

Philippe Van Cappellen

List of Publications by Year in descending order

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Version: 2024-02-01

221
papers

20,326
citations

9254

74
h-index

11601

135
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231
docs citations

231
times ranked

17153
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of riboflavin and desferrioxamine B on Fe(II) oxidation by O ₂ . <i>Fundamental Research</i> , 2022, 2, 208-217.	1.6	3
2	Agricultural phosphorus surplus trajectories for Ontario, Canada (1961–2016), and erosional export risk. <i>Science of the Total Environment</i> , 2022, 818, 151717.	3.9	16
3	Organic Matter Degradation in Energy-Limited Subsurface Environments—A Bioenergetics-Informed Modeling Approach. <i>Geomicrobiology Journal</i> , 2022, 39, 1-16.	1.0	3
4	Phosphorus retention and transformation in a dammed reservoir of the Thames River, Ontario: Impacts on phosphorus load and speciation. <i>Journal of Great Lakes Research</i> , 2022, 48, 84-96.	0.8	12
5	Managing nitrogen legacies to accelerate water quality improvement. <i>Nature Geoscience</i> , 2022, 15, 97-105.	5.4	112
6	Effects of pH and Dissolved Silicate on Phosphate Mineral-Water Partitioning with Goethite. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 34-43.	1.2	7
7	Deployment of functional DNA-based biosensors for environmental water analysis. <i>TrAC - Trends in Analytical Chemistry</i> , 2022, 153, 116639.	5.8	12
8	The Cold Region Critical Zone in Transition: Responses to Climate Warming and Land Use Change. <i>Annual Review of Environment and Resources</i> , 2021, 46, 111-134.	5.6	26
9	Beyond the Mass Balance: Watershed Phosphorus Legacies and the Evolution of the Current Water Quality Policy Challenge. <i>Water Resources Research</i> , 2021, 57, e2020WR029316.	1.7	29
10	Consecutive Fe redox cycles decrease bio-reducible Fe(III) and Fe isotope fractionations by eliminating small clay particles. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 308, 118-135.	1.6	4
11	Energetic scaling in microbial growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	14
12	Economic valuation of suspended sediment and phosphorus filtration services by four different wetland types: A preliminary assessment for southern Ontario, Canada. <i>Hydrological Processes</i> , 2021, 35, .	1.1	5
13	Temperature, moisture and freeze–thaw controls on CO ₂ production in soil incubations from northern peatlands. <i>Scientific Reports</i> , 2021, 11, 23219.	1.6	16
14	A DNA-based biosensor for aqueous Hg(II): Performance under variable pH, temperature and competing ligand composition. <i>Journal of Hazardous Materials</i> , 2020, 385, 121572.	6.5	20
15	Direct Measurement of Aqueous Mercury(II): Combining DNA-Based Sensing with Diffusive Gradients in Thin Films. <i>Environmental Science & Technology</i> , 2020, 54, 13680-13689.	4.6	16
16	Phosphorus binding to soil organic matter via ternary complexes with calcium. <i>Chemosphere</i> , 2020, 260, 127624.	4.2	40
17	Global Dam-Driven Changes to Riverine N:P:Si Ratios Delivered to the Coastal Ocean. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088288.	1.5	52
18	An analysis of the sample size requirements for acceptable statistical power in water quality monitoring for improvement detection. <i>Ecological Indicators</i> , 2020, 118, 106684.	2.6	12

