *Ulva armoricana* (Chlorophyta) in a Land-based Aquaculture System. *INTERNATIONAL JOURNAL OF AGRICULTURE AND BIOLOGY*, 18 (2): 298-304
- Ancev, T.; Stoecker, A.L.; Storm, D.E.; White, M.J., 2006. The Economics of Efficient Phosphorus Abatement in a Watershed. *Journal of Agricultural and Resource Economics*, 31 (3): 529-548. <http://www.waeaonline.org/publications/jare/recent-issues>
- Anctil, F.; Filion, M.; Tournebize, J., 2009. A neural network experiment on the simulation of daily nitrate-nitrogen and suspended sediment fluxes from a small agricultural catchment. *Ecological Modelling*, 220 (6): 879-887. 10.1016/j.ecolmodel.2008.12.021
- Andries, J.M.; Beisner, B.E., 2000. Fluctuating environments and phytoplankton community structure: a stochastic model. *The American Naturalist*, 155 (4): 556-569
- Andersen, B.S.; Carl, J.D.; Grønkjær, P.; Støttrup, J.G., 2005. Feeding ecology and growth of age 0 year *Platichthys flesus*(L.) in a vegetated and a bare sand habitat in a nutrient rich fjord. *Journal of Fish Biology*, 66 (2): 531-552. 10.1111/j.0022-1112.2005.00620.x
- Andersen, H.E.; Kronvang, B.; Larsen, S.E., 1999. Agricultural practices and diffuse nitrogen pollution Denmark: Empirical leaching and catchment models. *Water Science and Technology*, 39 (12): 257-264. 10.1016/s0273-1223(99)00342-x
- Andersen, J.H.; Axe, P.; Backer, H.; Carstensen, J.; Claussen, U.; Fleming-Lehtinen, V.; Järvinen, M.; Kaartokallio, H.; Knuutila, S.; Korpinen, S.; Kubiliute, A.; Laamanen, M.; Lysiak-Pastuszak, E.; Martin, G.; Murray, C.; Møhlenberg, F.; Nausch, G.; Norkko, A.; Villnäs, A., 2010. Getting the measure of eutrophication in the Baltic Sea: towards improved assessment principles and methods. *Biogeochemistry*, 106 (2): 137-156. 10.1007/s10533-010-9508-4
- Andersen, J.H.; Murray, C.; Kaartokallio, H.; Axe, P.; Molvær, J., 2010. A simple method for confidence rating of eutrophication status classifications. *Marine Pollution Bulletin*, 60 (6): 919-924. 10.1016/j.marpolbul.2010.03.020
- Andersen, J.H.; SCHLUTER, L., 2006. Coastal eutrophication: recent developments in definitions and implications for monitoring strategies. *Journal of Plankton ...*
- Andersen, J.H.; Schlüter, L.; Aertebjerg, G., 2006. Coastal eutrophication: recent developments in definitions and implications for monitoring strategies. *Journal of Plankton Research*, 28 (7): 621-628. 10.1093/plankt/fb1001
- Andersen, J.H.; Schlüter, L.; Ærtebjerg, G., 2006. Coastal eutrophication: recent developments in definitions and implications for monitoring strategies. *Journal of Plankton Research*, 28 (7): 621-628. 10.1093/plankt/fbl001
- Andersen, J.H.; Schlüter, L.; Aertebjerg, G., 2006. Coastal eutrophication: recent developments in definitions and implications for monitoring strategies. *Journal of Plankton Research*, 28 (7): 621-628
- Andersen, R.A., 2005. *Algal culturing techniques*. Academic press
- Andersen, T.; Hessen, D.O., 1991. CARBON, NITROGEN, AND PHOSPHORUS-CONTENT OF FRESH-WATER ZOOPLANKTON. *Limnology and Oceanography*, 36 (4): 807-814
- Anderson, D.M.; Alpermann, T.J.; Cembella, A.D.; Collos, Y.; Masseret, E.; Montresor, M., 2012. The globally distributed genus *Alexandrium*: Multifaceted roles in marine ecosystems and impacts on human health. *Harmful Algae*, 14: 10-35. 10.1016/j.hal.2011.10.012
- Anderson, D.M.; Andersen, P.; Bricelj, V.M.; Cullen, J.J.; Rensel, J.E.J., 2001. *Monitoring and management strategies for harmful algal blooms in coastal waters*. Unesco
- Anderson, D.M.; Burkholder, J.M.; Cochlan, W.P.; Glibert, P.M.; Gobler, C.J.; Heil, C.A.; Kudela, R.M.; Parsons, M.L.; Rensel, J.E.J.; Townsend, D.W.; Trainer, V.L.; Vargo, G.A., 2008. Harmful algal blooms and eutrophication: Examining linkages from selected coastal regions of the United States. *Harmful Algae*, 8 (1): 39-53. 10.1016/j.hal.2008.08.017
- Anderson, D.M.; Cembella, A.D.; Hallegraeff, G.M., 2012. Progress in Understanding Harmful Algal Blooms: Paradigm Shifts and New Technologies for Research, Monitoring, and Management. In: Carlson, C.A.; Giovannoni, S.J., eds. *Annual Review of Marine Science*, Vol 4. Palo Alto: Annual Reviews (Annual Review of Marine Science), Vol.4, 143-176. 10.1146/annurev-marine-120308-081121
- Anderson, D.M.; Glibert, P.M.; Burkholder, J.M., 2002. Harmful algal blooms and eutrophication: Nutrient sources, composition, and consequences. *Estuaries*, 25 (4B): 704-726. 10.1007/bf02804901

- Andersson, L.; Rydberg, L., 1988. TRENDS IN NUTRIENT AND OXYGEN CONDITIONS WITHIN THE KATTEGAT - EFFECTS OF LOCAL NUTRIENT SUPPLY. *Estuarine Coastal and Shelf Science*, 26 (5): 559-579. 10.1016/0272-7714(88)90006-6
- Andrades, R.; Gomes, M.P.; Pereira, G.H.; Souza, J.F.; Albuquerque, C.Q.; Martins, A.S., 2014. The influence of allochthonous macroalgae on the fish communities of tropical sandy beaches. *Estuarine Coastal and Shelf Science*, 144: 75-81. 10.1016/j.ecss.2014.04.014
- Angelier, E., 2000. *Ecologie des eaux courantes*. ÉDITIONS TEC ET DOC / LAVOISIER
- Anneville, O.; Ginot, V.; Druart, J.-C.; Angeli, N., 2002. Long-term study (1974–1998) of seasonal changes in the phytoplankton in Lake Geneva: a multi-table approach. *Journal of Plankton Research*, 24 (10): 993-1008
- Annin, P., 2009. *The Great Lakes Water Wars*. Island Press
- Anschutz, P.; Deborde, J., 2016. Spectrophotometric determination of phosphate in matrices from sequential leaching of sediments. *Limnology and Oceanography-Methods*, 14 (4): 245-256. 10.1002/lom3.10085
- Anschutz, P.; Dedieu, K.; Desmazes, F.; Chaillou, G., 2005. Speciation, oxidation state, and reactivity of particulate manganese in marine sediments. *Chemical Geology*, 218 (3-4): 265-279. 10.1016/j.chemgeo.2005.01.008
- Anschutz, P.; Sundby, B.; Lefrancois, L.; Luther, G.W.; Mucci, A., 2000. Interactions between metal oxides and species of nitrogen and iodine in bioturbated marine sediments. *Geochimica Et Cosmochimica Acta*, 64 (16): 2751-2763. 10.1016/s0016-7037(00)00400-2
- Anschutz, P.; Zhong, S.J.; Sundby, B.; Mucci, A.; Gobell, C., 1998. Burial efficiency of phosphorus and the geochemistry of iron in continental margin sediments. *Limnology and Oceanography*, 43 (1): 53-64
- Anshutz, P.; Hyacinthe, C.; Carbonel, P.; Jouanneau, J.M.; Jorissen, F., 1999. La distribution du phosphore inorganique dans les sédiments modernes du golfe de Gascogne
- The distribution of inorganic phosphorus in modern sediments of the Bay of Biscay. *Comptes Rendus De L Academie Des Sciences Serie II Fascicule a-Sciences De La Terre Et Des Planetes*, 328 (11): 765-771
- Antenucci, J.P.; Alexander, R.; Romero, J.R.; Imberger, J., 2003. Management strategies for a eutrophic water supply reservoir-San Roque, Argentina. *Water science and technology : a journal of the International Association on Water Pollution Research*, 47: 149-155
- Antolic, B.; Zuljevic, A.; Despalatovic, M.; Grubelic, I.; Cvitkovic, I., 2008. Impact of the invasive green alga *Caulerpa racemosa* var. *cylindracea* on the epiphytic macroalgal assemblage of *Posidonia oceanica* seagrass rhizomes in the Adriatic Sea. *NOVA HEDWIGIA*, 86 (1-2): 155-167. 10.1127/0029-5035/2008/0086-0155
- Antonopoulos, V.Z.; Giannou, S.K., 2003. Simulation of water temperature and dissolved oxygen distribution in Lake Vegoritis, Greece. *Ecological Modelling*, 160 (1-2): 39-53. 10.1016/S0304-3800(02)00286-7
- Antunes, J.T.; Leão, P.N.; Vasconcelos, V.M., 2015. *Cylindrospermopsis raciborskii*: review of the distribution, phylogeography, and ecophysiology of a global invasive species. *Frontiers in Microbiology*, 6:
- Aparicio, F.L.; Nieto-Cid, M.; Borrull, E.; Calvo, E.; Pelejero, C.; Sala, M.M.; Pinhassi, J.; Gasol, J.M.; Marrase, C., 2016. Eutrophication and acidification: Do they induce changes in the dissolved organic matter dynamics in the coastal Mediterranean Sea? *Science of the Total Environment*, 563: 179-189. 10.1016/j.scitotenv.2016.04.108
- Aparicio Medrano, E.; Uittenbogaard, R.E.; Dionisio Pires, L.M.; van de Wiel, B.J.H.; Clercx, H.J.H., 2013. Coupling hydrodynamics and buoyancy regulation in *Microcystis aeruginosa* for its vertical distribution in lakes. *Ecological Modelling*, 248: 41-56. 10.1016/j.ecolmodel.2012.08.029
- Aquilina, L.; Aurousseau, P.; Croix, N.; Despres, L.; Dion, P., A.; Durand, P.; Helin, J.-C.; Ménesguen, A.; TOURNEBIZE, J.; Van Tilburgh, V., 2013. Des marées vertes pour longtemps ? Analyses scientifiques et plans de lutte contre les algues vertes. *Le Courrier de l'environnement de l'INRA*, 63 (63): 63-75
- Aquilina, L.; Aurousseau, P.; Croix, N.; Despres, L.; Dion, P.A.; Durand, P.; Helin, J.-C.; Ménesguen, A.; Tournebize, J.; Van Tilburgh, V., 2013. Des marées vertes pour longtemps ? Analyses scientifiques et plans de lutte contre les algues vertes. *Le Courrier de l'environnement de l'INRA*, 63 (63): 63-75
- Arabi, M.; Govindaraju, R.S.; Engel, B.; Hantush, M., 2007. Multiobjective sensitivity analysis of sediment and nitrogen processes with a watershed model. *Water Resources Research*, 43 (6). 10.1029/2006wr005463
- Arai, M.N., 2001. Pelagic coelenterates and eutrophication: a review. *Hydrobiologia*, 451 (1-3): 69-87. 10.1023/a:1011840123140
- Arai, Y.; Sparks, D.L., 2007. Phosphate reaction dynamics in soils and soil components: a multiscale approach. *Advances in agronomy*, 94: 135-179
- Arata, L.; Peerlings, J.; Sckokai, P., 2013. Manure Market as a Solution for the Nitrates Directive in Italy. *New Medit: Mediterranean Journal of Economics, Agriculture and Environment*, 12 (2): 22-33. [http://newmedit.iamb.it/static\\_content/185,185,new-medit.htm](http://newmedit.iamb.it/static_content/185,185,new-medit.htm)
- Archambault, M.C.; Briceij, V.M.; Grant, J.; Anderson, D.M., 2004. Effects of suspended and sedimented clays on juvenile hard clams, *Mercenaria mercenaria*, within the context of harmful algal bloom mitigation. *Marine Biology*, 144 (3): 553-565. 10.1007/s00227-003-1222-5
- Archer, D.; Emerson, S.; Reimers, C., 1989. Dissolution of calcite in deep-sea sediments - ph and o-2 microelectrode results. *Geochimica Et Cosmochimica Acta*, 53 (11): 2831-2845. 10.1016/0016-7037(89)90161-0
- Argillier, C.; Causse, S.; Gevrey, M.; Pedron, S.; De Bortoli, J.; Brucet, S.; Emmrich, M.; Jeppesen, E.; Lauridsen, T.; Mehner, T.; Olin, M.; Rask, M.; Volta, P.; Winfield, I.J.; Kelly, F.; Krause, T.; Palm, A.; Holmgren, K., 2013. Development of a fish-based index to assess the eutrophication status of European lakes. *Hydrobiologia*, 704 (1): 193-211. 10.1007/s10750-012-1282-y

- Arheimer, B.; Brandt, M., 1998. Modelling nitrogen transport and retention in the catchments of southern Sweden. *Ambio*, 27 (6): 471-480
- Arheimer, B.; Löwgren, M.; Pers, B.C.; Rosberg, J., 2005. Integrated Catchment Modeling for Nutrient Reduction: Scenarios Showing Impacts, Potential, and Cost of Measures. *AMBIO: a Journal of the Human Environment*, 34 (7): 513-520. 10.1579/0044-7447-34.7.513
- Arheimer, B.; Nilsson, J.; Lindström, G., 2015. Experimenting with Coupled Hydro-Ecological Models to Explore Measure Plans and Water Quality Goals in a Semi-Enclosed Swedish Bay. *Water*, 7 (7): 22. 10.3390/w7073906
- Arheimer, B.; Torstensson, G.; Wittgren, H.B., 2004. Landscape planning to reduce coastal eutrophication: Agricultural practices and constructed wetlands. *Landscape and Urban Planning*, 67 (1-4): 205-215. 10.1016/S0169-2046(03)00040-9
- Arhonditsis, G.B.; Kim, D.-K.; Shimoda, Y.; Zhang, W.; Watson, S.; Mugalingam, S.; Dittrich, M.; Geater, K.; McClure, C.; Keene, B.; Morley, A.; Richards, A.; Long, T.; Rao, Y.R.; Kalinauskas, R., 2016. Integration of best management practices in the Bay of Quinte watershed with the phosphorus dynamics in the receiving waterbody: What do the models predict? *Aquatic Ecosystem Health & Management*, 19 (1): 1-18. 10.1080/14634988.2016.1130566
- Arhonditsis, G.B.; Paerl, H.W.; Valdes-Weaver, L.M.; Stow, C.A.; Steinberg, L.J.; Reckhow, K.H., 2007. Application of Bayesian structural equation modeling for examining phytoplankton dynamics in the Neuse River Estuary (North Carolina, USA). *Estuarine Coastal and Shelf Science*, 72 (1-2): 63-80. 10.1016/j.ecss.2006.09.022
- Arismendez, S.S.; Kim, H.C.; Brenner, J.; Montagna, P.A., 2009. Application of watershed analyses and ecosystem modeling to investigate land-water nutrient coupling processes in the Guadalupe Estuary, Texas. *Ecological Informatics*, 4 (4): 243-253. 10.1016/j.ecoinf.2009.07.002
- Armour, J.D.; Hateley, L.R.; Pitt, G.L., 2009. Catchment modelling of sediment, nitrogen and phosphorus nutrient loads with SedNet/ANNEX in the Tully-Murray basin. *Marine and Freshwater Research*, 60 (11): 1091-1096. 10.1071/mf08345
- Armstrong, J.; Armstrong, W., 2001. Rice and Phragmites: effects of organic acids on growth, root permeability, and radial oxygen loss to the rhizosphere. *American Journal of Botany*, 88 (8): 1359-1370. 10.2307/3558443
- Arndt, C.; Powell, J.M.; Aguerre, M.J.; Wattiaux, M.A., 2015. Performance, digestion, nitrogen balance, and emission of manure ammonia, enteric methane, and carbon dioxide in lactating cows fed diets with varying alfalfa silage-to-corn silage ratios. *Journal of Dairy Science*, 98 (1): 418-430. 10.3168/jds.2014-8298
- Arndt, S.; Lacroix, G.; Gypens, N.; Regnier, P.; Lancelot, C., 2011. Nutrient dynamics and phytoplankton development along an estuary-coastal zone continuum: A model study. *Journal of Marine Systems*, 84 (3-4): 49-66. 10.1016/j.jmarsys.2010.08.005
- Arnell, N.W.; Gosling, S.N., 2013. The impacts of climate change on river flow regimes at the global scale. *Journal of Hydrology*, 486: 351-364. 10.1016/j.jhydrol.2013.02.010
- Arnold, J.G.; Fohrer, N., 2005. SWAT2000: current capabilities and research opportunities in applied watershed modelling. *Hydrological Processes*, 19 (3): 563-572. 10.1002/hyp.5611
- Arnold, J.G.; Srinivasan, R.; Muttiah, R.S.; Williams, J.R., 1998. Large area hydrologic modeling and assessment - Part 1: Model development. *Journal of the American Water Resources Association*, 34 (1): 73-89. 10.1111/j.1752-1688.1998.tb05961.x
- Arnold, J.G.; Srinivasan, R.; Muttiah, R.S.; Williams, J.R., 1998. LARGE AREA HYDROLOGIC MODELING AND ASSESSMENT PART I: MODEL DEVELOPMENT1. *JAWRA Journal of the American Water Resources Association*, 34 (1): 73-89. 10.1111/j.1752-1688.1998.tb05961.x
- Arnold, J.G.; Williams, J.R.; Maidment, D.R., 1995. Continuous -time water and sediment routing model for large basins. *Journal of Hydraulic Engineering-Asce*, 121 (2): 171-183. 10.1061/(asce)0733-9429(1995)121:2(171)
- Arroyo, N.L.; Aarnio, K.; Mäensivu, M.; Bonsdorff, E., 2012. Drifting filamentous algal mats disturb sediment fauna: Impacts on macro-metazoan interactions. *Journal of Experimental Marine Biology and Ecology*, 420-421: 77-90. 10.1016/j.jembe.2012.03.020
- Art, H.W., 1993. *Dictionary of ecology and environmental science*. H. Holt
- Artell, J.; Ahtiainen, H.; Pouta, E., 2013. Subjective vs. objective measures in the valuation of water quality. *J Environ Manage*, 130: 288-96. 10.1016/j.jenvman.2013.09.007
- Arthaud, F.; Vallod, D.; Robin, J.; Bornette, G., 2012. Eutrophication and drought disturbance shape functional diversity and life-history traits of aquatic plants in shallow lakes. *Aquatic Sciences*, 74 (3): 471-481. 10.1007/s00027-011-0241-4
- Artioli, Y.; Bendoricchio, G.; Palmeri, L., 2005. Defining and modelling the coastal zone affected by the Po river (Italy). A special issue in memory of Giuseppe Bendoricchio, 184 (1): 55-68. 10.1016/j.ecolmodel.2004.11.008
- Asaeda, T.; Trung, V.K.; Manatunge, J., 2000. Modeling the effects of macrophyte growth and decomposition on the nutrient budget in Shallow Lakes. *Aquatic Botany*, 68 (3): 217-237. 10.1016/S0304-3770(00)00123-6
- Asaeda, T.; Trung, V.K.; Manatunge, J.; Van Bon, T., 2001. Modelling macrophyte-nutrient-phytoplankton interactions in shallow eutrophic lakes and the evaluation of environmental impacts. *Ecological Engineering*, 16 (3): 341-357. 10.1016/S0925-8574(00)00120-8
- Asano, T., 2007. Relationships between local environmental movements and the region: A case study of Lake Kasumigaura. *Japanese Journal of Human Geography*, 59 (4): 1-22
- Asaoka, S.; Yamamoto, T.; Yoshioka, I.; Tanaka, H., 2009. Remediation of coastal marine sediments using granulated coal ash. *Journal of Hazardous Materials*, 172 (1): 92-98. 10.1016/j.jhazmat.2009.06.140
- Ascough, J.C.; Baffaut, C.; Nearing, M.A.; Liu, B.Y., 1997. The WEPP watershed model .1. Hydrology and erosion. *Transactions of the Asae*, 40 (4): 921-933

- Ascough, J.C.; Flanagan, D.C.; Nearing, M.A.; Engel, B.A., 2013. Sensitivity and first-order/Monte Carlo uncertainty analysis of the WEPP hillslope erosion model. *Transactions of the Asabe*, 56 (2): 437-452
- Ashida, K.; Michiue, M., 1972. Studies on bed load transportation for nonuniform sediment and river bed variation. *Disaster Prevention Research Institute Annuals*.
- Ashley, K.; Cordell, D.; Mavinic, D., 2011. A brief history of phosphorus: From the philosopher's stone to nutrient recovery and reuse. *Chemosphere*, 84 (6): 737-746. 10.1016/j.chemosphere.2011.03.001
- Ashwood, L.; Harden, N.; Bell, M.M.; Bland, W., 2014. Linked and Situated: Grounded Knowledge. *Rural Sociology*, 79 (4): 427-452. 10.1111/ruso.12042
- Aspila, K.I.; Agemian, H.; Chau, A.S.Y., 1976. A semi-automated method for the determination of inorganic, organic and total phosphate in sediments. *Analyst*, 101 (1200): 187-197. 10.1039/AN9760100187
- Assmuth, T., 2011. Policy and science implications of the framing and qualities of uncertainty in risks: Toxic and beneficial fish from the baltic sea. *Ambio*, 40 (2): 158-169. 10.1007/s13280-010-0127-z
- Atech, 2000. *Cost of algal blooms*. Canberra, ACT, Australia: Land and Water Resources Research and Development Corporation.
- Athearn, K., 2008. Economic losses from closure of shellfish harvesting areas in Maine. *University of Maine at Machias. Economic Value of Shellfish Conservation in Maine*:
- Aubin, J.; Papatryphon, E.; Van der Werf, H.; Chatzifotis, S., 2009. Assessment of the environmental impact of carnivorous finfish production systems using life cycle assessment. *Journal of Cleaner Production*, 17 (3): 354-361
- Aubry, C.; Barbier, R.; Lupton, S.; Pradel, M., 2014. Dimensions économique et sociotechnique de l'épandage des Mafor. *Rapport final de l'ESCo "Matières fertilisantes d'origine résiduaire*.
- Auby, I.; Manaud, F.; Maurer, D.; Trut, G., 1994. Etude de la prolifération des algues vertes dans le bassin d'Arcachon. *Etude IFREMER-CEMAGREF-SSASARBAC.Plouzané, France: IFREMER*, 146 p:
- Audet, J.; Martinsen, L.; Hasler, B.; Jonge, H.d.; Karydi, E.; Ovesen, N.B.; Kronvang, B., 2014. Comparison of sampling methodologies for nutrient monitoring in streams: uncertainties, costs and implications for mitigation. *Hydrology and Earth System Sciences*, 18 (11): 4721-4731
- Auer, B., 2004. Comparison of pelagic food webs in lakes along a trophic gradient and with seasonal aspects: influence of resource and predation. *Journal of Plankton Research*, 26 (6): 697-709. 10.1093/plankt/fbh058
- Auffrey, L.M.; Robinson, S.M.C.; Barbeau, M.A., 2004. Effect of green macroalgal mats on burial depth of soft-shelled clams Mya arenaria. *Marine Ecology Progress Series*, 278: 193–203. 10.3354/meps278193
- Aukerman, C., 2004. Agricultural diffuse pollution controls: Lessons for Scotland from the Chesapeake Bay watershed. *Journal of Land Use and Environmental Law*, 20 (1): 77
- Ayong Le Kama, A.; Pommeret, A.; Prieur, F., 2014. Optimal Emission Policy under the Risk of Irreversible Pollution. *Journal of Public Economic Theory*, 16 (6): 959-980. 10.1111/jpet.12085
- Azevedo, L.B.; Henderson, A.D.; van Zelm, R.; Jolliet, O.; Huijbregts, M.A.J., 2013. Assessing the Importance of Spatial Variability versus Model Choices in Life Cycle Impact Assessment: The Case of Freshwater Eutrophication in Europe. *Environmental Science & Technology*, 47 (23): 13565-13570. 10.1021/es403422a
- Azevedo, L.B.; Zelm, R.; Elshout, P.M.; Hendriks, A.J.; Leuven, R.S.; Struijs, J.; Zwart, D.; Huijbregts, M.A., 2013. Species richness-phosphorus relationships for lakes and streams worldwide. *Global Ecology and Biogeography*, 22 (12): 1304-1314
- Azinheira, D.L.; Scott, D.T.; Hession, W.; Hester, E.T., 2014. Comparison of effects of inset floodplains and hyporheic exchange induced by in-stream structures on solute retention. *Water Resources Research*, 50 (7): 6168-6190. 10.1002/2013wr014400
- Baatrup-Pedersen, A.; Göthe, E.; Riis, T.; O'Hare, M.T., 2016. Functional trait composition of aquatic plants can serve to disentangle multiple interacting stressors in lowland streams. *Science of the Total Environment*, 543, Part A: 230-238. <http://dx.doi.org/10.1016/j.scitotenv.2015.11.027>
- Bacher, C.; Millet, B.; Vaquer, A., 1997. Modelling the impact of cultivated filter-feeders on phytoplanktonic biomass of the Thau lagoon (France). *Comptes Rendus De L Academie Des Sciences Serie Iii-Sciences De La Vie-Life Sciences*, 320 (1): 73-81. 10.1016/s0764-4469(99)80089-4
- Backer, L.C., 2009. Impacts of Florida red tides on coastal communities. *Harmful Algae*, 8 (4): 618-622. 10.1016/j.hal.2008.11.008
- Backorova, M.; Maslanakova, I.; Backor, M., 2016. Copper uptake and copper-induced physiological changes in the marine alga Cladophora prolifera (Roth.) Kutz. (Chlorophyta, Ulvophyceae). *BRAZILIAN JOURNAL OF BOTANY*, 39 (2): 447–452. 10.1007/s40415-016-0251-5
- Baden, S.; Bostrom, C.; Tobiasson, S.; Arponen, H.; Moksnes, P.O., 2010. Relative importance of trophic interactions and nutrient enrichment in seagrass ecosystems: A broad-scale field experiment in the Baltic-Skagerrak area. *Limnology and Oceanography*, 55 (3): 1435-1448. 10.4319/lo.2010.55.3.1435
- Baeta, A.; Niquil, N.; Marques, J.C.; Patricio, J., 2011. Modelling the effects of eutrophication, mitigation measures and an extreme flood event on estuarine benthic food webs. *Ecological Modelling*, 222 (6): 1209-1221. 10.1016/j.ecolmodel.2010.12.010
- Baeta, A.; Valielas, I.; Rossi, F.; Pinto, R.; Richard, P.; Niquil, N.; Marques, J.C., 2009. Eutrophication and trophic structure in response to the presence of the eelgrass Zostera noltii. *Marine Biology*, 156 (10): 2107-2120. 10.1007/s00227-009-1241-y
- Bagnold, R.A., 1977. Bed load transport by natural rivers. *Water Resources Research*, 13 (2): 303-312. 10.1029/WR013i002p00303

- Bailey, J.; Van Ardelan, M.; Hernández, K.; González, H.; Iriarte, J.; Olsen, L.; Salgado, H.; Tiller, R., 2015. Interdisciplinarity as an Emergent Property: The Research Project "CINTERA" and the Study of Marine Eutrophication. *Sustainability*, 7 (7): 9118
- Baird, M.E.; Walker, S.J.; Wallace, B.B.; Webster, I.T.; Parslow, J.S., 2003. The use of mechanistic descriptions of algal growth and zooplankton grazing in an estuarine eutrophication model. *Estuarine Coastal and Shelf Science*, 56 (3-4): 685-695. 10.1016/s0272-7714(02)00219-6
- Bakker, E.S.; Van Donk, E.; Declerck, S.A.J.; Helmsing, N.R.; Hidding, B.; Nolet, B.A., 2010. Effect of macrophyte community composition and nutrient enrichment on plant biomass and algal blooms. *Basic and Applied Ecology*, 11 (5): 432-439. 10.1016/j.baae.2010.06.005
- Bakker, E.S.; Van Donk, E.; Immers, A.K., 2016. Lake restoration by in-lake iron addition: a synopsis of iron impact on aquatic organisms and shallow lake ecosystems. *Aquatic Ecology*, 50 (1): 121-135. 10.1007/s10452-015-9552-1
- Bakker, E.S.; Wood, K.A.; Pagès, J.F.; Veen, G.F.C.; Christianen, M.J.A.; Santamaría, L.; Nolet, B.A.; HILT, S., 2016. Herbivory on freshwater and marine macrophytes: A review and perspective. *Aquatic Botany*: 1-19. 10.1016/j.aquabot.2016.04.008
- Balana, B.B.; Lago, M.; Baggaley, N.; Castellazzi, M.; Sample, J.; Stutter, M.; Slee, B.; Vinten, A., 2012. Integrating economic and biophysical data in assessing cost-effectiveness of buffer strip placement. *Journal of Environmental Quality*, 41 (2): 380-388. 10.2134/jeq2010.0544
- Balcerzak, W., 2006. The Protection of Reservoir Water against the Eutrophication Process. *Polish Journal of Environmental Studies*, 15 (6):
- Baldacci, C.; Sfriso, A.; Pavoni, B., 2001. Macrofauna impact on *Ulva rigida* C. Ag. production and relationship with environmental variables in the lagoon of Venice. *Marine Environmental Research*, 52 (1): 27-49. 10.1016/s0141-1136(00)00259-2
- Baldwin, J., 2000. Tourism development, wetland degradation and beach erosion in Antigua, West Indies. *Tourism Geographies*, 2 (2): 193-218
- Balzer, W.; Boehler, E.; Tang, X.; Ren, J.; Zhang, J.; Wang, D., 2013. Arsenic in solution, colloidal and particulate phases of East-Hainan estuaries. *Continental Shelf Research*, 57: 73-81. 10.1016/j.csr.2012.04.005
- Bankoff, G., 1999. Societies in conflict: algae and humanity in the Philippines. *Environ Hist Camb*, 5 (1): 97-123
- Bao, M.; Guan, W.B.; Wang, Z.L.; Wang, D.F.; Cao, Z.Y.; Chen, Q., 2015. Features of the physical environment associated with green tide in the southwestern Yellow Sea during spring. *Acta Oceanologica Sinica*, 34 (7): 97-104. 10.1007/s13131-015-0692-x
- Barataud, F., 2016. La rencontre entre agriculture et politiques de l'eau : une épreuve mutuelle (projet AGEPEAU). In: Goeldener-Gianella, L.; Barreteau, O.; Euzen, A.; Pinon-Leconte, M.; Gautier, Q.; Arnould, P., eds. *Concilier la gestion de l'eau et des territoires*. Paris: Editions Johanet, 321-336
- Barataud, F.; Barbier, M.; Benoît, M.; Blouët, A.; Hellec, F.; Levain, A.; Petit, S.; Trévisan, D., 2013. *L'agriculture à l'épreuve des politiques de l'eau. Rapport de recherche INRA au programme Eaux et Territoires, Ministère de l'Ecologie et du Développement Durable*, 87.
- Barausse, A.; Duci, A.; Mazzoldi, C.; Artioli, Y.; Palmeri, L., 2009. Trophic network model of the Northern Adriatic Sea: Analysis of an exploited and eutrophic ecosystem. *Estuarine Coastal and Shelf Science*, 83 (4): 577-590. 10.1016/j.ecss.2009.05.003
- Barba-Brioso, C.; Quaranta, G.; Galan, E.; Fernandez-Caliani, J.C.; Miras, A., 2010. The life cycle impact assessment applied to the Domingo Rubio tidal system by the study of seasonal variations of the aquatic eutrophication potential. *Science of the Total Environment*, 408 (23): 5897-5902. 10.1016/j.scitotenv.2010.08.002
- Barbe, J.; Lafont, M.; Mallet, L.; Mouthon, J.; PHILIPE, M.; Vey, V., 2003. Actualisation de la méthode de diagnose rapide des plans d'eau: analyse critique des indices de qualité des lacs et propositions d'indices de fonctionnement de l'écosystème lacustre. *Cemagref, Lyon*: 107
- Barbier, E.B., 2007. Valuing Ecosystem Services as Productive Inputs. *Economic Policy*, (49): 177. 10.1111/j.1468-0327.2007.00174.x
- Barbier, E.B.; Hacker, S.D.; Kennedy, C.; Koch, E.W.; Stier, A.C.; Silliman, B.R., 2011. The value of estuarine and coastal ecosystem services. *Ecological Monographs*, 81 (2): 169-193. 10.1890/10-1510.1
- Barbier, M., 2011. L'eau minérale naturelle ou le paradoxe de la pureté originelle. *Humains, non-humains*. Paris: La Découverte, 22-29
- Bárcena, J.F.; Gómez, A.G.; García, A.; Álvarez, C.; Juanes, J.A., 2017. Quantifying and mapping the vulnerability of estuaries to point-source pollution using a multi-metric assessment: The Estuarine Vulnerability Index (EVI). *Ecological Indicators*, 76: 159-169. <http://dx.doi.org/10.1016/j.ecolind.2017.01.015>
- Barendregt, A.; Bio, A.M.F., 2003. Relevant variables to predict macrophyte communities in running waters. *Modelling the structure of aquatic communities: concepts, methods and problems.*, 160 (3): 205-217. 10.1016/S0304-3800(02)00254-5
- Barendregt, A.; Stam, S.M.E.; Wassen, M.J., 1992. Restoration of fen ecosystems in the Vecht River plain: cost-benefit analysis of hydrological alternatives. *Hydrobiologia*, 233 (1-3): 247-259. 10.1007/BF00016113
- Baretta, J.W.; Ruardij, P.; Vested, H.J.; Barettabekker, J.G., 1994. Eutrophication modeling of the Nort-sea - 2 different approaches. *Ecological Modelling*, 75: 471-483. 10.1016/0304-3800(94)90041-8

- Baretta-Bekker, J.G.; Baretta, J.W.; Ebenhoh, W., 1997. Microbial dynamics in the marine ecosystem model ERSEM II with decoupled carbon assimilation and nutrient uptake. *Journal of Sea Research*, 38 (3-4): 195-211. 10.1016/s1385-1101(97)00052-x
- Barker, T.; Hatton, K.; O'Connor, M.; Connor, L.; Moss, B., 2008. Effects of nitrate load on submerged plant biomass and species richness: results of a mesocosm experiment. *Fundamental and Applied Limnology*, 173 (2): 89-100. 10.1127/1863-9135/2008/0173-0089
- Barko, J.W., 1982. Influence of potassium source (sediment vs. open water) and sediment composition on the growth and nutrition of a submersed freshwater macrophyte (*Hydrilla verticillata*) (L.f. Royle). *Aquatic Botany*, 12: 157-172
- Barr, N.G.; Dudley, B.D.; Rogers, K.M.; Cornelisen, C.D., 2013. Broad-scale patterns of tissue-delta N-15 and tissue-N indices in frondose *Ulva* spp.; Developing a national baseline indicator of nitrogen-loading for coastal New Zealand. *Marine Pollution Bulletin*, 67 (1-2): 203-216. 10.1016/j.marpolbul.2012.11.033
- Barr, N.G.; Rees, T.A.V., 2003. Nitrogen status and metabolism in the green seaweed *Enteromorpha intestinalis*: an examination of three natural populations. *Marine Ecology Progress Series*, 249: 133-144. 10.3354/meps249133
- Barr, N.G.; Tijssen, R.J.; Rees, T.A.V., 2004. Contrasting effects of methionine sulfoximine on uptake and assimilation of ammonium in *Ulva intestinalis* (Chlorophyceae). *Journal of Phycology*, 40 (4): 697-704. 10.1111/j.1529-8817.2004.04004.x
- Barraqué, B., 2001. De l'appropriation à l'usage : l'eau, patrimoine commun. *Genèse du droit de l'environnement. Droits des espaces naturels et des pollutions*. L'Harmattan, Vol.II, 213-239
- Barraqué, B., 2001. Les enjeux de la Directive cadre sur l'eau de l'Union Européenne. *Flux*, 46 (4): 70-75. 10.3917/flux.046.0070
- Barraqué, B., 2012. L'évolution de la gestion de l'eau et l'impact de la politique européenne. Séminaire « L'eau et sa disponibilité : rivalités et risques ». Paris: 7 mars 2012 Institut des Hautes Etudes pour la Science et la Technologie
- Barraqué, B.; Viauvattene, C., 2009. Eau des Villes et Eau des Champs. *Économie rurale*. 10.4000/economierurale.708
- Barroin, G., 1976. La lutte contre l'eutrophisation. *Aménagement et Nature*, 44: 21-23
- Barroin, G., 1991. La réhabilitation des plans d'eau. *La Recherche*, 22 (238): 1412-1422
- Barroin, G., 1999. Limnologie appliquée au traitement des lacs et des plans d'eau. *Les Études des Agences de l'eau*, (62): 214
- Barroin, G., 2004. Phosphore, azote, carbone... du facteur limitant au facteur de maîtrise. *Le Courier de l'environnement de l'INRA*, 52:
- Barrow, N.J., 1983. A discussion of the methods for measuring the rate of reaction between soil and phosphate. *Fertilizer Research*, 4 (1): 51-61. 10.1007/bf01049666
- Barrow, N.J., 2015. Soil phosphate chemistry and the P-sparing effect of previous phosphate applications. *Plant and Soil*, 397 (1-2): 401-409. 10.1007/s11104-015-2514-5
- Barthel, P.-A., 2006. Aménager la lagune de Tunis : un modèle d'urbanisme et de développement durable ? *Autrepart*, 39 (3): 129-146. 10.3917/autr.039.0129
- Barthel, P.-A., 2006. Mondialisation, urbanité et néo-maritimité : la corniche du Lac de Tunis. *L'Espace géographique*, 35 (2): 177-187
- Barthelemy, N.; Serrano, O.; Posada, F.; Casabianca, M.L.d.; Sfriso, A., 2001. Role of abiotic factors on the growth rate in *Ulva rigida* from two southern sites. *Vie Et Milieu-Life and Environment*, 51 (1-2): 21-28
- Bartlett, K.B.; Bartlett, D.S.; Harriss, R.C.; Sebacher, D.I., 1987. Methane emissions along a salt-marsh salinity gradient. *Biogeochemistry*, 4 (3): 183-202. 10.1007/bf02187365
- Bartlett, R.; Mortimer, R.J.G.; Morris, K., 2008. Anoxic nitrification: Evidence from Humber Estuary sediments (UK). *Chemical Geology*, 250 (1-4): 29-39. 10.1016/j.chemgeo.2008.02.001
- Bartoli, M.; Cattadori, M.; Giordani, G.; Viaroli, P., 1996. Benthic oxygen respiration, ammonium and phosphorus regeneration in surficial sediments of the Sacca di Goro (Northern Italy) and two French coastal lagoons: A comparative study. *Hydrobiologia*, 329 (1-3): 143-159. 10.1007/bf00034554
- Barton, D.; Saloranta, T.; Moe, J.; Eggestad, H.O.; Kuikka, S., 2008. *Bayesian Belief Networks as a Meta-Modelling Tool in Integrated River Basin Management – Pros and Cons in Evaluating Nutrient Abatement Decisions Under Uncertainty in a Norwegian River Basin*. 10.1016/j.ecolecon.2008.02.012
- Barton, D.N.; Saloranta, T.; Moe, S.J.; Eggestad, H.O.; Kuikka, S., 2008. Bayesian belief networks as a meta-modelling tool in integrated river basin management - Pros and cons in evaluating nutrient abatement decisions under uncertainty in a Norwegian river basin. *Ecological Economics*, 66 (1): 91-104. 10.1016/j.ecolecon.2008.02.012
- Bartout, P.; Touchart, L., 2013. L'inventaire des plans d'eau français : outil d'une meilleure gestion des eaux de surface. *Annales de géographie*, 691 (3): 266-289. 10.3917/ag.691.0266
- Bartram, J.; Carmichael, W.; Chorus, I.; Jones, G.; Skulberg, O., 1999. Introduction. *Toxic Cyanobacteria in Water*. E & FN Spon ed. London and New York: Chorus I. and Bartram J.
- Bas, A.; Gastineau, P.; Hay, J.; Levrel, H., 2013. Environmental compensation using habitat and resource equivalency analysis. *Revue d'Economie Politique*, 123 (1): 127-157. 10.3917/redp.231.0127
- Basset-Mens, C.; Anibar, L.; Durand, P.; van der Werf, H.M.G., 2006. Spatialised fate factors for nitrate in catchments: Modelling approach and implication for LCA results. *Science of the Total Environment*, 367 (1): 367-382. 10.1016/j.scitotenv.2005.12.026
- Bastyan, G.R.; Cambridge, M.L., 2008. Transplantation as a method for restoring the seagrass *Posidonia australis*. *Estuarine Coastal and Shelf Science*, 79 (2): 289-299. 10.1016/j.ecss.2008.04.012
- Batabyal, A.A.; Kahn, J.R.; O'Neill, R.V., 2003. On the Scarcity Value of Ecosystem Services. *Journal of Environmental Economics and Management*, 46 (2): 334-352. 10.1016/S0095-0696(02)00040-2

- Batega, D.W., 2006. Water pollution and social construction of health risks in urban Uganda: community perceptions, water use and burden of disease in Murchison Bay area, Kampala City. *11 th World Lakes Conference*. 106-108
- Bateman, A.; van der Horst, D.; Boardman, D.; Kansal, A.; Carliell-Marquet, C., 2011. Closing the phosphorus loop in England: The spatio-temporal balance of phosphorus capture from manure versus crop demand for fertiliser. *Resources Conservation and Recycling*, 55 (12): 1146-1153. 10.1016/j.resconrec.2011.07.004
- Bateman, I., 2006. Cost-Benefit Analysis and the Prevention of Eutrophication. In: Pearce, D., ed. *Environmental Valuation in Developed Countries: Case Studies*. Cheltenham, U.K. and Northampton, Mass.: Elgar, 317-342
- Baticle, C., 2015. Le tiers scientifique, nouvel acteur dans les conflits de nature entre chasseurs et environnementalistes. *Négociations*, 24 (2): 117-130. 10.3917/neg.024.0117
- Batsula, A.A.; Krivonos.Gm, 1973. Phosphorus in humic and fulvic acids of some ukrainian soils. *SOVIET SOIL SCIENCE*, 5 (3): 347-350
- Battoe, L.E.; Coveney, M.F.; Lowe, E.F.; Stites, D.L., 1999. *The role of phosphorus reduction and export in the restoration of Lake Apopka, Florida. (Phosphorus Biogeochemistry in Subtropical Ecosystems)*
- Baturin, G.N.; Chalov, P.I.; Merkulov.Ki, 1972. Radiometric evidence for recent formation of phosphatic nodules in marine shelf sediments. *Marine Geology*, 13 (3): M37-&
- Baustian, M.M.; Rabalais, N.N.; Morrison, W.L.; Turner, R.E., 2011. Seasonal microphytobenthos on the hypoxic northern Gulf of Mexico continental shelf. *Marine Ecology Progress Series*, 436: 51-66. 10.3354/meps09262
- Baustian, M.M.; Rabalais, N.N.; Morrison, W.L.; Turner, R.E., 2013. Microphytobenthos along the Louisiana continental shelf during mid-summer hypoxia. *Continental Shelf Research*, 52: 108-118. 10.1016/j.csr.2012.10.014
- Beal, E.J.; House, C.H.; Orphan, V.J., 2009. Manganese- and Iron-Dependent Marine Methane Oxidation. *Science*, 325 (5937): 184-187. 10.1126/science.1169984
- Beasley, D.B.; Huggins, L.F.; Monke, E.J., 1980. ANSWERS - A model for watershed planning. *Transactions of the Asae*, 23 (4): 938-944
- Beaudoin, N.; Saad, J.K.; Van Laethem, C.; Machet, J.M.; Maucorps, J.; Mary, B., 2005. Nitrate leaching in intensive agriculture in Northern France: Effect of farming practices, soils and crop rotations. *Agriculture, Ecosystems & Environment*, 111 (1-4): 292-310. 10.1016/j.agee.2005.06.006
- Beaugrand, G., 2004. The North Sea regime shift: evidence, causes, mechanisms and consequences. *Progress in Oceanography*, 60 (2-4): 245-262. 10.1016/j.pocean.2004.02.018
- Beaugrand, G.; Edwards, M.; Raybaud, V.; Goberville, E.; Kirby, R.R., 2015. Future vulnerability of marine biodiversity compared with contemporary and past changes. *Nature Climate Change*, 5 (7): 695-+. 10.1038/nclimate2650
- Beaujouan, V.; Durand, P.; Ruiz, L., 2001. Modelling the effect of the spatial distribution of agricultural practices on nitrogen fluxes in rural catchments. *Ecological Modelling*, 137 (1): 93-105. 10.1016/s0304-3800(00)00435-x
- Beaver, E.R., 2005. Adding benefits to Cost Assessment; a more balanced tool. 143-152
- Becheri, E., 1991. Rimini and Co -the end of a legend: dealing with the algae effect. *Tourism Management*, 12 (3): 229-235. 10.1016/0261-5177(91)90007-G
- Beck, M.W.; Brumbaugh, R.D.; Airolidi, L.; Carranza, A.; Coen, L.D.; Crawford, C.; Defeo, O.; Edgar, G.J.; Hancock, B.; Kay, M.C.; Lenihan, H.S.; Luckenbach, M.W.; Toropova, C.L.; Zhang, G.; Guo, X., 2011. Oyster Reefs at Risk and Recommendations for Conservation, Restoration, and Management. *Bioscience*, 61 (2): 107-116. 10.1525/bio.2011.61.2.5
- Beck, M.W.; Heck, K.L.; Able, K.W.; Childers, D.L.; Eggleston, D.B.; Gillanders, B.M.; Halpern, B.; Hays, C.G.; Hoshino, K.; Minello, T.J.; Orth, R.J.; Sheridan, P.F.; Weinstein, M.P., 2001. The Identification, Conservation, and Management of Estuarine and Marine Nurseries for Fish and Invertebrates. *Bioscience*, 51 (8): 633-641. 10.1641/0006-3568(2001)051[0633:ticamo]2.0.co;2
- Beck, N.G.; Fisher, A.T.; Bruland, K.W., 2001. Modeling water, heat, and oxygen budgets in a tidally dominated estuarine pond. *Marine Ecology Progress Series*, 217: 43-58. 10.3354/meps217043
- Beeton, A.M., 2002. Large freshwater lakes: present state, trends, and future. *Environmental Conservation*, 29 (1): 21-38. 10.1017/s0376892902000036
- Behrenfeld, M.J.; Halsey, K.H.; Milligan, A.J., 2008. Evolved physiological responses of phytoplankton to their integrated growth environment. *Philosophical Transactions of the Royal Society B-Biological Sciences*, 363 (1504): 2687-2703. 10.1098/rstb.2008.0019
- Behrenfeld, M.J.; Prasıl, O.; Badin, M.; Bruyant, F., 2004. In search of a physiological basis for covariations in light-limited and light-saturated photosynthesis. *Journal of Phycology*, 40: 4-25
- Belaidi, N.; Euzen, A., 2009. De la chose commune au patrimoine commun.. Regards croisés sur les valeurs sociales de l'accès à l'eau. *Mondes en développement*, 145 (1): 55-72. 10.3917/med.145.0055
- Belhouchette, H.; Louhichi, K.; Therond, O.; Mouratiadou, I.; Wery, J.; Van Ittersum, M.; Flichman, G., 2011. Assessing the impact of the Nitrate Directive on farming systems using a bio-economic modelling chain. *Agricultural Systems*, 104 (2): 135-145. 10.1016/j.agbsy.2010.09.003
- Bell, P.R., 1991. Status of eutrophication in the Great Barrier Reef lagoon. *Marine Pollution Bulletin*, 23: 89-93
- Bell, S.S.; Tewfik, A.; Hall, M.O.; Fonseca, M.S., 2008. Evaluation of seagrass planting and monitoring techniques: Implications for assessing restoration success and habitat equivalency. *Restoration Ecology*, 16 (3): 407-416. 10.1111/j.1526-100X.2007.00308.x
- Bell, V.A.; George, D.G.; Moore, R.J.; Parker, J., 2006. Using a 1-D mixing model to simulate the vertical flux of heat and oxygen in a lake subject to episodic mixing. *Ecological Modelling*, 190: 41-54

- Belov, A.P.; Giles, J.D., 1997. Dynamical model of buoyant cyanobacteria. *Hydrobiologia*, 349 (1-3): 87-97. 10.1023/A:1003049629490
- Ben Maïd, A.; Devaux, J.; Willy Thao Khamsing, W.T., 2014. *Ressources en eau : perception et consommation des Français – résultats d'enquête Collection Études et documents*
- Benbi, D.; Richter, J., 2002. A critical review of some approaches to modelling nitrogen mineralization. *Biology and Fertility of Soils*, 35 (3): 168-183. 10.1007/s00374-002-0456-6
- Bencala, K.E., 1993. A Perspective on Stream-Catchment Connections. *Journal of the North American Benthological Society*, 12 (1): 44-47. 10.2307/1467684
- Benckiser, G.; Schartel, T.; Weiske, A., 2015. Control of NO<sub>3</sub> – and N<sub>2</sub>O emissions in agroecosystems: A review. *Agronomy for Sustainable Development*, 35 (3): 1059-1074. 10.1007/s13593-015-0296-z
- Bendoricchio, G.; Coffaro, G.; Demarchi, C., 1994. A trophic model for *ulva-rigida* in the lagoon of Venice. *Ecological Modelling*, 75: 485-496. 10.1016/0304-3800(94)90042-6
- Bendtsen, J.; Hansen, J.L.S., 2013. Effects of global warming on hypoxia in the Baltic Sea-North Sea transition zone. *Ecological Modelling*, 264: 17-26. 10.1016/j.ecolmodel.2012.06.018
- Benhamou, C.; Salmon-Monviola, J.; Durand, P.; Grimaldi, C.; Merot, P., 2013. Modeling the interaction between fields and a surrounding hedgerow network and its impact on water and nitrogen flows of a small watershed. *Agricultural Water Management*, 121: 62-72. 10.1016/j.agwat.2013.01.004
- Beninca, E.; Dakos, V.; Van Nes, E.H.; Huisman, J.; Scheffer, M., 2011. Resonance of plankton communities with temperature fluctuations. *The American Naturalist*, 178 (4): E85-E95
- Benincà, E.; Huisman, J.; Heerkloss, R.; Jöhnk, K.D.; Branco, P.; Van Nes, E.H.; Scheffer, M.; Ellner, S.P., 2008. Chaos in a long-term experiment with a plankton community. *Nature*, 451 (7180): 822
- Beniston, M., 2006. Mountain Weather and Climate: A General Overview and a Focus on Climatic Change in the Alps.
- Benitez-Nelson, C.R., 2000. The biogeochemical cycling of phosphorus in marine systems. *Earth-Science Reviews*, 51 (1-4): 109-135. 10.1016/s0012-8252(00)00018-0
- Bennion, H.; Hilton, J.; Hughes, M.; Clark, J.; Hornby, D.; Fozzard, I.; Phillips, G.; Reynolds, C., 2005. The use of a GIS-based inventory to provide a national assessment of standing waters at risk from eutrophication in Great Britain. *Science of the Total Environment*, 344 (1): 259-273
- Bennion, H.; Juggins, S.; Anderson, N.J., 1996. Predicting epilimnetic phosphorus concentrations using an improved diatom-based transfer function and its application to lake eutrophication management. *Environmental Science & Technology*, 30 (6): 2004-2007
- Benoit, M.; Garnier, J.; Anglade, J.; Billen, G., 2014. Nitrate leaching from organic and conventional arable crop farms in the Seine Basin (France). *Nutrient Cycling in Agroecosystems*, 100 (3): 285-299. 10.1007/s10705-014-9650-9
- Benoit, P.; Gratton, Y.; Mucci, A., 2006. Modeling of dissolved oxygen levels in the bottom waters of the Lower St. Lawrence Estuary: Coupling of benthic and pelagic processes. *Marine Chemistry*, 102 (1-2): 13-32. 10.1016/j.marchem.2005.09.015
- Benzecri, J.P., 1979. Sur le calcul des taux d'inertie dans l'analyse d'un questionnaire, addendum et erratum à [BIN. MULT.]. *Cahiers de l'Analyse des Données*, 4 (3): 377-378
- Bérard, A.; Dorigo, U.; Mercier, I.; Becker-van Slooten, K.; Grandjean, D.; Leboulanger, C., 2003. Comparison of the ecotoxicological impact of the triazines Irgarol 1051 and atrazine on microalgal cultures and natural microalgal communities in Lake Geneva. *Chemosphere*, 53 (8): 935-944
- Berdelet, E.; Fleming, L.E.; Gowen, R.; Davidson, K.; Hess, P.; Backer, L.C.; Moore, S.K.; Hoagland, P.; Enevoldsen, H., 2016. Marine harmful algal blooms, human health and wellbeing: challenges and opportunities in the 21st century. *Journal of the Marine Biological Association of the United Kingdom*, 96 (1): 61-91. 10.1017/s0025315415001733
- Berelson, W.M.; Hammond, D.E.; Cutter, G.A., 1990. Insitu measurements of calcium-carbonate dissolution rates in deep-sea sediments. *Geochimica Et Cosmochimica Acta*, 54 (11): 3013-3020. 10.1016/0016-7037(90)90118-5
- Berezina, N.A.; Golubkov, S.M., 2008. Effect of drifting macroalgae *Cladophora glomerata* on benthic community dynamics in the easternmost Baltic Sea. *Journal of Marine Systems*, 74: S80-S85. 10.1016/j.jmarsys.2008.03.027
- Berezina, N.A.; Golubkov, S.M., 2008. Responses of Coastal Zoobenthos to Stress Induced by Drifting Algae in the Neva Estuary. *2008 IEEE/OES US/EU-Baltic International Symposium*. 294–297
- Berezina, N.A.; Tsiplenkina, I.G.; Pankova, E.S.; Gubelit, J.I., 2007. Dynamics of invertebrate communities on the stony littoral of the Neva Estuary (Baltic Sea) under macroalgal blooms and bioinvasions. *Transitional Waters Bulletin*, 1 (1): 65-76
- Bergamasco, A.; Zago, C., 1999. Exploring the nitrogen cycle and macroalgae dynamics in the lagoon of Venice using a multibox model. *Estuarine Coastal and Shelf Science*, 48 (2): 155-175. 10.1006/ecss.1998.0418
- Berger, R.; Bergström, L.; Gran, E.; Kautsky, L., 2004. How does eutrophication affect different life stages of *Fucus vesiculosus* in the Baltic Sea ? – a conceptual model. 243-248
- Berger, R.; Bergstrom, L.; Graneli, E.; Kautsky, L., 2004. How does eutrophication affect different life stages of *Fucus vesiculosus* in the Baltic Sea? a conceptual model. *Hydrobiologia*, 514 (1-3): 243-248. 10.1023/B:hydr.0000018222.44511.b7
- Berger, Y.; Conde, J.; Hubert, C.; Rathouis, P.C.; Roussel, F., 2015. *Evaluation du volet préventif du plan 2010-2015 de lutte contre les algues vertes en Bretagne*: Ministères en charge de l'écologie et de l'agriculture
- Bergstrom, L.; Berger, R.; Kautsky, L., 2003. Negative direct effects of nutrient enrichment on the establishment of *Fucus vesiculosus* in the Baltic Sea. *European Journal of Phycology*, 38 (1): 41–46. 10.1080/0967026031000096236

- Bergstrom, U.; Sundblad, G.; Downie, A.L.; Snickars, M.; Bostrom, C.; Lindegarth, M., 2013. Evaluating eutrophication management scenarios in the Baltic Sea using species distribution modelling. *Journal of Applied Ecology*, 50 (3): 680-690. 10.1111/1365-2664.12083
- Berkes, F., 1984. Competition between commercial and sport fishermen: An ecological analysis. *Human Ecology*, 12 (4): 413-429. 10.1007/BF01531126
- Berkes, F.; Folke, C., 1998. Linking social and ecological systems : management practices and social mechanisms for building resilience. In: Berkes, F.; Folke, C.; Colding, J., eds. Cambridge, U.K. Cambridge University Press.
- Bernardina, S.D., 2000. "Algues tueuses" et autres fléaux. Pour une anthropologie de l'imaginaire écologique en milieu marin: le cas de Caulerpa taxifolia. *La Ricerca Folklorica*, (42): 43-55. 10.2307/1479976
- Bernard-Jannin, L.; Brito, D.; Sun, X.; Jauch, E.; Neves, R.; Sauvage, S.; Sánchez-Pérez, J.-M., 2016. Spatially distributed modelling of surface water-groundwater exchanges during overbank flood events – a case study at the Garonne River. *Advances in Water Resources*, 94: 146-159. 10.1016/j.advwatres.2016.05.008
- Bernard-Sylvestre, A.; Euzen, A., 2013. Témoignage : L'eau à Paris : quelles perceptions ont les usagers ? *Sciences Eaux & Territoires*, Numéro 10 (1): 36-41
- Beroya-Eitner, M.A., 2016. Ecological vulnerability indicators. *Ecological Indicators*, 60: 329-334. <http://dx.doi.org/10.1016/j.ecolind.2015.07.001>
- Bessy, C.; Chateauraynaud, F., 1995. *Pour une sociologie de la perception*. Métailié
- Bethke, C.M.; Sanford, R.A.; Kirk, M.F.; Jin, Q.S.; Flynn, T.M., 2011. The thermodynamic ladder in geomicrobiology. *American Journal of Science*, 311 (3): 183-210. 10.2475/03.2011.01
- Beuret, J.E.; Trehet, C., 2004. Pour la gestion concertée de l'espace rural: appuyer des médiations territoriales. *Le Courier de l'environnement de l'INRA*, 43: 15
- Beusen, A.H.W.; Bouwman, A.F.; Van Beek, L.P.H.; Mogollon, J.M.; Middelburg, J.J., 2016. Global riverine N and P transport to ocean increased during the 20th century despite increased retention along the aquatic continuum. *Biogeosciences*, 13 (8): 2441-2451. 10.5194/bg-13-2441-2016
- Beutel, M.W.; Horne, A.J., 1999. A review of the effects of hypolimnetic oxygenation on lake and reservoir water quality. *Lake and Reservoir Management*, 15 (4): 285-297
- Beven, K.J.; Kirkby, M.J.; Schofield, N.; Tagg, A.F., 1984. TESTING A PHYSICALLY-BASED FLOOD FORECASTING-MODEL (TOPMODEL) FOR 3 UK CATCHMENTS. *Journal of Hydrology*, 69 (1-4): 119-143. 10.1016/0022-1694(84)90159-8
- Bhattarai, H.D.; Paudel, B.; Park, N.-S.; Lee, K.S.; Shin, H.-W., 2007. Evaluation of antifouling activity of eight commercially available organic chemicals against the early foulers marine bacteria and *Ulva* spores. *Journal of Environmental Biology*, 28 (4): 857–863
- Bianchi, D.; Dunne, J.P.; Sarmiento, J.L.; Galbraith, E.D., 2012. Data-based estimates of suboxia, denitrification, and N<sub>2</sub>O production in the ocean and their sensitivities to dissolved O<sub>2</sub>. *Global Biogeochemical Cycles*, 26. 10.1029/2011gb004209
- Bianchi, T.S., 2011. The role of terrestrially derived organic carbon in the coastal ocean: A changing paradigm and the priming effect. *Proceedings of the National Academy of Sciences of the United States of America*, 108 (49): 19473-19481. 10.1073/pnas.1017982108
- Bianchi, T.S.; DiMarco, S.F.; Cowan, J.H., Jr.; Hetland, R.D.; Chapman, P.; Day, J.W.; Allison, M.A., 2010. The science of hypoxia in the Northern Gulf of Mexico: A review. *Science of the Total Environment*, 408 (7): 1471-1484. 10.1016/j.scitotenv.2009.11.047
- Biederman, L.A.; Harpole, W.S., 2013. Biochar and its effects on plant productivity and nutrient cycling: a meta-analysis. *GCB Bioenergy*, 5 (2): 202-214. 10.1111/gcbb.12037
- Bierbaum, R., 2002. The role of science in federal policy development on a regional to global scale: Personal commentary. *Estuaries*, 25 (4): 878-885. 10.1007/BF02804913
- Bierman, V.; Hinz, S.; Zhu, D.; Wiseman, W.; Rabalais, N.; Turner, R., 1994. A preliminary mass-balance model of primary productivity and dissolved-oxygen in the Mississippi river plume inner gulf shelf region. *Estuaries*, 17 (4): 886-899. 10.2307/1352756
- Bierman, V.J.; Dolan, D.M.; Kasprzyk, R.; Clark, J.L., 1984. Retrospective analysis of the response of Saginaw Bay, Lake Huron, to reductions in phosphorus loadings. *Environmental Science & Technology*, 18 (1): 23-31
- Biggs, B.J., 2000. Eutrophication of streams and rivers: dissolved nutrient-chlorophyll relationships for benthic algae. *Journal of the North American Benthological Society*, 19 (1): 17-31
- Bijker, W.E.; Bal, R.; Hendriks, R., 2009. *The paradox of scientific authority: The role of scientific advice in democracies*. MIT press
- Bijma, J.; Poertner, H.-O.; Yesson, C.; Rogers, A.D., 2013. Climate change and the oceans - What does the future hold? *Marine Pollution Bulletin*, 74 (2): 495-505. 10.1016/j.marpolbul.2013.07.022
- Billen, G.; Degardin, P.; Even, S.; Thomas, W., 1995. *Intercomparaison des modèles Kalito, Monet et Prose*: Agence de l'Eau Seine-Normandie.
- Billen, G.; Garnier, J., 2009. *Eutrophisation des cours d'eau du Bassin de la Seine, Comprendre comment l'activité de l'homme entraîne la prolifération des végétaux aquatiques*. Paris Programme PIREN-Seine.
- Billen, G.; Garnier, J.; Benoit, M.; Anglade, J., 2013. La cascade de l'azote dans les territoires de grande culture du Nord de la France. *Cahiers Agriculture*, 22 (4): 272-281

- Billen, G.; Garnier, J.; Lassaletta, L., 2013. The nitrogen cascade from agricultural soils to the sea: modelling nitrogen transfers at regional watershed and global scales. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 368 (1621): 20130123-20130123. 10.1098/rstb.2013.0123
- Billen, G.; Garnier, J.; Nemery, J.; Sebilo, M.; Sferratore, A.; Barles, S.; Benoit, P.; Benoit, M., 2007. A long-term view of nutrient transfers through the Seine river continuum. *Science of the Total Environment*, 375 (1-3): 80-97. 10.1016/j.scitotenv.2006.12.005
- Billen, G.; Garnier, J.; Rousseau, V., 2005. Nutrient fluxes and water quality in the drainage network of the Scheldt basin over the last 50 years. *Hydrobiologia*, 540 (1): 47-67. 10.1007/s10750-004-7103-1
- Billen, G.; Silvestre, M.; Grizzetti, B.; Leip, A.; Garnier, J.; Voss, M.; Howarth, R.; Bouraoui, F.; Lepisto, A.; Kortelainen, P.; Johnes, P.; Curtis, C.; Humborg, C.; Smedburg, E.; Kaste, O.; Ganeshram, R.; Beusen, A.; Lancelot, C., 2011. Nitrogen flows from European watersheds to coastal marine waters. In: Sutton, M.A., Howard, C. M., Erisman, J. W., Billen, G., Bleeker, A., Grennfelt, P., van Grinsven, H. and Grizzetti, B. , ed. *The European Nitrogen Assessment*. Cambridge: Cambridge University Press, 271-297
- Billen, G.; Thieu, V.; Garnier, J.; Silvestre, M., 2009. Modelling the N cascade in regional watersheds: The case study of the Seine, Somme and Scheldt rivers. *Reactive nitrogen in agroecosystems: Integration with greenhouse gas interactions*, 133 (3): 234-246. 10.1016/j.agee.2009.04.018
- Billet, P., 2010. Themis v. Ulva sp. Variations juridiques sur les algues vertes. *Bulletin du Droit de l'Environnement Industriel*, 30:
- Bindraban, P.S.; Dimkpa, C.; Nagarajan, L.; Roy, A.; Rabbinge, R., 2015. Revisiting fertilisers and fertilisation strategies for improved nutrient uptake by plants. *Biology and Fertility of Soils*, 51 (8): 897-911. 10.1007/s00374-015-1039-7
- Bingner, R.L.; Theurer, F.D.; Yuan, Y., 2015. AnnAGNPS Technical processes.
- Binnerup, S.J.; Jensen, K.; Revsbech, N.P.; Jensen, M.H.; Sorensen, J., 1992. Denitrification, dissimilatory reduction of nitrate to ammonium, and nitrification in a bioturbated estuarine sediment as measured with n-15 and microsensor techniques. *Applied and Environmental Microbiology*, 58 (1): 303-313
- Birch, G.F.; Fazeli, M.S.; Niathai, C., 2005. Efficiency of an infiltration basin in removing contaminants from urban stormwater. *Environmental Monitoring and Assessment*, 101 (1-3): 23-38
- Birkinshaw, S.J.; Ewen, J., 2000. Modelling nitrate transport in the Slapton Wood catchment using SHETRAN. *Journal of Hydrology*, 230 (1-2): 18-33. 10.1016/s0022-1694(00)00173-6
- Birkinshaw, S.J.; Ewen, J., 2000. Nitrogen transformation component for SHETRAN catchment nitrate transport modelling. *Journal of Hydrology*, 230 (1-2): 1-17. 10.1016/s0022-1694(00)00174-8
- Bischof, K.; Krabs, G.; Wiencke, C.; Hanelt, D., 2002. Solar ultraviolet radiation affects the activity of ribulose-1, 5-bisphosphate carboxylase-oxygenase and the composition of photosynthetic and xanthophyll cycle pigments in the intertidal green alga Ulva lactuca L. *PLANTA*, 215 (3): 502-509. 10.1007/s00425-002-0774-9
- Bishop, K.; Buffam, I.; Erlandsson, M.; Folster, J.; Laudon, H.; Seibert, J.; Temnerud, J., 2008. Aqua Incognita: the unknown headwaters. *Hydrological Processes*, 22 (8): 1239-1242. 10.1002/hyp.7049
- Björk, S., 1988. Redevelopment of Lake Ecosystems: A Case-Study Approach. *Ambio*, 17 (2): 90-98
- BJORNSATER, B.R.; WHEELER, P.A., 1990. Effect of nitrogen and phosphorus supply on growth and tissue composition of ulvaceae and enteromorpha-intestinalis (ulvales, chlorophyta). *Journal of Phycology*, 26 (4): 603-611. 10.1111/j.0022-3646.1990.00603.x
- Blackall, L.; Burrell, P., 1998. The microbiology of nitrogen removal in activated sludge systems. *The Microbiology of Activated Sludge*. Springer, 203-226
- Blackall, L.L.; Burrell, P.C., 1998. *The microbiology of nitrogen removal in activated sludge systems*. Springer Netherlands (*The Microbiology of Activated Sludge*), 203-226
- Blair, N.E.; Aller, R.C., 2012. The Fate of Terrestrial Organic Carbon in the Marine Environment. In: Carlson, C.A.; Giovannoni, S.J., eds. *Annual Review of Marine Science, Vol 4*. Palo Alto: Annual Reviews (Annual Review of Marine Science), Vol.4, 401-423. 10.1146/annurev-marine-120709-142717
- Blanck, H., 2002. A critical review of procedures and approaches used for assessing pollution-induced community tolerance (PICT) in biotic communities. *Human and Ecological Risk Assessment*, 8 (5): 1003-1034
- Blanck, H.; Dahl, B., 1996. Pollution-induced community tolerance (PICT) in marine periphyton in a gradient of tri-n-butyltin (TBT) contamination. *Aquatic Toxicology*, 35 (1): 59-77
- Blanck, H.; Wängberg, S.-Å.; Molander, S., 1988. Pollution-induced community tolerance—a new ecotoxicological tool. *Functional testing of aquatic biota for estimating hazards of chemicals*. ASTM International
- Blewett, T.A.; Robertson, L.M.; MacLatchy, D.L.; Wood, C.M., 2013. Impact of environmental oxygen, exercise, salinity, and metabolic rate on the uptake and tissue-specific distribution of 17 alpha-ethynylestradiol in the euryhaline teleost Fundulus heteroclitus. *Aquatic Toxicology*, 138: 43-51. 10.1016/j.aquatox.2013.04.006
- Bliding, C.V., 1963. A critical survey of European taxa in Ulvales.
- Blomster, J.; Back, S.; Fewer, D.P.; Kiirikki, M.; Lehvo, A.; Maggs, C.A.; Stanhope, M.J., 2002. Novel morphology in Enteromorpha (Ulvophyceae) forming green tides. *American Journal of Botany*, 89 (11): 1756-1763. 10.3732/ajb.89.11.1756
- Blomster, J.; Maggs, C.A.; Stanhope, M.J., 1998. Molecular and morphological analysis of Enteromorpha intestinalis and E-compressa (Chlorophyta) in the British Isles. *Journal of Phycology*, 34 (2): 319-340. 10.1046/j.1529-8817.1998.340319.x
- Blumenthal, D.M., 2006. Interactions between resource availability and enemy release in plant invasion. *Ecology Letters*, 9 (7): 887-895. 10.1111/j.1461-0248.2006.00934.x

- Bocking, S., 1997. Fishing the Inland Seas: Great Lakes Research, Fisheries Management, and Environmental Policy in Ontario. *Environmental History*, 2 (1): 52-73. 10.2307/3985561
- Boczek, B.A., 1978. International Protection of the Baltic Sea Environment Against Pollution: A Study in Marine Regionalism. *The American Journal of International Law*, 72 (4): 782-814. 10.2307/2199777
- Bode, A.; Dortch, Q., 1996. Uptake and regeneration of inorganic nitrogen in coastal waters influenced by the Mississippi River spatial and seasonal variations. *Journal of Plankton Research*, 18 (12): 2251-2268
- Boedeltje, G.; Smolders, A.J.R.; Lamers, L.P.M.; Roelofs, J.G.M., 2005. Interactions between sediment propagule banks and sediment nutrient fluxes explain floating plant dominance in stagnant shallow waters. *Archiv Fur Hydrobiologie*, 162 (3): 349-362. 10.1127/0003-9136/2005/0162-0349
- Boegman, L.; Loewen, M.R.; Culver, D.A.; Hamblin, P.F.; Charlton, M.N., 2008. Spatial-dynamic modeling of algal biomass in Lake Erie: Relative impacts of dreissenid mussels and nutrient loads. *Journal of Environmental Engineering-Asce*, 134 (6): 456-468. 10.1061/(ASCE)-0733-9372(2008)134:6(456)
- Boehrer, B.; Schultze, M., 2009. Density Stratification and Stability. In: Likens, G.E., ed. *Encyclopedia of Inland Waters*. Oxford: Academic Press, 583-593
- Boers, P.; Vanderdoes, J.; Quaak, M.; Vandervlugt, J.; Walker, P., 1992. Fixation of phosphorus in lake-sediments using iron(iii)chloride - experiences, expectations. *Hydrobiologia*, 233 (1-3): 211-212. 10.1007/bf00016109
- Boers, P.C.M.; Van Raaphorst, W.; Van der Molen, D.T., 1998. Phosphorus retention in sediments. *Water Science and Technology*, 37 (3): 31-39. 10.1016/s0273-1223(98)00053-5
- Boesch, D., 2008. Global warming and coastal dead zones. *National Wetlands Newsletters*, 30 (4): 11-13
- Boesch, D.; Burreson, E.; Dennison, W.; Houde, E.; Kemp, M.; Kennedy, V.; Newell, R.; Paynter, K.; Orth, R.; Ulanowicz, R., 2001. Factors in the decline of coastal ecosystems. *Science*, 293 (5535): 1589-91
- Boesch, D.F., 2002. Challenges and opportunities for science in reducing nutrient over-enrichment of coastal ecosystems. *Estuaries*, 25 (4): 886-900. 10.1007/BF02804914
- Boesch, D.F., 2008. Global warming and coastal dead zones. *National Wetlands Newsletters*, 30 (4):
- Boesch, D.F.; Brinsfield, R.B.; Magnien, R.E., 2001. Chesapeake Bay eutrophication: Scientific understanding, ecosystem restoration, and challenges for agriculture. *Journal of Environmental Quality*, 30 (2): 303-320
- Bograd, S.J.; Castro, C.G.; Di Lorenzo, E.; Palacios, D.M.; Bailey, H.; Gilly, W.; Chavez, F.P., 2008. Oxygen declines and the shoaling of the hypoxic boundary in the California Current. *Geophysical Research Letters*, 35 (12): 6. 10.1029/2008gl034185
- Boháu, J.; Lipton, J., 2015. Environmental impact of the coal industry and resource equivalency method for environmental damage with ecological indicators. *Environmental Indicators*. 435-460. 10.1007/978-94-017-9499-2\_26
- Bohórquez, J.; Papaspyrou, S.; Yúfera, M.; Bergeijk, S.A.V.; García-robledo, E.; Jiménez-arias, J.L., 2013. Effects of green macroalgal blooms on the meiofauna community structure in the Bay of Cádiz. 70: 10-17
- Bohorquez, J.; Papaspyrou, S.; Yufera, M.; van Bergeijk, S.A.; Garcia-Robledo, E.; Jimenez-Arias, J.L.; Bright, M.; Corzo, A., 2013. Effects of green macroalgal blooms on the meiofauna community structure in the Bay of Cadiz. *Mar Pollut Bull*, 70 (1-2): 10-7. 10.1016/j.marpolbul.2013.02.002
- Boisson de Chazoumes, L.; Tignino, M., 2013. Droit international et eaux douces. *JurisClasseur Environnement et Développement durable*.
- Boithias, L.; Srinivasan, R.; Sauvage, S.; Macary, F.; Sánchez-Pérez, J.M., 2014. Daily Nitrate Losses: Implication on Long-Term River Quality in an Intensive Agricultural Catchment of Southwestern France. *Journal of Environment Quality*, 43 (1): 46. 10.2134/jeq2011.0367
- Bokn, T.L.; Duarte, C.M.; Pedersen, M.F.; Marba, N.; Moy, F.E.; Barron, C.; Bjerkeng, B.; Borum, J.; Christie, H.; Engelbert, S.; Fotel, F.L.; Hoell, E.E.; Karez, R.; Kersting, K.; Kraufvelin, P.; Lindblad, C.; Olsen, M.; Sanderud, K.A.; Sommer, U.; Sorensen, K., 2003. The response of experimental rocky shore communities to nutrient additions. *Ecosystems*, 6 (6): 577-594. 10.1007/s10021-002-0108-6
- Bokn, T.L.; Moy, F.E.; Christie, H.; Engelbert, S.; Karez, R.; Kersting, K.; Kraufvelin, P.; Lindblad, C.; Marba, N.; Pedersen, M.F.; others, 2002. Are rocky shore ecosystems affected by nutrient-enriched seawater? Some preliminary results from a mesocosm experiment. *Hydrobiologia*, 484 (1-3): 167-175
- Bokn, T.L.; Moy, F.E.; Christie, H.; Engelbert, S.; Karez, R.; Kersting, K.; Kraufvelin, P.; Lindblad, C.; Marba, N.; Pedersen, M.F.; Sorensen, K., 2002. Are rocky shore ecosystems affected by nutrient-enriched seawater? Some preliminary results from a mesocosm experiment. *Hydrobiologia*, 484 (1-3): 167-175. 10.1023/a:1021365307438
- Bolam, S.G.; Fernandes, T.F.; Read, P.; Raffaelli, D., 2000. Effects of macroalgal mats on intertidal sandflats: an experimental study. *Journal of Experimental Marine Biology and Ecology*, 249 (1): 123-137. 10.1016/s0022-0981(00)00185-4
- Bolton, J.J., 2016. What is aquatic botany? – and why algae are plants: the importance of non-taxonomic terms for groups of organisms. *Aquatic Botany*, 132: 1-4. <http://dx.doi.org/10.1016/j.aquabot.2016.02.006>
- Bonachela, J.A.; Raghib, M.; Levin, S.A., 2011. Dynamic model of flexible phytoplankton nutrient uptake. *Proceedings of the National Academy of Sciences*, 108 (51): 20633-20638
- Bond, C.A.; Loomis, J.B., 2009. Using Numerical Dynamic Programming to Compare Passive and Active Learning in the Adaptive Management of Nutrients in Shallow Lakes. *Canadian Journal of Agricultural Economics*, 57 (4): 555-573. 10.1111/j.1744-7976.2009.01170.x
- Bondavalli, C., 2003. Effect of eutrophication upon radionuclide dynamics in the Sacca di Goro lagoon (Po River Delta, Italy): a combined field, experimental and modeling study. *Environmental Pollution*, 125 (3): 433-446. 10.1016/s0269-7491(03)00076-9

- Bonin, P., 1996. Anaerobic nitrate reduction to ammonium in two strains isolated from costal marine sediment: A dissimilatory pathway. *Fems Microbiology Ecology*, 19 (1): 27-38
- Bonin, P.; Gilewicz, M.; Bertrand, J.C., 1989. Effects of oxygen on each step of denitrification on pseudomonas-nautica. *Canadian Journal of Microbiology*, 35 (11): 1061-1064
- Bonnaud, L.; Nicourt, C., 2006. Les éleveurs de porcs face à leurs détracteurs en Dordogne et dans le Finistère. *Etudes rurales*, 1: 13
- Bonnet, M.P.; Poulin, M., 2004. DyLEM-1D: a 1D physical and biochemical model for planktonic succession, nutrients and dissolved oxygen cycling application to a hyper-eutrophic reservoir. *Ecological Modelling*, 180 (2-3): 317-344. 10.1016/j.ecolmodel.2004.04.037
- Bonsdorff, E., 1992. Drifting algae and zoobenthos — Effects on settling and community structure. *Netherlands Journal of Sea Research*, 30: 57-62. 10.1016/0077-7579(92)90045-g
- Bonsdorff, E.; Andersson, A.; Elmgren, R., 2015. Baltic Sea ecosystem-based management under climate change: Integrating social and ecological perspectives. *Ambio*, 44: S333-S334. 10.1007/s13280-015-0669-1
- Bonsdorff, E.; Blomqvist, E.M.; Mattila, J.; Norkko, A., 1997. Coastal eutrophication: Causes, consequences and perspectives in the Archipelago areas of the northern Baltic Sea. *Estuarine, Coastal and Shelf Science*, 44 (Supplement 1): 63-72. 10.1016/S0272-7714(97)80008-X
- Bonsdorff, E.; Ronnberg, C.; Aarnio, K., 2002. Some ecological properties in relation to eutrophication in the Baltic Sea. *Hydrobiologia*, 475 (1): 371-377. 10.1023/a:1020395526898
- Bontemps, C.; Nauges, C., 2009. Carafe ou bouteille ?Le rôle de la qualité de l'environnement dans la décision du consommateur. *Economie & prévision*, 188 (2): 61-79
- Bontems, P.; Rotillon, G.; Turpin, N., 2005. Self>Selecting Agri-environmental Policies with an Application to the Don Watershed. *Environmental and Resource Economics*, 31 (3): 275-301. 10.1007/s10640-004-7593-3
- Boonstra, W.J.; Bock, B.B., 2009. Fallacies of Virtualization: A Case Study of Farming, Manure, Landscapes, and Dutch Rural Policy. *Science, Technology, & Human Values*, 34 (4): 427-448
- Booth, M.S.; Campbell, C., 2007. Spring nitrate flux in the Mississippi River Basin: A landscape model with conservation applications. *Environmental Science & Technology*, 41 (15): 5410-5418. 10.1021/es070179e
- Bootsma, M.C.; Barendregt, A.; van Alphen, J.C.A., 1999. Effectiveness of reducing external nutrient load entering a eutrophicated shallow lake ecosystem in the Naardermeer nature reserve, The Netherlands. *Biological Conservation*, 90 (3): 193-201. 10.1016/s0006-3207(99)00027-0
- Borah, D.K., 1989. Runoff simulation-model for small watersheds. *Transactions of the Asae*, 32 (3): 881-886
- Borg, A.; Pihl, L.; Wennhage, H., 1997. Habitat choice by juvenile cod (*Gadus morhua* L.) on sandy soft bottoms with different vegetation types. *Helgolander Meeresuntersuchungen*, 51 (2): 197–212. 10.1007/bf02908708
- Borja, A.; Bricker, S.B.; Dauer, D.M.; Demetriadis, N.T.; Ferreira, J.G.; Forbes, A.T.; Hutchings, P.; Jia, X.P.; Kenchington, R.; Marques, J.C.; Zhu, C.B., 2008. Overview of integrative tools and methods in assessing ecological integrity in estuarine and coastal systems worldwide. *Marine Pollution Bulletin*, 56 (9): 1519-1537. 10.1016/j.marpolbul.2008.07.005
- Borja, A.; Elliott, M.; Andersen, J.H.; Cardoso, A.C.; Carstensen, J.; Ferreira, J.G.; Heiskanen, A.-S.; Marques, J.C.; Neto, J.M.; Teixeira, H.; Uusitalo, L.; Uyarra, M.C.; Zampoukas, N., 2013. Good Environmental Status of marine ecosystems: what is it and how do we know when we have attained it? *Marine Pollution Bulletin*, 76 (1-2): 16-27. 10.1016/j.marpolbul.2013.08.042
- Borja, Á.; Galparsoro, I.; Solaun, O.; Muxika, I.; Tello, E.M.; Uriarte, A.; Valencia, V., 2006. The European Water Framework Directive and the DPSIR, a methodological approach to assess the risk of failing to achieve good ecological status. *Estuarine, Coastal and Shelf Science*, 66 (1): 84-96. 10.1016/j.ecss.2005.07.021
- Borja, A.; Prins, T.; Simboura, N.; Andersen, J.; Berg, T.; Marques, J.; Neto, J.; Papadopoulou, N.; Reker, J.; Teixeira, H.; Uusitalo, L., 2014. Tales from a thousand and one ways to integrate marine ecosystem components when assessing the environmental status. *Frontiers in Marine Science*, 1: 22. 0.3389/fmars.2014.00022
- Bormann, F.H.; Likens, G.E., 1979. Catastrophic disturbance and the steady-state in northern hardwood forests. *American Scientist*, 67 (6): 660-669
- Borsuk, M.E.; Higdon, D.; Stow, C.A.; Reckhow, K.H., 2001. A Bayesian hierarchical model to predict benthic oxygen demand from organic matter loading in estuaries and coastal zones. *Ecological Modelling*, 143 (3): 165-181. 10.1016/s0304-3800(01)00328-3
- Borsuk, M.E.; Powers, S.P.; Peterson, C.H., 2002. A survival model of the effects of bottom-water hypoxia on the population density of an estuarine clam (*Macoma balthica*). *Canadian Journal of Fisheries and Aquatic Sciences*, 59 (8): 1266-1274. 10.1139/f02-093
- Borsuk, M.E.; Stow, C.A.; Luettich, R.A.; Paerl, H.W.; Pinckney, J.L., 2001. Modelling oxygen dynamics in an intermittently stratified estuary: Estimation of process rates using field data. *Estuarine Coastal and Shelf Science*, 52 (1): 33-49. 10.1006/ecss.2000.0726
- Borsuk, M.E.; Stow, C.A.; Reckhow, K.H., 2004. A Bayesian network of eutrophication models for synthesis, prediction, and uncertainty analysis. *Ecological Modelling*, 173 (2-3): 219-239. 10.1016/j.ecolmodel.2003.08.020
- Borsuk, M.E.; Stow, C.A.; Reckhow, K.H., 2004. Confounding effect of flow on estuarine response to nitrogen loading. *Journal of Environmental Engineering-Asce*, 130 (6): 605-614. 10.1061/(asce)0733-9372(2004)13:6(605)
- Bose, R.; De, A.; Mozumdar, S.; Sen, G.; Mukherjee, A.D., 2012. Coastal water pollution in two rivers of the Bengal delta. *Geochemistry International*, 50 (10): 860-868. 10.1134/s0016702912100047

- Bose, R.; De, A.; Sen, G.; Mukherjee, A.D., 2012. Comparative study of the physico-chemical parameters of the coastal waters in rivers Matla and Saptamukhi: Impacts of coastal water coastal pollution. *Journal of Water Chemistry and Technology*, 34 (5): 246-251. 10.3103/s1063455x12050062
- Bostrom, B.; Andersen, J.M.; Fleischer, S.; Jansson, M., 1988. Exchange of phosphorus across the sediment - water interface. *Hydrobiologia*, 170: 229-244. 10.1007/bf00024907
- Botter, G.; Settin, T.; Marani, M.; Rinaldo, A., 2006. A stochastic model of nitrate transport and cycling at basin scale. *Water Resources Research*, 42 (4). 10.1029/2005wr004599
- Bouard, M., 2002. *Du sale au pollué : Perceptions des échouages en baie de Douarnenez*. Brest: Université de Bretagne Occidentale, Mémoire de maîtrise.
- Bouba-Olga, O.; Boutry, O.; Rivaud, A., 2009. Refining the exit-voice model with proximity economics. *Nature Sciences Societes*, 17 (4): 381-390. 10.1051/nss/2009063
- Bouba-Olga, O.; Chauchefoin, P.; Mathé, J., 2006. Innovation et territoire : une analyse des conflits autour de la ressource en eau, le cas du bassin-versant de la Charente. *Flux*, 63-64 (1-2): 32-41
- Boudreau, B.P., 1999. A theoretical investigation of the organic carbon-microbial biomass relation in muddy sediments. *Aquatic Microbial Ecology*, 17 (2): 181-189. 10.3354/ame017181
- Bouleau, G., 2008. L'épreuve de la directive-cadre européenne sur l'eau. *Annales des Mines - Responsabilité et environnement*, 49 (1): 84-91. 10.3917/re.049.0084
- Bouleau, G., 2014. The Co-production of Science and Waterscapes: the Case of the Seine and the Rhône Rivers, France. *Geoforum*, 57: 9. 10.1016/j.geoforum.2013.01.009
- Bouleau, G.; Pont, D., 2014. Les conditions de référence de la directive cadre européenne sur l'eau face à la dynamique des hydrossystèmes et des usages. *Nature Sciences Societes*, 22 (1): 3-14. 10.1051/nss/2014016
- Bouleau, G.; Pont, D., 2015. Did you say reference conditions? Ecological and socio-economic perspectives on the European Water Framework Directive. *Environmental Science and Policy*, 47. 10.1016/j.envsci.2014.10.012
- Boulêtreau, S.; Garabétian, F.; Sauvage, S.; Sánchez-Pérez, J.-M., 2006. Assessing the importance of a self-generated detachment process in river biofilm models. *Freshwater Biology*, 51 (5): 901-912. 10.1111/j.1365-2427.2006.01541.x
- Boulêtreau, S.; Izagirre, O.; Garabétian, F.; Sauvage, S.; Elosegi, A.; Sánchez-Pérez, J.-M., 2008. Identification of a minimal adequate model to describe the biomass dynamics of river epilithon. *River Research and Applications*, 24 (1): 36-53. 10.1002/rra.1046
- Boulton, A.J.; Findlay, S.; Marmonier, P.; Stanley, E.H.; Valett, H.M., 1998. The functional significance of the hyporheic zone in streams and rivers. *Annual Review of Ecology and Systematics*, 29: 59-81. 10.1146/annurev.ecolsys.29.1.59
- Bouraoui, F.; Grizzetti, B., 2014. Modelling mitigation options to reduce diffuse nitrogen water pollution from agriculture. *Science of the Total Environment*, 468: 1267-1277. 10.1016/j.scitotenv.2013.07.066
- Bourblanc, M., 2007. *Les politiques de reconquête de la qualité de l'eau face aux pollutions agricoles : changement et stabilité dans les arrangements institutionnels en Côtes-D'Armor (France) et dans le Noord-Brabant (Pays-Bas)*. Sciences politiques, Institut d'études politiques, Paris.
- Bourblanc, M., 2008. Le mythe de l'unité professionnelle agricole à l'épreuve de l'environnement : l'alliance fragile du syndicalisme majoritaire et des organisations coopératives dans la controverse sur les pollutions agricoles en Bretagne. *Les cahiers du CEVIPOF*, 48: 24
- Bourblanc, M., 2011. Des instruments émancipés. La gestion des pollutions agricoles des eaux en Côtes-d'Armor au prisme d'une dépendance aux instruments (1990-2007). *Revue française de science politique*, 61 (6): 1073-1096. 10.3917/rfsp.616.1073
- Bourblanc, M., 2014. Framing environmental problems: Problem entrepreneurs and the issue of water pollution from agriculture in Brittany. *Journal Environmental Policy Planning*, 16 (1): 14
- Bourblanc, M., 2016. Définir des indicateurs en milieu controversé : retour sur l'expertise scientifique « Algues vertes » en France ». *Vertigo*. 10.4000/vertigo.17601
- Bourblanc, M.; Blanchon, D., 2014. The challenges of rescaling South African water resources management: Catchment Management Agencies and interbasin transfers. *Journal of Hydrology*, 519 (Part C): 2381-2391. 10.1016/j.jhydrol.2013.08.001
- Bourblanc, M.; Brives, H., 2009. La construction du caractère « diffus » des pollutions agricoles. *Etudes rurales*, 183 15
- Bourdieu, P.; Delsaut, Y., 1981. Pour une sociologie de la perception. *Actes de la recherche en sciences sociales*, 40 (1): 6
- Bourke, M.F.; Kessler, A.J.; Cook, P.L.M., 2014. Influence of buried *Ulva lactuca* on denitrification in permeable sediments. *Marine Ecology Progress Series*, 498: 85-U420. 10.3354/meps10611
- Bouwman, A.F.; Van Vuuren, D.P.; Derwent, R.G.; Posch, M., 2002. A global analysis of acidification and eutrophication of terrestrial ecosystems. *Water, Air, & Soil Pollution*, 141 (1): 349-382
- Bowen, R.E.; Riley, C., 2003. Socio-Economic Indicators and Integrated Coastal Management. *Ocean & Coastal Management*, 46: 13. 10.1016/S0964-5691(03)00008-5
- Bowes, M.; Davison, P.; Hutchins, M.; McCall, S.; Prudhomme, C.; Sadowski, J.; Soley, R.; Wells, R.; Willets, S., 2016. *Climate change and eutrophication risk in English rivers*. Bristol: Environment Agency, 81.
- Bowes, M.J.; Smith, J.T.; Hilton, J.; Sturt, M.M.; Armitage, P.D., 2007. Periphyton biomass response to changing phosphorus concentrations in a nutrient-impacted river: a new methodology for phosphorus target setting. *Canadian Journal of Fisheries and Aquatic Sciences*, 64 (2): 227-238. 10.1139/f06-180
- Boyd, J.N.; Burnett, L.E., 1999. Reactive oxygen intermediate production by oyster hemocytes exposed to hypoxia. *Journal of Experimental Biology*, 202 (22): 3135-3143

- Boyer, J.-M.; Denier-Pasquier, F., 2004. Assainissement des eaux usées. *Jurisclasseur Environnement et Développement durable*.
- Boyer, P.; Denier-Pasquier, F., 2007. Planifications aquatiques. SDAGE. SAGE. *Jurisclasseur Environnement et Développement durable*.
- Boyer, P.; Denier-Pasquier, F., 2008. Police générale de l'eau et des milieux aquatiques. *Jurisclasseur Environnement et Développement durable*.
- Boyle, K.J.; Poor, J.; Taylor, L.O., 1999. Estimating the Demand for Protecting Freshwater Lakes from Eutrophication. *American Journal of Agricultural Economics*, 81 (5): 5
- Boyle, K.J.; Poor, P.J.; Taylor, L.O., 1999. Estimating the Demand for Protecting Freshwater Lakes from Eutrophication. *American Journal of Agricultural Economics*, 81 (5): 1118-1122. 10.2307/1244094
- Boynton, W.R.; Hagy, J.D.; Murray, L.; Stokes, C.; Kemp, W.M., 1996. A comparative analysis of eutrophication patterns in a temperate coastal lagoon. *Estuaries*, 19 (2B): 408-421. 10.2307/1352459
- Boy-Roura, M.; Cameron, K.C.; Di, H.J., 2016. Identification of nitrate leaching loss indicators through regression methods based on a meta-analysis of lysimeter studies. *Environmental Science and Pollution Research*, 23 (4): 3671-3680. 10.1007/s11356-015-5529-9
- Brack, W.; Apitz, S.E.; Borchardt, D.; Brils, J.; Cardoso, A.C.; Foekema, E.M.; van Gils, J.; Jansen, S.; Harris, B.; Hein, M.; Heise, S.; Hellsten, S.; de Maagd, P.G.; Muller, D.; Panov, V.E.; Posthuma, L.; Quevauviller, P.; Verdonschot, P.F.; von der Ohe, P.C., 2009. Toward a holistic and risk-based management of European river basins. *Integr Environ Assess Manag*, 5 (1): 5-10. 10.1897/ieam\_2008-024.1
- Brack, W.; Klamer, H.J.C.; de Ada, M.L.; Barcelo, D., 2007. Effect-directed analysis of key toxicants in European river basins - A review. *Environmental Science and Pollution Research*, 14 (1): 30-38. 10.1065/espr2006.08.329
- Bradshaw, E.G.; Rasmussen, P.; Nielsen, H.; Anderson, N.J., 2005. Mid- to late-Holocene land-use change and lake development at Dallund So, Denmark: trends in lake primary production as reflected by algal and macrophyte remains. *Holocene*, 15 (8): 1130-1142. 10.1191/0959683605hl885rp
- Braeckman, U.; Provoost, P.; Gribsholt, B.; Van Gansbeke, D.; Middelburg, J.J.; Soetaert, K.; Vincx, M.; Vanaverbeke, J., 2010. Role of macrofauna functional traits and density in biogeochemical fluxes and bioturbation. *Marine Ecology Progress Series*, 399: 173-186. 10.3354/meps08336
- Brasier, M.D., 1995. Fossil indicators of nutrient levels. 1: Eutrophication and climate change. *Geological Society, London, Special Publications*, 83: 113-132
- Bratt, A., 2002. Farmers' Choices: Management Practices to Reduce Nutrient Leakage within a Swedish Catchment. *Journal of Environmental Planning and Management*, 45 (5): 673-689. 10.1080/0964056022000013066
- Brault, D.; Quéguiner, B., 1989. Effect of inorganic and organic nitrogen sources on growth of *Ulva gigantea* (Kützing) Bliding. In: Pauw, N.d.E., ed. *Aquaculture*. European Aquaculture Society
- Brazier, R.E.; Beven, K.J.; Anthony, S.G.; Rowan, J.S., 2001. Implications of model uncertainty for the mapping of hillslope-scale soil erosion predictions. *Earth Surface Processes and Landforms*, 26 (12): 1333-1352. 10.1002/esp.266
- Brazier, R.E.; Beven, K.J.; Freer, J.; Rowan, J.S., 2000. Equifinality and uncertainty in physically based soil erosion models: Application of the glue methodology to WEPP-the water erosion prediction project-for sites in the UK and USA. *Earth Surface Processes and Landforms*, 25 (8): 825-845. 10.1002/1096-9837(200008)25:8<825::aid-esp101>;3.0.co;2-3
- Breitburg, D., 2002. Effects of hypoxia, and the balance between hypoxia and enrichment, on coastal fishes and fisheries. *Estuaries*, 25 (4B): 767-781. 10.1007/bf02804904
- Breitburg, D.L., 1992. Episodic hypoxia in Chesapeake Bay - interacting effects of recruitment, behavior, and physical disturbance. *Ecological Monographs*, 62 (4): 525-546. 10.2307/2937315
- Breitburg, D.L.; Hondorp, D.W.; Davias, L.A.; Diaz, R.J., 2009. Hypoxia, nitrogen, and fisheries: integrating effects across local and global landscapes. *Ann Rev Mar Sci*, 1: 329-49. 10.1146/annurev.marine.010908.163754
- Brentrup, F.; Kusters, J.; Lammel, J.; Kuhlmann, H., 2000. Methods to Estimate On-Field Nitrogen Emissions from Crop Production as an Input to LCA Studies in the Agricultural Sector. *International Journal of Life Cycle Assessment*, 5 (6): 349-357. 10.1065/lca2000.08.030
- Bresler, S.E., 2012. Policy recommendations for reducing reactive nitrogen from wastewater treatment in the Great Bay Estuary, NH. *Environmental Science & Policy*, 19–20: 69-77. [10.1016/j.envsci.2012.02.006](https://doi.org/10.1016/j.envsci.2012.02.006)
- Bretagne-Environnement, 2017. [eutrophisation.http://www.bretagne-environnement.org/Media/Glossaire/Eutrophisation?KeepThis=true&TB\\_iframe=true&height=150&width=400](http://www.bretagne-environnement.org/Media/Glossaire/Eutrophisation?KeepThis=true&TB_iframe=true&height=150&width=400) [consulté: 16/01/2017]
- Breuer, L.; Vache, K.B.; Julich, S.; Frede, H.G., 2008. Current concepts in nitrogen dynamics for mesoscale catchments. *Hydrological Sciences Journal-Journal Des Sciences Hydrologiques*, 53 (5): 1059-1074. 10.1623/hysj.53.5.1059
- Briand, E.; Escouffier, N.; Straub, C.; Sabart, M.; Quiblier, C.; Humbert, J.-F., 2009. Spatiotemporal changes in the genetic diversity of a bloom-forming *Microcystis aeruginosa* (cyanobacteria) population. *The ISME Journal*, 3 (4): 419
- Bricker, S.B.; Clement, C.G.; Pirhalla, D.E.; Orlando, S.P.; Farrow, D.R., 1999. *National estuarine eutrophication assessment: effects of nutrient enrichment in the nation's estuaries*. US National Oceanographic and Atmospheric Administration, National Ocean Service, Special Projects Office and the National Center for Coastal Ocean Science
- Bricker, S.B.; Longstaf, B.; Dennison, W.; Jones, A.; Boicourt, K.; Wicks, C.; Woerner, J., 2008. Effects of nutrient enrichment in the nation's estuaries: A decade of change. *Harmful Algae*, 8 (1): 21-32. 10.1016/j.hal.2008.08.028
- Bricker, S.B.; Longstaff, B.; Dennison, W.; Jones, A.; Boicourt, K.; Wicks, C.; Woerner, J., 2008. Effects of nutrient enrichment in the nation's estuaries: A decade of change. *Harmful Algae*, 8 (1): 21-32. 10.1016/j.hal.2008.08.028

- Bring, A.; Rogberg, P.; Destouni, G., 2015. Variability in climate change simulations affects needed long-term riverine nutrient reductions for the Baltic Sea. *Ambio*, 44: S381-S391. 10.1007/s13280-015-0657-5
- Brink, C.; van Ierland, E.; Hordijk, L.; Kroese, C., 2001. Cost-effective emission abatement in europe considering interrelations in agriculture. *TheScientificWorldJournal [electronic resource]*, 1 Suppl 2: 814-821. 10.1100/tsw.2001.295
- Brinson, M.M., 1993. Changes in the functioning of wetlands along environmental gradients. *Wetlands*, 13 (2): 65-74
- Brinson, M.M.; Bradshaw, H.D.; Kane, E.S., 1984. Nutrient assimilative-capacity of an alluvial floodplain swamp. *Journal of Applied Ecology*, 21 (3): 1041-1057. 10.2307/2405066
- Brinson, M.M.; Malvarez, A.I., 2002. Temperate freshwater wetlands: types, status, and threats. *Environmental Conservation*, 29 (2): 115-133. 10.1017/s0376892902000085
- Brisson, N.; Françoise, R.; Philippe, G.; Josiane, L.; Bernard, N.; Xavier, T.; Daniel, P.; Marie-Hélène, J.; Alain, B.; Dominique, R.; Bruno, M.; Eric, J., 2002. STICS: a generic model for simulating crops and their water and nitrogen balances. II. Model validation for wheat and maize. *Agronomie*, 22 (1): 69-92. 10.1051/agro:2001005
- Brisson, N.; Gary, C.; Justes, E.; Roche, R.; Mary, B.; Ripoche, D.; Zimmer, D.; Sierra, J.; Bertuzzi, P.; Burger, P.; Bussière, F.; Cabidoche, Y.M.; Cellier, P.; Debaeke, P.; Gaudillère, J.P.; Hénault, C.; Maraux, F.; Seguin, B.; Sinoquet, H., 2003. An overview of the crop model stics. *European Journal of Agronomy*, 18 (3): 309-332. 10.1016/S1161-0301(02)00110-7
- Brisson, N.; Mary, B.; Ripoche, D.; Jeuffroy, M.H.; Ruget; Nicoullaud, B.; Philippe, G.; Florence, D.-B.; Rodrigo, A.; Carolyne, D.; Guy, R.; Nicolas, B.; Sylvie, R.; Xavier, T.; Daniel, P.; Pierre, C.; Jean-Marie, M.; Jean Marc, M.; Richard, D., 1998. STICS: a generic model for the simulation of crops and their water and nitrogen balances. I. Theory and parameterization applied to wheat and corn. *Agronomie*, 18 (5-6): 311-346. 10.1051/agro:19980501
- Brito, A.C.; Quental, T.; Coutinho, T.P.; Branco, M.A.C.; Falcao, M.; Newton, A.; Icely, J.; Moita, T., 2012. Phytoplankton dynamics in southern Portuguese coastal lagoons during a discontinuous period of 40 years: An overview. *Estuarine Coastal and Shelf Science*, 110: 147-156. 10.1016/j.ecss.2012.04.014
- Brock, T.C.M.; Vandenbogaert, M.; Bos, A.R.; Vanbreukelen, S.W.F.; Reiche, R.; Terwoert, J.; Suykerbuyk, R.E.M.; Roijackers, R.M.M., 1992. Fate and effects of the insecticide Dursban(R) 4E in indoor *Elodea*-dominated and macrophyte-free freshwater model-ecosystems. 2. Secondary effects on community structure. *Archives of Environmental Contamination and Toxicology*, 23 (4): 391-409
- Brock, W.A.; Carpenter, S.R., 2007. Panaceas and Diversification of Environmental Policy. *Proceedings of the National Academy of Sciences of the United States of America*, 104 (39): 15206-15211
- Broecker, W.S.; Peng, T.-h.; Observatory, L.-D.G., 1982. *Tracers in the sea*. Lamont-Doherty Geological Observatory, Columbia University
- Brönmark, C.; Hansson, L.-A., 2005. *The Biology of Lakes and Ponds*. Oxford Oxford Univ. Press
- Brooks, B.W.; Lazorchak, J.M.; Howard, M.D.; Johnson, M.V.V.; Morton, S.L.; Perkins, D.A.; Reavie, E.D.; Scott, G.I.; Smith, S.A.; Steevens, J.A., 2016. Are harmful algal blooms becoming the greatest inland water quality threat to public health and aquatic ecosystems? *Environmental Toxicology and Chemistry*, 35 (1): 6-13
- Brooks, J., 1999. *Policy implications to phosphorus management in Florida ecosystems*. (*Phosphorus Biogeochemistry in Subtropical Ecosystems*)
- Brosnan, T.M.; Oshea, M.L., 1996. Long-term improvements in water quality due to sewage abatement in the lower Hudson River. *Estuaries*, 19 (4): 890-900. 10.2307/1352305
- Brouwer, E.; Bobbink, R.; Roelofs, J.G.M., 2002. Restoration of aquatic macrophyte vegetation in acidified and eutrophied softwater lakes: an overview. *Aquatic Botany*, 73 (4): 405-431. 10.1016/S0304-3770(02)00033-5
- Brouwer, E.; Roelofs, J.G.M., 2001. Degraded softwater lakes: Possibilities for restoration. *Restoration Ecology*, 9 (2): 155-166. 10.1046/j.1526-100x.2001.009002155.x
- Brouwer, E.; Roelofs, J.G.M., 2002. Oligotrophication of acidified, nitrogen-saturated softwater lakes after dredging and controlled supply of alkaline water. *Archiv Fur Hydrobiologie*, 155 (1): 83-97
- Browdy, C.L.; Bratvold, D.; Stokes, A.D.; McIntosh, R.P., 2001. *Perspectives on the application of closed shrimp culture systems*. Baton Rouge: World Aquaculture Soc (New Wave Proceedings of the Special Session on Sustainable Shrimp Farming)
- Brown, C.D.; Hoyer, M.V.; Bachmann, R.W.; Canfield, D.E., 2000. Nutrient-chlorophyll relationships: an evaluation of empirical nutrient-chlorophyll models using Florida and north-temperate lake data. *Canadian Journal of Fisheries and Aquatic Sciences*, 57 (8): 1574-1583
- Brown, C.D.; Hoyer, M.V.; Bachmann, R.W.; Canfield Jr, D.E., 2000. Nutrient-chlorophyll relationships: an evaluation of empirical nutrient-chlorophyll models using Florida and north-temperate lake data. *Canadian Journal of Fisheries and Aquatic Sciences*, 57 (8): 1574-1583
- Brown, J.H.; Gillooly, J.F.; Allen, A.P.; Savage, V.M.; West, G.B., 2004. Toward a metabolic theory of ecology. *Ecology*, 85 (7): 1771-1789. 10.1890/03-9000
- Brown, L.C.; Barnwell, T.O., 1987. The Enhanced Stream Water Quality Models QUAL2E and QUAL2E—UNCAD: Documentation and User Manual US Environmental Protection Agency, Environmental Research Laboratory;
- Brownlie, W.J.; Spears, B.; Patidar, S.; Linda, M.; Roaf, S., 2015. Assessing Pro-environmental Behaviour in Relation to the Management of Pollution from Private Sewage Systems. *Human Ecology*, 43 (1): 131-140. 10.1007/s10745-015-9728-2
- Bruce, E.M.; Bruce, L.C.; Cowell, P.J., 2011. Incorporating geomorphic zonation in nutrient models for coastal-estuarine environments: coupling GIS and aquatic ecosystem modeling. *19th International Congress on Modelling and Simulation (Modsim2011)*, 1867-1873

- Bruce, L.C.; Cook, P.L.M.; Hipsey, M.R., 2011. Using a 3D hydrodynamic-biogeochemical model to compare estuarine nitrogen assimilation efficiency under anoxic and oxic conditions. *19th International Congress on Modelling and Simulation (Modsim2011)*, 3691-3697
- Bruce, L.C.; Hamilton, D.; Imberger, J.; Gal, G.; Gophen, M.; Zohary, T.; Hambright, K.D., 2006. A numerical simulation of the role of zooplankton in C, N and P cycling in Lake Kinneret, Israel. *Ecological Modelling*, 193: 412-436
- Brucet, S.; Poikane, S.; Lyche-Solheim, A.; Birk, S., 2013. Biological assessment of European lakes: ecological rationale and human impacts. *Freshwater Biology*, 58 (6): 1106-1115. 10.1111/fwb.12111
- Bruen, M., 2009. Hydrology and the water framework directive in Ireland. *Biology and Environment: Proceedings of the Royal Irish Academy*, 109B (3): 207-220
- Bruesewitz, D.A., 2008. *The effects of invasive zebra mussels (Dreissena polymorpha) on nitrogen cycling in freshwater ecosystems of the Midwestern United States*. University of Notre Dame,
- Bruggeman, D.J.; Jones, M.L.; Lupi, F.; Scribner, K.T., 2005. Landscape Equivalency Analysis: Methodology for estimating spatially explicit biodiversity credits. *Environmental Management*, 36 (4): 518-534. 10.1007/s00267-004-0239-y
- Brun, A., 2003. Aménagement et gestion des eaux en France : l'échec de la politique de l'eau face aux intérêts du monde agricole. *VertigO*, 4 (3):
- Brun, A.; Haghe, J.P., 2016. Les médias, les algues vertes et le modèle agricole breton. *L'Espace géographique*, 45 (2): 142-156
- Brun, F.G.; Vergara, J.J.; Navarro, G.; Hernandez, I.; Perez-Llorens, J.L., 2003. Effect of shading by *Ulva rigida* canopies on growth and carbon balance of the seagrass *Zostera noltii*. *Marine Ecology Progress Series*, 265: 85–96. 10.3354/meps265085
- Brunet C.; Johnsen G.;Lavaud J.; Roy S. Pigments and photoacclimation processes. Phytoplankton Pigments: Characterization, C.a.A.i.O., 2011, . Pigments and photoacclimation processes.Ch. 11. In: Suzanne Roy, C.A.L., Einar Skarstad Egeland, Geir Johnsen, ed. *Phytoplankton Pigments*. Cambridge Press University, 445-471
- Brunke, M.; Gonser, T., 1997. The ecological significance of exchange processes between rivers and groundwater. *Freshwater Biology*, 37 (1): 1-33. 10.1046/j.1365-2427.1997.00143.x
- Bruschetti, M.; Luppi, T.; Fanjul, E.; Rosenthal, A.; Iribarne, O., 2008. Grazing effect of the invasive reef-forming polychaete *Ficopomatus enigmaticus* (Fauvel) on phytoplankton biomass in a SW Atlantic coastal lagoon. *Journal of Experimental Marine Biology and Ecology*, 354 (2): 212-219. 10.1016/j.jembe.2007.11.009
- Brush, M.J.; Nixon, S.W., 2010. Modeling the role of macroalgae in a shallow sub-estuary of Narragansett Bay, RI (USA). *Ecological Modelling*, 221 (7): 1065-1079. 10.1016/j.ecolmodel.2009.11.002
- Bryhn, A.C., 2009. Sustainable phosphorus loadings from effective and cost-effective phosphorus management around the Baltic Sea. *Plos One*, 4 (5). 10.1371/journal.pone.0005417
- Bryhn, A.C., 2012. Estimated trophic state effects and abatement costs in connection with improved urban sewage treatment in the Gulf of Riga. *Journal of Environmental Engineering (United States)*, 138 (6): 663-672. 10.1061/(ASCE)EE.1943-7870.0000510
- Bryhn, A.C.; Hakanson, L., 2009. Eutrophication: Model Before Acting. *Science*, 324 (5928): 723-723
- Bryhn, A.C.; Jiménez, A.; Mateos, A.; Ríos-Insua, S., 2009. Multi-attribute analysis of trophic state and waterfowl management in Ringkøbing Fjord, Denmark. *Journal of Environmental Management*, 90 (8): 2568-2577. 10.1016/j.jenvman.2009.01.017
- Bryhn, A.C.; Sessa, C.; Håkanson, L., 2010. Costs, ecosystem benefits and policy implications of remedial measures to combat coastal eutrophication - a framework for analyses and a practical example related to the gulf of Riga. *Eutrophication: Ecological Effects, Sources, Prevention and Reversal*. 103-134
- Brzezinski, M.A., 1985. The Si :C :N ratio of the marine diatoms : interspecific variability and the effect of some environmental variables. *Journal of Phycology*, 21: 347-357
- Brzezinski, M.A., 1985. The si-c-n ratio of marine diatoms - interspecific variability and the effect of some environmental variables. *Journal of Phycology*, 21 (3): 347-357
- Brzozowska, R.; Gawronska, H., 2009. The influence of a long-term artificial aeration on the nitrogen compounds exchange between bottom sediments and water in Lake Dlugie. *Oceanological and Hydrobiological Studies*, 38 (1): 113-119. 10.2478/v10009-009-0010-z
- Buchan, A.; LeCler, G.R.; Gulvik, C.A.; Gonzalez, J.M., 2014. Master recyclers: features and functions of bacteria associated with phytoplankton blooms. *Nat Rev Microbiol*, 12 (10): 686-98. 10.1038/nrmicro3326
- Buczko, U.; Kuchenbuch, R.O., 2007. Phosphorus indices as risk-assessment tools in the U.S.A. and Europe—a review. *Journal of Plant Nutrition and Soil Science*, 170 (4): 445-460. 10.1002/jpln.200725134
- Buffington, J.M.; Montgomery, D.R., 1997. A systematic analysis of eight decades of incipient motion studies, with special reference to gravel-bedded rivers. *Water Resources Research*, 33 (8): 1993-2029. 10.1029/96wr03190
- Bukaveckas, P.A., 2007. Effects of channel restoration on water velocity, transient storage, and nutrient uptake in a channelized stream. *Environmental Science & Technology*, 41 (5): 1570-1576. 10.1021/es061618x
- Bünemann, E.K., 2015. Assessment of gross and net mineralization rates of soil organic phosphorus – A review. *Soil Biology and Biochemistry*, 89: 82-98. 10.1016/j.soilbio.2015.06.026
- Bunnell, D.B.; Barbiero, R.P.; Ludsin, S.A.; Madenjian, C.P.; Warren, G.; Dolan, D.; Brenden, T.; Briland, R.; Gorman, O.T.; He, J.X.; Johengen, T.H.; Lantry, B.F.; Nalepa, T.F.; Riley, S.C.; Riseng, C.M.; Treska, T.J.; Tsehayne, I.; Warner, D.M.; Walsh, M.G.; Weidel, B.C., 2014. Changing ecosystem dynamics in the Laurentian Great Lakes: bottom-up and top-down regulation. *Bioscience*, 64: 13
- Bunnell, D.B.; Barbiero, R.P.; Ludsin, S.A.; Madenjian, C.P.; Warren, G.J.; Dolan, D.M.; Brenden, T.O.; Briland, R.; Gorman, O.T.; He, J.X.; Johengen, T.H.; Lantry, B.F.; Lesht, B.M.; Nalepa, T.F.; Riley, S.C.; Riseng, C.M.; Treska, T.J.; Tsehayne, I.;

- WALSH, M.G.; Warner, D.M.; Weidel, B.C., 2014. Changing Ecosystem Dynamics in the Laurentian Great Lakes: Bottom-Up and Top-Down Regulation. *Bioscience*, 64 (1): 26-39. 10.1093/biosci/bit001
- Burger, D.F.; Hamilton, D.P.; Pilditch, C.A., 2008. Modelling the relative importance of internal and external nutrient loads on water column nutrient concentrations and phytoplankton biomass in a shallow polymictic lake. *Ecological Modelling*, 211 (3-4): 411-423. 10.1016/j.ecolmodel.2007.09.028
- Burger, E.J., 1990. Health as a Surrogate for the Environment. *Daedalus*, 119 (4): 133-153
- Burgin, A.J.; Hamilton, S.K., 2007. Have we overemphasized the role of denitrification in aquatic ecosystems? A review of nitrate removal pathways. *Frontiers in Ecology and the Environment*, 5 (2): 89-96. 10.1890/1540-9295(2007)5[89:hwotro]2.0.co;2
- Burgos, S.A.; Embertson, N.M.; Zhao, Y.; Mitloehner, F.M.; DePeters, E.J.; Fadel, J.G., 2010. Prediction of ammonia emission from dairy cattle manure based on milk urea nitrogen: Relation of milk urea nitrogen to ammonia emissions. *Journal of Dairy Science*, 93 (6): 2377-2386. 10.3168/jds.2009-2415
- Burgos, S.A.; Fadel, J.G.; DePeters, E.J., 2007. Prediction of ammonia emission from dairy cattle manure based on milk urea nitrogen: Relation of milk urea nitrogen to urine urea nitrogen excretion. *Journal of Dairy Science*, 90 (12): 5499-5508. 10.3168/jds.2007-0299
- Burkart, C.S.; Jha, M.K., 2012. Site-Specific Simulation of Nutrient Control Policies: Integrating Economic and Water Quality Effects. *Journal of Agricultural and Resource Economics*, 37 (1): 20-33. <http://www.waeaonline.org/publications/jare/recent-issues>
- Burkepile, D.E.; Hay, M.E., 2006. Herbivore vs. nutrient control of marine primary producers: Context-dependent effects. *Ecology*, 87 (12): 3128-3139. 10.1890/0012-9658(2006)87[3128:hnvcom]2.0.co;2
- Burkholder, J.M.; Glasgow, H.B.; Glasgow, J.E., 1994. Comparative effects of water-column nitrate enrichment on eelgrass *Zostera marina*, shoalgrass *Halo-dule wrightii*, and widgeongrass *Ruppia maritime*. *Marine Ecology Progress Series*, 105: 121-138. 10.3354/meps105121
- Burkholder, J.M.; Glibert, P.M.; Skelton, H.M., 2008. Mixotrophy, a major mode of nutrition for harmful algal species in eutrophic waters. *Harmful Algae*, 8 (1): 77-93. 10.1016/j.hal.2008.08.010
- Burkholder, J.M.; Tomasko, D.A.; Touchette, B.W., 2007. Seagrasses and eutrophication. *Journal of Experimental Marine Biology and Ecology*, 350 (1-2): 46-72. 10.1016/j.jembe.2007.06.024
- Burroughs, R., 2012. Sustainability Trajectories for Urban Waters. In: Weinstein, P.M.; Turner, E.R., eds. *Sustainability Science: The Emerging Paradigm and the Urban Environment*. New York, NY: Springer New York, 329-349. 10.1007/978-1-4614-3188-6\_16
- Burson, A.; Stomp, M.; Akil, L.; Brussaard, C.P.D.; Huisman, J., 2016. Unbalanced reduction of nutrient loads has created an offshore gradient from phosphorus to nitrogen limitation in the North Sea. *Limnology and Oceanography*, 61 (3): 869-888. 10.1002/limo.10257
- Burt, T.; Pinay, G.; Sabater, S., 2010. What do we still need to know about the ecohydrology of riparian zones? *Ecohydrology*, 3 (3): 373-377. 10.1002/eco.140
- Burt, T.P.; Pinay, G., 2005. Linking hydrology and biogeochemistry in complex landscapes. *Progress in Physical Geography*, 29 (3): 297-316. 10.1191/030913305pp450ra
- Busca, D., 2003. Agriculture et environnement. La mise en œuvre négociée des dispositifs agri-environnementaux. Effets d'organisation, enjeux de territoire et dynamique d'appropriation stratégique *Ruralia*: 2
- Business Dictionary, 2017. eutrophication.<http://www.businessdictionary.com/definition/eutrophication.html> [consulté: 16/01/2017]
- Butusov, M.; Jernelov, A., 2013. *Phosphorus: An Element That Could Have Been Called Lucifer*. New York and Heidelberg: Springer
- Butzler, J.M.; Chase, J.M., 2009. The effects of variable nutrient additions on a pond mesocosm community. *Hydrobiologia*, 617: 65-73. 10.1007/s10750-008-9443-8
- Bužančić, M.; Ninčević Gladan, Ž.; Marasović, I.; Kušpilić, G.; Grbec, B., 2016. Eutrophication influence on phytoplankton community composition in three bays on the eastern Adriatic coast. *Oceanologia*, 58 (4): 302-316. 10.1016/j.oceano.2016.05.003
- Buzzelli, C.; Doering, P.; Wan, Y.S.; Sun, D.T., 2014. Modeling ecosystem processes with variable freshwater inflow to the Caloosahatchee River Estuary, southwest Florida. II. Nutrient loading, submarine light, and seagrasses. *Estuarine Coastal and Shelf Science*, 151: 272-284. 10.1016/j.ecss.2014.09.026
- Byrnes, B.H., 1990. Environmental effects of N fertilizer use—An overview. *Fertilizer Research*, 26 (1-3): 209-215
- Bystrom, O.; Andersson, H.; Gren, I.-M., 2000. Economic Criteria for Using Wetlands as Nitrogen Sinks under Uncertainty. *Ecological Economics*, 35 (1): 35-45. 10.1016/S0921-8009(00)00166-X
- Byström, O.; Andersson, H.C.; Gren, I.-M., 2000. Economic criteria for using wetlands as nitrogen sinks under uncertainty. *Ecological Economics*, 35 (1): 35-45. [10.1016/S0921-8009\(00\)00166-X](https://doi.org/10.1016/S0921-8009(00)00166-X)
- C., A.G., 1976. Per capita phosphorus loading from domestic sewage. *Water Research*, 10: 8
- Caballero-Alfonso, A.M.; Carstensen, J.; Conley, D.J., 2015. Biogeochemical and environmental drivers of coastal hypoxia. *Journal of Marine Systems*, 141: 190-199. 10.1016/j.jmarsys.2014.04.008
- Cabecadas, G.; Nogueira, M.; Brogueira, M.J., 1999. Nutrient dynamics and productivity in three European estuaries. *Marine Pollution Bulletin*, 38 (12): 1092-1096. 10.1016/s0025-326x(99)00111-3

- Cabrita, M.T.; Silva, A.; Oliveira, P.B.; Angélico, M.M.; Nogueira, M., 2015. Assessing eutrophication in the Portuguese continental exclusive economic zone within the European marine strategy framework directive. *Ecological Indicators*, 58: 286-299
- Cacela, D.; Lipton, J.; Beltman, D.; Hansen, J.; Wolotira, R., 2005. Associating ecosystem service losses with indicators of toxicity in habitat equivalency analysis. *Environmental Management*, 35 (3): 343-351. 10.1007/s00267-004-4117-4
- Caddy, J., 2000. Marine catchment basin effects versus impacts of fisheries on semi-enclosed seas. *Ices Journal of Marine Science*, 57 (3): 628-640. 10.1006/jmsc.2000.0739
- Cadée, G.C.; Hegeman, J., 2002. Phytoplankton in the Marsdiep at the end of the 20th century; 30 years monitoring biomass, primary production, and *Phaeocystis* blooms. *Journal of Sea Research*, 48 (2): 97-110. 10.1016/s1385-1101(02)00161-2
- Cadoret, A., 2006. *Land uses conflicts related to environment and social networks: stakes of an integrated management? The case of Languedoc-Roussillon coastal zone*. Université Paul Valéry - Montpellier III. <https://tel.archives-ouvertes.fr/tel-00176681>
- Cadoret, A., 2009. Conflict dynamics in coastal zones: A perspective using the example of Languedoc-Roussillon (France). *Journal of Coastal Conservation*, 13 (2): 151-163. 10.1007/s11852-009-0048-9
- Caetano, M.; Vale, C., 2002. Retention of arsenic and phosphorus in iron-rich concretions of Tagus salt marshes. *Marine Chemistry*, 79 (3-4): 261-271. 10.1016/s0304-4203(02)00068-3
- Cai, W.J.; Reimers, C.E.; Shaw, T., 1995. Microelectrode studies of organic-carbon degradation and calcite dissolution at a California continental rise site. *Geochimica Et Cosmochimica Acta*, 59 (3): 497-511. 10.1016/0016-7037(95)00316-r
- Cai, W.-J.; Hu, X.; Huang, W.-J.; Murrell, M.C.; Lehrter, J.C.; Lohrenz, S.E.; Chou, W.-C.; Zhai, W.; Hollibaugh, J.T.; Wang, Y.; Zhao, P.; Guo, X.; Gundersen, K.; Dai, M.; Gong, G.-C., 2011. Acidification of subsurface coastal waters enhanced by eutrophication. *Nature Geoscience*, 4: 766. 10.1038/ngeo1297
- <https://www.nature.com/articles/ngeo1297#supplementary-information>
- Calandrino, E.S.; Paerl, H.W., 2011. Determining the potential for the proliferation of the harmful cyanobacterium *Cylindrospermopsis raciborskii* in Currituck Sound, North Carolina. *Harmful Algae*, 11: 1-9. 10.1016/j.hal.2011.04.003
- Calbet, A.; Sazhin, A.F.; Nejstgaard, J.C.; Berger, S.A.; Tait, Z.S.; Olmos, L.; Sousoni, D.; Isari, S.; Martinez, R.A.; Bouquet, J.M.; Thompson, E.M.; Bamstedt, U.; Jakobsen, H.H., 2014. Future Climate Scenarios for a Coastal Productive Planktonic Food Web Resulting in Microplankton Phenology Changes and Decreased Trophic Transfer Efficiency. *Plos One*, 9 (4): 16. 10.1371/journal.pone.0094388
- Calder-Potts, R.; Spicer, J.; Calosi, P.; Findlay, H.; Widdicombe, S., 2015. A mesocosm study investigating the effects of hypoxia and population density on respiration and reproductive biology in the brittlestar *Amphiura filiformis*. *Marine Ecology Progress Series*, 534: 135-147. 10.3354/meps11379
- Calder-Potts, R.; Spicer, J.I.; Calosi, P.; Findlay, H.S.; Widdicombe, S., 2015. A mesocosm study investigating the effects of hypoxia and population density on respiration and reproductive biology in the brittlestar *Amphiura filiformis*. *Marine Ecology Progress Series*, 534: 135-147. 10.3354/meps11379
- Callcott, J.B.; Crowder, L.B.; Mumford, K., 1999. Current normative concepts in conservation. *Conservation Biology*, 13 (1): 22-35. 10.1046/j.1523-1739.1999.97333.x
- Callon, M. Différentes formes de démocratie technique. *Annales des Mines*: 10
- Calvez, M., 2006. L'analyse culturelle de Mary Douglas: une contribution à la sociologie des institutions. *SociologieS [en ligne]*:
- Calvo-Mendicta, I.; Petit, O.; Vivien, F.-D., 2011. The patrimonial value of water: How to approach water management while avoiding an exclusively market perspective. *Policy and Society*, 30 (4): 301-310. 10.1016/j.polsoc.2011.10.006
- Camacho, A.; Peinado, R.; Santamans, A.C.; Picazo, A., 2012. Functional ecological patterns and the effect of anthropogenic disturbances on a recently restored Mediterranean coastal lagoon. Needs for a sustainable restoration. *Estuarine Coastal and Shelf Science*, 114: 105-117. 10.1016/j.ecss.2012.04.034
- Camacho, G.A., 2006. On the occurrence and ecological features of deep chlorophyll maxima (DCM) in Spanish stratified lakes. *Limnetica*, 25 (1-2): 453-478
- Camacho, R.A.; Martin, J.L.; Watson, B.; Paul, M.J.; Zheng, L.; Stribling, J.B., 2015. Modeling the Factors Controlling Phytoplankton in the St. Louis Bay Estuary, Mississippi and Evaluating Estuarine Responses to Nutrient Load Modifications. *Journal of Environmental Engineering*, 141 (3). 10.1061/(asce)ee.1943-7870.0000892
- Cameron, K.C.; Di, H.J.; Moir, J.L., 2013. Nitrogen losses from the soil/plant system: a review: Nitrogen losses. *Annals of Applied Biology*, 162 (2): 145-173. 10.1111/aab.12014
- Campbell, N.A.; Mitchell, L.G.; Reece J.B. (1997). "Biology: Concepts and Connections", D.M., ON: Addison Wesley Longman Inc. G9, 1997. *Biology: Concepts and Connections* (2nd ed.). Addison Wesley Longman
- Campbell, S., 2001. Ammonium requirements of fast-growing ephemeral macroalgae in a nutrient-enriched marine embayment (Port Phillip Bay, Australia). *Marine Ecology Progress Series*, 209: 99-107. 10.3354/meps209099
- Campling, P.; Terres, J.M.; Vande Walle, S.; Van Orshoven, J.; Crouzet, P., 2005. Estimation of nitrogen balances from agriculture for EU-15: spatialisation of estimates to river basins using the CORINE Land Cover. *Physics and Chemistry of the Earth, Parts A/B/C*, 30 (1-3): 25-34. 10.1016/j.pce.2004.08.014
- Canal-Verges, P.; Potthoff, M.; Hansen, F.T.; Holmboe, N.; Rasmussen, E.K.; Flindt, M.R., 2014. Eelgrass re-establishment in shallow estuaries is affected by drifting macroalgae - Evaluated by agent-based modeling. *Ecological Modelling*, 272: 116-128. 10.1016/j.ecolmodel.2013.09.008
- Candolin, U.; Johanson, A.; Budria, A., 2016. The Influence of Stickleback on the Accumulation of Primary Production: a Comparison of Field and Experimental Data. *Estuaries and Coasts*, 39 (1): 248-257. 10.1007/s12237-015-9984-9

- Canfield, D.E.; Raiswell, R.; Bottrell, S., 1992. The reactivity of sedimentary iron minerals toward sulfide G4. *American Journal of Science*, 292 (9): 659-683
- Cannava, P.; Recous, S.; Parnaudeau, V.; Reau, R., 2008. Modeling N Dynamics to Assess Environmental Impacts of Cropped Soils. *Advances in Agronomy*. Elsevier, Vol.97, 131-174
- Canuel, E.A.; Cammer, S.S.; McIntosh, H.A.; Pondell, C.R., 2012. Climate Change Impacts on the Organic Carbon Cycle at the Land-Ocean Interface. *Annual Review of Earth and Planetary Sciences*, 40 (1): 685-711. 10.1146/annurev-earth-042711-105511
- Cao, W.; Huang, Z.; Zhai, W.; Li, Y.; Hong, H., 2015. Isotopic evidence on multiple sources of nitrogen in the northern Jiulong River, Southeast China. *Estuarine, Coastal and Shelf Science*, 163: 37-43. 10.1016/j.ecss.2015.05.042
- Cao, X.J.; Zhang, H., 2006. Commentary on Study of Surface Water Quality Model. *Journal of Water Resources and Architectural Engineering* (2006): 18-21,
- Capblancq, J.; Décamps, H., 2002. L'eutrophisation des eaux continentales: questions à propos d'un processus complexe. *Nature Sciences Sociétés*, 10 (2): 6-17
- Capblancq, J.; Décamps, H., 2002. Towards a sustainable control of eutrophication of continental waters. *Nature Sciences Sociétés*, 10 (2): 6-17. 10.1016/S1240-1307(02)80066-8
- Caraco, N.; Cole, J.; Findlay, S.; Wigand, C., 2006. *Vascular plants as engineers of oxygen in aquatic systems*. 10.1641/0006-3568(2006)056[0219:VPAE0O]2.0.CO;2
- Caraco, N.F.; Lampman, G.; Cole, J.J.; Limburg, K.E.; Pace, M.L.; Fischer, D., 1998. Microbial assimilation of DIN in a nitrogen rich estuary: implications for food quality and isotope studies. *Marine Ecology Progress Series*, 167: 59-71. 10.3354/meps167059
- Carbiener, R.; Trémolières, M.; Mercier, J.L.; Ortscheit, A., 1990. Aquatic macrophyte communities as bioindicators of eutrophication in calcareous oligosaprope stream waters (Upper Rhine plain, Alsace). *Vegetatio*, 86: 71-88.
- Cardenas, A.; Meyer, F.; Schwieder, H.; Wild, C.; Gardes, A., 2015. The formation of aggregates in coral reef waters under elevated concentrations of dissolved inorganic and organic carbon: A mesocosm approach. *Marine Chemistry*, 175: 47-55. 10.1016/j.marchem.2015.04.002
- Cardoso, P.G.; Pardal, M.A.; Lillebo, A.I.; Ferreira, S.M.; Raffaelli, D.; Marques, J.C., 2004. Dynamic changes in seagrass assemblages under eutrophication and implications for recovery. *Journal of Experimental Marine Biology and Ecology*, 302 (2): 233-248. 10.1016/j.jembe.2003.10.014
- Cardoso, P.G.; Pardal, M.A.; Lillebø, A.I.; Ferreira, S.M.; Raffaelli, D.; Marques, J.C., 2004. Dynamic changes in seagrass assemblages under eutrophication and implications for recovery. *Journal of Experimental Marine Biology and Ecology*, 302 (2): 233-248. 10.1016/j.jembe.2003.10.014
- Carey, C.C.; Hanson, P.C.; Lathrop, R.C.; St. Amand, A.L., 2016. Using wavelet analyses to examine variability in phytoplankton seasonal succession and annual periodicity. *Journal of Plankton Research*, 38 (1): 27-40
- Carey, C.C.; Ibelings, B.W.; Hoffmann, E.P.; Hamilton, D.P.; Brookes, J.D., 2012. Eco-physiological adaptations that favour freshwater cyanobacteria in a changing climate. *Water Research*, 46 (5): 1394-1407
- Carignan, R.; Kalff, J., 1980. Phosphorus sources for aquatic weeds: Water or sediments? *Science*, 207: 987-989
- Carlsson, L.; Persson, J.; Hakanson, L., 1999. A management model to predict seasonal variability in oxygen concentration and oxygen consumption in thermally stratified coastal waters. *Ecological Modelling*, 119 (2-3): 117-134. 10.1016/s0304-3800(99)00013-7
- Carmichael, R.H.; Annett, B.; Valielas, I., 2004. Nitrogen loading to Pleasant Bay, Cape Cod: application of models and stable isotopes to detect incipient nutrient enrichment of estuaries. *Marine Pollution Bulletin*, 48 (1-2): 137-143. 10.1016/s0025-326x(03)00372-2
- Carmichael, R.H.; Walton, W.; Clark, H., 2012. Bivalve-enhanced nitrogen removal from coastal estuaries. *Canadian Journal of Fisheries and Aquatic Sciences*, 69 (7): 1131-1149. 10.1139/f2012-057
- Carmichael, W.W., 1989. *Freshwater cyanobacteria (blue-green algae) toxins*. Pergamon Press, Oxford
- Carmichael, W.W.; Boyer, G.L., 2016. Health impacts from cyanobacteria harmful algae blooms: Implications for the North American Great Lakes. *Harmful Algae*, 54: 194-212
- Carpenter, D.O., 2007. The importance of the Great Lakes Water Quality Agreement. *Journal Public Health Policy*, 28 (2): 4. 10.1057/palgrave.jphp.3200129
- Carpenter, S.; Walker, B.; Andries, J.M.; Abel, N., 2001. From Metaphor to Measurement: Resilience of What to What? *Ecosystems*, 4 (8): 765-781. 10.1007/s10021-001-0045-9
- Carpenter, S.R., 2002. Ecological Futures: Building an Ecology of the Long Now. *Ecology*, 83 (8): 2069-2083. 10.2307/3072038
- Carpenter, S.R., 2005. Eutrophication of aquatic ecosystems: bistability and soil phosphorus. *Proceedings of the National Academy of Sciences of the United States of America*, 102 (29): 10002-10005
- Carpenter, S.R.; Bolgrien, D.; Lathrop, R.C.; Stow, C.A.; Reed, T.; Wilson, M.A., 1998. Ecological and economic analysis of lake eutrophication by nonpoint pollution. *Austral Ecology*, 23 (1): 68-79
- Carpenter, S.R.; Caraco, N.F.; Correll, D.L.; Howarth, R.W.; Sharpley, A.N.; Smith, V.H., 1998. Nonpoint pollution of surface waters with phosphorus and nitrogen. *Ecological Applications*, 8 (3): 559-568
- Carpenter, S.R.; Cole, J.J.; Pace, M.L.; Wilkinson, G.M., 2016. Response of plankton to nutrients, planktivory and terrestrial organic matter: a model analysis of whole-lake experiments. *Ecology Letters*, 19 (3): 230-239. 10.1111/ele.12558
- Carpenter, S.R.; Ludwig, D.; Brock, W.A., 1999. Management of Eutrophication for Lakes Subject to Potentially Irreversible Change. *Ecological Applications*, 9 (3): 751-771. 10.2307/2641327

- Carpenter, S.R.; Ludwig, D.; Brock, W.A., 2004. Management of Eutrophication for Lakes Subject to Potentially Irreversible Change. In: Rosser, J.B., Jr., ed. *Complexity in economics. Volume 3. Urban-economic models, evolutionary economics and ecologic-economic systems*. Elgar Reference Collection. International Library of Critical Writings in Economics, vol. 174. Cheltenham, U.K. and Northampton, Mass.: Elgar, 442-462
- Carraro, E.; Guyennon, N.; Hamilton, D.; Valsecchi, L.; Manfredi, E.C.; Viviano, G.; Salerno, F.; Tartari, G.; Copetti, D., 2012. Coupling high-resolution measurements to a three-dimensional lake model to assess the spatial and temporal dynamics of the cyanobacterium *Planktothrix rubescens* in a medium-sized lake. *Hydrobiologia*, 698 (1): 77-95. 10.1007/s10750-012-1096-y
- Carraro, E.; Guyennon, N.; Viviano, G.; Manfredi, E.C.; Valsecchi, L.; Salerno, F.; Tartari, G.; Copetti, D., 2012. 16 - Impact of Global and Local Pressures on the Ecology of a Medium-Sized Pre-Alpine Lake. In: Jørgensen, F.J.; Sven, E., eds. *Developments in Environmental Modelling*. Elsevier (Models of the Ecological HierarchyFrom Molecules to the Ecosphere), Vol.25, 259-274
- Carrias, J.F.; Amblard, C.; Quiblier-Lloberas, C.; Bourdier, G., 1998. Seasonal dynamics of free and attached heterotrophic nanoflagellates in an oligomesotrophic lake. *Freshwater Biology*, 39 (1): 91-101. 10.1046/j.1365-2427.1998.00263.x
- Carroll, R.W.H.; Warwick, J.J., 2001. Uncertainty analysis of the Carson River mercury transport model. *Ecological Modelling*, 137 (2): 211-224. 10.1016/S0304-3800(00)00438-5
- Carstensen, J.; Andersen, J.H.; Gustafsson, B.G.; Conley, D.J., 2014. Deoxygenation of the Baltic Sea during the last century. *Proceedings of the National Academy of Sciences*, 111 (15): 5628-5633. 10.1073/pnas.1323156111
- Carstensen, J.; Conley, D.J.; Andersen, J.H.; Aertebjerg, G., 2006. Coastal eutrophication and trend reversal: A Danish case study. *Limnology and Oceanography*, 51 (1): 398-408
- Carstensen, J.; Klaas, R.; Cloern, J.E., 2015. Phytoplankton blooms in estuarine and coastal waters: Seasonal patterns and key species. *Estuarine Coastal and Shelf Science*, 162: 98-109. 10.1016/j.ecss.2015.05.005
- Carstensen, J.; Sanchez-Camacho, M.; Duarte, C.M.; Krause-Jensen, D.; Marba, N., 2011. Connecting the Dots: Responses of Coastal Ecosystems to Changing Nutrient Concentrations. *Environmental Science & Technology*, 45 (21): 9122-9132. 10.1021/es202351y
- Cartier, S., 2007. Face au ruissellement érosif, solidarité et socialisation du territoire rural.Ch. Chapitre V. In: Luginbuhl, Y., ed. *Nouvelles urbanités, nouvelles ruralités en Europe*. Peter Lang, 437-444
- Carvalho, L.; Poikane, S.; Solheim, A.L.; Phillips, G.; Borics, G.; Catalan, J.; De Hoyos, C.; Drakare, S.; Dudley, B.J.; Jarvinen, M.; Laplace-Treyture, C.; Maileht, K.; McDonald, C.; Mischke, U.; Moe, J.; Morabito, G.; Noges, P.; Noges, T.; Ott, I.; Pasztaleniec, A.; Skjelbred, B.; Thackeray, S.J., 2013. Strength and uncertainty of phytoplankton metrics for assessing eutrophication impacts in lakes. *Hydrobiologia*, 704 (1): 127-140. 10.1007/s10750-012-1344-1
- Carvalho, S.; Pereira, P.; Pereira, F.; Pablo, H.d.; Vale, C.; Gaspar, M.B., 2011. Factors structuring temporal and spatial dynamics of macrobenthic communities in a eutrophic coastal lagoon (Obidos lagoon, Portugal). *Marine Environmental Research*, 71 (2): 97-110. 10.1016/j.marenvres.2010.11.005
- Casabianca, M.L.d.; Barthelemy, N.; Serrano, O.; Sfriso, A., 2002. Growth rate of *Ulva rigida* in different Mediterranean eutrophicated sites. *Bioresource Technology*, 82 (1): 27-31. 10.1016/s0960-8524(01)00155-9
- Casini, M.; Lovgren, J.; Hjelm, J.; Cardinale, M.; Molinero, J.C.; Kornilovs, G., 2008. Multi-level trophic cascades in a heavily exploited open marine ecosystem. *Proceedings of the Royal Society B-Biological Sciences*, 275 (1644): 1793-1801. 10.1098/rspb.2007.1752
- Caspers, H., 1974. Nutrients and Eutrophication: The Limiting-Nutrient Controversy. *Internationale Revue der gesamten Hydrobiologie und Hydrographie*, 59 (5): 734-735. 10.1002/iroh.19740590516
- Cassell, E.A.; Kort, R.L.; Meals, D.W.; Aschmann, S.G.; Dorioz, J.M.; Anderson, D.P., 2001. Dynamic phosphorus mass balance modeling of large watersheds: long-term implications of management strategies. *Water Science and Technology*, 43 (5): 153-162
- Cassell, E.A.; Meals, D.W.; Aschmann, S.G.; Anderson, D.P.; Rosen, B.H.; Kort, R.L.; Dorioz, J.M., 2002. Use of simulation mass balance modeling to estimate phosphorus and bacteria dynamics in watersheds. *Water Science and Technology*, 45 (9): 157-166
- Castilla, J.C., 1996. Copper mine tailing disposal in northern Chile rocky shores: Enteromorpha compressa (Chlorophyta) as a sentinel species. *Environmental Monitoring and Assessment*, 40 (2): 171-184. 10.1007/bf00414390
- Catton, W.R.; Dunlap, R.E., 1978. *Paradigms, theories, and the primacy of the hep-nep distinction*.
- Caussade, B.; Chaussavoine, C.; Dalmayrac, S.; Masbernat, L., 1978. Modelisation d'écosystèmes rivières : application à un bief du Lot. *Annls Limnol.*, 14 (1-2): 139-162. 10.1051/limn/1978002
- Causse, J.; Baurès, E.; Mery, Y.; Jung, A.-V.; Thomas, O., 2015. Variability of N Export in Water: A Review. *Critical Reviews in Environmental Science and Technology*, 45 (20): 2245-2281. 10.1080/10643389.2015.1010432
- Cayan, D.R., 1980. Large-scale relationships between sea-surface temperature and surface air-temperature. *Monthly Weather Review*, 108 (9): 1293-1301. 10.1175/1520-0493(1980)108<1293:lsrbss>2.0.co;2
- Cea, L.; Legout, C.; Grangeon, T.; Nord, G., 2016. Impact of model simplifications on soil erosion predictions: application of the GLUE methodology to a distributed event-based model at the hillslope scale. *Hydrological Processes*, 30 (7): 1096-1113. 10.1002/hyp.10697
- Cebrian, J.; Corcoran, D.; Lartigue, J., 2014. Eutrophication-Driven Shifts in Primary Producers in Shallow Coastal Systems: Implications for System Functional Change. *Estuaries and Coasts*, 37 (1): S180-S197. 10.1007/s12237-013-9689-x

- Cebrian, J.; Stutes, J.P.; Christiaen, B., 2013. Effects of grazing and fertilization on epiphyte growth dynamics under moderately eutrophic conditions: implications for grazing rate estimates. *Marine Ecology Progress Series*, 474: 121-133. 10.3354/meps10092
- Cedrins, R., 1997. Regional agricultural cooperation in the Baltic Sea region-experiences and future potential-the Western perspective. *Ambio (Sweden)*:
- Cejudo, F.J.; Delatorre, A.; Panque, A., 1984. Short-term ammonium inhibition of nitrogen-fixation in azotobacter. *Biochemical and Biophysical Research Communications*, 123 (2): 431-437. 10.1016/0006-291x(84)90248-1
- Celen, I.; Buchanan, J.R.; Burns, R.T.; Robinson, R.B.; Raman, D.R., 2007. Using a chemical equilibrium model to predict amendments required to precipitate phosphorus as struvite in liquid swine manure. *Water Research*, 41 (8): 1689-1696. 10.1016/j.watres.2007.01.018
- Cellier, P.; Rochette, P.; Hénault, C.; Genermont, S.; Laville, P.; Loubet, B., 2013. Gaseous emissions at different space scales in the nitrogen cycle: A review. *Cahiers Agricultures*, 22 (4): 258-271
- Cellina, F.; De Leo, G.A.; Rizzoli, A.E.; Viaroli, P.; Bartoli, M., 2003. Economic modelling as a tool to support macroalgal bloom management: a case study (Sacca di Goro, Po river delta). *Oceanologica Acta*, 26 (1): 139-147. 10.1016/s0399-1784(02)01238-0
- Cendrero, A.; Francés, E.; Del Corral, D.; Fermán, J.L.; Fischer, D.; Del Río, L.; Camino, M.; López , A., 2003. Indicators and Indices of Environmental Quality for Sustainability Assessment in Coastal Areas; Application to Case Studies in Europe and the Americas. *Journal of Coastal Research*, 19 (4): 919-933
- Cerco, C.F., 1995. Simulation of long-term trends in Chesapeake Bay eutrophication. *Journal of Environmental Engineering-Asce*, 121 (4): 298-310. 10.1061/(asce)0733-9372(1995)121:4(298)
- Cerco, C.F.; Cole, T., 1993. 3-dimentional eutrophication model of Chesapeake Bay 3. *Journal of Environmental Engineering-Asce*, 119 (6): 1006-1025. 10.1061/(asce)0733-9372(1993)119:6(1006)
- Cerco, C.F.; Noel, M.R., 2013. Twenty-one-year simulation of Chesapeake Bay water quality using CE-QUAL-ICM eutrophication model. *Journal of the American Water Resources Association*, 49 (5): 1119-1133. 10.1111/jawr.12107
- Cerco, C.F.; Tillman, D.; Hagy, J.D., 2010. Coupling and comparing a spatially- and temporally-detailed eutrophication model with an ecosystem network model: An initial application to Chesapeake Bay. *Environmental Modelling & Software*, 25 (4): 562-572. 10.1016/j.envsoft.2009.09.008
- Cerdan, O.; Souchere, V.; Lecomte, V.; Couturier, A.; Le Bissonnais, Y., 2002. Incorporating soil surface crusting processes in an expert-based runoff model: Sealing and Transfer by Runoff and Erosion related to Agricultural Management. *Catena*, 46 (2-3): 189-205. 10.1016/s0341-8162(01)00166-7
- Cerro, I.; Antigueedad, I.; Srinavasan, R.; Sauvage, S.; Volk, M.; Sanchez-Perez, J.M., 2014. Simulating Land Management Options to Reduce Nitrate Pollution in an Agricultural Watershed Dominated by an Alluvial Aquifer. *Journal of Environmental Quality*, 43 (1): 67-74. 10.2134/jeq2011.0393
- Cetkauskaitė, A.; Zarkov, D.; Stoskus, L., 2001. Water Quality Control, Monitoring and Wastewater Treatment in Lithuania 1950 to 1999. *Ambio*, 30 (4/5): 297-305
- CEVA, 2010. Complément d'étude sur les processus biologiques, hydrologiques et sédimentologies impliqués dans les blooms macroalgues - CIMAV 2009 - Rapport sur le projet 3, 25+Annexes.
- CEVA, 2011. Complément d'étude sur les processus biologiques, hydrologiques et sédimentologies impliqués dans les blooms macroalgues - CIMAV 2010 - Rapport sur le projet 3, 15.
- CEVA, 2012. Complément d'étude sur les processus biologiques, hydrologiques et sédimentologies impliqués dans les blooms macroalgues - CIMAV 2011 - Rapport sur le projet 3, 36.
- CEVA, 2016. Contrôle de Surveillance DCE 2015: Suivi des blooms de macroalgues opportunistes, 50 pp + Annexes.
- CEVA, 2016. Suivi des proliférations d'algues vertes sur le littoral breton en complément du contrôle de surveillance DCE - Cimav 2015 - Rapport sur le projet 4, 96 pp + Annexes.
- Chai, C.; Yu, Z.; Song, X.; Cao, X., 2006. The status and characteristics of eutrophication in the Yangtze River (Changjiang) Estuary and the adjacent East China Sea, China. *Hydrobiologia*, 563 (1): 313-328
- Chai, L.L.; Krobol, R.; MacDonald, D.; Bittman, S.; Beauchemin, K.A.; Janzen, H.H.; McGinn, S.M.; Vanderzaag, A., 2016. An ecoregion-specific ammonia emissions inventory of Ontario dairy farming: Mitigation potential of diet and manure management practices. *Atmospheric Environment*, 126: 1-14. 10.1016/j.atmosenv.2015.11.030
- Chalk, P.M.; Craswell, E.T.; Polidoro, J.C.; Chen, D., 2015. Fate and efficiency of 15N-labelled slow- and controlled-release fertilizers. *Nutrient Cycling in Agroecosystems*, 102 (2): 167-178. 10.1007/s10705-015-9697-2
- Chalk, P.M.; Inácio, C.T.; Balieiro, F.C.; Rouws, J.R.C., 2016. Do techniques based on 15N enrichment and 15N natural abundance give consistent estimates of the symbiotic dependence of N2-fixing plants? *Plant and Soil*, 399 (1-2): 415-426. 10.1007/s11104-015-2689-9
- Chambers, R.A.; Fourqurean, J.W.; Macko, S.A.; Hoppenot, R., 2001. Biogeochemical effects of iron availability on primary producers in a shallow marine carbonate environment. *Limnology and Oceanography*, 46 (6): 1278-1286
- Chan, F.; Barth, J.A.; Lubchenco, J.; Kirincich, A.; Weeks, H.; Peterson, W.T.; Menge, B.A., 2008. Emergence of anoxia in the California current large marine ecosystem. *Science*, 319 (5865): 920-920. 10.1126/science.1149016
- Chan, T.U.; Hamilton, D.P.; Robson, B.J., 2002. Modelling phytoplankton succession and biomass in a seasonal west Australian estuary. In: Wetzel, R.G., ed. *International Association of Theoretical and Applied Limnology, Vol 28, Pt 2, Proceedings*. (International Association of Theoretical and Applied Limnology - Proceedings), Vol.28, 1086-1088

- Chang, H.Y.; Wu, S.H.; Shao, K.T.; Kao, W.Y.; Maa, C.J.W.; Jan, R.Q.; Liu, L.L.; Tzeng, C.S.; Hwang, J.S.; Hsieh, H.L.; Kao, S.J.; Chen, Y.K.; Lin, H.J., 2012. Longitudinal variation in food sources and their use by aquatic fauna along a subtropical river in Taiwan. *Freshwater Biology*, 57 (9): 1839-1853. 10.1111/j.1365-2427.2012.02843.x
- Chang, N.B.; Imen, S.; Vannah, B., 2015. Remote Sensing for Monitoring Surface Water Quality Status and Ecosystem State in Relation to the Nutrient Cycle: A 40-Year Perspective. *Critical Reviews in Environmental Science and Technology*, 45 (2): 101-166. 10.1080/10643389.2013.829981
- Chang, N.B.; Wimberly, B.; Xuan, Z.M., 2012. Identification of spatiotemporal nutrient patterns in a coastal bay via an integrated k-means clustering and gravity model. *Journal of Environmental Monitoring*, 14 (3): 992-1005. 10.1039/c2em10574h
- Chang, N.N.; Shiao, J.C.; Gong, G.C., 2012. Diversity of demersal fish in the East China Sea: Implication of eutrophication and fishery. *Continental Shelf Research*, 47: 12. 10.1016/j.csr.2012.06.011
- Chanudet, V.; Fabre, V.; van der Kaaij, T., 2012. Application of a three-dimensional hydrodynamic model to the Nam Theun 2 Reservoir (Lao PDR). *Journal of Great Lakes Research*, 38: 260-269. 10.1016/j.jglr.2012.01.008
- Chaoui, H.; Montes, F.; Rotz, C.A.; Richard, T.L., 2009. Volatile ammonia fraction and flux from thin layers of buffered ammonium solution and dairy cattle manure. *Transactions of the Asabe*, 52 (5): 1695-1706
- Chapelle, A., 1995. A preliminary model of nutrient cycling in sediments of a Mediterranean lagoon. *Ecological Modelling*, 80 (2-3): 131-147. 10.1016/0304-3800(94)00073-q
- Chapelle, A.; Lazure, P.; Menesguen, A., 1994. Modeling eutrophication events in a coastal ecosystem - sensitivity analysis. *Estuarine Coastal and Shelf Science*, 39 (6): 529-548. 10.1016/s0272-7714(06)80008-9
- Chapelle, A.; Lazure, P.; Souchu, P., 2001. Modelling anoxia in the Thau lagoon (France). *Oceanologica Acta*, 24: S87-S97
- Chapelle, A.; Le Gac, M.; Labry, C.; Siano, R.; Quere, J.; Caradec, F.; Le Bec, C.; Nezan, E.; Doner, A.; Gouriou, J., 2015. The Bay of Brest (France), a new risky site for toxic Alexandrium minutum blooms and PSP shellfish contamination. *Harmful algae news*, 51: 4-5
- Chapelle, A.; Menesguen, A.; Deslous-Paoli, J.M.; Souchu, P.; Mazouni, N.; Vaquer, A.; Millet, B., 2000. Modelling nitrogen, primary production and oxygen in a Mediterranean lagoon. Impact of oysters farming and inputs from the watershed. *Ecological Modelling*, 127 (2-3): 161-181. 10.1016/s0304-3800(99)00206-9
- Chapin, D.M.; Bliss, L.C.; Bledsoe, L.J., 1991. Environmental-regulation of nitrogen-fixation in a high arctic lowland ecosystem. *Canadian Journal of Botany-Revue Canadienne De Botanique*, 69 (12): 2744-2755
- Chapra, S.C.; Canale, R.P., 1991. Long-Term Phenomenological Model of Phosphorus and Oxygen for Stratified Lakes. *Water Research*, 25: 707-715
- Charlier, R.H., 2007. Green Tides on teh Brittany Coasts. *Environmental Research, Engineering and Management*, 3 (41): 7
- Charlier, R.H.; Morand, P.; Finkl, C.W., 2008. How Brittany and Florida coasts cope with green tides. *International Journal of Environmental Studies*, 65 (2): 27. 10.1080/00207230701791448
- Charlier, R.H.; Morand, P.; Finkl, C.W.; Thys, A.; others, 2007. Green tides on the Brittany coasts. *Environ Res Eng Manag*, 3 (41): 52-59
- Charru, F.; Mouilleron, H.; Eiff, O., 2004. Erosion and deposition of particles on a bed sheared by a viscous flow. *Journal of Fluid Mechanics*, 519: 55-80. 10.1017/s0022112004001028
- Châteauraynaud, F., 2010. Les topiques environnementales entre controverses et conflits. Écologie politique et sociologie pragmatique en France. Proposition de contribution à l'ouvrage : Sciences sociales et environnement en Allemagne et en France
- Chau, K., 2007. Integrated water quality management in Tolo Harbour, Hong Kong: a case study. *Journal of Cleaner Production*, 15 (16): 1568-1572. 10.1016/j.jclepro.2006.07.047
- Chau, K.W.; Jin, H., 1998. Eutrophication model for a coastal bay in Hong Kong. *Journal of Environmental Engineering*, 124 (7): 628-638
- Chaussavoine, C., 1979. *Contribution la modélisation d'écosystèmes aquatiques*. INP, Toulouse.
- Chebly, J.E., 2014. The Value of Water: Economics of Water for a Sustainable Use. *Economic and Social Review*, 45 (2): 207-222. <http://www.esr.ie/issue/archive>
- Chemicool Dictionary, 2017. Definition of Eutrophication.<http://www.chemicool.com/definition/eutrophication.html> [consulté: 16/01/2017]
- Chen, B.; Liu, E.; Tian, Q.; Yan, C.; Zhang, Y., 2014. Soil nitrogen dynamics and crop residues. A review. *Agronomy for Sustainable Development*, 34 (2): 429-442. 10.1007/s13593-014-0207-8
- Chen, B.; Zou, D.; Jiang, H., 2015. Elevated CO<sub>2</sub> exacerbates competition for growth and photosynthesis between Gracilaria lemaneiformis and Ulva lactuca. *Aquaculture*, 443: 49-55. 10.1016/j.aquaculture.2015.03.009
- Chen, B.B.; Zou, D.H.; Ma, J.H., 2016. Interactive effects of elevated CO<sub>2</sub> and nitrogen-phosphorus supply on the physiological properties of Pyropia haitanensis (Bangiales, Rhodophyta). *Journal of Applied Phycology*, 28 (2): 1235-1243. 10.1007/s10811-015-0628-z
- Chen, C.; Wiesenburg, D.; Xie, L., 1997. Influences of river discharge on biological production in the inner shelf: A coupled biological and physical model of the Louisiana-Texas shelf. *Journal of Marine Research*, 55 (2): 293-320. 10.1357/0022240973224391
- Chen, D.; Guo, Y.; Hu, M.; Dahlgren, R.A., 2015. A lagged variable model for characterizing temporally dynamic export of legacy anthropogenic nitrogen from watersheds to rivers. *Environmental Science and Pollution Research*, 22 (15): 11314-11326. 10.1007/s11356-015-4377-y

- Chen, D.; Hu, M.; Guo, Y.; Dahlgren, R.A., 2015. Reconstructing historical changes in phosphorus inputs to rivers from point and nonpoint sources in a rapidly developing watershed in eastern China, 1980–2010. *Science of the Total Environment*, 533: 196-204. 10.1016/j.scitotenv.2015.06.079
- Chen, D.; Hu, M.; Guo, Y.; Dahlgren, R.A., 2016. Modeling forest/agricultural and residential nitrogen budgets and riverine export dynamics in catchments with contrasting anthropogenic impacts in eastern China between 1980–2010. *Agriculture, Ecosystems & Environment*, 221: 145-155. 10.1016/j.agee.2016.01.037
- Chen, D.J.; Hu, M.P.; Guo, Y.; Dahlgren, R.A., 2016. Modeling forest/agricultural and residential nitrogen budgets and riverine export dynamics in catchments with contrasting anthropogenic impacts in eastern China between 1980-2010. *Agriculture Ecosystems & Environment*, 221: 145-155. 10.1016/j.agee.2016.01.037
- Chen, F.; Chen, J.; Jia, G.; Jin, H.; Xu, J.; Yang, Z.; Zhuang, Y.; Liu, X.; Zhang, H., 2013. Nitrate delta N-15 and delta O-18 evidence for active biological transformation in the Changjiang Estuary and the adjacent East China Sea. *Acta Oceanologica Sinica*, 32 (4): 11-17. 10.1007/s13131-013-0294-4
- Chen, H.J.; Ivanoff, D.; Pietro, K., 2015. Long-term phosphorus removal in the Everglades stormwater treatment areas of South Florida in the United States. *Ecological Engineering*, 79: 158-168. 10.1016/j.ecoleng.2014.12.012
- Chen, J.-B.; Busigny, V.; Gaillardet, J.; Louvat, P.; Wang, Y.-N., 2014. Iron isotopes in the Seine River (France): Natural versus anthropogenic sources. *Geochimica Et Cosmochimica Acta*, 128: 128-143. 10.1016/j.gca.2013.12.017
- Chen, J.F.; Xu, H.L.; Sun, Y.B.; Huang, L.L.; Zhang, P.X.; Zou, C.P.; Yu, B.; Zhu, G.F.; Zhao, C.Y., 2016. Interspecific differences in growth response and tolerance to the antibiotic sulfadiazine in ten clonal wetland plants in South China. *Science of the Total Environment*, 543: 197-205. 10.1016/j.scitotenv.2015.11.015
- Chen, J.Y.; Ni, X.B.; Liu, M.L.; Chen, J.F.; Mao, Z.H.; Jin, H.Y.; Pan, D.L., 2014. Monitoring the occurrence of seasonal low-oxygen events off the Changjiang Estuary through integration of remote sensing, buoy observations, and modeling. *Journal of Geophysical Research-Oceans*, 119 (8): 5311-5322. 10.1002/2014jc010333
- Chen, Q.; Morales-Chaves, Y.; Li, H.; Mynett, A.E., 2006. Hydroinformatics techniques in eco-environmental modelling and management. *Journal of Hydroinformatics*, 8 (4): 297-316. 10.2166/hydro.2006.011
- Chen, Q.; Zhang, C.; Recknagel, F.; Guo, J.; Blanckaert, K., 2014. Adaptation and multiple parameter optimization of the simulation model SALMO as prerequisite for scenario analysis on a shallow eutrophic Lake. *Ecological Modelling*, 273: 109-116. 10.1016/j.ecolmodel.2013.11.006
- Chen, S.X.; Hong, W.S.; Su, Y.Q.; Zhang, Q.Y., 2008. Microhabitat selection in the early juvenile mudskipper *Boleophthalmus pectinirostris* (L.). *Journal of Fish Biology*, 72 (3): 585-593. 10.1111/j.1095-8649.2007.01723.x
- Chen, X.; McGowan, S.; Xu, L.; Zeng, L.H.; Yang, X.D., 2016. Effects of hydrological regulation and anthropogenic pollutants on Dongting Lake in the Yangtze floodplain. *Ecohydrology*, 9 (2): 315-325. 10.1002/eco.1637
- Chen, X.F.; Shen, Z.Y.; Li, Y.Y.; Yang, Y., 2015. Physical controls of hypoxia in waters adjacent to the Yangtze Estuary: A numerical modeling study. *Marine Pollution Bulletin*, 97 (1-2): 349-364. 10.1016/j.marpolbul.2015.05.067
- Chen, Y.; Song, X.; Zhang, Z.; Shi, P.J.; Tao, F.L., 2015. Simulating the impact of flooding events on non-point source pollution and the effects of filter strips in an intensive agricultural watershed in China. *Limnology*, 16 (2): 91-101. 10.1007/s10201-014-0443-2
- Chen, Y.Z.; Lin, W.Q.; Zhu, J.R.; Lu, S.Q., 2016. Numerical simulation of an algal bloom in Dianshan Lake. *Chinese Journal of Oceanology and Limnology*, 34 (1): 231-244. 10.1007/s00343-015-4298-0
- Cherr, C.M.; Scholberg, J.M.S.; McSorley, R., 2006. Green Manure Approaches to Crop Production. *Agronomy Journal*, 98 (2): 302. 10.2134/agronj2005.0035
- Cherry, K.A.; Shepherd, M.; Withers, P.J.A.; Mooney, S.J., 2008. Assessing the effectiveness of actions to mitigate nutrient loss from agriculture: A review of methods. *Science of the Total Environment*, 406 (1-2): 1-23. 10.1016/j.scitotenv.2008.07.015
- Chesney, E.J.; Baltz, D.M.; Thomas, R.G., 2000. Louisiana estuarine and coastal fisheries and habitats: Perspectives from a fish's eye view. *Ecological Applications*, 10 (2): 350-366
- Chesson, P., 2000. General theory of competitive coexistence in spatially-varying environments. *Theoretical Population Biology*, 58 (3): 211-237
- Chesson, P., 2000. Mechanisms of maintenance of species diversity. *Annual Review of Ecology and Systematics*, 31 (1): 343-366
- Chesson, P.; Gebauer, R.L.; Schwinnig, S.; Huntly, N.; Wiegand, K.; Ernest, M.S.; Sher, A.; Novoplansky, A.; Weltzin, J.F., 2004. Resource pulses, species interactions, and diversity maintenance in arid and semi-arid environments. *Oecologia*, 141 (2): 236-253
- Chevassus-au-Louis, B.; Andral, B.; Femenias, A.; Bouvier, M., 2012. *Bilan des connaissances scientifiques sur les causes de prolifération de macroalgues vertes: Application à la situation de la Bretagne et propositions*, 147.
- Chien, S.H.; Prochnow, L.I.; Cantarella, H., 2009. Recent developments of fertilizer production and use to improve nutrient efficiency and minimize environmental impacts. *Advances in agronomy*, 102: 267-322
- Childers, D.L.; Corman, J.; Edwards, M.; Elser, J.J., 2011. Sustainability Challenges of Phosphorus and Food: Solutions from Closing the Human Phosphorus Cycle. *Bioscience*, 61 (2): 117-124. 10.1525/bio.2011.612.6
- Chishlock, M.F.; Sarnelle, O.; Olsen, B.K.; Doster, E.; Wilson, A.E., 2013. Large effects of consumer offense on ecosystem structure and function. *Ecology*, 94 (11): 2375-2380. 10.1890/13-0320.1
- Chishlock, M.F.; Sharp, K.L.; Wilson, A.E., 2014. *Cylindrospermopsis raciborskii* dominates under very low and high nitrogen-to-phosphorus ratios. *Water Research*, 49 (C): 207-214. 10.1016/j.watres.2013.11.022

- Cho, C.W.; Song, Y.S.; Kim, C.K.; Kim, T.I.; Han, J.S.; Woo, S.B.; An, S.; Choi, T., 2015. A Modeling Study on Hypoxia Formation in the Bottom Water of the Yeongsan River Estuary, Korea. *Journal of Coastal Research*, 31 (4): 920-929. 10.2112/jcoastres-d-13-00099.1
- Cho, K.H.; Kang, J.H.; Ki, S.J.; Park, Y.; Cha, S.M.; Kim, J.H., 2009. Determination of the optimal parameters in regression models for the prediction of chlorophyll-a: A case study of the Yeongsan Reservoir, Korea. *Science of the Total Environment*, 407 (8): 2536-2545. 10.1016/j.scitotenv.2009.01.017
- Chouvelon, T., 2011. Structure et fonctionnement des r'eseaux trophiques par l' utilisation de traceurs 'ecologiques ( isotopes stables , m'etaux ) en environnement marin ouvert : le cas du Golfe de Gascogne Tiphaine Chouvelon To cite this version.
- Chowdhury, M.A.; de Neergaard, A.; Jensen, L.S., 2014. Potential of aeration flow rate and bio-char addition to reduce greenhouse gas and ammonia emissions during manure composting. *Chemosphere*, 97: 16-25. 10.1016/j.chemosphere.2013.10.030
- Chowdhury, R.B.; Moore, G.A.; Weatherley, A.J.; Arora, M., 2014. A review of recent substance flow analyses of phosphorus to identify priority management areas at different geographical scales. *Resources, Conservation and Recycling*, 83: 213-228. 10.1016/j.resconrec.2013.10.014
- Christensen, P.B.; Glud, R.N.; Dalsgaard, T.; Gillespie, P., 2003. Impacts of longline mussel farming on oxygen and nitrogen dynamics and biological communities of coastal sediments. *Aquaculture*, 218 (1-4): 567-588. 10.1016/s0044-8486(02)00587-2
- Christia, C.; Giordani, G.; Papastergiadou, E., 2014. Assessment of ecological quality of coastal lagoons with a combination of phytoplankton and water quality indices. *Marine Pollution Bulletin*, 86 (1-2): 411-423. 10.1016/j.marpolbul.2014.06.038
- Chung, E.G.; Bombardelli, F.A.; Schladow, S.G., 2009. Modeling linkages between sediment resuspension and water quality in a shallow, eutrophic, wind-exposed lake. *Ecological Modelling*, 220 (9-10): 1251-1265. 10.1016/j.ecolmodel.2009.01.038
- Chyan, J.M.; Lu, C.C.; Shiu, R.F.; Bellotindos, L.M., 2016. Purification of landscape water by using an innovative application of subsurface flow constructed wetland. *Environmental Science and Pollution Research*, 23 (1): 535-545. 10.1007/s11356-015-5265-1
- Cicerone, R.J.; Oremland, R.S., 1988. Biogeochemical aspects of atmospheric methane. *Global Biogeochemical Cycles*, 2 (4): 299-327. 10.1029/GB002i004p00299
- Ciecielska, H.; Kolada, A., 2014. ESMI: a macrophyte index for assessing the ecological status of lakes. *Environmental Monitoring and Assessment*, 186 (9): 5501-5517. 10.1007/s10661-014-3799-1
- Ciglenecki, I.; Janevic, I.; Margus, M.; Bura-Nakic, E.; Caric, M.; Ljubesic, Z.; Batistic, M.; Hrustic, E.; Dupcic, I.; Garic, R., 2015. Impacts of extreme weather events on highly eutrophic marine ecosystem (Rogoznica Lake, Adriatic coast). *Continental Shelf Research*, 108: 144-155. 10.1016/j.csr.2015.05.007
- Cioffi, F.; Di Eugenio, A.; Gallerano, F., 1995. A new representation of anoxic crises in hypertrophic lagoons. *Applied Mathematical Modelling*, - 19 (- 11): - 695
- Cioffi, F.; Gallerano, F., 2001. Management strategies for the control of eutrophication processes in Fogliano lagoon (Italy): a long-term analysis using a mathematical model. *Applied Mathematical Modelling*, 25 (5): 385-426. 10.1016/s0307-904x(00)00053-6
- Cioffi, F.; Gallerano, F., 2006. From rooted to floating vegetal species in lagoons as a consequence of the increases of external nutrient load: An analysis by model of the species selection mechanism. *Applied Mathematical Modelling*, 30 (1): 10-37. 10.1016/j.apm.2005.03.004
- Claeys, C.; Sirot, O., 2010. Proliférantes natures. Introduction. *Etudes rurales*, 185 (1): 9-22
- Clarke, S.J., 2002. Vegetation growth in rivers: influences upon sediment and nutrient dynamics. *Progress in Physical Geography*, 26 (2): 159-172. 10.1191/0309133302pp324ra
- Claussen, U.; Zevenboom, W.; Brockmann, U.; Topcu, D.; Bot, P., 2009. Assessment of the eutrophication status of transitional, coastal and marine waters within OSPAR. *Hydrobiologia*, 629 (49-58):
- Cleveland, C.C.; Liptzin, D., 2007. C : N : P stoichiometry in soil: is there a "Redfield ratio" for the microbial biomass? *Biogeochemistry*, 85 (3): 235-252. 10.1007/s10533-007-9132-0
- Cloern, J.; Krantz, T.; Duffy, J.E., 2013. *Eutrophication*. Washington, D.C.: Cutler J. Cleveland (*Environmental Information Coalition, National Council for Science and the Environment*)
- Cloern, J.E., 1982. Does the benthos control phytoplankton biomass in South-San-Francisco Bay. *Marine Ecology Progress Series*, 9 (2): 191-202. 10.3354/meps009191
- Cloern, J.E., 1987. Turbidity as a control on phytoplankton biomass and productivity in estuaries. *Continental Shelf Research*, 7 (11-12): 1367-1381
- Cloern, J.E., 2001. Our evolving conceptual model of the coastal eutrophication problem. *Marine Ecology Progress Series*, 210: 223-253. 10.3354/meps210223
- Cloern, J.E.; Grenz, C.; VidergarLucas, L., 1995. An empirical model of the phytoplankton chlorophyll:carbon ratio - The conversion factor between productivity and growth rate. *Limnology and Oceanography*, 40 (7): 1313-1321
- Cloern, J.E.; Jassby, A.D., 2009. Patterns and Scales of Phytoplankton Variability in Estuarine-Coastal Ecosystems. *Estuaries and Coasts*, 33 (2): 230-241. 10.1007/s12237-009-9195-3
- Cloern, J.E.; Jassby, A.D., 2012. Drivers of change in estuarine-coastal ecosystems: Discoveries from four decades of study in San Francisco Bay. *Reviews of Geophysics*, 50: 33. 10.1029/2012rg000397

- Cloern, J.E.; Jassby, A.D.; Thompson, J.K.; Hieb, K.A., 2007. A cold phase of the East Pacific triggers new phytoplankton blooms in San Francisco Bay. *Proceedings of the National Academy of Sciences of the United States of America*, 104 (47): 18561-18565. 10.1073/pnas.0706151104
- CNRS, 2017. Découvrir l'eau - Ecosystèmes aquatiques continentaux - L'eutrophisation.<http://www.cnrs.fr/cw/dossiers/doseau/decouv/ecosys/eutrophisat.html> [consulté: 16/01/2017]
- Coad, P.; Cathers, B.; Ball, J.E.; Kadluczka, R., 2014. Proactive management of estuarine algal blooms using an automated monitoring buoy coupled with an artificial neural network. *Environmental Modelling & Software*, 61: 393-409. 10.1016/j.envsoft.2014.07.011
- Coat, G.; Dion, P.; Noailles, M.-C.; Reviers, B.d.; Fontaine, J.-M.; Berger-Perrot, Y.; Loiseaux-De Goér, S., 1998. *Ulva armoricana* (Ulvales, Chlorophyta) from the coasts of Brittany (France). II. Nuclear rDNA ITS sequence analysis. *European Journal of Phycology*, 33 (1): 81–86. 10.1080/09670269810001736563
- Combaert, D.; Wong, A.; Bayley, S.E., 2014. Precipitation-induced alternative regime switches in shallow lakes of the Boreal Plains (Alberta, Canada). *Ecosystems*, 17 (3): 535-549
- Cochrane, T.A.; Flanagan, D.C., 1999. Assessing water erosion in small watersheds using WEPP with GIS and digital elevation models. *Journal of Soil and Water Conservation*, 54 (4): 678-685
- Codd, G.A., 2000. Cyanobacterial toxins, the perception of water quality, and the prioritisation of eutrophication control. *Ecological Engineering*, 16 (1): 51-60
- Cofala, J.; Amann, M.; Klimont, Z., 2000. Calculating emission control scenarios and their costs in the RAINS model: Recent experience and future needs. *Pollution Atmosphérique*, (163 SPEC. ISS.): 37-47
- Coffaro, G.; Bocci, M., 1997. Resources competition between *Ulva rigida* and *Zostera marina*: a quantitative approach applied to the Lagoon of Venice. *Ecological Modelling*, 102 (1): 81-95. 10.1016/S0304-3800(97)00096-3
- Coffaro, G.; Bocci, M.; Bendoricchio, G., 1997. Application of structural dynamic approach to estimate space variability of primary producers in shallow marine water. *Ecological Modelling*, 102 (1): 97-114. 10.1016/S0304-3800(97)00097-5
- Coffaro, G.; Sfriso, A., 1997. Simulation model of *Ulva rigida* growth in shallow water of the Lagoon of Venice. *Ecological Modelling*, 102 (1): 55-66. 10.1016/s0304-3800(97)00094-x
- Cogle, A.L.; Lane, L.J.; Basher, L., 2003. Testing the hillslope erosion model for application in India, New Zealand and Australia. *Environmental Modelling & Software*, 18 (8-9): 825-830. 10.1016/s1364-8152(03)00082-3
- Cohen, M.J.; Shepherd, K.D.; Walsh, M.G., 2005. Empirical reformulation of the Universal Soil Loss Equation for erosion risk assessment in a tropical watershed. *Geoderma*, 124 (3-4): 235-252. 10.1016/j.geoderma.2004.05.003
- Cohen, R.A.; Fong, P., 2004. Nitrogen uptake and assimilation in *Enteromorpha intestinalis* (L.) Link (Chlorophyta): using N-15 to determine preference during simultaneous pulses of nitrate and ammonium. *Journal of Experimental Marine Biology and Ecology*, 309 (1): 67–77. 10.1016/j.jembe.2004.03.009
- Cohen, R.A.; Fong, P., 2004. Physiological responses of a bloom-forming green macroalga to short-term change in salinity, nutrients, and light help explain its ecological success. *Estuaries*, 27 (2): 209–216. 10.1007/bf02803378
- Cohen, R.A.; Fong, P., 2005. Experimental evidence supports the use of delta N-15 content of the opportunistic green macroalga *Enteromorpha intestinalis* (Chlorophyta) to determine nitrogen sources to estuaries. *Journal of Phycology*, 41 (2): 287–293. 10.1111/j.1529-8817.2005.04022.x
- Cohu, S.; Mangialajo, L.; Thibaut, T.; Blanfune, A.; Marro, S.; Lemee, R., 2013. Proliferation of the toxic dinoflagellate *Ostreopsis cf. ovata* in relation to depth, biotic substrate and environmental factors in the North West Mediterranean Sea. *Harmful Algae*, 24: 32-44. 10.1016/j.hal.2013.01.002
- Cole, B.E.; Cloern, J.E., 1987. An empirical-model for estimating phytoplankton productivity in estuaries. *Marine Ecology Progress Series*, 36 (3): 299-305. 10.3354/meps036299
- COLEMAN, N.V.; STEWART, W.D.P., 1979. Enteromorpha-prolifera in a poly-eutrophic loch in Scotland. *BRITISH PHYCOLOGICAL JOURNAL*, 14 (2): 121
- Coll, M.; Piroddi, C.; Steenbeek, J.; Kaschner, K.; Ben Rais Lasram, F.; Aguzzi, J.; Ballesteros, E.; Bianchi, C.N.; Corbera, J.; Dailianis, T.; Danovaro, R.; Estrada, M.; Froglio, C.; Galil, B.S.; Gasol, J.M.; Gertwagen, R.; Gil, J.; Guilhaumon, F.; Kesner-Reyes, K.; Kitsos, M.-S.; Koukouras, A.; Lampadariou, N.; Laxamana, E.; López-Fé de la Cuadra, C.M.; Lotze, H.K.; Martin, D.; Mouillot, D.; Oro, D.; Raicevich, S.; Rius-Barile, J.; Saiz-Salinas, J.I.; San Vicente, C.; Somot, S.; Templado, J.; Turon, X.; Vafidis, D.; Villanueva, R.; Voultsiadou, E., 2010. The biodiversity of the Mediterranean Sea: estimates, patterns, and threats. *Plos One*, 5 (8): e11842-e11842. 10.1371/journal.pone.0011842
- Coll, M.; Piroddi, C.; Steenbeek, J.; Kaschner, K.; Ben Rais Lasram, F.; Aguzzi, J.; Ballesteros, E.; Bianchi, C.N.; Corbera, J.; Dailianis, T.; Danovaro, R.; Estrada, M.; Froglio, C.; Galil, B.S.; Gasol, J.M.; Gertwagen, R.; Gil, J.; Guilhaumon, F.; Kesner-Reyes, K.; Kitsos, M.S.; Koukouras, A.; Lampadariou, N.; Laxamana, E.; Lopez-Fé de la Cuadra, C.M.; Lotze, H.K.; Martin, D.; Mouillot, D.; Oro, D.; Raicevich, S.; Rius-Barile, J.; Saiz-Salinas, J.I.; San Vicente, C.; Somot, S.; Templado, J.; Turon, X.; Vafidis, D.; Villanueva, R.; Voultsiadou, E., 2010. The biodiversity of the Mediterranean Sea: estimates, patterns, and threats. *Plos One*, 5 (8): e11842. 10.1371/journal.pone.0011842
- Collier, C.A.; de Almeida Neto, M.S.; Aretakis, G.M.A.; Santos, R.E.; de Oliveira, T.H.; Mourão, J.S.; Severi, W.; El-Deir, A.C.A., 2015. Integrated approach to the understanding of the degradation of an urban river: Local perceptions, environmental parameters and geoprocessing. *Journal of Ethnobiology and Ethnomedicine*, 11 (1). 10.1186/s13002-015-0054-y
- Collins, A.L.; Walling, D.E., 2007. Fine-grained bed sediment storage within the main channel systems of the Frome and Piddle catchments, Dorset, UK. *Hydrological Processes*, 21 (11): 1448-1459. 10.1002/hyp.6269

- Collos, Y.; Bec, B.; Jauzein, C.; Abadie, E.; Laugier, T.; Lautier, J.; Pastoureaud, A.; Souchu, P.; Vaquer, A., 2009. Oligotrophication and emergence of picocyanobacteria and a toxic dinoflagellate in Thau lagoon, southern France. *Journal of Sea Research*, 61 (1-2): 68-75. 10.1016/j.seares.2008.05.008
- Colnenne-David, C.; Doré, T., 2015. Designing innovative productive cropping systems with quantified and ambitious environmental goals. *Renewable Agriculture and Food Systems*, 30 (06): 487-502. 10.1017/S1742170514000313
- Colomb, B.; Debaeke, P.; Jouany, C.; Nolot, J.M., 2007. Phosphorus management in low input stockless cropping systems: Crop and soil responses to contrasting P regimes in a 36-year experiment in southern France. *European Journal of Agronomy*, 26 (2): 154-165. 10.1016/j.eja.2006.09.004
- Colombo, G., 1992. Marine eutrophication and population dynamics: 25th European Marine Biology Symposium. Olsen & Olsen, VIII, 395 S;
- Coma, R.; Ribes, M.; Serrano, E.; Jimenez, E.; Salat, J.; Pascual, J., 2009. Global warming-enhanced stratification and mass mortality events in the Mediterranean. *Proceedings of the National Academy of Sciences of the United States of America*, 106 (15): 6176-6181. 10.1073/pnas.0805801106
- Comeau, S.; Edmunds, P.J.; Spindel, N.B.; Carpenter, R.C., 2013. The responses of eight coral reef calcifiers to increasing partial pressure of CO<sub>2</sub> do not exhibit a tipping point. *Limnology and Oceanography*, 58 (1): 388-398. 10.4319/lo.2013.58.1.0388
- Comifer Groupe, A., 2013. *Calcul de la fertilisation azotée. Guide méthodologique pour l'établissement des prescriptions locales. Cultures annuelles et prairies*. Paris: Comifer
- Comifer Groupe, P., 1993. Aide au diagnostic et à la prescription de la fertilisation phosphatée et potassique des grandes cultures - 1993 Comifer, Paris.
- Comité National Français de l'AISH, 1996. Eutrophisation.<http://hydrologie.org/glu/FRDIC/DICEUTRO.HTM> [consulté: 16/01/2017]
- Commission européenne, 2009. *Guidance document No.23 : Guidance document on eutrophication assessment in the context of European water policies, European Communities*.
- Commission européenne, 2011. *Directive « Nitrates » (91/676/CEE), Etat de la situation et évolution de l'environnement aquatique et des pratiques agricoles, Guide pour l'élaboration de rapports par les Etats Membres*.
- Commission européenne, 2015. *Communication au Parlement européen et au Conseil, Directive-cadre sur l'eau et directives inondations – mesures à prendre pour atteindre le « bon état » des eaux de l'Union européenne et réduire les risque d'inondation*.
- Committee on Environment and Natural Resources, 2000. *Integrated assessment of hypoxia in the Northern Gulf of Mexico*, 58p.
- Compson, Z.G.; Hungate, B.A.; Whitham, T.G.; Meneses, N.; Busby, P.E.; Wojtowicz, T.; Ford, A.C.; Adams, K.J.; Marks, J.C., 2016. Plant genotype influences aquatic-terrestrial ecosystem linkages through timing and composition of insect emergence. *Ecosphere*, 7 (5). 10.1002/ecs2.1331
- Conan, C.; Bouraoui, F.; Turpin, N.; de Marsily, G.; Bidoglio, G., 2003. Modeling flow and nitrate fate at catchment scale in Brittany (France). *Journal of Environmental Quality*, 32 (6): 2026-2032
- Conley, D.J., 2012. Save the Baltic Sea. *Nature*, 486 (7404): 463-464
- Conley, D.J.; Bjorck, S.; Bonsdorff, E.; Carstensen, J.; Destouni, G.; Gustafsson, B.G.; Hietanen, S.; Kortekaas, M.; Kuosa, H.; Meier, H.E.M.; Mueller-Karulis, B.; Nordberg, K.; Norkko, A.; Nuernberg, G.; Pitkanen, H.; Rabalais, N.N.; Rosenberg, R.; Savchuk, O.P.; Slomp, C.P.; Voss, M.; Wulff, F.; Zillen, L., 2009. Hypoxia-Related Processes in the Baltic Sea. *Environmental Science & Technology*, 43 (10): 3412-3420. 10.1021/es802762a
- Conley, D.J.; Bonsdorff, E.; Carstensen, J.; Destouni, G.; Gustafsson, B.G.; Hansson, L.-A.; Rabalais, N.N.; Voss, M.; Zillen, L., 2009. Tackling Hypoxia in the Baltic Sea: Is Engineering a Solution? *Environmental Science & Technology*, 43 (10): 3407-3411. 10.1021/es8027633
- Conley, D.J.; Carstensen, J.; Aertebjerg, G.; Christensen, P.B.; Dalsgaard, T.; Hansen, J.L.S.; Josefson, A.B., 2007. Long-term changes and impacts of hypoxia in Danish coastal waters. *Ecological Applications*, 17 (5): S165-S184. 10.1890/05-0766.1
- Conley, D.J.; Carstensen, J.; Aigars, J.; Axe, P.; Bonsdorff, E.; Eremina, T.; Haahti, B.-M.; Humborg, C.; Jonsson, P.; Kotta, J.; Lannegren, C.; Larsson, U.; Maximov, A.; Medina, M.R.; Lysiak-Pastuszak, E.; Remeikaite-Nikiene, N.; Walve, J.; Wilhelms, S.; Zillen, L., 2011. Hypoxia Is Increasing in the Coastal Zone of the Baltic Sea. *Environmental Science & Technology*, 45 (16): 6777-6783. 10.1021/es201212r
- Conley, D.J.; Carstensen, J.; Vaquer-Sunyer, R.; Duarte, C.M., 2009. Ecosystem thresholds with hypoxia. *Hydrobiologia*, 629 (1): 21-29. 10.1007/s10750-009-9764-2
- Conley, D.J.; Josefson, A.B., 2001. Hypoxia, nutrient management and restoration in Danish waters. In: Rabalais, N.N., ed. *Coastal and Estuarine Sciences, Vol 58: Coastal Hypoxia: Consequences for Living Resources and Ecosystems*. Washington: Amer Geophysical Union (Coastal and Estuarine Sciences), Vol.58, 425-434
- Conley, D.J.; Markager, S.; Andersen, J.; Ellermann, T.; Svendsen, L.M., 2002. Coastal eutrophication and the Danish National Aquatic Monitoring and Assessment Program. *Estuaries*, 25 (4B): 848-861. 10.1007/bf02804910
- Conley, D.J.; Paerl, H.W.; Howarth, R.W.; Boesch, D.F.; Seitzinger, S.P.; Havens, K.E.; Lancelot, C.; Likens, G.E., 2009. ECOLOGY Controlling Eutrophication: Nitrogen and Phosphorus. *Science*, 323 (5917): 1014-1015. 10.1126/science.1167755
- Conley, D.J.; Paerl, H.W.; Howarth, R.W.; Boesch, D.F.; Seitzinger, S.P.; Havens, K.E.; Lancelot, C.; Likens, G.E., 2009. Eutrophication: Time to Adjust Expectations Response. *Science*, 324 (5928): 724-725

- Conley, D.J.; Paerl, H.W.; Howarth, R.W.; Boesch, D.F.; Seitzinger, S.P.; Karl, E.; Karl, E.; Lancelot, C.; Gene, E.; Gene, E., 2009. Controlling eutrophication: nitrogen and phosphorus. *Science*, 123: 1014-1015
- Conley, D.J.; Schelske, C.L.; Stoermer, E.F., 1993. Modification of the biogeochemical cycle of silica with eutrophication. *Marine Ecology Progress Series*, 101 (1-2): 179-192
- Connell, E.L.; Colmer, T.D.; Walker, D.I., 1999. Radial oxygen loss from intact roots of *Halophila ovalis* as a function of distance behind the root tip and shoot illumination. *Aquatic Botany*, 63 (3-4): 219-228. 10.1016/s0304-3770(98)00126-0
- Conover, J.; Green, L.A.; Thornber, C.S., 2016. Biomass decay rates and tissue nutrient loss in bloom and non-bloom-forming macroalgal species. *Estuarine Coastal and Shelf Science*, 178: 58–64. 10.1016/j.ecss.2016.05.018
- Constantin, J.; Beaudoin, N.; Launay, M.; Duval, J.; Mary, B., 2012. Long-term nitrogen dynamics in various catch crop scenarios: Test and simulations with STICS model in a temperate climate. *Agriculture, Ecosystems & Environment*, 147 (0): 36-46. 10.1016/j.agee.2011.06.006
- Constantin, J.; Le Bas, C.; Justes, E., 2015. Large-scale assessment of optimal emergence and destruction dates for cover crops to reduce nitrate leaching in temperate conditions using the STICS soil–crop model. *European Journal of Agronomy*, 69: 75-87. 10.1016/j.eja.2015.06.002
- Constantin, J.; Mary, B.; Laurent, F.; Aubrion, G.; Fontaine, A.; Kerveillant, P.; Beaudoin, N., 2010. Effects of catch crops, no till and reduced nitrogen fertilization on nitrogen leaching and balance in three long-term experiments. *Agriculture, Ecosystems & Environment*, 135 (4): 268-278. 10.1016/j.agee.2009.10.005
- Conti, M.E., 1996. The pollution of the Adriatic Sea: scientific knowledge and policy actions. *International journal of Environment and Pollution*, 6 (2-3): 113-130
- Cook, N.A.; Sarver, E.A.; Krometis, L.H.; Huang, J., 2015. Habitat and water quality as drivers of ecological system health in Central Appalachia. *Ecological Engineering*, 84: 180-189. 10.1016/j.ecoleng.2015.09.006
- Cooke, G.D.; Welch, E.B.; Peterson, S.A., 2013. *Lake and reservoir restoration*. Elsevier
- Cooper, S.R., 1995. Chesapeake bay watershed historical land-use - impact on water-quality and diatom communities. *Ecological Applications*, 5 (3): 703-723. 10.2307/1941979
- Cooper, S.R.; Brush, G.S., 1993. A 2,500-year history of anoxia and eutrophication in CHESAPEAKE BAY. *Estuaries*, 16 (3B): 617-626. 10.2307/1352799
- Coordination Rurale, 2017. Nitrates, phosphates et eutrophisation : le débat est ouvert !<http://www.coordinationrurale.fr/> [consulté: 16/01/2017]
- Copetti, D.; Finsterle, K.; Marziali, L.; Stefani, F.; Tartari, G.; Douglas, G.; Reitzel, K.; Spears, B.M.; Winfield, I.J.; Crosa, G.; D'Haese, P.; Yasseri, S.; Lurling, M., 2016. Eutrophication management in surface waters using lanthanum modified bentonite: A review. *Water Research*, 97: 162-174. 10.1016/j.watres.2015.11.056
- Copetti, D.; Tartari, G.; Morabito, G.; Oggioni, A.; Legnani, E.; Imberger, J., 2006. A biogeochemical model of Lake Pusiano (North Italy) and its use in the predictability of phytoplankton blooms: first preliminary results. *Journal of Limnology*, 65: 59-64
- Cordell, D., 2008. The Story of Phosphorus: missing global governance of a critical resource. *SENSE Earth Systems Governance*, Amsterdam. Amsterdam: August, 24th-31st
- Cordell, D.; Drangert, J.O.; White, S., 2009. The story of phosphorus: Global food security and food for thought. *Global Environmental Change-Human and Policy Dimensions*, 19 (2): 292-305. 10.1016/j.gloenvcha.2008.10.009
- Cordell, D.; Drangert, J.-O.; White, S., 2009. The story of phosphorus: Global food security and food for thought *Global Environmental Change-Human and Policy Dimensions*, 19 (2): 14. 10.1016/j.gloenvcha.2008.10.009
- Cordell, D.; Rosemarin, A.; Schroder, J.J.; Smit, A.L., 2011. Towards global phosphorus security: A systems framework for phosphorus recovery and reuse options. *Chemosphere*, 84 (6): 747-758. 10.1016/j.chemosphere.2011.02.032
- Cordell, D.; White, S., 2011. Peak Phosphorus: Clarifying the Key Issues of a Vigorous Debate about Long-Term Phosphorus Security. *Sustainability*, 3 (10): 22. 10.3390/su3102027
- Cordell, D.; White, S., 2013. Sustainable Phosphorus Measures: Strategies and Technologies for Achieving Phosphorus Security. *Agronomy*, 3 (1): 86
- Corenblit, D.; Davies, N.S.; Steiger, J.; Gibling, M.R.; Bornette, G., 2015. Considering river structure and stability in the light of evolution: feedbacks between riparian vegetation and hydrogeomorphology. *Earth Surface Processes and Landforms*, 40 (2): 189-207. 10.1002/esp.3643
- Corenblit, D.; Tabacchi, E.; Steiger, J.; Gurnell, A.M., 2007. Reciprocal interactions and adjustments between fluvial landforms and vegetation dynamics in river corridors: A review of complementary approaches. *Earth-Science Reviews*, 84 (1-2): 56-86. 10.1016/j.earscirev.2007.05.004
- Corral-Verdugo, V.; Bechtel, R.B.; Fraijo-Sing, B., 2003. Environmental beliefs and water conservation: An empirical study. *Journal of Environmental Psychology*, 23 (3): 247-257. 10.1016/S0272-4944(02)00086-5
- Correll, D.L., 1998. The role of phosphorus in the eutrophication of receiving waters: a review. *Journal of Environmental Quality*, 27 (2): 261-266
- Cosgrove, S.; Rathaille, A.N.; Raine, R., 2014. The influence of bloom intensity on the encystment rate and persistence of *Alexandrium minutum* in Cork Harbor, Ireland. *Harmful Algae*, 31: 114-124. 10.1016/j.hal.2013.10.015
- Cosme, N.; Koski, M.; Hauschild, M.Z., 2015. Exposure factors for marine eutrophication impacts assessment based on a mechanistic biological model. *Ecological Modelling*, 317: 50-63. 10.1016/j.ecolmodel.2015.09.005
- Costa, C.; Li, C.S.; Cerri, C.E.P.; Cerri, C.C., 2014. Measuring and modeling nitrous oxide and methane emissions from beef cattle feedlot manure management: First assessments under Brazilian condition. *Journal of Environmental Science and*

*Health Part B-Pesticides Food Contaminants and Agricultural Wastes*, 49 (9): 696-711.  
10.1080/03601234.2014.922856

- Costanza, R.; d'Arge, R.; de Groot, R.; Farber, S.; Grasso, M.; Hannon, B.; Limburg, K.; Naeem, S.; O'Neill, R.V.; Paruelo, J.; Raskin, R.G.; Sutton, P.; van den Belt, M., 1997. The value of the world's ecosystem services and natural capital. *Nature*, 387 (6630): 253-260. 10.1038/387253a0
- Cottet, M.; Piégay, H., 2013. Diversité des savoirs relatifs aux milieux aquatiques : quels impacts pour la restauration écologique ? Le cas des bras morts du Rhône et de l'Ain. *Géocarrefour*, 88 (1): 15-30
- Cottet, M.; Riviere-Honegger, A.; Piégay, H., 2010. Mieux comprendre la perception des paysages de bras morts en vue d'une restauration écologique: quels sont les liens entre les qualités esthétique et écologique perçues par les acteurs? *Norois*, 3 (116): 85-103
- Cottingham, A.; Hall, N.G.; Potter, I.C., 2016. Factors influencing growth of *Acarthopagrus butcheri* (Sparidae) in a eutrophic estuary have changed over time. *Estuarine Coastal and Shelf Science*, 168: 29-39. 10.1016/j.ecss.2015.10.031
- Coucheney, E.; Buis, S.; Launay, M.; Constantin, J.; Mary, B.; García de Cortázar-Atauri, I.; Riponche, D.; Beaudoin, N.; Ruget, F.; Andrianarisoa, K.S.; Le Bas, C.; Justes, E.; Léonard, J., 2015. Accuracy, robustness and behavior of the STICS soil–crop model for plant, water and nitrogen outputs: Evaluation over a wide range of agro-environmental conditions in France. *Environmental Modelling & Software*, 64: 177-190. 10.1016/j.envsoft.2014.11.024
- Coughlin, R.E., 1976. The Perception and Valuation of Water Quality. In: Craik, K.H.; Zube, E.H., eds. *Perceiving Environmental Quality: Research and Applications*. Boston, MA: Springer US, 205-227. 10.1007/978-1-4684-2865-0\_11
- Coutant, C.C., 1990. Temperature-oxygen habitat for fresh-water and coastal striped bass in a changing climate. *Transactions of the American Fisheries Society*, 119 (2): 240-253. 10.1577/1548-8659(1990)119<0240:thffac>2.3.co;2
- Coutinho, M.T.P.; Brito, A.C.; Pereira, P.; Goncalves, A.S.; Moita, M.T., 2012. A phytoplankton tool for water quality assessment in semi-enclosed coastal lagoons: Open vs closed regimes. *Estuarine Coastal and Shelf Science*, 110: 134-146. 10.1016/j.ecss.2012.04.007
- Cowan, S., 1998. Water Pollution and Abstraction and Economic Instruments. *Oxford Review of Economic Policy*, 14 (4): 40-49. 10.1093/oxrep/grx063
- Cowell, D.A.; Apsimon, H.M., 1998. Cost-effective strategies for the abatement of ammonia emissions from European agriculture. 32 (3): 573-580. 10.1016/S1352-2310(97)00203-3
- Cowell, D.A.; Phillips, V.R.; Sneath, R.W., 1999. An assessment of ways to abate ammonia emissions from livestock buildings and waste stores. Part 2. cost modelling. *Bioresource Technology*, 70 (2): 157-164. 10.1016/s0960-8524(99)00027-9
- Crain, C.M.; Kroeker, K.; Halpern, B.S., 2008. Interactive and cumulative effects of multiple human stressors in marine systems. *Ecology Letters*, 11 (12): 1304-1315. 10.1111/j.1461-0248.2008.01253.x
- Crase, L.; Gillespie, R., 2008. The impact of water quality and water level on the recreation values of Lake Hume. *Australasian Journal of Environmental Management*, 15 (1): 21-29. 10.1080/14486563.2008.9725179
- Crepin, A.-S., 2007. Using Fast and Slow Processes to Manage Resources with Thresholds. *Environmental and Resource Economics*, 36 (2): 191-213. 10.1007/s10640-006-9029-8
- Cruz-Torres, M.L., 2001. Local-Level Responses to Environmental Degradation in Northwestern Mexico. *Journal of Anthropological Research*, 57 (2): 111-136
- Cugier, P.; Billen, G.; Guillaud, J.; Garnier, J.; Menesguen, A., 2005. Modelling the eutrophication of the Seine Bight (France) under historical, present and future riverine nutrient loading. *Journal of Hydrology*, 304 (1-4): 381-396. 10.1016/j.jhydrol.2004.07.049
- Cui, N.X.; Wu, J.; Zhong, F.; Yang, L.H.; Xiang, D.F.; Cheng, S.P.; Zhou, Q., 2015. Seed banks and their implications of rivers with different trophic levels in Chaohu Lake Basin, China. *Environmental Science and Pollution Research*, 22 (3): 2247-2257. 10.1007/s11356-014-3501-8
- Cui, Y.; Zhu, G.; Li, H.; Luo, L.; Cheng, X.; Jin, Y.; Trolle, D., 2016. Modeling the response of phytoplankton to reduced external nutrient load in a subtropical Chinese reservoir using DYRESM-CAEDYM. *Lake and Reservoir Management*, 32 (2): 146-157. 10.1080/10402381.2015.1136365
- Cummins, R., 2012. Potential economic loss to the Calhoun Country oystermen Dolphin Talk.
- Cummins, S.P.; Roberts, D.E.; Zimmerman, K.D., 2004. Effects of the green macroalga *Enteromorpha intestinalis* on macrobenthic and seagrass assemblages in a shallow coastal estuary. *Marine Ecology Progress Series*, 266: 77-87. 10.3354/meps266077
- Curtarelli, M.P.; Ogashawara, I.; Alcântara, E.H.; Stech, J.L., 2015. Coupling remote sensing bio-optical and three-dimensional hydrodynamic modeling to study the phytoplankton dynamics in a tropical hydroelectric reservoir. *Remote Sensing of Environment*, 157: 185-198. 10.1016/j.rse.2014.06.013
- Curtin, R.; Prellezo, R., 2010. Understanding marine ecosystem based management: A literature review. *Marine Policy*, 34 (5): 821-830. 10.1016/j.marpol.2010.01.003
- Curtis, C.J.; Battarbee, R.W.; Monteith, D.T.; Shilland, E.M., 2014. The future of upland water ecosystems of the UK in the 21st century: A synthesis. *Ecological Indicators*, 37: 412-430
- da Silva, A.M., 2004. Rainfall erosivity map for Brazil. *Catena*, 57 (3): 251-259. 10.1016/j.catena.2003.11.006
- da Silva, J.M.; Coimbra, J.; Wilson, J.M., 2009. Ammonia sensitivity of the glass eel (*anguilla anguilla* l.): Salinity dependence and the role of branchial sodium/potassium adenosine triphosphatase. *Environmental Toxicology and Chemistry*, 28 (1): 141-147

- da Silva, R.M.; Santos, C.A.G.; Silva, V.C.D.; Silva, L.P.E., 2013. Erosivity, surface runoff, and soil erosion estimation using GIS-coupled runoff-erosion model in the Mamuaba catchment, Brazil. *Environmental Monitoring and Assessment*, 185 (11): 8977-8990. 10.1007/s10661-013-3228-x
- Dai, R.H.; Wang, P.F.; Jia, P.L.; Zhang, Y.; Chu, X.C.; Wang, Y.F., 2016. A review on factors affecting microcystins production by algae in aquatic environments. *World Journal of Microbiology & Biotechnology*, 32 (3): 7. 10.1007/s11274-015-2003-2
- Daily, G., 1997. *Nature's services: societal dependence on natural ecosystems*. Island Press
- Dal Ferro, N.; Cocco, E.; Lazzaro, B.; Berti, A.; Morari, F., 2016. Assessing the role of agri-environmental measures to enhance the environment in the Veneto Region, Italy, with a model-based approach. *Agriculture Ecosystems & Environment*, 223: 312-325. 10.1016/j.agee.2016.08.010
- Dalla Bernardina, S., 2010. Les invasions biologiques sous le regard des sciences de l'homme. In: Barbault, R.; Atramontowicz, M., eds. *Les invasions biologiques, une question de natures et de sociétés*. Paris: Quae, 65-108
- Dalsgaard, T.; Canfield, D.E.; Petersen, J.; Thamdrup, B.; Acuna-Gonzalez, J., 2003. N<sub>2</sub> production by the anammox reaction in the anoxic water column of Golfo Dulce, Costa Rica. *Nature*, 422 (6932): 606-8. 10.1038/nature01526
- Dalu, T.; Richoux, N.B.; Froneman, P.W., 2016. Nature and source of suspended particulate matter and detritus along an austral temperate river-estuary continuum, assessed using stable isotope analysis. *Hydrobiologia*, 767 (1): 95-110. 10.1007/s10750-015-2480-1
- Daly Yahia, M.N.; Goy, J.; Daly Yahia-Kéfi, O., 2003. Distribution et écologie des Méduses (Cnidaria) du golfe de Tunis (Méditerranée sud occidentale). *Oceanologica Acta*, 26 (5-6): 645-655. 10.1016/j.oceaact.2003.05.002
- Dammekens, S., 2001. *Exemple de prolifération algale sur les côtes bretonnes : l'algue verte, symbole de pollution et facteur de désordre. Etude comparative Caulerpe/algues vertes. Rapport établi sous la direction de S. DALLA BERNARDINA, dans le cadre du programme d'étude « « Algues tueuses » et autres fléaux. Pour une anthropologie de l'imaginaire écologique en milieu marin : le cas de Caulerpa taxifolia »* Université de Bretagne Occidentale, 87.
- Damon, P.M.; Bowden, B.; Rose, T.; Rengel, Z., 2014. Crop residue contributions to phosphorus pools in agricultural soils: A review. *Soil Biology and Biochemistry*, 74: 127-137. 10.1016/j.soilbio.2014.03.003
- Dandelot, S.; Matheron, R.; Le Petit, J.; Verlaque, R.; Cazaubon, A., 2005. Variations temporelles des paramètres physicochimiques et microbiologiques de trois écosystèmes aquatiques (Sud-Est de la France) envahis par des Ludwigia. *Comptes Rendus Biologies*, 328 (10): 991-999
- Danger, M.; Daufresne, T.; Lucas, F.; Pissard, S.; Lacroix, G., 2008. Does Liebig's law of the minimum scale up from species to communities? *Oikos*, 117 (11): 1741-1751. 10.1111/j.1600-0706.2008.16793.x
- Danish Hydraulic, I., 1993. MIKE11, User Guide & Reference Manual Danish Hydraulics Institute.
- Danish Hydraulic, I., 1996. MIKE 3 Eutrophication Module, User Guide and Reference Manual, Release 2.7 Danish Hydraulic Institute.
- Das, A.; Justic, D.; Swenson, E., 2010. Modeling estuarine-shelf exchanges in a deltaic estuary: Implications for coastal carbon budgets and hypoxia. *Ecological Modelling*, 221 (7): 978-985. 10.1016/j.ecolmodel.2009.01.023
- Daskalov, G.M., 2002. Overfishing drives atrophic cascade in the Black Sea. *Marine Ecology Progress Series*, 225: 53-63. 10.3354/meps225053
- Daskalov, G.M.; Grishin, A.N.; Rodionov, S.; Mihneva, V., 2007. Trophic cascades triggered by overfishing reveal possible mechanisms of ecosystem regime shifts. *Proceedings of the National Academy of Sciences of the United States of America*, 104 (25): 10518-10523. 10.1073/pnas.0701100104
- Dauwe, B.; Middelburg, J.J.; Herman, P.M.J., 2001. Effect of oxygen on the degradability of organic matter in subtidal and intertidal sediments of the North Sea area. *Marine Ecology Progress Series*, 215: 13-22. 10.3354/meps215013
- Davanzo, C.; Kremer, J.N., 1994. Diel oxygen dynamics and anoxic events in an eutrophic estuary of Waquoit Bay, Massachusetts. *Estuaries*, 17 (1B): 131-139. 10.2307/1352562
- Davidson, A.; Hodge, T., 1989. The fate of the Great Lakes. *Policy options*, (10): 19-26
- Davidson, E.A.; Howarth, R.W., 2007. Environmental science - Nutrients in synergy. *Nature*, 449 (7165): 1000-1001. 10.1038/449100a
- Davidson, E.A.; Howarth, R.W., 2007. Environmental science: Nutrients in synergy (vol 449, pg 1000, 2007). *Nature*, 450 (7168): 363-363. 10.1038/450363a
- Davidson, K.; Gowen, R.J.; Harrison, P.J.; Fleming, L.E.; Hoagland, P.; Moschonas, G., 2014. Anthropogenic nutrients and harmful algae in coastal waters. *Journal of Environmental Management*, 146: 206-216. 10.1016/j.jenvman.2014.07.002
- Davidson, K.; Gowen, R.J.; Tett, P.; Bresnan, E.; Harrison, P.J.; McKinney, A.; Milligan, S.; Mills, D.K.; Silke, J.; Crooks, A.M., 2012. Harmful algal blooms: How strong is the evidence that nutrient ratios and forms influence their occurrence? *Estuarine Coastal and Shelf Science*, 115: 399-413. 10.1016/j.ecss.2012.09.019
- Davies, A.M.; Xing, J., 2007. On the influence of stratification and tidal forcing upon mixing in sill regions. *Ocean Dynamics*, 57 (4-5): 431-451. 10.1007/s10236-007-0114-5
- Dayton, P.K.; Tegner, M.J.; Edwards, P.B.; Riser, K.L., 1998. Sliding baselines, ghosts, and reduced expectations in kelp forest communities. *Ecological Applications*, 8 (2): 309-322. 10.2307/2641070
- De Bie, M.J.M.; Middelburg, J.J.; Starink, M.; Laanbroek, H.J., 2002. Factors controlling nitrous oxide at the microbial community and estuarine scale. *Marine Ecology Progress Series*, 240: 9
- de Groot, R.S., 1992. *Functions of nature : evaluation of nature in environmental planning, management and decision making*. Groningen: Wolters-Noordhoff BV

- de Groot, R.S.; Wilson, M.A.; Boumans, R.M.J., 2002. A typology for the classification, description and valuation of ecosystem functions, goods and services. *Ecological Economics*, 41 (3): 393-408. 10.1016/S0921-8009(02)00089-7
- de Haan, M.; Keuning, S.J., 1996. Taking the environment into account: the Namea approach. *Review of Income and Wealth*, 42 (2): 131-148. 10.1111/j.1475-4991.1996.tb00162.x
- De Jager, N.R.; Swanson, W.; Strauss, E.A.; Thomsen, M.; Yin, Y., 2015. Flood pulse effects on nitrification in a floodplain forest impacted by herbivory, invasion, and restoration. *Wetlands Ecology and Management*, 23 (6): 1067-1081. 10.1007/s11273-015-9445-z
- De Jong, F., 2006. *Marine eutrophication in perspective: on the relevance of ecology for environmental policy*. Springer (Science & Business Media)
- de Jong, F., 2016. Ecological knowledge and North Sea environmental policies. *Environmental Science & Policy*, 55 (Part 3): 449-455. 10.1016/j.envsci.2015.08.018
- de Jonge, V.N.; Elliott, M.; Orive, E., 2002. Causes, historical development, effects and future challenges of a common environmental problem: eutrophication. *Hydrobiologia*, 475 (1): 1-19
- De Lange, H.J.; Sala, S.; Vighi, M.; Faber, J.H., 2010. Ecological vulnerability in risk assessment — A review and perspectives. *Science of the Total Environment*, 408 (18): 3871-3879. <http://dx.doi.org/10.1016/j.scitotenv.2009.11.009>
- de l'Eau, A., 1999. Système d'évaluation de la qualité de l'eau des cours d'eau. *Études interagences*, (64):
- de Nie, H.W., 1987. *The decrease in aquatic vegetation in Europe and its consequences for fish populations*, 52 p.
- De Raedemaeker, F.; Brophy, D.; O'Connor, I.; O'Neill, B., 2012. Dependence of RNA:DNA ratios and Fulton's K condition indices on environmental characteristics of plaice and dab nursery grounds. *Estuarine, Coastal and Shelf Science*, 98: 60-70. 10.1016/j.ecss.2011.11.033
- de Vries, I.; Duin, R.N.M.; Peeters, J.C.H.; Los, F.J.; Bokhorst, M.; Laane, R., 1998. Patterns and trends in nutrients and phytoplankton in Dutch coastal waters: comparison of time-series analysis, ecological model simulation, and mesocosm experiments. *Ices Journal of Marine Science*, 55 (4): 620-634. 10.1006/jmsc.1998.0399
- de Vries, I.; Smaal, A.C.; Nienhuis, P.H.; Joordens, J.C.A., 1996. Estuarine Management Strategies and the Predictability of Ecosystem Changes. *Journal of Coastal Conservation*, 2 (2): 139-148
- Death, R.G.; Death, F.; Stubbington, R.; Joy, M.K.; van den Belt, M., 2015. How good are Bayesian belief networks for environmental management? A test with data from an agricultural river catchment. *Freshwater Biology*, 60 (11): 2297-2309. 10.1111/fwb.12655
- Debaeke, P.; Rouet, P.; Justes, E., 2006. Relationship Between the Normalized SPAD Index and the Nitrogen Nutrition Index: Application to Durum Wheat. *Journal of Plant Nutrition*, 29 (1): 75-92. 10.1080/01904160500416471
- Deboer, J.A.; Whoriskey, F.G., 1983. Production and role of hyaline hairs in ceramium-rubrum. *Marine Biology*, 77 (3): 229-234. 10.1007/bf00395811
- Deborde, J.; Abrill, G.; Mouret, A.; Jezequel, D.; Thouzeau, G.; Clavier, J.; Bachelet, G.; Anschutz, P., 2008. Effects of seasonal dynamics in a Zostera noltii meadow on phosphorus and iron cycles in a tidal mudflat (Arcachon Bay, France). *Marine Ecology Progress Series*, 355: 59-71. 10.3354/meps07254
- Deborde, J.; Anschutz, P.; Chaillou, G.; Etcheber, H.; Commarieu, M.V.; Lecroart, P.; Abril, G., 2007. The dynamics of phosphorus in turbid estuarine systems: Example of the Gironde estuary (France). *Limnology and Oceanography*, 52 (2): 862-872
- Deflandre, B.; Mucci, A.; Gagne, J.P.; Guignard, C.; Sundby, B., 2002. Early diagenetic processes in coastal marine sediments disturbed by a catastrophic sedimentation event. *Geochimica Et Cosmochimica Acta*, 66 (14): 2547-2558. 10.1016/s0016-7037(02)00861-x
- DeForest, J.L.; Drerup, S.A.; Vis, M.L., 2016. Using fatty acids to fingerprint biofilm communities: a means to quickly and accurately assess stream quality. *Environmental Monitoring and Assessment*, 188 (5). 10.1007/s10661-016-5290-7
- Dejak, C.; Lalatta, L.M.; Meregalli, L.; Pecenik, G., 1987. Development of a mathematical eutrophication model of the lagoon of Venice. *Ecological Modelling*, 37 (1-2): 1-20. 10.1016/0304-3800(87)90081-0
- del Barrio, P.; Ganju, N.K.; Aretxabaleta, A.L.; Hayn, M.; Garcia, A.; Howarth, R.W., 2014. Modeling future scenarios of light attenuation and potential seagrass success in a eutrophic estuary. *Estuarine Coastal and Shelf Science*, 149: 13-23. 10.1016/j.ecss.2014.07.005
- Delalande, D., 2002. Pollutions atmosphériques transfrontières: mise en œuvre du protocole de Göteborg et de la directive plafonds. *Direction des études économiques et de l'évaluation environnementale, document de travail*, (02-E07):
- Delclaux, F., 1980. *Production primaire en milieu thermiquement stratifié. Modélisation et application à la rivière Lot*. INP, Toulouse.177
- Deleivamoreno, J.; Agostini, V.; Caddy, J.; Carocci, F., 2000. Is the pelagic-demersal ratio from fishery landings a useful proxy for nutrient availability? A preliminary data exploration for the semi-enclosed seas around Europe. *Ices Journal of Marine Science*, 57 (4): 1091-1102. 10.1006/jmsc.2000.0705
- Delestre, O.; Lucas, C.; Ksinant, P.A.; Darboux, F.; Laguerre, C.; Vo, T.N.T.; James, F.; Cordier, S., 2014. SWASHES: a compilation of shallow water analytic solutions for hydraulic and environmental studies (vol 72, pg 269, 2013). *International Journal for Numerical Methods in Fluids*, 74 (3): 229-230. 10.1002/fld.3865
- Delgado, A.; Scalenghe, R., 2008. Aspects of phosphorus transfer from soils in Europe. *Journal of Plant Nutrition and Soil Science*, 171 (4): 552-575. 10.1002/jpln.200625052
- Delgado, J.A.; Groffman, P.M.; Nearing, M.A.; Goddard, T.; Reicosky, D.; Lal, R.; Kitchen, N.R.; Rice, C.W.; Towery, D.; Salon, P., 2011. Conservation practices to mitigate and adapt to climate change. *Journal of Soil and Water Conservation*, 66 (4): 118A-129A. 10.2489/jswc.66.4.118A

- D'Elia, C.F.; Boynton, W.R.; Sanders, J.G., 2003. A Watershed Perspective on Nutrient Enrichment, Science, and Policy in the Patuxent River, Maryland: 1960-2000. *Estuaries*, 26 (2): 171-185
- Delphin, J.-E., 2000. Estimation of nitrogen mineralization in the field from an incubation test and from soil analysis. *Agronomie*, 20 (4): 349-361
- Delpla, I.; Baurès, E.; Jung, A.-V.; Thomas, O., 2011. Impacts of rainfall events on runoff water quality in an agricultural environment in temperate areas. *Science of the Total Environment*, 409 (9): 1683-1688. 10.1016/j.scitotenv.2011.01.033
- Demars, B.O.L.; Harper, D.M.; Pitt, J.A.; Slaughter, R., 2005. \Impact of phosphorus control measures on in-river phosphorus retention associated with point source pollution. *Hydrology and Earth System Sciences*, 9 (1-2): 43-55
- Deneufbourg, M.; Vandenberghe, C.; Gaule, D.; Bolly, P.-Y.; Marcoen, J.M., 2013. Application of the Sustainable Nitrogen Management Program in two small agricultural watersheds (Arquennes - Belgium) and impact evaluation by monitoring of nitrate fluxes at outlets and by numerical modeling. *Biotechnologie Agronomie Societe Et Environnement*, 17: 164-176
- Deng, Y.; Tang, X.; Huang, B.; Ding, L., 2012. Effect of temperature and irradiance on the growth and reproduction of the green macroalga, *Chaetomorpha valida* (Cladophoraceae, Chlorophyta). *Journal of Applied Phycology*, 24 (4): 927-933. 10.1007/s10811-011-9713-0
- Denny, M.W.; Gaines, S.D., eds., 2007. *Encyclopedia of tidepools and rocky shores*. Encyclopedias of the natural world. Berkeley [Calif.]: University of California Press, Pages
- Denny, P., 1972. Sites of nutrient absorption in aquatic macrophytes. *Journal of Ecology*, 60: 819-829
- DeNoyelles, F.; Kettle, W.D.; Sinn, D.E., 1982. The responses of plankton communities in experimental ponds to atrazine, the most heavily used pesticide in the United States. *Ecology*, 63 (5): 1285-1293
- Dent, C.L.; Cumming, G.S.; Carpenter, S.R., 2002. Multiple states in river and lake ecosystems. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 357 (1421): 635-645. 10.1098/rstb.2001.0991
- Deronzier, G.; Choubert, J.M., 2004. Traitement du phosphore dans les petites stations d'épuration à boues activées. Comparaisons techniques et économiques des voies de traitement biologique et physico-chimique. *Document technique FNDAE*, (29):
- Deroubaix, J.-F., 2007. The co-production of a "relevant" expertise – administrative and scientific cooperation in the French water policies elaboration and implementation. *Hydrology and Earth System Sciences Discussions*, 4 (5): 3771-3792
- Derville, I., 2000. La qualité de l'eau en Bretagne. *Annales des Mines*: 65-70
- Deschamps, G., 2016. *La pêche à pied: Histoire et techniques*. Editions Quae
- Descola, P., 2005. *Par-delà nature et culture*. Gallimard
- Descy, J.; Coste, M., 1991. A test of methods for assessing water quality based on diatoms. *Verh. Internat. Verein. Limnol.*, 24: 2112-2116
- Desrosiers, C.; Leflaive, J.; Eulin, A.; Ten-Hage, L., 2013. Bioindicators in marine waters: Benthic diatoms as a tool to assess water quality from eutrophic to oligotrophic coastal ecosystems. *Ecological Indicators*, 32: 25-34. 10.1016/j.ecolind.2013.02.021
- d'Etat, C., 2010. *L'eau et son droit*, 584 p.
- Deus, R.; Brito, D.; Kenov, I.A.; Lima, M.; Costa, V.; Medeiros, A.; Neves, R.; Alves, C.N., 2013. Three-dimensional model for analysis of spatial and temporal patterns of phytoplankton in Tucurui reservoir, Para, Brazil. *Ecological Modelling*, 253: 28-43. 10.1016/j.ecolmodel.2012.10.013
- Devlin, M.; Barry, J.; Painting, S.; Best, M., 2009. Extending the phytoplankton tool kit for the UK Water Framework Directive: indicators of phytoplankton community structure. *Hydrobiologia*, 633 (1): 151-168. 10.1007/s10750-009-9879-5
- Devlin, M.; Best, M.; Coates, D.; Bresnan, E.; O'Boyle, S.; Park, R.; Silke, J.; Cusack, C.; Skeats, J., 2007. Establishing boundary classes for the classification of UK marine waters using phytoplankton communities. *Marine Pollution Bulletin*, 55 (1-6): 91-103. 10.1016/j.marpolbul.2006.09.018
- Devreker, D.; Souissi, S.; Molinero, J.C.; Beyrend-Dur, D.; Gomez, F.; Forget-Leray, J., 2010. Tidal and annual variability of the population structure of *Eurytemora affinis* in the middle part of the Seine Estuary during 2005. *Estuarine Coastal and Shelf Science*, 89 (4): 245-255. 10.1016/j.ecss.2010.07.010
- Di, H.J.; Condon, L.M.; Frossard, E., 1997. Isotope techniques to study phosphorus cycling in agricultural and forest soils: a review. *Biology and Fertility of Soils*, 24 (1): 1-12
- Di Maggio, J.; Fernandez, C.; Parodi, E.R.; Soledad Diaz, M.; Estrada, V., 2016. Modeling phytoplankton community in reservoirs. A comparison between taxonomic and functional groups-based models. *Journal of Environmental Management*, 165: 31-52. 10.1016/j.jenvman.2015.08.027
- Diacono, M.; Rubino, P.; Montemurro, F., 2013. Precision nitrogen management of wheat. A review. *Agronomy for Sustainable Development*, 33 (1): 219-241. 10.1007/s13593-012-0111-z
- Diaz, M., 2012. Chapter 14: Agriculture's impact on aquaculture: Hypoxia and eutrophication in marine waters *Advancing the Aquaculture Agenda: Workshop Proceedings OCDE*: 275-318. OCDE
- Diaz, M.; Darnhofer, I.; Darrot, C.; Beuret, J.-E., 2013. Green tides in Brittany: What can we learn about niche-regime interactions? *Environmental Innovation and Societal Transitions*, 8 (Supplement C): 62-75. 10.1016/j.eist.2013.04.002
- Diaz, M.; Darnhofer, I.; Darrot, C.; Beuret, J.E., 2013. Green tides in Brittany: What can we learn about niche-regime interactions? *Environmental Innovation and Societal Transitions*, 8: 62-75. 10.1016/j.eist.2013.04.002

- Díaz, P.; Gappa, J.J.L.; Piriz, M.L., 2002. Symptoms of Eutrophication in Intertidal Macroalgal Assemblages of Nuevo Gulf (Patagonia, Argentina). *Botanica Marina*, 45 (3). 10.1515/bot.2002.026
- Diaz, P.A.; Reguera, B.; Ruiz-Villarreal, M.; Pazos, Y.; Velo-Suarez, L.; Berger, H.; Sourisseau, M., 2013. Climate Variability and Oceanographic Settings Associated with Interannual Variability in the Initiation of *Dinophysis acuminata* Blooms. *Marine Drugs*, 11 (8): 2964-2981. 10.3390/MD11082964
- Diaz, R.J., 2001. Overview of hypoxia around the world. *Journal of Environmental Quality*, 30 (2): 275-281
- Díaz, R.J., 2010. Agriculture's impact on aquaculture: Hypoxia and eutrophication in marine waters. *Advancing the Aquaculture Agenda*: 275-318
- Díaz, R.J.; Rosenberg, R., 1995. Marine benthic hypoxia: A review of its ecological effects and the behavioural responses of benthic macrofauna. In: Ansell, A.D.; Gibson, R.N.; Barnes, M., eds. *Oceanography and Marine Biology - an Annual Review*, Vol 33. London: U C L Press Ltd (Oceanography and Marine Biology), Vol.33, 245-303
- Díaz, R.J.; Rosenberg, R., 2008. Spreading dead zones and consequences for marine ecosystems. *Science*, 321 (5891): 926-929. 10.1126/science.1156401
- Díaz, R.J.; Rosenberg, R., 2011. Introduction to Environmental and Economic Consequences of Hypoxia. *International Journal of Water Resources Development*, 27 (1): 71-82. 10.1080/07900627.2010.531379
- Díaz-Pulido, G.; McCook, L.J.; Dove, S.; Berkelmans, R.; Roff, G.; Kline, D.I.; Weeks, S.; Evans, R.D.; Williamson, D.H.; Hoegh-Guldberg, O., 2009. Doom and Boom on a Resilient Reef: Climate Change, Algal Overgrowth and Coral Recovery. *Plos One*, 4 (4): 9. 10.1371/journal.pone.0005239
- Dictionnaire environnement,  
2017. définition : [eutrophisation](https://www.actu-environnement.com/ae/dictionnaire_environnement/definition/eutrophisation.php4).[https://www.actu-environnement.com/ae/dictionnaire\\_environnement/definition/eutrophisation.php4](https://www.actu-environnement.com/ae/dictionnaire_environnement/definition/eutrophisation.php4) [consulté: 16/01/2017]
- Dietz, F.J.; Hoogervorst, N.J.P., 1991. Towards a sustainable and efficient use of manure in agriculture: The Dutch case. *Environmental & Resource Economics*, 1 (3): 313-332. 10.1007/BF00367923
- Dijkstra, N.; Slomp, C.P.; Behrends, T.; Expedition, S., 2016. Vivianite is a key sink for phosphorus in sediments of the Landsort Deep, an intermittently anoxic deep basin in the Baltic Sea. *Chemical Geology*, 438: 58-72. 10.1016/j.chemgeo.2016.05.025
- Dimberg, P.H.; Bryhn, A.C., 2014. Predicted effects from abatement action against eutrophication in two small bays of the Baltic Sea. *Environmental Earth Sciences*, 72 (4): 1191-1199. 10.1007/s12665-013-3038-z
- Dimitriou, E.; Moussoulis, E., 2010. Hydrological and nitrogen distributed catchment modeling to assess the impact of future climate change at Trichonis Lake, western Greece. *Hydrogeology Journal*, 18 (2): 441-454. 10.1007/s10040-009-0535-y
- Dimuro, J.L.; Guertin, F.M.; Helling, R.K.; Perkins, J.L.; Romer, S. A financial and environmental analysis of constructed wetlands for industrial wastewater treatment. *Journal of Industrial Ecology*, 18 (5): 631-640. 10.1111/jiec.12129
- DIN Norm 4049, 1990. *Hydrologie, Begriffe der Gewässerbeschaffenheit*. Berlin, 25 pages.
- Dion, P., Le Bozec, S., 1996. The french atlantic coasts. In: Schramm, W.; Nienhuis, P.H., eds. *Marine benthic vegetation*. Berlin; New York: Springer-Verlag (Ecological studies)
- Dion, P., De Reviers, B., Coat, G., 1998. *Ulva armoricana* sp. nov. (Ulvales, Chlorophyta) from the coasts of Brittany (France). I. Morphological identification. *British Phycological Society*, 33 (1): 73-80
- Dion, P.; Le Bozec, S.; Golven, P. Factors controlling the green tides in the bay of Lannion (France). *EUMAC - Synthesis report* (1996),
- Dion, P.; Reviers, B.d.; Coat, G., 1998. *Ulva armoricana* sp. nov. (Ulvales, Chlorophyta) from the coasts of Brittany (France). I. Morphological identification. *European Journal of Phycology*, 33 (1): 73-80. 10.1017/S0967026298001607
- Dippner, J.W., 1993. A lagrangian model of phytoplankton growth dynamics for the Northern Adriatic sea. *Continental Shelf Research*, 13 (2-3): 331-355. 10.1016/0278-4343(93)90113-c
- Directive Nitrate, 1991. 91/676/CEE.
- Dittrich, M.; Gabriel, O.; Rutzen, C.; Koschel, R., 2011. Lake restoration by hypolimnetic Ca(OH)(2) treatment: Impact on phosphorus sedimentation and release from sediment. *Science of the Total Environment*, 409 (8): 1504-1515. 10.1016/j.scitotenv.2011.01.006
- Djakovac, T.; Degobbius, D.; Supic, N.; Precali, R., 2012. Marked reduction of eutrophication pressure in the northeastern Adriatic in the period 2000-2009. *Estuarine Coastal and Shelf Science*, 115: 25-32. 10.1016/j.ecss.2012.03.029
- Djambazov, G.; Pericleous, K., 2015. Modelled atmospheric contribution to nitrogen eutrophication in the English Channel and the southern North Sea. *Atmospheric Environment*, 102: 191-199. 10.1016/j.atmosenv.2014.11.071
- Dodds, W.K., 1991. Microenvironmental characteristics of filamentous algal communities in flowing fresh-waters. *Freshwater Biology*, 25 (2): 199-209. 10.1111/j.1365-2427.1991.tb00485.x
- Dodds, W.K., 2003. The role of periphyton in phosphorus retention in shallow freshwater aquatic systems. *Journal of Phycology*, 39 (5): 840-849
- Dodds, W.K., 2006. Eutrophication and trophic state in rivers and streams. *Limnology and Oceanography*, 51 (1\_part\_2): 671-680. 10.4319/lo.2006.51.1\_part\_2.0671
- Dodds, W.K.; Bouska, W.W.; Eitzmann, J.L.; Pilger, T.J.; Pitts, K.L.; Riley, A.J.; Schloesser, J.T.; Thornbrugh, D.J., 2009. Eutrophication of U.S. Freshwaters: Analysis of Potential Economic Damages. *Environmental Science & Technology*, 43 (1): 12-19. 10.1021/es801217q
- Dodds, W.K.; Cole, J.J., 2007. Expanding the concept of trophic state in aquatic ecosystems: it's not just the autotrophs. *Journal of Aquatic Sciences*, 69 (4): 427-439

- Dodds, W.K.; Smith, V.H., 2016. Nitrogen, phosphorus, and eutrophication in streams. *Inland Waters*, 6 (2): 155-164
- Dodds, W.K.; Smith, V.H.; Lohman, K., 2002. Nitrogen and phosphorus relationships to benthic algal biomass in temperate streams. *Canadian Journal of Fisheries and Aquatic Sciences*, 59 (5): 865-874
- Doi, T.; Nitta, A., 1991. Ecological modeling at Osaka Bay related to long-term eutrophication. *Marine Pollution Bulletin*, 23: 247-252. [10.1016/0025-326X\(91\)90682-i](https://doi.org/10.1016/0025-326X(91)90682-i)
- Dokulil, M., 2014. Old wine in new skins: eutrophication reloaded: global perspectives of potential amplification by climate warming, altered hydrological cycle and human interference. *Eutrophication*. New York: Nova Science Publishers, Inc:
- Dokulil, M.T., 2014. Potamoplankton and primary productivity in the River Danube. *Hydrobiologia*, 729 (1): 209-227. [10.1007/s10750-013-1589-3](https://doi.org/10.1007/s10750-013-1589-3)
- Dokulil, M.T.; Teubner, K., 2000. Cyanobacterial dominance in lakes. *Hydrobiologia*, 438 (1-3): 1-12. [10.1023/a:1004155810302](https://doi.org/10.1023/a:1004155810302)
- Dokulil, M.T.; Teubner, K., 2010. Eutrophication and climate change: present situation and future scenarios. *Eutrophication: causes, consequences and control*. Springer, 1-16
- Doll, B.; Jennings, G.; Spooner, J.; Penrose, D.; Usset, J.; Blackwell, J.; Fernandez, M., 2016. Identifying Watershed, Landscape, and Engineering Design Factors that Influence the Biotic Condition of Restored Streams. *Water*, 8 (4). [10.3390/w8040151](https://doi.org/10.3390/w8040151)
- Domingues, R.B.; Anselmo, T.P.; Barbosa, A.B.; Sommer, U.; Galvão, H.M., 2011. Nutrient limitation of phytoplankton growth in the freshwater tidal zone of a turbid, Mediterranean estuary. *Estuarine, Coastal and Shelf Science*, 91 (2): 282-297. [10.1016/j.ecss.2010.10.033](https://doi.org/10.1016/j.ecss.2010.10.033)
- Domingues, R.B.; Barbosa, A.; Galvao, H., 2008. Constraints on the use of phytoplankton as a biological quality element within the Water Framework Directive in Portuguese waters. *Marine Pollution Bulletin*, 56 (8): 1389-1395. [10.1016/j.marpolbul.2008.05.006](https://doi.org/10.1016/j.marpolbul.2008.05.006)
- Doney, S.C.; Fabry, V.J.; Feely, R.A.; Kleypas, J.A., 2009. Ocean Acidification: The Other CO<sub>2</sub> Problem. *Annual Review of Marine Science*, 1: 169-192. [10.1146/annurev.marine.010908.163834](https://doi.org/10.1146/annurev.marine.010908.163834)
- Doney, S.C.; Ruckelshaus, M.; Duffy, J.E.; Barry, J.P.; Chan, F.; English, C.A.; Galindo, H.M.; Grebmeier, J.M.; Hollowed, A.B.; Knowlton, N.; Polovina, J.; Rabalais, N.N.; Sydeman, W.J.; Talley, L.D., 2012. Climate Change Impacts on Marine Ecosystems. In: Carlson, C.A.; Giovannoni, S.J., eds. *Annual Review of Marine Science, Vol 4*. (Annual Review of Marine Science), Vol.4, 11-37. [10.1146/annurev-marine-041911-111611](https://doi.org/10.1146/annurev-marine-041911-111611)
- Dong, L.F.; Sobey, M.N.; Smith, C.J.; Rusmana, I.; Phillips, W.; Stott, A.; Osborn, A.M.; Nedwell, D.B., 2011. Dissimilatory reduction of nitrate to ammonium, not denitrification or anammox, dominates benthic nitrate reduction in tropical estuaries. *Limnology and Oceanography*, 56 (1): 279-291. [10.4319/lo.2011.56.1.0279](https://doi.org/10.4319/lo.2011.56.1.0279)
- Donnelly, C.; Stromqvist, J.; Arheimer, B., 2011. Modelling climate change effects on nutrient discharges from the Baltic Sea catchment: processes and results. In: Peters, N.E.; Krysanova, V.; Lepisto, A.; Prasad, R.; Thoms, M.; Wilby, R.; Zandaryaa, S., eds. *Water Quality: Current Trends and Expected Climate Change Impacts*. (IAHS Publication), Vol.348, 145-150
- Doody, D.G.; Foy, R.H.; Barry, C.D., 2012. Accounting for the role of uncertainty in declining water quality in an extensively farmed grassland catchment. *Environmental Science & Policy*, 24: 15-23. [10.1016/j.envsci.2012.07.007](https://doi.org/10.1016/j.envsci.2012.07.007)
- Doole, G.J., 2010. Evaluating Input Standards for Non-point Pollution Control under Firm Heterogeneity. *Journal of Agricultural Economics*, 61 (3): 680-696. [10.1111/j.1477-9552.2010.00259.x](https://doi.org/10.1111/j.1477-9552.2010.00259.x)
- Doole, G.J.; Pannell, D.J., 2011. Evaluating Environmental Policies under Uncertainty through Application of Robust Nonlinear Programming. *Australian Journal of Agricultural and Resource Economics*, 55 (4): 469-486. [10.1111/j.1467-8489.2011.00546.x](https://doi.org/10.1111/j.1467-8489.2011.00546.x)
- Doole, G.J.; Romera, A.J., 2014. Cost-Effective Regulation of Nonpoint Emissions from Pastoral Agriculture: A Stochastic Analysis. *Australian Journal of Agricultural and Resource Economics*, 58 (3): 471-494. [10.1111/1467-8489.12034](https://doi.org/10.1111/1467-8489.12034)
- Doole, G.J.; Vigiai, O.; Pannell, D.J.; Roberts, A.M., 2013. Cost-Effective Strategies to Mitigate Multiple Pollutants in an Agricultural Catchment in North Central Victoria, Australia. *Australian Journal of Agricultural and Resource Economics*, 57 (3): 441-460. [10.1111/1467-8489.12003](https://doi.org/10.1111/1467-8489.12003)
- Dordas, C., 2008. Role of nutrients in controlling plant diseases in sustainable agriculture. A review. *Agronomy for Sustainable Development*, 28 (1): 33-46. [10.1051/agro:2007051](https://doi.org/10.1051/agro:2007051)
- Dosskey, M.G.; Vidon, P.; Gurwick, N.P.; Allan, C.J.; Duval, T.P.; Lowrance, R., 2010. The Role of Riparian Vegetation in Protecting and Improving Chemical Water Quality in Streams1. *Journal of the American Water Resources Association*, 46 (2): 261-277. [10.1111/j.1752-1688.2010.00419.x](https://doi.org/10.1111/j.1752-1688.2010.00419.x)
- Douglas, G.B.; Lurling, M.; Spears, B.M., 2016. Assessment of changes in potential nutrient limitation in an impounded river after application of lanthanum-modified bentonite. *Water Research*, 97: 47-54. [10.1016/j.watres.2016.02.005](https://doi.org/10.1016/j.watres.2016.02.005)
- Douglas, M., 2001. *De la souillure: essais sur les notions de pollution et de tabou*. Découverte & Syros
- Douglas, M., 2004. *Comment pensent les institutions: suivi de La connaissance de soi et Il n'y a pas de don gratuit*. La découverte (*La Découverte Poche. Sciences humaines et sociales*)
- Douglas, M.; Wildavsky, A., 1982. How Can We Know the Risks We Face? Why Risk Selection Is a Social Process1. *Risk Analysis*, 2 (2): 49-58. [10.1111/j.1539-6924.1982.tb01365.x](https://doi.org/10.1111/j.1539-6924.1982.tb01365.x)
- Douglas, M.; Wildavsky, A., 1983. *Risk and Culture. An Essay on the Selection of Technological and Environmental Dangers*. University of California Press
- Douguet, J.-M.; O'Connor, M., 2003. Maintaining the integrity of the French terroir: a study of critical natural capital in its cultural context. *Ecological Economics*, 44 (2): 233-254. [10.1016/S0921-8009\(02\)00276-8](https://doi.org/10.1016/S0921-8009(02)00276-8)
- Doussan, I., 2009. Droit des pollutions azotées d'origine agricole. *Jurisclasseur Rural*. 1-44

- Downing, J.A., 2014. Limnology and oceanography: two estranged twins reuniting by global change. *Inland Waters*, 4 (2): 215-232
- Downing, J.A.; Osenberg, C.W.; Sarnelle, O., 1999. Meta-analysis of marine nutrient-enrichment experiments: Variation in the magnitude of nutrient limitation. *Ecology*, 80 (4): 1157-1167. 10.1890/0012-9658(1999)080[1157:maomne]2.0.co;2
- Downing, J.A.; Watson, S.B.; McCauley, E., 2001. Predicting cyanobacteria dominance in lakes. *Canadian Journal of Fisheries and Aquatic Sciences*, 58 (10): 1905-1908. 10.1139/cjfas-58-10-1905
- Doyle, J.D.; Parsons, S.A., 2002. Struvite formation, control and recovery. *Water Research*, 36: 3925-3940
- Doyle, M.W.; Stanley, E.H.; Harbor, J.M., 2003. Channel adjustments following two dam removals in Wisconsin. *Water Resources Research*, 39 (1): 1011. 10.1029/2002WR001714
- Driscoll, C.T.; Chen, C.Y.; Hammerschmidt, C.R.; Mason, R.P.; Gilmour, C.C.; Sunderland, E.M.; Greenfield, B.K.; Buckman, K.L.; Lamborg, C.H., 2012. Nutrient supply and mercury dynamics in marine ecosystems: A conceptual model. *Environmental Research*, 119: 118-131. 10.1016/j.envres.2012.05.002
- Droop, M.R., 1974. Nutrient status of algal cells in continuous culture. *Journal of the Marine Biological Association of the United Kingdom*, 54 (4): 825-855. 10.1017/s002531540005760x
- Drouin, J.M., 1993. *L'écologie et son histoire : réinventer la Nature*. Flammarion
- Druon, J.; Schrimpf, W.; Dobricic, S.; Stips, A., 2004. Comparative assessment of large-scale marine eutrophication: North Sea area and Adriatic Sea as case studies. *Marine Ecology Progress Series*, 272: 1-23. 10.3354/meps272001
- Druon, J.-N.; Schrimpf, W.; Dobricic, S.; Stips, A., 2004. Comparative assessment of large-scale marine eutrophication: North Sea area and Adriatic Sea as case studies. *Marine Ecology Progress Series*, 272: 1-23
- Du, B.; Saleh, A.; Jaynes, D.B.; Arnold, J.G., 2006. Evaluation of SWAT in simulating nitrate nitrogen and atrazine fates in a watershed with tiles and potholes. *Transactions of the Asabe*, 49 (4): 949-959
- Du, J.; Shen, J., 2016. Water residence time in Chesapeake Bay for 1980-2012. *Journal of Marine Systems*, 164: 101-111. 10.1016/j.jmarsys.2016.08.011
- Duarte, C.M., 2002. The future of seagrass meadows. *Environmental Conservation*, 29 (2): 192-206. 10.1017/s0376892902000127
- Duarte, C.M.; Borja, A.; Carstensen, J.; Elliott, M.; Krause-Jensen, D.; Marba, N., 2015. Paradigms in the Recovery of Estuarine and Coastal Ecosystems. *Estuaries and Coasts*, 38 (4): 1202-1212. 10.1007/s12237-013-9750-9
- Duarte, C.M.; Conley, D.J.; Carstensen, J.; Sanchez-Camacho, M., 2009. Return to Neverland: Shifting Baselines Affect Eutrophication Restoration Targets. *Estuaries and Coasts*, 32 (1): 29-36. 10.1007/s12237-008-9111-2
- Duarte, C.M.; Conley, D.J.; Carstensen, J.; Sánchez-Camacho, M., 2009. Return to Neverland: Shifting Baselines Affect Eutrophication Restoration Targets. *Estuaries and Coasts*, 32 (1): 29-36. 10.1007/s12237-008-9111-2
- Duarte, C.M.; Hendriks, I.E.; Moore, T.S.; Olsen, Y.S.; Steckbauer, A.; Ramajo, L.; Carstensen, J.; Trotter, J.A.; McCulloch, M., 2013. Is Ocean Acidification an Open-Ocean Syndrome? Understanding Anthropogenic Impacts on Seawater pH. *Estuaries and Coasts*, 36 (2): 221-236. 10.1007/s12237-013-9594-3
- Dubé, K., 2012. *Les cyanobactéries au Québec : la problématique d'un phénomène naturel. Analyse de représentations sociales du risque et de la nature, des discours et des pratiques en lien avec ce phénomène au lac William, à la baie Missiquoi et au lac Roxton.* Département d'anthropologie. Faculté des Sciences sociales, Université Laval, Québec.
- Duce, R.A.; LaRoche, J.; Altieri, K.; Arrigo, K.R.; Baker, A.R.; Capone, D.G.; Cornell, S.; Dentener, F.; Galloway, J.; Ganeshram, R.S.; Geider, R.J.; Jickells, T.; Kuypers, M.M.; Langlois, R.; Liss, P.S.; Liu, S.M.; Middelburg, J.J.; Moore, C.M.; Nickovic, S.; Oschlies, A.; Pedersen, T.; Prospero, J.; Schlitzer, R.; Seitzinger, S.; Sorensen, L.L.; Uematsu, M.; Ulloa, O.; Voss, M.; Ward, B.; Zamora, L., 2008. Impacts of atmospheric anthropogenic nitrogen on the open ocean. *Science*, 320 (5878): 893-897. 10.1126/science.1150369
- Duchene, J.; Bernard, I.; Pouvreau, S., 2015. Vers un retour de l'huître indigène en rade de Brest. *Espèces*, (16): 51-57
- Duchêne, P., 2005. Cent ans de procédés d'épuration des eaux résiduaires. *Techniques Sciences Méthodes hors série*, (11): 9
- Duchêne, P.; Vanier, C., 2002. Réflexion sur les paramètres de qualité exigés pour les rejets de station d'épuration. *Ingénieries*, 29: 13
- Ducrottoy, J.-P.; Elliott, M., 2008. The science and management of the North Sea and the Baltic Sea: natural history, present threats and future challenges. *Marine Pollution Bulletin*, 57 (1-5): 8-21. 10.1016/j.marpolbul.2008.04.030
- Dudley, B.D.; Barr, N.G.; Shima, J.S., 2010. Influence of light intensity and nutrient source on delta C-13 and delta N-15 signatures in *Ulva pertusa*. *Aquatic Biology*, 9 (1): 85-93. 10.3354/ab00241
- Dugdale, R.C., 1967. Nutrient limitation in sea - dynamics identification and significance. *Limnology and Oceanography*, 12 (4): 685-&. 10.4319/lo.1967.12.4.0685
- Dugdale, R.C.; Goering, J.J., 1967. Uptake of new and regenerated forms of nitrogen in primary productivity. *Limnology and Oceanography*, 12 (2): 196-&. 10.4319/lo.1967.12.2.0196
- Dugdale, R.C.; Wilkerson, F.P.; Parker, A.E., 2013. A biogeochemical model of phytoplankton productivity in an urban estuary: The importance of ammonium and freshwater flow. *Ecological Modelling*, 263: 291-307. 10.1016/j.ecolmodel.2013.05.015
- Dulière, V.; Gypens, N.; Lancelot, C.; Luyten, P.; Lacroix, G., 2016. Main contributors to nitrogen content in the English Channel and the Southern Bight of the North Sea. in revision.
- Dulvy, N.; Freckleton, R.; Polunin, N., 2004. Coral reef cascades and the indirect effects of predator removal by exploitation. 7: 410-416
- Dumax, N.; Rozan, A., 2011. Les mesures de compensation : un indicateur du coût environnemental. *Revue juridique de l'environnement*, spécial (5): 115-123

- Dunalska, J.A.; Staehr, P.A.; Jaworska, B.; Gorniak, D.; Gomulka, P., 2014. Ecosystem metabolism in a lake restored by hypolimnetic withdrawal. *Ecological Engineering*, 73: 616-623. 10.1016/j.ecoleng.2014.09.048
- Dunford, R.W.; Ginn, T.C.; Desvouges, W.H., 2004. The use of habitat equivalency analysis in natural resource damage assessments. *Ecological Economics*, 48 (1): 49-70. 10.1016/j.ecolecon.2003.07.011
- Dunford, R.W.; Ung, P.B.; Cook, J.A.; Mauseth, G.S., 2005. Challenges in using habitat equivalency analysis for scaling compensatory restoration. 9928-9933. 10.7901/2169-3358-2003-1-791
- Dunne, E.J.; Coveney, M.F.; Hoge, V.R.; Conrow, R.; Naleway, R.; Lowe, E.F.; Battoe, L.E.; Wang, Y., 2015. Phosphorus removal performance of a large-scale constructed treatment wetland receiving eutrophic lake water. *Ecological Engineering*, 79: 132-142. 10.1016/j.ecoleng.2015.02.003
- Dunne, E.J.; Reddy, K.R., 2005. *Phosphorus biogeochemistry of wetlands in agricultural watersheds*. Wageningen: Wageningen Academic Publishers (*Nutrient Management in Agricultural Watersheds: A Wetlands Solution*)
- Dupas, R.; Curie, F.; Gascuel-Odoux, C.; Moatar, F.; Delmas, M.; Parnaudeau, V.; Durand, P., 2013. Assessing N emissions in surface water at the national level: Comparison of country-wide vs. regionalized models. *Science of the Total Environment*, 443: 152-162. 10.1016/j.scitotenv.2012.10.011
- Dupas, R.; Delmas, M.; Dorioz, J.M.; Garnier, J.; Moatar, F.; Gascuel-Odoux, C., 2015. Assessing the impact of agricultural pressures on N and P loads and eutrophication risk. *Ecological Indicators*, 48: 396-407. 10.1016/j.ecolind.2014.08.007
- Dupas, R.; Delmas, M.; Dorioz, J.-M.; Garnier, J.; Moatar, F.; Gascuel-Odoux, C., 2015. Assessing the impact of agricultural pressures on N and P loads and eutrophication risk. *Ecological Indicators*, 48: 396-407. 10.1016/j.ecolind.2014.08.007
- Dupas, R.; Parnaudeau, V.; Reau, R.; Jeuffroy, M.H.; Durand, P.; Gascuel-Odoux, C., 2015. Integrating local knowledge and biophysical modeling to assess nitrate losses from cropping systems in drinking water protection areas. *Environmental Modelling & Software*, 69: 101-110. 10.1016/j.envsoft.2015.03.009
- Dupas, R.; Salmon-Monviola, J.; Beven, K.; Durand, P.; Haygarth, P.M.; Hollaway, M.J.; Gascuel-Odoux, C., 2016. Uncertainty assessment of a dominant-process catchment model of dissolved phosphorus transfer. *Hydrol. Earth Syst. Sci. Discuss.*, 2016: 1-37. 10.5194/hess-2015-545
- Dupont, C.; Rouzeau, N., 2015. Des exploitations intensives d'huîtres pendant l'Antiquité et le Moyen Âge sur le littoral atlantique français: l'exemple de Beauvoir-sur-Mer (Vendée). *Anthropozoologica*, 50 (2): 109-122
- Dupraz, P.; Latouche, K.; Turpin, N., 2009. Threshold Effect and Co-ordination of Agri-environmental Efforts. *Journal of Environmental Planning and Management*, 52 (5): 613-630. 10.1080/09640560902958164
- Durand, P., 2004. Simulating nitrogen budgets in complex farming systems using INCA: calibration and scenario analyses for the Kervidy catchment (W. France). *Hydrology and Earth System Sciences*, 8 (4): 793-802
- Durand, P.; Moreau, P.; Salmon-Monviola, J.; Ruiz, L.; Vertes, F.; Gascuel-Odoux, C., 2015. Modelling the interplay between nitrogen cycling processes and mitigation options in farming catchments. *Journal of Agricultural Science*, 153 (6): 959-974. 10.1017/s0021859615000258
- Durkheim, É., 1898. Représentations individuelles et représentations collectives. *Revue de Métaphysique et de Morale*, 6 (3): 29
- Dyer, D.C.; Perissinotto, R.; Carrasco, N.K., 2015. Temporal and spatial dietary dynamics of the longspine glassy (Ambassis ambassis) in the St Lucia estuarine system, iSimangaliso Wetland Park. *Water Sa*, 41 (1): 91-104. 10.4314/wsa.v41i1.12
- Dyson, K.; Huppert, D.D., 2010. Regional economic impacts of razor clam beach closures due to harmful algal blooms (HABs) on the Pacific coast of Washington. *Harmful Algae*, 9 (3): 264-271. 10.1016/j.hal.2009.11.003
- Eaufrance, 2017. glossaire sur l'eau.<http://www.glossaire.eaufrance.fr/concept/eutrophisation> [consulté: 16/01/2017]
- EC-JRC, 2010. Framework and requirements for Life Cycle Impact Assessment (LCIA) models and indicators. *ILCD Handbook - International Reference Life Cycle Data System*, European Union: 116
- Eckerberg, K.; Forsberg, B., 1996. Policy Strategies to Reduce Nutrient Leaching from Agriculture and Forestry and Their Local Implementation: A Case Study of the Laholm Bay, Sweden. *Journal of Environmental Planning and Management*, 39 (2): 223-242. 10.1080/09640569612570
- Eckhardt, K., 2008. A comparison of baseflow indices, which were calculated with seven different baseflow separation methods. *Journal of Hydrology*, 352 (1): 168-173. 10.1016/j.jhydrol.2008.01.005
- Edelvang, K.; Kaas, H.; Erichsen, A.C.; Alvarez-Berastegui, D.; Bundgaard, K.; Jorgensen, P.V., 2005. Numerical modelling of phytoplankton biomass in coastal waters. *Journal of Marine Systems*, 57 (1-2): 13-29. 10.1016/j.jmarsys.2004.10.003
- Edinger, J.E.; Dierks, S.; Kolluru, V., 2003. Density dependent grazing in estuarine water quality models. *Water Air and Soil Pollution*, 147 (1-4): 163-182. 10.1023/a:1024576916233
- Edmeades, D.C., 2003. The long-term effects of manures and fertilisers on soil productivity and quality: a review. *Nutrient Cycling in Agroecosystems*, 66 (2): 165-180
- Edwards, D.; Hurley, D.; Wenner, E., 2004. Nonparametric harmonic analysis of estuarine water-quality data: A National Estuarine Research Reserve case study. *Journal of Coastal Research*: 75-92
- Edwards, K.F.; Klausmeier, C.A.; Litchman, E., 2011. Evidence for a three-way trade-off between nitrogen and phosphorus competitive abilities and cell size in phytoplankton. *Ecology*, 92 (11): 2085-2095
- Edwards, K.F.; Klausmeier, C.A.; Litchman, E., 2013. A three-way trade-off maintains functional diversity under variable resource supply. *Am Nat*, 182 (6): 786-800. 10.1086/673532

- Edwards, K.F.; Thomas, M.K.; Klausmeier, C.A.; Litchman, E., 2012. Allometric scaling and taxonomic variation in nutrient utilization traits and maximum growth rate of phytoplankton. *Limnology and Oceanography*, 57 (2): 554-566
- Edwards, M.; Johns, D.G.; Leterme, S.C.; Svendsen, E.; Richardson, A.J., 2006. Regional climate change and harmful algal blooms in the northeast Atlantic. *Limnology and Oceanography*, 51 (2): 820-829
- Edwards, V.R.; Tett, P.; Jones, K.J., 2003. Changes in the yield of chlorophyll a from dissolved available inorganic nitrogen after an enrichment event - applications for predicting eutrophication in coastal waters. *Continental Shelf Research*, 23 (17-19): 1771-1785. 10.1016/j.csr.2003.06.003
- Edwards, V.R.; Tett, P.; Jones, K.J., 2003. Changes in the yield of chlorophyll a from dissolved available inorganic nitrogen after an enrichment event—applications for predicting eutrophication in coastal waters. *Continental Shelf Research*, 23 (17-19): 1771-1785. 10.1016/j.csr.2003.06.003
- EEA, 2005a. *The European Environment, state and outlook 2005*, 580.
- EEA, 2005b. *Sustainable use and management of natural resources*, 72.
- EEA, 2005c. *Household consumption and the environment* 72.
- EEA, 2006. EEA Glossary. In: EEA, ed.
- EEA, 2015. *State of Europe's seas*, 220.
- Efroymson, R.A.; Jager, H.I.; Hargrove, W.W., 2010. Valuing Wildlands. *Environmental Risk Assessment and Management from a Landscape Perspective*. 157-185. 10.1002/9780470593028.ch9
- Egge, J.K.; Aksnes, D.L., 1992. Silicate as regulating nutrient in phytoplankton competition. 83 (July 1988): 281-289
- Ehrmann, J.; Ritz, K., 2014. Plant: soil interactions in temperate multi-cropping production systems. *Plant and Soil*, 376 (1-2): 1-29. 10.1007/s11104-013-1921-8
- Eilola, K.; Almroth-Rosell, E.; Meier, H.E.M., 2014. Impact of saltwater inflows on phosphorus cycling and eutrophication in the Baltic Sea: a 3D model study. *Tellus Series a-Dynamic Meteorology and Oceanography*, 66. 10.3402/tellusa.v66.23985
- Eilola, K.; Gustafsson, B.; Kuznetsov, I.; Meier, H.; Neumann, T.; Savchuk, O., 2011. Evaluation of biogeochemical cycles in an ensemble of three state-of-the-art numerical models of the Baltic Sea. *Journal of Marine Systems*, 88 (2): 267-284. 10.1016/j.jmarsys.2011.05.004
- Eilola, K.; Meier, H.; Almroth, E., 2009. On the dynamics of oxygen, phosphorus and cyanobacteria in the Baltic Sea; A model study. *Journal of Marine Systems*, 75 (1-2): 163-184. 10.1016/j.jmarsys.2008.08.009
- Eilola, K.; Rosell, E.A.; Dieterich, C.; Fransner, F.; Hoglund, A.; Meier, H.E.M., 2012. Modeling Nutrient Transports and Exchanges of Nutrients Between Shallow Regions and the Open Baltic Sea in Present and Future Climate. *Ambio*, 41 (6): 586-599. 10.1007/s13280-012-0322-1
- Eisele, M.; Kiese, R.; Kramer, A.; Leibundgut, C., 2001. Application of a catchment water quality model for assessment and prediction of nitrogen budgets. *Physics and Chemistry of the Earth Part B-Hydrology Oceans and Atmosphere*, 26 (7-8): 547-551. 10.1016/s1464-1909(01)00048-x
- Ejsmont-Karabin, J.; Karabin, A., 2013. The suitability of zooplankton as lake ecosystem indicators: Crustacean trophic state index. *Polish Journal of Ecology*, 61 (3): 561-573
- Ekau, W.; Auel, H.; Pörtner, H.O.; Gilbert, D., 2010. Impacts of hypoxia on the structure and processes in pelagic communities (zooplankton, macro-invertebrates and fish). *Biogeosciences*, 7 (5): 1669-1699. 10.5194/bg-7-1669-2010
- Ekhholm, P.; Lehtoranta, J., 2012. Does control of soil erosion inhibit aquatic eutrophication? *J Environ Manage*, 93 (1): 140-6. 10.1016/j.jenvman.2011.09.010
- Eldridge, P.M.; Morse, J.W., 2000. A diagenetic model for sediment-seagrass interactions. *Marine Chemistry*, 70 (1-3): 89-103. 10.1016/s0304-4203(00)00018-9
- Elliot, M.; Fernandes, T.F.; de Jonge, V.N., 1999. The impact of European Directives on estuarine and coastal science and management. *Aquatic Ecology*, 33 (3): 10. 10.1023/A:1009960706750
- Elliott, 2011. Predicting the impact of changing nutrient load and temperature on the phytoplankton of England's largest lake, Windermere. *Freshwater Biology*: 1365-2427
- Elliott; Persson, I.; Thackeray, S.J.; Blenckner, T., 2007. Phytoplankton modelling of Lake Erken, Sweden by linking the models PROBE and PROTECH. *Ecological Modelling*, 202 (3-4): 421-426. 10.1016/j.ecolmodel.2006.11.004
- Elliott; Thackeray, S.J., 2004. The simulation of phytoplankton in shallow and deep lakes using PROTECH. *Ecological Modelling*, 178 (3-4): 357-369. 10.1016/j.ecolmodel.2004.02.012
- Elliott, J.A., 2012. Is the future blue-green? A review of the current model predictions of how climate change could affect pelagic freshwater cyanobacteria. *Water Research*, 46: 1364-1371
- Elliott, J.A.; Thackeray, S.J.; Huntingford, C.; Jones, R.G., 2005. Combining a regional climate model with a phytoplankton community model to predict future changes in phytoplankton in lakes. *Freshwater Biology*, 50 (8): 1404-1411. 10.1111/j.1365-2427.2005.01409.x
- Elliott, M.; Burdon, D.; Hemingway, K.L.; Apitz, S.E., 2007. Estuarine, coastal and marine ecosystem restoration: Confusing management and science - A revision of concepts. *Estuarine Coastal and Shelf Science*, 74 (3): 349-366. 10.1016/j.ecss.2007.05.034
- Elliott, M.; de Jonge, V.N., 2002. The management of nutrients and potential eutrophication in estuaries and other restricted water bodies. *Hydrobiologia*, 475 (1): 513-524. 10.1023/A:1020372316420
- Elmgren, R.; Blenckner, T.; Andersson, A., 2015. Baltic Sea management: Successes and failures. *Ambio*, 44 (Suppl 3): 335-344. 10.1007/s13280-015-0653-9
- Elofsson, K., 2003. Cost-Effective Reductions of Stochastic Agricultural Loads to the Baltic Sea. *Ecological Economics*, 47 (1): 13-31. 10.1016/j.ecolecon.2002.10.001