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19	Enhancement of Naphthalene Degradation by a Sequential Sulfate Injection Scenario in a (Semi)-Arid Coastal Soil: a Flow-Through Reactor Experiment. <i>Water, Air, and Soil Pollution</i> , 2020, 231, 1.	1.1	3
20	Unique surface density layers promote formation of harmful algal blooms in the Pengxi River, Three Gorges Reservoir. <i>Freshwater Science</i> , 2020, 39, 722-734.	0.9	19
21	Evaluating phosphorous from vehicular emissions as a potential source of contamination to ground and surface water. <i>Cogent Environmental Science</i> , 2020, 6, .	1.6	3
22	Oxidation of Fe(II) by Flavins under Anoxic Conditions. <i>Environmental Science & Technology</i> , 2020, 54, 11622-11630.	4.6	13
23	Sorption and Desorption of the Model Aromatic Hydrocarbons Naphthalene and Benzene: Effects of Temperature and Soil Composition. <i>Frontiers in Environmental Chemistry</i> , 2020, 1, .	0.7	8
24	Pore-scale controls on hydrological and geochemical processes in peat: Implications on interacting processes. <i>Earth-Science Reviews</i> , 2020, 207, 103227.	4.0	54
25	Changes in Sedimentary Phosphorus Burial Following Artificial Eutrophication of Lake 227, Experimental Lakes Area, Ontario, Canada. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2020JG005713.	1.3	23
26	Effects of dissolved organic phase composition and salinity on the engineered sulfate application in a flow-through system. <i>Environmental Science and Pollution Research</i> , 2020, 27, 11842-11854.	2.7	3
27	Assessment of the impact of geogenic and climatic factors on global risk of urinary stone disease. <i>Science of the Total Environment</i> , 2020, 721, 137769.	3.9	8
28	Carbon release and transformation from coastal peat deposits controlled by submarine groundwater discharge: a column experiment study. <i>Limnology and Oceanography</i> , 2020, 65, 1116-1135.	1.6	5
29	Carbon turnover and microbial activity in an artificial soil under imposed cyclic drainage and imbibition. <i>Vadose Zone Journal</i> , 2020, 19, e20021.	1.3	12
30	Arsenic Oxidation by Flavin-Derived Reactive Species under Oxic and Anoxic Conditions: Oxidant Formation and pH Dependence. <i>Environmental Science & Technology</i> , 2019, 53, 10897-10905.	4.6	18
31	Bacterial Stern layer diffusion: experimental determination with spectral induced polarization and sensitivity to nitrite toxicity. <i>Near Surface Geophysics</i> , 2019, 17, 623-635.	0.6	8
32	Potential for Aerobic Methanotrophic Metabolism on Mars. <i>Astrobiology</i> , 2019, 19, 1187-1195.	1.5	9
33	Comparative valuation of potential and realized ecosystem services in Southern Ontario, Canada. <i>Environmental Science and Policy</i> , 2019, 100, 105-112.	2.4	24
34	Effects of Damming on River Nitrogen Fluxes: A Global Analysis. <i>Global Biogeochemical Cycles</i> , 2019, 33, 1339-1357.	1.9	53
35	Understanding and managing the re-eutrophication of Lake Erie: Knowledge gaps and research priorities. <i>Freshwater Science</i> , 2019, 38, 675-691.	0.9	51
36	Response to Comment on "Legacy nitrogen may prevent achievement of water quality goals in the Gulf of Mexico". <i>Science</i> , 2019, 365, .	6.0	5