- Elofsson, K., 2007. Cost Uncertainty and Unilateral Abatement. *Environmental and Resource Economics*, 36 (2): 143-162. 10.1007/s10640-006-9018-y
- Elofsson, K., 2010. Cost-effectiveness of the Baltic Sea Action Plan. *Marine Policy*, 34 (5): 1043-1050. 10.1016/j.marpol.2010.03.003
- Elofsson, K., 2010. The Costs of Meeting the Environmental Objectives for the Baltic Sea: A Review of the Literature. *Ambio*: 1-10. 10.1007/s13280-009-0005-8
- Elofsson, K., 2012. Swedish nutrient reduction policies: An evaluation of cost-effectiveness. *Regional Environmental Change*, 12 (1): 225-235. 10.1007/s10113-011-0251-8
- Elofsson, K., 2014. Climate Change and Regulation of Nitrogen Loads under Moral Hazard. *European Review of Agricultural Economics*, 41 (2): 327-351. 10.1093/erae/jbx031
- Elofsson, K.; Folmer, H.; Gren, I.M., 2003. Management of eutrophicated coastal ecosystems: A synopsis of the literature with emphasis on theory and methodology. *Ecological Economics*, 47 (1): 1-11. 10.1016/j.ecolecon.2003.09.001
- Elser, J.; Bennett, E., 2011. Phosphorus cycle: A broken biogeochemical cycle. *Nature*, 478 (7367): 29-31. 10.1038/478029a
- Elser, J.J.; Andersen, T.; Baron, J.S.; Bergstrom, A.-K.; Jansson, M.; Kyle, M.; Nydick, K.R.; Steger, L.; Hessen, D.O., 2009. Shifts in Lake N:P Stoichiometry and Nutrient Limitation Driven by Atmospheric Nitrogen Deposition. *Science*, 326 (5954): 835-837. 10.1126/science.1176199
- Elser, J.J.; Andersen, T.; Baron, J.S.; Bergstrom, A.-K.; Jansson, M.; Kyle, M.; Nydick, K.R.; Steger, L.; Hessen, D.O., 2009. Shifts in lake N:P stoichiometry and nutrient limitation driven by atmospheric nitrogen deposition. *Science*, 326 (5954): 835-837. 10.1126/science.1176199
- Elser, J.J.; Bracken, M.E.S.; Cleland, E.E.; Gruner, D.S.; Harpole, W.S.; Hillebrand, H.; Ngai, J.T.; Seabloom, E.W.; Shurin, J.B.; Smith, J.E., 2007. Global analysis of nitrogen and phosphorus limitation of primary producers in freshwater, marine and terrestrial ecosystems. *Ecology Letters*, 10 (12): 1135-1142. 10.1111/j.1461-0248.2007.01113.x
- Elser, J.J.; Fagan, W.F.; Denno, R.F.; Dobberfuhl, D.R.; Folarin, A.; Huberty, A.; Interlandi, S.; Kilham, S.S.; McCauley, E.; Schulz, K.L.; Siemann, E.H.; Sterner, R.W., 2000. Nutritional constraints in terrestrial and freshwater food webs. *Nature*, 408 (6812): 578-580. 10.1038/35046058
- Elser, J.J.; Marzolf, E.R.; Goldman, C.R., 1990. Phosphorus and Nitrogen Limitation of Phytoplankton Growth in the Freshwaters of North America: A Review and Critique of Experimental Enrichments. *Canadian Journal of Fisheries and Aquatic Sciences*, 47 (7): 1468-1477. doi:10.1139/f90-165
- Elser, J.J.; Peace, A.L.; Kyle, M.; Wojewodzic, M.; McCrackin, M.L.; Andersen, T.; Hessen, D.O., 2010. Atmospheric nitrogen deposition is associated with elevated phosphorus limitation of lake zooplankton. *Ecology Letters*, 13 (10): 1256-61. 10.1111/j.1461-0248.2010.01519.x
- Elshaarawi, A.H., 1984. Dissolved-oxygen concentrations in Lake Erie (USA-Canada) .2. A statistical-model for dissolved-oxygen in the central basin of Lake Erie. *Journal of Hydrology*, 72 (3-4): 231-243. 10.1016/0022-1694(84)90082-9
- Eme, C.; Boutin, C., 2015. *Composition des eaux usées domestiques par souche émission à l'échelle de l'habitation. Etude bibliographique. Rapport ONEMA du partenariat 2015 ONEMA-Irstea du thème « L'eau en espace urbanisé »*, 91.
- Emerson, S.; Bender, M., 1981. Carbon fluxes at the sediment-water interface of the deep-sea - calcium-carbonate preservation. *Journal of Marine Research*, 39 (1): 139-162
- Emerson, S.; Hedges, J., 2003. 6.11 - Sediment Diagenesis and Benthic Flux A2 - Holland, Heinrich D. In: Turekian, K.K., ed. *Treatise on Geochemistry*. Oxford: Pergamon, 293-319. <http://dx.doi.org/10.1016/B0-08-043751-6/06112-0>
- Emilson, C.E.; Kreutzweiser, D.P.; Gunn, J.M.; Mykytczuk, N.C.S., 2016. Effects of land use on the structure and function of leaf-litter microbial communities in boreal streams. *Freshwater Biology*, 61 (7): 1049-1061. 10.1111/fwb.12765
- Engelund, F.; Hansen, E., 1967. *A monograph on sediment transport in alluvial streams*. Copenhagen V, Denmark.: TEKNISKFORLAG.
- Engstrom-Ost, J.; Immonen, E.; Candolin, U.; Mattila, J., 2007. The indirect effects of eutrophication on habitat choice and survival of fish larvae in the Baltic Sea. *Marine Biology*, 151 (1): 393-400. 10.1007/s00227-006-0498-7
- Engstrom-Ost, J.; Isaksson, I., 2006. Effects of macroalgal exudates and oxygen deficiency on survival and behaviour of fish larvae. *Journal of Experimental Marine Biology and Ecology*, 335 (2): 227-234. 10.1016/j.jembe.2006.03.007
- Engström-Öst, J.; Isaksson, I., 2006. Effects of macroalgal exudates and oxygen deficiency on survival and behaviour of fish larvae. *Journal of Experimental Marine Biology and Ecology*, 335 (2): 227-234. 10.1016/j.jembe.2006.03.007
- Ensign, S.H.; Doyle, M.W., 2006. Nutrient spiraling in streams and river networks. *Journal of Geophysical Research-Biogeosciences*, 111 (G4). 10.1029/2005jg000114
- Environmental, D.; Agency, P.; Box, P.O.; Monitoring, E.; Section, C., 2002. Coastal Eutrophication and the Danish National Aquatic Monitoring and Assessment Program. 25 (4): 848-861
- Eppley, R.W.; Rogers, J.N.; McCarthy, J.J., 1969. Half-saturation constants for uptake of nitrate and ammonium by marine phytoplankton. *Limnology and Oceanography*, 14 (6): 912-&. 10.4319/lo.1969.14.6.0912
- Eriksson, B.K., 2012. *La surpêche favorise-t-elle les proliférations d'algues ? Rapport du parlement européen, direction générale des politiques internes de l'Union, département thématique B, Pêche*. Parlement Européen
- Eriksson, B.K.; Johansson, G., 2003. Sedimentation reduces recruitment success of *Fucus vesiculosus* (Phaeophyceae) in the Baltic Sea. *European Journal of Phycology*, 38 (3): 217–222. 10.1080/0967026031000121688
- Eriksson, B.K.; Johansson, G.; Snoeijs, P., 1998. Long-term changes in the sublittoral zonation of brown algae in the southern Bothnian Sea. *European Journal of Phycology*, 33 (3): 241-249. 10.1080/09670269810001736743
- Eriksson, B.K.; Johansson, G.; Snoeijs, P., 2002. Long-term changes in the macroalgal vegetation of the inner Gullmar Fjord, Swedish Skagerrak coast. *Journal of Phycology*, 38 (2): 284-296. 10.1046/j.1529-8817.2002.00170.x

- Eriksson, B.K.; Ljunggren, L.; Sandstrom, A.; Johansson, G.; Mattila, J.; Rubach, A.; Raberg, S.; Snickars, M., 2009. Declines in predatory fish promote bloom-forming macroalgae. *Ecological Applications*, 19 (8): 1975–1988. 10.1890/08-0964.1
- Eriksson, B.K.; Rubach, A.; Hillebrand, H., 2007. Dominance by a canopy forming seaweed modifies resource and consumer control of bloom-forming macroalgae. *Oikos*, 116 (7): 1211–1219. 10.1111/j.2007.0030-1299.15666.x
- Eriksson, B.K.; Sieben, K.; Eklöf, J.; Ljunggren, L.; Olsson, J.; Casini, M.; Bergström, U., 2011. Effects of altered offshore food webs on coastal ecosystems emphasize the need for cross-ecosystem management. *AMBIO: a Journal of the Human Environment*, 40 (7): 786-797
- Erismann, J.W.; De Vries, W.; Kros, H.; Oenema, O.; Van Der Eerden, L.; Van Zeijts, H.; Smeulders, S., 2001. An outlook for a national integrated nitrogen policy. *Environmental Science and Policy*, 4 (2-3): 87-95. 10.1016/S1462-9011(00)00116-7
- Erismann, J.W.; Hensen, A.; de Vries, W.; Kros, H.; van de Wal, T.; de Winter, W.; Wien, J.E.; van Elswijk, M.; Maat, M.; Sanders, K., 2002. NitroGenius: a nitrogen decision support system. A game to develop the optimal policy to solve the Dutch nitrogen pollution problem. *Ambio*, 31 (2): 190-6
- Errecart, P.M.; Agnusdei, M.G.; Lattanzi, F.A.; Marino, M.A.; Berone, G.D., 2014. Critical Nitrogen Concentration Declines with Soil Water Availability in Tall Fescue. *Crop Science*, 54 (1): 318. 10.2135/cropsci2013.08.0561
- Esteves, M.; Faucher, X.; Galle, S.; Vauclin, M., 2000. Overland flow and infiltration modelling for small plots during unsteady rain: numerical results versus observed values. *Journal of Hydrology*, 228 (3-4): 265-282. 10.1016/s0022-1694(00)00155-4
- Etcheber, H.; Taillez, A.; Abril, G.; Garnier, J.; Servais, P.; Moatar, F.; Commarieu, M.V., 2007. Particulate organic carbon in the estuarine turbidity maxima of the Gironde, Loire and Seine estuaries: origin and lability. *Hydrobiologia*, 588: 245-259. 10.1007/s10750-007-0667-9
- European Environment Agency, 2001. *Eutrophication in Europeans coastal waters*. Copenhagen Topic report No. 7, 86p.
- European Environment Agency, E.E.A., 2017. *Climate change, impacts and vulnerability in Europe 2016. An indicator-based report*. Copenhagen, Denmark: EEA, 424.
- European Environment Agency, E.E.A., 2017. *Landscapes in transition — An account of 25 years of land cover change in Europe* EEA, 8.
- Eurostat, 2017. Glossaire:Eutrophication.<http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Eutrophication/fr> [consulté: 23/08/2017]
- Euzen, A., 2006. La vogue des eaux en bouteille. *European Journal of water quality*, 37: 13
- Euzen, A.; Haghe, J.P., 2012. What kind of water is good enough to drink? The evolution of perceptions about drinking water in Paris from modern to contemporary period. *Water History*, 4 (3): 13
- Euzen, A.; Lévi, Y., 2013. *Tout savoir sur l'eau du robinet*. Cnrs
- Euzen, A.; Morehouse, B., 2011. Water: What values? *Policy and Society*, 30 (4): 237-247. 10.1016/j.polsoc.2011.10.005
- Evans, G.; Jones, L., 2001. *Economic impact of the 2000 red tide on Galveston County, Texas: A case study* College Station: Department of Agricultural Economics, Texas A&M University, 56.
- Evans, M.A.; Fahnenstiel, G.; Scavia, D., 2011. Incidental Oligotrophication of North American Great Lakes. *Environmental Science & Technology*, 45 (8): 3297-3303. 10.1021/es103892w
- Evans, M.A.; Scavia, D., 2011. Forecasting hypoxia in the Chesapeake Bay and Gulf of Mexico: model accuracy, precision, and sensitivity to ecosystem change. *Environmental Research Letters*, 6 (1). 10.1088/1748-9326/6/1/015001
- Eveillard, P.; Saby, N.P.A.; Gouny, L.; Denoroy, P.; Lemercier, B., 2016. Effect on soil nutrient status of input/output balances for phosphate and potassium in France. *International Fertiliser Society at a Conference in Cambridge, United Kingdom, on 8 th December 2016*. 2016. International Fertiliser Society -
- Even, S.; Billen, G.; Bacq, N.; Théry, S.; Ruelland, D.; Garnier, J.; Cugier, P.; Poulin, M.; Blanc, S.; Lamy, F.; Paffoni, C., 2007. New tools for modelling water quality of hydrosystems: An application in the Seine River basin in the frame of the Water Framework Directive. *Human activity and material fluxes in a regional river basin: the Seine River watershed*, 375 (1): 274-291. 10.1016/j.scitotenv.2006.12.019
- Everett, R.A., 1994. Macroalgae in marine soft-sediment communities: effects on benthic faunal assemblages. *Journal of Experimental Marine Biology and Ecology*, 175 (2): 253-274. 10.1016/0022-0981(94)90030-2
- Ewen, J.; Parkin, G.; O'Connell, P.E., 2000. SHETRAN: distributes river basin flow and transport modeling system. *Journal of Hydrologic Engineering*, 5 (3): 250-258. 10.1061/(asce)1084-0699(2000)5:3(250)
- Exbrayat, J.F.; Viney, N.R.; Frede, H.G.; Breuer, L., 2011. Probabilistic multi-model ensemble predictions of nitrogen concentrations in river systems. *Geophysical Research Letters*, 38. 10.1029/2011gl047522
- Exbrayat, J.F.; Viney, N.R.; Seibert, J.; Wrede, S.; Frede, H.G.; Breuer, L., 2010. Ensemble modelling of nitrogen fluxes: data fusion for a Swedish meso-scale catchment. *Hydrology and Earth System Sciences*, 14 (12): 2383-2397. 10.5194/hess-14-2383-2010
- Eyre, B., 1997. Water quality changes in an episodically flushed sub-tropical Australian estuary: A 50 year perspective. *Marine Chemistry*, 59 (1-2): 177-187. 10.1016/s0304-4203(97)00070-4
- Fabre, A.; Pinay, G.; Ruffinoni, C., 1996. Seasonal changes in inorganic and organic phosphorus in the soil of a riparian forest. *Biogeochemistry*, 35 (3): 419-432. 10.1007/bf02183034
- Fabricius, K.; De'ath, G.; McCook, L.; Turak, E.; Williams, D.M., 2005. Changes in algal, coral and fish assemblages along water quality gradients on the inshore Great Barrier Reef. *Mar Pollut Bull*, 51 (1-4): 384-98. 10.1016/j.marpolbul.2004.10.041

- Fabricius, K.E.; Langdon, C.; Uthicke, S.; Humphrey, C.; Noonan, S.; De'ath, G.; Okazaki, R.; Muehllehner, N.; Glas, M.S.; Lough, J.M., 2011. Losers and winners in coral reefs acclimatized to elevated carbon dioxide concentrations. *Nature Climate Change*, 1 (3): 165-169. 10.1038/nclimate1122
- Fadel; Lemaire, B.J.; Vinçon-Leite, B.; Atoui, A.; Slim; Tassin, B., 2016. On the successful use of a simplified model to simulate the succession of toxic cyanobacteria in a hypereutrophic reservoir with a highly fluctuating water level. *Environmental Science and Pollution Research*, Accepted:
- Fadel, A., 2014. *Physico-chemical functioning and development of phytoplankton in Karaoun Reservoir (Lebanon). Application of a hydrodynamic-ecological model.* PhD thesis LEESU/Ecole des Ponts ParisTech Université Paris-Est, LEESU Ecole des Ponts ParisTech.
- Fagerbakke, K.M.; Heldal, M.; Norland, S., 1996. Content of carbon, nitrogen, oxygen, sulfur and phosphorus in native aquatic and cultured bacteria. *Aquatic Microbial Ecology*, 10 (1): 15-27. 10.3354/ame010015
- Fageria, V.D., 2001. Nutrient interactions in crop plants. *Journal of Plant Nutrition*, 24 (8): 1269-1290
- Faithfull, C.L.; Bergstrom, A.K.; Vrede, T., 2011. Effects of nutrients and physical lake characteristics on bacterial and phytoplankton production: A meta-analysis. *Limnology and Oceanography*, 56 (5): 1703-1713. 10.4319/lo.2011.56.5.1703
- Falkenmark, M., 2003. Freshwater as Shared between Society and Ecosystems: From Divided Approaches to Integrated Challenges. *Philosophical Transactions: Biological Sciences*, 358 (1440): 2037-2049
- Falkowski P.G., S.O., Katz M.E., Van de Schootbrugge B., Knoll A.H. , 2004. Why is the Land Green and the Ocean Red? In: Thierstein H.R., Y.J.R., ed. *Coccolithophores*. Berlin: Springer
- Falkowski, P.G.; Raven, J.A., 1997. *Aquatic Photosynthesis*. Malden, USA: Blackwell Science
- Fan, S.; Fu, M.; Wang, Z.; Zhang, X.; Song, W.; Li, Y.; Liu, G.; Shi, X.; Wang, X.; Zhu, M., 2015. Temporal variation of green macroalgal assemblage on Porphyra aquaculture rafts in the Subei Shoal, China. *Estuarine Coastal and Shelf Science*, 163 (A, SI): 23-28. 10.1016/j.ecss.2015.03.016
- Fan, W.; Song, J.B., 2014. A numerical study of the seasonal variations of nutrients in the Changjiang River estuary and its adjacent sea area. *Ecological Modelling*, 291: 69-81. 10.1016/j.ecolmodel.2014.07.026
- Fan, X.; Xu, D.; Wang, Y.; Zhang, X.; Cao, S.; Mou, S.; Ye, N., 2014. The effect of nutrient concentrations, nutrient ratios and temperature on photosynthesis and nutrient uptake by *Ulva prolifera*: implications for the explosion in green tides. *Journal of Applied Phycology*, 26 (1): 537-544. 10.1007/s10811-013-0054-z
- Fan, X.; Xu, D.; Wang, Y.T.; Zhang, X.W.; Cao, S.N.; Mou, S.L.; Ye, N.H., 2014. The effect of nutrient concentrations, nutrient ratios and temperature on photosynthesis and nutrient uptake by *Ulva prolifera*: implications for the explosion in green tides. *Journal of Applied Phycology*, 26 (1): 537-544. 10.1007/s10811-013-0054-z
- Fang, X.; Stefan, H.G., 1997. Simulated climate change effects on dissolved oxygen characteristics in ice-covered lakes. *Ecological Modelling*, 103 (2-3): 209-229. 10.1016/S0304-3800(97)00086-0
- Fang, X.; Stefan, H.G., 2009. Simulations of climate effects on water temperature, dissolved oxygen, and ice and snow covers in lakes of the contiguous United States under past and future climate scenarios. *Limnology and Oceanography*, 54 (6): 2359-2370. 10.4319/lo.2009.54.6\_part\_2.2359
- Fang, X.; Stefan, H.G.; Eaton, J.G.; McCormick, J.H.; Alam, S.R., 2004. Simulation of thermal/dissolved oxygen habitat for fishes in lakes under different climate scenarios - Part 1. Cool-water fish in the contiguous US. *Ecological Modelling*, 172 (1): 13-37. 10.1016/S0304-3800(03)00282-5
- Fang, X.; Stefan, H.G.; Eaton, J.G.; McCormick, J.H.; Alam, S.R., 2004. Simulation of thermal/dissolved oxygen habitat for fishes in lakes under different climate scenarios - Part 2. Cold-water fish in the contiguous US. *Ecological Modelling*, 172 (1): 39-54. 10.1016/S0304-3800(03)00285-0
- Fang, X.; Zhang, J.; Chen, Y.; Xu, X., 2008. QUAL2K Model Used in the Water Quality Assessment of Qiantang River, China. *Water Environment Research*, 80 (11): 2125-2133. 10.2175/106143008X304794
- Fangmeier, A.; Hadwigerfangmeier, A.; Vandereerden, L.; Jager, H.J., 1994. Effects of atmospheric ammonia on vegetation - a review. *Environmental Pollution*, 86 (1): 43-82. 10.1016/0269-7491(94)90008-6
- Fear, J.; Gallo, T.; Hall, N.; Loftin, J.; Paerl, H., 2004. Predicting benthic microalgal oxygen and nutrient flux responses to a nutrient reduction management strategy for the eutrophic Neuse River Estuary, North Carolina, USA. *Estuarine Coastal and Shelf Science*, 61 (3): 491-506. 10.1016/j.ecss.2004.06.013
- Fedra, K., 1985. A Modular Interactive Simulation System for Eutrophication and Regional Development. *Water Resources Research*, 21 (2): 143-152. 10.1029/WR021i002p00143
- Fehling, J.; Davidson, K.; Bolch, C.J.; Bates, S.S., 2004. Growth and domoic acid production by *Pseudo-nitzschia seriata* (Bacillariophyceae) under phosphate and silicate limitation. *Journal of Phycology*, 40 (4): 674-683. 10.1111/j.1529-8817.2004.03213.x
- Feist, T.; Pauer, J.; Melendez, W.; Lehrter, J.; DePetro, P.; Rygwelski, K.; Ko, D.; Kreis, R., 2016. Modeling the Relative Importance of Nutrient and Carbon Loads, Boundary Fluxes, and Sediment Fluxes on Gulf of Mexico Hypoxia. *Environmental Science & Technology*, 50 (16): 8713-8721. 10.1021/acs.est.6b01684
- Feist, T.J.; Pauer, J.J.; Melendez, W.; Lehrter, J.C.; DePetro, P.A.; Rygwelski, K.R.; Ko, D.S.; Kreis, R.G., 2016. Modeling the Relative Importance of Nutrient and Carbon Loads, Boundary Fluxes, and Sediment Fluxes on Gulf of Mexico Hypoxia. *Environmental Science & Technology*, 50 (16): 8713-8721. 10.1021/acs.est.6b01684
- Feldman, J.; Heasley, L., 2007. Recentering North American environmental history: Pedagogy and scholarship in the Great Lakes region. *Environmental History*, 12 (4): 7

- Feldman, K.L.; Armstrong, D.A.; Dumbauld, B.R.; DeWitt, T.H.; Doty, D.C., 2000. Oysters, Crabs, and Burrowing Shrimp: Review of an Environmental Conflict over Aquatic Resources and Pesticide Use in Washington State's (USA) Coastal Estuaries. *Estuaries*, 23 (2): 141-176. 10.2307/1352824
- Fellerhoff, C.; Voss, M.; Wantzen, K.M., 2003. Stable carbon and nitrogen isotope signatures of decomposing tropical macrophytes. *Aquatic Ecology*, 37 (4): 361-375. 10.1023/b:aeco.0000007049.25535.12
- Fennel, K.; Brady, D.; DiToro, D.; Fulweiler, R.; Gardner, W.; Giblin, A.; McCarthy, M.; Rao, A.; Seitzinger, S.; Thouvenot-Korppoo, M.; Tobias, C., 2009. Modeling denitrification in aquatic sediments. *Biogeochemistry*, 93 (1-2): 159-178. 10.1007/s10533-008-9270-z
- Fennel, K.; Collier, R.; Larson, G.; Crawford, G.; Boss, E., 2007. Seasonal nutrient and plankton dynamics in a physical-biological model of Crater Lake. *Hydrobiologia*, 574: 265-280. 10.1007/s10750-006-2615-5
- Fennel, W., 1995. A model of the yearly cycle of nutrients and plankton in the Baltic Sea. *Journal of Marine Systems*, 6 (4): 313-329. 10.1016/0924-7963(94)00031-6
- Fennel, W., 2010. A nutrient to fish model for the example of the Baltic Sea. *Journal of Marine Systems*, 81 (1-2): 184-195. 10.1016/j.jmarsys.2009.12.007
- Fernandes, S.O.; Javanaud, C.; Aigle, A.; Michotey, V.D.; Guasco, S.; Deborde, J.; Deflandre, B.; Anschutz, P.; Bonin, P.C., 2015. Anaerobic nitrification-denitrification mediated by Mn-oxides in meso-tidal sediments: Implications for N<sub>2</sub> and N<sub>2</sub>O production. *Journal of Marine Systems*, 144: 1-8. 10.1016/j.jmarsys.2014.11.011
- Fernandez, P.D.; Gomez, A.G.; Alba, J.G.; Diaz, C.A.; Cortezon, J.A.R., 2012. A model for describing the eutrophication in a heavily regulated coastal lagoon. Application to the Albufera of Valencia (Spain). *Journal of Environmental Management*, 112: 340-352. 10.1016/j.jenvman.2012.08.019
- Fernandez-Nieto, E.D.; Lucas, C.; de Luna, T.M.; Cordier, S., 2014. On the influence of the thickness of the sediment moving layer in the definition of the bedload transport formula in Exner systems. *Computers & Fluids*, 91: 87-106. 10.1016/j.compfluid.2013.11.031
- Ferrant, S.; Durand, P.; Justes, E.; Probst, J.-L.; Sanchez-Perez, J.-M., 2013. Simulating the long term impact of nitrate mitigation scenarios in a pilot study basin. *Agricultural Water Management*, 124: 85-96. 10.1016/j.agwat.2013.03.023
- Ferrant, S.; Oehler, F.; Durand, P.; Ruiz, L.; Salmon-Monviola, J.; Justes, E.; Dugast, P.; Probst, A.; Probst, J.-L.; Sanchez-Perez, J.-M., 2011. Understanding nitrogen transfer dynamics in a small agricultural catchment: Comparison of a distributed (TNT2) and a semi distributed (SWAT) modeling approaches. *Journal of Hydrology*, 406 (1-2): 1-15. 10.1016/j.jhydrol.2011.05.026
- Ferreira, J.; Andersen, J.; Borja, A.; Bricker, S.; Camp, J.; Cardoso da Silva, M.; Garcés, E.; Heiskanen, A.; Humborg, C.; Ignatiades, L., 2010. Marine Strategy Framework Directive–Task Group 5 Report Eutrophication. *EUR*, 24338: 49
- Ferreira, J.G.; Andersen, J.H.; Borja, A.; Bricker, S.B.; Camp, J.; da Silva, M.C.; Garcés, E.; Heiskanen, A.S.; Humborg, C.; Ignatiades, L.; Lancelot, C.; Menesguen, A.; Tett, P.; Hoepffner, N.; Claussen, U., 2011. Overview of eutrophication indicators to assess environmental status within the European Marine Strategy Framework Directive. *Estuarine Coastal and Shelf Science*, 93 (2): 117-131. 10.1016/j.ecss.2011.03.014
- Ferreira, V.; Castagnayrol, B.; Koricheva, J.; Gulis, V.; Chauvet, E.; Graca, M.A.S., 2015. A meta-analysis of the effects of nutrient enrichment on litter decomposition in streams. *Biological Reviews*, 90 (3): 669-688. 10.1111/brv.12125
- Ferris, J.M.; Christian, R., 1991. Aquatic primary production in relation to microalgal responses to changing light - a review. *Aquatic Sciences*, 53 (2-3): 187-217. 10.1007/bf00877059
- Fezzi, C.; Hutchins, M.; Rigby, D.; Bateman, I.J.; Posen, P.; Hadley, D., 2010. Integrated Assessment of Water Framework Directive Nitrate Reduction Measures. *Agricultural Economics*, 41 (2): 123-134. 10.1111/j.1574-0862.2009.00430.x
- Ficklin, D.L.; Luo, Y.; Zhang, M., 2013. Watershed modelling of hydrology and water quality in the Sacramento River watershed, California. *Hydrological Processes*, 27 (2): 236-250. 10.1002/hyp.9222
- Field, C.B.; Barros, V.R.; Dokken, D.J.; Mach, K.J.; Mastrandrea, M.D.; Bilir, T.E.; Chatterjee, M.; Ebi, K.L.; Estrada, Y.O.; Genova, R.C.; Girma, B.; Kissel, E.S.; Levy, A.N.; MacCracken, S.; Mastrandrea, P.R.; White, L.L., 2014. IPCC 2014. Summary for policymakers. *Cambridge University Press*. Cambridge, United Kingdom and New York, NY, USA: IPCC, Vol.Climate Change 2014: Impacts, Adaptation, and Vulnerability.
- Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 1-32
- Field, C.B.; Behrenfeld, M.J.; Randerson, J.T.; Falkowski, P., 1998. Primary production of the biosphere: Integrating terrestrial and oceanic components. *Science*, 281 (5374): 237-240. 10.1126/science.281.5374.237
- Filali, A.; Hauduc, H.; Rieger, L.; Philippe, F.; Gillot, S., 2015. Analyse et consolidation des données de fonctionnement des stations d'épuration: une étude de cas. *Techniques Sciences Méthodes*, 12: 30
- Filippelli, G.M., 2011. Phosphate rock formation and marine phosphorus geochemistry: The deep time perspective. *Chemosphere*, 84 (6): 759-766. 10.1016/j.chemosphere.2011.02.019
- Filoso, S.; Vallino, J.; Hopkinson, C.; Rastetter, E.; Claessens, L., 2004. Modeling nitrogen transport in the Ipswich River Basin, Massachusetts, using a hydrological simulation program in fortran (HSPF). *Journal of the American Water Resources Association*, 40 (5): 1365-1384. 10.1111/j.1752-1688.2004.tb01592.x
- Finkel, Z.V.; Beardall, J.; Flynn, K.J.; Quigg, A.; Rees, T.A.V.; Raven, J.A., 2010. Phytoplankton in a changing world: cell size and elemental stoichiometry. *Journal of Plankton Research*, 32 (1): 119-137. 10.1093/plankt/fbp098
- Finkl, C.W.; Krupa, S.L., 2003. Environmental Impacts of Coastal-Plain Activities on Sandy Beach Systems: Hazards, Perception and Mitigation. *Journal of Coastal Research*: 132-150
- Finlay, J.C.; Small, G.E.; Sternier, R.W., 2013. Human influences on nitrogen removal in lakes. *Science*, 342 (6155): 247-250

- Finlay, K.; Patoine, A.; Donald, D.B.; Bogard, M.J.; Leavitt, P.R., 2010. Experimental evidence that pollution with urea can degrade water quality in phosphorus-rich lakes of the Northern Great Plains. *Limnology and Oceanography*, 55 (3): 1213-1230. 10.4319/lo.2010.55.3.1213
- Finnveden, G.; Potting, J., 1999. Eutrophication as an impact category. *The International Journal of Life Cycle Assessment*, 4 (6): 311-314. 10.1007/BF02978518
- Fisher, J.; Acreman, M.C., 2004. Wetland nutrient removal: a review of the evidence. *Hydrology and Earth System Sciences*, 8 (4): 673-685
- Fisher, T.R.; Peele, E.R.; Ammerman, J.W.; Harding, L.W., 1992. Nutrient limitation of phytoplankton in chesapeake bay. *Marine Ecology Progress Series*, 82 (1): 51-63. 10.3354/meps082051
- Fitzpatrick, J.J., 2009. Assessing skill of estuarine and coastal eutrophication models for water quality managers. *Journal of Marine Systems*, 76 (1-2): 195-211. 10.1016/j.jmarsys.2008.05.018
- Flanagan, D.C.; Gilley, J.E.; Franti, T.G., 2007. Water Erosion Prediction Project(WEPP): Development history, model capabilities, and future enhancements. *Transactions of the Asabe*, 50 (5): 1603-1612
- Fleeger, J.W.; Carman, K.R.; Nisbet, R.M., 2003. Indirect effects of contaminants in aquatic ecosystems. *Science of the Total Environment*, 317 (1-3): 207-233. 10.1016/s0048-9697(03)00141-4
- Fleming, L.E.; Kirkpatrick, B.; Backer, L.C.; Walsh, C.J.; Nierenberg, K.; Clark, J.; Reich, A.; Hollenbeck, J.; Benson, J.; Cheng, Y.S.; Naar, J.; Pierce, R.; Bourdelais, A.J.; Abraham, W.M.; Kirkpatrick, G.; Zaias, J.; Wanner, A.; Mendes, E.; Shalat, S.; Hoagland, P.; Stephan, W.; Bean, J.; Watkins, S.; Clarke, T.; Byrne, M.; Baden, D.G., 2011. Review of Florida red tide and human health effects. *Harmful Algae*, 10 (2): 224-233. 10.1016/j.hal.2010.08.006
- Fleming-Lehtinen, V.; Andersen, J.H.; Carstensen, J.; Łysiak-Pastuszak, E.; Murray, C.; Pyhälä, M.; Laamanen, M., 2015. Recent developments in assessment methodology reveal that the Baltic Sea eutrophication problem is expanding. *Ecological Indicators*, 48: 380-388. 10.1016/j.ecolind.2014.08.022
- Fletcher, R.L., 1996. The Occurrence of "Green Tides"— a Review. In: Schramm, D.W.; Nienhuis, P.D.P.H., eds. *Marine Benthic Vegetation*. Springer Berlin Heidelberg (Ecological Studies), 7-43
- Flindt, M.R.; Kamp-Nielsen, L., 1997. Modelling of an estuarine eutrophication gradient. *Ecological Modelling*, 102 (1): 143-153. 10.1016/s0304-3800(97)00101-4
- Flipo, N.; Even, S.; Poulin, M.; Thery, S.; Ledoux, E., 2007. Modeling nitrate fluxes at the catchment scale using the integrated tool CAWAQS. *Science of the Total Environment*, 375 (1-3): 69-79. 10.1016/j.scitotenv.2006.12.016
- Flipo, N.; Mouhri, A.; Labarthe, B.; Biancamaria, S.; Rivière, A.; Weill, P., 2014. Continental hydrosystem modelling: the concept of nested stream-aquifer interfaces. *Hydrol. Earth Syst. Sci.*, 18 (8): 3121-3149. 10.5194/hess-18-3121-2014
- Floury, M.; Usseglio-Polatera, P.; Delattre, C.; Souchon, Y., 2017. Assessing long-term effects of multiple, potentially confounded drivers in ecosystems from species traits. *Global Change Biology*, 23 (6): 2297-2307. 10.1111/gcb.13575
- Floury, M.; Usseglio-Polatera, P.; Ferreol, M.; Delattre, C.; Souchon, Y., 2013. Global climate change in large European rivers: long-term effects on macroinvertebrate communities and potential local confounding factors. *Global Change Biology*, 19 (4): 1085-1099. 10.1111/gcb.12124
- Flynn, K.J., 1988. The concept of primary production in aquatic ecology. *Limnology and Oceanography*, 33 (5): 1215-1216
- Flynn, K.J.; Clark, D.R.; Mitra, A.; Fabian, H.; Hansen, P.J.; Glibert, P.M.; Wheeler, G.L.; Stoecker, D.K.; Blackford, J.C.; Brownlee, C., 2015. Ocean acidification with (de)eutrophication will alter future phytoplankton growth and succession. *Proceedings of the Royal Society B-Biological Sciences*, 282 (1804). 10.1098/rspb.2014.2604
- Folke, C., 2003. Freshwater for resilience: a shift in thinking. *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 358 (1440): 2027-2036
- Follain, S.; Schwartz, C.; Denoroy, P.; Villette, C.; Saby, N.P.A.; Arrouays, D.; Lemercier, B.; Walter, C., 2009. A method for assessing available phosphorus content in arable topsoils over large spatial scales. *Agronomy for Sustainable Development*, 29 (2): 371-379. 10.1051/agro:2008046
- Fölster, J.; Johnson, R.K.; Futter, M.N.; Wilander, A., 2014. The Swedish monitoring of surface waters: 50 years of adaptive monitoring. *Ambio*, 43 (1): 3-18. 10.1007/s13280-014-0558-z
- Fong, P.; Boyer, K.E.; Desmond, J.S.; Zedler, J.B., 1996. Salinity stress, nitrogen competition, and facilitation what controls seasonal succession of two opportunistic green macroalgae? *Journal of Experimental Marine Biology and Ecology*, 206 (1-2): 203-221. 10.1016/s0022-0981(96)02630-5
- Fong, P.; Boyer, K.E.; Zedler, J.B., 1998. Developing an indicator of nutrient enrichment in coastal estuaries and lagoons using tissue nitrogen content of the opportunistic alga, *Enteromorpha intestinalis* (L. Link). *Journal of Experimental Marine Biology and Ecology*, 231 (1): 63-79. 10.1016/s0022-0981(98)00085-9
- Fong, P.; Desmond, J.S., 1997. The effect of a horn snail on *Ulva expansa* (Chlorophyta): Consumer or facilitator of growth? *Journal of Phycology*, 33 (3): 353-359. 10.1111/j.0022-3646.1997.00353.x
- Fonge, A.B.; Chuyong, B.G.; Tening, A.S.; Fobid, A.C.; Numbisi, N.F., 2013. Seasonal occurrence, distribution and diversity of phytoplankton in the Douala Estuary, Cameroon. *African Journal of Aquatic Science*, 38 (2): 123-133. 10.2989/16085914.2013.769086
- Fonyo, C.M.; Boggess, W.G., 1989. Coordination of public and private ac as a case study of lake restoration. *JAWRA Journal of the American Water Resources Association*, 25 (2): 309-317. 10.1111/j.1752-1688.1989.tb03066.x
- Fonyo, C.M.; Boggess, W.G., 1989. Coordination of public and private action. A case study of lake restoration. *Water Resources Bulletin*, 25 (2): 309-317. 10.1111/j.1752-1688.1989.tb03066.x

- Fornarelli, R.; Galelli, S.; Castelletti, A.; Antenucci, J.P.; Marti, C.L., 2013. An empirical modeling approach to predict and understand phytoplankton dynamics in a reservoir affected by interbasin water transfers. *Water Resources Research*, 49 (6): 3626-3641. 10.1002/wrcr.20268
- Fortino, K.; Whalen, S.; Johnson, C., 2014. Relationships between lake transparency, thermocline depth, and sediment oxygen demand in Arctic lakes. *Inland Waters*, 4 (1): 79-90. 10.5268/iw-4.1.597
- Foster, G.R.; Moldenhauer, W.C.; Wischmeier, W.H., 1982. Transferability of U.S. technology for prediction and control of erosion in the tropics. *ASA*, 43: 135-149
- Fourqurean, J.W.; Duarte, C.M.; Kennedy, H.; Marba, N.; Holmer, M.; Mateo, M.A.; Apostolaki, E.T.; Kendrick, G.A.; Krause-Jensen, D.; McGlathery, K.J.; Serrano, O., 2012. Seagrass ecosystems as a globally significant carbon stock. *Nature Geoscience*, 5 (7): 505-509. 10.1038/ngeo1477
- Fovet, O.; Hrachowitz, M.; Ruiz, L.; Faucheu, M.; Aquilina, L.; Molenat, J.; Durand, P.; Gascuel-Odoux, C., 2013. Monitoring and Modelling of the Long-term Effect of Changing Agriculture on Nitrate Concentrations in Groundwater and Streams in Small Experimental subsurface dominant watersheds. *EGU General Assembly Conference Abstracts*. 8989
- Fovet, O.; Ruiz, L.; Hrachowitz, M.; Faucheu, M.; Gascuel-Odoux, C., 2015. Hydrological hysteresis and its value for assessing process consistency in catchment conceptual models. *Hydrology and Earth System Sciences*, 19 (1): 105-123. 10.5194/hess-19-105-2015
- Fox, L.E.; Sager, S.L.; Wofsy, S.C., 1986. The chemical control of soluble phosphorus in the amazon estuary. *Geochimica Et Cosmochimica Acta*, 50 (5): 783-794. 10.1016/0016-7037(86)90354-6
- Fox, S.E.; Stieve, E.; Valiela, I.; Hauxwell, J.; McClelland, J., 2008. Macrophyte Abundance in Waquoit Bay: Effects of Land-Derived Nitrogen Loads on Seasonal and Multi-Year Biomass Patterns. *Estuaries and Coasts*, 31 (3): 532-541. 10.1007/s12237-008-9039-6
- Fragoso, C.R.; Motta Marques, D.M.L.; Collischonn, W.; Tucci, C.E.M.; van Nes, E.H., 2008. Modelling spatial heterogeneity of phytoplankton in Lake Mangueira, a large shallow subtropical lake in South Brazil. *Ecological Modelling*, 219 (1-2): 125-137. 10.1016/j.ecolmodel.2008.08.004
- Fraisse, S.; Bormans, M.; Lagadeuc, Y., 2013. Morphofunctional traits reflect differences in phytoplankton community between rivers of contrasting flow regime. *Aquatic Ecology*, 47 (3): 315-327
- Francis, G.R., 1988. Institutions and Ecosystem Redevelopment in Great Lakes America with Reference to Baltic Europe. *Ambio*, 17 (2): 106-111
- Francoeur, S.N., 2001. Meta-analysis of lotic nutrient amendment experiments: detecting and quantifying subtle responses. *Journal of the North American Benthological Society*, 20 (3): 358-368. 10.2307/1468034
- Frank, K.T.; Petrie, B.; Choi, J.S.; Leggett, W.C., 2005. Trophic cascades in a formerly cod-dominated ecosystem. *Science*, 308 (5728): 1621-1623. 10.1126/science.1113075
- Franz; Friedman, I., 2002. Effects of a macroalgal mat (*Ulva lactuca*) on estuarine sand flat copepods: an experimental study. *Journal of Experimental Marine Biology and Ecology*, 271 (2): 209-226. 10.1016/s0022-0981(02)00045-x
- Frederiksen, M.S.; Glud, R.N., 2006. Oxygen dynamics in the rhizosphere of *Zostera marina*: A two-dimensional planar optode study. *Limnology and Oceanography*, 51 (2): 1072-1083
- FREDERIKSEN, O.T., 1987. The fight against eutrophication in the inlet of odense fjord by reaping of sea lettuce (*ulva-lactuca*). *Water Science and Technology*, 19 (10): 81-87
- Freeman, A.M.; Lamon, E.C.; Stow, C.A., 2009. Nutrient criteria for lakes, ponds, and reservoirs: A Bayesian TREED model approach. *Ecological Modelling*, 220 (5): 630-639. 10.1016/j.ecolmodel.2008.12.009
- Freitag, A., 2014. Naming, Framing, and Blaming: Exploring Ways of Knowing in the Deceptively Simple Question "What is Water Quality?". *Human Ecology*, 42 (2): 325-337. 10.1007/s10745-014-9649-5
- Fries, J.S.; Noble, R.T.; Pael, H.W.; Characklis, G.W., 2007. Particle suspensions and their regions of effect in the Neuse River Estuary: Implications for water quality monitoring. *Estuaries and Coasts*, 30 (2): 359-364
- Frigstad, H.; Andersen, T.; Hessen, D.O.; Jeansson, E.; Skogen, M.; Naustvoll, L.J.; Miles, M.W.; Johannessen, T.; Bellerby, R.G.J., 2013. Long-term trends in carbon, nutrients and stoichiometry in Norwegian coastal waters: Evidence of a regime shift. *Progress in Oceanography*, 111: 113-124. 10.1016/j.pocean.2013.01.006
- Frisk, T., 1982. An oxygen model for Lake Haukivesi. *Hydrobiologia*, 86 (1-2): 133-139. 10.1007/BF00005800
- Frisk, T.; Bilaletdin, A.; Kaipainen, H.; Malve, O.; Mols, M., 1999. Modelling phytoplankton dynamics of the eutrophic Lake Vortsjarv, Estonia. *Hydrobiologia*, 414: 59-69. 10.1023/A:1003802912687
- Froelich, P.N., 1988. Kinetic control of dissolved phosphate in natural rivers and estuaries - a primer on the phosphate buffer mechanism. *Limnology and Oceanography*, 33 (4): 649-668
- Froelich, P.N.; Klinkhammer, G.P.; Bender, M.L.; Luedtke, N.A.; Heath, G.R.; Cullen, D.; Dauphin, P.; Hammond, D.; Hartman, B.; Maynard, V., 1979. Early oxidation of organic-matter in pelagic sediments of the eastern equatorial atlantic - suboxic diagenesis. *Geochimica Et Cosmochimica Acta*, 43 (7): 1075-1090. 10.1016/0016-7037(79)90095-4
- Frontier, S.; Pichod-Viale, D.; Leprêtre, A.; Davout, D.; Luczak, C., 2008. *Ecosystèmes. Structure, fonctionnement, évolution.* Dunod, 4ème édition, Paris.
- Frossard, E.; Brossard, M.; Hedley, M.J.; Metherell, A., 1995. Reactions controlling the cycling of P in soils. In: Tiessen, H., ed. *Phosphorus in the global environment : transfers, cycles and management*. Chichester: J. Wiley (Scope), 107-137
- Frost, J.W.; Schleicher, T.; Craft, C., 2009. Effects of nitrogen and phosphorus additions on primary production and invertebrate densities in a Georgia (USA) tidal freshwater marsh. *Wetlands*, 29 (1): 196-203

- Fry, B.; Justic, D.; Riekenberg, P.; Swenson, E.M.; Turner, R.E.; Wang, L.X.; Pride, L.; Rabalais, N.N.; Kurtz, J.C.; Lehrter, J.C.; Murrell, M.C.; Shadwick, E.H.; Boyd, B., 2015. Carbon Dynamics on the Louisiana Continental Shelf and Cross-Shelf Feeding of Hypoxia. *Estuaries and Coasts*, 38 (3): 703-721. 10.1007/s12237-014-9863-9
- Fu, F.X.; Tatters, A.O.; Hutchins, D.A., 2012. Global change and the future of harmful algal blooms in the ocean. *Marine Ecology Progress Series*, 470: 207-233. 10.3354/meps10047
- Fujita, R.M., 1985. The role of nitrogen status in regulating transient ammonium uptake and nitrogen storage by macroalgae. *Journal of Experimental Marine Biology and Ecology*, 92 (2-3): 283-301. 10.1016/0022-0981(85)90100-5
- Fulford, R.S.; Breitburg, D.L.; Luckenbach, M.; Newell, R.I.E., 2010. Evaluating ecosystem response to oyster restoration and nutrient load reduction with a multispecies bioenergetics model. *Ecological Applications*, 20 (4): 915-934. 10.1890/08-1796.1
- Fulford, R.S.; Breitburg, D.L.; Newell, R.I.E.; Kemp, W.M.; Luckenbach, M., 2007. Effects of oyster population restoration strategies on phytoplankton biomass in Chesapeake Bay: a flexible modeling approach. *Marine Ecology Progress Series*, 336: 43-61. 10.3354/meps336043
- Fulweiler, R.W.; Rabalais, N.N.; Heiskanen, A.S., 2012. The eutrophication commandments. *Marine Pollution Bulletin*, 64 (10): 1997-1999. 10.1016/j.marpolbul.2012.07.025
- Funtowicz, S.; Shepherd, I.; Wilkinson, D.; Ravetz, J., 2000. Science and governance in the European Union: a contribution to the debate. *Science and Public Policy*, 27 (5): 327-336. 10.3152/147154300781781841
- Funtowicz, S.O.; Ravetz, J.R., 1993. The Emergence of Post-Normal Science. In: Von Schomberg, R., ed. *Science, Politics and Morality: Scientific Uncertainty and Decision Making*. Dordrecht: Springer Netherlands, 85-123. 10.1007/978-94-015-8143-1\_6
- Funtowicz, S.O.; Ravetz, J.R., 1993. Science for the post-normal age. *Futures*, 25 (7): 739-755. 10.1016/0016-3287(93)90022-L
- Futura Science, 2017. Eutrophisation.<http://www.futura-sciences.com/magazines/environnement/infos/dico/d/developpement-durable-eutrophisation-4617/> [consulté: 16/01/2017]
- Gabrielsen, P.; Bosch, P., 2003. *Internal working paper Environmental Indicators: Typology and Use in Reporting*, 20.
- Gac, A.; Beline, F.; Bioteau, T.; Maguet, K., 2007. A French inventory of gaseous emissions (CH<sub>4</sub>, N<sub>2</sub>O, NH<sub>3</sub>) from livestock manure management using a mass-flow approach. *Livestock Science*, 112 (3): 252-260. 10.1016/j.livsci.2007.09.006
- Gacia, E.; Littler, M.M.; Littler, D.S., 1999. An experimental test of the capacity of food web interactions (fish-epiphytes-seagrasses) to offset the negative consequences of eutrophication on seagrass communities. *Estuarine Coastal and Shelf Science*, 48 (6): 757-766. 10.1006/ecss.1999.0477
- Gaedke, U.; Ruhenstroth-Bauer, M.; Wiegand, I.; Tirok, K.; Aberle, N.; Breithaupt, P.; Lengfellner, K.; Wohlers, J.; Sommer, U., 2010. Biotic interactions may overrule direct climate effects on spring phytoplankton dynamics. *Global Change Biology*, 16 (3): 1122-1136. 10.1111/j.1365-2486.2009.02009.x
- Gafsi, M.; Kettab, A.; Djehiche, A.; Goteicha, K., 2016. Study of the efficiency of hypolimnetic aeration process on the preservation of the thermal stratification. *Desalination and Water Treatment*, 57 (13): 6017-6023. 10.1080/19443994.2014.998293
- Gagnon, J.M.; Beaudin, L.; Silverberg, N.; Mauviel, A., 2013. Mesocosm and in situ observations of the burrowing shrimp Calocaris templemani (Decapoda: Thalassinidea) and its bioturbation activities in soft sediments of the Laurentian Trough. *Marine Biology*, 160 (10): 2687-2697. 10.1007/s00227-013-2262-0
- Gal, G.; Hipsey, M.R.; Parparov, A.; Wagner, U.; Makler, V.; Zohary, T., 2009. Implementation of ecological modeling as an effective management and investigation tool: Lake Kinneret as a case study. *Ecological Modelling*, 220: 1697-1718
- Gala, W.R.; Hill, R.W.; Hostetter, L.A., 2008. Use of Habitat Equivalency Analysis (HEA) to determine the environmentally superior project alternative. 1393-1401. 10.2118/111760-MS
- Galaz, V., 2005. Social-ecological resilience and social conflict: institutions and strategic adaptation in Swedish water management. *Ambio*, 34 (7): 567-72
- Galaz, V.; Österblom, H.; Bodin, Ö.; Crona, B., 2016. Global networks and global change-induced tipping points. *International Environmental Agreements: Politics, Law and Economics*, 16 (2): 189-221. 10.1007/s10784-014-9253-6
- Gallardo, B., 2014. Europe's top 10 invasive species: relative importance of climatic, habitat and socio-economic factors. *Ethology Ecology & Evolution*, 26 (2-3): 130-151. 10.1080/03949370.2014.896417
- Gallardo, B.; Clavero, M.; Sanchez, M.I.; Vila, M., 2016. Global ecological impacts of invasive species in aquatic ecosystems. *Global Change Biology*, 22 (1): 151-163. 10.1111/gcb.13004
- Gallego, A.; Rodriguez, L.; Hospido, A.; Moreira, M.T.; Feijoo, G., 2010. Development of regional characterization factors for aquatic eutrophication. *International Journal of Life Cycle Assessment*, 15 (1): 32-43. 10.1007/s11367-009-0122-4
- Gallegos, C.L., 2014. Long-term variations in primary production in a eutrophic sub-estuary. II. Interannual variations and modeling. *Marine Ecology Progress Series*, 502: 69-83. 10.3354/meps10713
- Gallegos, C.L.; Jordan, T.E., 1997. Seasonal progression of factors limiting phytoplankton pigment biomass in the Rhode River estuary, Maryland (USA). II. Modeling N versus P limitation. *Marine Ecology Progress Series*, 161: 199-212. 10.3354/meps161199
- Gallejones, P.; Pardo, G.; Aizpurua, A.; del Prado, A., 2015. Life cycle assessment of first-generation biofuels using a nitrogen crop model. *Science of the Total Environment*, 505: 1191-1201. 10.1016/j.scitotenv.2014.10.061
- Gallopin, G.C.; Funtowicz, S.; O'Connor, M.; Ravetz, J., 2001. La science pour le xxie siècle : du contrat social aux fondements scientifiques. *Revue internationale des sciences sociales*, 168 (2): 239-250. 10.3917/riss.168.0239

- Galloway, J.N.; Dentener, F.J.; Capone, D.G.; Boyer, E.W.; Howarth, R.W.; Seitzinger, S.P.; Asner, G.P.; Cleveland, C.C.; Green, P.A.; Holland, E.A.; Karl, D.M.; Michaels, A.F.; Porter, J.H.; Townsend, A.R.; Vorusmarty, C.J., 2004. Nitrogen cycles: past, present, and future. *Biogeochemistry*, 70 (2): 153-226. 10.1007/s10533-004-0370-0
- Galloway, J.N.; Townsend, A.R.; Erisman, J.W.; Bekunda, M.; Cai, Z.; Freney, J.R.; Martinelli, L.A.; Seitzinger, S.P.; Sutton, M.A., 2008. Transformation of the nitrogen cycle: Recent trends, questions, and potential solutions. *Science*, 320 (5878): 889-892. 10.1126/science.1136674
- Gamenick, I.; Jahn, A.; Vopel, K.; Giere, O., 1996. Hypoxia and sulphide as structuring factors in a macrozoobenthic community on the Baltic Sea shore: colonisation studies and tolerance experiments. *Marine Ecology Progress Series*, 144: 73-85. 10.3354/meps144073
- Ganesan, M.; Veeragurunathan, V.; Eswaran, K.; Reddy, C.R.K.; Jha, B., 2010. Influence of ultraviolet radiation on spore liberation in marine macroalgae *Ulva fasciata* (Ulvales, Chlorophyceae) and *Gracilaria corticata* (Gracilariales, Rhodophyceae). *PHYCOLOGICAL RESEARCH*, 58 (4): 293–297. 10.1111/j.1440-1835.2010.00588.x
- Gangadharan, S.N.; Schultz, M.; Collino, B.; Clark, A.; Wimberly, C.R., 2001. Experimental investigation of Enteromorpha clathrata biofouling on lifting surfaces of marine vehicles. *MARINE TECHNOLOGY AND SNAME NEWS*, 38 (1): 31–50
- Gao, C.; Zhang, T., 2010. Eutrophication in a Chinese context: understanding various physical and socio-economic aspects. *Ambio*, 39 (5-6): 385-93
- Gao, G.; Clare, A.S.; Rose, C.; Caldwell, G.S., 2017. Eutrophication and warming-driven green tides (*Ulva rigida*) are predicted to increase under future climate change scenarios. *Marine Pollution Bulletin*, 114 (1): 439–447. 10.1016/j.marpolbul.2016.10.003
- Gao, G.; Zhong, Z.; Zhou, X.; Xu, J., 2016. Changes in morphological plasticity of *Ulva prolifera* under different environmental conditions: A laboratory experiment. *Harmful Algae*, 59: 51–58. 10.1016/j.hal.2016.09.004
- Gao, M.F.; Qiu, J.J.; Li, C.S.; Wang, L.G.; Li, H.; Gao, C.Y., 2014. Modeling nitrogen loading from a watershed consisting of cropland and livestock farms in China using Manure-DNDC. *Agriculture Ecosystems & Environment*, 185: 88-98. 10.1016/j.agee.2013.10.023
- Gao, S.; Chen, X.; Yi, Q.; Wang, G.; Pan, G.; Lin, A.; Peng, G., 2010. A Strategy for the Proliferation of *Ulva prolifera*, Main Causative Species of Green Tides, with Formation of Sporangia by Fragmentation. *Plos One*, 5 (1): e8571-. 10.1371/journal.pone.0008571
- Gao, Z.; Xu, D.; Meng, C.; Zhang, X.; Wang, Y.; Li, D.; Zou, J.; Zhuang, Z.; Ye, N., 2014. The green tide-forming macroalga *Ulva linza* outcompetes the red macroalga *Gracilaria lemaneiformis* via allelopathy and fast nutrients uptake. *Aquatic Ecology*, 48 (1): 53–62. 10.1007/s10452-013-9465-9
- Garcia, A.; Revilla, J.A.; Medina, R.; Alvarez, C.; Juanes, J.A., 2002. A model for predicting the temporal evolution of dissolved oxygen concentration in shallow estuaries. *Hydrobiologia*, 475 (1): 205-211. 10.1023/a:1020365225564
- Garciagil, L.J.; Golterman, H.L., 1993. Kinetics of fes-mediated denitrification in sediments from the camargue (rhone delta, southern france). *Fems Microbiology Ecology*, 13 (2): 85-91
- Gardner, J.B.; Drinkwater, L.E., 2009. The fate of nitrogen in grain cropping systems: a meta-analysis of <sup>15</sup>N field experiments. *Ecological Applications*, 19 (8): 2167-2184
- Gari, S.R.; Newton, A.; Icely, J.; Lowe, C.D., 2014. Testing the application of the Systems Approach Framework (SAF) for the management of eutrophication in the Ria Formosa. *Marine Policy*, 43: 40-45. 10.1016/j.marpol.2013.03.017
- Garmendia, M.; Borja, Á.; Breton, F.; Butenschön, M.; Marín, A.; Miller, P.I.; Morisseau, F.; Xu, W., 2015. Challenges and difficulties in assessing the environmental status under the requirements of the Ecosystem Approach in North African countries, illustrated by eutrophication assessment. *Environmental Monitoring and Assessment*, 187 (5). 10.1007/s10661-015-4316-x
- Garnier, J.; Billen, G.; Hannon, E.; Fonbonne, S.; Videnina, Y.; Soulie, M., 2002. Modelling the Transfer and Retention of Nutrients in the Drainage Network of the Danube River. *Estuarine, Coastal and Shelf Science*, 54 (3): 285-308. 10.1006/ecss.2000.0648
- Garnier, J.; Brion, N.; Callens, J.; Passy, P.; Deligne, C.; Billen, G.; Servais, P.; Billen, C., 2013. Modeling historical changes in nutrient delivery and water quality of the Zenne River (1790s-2010): The role of land use, waterscape and urban wastewater management. *Journal of Marine Systems*, 128: 62-76. 10.1016/j.jmarsys.2012.04.001
- Garnier, J.; Lassaletta, L.; Billen, G.; Romero, E.; Grizzetti, B.; Némery, J.; Le, T.P.Q.; Pistocchi, C.; Aissa-Grouz, N.; Luu, T.N.M.; Vilmin, L.; Dorioz, J.-M., 2015. Phosphorus budget in the water-agro-food system at nested scales in two contrasted regions of the world (ASEAN-8 and EU-27): Phosphorus in the water-agro-food-system. *Global Biogeochemical Cycles*, 29 (9): 1348-1368. 10.1002/2015gb005147
- Garnier, J.; Lassaletta, L.; Billen, G.; Romero, E.; Grizzetti, B.; Nemery, J.; Le, T.P.Q.; Pistocchi, C.; Aissa-Grouz, N.; Luu, T.N.M.; Vilmin, L.; Dorioz, J.M., 2015. Phosphorus budget in the water-agro-food system at nested scales in two contrasted regions of the world (ASEAN-8 and EU-27). *Global Biogeochemical Cycles*, 29 (9): 1348-1368. 10.1002/2015gb005147
- Garnier, P.; Neel, C.; Aita, C.; Recous, S.; Lafolie, F.; Mary, B., 2003. Modelling carbon and nitrogen dynamics in a bare soil with and without straw incorporation. *European Journal of Soil Science*, 54 (3): 555-568
- Garnier, P.; Rode, S., 2007. Entre aménagement et environnement, la naissance avortée d'un projet aléatoire : le barrage de Chambonchard. *Annales de géographie*, 656 (4): 382-397. 10.3917/ag.656.0382
- Garside, C., 1985. The vertical-distribution of nitrate in open ocean surface-water. *Deep-Sea Research Part a-Oceanographic Research Papers*, 32 (6): 723-732. 10.1016/0198-0149(85)90075-5
- Gascuel, C.; Ruiz, L.; Vertès, F., 2015. *Comment réconcilier agriculture et littoral ? Vers une agroécologie des territoires.* Versailles: Editions Quae

- Gassman, P.W.; Panagopoulos, Y.; Srinivasan, R.; White, M.; Jha, M.; Arnold, J.G.; Campbell, T.; Richardson, J.; Rabotyagov, S.; Valcu, A.M.; Kling, C.L.; Turner, R.E.; Moskal, M.L.; Rabalais, N., 2013. The development of swat modelling systems for large corn belt river basins part 1: Description of modelling system components. In: Lekkas, T.D., ed. *Proceedings of the 13th International Conference on Environmental Science and Technology*. (Proceedings of the International Conference on Environmental Science and Technology)
- Gassman, P.W.; Sadeghi, A.M.; Srinivasan, R., 2014. Applications of the SWAT Model Special Section: Overview and Insights. *Journal of Environmental Quality*, 43 (1): 1-8. 10.2134/jeq2013.11.0466
- Gassman, P.W.; Williams, J.R.; Wang, X.; Saleh, A.; Osei, E.; Hauck, L.M.; Izaurrealde, R.C.; Flowers, J.D., 2010. The agricultural policy/environmental extender (apex) model: an emerging tool for landscape and watershed environmental analyses. *Transactions of the Asabe*, 53 (3): 711-740
- Gasteyer, S.P., 2008. Agricultural transitions in the context of growing environmental pressure over water. *Agriculture and Human Values*, 25 (4): 469-486. 10.1007/s10460-008-9137-x
- Gault, J.; Guillet, M.; Guerbier, F.; Hubert, C.; Paulin, F.; Soulié, M.-C., 2015. *Analyse de la mise en oeuvre de la directive nitrates par d'autres Etats membres de l'Union européenne*: Ministères en charge de l'environnement et de l'agriculture.
- Gause, G., 1936. The struggle for existence. *Soil Science*, 41 (2): 159
- Gauthier, O.; Grisez, C., 2011. Préservation de l'alimentation en eau potable : un objectif et un levier pour la protection de la qualité des eaux. *Annales des Mines - Responsabilité et environnement*, 63 (3): 74-79. 10.3917/re.063.0074
- Gearhart, T.A.; Ritchie, K.; Nathan, E.; Stockwell, J.D.; Kraft, J., 2017. Alteration of essential fatty acids in secondary consumers across a gradient of cyanobacteria. *Hydrobiologia*, 784 (1): 155-170
- Gedan, K.B.; Kellogg, L.; Breitburg, D.L., 2014. Accounting for Multiple Foundation Species in Oyster Reef Restoration Benefits. *Restoration Ecology*, 22 (4): 517-524. 10.1111/rec.12107
- Gedan, K.B.; Silliman, B.R.; Bertness, M.D., 2009. Centuries of Human-Driven Change in Salt Marsh Ecosystems. *Annual Review of Marine Science*, 1: 117-141. 10.1146/annurev.marine.010908.163930
- Gee, A.K.; Wasson, K.; Shaw, S.L.; Haskins, J., 2010. Signatures of Restoration and Management Changes in the Water Quality of a Central California Estuary. *Estuaries and Coasts*, 33 (4): 1004-1024. 10.1007/s12237-010-9276-3
- Geertz Hansen, O.; Sandjensen, K., 1992. Growth-rates and photon yield of growth in natural-populations of a marine macroalga ulva-lactuca. *Marine Ecology Progress Series*, 81 (2): 179-183. 10.3354/meps081179
- GEERTZHANSEN, O.; SANDJENSEN, K.; HANSEN, D.F.; CHRISTIANSEN, A., 1993. Growth and grazing control of abundance of the marine macroalga, ulva-lactuca I in a eutrophic danish estuary. *Aquatic Botany*, 46 (2): 101–109. 10.1016/0304-3770(93)90039-y
- Geertz-Hansen, O.; SANDJENSEN, K.; HANSEN, D.F.; CHRISTIANSEN, A., 1993. Growth and grazing control of abundance of the marine macroalga, Ulva lactuca L. in a eutrophic Danish estuary. *Aquatic Botany*, 46 (2): 101–109. 10.1016/0304-3770(93)90039-y
- Gehanno, J.-F.; Rollin, L.; Darmoni, S., 2013. Is the coverage of Google Scholar enough to be used alone for systematic reviews. *BMC medical informatics and decision making*, 13 (1): 7
- Geider, R.J.; La Roche, J., 2002. Redfield revisited : variability of C:N:P in marine microalgae and its biochemical basis. *European Journal of Phycology*, 37: 1-17
- Geider, R.J.; MacIntyre, H.L.; Kana, T.M., 1997. Dynamic model of phytoplankton growth and acclimation: responses of the balanced growth rate and chlorophyll *a*: carbon ratio to light, nutrient-limitation and temperature. *Marine Ecology Progress Series*, 148: 187-200
- Generale, D.; Politiques, D.E.S., 2011. La surpeche favorise-t-elle les proliférations d'algues? :
- Geng, J.J.; Niu, X.J.; Wang, X.R.; Edwards, M.; Glindemann, D., 2010. The presence of trace phosphine in Lake Taihu water. *International Journal of Environmental Analytical Chemistry*, 90 (9): 737-746. 10.1080/03067310903013230
- Genkai-Kato, M.; Vadeboncoeur, Y.; Liboriussen, L.; Jeppesen, E., 2012. Benthic-planktonic coupling, regime shifts, and whole-lake primary production in shallow lakes. *Ecology*, 93 (3): 619-631
- Georgi, M.D., 2002. Overfishing drives a trophic cascade in the Black Sea. *Marine Ecology Progress Series*, 225: 53-63. 10.3354/meps225053
- Ger, K.A.; Hansson, L.A.; Lurling, M., 2014. Understanding cyanobacteria-zooplankton interactions in a more eutrophic world. *Freshwater Biology*, 59 (9): 1783-1798. 10.1111/fwb.12393
- Ger, K.A.; Urrutia-Cordero, P.; FROST, P.C.; Hansson, L.-A.; Sarnelle, O.; Wilson, A.E.; Lürling, M., 2016. The interaction between cyanobacteria and zooplankton in a more eutrophic world. *Harmful Algae*: 1-17. 10.1016/j.hal.2015.12.005
- Gerared-Marchant, P.; Walter, M.T.; Steenhuis, T.S., 2005. Simple models for phosphorus loss from manure during rainfall. *Journal of Environmental Quality*, 34 (3): 872-876. 10.2134/jeq2003.0097
- Gerdeaux, D., 2009. Phosphorus and eutrophication of fresh waters. Mechanisms and consequences in large lakes. In: Dorioz, J.M.; Aurousseau, P.; Bourrie, G., eds. *Oceanis, Vol 33, No 1 and 2*. Paris: Inst Oceanographique (Oceanis : Serie De Documents Oceanographiques), Vol.33, 75-86
- Gerecke, M., 2016. *Filter Feeding Potential of Corbicula fluminea in Lake Constance*. Thesis Environmental Sciences ETH Zürich,51
- Germon, J.-C., 2013. Gestion de la fertilisation azotée en agriculture : enjeux environnementaux et perspectives agronomiques au niveau du territoire français. *Cahiers Agriculture*, 22 (4): 241-248
- Gevaert, F.; Barr, N.G.; Rees, T.A.V., 2007. Diurnal cycle and kinetics of ammonium assimilation in the green alga *Ulva pertusa*. *Marine Biology*, 151 (4): 1517–1524. 10.1007/s00227-006-0588-6

- Ghiotti, S., 2006. Les Territoires de l'eau et la décentralisation. La gouvernance de bassin versant ou les limites d'une évidence. *Développement durable et territoires*, Dossier 6. 10.4000/developpementdurable.1742
- Giacomini, S.J.; Machet, J.M.; Boizard, H.; Recous, S., 2010. Dynamics and recovery of fertilizer 15N in soil and winter wheat crop under minimum versus conventional tillage. *Soil and Tillage Research*, 108 (1-2): 51-58. 10.1016/j.still.2010.03.005
- Giani, A.; Bird, D.; Prairie, Y.; Lawrence, J., 2005. Empirical study of cyanobacterial toxicity along a trophic gradient of lakes. *Canadian Journal of Fisheries and Aquatic Sciences*, 62 (9): 2100-2109
- Giani, M.; Djakovac, T.; Degobbis, D.; Cozzi, S.; Solidoro, C.; Umani, S.F., 2012. Recent changes in the marine ecosystems of the northern Adriatic Sea. *Estuarine, Coastal and Shelf Science*, 115 (Supplement C): 1-13. 10.1016/j.ecss.2012.08.023
- Gianni, A.; Zacharias, I., 2012. Modeling the hydrodynamic interactions of deep anoxic lagoons with their source basins. *Estuarine Coastal and Shelf Science*, 110: 157-167. 10.1016/j.ecss.2012.04.030
- Gibbons, M.J.; Richardson, A.J., 2009. Patterns of jellyfish abundance in the North Atlantic. *Hydrobiologia*, 616: 51-65. 10.1007/s10750-008-9593-8
- Gibbons, S.; Mourato, S.; Resende, G.M., 2014. The Amenity Value of English Nature: A Hedonic Price Approach. *Environmental and Resource Economics*, 57 (2): 175-196. 10.1007/s10640-013-9664-9
- Gibbs, J.P., 2002. An Hedonic Analysis of the Effects of Lake Water Clarity on New Hampshire Lakefront Properties. *Agricultural and Resource Economics Review*, 31 (1): 39-46. 10.1017/S1068280500003464
- Giblin, A.E.; Vallino, J.J., 2003. *The role of models in addressing coastal eutrophication. (Models in Ecosystem Science)*
- Gibson, C.A.; Meyer, J.L., 2007. Nutrient uptake in a large urban river. *Journal of the American Water Resources Association*, 43 (3): 576-587. 10.1111/j.1752-1688.2007.00041.x
- Gifford, S.; Dunstan, R.H.; O'Connor, W.; Koller, C.E.; MacFarlane, G.R., 2007. Aquatic zooremediation: deploying animals to remediate contaminated aquatic environments. *Trends in Biotechnology*, 25 (2): 60-65. 10.1016/j.tibtech.2006.12.002
- Giglioli, I.; Swyngedouw, E., 2008. Let's Drink to the Great Thirst! Water and the Politics of Fractured Techno-natures in Sicily. *International Journal of Urban and Regional Research*, 32 (2): 392-414. 10.1111/j.1468-2427.2008.00789.x
- Giguet-Covex, C.; Arnaud, F.; Poulenard, J.; Enters, D.; Reyss, J.-L.; Millet, L.; Lazzaroto, J.; Vidal, O., 2010. Sedimentological and geochemical records of past trophic state and hypolimnetic anoxia in large, hard-water Lake Bourget, French Alps. *Journal of Paleolimnology*, 43: 171-190
- Gikas, G.D.; Yiannakopoulou, T.; Tsihrintzis, V.A., 2009. Hydrodynamic and nutrient modeling in a Mediterranean coastal lagoon. *Journal of Environmental Science and Health Part a-Toxic/Hazardous Substances & Environmental Engineering*, 44 (13): 1400-1423. 10.1080/10934520903217336
- Gil, M.N.; Torres, A.I.; Esteves, J.L., 2005. Uptake of sewage derived nitrogen by *Ulva rigida* (Chlorophyceae) in Bahia Nueva (Golfo Nuevo, Patagonia, Argentine). *Hydrobiologia*, 532: 39-43
- Gilbert, D.; Rabalais, N.N.; Diaz, R.J.; Zhang, J., 2010. Evidence for greater oxygen decline rates in the coastal ocean than in the open ocean. *Biogeosciences*, 7 (7): 2283-2296. 10.5194/bg-7-2283-2010
- Gilbert, D.; Rabalais, N.N.; Diaz, R.J.; Zhang, J., 2010. Evidence for greater oxygen decline rates in the coastal ocean than in the open ocean. *Biogeosciences*, 7 (7): 2283-2296. 10.5194/bg-7-2283-2010
- Gilbert, D.; Sundby, B.; Gobeil, C.; Mucci, A.; Tremblay, G.H., 2005. A seventy-two-year record of diminishing deep-water oxygen in the St. Lawrence estuary: The northwest Atlantic connection. *Limnology and Oceanography*, 50 (5): 1654-1666
- Gilbertson, M.; Watterson, A., 2007. Diversionary Reframing of the Great Lakes Water Quality Agreement. *Journal of Public Health Policy*, 28 (2): 14. 10.1057/palgrave.jphp.3200134
- Giles, C.D.; Cade-Menun, B.J.; Hill, J.E., 2011. The inositol phosphates in soils and manures: Abundance, cycling, and measurement. *Canadian Journal of Soil Science*, 91 (3): 397-416. 10.4141/cjss09090
- Gillies, L.E.; Thrash, J.C.; Derada, S.; Rabalais, N.N.; Mason, O.U., 2015. Archaeal enrichment in the hypoxic zone in the northern Gulf of Mexico. *Environmental Microbiology*, 17 (10): 3847-3856. 10.1111/1462-2920.12853
- Gilly, W.F.; Beman, J.M.; Litvin, S.Y.; Robison, B.H., 2013. Oceanographic and Biological Effects of Shoaling of the Oxygen Minimum Zone. In: Carlson, C.A.; Giovannoni, S.J., eds. *Annual Review of Marine Science*, Vol 5. (Annual Review of Marine Science), Vol.5, 393-420. 10.1146/annurev-marine-120710-100849
- Giri, B.S.; Karimi, I.A.; Ray, M.B., 2001. Modeling and Monte Carlo simulation of TCDD transport in a river. *Water Research*, 35 (5): 1263-1279. 10.1016/S0043-1354(00)00379-1
- Giusti, E.; Marsili-Libelli, S., 2005. Modelling the interactions between nutrients and the submersed vegetation in the Orbetello Lagoon. *Ecological Modelling*, 184 (1): 141-161. 10.1016/j.ecolmodel.2004.11.014
- Gkelis, S.; Papadimitriou, T.; Zaoutsos, N.; Leonards, I., 2014. Anthropogenic and climate-induced change favors toxic cyanobacteria blooms: Evidence from monitoring a highly eutrophic, urban Mediterranean lake. *Harmful Algae*, 39: 322-333. 10.1016/j.hal.2014.09.002
- Glibert, P.M., 2010. Long-Term Changes in Nutrient Loading and Stoichiometry and Their Relationships with Changes in the Food Web and Dominant Pelagic Fish Species in the San Francisco Estuary, California. *Reviews in Fisheries Science*, 18 (2): 211-232. 10.1080/10641262.2010.492059
- Glibert, P.M., 2017. Eutrophication, harmful algae and biodiversity — Challenging paradigms in a world of complex nutrient changes. *Marine Pollution Bulletin*, 124 (2): 591-606. <https://doi.org/10.1016/j.marpolbul.2017.04.027>
- Glibert, P.M.; Allen, J.I.; Bouwman, A.F.; Brown, C.W.; Flynn, K.J.; Lewitus, A.J.; Madden, C.J., 2010. Modeling of HABs and eutrophication Status, advances, challenges. *Journal of Marine Systems*, 83 (3-4): 262-275. 10.1016/j.jmarsys.2010.05.004

- Glibert, P.M.; Burkholder, J.M., 2011. Harmful algal blooms and eutrophication: "strategies" for nutrient uptake and growth outside the Redfield comfort zone. *Chinese Journal of Oceanology and Limnology*, 29 (4): 724-738. 10.1007/s00343-011-0502-z
- Glibert, P.M.; Fullerton, D.; Burkholder, J.M.; Cornwell, J.C.; Kana, T.M., 2011. Ecological Stoichiometry, Biogeochemical Cycling, Invasive Species, and Aquatic Food Webs: San Francisco Estuary and Comparative Systems. *Reviews in Fisheries Science*, 19 (4): 358-417. 10.1080/10641262.2011.611916
- Glibert, P.M.; Mayorga, E.; Seitzinger, S., 2008. Prorocentrum minimum tracks anthropogenic nitrogen and phosphorus inputs on a global basis: Application of spatially explicit nutrient export models. *Harmful Algae*, 8 (1): 33-38. 10.1016/j.hal.2008.08.023
- Global Water Forum, 2017. Glossary.<http://www.globalwaterforum.org/resources/glossary/> [consulté: 16/01/2017]
- Glud, R.N., 2008. Oxygen dynamics of marine sediments. *Marine Biology Research*, 4 (4): 243-289. 10.1080/17451000801888726
- Glyshaw, P.W.; Riseng, C.M.; Nalepa, T.F.; Pothoven, S.A., 2015. Temporal trends in condition and reproduction of quagga mussels (*Dreissena rostriformis bugensis*) in southern Lake Michigan. *Journal of Great Lakes Research*, 41, Supplement 3: 16-26. <http://dx.doi.org/10.1016/j.jglr.2015.08.006>
- Gobin, A.; Jones, R.; Kirkby, M.; Campling, P.; Govers, G.; Kosmas, C.; Gentile, A.R., 2004. Indicators for pan-European assessment and monitoring of soil erosion by water. *Environmental Science & Policy*, 7 (1): 25-38. 10.1016/j.envsci.2003.09.004
- Gobler, C.J.; DePasquale, E.L.; Griffith, A.W.; Baumann, H., 2014. Hypoxia and Acidification Have Additive and Synergistic Negative Effects on the Growth, Survival, and Metamorphosis of Early Life Stage Bivalves. *Plos One*, 9 (1). 10.1371/journal.pone.0083648
- Godard, C.; Roger-Estrade, J.; Jayet, P.A.; Brisson, N.; Le Bas, C., 2008. Use of available information at a European level to construct crop nitrogen response curves for the regions of the EU. *Agricultural Systems*, 97 (1-2): 68-82. 10.1016/j.agsy.2007.12.002
- Godelier, M., 1984. *L'idéal et le matériel: pensée, économies, sociétés*. Fayard
- Godinot, O.; Leterme, P.; Vertès, F.; Faverdin, P.; Carof, M., 2015. Relative nitrogen efficiency, a new indicator to assess crop livestock farming systems. *Agronomy for Sustainable Development*, 35 (2): 857-868. 10.1007/s13593-015-0281-6
- Goecker, M.E.; Kall, S.E., 2003. Grazing preferences of marine isopods and amphipods on three prominent algal species of the Baltic Sea. *Journal of Sea Research*, 50 (4): 309-314. 10.1016/j.seares.2003.04.003
- Goeldener-Gianella, L.; Barreteau, O.; Euzen, A.; Pinon-Leconte, M.; Gautier, Q.; Arnould, P., 2016. *Concilier la gestion de l'eau et des territoires*. Paris: Editions Johanet
- Goffman, E., 1974. *Frame Analysis: An Essay on the Organization of the Experience*. New York: Harper Colophon
- Goldburg, R.J.; Elliott, M.S.; Naylor, R.L.; Commission, P.O., 2003. Marine aquaculture in the United States: environmental impacts and policy options.
- Goldman, C.R., 1968. Aquatic primary production. *American Zoologist*, 8 (1): 31-&
- Golterman, H.; De Oude, N., 1991. Eutrophication of lakes, rivers and coastal seas. *Water Pollution*. Springer, 79-124
- Gomez, E.; Ledoux, E.; Viennot, P.; Mignolet, C.; Benoit, M.; Bornerand, C.; Schott, C.; Mary, B.; Billen, G.; Ducharme, A.; Brunstein, D., 2003. An integrated modelling tool for nitrates transport in a hydrological system: Application to the river Seine basin. *Houille Blanche-Revue Internationale De L'Eau*, (3): 38-45
- Gong, R.; Xu, L.; Wang, D.; Li, H.; Xu, J., 2016. Water Quality Modeling for a Typical Urban Lake Based on the EFDC Model. *Environmental Modeling & Assessment*, 21 (5): 643-655. 10.1007/s10666-016-9519-1
- Gonzalez Sagrario, M.A.; Jeppesen, E.; Goma, J.; Sondergaard, M.; Jensen, J.P.; Lauridsen, T.; Landkildehus, F., 2005. Does high nitrogen loading prevent clear-water conditions in shallow lakes at moderately high phosphorus concentrations? *Freshwater Biology*, 50 (1): 27-41. 10.1111/j.1365-2427.2004.01290.x
- Gonzalez-Dugo, V.; Durand, J.-L.; Gastal, F., 2010. Water deficit and nitrogen nutrition of crops. A review. *Agronomy for Sustainable Development*, 30 (3): 529-544. 10.1051/agro/2009059
- Gonzalez-Sanchis, M.; Murillo, J.; Cabezas, A.; Vermaat, J.E.; Comin, F.A.; Garcia-Navarro, P., 2015. Modelling sediment deposition and phosphorus retention in a river floodplain. *Hydrological Processes*, 29 (3): 384-394. 10.1002/hyp.10152
- Gooday, A.; Jorissen, F.; Levin, L.; Middelburg, J.; Naqvi, S.; Rabalais, N.; Scranton, M.; Zhang, J., 2009. Historical records of coastal eutrophication-induced hypoxia. *Biogeosciences*, 6 (8): 1707-1745
- Gooday, A.J.; Jorissen, F.; Levin, L.A.; Middelburg, J.J.; Naqvi, S.W.A.; Rabalais, N.N.; Scranton, M.; Zhang, J., 2009. Historical records of coastal eutrophication-induced hypoxia. *Biogeosciences*, 6 (8): 1707-1745. 10.5194/bg-6-1707-2009
- Goolsby DA, B.W., Lawrence GB, Artz RS, Aulenbach BT, Hooper RP., 1999. *Flux and Sources of Nutrients in the Mississippi-Atchafalaya Basin*: NOAA Coastal Ocean Office. Decision Analysis Series no. 17.
- , Report for the Integrated Assessment on Hypoxia in the Gulf of Mexico. Silver Spring (MD).
- GORDON, D.M.; MCCOMB, A.J., 1989. Growth and production of the green-alga *cladophora-montagneana* in a eutrophic Australian estuary and its interpretation using a computer-program. *Water Research*, 23 (5): 633-645. 10.1016/0043-1354(89)90030-4
- Gorman, H.S., 2013. Learning from 100 Years of Ammonia Synthesis. Establishing Human-Defined Limits through Adaptive Systems of Governance GAIA - Ecological Perspectives for Science and Society, 22 (4): 7. 10.14512/gaia.22.4.11

- Gorman, H.S., 2015. *The story of N: A social history of the nitrogen cycle and the challenge of sustainability*. Rutgers University Press
- Goss, M.J.; Barry, D.A.J., 1995. Groundwater quality: Responsible agriculture and public perceptions. *Journal of Agricultural and Environmental Ethics*, 8 (1): 52-64. 10.1007/BF02286401
- Gough, C.A.; Chadwick, M.J.; Biewald, B.; Kuylenstierna, J.C.I.; Bailey, P.D.; Cinderby, S., 1995. Developing optimal abatement strategies for the effects of sulphur and nitrogen deposition at European scale. *Water, Air, & Soil Pollution*, 85 (4): 2601-2606. 10.1007/BF01186226
- Gould, K.A., 1993. Pollution and perception: Social visibility and local environmental mobilization. *Qualitative Sociology*, 16 (2): 157-178. 10.1007/BF00989748
- Gould, K.A., 1994. Legitimacy and Growth in the Balance: The Role of the State in Environmental Remediation. *Industrial & Environmental Crisis Quarterly*, 8 (3): 237-256
- Gould, K.A.; Weinberg, A.S., 1991. Who mobilizes whom? The role of national and regional social movement organizations in local environmental political mobilization. *Meetings of ASA, August, Cincinnati, OH.*
- Gould, K.A.; Weinberg, A.S.; Schnaiberg, A., 1993. Legitimizing impotence: Pyrrhic victories of the modern environmental movement. *Qualitative Sociology*, 16 (3): 207-246. 10.1007/BF00990100
- Gouvernement du Québec, 2017. Glossaire.<http://www.mddelcc.gouv.qc.ca/eau/sys-image/glossaire1.htm> [consulté: 16/01/2017]
- Gowen, R.J.; Collos, Y.; Tett, P.; Scherer, C.; Bec, B.; Abadie, E.; Allen, M.; O'Brien, T., 2015. Response of diatom and dinoflagellate lifeforms to reduced phosphorus loading: A case study in the Thau lagoon, France. *Estuarine Coastal and Shelf Science*, 162: 45-52. 10.1016/j.ecss.2015.03.033
- Gowen, R.J.; Mills, D.K.; Trimmer, M.; Nedwell, D.B., 2000. Production and its fate in two coastal regions of the Irish Sea : the influence of anthropogenic nutrients. 208 (1992): 51-64
- Gowen, R.J.; Tett, P.; Jones, K.J., 1992. Predicting marine eutrophication - the yield of chlorophyll from nitrogen in Scottish coastal waters. *Marine Ecology Progress Series*, 85 (1-2): 153-161. 10.3354/meps085153
- Gowen, R.J.; Tett, P.; Smayda, T.J., 2012. Phytoplankton and the balance of nature: An opinion. *Estuarine, Coastal and Shelf Science*, 113: 317-323. 10.1016/j.ecss.2012.08.009
- Goxe, A.; Callon, M.; Lascoumes, P.; Barthe, Y., 2001. *Agir dans un monde incertain. Essai sur la démocratie technique*. Le Seuil
- Graba, M.; Sauvage, S.; Majdi, N.; Miallet, B.; Moulin, F.Y.; Urrea, G.; Buffan-Dubau, E.; Tackx, M.; Sabater, S.; Sanchez-Pérez, J.-M., 2014. Modelling epilithic biofilms combining hydrodynamics, invertebrate grazing and algal traits. *Freshwater Biology*, 59 (6): 1213-1228. 10.1111/fwb.12341
- Grall, J.; Chauvaud, L., 2002. Marine eutrophication and benthos: the need for new approaches and concepts. *Global Change Biology*, 8 (9): 813-830. 10.1046/j.1365-2486.2002.00519.x
- Grammatikopoulou, I.; Pouta, E.; Myyrä, S., 2015. Exploring the determinants for adopting water conservation measures. What is the tendency of landowners when the resource is already at risk? *Journal of Environmental Planning and Management*. 10.1080/09640568.2015.1050551
- Grammatikopoulou, I.; Pouta, E.; Myyrä, S., 2016. Exploring the determinants for adopting water conservation measures. What is the tendency of landowners when the resource is already at risk? *Journal of Environmental Planning and Management*, 59 (6): 993-1014. 10.1080/09640568.2015.1050551
- Graneli, E.; Weberg, M.; Salomon, P.S., 2008. Harmful algal blooms of allelopathic microalgal species: The role of eutrophication. *Harmful Algae*, 8 (1): 94-102. 10.1016/j.hal.2008.08.011
- Grangere, K.; Lefebvre, S.; Bacher, C.; Cugier, P.; Menesguen, A., 2010. Modelling the spatial heterogeneity of ecological processes in an intertidal estuarine bay: dynamic interactions between bivalves and phytoplankton. *Marine Ecology Progress Series*, 415: 141-158. 10.3354/meps08659
- Granlund, K.; Rankinen, K.; Etheridge, R.; Seuri, P.; Lehtoranta, J., 2015. Ecological recycling agriculture can reduce inorganic nitrogen losses - model results from three Finnish catchments. *Agricultural Systems*, 133: 167-176. 10.1016/j.aggsy.2014.10.015
- Grantham, B.A.; Chan, F.; Nielsen, K.J.; Fox, D.S.; Barth, J.A.; Huyer, A.; Lubchenco, J.; Menge, B.A., 2004. Upwelling-driven nearshore hypoxia signals ecosystem and oceanographic changes in the northeast Pacific. *Nature*, 429 (6993): 749-754. 10.1038/nature02605
- Gray, J.S.; Wu, R.S.S.; Or, Y.Y., 2002. Effects of hypoxia and organic enrichment on the coastal marine environment. *Marine Ecology Progress Series*, 238: 249-279. 10.3354/meps238249
- Gray, J.S.; Wu, R.S.-s.; Or, Y.Y., 2002. Effects of hypoxia and organic enrichment on the coastal marine environment. *Marine Ecology Progress Series*, 238: 249-279
- Gray, S.J., 1992. Eutrophication in the sea. In: Colombo, G.; Viviani , R., eds. *Marine. Eutrophication and Pollution Dynamics*. Fredensborg: Olsen & Olsen, 394p
- Green, J.C., 2005. Further comment on drag and reconfiguration of macrophytes. *Freshwater Biology*, 50 (12): 2162-2166. 10.1111/j.1365-2427.2005.01470.x
- Green, L.; Fong, P., 2016. The good, the bad and the Ulva: the density dependent role of macroalgal subsidies in influencing diversity and trophic structure of an estuarine community. *Oikos*, 125 (7): 988–1000. 10.1111/oik.02860
- Green, L.; Sutula, M.; Fong, P., 2014. How much is too much? Identifying benchmarks of adverse effects of macroalgae on the macrofauna in intertidal flats. *Ecological Applications*, 24 (2): 300-314. 10.1890/13-0524.1

- Greene, S.; McElarney, Y.R.; Taylor, D., 2015. Water quality effects following establishment of the invasive Dreissena polymorpha (Pallas) in a shallow eutrophic lake: implications for pollution mitigation measures. *Hydrobiologia*, 743 (1): 237-253. 10.1007/s10750-014-2041-z
- Greening, H.; Elfving, C., 2002. Local, state, regional, and federal roles in coastal nutrient management. *Estuaries*, 25 (4): 838-847. 10.1007/BF02804909
- Greening, H.; Janicki, A., 2006. Toward reversal of eutrophic conditions in a subtropical estuary: Water quality and seagrass response to nitrogen loading reductions in Tampa Bay, Florida, USA. *Environmental Management*, 38 (2): 163-178. 10.1007/s00267-005-0079-4
- Greer, M.L.; Ewing, H.A.; Cottingham, K.L.; Weathers, K.C., 2013. Collaborative Understanding of Cyanobacteria in Lake Ecosystems. *The College Mathematics Journal*, 44 (5): 376-385. 10.4169/college.math.j.44.5.376
- Gregoire, M.; Lacroix, G., 2001. Study of the oxygen budget of the Black Sea waters using a 3D coupled hydrodynamical-biogeochemical model. *Journal of Marine Systems*, 31 (1-3): 175-202. 10.1016/S0924-7963(01)00052-5
- Gregoire, M.; Raick, C.; Soetaert, K., 2008. Numerical modeling of the central Black Sea ecosystem functioning during the eutrophication phase. *Progress in Oceanography*, 76 (3): 286-333. 10.1016/j.pocean.2008.01.002
- Gregoire, M.; Soetaert, K., 2010. Carbon, nitrogen, oxygen and sulfide budgets in the Black Sea: A biogeochemical model of the whole water column coupling the oxic and anoxic parts. *Ecological Modelling*, 221 (19): 2287-2301. 10.1016/j.ecolmodel.2010.06.007
- Gren, I.-M., 2001. International versus National Actions against Nitrogen Pollution of the Baltic Sea. *Environmental and Resource Economics*, 20 (1): 41-59. 10.1023/A:1017512113454
- Gren, I.-M., 2004. Uniform or Discriminating Payments for Environmental Production on Arable Land under Asymmetric Information. *European Review of Agricultural Economics*, 31 (1): 61-76. 10.1093/erae/jbx031
- Gren, I.-M., 2008. Adaptation and mitigation strategies for controlling stochastic water pollution: An application to the Baltic Sea. *Ecological Economics*, 66 (2): 337-347. 10.1016/j.ecolecon.2007.09.010
- Gren, I.-M., 2010. Resilience value of constructed coastal wetlands for combating eutrophication. *Ocean & Coastal Management*, 53 (7): 358-365. <https://doi.org/10.1016/j.ocecoaman.2010.04.015>
- Gren, I.M., 1999. Value of Land as a Pollutant Sink for International Waters. *Ecological Economics*, 30 (3): 419-431. 10.1016/S0921-8009(99)00007-5
- Gren, I.M., 2010. Climate change and the Water Framework Directive: Cost effectiveness and policy design for water management in the Swedish Mälardalen region. *Climatic Change*, 100 (3): 463-484. 10.1007/s10584-009-9720-1
- Gren, I.M.; Destouni, G., 2012. Does divergence of nutrient load measurements matter for successful mitigation of marine eutrophication? *Ambio*, 41 (2): 151-160. 10.1007/s13280-011-0182-0
- Gren, I.M.; Elofsson, K.; Jannke, P., 1997. Cost-effective nutrient reductions to the Baltic Sea. *Environmental and Resource Economics*, 10 (4): 341-362. 10.1023/A:1026497515871
- Gren, I.M.; Lindahl, O.; Lindqvist, M., 2009. Values of mussel farming for combating eutrophication: An application to the Baltic Sea. *Ecological Engineering*, 35 (5): 935-945. 10.1016/j.ecoleng.2008.12.033
- Gren, I.M.; Russell, C., 1999. Interdisciplinary Research on the Management of Aquatic Ecosystems. *Ecological Economics*, 30:
- Gren, I.M.; Savcavchuk, O.P.; Jansson, T., 2013. Cost-effective spatial and dynamic management of a eutrophied baltic sea. *Marine Resource Economics*, 28 (3): 263-284. 10.5950/0738-1360-28.3.263
- Gren, I.M.; Scharin, H., 2007. Efficient management of eutrophic coastal zones in theory and practice: An application on nitrogen reduction to the Stockholm archipelago. *Regional Environmental Change*, 7 (1): 27-35. 10.1007/s10113-007-0023-7
- Gren, I.M.; Söderqvist, T.; Wulff, F., 1997. Nutrient reductions to the Baltic Sea: Ecology, costs and benefits. *Journal of Environmental Management*, 51 (2): 123-143. 10.1006/jema.1997.0137
- Gren, I.-M.; Destouni, G., 2012. Does Divergence of Nutrient Load Measurements Matter for Successful Mitigation of Marine Eutrophication? *Ambio*, 41 (2): 151-160. 10.1007/s13280-011-0182-0
- Gren, I.-M.; Folmer, H., 2003. Cooperation with respect to cleaning of an international water body with stochastic environmental damage: the case of the Baltic Sea. *Ecological Economics*, 47 (1): 33-42
- Gren, I.-M.; Jannke, P.; Elofsson, K., 1997. Cost-Effective Nutrient Reductions to the Baltic Sea. *Environmental and Resource Economics*, 10 (4): 341-362. 10.1023/A:1026497515871
- Gren, I.-M.; Savchuk, O.P.; Jansson, T., 2013. Cost-Effective Spatial and Dynamic Management of a Eutrophied Baltic Sea. *Marine Resource Economics*, 28 (3): 263-284. 10.5950/0738-1360-28.3.263
- Grenney, W.J.; Teuscher, M.C.; Dixon, L.S., 1978. Characteristics of the Solution Algorithms for the QUAL II River Model. *Journal of the Water Pollution Control Federation* (1978): 151-157,
- Greve, T.M.; Borum, J.; Pedersen, O., 2003. Meristematic oxygen variability in eelgrass (*Zostera marina*). *Limnology and Oceanography*, 48 (1): 210-216
- Griffin, S.L.; Rippingale, R.J., 2001. Zooplankton grazing dynamics: top-down control of phytoplankton and its relationship to an estuarine habitat. *Hydrological Processes*, 15 (13): 2453-2464. 10.1002/hyp.293
- Grigalunas, T.A.; Opaluch, J.J.; Diamantides, J.; Woo, D.S., 2005. Chapter 11 : Eutrophication in the Northeast Shelf Large Marine Ecosystem: linking hydrodynamic and economic models for benefit estimation. In: T., H.; Sutinen, J., eds. *Sustaining large marine ecosystems: the human dimension*.
- Grimm, N.B.; Foster, D.; Groffman, P.; Grove, J.M.; Hopkinson, C.S.; Nadelhoffer, K.J.; Pataki, D.E.; Peters, D.P.C., 2008. The changing landscape: ecosystem responses to urbanization and pollution across climatic and societal gradients. *Frontiers in Ecology and the Environment*, 6 (5): 264-272. 10.1890/070147

- Grizzetti, B.; Bouraoui, F.; Aloe, A., 2012. Changes of nitrogen and phosphorus loads to European seas. *Global Change Biology*, 18 (2): 769-782. 10.1111/j.1365-2486.2011.02576.x
- Grizzetti, B.; Bouraoui, F.; De Marsily, G., 2005. Modelling nitrogen pressure in river basins: A comparison between a statistical approach and the physically-based SWAT model. *Physics and Chemistry of the Earth*, 30 (8-10): 508-517. 10.1016/j.pce.2005.07.005
- Grizzetti, B.; Pretato, U.; Lassaletta, L.; Billen, G.; Garnier, J., 2013. The contribution of food waste to global and European nitrogen pollution. *Environmental Science & Policy*, 33: 186-195. 10.1016/j.envsci.2013.05.013
- Groffman, P.M.; Altabet, M.A.; Bohlke, J.K.; Butterbach-Bahl, K.; David, M.B.; Firestone, M.K.; Giblin, A.E.; Kana, T.M.; Nielsen, L.P.; Voytek, M.A., 2006. Methods for measuring denitrification: Diverse approaches to a difficult problem. *Ecological Applications*, 16 (6): 2091-2122. 10.1890/1051-0761(2006)016[2091:mfmdda]2.0.co;2
- Groffman, P.M.; Tiedje, J.M., 1989. Denitrification in north temperate forest soils - relationships between denitrification and environmental-factors at the landscape scale. *Soil Biology & Biochemistry*, 21 (5): 621-626. 10.1016/0038-0717(89)90054-0
- Groffman, P.M.; Tiedje, J.M., 1989. Denitrification in north temperate forest soils - spatial and temporal patterns at the landscape and seasonal scales. *Soil Biology & Biochemistry*, 21 (5): 613-620. 10.1016/0038-0717(89)90053-9
- Gross, A.; Turner, B.L.; Wright, S.J.; Tanner, E.V.J.; Reichstein, M.; Weiner, T.; Angert, A., 2015. Oxygen isotope ratios of plant available phosphate in lowland tropical forest soils. *Soil Biology & Biochemistry*, 88: 354-361. 10.1016/j.soilbio.2015.06.015
- Grotz, N.; Guerinot, M.L., 2002. Limiting nutrients: an old problem with new solutions? *Current Opinion in Plant Biology*, 5 (2): 158-163
- Grubb, P.J., 1977. Maintenance of species-richness in plant communities - importance of regeneration niche. *Biological Reviews of the Cambridge Philosophical Society*, 52 (1): 107-145. 10.1111/j.1469-185X.1977.tb01347.x
- Grujard, É., 2003. La gestion de l'eau à l'épreuve des territoires. *Hérodote*, 110 (3): 47-69. 10.3917/her.110.0047
- Gruner, D.S.; Smith, J.E.; Seabloom, E.W.; Sandin, S.A.; Ngai, J.T.; Hillebrand, H.; Harpole, W.S.; Elser, J.J.; Cleland, E.E.; Bracken, M.E.S.; Borer, E.T.; Bolker, B.M., 2008. A cross-system synthesis of consumer and nutrient resource control on producer biomass. *Ecology Letters*, 11 (7): 740-755. 10.1111/j.1461-0248.2008.01192.x
- Grusson, Y.; Sun, X.L.; Gascoin, S.; Sauvage, S.; Raghavan, S.; Anctil, F.; Sachez-Perez, J.M., 2015. Assessing the capability of the SWAT model to simulate snow, snow melt and streamflow dynamics over an alpine watershed. *Journal of Hydrology*, 531: 574-588. 10.1016/j.jhydrol.2015.10.070
- Gubelit, Y.I., 2009. Biomass and primary production of *Cladophora glomerata* (L.) Kutz. in the Neva Estuary. *INLAND WATER BIOLOGY*, 2 (4): 300-304. 10.1134/s1995082909040026
- Gubelit, Y.I.; Berezina, N.A., 2010. The causes and consequences of algal blooms: The *Cladophora glomerata* bloom and the Neva estuary (eastern Baltic Sea). *Marine Pollution Bulletin*, 61 (4-6, SI): 183-188. 10.1016/j.marpolbul.2010.02.013
- Gubelit, Y.I.; Kovalchuk, N.A., 2010. Macroalgal blooms and species diversity in the Transition Zone of the eastern Gulf of Finland. *Hydrobiologia*, 656 (1): 83-86. 10.1007/s10750-010-0425-2
- Guerrini, F.; Cangini, M.; Boni, L.; Trost, P.; Pistocchi, R., 2000. Metabolic responses of the diatom *Achnanthes brevipes* (Bacillariophyceae) to nutrient limitation. *Journal of Phycology*, 36: 882-890
- Guerry, A.D., 2005. Icarus and Daedalus: conceptual and tactical lessons for marine ecosystem-based management. *Frontiers in Ecology and the Environment*, 3 (4): 202-211. 10.1890/1540-9295(2005)003[0202:IADCAT]2.0.CO;2
- Guidone, M.; Rinehart, S.; Thornber, G., 2012. Impacts of competition and herbivory on the growth of two bloom-forming ulva species in Narragansett Bay, Ri. *Journal of Phycology*, 48 (1, SI): S29-S30
- Guidone, M.; Thornber, C.S., 2013. Examination of *Ulva* bloom species richness and relative abundance reveals two cryptically co-occurring bloom species in Narragansett Bay, Rhode Island. *Harmful Algae*, 24: 1-9. 10.1016/j.hal.2012.12.007
- Guidone, M.; Thornber, C.S.; van Alstyne, K.L., 2015. Herbivore impacts on two morphologically similar bloom-forming *Ulva* species in a eutrophic bay. *Hydrobiologia*, 753 (1): 175-188. 10.1007/s10750-015-2204-6
- Guidone, M.; Thornber, C.S.; Vincent, E., 2012. Snail grazing facilitates growth of two morphologically similar bloom-forming *Ulva* species through different mechanisms. *J Ecol*, 100 (5): 1105-1112
- Guillaud, J.F.; Andrieux, F.; Menesguen, A., 2000. Biogeochemical modelling in the Bay of Seine (France): an improvement by introducing phosphorus in nutrient cycles. *Journal of Marine Systems*, 25 (3-4): 369-386. 10.1016/s0924-7963(00)00028-2
- Guillaud, J.F.; Menesguen, A., 1998. Modelling over twenty years (1976-1995) of the phytoplanktonic production in the Bay of Seine. *Oceanologica Acta*, 21 (6): 887-906. 10.1016/s0399-1784(99)80014-0
- Guinder, V.A.; Popovich, C.A.; Molinero, J.C.; Marcovecchio, J., 2013. Phytoplankton summer bloom dynamics in the Bahia Blanca Estuary in relation to changing environmental conditions. *Continental Shelf Research*, 52: 150-158. 10.1016/j.csr.2012.11.010
- Gulati, R.D.; Van Donk, E., 2002. Lakes in the Netherlands, their origin, eutrophication and restoration: state-of-the-art review. *Hydrobiologia*, 478 (1-3): 73-106
- Gunderson, L.H., 2001. *Panarchy: understanding transformations in human and natural systems.*: Island press
- Gurnell, A.M.; Pieglay, H.; Swanson, F.J.; Gregory, S.V., 2002. Large wood and fluvial processes. *Freshwater Biology*, 47 (4): 601-619. 10.1046/j.1365-2427.2002.00916.x
- Gustafson, G.M.; Salomon, E.; Jonsson, S.; Steineck, S., 2003. Fluxes of K, P, and Zn in a conventional and an organic dairy farming system through feed, animals, manure, and urine - a case study at Ojebyn, Sweden. *European Journal of Agronomy*, 20 (1-2): 89-99. 10.1016/s1161-0301(03)00077-7

- Gustafsson, B.G.; Schenk, F.; Blenckner, T.; Eilola, K.; Meier, H.E.M.; Muller-Karulis, B.; Neumann, T.; Ruoho-Airola, T.; Savchuk, O.P.; Zorita, E., 2012. Reconstructing the Development of Baltic Sea Eutrophication 1850-2006. *Ambio*, 41 (6): 534-548. 10.1007/s13280-012-0318-x
- Gustafsson, C.; Bostrom, C., 2014. Algal mats reduce eelgrass (*Zostera marina* L.) growth in mixed and monospecific meadows. *Journal of Experimental Marine Biology and Ecology*, 461: 85–92. 10.1016/j.jembe.2014.07.020
- Gustavson, K.; Wängberg, S.-Å., 1995. Tolerance induction and succession in microalgae communities exposed to copper and atrazine. *Aquatic Toxicology*, 32 (4): 283-302
- Guven, B.; Howard, A., 2006. A review and classification of the existing models of cyanobacteria. *Progress in Physical Geography*, 30: 1-24
- Guyomarc'h, J.-P.; Le Foll, F., 2011. *Les marées vertes en Bretagne : pour un diagnostic partagé, garant d'une action renforcée*: Région Bretagne, Conseil économique, social et environnemental.
- Guzman, G.; Alcantara, E.; Barron, V.; Torrent, J., 1994. Phytoavailability of phosphate adsorbed on ferrihydrite, hematite, and goethite. *Plant and Soil*, 159 (2): 219-225. 10.1007/bf00009284
- Gypens, N.; Borges, A.V.; Lancelot, C., 2009. Effect of eutrophication on air-sea CO<sub>2</sub> fluxes in the coastal Southern North Sea: a model study of the past 50 years. *Global Change Biology*, 15 (4): 1040-1056. 10.1111/j.1365-2486.2008.01773.x
- Gypens, N.; Delhez, E.; Vanhoutte-Brunier, A.; Burton, S.; Thieu, V.; Passy, P.; Liu, Y.; Callens, J.; Rousseau, V.; Lancelot, C., 2013. Modelling phytoplankton succession and nutrient transfer along the Scheldt estuary (Belgium, The Netherlands). *Journal of Marine Systems*, 128: 89-105. 10.1016/j.jmarsys.2012.10.006
- Gypens, N.; Lacroix, G.; Lancelot, C., 2007. Causes of variability in diatom and *Phaeocystis* blooms in Belgian coastal waters between 1989 and 2003: A model study. *Journal of Sea Research*, 57 (1): 19-35. 10.1016/j.seares.2006.07.004
- Habas, E.J.; Gilbert, C.K., 1974. The Economic Effects of the 1971 Florida Red Tide and the Damage it Presages for Future Occurrences. *Environmental Letters*, 6 (2): 139-147. 10.1080/00139307409437354
- Habert, J., 1997. *Rapport sur le projet de loi autorisant la convention pour la protection du milieu marin de l'Atlantique du Nord-Est* Commission des Affaires étrangères, de la défense et des forces armées.
- Hader, D.P.; Villafane, V.E.; Helbling, E.W., 2014. Productivity of aquatic primary producers under global climate change. *Photochemical & Photobiological Sciences*, 13 (10): 1370-1392. 10.1039/c3pp50418b
- Hagen, N.M.; Kleeberg, H.B., 1994. Optimum operation of restoration techniques for eutrophic water bodies. *Surveys in Geophysics*, 15 (3): 299-310. 10.1007/bf00665812
- Hagy, J.D.; Boynton, W.R.; Keefe, C.W.; Wood, K.V., 2004. Hypoxia in Chesapeake Bay, 1950-2001: Long-term change in relation to nutrient loading and river flow. *Estuaries*, 27 (4): 634-658. 10.1007/bf02907650
- Hagy, J.D.; Murrell, M.C., 2007. Susceptibility of a northern Gulf of Mexico estuary to hypoxia: An analysis using box models. *Estuarine Coastal and Shelf Science*, 74 (1-2): 239-253. 10.1016/j.ecss.2007.04.013
- Haith, D.A.; Hollingshead, N.; Bell, M.L.; Kreszewski, S.W.; Morey, S.J., 2012. Nutrient Loads to Cayuga Lake, New York: Watershed Modeling on a Budget. *Journal of Water Resources Planning and Management-Asce*, 138 (5): 571-580. 10.1061/(ASCE)WR.1943-5452.0000198
- Hakanson, L., 2005. The importance of lake morphometry for the structure and function of lakes. *International Review of Hydrobiology*, 90 (4): 433-461. 10.1002/iroh.200410775
- Hakanson, L., 2008. Factors and criteria to quantify coastal area sensitivity/vulnerability to eutrophication: Presentation of a sensitivity index based on morphometrical parameters. *International Review of Hydrobiology*, 93 (3): 372-388. 10.1002/iroh.200711033
- Hakanson, L.; Blenckner, T., 2008. A review on operational bioindicators for sustainable coastal management - Criteria, motives and relationships. *Ocean & Coastal Management*, 51 (1): 43-72. 10.1016/j.ocecoaman.2007.04.005
- Hales, B.; Emerson, S.; Archer, D., 1994. Respiration and dissolution in the sediments of the western north-atlantic - estimates from models of in-situ microelectrode measurements of porewater oxygen and ph. *Deep-Sea Research Part I-Oceanographic Research Papers*, 41 (4): 695-719. 10.1016/0967-0637(94)90050-7
- Halkos, G.E.; Galani, G.K., 2014. Cost-Effectiveness analysis in reducing nutrient loading in baltic and black seas: A review. *Journal of Environmental Management and Tourism*, 5 (1): 29-52. 10.14505/jemt.v5.1(9).03
- Hall, R.O.; Bernhardt, E.S.; Likens, G.E., 2002. Relating nutrient uptake with transient storage in forested mountain streams. *Limnology and Oceanography*, 47 (1): 255-265
- Hallegraeff, G.M., 1993. A review of harmful algal blooms and their apparent global increase. *Phycologia*, 32 (2): 79-99. 10.2216/10031-8884-32-2-79.1
- Hallfors, H.; Backer, H.; Leppanen, J.M.; Hallfors, S.; Hallfors, G.; Kuosa, H., 2013. The northern Baltic Sea phytoplankton communities in 1903-1911 and 1993-2005: a comparison of historical and modern species data. *Hydrobiologia*, 707 (1): 109-133. 10.1007/s10750-012-1414-4
- Hälfors, H.; Backer, H.; Leppänen, J.-M.; Hälfors, S.; Hälfors, G.; Kuosa, H., 2013. The northern Baltic Sea phytoplankton communities in 1903-1911 and 1993-2005: a comparison of historical and modern species data. *Hydrobiologia*, 707 (1): 109-133. 10.1007/s10750-012-1414-4
- Hallstan, S.; Johnson, R.K.; Willén, E.; Grandin, U., 2012. Comparison of classification-then-modelling and species-by-species modelling for predicting lake phytoplankton assemblages. *Ecological Modelling*, 231: 11-19. 10.1016/j.ecolmodel.2012.01.018
- Halpern, B.S.; McLeod, K.L.; Rosenberg, A.A.; Crowder, L.B., 2008. Managing for cumulative impacts in ecosystem-based management through ocean zoning. *Ocean & Coastal Management*, 51 (3): 203-211. 10.1016/j.ocecoaman.2007.08.002

- Hamaoui-Laguel, L.; Meleux, F.; Beekmann, M.; Bessagnet, B.; Génermont, S.; Cellier, P.; Létinois, L., 2014. Improving ammonia emissions in air quality modelling for France. *Atmospheric Environment*, 92: 584-595. 10.1016/j.atmosenv.2012.08.002
- Hamilton, D.P.; Schladow, S.G., 1997. Prediction of water quality in lakes and reservoirs. Part I -- Model description. *Ecological Modelling*, 96: 91-110. DOI: 10.1016/S0304-3800(96)00062-2
- Hammer, M.; Balfors, B.; Mortberg, U.; Petersson, M.; Quin, A., 2011. Governance of Water Resources in the Phase of Change: A Case Study of the Implementation of the EU Water Framework Directive in Sweden. *Ambio*, 40 (2): 210-220
- Hampton, S.; Zafonte, M., 2005. Calculating compensatory restoration in natural resource damage assessments: Recent experience in California. 833-844
- Hampton, S.; Zafonte, M., 2008. Discounting, risk, and uncertainty in natural resource damage assessments. 1157-1162. 10.7901/2169-3358-2008-1-1157
- Han, Z.; Cui, B.S., 2016. Development of an integrated stress index to determine multiple anthropogenic stresses on macrophyte biomass and richness in ponds. *Ecological Engineering*, 90: 151-162. 10.1016/j.ecoleng.2016.01.051
- Hanley, N., 1990. The Economics of Nitrate Pollution. *European Review of Agricultural Economics*, 17 (2): 129-151. 10.1093/erae/17.2.129
- Hannigan, J., 2014. *Environmental Sociology*. 258
- Hänninen, S., 1992. How to Combat Pollution by Words. *Alternatives: Global, Local, Political*, 17 (2): 209-229
- Hannon, E.; Garnier, J.; Billen, G., 1998. Changement des flux biogeochemiques dans les rivières, le modèle Riverstrahler applique au Danube. *Man and River System*. Presses Ponts et Chausées ed.: Cergrene CNRS, 273
- Hanrahan, G.; Gledhill, M.; House, W.A.; Worsfold, P.J., 2001. Phosphorus loading in the Frome catchment, UK: Seasonal refinement of the coefficient modeling approach. *Journal of Environmental Quality*, 30 (5): 1738-1746
- Hanrahan, G.; Salmassi, T.M.; Khachikian, C.S.; Foster, K.L., 2005. Reduced inorganic phosphorus in the natural environment: significance, speciation and determination. *Talanta*, 66 (2): 435-444. 10.1016/j.talanta.2004.10.004
- Hansen, G.J.A.; Read, J.S.; Hansen, J.F.; Winslow, L.A., 2017. Projected shifts in fish species dominance in Wisconsin lakes under climate change. *Global Change Biology*, 23 (4): 1463-1476. 10.1111/gcb.13462
- Hansen, J.P.; Snickars, M., 2014. Applying macrophyte community indicators to assess anthropogenic pressures on shallow soft bottoms. *Hydrobiologia*, 738 (1): 171-189. 10.1007/s10750-014-1928-z
- Hansen, J.P.; Wikstrom, S.A.; Kautsky, L., 2008. Effects of water exchange and vegetation on the macroinvertebrate fauna composition of shallow land-uplift bays in the Baltic Sea. *Estuarine Coastal and Shelf Science*, 77 (3): 535-547. 10.1016/j.ecss.2007.10.013
- Hansen, L.B.; Hansen, L.G., 2014. Can Non-point Phosphorus Emissions from Agriculture Be Regulated Efficiently Using Input-Output Taxes? *Environmental and Resource Economics*, 58 (1): 109-125. 10.1007/s10640-013-9693-4
- Hanson, D.A.; Britney, E.M.; Earle, C.J.; Stewart, T.G., 2013. Adapting Habitat Equivalency Analysis (HEA) to assess environmental loss and compensatory restoration following severe forest fires. *Forest Ecology and Management*, 294: 166-177. 10.1016/j.foreco.2012.12.032
- Hanson, D.A.; Britney, E.M.; Stewart, T.G.; Wolfson, A.W.; Baker, M., 2014. Restoration scaling of environmental damages in the face of a changing environment and uncertainty. 181: 491-502. 10.2495/EID140421
- Hansson, L.A.; Annadotter, H.; Bergman, E.; Hamrin, S.F.; Jeppesen, E.; Kairesalo, T.; Luokkanen, E.; Nilsson, P.A.; Sondergaard, M.; Strand, J., 1998. Biomanipulation as an application of food-chain theory: Constraints, synthesis, and recommendations for temperate lakes. *Ecosystems*, 1 (6): 558-574. 10.1007/s100219900051
- Hao, X.; Chang, C.; Larney, F.J., 2004. Carbon, Nitrogen Balances and Greenhouse Gas Emission during Cattle Feedlot Manure Composting. *Journal of Environmental Quality*, 33 (1): 37-44
- Haraguchi, L.; Carstensen, J.; Abreu, P.C.; Odebrecht, C., 2015. Long-term changes of the phytoplankton community and biomass in the subtropical shallow Patos Lagoon Estuary, Brazil. *Estuarine, Coastal and Shelf Science*, 162: 76-87. 10.1016/j.ecss.2015.03.007
- Harder, T.; Dobretsov, S.; Qian, P., 2004. Waterborne polar macromolecules act as algal antifoulants in the seaweed *Ulva reticulata*. *Marine Ecology Progress Series*, 274: 133-141. 10.3354/meps274133
- Harding, L.W.; Adolf, J.E.; Mallonee, M.E.; Miller, W.D.; Gallegos, C.L.; Perry, E.S.; Johnson, J.M.; Sellner, K.G.; Paerl, H.W., 2015. Climate effects on phytoplankton floral composition in Chesapeake Bay. *Estuarine Coastal and Shelf Science*, 162: 53-68. 10.1016/j.ecss.2014.12.030
- Harding, L.W.; Gallegos, C.L.; Perry, E.S.; Miller, W.D.; Adolf, J.E.; Mallonee, M.E.; Paerl, H.W., 2016. Long-Term Trends of Nutrients and Phytoplankton in Chesapeake Bay. *Estuaries and Coasts*, 39 (3): 664-681. 10.1007/s12237-015-0023-7
- Hargreaves, J.A., 1998. Nitrogen biogeochemistry of aquaculture ponds. *Aquaculture*, 166 (3-4): 181-212. 10.1016/s0044-8486(98)00298-1
- Harley, C.D.G.; Hughes, A.R.; Hultgren, K.M.; Miner, B.G.; Sorte, C.J.B.; Thornber, C.S.; Rodriguez, L.F.; Tomanek, L.; Williams, S.L., 2006. The impacts of climate change in coastal marine systems. *Ecology Letters*, 9 (2): 228-241. 10.1111/j.1461-0248.2005.00871.x
- Haroon, M.F.; Hu, S.H.; Shi, Y.; Imelfort, M.; Keller, J.; Hugenholtz, P.; Yuan, Z.G.; Tyson, G.W., 2013. Anaerobic oxidation of methane coupled to nitrate reduction in a novel archaeal lineage. *Nature*, 500 (7464): 567-. 10.1038/nature12375
- Harper, D.M., 1992. *Eutrophication of freshwaters*. Springer

- Harpole, W.S.; Ngai, J.T.; Cleland, E.E.; Seabloom, E.W.; Borer, E.T.; Bracken, M.E.S.; Elser, J.J.; Gruner, D.S.; Hillebrand, H.; Shurin, J.B.; Smith, J.E., 2011. Nutrient co-limitation of primary producer communities. *Ecology Letters*, 14 (9): 852-862. 10.1111/j.1461-0248.2011.01651.x
- Harris, T.D.; Smith, V.H., 2016. Do persistent organic pollutants stimulate cyanobacterial blooms? *Inland Waters*, 6 (2): 124-130. 10.5268/IW-6.2.887
- Harris, T.D.; Smith, V.H.; Graham, J.L.; Van de Waal, D.B.; Tedesco, L.P.; Clercin, N., 2016. Combined effects of nitrogen to phosphorus and nitrate to ammonia ratios on cyanobacterial metabolite concentrations in eutrophic Midwestern USA reservoirs. *Inland Waters*, 6 (2): 199-210
- Harrison, J.A.; Maranger, R.J.; Alexander, R.B.; Giblin, A.E.; Jacinthe, P.-A.; Mayorga, E.; Seitzinger, S.P.; Sobota, D.J.; Wollheim, W.M., 2009. The regional and global significance of nitrogen removal in lakes and reservoirs. *Biogeochemistry*, 93 (1-2): 143-157. 10.1007/s10533-008-9272-x
- Harrison, P.J.; Hurd, C.L., 2001. Nutrient physiology of seaweeds: Application of concepts to aquaculture. *Cahiers De Biologie Marine*, 42 (1-2): 71-82
- Harrison, P.J.; Thompson, P.A.; Calderwood, G.S., 1990. Effects of nutrient and light limitation on the biochemical composition of phytoplankton. *Journal of Applied Phycology*, 2: 45-56
- Harrison, R.; Webb, J., 2001. A review of the effect of n fertilizer type on gaseous emissions. *Advances in agronomy*, 73: 65-108
- Hart, M.R.; Quin, B.F.; Nguyen, M., 2004. Phosphorus runoff from agricultural land and direct fertilizer effects. *Journal of Environmental Quality*, 33 (6): 1954-1972
- Hartemann, P., 2013. Eau de consommation, risque, santé. *Sciences Eaux & Territoires*, Numéro 10 (1): 14-21
- Harzallah, A.; Chapelle, A., 2002. Contribution of climate variability to occurrences of anoxic crises 'malaigues' in the Thau lagoon (southern France). *Oceanologica Acta*, 25 (2): 79-86. 10.1016/s0399-1784(02)01184-2
- Haselmair, A.; Stachowitzsch, M.; Zuschin, M.; Riedel, B., 2010. Behaviour and mortality of benthic crustaceans in response to experimentally induced hypoxia and anoxia in situ. *Marine Ecology Progress Series*, 414: 195-208. 10.3354/meps08657
- Haslam, S.M., 2014. *River plants of western Europe*. Cambridge University Press
- Hasler, A.D., 1947. Eutrophication of lakes by domestic drainage. *Ecology*, 28 (4): 383-395
- Hasler, B.; Smart, J.C.R.; Fonnesbech-Wulff, A.; Andersen, H.E.; Thodsen, H.; Blicher Mathiesen, G.; Smedberg, E.; Göke, C.; Czajkowski, M.; Was, A.; Elofsson, K.; Humborg, C.; Wolfsberg, A.; Wulff, F., 2014. Hydro-economic modelling of cost-effective transboundary water quality management in the Baltic Sea. *Water Resources and Economics*, 5: 1-23. 10.1016/j.wre.2014.05.001
- Hassan, H.; Hanaki, K.; Matsuo, T., 1998. A modeling approach to simulate impact of climate change in lake water quality: Phytoplankton growth rate assessment. *Water Science and Technology*, 37 (2): 177-185. 10.1016/S0273-1223(98)00022-5
- Hassenteufel, P., 2008. *Sociologie politique: l'action publique*. Paris: Armand Colin
- Hassett, B.; Palmer, M.; Bernhardt, E.; Smith, S.; Carr, J.; Hart, D., 2005. Restoring watersheds project by project: trends in Chesapeake Bay tributary restoration. *Frontiers in Ecology and the Environment*, 3 (5): 259-267
- Hauck, R.D., 1984. Atmospheric Nitrogen. Chemistry, Nitrification, Denitrification, and their Interrelationships. *The Natural Environment and the Biogeochemical Cycles*. Berlin, Heidelberg: Springer Berlin Heidelberg, 105-125. 10.1007/978-3-540-38829-6\_5
- Hauxwell, J.; Cebrián, J.; Furlong, C.; Valiela, I., 2001. Macroalgal Canopies Contribute to Eelgrass (*Zostera Marina*) Decline in Temperate Estuarine Ecosystems. *Ecology*, 82 (4): 1007-1022. 10.1890/0012-9658(2001)082[1007:mcctez]2.0.co;2
- Hauxwell, J.; Cebrian, J.; VALIELA, I., 2003. Eelgrass *Zostera marina* loss in temperate estuaries: relationship to land-derived nitrogen loads and effect of light limitation imposed by algae. *Marine Ecology Progress Series*, 247: 59-73. 10.3354/meps247059
- Hauxwell, J.; McClelland, J.; Behr, P.J.; Valiela, I., 1998. Relative importance of grazing and nutrient controls of macroalgal biomass in three temperate shallow estuaries. *Estuaries*, 21 (2): 347-360. 10.2307/1352481
- Havens, K.E., 1991. Zooplankton dynamics in a fresh-water estuary. *Archiv Fur Hydrobiologie*, 123 (1): 69-97
- Havens, K.E., 2008. Cyanobacteria blooms: effects on aquatic ecosystems. *Cyanobacterial harmful algal blooms: state of the science and research needs*: 733-747
- Havens, K.E.; East, T.L., 1997. Carbon dynamics in the 'grazing food chain' of a subtropical lake. *Journal of Plankton Research*, 19 (11): 1687-1711
- Havnø, K.; Madsen, M.; Dørge, J., 1995. *MIKE11—a generalized river modelling package*. USA: V.P. Singh (Ed.), 733-782
- Hayden, H.S.; Blomster, J.; Maggs, C.A.; Silva, P.C.; Stanhope, M.J.; Waaland, J.R., 2003. Linnaeus was right all along: *Ulva* and *Enteromorpha* are not distinct genera. *European Journal of Phycology*, 38 (3): 277-294
- Hayden, H.S.; Blomster, J.; Maggs, C.A.; Silva, P.C.; Stanhope, M.J.; Waaland, J.R., 2012. Linnaeus was right all along: *Ulva* and *Enteromorpha* are not distinct genera. *European Journal of Phycology*, 38 (3): 277-294. 10.1080/1364253031000136321
- Haygarth, P.M.; Condron, L.M.; Heathwaite, A.L.; Turner, B.L.; Harris, G.P., 2005. The phosphorus transfer continuum: Linking source to impact with an interdisciplinary and multi-scaled approach. *Science of the Total Environment*, 344 (1-3): 5-14. 10.1016/j.scitotenv.2005.02.001
- Haygarth, P.M.; Heathwaite, A.L.; Jarvis, S.C.; Harrod, T.R., 2000. Hydrological factors for phosphorus transfer from agricultural soils. *Advances in agronomy*, 69: 153-178

- Haynes, R.J.; Goh, K.M., 1978. Ammonium and nitrate nutrition of plants. *Biological Reviews of the Cambridge Philosophical Society*, 53 (4): 465-510. 10.1111/j.1469-185X.1978.tb00862.x
- He, M.; Dijkstra, F.A., 2014. Drought effect on plant nitrogen and phosphorus: a meta-analysis. *New Phytologist*, 204 (4): 924-931. 10.1111/nph.12952
- Healey, F.P., 1980. Slope of the Monod equation as an indicator of advantage in nutrient competition. *Microbial Ecology*, 5 (4): 281-286. 10.1007/bf02020335
- Heathwaite, A.L.; Johnes, P.J.; Peters, N.E., 1996. Trends in nutrients. *Hydrological Processes*, 10 (2): 263-293
- Hecky, R.E.; Campbell, P.; Hendzel, L.L., 1993. The stoichiometry of carbon, nitrogen, and phosphorus in particulate matter of lakes and oceans. *Limnology and Oceanography*, 38 (4): 709-724
- Hecky, R.E.; Kilham, P., 1988. Nutrient limitation of phytoplankton in fresh-water and marine environments - a review of recent-evidence on the effects of enrichment. *Limnology and Oceanography*, 33 (4): 796-822
- Hedin, L.O.; von Fischer, J.C.; Ostrom, N.E.; Kennedy, B.P.; Brown, M.G.; Robertson, G.P., 1998. Thermodynamic constraints on nitrogen transformations and other biogeochemical processes at soil-stream interfaces. *Ecology*, 79 (2): 684-703. 10.2307/176963
- Heggie, D.T.; Skyring, G.W.; Obrien, G.W.; Reimers, C.; Herczeg, A.; Moriarty, D.J.W.; Burnett, W.C.; Milnes, A.R., 1990. Organic-carbon cycling and modern phosphorite formation on the east australian continental-margin - an overview. In: Notholt, A.J.G.; Jarvis, I., eds. *Phosphorite Research and Development*. 87-117
- Heil, C.A.; Glibert, P.M.; Fan, C.L., 2005. Prorocentrum minimum (Pavillard) Schiller - A review of a harmful algal bloom species of growing worldwide importance. *Harmful Algae*, 4 (3): 449-470. 10.1016/j.hal.2004.08.003
- Hein, L., 2006. Cost-Efficient Eutrophication Control in a Shallow Lake Ecosystem Subject to Two Steady States. *Ecological Economics*, 59 (4): 429-439. 10.1016/j.ecolecon.2005.10.021
- Heinen, M., 2006. Simplified denitrification models: Overview and properties. *Geoderma*, 133 (3-4): 444-463. 10.1016/j.geoderma.2005.06.010
- Heip, C., 1995. Eutrophication and zoobenthos dynamics. *Ophelia*, 41 (1): 113-136
- Heisler, J.; Glibert, P.M.; Burkholder, J.M.; Anderson, D.M.; Cochlan, W.; Dennison, W.C.; Dortch, Q.; Gobler, C.J.; Heil, C.A.; Humphries, E.; Lewitus, A.; Magnien, R.; Marshall, H.G.; Sellner, K.; Stockwell, D.A.; Stoecker, D.K.; Suddleson, M., 2008. Eutrophication and harmful algal blooms: A scientific consensus. *Harmful Algae*, 8 (1): 3-13. 10.1016/j.hal.2008.08.006
- Helcom, 2009. *Eutrophication in the Baltic Sea: an integrated thematic assessment of the effects of nutrient enrichment in the Baltic Sea region: executive summary*. Helsinki Commission, Baltic Marine Environment Protection Commission (Balt. Sea Environ. Proc. No. 115A)
- Hellweger, F.L.; Kravchuk, E.S.; Novotny, V.; Gladyshev, M.I., 2008. Agent-based modeling of the complex life cycle of a cyanobacterium (*Anabaena*) in a shallow reservoir. 53: 1227-1241
- Hellweger, F.L.; Kravchuk, E.S.; Novotny, V.; Gladyshev, M.I., 2008. Agent-based modeling of the complex life cycle of a cyanobacterium (*Anabaena*) in a shallow reservoir. *Limnology and Oceanography*, 53 (4): 1227-1241
- Helly, J.J.; Levin, L.A., 2004. Global distribution of naturally occurring marine hypoxia on continental margins. *Deep-Sea Research Part I-Oceanographic Research Papers*, 51 (9): 1159-1168. 10.1016/j.dsr.2004.03.009
- Helly, J.J.; Levin, L.A., 2004. Global distribution of naturally occurring marine hypoxia on continental margins in Deep-Sea Research (Part I). 51: 9
- Helmes, R.J.K.; Huijbregts, M.A.J.; Henderson, A.D.; Jolliet, O., 2012. Spatially explicit fate factors of phosphorous emissions to freshwater at the global scale. *International Journal of Life Cycle Assessment*, 17 (5): 646-654. 10.1007/s11367-012-0382-2
- Helminen, H.; Juntura, E.; Koponen, J.; Laihonen, P.; Ylinen, H., 1998. Assessing of long-distance background nutrient loading to the Archipelago Sea, northern Baltic, with a hydrodynamic model. *Environmental Modelling & Software*, 13 (5-6): 511-518. 10.1016/s1364-8152(98)00058-9
- Hem, J.D.; Lind, C.J., 1983. Non-equilibrium models for predicting forms of precipitated manganese oxides. *Geochimica Et Cosmochimica Acta*, 47 (11): 2037-2046. 10.1016/0016-7037(83)90219-3
- Hemminga, M.A., 1998. The root/rhizome system of seagrasses: an asset and a burden. *Journal of Sea Research*, 39 (3-4): 183-196. 10.1016/s1385-1101(98)00004-5
- Hengst, A.; Melton, J.; Murray, L., 2010. Estuarine Restoration of Submersed Aquatic Vegetation: The Nursery Bed Effect. *Restoration Ecology*, 18 (4): 605-614. 10.1111/j.1526-100X.2010.00700.x
- Hénin, S., 1980. *Rapport du groupe de travail Activités Agricoles et Qualité des Eaux* Ministère de l'Agriculture et Ministère de l'Environnement (Paris).
- Henriksen, K.; Kemp, W.M., 1988. Nitrification in estuarine and coastal marine sediments. Ch. 10. In: Blackburn, T.H.; Sorensen, J., eds. *Nitrogen Cycling in Coastal Marine Environments*. John Wiley & Sons, 207-246
- Henry, C., 2013. Incertitude scientifique et incertitude fabriquée. D'une approche rationnelle aux dénis de science. *Revue économique*, 64 (4): 589-598. 10.3917/reco.644.0589
- Henry, C.P.; Amoros, C.; Roset, N., 2002. Restoration ecology of riverine wetlands: A 5-year post-operation survey on the Rhone River, France. *Ecological Engineering*, 18 (5): 543-554. 10.1016/s0925-8574(02)00019-8
- Hense, I., 2010. Approaches to model the life cycle of harmful algae. *Journal of Marine Systems*, 83 (3-4): 108-114. 10.1016/j.jmarsys.2010.02.014
- Hense, I.; Beckmann, A., 2006. Towards a model of cyanobacteria life cycle—effects of growing and resting stages on bloom formation of N 2-fixing species. *Ecological Modelling*, 195 (3): 205-218

- Hense, I.; Beckmann, A., 2010. The representation of cyanobacteria life cycle processes in aquatic ecosystem models. *Ecological Modelling*, 221 (19): 2330-2338. 10.1016/j.ecolmodel.2010.06.014
- Henze, M., 1992. Characterization of wastewater for modeling of activated sludge processes. . *Water Science and Technology*, 25 (6): 14
- Henze, M.; Comeau, Y., 2008. Wastewater characterization. *Biological Wastewater Treatment: Principles Modelling and Design*. IWA Publishing, 33-52
- Henze, M.; Harrenmoes, P.; La Cour Jansen, J.; Arvin, E., 1996. *Wastewater Treatment Biological and chemical Processes*. Berlin, Germany:
- Herbert, R.A., 1999. Nitrogen cycling in coastal marine ecosystems. *Fems Microbiology Reviews*, 23 (5): 563-590. 10.1111/j.1574-6976.1999.tb00414.x
- Hermon, C., 2010. La responsabilité de l'Etat du fait des « marées vertes ». *Droit rural*, 382 (étude 9):
- Hermon, C.; Doussan, I., 2012. *Production agricole et droit de l'environnement*. LexisNexis
- Hernandez, I.; Peralta, G.; PerezLlorens, J.L.; Vergara, J.J.; Niell, F.X., 1997. Biomass and dynamics of growth of *Ulva* species in Palmones river estuary. *Journal of Phycology*, 33 (5): 764–772. 10.1111/j.0022-3646.1997.00764.x
- Herzog, F.; Prasuhn, V.; Spiess, E.; Richner, W., 2008. Environmental cross-compliance mitigates nitrogen and phosphorus pollution from Swiss agriculture. *Environmental Science & Policy*, 11 (7): 655-668. 10.1016/j.envsci.2008.06.003
- Herzog, T.R., 1985. A cognitive analysis of preference for waterscapes. *Journal of Environmental Psychology*, 5 (3): 225-241. 10.1016/S0272-4944(85)80024-4
- Hessen, D.O.; Kaartvedt, S., 2014. Top-down cascades in lakes and oceans: different perspectives but same story? *Journal of Plankton Research*, 36 (4): 914-924. 10.1093/plankt/fbu040
- Hessing-Lewis, M.L.; Hacker, S.D., 2013. Upwelling-influence, macroalgal blooms, and seagrass production; temporal trends from latitudinal and local scales in northeast Pacific estuaries. *Limnology and Oceanography*, 58 (3): 1103-1112. 10.4319/lo.2013.58.3.1103
- Hetland, R.; DiMarco, S., 2008. How does the character of oxygen demand control the structure of hypoxia on the Texas-Louisiana continental shelf? *Journal of Marine Systems*, 70 (1-2): 49-62. 10.1016/j.jmarsys.2007.03.002
- Hetland, R.D.; DiMarco, S.F., 2008. How does the character of oxygen demand control the structure of hypoxia on the Texas-Louisiana continental shelf? *Journal of Marine Systems*, 70 (1-2): 49-62. 10.1016/j.jmarsys.2007.03.002
- Hieltjes, A.H.M.; Lijklema, L., 1980. Fractionation of inorganic phosphates in calcareous sediments. *Journal of Environmental Quality*, 9 (3): 405-407
- Higgins, B.T.; Kendall, A., 2012. Life Cycle Environmental and Cost Impacts of Using an Algal Turf Scrubber to Treat Dairy Wastewater. *Journal of Industrial Ecology*, 16 (3): 436-447. 10.1111/j.1530-9290.2011.00427.x
- Hill, A.R., 1996. Nitrate removal in stream riparian zones. *Journal of Environmental Quality*, 25 (4): 743-755
- Hill, A.R.; Devito, K.J.; Campagnolo, S.; Sanmugadas, K., 2000. Subsurface denitrification in a forest riparian zone: Interactions between hydrology and supplies of nitrate and organic carbon. *Biogeochemistry*, 51 (2): 193-223. 10.1023/a:1006476514038
- Hillebrand, H., 2009. Meta-Analysis of Grazer Control of Periphyton Biomass across Aquatic Ecosystems(1). *J Phycol*, 45 (4): 798-806. 10.1111/j.1529-8817.2009.00702.x
- Hillmer, I.; van Reenen, P.; Imberger, J.; Zohary, T., 2008. Phytoplankton patchiness and their role in the modelled productivity of a large, seasonally stratified lake. *Ecological Modelling*, 218 (1-2): 49-59. 10.1016/j.ecolmodel.2008.06.017
- Hilt, S., 2015. Regime shifts between macrophytes and phytoplankton—concepts beyond shallow lakes, unravelling stabilizing mechanisms and practical consequences. *Limnetica*, 34 (2): 467-480
- Hilt, S.; Gross, E.M.; Hupfer, M.; Morscheid, H.; Mahlmann, J.; Melzer, A.; Poltz, J.; Sandrock, S.; Scharf, E.M.; Schneider, S.; de Weyer, K.V., 2006. Restoration of submerged vegetation in shallow eutrophic lakes - A guideline and state of the art in Germany. *Limnologica*, 36 (3): 155-171. 10.1016/j.limno.2006.06.001
- Hilt, S.; Köhler, J.; Adrian, R.; Monaghan, M.T.; Sayer, C.D., 2013. Clear, crashing, turbid and back - long-term changes in macrophyte assemblages in a shallow lake. *Freshwater Biology*, 58 (10): 2027-2036. 10.1111/fwb.12188
- Hilt, S.; Köhler, J.; Kozerski, H.P.; van Nes, E.H.; Scheffer, M., 2011. Abrupt regime shifts in space and time along rivers and connected lake systems. *Oikos*, 120 (5): 766-775
- Hilt, S.; Van de Weyer, K.; Kohler, A.; Chorus, I., 2010. Submerged Macrophyte Responses to Reduced Phosphorus Concentrations in Two Peri-Urban Lakes. *Restoration Ecology*, 18: 452-461. 10.1111/j.1526-100X.2009.00577.x
- Hilton, J.; O'Hare, M.; Bowes, M.J.; Jones, J.I., 2006. How green is my river? A new paradigm of eutrophication in rivers. *Science of the Total Environment*, 365 (1-3): 66-83. 10.1016/j.scitotenv.2006.02.055
- Hinga, K.R., 2002. Effects of pH on coastal marine phytoplankton. *Marine Ecology Progress Series*, 238: 281-300. 10.3354/meps238281
- Hipsey, M.R.; Bruce, L.C.; Kilminster, K., 2013. A 3D hydrodynamic-biogeochemical model for assessing artificial oxygenation in a riverine salt-wedge estuary. *20th International Congress on Modelling and Simulation (Modsim2013)*, 1770-1776
- Hirota, M.; Senga, Y.; Seike, Y.; Nohara, S.; Kunii, H., 2007. Fluxes of carbon dioxide, methane and nitrous oxide in two contrastive fringing zones of coastal lagoon, Lake Nakumi, Japan. *Chemosphere*, 68 (3): 597-603. 10.1016/j.chemosphere.2007.01.002
- Hirschman, A.O., 1970. *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Harvard university press
- HO, Y.B., 1981. Mineral element content in ulva-lactuca I with reference to eutrophication in Hong-Kong Coastal waters. *Hydrobiologia*, 77 (1): 43-47. 10.1007/bf00006386

- HO, Y.B., 1990. *Ulva-lactuca* as bioindicator of metal contamination in intertidal waters in Hong-Kong. *Hydrobiologia*, 203 (1-2): 73–81. 10.1007/bf00005615
- Hoagland, P.; Anderson, D.M.; Kaoru, Y.; White, A.W., 2002. The economic effects of harmful algal blooms in the United States: estimates, assessment issues, and information needs. *Estuaries*, 25 (4): 819-837. 10.1007/BF02804908
- Hoagland, P.; Jin, D.; Beet, A.; Kirkpatrick, B.; Reich, A.; Ullmann, S.; Fleming, L.E.; Kirkpatrick, G., 2014. The human health effects of Florida Red Tide (FRT) blooms: An expanded analysis. *Environment International*, 68: 144-153. 10.1016/j.envint.2014.03.016
- Hoagland, P.; Jin, D.; Polansky, L.Y.; Kirkpatrick, B.; Kirkpatrick, G.; Fleming, L.E.; Reich, A.; Watkins, S.M.; Ullmann, S.G.; Backer, L.C., 2009. The costs of respiratory illnesses arising from Florida gulf coast Karenia brevis blooms. *Environmental Health Perspectives*, 117 (8): 1239-1243. 10.1289/ehp.0900645
- Hoagland, P.; Scatista, S., 2006. The economic effects of harmful algal blooms. *Ecology of harmful algae*. Springer, 391-402. 10.1007/978-3-540-32210-8\_30
- Hoang, L.; Mynett, A.; van Griensven, A., 2013. Modelling Water and Nitrogen Transport and Transformation across the Landscape at River Basin Scale Using SWAT. *Proceedings of the 35th Iahr World Congress, Vols iii and iv*:
- Hoang, V.-N.; Alauddin, M., 2010. Assessing the eco-environmental performance of agricultural production in OECD countries: the use of nitrogen flows and balance. *Nutrient Cycling in Agroecosystems*, 87 (3): 353-368. 10.1007/s10705-010-9343-y
- Hoegh-Guldberg , O.R.; Cai, E.S.; Poloczanska, P.G.; Brewer, S.; Sundby, K.; Hilmi, V.J.; S., J., 2014. The Ocean. In: Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White ed. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects". Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* Cambridge
- Hoehler, T.M.; Alperin, M.J.; Albert, D.B.; Martens, C.S., 1994. Field and laboratory studies of methane oxidation in an anoxic marine sediment - evidence for a methanogen-sulfate reducer consortium. *Global Biogeochemical Cycles*, 8 (4): 451-463. 10.1029/94gb01800
- Hofmann, L.C.; Heiden, J.; Bischof, K.; Teichberg, M., 2014. Nutrient availability affects the response of the calcifying chlorophyte *Halimeda opuntia* (L.) JV Lamouroux to low pH. *PLANTA*, 239 (1): 231-242. 10.1007/s00425-013-1982-1
- Hökby, S.; Söderqvist, T., 2003. Elasticities of Demand and Willingness to Pay for Environmental Services in Sweden. *Environmental and Resource Economics*, 26 (3): 361-383. 10.1023/B:EARE.0000003581.97411.75
- Holling, C.S., 1973. Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4 (1): 1-23
- Holmberg, O.R.; Naumann, E., 1927. Die Trophie-Begriffe in sprachlicher Hinsicht. *Botaniska Notiser Lund*: 211-214
- Holmer, M.; Andersen, F.O.; Nielsen, S.L.; Boschker, H.T.S., 2001. The importance of mineralization based on sulfate reduction for nutrient regeneration in tropical seagrass sediments. *Aquatic Botany*, 71 (1): 1-17. 10.1016/s0304-3770(01)00170-x
- Holmer, M.; Kristensen, E., 1994. Coexistence of sulfate reduction and methane production in an organic-rich sediment. *Marine Ecology Progress Series*, 107 (1-2): 177-184. 10.3354/meps107177
- Holmer, M.; Nielsen, R.M., 2007. Effects of filamentous algal mats on sulfide invasion in eelgrass (*Zostera marina*). *Journal of Experimental Marine Biology and Ecology*, 353 (2): 245-252. 10.1016/j.jembe.2007.09.010
- Holmes, R.; Armanini, D.G.; Yates, A.G., 2016. Effects of Best Management Practice on Ecological Condition: Does Location Matter? *Environmental Management*, 57 (5): 1062-1076. 10.1007/s00267-016-0662-x
- Holst, S., 2012. Effects of climate warming on strobilation and ephyra production of North Sea scyphozoan jellyfish. *Hydrobiologia*, 690 (1): 127-140. 10.1007/s10750-012-1043-y
- Holtgrieve, G.W.; Schindler, D.E., 2011. Marine-derived nutrients, bioturbation, and ecosystem metabolism: reconsidering the role of salmon in streams. *Ecology*, 92 (2): 373-385. 10.1890/09-1694.1
- Honti, M., 2015. Controlling River Eutrophication under Conflicts of Interests—A GIS Modeling Approach. *Water*, 7 (9): 5078
- Hopkinson, C.S.; Buffam, I.; Hobbie, J.; Vallino, J.; Perdue, M.; Eversmeyer, B.; Prahl, F.; Covert, J.; Hodson, R.; Moran, M.A.; Smith, E.; Baross, J.; Crump, B.; Findlay, S.; Foreman, K., 1998. Terrestrial inputs of organic matter to coastal ecosystems: An intercomparison of chemical characteristics and bioavailability. *Biogeochemistry*, 43 (3): 211-234. 10.1023/a:1006016030299
- Horne, A.J., 2000. Phytoremediation by constructed wetlands.Ch. 2. In: Terry, N.; Banuelos, G., eds. *Phytoremediation of contaminated soil and water*. CRC Press, 27 p.
- Horne, A.J.; Goldman, C.R., 1994. *Limnology*. United States of America: McGraw –Hill press, 133
- Horowitz, A.J.; Stephens, V.C.; Elrick, K.A.; Smith, J.J., 2012. Concentrations and annual fluxes of sediment-associated chemical constituents from conterminous US coastal rivers using bed sediment data. *Hydrological Processes*, 26 (7): 1090-1114. 10.1002/hyp.8437
- Hosono, T.; Tokunaga, T.; Tsushima, A.; Shimoda, J., 2014. Combined use of delta C-13, delta N-15, and delta S-34 tracers to study anaerobic bacterial processes in groundwater flow systems. *Water Research*, 54: 284-296. 10.1016/j.watres.2014.02.005
- Hosper, S.H., 1985. Restoration of Lake-Veluwe, The Netherlands, by reduction of phosphorus loading and flushing. *Water Science and Technology*, 17 (4-5): 757-768
- Hosper, S.H.; Gulati, R.D.; Van Liere, L.; Roouackers, R.M.M.; Beusen, A.H.W.; Klepper, O.; Meinardi, C.R., 1995. Integrated Water Resources ManagementModelling the flow of nitrogen and phosphorus in Europe: From loads to coastal seas. *Water Science and Technology*, 31 (8): 141-145. 10.1016/0273-1223(95)00364-S

- Hou, G.X.; Song, L.R.; Liu, J.T.; Xiao, B.D.; Liu, Y.D., 2004. Modeling of cyanobacterial blooms in hypereutrophic Lake Dianchi, China. *Journal of Freshwater Ecology*, 19 (4): 623-629. 10.1080/02705060.2004.9664743
- Houghton, J.D.R.; Doyle, T.K.; Davenport, J.; Lilley, M.K.S.; Wilson, R.P.; Hays, G.C., 2007. Stranding events provide indirect insights into the seasonality and persistence of jellyfish medusae (Cnidaria: Scyphozoa). *Hydrobiologia*, 589 (1): 1-13. 10.1007/s10750-007-0572-2
- Houliez, E.; Lizon, F.; Artigas, L.F.; Lefebvre, S.; Schmitt, F.G., 2013. Spatio-temporal variability of phytoplankton photosynthetic activity in a macrotidal ecosystem (the Strait of Dover, eastern English Channel). *Estuarine Coastal and Shelf Science*, 129: 37-48. 10.1016/j.ecss.2013.06.009
- Houot, S.; Pons, M.-N.; Pradel, M., 2014. *Valorisation des matières fertilisantes d'origine résiduaire sur les sols à usage agricole ou forestier. Impacts agronomiques, environnementaux, socio-économiques. Expertise scientifique collective, synthèse du rapport*, INRA, CNRS, IRSTEA 107.
- House, W.A., 2003. Geochemical cycling of phosphorus in rivers. *Applied Geochemistry*, 18 (5): 739-748. 10.1016/s0883-2927(02)00158-0
- Housh, M.; Yaeger, M.A.; Cai, X.; McIsaac, G.F.; Khanna, M.; Sivapalan, M.; Ouyang, Y.; Al-Qadi, I.; Jain, A.K., 2015. Managing Multiple Mandates: A System of Systems Model to Analyze Strategies for Producing Cellulosic Ethanol and Reducing Riverine Nitrate Loads in the Upper Mississippi River Basin. *Environmental Science & Technology*, 49 (19): 11932-11940. 10.1021/acs.est.5b02712
- Houston, J.E.; Sun, H., 1999. Cost-Share Incentives and Best Management Practices in a Pilot Water Quality Program. *Journal of Agricultural and Resource Economics*, 24 (1): 239-252. <http://www.waeaonline.org/publications/jare/recent-issues>
- Houziaux, J.S.; Fettweis, M.; Francken, F.; Van Lancker, V., 2011. Historic (1900) seafloor composition in the Belgian-Dutch part of the North Sea: A reconstruction based on calibrated visual sediment descriptions. *Continental Shelf Research*, 31 (10): 1043-1056. 10.1016/j.csr.2011.03.010
- Howard, A.; Irish, A.E.; Reynolds, C.S., 1996. A new simulation of cyanobacterial underwater movement (SCUM'96). *Journal of Plankton Research*, 18 (8): 1375-1385. 10.1093/plankt/18.8.1375
- Howarth, R.; Chan, F.; Conley, D.J.; Garnier, J.; Doney, S.C.; Marino, R.; Billen, G., 2011. Coupled biogeochemical cycles: eutrophication and hypoxia in temperate estuaries and coastal marine ecosystems. *Frontiers in Ecology and the Environment*, 9 (1): 18-26. 10.1890/100008
- Howarth, R.; Paerl, H.W., 2008. Coastal marine eutrophication: control of both nitrogen and phosphorus is necessary. *Proceedings of the National Academy of Sciences*: Dec 4:pnas-0807266106
- Howarth, R.W., 1988. Nutrient limitation of net primary production in marine ecosystems. *Annual Review of Ecology and Systematics*, 19: 89-110. 10.1146/annurev.es.19.110188.000513
- Howarth, R.W., 2008. Coastal nitrogen pollution: A review of sources and trends globally and regionally. *Harmful Algae*, 8 (1): 14-20. 10.1016/j.hal.2008.08.015
- Howarth, R.W.; Billen, G.; Swaney, D.; Townsend, A.; Jaworski, N.; Lajtha, K.; Downing, J.A.; Elmgren, R.; Caraco, N.; Jordan, T., 1996. Regional nitrogen budgets and riverine N & P fluxes for the drainages to the North Atlantic Ocean: Natural and human influences. *Nitrogen cycling in the North Atlantic Ocean and its watersheds*. Springer, 75-139
- Howarth, R.W.; Billen, G.; Swaney, D.; Townsend, A.; Jaworski, N.; Lajtha, K.; Downing, J.A.; Elmgren, R.; Caraco, N.; Jordan, T.; Berendse, F.; Freney, J.; Kudeyarov, V.; Murdoch, P.; Zhu, Z.L., 1996. Regional nitrogen budgets and riverine N&P fluxes for the drainages to the North Atlantic Ocean: Natural and human influences. *Biogeochemistry*, 35 (1): 75-139. 10.1007/bf02179825
- Howarth, R.W.; Chan, F.; Marino, R., 1999. Do top-down and bottom-up controls interact to exclude nitrogen-fixing cyanobacteria from the plankton of estuaries? An exploration with a simulation model. *Biogeochemistry*, 46 (1-3): 203-231
- Howarth, R.W.; Marino, R., 2006. Nitrogen as the limiting nutrient for eutrophication in coastal marine ecosystems: Evolving views over three decades. *Limnology and Oceanography*, 51 (1): 364-376
- Howarth, R.W.; Swaney, D.P.; Boyer, E.W.; Marino, R.; Jaworski, N.; Goodale, C., 2006. The influence of climate on average nitrogen export from large watersheds in the Northeastern United States. *Biogeochemistry*, 79 (1-2): 163-186. 10.1007/s10533-006-9010-1
- Howarth, R.W.; Swaney, D.P.; Butler, T.J.; Marino, R., 2000. Climatic control on eutrophication of the Hudson River estuary. *Ecosystems*, 3 (2): 210-215. 10.1007/s100210000020
- Howell, P.T.; Molnar, D.R.; Harris, R.B., 1999. Juvenile Winter Flounder Distribution by Habitat Type. *Estuaries*, 22 (4): 1090. 10.2307/1353086
- Hristov, A.N.; Zaman, S.; Pol, M.V.; Ndegwa, P.; Campbell, L.; Silva, S., 2009. Nitrogen Losses from Dairy Manure Estimated Through Nitrogen Mass Balance and Chemical Markers. *Journal of Environmental Quality*, 38 (6): 2438-2448. 10.2134/jeq2009.0057
- Hu, C.; Li, D.; Chen, C.; Ge, J.; Muller-Karger, F.E.; Liu, J.; Yu, F.; He, M.-X., 2010. On the recurrent *Ulva prolifera* blooms in the Yellow Sea and East China Sea. *Journal of Geophysical Research: Oceans (1978-2012)*, 115 (C5):
- Hu, F.J.; Bolding, K.; Bruggeman, J.; Jeppesen, E.; Flindt, M.R.; van Gerven, L.; Janse, J.H.; Janssen, A.B.G.; Kuiper, J.J.; Mooij, W.M.; Trolle, D., 2016. FABM-PCLake - linking aquatic ecology with hydrodynamics. *Geoscientific Model Development*, 9 (6): 2271-2278. 10.5194/gmd-9-2271-2016

- Hu, X.P.; Cai, W.J.; Rabalais, N.N.; Xue, J.H., 2016. Coupled oxygen and dissolved inorganic carbon dynamics in coastal ocean and its use as a potential indicator for detecting water column oil degradation. *Deep-Sea Research Part II-Topical Studies in Oceanography*, 129: 311-318. 10.1016/j.dsr2.2014.01.010
- Hu, Z.X.; Guo, L.Y.; Liu, T.; Chuai, X.M.; Chen, Q.K.; Shi, F.; Jiang, L.J.; Yang, L.Y., 2014. Uniformisation of phytoplankton chlorophyll a and macrophyte biomass to characterise the potential trophic state of shallow lakes. *Ecological Indicators*, 37: 1-9. 10.1016/j.ecolind.2013.10.007
- Huang, J.; Gao, J.; Hoermann, G., 2012. Hydrodynamic-phytoplankton model for short-term forecasts of phytoplankton in Lake Taihu, China. *Limnologica*, 42 (1): 7-18. 10.1016/j.limno.2011.06.003
- Huang, J.; Gao, J.; Hoermann, G.; Fohrer, N., 2014. Modeling the effects of environmental variables on short-term spatial changes in phytoplankton biomass in a large shallow lake, Lake Taihu. *Environmental Earth Sciences*, 72 (9): 3609-3621. 10.1007/s12665-014-3272-z
- Huang, J.; Gao, J.; Xu, Y.; Liu, J., 2015. Towards better environmental software for spatio-temporal ecological models: Lessons from developing an intelligent system supporting phytoplankton prediction in lakes. *Ecological Informatics*, 25 (0): 49-56. 10.1016/j.ecoinf.2014.11.005
- Huang, L.; Smith, M.D.; Craig, J.K., 2010. Quantifying the Economic Effects of Hypoxia on a Fishery for Brown Shrimp Farfantepenaeus aztecus. *Marine and Coastal Fisheries*, 2 (1): 232-248. 10.1577/C09-048.1
- Huang, Z.; Xue, B.; Pang, Y., 2009. Simulation on stream flow and nutrient loadings in Gucheng Lake, Low Yangtze River Basin, based on SWAT model. *Quaternary International*, 208: 109-115. 10.1016/j.quaint.2008.12.018
- Hubert, G.; Deroubaix, J.F., 1999. Evaluation globale d'un outil de planification locale, le SAGE. *Aménagement et Nature*, 134: 7
- Hudnell, H.K., 2010. The state of U.S. freshwater harmful algal blooms assessments, policy and legislation. *Toxicon*, 55 (5): 1024-1034. 10.1016/j.toxicon.2009.07.021
- Hufschmidt, G., 2011. A comparative analysis of several vulnerability concepts. *Natural Hazards*, 58 (2): 621-643. 10.1007/s11069-011-9823-7
- Hughes, A.; Bando, K.; Rodriguez, L.; Williams, S., 2004. Relative effects of grazers and nutrients on seagrasses: a meta-analysis approach. *Marine Ecology Progress Series*, 282 (March 2015): 87-99. 10.3354/meps282087
- Hughes, A.R.; Bando, K.J.; Rodriguez, L.F.; Williams, S.L., 2004. Relative effects of grazers and nutrients on seagrasses: a meta-analysis approach. *Marine Ecology Progress Series*, 282: 87-99. 10.3354/meps282087
- Hughes, B.B.; Eby, R.; Van Dyke, E.; Tinker, M.T.; Marks, C.I.; Johnson, K.S.; Wasson, K., 2013. Recovery of a top predator mediates negative eutrophic effects on seagrass. *Proceedings of the National Academy of Sciences of the United States of America*, 110 (38): 15313-15318. 10.1073/pnas.1302805110
- Hughes, M.; Weiler, B.; Curtis, J., 2012. What's the problem? River management, education, and public beliefs. *Ambio*, 41 (7): 709-19. 10.1007/s13280-012-0282-5
- Hugues, T.; Belwood, D.; Connolly, S.; Cornell, H.; Karlson, R., 2014. Double jeopardy and global extinction risk in corals and reef fishes. *Current biology*. 2946-2951
- Huijbregts, M., 1999. Life-cycle impact assessment of acidifying and eutrophying air pollutants - Calculation of equivalency factors with RAINS-LCA. 40
- Huijbregts, M.A.J.; Schöpp, W.; Verkuijen, E.; Heijungs, R.; Reijnders, L., 2001. Spatially explicit characterization of acidifying and eutrophying air pollution in life-cycle assessment. *Journal of Industrial Ecology*, 4 (3): 75-92. 10.1162/108819800300106393
- Huijbregts, M.A.J.; Seppala, J., 2001. Life cycle impact assessment of pollutants causing aquatic eutrophication. *International Journal of Life Cycle Assessment*, 6 (6): 339-343. 10.1007/bf02978864
- Huisman, J.; Jonker, R.R.; Zonneveld, C.; Weissing, F.J., 1999. Competition for light between phytoplankton species: experimental tests of mechanistic theory. *Ecology*, 80 (1): 211-222
- Huisman, J.; Sommeijer, B., 2002. Population dynamics of sinking phytoplankton in light-limited environments: simulation techniques and critical parameters. *Journal of Sea Research*, 48 (2): 83-96
- Huisman, J.; van Oostveen, P.; Weissing, F.J., 1999. Critical depth and critical turbulence: two different mechanisms for the development of phytoplankton blooms. *Limnology and Oceanography*, 44 (7): 1781-1787
- Huisman, J.; Weissing, F.J., 1999. Biodiversity of plankton by species oscillations and chaos. *Nature*, 402 (6760): 407
- Hull, S.C., 1987. Macroalgal mats and species abundance: a field experiment. *Estuarine, Coastal and Shelf Science*, 25 (5): 519-532. 10.1016/0272-7714(87)90112-0
- Hull, V.; Parrella, L.; Falcucci, M., 2008. Modelling dissolved oxygen dynamics in coastal lagoons. *Ecological Modelling*, 211 (3-4): 468-480. 10.1016/j.ecolmodel.2007.09.023
- Hulot, F.D.; Lacroix, G.; Lescher-Moutoue, F.O.; Loreau, M., 2000. Functional diversity governs ecosystem response to nutrient enrichment. *Nature*, 405 (6784): 340-344. 10.1038/35012591
- Hulth, S.; Aller, R.C.; Gilbert, F., 1999. Coupled anoxic nitrification manganese reduction in marine sediments. *Geochimica Et Cosmochimica Acta*, 63 (1): 49-66. 10.1016/s0016-7037(98)00285-3
- Human, L.R.D.; Adams, J.B.; Allanson, B.R., 2016. Insights into the cause of an *Ulva lactuca* Linnaeus bloom in the Knysna Estuary. *SOUTH AFRICAN JOURNAL OF BOTANY*, 107 (S1): 55-62. 10.1016/j.sajb.2016.05.016
- Humbert, J.-F.; Barbe, V.; Latifi, A.; Gugger, M.; Calteau, A.; Coursin, T.; Lajus, A.; Castelli, V.; Oztas, S.; Samson, G., 2013. A tribute to disorder in the genome of the bloom-forming freshwater cyanobacterium *Microcystis aeruginosa*. *Plos One*, 8 (8): e70747

- Humborg, C.; Fennel, K.; Pastuszak, M.; Fennel, W., 2000. A box model approach for a long-term assessment of estuarine eutrophication, Szczecin Lagoon, southern Baltic. *Journal of Marine Systems*, 25 (3-4): 387-403. 10.1016/s0924-7963(00)00029-4
- Hundey, E.J.; Russell, S.D.; Longstaffe, F.J.; Moser, K.A., 2016. Agriculture causes nitrate fertilization of remote alpine lakes. *Nature Communications*, 7. 10.1038/ncomms10571
- Hunsaker, C.T.; Levine, D.A., 1995. Hierarchical Approaches to the Study of Water Quality in Rivers. *Bioscience*, 45 (3): 193-203. 10.2307/1312558
- Huppert, G., 1988. New Instruments for Environmental Policy: A Perspective. *International Journal of Social Economics*, 15 (3-4): 42-50. 10.1108/eb014102
- Hurd, C.L., 1990. *The physiological ecology of nutrient uptake by intertidal fucoid algae*. PhD. The Queen's University,
- Hussner, A.; Van de Weyer, K.; Gross, E.M.; Hilt, S., 2010. Comments on increasing number and abundance of non-indigenous aquatic macrophyte species in Germany. *Weed Research*, 50 (6): 519-526. 10.1111/j.1365-3180.2010.00812.x
- Husson, B.; Hernandez-Farinés, T.; Le Gendre, R.; Schapira, M.; Chapelle, A., 2016. Two decades of Pseudo-nitzschia spp. blooms and king scallop (*Pecten maximus*) contamination by domoic acid along the French Atlantic and English Channel coasts: Seasonal dynamics, spatial heterogeneity and interannual variability. *Harmful Algae*, 51: 26-39. 10.1016/j.hal.2015.10.017
- Huszar, V.L.M.; Caraco, N.F.; Roland, F.; Cole, J., 2006. Nutrient-chlorophyll relationships in tropical subtropical lakes: do temperate models fit? *Biogeochemistry*, 79 (1-2): 239-250. 10.1007/s10533-006-9007-9
- Hutchins, M.; Elliott, A.; Caillouet, L.; Williams, R., 2013. *Understanding the Effects of Climate Change on Water Quality: a Case-study Assessment on Rivers and Lakes in England*: Centre for Ecology & Hydrology., 29.
- Hutchinson, G., 1967. *A Treatise on Limnology. Introduction to Lake Biology and the Limnoplankton*. New York:
- Hutchinson, G.E., 1961. The paradox of the plankton. *The American Naturalist*, 95 (882): 137-145
- Hutchinson, G.E., 1967. *A treatise on limnology. Introduction to lake biology and the limnoplankton*. New York:
- Hutchinson, G.E., 1973. Marginalia: Eutrophication: The scientific background of a contemporary practical problem. *American Scientist*, 61 (3): 269-279
- Hyacinthe, C.; Anschutz, P.; Carbonel, P.; Jouanneau, J.M.; Jorissen, F.J., 2001. Early diagenetic processes in the muddy sediments of the Bay of Biscay. *Marine Geology*, 177 (1-2): 111-128. 10.1016/s0025-3227(01)00127-x
- Hyacinthe, C.; Van Cappellen, P., 2004. An authigenic iron phosphate phase in estuarine sediments: composition, formation and chemical reactivity. *Marine Chemistry*, 91 (1-4): 227-251. 10.1016/j.marchem.2004.04.006
- Hyytiäinen, K.; Ahlvik, L.; Ahtiainen, H.; Artell, J.; Huhtala, A.; Dahlbo, K., 2015. Policy Goals for Improved Water Quality in the Baltic Sea: When do the Benefits Outweigh the Costs? *Environmental and Resource Economics*, 61 (2): 217-241. 10.1007/s10640-014-9790-z
- Hyytiäinen, K.; Huhtala, A., 2014. Combating eutrophication in coastal areas at risk for oil spills. *Annals of Operations Research*, 219 (1): 101-121. 10.1007/s10479-011-0879-2 10.1007/s10479-009-0674-5; Vesterinen, J., Pouta, E., Huhtala, A., Neuvonen, M., Impacts of changes in water quality on recreation behavior and benefits in Finland (2009) *Journal of Environmental Management*, 91 (4), pp. 984-994
- Ibelings, B.W.; Portielje, R.; Lammens, E.H.R.R.; Noordhuis, R.; van den Berg, M.S.; Joosse, W.; Meijer, M.L., 2007. Resilience of alternative stable states during the recovery of shallow lakes from eutrophication: Lake Veluwe as a case study. *Ecosystems*, 10 (1): 4-16. 10.1007/s10021-006-9009-4
- Ibisch, R.; Austnes, K.; Borchardt, D.; Boteler, B.; Leujak, W.; Lukat, E.; Rouillard, J.; Schmedtje, U.; Solheim, A.L.; Westphal, K., 2017. *European assessment of eutrophication abatement measures across land-based sources, inland, coastal and marine waters*: European Topic Centre on Inland, Coastal and Marine Waters Helmholtz Centre for Environmental Research GmbH – UFZ, Germany, 95 p.
- IEEE/OES US, 2008. IEEE/OES US/EU-Baltic International Symposium 2008
- Leong, I.I.; Lou, I.; Ung, W.K.; Mok, K.M., 2015. Using Principle Component Regression, Artificial Neural Network, and Hybrid Models for Predicting Phytoplankton Abundance in Macau Storage Reservoir. *Environmental Modeling & Assessment*, 20 (4): 355-365. 10.1007/s10666-014-9433-3
- Ifremer Environnement, 2017. eutrophisation.<http://envlit.ifremer.fr/infos/glossaire/e/eutrophisation> [consulté: 16/01/2017]
- Iglesias, C.; Mazzeo, N.; Meerhoff, M.; Lacerot, G.; Clemente, J.M.; Scasso, F.; Kruk, C.; Goyenola, G.; Garcia-Alonso, J.; Amsinck, S.L.; Paggi, J.C.; de Paggi, S.J.; Jeppesen, E., 2011. High predation is of key importance for dominance of small-bodied zooplankton in warm shallow lakes: evidence from lakes, fish exclosures and surface sediments. *Hydrobiologia*, 667 (1): 133-147. 10.1007/s10750-011-0645-0
- Iho, A.; Ribaudo, M.; Hyytiäinen, K., 2015. Water protection in the Baltic Sea and the Chesapeake Bay: Institutions, policies and efficiency. *Marine Pollution Bulletin*, 93 (1-2): 81-93. 10.1016/j.marpolbul.2015.02.011
- Ilnicki, P., 2014. Emissions of nitrogen and phosphorus into rivers from agricultural land – selected controversial issues. *Journal of Water and Land Development*, no. 23: 31-39. 10.1515/jwld-2014-0027
- Imai, I.; Yamaguchi, M.; Hori, Y., 2006. Eutrophication and occurrences of harmful algal blooms in the Seto Inland Sea, Japan. *Plankton and Benthos Research*, 1 (2): 71-84. 10.3800/pbr.1.71
- Imboden, D.M., 1974. Phosphorus model of lake eutrophication: P model of lake eutrophication. *Limnology and Oceanography*, 19 (2): 297-304. 10.4319/lo.1974.19.2.0297
- Imboden, D.M.; Gächter, R., 1978. A dynamic lake model for trophic state prediction. *Ecological Modelling*, 4 (2): 77-98. 10.1016/0304-3800(78)90001-7

- Immers, A.K.; Bakker, E.S.; Van Donk, E.; Ter Heerdt, G.N.J.; Geurts, J.J.M.; Declerck, S.A.J., 2015. Fighting internal phosphorus loading: An evaluation of the large scale application of gradual Fe-addition to a shallow peat lake. *Ecological Engineering*, 83: 78-89. 10.1016/j.ecoleng.2015.05.034
- Immers, A.K.; Van der Sande, M.T.; Van der Zande, R.M.; Geurts, J.J.M.; Van Donk, E.; Bakker, E.S., 2013. Iron addition as a shallow lake restoration measure: impacts on charophyte growth. *Hydrobiologia*, 710 (1): 241-251. 10.1007/s10750-011-0995-7
- Immers, A.K.; Vendrig, K.; Ibelings, B.W.; Van Donk, E.; Ter Heerdt, G.N.J.; Geurts, J.J.M.; Bakker, E.S., 2014. Iron addition as a measure to restore water quality: Implications for macrophyte growth. *Aquatic Botany*, 116: 44-52. 10.1016/j.aquabot.2014.01.007
- Inf'ODE. Bulletin de liaison de l'Observatoire Départemental de l'Environnement: Eutrophisation et marées vertes - Avis du Conseil scientifique.
- Ingela, M.B.W., 1990. Expecting the Unexpected: Some Ancient Roots to Current Perceptions of Nature. *Ambio*, 19 (2): 62-69
- Inkala, A.; Hellsten, S.; Heikkilä, M., 1998. Integrated 3D modelling of water circulation and the dynamics of phytoplankton; the effects of a planned reservoir. *International Review of Hydrobiology*, 83: 681-688
- Institute, T.S.E., 1990. "Forward to 1950": Policy Considerations for the Baltic Environment. *Ambio*: 21-24
- Invidia, M.; Sei, S.; Gorbi, G., 2004. Survival of the copepod *Acartia tonsa* following egg exposure to near anoxia and to sulfide at different pH values. *Marine Ecology Progress Series*, 276: 187-196. 10.3354/meps276187
- Irigoinen, X.; Castel, J., 1997. Light limitation and distribution of chlorophyll pigments in a highly turbid estuary: the Gironde (SW France). *Estuarine, Coastal and Shelf Science*, 44 (4): 507-517
- Ironside, G., 2001. *Nutrients in the Canadian Environment: Reporting on the State of Canada's Environment*. Environment Canada
- Isaacson, R.L.; Blum, M.L., 1967. *Psychology: the science of behavior*. Harper & Row
- Isaksson, I.; Montfransb, V., 1994. Eutrophication-related changes in macrovegetation and foraging of young cod (*Gadus morhua* L.): a mesocosm experiment \*. (93):
- Isaksson, I.; Pihl, L., 1992. Structural changes in benthic macrovegetation and associated epibenthic faunal communities. *Netherlands Journal of Sea Research*, 30: 131-140. 10.1016/0077-7579(92)90052-g
- Isaksson, I.; Pihl, L.; Vanmontfrans, J., 1994. Eutrophication-related changes in macrovegetation and foraging of young cod (*gadus-morhua* l) - a mesocosm experiment. *Journal of Experimental Marine Biology and Ecology*, 177 (2): 203-217. 10.1016/0022-0981(94)90237-2
- Isermann, K., 1990. Share of agriculture in nitrogen and phosphorus emissions into the surface waters of Western Europe against the background of their eutrophication. *Fertilizer Research*, 26 (1-3): 253-269
- Isermann, K., 1990. Share of agriculture in nitrogen and phosphorus emissions into the surface waters of western-europe against the background of their eutrophication. *Fertilizer Research*, 26 (1-3): 253-269. 10.1007/bf01048764
- Ishikawa, N.F.; Togashi, H.; Kato, Y.; Yoshimura, M.; Kohmatsu, Y.; Yoshimizu, C.; Ogawa, N.O.; Ohte, N.; Tokuchi, N.; Ohkouchi, N.; Tayasu, I., 2016. Terrestrial-aquatic linkage in stream food webs along a forest chronosequence: multi-isotopic evidence. *Ecology*, 97 (5): 1146-1158. 10.1890/15-1133.1
- ISO, 2006. Environmental management - Life cycle assessment - Principles and framework. EN ISO 14040:2006 International Organization for Standardization.
- ISO, 2006. Environmental management - Life cycle assessment - Requirements and guidelines. EN ISO 14044:2006 International Organization for Standardization.
- Ison, R.; Röling, N.G.; Watson, D., 2007. Challenges to science and society in the sustainable management and use of water: investigating the role of social learning. *Environmental Science & Policy*, 10 (6): 499-511. 10.1016/j.envsci.2007.02.008
- Iwasa, Y.; Uchida, T.; Yokomizo, H., 2007. Nonlinear Behavior of the Socio-Economic Dynamics for Lake Eutrophication Control. *Ecological Economics*, 63 (1): 219-229. 10.1016/j.ecolecon.2006.11.003
- Jacinthe, P.A.; Groffman, P.M.; Gold, A.J.; Mosier, A., 1998. Patchiness in microbial nitrogen transformations in groundwater in a riparian forest. *Journal of Environmental Quality*, 27 (1): 156-164
- Jack, B., 2006. Tackling eutrophication: The implications of a precautionary approach. *European Environmental Law Review*, 15 (12): 14
- Jack, B., 2006. Tackling Eutrophication: The Implications of a Precautionary Approach. *Eur. Envtl. L. Rev.*, 15: 354
- Jackson, J.B.C.; Kirby, M.X.; Berger, W.H.; Bjorndal, K.A.; Botsford, L.W.; Bourque, B.J.; Bradbury, R.H.; Cooke, R.; Erlandson, J.; Estes, J.A.; Hughes, T.P.; Kidwell, S.; Lange, C.B.; Lenihan, H.S.; Pandolfi, J.M.; Peterson, C.H.; Steneck, R.S.; Tegner, M.J.; Warner, R.R., 2001. Historical overfishing and the recent collapse of coastal ecosystems. *Science*, 293 (5530): 629-638. 10.1126/science.1059199
- Jackson, L.E.; Rashleigh, B.; McDonald, M.E., 2012. Economic Value of Stream Degradation across the Central Appalachians. *Journal of Regional Analysis and Policy*, 42 (3): 188-197. [http://www.irap-journal.org/pastvolumes/most\\_recent.htm](http://www.irap-journal.org/pastvolumes/most_recent.htm)
- Jackson, R.B.; Mooney, H.A.; Schulze, E.D., 1997. A global budget for fine root biomass, surface area, and nutrient contents. *Proceedings of the National Academy of Sciences of the United States of America*, 94 (14): 7362-7366. 10.1073/pnas.94.14.7362
- Jacoby, C.A.; Frazer, T.K., 2009. Eutrophication: Time to Adjust Expectations. *Science*, 324 (5928): 723-724
- Jacquet, S.; Briand, J.-F.; Leboulanger, C.; Avois-Jacquet, C.; Oberhaus, L.; Tassin, B.; Vinçon-Leite, B.; Paolini, G.; Druart, J.-C.; Anneville, O., 2005. The proliferation of the toxic cyanobacterium *Planktothrix rubescens* following restoration of the largest natural French lake (Lac du Bourget). *Harmful Algae*, 4 (4): 651-672

- Jahnke, R.A.; Craven, D.B.; Gaillard, J.F., 1994. The influence of organic-matter diagenesis on caco3 dissolution at the deep-sea floor. *Geochimica Et Cosmochimica Acta*, 58 (13): 2799-2809. 10.1016/0016-7037(94)90115-5
- Jahnke, R.A.; Emerson, S.R.; Roe, K.K.; Burnett, W.C., 1983. The present-day formation of apatite in mexican continental-margin sediments. *Geochimica Et Cosmochimica Acta*, 47 (2): 259-266. 10.1016/0016-7037(83)90138-2
- Jaisi, D.P.; Blake, R.E., 2010. Tracing sources and cycling of phosphorus in Peru Margin sediments using oxygen isotopes in authigenic and detrital phosphates. *Geochimica Et Cosmochimica Acta*, 74 (11): 3199-3212. 10.1016/j.gca.2010.02.030
- Jakobsen, T.S.; Hansen, P.B.; Jeppesen, E.; Sondergaard, M., 2004. Cascading effect of three-spined stickleback *Gasterosteus aculeatus* on community composition, size, biomass and diversity of phytoplankton in shallow, eutrophic brackish lagoons. *Marine Ecology Progress Series*, 279: 305-309. 10.3354/meps279305
- James, C.; Fisher, J.; Russell, V.; Collings, S.; Moss, B., 2005. Nitrate availability and hydrophyte species richness in shallow lakes. *Freshwater Biology*, 50 (6): 1049-1063. 10.1111/j.1365-2427.2005.01375.x
- Janssen, A.B.; Teurlincx, S.; An, S.; Janse, J.H.; Paerl, H.W.; Mooij, W.M., 2014. Alternative stable states in large shallow lakes? *Journal of Great Lakes Research*, 40 (4): 813-826
- Janssen, H.; Schroder, T.; Zettler, M.L.; Pollehne, F., 2015. Offshore wind farms in the southwestern Baltic Sea: A model study of regional impacts on oxygen conditions. *Journal of Sea Research*, 95: 248-257. 10.1016/j.seares.2014.05.001
- Janvier, C.; Roy, A., 2001. *La préoccupation des Français pour la qualité de l'eau*.
- Jarvie, H.; Sharpley, A.; Withers, P.; Thad Scott, J.; Haggard, B.; Neal, C., 2013. *Phosphorus Mitigation to Control River Eutrophication: Murky Waters, Inconvenient Truths, and "Postnormal" Science*. 10.2134/jeq2012.0085
- Jarvie, H.P.; Neal, C.; Withers, P.J.A., 2006. Sewage-effluent phosphorus: A greater risk to river eutrophication than agricultural phosphorus? *Science of the Total Environment*, 360 (1-3): 246-253. 10.1016/j.scitotenv.2005.08.038
- Jarvie, H.P.; Sharpley, A.N.; Spears, B.; Buda, A.R.; May, L.; Kleinman, P.J.A., 2013. Water Quality Remediation Faces Unprecedented Challenges from "Legacy Phosphorus". *Environmental Science & Technology*, 47 (16): 8997-8998. 10.1021/es403160a
- Jarvie, H.P.; Wade, A.J.; Butterfield, D.; Whitehead, P.G.; Tindall, C.I.; Virtue, W.A.; Dryburgh, W.; McGraw, A., 2002. Modelling nitrogen dynamics and distributions in the River Tweed, Scotland: an application of the INCA model. *Hydrology and Earth System Sciences*, 6 (3): 433-453
- Jaschinski, S.; Floder, S.; Petenati, T.; Gobel, J., 2015. Effects of nitrogen concentration on the taxonomic and functional structure of phytoplankton communities in the Western Baltic Sea and implications for the European water framework directive. *Hydrobiologia*, 745 (1): 201-210. 10.1007/s10750-014-2109-9
- Jasechko, S.; Kirchner, J.W.; Welker, J.M.; McDonnell, J.J., 2016. Substantial proportion of global streamflow less than three months old. *Nature Geoscience*, 9 (2): 126-. 10.1038/ngeo2636
- Javanaud, C.; Michotey, V.; Guasco, S.; Garcia, N.; Anschutz, P.; Canton, M.; Bonin, P., 2011. Anaerobic ammonium oxidation mediated by Mn-oxides: from sediment to strain level. *Research in Microbiology*, 162 (9): 848-857. 10.1016/j.resmic.2011.01.011
- Jedelhauser, M.; Binder, C.R., 2015. Losses and efficiencies of phosphorus on a national level – A comparison of European substance flow analyses. *Resources, Conservation and Recycling*, 105: 294-310. 10.1016/j.resconrec.2015.09.021
- Jégo, G.; Martinez, M.; Antigüedad, I.; Launay, M.; Sanchez-Pérez, J.-M.; Justes, E., 2008. Evaluation of the impact of various agricultural practices on nitrate leaching under the root zone of potato and sugar beet using the STICS soil–crop model. *Science of the Total Environment*, 394 (2): 207-221
- Jégo, G.; Sánchez-Pérez, J.M.; Justes, E., 2012. Predicting soil water and mineral nitrogen contents with the STICS model for estimating nitrate leaching under agricultural fields. *Agricultural Water Management*, 107: 54-65. 10.1016/j.agwat.2012.01.007
- Jenny, J.P.; Arnaud, F.; Dorioz, J.M.; Covex, C.G.; Frossard, V.; Sabatier, P.; Millet, L.; Reys, J.L.; Tachikawa, K.; Bard, E.; Pignol, C.; Soufi, F.; Romeyer, O.; Perga, M.E., 2013. A spatiotemporal investigation of varved sediments highlights the dynamics of hypolimnetic hypoxia in a large hard-water lake over the last 150 years. *Limnology and Oceanography*, 58: 1395-1408. 10.4319/lo.2013.58.4.1395
- Jensen, H.S.; Mortensen, P.B.; Andersen, F.O.; Rasmussen, E.; Jensen, A., 1995. Phosphorus cycling in a coastal marine sediment, aarhus bay, denmark. *Limnology and Oceanography*, 40 (5): 908-917
- Jensen, H.S.; Thamdrup, B., 1993. Iron-bound phosphorus in marine-sediments as measured by bicarbonate-dithionite extraction. *Hydrobiologia*, 253 (1-3): 47-59. 10.1007/bf00050721
- Jensen, S.I.; Kuhl, M.; Glud, R.N.; Jorgensen, L.B.; Prieme, A., 2005. Oxic microzones and radial oxygen loss from roots of *Zostera marina*. *Marine Ecology Progress Series*, 293: 49-58. 10.3354/meps293049
- Jentoft, S., 2007. Limits of governability: Institutional implications for fisheries and coastal governance. *Marine Policy*, 31: 10. 10.1016/j.marpol.2006.11.003
- Jeppesen, E.; Jensen, J.P.; Jensen, C.; Faafeng, B.; Hessen, D.O.; Sondergaard, M.; Lauridsen, T.; Brettm, P.; Christoffersen, K., 2003. The impact of nutrient state and lake depth on top-down control in the pelagic zone of lakes: A study of 466 lakes from the temperate zone to the arctic. *Ecosystems*, 6 (4): 313-325. 10.1007/s10021-002-0145-1
- Jeppesen, E.; Kronvang, B.; Meerhoff, M.; Søndergaard, M.; Hansen, K.M.; Andersen, H.E.; Lauridsen, T.L.; Liboriussen, L.; Beklioglu, M.; Özen, A., 2009. Climate change effects on runoff, catchment phosphorus loading and lake ecological state, and potential adaptations. *Journal of Environmental Quality*, 38 (5): 1930-1941
- Jeppesen, E.; Kronvang, B.; Olesen, J.E.; Audet, J.; Sondergaard, M.; Hoffmann, C.C.; Andersen, H.E.; Lauridsen, T.L.; Liboriussen, L.; Larsen, S.E.; Beklioglu, M.; Meerhoff, M.; Ozen, A.; Ozkan, K., 2011. Climate change effects on nitrogen loading

- from cultivated catchments in Europe: implications for nitrogen retention, ecological state of lakes and adaptation. *Hydrobiologia*, 663 (1): 1-21. 10.1007/s10750-010-0547-6
- Jeppeesen, E.; Meerhoff, M.; Davidson, T.A.; Trolle, D.; Sondergaard, M.; Lauridsen, T.L.; Beklioglu, M.; Brucet Balmaña, S.; Volta, P.; González-Bergonzoni, I., 2014. Climate change impacts on lakes: an integrated ecological perspective based on a multi-faceted approach, with special focus on shallow lakes. *Journal of Limnology*, 73 (s1): 84-107
- Jeppeesen, E.; Meerhoff, M.; Holmgren, K.; Gonzalez-Bergonzoni, I.; Teixeira-de Mello, F.; Declerck, S.A.J.; De Meester, L.; Sondergaard, M.; Lauridsen, T.L.; Bjerring, R.; Conde-Porcuna, J.M.; Mazzeo, N.; Iglesias, C.; Reizenstein, M.; Malmquist, H.J.; Liu, Z.W.; Balayla, D.; Lazzaro, X., 2010. Impacts of climate warming on lake fish community structure and potential effects on ecosystem function. *Hydrobiologia*, 646 (1): 73-90. 10.1007/s10750-010-0171-5
- Jeppeesen, E.; Mehner, T.; Winfield, I.J.; Kangur, K.; Sarvala, J.; Gerdeaux, D.; Rask, M.; Malmquist, H.J.; Holmgren, K.; Volta, P.; Romo, S.; Eckmann, R.; Sandström, A.; Blanco, S.; Kangur, A.; Ragnarsson Stabo, H.; Tarvainen, M.; Ventelä, A.-M.; Søndergaard, M.; Lauridsen, T.L.; Meerhoff, M., 2012. Impacts of climate warming on the long-term dynamics of key fish species in 24 European lakes. *Hydrobiologia*, 694 (1): 1-39. 10.1007/s10750-012-1182-1
- Jeppeesen, E.; Peder Jensen, J.; Søndergaard, M.; Lauridsen, T.; Landkildehus, F., 2000. Trophic structure, species richness and biodiversity in Danish lakes: changes along a phosphorus gradient. *Freshwater Biology*, 45 (2): 201-218
- Jeppeesen, E.; Sondergaard, M.; Kanstrup, E.; Petersen, B.; Eriksen, R.B.; Hammershoj, M.; Mortensen, E.; Jensen, J.P.; Have, A., 1994. Does the impact of nutrients on the biological structure and function of brackish and fresh-water lakes differ. *Hydrobiologia*, 275: 15-30
- Jeppeesen, E.; Sondergaard, M.; Kronvang, B.; Jensen, J.P.; Svendsen, L.M.; Lauridsen, T.L., 1999. Lake and catchment management in Denmark. *Hydrobiologia*, 395: 419-432. 10.1023/a:1017071602549
- Jeppeesen, E.; Sondergaard, M.; Lauridsen, T.L.; Davidson, T.A.; Liu, Z.W.; Mazzeo, N.; Trochine, C.; Ozkan, K.; Jensen, H.S.; Trolle, D.; Starling, F.; Lazzaro, X.; Johansson, L.S.; Bjerring, R.; Liboriussen, L.; Larsen, S.E.; Landkildehus, F.; Egemose, S.; Meerhoff, M., 2012. Biomanipulation as a restoration tool to combat eutrophication: Recent advances and future challenges. In: Woodward, G.; Jacob, U.; Ogorman, E.J., eds. *Advances in Ecological Research, Vol 47: Global Change in Multispecies Systems, Pt 2*. San Diego: Elsevier Academic Press Inc (Advances in Ecological Research), Vol.47, 411-488. 10.1016/b978-0-12-398315-2.00006-5
- Jeppeesen, E.; Søndergaard, M.; Liu, Z., 2017. Lake Restoration and Management in a Climate Change Perspective: An Introduction. *Water*, 9 (2): 122
- Jeppeesen, E.; Sondergaard, M.; Meerhoff, M.; Lauridsen, T.L.; Jensen, J.P., 2007. Shallow lake restoration by nutrient loading reduction - some recent findings and challenges ahead. *Hydrobiologia*, 584: 239-252. 10.1007/s10750-007-0596-7
- Jeppeesen, E.; Sondergaard, M.; Sondergaard, M.; Christoffersen, K., 1998. *The Structuring Role of Submerged Macrophytes in Lakes*. New York: Springer (Ecological Studies)
- Jesinghaus, J., 1999. A European System of Environmental Pressure Indices, First Volume of the Environmental Pressure Indices Handbook." The Indicators Part I." Introduction to the political and theoretical background. *Sustainable development in Europe*.
- Jetoo, S.; Grover, V.; Krantzberg, G., 2015. The Toledo Drinking Water Advisory: Suggested Application of the Water Safety Planning Approach. *Sustainability*, 7 (8): 9787
- Jetten, M.S.M.; Logemann, S.; Muyzer, G.; Robertson, L.A.; deVries, S.; vanLoosdrecht, M.C.M.; Kuennen, J.G., 1997. Novel principles in the microbial conversion of nitrogen compounds. *Antonie Van Leeuwenhoek International Journal of General and Molecular Microbiology*, 71 (1-2): 75-93. 10.1023/a:1000150219937
- Jetten, V.; de Roo, A.; Favis-Mortlock, D., 1999. Evaluation of field-scale and catchment-scale soil erosion models. *Catena*, 37 (3-4): 521-541. 10.1016/s0341-8162(99)00037-5
- Jha, M.; Gassman, P.W.; Secchi, S.; Gu, R.; Arnold, J., 2004. Effect of watershed subdivision on swat flow, sediment, and nutrient predictions. *Journal of the American Water Resources Association*, 40 (3): 811-825. 10.1111/j.1752-1688.2004.tb04460.x
- Ji, Z.G.; Jin, K.R., 2016. An integrated environmental model for a surface flow constructed wetland: Water quality processes. *Ecological Engineering*, 86: 247-261. 10.1016/j.ecoleng.2015.09.018
- Jiang, Z.B.; Liu, J.J.; Chen, J.F.; Chen, Q.Z.; Yan, X.J.; Xuan, J.L.; Zeng, J.N., 2014. Responses of summer phytoplankton community to drastic environmental changes in the Changjiang (Yangtze River) estuary during the past 50 years. *Water Research*, 54: 1-11. 10.1016/j.watres.2014.01.032
- Jiao, H.P.; Yan, T.; McDowell, D.A., 2014. Prediction of manure nitrogen and organic matter excretion for young Holstein cattle fed on grass silage-based diets. *Journal of Animal Science*, 92 (7): 3042-3052. 10.2527/jas.2013-7552
- Jie, X.; Xiaohong, Z.; Chunlei, G.; Meijie, J.; Ruixiang, L.; Zongling, W.; Yan, L.; Shiliang, F.; Xuelei, Z., 2016. Effect of temperature, salinity and irradiance on growth and photosynthesis of *Ulva prolifera*. *Acta Oceanologica Sinica*, 35 (10): 114–121. 10.1007/s13131-016-0891-0
- Jiménez, A.; Mateos, A.; Bryhn, A.C., 2011. Selecting intervention strategies against eutrophication and the drastic decrease in bird abundance in Ringkøbing Fjord. *TOP*, 19 (2): 448-463. 10.1007/s11750-010-0136-x
- Jin, C.L.; Liang, Y.H.; Liu, S.Y.; Wu, S.; Qian, X.Q.; Zhou, X.J., 2015. The pulmonata snail *Lymnaea* is a potential biomanipulation species for use against cyanobacteria blooms. *Journal of Freshwater Ecology*, 30 (4): 479-490. 10.1080/02705060.2014.979377
- Jin, D.; Hoagland, P., 2008. The value of harmful algal bloom predictions to the nearshore commercial shellfish fishery in the Gulf of Maine. *Harmful Algae*, 7 (6): 772-781. 10.1016/j.hal.2008.03.002

- Jin, D.; Thunberg, E.; Hoagland, P., 2008. Economic impact of the 2005 red tide event on commercial shellfish fisheries in New England. *Ocean & Coastal Management*, 51 (5): 420-429. 10.1016/j.ocecoaman.2008.01.004
- Jing, S.R.; Lin, Y.F.; Lee, D.Y.; Wang, T.W., 2001. Nutrient removal from polluted river water by using constructed wetlands. *Bioresource Technology*, 76 (2): 131-135. 10.1016/s0960-8524(00)00100-0
- Jobling, S.; Coey, S.; Whitmore, J.G.; Kime, D.E.; Van Look, K.J.W.; McAllister, B.G.; Beresford, N.; Henshaw, A.C.; Brighty, G.; Tyler, C.R.; Sumpter, J.P., 2002. Wild intersex roach (*Rutilus rutilus*) have reduced fertility. *Biology of Reproduction*, 67 (2): 515-524. 10.1093/biolreprod67.2.515
- Jöborn, A.; Danielsson, I.; Arheimer, B.; Jonsson, A.C.; Larsson, M.H.; Lundqvist, L.J.; Löwgren, M.; Tonderski, K., 2005. Integrated Water Management for Eutrophication Control: Public Participation, Pricing Policy, and Catchment Modeling. *Ambio*, 34 (7): 482-488. 10.1579/0044-7447-34.7.482
- Jodelet, D., 2003. *Les représentations sociales*. Presses universitaires de France
- Johansson, G.; Eriksson, B.K.; Pedersén, M.; Snoeijs, P., 1998. *Hydrobiologia*, 385 (1/3): 121-138. 10.1023/a:1003405826222
- Johnes, P.J., 1996. Evaluation and management of the impact of land use change on the nitrogen and phosphorus load delivered to surface waters: The export coefficient modelling approach. *Journal of Hydrology*, 183 (3-4): 323-349. 10.1016/0022-1694(95)02951-6
- Johnk, K.D.; Huisman, J.; Sharples, J.; Sommeijer, B.; Visser, P.M.; Stroom, J.M., 2008. Summer heatwaves promote blooms of harmful cyanobacteria. *Global Change Biology*, 14 (3): 495-512. 10.1111/j.1365-2486.2007.01510.x
- Johnson, D.A.; Welsh, B.L., 1985. Detrimental effects of *Ulva lactuca* (L.) exudates and low oxygen on estuarine crab larvae. *Journal of Experimental Marine Biology and Ecology*, 86 (1): 73-83. 10.1016/0022-0981(85)90043-7
- Johnson, D.S., 2011. High-marsh invertebrates are susceptible to eutrophication. *Marine Ecology Progress Series*, 438: 143-152. 10.3354/meps09306
- Johnson, G.V., 1991. General model for predicting crop response to fertilizer. *Agronomy Journal*, 83 (2): 367-373
- Johnston, J.M., 2001. A scientific and technological framework for evaluating comparative risk in ecological risk assessments. In: Linders, J.B.H., ed. *Modelling of Environmental Chemical Exposure and Risk*. (NATO Science Series IV-Earth and Environmental Sciences), Vol.2, 133-150
- Johnston, J.M.; Novak, J.H.; Kraemer, S.R., 2000. Multimedia integrated modeling for environmental protection: Introduction to a collaborative framework. *Environmental Monitoring and Assessment*, 63 (1): 253-263. 10.1023/a:1006464407117
- Johnston, M.W.; Purkis, S.J.; Dodge, R.E., 2015. Measuring Bahamian lionfish impacts to marine ecological services using habitat equivalency analysis. *Marine Biology*, 162 (12): 2501-2512. 10.1007/s00227-015-2745-2
- Joint, I.; Pomroy, A., 1981. Primary production in a turbid estuary. *Estuarine, Coastal and Shelf Science*, 13 (3): 303-316
- Jokinen, H.; Wennhage, H.; Ollus, V.; Aro, E.; Norkko, A., 2016. Juvenile flatfish in the northern Baltic Sea — long-term decline and potential links to habitat characteristics. *Journal of Sea Research*, 107, Part 1: 67-75. 10.1016/j.seares.2015.06.002
- Jokinen, P., 2000. Advanced industrial countries: Europeanisation and ecological modernisation: agri-environmental policy and practices in Finland. *Environmental Politics*, 9 (1): 29
- Jompa, J.; McCook, L.J., 2003. Coral-algal competition: macroalgae with different properties have different effects on corals. *Marine Ecology Progress Series*, 258: 87-95. 10.3354/meps258087
- Jones, I.D.; Elliott, J.A., 2007. Modelling the effects of changing retention time on abundance and composition of phytoplankton species in a small lake. *Freshwater Biology*, 52 (6): 988-997. 10.1111/j.1365-2427.2007.01746.x
- Jones, J.B.; Mulholland, P.J., 2000. *Streams and Ground Waters - 1st Edition*. New York.: Elsevier
- Jones, J.I.; Collins, A.L.; Naden, P.S.; Sear, D.A., 2012. The relationship between fine sediment and macrophytes in rivers. *River Research and Applications*, 28 (7): 1006-1018. 10.1002/rra.1486
- Jones, J.I.; Sayer, C.D., 2003. Does the fish-invertebrate-periphyton cascade precipitate plant loss in shallow lakes? *Ecology (Washington D C)*, 84 (8): 2155-2167
- Jones, J.R.; Borofka, B.P.; Bachmann, R.W., 1976. Factors affecting nutrient loads in some iowa streams. *Water Research*, 10 (2): 117-122. 10.1016/0043-1354(76)90109-3
- Jones, M.; Pinn, E., 2006. The impact of a macroalgal mat on benthic biodiversity in Poole Harbour. *Marine Pollution Bulletin*, 53 (1-4): 63-71. 10.1016/j.marpolbul.2005.09.018
- Jonge, V.N.d.; Elliott, M.; Orive, E., 2002. Causes, historical development, effects and future challenges of a common environmental problem: eutrophication. *Hydrobiologia*, 475/476 (1-19):
- Jönsson, A.M., 2011. Framing environmental risks in the baltic sea: A news media analysis. *Ambio*, 40 (2): 121-132. 10.1007/s13280-010-0124-2
- Jönsson, H.; Bak, A.; Jeppsson, U.; Hellström, D.; Karrman, E., 2005. *Composition of urine, faeces, greywater and biowaste for utilisation in the URWARE model*. The Mistra Programme Urban Water: Chalmers University of Technology 49.
- Jonssona, A.C.; Andersson, L.; Olssonc, J.A.; Johansson, M., 2011. Defining goals in participatory water management: Merging local visions and expert judgements. *Journal of Environmental Planning and Management*, 54 (7): 909-935. 10.1080/09640568.2010.541738
- Jordan, P.; Haygarth, P.M.; Shortle, G.; Harris, R.C., 2012. Catchment science and policy for agriculture and water quality. *Environmental Science and Policy*, 24: 1-3. 10.1016/j.envsci.2012.09.009
- Jordan-Meille, L.; Dorioz, J.M., 2004. Soluble phosphorus dynamics in an agricultural watershed. *Agronomie*, 24 (5): 237-248
- Jordan-Meille, L.; Dorioz, J.-M.; Wang, D., 1998. Analysis of the export of diffuse phosphorus from a small rural watershed. *Agronomie*, 18: 5-26

- Jordan-Meille, L.; Rubaek, G.H.; Ehlert, P.A.I.; Genot, V.; Hofman, G.; Goulding, K.; Recknagel, J.; Provolo, G.; Barraclough, P., 2012. An overview of fertilizer-P recommendations in Europe: soil testing, calibration and fertilizer recommendations: <i>P</i> fertilizer methods in Europe</i>. *Soil Use and Management*, 28 (4): 419-435. 10.1111/j.1475-2743.2012.00453.x
- Jorgensen, B.B., 1982. Mineralization of organic-matter in the sea bed - the role of sulfate reduction. *Nature*, 296 (5858): 643-645. 10.1038/296643a0
- Jorgensen, N.O.G.; Klausen, C., 2012. Effects of traditional rainbow trout (*Oncorhynchus mykiss*) breeding on dissolved organic nitrogen pools and microbial activity in the water. *Aquaculture Research*, 44 (1): 125-139. 10.1111/j.1365-2109.2011.03017.x
- Jorgensen, P.; Ibarra-Obando, S.E.; Carriquiry, J.D., 2010. Management of natural *Ulva* spp. blooms in San Quintin Bay, Baja California: Is it justified? *Journal of Applied Phycology*, 22 (5): 549-558. 10.1007/s10811-009-9491-0
- Jørgensen, S.E., 1976. A eutrophication model for a lake. *Ecological Modelling*, 2 (2): 147-165. 10.1016/0304-3800(76)90030-2
- Jørgensen, S.E., 2010. A review of recent developments in lake modelling. *Ecological Modelling*, 221: 689-692. DOI: 10.1016/j.ecolmodel.2009.10.022
- Jorgensen, S.E.; Bendoricchio, G., 2001. *Fundamentals of Ecological Modelling, Volume 21 - 4th Edition*. Amsterdam: Elsevier
- Jude, D.J.; DeBoe, S.F., 1996. Possible impact of gobies and other introduced species on habitat restoration efforts. *Canadian Journal of Fisheries and Aquatic Sciences*, 53: 136-141. 10.1139/cjfas-53-S1-136
- Julien, P.; Simons, D.B.; Li, R.M., 1984. IMPINGEMENT OF WATER JETS ON NONUNIFORM STREAM BED - DISCUSSION. *Journal of Hydraulic Engineering-Asce*, 110 (6): 861-863
- Justic, D.; Bierman, V.; Scavia, D.; Hetland, R., 2007. Forecasting Gulf's hypoxia: The next 50 years? *Estuaries and Coasts*, 30 (5): 791-801
- Justic, D.; Bierman, V.J., Jr.; Scavia, D.; Hetland, R.D., 2007. Forecasting Gulf's hypoxia: The next 50 years? *Estuaries and Coasts*, 30 (5): 791-801
- Justic, D.; Legovic, T.; Rottinisandrini, L., 1987. Trends in oxygen-content 1911-1984 and occurrence of benthic mortality in the northern adriatic sea. *Estuarine Coastal and Shelf Science*, 25 (4): 435-445. 10.1016/0272-7714(87)90035-7
- Justic, D.; Rabalais, N.; Turner, R., 2003. Simulated responses of the Gulf of Mexico hypoxia to variations in climate and anthropogenic nutrient loading. *Journal of Marine Systems*, 42 (3-4): 115-126. 10.1016/S0924-7963(03)00070-8
- Justic, D.; Rabalais, N.N.; Turner, R.E., 1996. Effects of climate change on hypoxia in coastal waters: A doubled CO<sub>2</sub> scenario for the northern Gulf of Mexico. *Limnology and Oceanography*, 41 (5): 992-1003
- Justic, D.; Rabalais, N.N.; Turner, R.E., 2002. Modeling the impacts of decadal changes in riverine nutrient fluxes on coastal eutrophication near the Mississippi River Delta. *Ecological Modelling*, 152 (1): 33-46. 10.1016/s0304-3800(01)00472-0
- Justic, D.; Rabalais, N.N.; Turner, R.E., 2005. Coupling between climate variability and coastal eutrophication: Evidence and outlook for the northern Gulf of Mexico. *Journal of Sea Research*, 54 (1): 25-35. 10.1016/j.seares.2005.02.008
- Justić, D.; Rabalais, N.N.; Turner, R.E., 1995. Stoichiometric nutrient balance and origin of coastal eutrophication. *Marine Pollution Bulletin*, 30 (1): 41-46
- Kabanov, P.B., 2009. Benthic carbonate facies of the Phanerozoic: Review and example from the carboniferous of the Russian platform. *Stratigraphy and Geological Correlation*, 17 (5): 493-509. 10.1134/s0869593809050037
- Kadlec, R.H.; Knight, R.L., 1996. *Treatment wetlands*. Boca Raton: Lewis Publishers
- Kahn, J.R., 1988. Measuring the economic effects of brown tides. *Journal of Shellfish Research*, 7 (1): 165
- Kaiser, J., 1999. Battle Over a Dying Sea. *Science*, 284 (5411): 28-30
- Kaku, K.; Ikeguchi, A.; Ogino, A.; Osada, T.; Hojito, M.; Shimada, K., 2004. Achieving a nitrogen balance for Japanese domestic livestock waste: Testing the scenario of planting feed grain in land left fallow. *Asian-Australasian Journal of Animal Sciences*, 17 (7): 1026-1032
- Kaldy, J.E.; Dunton, K.H.; Kowalski, J.L.; Lee, K.S., 2004. Factors controlling seagrass revegetation onto dredged material deposits: A case study in Lower Laguna Madre, Texas. *Journal of Coastal Research*, 20 (1): 292-300. 10.2112/1551-5036(2004)20[292:fcsrod]2.0.co;2
- Kamer, K.; Boyle, K.A.; Fong, P., 2001. Macroalgal bloom dynamics in a highly eutrophic southern California estuary. *Estuaries*, 24 (4): 623-635. 10.2307/1353262
- Kamer, K.; Fong, P., 2001. Nitrogen enrichment ameliorates the negative effects of reduced salinity on the green macroalga *Enteromorpha intestinalis*. *Marine Ecology Progress Series*, 218: 87-93. 10.3354/meps218087
- Kamer, K.; Fong, P.; Kennison, R.; Schiff, K., 2004. Nutrient limitation of the macroalga *Enteromorpha intestinalis* collected along a resource gradient in a highly eutrophic estuary. *Estuaries*, 27 (2): 201-208. 10.1007/bf02803377
- Kamermans, P.; Malta, E.J.; Verschuur, J.M.; Lentz, L.F.; Schrijvers, L., 1998. Role of cold resistance and burial for winter survival and spring initiation of an *Ulva* spp. (*Chlorophyta*) bloom in a eutrophic lagoon (Veerse Meer lagoon, The Netherlands). *Marine Biology*, 131 (1): 45-51
- Kampf, S.K.; Burges, S.J., 2007. A framework for classifying and comparing distributed hillslope and catchment hydrologic models. *Water Resources Research*, 43 (5). 10.1029/2006wr005370
- Kannel, P.R.; Kanel, S.R.; Lee, S.; Lee, Y.-S.; Gan, T.Y., 2011. A Review of Public Domain Water Quality Models for Simulating Dissolved Oxygen in Rivers and Streams. *Environmental Modeling & Assessment*, 16 (2): 183-204. 10.1007/s10666-010-9235-1

- Kant, S.; Bi, Y.M.; Rothstein, S.J., 2011. Understanding plant response to nitrogen limitation for the improvement of crop nitrogen use efficiency. *Journal of Experimental Botany*, 62 (4): 1499-1509. 10.1093/jxb/erq297
- Kaplan-Levy, R.N.; Hadas, O.; Summers, M.L.; Rücker, J.; Sukenik, A., 2010. Akinetes: dormant cells of cyanobacteria. *Dormancy and Resistance in Harsh Environments*. Springer, 5-27
- Karez, R.; Engelbert, S.; Kraufvelin, P.; Pedersen, M.F.; Sommer, U., 2004. Biomass response and changes in composition of ephemeral macroalgal assemblages along an experimental gradient of nutrient enrichment. *Aquatic Botany*, 78 (2): 103–117. 10.1016/j.aquabot.2003.09.008
- Karim, M.R.; Sekine, M.; Higuchi, T.; Imai, T.; Ukita, M., 2003. Simulation of fish behavior and mortality in hypoxic water in an enclosed bay. *Ecological Modelling*, 159 (1): 27-42. 10.1016/s0304-3800(02)00282-x
- Karim, M.R.; Sekine, M.; Ukita, M., 2002. Simulation of eutrophication and associated occurrence of hypoxic and anoxic condition in a coastal bay in Japan. *Marine Pollution Bulletin*, 45 (1-12): 280-285. 10.1016/s0025-326x(02)00098-x
- Karim, M.R.; Sekine, M.; Ukita, M., 2003. A model of fish preference and mortality under hypoxic water in the coastal environment. *Marine Pollution Bulletin*, 47 (1-6): 25-29. 10.1016/s0025-326x(02)00409-5
- Karjalainen, H.; Stefansdottir, G.; Tuominen, L.; Kairesalo, T., 2001. Do submersed plants enhance microbial activity in sediment? *Aquatic Botany*, 69 (1): 1-13. 10.1016/s0304-3770(00)00138-8
- Karlson, K.; Bonsdorff, E.; Rosenberg, R., 2007. The impact of benthic macrofauna for nutrient fluxes from Baltic Sea sediments. *Ambio*, 36 (2-3): 161-167. 10.1579/0044-7447(2007)36[161:tiobmf]2.0.co;2
- Karlson, K.; Rosenberg, R.; Bonsdorff, E., 2002. Temporal and spatial large-scale effects of eutrophication and oxygen deficiency on benthic fauna in Scandinavian and Baltic waters - A review. *Oceanography and Marine Biology, Vol 40*, 40: 427-489
- Karlsson, O.M.; Malmæus, J.M.; Viktori, T.; Andersson, M.G.; Rydin, E., 2014. A revised semi-empirical mass balance model for phosphorus in Baltic coastal areas. *Fundamental and Applied Limnology*, 185 (3-4): 209-221. 10.1127/fal/2014/0613
- Karrman, E.; Jonsson, H., 2001. Including oxidisation of ammonia in the eutrophication impact category. *International Journal of Life Cycle Assessment*, 6 (1): 29-33
- Karus, K.; Feldmann, T., 2013. Factors influencing macrophyte metrics in Estonian coastal lakes in the light of ecological status assessment. *Hydrobiologia*, 704 (1): 153-163. 10.1007/s10750-012-1300-0
- Karydas, C.G.; Panagos, P.; Gitas, I.Z., 2014. A classification of water erosion models according to their geospatial characteristics. *International Journal of Digital Earth*, 7 (3): 229-250. 10.1080/17538947.2012.671380
- Karydis, M., 2005. Understanding marine eutrophication from agricultural runoff in semi enclosed areas: A short review in the Gulf of Geras, Greece. In: Lekkas, T.D., ed. *Proceedings of the 9th International Conference on Environmental Science and Technology, Vol A - Oral Presentations, Pts A and B.* (Proceedings of the International Conference on Environmental Science and Technology), A721-A725
- Karydis, M.; Kitsiou, D., 2012. Eutrophication and environmental policy in the Mediterranean Sea: a review. *Environmental Monitoring and Assessment*, 184 (8): 4931-4984. 10.1007/s10661-011-2313-2
- Kaselowski, T.; Adams, J.B., 2013. Not so pristine - characterising the physico- chemical conditions of an undescribed temporarily open/closed estuary. *Water Sa*, 39 (5): 627-635. 10.4314/wsa.v39i5.6
- Kasih, G.A.A.; Kitada, T., 2004. Numerical simulation of water quality response to nutrient loading and sediment resuspension in Mikawa Bay, central Japan: quantitative evaluation of the effects of nutrient-reduction measures on algal blooms. *Hydrological Processes*, 18 (16): 3037-3059. 10.1002/hyp.5748
- Kaste, O.; Wright, R.F.; Barkved, L.J.; Bjerkeng, B.; Engen-Skaugen, T.; Magnusson, J.; Saelthun, N.R., 2006. Linked models to assess the impacts of climate change on nitrogen in a Norwegian river basin and fjord system. *Science of the Total Environment*, 365 (1-3): 200-222. 10.1016/j.scitotenv.2006.02.035
- Katajisto, T., 2004. Effects of anoxia and hypoxia on the dormancy and survival of subitaneous eggs of *Acartia bifilosa* (Copepoda : Calanoida). *Marine Biology*, 145 (4): 751-757. 10.1007/s00227-004-1361-3
- Katsev, S.; Chaillou, G.; Sundby, B.; Mucci, A., 2007. Effects of progressive oxygen depletion on sediment diagenesis and fluxes: A model for the lower St. Lawrence River Estuary. *Limnology and Oceanography*, 52 (6): 2555-2568. 10.4319/lo.2007.52.6.2555
- Kattel, G.R.; Dong, X.H.; Yang, X.D., 2016. A century-scale, human-induced ecohydrological evolution of wetlands of two large river basins in Australia (Murray) and China (Yangtze). *Hydrology and Earth System Sciences*, 20 (6): 2151-2168. 10.5194/hess-20-2151-2016
- Kauppila, P.; Meeuwig, J.J.; Pitkanen, H., 2003. Predicting oxygen in small estuaries of the Baltic Sea: a comparative approach. *Estuarine Coastal and Shelf Science*, 57 (5-6): 1115-1126. 10.1016/s0272-7714(03)00014-3
- Kaushal, S.S.; Mayer, P.M.; Vidon, P.G.; Smith, R.M.; Pennino, M.J.; Newcomer, T.A.; Duan, S.W.; Welty, C.; Belt, K.T., 2014. LAND USE AND CLIMATE VARIABILITY AMPLIFY CARBON, NUTRIENT, AND CONTAMINANT PULSES: A REVIEW WITH MANAGEMENT IMPLICATIONS. *Journal of the American Water Resources Association*, 50 (3): 585-614. 10.1111/jawr.12204
- Kautz, T.; Amelung, W.; Ewert, F.; Gaiser, T.; Horn, R.; Jahn, R.; Javaux, M.; Kemna, A.; Kuzyakov, Y.; Munch, J.-C.; Pätzold, S.; Peth, S.; Scherer, H.W.; Schloter, M.; Schneider, H.; Vanderborght, J.; Vetterlein, D.; Walter, A.; Wiesenberg, G.L.B.; Köpke, U., 2013. Nutrient acquisition from arable subsoils in temperate climates: A review. *Soil Biology and Biochemistry*, 57: 1003-1022. 10.1016/j.soilbio.2012.09.014
- Kavanagh, P.; Bree, T., 2009. Water framework directive programme of measures: Protection of high-status sites, forest, water and on-site wastewater-treatment systems. *Biology and Environment*, 109 (3): 345-364. 10.3318/BIOE.2009.109.3.345

- Kealy, M.J.; Rockel, M.L.; Nicolette, J.P., 2005. Net environmental benefits analysis to evaluate mitigation alternatives for a pipeline siting. 5075-5078
- Kearney, M.S.; Riter, J.C.A.; Turner, R.E., 2011. Freshwater river diversions for marsh restoration in Louisiana: Twenty-six years of changing vegetative cover and marsh area. *Geophysical Research Letters*, 38. 10.1029/2011gl047847
- Keeler, B.L.; Polasky, S.; Brauman, K.A.; Johnson, K.A.; Finlay, J.C.; O'Neill, A.; Kovacs, K.; Dalzell, B., 2012. Linking water quality and well-being for improved assessment and valuation of ecosystem services. *Proceedings of the National Academy of Sciences of the United States of America*, 109 (45): 18619-18624. 10.1073/pnas.1215991109
- Keener, H.M.; Elwell, D.L.; Grande, D., 2002. NH<sub>3</sub> emissions and N-balances for a 1.6 million caged layer facility: Manure belt/composting vs. deep pit operation. *Transactions of the Asae*, 45 (6): 1977-1984
- Keesing, J.K.; Liu, D.; Fearn, P.; Garcia, R., 2011. Inter- and intra-annual patterns of *Ulva prolifera* green tides in the Yellow Sea during 2007-2009, their origin and relationship to the expansion of coastal seaweed aquaculture in China. *Marine Pollution Bulletin*, 62 (6): 1169-1182. 10.1016/j.marpolbul.2011.03.040
- Keesing, J.K.; Liu, D.Y.; Shi, Y.J.; Wang, Y.J., 2016. Abiotic factors influencing biomass accumulation of green tide causing *Ulva* spp. on *Pyropia* culture rafts in the Yellow Sea, China. *Marine Pollution Bulletin*, 105 (1): 88-97. 10.1016/j.marpolbul.2016.02.051
- Kehoe, T., 1992. Merchants of pollution?: The soap and detergent industry and the fight to restore Great Lakes water quality, 1965-1972. *Environmental History Review*, 16 (3): 21-46
- Kehoe, T., 1997. *Cleaning Up the Great Lakes: From Cooperation to Confrontation* Northern Illinois University Press
- Kehr, J.-C.; Dittmann, E., 2015. Biosynthesis and function of extracellular glycans in cyanobacteria. *Life*, 5 (1): 164-180
- Kelble, C.R., 2013. Low Salinity Predation Refugia Could Cause HAB Initiation. *Journal of Phycology*, 49 (1): 18-19. 10.1111/jpy.12015
- Kellogg, D.Q.; Gold, A.J.; Cox, S.; Addy, K.; August, P.V., 2010. A geospatial approach for assessing denitrification sinks within lower-order catchments. *Ecological Engineering*, 36 (11): 1596-1606. <https://doi.org/10.1016/j.ecoleng.2010.02.006>
- Kellogg, M.L.; Smyth, A.R.; Luckenbach, M.W.; Carmichael, R.H.; Brown, B.L.; Cornwell, J.C.; Piehler, M.F.; Owens, M.S.; Dalrymple, D.J.; Higgins, C.B., 2014. Use of oysters to mitigate eutrophication in coastal waters. *Estuarine, Coastal and Shelf Science*, 151: 156-168. 10.1016/j.ecss.2014.09.025
- Kelly, M.G.; Wilson, S., 2004. Effect of phosphorus stripping on water chemistry and diatom ecology in an eastern lowland river. *Water Research*, 38 (6): 1559-1567. 10.1016/j.watres.2003.12.022
- Kemp, W.M.; Boynton, W.R.; Adolf, J.E.; Boesch, D.; Boicourt, W.C.; Brush, G.; Cornwell, J.C.; Fisher, T.R.; Glibert, P.M.; Hagy, J.D.; Harding, L.W.; Houde, E.D.; Kimmel, D.G.; Miller, W.D.; Newell, R.I.E.; Roman, M.R.; Smith, E.M.; Stevenson, J.C., 2005. Eutrophication of Chesapeake Bay: historical trends and ecological interactions. *Marine Ecology Progress Series*, 303: 1-29
- Kemp, W.M.; Boynton, W.R.; Adolf, J.E.; Boesch, D.F.; Boicourt, W.C.; Brush, G.; Cornwell, J.C.; Fisher, T.R.; Glibert, P.M.; Hagy, J.D.; Harding, L.W.; Houde, E.D.; Kimmel, D.G.; Miller, W.D.; Newell, R.I.E.; Roman, M.R.; Smith, E.M.; Stevenson, J.C., 2005. Eutrophication of Chesapeake Bay: historical trends and ecological interactions. *Marine Ecology Progress Series*, 303: 1-29. 10.3354/meps303001
- Kemp, W.M.; Testa, J.M.; Conley, D.J.; Gilbert, D.; Hagy, J.D., 2009. Temporal responses of coastal hypoxia to nutrient loading and physical controls. *Biogeosciences*, 6 (12): 2985-3008
- Kennedy, A.D., 1997. Biological complexity confounds the separation of point- and non-point sources of human impact on the natural world. *Environmental Monitoring and Assessment*, 48 (2): 173-192. 10.1023/a:1005704720545
- Kennedy, C.J.; Cheong, S.M., 2013. Lost ecosystem services as a measure of oil spill damages: A conceptual analysis of the importance of baselines. *Journal of Environmental Management*, 128: 43-51. 10.1016/j.jenvman.2013.04.035
- Kennison, R.L.; Kamer, K.; Fong, P., 2011. RAPID NITRATE UPTAKE RATES AND LARGE SHORT-TERM STORAGE CAPACITIES MAY EXPLAIN WHY OPPORTUNISTIC GREEN MACROALGAE DOMINATE SHALLOW EUTROPHIC ESTUARIES1. *Journal of Phycology*: no-no
- Keplinger, K.O.; Hauck, L.M., 2006. The Economics of Manure Utilization: Model and Application. *Journal of Agricultural and Resource Economics*, 31 (2): 414-440. <http://www.waeaonline.org/publications/jare/recent-issues>
- Kerfoot, W.C.; Robbins, J.A.; Weider, L.J., 1999. A new approach to historical reconstruction: Combining descriptive and experimental paleolimnology. *Limnology and Oceanography*, 44 (5): 1232-1247
- Kerimoglu; Jacquet; Vinçon-Leite, B.; Lemaire Bruno, J.; Rimet; Trévisan; Anneville, 2016. Modelling the plankton groups of the deep, peri-alpine Lake Bourget. *Ecological Modelling*, under review:
- Kern, K., 2011. Governance For Sustainable Development in the Baltic Sea Region. *Journal of Baltic Studies*, 42 (1): 21-35. 10.1080/01629778.2011.538517
- Kerrison, P.D.; Le, H.N.; Twigg, G.C.; Smallman, D.R.; MacPhee, R.; Houston, F.A.B.; Hughes, A.D., 2016. Decontamination treatments to eliminate problem biota from macroalgal tank cultures of *Osmundea pinnatifida*, *Palmaria palmata* and *Ulva lactuca*. *Journal of Applied Phycology*, 28 (6): 3423-3434. 10.1007/s10811-016-0873-9
- Key, N.D.; Kaplan, J.D., 2007. Multiple Environmental Externalities and Manure Management Policy. *Journal of Agricultural and Resource Economics*, 32 (1): 115-134. <http://www.waeaonline.org/publications/jare/recent-issues>
- Keynes, J.M., 2013. *A treatise on probability*. Courier Corporation
- Khabsa, M.; Giles, C.L., 2014. The number of scholarly documents on the public web. *Plos One*, 9 (5): e93949. 10.1371/journal.pone.0093949
- Khan, F.A.; Ansari, A.A., 2005. Eutrophication: an ecological vision. *The botanical review*, 71 (4): 449-482
- Kideys, A.E., 1994. Marine systems. 7963 (93):

- Kideys, A.E., 1994. Recent dramatic changes in the black-sea ecosystem - the reason for the sharp decline in turkish anchovy fisheries. *Journal of Marine Systems*, 5 (2): 171-181. 10.1016/0924-7963(94)90030-2
- Kideys, A.E., 2002. Ecology: Fall and rise of the Black Sea ecosystem. *Science*, 297 (5586): 1482-1484. 10.1126/science.1073002
- Kils, U., 1993. FORMATION OF MICROPATCHES BY ZOOPLANKTON-DRIVEN MICROTURBULENCES. *Bulletin of Marine Science*, 53 (1): 160-169
- Kim, D.-G.; Saggard, S.; Roudier, P., 2012. The effect of nitrification inhibitors on soil ammonia emissions in nitrogen managed soils: a meta-analysis. *Nutrient Cycling in Agroecosystems*, 93 (1): 51-64. 10.1007/s10705-012-9498-9
- Kim, J.K.; Kraemer, G.P.; Yarish, C., 2013. Emersion Induces Nitrogen Release and Alteration of Nitrogen Metabolism in the Intertidal Genus *Porphyra*. *Plos One*, 8 (7). 10.1371/journal.pone.0069961
- Kim, K.Y.; Choi, T.S.; Kim, J.H.; Han, T.; Shin, H.W.; Garbary, D.J., 2004. Physiological ecology and seasonality of *Ulva pertusa* on a temperate rocky shore. *Phycologia*, 43 (4): 483-492. 10.2216/i0031-8884-43-4-483.1
- Kim, S., 2003. Irresolvable cultural conflicts and conservation/development arguments: Analysis of Korea's Saemangeum project. *Policy Sciences*, 36 (2): 125-149. 10.1023/A:1024866323901
- Kimmerer, W.J.; Smith, S.V.; Hollibaugh, J.T., 1993. A simple heuristic model of nutrient cycling in an estuary. *Estuarine Coastal and Shelf Science*, 37 (2): 145-159. 10.1006/ecss.1993.1048
- Kimura, S.D.; Hatano, R., 2007. An eco-balance approach to the evaluation of historical changes in nitrogen loads at a regional scale. *Agricultural Systems*, 94 (2): 165-176. 10.1016/j.agsy.2006.08.005
- King, K.W.; McDonald, J.; Moore, J.F.; Agrawal, S.G.; Fischer, E.N.; Balogh, J.C., 2010. NUTRIENT AND PESTICIDE REMOVAL FROM LABORATORY-SIMULATED TILE DRAINAGE DISCHARGE. *Transactions of the Asabe*, 53 (3): 769-777
- King, K.W.; Williams, M.R.; Macrae, M.L.; Fausey, N.R.; Frankenberger, J.; Smith, D.R.; Kleinman, P.J.A.; Brown, L.C., 2015. Phosphorus Transport in Agricultural Subsurface Drainage: A Review. *Journal of Environmental Quality*, 44 (2): 467-485. 10.2134/jeq2014.04.0163
- Kinnell, P.I.A., 1997. Runoff ratio as a factor in the empirical modelling of soil erosion by individual rainstorms. *Australian Journal of Soil Research*, 35 (1): 1-13. 10.1071/s95085
- Kinnell, P.I.A., 2007. Runoff dependent erosivity and slope length factors suitable for modelling annual erosion using the Universal Soil Loss Equation. *Hydrological Processes*, 21 (20): 2681-2689. 10.1002/hyp.6493
- Kinnell, P.I.A., 2010. Event soil loss, runoff and the Universal Soil Loss Equation family of models: A review. *Journal of Hydrology*, 385 (1-4): 384-397. 10.1016/j.jhydrol.2010.01.024
- Kinsman-Costello, L.E.; Hamilton, S.K.; O'Brien, J.M.; Lennon, J.T., 2016. Phosphorus release from the drying and reflooding of diverse shallow sediments. *Biogeochemistry*, 130 (1-2): 159-176. 10.1007/s10533-016-0250-4
- Kinsman-Costello, L.E.; O'Brien, J.M.; Hamilton, S.K., 2015. Natural stressors in uncontaminated sediments of shallow freshwaters: The prevalence of sulfide, ammonia, and reduced iron. *Environmental Toxicology and Chemistry*, 34 (3): 467-479. 10.1002/etc.2801
- Kirchmann, H.; Pettersson, S., 1995. Human urine-chemical composition and fertilizer use efficiency. *Fertilizer Research*, 40 (2): 6. 10.1007/BF00750100
- Kirkby, M.J.; Abrahart, R.; McMahon, M.D.; Shao, J.; Thornes, J.B., 1998. MEDALUS soil erosion models for global change. *Geomorphology*, 24 (1): 35-49. 10.1016/s0169-555x(97)00099-8
- Kirkpatrick, B.; Fleming, L.E.; Squicciarini, D.; Backer, L.C.; Clark, R.; Abraham, W.; Benson, J.; Cheng, Y.S.; Johnson, D.; Pierce, R.; Zaias, J.; Bossart, G.D.; Baden, D.G., 2004. Literature review of Florida red tide: implications for human health effects. *Harmful Algae*, 3 (2): 99-115. 10.1016/j.hal.2003.08.005
- Kirkpatrick, B.; Kohler, K.; Byrne, M.; Fleming, L.E.; Scheller, K.; Reich, A.; Hitchcock, G.; Kirkpatrick, G.; Ullmann, S.; Hoagland, P., 2014. Human responses to Florida red tides: Policy awareness and adherence to local fertilizer ordinances. *Science of the Total Environment*, 493: 898-909. 10.1016/j.scitotenv.2014.06.083
- Kishi, M.; Ikeda, S., 1986. Population-dynamics of red tide organisms in eutrophicated coastal waters - Numerical experiment of phytoplankton bloom in the East Seto Inland sea, Japan. *Ecological Modelling*, 31 (1-4): 145-174. 10.1016/0304-3800(86)90061-x
- Kissinger, W.F.; Erickson, G.E.; Klopfenstein, T.J., 2006. Summary of manure amounts, characteristics, and nitrogen mass balance for open beef feedlot pens in summer and winter feeding periods. *Journal of Animal Science*, 84: 132-133
- Kitabatake, Y., 1982. Welfare Cost of Eutrophication-Caused Production Losses: A Case of Aquaculture in Lake Kasumigaura. *Journal of Environmental Economics and Management*, 9 (3): 199-212. 10.1016/0095-0696(82)90030-4
- Kitsiou, D.; Karydis, M., 2011. Coastal marine eutrophication assessment: a review on data analysis. *Environment International*, 37 (4): 778-801
- Kittner, C.; Riisgard, H.U., 2005. Effect of temperature on filtration rate in the mussel *Mytilus edulis*: no evidence for temperature compensation. *Marine Ecology Progress Series*, 305: 147-152. 10.3354/meps305147
- Kivaisi, A.K., 2001. The potential for constructed wetlands for wastewater treatment and reuse in developing countries: a review. *Ecological Engineering*, 16 (4): 545-560. 10.1016/s0925-8574(00)00113-0
- Klauer, B.; Schiller, J.; Bathe, F., 2015. Concept for cost effective improvement of river morphology in the context of the European Water Framework Directive. *Journal of Environmental Planning and Management*, 58 (11): 1944-1960. 10.1080/09640568.2014.969833
- Klaus, V.H.; Sintermann, J.; Kleinebecker, T.; Holzel, N., 2011. Sedimentation-induced eutrophication in large river floodplains - An obstacle to restoration? *Biological Conservation*, 144 (1): 451-458. 10.1016/j.biocon.2010.09.031
- Klausmeier, C.A.; Litchman, E.; Daufresne, T.; Levin, S.A., 2004. Optimal nitrogen-to-phosphorus stoichiometry of phytoplankton. *Nature*, 429 (6988): 171-174. 10.1038/nature02454

- Klausmeier, C.A.; Litchman, E.; Levin, S.A., 2004. Phytoplankton growth and stoichiometry under multiple nutrient limitation. *Limnology and Oceanography*, 49 (4part2): 1463-1470
- Kleinman, P.J.A.; Sharpley, A.N.; Withers, P.J.A.; Bergstrom, L.; Johnson, L.T.; Doody, D.G., 2015. Implementing agricultural phosphorus science and management to combat eutrophication. *Ambio*, 44: S297-S310. 10.1007/s13280-015-0631-2
- Klevenhusen, F.; Kreuzer, M.; Soliva, C.R., 2011. Enteric and manure-derived methane and nitrogen emissions as well as metabolic energy losses in cows fed balanced diets based on maize, barley or grass hay. *Animal*, 5 (3): 450-461. 10.1017/s1751731110001795
- Kling, C.L., 2014. Luminate: Linking Agricultural Land Use, Local Water Quality and Gulf of Mexico Hypoxia. *European Review of Agricultural Economics*, 41 (3): 431-459. 10.1093/erae/jbu009
- Kling, C.L.; Panagopoulos, Y.; Rabotyagov, S.S.; Valcu, A.M.; Gassman, P.W.; Campbell, T.; White, M.J.; Arnold, J.G.; Srinivasan, R.; Jha, M.K.; Richardson, J.J.; Moskal, L.M.; Turner, R.E.; Rabalais, N.N., 2014. LUMINATE: linking agricultural land use, local water quality and Gulf of Mexico hypoxia. *European Review of Agricultural Economics*, 41 (3): 431-459. 10.1093/erae/jbu009
- Klop, G.; Velthof, G.L.; van Groenigen, J.W., 2012. Application technique affects the potential of mineral concentrates from livestock manure to replace inorganic nitrogen fertilizer: <i>Can mineral concentrates replace N fertilizer?</i>. *Soil Use and Management*, 28 (4): 468-477. 10.1111/j.1475-2743.2012.00434.x
- Knapp, K.C.; Schwabe, K.A., 2008. Spatial Dynamics of Water and Nitrogen Management in Irrigated Agriculture. *American Journal of Agricultural Economics*, 90 (2): 524-539. 10.1111/j.1467-8276.2007.01124.x
- Knisel, W.G., 1980. *CREAMS: a field scale model for Chemicals, Runoff, and Erosion from Agricultural Management Systems [USA]*. 643
- Knoden, D.; Vertès, F.; Foray, S., 2015. La directive Nitrates dans quelques régions d'Europe. *Fourrages*, 224: 269-278
- Knowles, R., 1982. Denitrification. *Microbiological Reviews*, 46 (1): 43-70
- Koelmans, A.A.; Van der Heijde, A.; Knijff, L.M.; Aalderink, R.H., 2001. Integrated modelling of eutrophication and organic contaminant fate & effects in aquatic ecosystems. A review. *Water Research*, 35 (15): 3517-3536. 10.1016/s0043-1354(01)00095-1
- Kohler, A., 1975. Submerse Makrophyten und ihre Gesellschaften als Indikatoren der Gewässerbelastung. *Beiträge der naturkundlichen Forschung Südwesdeutschlands*, 34: 149-159.
- Kohler, F.; Thierry, C.; Marchand, G., 2014. Multifunctional agriculture and farmers' attitudes: Two case studies in rural France. *Human Ecology*, 42 (6): 929-949. 10.1007/s10745-014-9702-4
- Kolada, A.; Pasztaleniec, A.; Bielczynska, A.; Soszka, H., 2016. Phytoplankton, macrophytes and benthic diatoms in lake classification: Consistent, congruent, redundant? Lessons learnt from WFD-compliant monitoring in Poland. *Limnologica*, 59: 44-52. 10.1016/j.limno.2016.05.003
- Kolada, A.; Willby, N.; Dudley, B.; Noges, P.; Sondergaard, M.; Hellsten, S.; Mjelde, M.; Penning, E.; van Geest, G.; Bertrin, V.; Ecke, F.; Maemets, H.; Karus, K., 2014. The applicability of macrophyte compositional metrics for assessing eutrophication in European lakes. *Ecological Indicators*, 45: 407-415. 10.1016/j.ecolind.2014.04.049
- Kolb, G.S.; Ekholm, J.; Hamback, P.A., 2010. Effects of seabird nesting colonies on algae and aquatic invertebrates in coastal waters. *Marine Ecology Progress Series*, 417: 287-300. 10.3354/meps08791
- Kolbe, T.; Marcais, J.; Thomas, Z.; Abbott, B.W.; de Dreux, J.-R.; Rousseau-Gueutin, P.; Aquilina, L.; Labasque, T.; Pinay, G., 2016. Coupling 3D groundwater modeling with CFC-based age dating to classify local groundwater circulation in an unconfined crystalline aquifer. *Journal of Hydrology*, 543: 31-46. 10.1016/j.jhydrol.2016.05.020
- Kolber, Z.; Zehr, J.; Falkowski, P., 1988. EFFECTS OF GROWTH IRRADIANCE AND NITROGEN LIMITATION ON PHOTOSYNTHETIC ENERGY-CONVERSION IN PHOTOSYSTEM-II. *Plant Physiology*, 88 (3): 923-929. 10.1104/pp.88.3.923
- Kolesar, S.E., 2006. The effects of low dissolved oxygen on predation interactions between *Mnemiopsis leidyi* ctenophores and larval fish in Chesapeake Bay ecosystem. University of Maryland,
- Kolman, P.; Brookes, J.; Hamilton, D., 2001. Mixing in a small, artificially destratified Perth reservoir. *Environmental engineering thesis 2001*: University of Western Australia.
- Konrad, M.T.; Andersen, H.E.; Thodsen, H.; Termansen, M.; Hasler, B., 2014. Cost-efficient reductions in nutrient loads; identifying optimal spatially specific policy measures. *Water Resources and Economics*, 7: 39-54. 10.1016/j.wre.2014.09.001
- Kooyoomjian, K.J.; Clesceri, N.L., 1974. Perception of water quality by select respondent groupings in inland water-based recreational environments. *JAWRA Journal of the American Water Resources Association*, 10 (4): 728-744. 10.1111/j.1752-1688.1974.tb05633.x
- Koriyama, M.; Seguchi, M.; Ishitani, T.; Isnansetyo, A., 2011. Analysis of hypoxia in the western interior parts of the Ariake Sea, Japan, using a box model. *Environmental Monitoring and Assessment*, 179 (1-4): 65-80. 10.1007/s10661-010-1719-6
- Körner, S., 2002. Loss of submerged macrophytes in shallow lakes in north-eastern Germany. *International Review of Hydrobiology*, 87 (4): 375-384
- Kornijow, R.; Kowalewski, G.; Sugier, P.; Kaczorowska, A.; Gasiorowski, M.; Woszczyk, M., 2016. Towards a more precisely defined macrophyte-dominated regime: the recent history of a shallow lake in Eastern Poland. *Hydrobiologia*, 772 (1): 45-62. 10.1007/s10750-015-2624-3

- Korpinen, P.; Kiirikki, M.; Koponen, J.; Peltoniemi, H.; Sarkkula, J., 2004. Evaluation and control of eutrophication in Helsinki sea area with the help of a nested 3D-ecohydrodynamic model. *Journal of Marine Systems*, 45 (3-4): 255-265. 10.1016/j.jmarsys.2003.11.008
- Korpinen, S.; Jormalainen, V., 2008. Grazing and nutrients reduce recruitment success of *Fucus vesiculosus* L. (Fucales: Phaeophyceae). *Estuarine, Coastal and Shelf Science*, 78 (2): 437-444. 10.1016/j.ecss.2008.01.005
- Korpinen, S.; Jormalainen, V.; Honkanen, T., 2007. Effects of nutrients, herbivory, and depth on the macroalgal community in the rocky sublittoral. *Ecology*, 88 (4): 839-852. 10.1890/05-0144
- Korpinen, S.; Meski, L.; Andersen, J.H.; Laamanen, M., 2012. Human pressures and their potential impact on the Baltic Sea ecosystem. *Ecological Indicators*, 15 (1): 105-114. 10.1016/j.ecolind.2011.09.023
- Korpinen, S.B., E., 2015. Eutrophication and hypoxia: impacts of nutrient and organic enrichment. In: Frid, T.P.C.C.L.J., ed. *Human Impacts on Biodiversity, Functioning and Services*. Cambridge University Press, 202-243
- Kosenius, A.-K., 2010. Heterogeneous Preferences for Water Quality Attributes: The Case of Eutrophication in the Gulf of Finland, the Baltic Sea. *Ecological Economics*, 69 (3): 528-538. 10.1016/j.ecolecon.2009.08.030
- Kosenius, A.K., 2010. Heterogeneous preferences for water quality attributes: The Case of eutrophication in the Gulf of Finland, the Baltic Sea. *Ecological Economics*, 69 (3): 528-538. 10.1016/j.ecolecon.2009.08.030
- Koskela, S.; Seppälä, J.; Lipp, A.; Hiltunen, M.-R.; Pold, E.; Talve, S., 2007. Estonian electricity supply scenarios for 2020 and their environmental performance. *Energy Policy*, 35 (7): 3571-3582
- Kosten, S.; Huszar, V.L.; Bécares, E.; Costa, L.S.; Donk, E.; Hansson, L.A.; Jeppesen, E.; Kruk, C.; Lacerot, G.; Mazzeo, N., 2012. Warmer climates boost cyanobacterial dominance in shallow lakes. *Global Change Biology*, 18 (1): 118-126
- Kosten, S.; Kamarainen, A.; Jeppesen, E.; van Nes, E.H.; Peeters, E.; Mazzeo, N.; Sass, L.; Hauxwell, J.; Hansel-Welch, N.; Lauridsen, T.L.; Sondergaard, M.; Bachmann, R.W.; Lacerot, G.; Scheffer, M., 2009. Climate-related differences in the dominance of submerged macrophytes in shallow lakes. *Global Change Biology*, 15 (10): 2503-2517. 10.1111/j.1365-2486.2009.01969.x
- Kostka, J.E.; Luther, G.W., 1994. Partitioning and speciation of solid-phase iron in salt-marsh sediments. *Geochimica Et Cosmochimica Acta*, 58 (7): 1701-1710. 10.1016/0016-7037(94)90531-2
- Kotani, K.; Tanaka, K.; Managi, S., 2014. Cooperative choice and its framing effect under threshold uncertainty in a provision point mechanism. *Economics of Governance*, 15 (4): 329-353. 10.1007/s10101-014-0147-4
- Kouzminov, A.; Ruck, J.; Wood, S.A., 2007. New Zealand risk management approach for toxic cyanobacteria in drinking water. *Australian and New Zealand Journal of Public Health*, 31 (3): 275-281. 10.1111/j.1467-842X.2007.00061.x
- Kratovits, A.; Punning, J.M., 2001. Driving Forces for the Formation of Environmental Policy in the Baltic Countries. *Ambio*, 30 (7): 443-449
- Kratzer, C.R.; Brezonik, P.L., 1984. Application of nutrient loading models to the analysis of trophic conditions in Lake Okeechobee, Florida. *Environmental Management*, 8 (2): 109-120. 10.1007/BF01866931
- Kraufvelin, P.; Lindholm, A.; Pedersen, M.F.; Kirkerud, L.A.; Bonsdorff, E., 2009. Biomass, diversity and production of rocky shore macroalgae at two nutrient enrichment and wave action levels. *Marine Biology*, 157 (1): 29-47. 10.1007/s00227-009-1293-z
- Kraufvelin, P.; Moy, F.E.; Christie, H.; Bokn, T.L., 2006. Nutrient addition to experimental rocky shore communities revisited: delayed responses, rapid recovery. *Ecosystems*, 9 (7): 1076-1093
- Kraufvelin, P.; Ruuskanen, A.T.; Nappu, N.; Kiirikki, M., 2007. Winter colonisation and succession of filamentous macroalgae on artificial substrates and possible relationships to *Fucus vesiculosus* settlement in early summer. *Estuarine, Coastal and Shelf Science*, 72 (4): 665-674. 10.1016/j.ecss.2006.11.029
- Kraufvelin, P.; Salovius, S.; Christie, H.; Moy, F.E.; Karez, R.; Pedersen, M.F., 2006. Eutrophication-induced changes in benthic algae affect the behaviour and fitness of the marine amphipod *Gammarus locusta*. *Aquatic Botany*, 84 (3): 199-209. 10.1016/j.aquabot.2005.08.008
- Krause, P.; Bende-Michl, U.; Fink, M.; Helmschrot, J.; Kralisch, S.; Kuenne, A., 2009. Parameter sensitivity analysis of the JAMS/J2000-S model to improve water and nutrient transport process simulation - a case study for the Duck catchment in Tasmania. *18th World Imacs Congress and Modsim09 International Congress on Modelling and Simulation: Interfacing Modelling and Simulation with Mathematical and Computational Sciences*: 2009, 3179-3186
- Krause-Jensen, D.; Carstensen, J.; Dahl, K., 2007. Total and opportunistic algal cover in relation to environmental variables. *Mar Pollut Bull*, 55 (1-6): 114-25. 10.1016/j.marpolbul.2006.08.019
- Kristensen, E., 2000. Organic matter diagenesis at the oxic/anoxic interface in coastal marine sediments, with emphasis on the role of burrowing animals. *Hydrobiologia*, 426 (1-3): 1-24. 10.1023/a:1003980226194
- Krivenko, C.T.; Moncheva, S.; Kremena, S.; Finenko, Z.; Oguz, Z.; Akoglu, E.; Timofte, F., 2011. *The Black Sea: Additional information on status of threatened ecological characteristics relevant to the Marine Strategy Framework Directive. 7th framework project Options for Delivering Ecosystem-Based Marine Management*.
- Krodkiewska, M.; Kostecki, M., 2015. Assessment of the restoration measures in a man-made reservoir: do oligochaete communities respond to the improvement of water quality? *Environmental Monitoring and Assessment*, 187 (9). 10.1007/s10661-015-4787-9
- Kroeger, R.; Dunne, E.J.; Novak, J.; King, K.W.; McLellan, E.; Smith, D.R.; Strock, J.; Boomer, K.; Tomer, M.; Noe, G.B., 2013. Downstream approaches to phosphorus management in agricultural landscapes: Regional applicability and use. *Science of the Total Environment*, 442: 263-274. 10.1016/j.scitotenv.2012.10.038
- Kroeker, K.J.; Kordas, R.L.; Crim, R.N.; Singh, G.G., 2010. Meta-analysis reveals negative yet variable effects of ocean acidification on marine organisms. *Ecology Letters*, 13 (11): 1419-1434. 10.1111/j.1461-0248.2010.01518.x

- Kroeze, 2003. Uncertainties in the fate of nitrogen I: An overview of sources of uncertainty illustrated with a Dutch case study. *Nutrient Cycling in Agroecosystems*, 66: 43-69
- Kroeze, C.; Dumont, E.; Seitzinger, S., 2010. Future trends in emissions of N<sub>2</sub>O from rivers and estuaries. *Journal of Integrative Environmental Sciences*, 7 (sup1): 71-78. 10.1080/1943815X.2010.496789
- Kroiss, H., 1999. Water protection strategies - Critical discussion in regard to the Danube river basin. 185-192. 10.1016/S0273-1223(99)00201-2
- Krom, M.D.; Berner, R.A., 1980. Adsorption of phosphate in anoxic marine-sediments. *Limnology and Oceanography*, 25 (5): 797-806
- Kromkamp, J., 1987. Formation and functional significance of storage products in cyanobacteria. *New Zealand Journal of Marine and Freshwater Research*, 21: 457-465
- Kromkamp, J.; Walsby, A.E., 1990. A computer-model of buoyancy and vertical migration in cyanobacteria. *Journal of Plankton Research*, 12: 161-183
- Kromkamp, J.C.; Van Engeland, T., 2010. Changes in Phytoplankton Biomass in the Western Scheldt Estuary During the Period 1978-2006. *Estuaries and Coasts*, 33 (2): 270-285. 10.1007/s12237-009-9215-3
- Kronvang, B.; Årtebjerg, G.; Grant, R.; Kristensen, P.; Hovmand, M.; Kirkegaard, J., 1993. Nationwide monitoring of nutrients and their ecological effects: state of the Danish aquatic environment. *Ambio*, 22 (4): 176-187
- Kronvang, B.; Andersen, H.E.; Børgesen, C.; Dalgaard, T.; Larsen, S.E.; Bøgestrand, J.; Blicher-Mathiasen, G., 2008. Effects of policy measures implemented in Denmark on nitrogen pollution of the aquatic environment. *Environmental Science & Policy*, 11 (2): 144-152. <https://doi.org/10.1016/j.envsci.2007.10.007>
- Kronvang, B.; Bechmann, M.; Pedersen, M.L.; Flynn, N., 2003. Phosphorus dynamics and export in streams draining micro-catchments: Development of empirical models. *Journal of Plant Nutrition and Soil Science-Zeitschrift Fur Pflanzenernahrung Und Bodenkunde*, 166 (4): 469-474. 10.1002/jpln.200321164
- Kronvang, B.; Behrendt, H.; Andersen, H.E.; Arheimer, B.; Barr, A.; Borgvang, S.A.; Bouraoui, F.; Granlund, K.; Grizzetti, B.; Groenendijk, P.; Schwaiger, E.; Hejzlar, J.; Hoffmann, L.; Johnsson, H.; Panagopoulos, Y.; Lo Porto, A.; Reisser, H.; Schoumans, O.; Anthony, S.; Silgram, M.; Venohr, M.; Larsen, S.E., 2009. Ensemble modelling of nutrient loads and nutrient load partitioning in 17 European catchments. *Journal of Environmental Monitoring*, 11 (3): 572-583. 10.1039/B900101H
- Kronvang, B.; Jeppesen, E.; Conley, D.J.; Sondergaard, M.; Larsen, S.E.; Ovesen, N.B.; Carstensen, J., 2005. Nutrient pressures and ecological responses to nutrient loading reductions in Danish streams, lakes and coastal waters. *Journal of Hydrology*, 304 (1-4): 274-288. 10.1016/j.jhydrol.2004.07.035
- Kronvang, B.; Rubæk, G.H.; Heckrath, G., 2009. International Phosphorus Workshop: Diffuse Phosphorus Loss to Surface Water Bodies-Risk Assessment, Mitigation Options, and Ecological Effects in River Basins. *Journal of Environmental Quality*, 38 (5): 1924-1929. 10.2134/jeq2009.0051
- Kronvang, B.; Rubæk, G.H.; Heckrath, G., 2009. International phosphorus workshop: diffuse phosphorus loss to surface water bodies--risk assessment, mitigation options, and ecological effects in river basins. *Journal of Environmental Quality*, 38 (5): 1924-1929. 10.2134/jeq2009.0051
- Kronvang, B.; Vagstad, N.; Behrendt, H.; Bøgestrand, J.; Larsen, S.E., 2007. Phosphorus losses at the catchment scale within Europe: an overview. *Soil Use and Management*, 23: 104-116. 10.1111/j.1475-2743.2007.00113.x
- Kruk, C.; Huszar, V.L.M.; Peeters, E.T.H.M.; Bonilla, S.; Costa, L.; LÜRling, M.; Reynolds, C.S.; Scheffer, M., 2010. A morphological classification capturing functional variation in phytoplankton. *Freshwater Biology*, 55 (3): 614-627. 10.1111/j.1365-2427.2009.02298.x
- Kruk, C.; Segura, A.M., 2012. The habitat template of phytoplankton morphology-based functional groups. *Hydrobiologia*, 698 (1): 191-202
- Kruse, J.; Abraham, M.; Amelung, W.; Baum, C.; Bol, R.; Kühn, O.; Lewandowski, H.; Niederberger, J.; Oelmann, Y.; Rüger, C.; Santner, J.; Siebers, M.; Siebers, N.; Spohn, M.; Vestergren, J.; Vogts, A.; Leinweber, P., 2015. Innovative methods in soil phosphorus research: A review. *Journal of Plant Nutrition and Soil Science*, 178 (1): 43-88. 10.1002/jpln.201400327
- Krysanova, V.; Müller-Wohlfeld, D.I.; Becker, A., 1998. Development and test of a spatially distributed hydrological water quality model for mesoscale watersheds. *Ecological Modelling*, 106 (2-3): 261-289. 10.1016/s0304-3800(97)00204-4
- Kucharik, C.J.; Foley, J.A.; Delire, C.; Fisher, V.A.; Coe, M.T.; Lengers, J.D.; Young-Molling, C.; Ramankutty, N.; Norman, J.M.; Gower, S.T., 2000. Testing the performance of a Dynamic Global Ecosystem Model: Water balance, carbon balance, and vegetation structure. *Global Biogeochemical Cycles*, 14 (3): 795-825. 10.1029/1999gb001138
- Kuenen, J.G.; Robertson, L.A., 1988. Ecology of nitrification and denitrification. *The nitrogen and sulphur cycles; 42nd symposium of the Society for General Microbiology*. University of Southampton, January 1988:
- Kumar, K.; Goh, K.M., 1999. Crop Residues and Management Practices: Effects on Soil Quality, Soil Nitrogen Dynamics, Crop Yield, and Nitrogen Recovery. *Advances in Agronomy*. Elsevier, Vol.68, 197-319
- Kuo, J.T.; Thomann, R.V., 1983. Phytoplankton modeling in the embayments of lakes. *Journal of Environmental Engineering-Asce*, 109 (6): 1311-1332
- Kuosmanen, T.; Laukkonen, M., 2011. (In)Efficient Environmental Policy with Interacting Pollutants. *Environmental and Resource Economics*, 48 (4): 629-649. 10.1007/s10640-010-9417-y
- Kuster, E.; Dorusch, F.; Altenburger, R., 2005. Effects of hydrogen sulfide to *Vibrio fischeri*, *Scenedesmus vacuolatus*, and *Daphnia magna*. *Environmental Toxicology and Chemistry*, 24 (10): 2621-2629. 10.1897/04-546r.1

- Kutas, T.; Toth, J., 1985. A stochastic-model of phytoplankton dynamics in Lake Balaton. *Journal of Statistical Computation and Simulation*, 21 (3-4): 241-264. 10.1080/00949658508810818
- Kuypers, M.M.M.; Sliekers, A.O.; Lavik, G.; Schmid, M.; Jorgensen, B.B.; Kuenen, J.G.; Damste, J.S.S.; Strous, M.; Jetten, M.S.M., 2003. Anaerobic ammonium oxidation by anammox bacteria in the Black Sea. *Nature*, 422 (6932): 608-611. 10.1038/nature01472
- Ł, L.P.; Svenson, A.; Moksnes, P.-o., 1999. Distribution of green algal mats throughout shallow soft bottoms of the Swedish Skagerrak archipelago in relation to nutrient sources and wave exposure. 41: 281-294
- L., N.-F., 2010. Mediterranean Climate and Eutrophication of Reservoirs: Limnological Skills to Improve Management. In: Springer, ed. *Eutrophication: causes, consequences and control*. Dordrecht: Springer. 10.1007/978-90-481-9625-8\_6
- La Point, T.W.; Waller, W.T., 2000. Field assessments in conjunction with whole effluent toxicity testing. *Environmental Toxicology and Chemistry*, 19 (1): 14-24. 10.1897/1551-5028(2000)019<0014:faicww>2.3.co;2
- Laakkonen, S.; Laurila, S., 2007. Changing environments or shifting paradigms? Strategic decision making toward water protection in Helsinki, 1850-2000. *Ambio*, 36 (2-3): 212-219
- Lacaze, A.; Lacaze, J.-C., 1996. *L'eutrophisation des eaux marines et continentales: causes, manifestations, conséquences et moyens de lutte*. Ellipses
- Lacoul, P.; Freedman, B., 2006. Relationships between aquatic plants and environmental factors along a steep Himalayan altitudinal gradient. *Aquatic Botany*, 84: 3-16. gb-pdf
- Lacroix, A.; Beaudoin, N.; Makowski, D., 2005. Agricultural water nonpoint pollution control under uncertainty and climate variability. *Ecological Economics*, 53 (1): 115-127. 10.1016/j.ecolecon.2004.11.001
- Lacroix, G.; Ruddick, K.; Gypens, N.; Lancelot, C., 2007. Modelling the relative impact of rivers (Scheldt/Rhine/Seine) and Western Channel waters on the nutrient and diatoms/Phaeocystis distributions in Belgian waters (Southern North Sea). *Continental Shelf Research*, 27 (10-11): 1422-1446. 10.1016/j.csr.2007.01.013
- Ladd, A.E.; Edward, B., 2002. Corporate Swine and Capitalist Pigs: A Decade of Environmental Injustice and Protest in North Carolina. *Social Justice*, 29 (3 (89)): 26-46
- Ladha, J.K.; Pathak, H.; Krupnik, T.J.; Six, J.; van Kessel, C., 2005. Efficiency of fertilizer nitrogen in cereal production: retrospects and prospects. *Advances in agronomy*, 87: 85-156
- Laflen, J.M.; Elliot, W.J.; Flanagan, D.C.; Meyer, C.R.; Nearing, M.A., 1997. WEPP-predicting water erosion using a process-based model. *Journal of Soil and Water Conservation*, 52 (2): 96-102
- Lagacherie, P.; Rabotin, M.; Colin, F.; Moussa, R.; Voltz, M., 2010. Geo-MHYDAS: A landscape discretization tool for distributed hydrological modeling of cultivated areas. *Computers & Geosciences*, 36 (8): 1021-1032. 10.1016/j.cageo.2009.12.005
- Lahaye, M.; Cimadevilla, E.A.C.; Kuhlenkamp, R.; Quemener, B.; Lognone, V.; Dion, P., 1999. Chemical composition and C-13 NMR spectroscopic characterisation of ulvans from Ulva (Ulvales, Chlorophyta). *Journal of Applied Phycology*, 11 (1): 1-7. 10.1023/a:1008063600071
- Lajeunesse, E.; Malverti, L.; Charru, F., 2010. Bed load transport in turbulent flow at the grain scale: Experiments and modeling. *Journal of Geophysical Research-Earth Surface*, 115. 10.1029/2009jf001628
- Lajtha, K.; Harrison, A.F., 1995. Strategies of phosphorus acquisition and conservation by plant species and communities. In: Tiessen, H., ed. *Phosphorus in the global environment*. John Wiley and Sons, 139-147
- Lam, Q.D.; Schmalz, B.; Fohrer, N., 2010. Modelling point and diffuse source pollution of nitrate in a rural lowland catchment using the SWAT model. *Agricultural Water Management*, 97 (2): 317-325. 10.1016/j.agwat.2009.10.004
- Lambert, R.; Toussaint, B.; Peeters, A., 2004. *Estimating nitrogen losses from animal manures using their phosphorus balance*. Wageningen: Wageningen Acad Publ (*Controlling Nitrogen Flows and Losses*)
- Lamberti, V.; Konort, M.D. 1979. Builders for detergent compositions. Brevet
- Lampert, W., 2011. *Daphnia: Development of Model Organism in Ecology and Evolution* Olden-dorf/Luhe, Germany: International Ecology Institute (*Excellence in Ecology Series*)
- Lancelot, C.; Gypens, N.; Billen, G.; Garnier, J.; Roubeix, V., 2007. Testing an integrated river-ocean mathematical tool for linking marine eutrophication to land use: The Phaeocystis-dominated Belgian coastal zone (Southern North Sea) over the past 50 years. *Journal of Marine Systems*, 64 (1-4): 216-228. 10.1016/j.jmarsys.2006.03.010
- Lancelot, C.; Passy, P.; Gypens, N., 2014. Model assessment of present-day Phaeocystis colony blooms in the Southern Bight of the North Sea (SBNS) by comparison with a reconstructed pristine situation. *Harmful Algae*, 37: 172-182. 10.1016/j.hal.2014.05.017
- Lancelot, C.; Rousseau, V.; Gypens, N., 2009. Ecologically based indicators for Phaeocystis disturbance in eutrophied Belgian coastal waters (Southern North Sea) based on field observations and ecological modelling. *Journal of Sea Research*, 61 (1-2): 44-49. 10.1016/j.seares.2008.05.010
- Lancelot, C.; Spitz, Y.; Gypens, N.; Ruddick, K.; Becquevert, S.; Rousseau, V.; Lacroix, G.; Billen, G., 2005. Modelling diatom and Phaeocystis blooms and nutrient cycles in the Southern Bight of the North Sea: the MIRO model. *Marine Ecology Progress Series*, 289: 63-78. 10.3354/meps289063
- Lancelot, C.; Staneva, J.; Gypens, N., 2004. *Modelling the response of coastal ecosystem to nutrient change, Biogeochemical Silicium Cycle: Elemental to Global Scale*. Paris: Institut Océanographique, 531-556.
- Lancelot, C.; Staneva, J.; Gypens, N.; Institut, O., 2004. Modelling the response of coastal ecosystem to nutrient change. *Biogeochemical Silicium Cycle: Elemental to Global Scale*. (Oceanis-Serie de Documents Oceanographiques), Vol.28, 531-556