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37	Impact of Hydrofluoric Acid Treatment on Humic Acid Properties Extracted from Organic Soils and an Organic Amendment: A Technical Evaluation. <i>Soil Science Society of America Journal</i> , 2019, 83, 1219-1226.	1.2	5
38	Selenium in buoyant marine debris biofilm. <i>Marine Pollution Bulletin</i> , 2019, 149, 110562.	2.3	6
39	Can Improved Flow Partitioning in Hydrologic Models Increase Biogeochemical Predictability?. <i>Water Resources Research</i> , 2019, 55, 2939-2960.	1.7	12
40	Biodegradation Kinetics of Benzene and Naphthalene in the Vadose and Saturated Zones of a (Semi)-arid Saline Coastal Soil Environment. <i>Geofluids</i> , 2019, 2019, 1-15.	0.3	6
41	On the Role of a Large Shallow Lake (Lake St. Clair, USA&Canada) in Modulating Phosphorus Loads to Lake Erie. <i>Water Resources Research</i> , 2019, 55, 10548-10564.	1.7	10
42	Coupling Water Column and Sediment Biogeochemical Dynamics: Modeling Internal Phosphorus Loading, Climate Change Responses, and Mitigation Measures in Lake Vansjø, Norway. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 3847-3866.	1.3	29
43	Bioretention cells under cold climate conditions: Effects of freezing and thawing on water infiltration, soil structure, and nutrient removal. <i>Science of the Total Environment</i> , 2019, 649, 749-759.	3.9	54
44	Nitrous oxide emissions from inland waters: Are IPCC estimates too high?. <i>Global Change Biology</i> , 2019, 25, 473-488.	4.2	119
45	Benthic nitrite exchanges in the Seine River (France): An early diagenetic modeling analysis. <i>Science of the Total Environment</i> , 2018, 628-629, 580-593.	3.9	13
46	Linking Spectral Induced Polarization (SIP) and Subsurface Microbial Processes: Results from Sand Column Incubation Experiments. <i>Environmental Science & Technology</i> , 2018, 52, 2081-2090.	4.6	45
47	Speciation dynamics of oxyanion contaminants (As, Sb, Cr) in argillaceous suspensions during oxic-anoxic cycles. <i>Applied Geochemistry</i> , 2018, 91, 75-88.	1.4	16
48	Legacy nitrogen may prevent achievement of water quality goals in the Gulf of Mexico. <i>Science</i> , 2018, 360, 427-430.	6.0	262
49	Phosphorus and nitrogen trajectories in the Mediterranean Sea (1950&2030): Diagnosing basin-wide anthropogenic nutrient enrichment. <i>Progress in Oceanography</i> , 2018, 162, 257-270.	1.5	8
50	The role of groundwater discharge fluxes on Si:P ratios in a major tributary to Lake Erie. <i>Science of the Total Environment</i> , 2018, 622-623, 814-824.	3.9	5
51	Sensing Coated Iron-Oxide Nanoparticles with Spectral Induced Polarization (SIP): Experiments in Natural Sand Packed Flow-Through Columns. <i>Environmental Science & Technology</i> , 2018, 52, 14256-14265.	4.6	19
52	Sorption of benzene and naphthalene on (semi)-arid coastal soil as a function of salinity and temperature. <i>Journal of Contaminant Hydrology</i> , 2018, 219, 61-71.	1.6	18
53	The spatial and temporal distribution of metals in an urban stream: A case study of the Don River in Toronto, Canada. <i>Journal of Great Lakes Research</i> , 2018, 44, 1314-1326.	0.8	13
54	Environmental Indicator Principium with Case References to Agricultural Soil, Water, and Air Quality and Model&Derived Indicators. <i>Journal of Environmental Quality</i> , 2018, 47, 191-202.	1.0	4

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55	Gibbs Energy Dynamic Yield Method (GEDYM): Predicting microbial growth yields under energy-limiting conditions. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 241, 1-16.	1.6	42
56	Metal Cycling in Surface Sediments: Modeling The Interplay of Transport and Reaction. , 2018, , 21-64.		20
57	Microbial selenium sulfide reduction for selenium recovery from wastewater. <i>Journal of Hazardous Materials</i> , 2017, 329, 110-119.	6.5	27
58	Two centuries of nitrogen dynamics: Legacy sources and sinks in the Mississippi and Susquehanna River Basins. <i>Global Biogeochemical Cycles</i> , 2017, 31, 2-23.	1.9	199
59	Fate of Adsorbed U(VI) during Sulfidization of Lepidocrocite and Hematite. <i>Environmental Science & Technology</i> , 2017, 51, 2140-2150.	4.6	25
60	Solute pools in Nikanotee Fen watershed in the Athabasca oil sands region. <i>Environmental Pollution</i> , 2017, 225, 150-162.	3.7	28
61	Global perturbation of organic carbon cycling by river damming. <i>Nature Communications</i> , 2017, 8, 15347.	5.8	246
62	Understanding the unique biogeochemistry of the Mediterranean Sea: Insights from a coupled phosphorus and nitrogen model. <i>Global Biogeochemical Cycles</i> , 2017, 31, 1010-1031.	1.9	54
63	A diagnostic approach to constraining flow partitioning in hydrologic models using a multiobjective optimization framework. <i>Water Resources Research</i> , 2017, 53, 3279-3301.	1.7	22
64	Agricultural soil denitrifiers possess extensive nitrite reductase gene diversity. <i>Environmental Microbiology</i> , 2017, 19, 1189-1208.	1.8	61
65	The Role of Pore Structure on Nitrate Reduction in Peat Soil: A Physical Characterization of Pore Distribution and Solute Transport. <i>Wetlands</i> , 2017, 37, 951-960.	0.7	15
66	Sediment phosphorus speciation and mobility under dynamic redox conditions. <i>Biogeosciences</i> , 2017, 14, 3585-3602.	1.3	74
67	Deconstructing the redox cascade: what role do microbial exudates (flavins) play?. <i>Environmental Chemistry</i> , 2017, 14, 515.	0.7	18
68	Geological evolution of the marine selenium cycle: Insights from the bulk shale $\delta^{82/76}\text{Se}$ record and isotope mass balance modeling. <i>Earth and Planetary Science Letters</i> , 2016, 441, 178-187.	1.8	23
69	Influence of dormancy on microbial competition under intermittent substrate supply: insights from model simulations. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw071.	1.3	12
70	Inoculating Bacteria into Polycyclic Aromatic Hydrocarbon-Contaminated Oil Sands Soil by Means of Electrokinetics. <i>Water, Air, and Soil Pollution</i> , 2016, 227, 1.	1.1	6
71	The legacy of surface mining: Remediation, restoration, reclamation and rehabilitation. <i>Environmental Science and Policy</i> , 2016, 66, 227-233.	2.4	126
72	Non-steady state diagenesis of organic and inorganic sulfur in lake sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 194, 15-33.	1.6	45

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73	Direct Discharges of Domestic Wastewater are a Major Source of Phosphorus and Nitrogen to the Mediterranean Sea. <i>Environmental Science & Technology</i> , 2016, 50, 8722-8730.	4.6	67
74	Circulation and oxygen cycling in the Mediterranean Sea: Sensitivity to future climate change. <i>Journal of Geophysical Research: Oceans</i> , 2016, 121, 8230-8247.	1.0	27
75	Rivers in the Anthropocene: Global scale modifications of riverine nutrient fluxes by damming. <i>Ecohydrology and Hydrobiology</i> , 2016, 16, 106-111.	1.0	107
76	Iron Isotope Fractionations Reveal a Finite Bioavailable Fe Pool for Structural Fe(III) Reduction in Nontronite. <i>Environmental Science & Technology</i> , 2016, 50, 8661-8669.	4.6	31
77	Structure of peat soils and implications for water storage, flow and solute transport: A review update for geochemists. <i>Chemical Geology</i> , 2016, 429, 75-84.	1.4	278
78	Global phosphorus retention by river damming. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 15603-15608.	3.3	322
79	Iron isotope fractionation in sediments of an oligotrophic freshwater lake. <i>Earth and Planetary Science Letters</i> , 2015, 423, 164-172.	1.8	23
80	Reactive silicon dynamics in a large prairie reservoir (Lake Diefenbaker, Saskatchewan). <i>Journal of Great Lakes Research</i> , 2015, 41, 100-109.	0.8	23
81	Effects of aqueous uranyl speciation on the kinetics of microbial uranium reduction. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 157, 109-124.	1.6	44
82	Plastic debris in the Laurentian Great Lakes: A review. <i>Journal of Great Lakes Research</i> , 2015, 41, 9-19.	0.8	300
83	Kinetics of Substrate Biodegradation under the Cumulative Effects of Bioavailability and Self-Inhibition. <i>Environmental Science & Technology</i> , 2015, 49, 5529-5537.	4.6	30
84	Reactive transport modeling of early diagenesis in a reservoir lake affected by acid mine drainage: Trace metals, lake overturn, benthic fluxes and remediation. <i>Chemical Geology</i> , 2015, 419, 75-91.	1.4	28
85	Water table fluctuations and soil biogeochemistry: An experimental approach using an automated soil column system. <i>Journal of Hydrology</i> , 2014, 509, 245-256.	2.3	81
86	Silicon isotope fractionation during abiotic silica precipitation at low temperatures: Inferences from flow-through experiments. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 142, 95-114.	1.6	93
87	Land-use Drives Seasonal Riverine Si Cycling at the Landscape Scale. <i>Procedia Earth and Planetary Science</i> , 2014, 10, 133-138.	0.6	1
88	A biogeochemical model for phosphorus and nitrogen cycling in the Eastern Mediterranean Sea. <i>Journal of Marine Systems</i> , 2014, 139, 460-471.	0.9	21
89	Sulfidization of lepidocrocite and its effect on uranium phase distribution and reduction. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 142, 570-586.	1.6	17
90	Worldwide retention of nutrient silicon by river damming: From sparse data set to global estimate. <i>Global Biogeochemical Cycles</i> , 2014, 28, 842-855.	1.9	85