- Lancelot, C.; Staneva, J.; Van Eeckhout, D.; Beckers, J.M.; Stanev, E., 2002. Modelling the Danube-influenced north-western continental shelf of the Black Sea. II: Ecosystem response to changes in nutrient delivery by the Danube River after its damming in 1972. *Estuarine Coastal and Shelf Science*, 54 (3): 473-499. 10.1006/ecss.2000.0659
- Lancelot, C.; Thieu, V.; Polard, A.; Garnier, J.; Billen, G.; Hecq, W.; Gypens, N., 2011. Cost assessment and ecological effectiveness of nutrient reduction options for mitigating Phaeocystis colony blooms in the Southern North Sea: An integrated modeling approach. *Science of the Total Environment*, 409 (11): 2179-2191. 10.1016/j.scitotenv.2011.02.023
- Lang, P.; Meis, S.; Prochazkova, L.; Carvaiho, L.; Mackay, E.B.; Woods, H.J.; Pottie, J.; Milne, I.; Taylor, C.; Maberly, S.C.; Spears, B.M., 2016. Phytoplankton community responses in a shallow lake following lanthanum-bentonite application. *Water Research*, 97: 55-68. 10.1016/j.watres.2016.03.018
- Langpap, C.; Hascic, I.; Wu, J., 2008. Protecting Watershed Ecosystems through Targeted Local Land Use Policies. *American Journal of Agricultural Economics*, 90 (3): 684-700. 10.1111/j.1467-8276.2008.01145.x
- Lankoski, J.; Lichtenberg, E.; Ollikainen, M., 2008. Point/Nonpoint Effluent Trading with Spatial Heterogeneity. *American Journal of Agricultural Economics*, 90 (4): 1044-1058. 10.1111/j.1467-8276.2008.01172.x
- Lansford, V., 2001. *Economic and Environmental Implications of a Phosphorus Standard: 160-Sow Representative Farm in Montgomery County, Missouri*. University of Missouri.  
<http://search.ebscohost.com/login.aspx?direct=true&db=eoh&AN=0621959&lang=fr&site=ehost-live>
- Lapointe, B.E., 1997. Nutrient thresholds for bottom-up control of macroalgal blooms on coral reefs in Jamaica and southeast Florida. *Limnology and Oceanography*, 42 (5, 2): 1119-1131
- Lapointe, B.E., 1999. Simultaneous top-down and bottom-up forces control macroalgal blooms on coral reefs - (Reply to the comment by Hughes et al.). *Limnology and Oceanography*, 44 (6): 1586-1592
- Lapointe, B.E.; Barile, P.J.; Littler, M.M.; Littler, D.S., 2005. Macroalgal blooms on southeast Florida coral reefs. *Harmful Algae*, 4 (6): 1106-1122. 10.1016/j.hal.2005.06.002
- Lapointe, B.E.; Barile, P.J.; Littler, M.M.; Littler, D.S., 2005. Macroalgal blooms on southeast Florida coral reefs II. Cross-shelf discrimination of nitrogen sources indicates widespread assimilation of sewage nitrogen. *Harmful Algae*, 4 (6): 1106-1122. 10.1016/j.hal.2005.06.002
- Lapointe, B.E.; Barile, P.J.; Littler, M.M.; Littler, D.S.; Bedford, B.J.; Gasque, C., 2005. Macroalgal blooms on southeast Florida coral reefs. *Harmful Algae*, 4 (6): 1092-1105. 10.1016/j.hal.2005.06.004
- Lapointe, B.E.; Barile, P.J.; Littler, M.M.; Littler, D.S.; Bedford, B.J.; Gasque, C., 2005. Macroalgal blooms on southeast Florida coral reefs I. Nutrient stoichiometry of the invasive green alga *Codium isthmocladum* in the wider Caribbean indicates nutrient enrichment. *Harmful Algae*, 4 (6): 1092-1105. 10.1016/j.hal.2005.06.004
- Lapointe, B.E.; Bedford, B.J., 2011. Stormwater nutrient inputs favor growth of non-native macroalgae (*Rhodophyta*) on O'ahu, Hawaiian Islands. *Harmful Algae*, 10 (3): 310-318. 10.1016/j.hal.2010.11.004
- Lapointe, B.E.; Herren, L.W., 2013. Eutrophication and macroalgal blooms in coastal waters of south florida: Taxonomic composition and n: P ratios. *Phycologia*, 52 (4, S): 58-59
- Lapointe, B.E.; OCONNELL, J., 1989. NUTRIENT-ENHANCED GROWTH OF CLADOPHORA-PROLIFERA IN HARRINGTON SOUND, BERMUDA - EUTROPHICATION OF A CONFINED, PHOSPHORUS-LIMITED MARINE ECOSYSTEM. *Estuarine Coastal and Shelf Science*, 28 (4): 347-360. 10.1016/0272-7714(89)90084-x
- Lapointe, B.E.; TENORE, K.R., 1981. Experimental outdoor studies with *ulva-fasciata delile* .1. Interaction of light and nitrogen on nutrient-uptake, growth, and biochemical-composition. *Journal of Experimental Marine Biology and Ecology*, 53 (2-3): 135-152. 10.1016/0022-0981(81)90015-0
- Lardicci, C.; Como, S.; Corti, S.; Rossi, F., 2001. Changes and recover of macrozoobenthic communities after restoration measures of the Orbetello Lagoon (Tyrrhenian coast, Italy). *Aquatic Conservation-Marine and Freshwater Ecosystems*, 11 (4): 281-287. 10.1002/aqc.456
- Larkin, S.L.; Adams, C.M., 2007. Harmful Algal Blooms and Coastal Business: Economic Consequences in Florida. *Society & Natural Resources*, 20 (9): 849-859. 10.1080/08941920601171683
- Larousse, 2017. eutrophisation.<http://www.larousse.fr/dictionnaires/francais/eutrophisation/31777> [consulté: 16/01/2017]
- LaRowe, D.E.; Van Cappellen, P., 2011. Degradation of natural organic matter: A thermodynamic analysis. *Geochimica Et Cosmochimica Acta*, 75 (8): 2030-2042. 10.1016/j.gca.2011.01.020
- Larson, D.W., 1996. Macroscope: Curing the Incurable? *American Scientist*, 84 (1): 7-9
- Lartigue, J.; Sherman, T.D., 2006. A field study of nitrogen storage and nitrate reductase activity in the estuarine macroalgae Enteromorpha lingulata (Chlorophyceae) and *Gelidium pusillum* (Rhodophyceae). *Estuaries and Coasts*, 29 (4): 699-708
- Latacz-Lohmann, U.; Hodge, I., 2003. European Agri-environmental Policy for the 21st Century. *Australian Journal of Agricultural and Resource Economics*, 47 (1): 123-139. 10.1111/1467-8489.00206
- Lau, S.; Lane, N., 2001. Continuity and change in environmental systems: the case of shallow lake ecosystems *Progress in Physical Geography*, 25 (2): 24. 10.1177/030913330102500202
- Laukkonen, M.; Ekholm, P.; Huhtala, A.; Pitkanen, H.; Kiirikki, M.; Rantanen, P.; Inkala, A., 2009. Integrating Ecological and Economic Modeling of Eutrophication: Toward Optimal Solutions for a Coastal Area Suffering from Sediment Release of Phosphorus. *Ambio*, 38 (4): 225-235
- Laukkonen, M.; Huhtala, A., 2008. Optimal management of a eutrophied coastal ecosystem: Balancing agricultural and municipal abatement measures. *Environmental and Resource Economics*, 39 (2): 139-159. 10.1007/s10640-007-9099-2

- Laura, M.; Spangenberg, J.; O'Connor, M., 2009. An analysis of risks for biodiversity under the DPSIR framework. 10.1016/j.ecolecon.2009.03.017
- Laverock, B.; Gilbert, J.A.; Tait, K.; Osborn, A.M.; Widdicombe, S., 2011. Bioturbation: impact on the marine nitrogen cycle. *Biochemical Society Transactions*, 39: 315-320. 10.1042/bst0390315
- Lavery, P.; Bootle, S.; Vanderklift, M., 1999. Ecological effects of macroalgal harvesting on beaches in the Peel-Harvey Estuary, Western Australia. *Estuarine, Coastal and Shelf Science*, 49 (2): 295–309
- Lavery, P.S.; Lukatelich, R.J.; MCCOMB, A.J., 1991. Changes in the biomass and species composition of macroalgae in a eutrophic estuary. *Estuarine, Coastal and Shelf Science*, 33 (1): 1–22
- LAVERY, P.S.; MCCOMB, A.J., 1991. THE NUTRITIONAL ECO-PHYSIOLOGY OF CHAETOMORPHA-LINUM AND ULVA-RIGIDA IN PEEL INLET, WESTERN AUSTRALIA. *Botanica Marina*, 34 (3): 251–260. 10.1515/botm.1991.34.3.251
- Lawrence, D.; Valiela, I.; Tomasky, G., 2004. Estuarine calanoid copepod abundance in relation to season, salinity, and land-derived nitrogen loading, Waquoit Bay, MA. *Estuarine, Coastal and Shelf Science*, 61 (3): 547-557. 10.1016/j.ecss.2004.06.018
- Lawrence, E.; Jackson, A.; Jackson, J., 1998. *Longman Dictionary of Environmental Science*. Essex, England: Addison Wesley Longman Limited, p. 144-145.
- Lazar, J.G.; Gold, A.J.; Addy, K.; Mayer, P.M.; Forshay, K.J.; Groffman, P.M., 2014. Instream large wood: Denitrification hotspots with low n<sub>2</sub>O production. *Journal of the American Water Resources Association*, 50 (3): 615-625. 10.1111/jawr.12202
- Le Bagousse-Pinguet, Y.; Liancourt, P.; Gross, N.; Straile, D., 2012. Indirect facilitation promotes macrophyte survival and growth in freshwater ecosystems threatened by eutrophication. *Journal of Ecology*, 100 (2): 530-538. 10.1111/j.1365-2745.2011.01931.x
- Le Bec, C.; Legendre, A.; Messiaen, G., 2016. Changes in the annual harmful algal blooms of *Alexandrium minutum*: effects of environmental conditions and drainage basin inputs in the Rance estuary (Brittany, France). *Aquatic Living Resources*, 29 (1): 13. 10.1051/alar/2016006
- Le Bissonnais, Y., 2016. Aggregate stability and assessment of soil crustability and erodibility: I. Theory and methodology. *European Journal of Soil Science*, 67 (1): 11-21. 10.1111/ejss.4\_12311
- Le Bissonnais, Y.; Bruand, A.; Jamagne, M., 1989. Laboratory experimental-study of soil crusting -relation between aggregate breakdown mechanisms and crust structure. *Catena*, 16 (4-5): 377-392. 10.1016/0341-8162(89)90022-2
- Le, C.; Zha, Y.; Li, Y.; Sun, D.; Lu, H.; Yin, B., 2010. Eutrophication of lake waters in China: cost, causes, and control. *Environmental Management*, 45 (4): 662-668
- Le, C.F.; Hu, C.M.; Cannizzaro, J.; Duan, H.T., 2013. Long-term distribution patterns of remotely sensed water quality parameters in Chesapeake Bay. *Estuarine Coastal and Shelf Science*, 128: 93-103. 10.1016/j.ecss.2013.05.004
- Le Chêne, M., 2012. Algues vertes, terrain glissant. *Ethnologie Francaise*, 42 (4): 657-665. 10.3917/ethn.124.0657
- Le Chêne, M., 2012. The green algae and the effluents of breeding in Brittany: Is a valorisation possible? *Ethnologie Francaise*, 42 (4): 657-665. 10.3917/ethn.124.0657
- Le Goffe, P., 1995. The benefits of improvements in coastal water quality: a contingent approach. *Journal of Environmental Management*, 45 (4): 12. 10.1006/jema.1995.0078
- Le Lay, Y.-F.; Permingeat, F., 2008. Spécificité territoriale et petits arrangements avec la loi: la place des usages locaux dans l'entretien de la rivière (XIXe-XXe siècles). *Géocarrefour*, 83 (1): 45-55. 10.4000/geocarrefour.4522
- Le Luherne, E.; Réveillac, E.; Ponsero, A.; Sturbois, A.; Ballu, S.; Perdriau, M.; Le Pape, O., 2016. Fish community responses to green tides in shallow estuarine and coastal areas. *Estuarine, Coastal and Shelf Science*, 175: 79-92. 10.1016/j.ecss.2016.03.031
- Le Roy-Gleize, C.; Jarry, C., 2011. Incidences des schémas d'aménagement et de gestion des eaux sur les installations classées. *Bulletin du Droit de l'Environnement Industriel*, 34:
- Lease, H.; Hansen, J.; Bergman, H.; Meyer, J., 2003. Structural changes in gills of Lost River suckers exposed to elevated pH and ammonia concentrations. *Comparative Biochemistry and Physiology C-Toxicology & Pharmacology*, 134 (4): 491-500. 10.1016/S1532-0456(03)00044-9
- Ledoux, E.; Gomez, E.; Monget, J.M.; Viavattene, C.; Viennot, P.; Ducharme, A.; Benoit, M.; Mignolet, C.; Schott, C.; Mary, B., 2007. Agriculture and groundwater nitrate contamination in the Seine basin. The STICS-MODCOU modelling chain. *Science of the Total Environment*, 375 (1-3): 33-47. 10.1016/j.scitotenv.2006.12.002
- Lee, C.J.; Hirsch, R.M.; Schwarz, G.E.; Holtschlag, D.J.; Preston, S.D.; Crawford, C.G.; Vecchia, A.V., 2016. An evaluation of methods for estimating decadal stream loads. *Journal of Hydrology*, 542: 185-203. 10.1016/j.jhydrol.2016.08.059
- Lee, J.; Parker, A.E.; Wilkerson, F.P.; Dugdale, R.C., 2015. Uptake and inhibition kinetics of nitrogen in *Microcystis aeruginosa*: Results from cultures and field assemblages collected in the San Francisco Bay Delta, CA. *Harmful Algae*, 47: 126-140. 10.1016/j.hal.2015.06.002
- Lee, T.M.; Huang, Y.L.; Chen, M.H., 2005. Copper induction of phosphorus deficiency in *Ulva fasciata* (Ulvales, Chlorophyta). *Phycologia*, 44 (6): 620–628. 10.2216/0031-8884(2005)44[620:ciopdi]2.0.co;2
- Lee, W.Y.; Wang, W.X., 2001. Metal accumulation in the green macroalga *Ulva fasciata*: effects of nitrate, ammonium and phosphate. *Science of the Total Environment*, 278 (1-3): 11–22. 10.1016/s0048-9697(00)00884-6
- Lee, Y.; Ha, S.Y.; Park, H.K.; Han, M.S.; Shin, K.H., 2015. Identification of key factors influencing primary productivity in two river-type reservoirs by using principal component regression analysis. *Environmental Monitoring and Assessment*, 187 (4). 10.1007/s10661-015-4438-1

- Lee, Y.G.; An, K.G.; Ha, P.T.; Lee, K.Y.; Kang, J.H.; Cha, S.M.; Cho, K.H.; Lee, Y.S.; Chang, I.S.; Kim, K.W.; Kimj, J.H., 2009. Decadal and seasonal scale changes of an artificial lake environment after blocking tidal flows in the Yeongsan Estuary region, Korea. *Science of the Total Environment*, 407 (23): 6063-6072. 10.1016/j.scitotenv.2009.08.031
- Legovic, T., 1997. Toxicity may affect predictability of eutrophication models in the coastal sea. *Ecological Modelling*, 99 (1): 1-6. 10.1016/s0304-3800(96)01939-4
- Lehikoinen, A.; Helle, I.; Klemola, E.; Mäntyniemi, S.; Kuikka, S.; Pitkänen, H., 2014. Evaluating the impact of nutrient abatement measures on the ecological status of coastal waters: A Bayesian network for decision analysis. *International Journal of Multicriteria Decision Making*, 4 (2): 114-134. 10.1504/IJMCDM.2014.060426
- Lehmann, A.; Hinrichsen, H.H.; Getzlaff, K.; Myrberg, K., 2014. Quantifying the heterogeneity of hypoxic and anoxic areas in the Baltic Sea by a simplified coupled hydrodynamic-oxygen consumption model approach. *Journal of Marine Systems*, 134: 20-28. 10.1016/j.jmarsys.2014.02.012
- Lehmann, A.; Lachavanne, J.B., 1999. Changes in the water quality of Lake Geneva indicated by submerged macrophytes. *Freshwater Biology*, 42 (3): 457-466. 10.1046/j.1365-2427.1999.00489.x
- Lehvo, A.; Back, S., 2001. Survey of macroalgal mats in the Gulf of Finland, Baltic Sea. *Aquatic Conservation-Marine and Freshwater Ecosystems*, 11 (1): 11-18. 10.1002/aqc.428
- Leidenberger, S.; Harding, K.; Jonsson, P.R., 2012. ECOLOGY AND DISTRIBUTION OF THE ISOPOD GENUS IDOTEA IN THE BALTIC SEA: KEY SPECIES IN A CHANGING ENVIRONMENT. *Journal of Crustacean Biology*, 32 (3): 359-381. 10.1163/193724012x626485
- Leigh, C.; Burford, M.A.; Connolly, R.M.; Olley, J.M.; Saeck, E.; Sheldon, F.; Smart, J.C.R.; Bunn, S.E., 2013. Science to Support Management of Receiving Waters in an Event-Driven Ecosystem: From Land to River to Sea. *Water*, 5 (2): 780-797. 10.3390/w5020780
- Leigh, C.; Burford, M.A.; Roberts, D.T.; Udy, J.W., 2010. Predicting the vulnerability of reservoirs to poor water quality and cyanobacterial blooms. *Water Research*, 44 (15): 4487-4496
- Leip, A.; Billen, G.; Garnier, J.; Grizzetti, B.; Lassaletta, L.; Reis, S.; Simpson, D.; Sutton, M., A.; Vries, W.d.; Weiss, F.; Westhoek, H., 2015. Impacts of European livestock production: nitrogen, sulphur, phosphorus and greenhouse gas emissions, land-use, water eutrophication and biodiversity. *Environmental Research Letters*, 10 (11): 115004
- Lemaire, G.; Jeuffroy, M.-H.; Gastal, F., 2008. Diagnosis tool for plant and crop N status in vegetative stage. *European Journal of Agronomy*, 28 (4): 614-624. 10.1016/j.eja.2008.01.005
- Lemercier, B.; Walter, C.; Arrouays, D.; Aurousseau, P.; Follain, S.; Michaud, A.R.; Saby, N.; Sarr, J.-B.; Schwartz, C.; Vertes, F., 2009. Stockage de phosphore dans les sols: surveillance et diagnostic aux échelles nationale et régionale. Océanis
- Lemieux, C., 2007. À quoi sert l'analyse des controverses ? *Mil neuf cent. Revue d'histoire intellectuelle*, 25 (1): 191-212
- Lempert, R.J.; Collins, M.T., 2007. Managing the risk of uncertain threshold responses: Comparison of robust, optimum, and precautionary approaches. *Risk Analysis*, 27 (4): 1009-1026. 10.1111/j.1539-6924.2007.00940.x
- Lenanton, R.C.J.; Loneragan, N.R.; Er, I.C.P., 1985. Blue-green Algal Blooms and the Commercial Fishery of a Large Australian Estuary. 16 (12): 477-482
- Lenhart, H.J.; Mills, D.K.; Baretta-Bekker, H.; van Leeuwen, S.M.; van der Molen, J.; Baretta, J.W.; Blaas, M.; Desmit, X.; Kuhn, W.; Lacroix, G.; Los, H.J.; Meneguen, A.; Neves, R.; Proctor, R.; Ruardij, P.; Skogen, M.D.; Vanhoutte-Brunier, A.; Villars, M.T.; Wakelin, S.L., 2010. Predicting the consequences of nutrient reduction on the eutrophication status of the North Sea. *Journal of Marine Systems*, 81 (1-2): 148-170. 10.1016/j.jmarsys.2009.12.014
- Lenihan, H.S., 1999. Physical-biological coupling on oyster reefs: How habitat structure influences individual performance. *Ecological Monographs*, 69 (3): 251-275. 10.1890/0012-9615(1999)069[0251:pbcoor]2.0.co;2
- Lenihan, H.S.; Peterson, C.H., 1998. How habitat degradation through fishery disturbance enhances impacts of hypoxia on oyster reefs. *Ecological Applications*, 8 (1): 128-140. 10.2307/2641316
- Lenzi, M.; Salvaterra, G.; Gennaro, P.; Mercatali, I.; Persia, E.; Porrello, S.; Sorce, C., 2015. A new approach to macroalgal bloom control in eutrophic, shallow-water, coastal areas. *Journal of Environmental Management*, 150: 456-465. 10.1016/j.jenvman.2014.12.031
- Lenzi, M.A.; DiLuzio, M., 1997. Surface runoff, soil erosion and water quality modelling in the Alpine watershed using AGNPS integrated with a Geographic Information System. *European Journal of Agronomy*, 6 (1-2): 1-14. 10.1016/s1161-0301(96)02001-1
- Leon, L.F.; Antenucci, J.P.; Rao, Y.R.; McCrimmon, C., 2012. Summary performance of the Estuary and Lake Computer Model (ELCOM): application in the Laurentian and other Great Lakes. *Water Quality Research Journal of Canada*, 47 (3-4): 252-267. 10.2166/wqrjc.2012.022
- Leon, L.F.; Smith, R.E.H.; Hipsey, M.R.; Bocaniov, S.A.; Higgins, S.N.; Hecky, R.E.; Antenucci, J.P.; Imberger, J.A.; Guildford, S.J., 2011. Application of a 3D hydrodynamic-biological model for seasonal and spatial dynamics of water quality and phytoplankton in Lake Erie. *Journal of Great Lakes Research*, 37 (1): 41-53. 10.1016/j.jglr.2010.12.007
- Leon, L.F.; Smith, R.E.H.; Malkin, S.Y.; Depew, D.; Hipsey, M.R.; Antenucci, J.P.; Higgins, S.N.; Hecky, R.E.; Rao, R.Y., 2012. Nested 3D modeling of the spatial dynamics of nutrients and phytoplankton in a Lake Ontario nearshore zone. *Journal of Great Lakes Research*, 38: 171-183. 10.1016/j.jglr.2012.02.006
- Leon, L.K.; Imberger, J.; Smith, R.E.H.; Hecky, R.E.; Lam, D.C.L.; Schertzer, W.M., 2005. Modeling as a tool for nutrient management in Lake Erie: a hydrodynamics study. *Journal of Great Lakes Research*, 31: 309-318
- Leonardos, N.; Geider, R.J., 2004. Responses of elemental and biochemical composition of *Chaetoceros muelleri* to growth under varying light and nitrate : phosphate supply ratios and their influence on critical N: P. *Limnology and Oceanography*, 49 (6): 2105-2114. 10.4319/lo.2004.49.6.2105

- LePape, O.; Menesguen, A., 1997. Hydrodynamic prevention of eutrophication in the Bay of Brest (France), a modelling approach. *Journal of Marine Systems*, 12 (1-4): 171-186
- Lesage, M., 2013. *Rapport d'évaluation de la politique de l'eau en France. « Mobiliser les territoires pour inventer le nouveau service public de l'eau et atteindre nos objectifs de qualité »*, 219 p.
- Leschen, A.S.; Ford, K.H.; Evans, N.T., 2010. Successful Eelgrass (*Zostera marina*) Restoration in a Formerly Eutrophic Estuary (Boston Harbor) Supports the Use of a Multifaceted Watershed Approach to Mitigating Eelgrass Loss. *Estuaries and Coasts*, 33 (6): 1340-1354. 10.1007/s12237-010-9272-7
- Lesouef, A.; André, A., 1982. Mise au point d'un modèle de qualité de la Seine de Montreau à Poses. 1982
- Lessin, G.; Raudsepp, U.; Maljutenko, I.; Laanemets, J.; Passenko, J.; Jaanus, A., 2014. Model study on present and future eutrophication and nitrogen fixation in the Gulf of Finland, Baltic Sea. *Journal of Marine Systems*, 129: 76-85. 10.1016/j.jmarsys.2013.08.006
- Lester, R.E.; Boulton, A.J., 2008. Rehabilitating agricultural streams in Australia with wood: A review. *Environmental Management*, 42 (2): 310-326. 10.1007/s00267-008-9151-1
- Leston, S.; Nunes, M.; Viegas, I.; Lemos, M.F.L.; Freitas, A.; Barbosa, J.; Ramos, F.; Pardal, M.A., 2011. The effects of the nitrofuran furaltadone on *Ulva lactuca*. *Chemosphere*, 82 (7): 1010-1016. 10.1016/j.chemosphere.2010.10.067
- Leston, S.; Nunes, M.; Viegas, I.; Nebot, C.; Cepeda, A.; Pardal, M.A.; Ramos, F., 2014. The influence of sulfathiazole on the macroalgae *Ulva lactuca*. *Chemosphere*, 100: 105-110. 10.1016/j.chemosphere.2013.12.038
- Leston, S.; Nunes, M.; Viegas, I.; Ramos, F.; Pardal, M.A., 2013. The effects of chloramphenicol on *Ulva lactuca*. *Chemosphere*, 91 (4): 552-557. 10.1016/j.chemosphere.2012.12.061
- Levain, A., 2011. Les algues vertes surveillent-elles les cochons bretons ? A propos de quelques mutations du sauvage et du domestique en contexte d'élevage intensif *1er congrès de l'Association Française des Ethnologues et Anthropologues (AFEA) "Connaissances : no(s) limit(es)"*. Paris: 21-24 septembre 2011
- Levain, A., 2014. Faire face aux « marées vertes », penser les crises du vivant. *Ethnographiques.org*, (27 en ligne):
- Levain, A., 2014. Pour innover, vivons cachés ? Ce que c'est que d'être pilote. *Comment réconcilier agriculture et littoral ? Pour une agroécologie des territoires*. Versailles: Quae
- Levain, A., 2014. Vivre avec l'algue verte: médiations, épreuves et signes. Muséum National d'Histoire Naturelle,
- Levain, A., 2016. Une épreuve médiatique ? Les éleveurs bretons et les marées vertes. *Etudes rurales*, 198: 23
- Levain, A., 2017. De l'épreuve à l'expérience. Les éleveurs bretons face à la médiatisation des marées vertes *Etudes rurales*, 198: 23
- Levain, A., 2017. Hùtái, une sortie de l'insignifiance. L'apparition des marées vertes en baie de Qingdao (Shandong, Chine). *Techniques & culture*, 68: 17
- Levain, A.; Vertès, F.; Ruiz, L.; Delaby, L.; Gascuel-Odoux, C.; Barbier, M., 2015. 'I am an Intensive Guy': The Possibility and Conditions of Reconciliation Through the Ecological Intensification Framework. *Environmental Management*, 56 (5): 1184-1198. 10.1007/s00267-015-0548-3
- Lévêque, C., 2000. Lake and pond ecosystems. In: S.A, L., ed. *Encyclopedia of biodiversity*. New York: Academic Press
- Levin, L.; Ekau, W.; Gooday, A.; Jorissen, F.; Middelburg, J.; Naqvi, S.; Neira, C.; Rabalais, N.; Zhang, J., 2009. Effects of natural and human-induced hypoxia on coastal benthos. *Biogeosciences*, 6: 2063-2098
- Levin, L.A.; Ekau, W.; Gooday, A.J.; Jorissen, F.; Middelburg, J.J.; Naqvi, S.W.A.; Neira, C.; Rabalais, N.N.; Zhang, J., 2009. Effects of natural and human-induced hypoxia on coastal benthos. *Biogeosciences*, 6 (10): 2063-2098. 10.5194/bg-6-2063-2009
- Levin, L.A.; Liu, K.K.; Emeis, K.C.; Breitburg, D.L.; Cloern, J.; Deutsch, C.; Giani, M.; Goffart, A.; Hofmann, E.E.; Lachkar, Z.; Limburg, K.; Liu, S.M.; Montes, E.; Naqvi, W.; Raguenneau, O.; Rabouille, C.; Sarkar, S.K.; Swaney, D.P.; Wassman, P.; Wishner, K.F., 2015. Comparative biogeochemistry-ecosystem-human interactions on dynamic continental margins. *Journal of Marine Systems*, 141: 3-17. 10.1016/j.jmarsys.2014.04.016
- Levine, S.N.; Schindler, D.W., 1989. Phosphorus, nitrogen, and carbon dynamics of Experimental Lake 303 during recovery from eutrophication. *Canadian Journal of Fisheries and Aquatic Sciences*, 46 (1): 2-10
- Levrault, A.-M.; Payen, D.; Coppinger, N.; Cholley, F.; Madignier, M.-L.; Benezit, J.-J.; Simoni, M.-L.; Laganier, R., 2013. *Évaluation de la politique de l'eau*, 134 p.
- Lewis, D.M.; Elliott, J.A.; Lambert, M.F.; Reynolds, C.S., 2002. The simulation of an Australian reservoir using a phytoplankton community model:Protech. *Ecological Modelling*, 150: 107-116. DOI: 10.1016/S0304-3800(01)00466-5</p>
- DOI: 10.1016/S0304-3800(01)00466-5
- Lewis, M.A.; Weber, D.E., 2002. Effects of substrate salinity on early seedling survival and growth of *Scirpus robustus* Pursh and *Spartina alterniflora* Loisel. *Ecotoxicology*, 11 (1): 19-26. 10.1023/a:1013788928922
- Lewitus, A.J.; Horner, R.A.; Caron, D.A.; Garcia-Mendoza, E.; Hickey, B.M.; Hunter, M.; Huppert, D.D.; Kudela, R.I.M.; Langlois, G.W.; Largier, J.L.; Lessard, E.J.; RaLonde, R.; Jack Rensel, J.E.; Strutton, P.G.; Trainer, V.L.; Tweddle, J.F., 2012. Harmful algal blooms along the North American west coast region: History, trends, causes, and impacts. *Harmful Algae*, 19: 133-159. 10.1016/j.hal.2012.06.009
- Leumann, G., 2002. Advancements of water resources management for an agriculture compatible with environment. *Landnutzung und Landentwicklung*, 43 (4): 167-170
- Li, C.S.; Salas, W.; Zhang, R.H.; Krauter, C.; Rotz, A.; Mitloehner, F., 2012. Manure-DNDC: a biogeochemical process model for quantifying greenhouse gas and ammonia emissions from livestock manure systems. *Nutrient Cycling in Agroecosystems*, 93 (2): 163-200. 10.1007/s10705-012-9507-z

- Li, H.; Xu, F.; Mizunoya, T.; Luo, J.; Yabar, H.; Higano, Y., 2011. Comprehensive Watershed Management Policies in the Dian Chi Lake China with a Focus on Non-point Source Pollution. *Studies in Regional Science*, 41 (2): 467-476. 10.2457/srs.41.467
- Li, H.; Zhang, Y.; Han, X.; Shi, X.; Rivkin, R.B.; Legendre, L., 2016. Growth responses of *Ulva prolifera* to inorganic and organic nutrients: Implications for macroalgal blooms in the southern Yellow Sea, China. *Scientific Reports*, 6: 26498. 10.1038/srep26498
- Li, J.; Liu, T., 2012. Ecological damage assessment of jiaozhou bay reclamation based on habitat equivalency analysis. *Shengtai Xuebao/Acta Ecologica Sinica*, 32 (22): 7146-7155. 10.5846/stxb201110131506
- Li, J.; Liu, T.; Wang, J.; Hadley, J.D., 2013. Assessment on external cost of reclamation in Jiaozhou bay based on resource equivalency analysis. *WIT Transactions on Information and Communication Technologies*. 2505-2511. 10.2495/ISME20133393
- Li, J.M.; Hou, H.Z.; Yao, H.Y.; Wang, X.L., 2014. Marine biological damage assessment of oil spill based on resources equivalency analysis. *Shengtai Xuebao/Acta Ecologica Sinica*, 34 (13): 3762-3770. 10.5846/stxb201305251173
- Li, M.; Lee, Y.J.; Testa, J.M.; Li, Y.; Ni, W.F.; Kemp, W.M.; Di Toro, D.M., 2016. What drives interannual variability of hypoxia in Chesapeake Bay: Climate forcing versus nutrient loading? *Geophysical Research Letters*, 43 (5): 2127-2134. 10.1002/2015gl067334
- Li, S.; Yu, K.; Huo, Y.; Zhang, J.; Wu, H.; Cai, C.e.; Liu, Y.; Shi, D.; He, P., 2016. Effects of nitrogen and phosphorus enrichment on growth and photosynthetic assimilation of carbon in a green tide-forming species (*Ulva prolifera*) in the Yellow Sea. *Hydrobiologia*, 776 (1): 161–171. 10.1007/s10750-016-2749-z
- Li, S.N.; Shi, X.L.; Lepere, C.; Liu, M.X.; Wang, X.J.; Kong, F.X., 2016. Unexpected predominance of photosynthetic picoeukaryotes in shallow eutrophic lakes. *Journal of Plankton Research*, 38 (4): 830-842. 10.1093/plankt/fbw042
- Li, S.X.; Wang, Z.H.; Stewart, B., 2013. Responses of crop plants to ammonium and nitrate N. *Advances in agronomy*, 118: 205-397
- Li, S.X.; Wang, Z.H.; Stewart, B.A., 2011. Differences of some leguminous and nonleguminous crops in utilization of soil phosphorus and responses to phosphate fertilizers. *Advances in agronomy*, 110: 125-249
- Li, T.J.; Wang, G.Q.; Huang, Y.F.; Fu, X.D., 2009. Modeling the Process of Hillslope Soil Erosion in the Loess Plateau. *Journal of Environmental Informatics*, 14 (1): 1-10. 10.3808/jei.200900148
- Li, W.; Qin, B.; Zhu, G., 2014. Forecasting short- term cyanobacterial blooms in Lake Taihu, China, using a coupled hydrodynamic- algal biomass model. *Ecohydrology*, 7 (2): 794-802. 10.1002/eco.1402
- Li, W.C.; Armstrong, De; Harris, R.F., 1973. Measurement of exchangeable inorganic-phosphate in lake sediments. *Environmental Science & Technology*, 7 (5): 454-456. 10.1021/es60077a006
- Li, X.Z.; Xiao, D.N.; Jongman, R.H.; Harms, W.B.; Bregt, A.K., 2003. Spatial modeling on the nutrient retention of an estuary wetland. *Ecological Modelling*, 167 (1-2): 33-46. 10.1016/s0304-3800(03)00170-4
- Li, Y.; Chen, B.-M.; Wang, Z.-G.; Peng, S.-L., 2011. Effects of temperature change on water discharge, and sediment and nutrient loading in the lower Pearl River basin based on SWAT modelling. *Hydrological Sciences Journal-Journal Des Sciences Hydrologiques*, 56 (1): 68-83. 10.1080/02626667.2010.538396
- Li, Y.; Liu, Y.; Zhao, L.; Hastings, A.; Guo, H., 2015. Exploring change of internal nutrients cycling in a shallow lake: A dynamic nutrient driven phytoplankton model. *Ecological Modelling*, 313: 137-148. 10.1016/j.ecolmodel.2015.06.025
- Li, Y.; Niu, S.; Yu, G., 2016. Aggravated phosphorus limitation on biomass production under increasing nitrogen loading: a meta-analysis. *Global Change Biology*, 22 (2): 934-943. 10.1111/gcb.13125
- Li, Y.B.; Wang, X.L.; Han, X.R.; Li, K.Q.; Zhao, X.X.; Shi, X.Y., 2008. An ecosystem model of the phytoplankton competition in the East China Sea, as based on field experiments. *Hydrobiologia*, 600: 283-296. 10.1007/s10750-007-9241-8
- Li, Y.P.; Du, W.; Yu, Z.B.; Tang, C.Y.; Wang, Y.; Anim, D.O.; Ni, L.X.; Lau, J.; Chew, S.A.; Acharya, K., 2015. Impact of flexible emergent vegetation on the flow turbulence and kinetic energy characteristics in a flume experiment. *Journal of Hydro-Environment Research*, 9 (3): 354-367. 10.1016/j.jher.2014.01.006
- Li, Y.Q.; Xiao, C.L.; Zhao, L.L.; Liang, X.J.; Jiang, Z.C., 2013. Assessment and Analysis of Eutrophication In Xinlicheng Reservoir. In: Zhao, J.; Iranpour, R.; Li, X.; Jin, B., eds. *Advances in Environmental Technologies*, Pts 1-6. (Advanced Materials Research), Vol.726-731, 3376-3380. 10.4028/www.scientific.net/AMR.726-731.3376
- Li, Y.Z.; Liu, Y.; Zhao, L.; Hastings, A.; Guo, H.C., 2015. Exploring change of internal nutrients cycling in a shallow lake: A dynamic nutrient driven phytoplankton model. *Ecological Modelling*, 313: 137-148. 10.1016/j.ecolmodel.2015.06.025
- Liao, W.J.; van der Werf, H.M.G.; Salmon-Monviola, J., 2015. Improved Environmental Life Cycle Assessment of Crop Production at the Catchment Scale via a Process-Based Nitrogen Simulation Model. *Environmental Science & Technology*, 49 (18): 10790-10796. 10.1021/acs.est.5b01347
- Licciardello, F.; Zema, D.A.; Zimbone, S.A.; Bingner, R.L., 2007. Runoff and soil erosion evaluation by the AnnAGNPS model in a small Mediterranean watershed. *Transactions of the Asabe*, 50 (5): 1585-1593
- Lie, A.A.Y.; Wong, C.K.; Lam, J.Y.C.; Liu, J.H.; Yung, Y.K., 2011. Changes in the nutrient ratios and phytoplankton community after declines in nutrient concentrations in a semi-enclosed bay in Hong Kong. *Marine Environmental Research*, 71 (3): 178-188. 10.1016/j.marenvres.2011.01.001
- Liffen, T.; Gurnell, A.M.; O'Hare, M.T.; Pollen-Bankhead, N.; Simon, A., 2011. Biomechanical properties of the emergent aquatic macrophyte *Sparganium erectum*: Implications for fine sediment retention in low energy rivers. *Ecological Engineering*, 37 (11): 1925-1931. 10.1016/j.ecoleng.2011.06.015
- Lijklema, L., 1980. Interaction of ortho-phosphate with iron(iii) and aluminum hydroxides. *Environmental Science & Technology*, 14 (5): 537-541. 10.1021/es60165a013

- Likens, G.E.; Bormann, F.H., 1970. Nutrient cycling in ecosystems. *Proceedings, Annual Biological Colloquium, Oregon State University*. 25-67
- Limburg, K.E.; Olson, C.; Walther, Y.; Dale, D.; Slomp, C.P.; Hoie, H., 2011. Tracking Baltic hypoxia and cod migration over millennia with natural tags. *Proceedings of the National Academy of Sciences of the United States of America*, 108 (22): E177-E182. 10.1073/pnas.1100684108
- Lin, H.; Taillefert, M., 2014. Key geochemical factors regulating Mn(IV)-catalyzed anaerobic nitrification in coastal marine sediments. *Geochimica Et Cosmochimica Acta*, 133: 17-33. 10.1016/j.gca.2014.01.025
- Lin, H.J.; Shao, K.T.; Jan, R.Q.; Hsieh, H.L.; Chen, C.P.; Hsieh, L.Y.; Hsiao, Y.T., 2007. A trophic model for the Danshuei River Estuary, a hypoxic estuary in northern Taiwan. *Marine Pollution Bulletin*, 54 (11): 1789-1800. 10.1016/j.marpolbul.2007.07.008
- Lin, J.; Xie, L.; Pietrafesa, L.J.; Xu, H.; Woods, W.; Mallin, M.A.; Durako, M.J., 2008. Water quality responses to simulated flow and nutrient reductions in the Cape Fear River Estuary and adjacent coastal region, North Carolina. *Ecological Modelling*, 212 (3-4): 200-217. 10.1016/j.ecolmodel.2007.10.026
- Lin, L.; Webster, J.R.; Hwang, T.; Band, L.E., 2015. Effects of lateral nitrate flux and instream processes on dissolved inorganic nitrogen export in a forested catchment: A model sensitivity analysis. *Water Resources Research*, 51 (4): 2680-2695. 10.1002/2014wr015962
- Lin, S.; Stevenson, R., 2015. *Phytoplankton biomass in U.S.A. lakes may increase by 88% by the end of the 21st century.* 10.13140/RG.2.1.1195.7527
- Lin, Z.; Radcliffe, D.E.; Rissee, L.M.; Romeis, J.J.; Jackson, C.R., 2009. Modeling Phosphorus in the Lake Allatoona Watershed Using SWAT: II. Effect of Land Use Change. *Journal of Environmental Quality*, 38 (1): 121-129. 10.2134/jeq2007.0111
- Lindén, E.; Lehikoinen, A.; Kotta, J.; Aps, R.; Pitkänen, H.; Räike, A.; Korpinen, P.; Kuikka, S., 2008. EVAGULF - protection of the aquatic communities in the Gulf of Finland: Risk-based policymaking. 10.1109/BALTIC.2008.4625520
- Lindim, C., 2015. Modeling the impact of Zebra mussels (*Dreissena polymorpha*) on phytoplankton and nutrients in a lowland river. *Ecological Modelling*, 301: 17-26. <http://dx.doi.org/10.1016/j.ecolmodel.2015.01.012>
- Lindim, C.; Becker, A.; Grueneberg, B.; Fischer, H., 2015. Modelling the effects of nutrient loads reduction and testing the N and P control paradigm in a German shallow lake. *Ecological Engineering*, 82: 415-427. 10.1016/j.ecoleng.2015.05.009
- Lindstrom, G.; Pers, C.; Rosberg, J.; Stromqvist, J.; Arheimer, B., 2010. Development and testing of the HYPE (Hydrological Predictions for the Environment) water quality model for different spatial scales. *Hydrology Research*, 41 (3-4): 295-319. 10.2166/nh.2010.007
- Line, D.E.; Coffey, S.W.; Osmond, D.L., 1997. WATERSHEDSS GRASS-AGNPS model tool. *Transactions of the Asae*, 40 (4): 971-975
- Linke, S.; Gilek, M.; Karlsson, M.; Udovyk, O., 2014. Unravelling science-policy interactions in environmental risk governance of the Baltic Sea: Comparing fisheries and eutrophication. *Journal of Risk Research*, 17 (4): 505-523. 10.1080/13669877.2013.794154
- Lointauta, 2017. Eutrophisation.<http://www.lointauta.com/dictionnaire/fr/definition/eutrophisation/> [consulté: 16/01/2017]
- Linton, J.; Budds, J., 2014. The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water. *Geoforum*, 57: 170-180. 10.1016/j.geoforum.2013.10.008
- Lipton, D.W., 1998. Pfiesteria's economic impact on seafood industry sales and recreational fishing. *Proceedings of the University of Maryland Center for Agricultural and Natural Resource Policy Conference, Economics of Policy Options for Nutrient Management and Dinoflagellates*, Laurel, MD:
- Litchman, E., 2003. Competition and coexistence of phytoplankton under fluctuating light: experiments with two cyanobacteria. *Aquatic Microbial Ecology*, 31 (3): 241-248
- Litchman, E.; Klausmeier, C.A., 2008. Trait-based community ecology of phytoplankton. *Annual Review of Ecology, Evolution, and Systematics*, 39: 615-639
- Litchman, E.; Klausmeier, C.A.; Schofield, O.M.; Falkowski, P.G., 2007. The role of functional traits and trade-offs in structuring phytoplankton communities: scaling from cellular to ecosystem level. *Ecology Letters*, 10 (12): 1170-1181
- Little, J.L.; Hall, R.I.; Quinlan, R.; Smol, J.P., 2000. Past trophic status and hypolimnetic anoxia during eutrophication and remediation of Gravenhurst Bay, Ontario: comparison of diatoms, chironomids, and historical records. *Canadian Journal of Fisheries and Aquatic Sciences*, 57 (2): 333-341. 10.1139/cjfas-57-2-333
- Liu, B.; de Swart, H.E., 2015. Impact of river discharge on phytoplankton bloom dynamics in eutrophic estuaries: A model study. *Journal of Marine Systems*, 152: 64-74. 10.1016/j.jmarsys.2015.07.007
- Liu, B.; Schaider, L.A.; Mason, R.P.; Shine, J.P.; Rabalais, N.N.; Senn, D.B., 2015. Controls on methylmercury accumulation in northern Gulf of Mexico sediments. *Estuarine Coastal and Shelf Science*, 159: 50-59. 10.1016/j.ecss.2015.03.030
- Liu, D.; Bai, J.; Song, S.; Zhang, J.; Sun, P.; Li, Y.; Han, G., 2007. The Impact of Sewage Discharge on the Macroalgae Community in the Yellow Sea Coastal Area Around Qingdao, China. *Water, Air, & Soil Pollution: Focus*, 7 (6): 683-692. 10.1007/s11267-007-9121-2
- Liu, D.; Keesing, J.K.; He, P.; Wang, Z.; Shi, Y.; Wang, Y., 2013. The world's largest macroalgal bloom in the Yellow Sea, China: Formation and implications. *Estuarine Coastal and Shelf Science*, 129: 2-10. 10.1016/j.ecss.2013.05.021
- Liu, D.; Keesing, J.K.; Xing, Q.; Shi, P., 2009. World's largest macroalgal bloom caused by expansion of seaweed aquaculture in China. *Marine Pollution Bulletin*, 58 (6): 888-895. 10.1016/j.marpolbul.2009.01.013

- Liu, D.Y.; Keesing, J.K.; He, P.M.; Wang, Z.L.; Shi, Y.J.; Wang, Y.J., 2013. The world's largest macroalgal bloom in the Yellow Sea, China: Formation and implications. *Estuarine Coastal and Shelf Science*, 129: 2-10. 10.1016/j.ecss.2013.05.021
- Liu, H.; Xu, W.S.; Kang, H.X.; Yin, B.S.; Yang, D.Z., 2014. Numerical Simulation of the Nutrient Limitation in the Yangtze River Estuary. In: Ma, S.; Jia, L.; Li, X.; Wang, L.; Zhou, H.; Sun, X., eds. *Life System Modeling and Simulation*. (Communications in Computer and Information Science), Vol.461, 188-197
- Liu, J.; Aronsson, H.; Ulén, B.; Bergström, L., 2012. Potential phosphorus leaching from sandy topsoils with different fertilizer histories before and after application of pig slurry: <i>Phosphorus leaching from sandy topsoils</i>. *Soil Use and Management*, 28 (4): 457-467. 10.1111/j.1475-2743.2012.00442.x
- Liu, J.L.; Liu, J.K.; Anderson, J.T.; Zhang, R.; Zhang, Z.M., 2016. Potential of aquatic macrophytes and artificial floating island for removing contaminants. *Plant Biosystems*, 150 (4): 702-709. 10.1080/11263504.2014.990535
- Liu, J.W.; Dong, S.L., 2001. Comparative studies on utilizing nitrogen capacity between two macroalgae Gracilaria tenuistipitata var. liui (rhodophyta) and Ulva pertusa (chlorophyta) II. Feedback controls of intracellular nitrogen pools on nitrogen uptake. *Journal of Environmental Sciences*, 13 (3): 323-327
- Liu, P.J.; Meng, P.J.; Liu, L.L.; Wang, J.T.; Leu, M.Y., 2012. Impacts of human activities on coral reef ecosystems of southern Taiwan: A long-term study. *Marine Pollution Bulletin*, 64 (6): 1129-1135. 10.1016/j.marpolbul.2012.03.031
- Liu, T.Z.; Yuan, J.J.; Dong, W.Y.; Wu, H.C.; Wang, H.J., 2015. Effects on inorganic nitrogen compounds release of contaminated sediment treatment with in situ calcium nitrate injection. *Environmental Science and Pollution Research*, 22 (2): 1250-1260. 10.1007/s11356-014-3421-7
- Liu, W.C.; Chan, W.T., 2014. Assessing the influence of nutrient reduction on water quality using a three-dimensional model: case study in a tidal estuarine system. *Environmental Monitoring and Assessment*, 186 (12): 8807-8825. 10.1007/s10661-014-4045-6
- Liu, W.C.; Chen, H.H.; Hsieh, W.H.; Chang, C.H., 2006. Linking watershed and eutrophication modelling for the Shihmen Reservoir, Taiwan. *Water Science and Technology*, 54 (11-12): 39-46. 10.2166/wst.2006.834
- Liu, W.C.; Chen, W.B.; Kimura, N., 2009. Measurement of Sediment Oxygen Demand to Simulate Dissolved Oxygen Distribution: Case Study in the Main Danshuei River Estuary. *Environmental Engineering Science*, 26 (12): 1701-1711. 10.1089/ees.2009.0132
- Liu, X.; Zhang, A.; Ji, C.; Joseph, S.; Bian, R.; Li, L.; Pan, G.; Paz-Ferreiro, J., 2013. Biochar's effect on crop productivity and the dependence on experimental conditions—a meta-analysis of literature data. *Plant and Soil*, 373 (1-2): 583-594. 10.1007/s11104-013-1806-x
- Liu, Y.; Arhonditsis, G.B.; Stow, C.A.; Scavia, D., 2011. Predicting the Hypoxic-Volume in Chesapeake Bay with the Streeter-Phelps Model: A Bayesian Approach. *Journal of the American Water Resources Association*, 47 (6): 1348-1363. 10.1111/j.1752-1688.2011.00588.x
- Liu, Y.; Evans, M.; Scavia, D., 2010. Gulf of Mexico Hypoxia: Exploring Increasing Sensitivity to Nitrogen Loads. *Environmental Science & Technology*, 44 (15): 5836-5841. 10.1021/es903521n
- Liu, Y.; Scavia, D., 2010. Analysis of the Chesapeake Bay Hypoxia Regime Shift: Insights from Two Simple Mechanistic Models. *Estuaries and Coasts*, 33 (3): 629-639. 10.1007/s12237-009-9251-z
- Liu, Y.; Wu, L.; Baddeley, J.A.; Watson, C.A., 2011. Models of biological nitrogen fixation of legumes. A review. *Agronomy for Sustainable Development*, 31 (1): 155-172. 10.1051/agro/2010008
- Livingston, R.J., 2000. *Eutrophication processes in coastal systems: origin and succession of plankton blooms and effects on secondary production in Gulf Coast estuaries*. CRC press
- Livingstone, M.; Smith, R.; Laughlin, R., 2000. A spatial study of denitrification potential of sediments in Belfast and Strangford Loughs and its significance. *Science of the Total Environment*, 251: 369-380
- Llorens, E.; Comas, J.; Martí, E.; Riera, J.L.; Sabater, F.; Poch, M., 2009. Integrating empirical and heuristic knowledge in a KBS to approach stream eutrophication. *Ecological Modelling*, 220 (18): 2162-2172. <http://dx.doi.org/10.1016/j.ecolmodel.2009.06.012>
- Lloyd, C.E.M.; Freer, J.E.; Johnes, P.J.; Coxon, G.; Collins, A.L., 2016. Discharge and nutrient uncertainty: implications for nutrient flux estimation in small streams. *Hydrological Processes*, 30 (1): 135-152. 10.1002/hyp.10574
- Lohrenz, S.E.; Fahnenstiel, G.L.; Redalje, D.G.; Lang, G.A.; Chen, X.; Dagg, M.J., 1997. Variations in primary production of northern Gulf of Mexico continental shelf waters linked to nutrient inputs from the Mississippi River. 155: 45-54
- Lohrenz, S.E.; Fahnenstiel, G.L.; Redalje, D.G.; Lang, G.A.; Chen, X.G.; Dagg, M.J., 1997. Variations in primary production of northern Gulf of Mexico continental shelf waters linked to nutrient inputs from the Mississippi River. *Marine Ecology Progress Series*, 155: 45-54. 10.3354/meps155045
- Lohrer, A.M.; Thrush, S.F.; Gibbs, M.M., 2004. Bioturbators enhance ecosystem function through complex biogeochemical interactions. *Nature*, 431 (7012): 1092-1095. 10.1038/nature03042
- Longphuirt, S.N.; O'Boyle, S.; Wilkes, R.; Dabrowski, T.; Stengel, D.B., 2016. Influence of hydrological regime in determining the response of macroalgal blooms to nutrient loading in two Irish estuaries. *Estuaries and Coasts*, 39 (2): 478-494
- Longstaff, B.J.; Kildea, T.; Runcie, J.W.; Cheshire, A.; Dennison, W.C.; Hurd, C.; Kana, T.; Raven, J.A.; Larkum, A.W.D., 2002. An in situ study of photosynthetic oxygen exchange and electron transport rate in the marine macroalga Ulva lactuca (Chlorophyta). *PHOTOSYNTHESIS RESEARCH*, 74 (3): 281-293. 10.1023/a:1021279627409
- Lonin, S.; Tuchkovenko, Y., 2001. Water quality modelling for the ecosystem of the Cienaga de Tesca coastal lagoon. *Ecological Modelling*, 144 (2-3): 279-293. 10.1016/S0304-3800(01)00376-3
- Loomis, J.B.; Allen, B., 2008. Using Non Market Valuation to Inform the Choice between Permits and Fees in Environmental Regulation. *Environmental and Resource Economics*, 40 (3): 329-337. 10.1007/s10640-007-9156-x

- Loperfido, J.V.; Just, C.L.; Papanicolaou, A.N.; Schnoor, J.L., 2010. In situ sensing to understand diel turbidity cycles, suspended solids, and nutrient transport in Clear Creek, Iowa. *Water Resources Research*, 46. 10.1029/2009wr008293
- Lopes, J.F.; Vaz, N.; Vaz, L.; Ferreira, J.A.; Dias, J.M., 2015. Assessing the state of the lower level of the trophic web of a temperate lagoon, in situations of light or nutrient stress: A modeling study. *Ecological Modelling*, 313: 59-76. 10.1016/j.ecolmodel.2015.06.009
- Lopes, R.J.; Pardal, M.A.; Múrias, T.; Cabral, J.A.; Marques, J.C., 2006. Influence of macroalgal mats on abundance and distribution of dunlin *Calidris alpina* in estuaries : a long-term approach. 323: 11-20
- Lopez-Arredondo, D.L.; Leyva-Gonzalez, M.A.; Alatorre-Cobos, F.; Herrera-Estrella, L., 2013. Biotechnology of nutrient uptake and assimilation in plants. *International Journal of Developmental Biology*, 57 (6-8): 595-610. 10.1387/ijdb.1302681h
- Lopez-Urrutia, A.; San Martin, E.; Harris, R.P.; Irigoien, X., 2006. Scaling the metabolic balance of the oceans. *Proceedings of the National Academy of Sciences of the United States of America*, 103 (23): 8739-8744. 10.1073/pnas.0601137103
- Los, F.J.; Brinkman, J.J., 1988. Phytoplankton modelling by means of optimization: a 10-year experience with BLOOM II. *Internationale Vereinigung fur Theoretische und Angewandte Limnologie. Verhandlungen*, 23 (2):
- Los, F.J.; Troost, T.A.; Van Beek, J.K.L., 2014. Finding the optimal reduction to meet all targets-Applying Linear Programming with a nutrient tracer model of the North Sea. *Journal of Marine Systems*, 131: 91-101. 10.1016/j.jmarsys.2013.12.001
- Lotze, H.K.; Lenihan, H.S.; Bourque, B.J.; Bradbury, R.H.; Cooke, R.G.; Kay, M.C.; Kidwell, S.M.; Kirby, M.X.; Peterson, C.H.; Jackson, J.B.C., 2006. Depletion, degradation, and recovery potential of estuaries and coastal seas. *Science*, 312 (5781): 1806-1809. 10.1126/science.1128035
- Lotze, H.K.; Milewski, I., 2004. Two centuries of multiple human impacts and successive changes in a North Atlantic food web. *Ecological Applications*, 14 (5): 1428-1447. 10.1890/03-5027
- Lotze, H.K.; Schramm, W., 2000. Can ecophysiological traits explain species dominance patterns in macroalgal blooms? (vol 36, pg 287, 2000). *Journal of Phycology*, 36 (3): 622
- Lotze, H.K.; Schramm, W., 2000. Ecophysiological traits explain species dominance patterns in macroalgal blooms. *Journal of Phycology*, 36 (2): 287-295. 10.1046/j.1529-8817.2000.99109.x
- Lotze, H.K.; Schramm, W.; Schories, D.; Worm, B., 1999. Control of macroalgal blooms at early developmental stages: *Pilayella littoralis* versus *Enteromorpha* spp. *Oecologia*, 119 (1): 46-54. 10.1007/s004420050759
- Lotze, H.K.; Worm, B., 2000. Variable and complementary effects of herbivores on different life stages of bloom-forming macroalgae. *Marine Ecology Progress Series*, 200: 167-175. 10.3354/meps200167
- Lotze, H.K.; Worm, B.; Sommer, U., 2000. Propagule banks, herbivory and nutrient supply control population development and dominance patterns in macroalgal blooms. *Oikos*, 89 (1): 46-58. 10.1034/j.1600-0706.2000.890106.x
- Lou, K.Y.; Rajapaksha, A.U.; Ok, Y.S.; Chang, S.X., 2016. Pyrolysis temperature and steam activation effects on sorption of phosphate on pine sawdust biochars in aqueous solutions. *Chemical Speciation and Bioavailability*, 28 (1-4): 42-50. 10.1080/09542299.2016.1165080
- Louca, V.; Lindsay, S.W.; Majambere, S.; Lucas, M.C., 2009. Fish community characteristics of the lower Gambia River floodplains: a study in the last major undisturbed West African river. *Freshwater Biology*, 54 (2): 254-271. 10.1111/j.1365-2427.2008.02105.x
- Louette, G.; Declerck, S.; Vandekerckhove, J.; De Meester, L., 2009. Evaluation of Restoration Measures in a Shallow Lake through a Comparison of Present Day Zooplankton Communities with Historical Samples. *Restoration Ecology*, 17 (5): 629-640. 10.1111/j.1526-100X.2008.00409.x
- Lovato, T.; Ciavatta, S.; Brigolin, D.; Rubino, A.; Pastres, R., 2013. Modelling dissolved oxygen and benthic algae dynamics in a coastal ecosystem by exploiting real-time monitoring data. *Estuarine Coastal and Shelf Science*, 119: 17-30. 10.1016/j.ecss.2012.12.025
- Lovett, G.; Cole, J.; Pace, M., 2006. Is net ecosystem production equal to ecosystem carbon accumulation? *Ecosystems*, 9 (1): 152-155. 10.1007/s10021-005-0036-3
- Lovley, D.R.; Phillips, E.J.P., 1988. Novel mode of microbial energy-metabolism - organic-carbon oxidation coupled to dissimilatory reduction of iron or manganese. *Applied and Environmental Microbiology*, 54 (6): 1472-1480
- Low-Decarie, E.; Fussmann, G.F.; Bell, G., 2014. Aquatic primary production in a high-CO<sub>2</sub> world. *Trends in Ecology & Evolution*, 29 (4): 223-232. 10.1016/j.tree.2014.02.006
- Lowe, C.D.; Gilbert, A.J.; Mee, L.D., 2014. Human-environment interaction in the Baltic Sea. *Marine Policy*, 43: 46-54. 10.1016/j.marpol.2013.03.006
- Lowery, T.A., 1998. Modelling estuarine eutrophication in the context of hypoxia, nitrogen loadings, stratification and nutrient ratios. *Journal of Environmental Management*, 52 (3): 289-305. 10.1006/jema.1998.0180
- Lowgren, M., 1989. Resource allocation and environmental objectives. A regional evaluation of Swedish eutrophication control policy 1965-80. *Journal of Environmental Management*, 29 (4): 363-376
- Lowgren, M., 2005. The Water Framework Directive: Stakeholder Preferences and Catchment Management Strategies: Are They Reconcilable? *Ambio*, 34 (7): 501-506
- Löwgren, M., 2005. The water framework directive: Stakeholder preferences and catchment management strategies. Are they reconcilable? *Ambio*, 34 (7): 501-506
- Löwgren, M.; Hillmo, T.; Lohm, U., 1989. Water Pollution Perspectives: Problem Conceptualizations and Abatement Strategies in Sweden during the 20th Century. *GeoJournal*, 19 (2): 161-171
- Lowgren, M.; Karlsson, G., 1987. Effectiveness of tertiary wastewater treatment in river-basin scale. *Journal of Environmental Management*, 25 (1): 13-26

- Lowrance, R.; Altier, L.S.; Newbold, J.D.; Schnabel, R.R.; Groffman, P.M.; Denver, J.M.; Correll, D.L.; Gilliam, J.W.; Robinson, J.L.; Brinsfield, R.B.; Staver, K.W.; Lucas, W.; Todd, A.H., 1997. Water quality functions of Riparian forest buffers in Chesapeake Bay watersheds. *Environmental Management*, 21 (5): 687-712. 10.1007/s002679900060
- Lu, C.Q.; Tian, H.Q., 2017. Global nitrogen and phosphorus fertilizer use for agriculture production in the past half century: shifted hot spots and nutrient imbalance. *Earth System Science Data*, 9 (1): 181-192. 10.5194/essd-9-181-2017
- Lu, G.Y.; Song, X.X.; Yu, Z.M.; Cao, X.H.; Yuan, Y.Q., 2015. Effects of modified clay flocculation on major nutrients and diatom aggregation during *Skeletonema costatum* blooms in the laboratory. *Chinese Journal of Oceanology and Limnology*, 33 (4): 1007-1019. 10.1007/s00343-015-4162-2
- Lu, Q.; He, Z.L.; Graetz, D.A.; Stoffella, P.J.; Yang, X.E., 2010. Phytoremediation to remove nutrients and improve eutrophic stormwaters using water lettuce (*Pistia stratiotes* L.). *Environmental Science and Pollution Research*, 17 (1): 84-96. 10.1007/s11356-008-0094-0
- Luang, A.D.; De Laender, F.; Olsen, Y.; Vadstein, O.; Dewulf, J.; Janssen, C.R., 2014. Inferring time-variable effects of nutrient enrichment on marine ecosystems using inverse modelling and ecological network analysis. *Science of the Total Environment*, 493: 708-718. 10.1016/j.scitotenv.2014.06.027
- Lubell, M.; Sabatier, P.A.; Vedlitz, A.; Focht, W.; Trachtenberg, Z.; Matlock, M., 2005. Swimming Upstream: Collaborative Approaches to Watershed Management (Conclusions and Recommendations). *Swimming Upstream: Collaborative Approaches to Watershed Management*. Cambridge, MA: MIT Press (American and Comparative Environmental Series)
- Lucas, J.; Prévôt, L., 1991. Phosphate and fossil preservation. In: Allison, P.A.; Briggs, D.E.G., eds. *Taphonomy : releasing the data locked in the fossil record*. New York : Plenum press (Topics in geobiology), Vol.9, 389-409
- Lucotte, M.; Danglejan, B., 1985. A comparison of several methods for the determination of iron hydroxides and associated ortho-phosphates in estuarine particulate matter. *Chemical Geology*, 48 (1-4): 257-264. 10.1016/0009-2541(85)90050-6
- Lucrezi, S.; van der Merwe, P., 2014. Beachgoers' Awareness and Evaluation of the Blue Flag Award in South Africa. *Journal of Coastal Research*: 1129-1140. 10.2112/JCOASTRES-D-13-00159.1
- Ludwig, D.; Brock, W.A.; Carpenter, S.R., 2005. Uncertainty in discount models and environmental accounting. *Ecology and Society*, 10 (2):
- Ludwig, D.; Carpenter, S.; Brock, W., 2003. Optimal phosphorus loading for a potentially eutrophic lake. *Ecological Applications*, 13 (4): 1135-1152. 10.1890/1051-0761(2003)13[1135:OPLFAP]2.0.CO;2
- Ludwig, D.F.; Iannuzzi, T.J., 2006. Habitat equivalency in urban estuaries: An analytical hierarchy process for planning ecological restoration. *Urban Ecosystems*, 9 (4): 265-290. 10.1007/s11252-006-0007-2
- Luebbe, M.K.; Erickson, G.E.; Klopfenstein, T.J.; Greenquist, M.A.; Benton, J.R., 2011. Effect of dietary cation-anion difference on urinary pH, feedlot performance, nitrogen mass balance, and manure pH in open feedlot pens. *Journal of Animal Science*, 89 (2): 489-500. 10.2527/jas.2009-2458
- Luginbühl, Y., 2012. *La mise en scène du monde. Construction du paysage européen*. CNRS Editions
- Lugoli, F.; Garmendia, M.; Lehtinen, S.; Kauppila, P.; Moncheva, S.; Revilla, M.; Roselli, L.; Slabakova, N.; Valencia, V.; Dromph, K.M.; Basset, A., 2012. Application of a new multi-metric phytoplankton index to the assessment of ecological status in marine and transitional waters. *Ecological Indicators*, 23: 338-355. 10.1016/j.ecolind.2012.03.030
- Lund, J.W., 1967. Eutrophication. *Nature*, 214: 557-558
- Lundberg, C., 2005. Conceptualizing the Baltic Sea ecosystem: an interdisciplinary tool for environmental decision making. *Ambio*, 34 (6): 433-9
- Lundqvist, L.J., 2001. Games Real Farmers Play: Knowledge , memory and the fate of collective action to prevent eutrophication of water catchments. *Local Environment*, 6 (4): 407-419. 10.1080/13549830120091707
- Lung, W.S., 1988. The role of estuarine modeling in nutrient control. *Water Science and Technology*, 20 (6-7): 243-252
- Lung, W.S.; Nice, A.J., 2007. Eutrophication model for the Patuxent Estuary: Advances in predictive capabilities. *Journal of Environmental Engineering-Asce*, 133 (9): 917-930. 10.1061/(asce)0733-9372(2007)133:9(917)
- Lung, W.S.; Testerman, N., 1989. Modeling fate and transport of nutrients in the James estuary. *Journal of Environmental Engineering-Asce*, 115 (5): 978-991
- Lung, W.-S.; Paerl, H.W., 1988. Modeling blue-green algal blooms in the lower neuse river. *Water Research*, 22 (7): 895-905. 10.1016/0043-1354(88)90027-9
- Luo, M.B.; Liu, F.; Xu, Z.L., 2012. Growth and nutrient uptake capacity of two co-occurring species, *Ulva prolifera* and *Ulva linza*. *Aquatic Botany*, 100: 18-24. 10.1016/j.aquabot.2012.03.006
- Lürling, M.; Mackay, E.; Reitzel, K.; Spears, B.M., 2016. Editorial - A critical perspective on geo-engineering for eutrophication management in lakes. *Water Res*, 97: 1-10. 10.1016/j.watres.2016.03.035
- Lürling, M.; Mackay, E.; Reitzel, K.; Spears, B.M., 2016. Editorial – A critical perspective on geo-engineering for eutrophication management in lakes. *Water Research*, 97 (Supplement C): 1-10. 10.1016/j.watres.2016.03.035
- Lürling, M.; Mackay, E.; Reitzel, K.; Spears, B.M., 2016. Editorial–A critical perspective on geo-engineering for eutrophication management in lakes Elsevier.
- Luther, G.W.; Sundby, B.; Lewis, B.L.; Brendel, P.J.; Silverberg, N., 1997. Interactions of manganese with the nitrogen cycle: Alternative pathways to dinitrogen. *Geochimica Et Cosmochimica Acta*, 61 (19): 4043-4052. 10.1016/s0016-7037(97)00239-1

- Luu, T.N.M.; Garnier, J.; Billen, G.; Le, T.P.Q.; Nemery, J.; Orange, D.; Le, L.A., 2012. N, P, Si budgets for the Red River Delta (northern Vietnam): how the delta affects river nutrient delivery to the sea. *Biogeochemistry*, 107 (1-3): 241-259. 10.1007/s10533-010-9549-8
- Lyche-Solheim, A.; Feld, C.K.; Birk, S.; Phillips, G.; Carvalho, L.; Morabito, G.; Mischke, U.; Willby, N.; Sondergaard, M.; Hellsten, S.; Kolada, A.; Mjelde, M.; Bohmer, J.; Miler, O.; Pusch, M.T.; Argillier, C.; Jeppesen, E.; Lauridsen, T.L.; Poikane, S., 2013. Ecological status assessment of European lakes: a comparison of metrics for phytoplankton, macrophytes, benthic invertebrates and fish. *Hydrobiologia*, 704 (1): 57-74. 10.1007/s10750-012-1436-y
- Lyngsgaard, M.M.; Richardson, K.; Markager, S.; Nielsen, M.H.; Olesen, M.; Christensen, J.P.A., 2014. Deep primary production in coastal pelagic systems: importance for ecosystem functioning. *Marine Ecology Progress Series*, 517: 15-33. 10.3354/meps11015
- Lynn, S.G.; Kilham, S.S.; Kreeger, D.A.; Interlandi, S.J., 2000. Effect of nutrient availability on the biochemical and elemental stoichiometry in the freshwater diatom *Stephanodiscus minutulus* (Bacillariophyceae). *Journal of Phycology*, 36: 510-522
- Lyons, D.A.; Arvanitidis, C.; Blight, A.J.; Chatzinikolaou, E.; Guy-Haim, T.; Kotta, J.; Orav-Kotta, H.; Queiros, A.M.; Rilov, G.; Somerfield, P.J.; Crowe, T.P., 2014. Macroalgal blooms alter community structure and primary productivity in marine ecosystems. *Global Change Biology*, 20 (9): 2712-2724. 10.1111/gcb.12644
- Lyons, D.A.; Arvanitidis, C.; Blight, A.J.; Chatzinikolaou, E.; Guy-Haim, T.; Kotta, J.; Orav-Kotta, H.; Queirós, A.M.; Rilov, G.; Somerfield, P.J.; Crowe, T.P., 2014. Macroalgal blooms alter community structure and primary productivity in marine ecosystems. *Global Change Biology*, 20 (9): 2712-2724. 10.1111/gcb.12644
- Lyttimäki, J., 2012. Gone with the wind? Newspaper discourse of eutrophication and blue-green algae blooms in Finland. *Water and Environment Journal*, 26 (3): 405-414. 10.1111/j.1747-6593.2011.00301.x
- Lyttimäki, J., 2015. Prospects for Environmental Communication Based on 25 Years of Newspaper Coverage of Climate Change and Eutrophication in Finland. *Applied Environmental Education & Communication*, 14 (4): 246-255. 10.1080/1533015X.2015.1109486
- Lyttimäki, J.; Assmuth, T., 2015. Down with the flow: public debates shaping the risk framing of artificial groundwater recharge. *GeoJournal*, 80 (1): 113-127. 10.1007/s10708-014-9540-3
- Lyttimäki, J.M., 2007. Temporalities and environmental reporting: press news on eutrophication in Finland. *Environmental Sciences*, 4 (1): 41-51. 10.1080/15693430701295866
- Ma, L.; He, F.; Sun, J.; Wang, L.; Xu, D.; Wu, Z.B., 2015. Remediation effect of pond-ditch circulation on rural wastewater in southern China. *Ecological Engineering*, 77: 363-372. 10.1016/j.ecoleng.2014.11.036
- Ma, L.; Schmitt, F.G., 2014. Development and environmental conflicts in China. *China Perspectives*, 2008 (2): 94-102
- Ma, S.; Swinton, S.M.; Lupi, F.; Jolejole-Foreman, C., 2012. Farmers' Willingness to Participate in Payment-for-Environmental-Services Programmes. *Journal of Agricultural Economics*, 63 (3): 604-626. 10.1111/j.1477-9552.2012.00358.x
- Maar, M.; Timmermann, K.; Petersen, J.K.; Gustafsson, K.E.; Storm, L.M., 2010. A model study of the regulation of blue mussels by nutrient loadings and water column stability in a shallow estuary, the Limfjorden. *Journal of Sea Research*, 64 (3): 322-333. 10.1016/j.seares.2010.04.007
- Machado, D.A.; Imberger, J., 2014. Modeling the impact of natural and anthropogenic nutrient sources on phytoplankton dynamics in a shallow coastal domain, Western Australia. *Environmental Fluid Mechanics*, 14 (1): 87-111. 10.1007/s10652-013-9296-1
- MacKenzie, B.R.; Ojaveer, H.; Eero, M., 2011. Historical ecology provides new insights for ecosystem management: eastern Baltic cod case study. *Marine Policy*, 35 (2): 266-270. 10.1016/j.marpol.2010.10.004
- MacKenzie, B.R.; Schiedek, D., 2007. Daily ocean monitoring since the 1860s shows record warming of northern European seas. *Global Change Biology*, 13 (7): 1335-1347. 10.1111/j.1365-2486.2007.01360.x
- MacKenzie, J., 2005. Removal of Sea Lettuce, *Ulva* spp., in Estuaries to Improve the Environments for Invertebrates, Fish, Wading Birds, and Eelgrass, *Zostera marina*. *Marine Fisheries Review*, 67 (4): 1-8
- Maclarkey, R.L., 1991. The emergence of environmental legislation and policy in the great lakes ecosystem. *International Review of Modern Sociology*, 21 (2): 93-111
- Madden, C.J.; Kemp, W.M., 1996. Ecosystem model of an estuarine submersed plant community: Calibration and simulation of eutrophication responses. *Estuaries*, 19 (2B): 457-474. 10.2307/1352463
- Madenjian, C.P.; Bunnell, D.B.; Warner, D.M.; Pothoven, S.A.; Fahnenstiel, G.L.; Nalepa, T.F.; Vanderploeg, H.A.; Tsehay, I.; Claramunt, R.M.; Clark, R.D., 2015. Changes in the Lake Michigan food web following dreissenid mussel invasions: A synthesis. *Journal of Great Lakes Research*, 41: 217-231
- Madsen, T.V.; Cedergreen, N., 2002. Sources of nutrients to rooted submerged macrophytes growing in a nutrient-rich stream. *Freshwater Biology*, 47 (2): 283-291
- Magalhaes, J.; Flindt, M.R.; Marques, J.C.; Pardal, M.A., 2008. Modelling nutrient mass balance in a temperate meso-tidal estuary: Implications for management. *Estuarine Coastal and Shelf Science*, 76 (1): 175-185. 10.1016/j.ecss.2007.06.013
- Magenheimer, J.F.; Moore, T.R.; Chmura, G.L.; Daoust, R.J., 1996. Methane and carbon dioxide flux from a macrotidal salt marsh, Bay of Fundy, New Brunswick. *Estuaries*, 19 (1): 139-145. 10.2307/1352658
- Magesan, G.N.; Wang, H.L.; Clinton, P.W., 2012. Nitrogen cycling in gorse-dominated ecosystems in New Zealand. *New Zealand Journal of Ecology*, 36 (1): 21-28

- Magnuson, J.J.; Webster, K.E.; Assel, R.A.; Bowser, C.J.; Dillon, P.J.; Eaton, J.G.; Evans, H.E.; Fee, E.J.; Hall, R.I.; Mortsch, L.R.; Schindler, D.W.; Quinn, F.H., 1997. Potential effects of climate changes on aquatic systems: Laurentian Great Lakes and Precambrian Shield Region. *Hydrological Processes*, 11 (8): 825-871
- Magre, E.J., 1974. Ulva lactuca negatively affect Balanus balanoides (Cirripedia Thoracia) in tidepools. *Crustaceana*, 27 (3): 231-234
- Maier, G.O.; Toft, J.D.; Simenstad, C.A., 2011. Variability in Isotopic ( $\delta$  C-13,  $\delta$  N-15,  $\delta$  S-34) Composition of Organic Matter Contributing to Detritus-based Food Webs of the Columbia River Estuary. *Northwest Science*, 85 (1): 41-54. 10.3955/046.085.0104
- Mailhot, A.; Villeneuve, J.-P., 2003. Mean-value second-order uncertainty analysis method: application to water quality modelling. *Advances in Water Resources*, 26 (5): 491-499. 10.1016/S0309-1708(03)00006-X
- Maine, M.A.; Sune, N.; Hadad, H.; Sanchez, G.; Bonetto, C., 2006. Nutrient and metal removal in a constructed wetland for wastewater treatment from a metallurgic industry. *Ecological Engineering*, 26 (4): 341-347. 10.1016/j.ecoleng.2005.12.004
- Mainstone, C.P.; Parr, W., 2002. Phosphorus in rivers - ecology and management. *Science of the Total Environment*, 282: 25-47. 10.1016/s0048-9697(01)00937-8
- Maitre d'hôtel, E.; Pelegrin, F., 2012. *Les valeurs de la biodiversité : un état des lieux de la recherche française. Rapport FRB, série expertise et synthèse*, 48.
- Mäler, K.-G.; Aniyar, S.; Jansson, Å., 2009. Accounting for Ecosystems. *Environmental and Resource Economics*, 42 (1): 39-51. 10.1007/s10640-008-9234-8
- Malhadas, M.S.; Mateus, M.D.; Brito, D.; Neves, R., 2014. Trophic state evaluation after urban loads diversion in a eutrophic coastal lagoon (A"bidos Lagoon, Portugal): a modeling approach. *Hydrobiologia*, 740 (1): 231-251. 10.1007/s10750-014-1956-8
- Mallin, M.A.; McIver, M.R.; Wells, H.A.; Parsons, D.C.; Johnson, V.L., 2005. Reversal of eutrophication following sewage treatment upgrades in the New River Estuary, North Carolina. *Estuaries*, 28 (5): 750-760. 10.1007/bf02732912
- Malloy, K.J.; Wade, D.; Janicki, A.; Grabe, S.A.; Nijbroek, R., 2007. Development of a benthic index to assess sediment quality in the Tampa Bay Estuary. *Marine Pollution Bulletin*, 54 (1): 22-31. 10.1016/j.marpolbul.2006.06.011
- Maloufi, S.; Catherine, A.; Mouillot, D.; Louvard, C.; Couté, A.; Bernard, C.; Troussellier, M., 2016. Environmental heterogeneity among lakes promotes hyper  $\beta$ -diversity across phytoplankton communities. *Freshwater Biology*, 61 (5): 633-645
- Malta, E.; Rijstebil, J.W.; Brouwer, P.E.M.; Kromkamp, J.C., 2003. Vertical heterogeneity in physiological characteristics of *Ulva* spp. mats. *Marine Biology*, 143 (5): 1029-1038. 10.1007/s00227-003-1134-4
- Malta, E.J.; Draisma, S.G.A.; Kamermans, P., 1999. Free-floating *Ulva* in the southwest Netherlands: species or morphotypes? A morphological, molecular and ecological comparison. *European Journal of Phycology*, 34 (5): 443-454. 10.1080/09541449910001718801
- Malta, E.-J.; Draisma, S.G.A.; Stegenga, H.; Crielaard, G.; Rottier, R., 1997. Succession of ULVA blooms: A morphological, molecular and ecophysiological comparison of closely related species. *Phycologia*, 36 (4, S): 69
- Mander, U.; Kull, A.; Kuusemets, V., 2000. Nutrient flows and land use change in a rural catchment: a modelling approach. *Landscape Ecology*, 15 (3): 187-199. 10.1023/a:1008181811552
- Manna, R.K.; Satpathy, B.B.; Roshith, C.M.; Naskar, M.; Bhaumik, U.; Sharma, A.P., 2013. Spatio-temporal changes of hydrochemical parameters in the estuarine part of the River Ganges under altered hydrological regime and its impact on biotic communities. *Aquatic Ecosystem Health & Management*, 16 (4): 433-444. 10.1080/14634988.2013.853596
- Marchi, M.; Jørgensen, S.E.; Bécares, E.; Fernández-Aláez, C.; Rodríguez, C.; Fernández-Aláez, M.; Pulselli, F.M.; Marchettini, N.; Bastianoni, S., 2012. Effects of eutrophication and exotic crayfish on health status of two Spanish lakes: a joint application of ecological indicators. *Ecological Indicators*, 20 (Supplement C): 92-100. 10.1016/j.ecolind.2012.02.005
- Marescaux, J.; Falisse, E.; Lorquet, J.; Van Doninck, K.; Beisel, J.-N.; Descy, J.-P., 2016. Assessing filtration rates of exotic bivalves: dependence on algae concentration and seasonal factors. *Hydrobiologia*, 777 (1): 67-78. 10.1007/s10750-016-2764-0
- Margalef, R., 1960. Ideas for a Synthetic Approach to the Ecology Of Running Waters. *Internationale Revue der gesamten Hydrobiologie und Hydrographie*, 45 (1): 133-153. 10.1002/iroh.19600450108
- Marić, D.; Kraus, R.; Godrijan, J.; Supić, N.; Djakovac, T.; Precali, R., 2012. Phytoplankton response to climatic and anthropogenic influences in the north-eastern Adriatic during the last four decades. *Estuarine, Coastal and Shelf Science*, 115: 98-112. 10.1016/j.ecss.2012.02.003
- Marini, M.; Grilli, F.; Guarnieri, A.; Jones, B.H.; Klajic, Z.; Pinardi, N.; Sanxhaku, M., 2010. Is the southeastern Adriatic Sea coastal strip an eutrophic area? *Estuarine, Coastal and Shelf Science*, 88 (3): 395-406
- Marino, R.; Chan, F.; Howarth, R.W.; Pace, M.; Likens, G.E., 2002. Ecological and biogeochemical interactions constrain planktonic nitrogen fixation in estuaries. *Ecosystems*, 5 (7): 719-725. 10.1007/s10021-002-0176-7
- Marinoni, O.; Adkins, P., 2009. Joint application of cost-utility analysis and modern portfolio theory to inform decision processes in a changing climate. 2385-2391
- Marion, L.; Brient, L., 1998. Wetland effects on water quality: input-output studies of suspended particulate matter, nitrogen (N) and phosphorus (P) in Grand-Lieu, a natural plain lake. *Hydrobiologia*, 374: 217-235
- Markensten, H.; Moore, K.; Persson, I., 2010. Simulated lake phytoplankton composition shifts toward cyanobacteria dominance in a future warmer climate. *Ecological Applications*, 20 (3): 752-767. 10.1890/08-2109.1
- Markowska, A.; Zylicz, T., 1999. Costing an international public good: The case of the Baltic Sea. *Ecological Economics*, 30 (2): 301-316. 10.1016/S0921-8009(98)00138-4

- Markowska, A.; Źylicz, T., 1999. Costing an international public good: the case of the Baltic Sea. *Ecological Economics*, 30 (2): 301-316. [10.1016/S0921-8009\(98\)00138-4](https://doi.org/10.1016/S0921-8009(98)00138-4)
- Marmonier, P.; Archambaud, G.; Belaidi, N.; Bougon, N.; Breil, P.; Chauvet, E.; Claret, C.; Cornut, J.; Datry, T.; Dole-Olivier, M.J.; Dumont, B.; Flipo, N.; Foulquier, A.; Gerino, M.; Guilpart, A.; Julien, F.; Maazouzi, C.; Martin, D.; Mermilliod-Blondin, F.; Montuelle, B.; Namour, P.; Navel, S.; Ombredane, D.; Pelte, T.; Piscart, C.; Pusch, M.; Stroffek, S.; Robertson, A.; Sanchez-Pérez, J.M.; Sauvage, S.; Taleb, A.; Wantzen, B.; Vervier, P., 2012. The role of organisms in hyporheic processes: gaps in current knowledge, needs for future research and applications. *Annales de Limnologie - International Journal of Limnology*, 48: 253-266. [10.1051/limn/2012009](https://doi.org/10.1051/limn/2012009)
- Marois, D.E.; Mitsch, W.J., 2016. Modeling phosphorus retention at low concentrations in Florida Everglades mesocosms. *Ecological Modelling*, 319: 42-62. [10.1016/j.ecolmodel.2015.09.024](https://doi.org/10.1016/j.ecolmodel.2015.09.024)
- Marques, S.C.; Pardal, M.A.; Pereira, M.J.; Goncalves, F.; Marques, J.C.; Azeiteiro, U.M., 2007. Zooplankton distribution and dynamics in a temperate shallow estuary. *Hydrobiologia*, 587: 213-223. [10.1007/s10750-007-0682-x](https://doi.org/10.1007/s10750-007-0682-x)
- Marsh, D.; Mkware, L.; Scarpa, R., 2011. Do Respondents' Perceptions of the Status Quo Matter in Non-Market Valuation with Choice Experiments? An Application to New Zealand Freshwater Streams. *Sustainability*, 3 (9): 1593
- Martelloni, T.; Tomassetti, P.; Gennaro, P.; Vani, D.; Persia, E.; Persiano, M.; Falchi, R.; Porrello, S.; Lenzi, M., 2016. Artificial soft sediment resuspension and high density opportunistic macroalgal mat fragmentation as method for increasing sediment zoobenthic assemblage diversity in a eutrophic lagoon. *Mar Pollut Bull*, 110 (1): 212-20. [10.1016/j.marpolbul.2016.06.060](https://doi.org/10.1016/j.marpolbul.2016.06.060)
- Martens, C.S.; Berner, R.A.; Rosenfeld, J.K., 1978. Interstitial water chemistry of anoxic long-island sound sediments .2. Nutrient regeneration and phosphate removal. *Limnology and Oceanography*, 23 (4): 605-617
- Martin, E.; Gascoin, S.; Grusson, Y.; Murgue, C.; Bardeau, M.; Anctil, F.; Ferrant, S.; Lardy, R.; Le Moigne, P.; Leenhardt, D.; Rivalland, V.; Perez, J.M.S.; Sauvage, S.; Therond, O., 2016. On the Use of Hydrological Models and Satellite Data to Study the Water Budget of River Basins Affected by Human Activities: Examples from the Garonne Basin of France. *Surveys in Geophysics*, 37 (2): 223-247. [10.1007/s10712-016-9366-2](https://doi.org/10.1007/s10712-016-9366-2)
- Martin, J.L.; Hanke, A.R.; LeGresley, M.M., 2009. Long term phytoplankton monitoring, including harmful algal blooms, in the Bay of Fundy, eastern Canada. *Journal of Sea Research*, 61 (1-2): 76-83. [10.1016/j.seares.2008.05.011](https://doi.org/10.1016/j.seares.2008.05.011)
- Martin, S., 2004. The cost of restoration as a way of defining resilience: a viability approach applied to a model of lake eutrophication. *Ecology and Society*, 9 (2):
- Martin, W.R.; Sayles, F.L., 1996. CaCO<sub>3</sub> dissolution in sediments of the Ceara Rise, western equatorial Atlantic. *Geochimica Et Cosmochimica Acta*, 60 (2): 243-263. [10.1016/0016-7037\(95\)00383-5](https://doi.org/10.1016/0016-7037(95)00383-5)
- Martin-Bidou, P., 2013. Protection des eaux. *Jurisclasseur Administratif*. 1-69
- Martin-Creuzburg, D.; von Elert, E.; Hoffmann, K.H., 2008. Nutritional constraints at the cyanobacteria—*Daphnia magna* interface: the role of sterols. *Limnology and Oceanography*, 53 (2): 456-468
- Martinetto, P.; Teichberg, M.; Valiela, I.; Montemayor, D.; Iribarne, O., 2011. Top-down and bottom-up regulation in a high nutrient-high herbivory coastal ecosystem. *Marine Ecology Progress Series*, 432: 69-82. [10.3354/meps09173](https://doi.org/10.3354/meps09173)
- Martínez, B.; Pato, L.S.; Rico, J.M., 2012. Nutrient uptake and growth responses of three intertidal macroalgae with perennial, opportunistic and summer-annual strategies. *Aquatic Botany*, 96 (1): 14-22. [10.1016/j.aquabot.2011.09.004](https://doi.org/10.1016/j.aquabot.2011.09.004)
- Martinez, J.; Béline, F., 2002. Nitrogen management from intensive livestock production: Scientific and environmental issues. *Natures Sciences Societies*, 10: 52-61. [10.1016/S1240-1307\(02\)80134-0](https://doi.org/10.1016/S1240-1307(02)80134-0)
- Martinkova, M.; Krysanova, V.; Hesse, C.; Hanel, M.; Blazkova, S., 2011. Modelling of the climate change effects on nitrogen loads in the Jizera catchment, Czech Republic. In: Peters, N.E.; Krysanova, V.; Lepisto, A.; Prasad, R.; Thoms, M.; Wilby, R.; Zandaryaa, S., eds. *Water Quality: Current Trends and Expected Climate Change Impacts*. (IAHS Publication), Vol.348, 159-164
- Martins, I.; Leite, N.; Constantino, E., 2014. Consumption and feeding preference of *Echinogammarus marinus* on two different algae: *Fucus vesiculosus* and *Ulva intestinalis*. *Journal of Sea Research*, 85: 443-446. [10.1016/j.seares.2013.07.017](https://doi.org/10.1016/j.seares.2013.07.017)
- Martins, I.; Marcotegui, A.; Marques, J.C., 2008. Impacts of macroalgal spores on the dynamics of adult macroalgae in a eutrophic estuary: High versus low hydrodynamic seasons and long-term simulations for global warming scenarios. *Marine Pollution Bulletin*, 56 (5): 984-998. [10.1016/j.marpolbul.2008.01.025](https://doi.org/10.1016/j.marpolbul.2008.01.025)
- Martins, I.; Marques, J.C., 2002. A model for the growth of opportunistic macroalgae (*Enteromorpha* sp.) in tidal estuaries. *Estuarine Coastal and Shelf Science*, 55 (2): 247-257. [10.1006/ecss.2001.0900](https://doi.org/10.1006/ecss.2001.0900)
- Martins, I.; Marques, J.C.; Jorgensen, S.E.; Nielsen, S.N., 1997. Modelling the effects of green macroalgae blooms on the population dynamics of *Cyathura carinata* (Crustacea : Isopoda) in an eutrophied estuary. *Ecological Modelling*, 102 (1): 33-53. [10.1016/s0304-3800\(97\)00098-7](https://doi.org/10.1016/s0304-3800(97)00098-7)
- Martins, I.; Pardal, M.Á.; Lillebø, A.I.; Flindt, M.R.; Marques, J.C., 2001. Hydrodynamics as a Major Factor Controlling the Occurrence of Green Macroalgal Blooms in a Eutrophic Estuary: A Case Study on the Influence of Precipitation and River Management. *Estuarine, Coastal and Shelf Science*, 52 (2): 165-177. [10.1006/ecss.2000.0708](https://doi.org/10.1006/ecss.2000.0708)
- Martins, M.S.; Massocato, T.F.; Horta, P.A.; Barufi, J.B., 2016. First record of red macroalgae bloom in Southern Atlantic Brazil. *ALGAE*, 31 (1): 33-39. [10.4490/algae.2016.31.3.5](https://doi.org/10.4490/algae.2016.31.3.5)
- Martins, N.T.; Runcie, J.W.; Gurgel, C.F.D., 2015. The impact of different preservation methods on macroalgal tissue light absorptance values: A case study with *Ulva australis*. *Aquatic Botany*, 120 (B): 236-239. [10.1016/j.aquabot.2014.08.008](https://doi.org/10.1016/j.aquabot.2014.08.008)
- Mary, B.; Beaudoin, N.; Justes, E.; Machet, J.M., 1999. Calculation of nitrogen mineralization and leaching in fallow soil using a simple dynamic model. *European Journal of Soil Science*, 50 (4): 549-566. [10.1046/j.1365-2389.1999.00264.x](https://doi.org/10.1046/j.1365-2389.1999.00264.x)

- MARZOLF, E.; MULHOLLAND, P.; STEINMAN, A., 1994. IMPROVEMENTS TO THE DIURNAL UPSTREAM-DOWNSTREAM DISSOLVED-OXYGEN CHANGE TECHNIQUE FOR DETERMINING WHOLE-STREAM METABOLISM IN SMALL STREAMS. *Canadian Journal of Fisheries and Aquatic Sciences*, 51 (7): 1591-1599. 10.1139/f94-158
- Masakorala, K.; Turner, A.; Brown, M.T., 2008. Influence of synthetic surfactants on the uptake of Pd, Cd and Pb by the marine macroalga, *Ulva lactuca*. *Environmental Pollution*, 156 (3): 897-904. 10.1016/j.envpol.2008.05.030
- Masakorala, K.; Turner, A.; Brown, M.T., 2011. Toxicity of Synthetic Surfactants to the Marine Macroalga, *Ulva lactuca*. *Water Air and Soil Pollution*, 218 (1-4): 283-291. 10.1007/s11270-010-0641-4
- Mascarenhas, M., 2007. Where the waters divide: First Nations, tainted water and environmental justice in Canada. *Local Environment*, 12 (6): 12. 10.1080/13549830701657265
- Mason, C., 1991. *Biology of freshwater pollution*. 2nd edn. Harlow, Essex, England: Longman Scientific & Technical. New York, Wiley
- Masterson, P.; Arenas, F.A.; Thompson, R.C.; Jenkins, S.R., 2008. Interaction of top down and bottom up factors in intertidal rockpools: Effects on early successional macroalgal community composition, abundance and productivity. *Journal of Experimental Marine Biology and Ecology*, 363 (1-2): 12-20. 10.1016/j.jembe.2008.06.001
- Masuda, K., 2016. Measuring eco-efficiency of wheat production in Japan: a combined application of life cycle assessment and data envelopment analysis. *Journal of Cleaner Production*, 126: 373-381. 10.1016/j.jclepro.2016.03.090
- Matabos, M.; Tunnicliffe, V.; Juniper, S.K.; Dean, C., 2012. A Year in Hypoxia: Epibenthic Community Responses to Severe Oxygen Deficit at a Subsea Observatory in a Coastal Inlet. *Plos One*, 7 (9). 10.1371/journal.pone.0045626
- Mathews, A.L.; Phlips, E.J.; Badylak, S., 2015. Modeling phytoplankton productivity in a shallow, microtidal, subtropical estuary. *Marine Ecology Progress Series*, 531: 63-80. 10.3354/meps11313
- Mati, B.M.; Veihe, A., 2001. Application of the USLE in a Savannah environment: Comparative experiences from East and West Africa. *Singapore Journal of Tropical Geography*, 22 (2): 138-155. 10.1111/1467-9493.00099
- Matiatos, I., 2016. Nitrate source identification in groundwater of multiple land-use areas by combining isotopes and multivariate statistical analysis: A case study of Asopos basin (Central Greece). *Science of the Total Environment*, 541: 802-814. 10.1016/j.scitotenv.2015.09.134
- Matsui, T.; Kojima, H.; Fukui, M., 2013. Effects of temperature on anaerobic decomposition of high-molecular weight organic matter under sulfate-reducing conditions. *Estuarine Coastal and Shelf Science*, 119: 139-144. 10.1016/j.ecss.2013.01.003
- Maugendre, L.; Gattuso, J.P.; Louis, J.; de Kluijver, A.; Marro, S.; Soetaert, K.; Gazeau, F., 2015. Effect of ocean warming and acidification on a plankton community in the NW Mediterranean Sea. *Ices Journal of Marine Science*, 72 (6): 1744-1755. 10.1093/icesjms/fsu161
- Maxim, L.; van der Sluijs, J.P., 2011. Quality in environmental science for policy: assessing uncertainty as a component of policy analysis. *Environmental Science & Policy*, 14 (4): 10. 10.1016/j.envsci.2011.01.003
- May, P.J., 2005. Regulation and Compliance Motivations: Examining Different Approaches. *Public Administration Review*, 65 (1): 31-44
- Mayer, C.; Burlakova, L.; Eklöv, P.; Fitzgerald, D.; Karatayev, A.; Ludsin, S.; Millard, S.; Mills, E.; Ostapenya, A.P.; Rudstam, L.; Zhu, B.; Zhukova, T., 2013. Benthification of Freshwater Lakes. *Quagga and Zebra Mussels*. CRC Press, 575-586. doi:10.1201/b15437-44
- 10.1201/b15437-44
- Mayorga, E.; Seitzinger, S.P.; Harrison, J.A.; Dumont, E.; Beusen, A.H.W.; Bouwman, A.F.; Fekete, B.M.; Kroese, C.; Van Drecht, G., 2010. Global Nutrient Export from WaterSheds 2 (NEWS 2): Model development and implementation. *Environmental Modelling & Software*, 25 (7): 837-853. 10.1016/j.envsoft.2010.01.007
- Mazé, J.; Morand, P.; Potoky, P., 1993. Stabilisation of 'Green tides' *Ulva* by a method of composting with a view to pollution limitation. *Journal of Applied Phycology*, 5 (2): 183. 10.1007/BF00004015
- Mazumder, A.; Taylor, W.D., 1994. Thermal structure of lakes varying in size and water clarity. *Limnology and Oceanography*, 39 (4): 968-976
- McCann, L.; Easter, K.W., 1999. Transaction Costs of Policies to Reduce Agricultural Phosphorous Pollution in the Minnesota River. *Land Economics*, 75 (3): 402-414. 10.2307/3147186
- McCann, L.M.J., 2009. Transaction Costs of Environmental Policies and Returns to Scale: The Case of Comprehensive Nutrient Management Plans. *Review of Agricultural Economics*, 31 (3): 561-573. 10.1111/j.1467-9353.2009.01453.x
- McClain, M.E.; Boyer, E.W.; Dent, C.L.; Gergel, S.E.; Grimm, N.B.; Groffman, P.M.; Hart, S.C.; Harvey, J.W.; Johnston, C.A.; Mayorga, E.; McDowell, W.H.; Pinay, G., 2003. Biogeochemical hot spots and hot moments at the interface of terrestrial and aquatic ecosystems. *Ecosystems*, 6 (4): 301-312. 10.1007/s10021-003-0161-9
- McClanahan, T.R.; Sala, E.; Stickels, P.A.; Cokos, B.A.; Baker, A.C.; Starger, C.J.; Jones, S.H., 2003. Interaction between nutrients and herbivory in controlling algal communities and coral condition on Glover's Reef, Belize. *Marine Ecology Progress Series*, 261: 135-147. 10.3354/meps261135
- McClanahan, T.R.; Steneck, R.S.; Pietri, D.; Cokos, B.; Jones, S., 2005. Interaction between inorganic nutrients and organic matter in controlling coral reef communities in Glovers Reef Belize. *Mar Pollut Bull*, 50 (5): 566-75. 10.1016/j.marpolbul.2005.01.005
- McCook, L.; Jompa, J.; Diaz-Pulido, G., 2014. Competition between corals and algae on coral reefs: a review of evidence and mechanisms. *Coral Reefs*, 19 (4): 400-417. 10.1007/s003380000129
- McCook, L.J., 1999. Macroalgae, nutrients and phase shifts on coral reefs: scientific issues and management consequences for the Great Barrier Reef. *Coral Reefs*, 18 (4): 357-367. 10.1007/s003380050213

- McCutchan, J.; Saunders, J.; Lewis, W.; Hayden, M., 2002. Effects of groundwater flux on open-channel estimates of stream metabolism. *Limnology and Oceanography*, 47 (1): 321-324
- McDonald, K.S.; Tighe, M.; Ryder, D.S., 2016. An ecological risk assessment for managing and predicting trophic shifts in estuarine ecosystems using a Bayesian network. *Environmental Modelling & Software*, 85: 202-216. 10.1016/j.envsoft.2016.08.014
- McEwan, J.; Gabric, A.J.; Bell, P.R.F., 1998. Water quality and phytoplankton dynamics in Moreton Bay, south-eastern Queensland. II. Mathematical modelling. *Marine and Freshwater Research*, 49 (3): 227-239. 10.1071/mf97123
- McGechan, M.B., 2002. Sorption of Phosphorus by Soil, Part 2: Measurement Methods, Results and Model Parameter Values SW—Soil and Water. *Biosystems Engineering*, 82 (2): 115-130. 10.1006/bioe.2002.0068
- McGlathery, K.J., 2001. Macroalgal blooms contribute to the decline of seagrass in nutrient-enriched coastal waters. *Journal of Phycology*, 37 (4): 453–456. 10.1046/j.1529-8817.2001.037004453.x
- McGlathery, K.J.; Krause-Jensen, D.; Rysgaard, S.; Christensen, P.B., 1997. Patterns of ammonium uptake within dense mats of the filamentous macroalgae *Chaetomorpha linum*. *Aquatic Botany*, 59 (1-2): 99–115. 10.1016/s0304-3770(97)00026-0
- McGlathery, K.J.; Pedersen, M.F., 1999. The effect of growth irradiance on the coupling of carbon and nitrogen metabolism in *Chaetomorpha linum* (Chlorophyta). *Journal of Phycology*, 35 (4): 721–731. 10.1046/j.1529-8817.1999.3540721.x
- McGlathery, K.J.; Pedersen, M.F.; Borum, J., 1996. Changes in intracellular nitrogen pools and feedback controls on nitrogen uptake in *Chaetomorpha linum* (chlorophyta). *Journal of Phycology*, 32 (3): 393–401. 10.1111/j.0022-3646.1996.00393.x
- McGlathery, K.J.; Sundback, K.; Anderson, I.C., 2007. Eutrophication in shallow coastal bays and lagoons: the role of plants in the coastal filter. *Marine Ecology Progress Series*, 348: 1-18. 10.3354/meps07132
- McGlathery, K.J.; Sundbäck, K.; Anderson, I.C., 2007. Eutrophication in shallow coastal bays and lagoons: the role of plants in the coastal filter. *Marine Ecology Progress Series*, 348: 1-18
- McGlynn, B.L.; McDonnell, J.J., 2003. Quantifying the relative contributions of riparian and hillslope zones to catchment runoff. *Water Resources Research*, 39 (11). 10.1029/2003wr002091
- McGlynn, B.L.; McDonnell, J.J.; Shanley, J.B.; Kendall, C., 1999. Riparian zone flowpath dynamics during snowmelt in a small headwater catchment. *Journal of Hydrology*, 222 (1-4): 75-92. 10.1016/s0022-1694(99)00102-x
- McGlynn, B.L.; Seibert, J., 2003. Distributed assessment of contributing area and riparian buffering along stream networks. *Water Resources Research*, 39 (4). 10.1029/2002wr001521
- McGroddy, M.E.; Daufresne, T.; Hedin, L.O., 2004. Scaling of C : N : P stoichiometry in forests worldwide: Implications of terrestrial redfield-type ratios. *Ecology*, 85 (9): 2390-2401. 10.1890/03-0351
- McIntyre, N.; Jackson, B.; Wade, A.J.; Butterfield, D.; Wheater, H.S., 2005. Sensitivity analysis of a catchment-scale nitrogen model. *Journal of Hydrology*, 315 (1-4): 71-92. 10.1016/j.jhydrol.2005.04.010
- McIntyre, N.R.; Wagener, T.; Wheater, H.S.; Chapra, S.C., 2003. Risk-based modelling of surface water quality: a case study of the Charles River, Massachusetts. *Journal of Hydrology*, 274 (1): 225-247. 10.1016/S0022-1694(02)00417-1
- McIntyre, N.R.; Wheater, H.S., 2004. Calibration of an in-river phosphorus model: prior evaluation of data needs and model uncertainty. *Journal of Hydrology*, 290 (1): 100-116. 10.1016/j.jhydrol.2003.12.003
- McLaughlan, C.; Aldridge, D.C., 2013. Cultivation of zebra mussels (*Dreissena polymorpha*) within their invaded range to improve water quality in reservoirs. *Water Research*, 47 (13): 4357-4369. 10.1016/j.watres.2013.04.043
- McLusky, D.S., 1999. Estuarine benthic ecology: A European perspective. *Australian Journal of Ecology*, 24 (4): 302-311. 10.1046/j.1442-9993.1999.00983.x
- McNeal, K.S.; Miller, H.R.; Herbert, B.E., 2008. The effect of using inquiry and multiple representations on introductory geology students' conceptual model development of coastal eutrophication. *Journal of Geoscience Education*, 56 (3): 201-211
- McNeish, R.E.; Moore, E.M.; Benbow, M.E.; McEwan, R.W., 2015. Removal of the Invasive Shrub, *Lonicera Maackii*, from Riparian Forests Influences Headwater Stream Biota and Ecosystem Function. *River Research and Applications*, 31 (9): 1131-1139. 10.1002/rra.2808
- McQuatters-Gollop, A.; Raitsos, D.E.; Edwards, M.; Pradhan, Y.; Mee, L.D.; Lavender, S.J.; Attrill, M.J., 2007. A long-term chlorophyll data set reveals regime shift in North Sea phytoplankton biomass unconnected to nutrient trends. *Limnology and Oceanography*, 52 (2): 635-648
- McSkimming, C.; Tanner, J.E.; Russell, B.D.; Connell, S.D., 2015. Compensation of nutrient pollution by herbivores in seagrass meadows. *Journal of Experimental Marine Biology and Ecology*, 471: 112–118. 10.1016/j.jembe.2015.05.018
- McTammany, M.; Benfield, E.; Webster, J., 2007. Recovery of stream ecosystem metabolism from historical agriculture. *Journal of the North American Benthological Society*, 26 (3): 532-545
- Meals, D.W.; Cassell, E.A.; Hughell, D.; Wood, L.; Jokela, W.E.; Parsons, R., 2008. Dynamic spatially explicit mass-balance modeling for targeted watershed phosphorus management - I. Model development. *Agriculture Ecosystems & Environment*, 127 (3-4): 189-200. 10.1016/j.agee.2008.04.004
- Meals, D.W.; Dressing, S.A.; Davenport, T.E., 2010. Lag Time in Water Quality Response to Best Management Practices: A Review. *Journal of Environmental Quality*, 39 (1): 85-96. 10.2134/jeq2009.0108
- MEDDE; IFREMER, 2012. Plan d'action pour le milieu marin. Document d'accompagnement de l'arrêté relatif à la définition du bon état écologique des eaux marines.: 197 p.

- MEDDTL; MAAPRAT, 2012. *Bilan des connaissances scientifiques sur les causes de prolifération de macroalgues vertes. Application à la situation de la Bretagne et propositions. Rapport CGEDD n°007942-01 et rapport CGAAER n°11128 aux Ministres*
- Mee, L.D., 1992. The black-sea in crisis - a need for concerted international action. *Ambio*, 21 (4): 278-286
- Mee, L.D.; Friedrich, J.; Gomoiu, M.T., 2005. Restoring the Black Sea in times of uncertainty. *Oceanography*, 18 (2): 11. 10.5670/oceanog.2005.45.
- Meerhoff, M.; Iglesias, C.; De Mello, F.T.; Clemente, J.M.; Jensen, E.; Lauridsen, T.L.; Jeppesen, E., 2007. Effects of habitat complexity on community structure and predator avoidance behaviour of littoral zooplankton in temperate versus subtropical shallow lakes. *Freshwater Biology*, 52 (6): 1009-1021. 10.1111/j.1365-2427.2007.01748.x
- Meeuwig, J.J., 1998. *A11 Water is Wet: predicting eutrophication in lakes and estuaries*. Department of Biology, McGill University, Montréal,
- Meeuwig, J.J., 1999. Predicting coastal eutrophication from land-use: an empirical approach to small non-stratified estuaries. *Marine Ecology Progress Series*, 176: 231-241. 10.3354/meps176231
- Meeuwig, J.J.; Kauppila, P.; Pitkanen, H., 2000. Predicting coastal eutrophication in the Baltic: a limnological approach. *Canadian Journal of Fisheries and Aquatic Sciences*, 57 (4): 844-855. 10.1139/cjfas-57-4-844
- Mehra, O.P.; Jackson, M.L., 2013. Iron oxide removal from soils and clays by a dithionite-citrate system buffered with sodium bicarbonate A2 - Ingerson, Earl. *Clays and Clay Minerals*. Pergamon, 317-327. <http://dx.doi.org/10.1016/B978-0-08-009235-5.50026-7>
- Meier, H.E.M.; Andersson, H.C.; Arheimer, B.; Donnelly, C.; Eilola, K.; Gustafsson, B.G.; Kotwicki, L.; Neset, T.S.; Niiranen, S.; Piwowarczyk, J.; Savchuk, O.P.; Schenk, F.; Węsławski, J.M.; Zorita, E., 2014. Ensemble Modeling of the Baltic Sea Ecosystem to Provide Scenarios for Management. *Ambio*, 43 (1): 37-48. 10.1007/s13280-013-0475-6
- Meier, H.E.M.; Andersson, H.C.; Eilola, K.; Gustafsson, B.G.; Kuznetsov, I.; Muller-Karulis, B.; Neumann, T.; Savchuk, O.P., 2011. Hypoxia in future climates: A model ensemble study for the Baltic Sea. *Geophysical Research Letters*, 38. 10.1029/2011gl049929
- Meier, H.E.M.; Eilola, K.; Almroth, E., 2011. Climate-related changes in marine ecosystems simulated with a 3-dimensional coupled physical-biogeochemical model of the Baltic Sea. *Climate Research*, 48 (1): 31-55. 10.3354/cr00968
- Meier, H.E.M.; Hordoir, R.; Andersson, H.C.; Dieterich, C.; Eilola, K.; Gustafsson, B.G.; Hoglund, A.; Schimanke, S., 2012. Modeling the combined impact of changing climate and changing nutrient loads on the Baltic Sea environment in an ensemble of transient simulations for 1961-2099. *Climate Dynamics*, 39 (9-10): 2421-2441. 10.1007/s00382-012-1339-7
- Meire, L.; Soetaert, K.E.R.; Meysman, F.J.R., 2013. Impact of global change on coastal oxygen dynamics and risk of hypoxia. *Biogeosciences*, 10 (4): 2633-2653. 10.5194/bg-10-2633-2013
- Melesse, A.M.; Krishnaswamy, J.; Zhang, K.Q., 2008. Modeling coastal eutrophication at Florida bay using neural networks. *Journal of Coastal Research*, 24 (2B): 190-196. 10.2112/06-0646.1
- Mellander, P.-E.; Melland, A.R.; Jordan, P.; Wall, D.P.; Murphy, P.N.C.; Shortle, G., 2012. Quantifying nutrient transfer pathways in agricultural catchments using high temporal resolution data. *Environmental Science & Policy*, 24: 44-57. 10.1016/j.envsci.2012.06.004
- Melton, I., James T.; Collado-Vides, L.; Lopez-Bautista, J.M., 2016. Molecular identification and nutrient analysis of the green tide species *Ulva ohnoi* M. Hiraoka & S. Shimada, 2004 (Ulvophyceae, Chlorophyta), a new report and likely nonnative species in the Gulf of Mexico and Atlantic Florida, USA. *AQUATIC INVASIONS*, 11 (3): 225-237. 10.3391/ai.2016.11.3.01
- Melzner, F.; Thomsen, J.; Koeve, W.; Oschlies, A.; Gutowska, M.A.; Bange, H.W.; Hansen, H.P.; Koertzinger, A., 2013. Future ocean acidification will be amplified by hypoxia in coastal habitats. *Marine Biology*, 160 (8): 1875-1888. 10.1007/s00227-012-1954-1
- Mendelssohn, I.A.; Kleiss, B.A.; Wakeley, J.S., 1995. Factors controlling the formation of oxidized root channels - a review. *Wetlands*, 15 (1): 37-46
- Mendo, T.; Wosnitza, A.; Barrantes, J.G., 2006. Utilization of seaweed *Ulva* sp in Paracas Bay (Peru): experimenting with compost. *Journal of Applied Phycology*, 18 (1): 27-31. 10.1007/s10811-005-9010-x
- Menendez, M.; Comin, F.A., 2000. Spring and summer proliferation of floating macroalgae in a Mediterranean coastal lagoon (Tancada Lagoon, Ebro Delta, NE Spain). *Estuarine Coastal and Shelf Science*, 51 (2): 215-226. 10.1006/ecss.2000.0637
- Menéndez, M.; Comin, F.A., 2000. Spring and summer proliferation of floating macroalgae in a Mediterranean coastal lagoon (Tancada Lagoon, Ebro Delta, NE Spain). *Estuarine, Coastal and Shelf Science*, 51 (2): 215-226
- Menendez, M.; Herrera, J.; Comin, F.A., 2002. Effect of nitrogen and phosphorus supply on growth, chlorophyll content and tissue composition of the macroalga *Chaetomorpha linum* (OF Mull.) Kutz in a Mediterranean coastal lagoon. *Scientia Marina*, 66 (4): 355-364
- Menesguen, A., 2001. *L'eutrophisation des eaux marines et saumâtres en Europe, en particulier en France*. Brest: IFREMER, 64 p.
- Ménèsguen, A., 1992. Modelling coastal eutrophication: the case of French *Ulva* blooms. *Science of the Total Environment*, Supplement 1992: 979-992
- Ménèsguen, a., 1999. L'utilisation de modèles écologiques dans la lutte contre l'eutrophisation des eaux côtières françaises. *Pollutions diffuses : du bassin versant au littoral*. Ploufragan, France: 23-24 septembre 1999. IFREMER, 17 p.