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91	A biogeochemical model for phosphorus and nitrogen cycling in the Eastern Mediterranean Sea. <i>Journal of Marine Systems</i> , 2014, 139, 420-432.	0.9	22
92	Biogenic silica dissolution in diatom aggregates: insights from reactive transport modelling. <i>Marine Ecology - Progress Series</i> , 2014, 517, 35-49.	0.9	2
93	Effects of temperature on rates and mineral products of microbial Fe(II) oxidation by <i>Leptothrix cholodnii</i> at microaerobic conditions. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 108, 107-124.	1.6	42
94	Selenium sorption and isotope fractionation: Iron(III) oxides versus iron(II) sulfides. <i>Chemical Geology</i> , 2013, 342, 21-28.	1.4	74
95	Phosphate sorption from seawater solutions: Particle concentration effect. <i>Marine Chemistry</i> , 2013, 148, 52-62.	0.9	10
96	Sorption of Arsenite, Arsenate, and Thioarsenates to Iron Oxides and Iron Sulfides: A Kinetic and Spectroscopic Investigation. <i>Environmental Science & Technology</i> , 2013, 47, 5652-5659.	4.6	175
97	Model-Based Integration and Analysis of Biogeochemical and Isotopic Dynamics in a Nitrate-Polluted Pyritic Aquifer. <i>Environmental Science & Technology</i> , 2013, 47, 130909083606007.	4.6	10
98	Arsenic binding to organic and inorganic sulfur species during microbial sulfate reduction: a sediment flow-through reactor experiment. <i>Environmental Chemistry</i> , 2013, 10, 285.	0.7	45
99	Arsenic Bioremediation by Biogenic Iron Oxides and Sulfides. <i>Applied and Environmental Microbiology</i> , 2013, 79, 4325-4335.	1.4	99
100	Dissolved inorganic carbon and alkalinity fluxes from coastal marine sediments: model estimates for different shelf environments and sensitivity to global change. <i>Biogeosciences</i> , 2013, 10, 371-398.	1.3	142
101	Oxygen Dependency of Neutrophilic Fe(II) Oxidation by <i>Leptothrix</i> Differs from Abiotic Reaction. <i>Geomicrobiology Journal</i> , 2012, 29, 550-560.	1.0	40
102	Effect of pressure on silica solubility of diatom frustules in the oceans: Results from long-term laboratory and field incubations. <i>Marine Chemistry</i> , 2012, 136-137, 1-6.	0.9	12
103	Isotopic and microbiological signatures of pyrite-driven denitrification in a sandy aquifer. <i>Chemical Geology</i> , 2012, 300-301, 123-132.	1.4	74
104	Comparative survey of potential nitrate and sulfate reduction rates in aquatic sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 77, 474-488.	1.6	52
105	Calcite growth kinetics: Modeling the effect of solution stoichiometry. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 77, 121-134.	1.6	121
106	Selenium as paleo-oceanographic proxy: A first assessment. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 89, 302-317.	1.6	80
107	Thermodynamic limitations on microbially catalyzed reaction rates. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 90, 96-109.	1.6	78
108	Controls on the Recycling and Preservation of Biogenic Silica from Biomineralization to Burial. <i>Silicon</i> , 2012, 4, 7-22.	1.8	56