- Ménesguen, A., 2014. Eutrophisation du milieu marin.Ch. 5. In: Monaco, A.; Prouzet, P., eds. *Vulnérabilité du système océanique*. ISTE editions, Vol.2, 187-292
- Menesguen, A.; Aminot, A.; Belin, C.; Chapelle, A.; Guillaud, J.-F.; Joanny, M.; Lefebvre, A.; Merceron, M.; Piriou, J.-Y.; Souchu, P., 2001. *Leutrophisation des eaux marines et saumâtres en Europe, en particulier en France*: <http://archimer.ifremer.fr/doc/00000/22/59>.
- Menesguen, A.; Cugier, P.; Leblond, I., 2006. A new numerical technique for tracking chemical species in a multisource, coastal ecosystem applied to nitrogen causing *Ulva* blooms in the Bay of Brest (France). *Limnology and Oceanography*, 51 (1): 591-601
- Menesguen, A.; Dion, P., 2009. Role of phosphorus in coastal eutrophication. In: Dorioz, J.M.; Aurousseau, P.; Bourrie, G., eds. *Oceanis, Vol 33, No 1 and 2.* (Oceanis : Serie De Documents Oceanographiques), Vol.33, 17-35
- Ménesguen, A.; Piriou, J.-Y., 1995. Nitrogen loadings and macroalgal (*Ulva* sp.) mass accumulation in Brittany (France). *Ophelia*, 42 (1): 227-237
- Ménesguen, A.; Salomon, J.-C., 1988. Eutrophication modelling as a tool for fighting against *Ulva* coastal mass blooms. *Internat. Conference*. Venice, Italy: 19-22 sept. 1988. Balkema, 443-450
- Menez, F., 2000. La disparition des algues dans la lagune de Venise. Récit mythique et histoire (presque) vraie. *La Ricerca Folklorica*, (42): 33-41. 10.2307/1479975
- Menezes, R.F.; Borchsenius, F.; Svenning, J.C.; Davidson, T.A.; Sondergaard, M.; Lauridsen, T.L.; Landkildehus, F.; Jeppesen, E., 2015. Homogenization of fish assemblages in different lake depth strata at local and regional scales. *Freshwater Biology*, 60 (4): 745-757. 10.1111/fwb.12526
- Menon, M.; Yuan, Q.; Jia, X.; Dougill, A.J.; Hoon, S.R.; Thomas, A.D.; Williams, R.A., 2011. Assessment of physical and hydrological properties of biological soil crusts using X-ray microtomography and modeling. *Journal of Hydrology*, 397 (1-2): 47-54. 10.1016/j.jhydrol.2010.11.021
- Menzi, H.; Katz, P.E.; Fahrni, M.; Neftel, A.; Frick, R., 1998. A simple empirical model based on regression analysis to estimate ammonia emissions after manure application. *Atmospheric Environment*, 32 (3): 301-307. 10.1016/s1352-2310(97)00239-2
- Merceron, M., 2001. L'eutrophisation des eaux marines et saumâtres en Europe, en particulier en France. *Rapport commandé par la DGXI*:
- Merceron, M.; Antoine, V.; Auby, I.; Morand, P., 2007. In situ growth potential of the subtidal part of green tide forming *Ulva* spp. stocks. *Science of the Total Environment*, 384 (1-3): 293-305. 10.1016/j.scitotenv.2007.05.007
- Merceron, M.; Morand, P., 2004. Existence of a deep subtidal stock of drifting *Ulva* in relation to intertidal algal mat developments. *Journal of Sea Research*, 52 (4): 269-280. 10.1016/j.seares.2004.05.002
- Mercoiret, L., 2010. *Qualité de eaux usées domestiques produites par les petites collectivités. Application aux agglomérations d'assainissement inférieures à 2000 Equivalents Habitants. Rapport ONEMA du partenariat 2010 ONEMA-Irstea du domaine « Ecotechnologies et pollution »*: ONEMA Cemagref, 64.
- Merino-Martos, A.; de Vicente, J.; Cruz-Pizarro, L.; de Vicente, I., 2015. Single-ion interferences when using magnetic microparticles for phosphorus removal in aquatic ecosystems. *Limnetica*, 34 (1): 17-27
- Mermet, L.; Billé, R.; Leroy, M.; Narcy, J.-B.; Poux, X., 2005. L'analyse stratégique de la gestion environnementale : un cadre théorique pour penser l'efficacité en matière d'environnement. *Nature Sciences Sociétés*, 13 (2): 127-137
- Merot, P.; Squividant, H.; Aurousseau, P.; Hefting, M.; Burt, T.; Maitre, V.; Kruk, M.; Butturini, A.; Thenail, C.; Viaud, V., 2003. Testing a climato-topographic index for predicting wetlands distribution along an European climate gradient. *Ecological Modelling*, 163 (1-2): 51-71. 10.1016/s0304-3800(02)00387-3
- Merritt, W.S.; Letcher, R.A.; Jakeman, A.J., 2003. A review of erosion and sediment transport models. *Environmental Modelling & Software*, 18 (8-9): 761-799. 10.1016/s1364-8152(03)00078-1
- Mesa, L.; Mayorra, G.; Saigo, M.; Giri, F., 2015. Nutrient Dynamics in Wetlands of the Middle Parana River Subjected to Rotational Cattle Management. *Wetlands*, 35 (6): 1117-1125. 10.1007/s13157-015-0699-2
- Mesdaghinia, A.; Nasseri, S.; Mahvi, A.H.; Tashauoei, H.R.; Hadi, M., 2015. The estimation of per capita loadings of domestic wastewater in Tehran. *Journal of Environmental Health Science and Engineering*, 13 (25). 10.1186/s40201-015-0174-2
- Metcalfe, M.R., 2002. Environmental Regulation and Implications for Competitiveness in International Pork Trade. *Journal of Agricultural and Resource Economics*, 27 (1): 222-243. <http://www.waeaonline.org/publications/jare/recent-issues>
- Mettoux, A.P., 2004. Associations et changement social. Le cas d'«Eau et rivières de Bretagne», association de défense de l'environnement.. *Strates. Matériaux pour la recherche en sciences sociales*, 11:
- Mewes, M., 2012. Diffuse nutrient reduction in the German Baltic Sea catchment: Cost-effectiveness analysis of water protection measures. *Ecological Indicators*, 22: 16-26. 10.1016/j.ecolind.2012.01.006
- MEYBECK, M., 1982. CARBON, NITROGEN, AND PHOSPHORUS TRANSPORT BY WORLD RIVERS. *American Journal of Science*, 282 (4): 401-450
- Meybeck, M., 2003. Global analysis of river systems: from Earth system controls to. *Philosophical Transactions of the Royal Society B-Biological Sciences*, 358 (1440): 1935-1955. 10.1098/rstb.2003.1379
- Meybeck, M.; Cauwet, G.; Dessery, S.; Somville, M.; Gouleau, D.; Billen, G., 1988. NUTRIENTS (ORGANIC C, P, N, SI) IN THE EUTROPHIC RIVER LOIRE (FRANCE) AND ITS ESTUARY. *Estuarine Coastal and Shelf Science*, 27 (6): 595-624. 10.1016/0272-7714(88)90071-6

- Meybeck, M.; Lestel, L.; Carré, C.; Bouleau, G.; Garnier, J.; Mouchel, J.M., 2016. Trajectories of river chemical quality issues over the Longue Durée: the Seine River (1900S–2010). *Environmental Science and Pollution Research*. 10.1007/s11356-016-7124-0
- Meybeck, M.; Moatar, F., 2012. Daily variability of river concentrations and fluxes: indicators based on the segmentation of the rating curve. *Hydrological Processes*, 26 (8): 1188-1207. 10.1002/hyp.8211
- Meyer, J.L.; Likens, G.E., 1979. TRANSPORT AND TRANSFORMATION OF PHOSPHORUS IN A FOREST STREAM ECOSYSTEM. *Ecology*, 60 (6): 1255-1269. 10.2307/1936971
- Meyer, O., 1994. Functional Groups of Microorganisms. In: Schulze, E.-D.; Mooney, H.A., eds. *Biodiversity and Ecosystem Function*. Berlin, Heidelberg: Springer Berlin Heidelberg, 67-96. 10.1007/978-3-642-58001-7\_4
- Meyer-Peter, E.; Müller, R., 1948. Formulas for Bed-Load Transport Int. Assoc. Hydraul. Struct. Research.
- Meyer-Reil, L.A.; Koster, M., 2000. Eutrophication of marine waters: Effects on benthic microbial communities. *Marine Pollution Bulletin*, 41 (1-6): 255-263. 10.1016/s0025-326x(00)00114-4
- Meyers, P.A., 2006. An overview of sediment organic matter records of human eutrophication in the Laurentian Great Lakes region. *Water, Air, & Soil Pollution: Focus*, 6 (5-6): 453-463
- Michalak, A.M.; Anderson, E.J.; Beletsky, D.; Boland, S.; Bosch, N.S.; Bridgeman, T.B.; Chaffin, J.D.; Cho, K.; Confesor, R.; Daloğlu, I., 2013. Record-setting algal bloom in Lake Erie caused by agricultural and meteorological trends consistent with expected future conditions. *Proceedings of the National Academy of Sciences*, 110 (16): 6448-6452
- Michalec, F.-G.; Holzner, M.; Souissi, A.; Stancheva, S.; Barras, A.; Boukherroub, R.; Souissi, S., 2016. Lipid nanocapsules for behavioural testing in aquatic toxicology: Time-response of Eurytemora affinis to environmental concentrations of PAHs and PCB. *Aquatic Toxicology*, 170: 310-322. 10.1016/j.aquatox.2015.08.010
- Michel-Guillou, E., 2004. Qualité des eaux souterraines : attribution de responsabilité et implication personnelle des agriculteurs. *Psychologie et Société*, 8: 10
- Michel-Guillou, E., 2009. Évaluation de la qualité de l'eau par les agriculteurs: confrontation des données perceptives aux données objectives. In: Michel-Guillou, E.; Masson, E., eds. *Les différentes facettes de l'objet en psychologie sociales. Le cabinet des curiosités*. Paris: L'Harmattan, 18
- Michel-Guillou, É., 2009. L'environnement, l'eau et les agriculteurs : entre conscience environnementale et défense du métier. *Bulletin de psychologie*, Numéro 502 (4): 381-388. 10.3917/bupsy.502.0381
- Michel-Guillou, É., 2011. La construction sociale de la ressource en eau. *Pratiques Psychologiques*, 17 (3): 219-236. 10.1016/j.prps.2010.04.001
- Micheli, F., 1999. Eutrophication, fisheries, and consumer-resource dynamics in marine pelagic ecosystems. *Science*, 285 (5432): 1396-1398. 10.1126/science.285.5432.1396
- Michio, K.; Kengo, K.; Yasunori, K.; Hitoshi, M.; Takayuki, Y.; Hideaki, Y.; Hiroshi, S., 2003. Effects of deposit feeder *Stichopus japonicus* on algal bloom and organic matter contents of bottom sediments of the enclosed sea. *Marine Pollution Bulletin*, 47 (1-6): 118-125. 10.1016/s0025-326x(02)00411-3
- Middelburg, J.J.; Levin, L.A., 2009. Coastal hypoxia and sediment biogeochemistry. *Biogeosciences*, 6 (7): 1273-1293. 10.5194/bg-6-1273-2009
- Middleton, K.R.; Smith, G.S., 1979. Comparison of ammoniacal and nitrate nutrition of perennial ryegrass through a thermodynamic model. *Plant and Soil*, 53 (4): 487-504. 10.1007/bf02140720
- Mieleitner, J.; Reichert, P., 2005. Modelling functional groups of algae in Lake Zürich. *Modelling and Simulation 2005*. 256-261
- Mieleitner, J.; Reichert, P., 2008. Modelling functional groups of phytoplankton in three lakes of different trophic state. *Ecological Modelling*, 211: 279-291. DOI: 10.1016/j.ecolmodel.2007.09.010
- Miguez, B.M.; Farina-Busto, L.; Figueiras, F.G.; Perez, F.F., 2001. Succession of phytoplankton assemblages in relation to estuarine hydrodynamics in the Ria de Vigo: A box model approach. *Scientia Marina*, 65: 65-76
- Mikaelyan, A.S.; Zatsepin, A.G.; Chasovnikov, V.K., 2013. Long-term changes in nutrient supply of phytoplankton growth in the Black Sea. *Journal of Marine Systems*, 117: 53-64. 10.1016/j.jmarsys.2013.02.012
- Millennium Ecosystem Assessment, 2005. Environmental Degradation and Human Well-Being: Report of the Millennium Ecosystem Assessment. *Population and Development Review*, 31 (2): 389-398. 10.1111/j.1728-4457.2005.00073.x
- Miller, M.W., 1998. Coral/seaweed competition and the control of reef community structure within and between latitudes. *Oceanography and Marine Biology <D>*, 36: 65-96
- Miller, S.A.; Landis, A.E.; Theis, T.L., 2006. Use of Monte Carlo Analysis to Characterize Nitrogen Fluxes in Agroecosystems. *Environmental Science & Technology*, 40 (7): 2324-2332. 10.1021/es0518878
- Millie, D.F.; Weckman, G.R.; Paerl, H.W.; Pinckney, J.L.; Bendis, B.J.; Pigg, R.J.; Fahnenstiel, G.L., 2006. Neural net modeling of estuarine indicators: Hindcasting phytoplankton biomass and net ecosystem production in the Neuse (North Carolina) and Trout (Florida) Rivers, USA. *Ecological Indicators*, 6 (3): 589-608. 10.1016/j.ecolind.2005.08.021
- Millie, D.F.; Weckman, G.R.; Pigg, R.J.; Tester, P.A.; Dyble, J.; Litaker, R.W.; Carrick, H.J.; Fahnenstiel, G.L., 2006. Modeling phytoplankton abundance in Saginaw Bay, Lake Huron: Using artificial neural networks to discern functional influence of environmental variables and relevance to a great lakes observing system. *Journal of Phycology*, 42 (2): 336-349. 10.1111/j.1529-8817.2006.00209.x
- Milon, J.W.; Dodge, R.E., 2001. Applying habitat equivalency analysis for coral reef damage assessment and restoration. *Bulletin of Marine Science*, 69 (2): 975-988
- Milstead, W.B.; Hollister, J.W.; Moore, R.B.; Walker, H.A., 2013. Estimating Summer Nutrient Concentrations in Northeastern Lakes from SPARROW Load Predictions and Modeled Lake Depth and Volume. *Plos One*, 8 (11): e81457. 10.1371/journal.pone.0081457

- Minaudo, C.; Dupas, R.; Gascuel-Odoux, C.; Fovet, O.; Mellander, P.-E.; Jordan, P.; Shore, M.; Moatar, F., 2017. Nonlinear empirical modeling to estimate phosphorus exports using continuous records of turbidity and discharge. *Water Resources Research*, 53 (9): 7590-7606. 10.1002/2017wr020590
- Minaudo, C.; Meybeck, M.; Moatar, F.; Gassama, N.; Curie, F., 2015. Eutrophication mitigation in rivers: 30 years of trends in spatial and seasonal patterns of biogeochemistry of the Loire River (1980-2012). *Biogeosciences*, 12 (8): 2549-2563. 10.5194/bg-12-2549-2015
- Minaudo, C.; Moatar, F.; Coynel, A.; Etcheber, H.; Gassama, N.; Curie, F., 2016. Using recent high-frequency surveys to reconstitute 35 years of organic carbon variations in a eutrophic lowland river. *Environmental Monitoring and Assessment*, 188 (1): 17. 10.1007/s10661-015-5054-9
- Minaudo, C.; Moatar, F.; Meybeck, M.; Curie, F.; Gassama, N.; Leitao, M., 2013. Loire River eutrophication mitigation (1981-2011) measured by seasonal nutrients and algal pigments. In: Arheimer, B.; Collins, A.; Krysanova, V.; Lakshmanan, E.; Meybeck, M.; Stone, M., eds. *Understanding Freshwater Quality Problems in a Changing World*. Wallingford: Int Assoc Hydrological Sciences (IAHS Publication), Vol.361, 167-174
- Mineely, P.J.; Wong, L.; Cameron, P.; Hillier, P.; Mondon, J., 2001. Environmental aspects of wastewater discharges from a hardwood woodchip mill located on an estuary in Northern Tasmania. *Appita Journal*, 54 (5): 431-434
- Mischke, U.; Venohr, M.; Behrendt, H., 2011. Using Phytoplankton to Assess the Trophic Status of German Rivers. *International Review of Hydrobiology*, 96 (5): 578-598. 10.1002/iroh.201111304
- Mishra, P.; Panda, U.S.; Pradhan, U.; Kumar, C.S.; Naik, S.; Begum, M.; Ishwarya, J., 2015. Coastal water quality monitoring and modelling off Chennai city. In: Sundar, V.; Sannasiraj, S.A.; Murali, K.; Sriram, V., eds. *8th International Conference on Asian and Pacific Coasts*. Amsterdam: Elsevier Science Bv (Procedia Engineering), Vol.116, 955-962. 10.1016/j.proeng.2015.08.386
- Misra, A.K.; Tiwari, P.K.; Venturino, E., 2016. Modeling the impact of awareness on the mitigation of algal bloom in a lake. *Journal of Biological Physics*, 42 (1): 147-165. 10.1007/s10867-015-9397-9
- Misselbrook, T.H.; Nicholson, F.A.; Chambers, B.J., 2005. Predicting ammonia losses following the application of livestock manure to land. *Bioresource Technology*, 96 (2): 159-168. 10.1016/j.biotech.2004.05.004
- Mitchell, D.M., 2001. *An Examination of Non-regulatory Methods for Controlling Nonpoint Source Pollution*. Oklahoma State University.<http://search.ebscohost.com/login.aspx?direct=true&db=eoh&AN=0621593&lang=fr&site=ehost-live>
- Mitchell, D.M.; Willett, K., 2012. Modeling Transactions Costs in a Regional Transferable Discharge Permit System for Phosphorus Runoff. *Journal of Regional Analysis and Policy*, 42 (2): 126-138. [http://www.jrap-journal.org/pastvolumes/most\\_recent.htm](http://www.jrap-journal.org/pastvolumes/most_recent.htm)
- Mitsch, W.J.; Gosselink, J.G., 2000. The value of wetlands: importance of scale and landscape setting. *Ecological Economics*, 35 (1): 25-33. 10.1016/s0921-8009(00)00165-8
- Miyajima, T.; Yoshimizu, C.; Tsuboi, Y.; Tanaka, Y.; Tayasu, I.; Nagata, T.; Koike, I., 2009. Longitudinal distribution of nitrate delta N-15 and delta O-18 in two contrasting tropical rivers: implications for instream nitrogen cycling. *Biogeochemistry*, 95 (2-3): 243-260. 10.1007/s10533-009-9334-8
- Moatar, F.; Abbott, B.W.; Minaudo, C.; Curie, F.; Pinay, G., 2017. Elemental properties, hydrology, and biology interact to shape concentration-discharge curves for carbon, nutrients, sediment, and major ions. *Water Resources Research*, 53 (2): 1270-1287. 10.1002/2016wr019635
- Moatar, F.; Fessant, F.; Poirel, A., 1999. pH modelling by neural networks. Application of control and validation data series in the Middle Loire river. *Ecological Modelling*, 120 (2-3): 141-156. 10.1016/s0304-3800(99)00098-8
- Moatar, F.; Gailhard, J., 2006. Water temperature behaviour in the River Loire since 1976 and 1881. *Comptes Rendus Geoscience*, 338 (5): 319-328. 10.1016/j.crte.2006.02.011
- Moatar, F.; Meybeck, M., 2005. Compared performances of different algorithms for estimating annual nutrient loads discharged by the eutrophic River Loire. *Hydrological Processes*, 19 (2): 429-444. 10.1002/hyp.5541
- Moatar, F.; Meybeck, M., 2007. Riverine fluxes of pollutants: Towards predictions of uncertainties by flux duration indicators. *Comptes Rendus Geoscience*, 339 (6): 367-382. 10.1016/j.crte.2007.05.001
- Moatar, F.; Meybeck, M.; Poirel, A., 2009. Daily variability and its implication on long term river water quality surveys : the Middle Loire example. *Houille Blanche-Revue Internationale De L'Eau*, (4): 91-99. 10.1051/lhb/2009050
- Moatar, F.; Meybeck, M.; Raymond, S.; Birgand, F.; Curie, F., 2013. River flux uncertainties predicted by hydrological variability and riverine material behaviour. *Hydrological Processes*, 27 (25): 3535-3546. 10.1002/hyp.9464
- Moatar, F.; Miquel, J.; Poirel, A., 2001. A quality-control method for physical and chemical monitoring data. Application to dissolved oxygen levels in the river Loire (France). *Journal of Hydrology*, 252 (1): 25-36
- Moatar, F.; Poirel, A.; Obled, C., 1999. Analyse de séries temporelles de mesures de l'oxygène dissous et du pH sur la Loire au niveau du site nucléaire de Dampierre (Loiret) : 1. Compréhension des variations temporelles des teneurs en oxygène dissous et du pH en relation avec des données hydrométéorologiques. *Hydroécol. Appl.*, 11: 127-151
- Moe, S.J.; Haande, S.; Couture, R.M., 2016. Climate change, cyanobacteria blooms and ecological status of lakes: A Bayesian network approach. *Ecological Modelling*, 337: 330-347. 10.1016/j.ecolmodel.2016.07.004
- Möhring, M.; Troitzsch, K.G., 2001. Lake Anderson revisited by agents. *JASSS*, 4 (3):
- Moilanen, A.; Van Teeffelen, A.J.A.; Ben-Haim, Y.; Ferrier, S., 2009. How much compensation is enough? A framework for incorporating uncertainty and time discounting when calculating offset ratios for impacted habitat. *Restoration Ecology*, 17 (4): 470-478. 10.1111/j.1526-100X.2008.00382.x
- Moksnes, P.O.; Gullstrom, M.; Tryman, K.; Baden, S., 2008. Trophic cascades in a temperate seagrass community. *Oikos*, 117 (5): 763-777. 10.1111/j.2008.0030-1299.16521.x

- Molenat, J.; Gascuel-Odoux, C.; Davy, P.; Durand, P.; Gruau, G., 2002. Nitrate export from an agricultural basin: control mechanisms and nitrate residence times. *Agricultural effects on ground and surface waters: research at the edge of science and society. Proceedings of an international symposium, Wageningen, Netherlands, October 2000.* 273-278
- Molinet-Dubost, M., 2012. Air. Notions générales. Approches qualitatives de la protection de l'air. *Jurisclasseur Environnement et Développement durable.*
- Møller, A.P.; Flensted-Jensen, E.; Laursen, K.; Mardal, W., 2014. Fertilizer Leakage to the Marine Environment, Ecosystem Effects and Population Trends of Waterbirds in Denmark. *Ecosystems*, 18 (1): 30-44. 10.1007/s10021-014-9810-4
- Mollmann, C.; Diekmann, R.; Muller-Karulis, B.; Kornilovs, G.; Plikshs, M.; Axe, P., 2009. Reorganization of a large marine ecosystem due to atmospheric and anthropogenic pressure: a discontinuous regime shift in the Central Baltic Sea. *Global Change Biology*, 15 (6): 1377-1393. 10.1111/j.1365-2486.2008.01814.x
- Monod, J., 1949. THE GROWTH OF BACTERIAL CULTURES. *Annual Review of Microbiology*, 3: 371-394. 10.1146/annurev.mi.03.100149.002103
- Montagnes, D.J.S.; Chambouvet, A.; Guillou, L.; Fenton, A., 2008. Responsibility of microzooplankton and parasite pressure for the demise of toxic dinoflagellate blooms. *Aquatic Microbial Ecology*, 53 (2): 211-225. 10.3354/ame01245
- Montes, F.; Rotz, C.A.; Chaoui, H., 2009. Process modeling of ammonia volatilization from ammonium solution and manure surfaces : a review with recommended models. *Transactions of the Asabe*, 52 (5): 1707-1719
- Mooij, W.M.; Hulsmann, S.; Domis, L.N.D.; Nolet, B.A.; Bodelier, P.L.E.; Boers, P.C.M.; Pires, L.M.D.; Gons, H.J.; Ibelings, B.W.; Noordhuis, R.; Portielje, R.; Wolfstein, K.; Lammens, E., 2005. The impact of climate change on lakes in the Netherlands: a review. *Aquatic Ecology*, 39 (4): 381-400. 10.1007/s10452-005-9008-0
- Mooij, W.M.; Trolle, D.; Jeppesen, E.; Arhonditsis, G.; Belolipetsky, P.V.; Chitamwebwa, D.B.R.; Degermendzhyan, A.G.; DeAngelis, D.L.; Domis, L.N.D.S.; Downing, A.S.; Elliott, J.A.; Fragoso, C.R.; Gaedke, U.; Genova, S.N.; Gulati, R.D.; Hakanson, L.; Hamilton, D.P.; Hipsey, M.R.; t Hoen, J.; Huelsmann, S.; Los, F.H.; Makler-Pick, V.; Petzoldt, T.; Prokopkin, I.G.; Rinke, K.; Schep, S.A.; Tominaga, K.; Van Dam, A.A.; Van Nes, E.H.; Wells, S.A.; Janse, J.H., 2010. Challenges and opportunities for integrating lake ecosystem modelling approaches. *Aquatic Ecology*, 44 (3): 633-667. 10.1007/s10452-010-9339-3
- Moore, M.T.; Kroger, R.; Locke, M.A.; Cullum, R.F.; Steinriede, R.W.; Testa, S.; Lizotte, R.E.; Bryant, C.T.; Cooper, C.M., 2010. Nutrient mitigation capacity in Mississippi Delta, USA drainage ditches. *Environmental Pollution*, 158 (1): 175-184. 10.1016/j.envpol.2009.07.024
- Moore, S.K.; Trainer, V.L.; Mantua, N.J.; Parker, M.S.; Laws, E.A.; Backer, L.C.; Fleming, L.E., 2008. Impacts of climate variability and future climate change on harmful algal blooms and human health. *Environmental Health*, 7 (2): S4
- Morais, J.; Barbosa, R.; Lapa, N.; Mendes, B.; Gulyurtlu, I., 2011. Environmental and socio-economic assessment of co-combustion of coal, biomass and non-hazardous wastes in a Power Plant. *Resources, Conservation and Recycling*, 55 (11): 1109-1118. 10.1016/j.resconrec.2011.06.011
- Morand, P.; Briand, X., 1996. Excessive growth of macroalgae: A symptom of environmental disturbance. *Botanica Marina*, 39 (6): 491-516. 10.1515/botm.1996.39.1-6.491
- Morand, P.; Briand, X.; Charlier, R.H., 2006. Anaerobic digestion of Ulva sp.3. Liquefaction juices extraction by pressing and technico-economic budget. *Journal of Applied Physiology*, 18: 14
- Morand, P.; Merceron, M., 2005. Macroalgal Population and Sustainability. *Journal of Coastal Research*: 1009-1020. 10.2112/04-700A.1
- Moreau, P.; Ruiz, L.; Vertes, F.; Baratte, C.; Delaby, L.; Faverdin, P.; Gascuel-Odoux, C.; Piquemal, B.; Ramat, E.; Salmon-Monviola, J.; Durand, P., 2013. CASIMOD'N: An agro-hydrological distributed model of catchment-scale nitrogen dynamics integrating farming system decisions. *Agricultural Systems*, 118: 41-51. 10.1016/j.agsy.2013.02.007
- Moreau, P.; Viaud, V.; Parnaudeau, V.; Salmon-Monviola, J.; Durand, P., 2013. An approach for global sensitivity analysis of a complex environmental model to spatial inputs and parameters: A case study of an agro-hydrological model. *Environmental Modelling & Software*, 47: 74-87
- Morgan, K.L.; Larkin, S.L.; Adams, C.M., 2009. Firm-level economic effects of HABS: A tool for business loss assessment. *Harmful Algae*, 8 (2): 212-218. 10.1016/j.hal.2008.05.002
- Morgan, R.P.C.; Quinton, J.N.; Rickson, R.J., 1994. Modeling methodology for soil-erosion assessment and soil conservation design - the EUROSEM approach. *Outlook on Agriculture*, 23 (1): 5-9
- Morgan, R.P.C.; Quinton, J.N.; Smith, R.E.; Govers, G.; Poesen, J.W.A.; Auerswald, K.; Chisci, G.; Torri, D.; Styczen, M.E., 1998. The European Soil Erosion Model (EUROSEM): A dynamic approach for predicting sediment transport from fields and small catchments. *Earth Surface Processes and Landforms*, 23 (6): 527-544. 10.1002/(sici)1096-9837(199806)23:6<527::aid-esp868>3.0.co;2-5
- Morgan, R.P.C.; Quinton, J.N.; Smith, R.E.; Govers, G.; Poesen, J.W.A.; Chisci, G.; Torri, D., 1998. The EUROSEM model. In: Boardman, J.; FavisMortlock, D., eds. *Modelling Soil Erosion by Water*. (Nato Advanced Science Institute Series, Series I, Global Environment Change), Vol.55, 389-398
- Morrice, J.A.; Valett, H.M.; Dahm, C.N.; Campana, M.E., 1997. Alluvial Characteristics, Groundwater-Surface Water Exchange and Hydrological Retention in Headwater Streams. *Hydrological Processes*, 11 (3): 253-267. 10.1002/(SICI)1099-1085(19970315)11:3<253::AID-HYP439>3.0.CO;2-1
- Morris, M.H., 2008. When it Works and Where it Fails: Spatial, Temporal, and Budgetary Constraints to Civic Environmentalism\*. *Social Science Quarterly*, 89 (5): 1252-1276. 10.1111/j.1540-6237.2008.00577.x

- Morrison, R.J.; Denton, G.R.W.; Tamata, U.B.; Grignon, J., 2013. Anthropogenic biogeochemical impacts on coral reefs in the Pacific Islands-An overview. *Deep-Sea Research Part II-Topical Studies in Oceanography*, 96: 5-12. 10.1016/j.dsr2.2013.02.014
- Morse, J.; Eldridge, P., 2007. A non-steady state diagenetic model for changes in sediment biogeochemistry in response to seasonally hypoxic/anoxic conditions in the "dead zone" of the Louisiana shelf. *Marine Chemistry*, 106 (1-2): 239-255. 10.1016/j.marchem.2006.02.003
- Mortimer, C.H., 1941. The Exchange of Dissolved Substances Between Mud and Water in Lakes. *Journal of Ecology*, 29 (2): 280-329. 10.2307/2256395
- Mortimer, R.J.G.; Harris, S.J.; Krom, M.D.; Freitag, T.E.; Prosser, J.I.; Barnes, J.; Anschutz, P.; Hayes, P.J.; Davies, I.M., 2004. Anoxic nitrification in marine sediments. *Marine Ecology Progress Series*, 276: 37-51. 10.3354/meps276037
- Mortimer, R.J.G.; Krom, M.D.; Harris, S.J.; Hayes, P.J.; Davies, I.M.; Davison, W.; Zhang, H., 2002. Evidence for suboxic nitrification in recent marine sediments. *Marine Ecology Progress Series*, 236: 31-35. 10.3354/meps236031
- Moschonas, G.; Gowen, R.J.; Stewart, B.M.; Davidson, K., 2015. Nitrogen dynamics in the Irish Sea and adjacent shelf waters: An exploration of dissolved organic nitrogen. *Estuarine Coastal and Shelf Science*, 164: 276-287. 10.1016/j.ecss.2015.07.030
- Moscovici, S., 1989. Des représentations collectives aux représentations sociales: éléments pour une histoi. In: Jodelet, D., ed. *Les représentations sociales*. Presse Université de France. 10.3917/puf.jodel.2003.01.0079
- Moser, G., 1984. Water quality perception, a dynamic evaluation. *Journal of Environmental Psychology*, 4 (3): 201-210. 10.1016/S0272-4944(84)80041-9
- Moser, G.; Ratiu, E.; De Vanssay, B., 2004. Water Use and Management in the Light of Sustainable Development. *IHDP Update*, 4:
- Moss, B.; Jeppesen, E.; Søndergaard, M.; Lauridsen, T.L.; Liu, Z., 2013. Nitrogen, macrophytes, shallow lakes and nutrient limitation: Resolution of a current controversy? *Hydrobiologia*, 710 (1): 3-21. 10.1007/s10750-012-1033-0
- Moss, B.; Kosten, S.; Meerhoff, M.; Battarbee, R.W.; Jeppesen, E.; Mazzeo, N.; Havens, K.; Lacerot, G.; Liu, Z.; De Meester, L.; Paerl, H.; Scheffer, M., 2011. Allied attack: climate change and eutrophication. *Inland Waters*, 1 (2): 101-105
- Moss, B.; Kosten, S.; Meerhoff, M.; Battarbee, R.W.; Jeppesen, E.; Mazzeo, N.; Havens, K.; Lacerot, G.; Liu, Z.W.; De Meester, L.; Paerl, H.; Scheffer, M., 2011. Allied attack: climate change and eutrophication. *Inland Waters*, 1 (2): 101-105. 10.5268/iw-1.2.359
- Mosselman, E., 1995. A review of mathematical models of river planform changes. *Earth Surface Processes and Landforms*, 20 (7): 661-670. 10.1002/esp.3290200708
- Mostafa, M.M., 2015. Post-materialism, Religiosity, Political Orientation, Locus of Control and Concern for Global Warming: A Multilevel Analysis Across 40 Nations. *Social Indicators Research*: 1-26. 10.1007/s11205-015-1079-2
- Mostert, E.; Pahl-Wostl, C.; Rees, Y.; Searle, B.; Tåbara, D.; Tippett, J., 2007. Social Learning in European River-Basin Management: Barriers and Fostering Mechanisms from 10 River Basins *Ecology and Society*, 12 (1): 19
- Mouillot, D.; Spatharis, S.; Reizopoulou, S.; Laugier, T.; Sabetta, L.; Basset, A.; Chi, T.D., 2006. Alternatives to taxonomic-based approaches to assess changes in transitional water communities. *Aquatic Conservation-Marine and Freshwater Ecosystems*, 16 (5): 469-482. 10.1002/aqc.769
- Mountain, D.G.; Kane, J., 2010. Major changes in the Georges Bank ecosystem, 1980s to the 1990s. *Marine Ecology Progress Series*, 398: 81-91. 10.3354/meps08323
- Mountfort, D.O.; Kaspar, H.F.; Downes, M.; Asher, R.A., 1999. Partitioning effects during terminal carbon and electron flow in sediments of a low-salinity meltwater pond near Bratina Island, McMurdo Ice Shelf, Antarctica. *Applied and Environmental Microbiology*, 65 (12): 5493-5499
- Moussa, R., 2009. Definition of new equivalent indices of Horton-Strahler ratios for the derivation of the Geomorphological Instantaneous Unit Hydrograph. *Water Resources Research*, 45. 10.1029/2008wr007330
- Moustaka-Gouni, M.; Michaloudi, E.; Sommer, U., 2014. Modifying the PEG model for Mediterranean lakes—no biological winter and strong fish predation. *Freshwater Biology*, 59 (6): 1136-1144
- Mozetic, P.; France, J.; Kogovsek, T.; Talaber, I.; Malej, A., 2012. Plankton trends and community changes in a coastal sea (northern Adriatic): Bottom-up vs. top-down control in relation to environmental drivers. *Estuarine Coastal and Shelf Science*, 115: 138-148. 10.1016/j.ecss.2012.02.009
- Mueller, H.; Hamilton, D.P.; Doole, G.J., 2016. Evaluating services and damage costs of degradation of a major lake ecosystem. *Ecosystem Services*, 22 (Part B): 370-380. 10.1016/j.ecoser.2016.02.037
- Mukai, T.; Takimoto, K.; Shibata, T.; Abe, H., 1985. Simulation study of eutrophication in Hiroshima bay - simulation of particulate and dissolved organic-matter using cyclic transformation of carbon. *Water Research*, 19 (4): 511-525. 10.1016/0043-1354(85)90044-2
- Mulder, A.; Vandegraaf, A.A.; Robertson, L.A.; Kuennen, J.G., 1995. Anaerobic ammonium oxidation discovered in a denitrifying fluidized-bed reactor. *Fems Microbiology Ecology*, 16 (3): 177-183. 10.1111/j.1574-6941.1995.tb00281.x
- Mulholland, P.; Fellows, C.; Tank, J.; Grimm, N.; Webster, J.; Hamilton, S.; Marti, E.; Ashkenas, L.; Bowden, W.; Dodds, W.; McDowell, W.; Paul, M.; Peterson, B., 2001. Inter-biome comparison of factors controlling stream metabolism. *Freshwater Biology*, 46 (11): 1503-1517. 10.1046/j.1365-2427.2001.00773.x
- Mulholland, P.; Houser, J.; Maloney, K., 2005. Stream diurnal dissolved oxygen profiles as indicators of in-stream metabolism and disturbance effects: Fort Benning as a case study. *Ecological Indicators*, 5 (3): 243-252. 10.1016/j.ecolind.2005.03.004

- Mulholland, P.J.; Marzolf, E.R.; Webster, J.R.; Hart, D.R.; Hendricks, S.P., 1997. Evidence that hyporheic zones increase heterotrophic metabolism and phosphorus uptake in forest streams. *Limnology and Oceanography*, 42 (3): 443-451
- Mulholland, P.J.; Newbold, J.D.; Elwood, J.W.; Ferren, L.A.; Webster, J.R., 1985. PHOSPHORUS SPIRALING IN A WOODLAND STREAM - SEASONAL-VARIATIONS. *Ecology*, 66 (3): 1012-1023. 10.2307/1940562
- Muller, A.C.; Muller, D.L., 2015. Forecasting future estuarine hypoxia using a wavelet based neural network model. *Ocean Modelling*, 96: 314-323. 10.1016/j.ocemod.2015.11.003
- Muller, S., 1990. *Une séquence de groupements végétaux bio-indicateurs d'eutrophisation croissante des cours d'eau faiblement minéralisés des Basses Vosges gréseuses du Nord*. Paris, FRANCE: Elsevier
- Mumby, P.J.; Hastings, A.H.; Edwards, J.E., 2007. Thresholds and the resilience of Caribbean coral reefs. 450: 98-101
- Munawar, M.; Munawar, I.F.; Fitzpatrick, M.; Niblock, H.; Lorimerl, J., 2015. The phytoplankton community of Lake Ontario in 2008: Structure, biodiversity and long term changes. *Aquatic Ecosystem Health & Management*, 18 (1): 28-42. 10.1080/14634988.2014.936808
- Murdock, J.N.; Shields, F.D.; Lizotte, R.E., 2013. Periphyton responses to nutrient and atrazine mixtures introduced through agricultural runoff. *Ecotoxicology*, 22 (2): 215-230
- Murias, T.; Cabral, J.A.; Marques, J.C.; GossCustard, J.D., 1996. Short-term effects of intertidal macroalgal blooms on the macrohabitat selection and feeding behaviour of wading birds in the Mondego estuary (west Portugal). *Estuarine Coastal and Shelf Science*, 43 (6): 677-688. 10.1006/ecss.1996.0096
- Murphy, K.J., 2002. Plant communities and plant diversity in softwater lakes of northern Europe. *Aquatic Botany*, 73 (4): 287-324. 10.1016/s0304-3770(02)00028-1
- Murphy, R.R.; Kemp, W.M.; Ball, W.P., 2011. Long-Term Trends in Chesapeake Bay Seasonal Hypoxia, Stratification, and Nutrient Loading. *Estuaries and Coasts*, 34 (6): 1293-1309. 10.1007/s12237-011-9413-7
- Murray, A.G.; Parslow, J.S., 1999. Modelling of nutrient impacts in Port Phillip Bay - a semi-enclosed marine Australian ecosystem. *Marine and Freshwater Research*, 50 (6): 597-611. 10.1071/mf98087
- Murray, J.W.; Codispoti, L.A.; Friederich, G.E., 1995. Oxidation-reduction environments - the suboxic zone in the black-sea. In: Huang, C.P.; Omelia, C.R.; Morgan, J.J., eds. *Aquatic Chemistry: Interfacial and Interspecies Processes*. Washington: Amer Chemical Soc (Advances in Chemistry Series), Vol.244, 157-176. 10.1021/ba-1995-0244.ch007
- Muylaert, K.; Sanchez-Perez, J.M.; Teissier, S.; Sauvage, S.; Dauta, A.; Vervier, P., 2009. Eutrophication and its effect on dissolved Si concentrations in the Garonne River (France). *Journal of Limnology*, 68 (2): 368-374. 10.3274/jl09-68-2-19
- Muylaert, K.; Tackx, M.; Vyverman, W., 2005. Phytoplankton growth rates in the freshwater tidal reaches of the Schelde estuary (Belgium) estimated using a simple light-limited primary production model. *Hydrobiologia*, 540: 127-140. 10.1007/s10750-004-7128-5
- Mvungi, E.F.; Lyimo, T.J.; Björk, M., 2012. When Zostera marina is intermixed with Ulva, its photosynthesis is reduced by increased pH and lower light, but not by changes in light quality. *Aquatic Botany*, 102: 44-49. 10.1016/j.aquabot.2012.04.007
- Mvungi, E.F.; Mamboya, F.A., 2012. Photosynthetic performance, epiphyte biomass and nutrient content of two seagrass species in two areas with different level of nutrients along the Dar es Salaam coast. *African Journal of Marine Science*, 34 (3): 323–330. 10.2989/1814232x.2012.709957
- Naddafi, R.; Pettersson, K.; Eklöv, P., 2008. Effects of the zebra mussel, an exotic freshwater species, on seston stoichiometry. *Limnology and Oceanography*, 53 (5): 1973-1987. 10.4319/lo.2008.53.5.1973
- Nævdal, E., 2001. Optimal regulation of eutrophying lakes, fjords, and rivers in the presence of threshold effects. *American Journal of Agricultural Economics*, 83 (4): 972-984. 10.1111/0002-9092.00223
- Najjar, R.G.; Pyke, C.R.; Adams, M.B.; Breitburg, D.; Hershner, C.; Kemp, M.; Howarth, R.; Mulholland, M.R.; Paolisso, M.; Secor, D.; Sellner, K.; Wardrop, D.; Wood, R., 2010. Potential climate-change impacts on the Chesapeake Bay. *Estuarine Coastal and Shelf Science*, 86 (1): 1-20. 10.1016/j.ecss.2009.09.026
- Nakura, Y.; Nishida, T.; Ichiki, S., 2013. New direction for water environmental management. *Proceedings of the 10th Global Congress on ICM: Lessons Learned to Address New Challenges, EMECS 2013 - MEDCOAST 2013 Joint Conference*. 1035-1044
- Nangia, V.; Gowda, P.H.; Mulla, D.J.; Sands, G.R., 2008. Water Quality Modeling of Fertilizer Management Impacts on Nitrate Losses in Tile Drains at the Field Scale. *Journal of Environment Quality*, 37 (2): 296. 10.2134/jeq2007.0224
- Nannipieri, P.; Eldor, P., 2009. The chemical and functional characterization of soil N and its biotic components. *Soil Biology and Biochemistry*, 41 (12): 2357-2369. 10.1016/j.soilbio.2009.07.013
- Napoleon, C.; Raimbault, V.; Claquin, P., 2013. Influence of Nutrient Stress on the Relationships between PAM Measurements and Carbon Incorporation in Four Phytoplankton Species. *Plos One*, 8 (6). 10.1371/journal.pone.0066423
- Naqvi, S.W.A.; Bange, H.W.; Farias, L.; Monteiro, P.M.S.; Scranton, M.I.; Zhang, J., 2010. Marine hypoxia/anoxia as a source of CH<sub>4</sub> and N<sub>2</sub>O. *Biogeosciences*, 7 (7): 2159-2190. 10.5194/bg-7-2159-2010
- Naqvi, S.W.A.; Bange, H.W.; Farias, L.; Monteiro, P.M.S.; Scranton, M.I.; Zhang, J., 2010. Marine hypoxia/anoxia as a source of CH<sub>4</sub> and N<sub>2</sub>O. *Biogeosciences*, 7 (7): 2159-2190. 10.5194/bg-7-2159-2010
- Narcy, J.B., 2004. *Pour une gestion spatiale de l'eau: comment sortir du tuyau?* : PIE Lang
- Narcy, J.B., 2013. *Regards des sciences sociales sur la mise en œuvre des politiques de l'eau*. ONEMA
- Narcy, J.-B.; Dufour, A.; Poux, X.; Cudennec, C.; Mérot, P., 2013. Des recherches associées aux besoins de changements. Le cas des marées vertes dans le bassin versant du Yar. *Le Courrier de l'environnement de l'INRA*, 63 (63): 47-62
- Narcy, J.-B.; Mermet, L., 2003. Nouvelles justifications pour une gestion spatiale de l'eau. *Natures Sciences Societes*, 11 (2): 10

- Nash, S.; Hartnett, M.; Dabrowski, T., 2011. Modelling phytoplankton dynamics in a complex estuarine system. *Proceedings of the Institution of Civil Engineers-Water Management*, 164 (1): 35-54. 10.1680/wama.800087
- Nates, S.F.; Felder, D.L., 1998. Impacts of burrowing ghost shrimp, genus *Lepidophthalmus* crustacea : Decapoda : Thalassinidea, on penaeid shrimp culture. *Journal of the World Aquaculture Society*, 29 (2): 188-210. 10.1111/j.1749-7345.1998.tb00978.x
- Nathalie, H.-F., 2010. La Cour de Justice de l'Union européenne et la qualité de l'eau : reflets jurisprudentiels des paradoxes de la politique de l'eau de l'Union. *Les Cahiers de droit*, 51 (3-4): 947-980
- National Academy of, S., 1969. *Eutrophication: causes, consequences, correctives*. Proceedings of Madison Symposium, Wisconsin, 11-15 June. 1967.: National Oceanic and Atmospheric Administration, 2008. Nutrient Pollution – Eutrophication.[http://oceanservice.noaa.gov/education/kits/estuaries/media/supp\\_estuar09b\\_eutro.html](http://oceanservice.noaa.gov/education/kits/estuaries/media/supp_estuar09b_eutro.html) [consulté: 16/01/2017]
- National Research Council, 1993. *Soil and water quality: an agenda for agriculture*. National Academies Press
- Nauleau, O., 1988. Analyse bibliographique des conditions du développement des algues coloniales à formations macroscopiques.
- Naumann, E., 1919. Some aspects of the ecology of the limnoplankton, with special reference to the phytoplankton. *Svensk Botanisk Tidskrift*, 13 (2): 129-163
- Nciizah, A.D.; Wakindiki, I.I.C., 2015. Soil sealing and crusting effects on infiltration rate: a critical review of shortfalls in prediction models and solutions. *Archives of Agronomy and Soil Science*, 61 (9): 1211-1230. 10.1080/03650340.2014.998203
- Neal, C.; Hilton, J.; Wade, A.J.; Neal, M.; Wickham, H., 2006. Chlorophyll-a in the rivers of eastern England. *Science of the Total Environment*, 365 (1-3): 84-104. 10.1016/j.scitotenv.2006.02.039
- Neal, C.; Jarvie, H.P., 2005. Agriculture, community, river eutrophication and the Water Framework Directive. *Hydrological Processes*, 19 (9): 1895-1901. 10.1002/hyp.5903
- Neal, C.; Jarvie, H.P.; Howarth, S.M.; Whitehead, P.G.; Williams, R.J.; Neal, M.; Harrow, M.; Wickham, H., 2000. The water duality of the River Kennet: initial observations on a lowland chalk stream impacted by sewage inputs and phosphorus remediation. *Science of the Total Environment*, 251: 477-495. 10.1016/s0048-9697(00)00400-9
- Neal, C.; Watts, C.; Williams, R.; Neal, M.; Hill, L.; Wickham, H., 2002. Diurnal and longer term patterns in carbon dioxide and calcite saturation for the River Kennet, south-eastern England. *Science of the Total Environment*, 282: 205-231
- Nearing, M.A.; Deerascough, L.; Laflen, J.M., 1990. Sensitivity analysis of the wepp hillslope profile erosion model. *Transactions of the Asae*, 33 (3): 839-849
- Nearing, M.A.; Foster, G.R.; Lane, L.J.; Finkner, S.C., 1989. A process-based soil-erosion model for USDA-water erosion prediction project technology. *Transactions of the Asae*, 32 (5): 1587-1593
- Nearing, M.A.; Jetten, V.; Baffaut, C.; Cerdan, O.; Couturier, A.; Hernandez, M.; Le Bissonnais, Y.; Nichols, M.H.; Nunes, J.P.; Renschler, C.S.; Souchere, V.; van Oost, K., 2005. Modeling response of soil erosion and runoff to changes in precipitation and cover. *Catena*, 61 (2-3): 131-154. 10.1016/j.catena.2005.03.007
- Nearing, M.A.; Nicks, A.D., 1998. Evaluation of the water erosion prediction project (WEPP) model for hillslopes. In: Boardman, J.; FavisMortlock, D., eds. *Modelling Soil Erosion by Water*. Berlin: Springer-Verlag Berlin (Nato Advanced Science Institute Series, Series I, Global Environment Change), Vol.55, 43-53
- Nearing, M.A.; Wei, H.; Stone, J.J.; Pierson, F.B.; Spaeth, K.E.; Weltz, M.A.; Flanagan, D.C.; Hernandez, M., 2011. A rangeland hydrology and erosion model. *Transactions of the Asabe*, 54 (3): 901-908
- Nedergaard, R.I.; Risgaard-Peterson, N.; Finster, K., 2002. The importance of sulfate reduction associated with *Ulva lactuca* thalli during decomposition: a mesocosm experiment. *Journal of Experimental Marine Biology and Ecology*, 275 (1): 15-29. 10.1016/s0022-0981(02)00211-3
- Nedwell, D.B., 1999. Effect of low temperature on microbial growth: Lowered affinity for substrates limits growth at low temperature. *Fems Microbiology Ecology*, 30 (2): 101–111. 10.1111/j.1574-6941.1999.tb00639.x
- Neira, C.; Rackemann, M., 1996. Black spots produced by buried macroalgae in intertidal sandy sediments of the Wadden Sea: Effects on the meiobenthos. *Journal of Sea Research*, 36 (3-4): 153–170. 10.1016/s1385-1101(96)90786-8
- Nejrup, L.B.; Pedersen, M.F., 2010. Growth and biomass development of the introduced red alga *Gracilaria vermiculophylla* is unaffected by nutrient limitation and grazing. *Aquatic Biology*, 10 (3): 249-259. 10.3354/ab00281
- Nelkin, D., 1976. Ecologists and the public interest. *Hastings Center Report*, 6 (1): 38-44. 10.2307/3560361
- Nelkin, D., 1977. Scientists and Professional Responsibility: The Experience of American Ecologists. *Social Studies of Science*, 7 (1): 75-95
- Nelson, D.M.; Brzezinski, M.A., 1990. KINETICS OF SILICIC-ACID UPTAKE BY NATURAL DIATOM ASSEMBLAGES IN 2 GULF-STREAM WARM-CORE RINGS. *Marine Ecology Progress Series*, 62 (3): 283-292. 10.3354/meps062283
- Nelson, N.O.; Janke, R.R., 2007. Phosphorus sources and management in organic production systems. *Horttechnology*, 17 (4): 442-454
- Nelson, T.A.; Lee, D.J.; Smith, B.C., 2003. Are “green Tides” Harmful Algal Blooms? Toxic Properties of Water-Soluble Extracts from Two Bloom-Forming Macroalgae, *Ulva Fenestrata* and *Ulvaria Obscura* (ulvophyceae). *Journal of Phycology*, 39 (5): 874-879. 10.1046/j.1529-8817.2003.02157.x
- Nelson, T.A.; Nelson, A.V.; Tjoelker, M., 2003. Seasonal patterns in ulvoid algal biomass, productivity, and key environmental factors in the Northeast Pacific. *Bot Mar*, 46: 263–327

- Nemery, J.; Garnier, J., 2007. Origin and fate of phosphorus in the Seine watershed (France): Agricultural and hydrographic P budgets. *Journal of Geophysical Research-Biogeosciences*, 112 (G3): 14. 10.1029/2006jg000331
- Nemery, J.; Garnier, J.; Morel, C., 2005. Phosphorus budget in the Marne Watershed (France): urban vs. diffuse sources, dissolved vs. particulate forms. *Biogeochemistry*, 72 (1): 35-66. 10.1007/s10533-004-0078-1
- Némery, J.; Garnier, J.; Morel, C., 2005. Phosphorus budget in the Marne Watershed (France): urban vs. diffuse sources, dissolved vs. particulate forms. *Biogeochemistry*, 72 (1): 35-66. 10.1007/s10533-004-0078-1
- Neori, A.; Chopin, T.; Troell, M.; Buschmann, A.H.; Kraemer, G.P.; Halling, C.; Shpigel, M.; Yarish, C., 2004. Integrated aquaculture: rationale, evolution and state of the art emphasizing seaweed biofiltration in modern mariculture. *Aquaculture*, 231 (1-4): 361-391. 10.1016/j.aquaculture.2003.11.015
- Nesme, T.; Senthilkumar, K.; Mollier, A.; Pellerin, S., 2015. Effects of crop and livestock segregation on phosphorus resource use: A systematic, regional analysis. *European Journal of Agronomy*, 71: 88-95. 10.1016/j.eja.2015.08.001
- Ness, B.; Anderberg, S.; Olsson, L., 2010. Structuring problems in sustainability science: The multi-level DPSIR framework. *Geoforum*, 41 (3): 479-488. 10.1016/j.geoforum.2009.12.005
- Ness, B.; Urbel-Piirsalu, E.; Anderberg, S.; Olsson, L., 2007. Categorising tools for sustainability assessment. *Ecological Economics*, 60 (3): 498-508. 10.1016/j.ecolecon.2006.07.023
- Nestler, A.; Berglund, M.; Accoe, F.; Dutta, S.; Xue, D.; Boeckx, P.; Taylor, P., 2011. Isotopes for improved management of nitrate pollution in aqueous resources: review of surface water field studies. *Environmental Science and Pollution Research*, 18 (4): 519-533. 10.1007/s11356-010-0422-z
- Nestlerode, J.A.; Diaz, R.J., 1998. Effects of periodic environmental hypoxia on predation of a tethered polychaete, *Glycera americana*: implications for trophic dynamics. *Marine Ecology Progress Series*, 172: 185-195. 10.3354/meps172185
- Netten, J.J.C.; Arts, G.H.P.; Gylstra, R.; van Nes, E.H.; Scheffer, M.; Roijackers, R.M.M., 2010. Effect of temperature and nutrients on the competition between free-floating *Salvinia natans* and submerged *Elodea nuttallii* in mesocosms. *Fundamental and Applied Limnology*, 177 (2): 125-132. 10.1127/1863-9135/2010/0177-0125
- Neumann, T.; Eilola, K.; Gustafsson, B.; Muller-Karulis, B.; Kuznetsov, I.; Meier, H.E.M.; Savchuk, O.P., 2012. Extremes of Temperature, Oxygen and Blooms in the Baltic Sea in a Changing Climate. *Ambio*, 41 (6): 574-585. 10.1007/s13280-012-0321-2
- Neumann, T.; Fennel, W.; Kremp, C., 2002. Experimental simulations with an ecosystem model of the Baltic Sea: A nutrient load reduction experiment. *Global Biogeochemical Cycles*, 16 (3). 10.1029/2001gb001450
- Neumann, T.; Schemewski, G., 2005. An ecological model evaluation of two nutrient abatement strategies for the Baltic Sea. *Journal of Marine Systems*, 56 (1-2): 195-206. 10.1016/j.jmarsys.2004.10.002
- Neumann, T.; Schernewski, G., 2008. Eutrophication in the Baltic Sea and shifts in nitrogen fixation analyzed with a 3D ecosystem model. *Journal of Marine Systems*, 74 (1-2): 592-602. 10.1016/j.jmarsys.2008.05.003
- Newbold, J.D.; Elwood, J.W.; O'Neill, R.V.; Sheldon, A.L., 1983. PHOSPHORUS DYNAMICS IN A WOODLAND STREAM ECOSYSTEM - A STUDY OF NUTRIENT SPIRALLING. *Ecology*, 64 (5): 1249-1265. 10.2307/1937833
- Newcombe, G.; Chorus, I.; Falconer, I.; Lin, T.-F., 2012. Cyanobacteria: Impacts of climate change on occurrence, toxicity and water quality management. *Water Research Cyanobacteria: Impacts of climate change on occurrence, toxicity and water quality management*, 46: 1347-1348. 10.1016/j.watres.2011.12.047
- Newell, R.I., 1988. Ecological changes in Chesapeake Bay: are they the result of overharvesting the American oyster, *Crassostrea virginica*. *Understanding the estuary: advances in Chesapeake Bay research*, 129: 536-546
- Newell, R.I.E., 2004. Ecosystem influences of natural and cultivated populations of suspension-feeding bivalve molluscs: A review. *Journal of Shellfish Research*, 23 (1): 51-61
- Newell, R.I.E.; Cornwell, J.C.; Owens, M.S., 2002. Influence of simulated bivalve biodeposition and microphytobenthos on sediment nitrogen dynamics: A laboratory study. *Limnology and Oceanography*, 47 (5): 1367-1379
- Newham, L.T.H.; Letcher, R.A.; Jakeman, A.J.; Kobayashi, T., 2004. A framework for integrated hydrologic, sediment and nutrient export modelling for catchment-scale management. *Environmental Modelling & Software*, 19 (11): 1029-1038. 10.1016/j.envsoft.2003.11.006
- Newton, C.; Thornber, C., 2012. Abundance and Species Composition Surveys of Macroalgal Blooms in Rhode Island Salt Marshes. *Northeastern Naturalist*, 19 (3): 501-516. 10.1656/045.019.0311
- Newton, C.; Thornber, C., 2013. Ecological Impacts of Macroalgal Blooms on Salt Marsh Communities. *Estuaries and Coasts*: 1-12
- Ng, T.L.; Wayland Eheart, J.; Cai, X.; Braden, J.B.; Czapar, G.F., 2014. Agronomic and stream nitrate load responses to incentives for bioenergy crop cultivation and reductions of carbon emissions and fertilizer use. *Journal of Water Resources Planning and Management*, 140 (1): 112-120. 10.1061/(ASCE)WR.1943-5452.0000320
- Ngatia, L.W.; Hsieh, Y.P.; Nemours, D.; Fu, R.; Taylor, R.W., 2017. Potential phosphorus eutrophication mitigation strategy: Biochar carbon composition, thermal stability and pH influence phosphorus sorption. *Chemosphere*, 180: 201-211. 10.1016/j.chemosphere.2017.04.012
- Nguyen, T.V.; Ravn-Jonsen, L.; Vestergaard, N., 2015. Marginal Damage Cost of Nutrient Enrichment: The Case of the Baltic Sea. *Environmental and Resource Economics*. 10.1007/s10640-014-9859-8
- Ni, J.Q., 1999. Mechanistic models of ammonia release from liquid manure: a review. *Journal of Agricultural Engineering Research*, 72 (1): 1-17. 10.1006/jaer.1998.0342
- Nichols, D.S., 1983. Capacity of natural wetlands to remove nutrients from wastewater. *Journal Water Pollution Control Federation*, 55 (5): 495-505

- Nicolette, J.; Burr, S.; Rockel, M., 2013. A practical approach for demonstrating environmental sustainability and stewardship through a net ecosystem service analysis. *Sustainability (Switzerland)*, 5 (5): 2152-2177. 10.3390/su5052152
- Nieder, R.; Benbi, D.K.; Scherer, H.W., 2011. Fixation and defixation of ammonium in soils: a review. *Biology and Fertility of Soils*, 47 (1): 1-14. 10.1007/s00374-010-0506-4
- Nielsen, L.B.; Finster, K.; Welsh, D.T.; Donelly, A.; Herbert, R.A.; de Wit, R.; Lomstein, B.A., 2001. Sulphate reduction and nitrogen fixation rates associated with roots, rhizomes and sediments from *Zostera noltii* and *Spartina maritima* meadows. *Environmental Microbiology*, 3 (1): 63-71. 10.1046/j.1462-2920.2001.00160.x
- Nielsen, O.I.; Koch, M.S.; Jensen, H.S.; Madden, C.J., 2006. Thalassia testudinum phosphate uptake kinetics at low in situ concentrations using a <sup>15</sup>N radioisotope technique. *Limnology and Oceanography*, 51 (1): 208-217
- Nielsen, S., 1997. Examination and optimization of different exergy forms in macrophyte societies. *Ecological Modelling*, 102 (1): 115-127. 10.1016/S0304-3800(97)00102-6
- Niemi, G.J.; Detenbeck, N.E.; Perry, J.A., 1993. Comparative-analysis of variables to measure recovery rates in streams. *Environmental Toxicology and Chemistry*, 12 (9): 1541-1547. 10.1897/1552-8618(1993)12[1541:caovtm]2.0.co;2
- Nierenberg, K.; Kirner, K.; Hoagland, P.; Ullmann, S.; LeBlanc, W.G.; Kirkpatrick, G.; Fleming, L.E.; Kirkpatrick, B., 2010. Changes in work habits of lifeguards in relation to Florida red tide. *Harmful Algae*, 9 (4): 419-425. 10.1016/j.hal.2010.02.005
- Nijboer, R.C.; Verdonschot, P.F.M., 2004. Variable selection for modelling effects of eutrophication on stream and river ecosystems. *Ecological Modelling*, 177 (1-2): 17-39. 10.1016/j.ecolmodel.2003.12.050
- Nimick, D.; Gammons, C.; Parker, S., 2011. Diel biogeochemical processes and their effect on the aqueous chemistry of streams: A review. *Chemical Geology*, 283 (1-2): 3-17. 10.1016/j.chemgeo.2010.08.017
- Nitoi, I.; Constantin, L.A.; Oancea, P.; Cristea, I.; Crisan, M.; Sgem, 2015. TiO<sub>2</sub> SOLAR LIGHT PHOTOCATALYSIS A PROMISING TREATMENT METHOD OF WASTEWATER WITH TRINITROTOLUENE CONTENT. *Ecology, Economics, Education and Legislation, Vol I.* (International Multidisciplinary Scientific GeoConference-SGEM), 969-976
- Nixon, S.W., 1995. COASTAL MARINE EUTROPHICATION - A DEFINITION, SOCIAL CAUSES, AND FUTURE CONCERNs. *Ophelia*, 41: 199-219
- Nixon, S.W., 1995. Coastal marine eutrophication: a definition, social causes, and future concerns. *Ophelia*, 41 (1): 199-219
- Nixon, S.W., 1997. Prehistoric nutrient inputs and productivity in Narragansett Bay. *Estuaries*, 20 (2): 253-261. 10.2307/1352341
- Nixon, S.W., 2009. Eutrophication and the microscope. *Hydrobiologia*, 629 (1): 5-19. 10.1007/s10750-009-9759-z
- Nkoa, R., 2014. Agricultural benefits and environmental risks of soil fertilization with anaerobic digestates: a review. *Agronomy for Sustainable Development*, 34 (2): 473-492. 10.1007/s13593-013-0196-z
- Nobre, A.M.; Ferreira, J.G.; Newton, A.; Simas, T.; Icely, J.D.; Neves, R., 2005. Management of coastal eutrophication: Integration of field data, ecosystem-scale simulations and screening models. *Journal of Marine Systems*, 56 (3-4): 375-390. 10.1016/j.jmarsys.2005.03.003
- Noe, G.B.; Hupp, C.R., 2005. Carbon, nitrogen, and phosphorus accumulation in floodplains of Atlantic Coastal Plain rivers, USA. *Ecological Applications*, 15 (4): 1178-1190. 10.1890/04-1677
- Nordström, M.; Booth, D.M., 2007. Drift algae reduce foraging efficiency of juvenile flatfish. *Journal of Sea Research*, 58 (4): 335-341. 10.1016/j.seares.2007.08.001
- Nørgård, J.S.; Christensen, B.L., 1989. Shrinking Danish agriculture. *Agriculture and Human Values*, 6 (1-2): 110-116. 10.1007/BF02219427
- Norkko, A.; Bonsdorff, E., 1996. Population responses of coastal zoobenthos to stress induced by drifting algal mats. *Marine Ecology Progress Series*, 140 (1-3): 141-151. 10.3354/meps140141
- Norkko, A.; Bonsdorff, E., 1996. Rapid zoobenthic community responses to accumulations of drifting algae. *Marine Ecology Progress Series*, 131 (1-3): 143-157. 10.3354/meps131143
- Norkko, J.; Bonsdorff, E.; Norkko, A., 2000. Drifting algal mats as an alternative habitat for benthic invertebrates: Species specific responses to a transient resource. *Journal of Experimental Marine Biology and Ecology*, 248 (1): 79-104. 10.1016/s0022-0981(00)00155-6
- Norkko, J.; Reed, D.C.; Timmermann, K.; Norkko, A.; Gustafsson, B.G.; Bonsdorff, E.; Slomp, C.P.; Carstensen, J.; Conley, D.J., 2012. A welcome can of worms? Hypoxia mitigation by an invasive species. *Global Change Biology*, 18 (2): 422-434. 10.1111/j.1365-2486.2011.02513.x
- Norlem, M.; Paraska, D.; Hipsey, M.R., 2013. Sediment-water oxygen and nutrient fluxes in a hypoxic estuary. *20th International Congress on Modelling and Simulation (Modsim2013)*, 1777-1783
- Norris, G.A., 2003. Impact characterization in the tool for the reduction and assessment of chemical and other environmental impacts: Methods for acidification, eutrophication, and ozone formation. *Journal of Industrial Ecology*, 6 (3-4): 79-101
- Novak, S.M.; Fiorelli, J.L., 2010. Greenhouse gases and ammonia emissions from organic mixed crop-dairy systems: a critical review of mitigation options. *Agronomy for Sustainable Development*, 30 (2): 215-236. 10.1051/agro/2009031
- Novo, F.G., 2012. Moral drought: The ethics of water use. *Water Policy*, 14 (SUPPL. 1): 65-72. 10.2166/wp.2012.005
- Novoa, S.; Chust, G.; Sagarminaga, Y.; Revilla, M.; Borja, A.; Franco, J., 2012. Water quality assessment using satellite-derived chlorophyll-a within the European directives, in the southeastern Bay of Biscay. *Marine Pollution Bulletin*, 64 (4): 739-750. 10.1016/j.marpolbul.2012.01.020
- Noyma, N.P.; de Magalhaes, L.; Furtado, L.L.; Mucci, M.; van Oosterhout, F.; Huszar, V.L.M.; Marinho, M.M.; Lurling, M., 2016. Controlling cyanobacterial blooms through effective flocculation and sedimentation with combined use of flocculants and phosphorus adsorbing natural soil and modified clay. *Water Research*, 97: 26-38. 10.1016/j.watres.2015.11.057

- Nunes, J.P.; Seixas, J.; Keizer, J.J.; Ferreira, A.J.D., 2009. Sensitivity of runoff and soil erosion to climate change in two Mediterranean watersheds. Part I: model parameterization and evaluation. *Hydrological Processes*, 23 (8): 1202-1211. 10.1002/hyp.7247
- Nunes, P.A.L.D.; Bergh, J.C.J.M.v.d.; Nijkamp, P., 2003. *The ecological economics of biodiversity: methods and policy applications*. Cheltenham: Edward Elgar Publishing Ltd
- Nunneri, C.; Windhorst, W.; Kerry Turner, R.; Lenhart, H., 2007. Nutrient emission reduction scenarios in the North Sea: An abatement cost and ecosystem integrity analysis. *Ecological Indicators*, 7 (4): 776-792. 10.1016/j.ecolind.2006.09.002
- Nurnberg, G.K., 2007. Lake responses to long-term hypolimnetic withdrawal treatments. *Lake and Reservoir Management*, 23 (4): 388-409
- Nyenje, P.; Foppen, J.; Uhlenbrook, S.; Kulabako, R.; Muwanga, A., 2010. Eutrophication and nutrient release in urban areas of sub-Saharan Africa—a review. *Science of the Total Environment*, 408 (3): 447-455
- O'Connor, M., 2006. The “Four Spheres” framework for sustainability. *Ecological Complexity*, 3 (4): 285-292. 10.1016/j.ecocom.2007.02.002
- O'Connor, M.; Schoer, K., 2009. *Environmental-Economic Accounting: Environmental Degradation in the new SEEA. Environmental Degradation in the new SEEA Proposals for a systematic presentation of environmental degradation in the framework of EEA*. Statistisches Bundesamt Wiesbaden.
- O'Hare, M.T.; Clarke, R.T.; Bowes, M.J.; Cailes, C.; Henville, P.; Bissett, N.; McGahey, C.; Neal, M., 2010. Eutrophication impacts on a river macrophyte. *Aquatic Botany*, 92 (3): 173-178. <http://dx.doi.org/10.1016/j.aquabot.2009.11.001>
- O'Neil, J.; Davis, T.; Burford, M.; Gobler, C., 2012. The rise of harmful cyanobacteria blooms: the potential roles of eutrophication and climate change. *Harmful Algae*, 14: 313-334
- O'Neil, J.M.; Davis, T.W.; Burford, M.A.; Gobler, C.J., 2012. The rise of harmful cyanobacteria blooms: The potential roles of eutrophication and climate change. *Harmful Algae*, 14: 313-334. 10.1016/j.hal.2011.10.027
- O'Neill, K.; Schreider, M.; McArthur, L.; Schreider, S., 2015. Changes in the water quality characteristics during a macroalgal bloom in a coastal lagoon. *Ocean & Coastal Management*, 118 (A, SI): 32-36. 10.1016/j.ocecoaman.2015.04.020
- Obenour, D.; Michalak, A.; Scavia, D., 2015. Assessing biophysical controls on Gulf of Mexico hypoxia through probabilistic modeling. *Ecological Applications*, 25 (2): 492-505. 10.1890/13-2257.1
- Obenour, D.R.; Scavia, D.; Rabalais, N.N.; Turner, R.E.; Michalak, A.M., 2013. Retrospective Analysis of Midsummer Hypoxic Area and Volume in the Northern Gulf of Mexico, 1985-2011. *Environmental Science & Technology*, 47 (17): 9808-9815. 10.1021/es400983g
- Oberhaus, L.; Gélinas, M.; Pinel-Alloul, B.; Ghadouani, A.; Humbert, J.-F., 2007. Grazing of two toxic *Planktothrix* species by *Daphnia pulicaria*: potential for bloom control and transfer of microcystins. *Journal of Plankton Research*, 29 (10): 827-838
- Obersteiner, M.; Penuelas, J.; Ciais, P.; van der Velde, M.; Janssens, I.A., 2013. The phosphorus trilemma. *Nature Geoscience*, 6 (11): 1. 10.1038/ngeo1990.
- O'Boyle, S.; Wilkes, R.; McDermott, G.; Longphuirt, S.N.; Murray, C., 2015. Factors affecting the accumulation of phytoplankton biomass in Irish estuaries and nearshore coastal waters: A conceptual model. *Estuarine Coastal and Shelf Science*, 155: 75-88. 10.1016/j.ecss.2015.01.007
- OBRIEN, M.C.; WHEELER, P.A., 1987. SHORT-TERM UPTAKE OF NUTRIENTS BY ENTEROMORPHA-PROLIFERA (CHLOROPHYCEAE). *Journal of Phycology*, 23 (4): 547-556
- Ocampo, C.J.; Oldham, C.E.; Sivapalan, M., 2006. Nitrate attenuation in agricultural catchments: Shifting balances between transport and reaction. *Water Resources Research*, 42 (1). 10.1029/2004wr003773
- OCDE, 2012. *Qualité de l'eau et agriculture : un défi pour les politiques publiques*. OECD Publishing
- Ochocka, A.; Pasztaleniec, A., 2016. Sensitivity of plankton indices to lake trophic conditions. *Environmental Monitoring and Assessment*: 1-16. 10.1007/s10661-016-5634-3
- O'Connor, M., 1989. Codependency and indeterminacy: A critique of the theory of production. *Capitalism Nature Socialism*, 1 (3): 33-57. 10.1080/10455758909358383
- O'Connor, M.I.; Piehler, M.F.; Leech, D.M.; Anton, A.; Bruno, J.F., 2009. Warming and Resource Availability Shift Food Web Structure and Metabolism. *PLoS Biol*, 7 (8). 10.1371/journal.pbio.1000178
- Oczkowski, A.; McKinney, R.; Ayvazian, S.; Hanson, A.; Wigand, C.; Markham, E., 2015. Preliminary Evidence for the Amplification of Global Warming in Shallow, Intertidal Estuarine Waters. *Plos One*, 10 (10). 10.1371/journal.pone.0141529
- Oczkowski, A.; Thornber, C.S.; Markham, E.E.; Rossi, R.; Ziegler, A.; Rinehart, S., 2015. Testing sample stability using four storage methods and the macroalgae *Ulva* and *Gracilaria*. *Limnology and Oceanography-Methods*, 13 (1): 9–14. 10.1002/lom3.10002
- Odom, R.L.; Walters, L.J., 2014. A safe alternative to invasive *Caulerpa taxifolia* (Chlorophyta)? Assessing aquarium-release invasion potential of aquarium strains of the macroalgal genus *Chaetomorpha* (Chlorophyta). *Biological Invasions*, 16 (8): 1589-1597. 10.1007/s10530-013-0593-x
- ODUM, H., 1956. PRIMARY PRODUCTION IN FLOWING WATERS. *Limnology and Oceanography*, 1 (2): 102-117
- Officer, C.B.; Biggs, R.B.; Taft, J.L.; Cronin, L.E.; Tyler, M.A.; Boynton, W.R., 1984. Chesapeake Bay Anoxia - origin, development, and significance. *Science*, 223 (4631): 22-27. 10.1126/science.223.4631.22
- Officer, C.B.; Smayda, T.J.; Mann, R., 1982. Benthic filter feeding - a natural eutrophication control. *Marine Ecology Progress Series*, 9 (2): 203-210. 10.3354/meps009203

- Ofiara, D.D., 2002. Natural resource damage assessments in the United States: rules and procedures for compensation from spills of hazardous substances and oil in waterways under US jurisdiction. *Marine Pollution Bulletin*, 44 (2): 96-110. 10.1016/S0025-326X(01)00263-6
- Oganjan, K.; Lauringson, V., 2014. Grazing rate of zebra mussel in a shallow eutrophicated bay of the Baltic Sea. *Marine Environmental Research*, 102: 43-50. 10.1016/j.marenvres.2014.05.003
- Ogejo, J.A.; Senger, R.S.; Zhang, R.H., 2010. Global sensitivity analysis of a process-based model for ammonia emissions from manure storage and treatment structures. *Atmospheric Environment*, 44 (30): 3621-3629. 10.1016/j.atmosenv.2010.06.053
- Oguz, T.; Ducklow, H.W.; Malanotte-Rizzoli, P., 2000. Modeling distinct vertical biogeochemical structure of the Black Sea: Dynamical coupling of the oxic, suboxic, and anoxic layers. *Global Biogeochemical Cycles*, 14 (4): 1331-1352. 10.1029/1999gb001253
- Oguz, T.; Gilbert, D., 2007. Abrupt transitions of the top-down controlled Black Sea pelagic ecosystem during 1960-2000: Evidence for regime-shifts under strong fishery exploitation and nutrient enrichment modulated by climate-induced variations. *Deep-Sea Research Part I-Oceanographic Research Papers*, 54 (2): 220-242. 10.1016/j.dsr.2006.09.010
- Oita, A.; Nagano, I.; Matsuda, H., 2016. An improved methodology for calculating the nitrogen footprint of seafood. *Ecological Indicators*, 60: 1091-1103. 10.1016/j.ecolind.2015.08.039
- Okmyung, B.I.N.; Czajkowski, J., 2013. The Impact of Technical and Non-technical Measures of Water Quality on Coastal Waterfront Property Values in South Florida. 28 (1): 43-63. 10.5950/0738-1360-28.1.43
- Ólafsson, E.; Aarnio, K.; Bonsdorff, E.; Arroyo, N.L., 2013. Fauna of the green alga *Cladophora glomerata* in the Baltic Sea: density, diversity, and algal decomposition stage. *Marine Biology*, 160 (9): 2353-2362. 10.1007/s00227-013-2229-1
- Ólafsson, E.B., 1988. Inhibition of larval settlement to a soft bottom benthic community by drifting algal mats: An experimental test. *Marine Biology*, 97 (4): 571-574. 10.1007/bf00391053
- Olfs, H.-W.; Blankenau, K.; Brentrup, F.; Jasper, J.; Link, A.; Lammel, J., 2005. Soil- and plant-based nitrogen-fertilizer recommendations in arable farming. *Journal of Plant Nutrition and Soil Science*, 168 (4): 414-431. 10.1002/jpln.200520526
- Oliver, R.L.; Ganf, G.G., 2000. Freshwater blooms. *The Ecology of Cyanobacteria*. Springer, 149-194
- Olivotti, R.; Faganeli, J.; Malej, A., 1986. Eutrophication of Coastal Waters—Gulf of Trieste. *Water Science and Technology*, 18 (9): 303-316
- Olli, K.; Paelr, H.W.; Klais, R., 2015. Diversity of coastal phytoplankton assemblages – Cross ecosystem comparison. *Estuarine, Coastal and Shelf Science*, 162: 110-118. 10.1016/j.ecss.2015.03.015
- Ollikainen, M.; Honkatukia, J., 2001. Towards efficient pollution control in the Baltic Sea: An anatomy of current failure with suggestions for change. *Ambio*, 30 (4-5): 245-253
- Olsen, O.T., 1883. *The Piscatorial Atlas of the North Sea, English Channel, and St. George's Channels: Illustrating the Fishing Ports, Boats, Gear, Species of Fish (how, Where, and when Caught), and Other Information Concerning Fish and Fisheries*. OT Olsen
- Olsen, S.R.; Cole, C.V.; Watanabe, F.S., 1954. *Estimation of available phosphorus in soils by extraction with sodium bicarbonate*. Washington: USDA (Circular / United States Department of Agriculture; no. 939), 18
- Olson, T.C., 1977. RESTORING PRODUCTIVITY OF A GLACIAL TILL SOIL AFTER TOPSOIL REMOVAL. *Journal of Soil and Water Conservation*, 32 (3): 130-132
- Olsson, J.A.; Berg, K., 2005. Local stakeholders' acceptance of model-generated data used as a communication tool in water management: The Rönneå study. *Ambio*, 34 (7): 507-512
- Olsson, J.A.; Jonsson, A.C.; Andersson, L.; Arheimer, B., 2011. A model-supported participatory process for nutrient management: A socio-legal analysis of a bottom-up implementation of the EU Water Framework Directive. *International Journal of Agricultural Sustainability*, 9 (2): 379-389. 10.1080/14735903.2011.582361
- Olufeagba, B.J.; Flake, R.H., 1981. Modeling and control of dissolved-oxygen in an estuary. *Ecological Modelling*, 14 (1-2): 79-94. 10.1016/0304-3800(81)90015-6
- Olyarnik, S.V.; Stachowicz, J.J., 2012. Multi-year study of the effects of *Ulva* sp blooms on eelgrass *Zostera marina*. *Marine Ecology Progress Series*, 468: 107-117. 10.3354/meps09973
- Omernik, J.M.; Abernathy, A.R.; Male, L.M., 1981. STREAM NUTRIENT LEVELS AND PROXIMITY OF AGRICULTURAL AND FOREST LAND TO STREAMS - SOME RELATIONSHIPS. *Journal of Soil and Water Conservation*, 36 (4): 227-231
- Omnes, P.; Slawyk, G.; Garcia, N.; Bonin, P., 1996. Evidence of denitrification and nitrate ammonification in the River Rhone plume (northwestern Mediterranean Sea). *Marine Ecology Progress Series*, 141 (1-3): 275-281. 10.3354/meps141275
- Omstedt, A.; Meuller, L.; Nyberg, L., 1997. Interannual, seasonal and regional variations of precipitation and evaporation over the Baltic Sea. *Ambio*, 26 (8): 484-492
- Onandia, G.; Gudimov, A.; Miracle, M.R.; Arhonditsis, G., 2015. Towards the development of a biogeochemical model for addressing the eutrophication problems in the shallow hypertrophic lagoon of Albufera de Valencia, Spain. *Ecological Informatics*, 26: 70-89. 10.1016/j.ecoinf.2015.01.004
- O'Neil, J.M.; Davis, T.W.; Burford, M.A.; Gobler, C.J., 2012. The rise of harmful cyanobacteria blooms: The potential roles of eutrophication and climate change. *Harmful Algae*, 14: 313-334. 10.1016/j.hal.2011.10.027
- Oorts, K.; Laurent, F.; Mary, B.; Thiebeau, P.; Labreuche, J.; Nicolardot, B., 2007. Experimental and simulated soil mineral N dynamics for long-term tillage systems in northern France. *Soil and Tillage Research*, 94 (2): 441-456. 10.1016/j.still.2006.09.004

- Orderud, G.I.; Vogt, R.D., 2013. Trans-disciplinarity required in understanding, predicting and dealing with water eutrophication. *International Journal of Sustainable Development and World Ecology*, 20 (5): 404-415. 10.1080/13504509.2013.814605
- Oremland, R.S.; Marsh, L.M.; Polcin, S., 1982. Methane production and simultaneous sulfate reduction in anoxic, salt-marsh sediments. *Nature*, 296 (5853): 143-145. 10.1038/296143a0
- Oreskes, N.; Conway, E.M., 2011. *Merchants of doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming*. Bloomsbury Publishing USA
- Orfanidis, S.; Dencheva, K.; Nakou, K.; Tsioli, S.; Papathanasiou, V.; Rosati, I., 2014. Benthic macrophyte metrics as bioindicators of water quality: towards overcoming typological boundaries and methodological tradition in Mediterranean and Black Seas. *Hydrobiologia*, 740 (1): 61-78. 10.1007/s10750-014-1938-x
- Orfanidis, S.; Panayotidis, P.; Stamatis, N., 2003. An insight to the ecological evaluation index (EEI). *Ecological Indicators*, 3 (1): 27-33. 10.1016/s1470-160x(03)00008-6
- O'Riordan, T., 1999. Economic challenges for lake management. *Hydrobiologia*, 395-396: 13-18. 10.1023/A:1017042612177
- O'Rourke, S.M.; Foy, R.H.; Watson, C.J.; Ferris, C.P.; Gordon, A., 2010. Effect of Varying the Phosphorus Content of Dairy Cow Diets on Losses of Phosphorus in Overland Flow Following Surface Applications of Manure. *Journal of Environmental Quality*, 39 (6): 2138-2146. 10.2134/jeq2010.0205
- Orr, K.K.; Wilding, T.A.; Horstmeyer, L.; Weigl, S.; Heymans, J.J., 2014. Detached macroalgae: Its importance to inshore sandy beach fauna. *Estuarine, Coastal and Shelf Science*, 150, Part A: 125-135. 10.1016/j.ecss.2013.12.011
- Osborn, S.; Cook, H.F., 1997. Nitrate Vulnerable Zones and Nitrate Sensitive Areas: A Policy and Technical Analysis of Groundwater Source Protection in England and Wales. *Journal of Environmental Planning and Management*, 40 (2): 217-233. 10.1080/09640569712191
- OSPAR Commission, 2003. *Strategies of the OSPAR Commission for the protection of the marine environment of the north-east Atlantic (Reference number: 2003-21)*: EUC 03/17/1-E Annex 31, p 22.
- OSPAR Commission, 2010. *Bilan de santé 2010* Commission OSPAR, Londres, 176 pp.
- Ostberg, K.; Hakansson, C.; Hasselstrom, L.; Bostedt, G., 2013. Benefit Transfer for Environmental Improvements in Coastal Areas: General versus Best-Fitting Models. *Canadian Journal of Agricultural Economics*, 61 (2): 239-258. 10.1111/cjag.12010
- Ostman, O.; Eklof, J.; Eriksson, B.K.; Olsson, J.; Moksnes, P.O.; Bergstrom, U., 2016. Top-down control as important as nutrient enrichment for eutrophication effects in North Atlantic coastal ecosystems. *Journal of Applied Ecology*, 53 (4): 1138-1147. 10.1111/1365-2664.12654
- Ostman, O.; Eklof, J.; Eriksson, B.K.; Olsson, J.; Moksnes, P.-O.; Bergstrom, U., 2016. Top-down control as important as nutrient enrichment for eutrophication effects in North Atlantic coastal ecosystems. *Journal of Applied Ecology*, 53 (4): 1138-1147. 10.1111/1365-2664.12654
- Othman, R.; Hanifah, N.A.; M., W.; A., W.N., 2014. Urban watershed eutrophication state monitoring using aquatic plant based technology. *International Conference on Global Trends in Academic Research (GTAR 2014)*. Bali, Indonesia: 2-3 June 2014
- Othman, R.; Mat Ali, Q.A.; Muhammad, W.; Yaman, M.; Baharuddin, Z.M., 2014. Eutrophication state monitoring for unhealthy aquatic ecosystem via free-floating macrophytes pattern and behavioral. *International Journal of Sustainable Energy and Environmental Research*, 3 (3): 171-177
- Othman, R.; Muhamad, W.; Ali, Q.A.M.; Yaman, M.; Rahman, N.A.; Baharuddin, Z.M., 2013. Phytoindicator for Eutrophication State Monitoring in Unhealthy Aquatic Ecosystem Using Floater Macrophytes. *International Conference on Frontiers of Environment, Energy and Bioscience (Icfeeb 2013)*: 709-713
- Ottosen, L.D.M.; Risgaard-Petersen, N.; Nielsen, L.P., 1999. Direct and indirect measurements of nitrification and denitrification in the rhizosphere of aquatic macrophytes. *Aquatic Microbial Ecology*, 19 (1): 81-91. 10.3354/ame019081
- Oudart, D.; Robin, P.; Paillat, J.M.; Paul, E., 2015. Modelling nitrogen and carbon interactions in composting of animal manure in naturally aerated piles. *Waste Management*, 46: 588-598. 10.1016/j.wasman.2015.07.044
- Oudendag, D.A.; Luesink, H.H., 1998. The Manure Model: manure, minerals (N, P and K), ammonia emission, heavy metals and the use of fertiliser in Dutch agriculture. *Environmental Pollution*, 102: 241-246. 10.1016/s0269-7491(98)80039-0
- Oviatt, C.A., 2004. The changing ecology of temperate coastal waters during a warming trend. *Estuaries*, 27 (6): 895-904. 10.1007/bf02803416
- Oxford Dictionary, 2017. Eutrophication.<http://www.oxforddictionaries.com/fr/definition/anglais/eutrophication> [consulté: 16/01/2017]
- Padedda, B.M.; Luglie, A.; Ceccherelli, G.; Trebini, F.; Sechi, N., 2010. Nutrient-flux evaluation by the LOICZ Biogeochemical Model in Mediterranean lagoons: the case of Cabras Lagoon (Central-Western Sardinia). *Chemistry and Ecology*, 26 (2): 147-162. 10.1080/02757541003627670
- Paerl, H.W., 1990. Physiological ecology and regulation of n<sub>2</sub> fixation in natural-waters. *Advances in Microbial Ecology*, 11: 305-344
- Paerl, H.W., 2009. Controlling Eutrophication along the Freshwater-Marine Continuum: Dual Nutrient (N and P) Reductions are Essential. *Estuaries and Coasts*, 32 (4): 593-601. 10.1007/s12237-009-9158-8
- Paerl, H.W., 2009. Controlling eutrophication along the freshwater–marine continuum: Dual nutrient (N and P) reductions are essential. *Estuaries and Coasts*, 32 (4): 593-601. 10.1007/s12237-009-9158-8

- Paerl, H.W.; Gardner, W.S.; Havens, K.E.; Joyner, A.R.; McCarthy, M.J.; Newell, S.E.; Qin, B.; Scott, J.T., 2016. Mitigating cyanobacterial harmful algal blooms in aquatic ecosystems impacted by climate change and anthropogenic nutrients. *Harmful Algae*, 54: 213-222. <http://dx.doi.org/10.1016/j.hal.2015.09.009>
- Paerl, H.W.; Gardner, W.S.; Havens, K.E.; Joyner, A.R.; McCarthy, M.J.; Newell, S.E.; Qin, B.Q.; Scott, J.T., 2016. Mitigating cyanobacterial harmful algal blooms in aquatic ecosystems impacted by climate change and anthropogenic nutrients. *Harmful Algae*, 54: 213-222. [10.1016/j.hal.2015.09.009](https://doi.org/10.1016/j.hal.2015.09.009)
- Paerl, H.W.; Hall, N.S.; Peierls, B.L.; Rossignol, K.L., 2014. Evolving paradigms and challenges in estuarine and coastal eutrophication dynamics in a culturally and climatically stressed world. *Estuaries and Coasts*, 37 (2): 243-258
- Paerl, H.W.; Huisman, J., 2008. Blooms like it hot. *Science*, 320 (5872): 57-58
- Paerl, H.W.; Huisman, J., 2009. Climate change: a catalyst for global expansion of harmful cyanobacterial blooms. *Environmental Microbiology Reports*, 1 (1): 27-37. [10.1111/j.1758-2229.2008.00004.x](https://doi.org/10.1111/j.1758-2229.2008.00004.x)
- Paerl, H.W.; Otten, T.G., 2013. Harmful Cyanobacterial Blooms: Causes, Consequences, and Controls. *Microbial Ecology*, 65 (4): 995-1010. [10.1007/s00248-012-0159-y](https://doi.org/10.1007/s00248-012-0159-y)
- Paerl, H.W.; Otten, T.G., 2016. Duelling 'CyanoHABs': unravelling the environmental drivers controlling dominance and succession among diazotrophic and non-N<sub>2</sub>-fixing harmful cyanobacteria. *Environmental Microbiology*, 18 (2): 316-324. [10.1111/1462-2920.13035](https://doi.org/10.1111/1462-2920.13035)
- Paerl, H.W.; Paul, V.J., 2012. Climate change: links to global expansion of harmful cyanobacteria. *Water Research*, 46 (5): 1349-1363
- Paerl, H.W.; Scott, J.T.; McCarthy, M.J.; Newell, S.E.; Gardner, W.S.; Havens, K.E.; Hoffman, D.K.; Wilhelm, S.W.; Wurtsbaugh, W.A., 2016. It Takes Two to Tango: When and Where Dual Nutrient (N & P) Reductions Are Needed to Protect Lakes and Downstream Ecosystems. *Environmental Science & Technology*, 50 (20): 10805-10813. [10.1021/acs.est.6b02575](https://doi.org/10.1021/acs.est.6b02575)
- Pahl-Wostl, C., 2002. Participative and stakeholder-based policy design, evaluation and modeling processes. *Integrated assessment*, 3 (1): 3-14. [10.1076/iaij.3.1.3.7409](https://doi.org/10.1076/iaij.3.1.3.7409)
- Pahl-Wostl, C., 2007. Transitions towards adaptive management of water facing climate and global change. In: Craswell, E.; Bonnell, M.; Bossio, D.; Demuth, S.; Van De Giesen, N., eds. *Integrated Assessment of Water Resources and Global Change: A North-South Analysis*. Dordrecht: Springer Netherlands, 49-62. [10.1007/978-1-4020-5591-1\\_4](https://doi.org/10.1007/978-1-4020-5591-1_4)
- Painting, S.J.; van der Molen, J.; Parker, E.R.; Coughlan, C.; Birchenough, S.; Bolam, S.; Aldridge, J.N.; Forster, R.M.; Greenwood, N., 2013. Development of indicators of ecosystem functioning in a temperate shelf sea: a combined fieldwork and modelling approach. *Biogeochemistry*, 113 (1-3): 237-257. [10.1007/s10533-012-9774-4](https://doi.org/10.1007/s10533-012-9774-4)
- Palijan, G.; Fuks, D., 2006. Alteration of factors affecting bacterioplankton abundance in the Danube River floodplain (Kopacki Rit, Croatia). *Hydrobiologia*, 560: 405-415. [10.1007/s10750-005-1370-3](https://doi.org/10.1007/s10750-005-1370-3)
- Paludan, C.; Alexeyev, F.E.; Drews, H.; Fleischer, S.; Fuglsang, A.; Kindt, T.; Kowalski, P.; Moos, M.; Radlowki, A.; Stromfors, G.; Westberg, V.; Wolter, K., 2002. Wetland management to reduce Baltic sea eutrophication. *Water Science and Technology*, 45 (9): 87-94
- Pancrace, C.; Barny, M.-A.; Ueoka, R.; Calteau, A.; Scalvenzi, T.; Pédrón, J.; Barbe, V.; Piel, J.; Humbert, J.-F.; Gugger, M., 2017. Insights into the *Planktothrix* genus: Genomic and metabolic comparison of benthic and planktic strains. *Scientific Reports*, 7:
- Panday, A.; Himanshu, S.K.; Mishra, S.K.; Singh, V.P., 2016. Physically based soil erosion and sediment yield models revisited. *Catena*, 147: 595-620
- Paolisso, M., 1999. Toxic Algal Blooms, Nutrient Runoff, and Farming on Maryland's Eastern Shore. *Culture & Agriculture*, 21 (3): 53-58. [10.1525/cag.1999.21.3.53](https://doi.org/10.1525/cag.1999.21.3.53)
- Paolisso, M.; Chambers, E., 2001. Culture, Politics, and Toxic Dinoflagellate Blooms: The Anthropology of Pfiesteria. *Human Organization*, 60 (1): 1-12. [10.17730/humo.60.1.7dxhxml87fm34q9](https://doi.org/10.17730/humo.60.1.7dxhxml87fm34q9)
- Paolisso, M.; Dery, N.; Herman, S., 2006. Restoration of the Chesapeake Bay using a non-native oyster: ecological and fishery considerations. *Human Organization*, 65 (3): 14
- Paolisso, M.; Maloney, R.S., 2000. Farmer morality and Maryland's nutrient management regulations. *Culture & Agriculture*, 22 (3): 5
- Paolisso, M.; Trombley, J.; Hood, R.R.; Sellner, K.G., 2015. Environmental models and public stakeholders in the Chesapeake Bay watershed. *Estuaries and Coasts*, 38 (1): 16
- Papachristou, E.; Haritonidis, S., 1992. Present status of eutrophication in Pagassitikos Gulf, Magnesia, Greece. Biological indicators-pollution sources. *Fresenius Environmental Bulletin*, 1 (8): 506-510
- Park, C.S.; Hwang, E.K., 2011. An investigation of the relationship between sediment particles size and the development of green algal mats (*Ulva prolifera*) on the intertidal flats of Muan, Korea. *Journal of Applied Phycology*, 23 (3, SI): 515-522. [10.1007/s10811-010-9620-9](https://doi.org/10.1007/s10811-010-9620-9)
- Park, G.S.; Marshall, H.G., 2000. Estuarine relationships between zooplankton community structure and trophic gradients. 22 (1): 121-135
- Park, K.; Jung, H.S.; Kim, H.S.; Ahn, S.M., 2005. Three-dimensional hydrodynamic-eutrophication model (HEM-3D): application to Kwang-Yang Bay, Korea. *Marine Environmental Research*, 60 (2): 171-193. [10.1016/j.marenvres.2004.10.003](https://doi.org/10.1016/j.marenvres.2004.10.003)
- Park, S.S.; Na, Y.; Uchrin, C.G., 2003. An oxygen equivalent model for water quality dynamics in a macrophyte dominated river. *Ecological Modelling*, 168 (1-2): 1-12. [http://dx.doi.org/10.1016/S0304-3800\(03\)00189-3](http://dx.doi.org/10.1016/S0304-3800(03)00189-3)
- Parker, G., 1990. Surface-based bedload transport relation for gravel rivers. *Journal of Hydraulic Research*, 28 (4): 417-436

- Parker, H.S., 1981. Influence of relative water motion on the growth, ammonium uptake and carbon and nitrogen composition of *Ulva lactuca* (Chlorophyta). *Marine Biology*, 63 (3): 309–318. 10.1007/bf00396001
- Parkin, T.B., 1987. SOIL MICROSITES AS A SOURCE OF DENITRIFICATION VARIABILITY. *Soil Science Society of America Journal*, 51 (5): 1194-1199
- Parma, S., 1980. The history of the eutrophication concept and the eutrophication in the Netherlands. *Aquatic Ecology*, 14 (1): 5-11
- Parnaudeau, V.; Reau, R.; Dubrulle, P., 2012. Un outil d'évaluation des fuites d'azote vers l'environnement à l'échelle du système de culture: le logiciel Syst'N. *Innovations Agronomiques*, 21: 59-70
- Parsons, G.R.; Morgan, A.O.; Whitehead, J.C.; Haab, T.C., 2006. The welfare effects of pfiesteria-related fish kills: A contingent behavior analysis of seafood consumers. *Agricultural and Resource Economics Review*, 35 (2). 10.1017/S106828050000678X
- Parsons, M.L.; Dortch, Q.; Turner, R.E., 2002. Sedimentological evidence of an increase in Pseudo-nitzschia (Bacillariophyceae) abundance in response to coastal eutrophication. *Limnology and Oceanography*, 47 (2): 551-558
- Partheniades, E., 1965. Erosion and Deposition of Cohesive Soils. *Journal of the Hydraulics Division*, 91 (1): 105-139
- Pascal, P.Y.; Fleeger, J.W., 2013. Diverse Dietary Responses by Saltmarsh Consumers to Chronic Nutrient Enrichment. *Estuaries and Coasts*, 36 (6): 1115-1124. 10.1007/s12237-013-9624-1
- Pasek, M.A.; Sampson, J.M.; Atlas, Z., 2014. Redox chemistry in the phosphorus biogeochemical cycle. *Proceedings of the National Academy of Sciences of the United States of America*, 111 (43): 15468-15473. 10.1073/pnas.1408134111
- Passet, R., 2010. *Les grandes représentations du monde et de l'économie à travers l'histoire. Les liens qui libèrent*
- Passy, P.; Gypens, N.; Billen, G.; Garnier, J.; Thieu, V.; Rousseau, V.; Callens, J.; Parent, J.Y.; Lancelot, C., 2013. A-model reconstruction of riverine nutrient fluxes and eutrophication in the Belgian Coastal Zone since 1984. *Journal of Marine Systems*, 128: 106-122. 10.1016/j.jmarsys.2013.05.005
- Passy, P.; Le Gendre, R.; Garnier, J.; Cugier, P.; Callens, J.; Paris, F.; Billen, G.; Riou, P.; Romero, E., 2016. Eutrophication modelling chain for improved management strategies to prevent algal blooms in the Bay of Seine. *Marine Ecology Progress Series*, 543: 107-125. 10.3354/meps11533
- Paterson, J., 1989. Water management and recreational values; Some cases in Victoria, Australia. 21 (2): 1-12
- Patrício, J.; Marques, J.C., 2006. Mass balanced models of the food web in three areas along a gradient of eutrophication symptoms in the south arm of the Mondego estuary (Portugal). *Ecological Modelling*, 197 (1-2): 21-34. 10.1016/j.ecolmodel.2006.03.008
- Patrício, J.; Ulanowicz, R.; Pardal, M.; Marques, J., 2006. Ascendancy as ecological indicator for environmental quality assessment at the ecosystem level: a case study. *Hydrobiologia*, 555 (1): 19-30
- Patsch, J.; Radach, G., 1997. Long-term simulation of the eutrophication of the North Sea: temporal development of nutrients, chlorophyll and primary production in comparison to observations. *Journal of Sea Research*, 38 (3-4): 275-310. 10.1016/s1385-1101(97)00051-8
- Patynen, A.; Elliott, J.A.; Kiuru, P.; Sarvala, J.; Ventela, A.M.; Jones, R.I., 2014. Modelling the impact of higher temperature on the phytoplankton of a boreal lake. *Boreal Environment Research*, 19: 66-78
- Paul, E.A.; Clark, F.E., 1996. *Soil microbiology and biochemistry*. Academic Press
- Paul, E.F.; Ford, B.W., 2002. Nitrogen Fertilizers: Meeting Contemporary Challenges. *Ambio*, 31 (2): 169-176
- Pauw, N., 1989. Aquaculture: A biotechnology in progress : International conference : Papers. Vols 1-2. *Aquaculture - A biotechnology in progress*. Bredene, Belgium. European Aquaculture Society, 6
- Pawlak, J.F.; Laamanen, M.; Andersen, J.H., 2009. *Eutrophication in the Baltic Sea: an integrated thematic assessment of the effects of nutrient enrichment in the Baltic Sea region: executive summary*. Helsinki Commission, Baltic Marine Environment Protection Commission
- Payraudeau, S.; Cernesson, F.; Tournoud, M.G.; Beven, K.J., 2004. Modelling nitrogen loads at the catchment scale under the influence of land use. *Physics and Chemistry of the Earth*, 29 (11-12): 811-819. 10.1016/j.pce.2004.05.008
- Payraudeau, S.; Tournoud, M.G.; Cernesson, F., 2002. An adapted modelling approach for the nitrogen load management on a catchment scale. In: Hassanzadeh, S.M.; Schotting, R.J.; Gray, W.G.; Pinder, G.F., eds. *Computational Methods in Water Resources, Vols 1 and 2, Proceedings. (Developments in Water Science)*, Vol.47, 1741-1748
- Payraudeau, S.; Van Der Werf, H.M.G., 2005. Environmental impact assessment for a farming region: A review of methods. *Agriculture, Ecosystems and Environment*, 107 (1): 1-19. 10.1016/j.agee.2004.12.012
- Payraudeau, S.; van der Werf, H.M.G.; Vertès, F., 2007. Analysis of the uncertainty associated with the estimation of nitrogen losses from farming systems. *Agricultural Systems*, 94 (2): 416-430. 10.1016/j.agsy.2006.11.014
- Paytan, A.; McLaughlin, K., 2007. The oceanic phosphorus cycle. *Chemical Reviews*, 107 (2): 563-576. 10.1021/cr0503613
- Peck, D.V.; Olsen, A.R.; Weber, M.H.; Paulsen, S.G.; Peterson, C.; Holdsworth, S.M., 2013. Survey design and extent estimates for the National Lakes Assessment. *Freshwater Science*, 32 (4): 1231-1245. 10.1899/11-075.1
- Peckol, P.; Rivers, J.S., 1995. PHYSIOLOGICAL-RESPONSES OF THE OPPORTUNISTIC MACROALGAE CLADOPHORA-VAGABUNDA (L) VANDENHOEK AND GRACILARIA-TIKVAHIAE (MCLACHLAN) TO ENVIRONMENTAL DISTURBANCES ASSOCIATED WITH EUTROPHICATION. *Journal of Experimental Marine Biology and Ecology*, 190 (1): 1–16. 10.1016/0022-0981(95)00026-n
- Pedersen, M.F., 1994. TRANSIENT AMMONIUM UPTAKE IN THE MACROALGA ULVA LACTUCA (CHLOROPHYTA): NATURE, REGULATION, AND THE CONSEQUENCES FOR CHOICE OF MEASURING TECHNIQUE1. *Journal of Phycology*, 30 (6): 980–986

- Pedersen, M.F., 1994. TRANSIENT AMMONIUM UPTAKE IN THE MACROALGA *ULVA-LACTUCA* (CHLOROPHYTA) - NATURE, REGULATION, AND THE CONSEQUENCES FOR CHOICE OF MEASURING TECHNIQUE. *Journal of Phycology*, 30 (6): 980-986. 10.1111/j.0022-3646.1994.00980.x
- Pedersen, M.F.; Borum, J.; Leck Fotel, F., 2010. Phosphorus dynamics and limitation of fast- and slow-growing temperate seaweeds in Oslofjord, Norway. *Marine Ecology Progress Series*, 399: 103-115. 10.3354/meps08350
- Pedersen, O.; Borum, J.; Duarte, C.M.; Fortes, M.D., 1998. Oxygen dynamics in the rhizosphere of *Cymodocea rotundata*. *Marine Ecology Progress Series*, 169: 283-288. 10.3354/meps169283
- Pelletier, N.; Leip, A., 2014. Quantifying anthropogenic mobilization, flows (in product systems) and emissions of fixed nitrogen in process-based environmental life cycle assessment: rationale, methods and application to a life cycle inventory. *International Journal of Life Cycle Assessment*, 19 (1): 166-173. 10.1007/s11367-013-0622-0
- Pelton, D.K.; Levine, S.N.; Braner, M., 1998. Measurements of phosphorus uptake by macrophytes and epiphytes from the LaPlatte river (VT) using P-32 in stream microcosms. *Freshwater Biology*, 39 (2): 285-299. 10.1046/j.1365-2427.1998.00281.x
- Peltre, M.-C.; Léglize, L.; Salleron, J.-L., 1993. Végétation fixée et phosphore en petit cours d'eau. Conséquences d'une réduction des apports de phosphore. *Bull. Fr. Pêche Piscic.*, (331): 357-371
- Pelzer, E.; Hombert, N.; Jeuffroy, M.-H.; Makowski, D., 2014. Meta-Analysis of the Effect of Nitrogen Fertilization on Annual Cereal-Legume Intercrop Production. *Agronomy Journal*, 106 (5): 1775. 10.2134/agronj13.0590
- Pena, M.; Katsev, S.; Oguz, T.; Gilbert, D., 2010. Modeling dissolved oxygen dynamics and hypoxia. *Biogeosciences*, 7 (3): 933-957
- Peña, M.A.; Katsev, S.; Oguz, T.; Gilbert, D., 2010. Modeling dissolved oxygen dynamics and hypoxia. *Biogeosciences*, 7 (3): 933-957. 10.5194/bg-7-933-2010
- Penard, C.; Menesguen, A.; Dumas, F.; Guillaud, J.F., 2007. Towards operational modelling of the fate of nutrients in the coastal zone off Brittany (France). *Houille Blanche-Revue Internationale De L'Eau*, (5): 62-67. 10.1051/lhb:2007061
- Penhale, P.A.; Wetzel, R.G., 1983. Structural and functional adaptations of eelgrass (*Zostera marina* L.) to the anaerobic sediment environment. *Canadian Journal of Botany-Revue Canadienne De Botanique*, 61 (5): 1421-1428
- Penn, C.J.; McGrath, J.M.; Rounds, E.; Fox, G.; Heeren, D., 2012. Trapping Phosphorus in Runoff with a Phosphorus Removal Structure. *Journal of Environmental Quality*, 41 (3): 672-679. 10.2134/jeq2011.0045
- Pereira, A.; Geraldes, P.; Lima-Fernandes, E.; Fernandes, I.; Cassio, F.; Pascoal, C., 2016. Structural and functional measures of leaf-associated invertebrates and fungi as predictors of stream eutrophication. *Ecological Indicators*, 69: 648-656. 10.1016/j.ecolind.2016.05.017
- Pereira, P.; Pablo, H.d.; Guilherme, S.; Carvalho, S.; Santos, M.A.; Vale, C.; Pacheco, M., 2014. Metal accumulation and oxidative stress responses in *Ulva* spp. in the presence of nocturnal pulses of metals from sediment: A field transplantation experiment under eutrophic conditions. *Marine Environmental Research*, 94: 56-64. 10.1016/j.marenvres.2013.12.005
- Pereira, P.; Pablo, H.d.; Pacheco, M.; Vale, C.; Santos, F., 2008. Co-occurrence of eutrophication and metal contamination in a coastal lagoon (Obidos, Portugal): Environmental monitoring by oxidative stress responses in the macroalgae *Ulva* sp. *Marine Environmental Research*, 66 (1): 199
- Pereira, P.; Pablo, H.d.; Rosa-Santos, F.; Pacheco, M.; Vale, C., 2009. Metal accumulation and oxidative stress in *Ulva* sp substantiated by response integration into a general stress index. *Aquatic Toxicology*, 91 (4): 336-345. 10.1016/j.aquatox.2008.12.003
- Perez-Llorens, J.L.; Brun, F.G.; Andria, J.; Vergara, J.J., 2004. Seasonal and tidal variability of environmental carbon related physico-chemical variables and inorganic C acquisition in *Gracilaria longissima* and *Enteromorpha intestinalis* from Los Torufios salt marsh (Cádiz Bay, Spain). *Journal of Experimental Marine Biology and Ecology*, 304 (2): 183-201. 10.1016/j.jembe.2003.12.003
- Perez-Mayorga, D.M.; Ladah, L.B.; Zertuche-Gonzalez, J.A.; Leichter, J.J.; Filonov, A.B.; Lavin, M.F., 2011. Nitrogen uptake and growth by the opportunistic macroalga *Ulva lactuca* (Linnaeus) during the internal tide. *Journal of Experimental Marine Biology and Ecology*, 406 (1-2): 108-115. 10.1016/j.jembe.2011.05.028
- Perga, M.-E.; Maberly, S.C.; Jenny, J.-P.; Alric, B.; Pignol, C.; Naffrechoux, E., 2016. A century of human-driven changes in the carbon dioxide concentration of lakes. *Global Biogeochemical Cycles*, 30 (2): 93-104. 10.1002/2015GB005286
- Perrot, T.; Rossi, N.; Menesguen, A.; Dumas, F., 2014. Modelling green macroalgal blooms on the coasts of Brittany, France to enhance water quality management. *Journal of Marine Systems*, 132: 38-53. 10.1016/j.jmarsys.2013.12.010
- Perrot, T.; Rossi, N.; Ménesguen, A.; Dumas, F., 2014. Modelling green macroalgal blooms on the coasts of Brittany, France to enhance water quality management. *Journal of Marine Systems*, 132: 38-53. 10.1016/j.jmarsys.2013.12.010
- Pers, B.C., 2005. Modeling the response of eutrophication control measures in a Swedish lake. *Ambio*, 34 (7): 552-558. 10.1639/0044-7447(2005)034[0552:MTROEC]2.0.CO;2
- Persson, J.; Jonsson, P., 2000. Historical development of laminated sediments - an approach to detect soft sediment ecosystem changes in the Baltic Sea. *Marine Pollution Bulletin*, 40 (2): 122-134. 10.1016/s0025-326x(99)00180-0
- Perus, J.; Bonsdorff, E., 2004. Long-term changes in macrozoobenthos in the Åland archipelago, northern Baltic Sea. *Journal of Sea Research*, 52 (1): 45-56. 10.1016/j.sears.2003.07.004
- Peterjohn, W.T.; Correll, D.L., 1984. NUTRIENT DYNAMICS IN AN AGRICULTURAL WATERSHED - OBSERVATIONS ON THE ROLE OF A RIPARIAN FOREST. *Ecology*, 65 (5): 1466-1475. 10.2307/1939127

- Petersen, J.K.; Hasler, B.; Timmermann, K.; Nielsen, P.; Torring, D.B.; Larsen, M.M.; Holmer, M., 2014. Mussels as a tool for mitigation of nutrients in the marine environment. *Marine Pollution Bulletin*, 82 (1-2): 137-143. 10.1016/j.marpolbul.2014.03.006
- Petersen, J.K.; Pihl, L., 1995. Responses to hypoxia of plaice, *Pleuronectes platessa*, and dab, *Limanda limanda*, in the south-east Kattegat: distribution and growth. *Environmental Biology of Fishes*, 43 (3): 311-321. 10.1007/bf00005864
- Peterson, D.H.; Festa, J.F., 1984. Numerical-simulation of phytoplankton productivity in partially mixed estuaries. *Estuarine Coastal and Shelf Science*, 19 (5): 563-589. 10.1016/0272-7714(84)90016-7
- Peterson, G.D.; Carpenter, S.R.; Brock, W.A., 2003. Uncertainty and the management of multistate ecosystems: An apparently rational route to collapse. *Ecology*, 84 (6): 1403-1411. 10.1890/0012-9658(2003)084[1403:UATMOM]2.0.CO;2
- Petihakis, G.; Triantafyllou, G.; Koutsoubas, D.; Allen, I.; Dounas, C., 1999. Modelling the annual cycles of nutrients and phytoplankton in a Mediterranean lagoon (Gialova, Greece). *Marine Environmental Research*, 48 (1): 37-58. 10.1016/s0141-1136(99)00031-8
- Petit, O., 2009. *La politique de gestion des eaux souterraines en France. Une analyse en termes de gestion intégrée.*
- Petit, S., 2015. Au fond de l'eau: histoires sociales et représentations environnementales d'un bassin versant agricole. *Territoire en mouvement Revue de géographie et aménagement. Territory in movement Journal of geography and planning*, (25-26):
- Petit, S.; Barataud, F., 2015. L'eau, source de savoirs: analyse de situations d'expertise dans des bassins versants agricoles. *VertigO*, 15 (1):
- Peyrard, D.; Delmotte, S.; Sauvage, S.; Namour, P.; Gérino, M.; Vervier, P.; Sanchez-Pérez, J.-M., 2011. Longitudinal transformation of nitrogen and carbon in the hyporheic zone of an N-rich stream: A combined modelling and field study. *Physics and Chemistry of the Earth*, vol. 36 (n° 12): pp.-599-611
- Peyrard, D.; Sauvage, S.; Vervier, P.; Sanchez-Pérez, J.M.; Quintard, M., 2008. A coupled vertically integrated model to describe lateral exchanges between surface and subsurface in large alluvial floodplains with a fully penetrating river. *Hydrological Processes*, 22 (21): 4257-4273. 10.1002/hyp.7035
- Peyraud, J.L.; Cellier, P.; Donnars, C.; Vertès, F., 2014. *Réduire les pertes d'azote dans l'élevage - expertise scientifique collective.* Ed. Quae
- Peyraud, J.-L.; Cellier, P.; Donnars, C.; Réchauchère, O., 2012. *Les flux d'azote liés aux élevages, réduire les pertes, rétablir les équilibres". Expertise scientifique collective, synthèse du rapport, INRA (France)*, 68.
- Pezeshki, S.R., 2001. Wetland plant responses to soil flooding. *Environmental and Experimental Botany*, 46 (3): 299-312. 10.1016/s0098-8472(01)00107-1
- Phelps, E.B.; Streeter, H.W., 1958. *A Study of the Pollution and Natural Purification of the Ohio River*: U.S. Department of Health, Education, & Welfare. Technical Report
- Phillips, D.L.; Gregg, J.W., 2003. Source partitioning using stable isotopes: coping with too many sources. *Oecologia*, 136 (2): 261-269. 10.1007/s00442-003-1218-3
- Phillips, E.J.P.; Lovley, D.R., 1987. Determination of fe(iii) and fe(ii) in oxalate extracts of sediment. *Soil Science Society of America Journal*, 51 (4): 938-941
- Phillips, G.L.; Eminson, D.; Moss, B., 1978. A mechanism to account for macrophyte decline in progressively eutrophicated freshwaters. *Aquatic Botany*, 4: 103-126
- Phillips, J.M.; Webb, B.W.; Walling, D.E.; Leeks, G.J.L., 1999. Estimating the suspended sediment loads of rivers in the LOIS study area using infrequent samples. *Hydrological Processes*, 13 (7): 1035-1050. 10.1002/(sici)1099-1085(199905)13:7<1035::aid-hyp788>3.0.co;2-k
- Phillips, V.R.; Lee, D.S.; Scholten, R.; Garland, J.A.; Sneath, R.W., 2001. A review of methods for measuring emission rates of ammonia from livestock buildings and slurry or manure stores, Part 2: Monitoring flux rates, concentrations and airflow rates. *Journal of Agricultural Engineering Research*, 78 (1): 1-14. 10.1006/jaer.2000.0618
- Piazza, B.P.; La Peyre, M.K., 2007. Restoration of the annual flood pulse in Breton Sound, Louisiana, USA: habitat change and nekton community response. *Aquatic Biology*, 1 (2): 109-119. 10.3354/ab00013
- Picard, V.; Lair, N., 2005. Spatio-temporal investigations on the planktonic organisms of the Middle Loire (France), during the low water period: biodiversity and community dynamics. *Hydrobiologia*, 551: 69-86. 10.1007/s10750-005-4451-4
- Picart, S.S.; Allen, J.; Butenschön, M.; Artioli, Y.; de Mora, L.; Wakelin, S.; Holt, J., 2015. What can ecosystem models tell us about the risk of eutrophication in the North Sea? *Climatic Change*, 132 (1): 111-125
- Picart, S.S.; Allen, J.I.; Butenschon, M.; Artioli, Y.; de Mora, L.; Wakelin, S.; Holt, J., 2015. What can ecosystem models tell us about the risk of eutrophication in the North Sea? *Climatic Change*, 132 (1): 111-125. 10.1007/s10584-014-1071-x
- Pierson, P., 1994. *Dismantling the Welfare State ? Reagan, Thatcher, and the Politics of Retrenchment*. New York: Cambridge University Press, 213
- Pihl, L.; Isaksson, I.; Wennhage, H., 1995. BAYS : EFFECTS ON THE COMMUNITY STRUCTURE J ' Skagerrak. 29: 349-358
- Pihl, L.; Modin, J.; Wennhage, H., 2005. Relating plaice (*Pleuronectes platessa*) recruitment to deteriorating habitat quality: effects of macroalgal blooms in coastal nursery grounds. *Canadian Journal of Fisheries and Aquatic Sciences*, 62 (5): 1184-1193. 10.1139/f05-023
- Pihlajamäki, M.; Tynkkynen, N., 2011. The challenge of bridging science and policy in the Baltic Sea eutrophication governance in Finland: The perspective of science. *Ambio*, 40 (2): 191-199. 10.1007/s13280-010-0130-4
- Pilson, M.E.Q., 1985. ON THE RESIDENCE TIME OF WATER IN NARRAGANSETT BAY. *Estuaries*, 8 (1): 2-14. 10.2307/1352116
- Pinay, G.; Black, V.J.; Planty-Tabacchi, A.M.; Gumiero, B.; Decamps, H., 2000. Geomorphic control of denitrification in large river floodplain soils. *Biogeochemistry*, 50 (2): 163-182. 10.1023/a:1006317004639

- Pinay, G.; Decamps, H., 1988. The role of riparian woods in regulating nitrogen fluxes between the alluvial aquifer and surface water: a conceptual model. *Regulated Rivers*. Vol.2, 507-516
- Pinay, G.; Peiffer, S.; De Dreuzy, J.R.; Krause, S.; Hannah, D.M.; Fleckenstein, J.H.; Sebilo, M.; Bishop, K.; Hubert-Moy, L., 2015. Upscaling Nitrogen Removal Capacity from Local Hotspots to Low Stream Orders' Drainage Basins. *Ecosystems*, 18 (6): 1101-1120. 10.1007/s10021-015-9878-5
- Pinay, G.; Ruffinoni, C.; Fabre, A., 1995. NITROGEN CYCLING IN 2 RIPARIAN FOREST SOILS UNDER DIFFERENT GEOMORPHIC CONDITIONS. *Biogeochemistry*, 30 (1): 9-29. 10.1007/bf02181038
- Pinckney, J.L.; Millie, D.F.; Vinyard, B.T.; Paerl, H.W., 1997. Environmental controls of phytoplankton bloom dynamics in the Neuse River Estuary, North Carolina, USA. *Canadian Journal of Fisheries and Aquatic Sciences*, 54 (11): 2491-2501. 10.1139/cjfas-54-11-2491
- Piñón-Gimate, A.; Serviere-Zaragoza, E.; Ochoa-Izaguirre, M.J.; Páez-Osuna, F., 2008. Species composition and seasonal changes in macroalgal blooms in lagoons along the southeastern Gulf of California. *Botanica Marina*, 51 (2). 10.1515/bot.2008.013
- Pinto, U.; Maheshwari, B.L.; Morris, E.C., 2014. Understanding the Relationships among Phytoplankton, Benthic Macroinvertebrates, and Water Quality Variables in Peri-Urban River Systems. *Water Environment Research*, 86 (12): 2279-2293. 10.2175/106143014x13975035526220
- Pipp, E.; Rott, E., 1995. A phytoplankton compartment model for a small meromictic lake with special reference to species-specific niches and long-term changes. *Ecological Modelling*, 78 (1-2): 129-148. 10.1016/0304-3800(94)00123-Y
- Pires, D.L.M.; Ibelings, B.W.; Brehm, M.; Van Donk, E., 2005. Comparing grazing on lake seston by *Dreissena* and *Daphnia*: Lessons for biomanipulation. *Microbial Ecology*, 50 (2): 242-252. 10.1007/s00248-004-0147-6
- PIROU, J.Y.; MENESGUEN, A., 1992. Environmental factors controling the *Ulva* sp. blooms in Brittany (France). In: Colombo, G., ed. *Marine eutrophication and population dynamics*. Fredensborg, Denmark: Olsen & Olsen (International symposium series), 111-115
- Piriou, J.-Y.; MENESGUEN, A.; Salomon, J.-C., 1991. Les marées vertes à ulves: conditions nécessaires, évolution et comparaison de sites. *Estuaries and coasts: spatial and temporal intercomparisons*, 19: 117
- Pitcairn, C.E.R.; Hawkes, H.A., 1973. The role of phosphorus in the growth of Cladophora. *Water Research*, 7 (1): 159-171. [http://dx.doi.org/10.1016/0043-1354\(73\)90160-7](http://dx.doi.org/10.1016/0043-1354(73)90160-7)
- Pitois, S.; Jackson, M.H.; Wood, B.J.B., 2000. Problems associated with the presence of cyanobacteria in recreational and drinking waters. *International Journal of Environmental Health Research*, 10 (3): 203-218
- Plaza-Bonilla, D.; Nolot, J.-M.; Raffaillac, D.; Justes, E., 2015. Cover crops mitigate nitrate leaching in cropping systems including grain legumes: Field evidence and model simulations. *Agriculture, Ecosystems & Environment*, 212: 1-12. 10.1016/j.agee.2015.06.014
- Plénet, D.; Lemaire, G., 1999. Relationships between dynamics of nitrogen uptake and dry matter accumulation in maize crops. Determination of critical N concentration. *Plant and Soil*, 216 (1-2): 65-82
- Plus, M.; Chapelle, A.; Lazure, P.; Auby, I.; Levavasseur, G.; Verlaque, M.; Belsher, T.; Deslous-Paoli, J.M.; Zaldivar, J.M.; Murray, C.N., 2003. Modelling of oxygen and nitrogen cycling as a function of macrophyte community in the Thau lagoon. *Continental Shelf Research*, 23 (17-19): 1877-1898. 10.1016/j.csr.2003.03.001
- Plus, M.; La Jeunesse, I.; Bouraoui, F.; Zaldivar, J.; Chapelle, A.; Lazure, P., 2006. Modelling water discharges and nitrogen inputs into a Mediterranean lagoon - Impact on the primary production. *Ecological Modelling*, 193 (1-2): 69-89. 10.1016/j.ecolmodel.2005.07.037
- Poertner, H.O., 2010. Oxygen- and capacity-limitation of thermal tolerance: a matrix for integrating climate-related stressor effects in marine ecosystems. *Journal of Experimental Biology*, 213 (6): 881-893. 10.1242/jeb.037523
- Poertner, H.O.; Knust, R., 2007. Climate change affects marine fishes through the oxygen limitation of thermal tolerance. *Science*, 315 (5808): 95-97. 10.1126/science.1135471
- Poirier, M.A.; Spalding, E.A.; Franze, C.D., 2009. Lessons Learned from a Decade of Assessment and Restoration Studies of Benthic Invertebrates and Submersed Aquatic Vegetation in Lake Pontchartrain. *Journal of Coastal Research*: 88-100. 10.2112/si54-005.1
- Polte, P.; Schanz, A.; Asmus, H., 2005. The contribution of seagrass beds (*Zostera noltii*) to the function of tidal flats as a juvenile habitat for dominant, mobile epibenthos in the Wadden Sea. *Marine Biology*, 147 (3): 813-822. 10.1007/s00227-005-1583-z
- Pomeroy, L.R.; D'Elia, C.F.; Schaffner, L.C., 2006. Limits to top-down control of phytoplankton by oysters in Chesapeake Bay. *Marine Ecology Progress Series*, 325: 301-309. 10.3354/meps325301
- Ponsero, A.; Le Mao, P., 2011. Estimation of benthic macrofauna consumption by water birds in the bay of Saint-Brieuc (France). *Revue D Ecologie-La Terre Et La Vie*, 66 (4): 383-397
- Poor, P.J., 2001. Objective versus Subjective Measures of Water Clarity in Hedonic Property Value Models. *Land Economics*, 77 (4): 482-493. 10.2307/3146935
- Poore, A.G.; Campbell, A.H.; Coleman, R.A.; Edgar, G.J.; Jormalainen, V.; Reynolds, P.L.; Sotka, E.E.; Stachowicz, J.J.; Taylor, R.B.; Vanderklift, M.A.; Duffy, J.E., 2012. Global patterns in the impact of marine herbivores on benthic primary producers. *Ecol Lett*, 15 (8): 912-22. 10.1111/j.1461-0248.2012.01804.x
- Poore, A.G.B.; Campbell, A.H.; Coleman, R.a.; Edgar, G.J.; Jormalainen, V.; Reynolds, P.L.; Sotka, E.E.; Stachowicz, J.J.; Taylor, R.B.; Vanderklift, M.a.; Duffy, J.E., 2012. Global patterns in the impact of marine herbivores on benthic primary producers. *Ecology Letters*, 15 (8): 912-22. 10.1111/j.1461-0248.2012.01804.x

- Port, O.; Aita, C.; Giacomini, S.J., 2003. Perda de nitrogênio por volatilização de amônia com o uso de dejetos de suínos em plantio direto. *Pesquisa Agropecuária Brasileira*, 38 (7): 857-865
- Porter, K.S., 2004. Does the cap fit? Rectifying eutrophication in the Chesapeake Bay. *Journal of Water Law*, 15 (5): 187-191
- Posch, M.; Seppala, J.; Hettelingh, J.P.; Johansson, M.; Margni, M.; Jolliet, O., 2008. The role of atmospheric dispersion models and ecosystem sensitivity in the determination of characterisation factors for acidifying and eutrophying emissions in LCIA. *International Journal of Life Cycle Assessment*, 13 (6): 477-486. 10.1007/s11367-008-0025-9
- Posch, T.; Koster, O.; Salcher, M.M.; Pernthaler, J., 2012. Harmful filamentous cyanobacteria favoured by reduced water turnover with lake warming. *Nature Climate Change*, 2: 809-813. 10.1038/nclimate1581
- Post, W.M.; Pastor, J.; Zinke, P.J.; Stangenberger, A.G., 1985. Global patterns of soil-nitrogen storage. *Nature*, 317 (6038): 613-616. 10.1038/317613a0
- Postma, D.; Jakobsen, R., 1996. Redox zonation: Equilibrium constraints on the Fe(III)/SO<sub>4</sub>-reduction interface. *Geochimica Et Cosmochimica Acta*, 60 (17): 3169-3175. 10.1016/0016-7037(96)00156-1
- Poudel, D.D.; Lee, T.; Srinivasan, R.; Abbaspour, K.; Jeong, C.Y., 2013. Assessment of seasonal and spatial variation of surface water quality, identification of factors associated with water quality variability, and the modeling of critical nonpoint source pollution areas in an agricultural watershed. *Journal of Soil and Water Conservation*, 68 (3): 155-171. 10.2489/jswc.68.3.155
- Poulton, S.W.; Canfield, D.E., 2005. Development of a sequential extraction procedure for iron: implications for iron partitioning in continentally derived particulates. *Chemical Geology*, 214 (3-4): 209-221. 10.1016/j.chemgeo.2004.09.003
- Poussard, G.; Rivas, J.; Lascombe, C., 1988. *L'eutrophisation dans le bassin Rhône Méditerranée Corse*: Agence de bassin Rhône-Méditerranée-Corse, 142.
- Poussard, G.; Rivas, J.; Lascombe, C., 1988. L'eutrophisation dans le bassin Rhône-Méditerranée-Corse. *Rapport de l'Agence de l'Eau RMC, Bierre-Bénite, France*:
- Pouvreau, E., 2014. Directive "nitrates". *Etat des lieux des méthodes d'évaluation de l'eutrophisation*: Onema.
- Power, J.F.; Wiese, R.; Flowerday, D., 2001. Managing farming systems for nitrate control: A research review from Management Systems Evaluation Areas. *Journal of Environmental Quality*, 30 (6): 1866-1880
- Powers, S.M.; Tank, J.L.; Robertson, D.M., 2015. Control of nitrogen and phosphorus transport by reservoirs in agricultural landscapes. *Biogeochemistry*, 124 (1-3): 417-439. 10.1007/s10533-015-0106-3
- Powley, H.R.; Krom, M.D.; Emeis, K.C.; Van Cappellen, P., 2014. A biogeochemical model for phosphorus and nitrogen cycling in the Eastern Mediterranean Sea Part 2. Response of nutrient cycles and primary production to anthropogenic forcing: 1950-2000. *Journal of Marine Systems*, 139: 420-432. 10.1016/j.jmarsys.2014.08.017
- Prado, P.; Caiola, N.; Ibanez, C., 2014. Freshwater inflows and seasonal forcing strongly influence macrofaunal assemblages in Mediterranean coastal lagoons. *Estuarine Coastal and Shelf Science*, 147: 68-77. 10.1016/j.ecss.2014.06.002
- Pranovi, F.; Da Ponte, F.; Torricelli, P., 2008. Historical changes in the structure and functioning of the benthic community in the lagoon of Venice. *Estuarine Coastal and Shelf Science*, 76 (4): 753-764. 10.1016/j.ecss.2007.08.006
- Pratt, M., 1996. Useful Disasters: The Complexity of Response to Stress in a Tropical Lake Ecosystem. *Anthropologica*, 38 (2): 125-148. 10.2307/25605836
- Pregnall, A.M.; Miller, S.L., 1988. Flux of ammonium from surf-zone and nearshore sediments in Nahant Bay, Massachusetts, USA, in relation to free-living *Pilayella littoralis*. *Marine Ecology Progress Series*, 50: 161-167. 10.3354/meps050161
- Premazzi, G.; Austoni, M.; Chiaudani, G.; Rodari, E.; Cardoso, A.C., 2005. Hypolimnetic withdrawal coupled with oxygenation as lake restoration measures: the successful case of Lake Varese (Italy). *Limnetica*, 24 (1): 123-131
- Prendergast, P.; Rybczuk, K., 2004. Visual Impact Assessment: A Neglected Component of Environmental Impact Statements in Ireland? *Journal of Environmental Planning and Management*, 47 (5): 667-684. 10.1080/0964056042000274425
- Pretty, J., 2001. Policy Challenges and Priorities for Internalizing the Externalities of Modern Agriculture. *Journal of Environmental Planning and Management*, 44 (2): 263-283. 10.1080/09640560123782
- Pretty, J.N.; Mason, C.F.; Nedwell, D.B.; Hine, R.E.; Leaf, S.; Dils, R., 2003. Environmental costs of freshwater eutrophication in England and Wales. *Environ Sci Technol*, 37 (2): 201-8
- Prieur, F., 2009. The Environmental Kuznets Curve in a World of Irreversibility. *Economic Theory*, 40 (1): 57-90. 10.1007/s00199-008-0351-y
- Pringle, C.M.; Rabeni, C.F.; Benke, A.C.; Aumen, N.G., 1993. The Role of Aquatic Science in Freshwater Conservation: Cooperation between the North American Benthological Society and Organizations for Conservation and Resource Management. *Journal of the North American Benthological Society*, 12 (2): 177-184. 10.2307/1467348
- Psenner, R.; Boström, B.; Dinka, M.; Pettersson, K.; Pucska, R.; Sager, M., 1988. Fractionation of phosphorus in suspended matter and sediment. *Archiv für Hydrobiologie—Beihefte Ergebnisse der Limnologie*, 30: 98-110
- Purcell, J.E., 2005. Climate effects on formation of jellyfish and ctenophore blooms: a review. *Journal of the Marine Biological Association of the United Kingdom*, 85 (3): 461-476. 10.1017/s0025315405011409
- Purcell, J.E., 2012. Jellyfish and Ctenophore Blooms Coincide with Human Proliferations and Environmental Perturbations. In: Carlson, C.A.; Giovannoni, S.J., eds. *Annual Review of Marine Science*, Vol 4. Palo Alto: Annual Reviews (Annual Review of Marine Science), Vol.4, 209-+. 10.1146/annurev-marine-120709-142751
- Qi, L.; Hu, C.; Xing, Q.; Shang, S., 2016. Long-term trend of *Ulva prolifera* blooms in the western Yellow Sea. *Harmful Algae*, 58: 35-44. 10.1016/j.hal.2016.07.004
- Qiao, X.D.; Wang, B.D.; Sun, X.; Liang, S.K., 2014. Numerical simulation of nutrient and phytoplankton dynamics in Guangxi coastal bays, China. *Journal of Ocean University of China*, 13 (2): 338-346. 10.1007/s11802-014-2072-0
- Qin, B., 2009. Lake eutrophication: control countermeasures and recycling exploitation. *Ecological Engineering*, 35: 1569-1573

- Qin, B.; Gao, G.; Zhu, G.; Zhang, Y.; Song, Y.; Tang, X.; Xu, H.; Deng, J., 2013. Lake eutrophication and its ecosystem response. *Chinese Science Bulletin*, 58 (9): 961-970
- Qin, H.P.; Khu, S.T.; Li, C., 2014. Water exchange effect on eutrophication in landscape water body supplemented by treated wastewater. *Urban Water Journal*, 11 (2): 108-115. 10.1080/1573062x.2012.758294
- Quemada, M.; Baranski, M.; Nobel-de Lange, M.N.J.; Vallejo, A.; Cooper, J.M., 2013. Meta-analysis of strategies to control nitrate leaching in irrigated agricultural systems and their effects on crop yield. *Agriculture, Ecosystems & Environment*, 174: 1-10. 10.1016/j.agee.2013.04.018
- Quéré, L., 2012. Le travail des émotions dans l'expérience publique : marées vertes en Bretagne. *Raisons pratiques*, 22: 27
- Quétier, F.; Lavorel, S., 2011. Assessing ecological equivalence in biodiversity offset schemes: Key issues and solutions. *Biological Conservation*, 144 (12): 2991-2999. 10.1016/j.biocon.2011.09.002
- Quiblier, C.; Susanna, W.; Isidora, E.-S.; Mark, H.; Aurelie, V.; Jean-François, H., 2013. A review of current knowledge on toxic benthic freshwater cyanobacteria—ecology, toxin production and risk management. *Water Research*, 47 (15): 5464-5479
- Quiel, K.; Becker, A.; Kirchesch, V.; Schol, A.; Fischer, H., 2011. Influence of global change on phytoplankton and nutrient cycling in the Elbe River. *Regional Environmental Change*, 11 (2): 405-421. 10.1007/s10113-010-0152-2
- Quilliam, R.S.; van Niekerk, M.A.; Chadwick, D.R.; Cross, P.; Hanley, N.; Jones, D.L.; Vinten, A.J.A.; Willby, N.; Oliver, D.M., 2015. Can macrophyte harvesting from eutrophic water close the loop on nutrient loss from agricultural land? *Journal of Environmental Management*, 152: 210-217. 10.1016/j.jenvman.2015.01.046
- Quillien, N.; Nordstrom, M.C.; Guyonnet, B.; Maguer, M.; Le Garrec, V.; Bonsdorff, E.; Grall, J., 2015. Large-scale effects of green tides on macrotidal sandy beaches: Habitat-specific responses of zoobenthos. *Estuarine Coastal and Shelf Science*, 164: 379-391. 10.1016/j.ecss.2015.07.042
- Quillien, N.; Nordström, M.C.; Guyonnet, B.; Maguer, M.; Le Garrec, V.; Bonsdorff, E.; Grall, J., 2015. Large-scale effects of green tides on macrotidal sandy beaches: Habitat-specific responses of zoobenthos. *Estuarine, Coastal and Shelf Science*, 164: 379-391. 10.1016/j.ecss.2015.07.042
- Quillien, N.; Nordstrom, M.C.; Schaal, G.; Bonsdorff, E.; Grall, J., 2016. Opportunistic basal resource simplifies food web structure and functioning of a highly dynamic marine environment. *Journal of Experimental Marine Biology and Ecology*, 477: 92-102. 10.1016/j.jembe.2016.01.010
- Quillien, N.; Nordström, M.C.; Schaal, G.; Bonsdorff, E.; Grall, J., 2016. Opportunistic basal resource simplifies food web structure and functioning of a highly dynamic marine environment. *Journal of Experimental Marine Biology and Ecology*, 477: 92–102. 10.1016/j.jembe.2016.01.010
- Quynh, L.T.P.; Billen, G.; Garnier, J.; Théry, S.; Fézard, C.; Minh, C.V., 2005. Nutrient (N, P) budgets for the Red River basin (Vietnam and China). *Global Biogeochemical Cycles*, 19 (2): GB2022. 10.1029/2004GB002405
- Rabalais, N., 2013. Runoff from the Mississippi River and hypoxia in the northern Gulf of Mexico. *Abstracts of Papers of the American Chemical Society*: Apr
- Rabalais, N.N., 2004. Eutrophication. The global coastal ocean: multiscale interdisciplinary processes. In: Robinson, A.R., and Kenneth H. Brink, ed. *The global coastal ocean: multiscale interdisciplinary processes*. Harvard University Press, Vol.13, 819-865
- Rabalais, N.N., 2011. Troubled Waters of the Gulf of Mexico. *Oceanography*, 24 (2): 200-211
- Rabalais, N.N., 2015. Human impacts on fisheries across the land-sea interface. *Proceedings of the National Academy of Sciences of the United States of America*, 112 (26): 7892-7893. 10.1073/pnas.1508766112
- Rabalais, N.N.; Cai, W.J.; Carstensen, J.; Conley, D.J.; Fry, B.; Hu, X.P.; Quinones-Rivera, Z.; Rosenberg, R.; Slomp, C.P.; Turner, R.E.; Voss, M.; Wissel, B.; Zhang, J., 2014. Eutrophication-Driven Deoxygenation in the Coastal Ocean. *Oceanography*, 27 (1): 172-183
- Rabalais, N.N.; Cai, W.-J.; Carstensen, J.; Conley, D.J.; Fry, B.; Hu, X.; Quinones-Rivera, Z.; Rosenberg, R.; Slomp, C.P.; Turner, R.E.; Voss, M.; Wissel, B.; Zhang, J., 2014. Eutrophication-Driven Deoxygenation in the Coastal Ocean. *Oceanography*, 27 (1): 172-183
- Rabalais, N.N.; Diaz, R.J.; Levin, L.A.; Turner, R.E.; Gilbert, D.; Zhang, J., 2010. Dynamics and distribution of natural and human-caused hypoxia. *Biogeosciences*, 7 (2): 585-619
- Rabalais, N.N.; Díaz, R.J.; Levin, L.A.; Turner, R.E.; Gilbert, D.; Zhang, J., 2010. Dynamics and distribution of natural and human-caused hypoxia. *Biogeosciences*, 7 (2): 585-619. 10.5194/bg-7-585-2010
- Rabalais, N.N.; Turner, R.E.; Diaz, R.J.; Justic, D., 2009. Global change and eutrophication of coastal waters. *Ices Journal of Marine Science*, 66 (7): 1528-1537. 10.1093/icesjms/fsp047
- Rabalais, N.N.; Turner, R.E.; Díaz, R.J.; Justić, D., 2009. Global change and eutrophication of coastal waters. *Ices Journal of Marine Science*, 66 (7): 1528-1537
- Raberg, S.; Berger-Jonsson, R.; Bjorn, A.; Granelli, E.; Kautsky, L., 2005. Effects of *Pilayella littoralis* on *Fucus vesiculosus* recruitment: implications for community composition. *Marine Ecology Progress Series*, 289: 131–139. 10.3354/meps289131
- Rabotyagov, S.S.; Campbell, T.D.; White, M.; Arnold, J.G.; Atwood, J.; Norfleet, M.L.; Kling, C.L.; Gassman, P.W.; Valcu, A.; Richardson, J.; Turner, R.E.; Rabalais, N.N., 2014. Cost-effective targeting of conservation investments to reduce the northern Gulf of Mexico hypoxic zone. *Proceedings of the National Academy of Sciences of the United States of America*, 111 (52): 18530-18535. 10.1073/pnas.1405837111
- Radach, G., 2000. :!!! i : i. 10 (4): 305-328

- Radcliffe, D.E.; Lin, Z.; Risso, L.M.; Romeis, J.J.; Jackson, C.R., 2009. Modeling Phosphorus in the Lake Allatoona Watershed Using SWAT: I. Developing Phosphorus Parameter Values. *Journal of Environmental Quality*, 38 (1): 111-120. 10.2134/jeq2007.0110
- Rafaj, P.; Amann, M.; Siri, J.G., 2014. Factorization of air pollutant emissions: Projections versus observed trends in Europe. *Science of the Total Environment*, 494: 272-282. 10.1016/j.scitotenv.2014.07.013
- Raffaelli, D.G.; Raven, J.A.; Poole, L.J., 1998. Ecological impact of green macroalgal blooms. *Oceanography and Marine Biology* 36: 97-125
- Raghothama, K.G.; Karthikeyan, A.S., 2005. Phosphate Acquisition. *Plant and Soil*, 274 (1-2): 37-49. 10.1007/s11104-004-2005-6
- Raine, R.; McDermott, G.; Silke, J.; Lyons, K.; Nolan, G.; Cusack, C., 2010. A simple short range model for the prediction of harmful algal events in the bays of southwestern Ireland. *Journal of Marine Systems*, 83 (3-4): 150-157. 10.1016/j.jmarsys.2010.05.001
- Raison du Cleuziou, Y., 2007. La nature embrigadée. Conflit en baie de Somme. *Ethnologie Francaise*, 37 (1): 153-162
- Ralston, E.P.; Kite-Powell, H.; Beet, A., 2011. An estimate of the cost of acute health effects from food-and water-borne marine pathogens and toxins in the USA. *Journal of water and health*, 9 (4): 680-694. 10.2166/wh.2011.157.
- Rankinen, K.; Valpasvuo-Jaatinen, P.; Karhunen, A.; Kenttämies, K.; Nenonen, S.; Baerlund, I., 2009. Simulated nitrogen leaching patterns and adaptation to climate change in two Finnish river basins with contrasting land use and climatic conditions. *Hydrology Research*, 40 (2-3): 177-186. 10.2166/nh.2009.059
- Rankovic, V.; Radulovic, J.; Radojevic, I.; Ostojic, A.; Comic, L., 2010. Neural network modeling of dissolved oxygen in the Gruza reservoir, Serbia. *Ecological Modelling*, 221 (8): 1239-1244. 10.1016/j.ecolmodel.2009.12.023
- Rao, N.S.; Easton, Z.M.; Schneiderman, E.M.; Zion, M.S.; Lee, D.R.; Steenhuis, T.S., 2009. Modeling watershed-scale effectiveness of agricultural best management practices to reduce phosphorus loading. *Journal of Environmental Management*, 90 (3): 1385-1395. 10.1016/j.jenvman.2008.08.011
- Rasanen, N.H.J.; Kankaala, P.; Akkanen, J.; Tahvanainen, T.; Saarnio, S., 2016. Effects of mire-originated dissolved organic carbon, nitrogen, and phosphorus on microbial activity in boreal headwaters. *Inland Waters*, 6 (1): 65-76. 10.5268/iw-6.1.903
- Rasconi, S.; Niquil, N.; Sime-Ngando, T., 2012. Phytoplankton chytridiomycosis: community structure and infectivity of fungal parasites in aquatic ecosystems. *Environmental Microbiology*, 14 (8): 2151-2170
- Rasmussen, E.K.; Petersen, O.S.; Thompson, J.R.; Flower, R.J.; Ayache, F.; Kraiem, M.; Chouba, L., 2009. Model analyses of the future water quality of the eutrophicated Ghar El Melh lagoon (Northern Tunisia). *Hydrobiologia*, 622: 173-193. 10.1007/s10750-008-9681-9
- Rasmussen, J.R.; Olesen, B.; Krause-Jensen, D., 2012. Effects of filamentous macroalgae mats on growth and survival of eelgrass, *Zostera marina*, seedlings. *Aquatic Botany*, 99: 41-48. 10.1016/j.aquabot.2012.01.005
- Rasouli, S.; Whalen, J.K.; Madramootoo, C.A., 2014. Review: Reducing residual soil nitrogen losses from agroecosystems for surface water protection in Quebec and Ontario, Canada: Best management practices, policies and perspectives. *Canadian Journal of Soil Science*, 94 (2): 109-127. 10.4141/cjss2013-015
- Rast, W.; Holland, M., 1988. Eutrophication of lakes and reservoirs: a framework for making management decisions. *Ambio*: 2-12
- Rast, W.; Thornton, J.A., 1996. Trends in eutrophication research and control. *Hydrological Processes*, 10 (2): 295-313
- Rastogi, R.P.; Madamwar, D.; Incharoensakdi, A., 2015. Bloom Dynamics of Cyanobacteria and Their Toxins: Environmental Health Impacts and Mitigation Strategies. *Frontiers in Microbiology*, 6: 1254. 10.3389/fmicb.2015.01254
- Ratkevicius, N.; Correa, J.A.; Moenne, A., 2003. Copper accumulation, synthesis of ascorbate and activation of ascorbate peroxidase in *Enteromorpha compressa* (L.) Grev. (*Chlorophyta*) from heavy metal-enriched environments in northern Chile. *PLANT CELL AND ENVIRONMENT*, 26 (10): 1599-1608. 10.1046/j.1365-3040.2003.01073.x
- Rauch, W.; Henze, M.; Koncsos, L.; Reichert, P.; Shanahan, P.; Somlyódy, L.; Vanrolleghem, P., 1998. River water quality modelling: I. state of the art. *Water Science and Technology*, 38 (11): 237-244. 10.1016/S0273-1223(98)00660-X
- Rausch, K.D.; Belyea, R.L., 2006. The future of coproducts from corn processing. *Applied biochemistry and biotechnology*, 128 (1): 47-86
- Rautenberger, R.; Bischof, K., 2006. Impact of temperature on UV-susceptibility of two *Ulva* (*Chlorophyta*) species from Antarctic and Subantarctic regions. *Polar Biology*, 29 (11): 988-996. 10.1007/s00300-006-0141-6
- Raven, J.A.; Geider, R.J., 1988. Temperature and algal growth. *New Phytologist*, 110 (4): 441-461. doi:10.1111/j.1469-8137.1988.tb00282.x
- Raven, J.A.; Hurd, C.L., 2012. Ecophysiology of photosynthesis in macroalgae. *PHOTOSYNTHESIS RESEARCH*, 113 (1-3): 105-125. 10.1007/s11120-012-9768-z
- Raven, J.A.R.J.G., 2003. Adaptation, acclimation and regulation in algal photosynthesis. In: A. W. D. Larkum, S.E.D., and J. A. Raven, ed. *Photosynthesis in Algae - Advances in Photosynthesis and Respiration*. Kluwer Academic Publishers
- Raymond, S.; Moatar, F.; Meybeck, M.; Bustillo, V., 2013. Choosing methods for estimating dissolved and particulate riverine fluxes from monthly sampling. *Hydrological Sciences Journal-Journal Des Sciences Hydrologiques*, 58 (6): 1326-1339. 10.1080/02626667.2013.814915
- Recking, A., 2009. Theoretical development on the effects of changing flow hydraulics on incipient bed load motion. *Water Resources Research*, 45. 10.1029/2008wr006826
- Recking, A., 2010. A comparison between flume and field bed load transport data and consequences for surface-based bed load transport prediction. *Water Resources Research*, 46. 10.1029/2009wr008007

- Reddy, K.R.; Delaune, R.D.; Debusk, W.F.; Koch, M.S., 1993. Long-term nutrient accumulation rates in the Everglades. *Soil Science Society of America Journal*, 57 (4): 1147-1155
- Reddy, K.R.; Diaz, O.A.; Scinto, L.J.; Agami, M., 1995. Phosphorus dynamics in selected wetlands and streams of the Lake Okeechobee Basin. *Ecological Engineering*, 5 (2-3): 183-207. 10.1016/0925-8574(95)00024-0
- Reddy, K.R.; Kadlec, R.H.; Flagg, E.; Gale, P.M., 1999. Phosphorus retention in streams and wetlands: A review. *Critical Reviews in Environmental Science and Technology*, 29 (1): 83-146. 10.1080/10643389991259182
- Redfield, A.C., 1934. On the proportions of organic derivatives in sea water and their relation to the composition of plankton. In: Daniel, R.J., ed. *In James Johnstone Memorial Volume* University of Liverpool 176–192
- Redfield, A.C., 1958. THE BIOLOGICAL CONTROL OF CHEMICAL FACTORS IN THE ENVIRONMENT. *American Scientist*, 46 (3): 205-221
- Rees, T.A.V., 2003. Safety factors and nutrient uptake by seaweeds. *Marine Ecology Progress Series*, 263: 29–42
- Regnier, E.; Schubert, K., 2013. *Consumer preferences, aquaculture technology and the sustainability of fisheries*. Centre d'économie de la Sorbonne
- Reguera, B.; Velo-Suarez, L.; Raine, R.; Park, M.G., 2012. Harmful Dinophysis species: A review. *Harmful Algae*, 14: 87-106. 10.1016/j.hal.2011.10.016
- Reid, P.C.; Borges, M.D.; Svendsen, E., 2001. A regime shift in the North Sea circa 1988 linked to changes in the North Sea horse mackerel fishery. *Fisheries Research*, 50 (1-2): 163-171. 10.1016/s0165-7836(00)00249-6
- Reid, P.C.; Lancelot, C.; Gieskes, W.W.C.; Hagmeier, E.; Weichert, G., 1990. PHYTOPLANKTON OF THE NORTH-SEA AND ITS DYNAMICS - A REVIEW. *Netherlands Journal of Sea Research*, 26 (2-4): 295-331. 10.1016/0077-7579(90)90094-w
- Reidy, B.; Dammgen, U.; Dohler, H.; Eurich-Menden, B.; van Evert, F.K.; Hutchings, N.J.; Luesink, H.H.; Menzi, H.; Misselbrook, T.H.; Monteny, G.J.; Webb, J., 2008. Comparison of models used for national agricultural ammonia emission inventories in Europe: Liquid manure systems. *Atmospheric Environment*, 42 (14): 3452-3464. 10.1016/j.atmosenv.2007.04.009
- Reidy, B.; Rhim, B.; Menzi, H., 2008. A new Swiss inventory of ammonia emissions from agriculture based on a survey on farm and manure management and farm-specific model calculations. *Atmospheric Environment*, 42 (14): 3266-3276. 10.1016/j.atmosenv.2007.04.036
- Reidy, B.; Webb, J.; Misselbrook, T.H.; Menzi, H.; Luesink, H.H.; Hutchings, N.J.; Eurich-Menden, B.; Doher, H.; Dammgen, U., 2009. Comparison of models used for national agricultural ammonia emission inventories in Europe: Litter-based manure systems. *Atmospheric Environment*, 43 (9): 1632-1640. 10.1016/j.atmosenv.2008.12.015
- Reifel, K.M.; Corcoran, A.A.; Cash, C.; Shipe, R.; Jones, B.H., 2013. Effects of a surfacing effluent plume on a coastal phytoplankton community. *Continental Shelf Research*, 60: 38-50. 10.1016/j.csr.2013.04.012
- Reiffenstein, R.J.; Hulbert, W.C.; Roth, S.H., 1992. Toxicology of hydrogen sulfide. *Annual review of pharmacology and toxicology*, 32: 109–134. 10.1146/annurev.pa.32.040192.000545
- Reissmann, J.H.; Burchard, H.; Feistel, R.; Hagen, E.; Lass, H.U.; Mohrholz, V.; Nausch, G.; Umlauf, L.; Wieczorek, G., 2009. Vertical mixing in the Baltic Sea and consequences for eutrophication - A review. *Progress in Oceanography*, 82 (1): 47-80. 10.1016/j.pocean.2007.10.004
- Remy, J.-C.; Hebert, J., 1977. Le devenir des engrais azotés dans le sol. *Compte Rendus de l'Académie d'Agriculture de France*, 11: 700-714
- Ren, J.S.; Barr, N.G.; Scheuer, K.; Schiel, D.R.; Zeldis, J., 2014. A dynamic growth model of macroalgae: Application in an estuary recovering from treated wastewater and earthquake-driven eutrophication. *Estuarine Coastal and Shelf Science*, 148: 59-69. 10.1016/j.ecss.2014.06.014
- Renard, K.G.; Foster, G.R.; Weesies, G.A.; McCool, D.K.; Yoder, D.C., 1998. *Predicting soil erosion by water: a guide to conservation planning with Revised Universal Soil Loss Equation (RUSLE)*. Washington:
- Renard, K.G.; Foster, G.R.; Weesies, G.A.; Porter, J.P., 1991. RUSLE - revised universal soil loss equation. *Journal of Soil and Water Conservation*, 46 (1): 30-33
- Renard, K.G.; Freimund, J.R., 1994. Using monthly precipitation data to estimate the r-factor in the revised USLE. *Journal of Hydrology*, 157 (1-4): 287-306. 10.1016/0022-1694(94)90110-4
- Renn, O.; Klinke, A.; van Asselt, M., 2011. Coping with complexity, uncertainty and ambiguity in risk governance: a synthesis. *Ambio*, 40 (2): 231-46
- Reynolds; Elliott, J.A., 2010. Complexity and emergent properties in aquatic ecosystems: predictability of ecosystem responses. *Freshwater Biology*, 10.1111/j.1365-2427.2010.02526.x: 1365-2427
- Reynolds, C.S., 1999. Modelling phytoplankton dynamics and its application to lake management. *Hydrobiologia*, 395: 123-131. 10.1023/A:1017039900307
- Reynolds, C.S., 2006. *The Ecology of Phytoplankton*. Cambridge University Press
- Reynolds, C.S., 2007. Variability in the provision and function of mucilage in phytoplankton: facultative responses to the environment. *Hydrobiologia*, 578 (1): 37-45
- Reynolds, C.S.; Huszar, V.; Kruk, C.; Naselli-Flores, L.; Melo, S., 2002. Towards a functional classification of the freshwater phytoplankton. *Journal of Plankton Research*, 24 (5): 417-428
- Reynolds, C.S.; Irish, A.E., 1997. Modelling phytoplankton dynamics in lakes and reservoirs: the problem of in-situ growth rates. *Hydrobiologia*, 349: 5-17. 10.1023/A:1003020823129
- Reynolds, C.S.; Irish, A.E.; Elliott, J.A., 2001. The ecological basis for simulating phytoplankton responses to environmental change (PROTECH). *Ecological Modelling*, 140: 271-291

- Reynolds, C.S.; Oliver, R.L.; Walsby, A.E., 1987. Cyanobacterial dominance: the role of buoyancy regulation in dynamic lake environments. *New Zealand Journal of Marine and Freshwater Research*, 21 (3): 379-390
- Reynolds, P.L.; Richardson, J.P.; Duffy, J.E., 2014. Field experimental evidence that grazers mediate transition between microalgal and seagrass dominance. *Limnology and Oceanography*, 59 (3): 1053-1064. 10.4319/lo.2014.59.3.1053
- Rhoads, D.C., 1974. Organism-sediment relations on the muddy sea floor. *Oceanography and Marine Biology, An Annual Review*, 12: 263-300
- Rhode, W., 1969. Crystallization of eutrophication concepts in Northern Europe *Eutrophication : causes, consequences, correctives : proceedings of a symposium* Madison: June 11-15. National Academy of Sciences, 50-64
- Riccardi, N.; Solidoro, C., 1996. The influence of environmental variables on *Ulva rigida* C. Ag. growth and production. *Botanica Marina*, 39 (1-6): 27-32
- Richard, N.; Juge, P., 2014. Observation des macrophytes aquatiques de la Loire et de la Vienne (2011-2012-2013). *Séminaire sur « Les réseaux de suivi et le partage de protocoles dans le bassin de la Loire, bilans et perspectives »*. La Roche-sur-Yon: 19 mars 2014
- Richards, R.P.; Alameddine, I.; Allan, J.D.; Baker, D.B.; Bosch, N.S.; Confesor, R.; DePinto, J.V.; Dolan, D.M.; Reutter, J.M.; Scavia, D., 2013. "Nutrient Inputs to the Laurentian Great Lakes by Source and Watershed Estimated Using SPARROW Watershed Models" by Dale M. Robertson and David A. Saad. *Journal of the American Water Resources Association*, 49 (3): 715-724. 10.1111/jawr.12006
- Richards, R.P.; Baker, D.B., 1993. TRENDS IN NUTRIENT AND SUSPENDED SEDIMENT CONCENTRATIONS IN LAKE ERIE TRIBUTARIES, 1975-1990. *Journal of Great Lakes Research*, 19 (2): 200-211. 10.1016/s0380-1330(93)71211-3
- Richards, R.P.; Baker, D.B.; Crumrine, J.P., 2009. Improved water quality in Ohio tributaries to Lake Erie: A consequence of conservation practices. *Journal of Soil and Water Conservation*, 64 (3): 200-211. 10.2489/jswc.64.3.200
- Richards, R.P.; Baker, D.B.; Crumrine, J.P.; Stearns, A.M., 2010. Unusually large loads in 2007 from the Maumee and Sandusky Rivers, tributaries to Lake Erie. *Journal of Soil and Water Conservation*, 65 (6): 450-462. 10.2489/jswc.65.6.450
- Richardson, A.J.; Bakun, A.; Hays, G.C.; Gibbons, M.J., 2009. The jellyfish joyride: causes, consequences and management responses to a more gelatinous future. *Trends Ecol Evol*, 24 (6): 312-22. 10.1016/j.tree.2009.01.010
- Richardson, K.; Jorgensen, B.B., 1996. Eutrophication: definition, history and effects. *Eutrophication in coastal marine ecosystems*. 1-19
- Rickenmann, D.; Recking, A., 2011. Evaluation of flow resistance in gravel-bed rivers through a large field data set. *Water Resources Research*, 47. 10.1029/2010wr009793
- Rico, A.; Lanas, P.; Lopez-Gappa, J., 2005. Colonization potential of the genus *Ulva* (Chlorophyta, Ulvales) in Comodoro Rivadavia Harbor (Chubut, Argentina). *Ciencias Marinas*, 31 (4): 719-725
- Riedel, B.; Zuschin, M.; Stachowitzsch, M., 2012. Tolerance of benthic macrofauna to hypoxia and anoxia in shallow coastal seas: a realistic scenario. *Marine Ecology Progress Series*, 458: 39-52. 10.3354/meps09724
- Rieger, L.; Gillot, S.; Langergraber, G.; Ohtsuki, T.; Shaw, A.; Takacs, I.; Winkler, S., 2012. *Guidelines for Using Activated Sludge Models* London, United Kingdom: IWA Publishing (Scientific and Technical Report)
- Rieger, L.; Gillot, S.; Langergraber, G.; Ohtsuki, T.; Shaw, A.; Takacs, I.; Winkler, S., 2013. *Guidelines for Using Activated Sludge Models*. London, 280.
- Riemann, B.; Carstensen, J.; Dahl, K.; Fossing, H.; Hansen, J.W.; Jakobsen, H.H.; Josefson, A.B.; Krause-Jensen, D.; Markager, S.; Staehr, P.A.; Timmermann, K.; Windolf, J.; Andersen, J.H., 2016. Recovery of Danish Coastal Ecosystems After Reductions in Nutrient Loading: A Holistic Ecosystem Approach. *Estuaries and Coasts*, 39 (1): 82-97. 10.1007/s12237-015-9980-0
- Rietjens, J.; Gailhard, J.; Gosse, P.; Malatre, K.; Royer, T.; Sabaton, C.; Travade, F., 1995. Un outil informatique d'aide à la gestion intégrée de la ressource en eau : le logiciel AGIRE Exemples d'application. *Hydroécologie Appliquée*, 7: 29-50. 10.1051/hydro:1995003
- Rigby, H.; Clarke, B.O.; Pritchard, D.L.; Meehan, B.; Beshah, F.; Smith, S.R.; Porter, N.A., 2016. A critical review of nitrogen mineralization in biosolids-amended soil, the associated fertilizer value for crop production and potential for emissions to the environment. *Science of the Total Environment*, 541: 1310-1338. 10.1016/j.scitotenv.2015.08.089
- Rigolot, C.; Espagnol, S.; Pomar, C.; Dourmad, J.Y., 2010. Modelling of manure production by pigs and NH<sub>3</sub>, N<sub>2</sub>O and CH<sub>4</sub> emissions. Part I: animal excretion and enteric CH<sub>4</sub>, effect of feeding and performance. *Animal*, 4 (8): 1401-1412. 10.1017/s1751731110000492
- Rigolot, C.; Espagnol, S.; Robin, P.; Hassouna, M.; Beline, F.; Paillat, J.M.; Dourmad, J.Y., 2010. Modelling of manure production by pigs and NH<sub>3</sub>, N<sub>2</sub>O and CH<sub>4</sub> emissions. Part II: effect of animal housing, manure storage and treatment practices. *Animal*, 4 (8): 1413-1424. 10.1017/s1751731110000509
- Rigosi, A.; Carey, C.C.; Ibelings, B.W.; Brookes, J.D., 2014. The interaction between climate warming and eutrophication to promote cyanobacteria is dependent on trophic state and varies among taxa. *Limnology and Oceanography*, 59 (1): 99-114
- Riley, M.; Stefan, H., 1988. Minlake - a Dynamic Lake Water-Quality Simulation-Model. *Ecological Modelling*, 43 (3-4): 155-182. 10.1016/0304-3800(88)90002-6
- Rivers, J.S.; Peckol, P., 1995. SUMMER DECLINE OF ULVA-LACTUCA (CHLOROPHYTA) IN A EUTROPHIC EMBAYMENT - INTERACTIVE EFFECTS OF TEMPERATURE AND NITROGEN AVAILABILITY. *Journal of Phycology*, 31 (2): 223-228. 10.1111/j.0022-3646.1995.00223.x

- Riverson, J.; Coats, R.; Costa-Cabral, M.; Dettinger, M.; Reuter, J.; Sahoo, G.; Schladow, G., 2013. Modeling the transport of nutrients and sediment loads into Lake Tahoe under projected climatic changes. *Climatic Change*, 116 (1): 35-50. 10.1007/s10584-012-0629-8
- Roach, B.; Wade, W.W., 2006. Policy evaluation of natural resource injuries using habitat equivalency analysis. *Ecological Economics*, 58 (2): 421-433. 10.1016/j.ecolecon.2005.07.019
- Robach, F.; Thiébaut, G.; Trémolières, M.; Muller, S., 1996. A reference system for continental running waters: Plant communities as bioindicators of increasing eutrophication in alkaline and acidic waters in north-east France. *Hydrobiologia*, 340 (1-3): 67-76
- Robarts, R.D.; Zohary, T., 1987. Temperature effects on photosynthetic capacity, respiration, and growth rates of bloom-forming cyanobacteria. *New Zealand Journal of Marine and Freshwater Research*, 21 (3): 391-399
- Roberts, A.M.; Pannell, D.J.; Doole, G.; Vigiak, O., 2012. Agricultural land management strategies to reduce phosphorus loads in the Gippsland Lakes, Australia. *Agricultural Systems*, 106 (1): 11-22. 10.1016/j.agsy.2011.10.009
- Roberts, D.A.; Nys, R.d., 2016. The effects of feedstock pre-treatment and pyrolysis temperature on the production of biochar from the green seaweed *Ulva*. *Journal of Environmental Management*, 169: 253-260. 10.1016/j.jenvman.2015.12.023
- Roberts, D.G.; McComb, A.J.; Kuo, J., 1984. The structure and continuity of the lacunar system of the seagrass *halophila-ovalis* (r-br) hook-f (hydrocharitaceae). *Aquatic Botany*, 18 (4): 377-388. 10.1016/0304-3770(84)90058-5
- Roberts, R.S.; Emel, J., 1992. Uneven Development and the Tragedy of the Commons: Competing Images for Nature-Society Analysis. *Economic Geography*, 68 (3): 249-271. 10.2307/144185
- Robertson, D.M., 2003. Influence of different temporal sampling strategies on estimating total phosphorus and suspended sediment concentration and transport in small streams. *Journal of the American Water Resources Association*, 39 (5): 1281-1308. 10.1111/j.1752-1688.2003.tb03709.x
- Robertson, D.M.; Roerish, E.D., 1999. Influence of various water quality sampling strategies on load estimates for small streams. *Water Resources Research*, 35 (12): 3747-3759. 10.1029/1999wr900277
- Robertson, D.M.; Saad, D.A., 2011. Nutrient inputs to the Laurentian great lakes by source and watershed estimated using Sparrow watershed models. *Journal of the American Water Resources Association*, 47 (5): 1011-1033. 10.1111/j.1752-1688.2011.00574.x
- Robinson, A.R.; Brink, K.H., 2005. *The global coastal ocean: multiscale interdisciplinary processes*. Harvard University Press
- Robson, B.J.; Bukaveckas, P.A.; Hamilton, D.P., 2008. Modelling and mass balance assessments of nutrient retention in a seasonally-flowing estuary (Swan River Estuary, Western Australia). *Estuarine Coastal and Shelf Science*, 76 (2): 282-292. 10.1016/j.ecss.2007.07.009
- Rocha, F.C.; Andrade, E.M.; Lopes, F.B., 2015. Water quality index calculated from biological, physical and chemical attributes. *Environmental Monitoring and Assessment*, 187 (1). 10.1007/s10661-014-4163-1
- Rodríguez, L.; Macías, F., 2006. Eutrophication trends in forest soils in Galicia (NW Spain) caused by the atmospheric deposition of nitrogen compounds. *Chemosphere*, 63 (9): 1598-1609
- Rodríguez Reartes, S.B.; Estrada, V.; Bazán, R.; Larrosa, N.; Cossavella, A.; Lopez, A.; Busso, F.; Diaz, M.S., 2016. Evaluation of ecological effects of anthropogenic nutrient loading scenarios in Los Molinos reservoir through a mathematical model. *Ecological Modelling*, 320: 393-406. 10.1016/j.ecolmodel.2015.10.028
- Rodríguez Rodríguez, G.; Villasante, S.; Carme García-Negro, M.d., 2011. Are red tides affecting economically the commercialization of the Galician (NW Spain) mussel farming? *Marine Policy*, 35 (2): 252-257. 10.1016/j.marpol.2010.08.008
- Roelke, D.; Buyukates, Y., 2001. The diversity of harmful algal bloom-triggering mechanisms and the complexity of bloom initiation. *Human and Ecological Risk Assessment: An International Journal*, 7 (5): 1347-1362
- Roelke, D.L.; Eldridge, P.M.; Cifuentes, L.A., 1999. A model of phytoplankton competition for limiting and nonlimiting nutrients: Implications for development of estuarine and nearshore management schemes. *Estuaries*, 22 (1): 92-104. 10.2307/1352930
- Roessink, I.; Koelmans, A.A.; Brock, T.C.M., 2008. Interactions between nutrients and organic micro-pollutants in shallow freshwater model ecosystems. *Science of the Total Environment*, 406 (3): 436-442. 10.1016/j.scitotenv.2008.07.051
- Roessink, I.; Moermond, C.T.A.; Gillissen, F.; Koelmans, A.A., 2010. Impacts of manipulated regime shifts in shallow lake model ecosystems on the fate of hydrophobic organic compounds. *Water Research*, 44 (20): 6153-6163
- Rogers, P.J.; Dake, N.; Dussart, G.B.J., 2004. Ulva problem in Kent: 1973-2003. *Marine Pollution Bulletin*, 49 (1-2): 145-146. 10.1016/j.marpbul.2004.04.013
- Rohlich, G., 1969. Eutrophication: causes, consequences, correctives. *Proceedings of a Symposium National Academy of Sciences, Washington, DC. ISBN. 309-01*
- Romanelli, M.; Cordisco, C.A.; Giovanardi, O., 2009. The long-term decline of the Chamelea gallina L. (Bivalvia: Veneridae) clam fishery in the Adriatic Sea: is a synthesis possible? *Acta Adriatica*, 50 (2): 171-204
- Romano, C.; Widdows, J.; Brinsley, M.D.; Staff, F.J., 2003. Impact of Enteromorpha intestinalis mats on near-bed currents and sediment dynamics: flume studies. *Marine Ecology Progress Series*, 256: 63-74. 10.3354/meps256063
- Romero, E.; Garnier, J.; Lassaletta, L.; Billen, G.; Le Gendre, R.; Riou, P.; Cugier, P., 2013. Large-scale patterns of river inputs in southwestern Europe: seasonal and interannual variations and potential eutrophication effects at the coastal zone. *Biogeochemistry*, 113 (1-3): 481-505. 10.1007/s10533-012-9778-0

- Romero, E.; Le Gendre, R.; Garnier, J.; Billen, G.; Fisson, C.; Silvestre, M.; Riou, P., 2016. Long-term water quality in the lower Seine: Lessons learned over 4 decades of monitoring. *Environmental Science & Policy*, 58: 141-154. 10.1016/j.envsci.2016.01.016
- Romshoo, S.A.; Muslim, M., 2011. Geospatial modeling for assessing the nutrient load of a Himalayan lake. *Environmental Earth Sciences*, 64 (5): 1269-1282. 10.1007/s12665-011-0944-9
- Romstad, E., 2014. The economics of eutrophication. *Eutrophication: Causes, Consequences and Control: Volume 2*. 45-53. 10.1007/978-94-007-7814-6\_4
- Ronnberg, C.; Bonsdorff, E., 2004. Baltic Sea eutrophication: area-specific ecological consequences. *Hydrobiologia*, 514 (1-3): 227-241. 10.1023/B:HYDR.0000019238.84989.7f
- Ros, G.H.; Temminghoff, E.J.M.; Hoffland, E., 2011. Nitrogen mineralization: a review and meta-analysis of the predictive value of soil tests. *European Journal of Soil Science*, 62 (1): 162-173. 10.1111/j.1365-2389.2010.01318.x
- Rosa, R.; Seibel, B.A., 2008. Synergistic effects of climate-related variables suggest future physiological impairment in a top oceanic predator. *Proceedings of the National Academy of Sciences of the United States of America*, 105 (52): 20776-20780. 10.1073/pnas.0806886105
- Rose, C.W.; Williams, J.R.; Sander, G.C.; Barry, D.A., 1983. A mathematical-model of soil-erosion and deposition processes .1. theory for a plane land element. *Soil Science Society of America Journal*, 47 (5): 991-995
- Rose, C.W.; Williams, J.R.; Sander, G.C.; Barry, D.A., 1983. A mathematical-model of soil-erosion and deposition processes .2. application to data from an arid-zone catchment. *Soil Science Society of America Journal*, 47 (5): 996-1000
- Rosenberg, C.; Ramus, J., 1982. Ecological growth strategies in the seaweeds *Gracilaria foliifera* (Rhodophyceae) and *Ulva* sp. (Chlorophyceae): Soluble nitrogen and reserve carbohydrates. *Marine Biology*, 66 (3): 251-259. 10.1007/bf00397030
- Rosenberg, G.; Ramus, J., 1984. UPTAKE OF INORGANIC NITROGEN AND SEAWEED SURFACE-AREA - VOLUME RATIOS. *Aquatic Botany*, 19 (1-2): 65-72. 10.1016/0304-3770(84)90008-1
- Rosenberg, R., 1985. Eutrophication—the future marine coastal nuisance? *Marine Pollution Bulletin*, 16 (6): 227-231
- Rosenberg, R.; Blomqvist, M.; H, C.N.; Cederwall, H.; Dimming, A., 2004. Marine quality assessment by use of benthic species-abundance distributions: a proposed new protocol within the European Union Water Framework Directive. *Mar Pollut Bull*, 49 (9-10): 728-39. 10.1016/j.marpolbul.2004.05.013
- Rosenberg, R.; Olsson, I.; Olundh, E., 1977. Energy-flow model of an oxygen-deficient estuary on Swedish West coast. *Marine Biology*, 42 (2): 99-107. 10.1007/bf00391560
- Rosenblatt, A.E.; Schmitz, O.J., 2014. Interactive effects of multiple climate change variables on trophic interactions: a meta-analysis. *Climate Change Responses*, 1 (1): 8
- Rosenblatt, A.E.; Schmitz, O.J., 2016. Climate Change, Nutrition, and Bottom-Up and Top-Down Food Web Processes. *Trends in Ecology & Evolution*, 31 (12): 965-975. <https://doi.org/10.1016/j.tree.2016.09.009>
- Rothenberger, M.B.; Calomeni, A.J., 2016. Complex interactions between nutrient enrichment and zooplankton in regulating estuarine phytoplankton assemblages: Microcosm experiments informed by an environmental dataset. *Journal of Experimental Marine Biology and Ecology*, 480: 62-73. 10.1016/j.jembe.2016.03.015
- Rothschild, B.J.; Ault, J.S.; Gouletquer, P.; Heral, M., 1994. Decline of the chesapeake bay oyster population - a century of habitat destruction and overfishing. *Marine Ecology Progress Series*, 111 (1-2): 29-39. 10.3354/meps111029
- Rougoor, C.W., 2001. Experiences with Fertilizer Taxes in Europe. *Journal of Environmental Planning and Management*, 44 (6): 877-887. 10.1080/09640560120087615
- Rousseaux, S., 2012. Pollution atmosphérique. Droit international et européen. *Jurisclasseur Environnement et Développement durable*.
- Rowe, J.; McCay, D.F.; Whittier, N., 2007. Estimation of natural resource damages for 23 florida cases using physical fates and biological modeling. 324-334
- Roy, P.O.; Huijbregts, M.; Deschenes, L.; Margni, M., 2012. Spatially-differentiated atmospheric source-receptor relationships for nitrogen oxides, sulfur oxides and ammonia emissions at the global scale for life cycle impact assessment. *Atmospheric Environment*, 62: 74-81. 10.1016/j.atmosenv.2012.07.069
- Rozan, T.F.; Taillefert, M.; Trouwborst, R.E.; Glazer, B.T.; Ma, S.F.; Herszage, J.; Valdes, L.M.; Price, K.S.; Luther, G.W., 2002. Iron-sulfur-phosphorus cycling in the sediments of a shallow coastal bay: Implications for sediment nutrient release and benthic macroalgal blooms. *Limnology and Oceanography*, 47 (5): 1346-1354
- Rozemeijer, J.; van der Velde, Y.; de Jonge, H.; van Geer, F.; Broers, H.-P.; Bierkens, M., 2010. Application and Evaluation of a New Passive Sampler for Measuring Average Solute Concentrations in a Catchment Scale Water Quality Monitoring Study. *Environmental Science & Technology*, 44 (4): 1353-1359. 10.1021/es903068h
- Rozemeijer, J.C.; Klein, J.; Broers, H.P.; van Tol-Leenders, T.P.; van der Grift, B., 2014. Water quality status and trends in agriculture-dominated headwaters; a national monitoring network for assessing the effectiveness of national and European manure legislation in The Netherlands. *Environmental Monitoring and Assessment*, 186 (12): 8981-8995. 10.1007/s10661-014-4059-0
- Rozemeijer, J.C.; Van der Velde, Y.; Van Geer, F.C.; De Rooij, G.H.; Torfs, P.J.J.F.; Broers, H.P., 2010. Improving Load Estimates for NO<sub>3</sub> and P in Surface Waters by Characterizing the Concentration Response to Rainfall Events. *Environmental Science & Technology*, 44 (16): 6305-6312. 10.1021/es101252e

- Rubegni, F.; Franchi, E.; Lenzi, M., 2013. Relationship between wind and seagrass meadows in a non-tidal eutrophic lagoon studied by a Wave Exposure Model (WEMo). *Marine Pollution Bulletin*, 70 (1-2): 54-63. 10.1016/j.marpolbul.2013.02.012
- Ruelland, D.; Billen, G.; Brunstein, D.; Garnier, J., 2007. SENEQUE: A multi-scaling GIS interface to the Riverstrahler model of the biogeochemical functioning of river systems. *Science of the Total Environment*, 375 (1-3): 257-273. 10.1016/j.scitotenv.2006.12.014
- Rukhovets, L.A.; Astrakhantsev, G.P.; Menshutkin, V.V.; Minina, T.R.; Petrova, N.A.; Poloskov, V.N., 2003. Development of Lake Ladoga ecosystem models: modeling of the phytoplankton succession in the eutrophication process. I. *Ecological Modelling*, 165 (1): 49-77. 10.1016/S0304-3800(03)00061-9
- Rumpel, C.; Crème, A.; Ngo, P.T.; Velásquez, G.; Mora, M.L.; Chabbi, A., 2015. The impact of grassland management on biogeochemical cycles involving carbon, nitrogen and phosphorus. *Journal of soil science and plant nutrition*, (AHEAD): 0-0
- Runcie, J.W.; Ritchie, R.J.; Larkum, A.W., 2003. Uptake kinetics and assimilation of inorganic nitrogen by *Catenella nipae* and *Ulva lactuca*. *Aquatic Botany*, 76 (2): 155-174. 10.1016/s0304-3770(03)00037-8
- Runkel, R.L.; McKnight, D.M.; Rajaram, H., 2003. Modeling hyporheic zone processes. *Advances in Water Resources*, 9 (26): 901-905. 10.1016/S0309-1708(03)00079-4
- Ruoho-Airola, T.; Eilola, K.; Savchuk, O.P.; Parviaainen, M.; Tarvainen, V., 2012. Atmospheric Nutrient Input to the Baltic Sea from 1850 to 2006: A Reconstruction from Modeling Results and Historical Data. *Ambio*, 41 (6): 549-557. 10.1007/s13280-012-0319-9
- Russell, B.D.; Connell, S.D., 2005. A novel interaction between nutrients and grazers alters relative dominance of marine habitats. *Marine Ecology Progress Series*, 289: 5-11. 10.3354/meps289005
- Russell, B.D.; Connell, S.D., 2007. Response of grazers to sudden nutrient pulses in oligotrophic versus eutrophic conditions. *Marine Ecology Progress Series*, 349: 73-80. 10.3354/meps07097
- Ruttenberg, K.C., 1992. Development of a sequential extraction method for different forms of phosphorus in marine-sediments. *Limnology and Oceanography*, 37 (7): 1460-1482
- Ruttenberg, K.C.; Berner, R.A., 1993. Authigenic apatite formation and burial in sediments from non-upwelling, continental-margin environments. *Geochimica Et Cosmochimica Acta*, 57 (5): 991-1007. 10.1016/0016-7037(93)90035-u
- Ruttenberg, K.C.; Goni, M.A., 1997. Depth trends in phosphorus distribution and C:N:P ratios of organic matter in Amazon Fan sediments; indices of organic matter source and burial history. *Proceedings of the Ocean Drilling Program; scientific results, Amazon Fan; covering Leg 155 of the cruises of the drilling vessel JOIDES Resolution, Bridgetown, Barbados, to Bridgetown, Barbados, sites 930-946, 25 March-24 May 1994*, 155: 505
- Ruttenberg, K.C.; Goni, M.A., 1997. Phosphorus distribution, C:N:P ratios, and delta C-13(oc) in arctic, temperate, and tropical coastal sediments: Tools for characterizing bulk sedimentary organic matter. *Marine Geology*, 139 (1-4): 123-145. 10.1016/s0025-3227(96)00107-7
- Ruttenberg, K.C.; Ogawa, N.O.; Tamburini, F.; Briggs, R.A.; Colasacco, N.D.; Joyce, E., 2009. Improved, high-throughput approach for phosphorus speciation in natural sediments via the SEDEX sequential extraction method. *Limnology and Oceanography-Methods*, 7: 319-333
- Ryabchenko, V.A.; Karlin, L.N.; Isaev, A.V.; Vankevich, R.E.; Eremina, T.R.; Molchanov, M.S.; Savchuk, O.P., 2016. Model estimates of the eutrophication of the Baltic Sea in the contemporary and future climate. *Oceanology*, 56 (1): 36-45. 10.1134/s0001437016010161
- Rybak, A.; Messyasz, B.; Leska, B., 2012. Bioaccumulation of alkaline soil metals (Ca, Mg) and heavy metals (Cd, Ni, Pb) patterns expressed by freshwater species of *Ulva* (Wielkopolska, Poland). *International Review of Hydrobiology*, 97 (6): 542-555. 10.1002/iroh.201201452
- Rydin, E., 2014. Inactivated phosphorus by added aluminum in Baltic Sea sediment. *Estuarine Coastal and Shelf Science*, 151: 181-185. 10.1016/j.ecss.2014.10.008
- Ryding, S.; Rast, W., 1993. *Le contrôle de l'eutrophisation des lacs et des réservoirs*, Edition Masson: ISBN 2-225-84393-7.
- Sabart, M.; Pobel, D.; Briand, E.; Combourieu, B.; Salençon, M.; Humbert, J.-F.; Latour, D., 2010. Spatiotemporal variations in microcystin concentrations and in the proportions of microcystin-producing cells in several *Microcystis aeruginosa* populations. *Applied and Environmental Microbiology*, 76 (14): 4750-4759
- Sabater, S.; Armengol, J.; Comas, E.; Sabater, F.; Urrizalqui, I.; Urrutia, I., 2000. Algal biomass in a disturbed Atlantic river: water quality relationships and environmental implications. *Science of the Total Environment*, 263 (1-3): 185-195. 10.1016/S0048-9697(00)00702-6
- Sabater, S.; Artigas, J.; Durán, C.; Pardos, M.; Romaní, A.M.; Tornés, E.; Ylla, I., 2008. Longitudinal development of chlorophyll and phytoplankton assemblages in a regulated large river (the Ebro River). *Science of the Total Environment*, 404 (1): 196-206
- Sabater, S.; Artigas, J.; Gaudes, A.; Munoz, I.; Urrea, G.; Romani, A.M., 2011. Long-term moderate nutrient inputs enhance autotrophy in a forested Mediterranean stream. *Freshwater Biology*, 56 (7): 1266-1280
- Sabater, S.; Butturini, A.; Clement, J.C.; Burt, T.; Dowrick, D.; Hefting, M.; Maitre, V.; Pinay, G.; Postolache, C.; Rzepecki, M.; Sabater, F., 2003. Nitrogen removal by riparian buffers along a European climatic gradient: Patterns and factors of variation. *Ecosystems*, 6 (1): 20-30. 10.1007/s10021-002-0183-8
- Sabater, S.; Guasch, H.; Ricart, M.; Romaní, A.; Vidal, G.; Klunder, C.; Schmitt-Jansen, M., 2007. Monitoring the effect of chemicals on biological communities. The biofilm as an interface. *Analytical and Bioanalytical Chemistry*, 387 (4): 1425-1434

- Sabine Houot, M.; Pons, N.; Pradel, M.; (coord.), A.T.; Aubry, C.; Augusto, L.; Barbier, R.; Benoît, P.; Brugère, H.; Caillaud, M.-A.; Casellas, M.; Chatelet, A.; Dabert, P.; Mareschal, S.D.; Doussan, I.; Etrillard, C.; Fuchs, J.; Génermont, S.; Giamberini, L.; Hélias, A.; Jardé, E.; Perche, S.L.; Lupton, S.; Marron, N.; Ménasser, S.; Mollier, A.; Morel, C.; Mougin, C.; Nguyen, C.; Parnaudeau, V.; Patureau, D.; Pourcher, A.-M.; Ryden, G.; Savini, I.; Smolders, E.; Topp, E.; Vieublé, L.; Viguié, C., 2014. *Valorisation des matières fertilisantes d'origine résiduaire sur les sols à usage agricole ou forestier, impacts agronomiques, environnementaux, socio-économiques*: Expertise scientifique collective INRA-CNRS-Irstea.
- Sadras, V.O., 2006. The N:P stoichiometry of cereal, grain legume and oilseed crops. *Field Crops Research*, 95 (1): 13-29. 10.1016/j.fcr.2005.01.020
- Sagasti, A.; Schaffner, L.C.; Duffy, J.E., 2001. Effects of periodic hypoxia on mortality, feeding and predation in an estuarine epifaunal community. *Journal of Experimental Marine Biology and Ecology*, 258 (2): 257-283. 10.1016/s0022-0981(01)00220-9
- Sahraoui, I.; Grami, B.; Bates, S.S.; Bouchouicha, D.; Chikhaoui, M.A.; Mabrouk, H.H.; Hlaili, A.S., 2012. Response of potentially toxic Pseudo-nitzschia (Bacillariophyceae) populations and domoic acid to environmental conditions in a eutrophied, SW Mediterranean coastal lagoon (Tunisia). *Estuarine Coastal and Shelf Science*, 102: 95-104. 10.1016/j.ecss.2012.03.018
- Sahu, M.; Gu, R.R., 2009. Modeling the effects of riparian buffer zone and contour strips on stream water quality. *Ecological Engineering*, 35 (8): 1167-1177. 10.1016/j.ecoleng.2009.03.015
- Salençon, M.-J.; Thébault, J.-M., 1994. Modélisation de l'écosystème du Lac de Parelop avec les modèles ASTER et MELODIA. *Hydroécologie Appliquée*, 6: 369-426. 10.1051/hydro:1994017
- Salgueiro-Gonzalez, N.; Turnes-Carou, I.; Besada, V.; Muniategui-Lorenzo, S.; Lopez-Mahia, P.; Prada-Rodrigue, D., 2015. Occurrence, distribution and bioaccumulation of endocrine disrupting compounds in water, sediment and biota samples from a European river basin. *Science of the Total Environment*, 529: 121-130. 10.1016/j.scitotenv.2015.05.048
- Salmon-Monviola, J.; Moreau, P.; Benhamou, C.; Durand, P.; Merot, P.; Oehler, F.; Gascuel-Odoux, C., 2013. Effect of climate change and increased atmospheric CO<sub>2</sub> on hydrological and nitrogen cycling in an intensive agricultural headwater catchment in western France. *Climatic Change*, 120 (1-2): 433-447. 10.1007/s10584-013-0828-y
- Salovius, S.; Kraufvelin, P., 2004. The filamentous green alga Cladophora glomerata as a habitat for littoral macro-fauna in the northern Baltic Sea. *Ophelia*, 58 (2): 65-78
- Saltzman, J.; Wishner, K.F., 1997. Zooplankton ecology in the eastern tropical Pacific oxygen minimum zone above a seamount: 1. General trends. *Deep-Sea Research Part I-Oceanographic Research Papers*, 44 (6): 907-930. 10.1016/s0967-0637(97)00007-1
- Saltzman, J.; Wishner, K.F., 1997. Zooplankton ecology in the eastern tropical Pacific oxygen minimum zone above a seamount: 2. Vertical distribution of copepods. *Deep-Sea Research Part I-Oceanographic Research Papers*, 44 (6): 931-954. 10.1016/s0967-0637(97)00006-x
- Samperio-Ramos, G.; Casiano, J.M.S.; Davila, M.G., 2016. Effect of ocean warming and acidification on the Fe(II) oxidation rate in oligotrophic and eutrophic natural waters. *Biogeochemistry*, 128 (1-2): 19-34. 10.1007/s10533-016-0192-x
- Sanchez-Pérez, J.-M.; Vervier, P.; Garabétyan, F.; Sauvage, S.; Loubet, M.; Rols, J.-L.; Bariac, T.; Weng, P., 2003. Nitrogen dynamics in the shallow groundwater of a riparian wetland zone of the Garonne, SW France: nitrate inputs, bacterial densities, organic matter supply and denitrification measurements. *Hydrology and Earth System Sciences Discussions*, 7 (1): 97-107
- Sanders, D., 1979. The ecology of Cabomba caroliniana. *Weed Control Methods for Public Health Applications*. CRC Press, Boca Raton, Florida, 133:
- Sandford, R.C.; Bol, R.; Worsfold, P.J., 2010. In situ determination of dissolved organic carbon in freshwaters using a reagentless UV sensor. *Journal of Environmental Monitoring*, 12 (9): 1678-1683. 10.1039/c0em00060d
- Sandin, L.; Johnson, R.K., 2000. The statistical power of selected indicator metrics using macroinvertebrates for assessing acidification and eutrophication of running waters. *Hydrobiologia*, 422: 233-243. 10.1023/a:1017082619481
- Sandjensen, K.; Borum, J., 1991. INTERACTIONS AMONG PHYTOPLANKTON, PERIPHYTON, AND MACROPHYTES IN TEMPERATE FRESH-WATERS AND ESTUARIES. *Aquatic Botany*, 41 (1-3): 137-175. 10.1016/0304-3770(91)90042-4
- Sanseverino, I.; Conduto Antonio, D.S.; Pozzoli, L.; Dobricic, S.; Lettiri, T., 2016. *Algal bloom and its economic impact*. 10.2788/660478
- Saraiva, S.; Pina, P.; Martins, F.; Santos, M.; Braunschweig, F.; Neves, R., 2007. Modelling the influence of nutrient loads on Portuguese estuaries. *Hydrobiologia*, 587: 5-18. 10.1007/s10750-007-0675-9
- Sardans, J.; Penuelas, J.; Rivas-Ubach, A., 2011. Ecological metabolomics: overview of current developments and future challenges. *Chemoecology*, 21 (4): 191-225. 10.1007/s00049-011-0083-5
- Sardans, J.; Rivas-Ubach, A.; Penuelas, J., 2012. The C:N:P stoichiometry of organisms and ecosystems in a changing world: A review and perspectives. *Perspectives in Plant Ecology Evolution and Systematics*, 14 (1): 33-47. 10.1016/j.ppees.2011.08.002
- Satoh, Y.; Hama, T., 2013. Stepwise alteration from fluorescent to non-fluorescent chlorophyll derivatives during early diagenesis of phytoplankton in aquatic environments. *Journal of Experimental Marine Biology and Ecology*, 449: 36-44. 10.1016/j.jembe.2013.08.011
- Saunders, D.L.; Kalff, J., 2001. Nitrogen retention in wetlands, lakes and rivers. *Hydrobiologia*, 443 (1-3): 205-212. 10.1023/a:1017506914063

- Saunders, F.P., 2016. Complex Shades of Green: Gradually Changing Notions of the 'Good Farmer' in a Swedish Context. *Sociologia Ruralis*, 56 (3): 391-407. 10.1111/soru.12115
- Sauvageau, C., 1920. *L'utilisation des algues marines*. Paris, Gaston Doin Editeur. Paris: Gaston Doin Editeur
- Savchuk, O.; Wulff, F., 1999. Modelling regional and large-scale response of Baltic Sea ecosystems to nutrient load reductions. *Hydrobiologia*, 393: 35-43. 10.1023/a:1003529531198
- Savchuk, O.P.; Volkova, V.V., 1990. Study and forecast of Baltic sea eutrophication with the help of simulation-model. *Doklady Akademii Nauk Sssr*, 314 (4): 1006-1009
- Savchuk, O.P.; Wulff, F., 2007. Modeling the Baltic Sea eutrophication in a decision support system. *Ambio*, 36 (2-3): 141-148. 10.1579/0044-7447(2007)36[141:mtbsei]2.0.co;2
- Savchuk, O.P.; Wulff, F., 2009. Long-term modeling of large-scale nutrient cycles in the entire Baltic Sea. *Hydrobiologia*, 629 (1): 209-224. 10.1007/s10750-009-9775-z
- Savci, S., 2012. An agricultural pollutant: chemical fertilizer. *International Journal of Environmental Science and Development*, 3 (1): 73
- Savci, S., 2012. Investigation of Effect of Chemical Fertilizers on Environment. In: Dan, Y., ed. *International Conference on Environmental Science and Development*. Amsterdam: Elsevier Science Bv (APCBE Procedia), Vol.1, 287-292. 10.1016/j.apcbee.2012.03.047
- Sawyer, C.N., 1966. Basic Concepts of Eutrophication. *Journal Water Pollution Control Federation*, 38 (5): 737-744
- Sayer, C.D.; Burgess, A.; Kari, K.; Davidson, T.A.; Peglar, S.; Yang, H.D.; Rose, N., 2010. Long-term dynamics of submerged macrophytes and algae in a small and shallow, eutrophic lake: implications for the stability of macrophyte-dominance. *Freshwater Biology*, 55 (3): 565-583. 10.1111/j.1365-2427.2009.02353.x
- Scanlan, C.M.; Foden, J.; Wells, E.; Best, M.A., 2007. The monitoring of opportunistic macroalgal blooms for the water framework directive. *Marine Pollution Bulletin*, 55 (1-6): 162-171. 10.1016/j.marpolbul.2006.09.017
- Scanvic, F., 2011. Les SDAGE, portée et place dans la hiérarchie des normes. *Bulletin du Droit de l'Environnement Industriel*, 33:
- Scarlett, A.; Donkin, M.E.; Fileman, T.W.; Donkin, P., 1997. Occurrence of the marine antifouling agent irgarol 1051 within the Plymouth Sound locality: Implications for the green macroalga *Enteromorpha intestinalis*. *Marine Pollution Bulletin*, 34 (8): 645-651. 10.1016/s0025-326x(96)00187-7
- Scavia, D.; Bricker, S.B., 2006. Coastal eutrophication assessment in the United States. *Biogeochemistry*, 79 (1-2): 187-208. 10.1007/s10533-006-9011-0
- Scavia, D.; Canale, R.P.; Powers, W.F.; Moody, J.L., 1981. Variance estimates for a dynamic eutrophication model of Saginaw bay, Lake Huron. *Water Resources Research*, 17 (4): 1115-1124. 10.1029/WR017i004p01115
- Scavia, D.; Donnelly, K., 2007. Reassessing hypoxia forecasts for the Gulf of Mexico. *Environmental Science & Technology*, 41 (23): 8111-8117. 10.1021/es0714235
- Scavia, D.; Field, J.C.; Boesch, D.F.; Buddemeier, R.W.; Burkett, V.; Cayan, D.R.; Fogarty, M.; Harwell, M.A.; Howarth, R.W.; Mason, C.; Reed, D.J.; Royer, T.C.; Sallenger, A.H.; Titus, J.G., 2002. Climate change impacts on US coastal and marine ecosystems. *Estuaries*, 25 (2): 149-164. 10.1007/bf02691304
- Scavia, D.; Rabalais, N.; Turner, R.; Justic, D.; Wiseman, W., 2003. Predicting the response of Gulf of Mexico hypoxia to variations in Mississippi River nitrogen load. *Limnology and Oceanography*, 48 (3): 951-956
- Scemama, P.; Levrel, H., 2016. Using Habitat Equivalency Analysis to Assess the Cost Effectiveness of Restoration Outcomes in Four Institutional Contexts. *Environmental Management*, 57 (1): 109-122. 10.1007/s00267-015-0598-6
- Schapira, M., 2005. *Dynamique spatio-temporelle de Phaeocystis globosa en Manche Orientale: effets de la turbulence et des apports sporadiques en sels nutritifs*. Lille 1,
- Scharin, H., 2002. Nutrient management for coastal zones: A case study of the nitrogen load to the Stockholm Archipelago. *Water Science and Technology*. 309-315
- Scheffer, M., 1991. Should we expect strange attractors behind plankton dynamics—and if so, should we bother? *Journal of Plankton Research*, 13 (6): 1291-1305
- Scheffer, M., 2004. *Ecology of shallow lakes*. Springer Science & Business Media
- Scheffer, M.; Carpenter, S.; de Young, B., 2005. Cascading effects of overfishing marine systems. *Trends in Ecology & Evolution*, 20 (11): 579-581. 10.1016/j.tree.2005.08.018
- Scheffer, M.; Carpenter, S.; Foley, J.A.; Folke, C.; Walker, B., 2001. Catastrophic shifts in ecosystems. *Nature*, 413 (6856): 591-596. 10.1038/35098000
- Scheffer, M.; Carpenter, S.R., 2003. Catastrophic regime shifts in ecosystems: linking theory to observation. *Trends in Ecology & Evolution*, 18 (12): 648-656. 10.1016/j.tree.2003.09.002
- Scheffer, M.; Carpenter, S.R.; Lenton, T.M.; Bascompte, J.; Brock, W.; Dakos, V.; Van de Koppel, J.; Van de Leemput, I.A.; Levin, S.A.; Van Nes, E.H., 2012. Anticipating critical transitions. *Science*, 338 (6105): 344-348
- Scheffer, M.; Hosper, S.H.; Meijer, M.L.; Moss, B.; Jeppesen, E., 1993. Alternative equilibria in shallow lakes. *Trends in Ecology & Evolution*, 8 (8): 275-279. 10.1016/0169-5347(93)90254-m
- Scheffer, M.; Szabo, S.; Gragnani, A.; van Nes, E.H.; Rinaldi, S.; Kautsky, N.; Norberg, J.; Roijackers, R.M.M.; Franken, R.J.M., 2003. Floating plant dominance as a stable state. *Proceedings of the National Academy of Sciences of the United States of America*, 100 (7): 4040-4045. 10.1073/pnas.0737918100
- Scheffer, M.; Westley, F.; Brock, W.A.; Holmgren, M., 2001. Linking theories from ecology, economy, and sociology. In: Gunderson, L.H.; Holling, C.S., eds. *Panarchy: Understanding transformations in human and natural systems*. Broché, 195-240

- Schein, A.; Courtenay, S.C.; Crane, C.S.; Teather, K.L.; van den Heuvel, M.R., 2012. The Role of Submerged Aquatic Vegetation in Structuring the Nearshore Fish Community Within an Estuary of the Southern Gulf of St. Lawrence. *Estuaries and Coasts*, 35 (3): 799-810. 10.1007/s12237-011-9466-7
- Schelske, C.L., 2009. Eutrophication: Focus on Phosphorus. *Science*, 324 (5928): 722-722
- Scherer, L.; Pfister, S., 2015. Modelling spatially explicit impacts from phosphorus emissions in agriculture. *International Journal of Life Cycle Assessment*, 20 (6): 785-795. 10.1007/s11367-015-0880-0
- Schernewski, G.; Wielgat, M., 2001. Eutrophication of the shallow Szczecin Lagoon (Baltic Sea): modelling, management and the impact of weather. In: Brebbia, C.A., ed. *Coastal Engineering V: Computer Modelling of Seas and Coastal Regions*. (Environmental Studies Series), Vol.6, 87-98
- Schiavon, M.; Moro, I.; Pilon-Smits, E.A.H.; Mattozo, V.; Malagoli, M.; Dalla Vecchia, F., 2012. Accumulation of selenium in Ulva sp and effects on morphology, ultrastructure and antioxidant enzymes and metabolites. *Aquatic Toxicology*, 122: 222-231. 10.1016/j.aquatox.2012.06.014
- Schiewer, U.; Schernewski, G., 2002. Baltic Coastal Ecosystem Dynamics and Integrated Coastal Zone Management.
- Schindler, D.; Armstrong, F.; Holmgren, S.; Brunskill, G., 1971. Eutrophication of Lake 227, Experimental Lakes Area, northwestern Ontario, by addition of phosphate and nitrate. *Journal of the Fisheries Board of Canada*, 28 (11): 1763-1782
- Schindler, D.W., 1974. Eutrophication and recovery in experimental lakes: implications for lake management. *Science*, 184: 897-899
- Schindler, D.W., 1977. Evolution of phosphorus limitation in lakes. *Science*, 195 (4275): 260-262. 10.1126/science.195.4275.260
- Schindler, D.W., 2006. Recent advances in the understanding and management of eutrophication. *Limnology and Oceanography*, 51 (1): 356-363
- Schindler, D.W., 2009. Lakes as sentinels and integrators for the effects of climate change on watersheds, airsheds, and landscapes. *Limnology and Oceanography*, 54: 2349-2358
- Schindler, D.W., 2012. The dilemma of controlling cultural eutrophication of lakes. *Proceedings of the Royal Society B-Biological Sciences*, 279 (1746): 4322-4333. 10.1098/rspb.2012.1032
- Schindler, D.W.; Hecky, R.; Findlay, D.; Stainton, M.; Parker, B.; Paterson, M.; Beaty, K.; Lyng, M.; Kasian, S., 2008. Eutrophication of lakes cannot be controlled by reducing nitrogen input: results of a 37-year whole-ecosystem experiment. *Proceedings of the National Academy of Sciences*, 105 (32): 11254-11258
- Schindler, D.W.; Hecky, R.E., 2009. Eutrophication: More Nitrogen Data Needed. *Science*, 324 (5928): 721-722
- Schindler, D.W.; Hecky, R.E.; Findlay, D.L.; Stainton, M.P.; Parker, B.R.; Paterson, M.J.; Beaty, K.G.; Lyng, M.; Kasian, S.E.M., 2008. Eutrophication of lakes cannot be controlled by reducing nitrogen input: Results of a 37-year whole-ecosystem experiment. *Proceedings of the National Academy of Sciences of the United States of America*, 105 (32): 11254-11258. 10.1073/pnas.0805108105
- Schlesinger, W.H.; Reynolds, J.F.; Cunningham, G.L.; Huenneke, L.F.; Jarrell, W.M.; Virginia, R.A.; Whitford, W.G., 1990. BIOLOGICAL FEEDBACKS IN GLOBAL DESERTIFICATION. *Science*, 247 (4946): 1043-1048. 10.1126/science.247.4946.1043
- Schmoker, C.; Russo, F.; Drillet, G.; Trottet, A.; Mahjoub, M.S.; Hsiao, S.H.; Larsen, O.; Tun, K.; Calbet, A., 2016. Effects of eutrophication on the planktonic food web dynamics of marine coastal ecosystems: The case study of two tropical inlets. *Marine Environmental Research*, 119: 176-188. 10.1016/j.marenvres.2016.06.005
- Schneider, D.W., 2000. Local knowledge, environmental politics, and the founding of ecology in the United States. Stephen Forbes and "The Lake as a Microcosm" (1887). *Isis*, 91 (4): 681-705
- Schnoor, J.L.; O'Connor, D.J., 1980. A steady-state eutrophication model for lakes. *Water Research*, 14 (11): 1651-1665. 10.1016/0043-1354(80)90071-8
- Schoelynck, J.; Puijalon, S.; Meire, P.; Struyf, E., 2015. Thigmomorphogenetic responses of an aquatic macrophyte to hydrodynamic stress. *Frontiers in Plant Science*, 6. 10.3389/fpls.2015.00043
- Scholtens, R.; Dore, C.J.; Jones, B.M.R.; Lee, D.S.; Phillips, V.R., 2004. Measuring ammonia emission rates from livestock buildings and manure stores - part 1: development and validation of external tracer ratio, internal tracer ratio and passive flux sampling methods. *Atmospheric Environment*, 38 (19): 3003-3015. 10.1016/j.atmosenv.2004.02.030
- Schories, D.; Anibal, J.; Chapman, A.S.; Herre, E.; Isaksson, I.; Lillebo, A.I.; Pihl, L.; Reise, K.; Sprung, M.; Thiel, M., 2000. Flagging greens: hydrobiid snails as substrata for the development of green algal mats (*Enteromorpha spp.*) on tidal flats of North Atlantic coasts. *Marine Ecology Progress Series*, 199: 127-136. 10.3354/meps199127
- Schott, C.; Billen, G., 2012. Agriculture et qualité des eaux dans le bassin de la Seine : une résistible dégradation ? *Pour*, 213 (1): 45-52. 10.3917/pour.213.0045
- Schoumans, O.F.; Chardon, W.J.; Bechmann, M.E.; Gascuel-Odoux, C.; Hofman, G.; Kronvang, B.; Rubæk, G.H.; Ulén, B.; Dorioz, J.M., 2014. Mitigation options to reduce phosphorus losses from the agricultural sector and improve surface water quality: A review. *Science of the Total Environment*, 468-469: 1255-1266. 10.1016/j.scitotenv.2013.08.061
- Schramm, W., 1996. *Marine benthic vegetation: recent changes and the effects of eutrophication*. Springer Science & Business Media
- Schramm, W.; Nienhuis, P.H., 1996. Introduction. *Marine Benthic Vegetation*. Springer, 1-4
- Schramm, W.; Nienhuis, P.H., eds., 1996. *Marine benthic vegetation: Recent changes and the effects of eutrophication*. Ecological studies. Berlin; New York: Springer-Verlag, Pages

- Schröder, J.J.; Neeteson, J.J.; Oenema, O.; Struik, P.C., 2000. Does the crop or the soil indicate how to save nitrogen in maize production? Reviewing the state of the art. *Field Crops Research*, 66: 151-164
- Schröder, V., 1988. Sublittoral erosion of Untersee (Lake Constance, Europe). Late consequences of eutrophication and hydrological phenomenon [German]. *Archiv Fur Hydrobiologie*, 112 (2): 265-278
- Schuffert, J.D.; Kastner, M.; Emanuele, G.; Jahnke, R.A., 1990. Carbonate-ion substitution in francolite - a new equation. *Geochimica Et Cosmochimica Acta*, 54 (8): 2323-2328. 10.1016/0016-7037(90)90058-s
- SCHURR, J.; RUCHTI, J., 1977. DYNAMICS OF O<sub>2</sub> AND CO<sub>2</sub> EXCHANGE, PHOTOSYNTHESIS, AND RESPIRATION IN RIVERS FROM TIME-DELAYED CORRELATIONS WITH IDEAL SUNLIGHT. *Limnology and Oceanography*, 22 (2): 208-225
- Schwalb, A.N.; Bouffard, D.; Boegman, L.; Leon, L.; Winter, J.G.; Molot, L.A.; Smith, R.E.H., 2015. 3D modelling of dreissenid mussel impacts on phytoplankton in a large lake supports the nearshore shunt hypothesis and the importance of wind-driven hydrodynamics. *Aquatic Sciences*, 77 (1): 95-114. 10.1007/s00027-014-0369-0
- Schweikert, K.; Burritt, D., 2011. The impact of coumaphos on the antioxidant metabolism in ULVA SP. *European Journal of Phycology*, 46 (1, SI): 155
- Schweikert, K.; Burritt, D.J., 2012. The organophosphate insecticide Coumaphos induces oxidative stress and increases antioxidant and detoxification defences in the green macroalgae Ulva pertusa. *Aquatic Toxicology*, 122: 86-92. 10.1016/j.aquatox.2012.05.003
- Scully, M.E., 2016. The contribution of physical processes to inter-annual variations of hypoxia in Chesapeake Bay: A 30-yr modeling study. *Limnology and Oceanography*, 61 (6): 2243-2260. 10.1002/lno.10372
- Scully, M.E., 2016. Mixing of dissolved oxygen in Chesapeake Bay driven by the interaction between wind-driven circulation and estuarine bathymetry. *Journal of Geophysical Research-Oceans*, 121 (8): 5639-5654. 10.1002/2016jc011924
- Sea, W., 1996. Recent changes in the contributions of river rhine and north sea to the eutrophication of the western dutch wadden sea. 30 (1): 27-39
- Sebastian, P.; Stibor, H.; Berger, S.; Diehl, S., 2012. Effects of water temperature and mixed layer depth on zooplankton body size. *Marine Biology*, 159 (11): 2431-2440. 10.1007/s00227-012-1931-8
- Sebilo, M.; Mayer, B.; Nicolardot, B.; Pinay, G.; Mariotti, A., 2013. Long-term fate of nitrate fertilizer in agricultural soils. *Proceedings of the National Academy of Sciences*, 110 (45): 18185-18189. 10.1073/pnas.1305372110
- Segura, A.M.; Kruk, C.; Calliari, D.; Fort, H., 2013. Use of a morphology-based functional approach to model phytoplankton community succession in a shallow subtropical lake. *Freshwater Biology*, 58 (3): 504-512. 10.1111/j.1365-2427.2012.02867.x
- Seip, K.L., 1991. The ecosystem of a mesotrophic lake .1. Simulating plankton biomass and the timing of phytoplankton blooms. *Aquatic Sciences*, 53 (2-3): 239-262. 10.1007/BF00877061
- Seitz, R.D.; Wennhage, H.; Bergström, U.; Lipcius, R.N.; Ysebaert, T., 2014. Ecological value of coastal habitats for commercially and ecologically important species. *ICES Journal of Marine Science: Journal du Conseil*, (71): 648-665. 10.1093/icesjms/fst152
- Seitzinger, S.; Harrison, J.A.; Bohlke, J.K.; Bouwman, A.F.; Lowrance, R.; Peterson, B.; Tobias, C.; Van Drecht, G., 2006. Denitrification across landscapes and waterscapes: A synthesis. *Ecological Applications*, 16 (6): 2064-2090. 10.1890/1051-0761(2006)016[2064:dalawa]2.0.co;2
- Seitzinger, S.P.; Harrison, J.A.; Dumont, E.; Beusen, A.H.W.; Bouwman, A.F., 2005. Sources and delivery of carbon, nitrogen, and phosphorus to the coastal zone: An overview of Global Nutrient Export from Watersheds (NEWS) models and their application. *Global Biogeochemical Cycles*, 19 (4). 10.1029/2005gb002606
- Seitzinger, S.P.; Harrison, J.A.; Dumont, E.; Beusen, A.H.W.; Bouwman, A.F., 2005. Sources and delivery of carbon, nitrogen, and phosphorus to the coastal zone: An overview of Global Nutrient Export from Watersheds (NEWS) models and their application: GLOBAL EXPORT OF C, N, AND P TO COASTAL SYSTEMS. *Global Biogeochemical Cycles*, 19 (4): n/a-n/a. 10.1029/2005GB002606
- Sekino, T.; Genkai-Kato, M.; Kawabata, Z.; Melnik, N.G.; Logacheva, N.P.; Belykh, O.I.; Obolkina, L.A.; Bondarenko, N.A.; Khodzher, T.V.; Gorlmnova, L.A.; Tanichev, A.I.; Yoshida, T.; Kagami, M.; Gurung, T.B.; Urabe, J.; Higashi, M.; Nakanishi, M., 2007. Role of phytoplankton size distribution in lake ecosystems revealed by a comparison of whole plankton community structure between Lake Baikal and Lake Biwa. *Limnology*, 8 (3): 227-232. 10.1007/s10201-007-0218-0
- Sellers, T.; Bukaveckas, P., 2003. Phytoplankton production in a large, regulated river: A modeling and mass balance assessment. *Limnology and Oceanography*, 48 (4): 1476-1487
- Sengco, M.R.; Li, A.S.; Tugend, K.; Kulis, D.; Anderson, D.M., 2001. Removal of red- and brown-tide cells using clay flocculation. I. Laboratory culture experiments with *Gymnodinium breve* and *Aureococcus anophagefferens*. *Marine Ecology Progress Series*, 210: 41-53. 10.3354/meps210041
- Senthilkumar, K.; Mollier, A.; Delmas, M.; Pellerin, S.; Nesme, T., 2014. Phosphorus recovery and recycling from waste: An appraisal based on a French case study. *Resources, Conservation and Recycling*, 87: 97-108. 10.1016/j.resconrec.2014.03.005
- Senthilkumar, K.; Nesme, T.; Mollier, A.; Pellerin, S., 2012. Conceptual design and quantification of phosphorus flows and balances at the country scale: The case of France: DESIGN OF P FLOWS FOR FRANCE. *Global Biogeochemical Cycles*, 26 (2): n/a-n/a. 10.1029/2011GB004102
- Senthilkumar, K.; Nesme, T.; Mollier, A.; Pellerin, S., 2012. Regional-scale phosphorus flows and budgets within France: The importance of agricultural production systems. *Nutrient Cycling in Agroecosystems*, 92 (2): 145-159. 10.1007/s10705-011-9478-5

- Seo, A.; Lee, K.; Kim, B.; Choung, Y., 2014. Classifying plant species indicators of eutrophication in Korean lakes. *Paddy and Water Environment*, 12: S29-S40. 10.1007/s10333-014-0437-z
- Seppala, J.; Knuutila, S.; Silvo, K., 2004. Eutrophication of aquatic ecosystems - A new method for calculating the potential contributions of nitrogen and phosphorus. *International Journal of Life Cycle Assessment*, 9 (2): 90-100. 10.1065/lca2004.02.145
- Sepplä, J.; Posch, M.; Johansson, M.; Hettelingh, J.P., 2006. Country-dependent characterisation factors for acidification and terrestrial eutrophication based on accumulated exceedance as an impact category indicator. *International Journal of Life Cycle Assessment*, 11 (6): 403-416. 10.1065/lca2005.06.215
- Sferratore, A.; Billen, G.; Garnier, J.; Smedberg, E.; Humborg, C.; Rahm, L., 2008. Modelling nutrient fluxes from sub-arctic basins: Comparison of pristine vs. dammed rivers. *Journal of Marine Systems*, 73 (3-4): 236-249. 10.1016/j.jmarsys.2007.10.012
- Sferratore, A.; Billen, G.; Garnier, J.; Thery, S., 2005. Modeling nutrient (N, P, Si) budget in the Seine watershed: Application of the Riverstrahler model using data from local to global scale resolution. *Global Biogeochemical Cycles*, 19 (4). 10.1029/2005gb002496
- Sfriso, A., 1995. Temporal and spatial responses of growth of *Ulva rigida* CAg to environmental and tissue concentrations of nutrients in the lagoon of Venice. *Botanica Marina*, 38 (6): 557-573. 10.1515/botm.1995.38.1-6.557
- Sfriso, A.; Pavoni, B.; Marcomini, A.; Orio, A.A., 1992. Macroalgae, nutrient cycles, and pollutants in the Lagoon of Venice. *Estuaries*, 15 (4): 517-528. 10.2307/1352394
- Sha, J.; Li, Z.; Swaney, D.P.; Hong, B.; Wang, W.; Wang, Y., 2014. Application of a Bayesian Watershed Model Linking Multivariate Statistical Analysis to Support Watershed-Scale Nitrogen Management in China. *Water Resources Management*, 28 (11): 3681-3695. 10.1007/s11269-014-0696-x
- Shannon, J.D., 1991. Modeled Sulfur Deposition Trends Since 1900 in North America. In: van Dop, H.; Steyn, D.G., eds. *Air Pollution Modeling and Its Application VIII*. Boston, MA: Springer US, 61-68. 10.1007/978-1-4615-3720-5\_3
- Sharp, J.H., 2001. Marine and aquatic communities, stress from eutrophication. *Encyclopedia of biodiversity*. Vol.4, 1-11
- Sharpley, A., 2016. Managing agricultural phosphorus to minimize water quality impacts. *Scientia Agricola*, 73 (1): 1-8. 10.1590/0103-9016-2015-0107
- Sharpley, A.; Daniel, T.; Wright, B.; Kleinman, P.; Sobecki, T.; Parry, R.; Joern, B., 1999. National research project to identify sources of agricultural phosphorus loss. *Better Crops*, 83 (4): 12-14
- Sharpley, A.; Jarvie, H.P.; Buda, A.; May, L.; Spears, B.; Kleinman, P., 2013. Phosphorus legacy: overcoming the effects of past management practices to mitigate future water quality impairment. *J Environ Qual*, 42 (5): 1308-26. 10.2134/jeq2013.03.0098
- Sharpley, A.N.; Bergstrom, L.; Aronsson, H.; Bechmann, M.; Bolster, C.H.; Borling, K.; Djodjic, F.; Jarvie, H.P.; Schoumans, O.F.; Stamm, C.; Tonderski, K.S.; Ulen, B.; Uusitalo, R.; Withers, P.J.A., 2015. Future agriculture with minimized phosphorus losses to waters: Research needs and direction. *Ambio*, 44: S163-S179. 10.1007/s13280-014-0612-x
- Sharpley, A.N.; Kleinman, P.J.A.; Jordan, P.; Bergstrom, L.; Allen, A.L., 2009. Evaluating the Success of Phosphorus Management from Field to Watershed. *Journal of Environmental Quality*, 38 (5): 1981-1988. 10.2134/jeq2008.0056
- Sharpley, A.N.; Kleinman, P.J.A.; McDowell, R.W.; Gitau, M.; Bryant, R.B., 2002. Modeling phosphorus transport in agricultural watersheds: Processes and possibilities. *Journal of Soil and Water Conservation*, 57 (6): 425-439
- Shatwell, T.; Adrian, R.; Kirillin, G., 2016. Planktonic events may cause polymictic-dimictic regime shifts in temperate lakes. *Sci Rep*, 6: 24361. 10.1038/srep24361
- Shaviv, A.; Mikkelsen, R.L., 1993. CONTROLLED-RELEASE FERTILIZERS TO INCREASE EFFICIENCY OF NUTRIENT USE AND MINIMIZE ENVIRONMENTAL DEGRADATION - A REVIEW. *Fertilizer Research*, 35 (1-2): 1-12. 10.1007/bf00750215
- Shaw, W.D.; Wlodarz, M., 2013. Ecosystems, ecological restoration, and economics: Does habitat or resource equivalency analysis mean other economic valuation methods are not needed? *Ambio*, 42 (5): 628-643. 10.1007/s13280-012-0351-9
- Shen, J., 2006. Optimal estimation of parameters for a estuarine eutrophication model. *Ecological Modelling*, 191 (3-4): 521-537. 10.1016/j.ecolmodel.2005.05.020
- Shen, J.; Kuo, A.Y., 1996. Inverse estimation of parameters for an estuarine eutrophication model. *Journal of Environmental Engineering-Asce*, 122 (11): 1031-1040. 10.1061/(asce)0733-9372(1996)122:11(1031)
- Shen, J.; Kuo, A.Y., 1998. Application of inverse method to calibrate estuarine eutrophication model. *Journal of Environmental Engineering-Asce*, 124 (5): 409-418. 10.1061/(asce)0733-9372(1998)124:5(409)
- Shen, Z.Y.; Gong, Y.W.; Li, Y.H.; Hong, Q.; Xu, L.; Liu, R.M., 2009. A comparison of WEPP and SWAT for modeling soil erosion of the Zhangjiachong Watershed in the Three Gorges Reservoir Area. *Agricultural Water Management*, 96 (10): 1435-1442. 10.1016/j.agwat.2009.04.017
- Shepherd, D.; Burgess, D.; Jickells, T.; Andrews, J.; Cave, R.; Turner, R.K.; Aldridge, J.; Parker, E.R.; Young, E., 2007. Modelling the effects and economics of managed realignment on the cycling and storage of nutrients, carbon and sediments in the Blackwater estuary UK. *Estuarine Coastal and Shelf Science*, 73 (3-4): 355-367. 10.1016/j.ecss.2007.01.019
- Shi, W.; Wang, M., 2009. Green macroalgae blooms in the Yellow Sea during the spring and summer of 2008. *Journal of Geophysical Research-Oceans*, 114. 10.1029/2009jc005513
- Shi, W.Q.; Tan, W.Q.; Wang, L.J.; Pan, G., 2016. Removal of *Microcystis aeruginosa* using cationic starch modified soils. *Water Research*, 97: 19-25. 10.1016/j.watres.2015.06.029

- Shi, Z.; Huang, X.P.; Zhang, X.; Ye, F.; Liang, X.M.; Ni, Z.X.; Cai, W.X., 2014. A 2011 drought event affecting distribution of nutrients and chlorophyll in the Zhujiang River estuary. *Chinese Journal of Oceanology and Limnology*, 32 (2): 433-443. 10.1007/s00343-014-3074-x
- Shimoda, Y.; Arhonditsis, G.B., 2016. Phytoplankton functional type modelling: Running before we can walk? A critical evaluation of the current state of knowledge. *Ecological Modelling*, 320: 29-43. 10.1016/j.ecolmodel.2015.08.029
- Short, F.T.; Kosten, S.; Morgan, P.A.; Malone, S.; Moore, G.E., 2016. Impacts of climate change on submerged and emergent wetland plants. *Aquatic Botany*, 135: 3-17. <http://dx.doi.org/10.1016/j.aquabot.2016.06.006>
- Short, F.T.; Neckles, H.A., 1999. The effects of global climate change on seagrasses. *Aquatic Botany*, 63 (3-4): 169-196. 10.1016/s0304-3770(98)00117-x
- Short, F.T.; Wyllie-Echeverria, S., 1996. Natural and human-induced disturbance of seagrasses. *Environmental Conservation*, 23 (1): 17-27
- Shrestha, R.R.; Dibike, Y.B.; Prowse, T.D., 2012. Modeling Climate Change Impacts on Hydrology and Nutrient Loading in the Upper Assiniboine Catchment. *Journal of the American Water Resources Association*, 48 (1): 74-89. 10.1111/j.1752-1688.2011.00592.x
- Siegel, D.; Doney, S.; Yoder, J., 2002. The North Atlantic spring phytoplankton bloom and Sverdrup's critical depth hypothesis. *Science*, 296 (5568): 730-733
- Silva, T.F.d.G.; Vinçon-Leite, B.; Giani, A.; Figueiredo, C.C.; Petrucci, G.; Lemaire, B.; Sperling, E.V.; Tassin, B.; Seidl, M.; Khac, V.T.; Viana, P.S.; Viana, V.F.L.; Toscano, R.A.; Rodrigues, B.H.M.; Nascimento, N.d.O., 2016. Modelagem da Lagoa da Pampulha: uma ferramenta para avaliar o impacto da bacia hidrográfica na dinâmica do fitoplâncton. *Engenharia Sanitária e Ambiental*, 21 (1): 95-108. 10.1590/S1413-4152201600100125692
- Silva-Santos, P.; Pardal, M.K.; Lopes, R.J.; Murias, T.; Cabral, J.A., 2006. A stochastic dynamic methodology (SDM) to the modelling of trophic interactionsl with a focus on estuarine eutrophication scenarios. *Ecological Indicators*, 6 (2): 394-408. 10.1016/j.ecolind.2005.05.001
- Simionato, C.G.; Clara Tejedor, M.L.; Campetella, C.; Guerrero, R.; Moreira, D., 2010. Patterns of sea surface temperature variability on seasonal to sub-annual scales at and offshore the Rio de la Plata estuary. *Continental Shelf Research*, 30 (19): 1983-1997. 10.1016/j.csr.2010.09.012
- Simmons, J.A., 2012. Toxicity of major cations and anions (Na<sup>+</sup>, K<sup>+</sup>, Ca<sup>2+</sup>, Cl<sup>-</sup>, and SO<sub>4</sub><sup>2-</sup>) to a macrophyte and an alga. *Environmental Toxicology and Chemistry*, 31 (6): 1370-1374. 10.1002/etc.1819
- Sincock, A.M.; Lees, M.J., 2002. Extension of the QUASAR River-Water Quality Model to Unsteady Flow Conditions. *Water and Environment Journal*, 16 (1): 12-17. 10.1111/j.1747-6593.2002.tb00361.x
- Sincock, A.M.; Wheater, H.S.; Whitehead, P.G., 2003. Calibration and sensitivity analysis of a river water quality model under unsteady flow conditions. *Journal of Hydrology*, 277: 214-229. 10.1016/S0022-1694(03)00127-6
- Singh, R.; Reed, P.M.; Keller, K., 2015. Many-objective robust decision making for managing an ecosystem with a deeply uncertain threshold response. *Ecology and Society*, 20 (3). 10.5751/ES-07687-200312
- Singh, S.; Bakshi, B.R., 2013. Accounting for the Biogeochemical Cycle of Nitrogen in Input-Output Life Cycle Assessment. *Environmental Science & Technology*, 47 (16): 9388-9396. 10.1021/es4009757
- Singh, S.; Bakshi, B.R., 2015. Footprints of carbon and nitrogen: Revisiting the paradigm and exploring their nexus for decision making. *Ecological Indicators*, 53: 49-60. 10.1016/j.ecolind.2015.01.001
- Singh, V.P.; Woolhiser, D.A., 2002. Mathematical modeling of watershed hydrology. *Journal of Hydrologic Engineering*, 7 (4): 270-292. 10.1061/(asce)1084-0699(2002)7:4(270)
- Sinha, E.; Michalak, A.; Balaji, V., 2017. Eutrophication will increase during the 21st century as a result of precipitation changes. *Science*, 357 (6349): 405-408
- Sironneau, J.; P., J.; J.-M., M.; R., D.; C., L., 2012. L'eau, Protection contre les pollutions nutritionnelles d'origine agricole. *Le Lamy environnement*
- Sjoeng, A.M.S.; Kaste, O.; Wright, R.F., 2009. Modelling future NO<sub>3</sub> leaching from an upland headwater catchment in SW Norway using the MAGIC model: II. Simulation of future nitrate leaching given scenarios of climate change and nitrogen deposition. *Hydrology Research*, 40 (2-3): 217-233. 10.2166/nh.2009.068
- Skarbøvik, E.; Shumka, S.; Mukaetov, D.; Nagothu, U.S., 2010. Harmonised monitoring of Lake Macro Prespa as a basis for Integrated Water Resources Management. *Irrigation and Drainage Systems*, 24 (3): 223-238. 10.1007/s10795-010-9099-1
- Skerratt, J.; Wild-Allen, K.; Rizwi, F.; Whitehead, J.; Coughanowr, C., 2013. Use of a high resolution 3D fully coupled hydrodynamic, sediment and biogeochemical model to understand estuarine nutrient dynamics under various water quality scenarios. *Ocean & Coastal Management*, 83: 52-66. 10.1016/j.ocecoaman.2013.05.005
- Skjærseth, J.B., 2010. Exploring the consequences of soft law and hard law: Implementing international nutrient commitments in Norwegian agriculture. *International Environmental Agreements: Politics, Law and Economics*, 10 (1): 1-14. 10.1007/s10784-009-9105-y
- Skogen, M.; Mathisen, L., 2009. Long-term effects of reduced nutrient inputs to the North Sea. *Estuarine Coastal and Shelf Science*, 82 (3): 433-442. 10.1016/j.ecss.2009.02.006
- Skogen, M.D.; Eilola, K.; Hansen, J.L.S.; Meier, H.E.M.; Molchanov, M.S.; Ryabchenko, V.A., 2014. Eutrophication status of the North Sea, Skagerrak, Kattegat and the Baltic Sea in present and future climates: A model study. *Journal of Marine Systems*, 132: 174-184. 10.1016/j.jmarsys.2014.02.004
- Skuras, D.; Wade, A.; Psaltopoulos, D.; Whitehead, P.; Kontolainou, A.; Erlandsson, M., 2014. An interdisciplinary modelling approach assessing the cost-effectiveness of agri-environmental measures on reducing nutrient concentration to

- WFD thresholds under climate change: the case of the Louros catchment. *Operational Research*, 14 (2): 205-224. 10.1007/s12351-014-0158-5
- Sliwinska-Wilczewska, S.; Pniewski, F.; Latala, A., 2016. Allelopathic activity of the picocyanobacterium *Synechococcus* sp under varied light, temperature, and salinity conditions. *International Review of Hydrobiology*, 101 (1-2): 69-77. 10.1002/iroh.201501819
- Slomp, C.; Epping, E.; Helder, W.; VanRaaphorst, W., 1996. A key role for iron-bound phosphorus in authigenic apatite formation in North Atlantic continental platform sediments. *Journal of Marine Research*, 54 (6): 1179-1205. 10.1357/0022240963213745
- Slomp, C.P.; Epping, E.H.G.; Helder, W.; VanRaaphorst, W., 1996. A key role for iron-bound phosphorus in authigenic apatite formation in North Atlantic continental platform sediments. *Journal of Marine Research*, 54 (6): 1179-1205. 10.1357/0022240963213745
- Slomp, C.P.; VanderGaast, S.J.; VanRaaphorst, W., 1996. Phosphorus binding by poorly crystalline iron oxides in North Sea sediments. *Marine Chemistry*, 52 (1): 55-73. 10.1016/0304-4203(95)00078-x
- Slomp, C.P.; Vanraaphorst, W., 1993. Phosphate adsorption in oxidized marine-sediments. *Chemical Geology*, 107 (3-4): 477-480. 10.1016/0009-2541(93)90235-b
- Smayda, T.J., 1997. Harmful algal blooms: Their ecophysiology and general relevance to phytoplankton blooms in the sea. *Limnology and Oceanography*, 42 (5): 1137-1153
- Smayda, T.J., 2008. Complexity in the eutrophication-harmful algal bloom relationship, with comment on the importance of grazing. *Harmful Algae*, 8 (1): 140-151. 10.1016/j.hal.2008.08.018
- Smayda, T.J., 2008. Complexity in the eutrophication–harmful algal bloom relationship, with comment on the importance of grazing. *Harmful Algae*, 8 (1): 140-151. 10.1016/j.hal.2008.08.018
- Smeets, E.; Weterings, R., 1999. *Environmental indicators: Typology and overview*. Copenhagen Technical report No. 25, 19.
- Smetacek, V.; Zingone, A., 2013. Green and golden seaweed tides on the rise. *Nature*, 504 (7478): 84-88. 10.1038/nature12860
- Smida, D.B.; Sahraoui, I.; Mabrouk, H.H.; Hlaili, A.S., 2012. Seasonal dynamics of genus *Alexandrium* (potentially toxic dinoflagellate) in the lagoon of Bizerte (North of Tunisia) and controls by the abiotic factors. *Comptes Rendus Biologies*, 335 (6): 406-416. 10.1016/j.crvi.2012.04.007
- Smil, V., 2001. *Enriching the earth : Fritz Haber, Carl Bosch, and the transformation of world food production*. Cambridge, Mass.: MIT Press
- Smith, A.J.; Bode, R.W.; Kleppel, G.S., 2007. A nutrient biotic index (NBI) for use with benthic macroinvertebrate communities. *Ecological Indicators*, 7 (2): 371-386. 10.1016/j.ecolind.2006.03.001
- Smith, D.G.; Croker, G.F.; McFarlane, K., 1995. Human perception of water appearance: 1. Clarity and colour for bathing and aesthetics. *New Zealand Journal of Marine and Freshwater Research*, 29 (1): 26
- Smith, D.G.; Croker, G.F.; McFarlane, K., 1995. Human perception of water appearance: 2. Colour judgment, and the influence of perceptual set on perceived water suitability for use. *New Zealand Journal of Marine and Freshwater Research*, 29 (1): 5. 10.1080/00288330.1995.9516638
- Smith, I.; Schallenberg, M., 2013. Occurrence of the agricultural nitrification inhibitor, dicyandiamide, in surface waters and its effects on nitrogen dynamics in an experimental aquatic system. *Agriculture Ecosystems & Environment*, 164: 23-31. 10.1016/j.agee.2012.09.002
- Smith, R.E.; Goodrich, D.C.; Quinton, J.N., 1995. Dynamic, distributed simulation of watershed erosion - the KINEROS2 and EUROSEM models. *Journal of Soil and Water Conservation*, 50 (5): 517-520
- Smith, S.D.P., 2014. The roles of nitrogen and phosphorus in regulating the dominance of floating and submerged aquatic plants in a field mesocosm experiment. *Aquatic Botany*, 112: 1-9. 10.1016/j.aquabot.2013.07.001
- Smith, S.L.; Yamanaka, Y., 2007. Optimization-based model of multinutrient uptake kinetics. *Limnology and Oceanography*, 52 (4): 1545-1558
- Smith, S.V.; Hollibaugh, J.T., 1989. Carbon-controlled nitrogen cycling in a marine macrocosm - An ecosystem-scale model for managing cultural eutrophication. *Marine Ecology Progress Series*, 52 (2): 103-109. 10.3354/meps052103
- Smith, V., 2003. Eutrophication of freshwater and coastal marine ecosystems - A global problem. *Environmental Science and Pollution Research*, 10 (2): 126-139. 10.1065/espr2002.12.142
- Smith, V.; Tilman, G.; Nekola, J., 1999. Eutrophication: impacts of excess nutrient inputs on freshwater, marine, and terrestrial ecosystems. *Environmental Pollution*, 100 (1-3): 179-196. 10.1016/S0269-7491(99)00091-3
- Smith, V.H., 1992. Effects of nitrogen - phosphorus supply ratios on nitrogen-fixation in agricultural and pastoral ecosystems. *Biogeochemistry*, 18 (1): 19-35. 10.1007/bf00000424
- Smith, V.H., 1998. *Cultural eutrophication of inland, estuarine, and coastal waters*. New York: Springer (*Successes, Limitations, and Frontiers in Ecosystem Science*)
- Smith, V.H., 2003. Eutrophication of freshwater and coastal marine ecosystems - A global problem. *Environmental Science and Pollution Research*, 10 (2): 126-139. 10.1065/espr2002.12.142
- Smith, V.H., 2003. Eutrophication of freshwater and coastal marine ecosystems a global problem. *Environmental Science and Pollution Research*, 10 (2): 126-139
- Smith, V.H.; Joye, S.B.; Howarth, R.W., 2006. Eutrophication of freshwater and marine ecosystems. *Limnology and Oceanography*, 51 (1part2): 351-355
- Smith, V.H.; Schindler, D.W., 2009. Eutrophication science: where do we go from here? *Trends in Ecology & Evolution*, 24: 201-207

- Smith, V.H.; Tilman, G.D.; Nekola, J.C., 1999. Eutrophication: impacts of excess nutrient inputs on freshwater, marine, and terrestrial ecosystems. *Environmental Pollution*, 100 (1): 179-196
- Smith, V.H.; Wood, S.A.; McBride, C.G.; Atalah, J.; Hamilton, D.P.; Abell, J., 2016. Phosphorus and nitrogen loading restraints are essential for successful eutrophication control of Lake Rotorua, New Zealand. *Inland Waters*, 6 (2): 273-283. 10.5268/iw-6.2.998
- Smits, A.J.M.; Vanavesaath, P.H.; Vandervelde, G., 1990. Germination requirements and seed banks of some Nymphaeid macrophytes - *Nymphaea alba* L. *Nuphar lutea* (L.) SM and *Nymphaoides peltata* (Gmel) O Kuntze. *Freshwater Biology*, 24 (2): 315-326. 10.1111/j.1365-2427.1990.tb00712.x
- Smits, J.G.C.; Vandermolen, D.T., 1993. Application of SWITCH, a model for sediment water exchange of nutrients. *Hydrobiologia*, 253 (1-3): 281-300. 10.1007/BF00050749
- Smitz, J.; Everbecq, E.; Delière, J.-F.; Descy, J.-P.; Wollast, R.; Vanderborght, J.-P., 1997. PEGASE, une méthodologie et un outil de simulation prévisionnelle pour la gestion de la qualité des eaux de surface. *Tribune de l'Eau (La)*, 50/4 (588):
- Smolders, A.J.P.; Lamers, L.P.M.; den Hartog, C.; Roelofs, J.G.M., 2003. Mechanisms involved in the decline of *Stratiotes aloides* L. in The Netherlands: sulphate as a key variable. *Hydrobiologia*, 506 (1-3): 603-610. 10.1023/B:HYDR.0000008551.56661.8e
- Smolders, A.J.P.; Lamers, L.P.M.; Lucassen, E.; Van der Velde, G.; Roelofs, J.G.M., 2006. Internal eutrophication: How it works and what to do about it - a review. *Chemistry and Ecology*, 22 (2): 93-111. 10.1080/02757540600579730
- Snodgrass, W.J., 1985. Lake-Ontario oxygen model .2. Errors associated with estimating transport across the thermocline. *Environmental Science & Technology*, 19 (2): 180-185. 10.1021/es00132a012
- Snodgrass, W.J., 1987. Analysis of models and measurements for sediment oxygen-demand in Lake Erie. *Journal of Great Lakes Research*, 13 (4): 738-756
- Snow, D.A.; Rochford, E.B.; Worden, S.K.; Benford, R.D., 1986. Frame alignment processes, micromobilization, and movement participation. *American Sociological Review*, 51 (4): 464-481. 10.2307/2095581
- Snyder, C.S.; Howarth, R.W.; Winstanley, D.; Ferber, D., 2001. Hypoxia, Fertilizer, and the Gulf of Mexico. *Science*, 292 (5521): 1485-1486
- Sobota, D.J.; Compton, J.E.; McCrackin, M.L.; Singh, S., 2015. Cost of reactive nitrogen release from human activities to the environment in the United States. *Environmental Research Letters*, 10 (2). 10.1088/1748-9326/10/2/025006
- Socolow, R.H., 1999. Nitrogen management and the future of food: Lessons from the management of energy and carbon. *Proceedings of the National Academy of Sciences of the United States of America*, 96 (11): 6001-6008. 10.1073/pnas.96.11.6001
- Söderqvist, T., 1998. Why Give up Money for the Baltic Sea? Motives for People's Willingness (or Reluctance) to Pay. *Environmental and Resource Economics*, 12 (2): 249-254. 10.1023/A:1008261509412
- Söderqvist, T., 1998. Why Give up Money for the Baltic Sea? Motives for People's Willingness (or Reluctance) to Pay. *Environmental and Resource Economics*, 12 (2): 249-254. 10.1023/A:1008261509412
- Soes, 2014. *L'environnement en France. ÉDITION 2014.*: Ministère de l'Énergie du Développement durable et de l'Énergie, 384.
- Soetaert, K.; Herman, P.M.J.; Kromkamp, J., 1994. Living in the twilight - Estimating net phytoplankton growth in the Westerschelde estuary (Netrherlands) by means of an ecosystem model (Moses). *Journal of Plankton Research*, 16 (10): 1277-1301. 10.1093/plankt/16.10.1277
- Soetaert, K.; Middelburg, J.J., 2009. Modeling eutrophication and oligotrophication of shallow-water marine systems: the importance of sediments under stratified and well-mixed conditions. *Hydrobiologia*, 629 (1): 239-254. 10.1007/s10750-009-9777-x
- Soetaert, K.; Rijswijk, P.V., 1993. Spatial and temporal patterns of the zooplankton in the Westerschelde estuary. 97 (1988): 47-59
- Sogard, S.M., 1992. Variability in growth rates of juvenile fishes in different estuarine habitats. *Marine Ecology - Progress Series*, (85): 35-53
- Sohlenius, G.; Emeis, K.C.; Andren, E.; Adren, T.; Kohly, A., 2001. Development of anoxia during the Holocene fresh-brackish water transition in the Baltic Sea. *Marine Geology*, 177 (3-4): 221-242. 10.1016/s0025-3227(01)00174-8
- Sohma, A.; Sekiguchi, Y.; Kuwae, T.; Nakamura, Y., 2008. A benthic-pelagic coupled ecosystem model to estimate the hypoxic estuary including tidal flat - Model description and validation of seasonal/daily dynamics. *Ecological Modelling*, 215 (1-3): 10-39. 10.1016/j.ecolmodel.2008.02.027
- Sohma, A.; Sekiguchi, Y.; Nakata, K., 2004. Modeling and evaluating the ecosystem of sea-grass beds, shallow waters without sea-grass, and an oxygen-depleted offshore area. *Journal of Marine Systems*, 45 (3-4): 105-142. 10.1016/j.jmarsys.2003.11.011
- Sohrabi, T.M.; Shirmohammadi, A.; Chu, T.W.; Montas, H.; Nejadhashemi, A.P., 2003. Uncertainty analysis of hydrologic and water quality predictions for a small watershed using SWAT2000. *Environmental Forensics*, 4 (4): 229-238. 10.1080/714044368
- Solidoro, C.; Brando, V.; Dejak, C.; Franco, D.; Pastres, R.; Pecenik, G., 1997. Long term simulations of population dynamics of *Ulva* r. in the lagoon of Venice. *Ecological Modelling*, 102 (2-3): 259-272. 10.1016/S0304-3800(97)00060-4
- Solidoro, C.; Brando, V.E.; Dejak, C.; Franco, D.; Pastres, R.; Pecenik, G., 1997. Long term simulations of population dynamics of *Ulva* r. in the lagoon of Venice. *Ecological Modelling*, 102 (2-3): 259-272. 10.1016/S0304-3800(97)00060-4
- Solidoro, C.; Dejak, C.; Franco, D.; Pastres, R.; Pecenik, G., 1995. A model for macroalgae and phytoplankton growth in the Venice lagoon. *Environment International*, 21 (5): 619-626. 10.1016/0160-4120(95)00080-5

- Solidoro, C.; Pecenik, G.; Pastres, R.; Franco, D.; Dejak, C., 1997. Modelling macroalgae (*Ulva rigida*) in the Venice lagoon: Model structure identification and first parameters estimation. *Ecological Modelling*, 94 (2-3): 191-206. 10.1016/S0304-3800(96)00025-7
- Solomon, C.; Bruesewitz, D.; Richardson, D.; Rose, K.; Van de Bogert, M.; Hanson, P.; Kratz, T.; Larget, B.; Adrian, R.; Babin, B.; Chiu, C.; Hamilton, D.; Gaiser, E.; Hendricks, S.; Istvanovics, V.; Laas, A.; O'Donnell, D.; Pace, M.; Ryder, E.; Staehr, P.; Torgersen, T.; Vanni, M.; Weathers, K.; Zhu, G., 2013. Ecosystem respiration: Drivers of daily variability and background respiration in lakes around the globe. *Limnology and Oceanography*, 58 (3): 849-866. 10.4319/lo.2013.58.3.0849
- Somero, G.N., 2012. The Physiology of Global Change: Linking Patterns to Mechanisms. In: Carlson, C.A.; Giovannoni, S.J., eds. *Annual Review of Marine Science, Vol 4*. (Annual Review of Marine Science), Vol.4, 39-61. 10.1146/annurev-marine-120710-100935
- Sommer, S.G.; Sibbesen, E.; Nielsen, T.; Schjorring, J.K.; Olesen, J.E., 1996. A passive flux sampler for measuring ammonia volatilization from manure storage facilities. *Journal of Environmental Quality*, 25 (2): 241-247
- Sommer, U., 1984. The paradox of the plankton: Fluctuations of phosphorus availability maintain diversity of phytoplankton in flow-through cultures. *Limnology and Oceanography*, 29 (3): 633-636
- Sommer, U.; Adrian, R.; De Senerpont Domis, L.; Elser, J.J.; Gaedke, U.; Ibelings, B.; Jeppesen, E.; Lürling, M.; Molinero, J.C.; Mooij, W.M., 2012. Beyond the Plankton Ecology Group (PEG) model: mechanisms driving plankton succession. *Annual Review of Ecology, Evolution, and Systematics*, 43: 429-448
- Sommer, U.; Adrian, R.; Domis, L.D.; Elser, J.J.; Gaedke, U.; Ibelings, B.; Jeppesen, E.; Lürling, M.; Molinero, J.C.; Mooij, W.M.; van Donk, E.; Winder, M., 2012. Beyond the Plankton Ecology Group (PEG) Model: Mechanisms driving plankton succession. In: Futuyma, D.J., ed. *Annual Review of Ecology, Evolution, and Systematics, Vol 43*. Palo Alto: Annual Reviews (Annual Review of Ecology Evolution and Systematics), Vol.43, 429-448. 10.1146/annurev-ecolsys-110411-160251
- Sommer, U.; Gliwicz, Z.M.; Lampert, W.; Duncan, A., 1986. The PEG-model of seasonal succession of planktonic events in fresh waters. *Arch. Hydrobiol.*, 106 (4): 433-471
- Sommer, U.; Lengfellner, K., 2008. Climate change and the timing, magnitude, and composition of the phytoplankton spring bloom. *Global Change Biology*, 14 (6): 1199-1208
- Søndergaard, M.; Jensen, J.P.; Jeppesen, E., 2005. Seasonal response of nutrients to reduced phosphorus loading in 12 Danish lakes. *Freshwater Biology*, 50 (10): 1605-1615. 10.1111/j.1365-2427.2005.01412.x
- Søndergaard, M.; Jeppesen, E.; Peder Jensen, J.; Lildal Amsinck, S., 2005. Water Framework Directive: ecological classification of Danish lakes. *Journal of Applied Ecology*, 42 (4): 616-629
- Søndergaard, M.; Larsen, S.E.; Johansson, L.S.; Lauridsen, T.L.; Jeppesen, E., 2016. Ecological classification of lakes: Uncertainty and the influence of year-to-year variability. *Ecological Indicators*, 61: 248-257. 10.1016/j.ecolind.2015.09.024
- Søndergaard, M.; Larsen, S.E.; Jorgensen, T.B.; Jeppesen, E., 2011. Using chlorophyll a and cyanobacteria in the ecological classification of lakes. *Ecological Indicators*, 11 (5): 1403-1412. 10.1016/j.ecolind.2011.03.002
- Sonneveld, B.; Nearing, M.A., 2003. A nonparametric/parametric analysis of the Universal Soil Loss Equation. *Catena*, 52 (1): 9-21. 10.1016/s0341-8162(02)00150-9
- Sophocleous, M., 2002. Interactions between groundwater and surface water: the state of the science. *Hydrogeology Journal*, 10 (1): 52-67. 10.1007/s10040-001-0170-8
- Soranno, P.A.; Cheruvellil, K.S.; Stevenson, R.J.; Rollins, S.L.; Holden, S.W.; Heaton, S.; Torng, E., 2008. A framework for developing ecosystem-specific nutrient criteria: Integrating biological thresholds with predictive modeling. *Limnology and Oceanography*, 53 (2): 773-787. 10.4319/lo.2008.53.2.0773
- Souchu, P.; Bec, B.a.; Smith, V.H.; Laugier, T.; Fiandrino, A.; Benau, L.; Orsoni, V.r.; Collos, Y.; Vaquer, A., 2010. Patterns in nutrient limitation and chlorophyll a along an anthropogenic eutrophication gradient in French Mediterranean coastal lagoons. *Canadian Journal of Fisheries and Aquatic Sciences*, 67 (4): 743-753
- Souchu, P.; Oger-Jeanneret, H.; Lassus, P.; Sechet, V.; Le Magueresse, A.; Le Bihan, V., 2013. *Dinophag. Programme de recherche sur Dinophysis dans les eaux littorales des Pays de la Loire*.
- Souchu, P.; Vaquer, A.; Collos, Y.; Landrein, S.; Deslous-Paoli, J.M.; Bibent, B., 2001. Influence of shellfish farming activities on the biogeochemical composition of the water column in Thau lagoon. *Marine Ecology Progress Series*, 218: 141-152. 10.3354/meps218141
- Souignac, F.; Vinçon-Leite, B.; Lemaire, B.J.; Scarati, R.; Bonhomme, C.; Dubois, P.; Mezemate, Y.; Tchiguirinskaia, I.; Schertzer, D.; Tassin, B., 2017. Performance assessment of a 3D hydrodynamic model using high temporal resolution measurements in a shallow urban lake. *Environmental Modelling and Assessment*, in press:
- Soulsby, P.G.; Lowthion, D.; Houston, M., 1982. Effects of macroalgal mats on the ecology of intertidal mudflats. *Marine Pollution Bulletin*, 13 (5): 162-166. 10.1016/0025-326x(82)90087-x
- Sousa, A.I.; Martins, I.; Lillebo, A.I.; Flindt, M.R.; Pardal, M.A., 2007. Influence of salinity, nutrients and light on the germination and growth of Enteromorpha sp spores. *Journal of Experimental Marine Biology and Ecology*, 341 (1): 142–150. 10.1016/j.jembe.2006.09.020
- Souty-Grosset, C.; Anastacio, P.M.; Aquiloni, L.; Banha, F.; Choquer, J.; Chucholl, C.; Tricarico, E., 2016. The red swamp crayfish *Procambarus clarkii* in Europe: Impacts on aquatic ecosystems and human well-being. *Limnologica*, 58: 78-93. 10.1016/j.limno.2016.03.003

- Spatharis, S.; Roelke, D.L.; Dimitrakopoulos, P.G.; Kokkoris, G.D., 2011. Analyzing the (mis)behavior of Shannon index in eutrophication studies using field and simulated phytoplankton assemblages. *Ecological Indicators*, 11 (2): 697-703. 10.1016/j.ecolind.2010.09.009
- Spatharis, S.; Tsirtsis, G., 2013. Zipf-Mandelbrot model behavior in marine eutrophication: two way fitting on field and simulated phytoplankton assemblages. *Hydrobiologia*, 714 (1): 191-199. 10.1007/s10750-013-1536-3
- Spatharis, S.; Tsirtsis, G.; Danielidis, D.B.; Chi, T.D.; Mouillot, D., 2007. Effects of pulsed nutrient inputs on phytoplankton assemblage structure and blooms in an enclosed coastal area. *Estuarine, Coastal and Shelf Science*, 73 (3-4): 807-815. 10.1016/j.ecss.2007.03.016
- Spears, B.M.; Lurling, M.; Yasseri, S.; Castro-Castellon, A.T.; Gibbs, M.; Meis, S.; McDonald, C.; McIntosh, J.; Sleep, D.; Van Oosterhout, F., 2013. Lake responses following lanthanum-modified bentonite clay (Phoslock (R)) application: An analysis of water column lanthanum data from 16 case study lakes. *Water Research*, 47 (15): 5930-5942. 10.1016/j.watres.2013.07.016
- Spears, B.M.; Mackay, E.B.; Yasseri, S.; Gunn, L.D.M.; Waters, K.E.; Andrews, C.; Cole, S.; De Ville, M.; Kelly, A.; Meis, S.; Moore, A.L.; Nurnberg, G.K.; van Oosterhout, F.; Pitt, J.A.; Madgwick, G.; Woods, H.J.; Lurling, M., 2016. A meta-analysis of water quality and aquatic macrophyte responses in 18 lakes treated with lanthanum modified bentonite (Phoslock (R)). *Water Research*, 97: 111-121. 10.1016/j.watres.2015.08.020
- Spencer, R.; Pellerin, B.; Bergamaschi, B.; Downing, B.; Kraus, T.; Smart, D.; Dahgren, R.; Hernes, P., 2007. Diurnal variability in riverine dissolved organic matter composition determined by in situ optical measurement in the San Joaquin River (California, USA). *Hydrological Processes*, 21 (23): 3181-3189. 10.1002/hyp.6887
- Spierenburg, P.; Lucassen, E.C.H.E.T.; Lotter, A.F.; Roelofs, J.G.M., 2009. Could rising aquatic carbon dioxide concentrations favour the invasion of elodeids in isoetid-dominated softwater lakes? *Freshwater Biology*, 54 (9): 1819-1831
- Spiertz, H., 2013. Challenges for Crop Production Research in Improving Land Use, Productivity and Sustainability. *Sustainability*, 5 (4): 1632-1644. 10.3390/su5041632
- Spiertz, J.H.J., 2010. Nitrogen, sustainable agriculture and food security. A review. *Agronomy for Sustainable Development*, 30 (1): 43-55. 10.1051/agro:2008064
- Sproule-Jones, M., 2002. Institutional experiments in the restoration of the North American Great Lakes environment. *Canadian Journal of Political Science*, 35 (4): 835-857
- STABEL, H., 1986. CALCITE PRECIPITATION IN LAKE CONSTANCE - CHEMICAL-EQUILIBRIUM, SEDIMENTATION, AND NUCLEATION BY ALGAE. *Limnology and Oceanography*, 31 (5): 1081-1093
- Stadmark, J.; Conley, D.J., 2011. Mussel farming as a nutrient reduction measure in the Baltic Sea: Consideration of nutrient biogeochemical cycles. *Marine Pollution Bulletin*, 62 (7): 1385-1388. 10.1016/j.marpolbul.2011.05.001
- Staehr, P.; Bade, D.; Van de Bogert, M.; Koch, G.; Williamson, C.; Hanson, P.; Cole, J.; Kratz, T., 2010. Lake metabolism and the diel oxygen technique: State of the science. *Limnology and Oceanography-Methods*, 8: 628-644. 10.4319/lom.2010.8.0628|10.4319/lom.2010.8.628
- Staehr, P.; Sand-Jensen, K.; Raun, A.; Nilsson, B.; Kidmose, J., 2010. Drivers of metabolism and net heterotrophy in contrasting lakes. *Limnology and Oceanography*, 55 (2): 817-830. 10.4319/lo.2009.55.2.0817
- Staehr, P.A.; Testa, J.M.; Kemp, W.M.; Cole, J.J.; Sand-Jensen, K.; Smith, S.V., 2012. The metabolism of aquatic ecosystems: history, applications, and future challenges. *Aquatic Sciences*, 74 (1): 15-29. 10.1007/s00027-011-0199-2
- Stauffer, B.A.; Gellene, A.G.; Schnetzer, A.; Seubert, E.L.; Oberg, C.; Sukhatme, G.S.; Caron, D.A., 2012. An oceanographic, meteorological, and biological 'perfect storm' yields a massive fish kill. *Marine Ecology Progress Series*, 468: 231-243. 10.3354/meps09927
- Steele, J.H.J.H., 1974. *The structure of marine ecosystems*.
- Steen, H., 2004. Interspecific competition between Enteromorpha (Ulvales: Chlorophyceae) and Fucus (Fucales : Phaeophyceae) germlings: effects of nutrient concentration, temperature, and settlement density. *Marine Ecology Progress Series*, 278: 89-101. 10.3354/meps278089
- Steffen, M.M.; Belisle, B.S.; Watson, S.B.; Boyer, G.L.; Wilhelm, S.W., 2014. Status, causes and controls of cyanobacterial blooms in Lake Erie. *Journal of Great Lakes Research*, 40 (2): 215-225. 10.1016/j.jglr.2013.12.012
- Steffensen, D.A., 2008. Economic cost of cyanobacterial blooms. *Cyanobacterial harmful algal blooms: State of the science and research needs*. Springer, 855-865
- Steffensen, D.A., 2008. Economic cost of cyanobacterial blooms. *Advances in experimental medicine and biology*, 619: 855-865. 10.1007/978-0-387-75865-7\_37
- Steinbach, P., 2001. Situation and restoration of amphihaline migratory fishes in the Loire basin. *Bulletin Francais De La Peche Et De La Pisciculture*, (357-60): 263-276
- Steinman, A.D.; Rosen, B.H., 2000. Lotic-lentic linkages associated with Lake Okeechobee, Florida. *Journal of the North American Benthological Society*, 19 (4): 733-741. 10.2307/1468130
- Stelzer, R.S.; Likens, G.E., 2006. Effects of sampling frequency on estimates of dissolved silica export by streams: The role of hydrological variability and concentration-discharge relationships. *Water Resources Research*, 42 (7). 10.1029/2005wr004615
- Stenback, G.A.; Crumpton, W.G.; Schilling, K.E.; Helmers, M.J., 2011. Rating curve estimation of nutrient loads in Iowa rivers. *Journal of Hydrology*, 396 (1-2): 158-169. 10.1016/j.jhydrol.2010.11.006
- Stenger-Kovács, C.; Buczko, K.; Hajnal, E.; Padisák, J., 2007. Epiphytic, littoral diatoms as bioindicators of shallow lake trophic status: Trophic Diatom Index for Lakes (TDIL) developed in Hungary. *Hydrobiologia*, 589 (1): 141-154

- Stepanenko, V.; Mammarella, I.; Ojala, A.; Miettinen, H.; Lykosov, V.; Vesala, T., 2016. LAKE 2.0: a model for temperature, methane, carbon dioxide and oxygen dynamics in lakes. *Geoscientific Model Development*, 9 (5): 1977-2006. 10.5194/gmd-9-1977-2016
- Sterner, R.W., 1990. The ratio of nitrogen to phosphorus resupplied by herbivores: Zooplankton and the algal competitive arena. *The American Naturalist*, 136 (2): 209-229
- Sterner, R.W.; Elser, J.J., 2002. *Ecological stoichiometry: the biology of elements from molecules to the biosphere*. Princeton University Press
- Stets, E.; Kelly, V.; Crawford, C., 2015. Regional and Temporal Differences in Nitrate Trends Discerned from Long-Term Water Quality Monitoring Data. *Journal of the American Water Resources Association*, 51 (5): 1394-1407. 10.1111/1752-1688.12321
- Steward, J.S.; Lowe, E.F., 2010. General empirical models for estimating nutrient load limits for Florida's estuaries and inland waters. *Limnology and Oceanography*, 55 (1): 433-445. 10.4319/lo.2010.55.1.0433
- Stewart, J.W.B.; Tiessen, H., 1987. Dynamics of soil organic phosphorus. *Biogeochemistry*, 4 (1): 41-60. 10.1007/bf02187361
- Steyaert, P.; Olivier, G., 2007. The European Water Framework Directive: How ecological assumptions frame technical and social change. *Ecology and Society*, 12 (1):
- Stillman, J.H., 2003. Acclimation capacity underlies susceptibility to climate change. *Science*, 301 (5629): 65-65. 10.1126/science.1083073
- Stimson, J.; Conklin, E., 2008. Potential reversal of a phase shift: the rapid decrease in the cover of the invasive green macroalga *Dictyosphaeria cavernosa* Forsskål on coral reefs in Kāne'ohe Bay, Oahu, Hawai'i. *Coral Reefs*, 27 (4): 717-726. 10.1007/s00338-008-0409-0
- Stoddard, J.L.; Van Sickle, J.; Herlihy, A.T.; Brahnay, J.; Paulsen, S.; Peck, D.V.; Mitchell, R.; Pollard, A.I., 2016. Continental-Scale Increase in Lake and Stream Phosphorus: Are Oligotrophic Systems Disappearing in the United States? *Environmental Science & Technology*, 50 (7): 3409-3415. 10.1021/acs.est.5b05950
- Stomp, M., 2008. *Colourful coexistence: a new solution to the plankton paradox*. Amsterdam
- Stomp, M.; van Dijk, M.A.; van Overzee, H.M.; Wortel, M.T.; Sigon, C.A.; Egas, M.; Hoogveld, H.; Gons, H.J.; Huisman, J., 2008. The timescale of phenotypic plasticity and its impact on competition in fluctuating environments. *The American Naturalist*, 172 (5): E169-E185
- Stone, B.L.; White, A.K., 2012. Most probable number quantification of hypophosphate and phosphite oxidizing bacteria in natural aquatic and terrestrial environments. *Archives of Microbiology*, 194 (3): 223-228. 10.1007/s00203-011-0775-9
- Story, P.A.; Forsyth, D.R., 2008. Watershed conservation and preservation: Environmental engagement as helping behavior. *Journal of Environmental Psychology*, 28 (4): 305-317. 10.1016/j.jenvp.2008.02.005
- Stow, C.A.; Carpenter, S.R.; Lathrop, R.C., 1997. A Bayesian observation error model to predict cyanobacterial biovolume from spring total phosphorus in Lake Mendota, Wisconsin. *Canadian Journal of Fisheries and Aquatic Sciences*, 54 (2): 464-473. 10.1139/cjfas-54-2-464
- Stow, C.A.; Qian, S.S.; Craig, J.K., 2005. Declining threshold for hypoxia in the Gulf of Mexico. *Environmental Science & Technology*, 39 (3): 716-723. 10.1021/es0494120
- Stow, C.A.; Scavia, D., 2009. Modeling hypoxia in the Chesapeake Bay: Ensemble estimation using a Bayesian hierarchical model. *Journal of Marine Systems*, 76 (1-2): 244-250. 10.1016/j.jmarsys.2008.05.008
- Stramma, L.; Johnson, G.C.; Sprintall, J.; Mohrholz, V., 2008. Expanding oxygen-minimum zones in the tropical oceans. *Science*, 320 (5876): 655-658. 10.1126/science.1153847
- Strang, V., 2005. Common senses water, sensory experience and the generation of meaning. *Journal of Material Culture*, 10 (1): 28. 10.1177/1359183505050096
- Stratton, L.; O'Neill, M.S.; Kruk, M.E.; Bell, M.L., 2008. The persistent problem of malaria: addressing the fundamental causes of a global killer. *Soc Sci Med*, 67 (5): 854-62. 10.1016/j.socscimed.2008.05.013
- Straub, C.; Quillardet, P.; Vergalli, J.; De Marsac, N.T.; Humbert, J.-F., 2011. A day in the life of *Microcystis aeruginosa* strain PCC 7806 as revealed by a transcriptomic analysis. *Plos One*, 6 (1): e16208
- Strayer, D.L.; Beighley, R.E.; Thompson, L.C.; Brooks, S.; Nilsson, C.; Pinay, G.; Naiman, R.J., 2003. Effects of land cover on stream ecosystems: Roles of empirical models and scaling issues. *Ecosystems*, 6 (5): 407-423. 10.1007/s10021-002-0170-0
- Strayer, D.L.; Cid, N.; Malcom, H.M., 2011. Long-term changes in a population of an invasive bivalve and its effects. *Oecologia*, 165 (4): 1063-1072
- Strayer, D.L.; Cole, J.J.; Findlay, S.E.G.; Fischer, D.T.; Gephart, J.A.; Malcom, H.M.; Pace, M.L.; Rosi-Marshall, E.J., 2014. Decadal-Scale Change in a Large-River Ecosystem. *Bioscience*, 64 (6): 496-510. 10.1093/biosci/biu061
- Strayer, D.L.; Pace, M.L.; Caraco, N.F.; Cole, J.J.; Findlay, S.E.G., 2008. Hydrology and grazing jointly control a large-river food web. *Ecology*, 89 (1): 12-18. 10.1890/07-0979.1
- Streeter HW; EB, P., 1925. *A Study of Pollution and Natural Purification of the Ohio River*: United States Public Health Service, U.S. Department of Health, Education and Welfare.
- Strezov, A.S.; Nonova, T.P., 2005. Comparative analysis of heavy metal and radionuclide contaminants in Black Sea green and red macroalgae. *Water Science and Technology*, 51 (11): 1-8
- Stricker, A.-E.; Heduit, A., 2010. *Phosphore des eaux usées- Etat des lieux et perspectives. Rapport ONEMA du partenariat 2009 ONEMA-Irstea du domaine «Ecotechnologies et pollution»*, 54.
- Strous, M.; Jetten, M.S.M., 2004. Anaerobic oxidation of methane and ammonium. *Annual Review of Microbiology*, 58: 99-117. 10.1146/annurev.micro.58.030603.123605

- Strous, M.; Kuenen, J.G.; Jetten, M.S.M., 1999. Key physiology of anaerobic ammonium oxidation. *Applied and Environmental Microbiology*, 65 (7): 3248-3250
- Struijs, J.; Beusen, A.; de Zwart, D.; Huijbregts, M., 2011. Characterization factors for inland water eutrophication at the damage level in life cycle impact assessment. *International Journal of Life Cycle Assessment*, 16 (1): 59-64. 10.1007/s11367-010-0232-z
- Struyf, E.; Bal, K.D.; Backx, H.; Vrebos, D.; Casteleyn, A.; De Deckere, E.; Schoelynck, J.; Brendonck, L.; Raitt, L.M.; Meire, P., 2012. Nitrogen, phosphorus and silicon in riparian ecosystems along the Berg River (South Africa): The effect of increasing human land use. *Water Sa*, 38 (4): 597-606. 10.4314/wsa.v38i4.15
- Struyf, E.; Van Damme, S.; Meire, P., 2004. Possible effects of climate change on estuarine nutrient fluxes: a case study in the highly nutrified Schelde estuary (Belgium, The Netherlands). *Estuarine Coastal and Shelf Science*, 60 (4): 649-661. 10.1016/j.ecss.2004.03.004
- Stuart, N., 2007. Technology and epistemology: environmental mentalities and urban water usage. *Environmental Values*, 16 (4): 14. 10.3197/096327107X243213
- Stuhldreier, I.; Bastian, P.; Schonig, E.; Wild, C., 2015. Effects of simulated eutrophication and overfishing on algae and invertebrate settlement in a coral reef of Koh Phangan, Gulf of Thailand. *Marine Pollution Bulletin*, 92 (1-2): 35-44. 10.1016/j.marpolbul.2015.01.007
- Stumm, W.; Sulzberger, B., 1992. The cycling of iron in natural environments - considerations based on laboratory studies of heterogeneous redox processes. *Geochimica Et Cosmochimica Acta*, 56 (8): 3233-3257. 10.1016/0016-7037(92)90301-x
- Sturdvant, S.K.; Brush, M.J.; Diaz, R.J., 2013. Modeling the Effect of Hypoxia on Macrofauna Production in the Lower Rappahannock River, Chesapeake Bay, USA. *Plos One*, 8 (12). 10.1371/journal.pone.0084140
- Stutter, M.; Dawson, J.J.C.; Glendell, M.; Napier, F.; Potts, J.M.; Sample, J.; Vinten, A.; Watson, H., 2017. Evaluating the use of in-situ turbidity measurements to quantify fluvial sediment and phosphorus concentrations and fluxes in agricultural streams. *Science of the Total Environment*, 607: 391-402. 10.1016/j.scitotenv.2017.07.013
- Subbarao, G.V.; Sahrawat, K.L.; Nakahara, K.; Ishikawa, T.; Kishii, M.; Rao, I.M.; Hash, C.T.; George, T.S.; Srinivasa Rao, P.; Nardi, P.; Bonnett, D.; Berry, W.; Suenaga, K.; Lata, J.C., 2012. Biological Nitrification Inhibition—A Novel Strategy to Regulate Nitrification in Agricultural Systems. *Advances in Agronomy*. Elsevier, Vol.114, 249-302
- Suddick, E.C.; Davidson, E.A., 2012. *The Role of Nitrogen in Climate Change and the Impacts of Nitrogen-Climate Interactions on Terrestrial and Aquatic Ecosystems, Agriculture, and Human Health in the United States*: North American Nitrogen Center of the International Nitrogen Initiative (NANC-INI), Woods Hole Research Center, 149 Woods Hole Road, Falmouth, MA, 02540-1644 USA, Technical Report Submitted to the US National Climate Assessment., 212.
- Sueyoshi, M.; Ishiyama, N.; Nakamura, F., 2016. beta-diversity decline of aquatic insects at the microhabitat scale associated with agricultural land use. *Landscape and Ecological Engineering*, 12 (2): 187-196. 10.1007/s11355-015-0283-1
- Sugimoto, K.; Hiraoka, K.; Ohta, S.; Niimura, Y.; Terawaki, T.; Okada, M., 2007. Effects of ulvoid (*Ulva* spp.) accumulation on the structure and function of eelgrass (*Zostera marina* L.) bed. *Marine Pollution Bulletin*, 54 (10): 1582–1585. 10.1016/j.marpolbul.2007.06.008
- Sugimoto, R.; Kasai, A.; Miyajima, T.; Fujita, K., 2010. Modeling phytoplankton production in Ise Bay, Japan: Use of nitrogen isotopes to identify dissolved inorganic nitrogen sources. *Estuarine Coastal and Shelf Science*, 86 (3): 450-466. 10.1016/j.ecss.2009.10.011
- Suhr, K., 2014. Nitrogen removal in RAS farms for Baltic Sea coastal farming. *Sciences*, 7: 3259-3271
- Suikkanen, S.; Pulina, S.; Engstrom-Ost, J.; Lehtiniemi, M.; Lehtinen, S.; Brutemark, A., 2013. Climate Change and Eutrophication Induced Shifts in Northern Summer Plankton Communities. *Plos One*, 8 (6): 10. 10.1371/journal.pone.0066475
- Sumagaysay-Chavoso, N.S.; San Diego-McGlone, M.L.; David, L.T., 2004. Environmental capacity of receiving water as basis for regulating intensity of milkfish (*Chanos chanos* Forsskal) culture. *Journal of Applied Ichthyology*, 20 (6): 476-487. 10.1111/j.1439-0426.2004.00577.x
- Summers, R.N.; Guise, N.R.; Smirk, D.D.; Summers, K.J., 1996. Bauxite residue (red mud) improves pasture growth on sandy soils in Western Australia. *Australian Journal of Soil Research*, 34 (4): 569-581. 10.1071/sr9960569
- Sun, J.; Ji, X.W.; Zhang, R.; Huang, Y.; Liang, Y.; Du, J.H.; Xie, X.C.; Li, A.M., 2016. Endocrine disrupting compounds reduction and water quality improvement in reclaimed municipal wastewater: A field-scale study along Jialu River in North China. *Chemosphere*, 157: 232-240. 10.1016/j.chemosphere.2016.05.025
- Sun, K.-M.; Li, R.; Li, Y.; Xin, M.; Xiao, J.; Wang, Z.; Tang, X.; Pang, M., 2015. Responses of *Ulva prolifera* to short-term nutrient enrichment under light and dark conditions. *Estuarine Coastal and Shelf Science*, 163 (A, SI): 56–62. 10.1016/j.ecss.2015.03.018
- Sun, L.P.; Liu, Y.; Jin, H., 2009. Nitrogen removal from polluted river by enhanced floating bed grown canna. *Ecological Engineering*, 35 (1): 135-140. 10.1016/j.ecoleng.2008.09.016
- Sun, M.Y.; Aller, R.C.; Lee, C.; Wakeham, S.G., 2002. Effects of oxygen and redox oscillation on degradation of cell-associated lipids in surficial marine sediments. *Geochimica Et Cosmochimica Acta*, 66 (11): 2003-2012. 10.1016/s0016-7037(02)00830-x
- Sun, S.P.; Nacher, C.P.I.; Merkey, B.; Zhou, Q.; Xia, S.Q.; Yang, D.H.; Sun, J.H.; Smets, B.F., 2010. Effective Biological Nitrogen Removal Treatment Processes for Domestic Wastewaters with Low C/N Ratios: A Review. *Environmental Engineering Science*, 27 (2): 111-126. 10.1089/ees.2009.0100