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109	Degradation of natural organic matter: A thermodynamic analysis. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 2030-2042.	1.6	447
110	³⁴ S/ ³² S fractionation by sulfate-reducing microbial communities in estuarine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3903-3914.	1.6	21
111	Atmospheric acidification of mineral aerosols: a source of bioavailable phosphorus for the oceans. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 6265-6272.	1.9	156
112	Twelve testable hypotheses on the geobiology of weathering. <i>Geobiology</i> , 2011, 9, 140-165.	1.1	133
113	Quantitative analysis of anaerobic oxidation of methane (AOM) in marine sediments: A modeling perspective. <i>Earth-Science Reviews</i> , 2011, 106, 105-130.	4.0	159
114	Incorporating dormancy in dynamic microbial community models. <i>Ecological Modelling</i> , 2011, 222, 3092-3102.	1.2	55
115	²²⁸ Ra, ²²⁶ Ra, ²²⁴ Ra and ²²³ Ra in potential sources and sinks of land-derived material in the German Bight of the North Sea: implications for the use of radium as a tracer. <i>Geo-Marine Letters</i> , 2011, 31, 259-269.	0.5	13
116	Reassessing the role of sulfur geochemistry on arsenic speciation in reducing environments. <i>Journal of Hazardous Materials</i> , 2011, 189, 647-652.	6.5	59
117	Chalcogen cycle science and technology. <i>Journal of Hazardous Materials</i> , 2011, 189, 623.	6.5	0
118	Distribution and Diversity of <i>Gallionella</i> -Like Neutrophilic Iron Oxidizers in a Tidal Freshwater Marsh. <i>Applied and Environmental Microbiology</i> , 2011, 77, 2337-2344.	1.4	37
119	Why is the Eastern Mediterranean phosphorus limited?. <i>Progress in Oceanography</i> , 2010, 85, 236-244.	1.5	232
120	Shelf erosion and submarine river canyons: implications for deep-sea oxygenation and ocean productivity during glaciation. <i>Biogeosciences</i> , 2010, 7, 1973-1982.	1.3	12
121	Biogeochemical Redox Processes and their Impact on Contaminant Dynamics. <i>Environmental Science & Technology</i> , 2010, 44, 15-23.	4.6	1,037
122	Non-Steady State Modeling of Arsenic Diagenesis in Lake Sediments. <i>Environmental Science & Technology</i> , 2010, 44, 197-203.	4.6	45
123	Reactivity of biogenic silica: Surface versus bulk charge density. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 517-530.	1.6	64
124	Physical and chemical steady-state compaction in deep-sea sediments: Role of mineral reactions. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 3494-3513.	1.6	5
125	Seawater-mediated interactions between diatomaceous silica and terrigenous sediments: Results from long-term incubation experiments. <i>Chemical Geology</i> , 2010, 270, 68-79.	1.4	52
126	Sulfate reducing activity and sulfur isotope fractionation by natural microbial communities in sediments of a hypersaline soda lake (Mono Lake, California). <i>Chemical Geology</i> , 2010, 278, 23-30.	1.4	39

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127	Bioavailability of organic matter in a freshwater estuarine sediment: long-term degradation experiments with and without nitrate supply. <i>Biogeochemistry</i> , 2009, 94, 13-28.	1.7	21
128	Solubility and dissimilatory reduction kinetics of iron(III) oxyhydroxides: A linear free energy relationship. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 5273-5282.	1.6	154
129	Denitrification coupled to pyrite oxidation and changes in groundwater quality in a shallow sandy aquifer. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 6716-6726.	1.6	110
130	Anthropogenic perturbations of the silicon cycle at the global scale: Key role of the land-ocean transition. <i>Global Biogeochemical Cycles</i> , 2009, 23, .	1.9	158
131	Remote quantification of methane fluxes in gassy marine sediments through seismic survey. <i>Geology</i> , 2009, 37, 235-238.	2.0	25
132	Biosorption of metals (Cu ²⁺ , Zn ²⁺) and anions (F ⁻ , H ₂ PO ₄ ⁻) by viable and autoclaved cells of the Gram-negative bacterium <i>Shewanella putrefaciens</i> . <i>Colloids and Surfaces B: Biointerfaces</i> , 2008, 65, 126-133.	2.5	63
133	Glacial-interglacial variations in marine phosphorus cycling: Implications for ocean productivity. <i>Global Biogeochemical Cycles</i> , 2008, 22, .	1.9	29
134	Effect of Sorbed Fe(II) on the Initial Reduction Kinetics of 6-Line Ferrihydrite and Amorphous Ferric Phosphate by <i>Shewanella putrefaciens</i> . <i>Geomicrobiology Journal</i> , 2008, 25, 181-192.	1.0	11
135	Methane efflux from marine sediments in passive and active margins: Estimations from bioenergetic reaction-transport simulations. <i>Earth and Planetary Science Letters</i> , 2008, 265, 329-344.	1.8	71
136	Anaerobic oxidation of methane (AOM) in marine sediments from the Skagerrak (Denmark): II. Reaction-transport modeling. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 2880-2894.	1.6	111
137	Quantitative interpretation of pore water O ₂ and pH distributions in deep-sea sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 1350-1364.	1.6	19
138	Surface complexation effects on phosphate adsorption to ferric iron oxyhydroxides along pH and salinity gradients in estuaries and coastal aquifers. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 3431-3445.	1.6	82
139	The surface chemistry of divalent metal carbonate minerals; a critical assessment of surface charge and potential data using the charge distribution multi-site ion complexation model. <i>Numerische Mathematik</i> , 2008, 308, 905-941.	0.7	170
140	Dissolution of biogenic silica from land to ocean: Role of salinity and pH. <i>Limnology and Oceanography</i> , 2008, 53, 1614-1621.	1.6	118
141	Vertical Distribution of Denitrification in an Estuarine Sediment: Integrating Sediment Flowthrough Reactor Experiments and Microprofiling via Reactive Transport Modeling. <i>Applied and Environmental Microbiology</i> , 2007, 73, 40-47.	1.4	31
142	Potential nitrate removal in a coastal freshwater sediment (Haringvliet Lake, The Netherlands) and response to salinization. <i>Water Research</i> , 2007, 41, 3061-3068.	5.3	64
143	Dependence of calcite growth rate and Sr partitioning on solution stoichiometry: Non-Kossel crystal growth. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 2240-2249.	1.6	140
144	Modeling Microbially Induced Carbon Degradation in Redox-Stratified Subsurface Environments: Concepts and Open Questions. <i>Geomicrobiology Journal</i> , 2007, 24, 139-155.	1.0	77