- Sun, X.; Bernard-Jannin, L.; Garneau, C.; Volk, M.; Arnold, J.G.; Srinivasan, R.; Sauvage, S.; Sánchez-Pérez, J.-M., 2016. Improved simulation of river water and groundwater exchange in an alluvial plain using the SWAT model. *Hydrological Processes*, 30 (2): 187-202
- Sun, X.; Bernard-Jannin, L.; Garneau, C.; Volk, M.; Arnold, J.G.; Srinivasan, R.; Sauvage, S.; Sanchez-Perez, J.M., 2016. Improved simulation of river water and groundwater exchange in an alluvial plain using the SWAT model. *Hydrological Processes*, 30 (2): 187-202. 10.1002/hyp.10575
- Sun, X.; Bernard-Jannin, L.; Sauvage, S.; Garneau, C.; Arnold, J.G.; Srinivasan, R.; Sánchez-Pérez, J.M., 2017. Assessment of the denitrification process in alluvial wetlands at floodplain scale using the SWAT model. *Ecological Engineering*, 103: 344-358
- Sun, Y.J.; Huang, T.L.; Li, X.P., 2008. A review of factors affecting P release from aquatic sediments and controlling techniques. Xi An: Shaanxi Sci & Tech Publ House (*Advances in Chemical Technologies for Water and Wastewater Treatment*)
- Sundarambal, P.; Tkalich, P.; Balasubramanian, R., 2010. Modelling the effect of atmospheric nitrogen deposition on marine phytoplankton in the Singapore Strait. *Water Science and Technology*, 61 (4): 859-867. 10.2166/wst.2010.357
- Sundback, K.; Petersen, D.G.; Dahllof, I.; Larson, F., 2007. Combined nutrient-toxicant effects on a shallow-water marine sediment system: sensitivity and resilience of ecosystem functions. *Marine Ecology Progress Series*, 330: 13-30. 10.3354/meps330013
- Sundby, B.; Gobeil, C.; Silverberg, N.; Mucci, A., 1992. The phosphorus cycle in coastal marine-sediments. *Limnology and Oceanography*, 37 (6): 1129-1145
- Sundby, B.; Vale, C.; Cacador, I.; Catarino, F.; Madureira, M.J.; Caetano, M., 1998. Metal-rich concretions on the roots of salt marsh plants: Mechanism and rate of formation. *Limnology and Oceanography*, 43 (2): 245-252
- Sundermann, A.; Leps, M.; Leisner, S.; Haase, P., 2015. Taxon-specific physico-chemical change points for stream benthic invertebrates. *Ecological Indicators*, 57: 314-323. 10.1016/j.ecolind.2015.04.043
- Sung, K.; Lee, G.J.; Munster, C., 2015. Effects of Eichhornia crassipes and Ceratophyllum demersum on Soil and Water Environments and Nutrient Removal in Wetland Microcosms. *International Journal of Phytoremediation*, 17 (10): 936-944. 10.1080/15226514.2014.1003791
- Supriyasilp, T.; Graettinger, A.J.; Durrans, S.R., 2003. Quantitatively directed sampling for main channel and hyporheic zone water-quality modeling. *Advances in Water Resources*, 26: 1029-1037. 10.1016/S0309-1708(03)00082-4
- Suriyagoda, L.D.B.; Ryan, M.H.; Renton, M.; Lambers, H., 2014. Plant Responses to Limited Moisture and Phosphorus Availability. *Advances in Agronomy*. Elsevier, Vol.124, 143-200
- Sutton, M.A.; Howard, C.M.; Erisman, J.W.; Billen, G.; Bleeker, A.; Grennfelt, P.; Van Grinsven, H.; Grizzetti, B., 2011. *The European nitrogen assessment: sources, effects and policy perspectives*. Cambridge University Press
- Suzuki, Y.; Iwasa, Y., 2009. Conflict between groups of players in coupled socio-economic and ecological dynamics. *Ecological Economics*, 68 (4): 1106-1115. 10.1016/j.ecolecon.2008.07.024
- Swink, S.N.; Ketterings, Q.M.; Chase, L.E.; Czymmek, K.J.; van Amburgh, M.E., 2011. Nitrogen balances for New York State: Implications for manure and fertilizer management. *Journal of Soil and Water Conservation*, 66 (1): 1-17. 10.2489/jswc.66.1.1
- Swyngedouw, E., 2009. The Political Economy and Political Ecology of the Hydro-Social Cycle. *Journal of Contemporary Water Research & Education*, 142 (1): 56-60. 10.1111/j.1936-704X.2009.00054.x
- Symoens, J.J.; Hooper, S.S.; Compère, P., 1982. Studies on aquatic vascular plants. Brussels Roy Soc. Belgium 424
- Szoegi, H.M.; Crabtree, B.; Edwards, T., 1996. Policy Cost-Effectiveness for Reducing Non-point Agricultural Groundwater Pollution in the UK. *Journal of Environmental Planning and Management*, 39 (2): 205-222. 10.1080/09640569612561
- Tabacchi, E.; Correll, D.L.; Hauer, R.; Pinay, G.; Plandy-Tabacchi, A.M.; Wissmar, R.C., 1998. Development, maintenance and role of riparian vegetation in the river landscape. *Freshwater Biology*, 40 (3): 497-516. 10.1046/j.1365-2427.1998.00381.x
- Tabacchi, E.; Lambs, L.; Guillot, H.; Plandy-Tabacchi, A.-M.; Muller, E.; Decamps, H., 2000. Impacts of riparian vegetation on hydrological processes. *Hydrological Processes*, Vol. 14 (n° 16-17): pp.-2959-2976
- Tacon, A.G.J.; Forster, I.P., 2003. Aquafeeds and the environment: policy implications. *Aquaculture*, 226 (1-4): 181-189. 10.1016/s0044-8486(03)00476-9
- Taheriyoun, M.; Karamouz, M.; Baghvand, A.; Emami, F.; Tavakolifar, H., 2009. Optimal selection and placement of point and nonpoint source pollution control strategies using a genetic algorithm. *International Agricultural Engineering Journal*, 18 (3-4): 1-13. 10.1029/2006WR004931
- Talberth, J.; Selman, M.; Walker, S.; Gray, E., 2015. Pay for Performance: Optimizing Public Investments in Agricultural Best Management Practices in the Chesapeake Bay Watershed. *Ecological Economics*, 118: 252-261. 10.1016/j.ecolecon.2015.07.033
- Talke, S.A.; de Swart, H.E.; de Jonge, V.N., 2009. An Idealized Model and Systematic Process Study of Oxygen Depletion in Highly Turbid Estuaries. *Estuaries and Coasts*, 32 (4): 602-620. 10.1007/s12237-009-9171-y
- Tamian, L., 2008. *Genèse du Rapport Hénin et émergence de la préoccupation environnementale dans la pensée agronomique française*. Mémoire Master Etudes rurales, INRA-Université Lyon 2,
- Tamini, L.D.; Larue, B.; West, G., 2012. Technical and Environmental Efficiencies and Best Management Practices in Agriculture. *Applied Economics*, 44 (13-15): 1659-1672. 10.1080/00036846.2010.548789
- Tamvakis, A.; Miritzis, J.; Tsirtsis, G.; Spyropoulou, A.; Spatharis, S., 2012. Effects of meteorological forcing on coastal eutrophication: Modeling with model trees. *Estuarine Coastal and Shelf Science*, 115: 210-217. 10.1016/j.ecss.2012.09.003

- Tanentzap, A.J.; Hamilton, D.P.; Yan, N.D., 2007. Calibrating the Dynamic Reservoir Simulation Model (DYRESM) and filling required data gaps for 1-dimensional thermal profile predictions in a boreal lake. *Limnology and Oceanography: Methods*, 5: 484-494. 10.4319/lom.2007.5.484
- Tankere, S.P.C.; Bourne, D.G.; Muller, F.L.L.; Torsvik, V., 2002. Microenvironments and microbial community structure in sediments. *Environmental Microbiology*, 4 (2): 97-105. 10.1046/j.1462-2920.2002.00274.x
- Tantanasarit, C.; Englehardt, A.J.; Babel, S., 2013. Nitrogen, phosphorus and silicon uptake kinetics by marine diatom Chaetoceros calcitrans under high nutrient concentrations. *Journal of Experimental Marine Biology and Ecology*, 446: 67-75
- Taranu, Z.E.; Gregory-Eaves, I.; Leavitt, P.R.; Bunting, L.; Buchaca, T.; Catalan, J.; Domaizon, I.; Guillizzi, P.; Lami, A.; McGowan, S.; Moorhouse, H.; Morabito, G.; Pick, F.R.; Stevenson, M.A.; Thompson, P.L.; Vinebrooke, R.D., 2015. Acceleration of cyanobacterial dominance in north temperate-subarctic lakes during the Anthropocene. *Ecol Lett*, 18 (4): 375-84. 10.1111/ele.12420
- Taylor, M.L.; Adams, R.M.; Miller, S.F., 1992. Farm-Level Response to Agricultural Effluent Control Strategies: The Case of the Willamette Valley. *Journal of Agricultural and Resource Economics*, 17 (1): 173-185. <http://www.waeaonline.org/publications/jare/recent-issues>
- Taylor, M.W.; Rees, T.A.V., 1999. Kinetics of ammonium assimilation in two seaweeds, Enteromorpha sp (Chlorophyceae) and Osmundaria colensoi (Rhodophyceae). *Journal of Phycology*, 35 (4): 740-746. 10.1046/j.1529-8817.1999.3540740.x
- Taylor, R.; Fletcher, R.L.; Raven, J.A., 2001. Preliminary studies on the growth of selected 'Green tide' algae in laboratory culture: Effects of irradiance, temperature, salinity and nutrients on growth rate. *Botanica Marina*, 44 (4): 327-336
- Taylor, S., 2005. Best management practices and water quality standards - How to bridge the gap. 161. 10.1061/40792(173)161
- Taylor, T.; Longo, A., 2010. Valuing algal bloom in the Black Sea Coast of Bulgaria: A choice experiments approach. *Journal of Environmental Management*, 91 (10): 1963-1971. 10.1016/j.jenvman.2010.04.007
- Teichberg, M.; Fox, S.E.; Olsen, Y.S.; VALIELA, I.; Martinetto, P.; Iribarne, O.; Muto, E.Y.; Petti, M.A.V.; Corbisier, T.N.; Soto-Jimenez, M.; Paez-Osuna, F.; Castro, P.; Freitas, H.; Zitelli, A.; Cardinaletti, M.; Tagliapietra, D., 2010. Eutrophication and macroalgal blooms in temperate and tropical coastal waters: nutrient enrichment experiments with Ulva spp. *Global Change Biology*, 16 (9): 2624-2637. 10.1111/j.1365-2486.2009.02108.x
- Teichberg, M.; Fox, S.E.; Olsen, Y.S.; Valielia, I.; Martinetto, P.; Iribarne, O.; Muto, E.Y.; Petti, M.A.V.; Corbisier, T.S.N.; Soto-Jiménez, M.N.; Páez-Osuna, F.; Castro, P.; Freitas, H.; Zitelli, A.; Cardinaletti, M.; Tagliapietra, D., 2009. Eutrophication and macroalgal blooms in temperate and tropical coastal waters: nutrient enrichment experiments with Ulva spp. *Global Change Biology*: no-no. 10.1111/j.1365-2486.2009.02108.x
- Telesh, I.V., 2004. Plankton of the Baltic estuarine ecosystems with emphasis on Neva Estuary: a review of present knowledge and research perspectives. *Marine Pollution Bulletin*, 49 (3): 206-219. 10.1016/j.marpolbul.2004.02.009
- Termignon, M.; Devaux, J., 2014. Evaluer les bénéfices issus d'un changement d'état des eaux (actualisation en vue du 2ème cycle DCE). Collection « Références » du Service de l'Économie, de l'Évaluation et de l'Intégration du Développement Durable (SEEIDD) du Commissariat Général au Développement Durable (CGDD): 64
- Termignon, M.; Devaux, J., 2014. Evaluer les bénéfices issus d'un changement d'état des eaux (actualisation en vue du 2ème cycle DCE) Collection « Références » du Service de l'Économie, de l'Évaluation et de l'Intégration du Développement Durable (SEEIDD) du Commissariat Général au Développement Durable (CGDD), 64.
- Terrados, J.; Williams, S.L., 1997. Leaf versus root nitrogen uptake by the surfgrass *Phyllospadix torreyi*. *Marine Ecology Progress Series*, 149 (1-3): 267-277. 10.3354/meps149267
- Tesoriero, A.J.; Liebscher, H.; Cox, S.E., 2000. Mechanism and rate of denitrification in an agricultural watershed: Electron and mass balance along groundwater flow paths. *Water Resources Research*, 36 (6): 1545-1559. 10.1029/2000wr900035
- Testa, J.M.; Kemp, W.M., 2012. Hypoxia-induced shifts in nitrogen and phosphorus cycling in Chesapeake Bay. *Limnology and Oceanography*, 57 (3): 835-850. 10.4319/lo.2012.57.3.0835
- Testa, J.M.; Li, Y.; Lee, Y.J.; Li, M.; Brady, D.C.; Di Toro, D.M.; Kemp, W.M.; Fitzpatrick, J.J., 2014. Quantifying the effects of nutrient loading on dissolved O<sub>2</sub> cycling and hypoxia in Chesapeake Bay using a coupled hydrodynamic-biogeochemical model. *Journal of Marine Systems*, 139: 139-158. 10.1016/j.jmarsys.2014.05.018
- Tetard, S.; Feunteun, E.; Bultel, E.; Gadais, R.; Begout, M.L.; Trancart, T.; Lasne, E., 2016. Poor oxic conditions in a large estuary reduce connectivity from marine to freshwater habitats of a diadromous fish. *Estuarine Coastal and Shelf Science*, 169: 216-226. 10.1016/j.ecss.2015.12.010
- Tett, P.; Carreira, C.; Mills, D.K.; van Leeuwen, S.; Foden, J.; Bresnan, E.; Gowen, R.J., 2008. Use of a Phytoplankton Community Index to assess the health of coastal waters. *Ices Journal of Marine Science*, 65 (8): 1475-1482. 10.1093/icesjms/fsn161
- Tett, P.; Walne, A., 1995. Observations and simulations of hydrography, nutrients and plankton in the Southern North Sea. *Ophelia*, 42: 371-416
- Teufel, B.; Weigelhofer, G.; Fuchsberger, J.; Hein, T., 2013. Effects of hydromorphology and riparian vegetation on the sediment quality of agricultural low-order streams: consequences for stream restoration. *Environmental Science and Pollution Research*, 20 (3): 1781-1793. 10.1007/s11356-012-1135-2
- Tew, K.S.; Meng, P.J.; Leu, M.Y., 2012. Factors correlating with deterioration of giant kelp *Macrocystis pyrifera* (Laminariales, Heterokontophyta) in an aquarium setting. *Journal of Applied Phycology*, 24 (5): 1269-1277. 10.1007/s10811-011-9775-z
- Thaipichitburapa, P.; Meksumpun, C.; Meksumpun, S., 2010. Province-based self-remediation efficiency of the Tha Chin river basin, Thailand. *Water Science and Technology*, 62 (3): 594-602. 10.2166/wst.2010.293
- The Free Dictionary, 2017. Eutrophication.<http://www.thefreedictionary.com/eutrophication> [consulté: 16/01/2017]

- Thebault, J.M.; Qotbi, A., 1999. A model of phytoplankton development in the lot River (France). Simulations of scenarios. *Water Research*, 33 (4): 1065-1079
- Thieffry, P., 2013. Droit européen de l'eau. *Jurisclasseur Environnement et Développement durable*.
- Thiel, M.; Watling, L., 1998. mud flat - long-lasting but highly localized effects. (1986): 177-189
- Thieu, V.; Billen, G.; Garnier, J., 2009. Nutrient transfer in three contrasting NW European watersheds: the Seine, Somme, and Scheldt Rivers. A comparative application of the Seneque/Riverstrahler model. *Water Research*, 43 (6): 1740-1754. 10.1016/j.watres.2009.01.014
- Thieu, V.; Billen, G.; Garnier, J.; Benoit, M., 2011. Nitrogen cycling in a hypothetical scenario of generalised organic agriculture in the Seine, Somme and Scheldt watersheds. *Regional Environmental Change*, 11 (2): 359-370. 10.1007/s10113-010-0142-4
- Thingstad, T.F., 1998. A theoretical approach to structuring mechanisms in the pelagic food web. *Eutrophication in Planktonic Ecosystems: Food Web Dynamics and Elemental Cycling*. Springer, 59-72
- Thomas, E.A., 1969. *the process of eutrophication in central european lakes*. Washington: National Academy of Sciences (*Eutrophication: Causes, consequences, correctives; proceedings of a symposium. International Symposium on Eutrophication, & National Academy of Sciences*)
- Thomas, Z.; Abbott, B.; Troccaz, O.; Baudry, J.; Pinay, G., 2016. Proximate and ultimate controls on carbon and nutrient dynamics of small agricultural catchments. *Biogeosciences*, 13 (6): 1863-1875. 10.5194/bg-13-1863-2016
- Thomaz, S.M.; Cunha, E.R.d., 2010. The role of macrophytes in habitat structuring in aquatic ecosystems: methods of measurement, causes and consequences on animal assemblages' composition and biodiversity. *Acta Limnologica Brasiliensis*, 22: 218-236
- Thompson, J.; Cassidy, R.; Doody, D.G.; Flynn, R., 2013. Predicting critical source areas of sediment in headwater catchments. *Agriculture Ecosystems & Environment*, 179: 41-52. 10.1016/j.agee.2013.07.010
- Thomsen, M.; Wernberg, T., 2015. The devil in the detail: harmful seaweeds are not harmful to everyone. 21: 1381-1382
- Thomsen, M.S.; McGlathery, K.J.; Tyler, A.C., 2006. Macroalgal distribution patterns in a shallow, soft-bottom lagoon, with emphasis on the nonnative *Gracilaria vermiculophylla* and *Codium fragile*. *Estuaries and Coasts*, 29 (3): 465-473. 10.1007/bf02784994
- Thomsen, M.S.; Wernberg, T.; Engelen, A.H.; Tuya, F.; Vanderklift, M.A.; Holmer, M.; McGlathery, K.J.; Arenas, F.; Kotta, J.; Silliman, B.R., 2012. A meta-analysis of seaweed impacts on seagrasses: generalities and knowledge gaps. *Plos One*, 7 (1): e28595. 10.1371/journal.pone.0028595
- Thornber, C.; Guidone, M.; Deacutis, C., 2011. Environmental impacts on the formation of macroalgal blooms in a USA large coastal estuary. *European Journal of Phycology*, 46 (1, SI): 78
- Thornber, C.S.; DiMilla, P.; Nixon, S.W.; McKinney, R.A., 2008. Natural and anthropogenic nitrogen uptake by bloom-forming macroalgae. *Marine Pollution Bulletin*, 56 (2): 261–269. 10.1016/j.marpolbul.2007.10.031
- Thornton, J.A.; Harding, W.R.; Dent, M.; Hart, R.C.; Lin, H.; Rast, C.L.; Rast, W.; Ryding, S.-O.; Slawski, T.M., 2013. Eutrophication as a 'wicked' problem. *Lakes & Reservoirs: Research & Management*, 18 (4): 298-316. 10.1111/lre.12044
- Thorp, J.H.; Delong, M.D.; Greenwood, K.S.; Casper, A.F., 1998. Isotopic analysis of three food web theories in constricted and floodplain regions of a large river. *Oecologia*, 117 (4): 551-563. 10.1007/s004420050692
- Thouvenot, M.; Billen, G.; Garnier, J., 2007. Modelling nutrient exchange at the sediment-water interface of river systems. *Journal of Hydrology*, 341: 55-78. 10.1016/j.jhydrol.2007.05.001
- Thur, S.M., 2006. Resolving oil pollution liability with restoration-based claims: The United States' experience. *Oceanis*, 32 (3-4): 375-392
- Thybo-Christesen, M.; Rasmussen, M.B.; Blackburn, T.H., 1993. Nutrient fluxes and growth of *Cladophora sericea* in a shallow Danish bay. *Marine Ecology Progress Series*, 100: 273
- Tilman, D., 1977. Resource competition between plankton algae: an experimental and theoretical approach. *Ecology*, 58 (2): 338-348
- Tim, U.S.; Jolly, R., 1994. Evaluating Agricultural Nonpoint-Source Pollution Using Integrated Geographic Information Systems and Hydrologic/Water Quality Model. *Journal of Environmental Quality*, 23 (1): 25-35. 10.2134/jeq1994.00472425002300010006x
- Timilsena, Y.P.; Adhikari, R.; Casey, P.; Muster, T.; Gill, H.; Adhikari, B., 2015. Enhanced efficiency fertilisers: a review of formulation and nutrient release patterns: Enhanced efficiency fertilizers. *Journal of the Science of Food and Agriculture*, 95 (6): 1131-1142. 10.1002/jsfa.6812
- Timmermann, K.; Dinesen, G.E.; Markager, S.; Ravn-Jonsen, L.; Bassompierre, M.; Roth, E.; Stotstrup, J.G., 2014. Development and Use of a Bioeconomic Model for Management of Mussel Fisheries under Different Nutrient Regimes in the Temperate Estuary of the Limfjord, Denmark. *Ecology and Society*, 19 (1). 10.5751/es-06041-190114
- Timmermann, K.; Markager, S.; Gustafsson, K.E., 2010. Streams or open sea? Tracing sources and effects of nutrient loadings in a shallow estuary with a 3D hydrodynamic-ecological model. *Journal of Marine Systems*, 82 (3): 111-121. 10.1016/j.jmarsys.2010.04.008
- Tipping, E.; Benham, S.; Boyle, J.F.; Crow, P.; Davies, J.; Fischer, U.; Guyatt, H.; Helliwell, R.; Jackson-Blake, L.; Lawlor, A.J.; Monteith, D.T.; Rowe, E.C.; Toberman, H., 2014. Atmospheric deposition of phosphorus to land and freshwater. *Environmental Science-Processes & Impacts*, 16 (7): 1608-1617. 10.1039/c3em00641g
- Tisseuil, C.; Wade, A.J.; Tudesque, L.; Lek, S., 2008. Modeling the Stream Water Nitrate Dynamics in 60,000-km<sup>2</sup> European Catchment, the Garonne, Southwest France. *Journal of Environmental Quality*, 37 (6): 2155-2169. 10.2134/jeq2007.0507

- Tlili, A.; Berard, A.; Blanck, H.; Bouchez, A.; Cássio, F.; Eriksson, K.M.; Morin, S.; Montuelle, B.; Navarro, E.; Pascoal, C., 2016. Pollution-induced community tolerance (PICT): towards an ecologically relevant risk assessment of chemicals in aquatic systems. *Freshwater Biology*, 61 (12): 2141-2151
- Tobias, C.; Bohlke, J., 2011. Biological and geochemical controls on diel dissolved inorganic carbon cycling in a low-order agricultural stream: Implications for reach scales and beyond. *Chemical Geology*, 283 (1-2): 18-30. 10.1016/j.chemgeo.2010.12.012
- Todd, E.C.D., 1995. Estimated costs of paralytic shellfish, diarrhetic shellfish and ciguatera poisoning in Canada. *Harmful marine algal blooms*: 831-834
- Tomita, A.; Nakura, Y.; Ishikawa, T., 2016. Measures for environmental conservation in enclosed coastal seas. *Marine Pollution Bulletin*, 102 (2): 329-332. 10.1016/j.marpolbul.2015.07.071
- Tong, C.; Huang, J.F.; Hu, Z.Q.; Jin, Y.F., 2013. Diurnal Variations of Carbon Dioxide, Methane, and Nitrous Oxide Vertical Fluxes in a Subtropical Estuarine Marsh on Neap and Spring Tide Days. *Estuaries and Coasts*, 36 (3): 633-642. 10.1007/s12237-013-9596-1
- Tonitto, C.; David, M.B.; Drinkwater, L.E., 2006. Replacing bare fallows with cover crops in fertilizer-intensive cropping systems: A meta-analysis of crop yield and N dynamics. *Agriculture, Ecosystems & Environment*, 112 (1): 58-72. 10.1016/j.agee.2005.07.003
- Toonen, R.J.; Nakayama, T.; Ogawa, T.; Rossiter, A.; Delbeek, J.C., 2012. Growth of cultured giant clams (*Tridacna* spp.) in low pH, high-nutrient seawater: species-specific effects of substrate and supplemental feeding under acidification. *Journal of the Marine Biological Association of the United Kingdom*, 92 (4): 731-740. 10.1017/s0025315411000762
- Toor, G.S.; Hunger, S.; Peak, J.D.; Sims, J.T.; Sparks, D.L., 2006. Advances in the characterization of phosphorus in organic wastes: environmental and agronomic applications. *Advances in agronomy*, 89: 1-72
- Topcu, A.; Pulatsu, S., 2011. Sakaryabasi (Cifteler-Eskisehir) Fish Culture and Research Station's Water Supply West Pond: A Research on Inorganic Nitrogen Flux from Sediment. *Ekoloji*, 20 (78): 26-33. 10.5053/ekoloji.2011.785
- Tornés, E.; Pérez, M.; Durán, C.; Sabater, S., 2014. Reservoirs override seasonal variability of phytoplankton communities in a regulated Mediterranean river. *Science of the Total Environment*, 475: 225-233
- Torre, A.; Aznar, O.; Bonin, M.; Caron, A.; Chia, E.; Galman, M.; Lefranc, C.; Melot, R.; Guérin, M.; Jeanneaux, P.; Paoli, J.-C.; Salazar, M.I.; Thinon, P.; Kirat, T., 2006. Conflits et tensions autour des usages de l'espace dans les territoires ruraux et périurbains. Le cas de six zones géographiques françaises. *Revue d'Économie Régionale & Urbaine*, août (3): 415-453. 10.3917/reru.063.0415
- Tørseth, K.; Aas, W.; Breivik, K.; Fjæraa, A.M.; Fiebig, M.; Hjellbrekke, A.G.; Lund Myhre, C.; Solberg, S.; Yttri, K.E., 2012. Introduction to the European Monitoring and Evaluation Programme (EMEP) and observed atmospheric composition change during 1972–2009. *Atmos. Chem. Phys.*, 12 (12): 5447-5481. 10.5194/acp-12-5447-2012
- Touchette, B.W.; Burkholder, J., 2001. Nitrate reductase activity in a submersed marine angiosperm: Controlling influences of environmental and physiological factors. *Plant Physiology and Biochemistry*, 39 (7-8): 583-593. 10.1016/s0981-9428(01)01278-5
- Touchette, B.W.; Burkholder, J.M., 2000. Review of nitrogen and phosphorus metabolism in seagrasses. *Journal of Experimental Marine Biology and Ecology*, 250 (1-2): 133-167. 10.1016/s0022-0981(00)00195-7
- Townsend, A.R.; Vitousek, P.M.; Houlton, B.Z., 2012. The climate benefits of better nitrogen and phosphorus management. *Issues in Science and Technology*, 28 (2): 85-91
- Townsend, H., 2014. Comparing and coupling a water quality and a fisheries ecosystem model of the Chesapeake Bay for the exploratory assessment of resource management strategies. *Ices Journal of Marine Science*, 71 (3): 703-712. 10.1093/icesjms/fst060
- Trainer, V.L.; Bates, S.S.; Lundholm, N.; Thessen, A.E.; Cochlan, W.P.; Adams, N.G.; Trick, C.G., 2012. Pseudo-nitzschia physiological ecology, phylogeny, toxicity, monitoring and impacts on ecosystem health. *Harmful Algae*, 14: 271-300. 10.1016/j.hal.2011.10.025
- Trancoso, A.R.; Saraiva, S.; Fernandes, L.; Pina, P.; Leitao, P.; Neves, R., 2005. Modelling macroalgae using a 3D hydrodynamic-ecological model in a shallow, temperate estuary. *Ecological Modelling*, 187 (2-3): 232-246. 10.1016/j.ecolmodel.2005.01.054
- Trauth, N.; Schmidt, C.; Vieweg, M.; Maier, U.; Fleckenstein, J.H., 2014. Hyporheic transport and biogeochemical reactions in pool-riffle systems under varying ambient groundwater flow conditions. *Journal of Geophysical Research-Biogeosciences*, 119 (5): 910-928. 10.1002/2013jg002586
- Trimmer, M.; Sanders, I.A.; Heppell, C.M., 2009. Carbon and nitrogen cycling in a vegetated lowland chalk river impacted by sediment. *Hydrological Processes*, 23 (15): 2225-2238. 10.1002/hyp.7276
- Tripathi, M.P.; Panda, R.K.; Raghuwanshi, N.S., 2003. Identification and prioritisation of critical sub-watersheds for soil conservation management using the SWAT model. *Biosystems Engineering*, 85 (3): 365-379. 10.1016/s1537-5110(03)00066-7
- Troell, M.; Pihl, L.; Ronnback, P.; Wennhage, H.; Soderqvist, T.S.; Kautsky, N., 2005. Regime shifts and ecosystem services in Swedish coastal soft bottom habitats: when resilience is undesirable. *Ecology and Society*, 10 (1): 13
- Trolle, D.; Hamilton, D.; Hipsey, M.; Bolding, K.; Bruggeman, J.; Mooij, W.; Janse, J.; Nielsen, A.; Jeppesen, E.; Elliott, J.; Makler-Pick, V.; Petzoldt, T.; Rinke, K.; Flindt, M.; Arhonditsis, G.; Gal, G.; Bjerring, R.; Tominaga, K.; Hoen, J.t.; Downing, A.; Marques, D.; Fragoso, C.; Sondergaard, M.; Hanson, P., 2012. A community-based framework for aquatic ecosystem models. *Hydrobiologia*, 683: 25-34

- Trolle, D.; Hamilton, D.P.; Pilditch, C.A.; Duggan, I.C.; Jeppesen, E., 2011. Predicting the effects of climate change on trophic status of three morphologically varying lakes: Implications for lake restoration and management. 26: 354-370
- Trolle, D.; Skovgaard, H.; Jeppesen, E., 2008. The Water Framework Directive: Setting the phosphorus loading target for a deep lake in Denmark using the 1D lake ecosystem model DYRESM-CAEDYM. *Ecological Modelling*, 219 (1–2): 138-152. 10.1016/j.ecolmodel.2008.08.005
- Troost, T.A.; Blaas, M.; Los, F.J., 2013. The role of atmospheric deposition in the eutrophication of the North Sea: A model analysis. *Journal of Marine Systems*, 125: 101-112. 10.1016/j.jmarsys.2012.10.005
- Troost, T.A.; de Kluijver, A.; Los, F.J., 2014. Evaluation of eutrophication variables and thresholds in the Dutch North Sea in a historical context - A model analysis. *Journal of Marine Systems*, 134: 45-56. 10.1016/j.jmarsys.2014.01.015
- Trott, L.A.; Alongi, D.M., 2000. The impact of shrimp pond effluent on water quality and phytoplankton biomass in a tropical mangrove estuary. *Marine Pollution Bulletin*, 40 (11): 947-951. 10.1016/s0025-326x(00)00035-7
- Tsirtsis, G.; Karydis, M., 1998. Evaluation of phytoplankton community indices for detecting eutrophic trends in the marine environment. *Environmental Monitoring and Assessment*, 50 (3): 255-269. 10.1023/a:1005883015373
- Tsirtsis, G.; Spatharis, S.; Karydis, M., 2008. Application of the lognormal equation to assess phytoplankton community structural changes induced by marine eutrophication. *Hydrobiologia*, 605: 89-98. 10.1007/s10750-008-9307-2
- Tsouvalis, J.; Waterton, C., 2012. Building 'participation' upon critique: The Loweswater Care Project, Cumbria, UK. *Environmental Modelling & Software*, 36 (Supplement C): 111-121. 10.1016/j.envsoft.2012.01.018
- Tuchkovenko, Y.S.; Lonin, S.A., 2003. Mathematical model of the oxygen regime of Cartagena Bay. *Ecological Modelling*, 165 (1): 91-106. 10.1016/s0304-3800(03)00064-4
- Tucker, G.E.; Bradley, D.N., 2010. Trouble with diffusion: Reassessing hillslope erosion laws with a particle-based model. *Journal of Geophysical Research-Earth Surface*, 115: 12. 10.1029/2009jf001264
- Turner, E.; Bruesewitz, D.; Mooney, R.; Montagna, P.; McClelland, J.; Sadovski, A.; Buskey, E., 2014. Comparing performance of five nutrient phytoplankton zooplankton (NPZ) models in coastal lagoons. *Ecological Modelling*, 277: 13-26. 10.1016/j.ecolmodel.2014.01.007
- Turner, E.L.; Bruesewitz, D.A.; Mooney, R.F.; Montagna, P.A.; McClelland, J.W.; Sadovski, A.; Buskey, E.J., 2014. Comparing performance of five nutrient phytoplankton zooplankton (NPZ) models in coastal lagoons. *Ecological Modelling*, 277: 13-26. 10.1016/j.ecolmodel.2014.01.007
- Turner, R.; Rabalais, N.; Swenson, E.; Kasprzak, M.; Romaire, T., 2005. Summer hypoxia in the northern Gulf of Mexico and its prediction from 1978 to 1995. *Marine Environmental Research*, 59 (1): 65-77. 10.1016/j.marenvres.2003.09.002
- Turner, R.E., 2009. Doubt and the Values of an Ignorance-Based World View for Restoration: Coastal Louisiana Wetlands. *Estuaries and Coasts*, 32 (6): 1054-1068. 10.1007/s12237-009-9214-4
- Turner, R.E.; Rabalais, N.N., 1994. Coastal eutrophication near the Mississippi river delta. *Nature*, 368 (6472): 619-621
- Turner, R.E.; Rabalais, N.N., 2013. Nitrogen and phosphorus phytoplankton growth limitation in the northern Gulf of Mexico. *Aquatic Microbial Ecology*, 68 (2): 159-169. 10.3354/ame01607
- Turner, R.E.; Rabalais, N.N.; Justic, D., 2006. Predicting summer hypoxia in the northern Gulf of Mexico: Riverine N, P, and Si loading. *Marine Pollution Bulletin*, 52 (2): 139-148. 10.1016/j.marpolbul.2005.08.012
- Turner, R.E.; Rabalais, N.N.; Justic, D., 2008. Gulf of Mexico Hypoxia: Alternate States and a Legacy. *Environmental Science & Technology*, 42 (7): 2323-2327. 10.1021/es071617k
- Turner, R.E.; Rabalais, N.N.; Justic, D., 2012. Predicting summer hypoxia in the northern Gulf of Mexico: Redux. *Marine Pollution Bulletin*, 64 (2): 319-324. 10.1016/j.marpolbul.2011.11.008
- Turner, R.E.; Rabalais, N.N.; Swenson, E.M.; Kasprzak, M.; Romaire, T., 2005. Summer hypoxia in the northern Gulf of Mexico and its prediction from 1978 to 1995. *Marine Environmental Research*, 59 (1): 65-77. 10.1016/j.marenvres.2003.09.002
- Turner, R.K.; Bateman, I.J.; Georgiou, S.; Jones, A.; Langford, I.H., 2001. An ecological economics approach to the management of a multi-purpose coastal wetland. *Working Paper - Centre for Social and Economic Research on the Global Environment*. 1-36
- Turner, R.K.; Georgiou, S.; Gren, I.M.; Wulff, F.; Barrett, S.; Söderqvist, T.; Bateman, I.J.; Folke, C.; Langaas, S.; Žylicz, T.; Mäler, K.G.; Markowska, A., 1999. Managing nutrient fluxes and pollution in the Baltic: An interdisciplinary simulation study. *Ecological Economics*, 30 (2): 333-352. 10.1016/S0921-8009(99)00046-4
- Turner, R.K.; Georgiou, S.; Gren, I.-M.; Wulff, F.; Barrett, S.; Söderqvist, T.; Bateman, I.J.; Folke, C.; Langaas, S.; Žylicz, T.; Mäler, K.-G.; Markowska, A., 1999. Managing nutrient fluxes and pollution in the Baltic: an interdisciplinary simulation study. *Ecological Economics*, 30 (2): 333-352. 10.1016/S0921-8009(99)00046-4
- Twardowski, M.S.; Townsend, D.W.; Sullivan, J.M.; Koch, C.; Pettigrew, N.R.; O'Donnell, J.; Stymiest, C.; Salisbury, J.; Moore, T.; Young-Morse, R.; Stockley, N.D.; Morrison, J.R., 2015. Developing the First Operational Nutrient Observatory for Ecosystem, Climate, and Hazard Monitoring for NERACOOS. *Marine Technology Society Journal*, 49 (3): 72-80
- Tyler, A.N.; Svab, E.; Preston, T.; Presing, M.; Kovacs, W.A., 2006. Remote sensing of the water quality of shallow lakes: A mixture modelling approach to quantifying phytoplankton in water characterized by high-suspended sediment. *International Journal of Remote Sensing*, 27 (8): 1521-1537. 10.1080/01431160500419311
- Tyler, R.M.; Brady, D.C.; Targett, T.E., 2009. Temporal and Spatial Dynamics of Diel-Cycling Hypoxia in Estuarine Tributaries. *Estuaries and Coasts*, 32 (1): 123-145. 10.1007/s12237-008-9108-x
- Tynkkynen, N., 2013. The challenge of environmental governance in the network society: The case of the Baltic Sea. *Environmental Policy and Governance*, 23 (6): 395-406. 10.1002/eet.1621

- Tynkkynen, N.; Schönach, P.; Pihlajamäki, M.; Nechiporuk, D., 2014. The governance of the mitigation of the Baltic Sea eutrophication: Exploring the challenges of the formal governing system. *Ambio*, 43 (1): 105-114. 10.1007/s13280-013-0481-8
- U.S. Environmental Protection Agency (EPA), 2012. *Climate and land-use change effects on ecological resources in three watersheds: a synthesis report.* : US EPA, 80.
- U.S. Environmental Protection Agency (EPA), 2013. *Watershed modeling to assess the sensitivity of streamflow, nutrient, and sediment loads to potential climate change and urban development in 20 U.S. watersheds.* Washington, DC: National Center for Environmental Assessment, 196.
- Udovyk, O.; Gilek, M., 2013. Coping with uncertainties in science-based advice informing environmental management of the Baltic Sea. *Environmental Science and Policy*, 29: 12-23. 10.1016/j.envsci.2013.01.015
- Uehlinger, U.; Bührer, H.; Reichert, P., 1996. Periphyton dynamics in a floodprone prealpine river: evaluation of significant processes by modelling. *Freshwater Biology*, 36 (2): 249-263. 10.1046/j.1365-2427.1996.00082.x
- Uekötter, F., 2014. Why Panaceas Work: Recasting Science, Knowledge, and Fertilizer Interests in German Agriculture. *Agricultural History*, 88 (1): 68-86. 10.3098/ah.2014.88.1.68
- Ugochukwu, C.N.; Nukpezah, D., 2008. Ecotechnological methods as strategies to reduce eutrophication and acidification in lakes. *The Environmentalist*, 28 (2): 137-142. 10.1007/s10669-007-9138-0
- Ulanowicz, R.E.; Tuttle, J.H., 1992. THE TROPHIC CONSEQUENCES OF OYSTER STOCK REHABILITATION IN CHESAPEAKE BAY. *Estuaries*, 15 (3): 298-306. 10.2307/1352778
- Ulen, B., 2007. Agriculture as a phosphorus source for eutrophication in the north-west European countries, Norway, Sweden, United Kingdom and Ireland: a review. *Soil Use and Management*, 23: 5-15
- Ulén, B.M.; Weyhenmeyer, G.A., 2007. Adapting regional eutrophication targets for surface waters— influence of the EU Water Framework Directive, national policy and climate change. *Environmental Science & Policy*, 10 (7-8): 734-742. 10.1016/j.envsci.2007.04.004
- Ullah, K.; Ahmad, M.; Sharma, V.; Lu, P.; Harvey, A.; Zufar, M.; Sultana, S.; Anyanwu, C., 2014. *Algal biomass as a global source of transport fuels: Overview and development perspectives.* 10.1016/j.pnsc.2014.06.008
- Undeman, E.; Gustafsson, E.; Gustafsson, B.G., 2014. A novel modeling tool with multi-stressor functionality for organic contaminant transport and fate in the Baltic Sea. *Science of the Total Environment*, 497: 382-391. 10.1016/j.scitotenv.2014.07.065
- UNEP/ MAP UNITED NATIONS ENVIRONMENT PROGRAMME MEDITERRANEAN ACTION PLAN, 2015. 2st Report of the Informal Online Working Group on Eutrophication. *5th Meeting of the Ecosystem Approach Integrated Monitoring Correspondence Group.* Rome, Italy:
- Unifa, 2014. *Evolution des bilans régionaux de fertilisation en France de 1988 à 2013 pour les trois éléments nutritifs : Phosphore, Potassium, Magnésium.* Paris: UNIFA, 42.
- University of the West of England, 2013. *Science for Environment Policy Indepth Report: Sustainable Phosphorus Use.* Bristol: University of the West of England.
- Urbaines, D.E.R., 1991. Directive du conseil du 21 mai 1991 relative au traitement des eaux résiduaires urbaines 91/271/CEE. *Journal Officiel des Communautés Européennes*, 30: 05-91
- Uusitalo, L.; Fleming-Lehtinen, V.; Hallfors, H.; Jaanus, A.; Hallfors, S.; London, L., 2013. A novel approach for estimating phytoplankton biodiversity. *Ices Journal of Marine Science*, 70 (2): 408-417. 10.1093/icesjms/fss198
- Vadeboncoeur, Y.; Vander Zanden, M.J.; Lodge, D.M., 2002. Putting the lake back together: Reintegrating benthic pathways into lake food web models. *Bioscience*, 52 (1): 44-54
- Vale, C.; Catarino, F.M.; Cortesao, C.; Cacador, M.I., 1990. Presence of metal-rich rhizoconcretions on the roots of spartina-maritima from the salt marshes of the tagus estuary, portugal. *Science of the Total Environment*, 97-8: 617-626. 10.1016/0048-9697(90)90265-v
- Valiela, I.; Geist, M.; McClelland, J.; Tomasky, G., 2000. Nitrogen loading from watersheds to estuaries: Verification of the Waquoit Bay Nitrogen Loading Model. *Biogeochemistry*, 49 (3): 277-293. 10.1023/a:1006345024374
- Valiela, I.; McClelland, J.; Hauxwell, J.; Behr, P.J.; Hersh, D.; Foreman, K., 1997. Macroalgal blooms in shallow estuaries: Controls and ecophysiological and ecosystem consequences. *Limnology and Oceanography*, 42 (5): 1105-1118
- Valkama, E.; Lemola, R.; Käkänen, H.; Turtola, E., 2015. Meta-analysis of the effects of undersown catch crops on nitrogen leaching loss and grain yields in the Nordic countries. *Agriculture, Ecosystems & Environment*, 203: 93-101. 10.1016/j.agee.2015.01.023
- Vallin, L.; Nissling, A.; Westin, L., 1999. Potential factors influencing reproductive success of Baltic cod, *Gadus morhua*: A review. *Ambio*, 28 (1): 92-99
- van Beers, C.; van den Bergh, J.C.J.M.; de Moor, A.; Oosterhuis, F., 2007. Determining the Environmental Effects of Indirect Subsidies: Integrated Method and Application to the Netherlands. *Applied Economics*, 39 (19-21): 2465-2482. 10.1080/00036840600592833
- Van Calker, K.J.; Berentsen, P.B.M.; Giesen, G.W.J.; Huirne, R.B.M., 2005. Identifying and ranking attributes that determine sustainability in Dutch dairy farming. *Agriculture and Human Values*, 22 (1): 53-63. 10.1007/s10460-004-7230-3
- Van Damme, M.; Kruit, R.J.W.; Schaap, M.; Clarisse, L.; Clerbaux, C.; Coheur, P.F.; Dammers, E.; Dolman, A.J.; Erisman, J.W., 2014. Evaluating 4 years of atmospheric ammonia (NH<sub>3</sub>) over Europe using IASI satellite observations and LOTOS-EUROS model results. *Journal of Geophysical Research-Atmospheres*, 119 (15): 9549-9566. 10.1002/2014jd021911
- Van de Poel, I., 2008. The bugs eat the waste: what else is there to know? Changing professional hegemony in the design of sewage treatment plants. *Soc Stud Sci*, 38 (4): 605-34. 10.1177/0306312707088149

- Van de Waal, D.B.; Smith, V.H.; Declerck, S.A.; Stam, E.; Elser, J.J., 2014. Stoichiometric regulation of phytoplankton toxins. *Ecology Letters*, 17 (6): 736-742
- van den Bergh, J.C.J.M.; Nunes, P.A.L.D.; Dotinga, H.M.; Kooistra, W.H.C.F.; Vrieling, E.I.G.; Peperzak, L., 2002. Exotic harmful algae in marine ecosystems: an integrated biological-economic-legal analysis of impacts and policies. *Marine Policy*, 26 (1): 59-74. 10.1016/S0308-597X(01)00032-X
- van der Heijden, S.; Haberlandt, U., 2015. A fuzzy rule based metamodel for monthly catchment nitrate fate simulations. *Journal of Hydrology*, 531: 863-876. 10.1016/j.jhydrol.2015.10.039
- van der Perk, M.; Bierkens, M.F.P., 1997. The identifiability of parameters in a water quality model of the Biebrza River, Poland. *Journal of Hydrology*, 200 (1): 307-322. 10.1016/S0022-1694(97)00021-8
- van der Sluijs, J.; Douguet, J.M.; O'Connor, M.; Ravetz, J., 2008. Évaluation de la qualité de la connaissance dans une perspective délibérative. *Vertigo*, 8 (2). 10.4000/vertigo.5035
- Van Dijk, A.; Bruijnzeel, L.A., 2004. Runoff and soil loss from bench terraces. 2. An event-based erosion process model. *European Journal of Soil Science*, 55 (2): 317-334. 10.1111/j.1365-0754.2004.00605.x
- Van Dolah, F.M., 2000. Marine algal toxins: Origins, health effects, and their increased occurrence. *Environmental Health Perspectives*, 108: 133-141
- Van Donk, E.; Hessen, D.O.; Verschoor, A.M.; Gulati, R.D., 2008. Re-oligotrophication by phosphorus reduction and effects on seston quality in lakes. *Limnologica*, 38 (3-4): 189-202. 10.1016/j.limno.2008.05.005
- van Donk, E.; van de Bund, W.J., 2002. Impact of submerged macrophytes including charophytes on phyto- and zooplankton communities: allelopathy versus other mechanisms. *Aquatic Botany*, 72 (3-4): 261-274. [http://dx.doi.org/10.1016/S0304-3770\(01\)00205-4](http://dx.doi.org/10.1016/S0304-3770(01)00205-4)
- van Eglmond, K.; Bresser, T.; Bouwman, L., 2002. The European Nitrogen Case. *Ambio*, 31 (2): 72-78
- van Geer, F.C.; Kronvang, B.; Broers, H.P., 2016. High-resolution monitoring of nutrients in groundwater and surface waters: process understanding, quantification of loads and concentrations, and management applications. *Hydrology and Earth System Sciences*, 20 (9): 3619-3629. 10.5194/hess-20-3619-2016
- Van Ginkel, C., 2011. Eutrophication: Present reality and future challenges for South Africa. *Water Sa*, 37 (5): 693-701
- van Grinsven, H.J.M.; Bouwman, L.; Cassman, K.G.; van Es, H.M.; McCrackin, M.L.; Beusen, A.H.W., 2015. Losses of Ammonia and Nitrate from Agriculture and Their Effect on Nitrogen Recovery in the European Union and the United States between 1900 and 2050. *Journal of Environmental Quality*, 44 (2): 356-367. 10.2134/jeq2014.03.0102
- Van Grinsven, H.J.M.; Holland, M.; Jacobsen, B.H.; Klimont, Z.; Sutton, M.A.; Willems, W.J., 2013. Costs and Benefits of Nitrogen for Europe and Implications for Mitigation. *Environmental Science & Technology*, 47 (8): 3571-3579. 10.1021/es303804g
- Van Houtven, G., 2014. Combining Expert Elicitation and Stated Preference Methods to Value Ecosystem Services from Improved Lake Water Quality. *Ecological Economics*, 99: 40-52. 10.1016/j.ecolecon.2013.12.018
- Van Looy, K.; Flouri, M.; Ferréol, M.; Prieto-Montes, M.; Souchon, Y., 2016. Long-term changes in temperate stream invertebrate communities reveal a synchronous trophic amplification at the turn of the millennium. *Science of the Total Environment*, 565: 481-488
- Van Looy, K.; Piffady, J.; Tormos, T.; Villeneuve, B.; Valette, L.; Chandesris, A.; Souchon, Y., 2015. Unravelling River System Impairments in Stream Networks with an Integrated Risk Approach. *Environmental Management*, 55 (6): 1343-1353. 10.1007/s00267-015-0477-1
- Van Mooy, B.A.S.; Krupke, A.; Dyhrman, S.T.; Fredricks, H.F.; Frischkorn, K.R.; Ossolinski, J.E.; Repeta, D.J.; Rouco, M.; Seewald, J.D.; Sylva, S.P., 2015. Major role of planktonic phosphate reduction in the marine phosphorus redox cycle. *Science*, 348 (6236): 783-785. 10.1126/science.aaa8181
- Van Nieuwenhuyse, E.E., 2007. Response of summer chlorophyll concentration to reduced total phosphorus concentration in the Rhine River (Netherlands) and the Sacramento-San Joaquin Delta (California, USA). *Canadian Journal of Fisheries and Aquatic Sciences*, 64 (11): 1529-1542
- van Puijenbroek, P.; Janse, J.H.; Knoop, J.M., 2004. Integrated modelling for nutrient loading and ecology of lakes in The Netherlands. *Ecological Modelling*, 174 (1-2): 127-141. 10.1016/j.ecolmodel.2004.01.002
- Van Straten, G.T.; Keesman, K.J., 1991. Uncertainty propagation and speculation in projective forecasts of environmental change: A lake-eutrophication example. *Journal of Forecasting*, 10 (1-2): 163-190
- Van, T.H.V.; Prapaspongsoa, T.; Poulsen, H.D.; Jorgensen, H., 2009. Prediction of manure nitrogen and carbon output from grower-finisher pigs. *Animal Feed Science and Technology*, 151 (1-2): 97-110. 10.1016/j.anifeedsci.2008.10.008
- van Woesik, R.; Tomascik, T.; Blake, S., 1999. Coral assemblages and physico-chemical characteristics of the Whitsunday Islands: evidence of recent community changes. *Marine and Freshwater Research*, 50 (5): 427. 10.1071/mf97046
- Van Zuidam, B.G.; Peeters, E., 2015. Wave forces limit the establishment of submerged macrophytes in large shallow lakes. *Limnology and Oceanography*, 60 (5): 1536-1549. 10.1002/ino.10115
- VanCappellen, P.; Ingall, E.D., 1996. Redox stabilization of the atmosphere and oceans by phosphorus-limited marine productivity. *Science*, 271 (5248): 493-496. 10.1126/science.271.5248.493
- Vandam, H.; Buskens, R.F.M., 1993. Ecology and management of moorland pools - balancing acidification and eutrophication. *Hydrobiologia*, 265 (1-3): 225-263
- vandenBerg, A.J.; Ridderinkhof, H.; Riegman, R.; Ruardij, P.; Lenhart, H., 1996. Influence of variability in water transport on phytoplankton biomass and composition in the southern North Sea: A modelling approach (FYFY). *Continental Shelf Research*, 16 (7): 907-. 10.1016/0278-4343(95)00023-2

- vandenBerg, A.J.; Turner, S.M.; vanDuyl, F.C.; Ruardij, P., 1996. Model structure and analysis of dimethylsulphide (DMS) production in the southern North Sea, considering phytoplankton dimethylsulphoniopropionate- (DMSP) lyase and eutrophication effects. *Marine Ecology Progress Series*, 145 (1-3): 233-244. 10.3354/meps145233
- Vander Zanden, M.J.; Vadeboncoeur, Y., 2002. Fishes as integrators of benthic and pelagic food webs in lakes. *Ecology*, 83 (8): 2152-2161
- Vanderploeg, H.A.; Liebig, J.R.; Carmichael, W.W.; Agy, M.A.; Johengen, T.H.; Fahnenstiel, G.L.; Nalepa, T.F., 2001. Zebra mussel (*Dreissena polymorpha*) selective filtration promoted toxic *Microcystis* blooms in Saginaw Bay (Lake Huron) and Lake Erie. *Canadian Journal of Fisheries and Aquatic Sciences*, 58 (6): 1208-1221. 10.1139/cjfas-58-6-1208
- Vanderploeg, H.A.; Liebig, J.R.; Nalepa, T.F., 1995. From picoplankton to microplankton - temperature-driven filtration by the unionid bivalve *lampsilis-radiata-siliquoidea* in lake st-clair. *Canadian Journal of Fisheries and Aquatic Sciences*, 52 (1): 63-74. 10.1139/f95-006
- VANNOTE, R.; MINSHALL, G.; CUMMINS, K.; SEDELL, J.; CUSHING, C., 1980. RIVER CONTINUUM CONCEPT. *Canadian Journal of Fisheries and Aquatic Sciences*, 37 (1): 130-137. 10.1139/f80-017
- Vanraaphorst, W.; Ruardij, P.; Brinkman, A., 1988. The assessment of benthic phosphorus regeneration in an estuarine ecosystem model. *Netherlands Journal of Sea Research*, 22 (1): 23-36. 10.1016/0077-7579(88)90050-6
- Vaquer-Sunyer, R.; Duarte, C.M., 2008. Thresholds of hypoxia for marine biodiversity. *Proceedings of the National Academy of Sciences of the United States of America*, 105 (40): 15452-15457. 10.1073/pnas.0803833105
- Vaquer-Sunyer, R.; Duarte, C.M., 2010. Sulfide exposure accelerates hypoxia-driven mortality. *Limnology and Oceanography*, 55 (3): 1075-1082. 10.4319/lo.2010.55.3.1075
- Vaquer-Sunyer, R.; Duarte, C.M., 2011. Temperature effects on oxygen thresholds for hypoxia in marine benthic organisms. *Global Change Biology*, 17 (5): 1788-1797. 10.1111/j.1365-2486.2010.02343.x
- Varis, O., 1993. Cyanobacteria dynamics in a restored finnish lake - a long-term simulation study. *Hydrobiologia*, 268 (3): 129-145. 10.1007/BF00014049
- Vasas, V.; Lancelot, C.; Rousseau, V.; Jordan, F., 2007. Eutrophication and overfishing in temperate nearshore pelagic food webs: a network perspective. *Marine Ecology Progress Series*, 336: 1-14. 10.3354/meps336001
- Vedura, 2017. Pollution de l'eau : eutrophisation des écosystèmes aquatiques.<http://www.vedura.fr/environnement/pollution/eau-eutrophisation-ecosystemes-aquatiques> [consulté: 23/08/2017]
- Verdelhos, T.; Neto, J.M.; Marques, J.C.; Pardal, M.A., 2005. The effect of eutrophication abatement on the bivalve *Scrobicularia plana*. *Estuarine Coastal and Shelf Science*, 63 (1-2): 261-268. 10.1016/j.ecss.2004.11.019
- Veresoglou, S.D.; Barto, E.K.; Menexes, G.; Rillig, M.C., 2013. Fertilization affects severity of disease caused by fungal plant pathogens. *Plant Pathology*, 62 (5): 961-969. 10.1111/ppa.12014
- Verhoeven, J.T.A.; Meuleman, A.F.M., 1999. Wetlands for wastewater treatment: Opportunities and limitations. *Ecological Engineering*, 12 (1-2): 5-12. 10.1016/s0925-8574(98)00050-0
- Verity, P.G., 2010. Expansion of potentially harmful algal taxa in a Georgia Estuary (USA). *Harmful Algae*, 9 (2): 144-152. 10.1016/j.hal.2009.08.009
- Verlicchi, P.; Al Aukidy, M.; Galletti, A.; Zambello, E.; Zanni, G.; Masotti, L., 2012. A project of reuse of reclaimed wastewater in the Po Valley, Italy: Polishing sequence and cost benefit analysis. *Journal of Hydrology*, 432-433: 127-136. 10.1016/j.jhydrol.2012.02.024
- Verma, S.; Markus, M.; Cooke, R.A., 2012. Development of error correction techniques for nitrate-N load estimation methods. *Journal of Hydrology*, 432: 12-25. 10.1016/j.jhydrol.2012.02.011
- Vermaat, J.E.; Bos, B.; Van Der Burg, P., 2016. Why do reed beds decline and fail to re-establish? A case study of Dutch peat lakes. *Freshwater Biology*: n/a-n/a. 10.1111/fwb.12801
- Vermeer, C.P.; Escher, M.; Portielje, R.; de Klein, J.J.M., 2003. Nitrogen uptake and translocation by *Chara*. *Aquatic Botany*, 76 (3): 245-258. 10.1016/s0304-3770(03)00056-1
- Verspagen, J.M.; Van de Waal, D.B.; Finke, J.F.; Visser, P.M.; Huisman, J., 2014. Contrasting effects of rising CO<sub>2</sub> on primary production and ecological stoichiometry at different nutrient levels. *Ecology Letters*, 17 (8): 951-960
- Verspagen, J.M.; Van de Waal, D.B.; Finke, J.F.; Visser, P.M.; Van Donk, E.; Huisman, J., 2014. Rising CO<sub>2</sub> levels will intensify phytoplankton blooms in eutrophic and hypertrophic lakes. *Plos One*, 9 (8): e104325. 10.1371/journal.pone.0104325
- Vervier, P.; Bonvallet-Garay, S.; Sauvage, S.; Valett, H.M.; Sanchez-Pérez, J.-M., 2009. Influence of the hyporheic zone on the phosphorus dynamics of a large gravel-bed river, Garonne River, France. *Hydrological Processes*, vol. 23 (n° 12): pp.-1801-1812
- Viaroli, P.; Bartoli, M.; Bondavalli, C.; Christian, R.R.; Giordani, G.; Naldi, M., 1996. Macrophyte communities and their impact on benthic fluxes of oxygen, sulphide and nutrients in shallow eutrophic environments. *Hydrobiologia*, 329 (1-3): 105-119. 10.1007/bf00034551
- Viaroli, P.; Bartoli, M.; Giordani, G.; Naldi, M.; Orfanidis, S.; Zaldivar, J.M., 2008. Community shifts, alternative stable states, biogeochemical controls and feedbacks in eutrophic coastal lagoons: a brief overview. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 18 (S1): S105-S117. 10.1002/aqc.956
- Viehman, S.; Thur, S.M.; Piniak, G.A., 2009. Coral reef metrics and habitat equivalency analysis. *Ocean and Coastal Management*, 52 (3-4): 181-188. 10.1016/j.ocecoaman.2008.12.004
- Vieira, J.M.P.; Pinho, J.L.S.; Duarte, A., 1998. Eutrophication vulnerability analysis: A case study. *Water Science and Technology*, 37 (3): 121-128. 10.1016/s0273-1223(98)00063-8

- Vigiak, O.; Bende-Michl, U., 2013. Estimating bootstrap and Bayesian prediction intervals for constituent load rating curves. *Water Resources Research*, 49 (12): 8565-8578. 10.1002/2013wr013559
- Vigiak, O.; Malago, A.; Bouraoui, F.; Vanmaercke, M.; Poesen, J., 2015. Adapting SWAT hillslope erosion model to predict sediment concentrations and yields in large Basins. *Science of the Total Environment*, 538: 855-875. 10.1016/j.scitotenv.2015.08.095
- Vilain, G.; Garnier, J.; Roose-Amsaleg, C.; Laville, P., 2012. Potential of denitrification and nitrous oxide production from agricultural soil profiles (Seine Basin, France). *Nutrient Cycling in Agroecosystems*, 92 (1): 35-50. 10.1007/s10705-011-9470-0
- VILLANO, N.; WARWICK, R.M., 1995. Meiobenthic communities associated with the seasonal cycle of growth and decay of ulvrigida agardh in The Palude-Della-Rosa, Lagoon Of Venice. *Estuarine Coastal and Shelf Science*, 41 (2): 181–194. 10.1006/ecss.1995.0060
- Villares, R.; Carballeira, A., 2003. Seasonal variation in the concentrations of nutrients in two green macroalgae and nutrient levels in sediments in the Rias Baixas (NW Spain). *Estuarine Coastal and Shelf Science*, 58 (4): 887-900. 10.1016/j.ecss.2003.07.004
- Villate, F.; Iriarte, A.; Uriarte, I.; Intxausti, L.; de la Sota, A., 2013. Dissolved oxygen in the rehabilitation phase of an estuary: Influence of sewage pollution abatement and hydro-climatic factors. *Marine Pollution Bulletin*, 70 (1-2): 234-246. 10.1016/j.marpolbul.2013.03.010
- Vilmin, L.; Flipo, N.; Escoffier, N.; Groleau, A., 2016. Estimation of the water quality of a large urbanized river as defined by the European WFD: what is the optimal sampling frequency? *Environmental Science and Pollution Research*. 10.1007/s11356-016-7109-z
- Viney, N.R.; Sivapalan, M., 1999. A conceptual model of sediment transport: application to the Avon River Basin in Western Australia. *Hydrological Processes*, 13 (5): 727-743. 10.1002/(sici)1099-1085(19990415)13:5<727::aid-hyp776>3.0.co;2-d
- Vink, S.; Chambers, R.M.; Smith, S.V., 1997. Distribution of phosphorus in sediments from Tomales bay, California. *Marine Geology*, 139 (1-4): 157-179. 10.1016/s0025-3227(96)00109-0
- Vinnerås, B.; Jönsson, H., 2002. Faecal separation for nutrient management, evaluation of different separation techniques. *Urban Water*, 4 (4): 8. 10.1016/S1462-0758(02)00026-2
- Vinodh, S., 2010. Improvement of agility and sustainability: a case study in an Indian rotary switches manufacturing organisation. *Journal of Cleaner Production*, 18 (10): 1015-1020
- Vitousek, P.M.; Aber, J.D.; Howarth, R.W.; Likens, G.E.; Matson, P.A.; Schindler, D.W.; Schlesinger, W.H.; Tilman, D., 1997. Human alteration of the global nitrogen cycle: Sources and consequences. *Ecological Applications*, 7 (3): 737-750. 10.2307/2269431
- Vitousek, P.M.; Cassman, K.; Cleveland, C.; Crews, T.; Field, C.B.; Grimm, N.B.; Howarth, R.W.; Marino, R.; Martinelli, L.; Rastetter, E.B.; Sprent, J.I., 2002. Towards an ecological understanding of biological nitrogen fixation. *Biogeochemistry*, 57 (1): 1-45. 10.1023/a:1015798428743
- Vitousek, P.M.; Howarth, R.W., 1991. NITROGEN LIMITATION ON LAND AND IN THE SEA - HOW CAN IT OCCUR. *Biogeochemistry*, 13 (2): 87-115
- Vitousek, P.M.; Mooney, H.A.; Lubchenco, J.; Melillo, J.M., 1997. Human domination of Earth's ecosystems. *Science*, 277 (5325): 494-499. 10.1126/science.277.5325.494
- Vollenweider, R., 1992. Coastal marine eutrophication: principles and control. *Science of the Total Environment*: 1-20
- Vollenweider, R.A., 1975. Input-output models. *Schweizerische Zeitschrift für Hydrologie*, 37 (1): 53-84. 10.1007/BF02505178
- Vollenweider, R.A.; Kerekes, J., 1982. *Eutrophication of waters. Monitoring, assessment and control. OECD Cooperative programme on monitoring of inland waters*. OECD, Paris
- Vollenweider, R.O., 1982. Eutrophisation des eaux. *Méthodes de surveillance, d'évaluation et de Lutte*. OCDE, Paris, Rapport technique, (42078): 165
- von Alvensleben, N.; Magnusson, M.; Heimann, K., 2016. Salinity tolerance of four freshwater microalgal species and the effects of salinity and nutrient limitation on biochemical profiles. *Journal of Applied Phycology*, 28 (2): 861-876. 10.1007/s10811-015-0666-6
- Von Blottnitz, H.; Rabl, A.; Boiadjiev, D.; Taylor, T.; Arnold, S., 2006. Damage Costs of Nitrogen Fertilizer in Europe and Their Internalization. *Journal of Environmental Planning and Management*, 49 (3): 413-433. 10.1080/09640560600601587
- Vu, T.K.V.; Vu, C.C.; Medoc, J.M.; Flindt, M.R.; Sommer, S.G., 2012. Management model for assessment of nitrogen flow from feed to pig manure after storage in Vietnam. *Environmental Technology*, 33 (6): 725-731. 10.1080/09593330.2011.592223
- Vymazal, J., 2007. Removal of nutrients in various types of constructed wetlands. *Science of the Total Environment*, 380 (1-3): 48-65. 10.1016/j.scitotenv.2006.09.014
- W., C.W.; L., B.G., 2016. Health impacts from cyanobacteria harmful algae blooms: Implications for the North American Great Lakes. *Harmful Algae*, 54: 8. 10.1016/j.hal.2016.02.002.
- Wade, A.J.; Durand, P.; Beaujouan, V.; Wessel, W.W.; Raat, K.J.; Whitehead, P.G.; Butterfield, D.; Rankinen, K.; Lepisto, A., 0001. A nitrogen model for European catchments: INCA, new model structure and equations. *Hydrol. Earth Syst. Sci.*, 6 (3): 559-582. 10.5194/hess-6-559-2002
- Wade, A.J.; Durand, P.; Beaujouan, V.; Wessel, W.W.; Raat, K.J.; Whitehead, P.G.; Butterfield, D.; Rankinen, K.; Lepisto, A., 2002. A nitrogen model for European catchments: INCA, new model structure and equations. *Hydrology and Earth System Sciences*, 6 (3): 559-582

- Wade, A.J.; Palmer-Felgate, E.J.; Halliday, S.J.; Skeffington, R.A.; Loewenthal, M.; Jarvie, H.P.; Bowes, M.J.; Greenway, G.M.; Haswell, S.J.; Bell, I.M.; Joly, E.; Fallatah, A.; Neal, C.; Williams, R.J.; Gozzard, E.; Newman, J.R., 2012. Hydrochemical processes in lowland rivers: insights from in situ, high-resolution monitoring. *Hydrology and Earth System Sciences*, 16 (11): 4323-4342. 10.5194/hess-16-4323-2012
- Wade, A.J.; Whitehead, P.G.; Butterfield, D., 2002. The Integrated Catchments model of Phosphorus dynamics (INCA-P), a new approach for multiple source assessment in heterogeneous river systems: model structure and equations. *Hydrology and Earth System Sciences*, 6 (3): 583-606
- Wagenhoff, A.; Lange, K.; Townsend, C.R.; Mattheei, C.D., 2013. Patterns of benthic algae and cyanobacteria along twin-stressor gradients of nutrients and fine sediment: a stream mesocosm experiment. *Freshwater Biology*, 58 (9): 1849-1863
- Wagenschein, D.; Rode, M., 2008. Modelling the impact of river morphology on nitrogen retention—A case study of the Weisse Elster River (Germany). *Ecological Modelling*, 211 (1): 224-232. 10.1016/j.ecolmodel.2007.09.009
- Wagman, D.D.; Evans, W.H.; Parker, V.B.; Schumm, R.H.; Halow, I.; Bailey, S.M.; Churney, K.L.; Nuttall, R.L., 1982. THE NBS TABLES OF CHEMICAL THERMODYNAMIC PROPERTIES - SELECTED VALUES FOR INORGANIC AND C-1 AND C-2 ORGANIC-SUBSTANCES IN SI UNITS. *Journal of Physical and Chemical Reference Data*, 11: 1-&
- Wagner, C.; Adrian, R., 2009. Cyanobacteria dominance: Quantifying the effects of climate change. *Limnology and Oceanography*, 54: 2460-2468
- Walker, D.I.; Kendrick, G.A., 1998. Threats to Macroalgal Diversity: Marine Habitat Destruction and Fragmentation, Pollution and Introduced Species. *Botanica Marina*, 41 (1-6). 10.1515/botm.1998.41.1-6.105
- Walker, J.F.; Graczyk, D.J., 1993. PRELIMINARY EVALUATION OF EFFECTS OF BEST MANAGEMENT-PRACTICES IN THE BLACK EARTH CREEK, WISCONSIN, PRIORITY WATERSHED. *Water Science and Technology*, 28 (3-5): 539-548
- Walker, R.R.; Snodgrass, W.J., 1986. Model for sediment oxygen-demand in lakes. *Journal of Environmental Engineering-Asce*, 112 (1): 25-43
- Walker, W.W., 1996. *Simplified procedures for eutrophication assessment and prediction: User manual*. US Army Engineer Waterways Experiment Station Vicksburg, MS
- Walkowiak, M.; Paasivirta, L.; Merilainen, J.J.; Arvola, L., 2016. Contrasting patterns in chironomid (Chironomidae) communities of shallow and deep boreal lakes since the 1960s. *Annales Zoologici Fennici*, 53 (1-2): 35-51
- Wall, C.C.; Peterson, B.J.; Gobler, C.J., 2011. The Growth of Estuarine Resources (*Zostera marina*, *Mercenaria mercenaria*, *Crassostrea virginica*, *Argopecten irradians*, *Cyprinodon variegatus*) in Response to Nutrient Loading and Enhanced Suspension Feeding by Adult Shellfish. *Estuaries and Coasts*, 34 (6): 1262-1277. 10.1007/s12237-011-9377-7
- Wallentinus, I., 1984. Comparisons of nutrient uptake rates for Baltic macroalgae with different thallus morphologies. *Marine Biology*, 80 (2): 215-225. 10.1007/bf02180189
- Wallin, A.; Zannakis, M.; Johansson, L.O.; Molander, S., 2013. Influence of interventions and internal motivation on Swedish homeowners' change of on-site sewage systems. *Resources, Conservation and Recycling*, 76: 27-40. 10.1016/j.resconrec.2013.04.004
- Walling, D.E.; Webb, B.W., 1985. ESTIMATING THE DISCHARGE OF CONTAMINANTS TO COASTAL WATERS BY RIVERS - SOME CAUTIONARY COMMENTS. *Marine Pollution Bulletin*, 16 (12): 488-492. 10.1016/0025-326x(85)90382-0
- Walsby, A.; Schanz, F., 2002. Light-dependent growth rate determines changes in the population of *Planktothrix rubescens* over the annual cycle in Lake Zürich, Switzerland. *New Phytologist*, 154 (3): 671-687
- Walters, C., 1997. Challenges in adaptive management of riparian and coastal ecosystems. *Ecology and Society*, 1 (2):
- Wan, Z.; She, J.; Maar, M.; Jonasson, L.; Baasch-Larsen, J., 2012. Assessment of a physical-biogeochemical coupled model system for operational service in the Baltic Sea. *Ocean Science*, 8 (4): 683-701. 10.5194/os-8-683-2012
- Wang, B.; Harder, T.H.; Kelly, S.T.; Piens, D.S.; China, S.; Kovarik, L.; Keiluweit, M.; Arey, B.W.; Gilles, M.K.; Laskin, A., 2016. Airborne soil organic particles generated by precipitation. *Nature Geoscience*, 9 (6): 433+. 10.1038/ngeo2705
- Wang, C.; Sun, Q.Y.; Wang, P.F.; Hou, J.; Qu, A.Y., 2013. An optimization approach to runoff regulation for potential estuarine eutrophication control: Model development and a case study of Yangtze Estuary, China. *Ecological Modelling*, 251: 199-210. 10.1016/j.ecolmodel.2012.12.026
- Wang, C.; Yu, R.; Zhou, M., 2011. Acute toxicity of live and decomposing green alga *Ulva* (Enteromorpha) prolifera to abalone *Haliotis discus hannai*. *Chin. J. Oceanol. Limn.*, 29 (3): 541-546. 10.1007/s00343-011-0126-3
- Wang, J.Z.; Gu, B.H.; Huang, J.H.; Han, X.G.; Lin, G.H.; Zheng, F.W.; Li, Y.C., 2014. Terrestrial Contributions to the Aquatic Food Web in the Middle Yangtze River. *Plos One*, 9 (7). 10.1371/journal.pone.0102473
- Wang, P.; Wang, H.; Linker, L.; Tian, R., 2016. Effects of cross-channel bathymetry and wind direction on destratification and hypoxia reduction in the Chesapeake Bay. *Estuarine Coastal and Shelf Science*, 178: 168-188. 10.1016/j.ecss.2016.05.009
- Wang, Q.G.; Zhao, X.H.; Yang, M.S.; Zhao, Y.; Liu, K.; Ma, Q., 2011. Water quality model establishment for middle and lower reaches of Hanshui River, China. *ResearchGate* (2011): 21(6):647-655.,
- Wang, R.J.; Tang, X.X., 2016. Allelopathic effects of macroalga *Corallina pilulifera* on the red-tide forming alga *Heterosigma akashiwo* under laboratory conditions. *Chinese Journal of Oceanology and Limnology*, 34 (2): 314-321. 10.1007/s00343-015-4336-y
- Wang, S.; Tang, D., 2014. Preliminary remote sensing observation of sea surface temperature increase during *Ulva* prolifera blooms. *Aquatic Ecosystem Health & Management*, 17 (3, SI): 299–304. 10.1080/14634988.2014.944471
- Wang, S.; Zhao, L.Y.; Wang, X.; Manuzon, R.; Darr, M.; Li, H.; Keener, H.M., 2014. Estimation of ammonia emission from manure belt poultry layer houses using an alternatives mass balance method. *Transactions of the Asabe*, 57 (3): 937-947

- Wang, X.; Bai, S.; Lu, X.; Li, Q.; Zhang, X.; Yu, L., 2008. Ecological risk assessment of eutrophication in Songhua Lake, China. *Stochastic Environmental Research and Risk Assessment*, 22 (4): 477-486
- Wang, X.; Williams, J.R.; Gassman, P.W.; Baffaut, C.; Izaurrealde, R.C.; Jeong, J.; Kiniry, J.R., 2012. EPIC and APEX: model use, calibration, and validation. *Transactions of the Asabe*, 55 (4): 1447-1462
- Wang, X.H.; Wang, X.; Hupperts, G.; Heijungs, R.; Ren, N.Q., 2015. Environmental implications of increasingly stringent sewage discharge standards in municipal wastewater treatment plants: case study of a cool area of China. *Journal of Cleaner Production*, 94: 278-283. 10.1016/j.jclepro.2015.02.007
- Wang, X.-l.; Lu, Y.-l.; He, G.-z.; Han, J.-y.; Wang, T.-y., 2007. Exploration of relationships between phytoplankton biomass and related environmental variables using multivariate statistic analysis in a eutrophic shallow lake: A 5-year study. *Journal of Environmental Sciences*, 19 (8): 920-927
- Wang, Y.N.; Liu, D.Y.; Di, B.P.; Shi, Y.J.; Wang, Y.J., 2016. Distribution of diatoms and silicoflagellates in surface sediments of the Yellow Sea and offshore from the Changjiang River, China. *Chinese Journal of Oceanology and Limnology*, 34 (1): 44-58. 10.1007/s00343-015-4237-0
- Wang, Z.G.; Doetterl, S.; Vanclouster, M.; van Wesemael, B.; Van Oost, K., 2015. Constraining a coupled erosion and soil organic carbon model using hillslope-scale patterns of carbon stocks and pool composition. *Journal of Geophysical Research-Biogeosciences*, 120 (3): 452-465. 10.1002/2014jg002768
- Wang, Z.-H.; Li, S.-X.; Malhi, S., 2008. Effects of fertilization and other agronomic measures on nutritional quality of crops. *Journal of the Science of Food and Agriculture*, 88 (1): 7-23. 10.1002/jsfa.3084
- Waraich, E.A.; Ahmad, R.; Ashraf, M.Y.; Ahmad, M., 2011. Improving agricultural water use efficiency by nutrient management in crop plants. *Acta Agriculturae Scandinavica, Section B — Soil & Plant Science*, 61 (4): 291-304. 10.1080/09064710.2010.491954
- Ward, L.G.; Kemp, W.M.; Boynton, W.R., 1984. The influence of waves and seagrass communities on suspended particulates in an estuarine embayment. *Marine Geology*, 59 (1-4): 85-103. 10.1016/0025-3227(84)90089-6
- Warren, R.F.; Apsimon, H.M., 1999. Uncertainties in integrated assessment modelling of abatement strategies: Illustrations with the ASAM model. *Environmental Science and Policy*, 2 (6): 439-456. 10.1016/S1462-9011(99)00040-4
- Warwick, J.J.; Cockrum, D.; Horvath, M., 1997. Estimating Non-Point-Source Loads and Associated Water Quality Impacts. *Journal of Water Resources Planning and Management*, 123 (5): 302-310. 10.1061/(ASCE)0733-9496(1997)123:5(302)
- Wasson, J.; Malavoi, J.; Maridet, L.; Souchon, Y.; Paulin, L., 1998. Impacts écologiques de la chenalisation des rivières. *Regulated Rivers: Research & Management*, 1: 17-36
- Wateau, F., 2011. Water, societies and sustainability: A few anthropological examples of non-market water values. *Policy and Society*, 30 (4): 257-265. 10.1016/j.polsoc.2011.10.004
- Waterton, C.; Maberly, S.C.; Tsouvalis, J.; Watson, N.; Winfield, I.J.; Norton, L.R., 2015. Committing to place: the potential of open collaborations for trusted environmental governance. *PLoS Biol*, 13 (3): e1002081. 10.1371/journal.pbio.1002081
- Watson, E.B.; Wigand, C.; Oczkowski, A.J.; Sundberg, K.; Vendettuoli, D.; Jayaraman, S.; Saliba, K.; Morris, J.T., 2015. Ulva additions alter soil biogeochemistry and negatively impact Spartina alterniflora growth. *Marine Ecology Progress Series*, 532: 59-72. 10.3354/meps11334
- Watson, N.; Mitchell, B.; Mulamoottil, G., 1996. Integrated Resource Management: Institutional Arrangements Regarding Nitrate Pollution in England. *Journal of Environmental Planning and Management*, 39 (1): 45-64. 10.1080/09640569612660
- Watson, S.B.; McCauley, E.; Downing, J.A., 1997. Patterns in phytoplankton taxonomic composition across temperate lakes of differing nutrient status. *Limnology and Oceanography*, 42 (3): 487-495
- Watson, S.B.; Miller, C.; Arhonditsis, G.; Boyer, G.L.; Carmichael, W.; Charlton, M.N.; Confesor, R.; Depew, D.C.; Hook, T.O.; Ludsin, S.A.; Matisoff, G.; McElmurry, S.P.; Murray, M.W.; Richards, R.P.; Rao, Y.R.; Steffen, M.M.; Wilhelm, S.W., 2016. The re-eutrophication of Lake Erie: Harmful algal blooms and hypoxia. *Harmful Algae*, 56: 44-66. 10.1016/j.hal.2016.04.010
- Wattiaux, M.A.; Karg, K.L., 2004. Protein level for alfalfa and corn silage-based diets: II. Nitrogen balance and manure characteristics. *Journal of Dairy Science*, 87 (10): 3492-3502
- Webb, J.; Anthony, S.G.; Yamulki, S., 2006. Validating the MAVIS model for optimizing incorporation of litter-based manures to reduce ammonia emissions. *Transactions of the Asabe*, 49 (6): 1905-1913
- Webb, J.; Pain, B.; Bittman, S.; Morgan, J., 2010. The impacts of manure application methods on emissions of ammonia, nitrous oxide and on crop response—A review. *Agriculture, Ecosystems & Environment*, 137 (1-2): 39-46. 10.1016/j.agee.2010.01.001
- Webb, J.; Sorensen, P.; Velthof, G.; Amon, B.; Pinto, M.; Rodhe, L.; Salomon, E.; Hutchings, N.; Burczyk, P.; Reid, J., 2013. An assessment of the variation of manure nitrogen efficiency throughout Europe and an appraisal of means to increase manure-N efficiency. *Advances in agronomy*, 119: 371-442
- Weber, J.L., 2007. *Accounting for soil in the SEEAA*. Rome.
- Weber, K.A., 1907. Aufbau und Vegetation der Moore Norddeutschlands. *Beibl. Bot. Jahrb.*, 90: 19-34 (Suppl. to Bot. Jahrb 40)
- Weijerman, M.; Lindeboom, H.; Zuur, A.F., 2005. Regime shifts in marine ecosystems of the North Sea and Wadden Sea. *Marine Ecology Progress Series*, 298: 21-39. 10.3354/meps298021
- Weingart, P., 1999. Scientific expertise and political accountability: paradoxes of science in politics. *Science and Public Policy*, 26 (3): 151-161. 10.3152/147154399781782437

- Weiss, C.M., 1969. Relation of phosphates to eutrophication. *American Water Works Association*, 61: 387-391
- Wellen, C.; Kamran-Disfani, A.-R.; Arhonditsis, G.B., 2015. Evaluation of the Current State of Distributed Watershed Nutrient Water Quality Modeling. *Environmental Science & Technology*, 49 (6): 3278-3290. 10.1021/es5049557
- Weller, D.E.; Baker, M.E.; Jordan, T.E., 2011. Effects of riparian buffers on nitrate concentrations in watershed discharges: new models and management implications. *Ecological Applications*, 21 (5): 1679-1695. 10.1890/10-0789.1
- Wells, M.L.; Trainer, V.L.; Smayda, T.J.; Karlson, B.S.O.; Trick, C.G.; Kudela, R.M.; Ishikawa, A.; Bernard, S.; Wulff, A.; Anderson, D.M.; Cochlan, W.P., 2015. Harmful algal blooms and climate change: learning from the past and present to forecast the future. *Harmful Algae*, 49: 68-93. 10.1016/j.hal.2015.07.009
- Welsh, D.T.; Castadelli, G., 2004. Bacterial nitrification activity directly associated with isolated benthic marine animals. *Marine Biology*, 144 (5): 1029-1037. 10.1007/s00227-003-1252-z
- Weng, P.; Sanchez-Pérez, J.-M.; Sauvage, S.; Vervier, P.; Giraud, F., 2003. Assessment of the quantitative and qualitative buffer function of an alluvial wetland: hydrological modelling of a large floodplain (Garonne River, France). *Hydrological Processes*, vol. 1 (n° 12): pp.2375-2392
- Wennhage, H., 2002. Vulnerability of newly settled plaice (*Pleuronectes platessa* L.) to predation: effects of habitat structure and predator functional response. *Journal of Experimental Marine Biology and Ecology*, 269 (2): 129-145. 10.1016/s0022-0981(02)00005-9
- Wennhage, H.; Pihl, L., 2007. From flatfish to sticklebacks: assemblage structure of epibenthic fauna in relation to macroalgal blooms. *Marine Ecology Progress Series*, 335: 187-198. 10.3354/meps335187
- Westman, W.E.; Oleary, J.F., 1986. Measures of resilience - the response of coastal sage scrub to fire. *Vegetatio*, 65 (3): 179-189. 10.1007/bf00044818
- Wetzel, M.; Weber, A.; Giere, O., 2002. Re-colonization of anoxic/sulfidic sediments by marine nematodes after experimental removal of macroalgal cover. *Marine Biology*, 141 (4): 679-689. 10.1007/s00227-002-0863-0
- Wetzel, R.G., 1983. *Limnology* (2nd edn). Philadelphia: Saunders College Publishing
- Wetzel, R.G., 2001. *Limnology - Lake and River Ecosystems*. San Diego [u.a.]: Academic Press
- Whelan, M.J.; Gandolfi, C.; Bischetti, G.B., 1999. A simple stochastic model of point source solute transport in rivers based on gauging station data with implications for sampling requirements. *Water Research*, 33 (14): 3171-3181. 10.1016/S0043-1354(99)00026-3
- Whitehead, P.G.; Crossman, J.; Balana, B.B.; Futter, M.N.; Comber, S.; Jin, L.; Skuras, D.; J.Wade, A.; Bowes, M.J.; Read, D.S., 2013. A cost-effectiveness analysis of water security and water quality: Impacts of climate and land-use change on the River Thames system. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 371 (2002). 10.1098/rsta.2012.0413 10.1098/rsta.2012.0406
- Whitehead, P.G.; Williams, R.J.; Lewis, D.R., 1997. Quality simulation along river systems (QUASAR): model theory and development. *Science of the Total Environment*, 194: 447-456. 10.1016/S0048-9697(96)05382-X
- Whitehead, P.G.; Wilson, E.J.; Butterfield, D., 1998. A semi-distributed Integrated Nitrogen model for multiple source assessment in Catchments (INCA): Part I - model structure and process equations. *Science of the Total Environment*, 210 (1-6): 547-558. 10.1016/S0048-9697(98)00037-0
- Whitehead, P.G.; Wilson, E.J.; Butterfield, D., 1998. A semi-distributed integrated nitrogen model for multiple source assessment in catchments (INCA): Part I — model structure and process equations. *Science of the Total Environment*, 210-211 (10.1016/S0048-9697(98)00037-0): 547-558
- Whitfield, A.K., 1986. Fish community structure response to major habitat changes within the littoral zone of an estuarine coastal lake. *Environmental Biology of Fishes*, 17 (1): 41-51. 10.1007/bf00000399
- Whitney, K., 2010. Living lawns, dying waters: The suburban boom, nitrogenous fertilizers, and the nonpoint source pollution dilemma. *Technol Cult*, 51 (3): 652-74
- Whitton, B.; Kelly, M.; Region, A.; House, K.; Way, O.G., 1998. Eutrophication control via nutrient reduction in rivers: literature review. *Environment Agency*:
- Whitton, B.A., 1970. Biology of Cladophora in freshwaters. *Water Research*, 4: 457-476
- WHO, 2002. *Eutrophication and Health*. Luxembourg European Commission, ISBN 92-894-4413-4.
- Wiberg, P.L.; Smith, J.D., 1987. Calculations of the critical shear-stress for motion of uniform and heterogeneous sediments. *Water Resources Research*, 23 (8): 1471-1480. 10.1029/WR023i008p01471
- Wikipedia, 2017. Eutrophisation.<https://fr.wikipedia.org/wiki/Eutrophisation> [consulté: 16/01/2017]
- Wilce, R.T.; Schneider, C.W.; Quinlan, A.V.; Bosch, K.V., 1982. The life history and morphology of free-living *Pilayella littoralis* (L.) Kjellm.(Ectocarpaceae, Ectocarpales) in Nahant Bay, Massachusetts. *Phycologia*, 21 (3): 336–354
- Wilcock, R.J.; Scarsbrook, M.R.; Costley, K.J.; Nagels, J.W., 2002. Controlled release experiments to determine the effects of shade and plants on nutrient retention in a lowland stream. *Hydrobiologia*, 485 (1-3): 153-162. 10.1023/a:1021375509662
- Wild-Allen, K.; Herzfeld, M.; Thompson, P.A.; Rosebrock, U.; Parslow, J.; Volkman, J.K., 2010. Applied coastal biogeochemical modelling to quantify the environmental impact of fish farm nutrients and inform managers. *Journal of Marine Systems*, 81 (1-2): 134-147. 10.1016/j.jmarsys.2009.12.013
- Wild-Allen, K.; Rayner, M., 2014. Continuous nutrient observations capture fine-scale estuarine variability simulated by a 3D biogeochemical model. *Marine Chemistry*, 167: 135-149. 10.1016/j.marchem.2014.06.011
- Wilkerson, V.A.; Mertens, D.R.; Casper, D.P., 1997. Prediction of excretion of manure and nitrogen by Holstein dairy cattle. *Journal of Dairy Science*, 80 (12): 3193-3204

- Wilkie, L.; O'Hare, M.T.; Davidson, I.; Dudley, B.; Paterson, D.M., 2012. Particle trapping and retention by *Zostera noltii*: A flume and field study. *Aquatic Botany*, 102: 15-22. 10.1016/j.aquabot.2012.04.004
- Willgoose, G.R.; Sharmeen, S., 2006. A One-dimensional model for simulating armouring and erosion on hillslopes: I. Model development and event-scale dynamics. *Earth Surface Processes and Landforms*, 31 (8): 970-991. 10.1002/esp.1398
- Williams, A.E.; Hecky, R.E., 2005. *Invasive aquatic weeds and eutrophication: The case of water hyacinth in Lake Victoria. (Restoration and Management of Tropical Eutrophic Lakes)*
- Williams, J.D.; Syers, J.K.; Harris, R.F.; Armstrong, De, 1971. Fractionation of inorganic phosphate in calcareous lake sediments. *Soil Science Society of America Proceedings*, 35 (2): 250-&
- Williams, J.D.H.; Jaquet, J.M.; Thomas, R., 1976. Forms of phosphorus in the surficial sediments of Lake Erie. *Journal of the Fisheries Board of Canada*, 33 (3): 413-429
- Williams, J.R., 1975. Sediment-yield prediction with universal equation using runoff energy factor. *Proceedings of the sediment-yield workshop*. Oxford. 244-252
- Williams, J.R.; Izaurralde, R.C., 2006. The APEX model. In: V.P. S.; Frevert, D.K., eds. *Watershed models*. CRC Press, 437-482
- Williams, M.R.; Filoso, S.; Longstaff, B.J.; Dennison, W.C., 2010. Long-Term Trends of Water Quality and Biotic Metrics in Chesapeake Bay: 1986 to 2008. *Estuaries and Coasts*, 33 (6): 1279-1299. 10.1007/s12237-010-9333-y
- Williams, M.R.; King, K.W.; Baker, D.B.; Johnson, L.T.; Smith, D.R.; Fausey, N.R., 2016. Hydrologic and biogeochemical controls on phosphorus export from Western Lake Erie tributaries. *Journal of Great Lakes Research*, 42 (6): 1403-1411. 10.1016/j.jglr.2016.09.009
- Williams, M.W.; Losleben, M.; Caine, N.; Greenland, D., 1996. Changes in climate and hydrochemical responses in a high-elevation catchment in the Rocky Mountains, USA. *Limnology and Oceanography*, 41 (5): 939-946
- Williams, S.L.; Smith, J.E., 2007. A global review of the distribution, taxonomy, and impacts of introduced seaweeds. *Annual Review of Ecology Evolution and Systematics*. Palo Alto: Annual Reviews (Annual Review of Ecology Evolution and Systematics), Vol.38, 327-359. 10.1146/annurev.ecolsys.38.091206.095543
- Williamson, J.M., 2011. The Role of Information and Prices in the Nitrogen Fertilizer Management Decision: New Evidence from the Agricultural Resource Management Survey. *Journal of Agricultural and Resource Economics*, 36 (3): 552-572. <http://www.waaonline.org/publications/jare/recent-issues>
- Wilson, K.A.; Able, K.W.; Heck, K.L., 1990. Predation rates on juvenile blue crabs in estuarine nursery habitats: evidence for the importance of macroalgae (*Ulva lactuca*). *Marine Ecology Progress Series*, 58: 243-251
- Wimalawansa, S.A.; Wimalawansa, S.J., 2016. Environmentally induced, occupational diseases with emphasis on chronic kidney disease of multifactorial origin affecting tropical countries. *Annals of Occupational and Environmental Medicine*, 28: 13. 10.1186/s40557-016-0119-y
- Wiman, I.M.B., 1990. Expecting the Unexpected: Some Ancient Roots to Current Perceptions of Nature. *Ambio*, 19 (2): 7
- Winder, M.; Schindler, D.E., 2004. Climate change uncouples trophic interactions in an aquatic ecosystem. *Ecology*, 85 (8): 2100-2106
- Winder, M.; Sommer, U., 2012. Phytoplankton response to a changing climate. *Hydrobiologia*, 698 (1): 5-16. 10.1007/s10750-012-1149-2
- Winter, J.G.; Palmer, M.E.; Howell, E.T.; Young, J.D., 2015. Long term changes in nutrients, chloride, and phytoplankton density in the nearshore waters of Lake Erie. *Journal of Great Lakes Research*, 41 (1): 145-155. 10.1016/j.jglr.2014.11.028
- Wischmeier, W.H.; Smith, D.D., 1978. *Predicting rainfall erosion losses—a guide to conservation planning*. Washington:
- Wiseman, W.J.; Rabalais, N.N.; Turner, R.E.; Dinnel, S.P.; MacNaughton, A., 1997. Seasonal and interannual variability within the Louisiana coastal current: stratification and hypoxia. *Journal of Marine Systems*, 12 (1-4): 237-248. 10.1016/s0924-7963(96)00100-5
- Withers, P.; Neal, C.; Jarvie, H.; Doody, D., 2014. Agriculture and Eutrophication: Where Do We Go from Here? *Sustainability*, 6 (9): 5853-5875. 10.3390/su6095853
- Withers, P.J.A., 2014. Agriculture and Eutrophication: Where Do We Go from Here? *Sustainability*, 6 (9): 5853-5875. 10.3390/su6095853
- Withers, P.J.A.; Davidson, I.A.; Foy, R.H., 2000. Prospects for controlling nonpoint phosphorus loss to water: A UK perspective. *Journal of Environmental Quality*, 29 (1): 167-175. 10.2134/jeq2000.00472425002900010021x
- Withers, P.J.A.; Jarvie, H.P., 2008. Delivery and cycling of phosphorus in rivers: A review. *Science of the Total Environment*, 400 (1-3): 379-395. 10.1016/j.scitotenv.2008.08.002
- Withers, P.J.A.; May, L.; Jarvie, H.P.; Jordan, P.; Doody, D.; Foy, R.H.; Bechmann, M.; Cooksley, S.; Dils, R.; Deal, N., 2012. Nutrient emissions to water from septic tank systems in rural catchments: Uncertainties and implications for policy. *Environmental Science and Policy*, 24: 71-82. 10.1016/j.envsci.2012.07.023
- Wladis, D.; Rosen, L.; Kros, H., 1999. Risk-based decision analysis of atmospheric emission alternatives to reduce ground water degradation on the European scale. *Ground Water*, 37 (6): 818-826. 10.1111/j.1745-6584.1999.tb01180.x
- Wlosinski, J.H.; Minshall, G.W., 1986. Predictability of stream ecosystem models of various levels of resolution. *Dynamics of Lotic Ecosystems*. Ann Arbor Science ed. Chelsea, MI, USA: T.D. Fontaine and S.M. Bartell, 69-86
- Wojtal-Frankiewicz, A.; Frankiewicz, P., 2011. The impact of pelagic (*Daphnia longispina*) and benthic (*Dreissena polymorpha*) filter feeders on chlorophyll and nutrient concentration. *Limnologica - Ecology and Management of Inland Waters*, 41 (3): 191-200. <http://dx.doi.org/10.1016/j.limno.2010.09.001>

- Wolf, M.A.; Sciuto, K.; Andreoli, C.; Moro, I., 2012. Ulva (Chlorophyta, Ulvales) Biodiversity in the North Adriatic Sea (Mediterranean, Italy): Cryptic Species and New Introductions. *Journal of Phycology*, 48 (6): 1510–1521. 10.1111/jphy.12005
- Wondzell, S.M.; Swanson, F.J., 1996. Seasonal and storm dynamics of the hyporheic zone of a 4th-order mountain stream .1. Hydrologic processes. *Journal of the North American Benthological Society*, 15 (1): 3-19. 10.2307/1467429
- Wondzell, S.M.; Swanson, F.J., 1996. Seasonal and storm dynamics of the hyporheic zone of a 4th-order mountain stream .2. Nitrogen cycling. *Journal of the North American Benthological Society*, 15 (1): 20-34. 10.2307/1467430
- Wong, M.G.; Parker, G., 2006. Reanalysis and correction of bed-load relation of Meyer-Peter and Muller using their own database. *Journal of Hydraulic Engineering*, 132 (11): 1159-1168. 10.1061/(asce)0733-9429(2006)132:11(1159)
- Wong, W.H.; Rabalais, N.N.; Turner, R.E., 2016. Size-dependent top-down control on phytoplankton growth by microzooplankton in eutrophic lakes. *Hydrobiologia*, 763 (1): 97-108. 10.1007/s10750-015-2365-3
- Wood, A.; Blackhurst, M.; Hawkins, T.; Xue, X.; Ashbolt, N.; Garland, J., 2015. Cost-effectiveness of nitrogen mitigation by alternative household wastewater management technologies. *Journal of Environmental Management*, 150: 344-354. 10.1016/j.jenvman.2014.10.002
- Woodruff, S.L.; House, W.A.; Callow, M.E.; Leadbeater, B.S.C., 1999. The effects of biofilms on chemical processes in surficial sediments. *Freshwater Biology*, 41 (1): 73-89. 10.1046/j.1365-2427.1999.00387.x
- Woodward, S.; Roberts, D.L.; Betts, R.A., 2005. A simulation of the effect of climate change-induced desertification on mineral dust aerosol. *Geophysical Research Letters*, 32 (18). 10.1029/2005gl023482
- Woolhise, D.A., 1973. Hydrologic and watershed modeling - State of art. *Transactions of the Asae*, 16 (3): 553-559
- Worm, B.; Lotze, H.K., 2006. Effects of eutrophication, grazing, and algal blooms on rocky shores. *Limnology and Oceanography*, 51 (1): 569–579
- Worm, B.; Lotze, H.K.; Hillebrand, H.; Sommer, U., 2002. Consumer versus resource control of species diversity and ecosystem functioning. *Nature*, 417 (6891): 848-851. 10.1038/nature00830
- Worrall, F.; Burt, T., 1998. Decomposition of river water nitrate time-series — comparing agricultural and urban signals. *Science of the Total Environment*, 210-211: 153-162. 10.1016/s0048-9697(98)00048-5
- Worrall, F.; Howden, N.; Burt, T., 2013. Assessment of sample frequency bias and precision in fluvial flux calculations - An improved low bias estimation method. *Journal of Hydrology*, 503: 101-110. 10.1016/j.jhydrol.2013.08.048
- Worrall, F.; Howden, N.; Burt, T., 2015. Time series analysis of the world's longest fluvial nitrate record: evidence for changing states of catchment saturation. *Hydrological Processes*, 29 (3): 434-444. 10.1002/hyp.10164
- Woznicki, S.A.; Nejadhaschemi, A.P.; Tang, Y.; Wang, L., 2016. Large-scale climate change vulnerability assessment of stream health. *Ecological Indicators*, 69: 578-594. <http://dx.doi.org/10.1016/j.ecolind.2016.04.002>
- Wright, R.F.; Beier, C.; Cosby, B.J., 1998. Effects of nitrogen deposition and climate change on nitrogen runoff at Norwegian boreal forest catchments: the MERLIN model applied to Risdalsheia (RAIN and CLIMEX projects). *Hydrology and Earth System Sciences*, 2 (4): 399-414
- Wu, J.T.; Hsu, Y.B.; Kow, L.C., 2015. Resilience of a phytoplankton community after disturbance in a subtropical reservoir: A case study in Feitsui Reservoir, Taiwan. *Ecological Indicators*, 52: 284-291. 10.1016/j.ecolind.2014.12.007
- Wu, Y.G.; Bartell, S.M.; Nair, S.K., 2006. A spatial model for restoration of the Upper-Mississippi River ecosystems - art. no. 62980K. In: Gao, W.; Ustin, S.L., eds. *Remote Sensing and Modeling of Ecosystems for Sustainability III*. Bellingham: Spie-Int Soc Optical Engineering (Proceedings of the Society of Photo-Optical Instrumentation Engineers (Spie)), Vol.6298, K2980-K2980. 62980K
- 10.1117/12.696276
- Wulff, F.; Humborg, C.; Andersen, H.E.; Blicher-Mathiesen, G.; Czajkowski, M.; Elofsson, K.; Fonnesbech-Wulff, A.; Hasler, B.; Hong, B.; Jansons, V.; Mört, C.M.; Smart, J.C.R.; Smedberg, E.; Stålnacke, P.; Swaney, D.P.; Thodsen, H.; Was, A.; Zylitz, T., 2014. Reduction of Baltic Sea nutrient inputs and allocation of abatement costs within the Baltic Sea catchment. *Ambio*, 43 (1): 11-25. 10.1007/s13280-013-0484-5
- Wulff, F.; Stigebrandt, A.; Rahm, L., 1990. NUTRIENT DYNAMICS OF THE BALTIC SEA. *Ambio*, 19 (3): 126-133
- Wustenberg, A.; Pors, Y.; Ehwald, R., 2011. Culturing of stoneworts and submersed angiosperms with phosphate uptake exclusively from an artificial sediment. *Freshwater Biology*, 56 (8): 1531-1539. 10.1111/j.1365-2427.2011.02591.x
- Xepapadeas, A., 2010. Modeling Complex Systems. *Agricultural Economics*, 41: 181-191. 10.1111/j.1574-0862.2010.00499.x
- Xepapadeas, A., 2011. The economics of non-point-source pollution. *Annual Review of Resource Economics*, 3 (1): 355-373
- Xia, Y.; Yan, X., 2011. Life-cycle evaluation of nitrogen-use in rice-farming systems: implications for economically-optimal nitrogen rates. *Biogeosciences*, 8 (11): 3159-3168. 10.5194/bg-8-3159-2011
- Xiang, C.; Wang, Y.; Liu, H., 2017. A scientometrics review on nonpoint source pollution research. *Ecological Engineering*, 99: 400-408. <http://dx.doi.org/10.1016/j.ecoleng.2016.11.028>
- Xiao, M.; Wu, F.C., 2014. A review of environmental characteristics and effects of low-molecular weight organic acids in the surface ecosystem. *Journal of Environmental Sciences*, 26 (5): 935-954. 10.1016/s1001-0742(13)60570-7
- Xiao, Y.J.; Ferrerira, J.G.; Bricker, S.B.; Nunes, J.P.; Zhu, M.Y.; Zhang, X.L., 2007. Trophic assessment in Chinese coastal systems - Review of methods and application to the Changjiang (Yangtze) Estuary and Jiaozhou Bay. *Estuaries and Coasts*, 30 (6): 901-918
- Xie, D.; Zhou, H.J.; Ji, H.T.; An, S.Q., 2015. The Growth and Establishment of Floating Turions of Potamogeton crispus Are Not Favored by Summer Climate. *Clean-Soil Air Water*, 43 (3): 336-340. 10.1002/clen.201300836
- Xing, G.X.; Zhu, Z.L., 2013. Regional nitrogen budgets for China and its major. *The Nitrogen Cycle at Regional to Global Scales*, 57 (58): 405-427

- Xing, Q.; Tosi, L.; Braga, F.; Gao, X.; Gao, M., 2015. Interpreting the progressive eutrophication behind the world's largest macroalgal blooms with water quality and ocean color data. *Natural Hazards*, 78 (1): 7–21. 10.1007/s11069-015-1694-x
- Xinqing, Z.; Lingfeng, H.; Qian, W.; Rongcheng, L., 2014. Amphipods fail to suppress the accumulation of *Ulva lactuca* biomass in eutrophic Yundang Lagoon. *Acta Oceanologica Sinica*, 33 (12): 155–162. 10.1007/s13131-014-0532-4
- Xiong, J.Q.; Wang, X.C.C.; Zhang, Q.Q.; Duan, R.; Wang, N., 2016. Characteristics of a landscape water with high salinity in a coastal city of China and measures for eutrophication control. *Ecological Indicators*, 61: 268–273. 10.1016/j.ecolind.2015.09.026
- Xu, D.; Li, F.; Gao, Z.; Wang, D.; Zhang, X.; Ye, N.; Zhuang, Z., 2013. Facilitative interactions between the green-tide macroalga *Monostroma arctium* and the red macroalga *Porphyra yezoensis*. *Journal of Experimental Marine Biology and Ecology*, 444: 8–15. 10.1016/j.jembe.2013.03.004
- Xu, D.; Zhang, X.; Wang, Y.; Fan, X.; Miao, Y.; Ye, N.; Zhuang, Z., 2016. Responses of photosynthesis and nitrogen assimilation in the green-tide macroalga *Ulva prolifera* to desiccation. *Marine Biology*, 163 (1). 10.1007/s00227-015-2806-6
- Xu, H.; Paeirl, H.W.; Qin, B.; Zhu, G.; Gaoa, G., 2010. Nitrogen and phosphorus inputs control phytoplankton growth in eutrophic Lake Taihu, China. *Limnology and Oceanography*, 55 (1): 420–432
- Xu, J.; Yin, K.; Lee, J.H.W.; Liu, H.; Ho, A.Y.T.; Yuan, X.; Harrison, P.J., 2009. Long-Term and Seasonal Changes in Nutrients, Phytoplankton Biomass, and Dissolved Oxygen in Deep Bay, Hong Kong. *Estuaries and Coasts*, 33 (2): 399–416. 10.1007/s12237-009-9213-5
- Xu, L.; Shen, J.; Marinova, D.; Guo, X.; Sun, F.; Zhu, F., 2013. Changes of public environmental awareness in response to the Taihu blue-green algae bloom incident in China. *Environment, Development and Sustainability*, 15 (5): 21
- Xu, R.B.; Wu, F.; Hilt, S.; Wu, C.; Wang, X.L.; Chang, X.X., 2015. Recovery limitation of endangered *Ottelia acuminata* by allelopathic interaction with cyanobacteria. *Aquatic Ecology*, 49 (3): 333–342. 10.1007/s10452-015-9528-1
- Xu, Z.-x.; Lu, S.-q., 2003. Hydrodynamic model for tidal river network. *Journal of Hydrodynamics* (2003): 15(2):64-70,
- Xue, J.F.; Pu, C.; Liu, S.L.; Zhao, X.; Zhang, R.; Chen, F.; Xiao, X.P.; Zhang, H.L., 2016. Carbon and nitrogen footprint of double rice production in Southern China. *Ecological Indicators*, 64: 249–257. 10.1016/j.ecolind.2016.01.001
- Yacobi, Y.Z., 2006. Temporal and vertical variation of chlorophyll alpha concentration, phytoplankton photosynthetic activity and light attenuation in Lake Kinneret: possibilities and limitations for simulation by remote sensing. *Journal of Plankton Research*, 28 (8): 725–736. 10.1093/plankt/fbl004
- Yacobi, Y.Z.; Gophen, I.K.; Walline, P., 1993. The spatial distribution of temperature , oxygen , plankton and fish determined simultaneously in Lake Kinneret , Israel. (6): 589-601
- Yadvinder, S.; Malhi, S.S.; Nyborg, M.; Beauchamp, E.G., 1994. Large granules, nests or bands: Methods of increasing efficiency of fall- applied urea for small cereal grains in North America. *Fertilizer Research*, 38: 61–87
- Yakushev, E.; Neretin, L., 1997. One-dimensional modeling of nitrogen and sulfur cycles in the aphotic zones of the Black and Arabian Seas. *Global Biogeochemical Cycles*, 11 (3): 401–414. 10.1029/97GB00782
- Yakushev, E.; Pollehne, F.; Jost, G.; Kuznetso, I.; Schneider, B.; Urnlauf, L., 2007. Analysis of the water column oxic/anoxic interface in the Black and Baltic seas with a numerical model. *Marine Chemistry*, 107 (3): 388–410. 10.1016/j.marchem.2007.06.003
- Yamamoto, T., 2003. The Seto Inland Sea - eutrophic or oligotrophic? *Marine Pollution Bulletin*, 47 (1-6): 37–42. 10.1016/s0025-326x(02)00416-2
- Yamamoto, T., 2003. The Seto Inland Sea—eutrophic or oligotrophic? *Marine Pollution Bulletin*, 47 (1): 37–42
- Yan, H.Y.; Zhang, X.R.; Dong, J.H.; Shang, M.S.; Shan, K.; Wu, D.; Yuan, Y.; Wang, X.; Meng, H.; Huang, Y., 2016. Spatial and temporal relation rule acquisition of eutrophication in Da'ning River based on rough set theory. *Ecological Indicators*, 66: 180–189
- Yan, T.; Frost, J.P.; Agnew, R.E.; Binnie, R.C.; Mayne, C.S., 2006. Relationships among manure nitrogen output and dietary and animal factors in lactating dairy cows. *Journal of Dairy Science*, 89 (10): 3981–3991
- Yan, Z.B.; Han, W.X.; Penuelas, J.; Sardans, J.; Elser, J.J.; Du, E.Z.; Reich, P.B.; Fang, J.Y., 2016. Phosphorus accumulates faster than nitrogen globally in freshwater ecosystems under anthropogenic impacts. *Ecology Letters*, 19 (10): 1237–1246. 10.1111/ele.12658
- Yanagi, T.; Yamamoto, T.; Koizumi, Y.; Ikeda, T.; Kamozono, M.; Tamori, H., 1995. A simulation of red tide formation. *Journal of Marine Systems*, 6 (3): 269–285. 10.1016/0924-7963(94)00027-9
- Yang, X.E.; Wu, X.; Hao, H.L.; He, Z.L., 2008. Mechanisms and assessment of water eutrophication. *Journal of Zhejiang University-Science B*, 9 (3): 197–209. 10.1631/jzus.B0710626
- Yang, X.-e.; Wu, X.; Hao, H.-l.; He, Z.-l., 2008. Mechanisms and assessment of water eutrophication. *Journal of Zhejiang University Science B*, 9 (3): 197–209
- Yang, X.H., 2014. Deriving RUSLE cover factor from time-series fractional vegetation cover for hillslope erosion modelling in New South Wales. *Soil Research*, 52 (3): 253–261. 10.1071/sr13297
- Yang, Y., 2016. A contribution to the economic assessment of green tides. Université de Bretagne occidentale - Brest.<https://tel.archives-ouvertes.fr/tel-01531265>
- Yang, Y.; Han, D.X.; Wang, H.Y., 2011. Applications of habitat equivalency analysis in ecological damage assessment of oil spill incident. *Chinese Journal of Applied Ecology*, 22 (8): 2113–2118
- Yassuda, E.A.; Sheng, Y.P., 1998. Modeling dissolved oxygen dynamics of Tampa Bay during summer of 1991. (*Estuarine and Coastal Modeling*)

- Yasuhara, M.; Hunt, G.; Breitburg, D.; Tsujimoto, A.; Katsuki, K., 2012. Human-induced marine ecological degradation: micropaleontological perspectives. *Ecol Evol*, 2 (12): 3242-68. 10.1002/ece3.425
- Ye, L.; Grimm, N.B., 2013. Modelling potential impacts of climate change on water and nitrate export from a mid-sized, semiarid watershed in the US Southwest. *Climatic Change*, 120 (1-2): 419-431. 10.1007/s10584-013-0827-z
- Ye, N.-h.; Zhang, X.-w.; Mao, Y.-z.; Liang, C.-w.; Xu, D.; Zou, J.; Zhuang, Z.-m.; Wang, Q.-y., 2011. 'Green tides' are overwhelming the coastline of our blue planet: taking the world's largest example. *Ecological research*, 26 (3): 477–485
- Ye, W.; Bates, B.C.; Viney, N.R.; Sivapalan, M.; Jakeman, A.J., 1997. Performance of conceptual rainfall-runoff models in low-yielding ephemeral catchments. *Water Resources Research*, 33 (1): 153-166. 10.1029/96wr02840
- Ye, Z.; Zhang, G.; Li, B.; Strom, J.S.; Dahl, P.J., 2008. Ammonia emissions affected by airflow in a model pig house : effects of ventilation rate, floor slat opening, and heaspace height in a manure storage pit. *Transactions of the Asabe*, 51 (6): 2113-2122
- Yeh, N.; Yeh, P.; Chang, Y.H., 2015. Artificial floating islands for environmental improvement. *Renewable & Sustainable Energy Reviews*, 47: 616-622. 10.1016/j.rser.2015.03.090
- Yekta, S.S.; Rahm, L., 2011. A model study of the effects of sulfide-oxidizing bacteria (*Beggiatoa* spp.) on phosphorus retention processes in hypoxic sediments: Implications for phosphorus management in the Baltic Sea. *Boreal Environment Research*, 16 (3): 167-184
- Yi, H.; Jie, W., 2011. A bibliometric study of the trend in articles related to eutrophication published in Science Citation Index. *Scientometrics*, 89 (3): 919-927. 10.1007/s11192-011-0479-6
- Yi, X.; Zou, R.; Guo, H., 2016. Global sensitivity analysis of a three-dimensional nutrients-algae dynamic model for a large shallow lake. *Ecological Modelling*, 327: 74-84
- Yih, S.-M.; Davidson, B., 1975. Identification in nonlinear, distributed parameter water quality models. *Water Resources Research*, 11 (5): 693-704. 10.1029/WR011i005p00693
- Yin, J.H.; Zhao, Z.X.; Zhang, G.T.; Wang, S.W.; Wan, A.Y., 2013. Tempo-spatial variation of nutrient and chlorophyll-alpha concentrations from summer to winter in the Zhangzi Island Area (Northern Yellow Sea). *Journal of Ocean University of China*, 12 (3): 373-384. 10.1007/s11802-013-2101-4
- Yin, K.D.; Song, X.X.; Liu, S.; Kan, J.J.; Qian, P.Y., 2008. Is inorganic nutrient enrichment a driving force for the formation of red tides? A case study of the dinoflagellate *Scrippsiella trochoidea* in an embayment. *Harmful Algae*, 8 (1): 54-59. 10.1016/j.hal.2008.08.004
- Young, E.B.; Beardall, J., 2003. Photosynthetic function in *Dunaliella tertiolecta* (Chlorophyta) during a nitrogen starvation and recovery cycle. *Journal of Phycology*, 39 (5): 897-905
- Young, P.; Parkinson, S.; Lees, M., 1996. Simplicity Out of Complexity in Environmental Modelling: Occam's Razor Revisited. *Journal of Applied Statistics*, 23 (2-3): 165-210. 10.1080/02664769624206
- Yu, B.; Xu, L.; Yang, Z., 2015. Ecological compensation for inundated habitats in hydropower developments based on carbon stock balance. *Journal of Cleaner Production*. 10.1016/j.jclepro.2015.07.071
- Yu, J.H.; Fan, C.X.; Zhong, J.C.; Zhang, Y.L.; Wang, C.H.; Zhang, L., 2016. Evaluation of in situ simulated dredging to reduce internal nitrogen flux across the sediment-water interface in Lake Taihu, China. *Environmental Pollution*, 214: 866-877. 10.1016/j.envpol.2016.03.062
- Yuan, Y.T.; Zhang, H.G.; Pan, G., 2016. Flocculation of cyanobacterial cells using coal fly ash modified chitosan. *Water Research*, 97: 11-18. 10.1016/j.watres.2015.12.003
- Yunev, O.A.; Vedernikov, V.I.; Basturk, O.; Yilmaz, A.; Kideys, A.E.; Moncheva, S.; Konovalov, S.K., 2002. Long-term variations of surface chlorophyll a and primary production in the open Black Sea, 11-28
- Yuping, Z.; Liju, T.; Qiuting, P.; Feng, L.; Jiangtao, W., 2015. Influence of nutrients pollution on the growth and organic matter output of *Ulva prolifera* in the southern Yellow Sea, China. *Marine Pollution Bulletin*, 95 (1): 107–114. 10.1016/j.marpolbul.2015.04.034
- Zafonte, M.; Hampton, S., 2005. Lost bird-years: Quantifying bird injuries in natural resource damage assessments for oil spills. 10979-10983
- Zaitsev, Y.P., 1992. Recent changes in the trophic structure of the Black Sea. *Fisheries Oceanography*, 1 (2): 180-189
- Zalack, J.T.; Smucker, N.J.; Vis, M.L., 2010. Development of a diatom index of biotic integrity for acid mine drainage impacted streams. *Ecological Indicators*, 10 (2): 287-295. 10.1016/j.ecolind.2009.06.003
- Zalewski, M., 2000. Ecohydrology - the scientific background to use ecosystem properties as management tools toward sustainability of water resources. *Ecological Engineering*, 16 (1): 1-8
- Zalewski, M., 2015. Ecohydrology and Hydrologic Engineering: Regulation of Hydrology-Biota Interactions for Sustainability. *Journal of Hydrologic Engineering*, 20 (1): A4014012. 10.1061/(ASCE)HE.1943-5584.0000999
- Zammit, C.; Sivapalan, M.; Kelsey, P.; Viney, N.R., 2005. Modelling the effects of land-use modifications to control nutrient loads from an agricultural catchment in Western Australia. *Ecological Modelling*, 187 (1): 60-70. 10.1016/j.ecolmodel.2005.01.024
- Zamparas, M.; Drosos, M.; Deligiannakis, Y.; Zacharias, I., 2015. Eutrophication control using a novel bentonite humic-acid composite material Bephos (TM). *Journal of Environmental Chemical Engineering*, 3 (4): 3030-3036. 10.1016/j.jece.2014.12.013
- Zamparas, M.; Zacharias, I., 2014. Restoration of eutrophic freshwater by managing internal nutrient loads. A review. *Science of the Total Environment*, 496: 551-562. 10.1016/j.scitotenv.2014.07.076

- Zampogno, G.C.; Costa, M.B.; Barbiero, D.C.; Ferreira, B.S.; Souza, F.T.V.M., 2013. Gastropod communities associated with *Ulva* spp. in the littoral zone in southeast Brazil. *LATIN AMERICAN JOURNAL OF AQUATIC RESEARCH*, 41 (5): 968–978. 10.3856/vol41-issue5-fulltext-15
- Zang, C.; Huang, S.; Wu, M.; Du, S.; Scholz, M.; Gao, F.; Lin, C.; Guo, Y.; Dong, Y., 2011. Comparison of Relationships Between pH, Dissolved Oxygen and Chlorophyll a for Aquaculture and Non-aquaculture Waters. *Water Air and Soil Pollution*, 219 (1-4): 157-174. 10.1007/s11270-010-0695-3
- Zannakis, M.; Wallin, A.; Johansson, L.-O., 2015. Political Trust and Perceptions of the Quality of Institutional Arrangements – how do they influence the public's acceptance of environmental rules. *Environmental Policy and Governance*, 25 (6): 424-438. 10.1002/eet.1676
- Zanoni, A.E.; Rutkowski, R.J., 1972. Per Capita Loadings of Domestic Wastewater. *Journal of Water Pollution Control Federation*, 44 (9): 6
- Zanou, B.; Bellas, C.; Skourtos, M., 2010. Implementation of the European Water Framework Directive: procedures and a simple model for the identification of the most cost-effective measures in eutrophicated catchments. *Water Policy*, 12 (3): 369
- Zanou, B.; Kogianni, A.; Skourtos, M., 2003. A classification approach of cost effective management measures for the improvement of watershed quality. *Ocean & Coastal Management*, 46 (11): 957-983. 10.1016/j.ocemarman.2004.01.003
- Zbikowski, R.; Szefer, P.; Latala, A., 2006. Distribution and relationships between selected chemical elements in green alga Enteromorpha sp from the southern Baltic. *Environmental Pollution*, 143 (3): 435–448. 10.1016/j.envpol.2005.12.007
- Zbikowski, R.; Szefer, P.; Latala, A., 2007. Comparison of green algae Cladophora sp and Enteromorpha sp as potential biomonitor of chemical elements in the southern Baltic. *Science of the Total Environment*, 387 (1-3): 320–332. 10.1016/j.scitotenv.2007.07.017
- Zeng, X.; Chen, X.; Zhuang, J., 2015. The positive relationship between ocean acidification and pollution. *Mar Pollut Bull*, 91 (1): 14-21. 10.1016/j.marpolbul.2014.12.001
- Zeng, Z.; Zhang, S.D.; Li, T.Q.; Zhao, F.L.; He, Z.L.; Zhao, H.P.; Yang, X.E.; Wang, H.L.; Zhao, J.; Rafiq, M.T., 2013. Sorption of ammonium and phosphate from aqueous solution by biochar derived from phytoremediation plants. *Journal of Zhejiang University-Science B*, 14 (12): 1152-1161. 10.1631/jzus.B1300102
- Zertuche-Gonzalez, J.A.; Camacho-Ibar, V.F.; Pacheco-Ruiz, I.; Cabello-Pasini, A.; Galindo-Bect, L.A.; Guzman-Calderon, J.M.; Macias-Carranza, V.; Espinoza-Avalos, J., 2009. The role of *Ulva* spp. as a temporary nutrient sink in a coastal lagoon with oyster cultivation and upwelling influence. *Journal of Applied Phycology*, 21 (6): 729–736. 10.1007/s10811-009-9408-y
- Zhai, W.; Zhao, H.; Zheng, N.; Xu, Y., 2012. Coastal acidification in summer bottom oxygen-depleted waters in northwestern-northern Bohai Sea from June to August in 2011. *Chinese Science Bulletin*, 57 (9): 1062-1068. 10.1007/s11434-011-4949-2
- Zhang, H.; Culver, D.A.; Boegman, L., 2008. A two-dimensional ecological model of Lake Erie: Application to estimate dreissenid impacts on large lake plankton populations. *Ecological Modelling*, 214 (2-4): 219-241. 10.1016/j.ecolmodel.2008.02.005
- Zhang, H.; Hu, W.; Gu, K.; Li, Q.; Zheng, D.; Zhai, S., 2013. An improved ecological model and software for short-term algal bloom forecasting. *Environmental Modelling & Software*, 48: 152-162. 10.1016/j.envsoft.2013.07.001
- Zhang, J.; Gilbert, D.; Gooday, A.J.; Levin, L.; Naqvi, S.W.A.; Middelburg, J.J.; Scranton, M.; Ekau, W.; Peña, A.; Dewitte, B.; Oguz, T.; Monteiro, P.M.S.; Urban, E.; Rabalais, N.N.; Ittekot, V.; Kemp, W.M.; Ulloa, O.; Elmgren, R.; Escobar-Briones, E.; Van der Plas, A.K., 2010. Natural and human-induced hypoxia and consequences for coastal areas: synthesis and future development. *Biogeosciences*, 7 (5): 1443-1467. 10.5194/bg-7-1443-2010
- Zhang, J.; Kim, J.K.; Yarish, C.; He, P., 2016. The expansion of *Ulva prolifera* OF Muller macroalgal blooms in the Yellow Sea, PR China, through asexual reproduction. *Marine Pollution Bulletin*, 104 (1-2): 101–106. 10.1016/j.marpolbul.2016.01.056
- Zhang, J.; Liu, S.M.; Ren, J.L.; Wu, Y.; Zhang, G.L., 2007. Nutrient gradients from the eutrophic Changjiang (Yangtze River) Estuary to the oligotrophic Kuroshio waters and re-evaluation of budgets for the East China Sea Shelf. *Progress in Oceanography*, 74 (4): 449-478. 10.1016/j.pocean.2007.04.019
- Zhang, J.H.; Huo, Y.Z.; Zhang, Z.L.; Yu, K.F.; He, Q.; Zhang, L.H.; Yang, L.L.; Xu, R.; He, P.M., 2013. Variations of morphology and photosynthetic performances of *Ulva prolifera* during the whole green tide blooming process in the Yellow Sea. *Marine Environmental Research*, 92: 35–42. 10.1016/j.marenvres.2013.08.009
- Zhang, J.H.; Liu, C.C.; Yang, L.L.; Gao, S.; Ji, X.; Huo, Y.Z.; Yu, K.F.; Xu, R.; He, P.M., 2015. The source of the *Ulva* blooms in the East China Sea by the combination of morphological, molecular and numerical analysis. *Estuarine Coastal and Shelf Science*, 164: 418-424. 10.1016/j.ecss.2015.08.007
- Zhang, J.Q.; Xie, Z.C.; Jiang, X.M.; Wang, Z., 2015. Control of Cyanobacterial Blooms via Synergistic Effects of Pulmonates and Submerged Plants. *Clean-Soil Air Water*, 43 (3): 330-335. 10.1002/clen.201300922
- Zhang, N.; Fan, Y.; Liu, Y., 2011. Relationship between diatom communities and environmental conditions at Honghe wetland, China. *African Journal of Biotechnology*, 10 (76): 17506-17518
- Zhang, Q.; Brady, D.C.; Boynton, W.R.; Ball, W.P., 2015. Long-Term Trends of Nutrients and Sediment from the Nontidal Chesapeake Watershed: An Assessment of Progress by River and Season. *Journal of the American Water Resources Association*, 51 (6): 1534-1555. 10.1111/1752-1688.12327

- Zhang, Q.; Hirsch, R.M.; Ball, W.P., 2016. Long-Term Changes in Sediment and Nutrient Delivery from Conowingo Dam to Chesapeake Bay: Effects of Reservoir Sedimentation. *Environmental Science & Technology*, 50 (4): 1877-1886. 10.1021/acs.est.5b04073
- Zhang, R.H.; Day, D.L.; Christianson, L.L.; Jepson, W.P., 1994. A computer-model for predicting ammonia release rate from swine manure pits. *Journal of Agricultural Engineering Research*, 58 (4): 223-229. 10.1006/jaer.1994.1052
- Zhang, X.; Xu, D.; Mao, Y.; Li, Y.; Xue, S.; Zou, J.; Lian, W.; Liang, C.; Zhuang, Z.; Wang, Q.; Ye, N., 2011. Settlement of vegetative fragments of *Ulva prolifera* confirmed as an important seed source for succession of a large-scale green tide bloom. *Limnology and Oceanography*, 56 (1): 233–242. 10.4319/lo.2011.56.1.0233
- Zhang, Y.; Wang, L.; Hu, Y.; Xi, X.; Tang, Y.; Chen, J.; Fu, X.; Sun, Y., 2015. Water organic pollution and eutrophication influence soil microbial processes, increasing soil respiration of estuarine wetlands: site study in Jiuduansha wetland. *Plos One*, 10 (5): e0126951
- Zhang, Y.C.; Slomp, C.P.; Broers, H.P.; Bostick, B.; Passier, H.F.; Bottcher, M.E.; Omorogie, E.O.; Lloyd, J.R.; Polya, D.A.; Van Cappellen, P., 2012. Isotopic and microbiological signatures of pyrite-driven denitrification in a sandy aquifer. *Chemical Geology*, 300: 123-132. 10.1016/j.chemgeo.2012.01.024
- Zhang, Y.D.; Su, Y.L.; Liu, Z.W.; Chen, X.C.; Yu, J.L.; Jin, M., 2016. A sediment record of environmental change in and around Lake Lugu, SW China, during the past two centuries. *Journal of Paleolimnology*, 55 (3): 259-271. 10.1007/s10933-016-9878-2
- Zhao, F.L.; Xi, S.; Yang, X.E.; Yang, W.D.; Li, J.J.; Gu, B.H.; He, Z.L., 2012. Purifying eutrophic river waters with integrated floating island systems. *Ecological Engineering*, 40: 53-60. 10.1016/j.ecoleng.2011.12.012
- Zhong, Y.; Chen, T.; Zheng, W.; Yang, Y., 2015. Selenium enhances antioxidant activity and photosynthesis in *Ulva fasciata*. *Journal of Applied Phycology*, 27 (1): 555–562. 10.1007/s10811-014-0350-2
- Zhu, M.; Liu, Z.; Shao, H.; Jin, Y., 2016. Effects of nitrogen and phosphate enrichment on the activity of nitrate reductase of *Ulva prolifera* in coastal zone. *ACTA PHYSIOLOGIAE PLANTARUM*, 38 (7). 10.1007/s11738-016-2178-7
- Zhu, Z.J.; Yuan, H.Z.; Wei, Y.; Li, P.S.; Zhang, P.H.; Xie, D., 2015. Effects of Ammonia Nitrogen and Sediment Nutrient on Growth of the Submerged Plant *Vallisneria natans*. *Clean-Soil Air Water*, 43 (12): 1653-1659. 10.1002/clen.201300878
- Ziadi, N.; Whalen, J.K.; Messiga, A.J.; Morel, C., 2013. Assessment and Modeling of Soil Available Phosphorus in Sustainable Cropping Systems. *Advances in Agronomy*. Elsevier, Vol.122, 85-126
- Zillén, L.; Conley, D.; Andren, T.; Andren, E.; Björck, S., 2008. Past occurrences of hypoxia in the Baltic Sea and the role of climate variability, environmental change and human impact. *Earth-Science Reviews*, 91 (1-4): 77-92
- Zillén, L.; Conley, D.J.; Andren, T.; Andren, E.; Björck, S., 2008. Past occurrences of hypoxia in the Baltic Sea and the role of climate variability, environmental change and human impact. *Earth-Science Reviews*, 91 (1-4): 77-92. 10.1016/j.earscirev.2008.10.001
- Zingone, A.; Oksfeldt Enevoldsen, H., 2000. The diversity of harmful algal blooms: a challenge for science and management. *Ocean & Coastal Management*, 43 (8–9): 725-748. 10.1016/S0964-5691(00)00056-9
- Zinia, N.J.; Kroeze, C., 2015. Future trends in urbanization and coastal water pollution in the Bay of Bengal: the lived experience. *Environment, Development and Sustainability*, 17 (3): 531-546. 10.1007/s10668-014-9558-1
- Zou, D.; Gao, K., 2014. The photosynthetic and respiratory responses to temperature and nitrogen supply in the marine green macroalga *Ulva conglobata* (Chlorophyta). *Phycologia*, 53 (1): 86–94. 10.2216/13-189.1
- Zouten, H.; Diaz, C.A.; Gomez, A.G.; Cortezon, J.A.R.; Alba, J.G., 2013. An advanced tool for eutrophication modeling in coastal lagoons: Application to the Victoria lagoon in the north of Spain. *Ecological Modelling*, 265: 99-113. 10.1016/j.ecolmodel.2013.06.009
- Zuo, S.P.; Wan, K.; Ma, S.M., 2015. Combined effect of predatory zooplankton and allelopathic aquatic macrophytes on algal suppression. *Environmental Technology*, 36 (1): 54-59. 10.1080/09593330.2014.936520
- Zylicz, T., 1993. The ecological economics of the Baltic Sea. *European Review*, 1 (4): 329-335. 10.1017/S1062798700000739

Expertise réalisée à la demande des ministères en charge de l'environnement et de l'agriculture, avec le soutien financier de l'AFB.



**AGENCE FRANÇAISE  
POUR LA BIODIVERSITÉ**  
**ÉTABLISSEMENT PUBLIC DE L'ÉTAT**