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145	Transformation of Hematite into Magnetite During Dissimilatory Iron Reduction Conditions and Mechanisms. <i>Geomicrobiology Journal</i> , 2007, 24, 403-416.	1.0	49
146	Competitive Binding of Cu ²⁺ and Zn ²⁺ to Live Cells of <i>Shewanella putrefaciens</i> . <i>Environmental Science & Technology</i> , 2007, 41, 909-914.	4.6	32
147	The global marine phosphorus cycle: sensitivity to oceanic circulation. <i>Biogeosciences</i> , 2007, 4, 155-171.	1.3	134
148	The use of flow-through sediment reactors in biogeochemical kinetics: Methodology and examples of applications. <i>Marine Chemistry</i> , 2007, 106, 256-271.	0.9	64
149	Phylogenetic and physiological diversity of dissimilatory ferric iron reducers in sediments of the polluted Scheldt estuary, Northwest Europe. <i>Environmental Microbiology</i> , 2007, 9, 1956-1968.	1.8	78
150	Geochemistry of trace metals in a fresh water sediment: Field results and diagenetic modeling. <i>Science of the Total Environment</i> , 2007, 381, 263-279.	3.9	73
151	Modelling the geochemical fate and transport of wastewater-derived phosphorus in contrasting groundwater systems. <i>Journal of Contaminant Hydrology</i> , 2007, 92, 87-108.	1.6	57
152	Denitrification coupled to pyrite oxidation and implications for groundwater quality. , 2007, , .		0
153	Acid-base activity of live bacteria: Implications for quantifying cell wall charge. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 267-276.	1.6	44
154	Kinetics of microbial sulfate reduction in estuarine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 1148-1162.	1.6	179
155	Organic matter mineralization in sediment of a coastal freshwater lake and response to salinization. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 2836-2855.	1.6	108
156	Reduction of Fe(III) colloids by <i>Shewanella putrefaciens</i> : A kinetic model. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 5842-5854.	1.6	73
157	Reactive iron(III) in sediments: Chemical versus microbial extractions. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 4166-4180.	1.6	126
158	Acid-base activity of microorganisms. <i>Journal of Geochemical Exploration</i> , 2006, 88, 181-185.	1.5	4
159	Potential rates and pathways of microbial nitrate reduction in coastal sediments. <i>FEMS Microbiology Ecology</i> , 2006, 58, 179-192.	1.3	83
160	Framboidal vaterite aggregates and their transformation into calcite: A morphological study. <i>Journal of Crystal Growth</i> , 2006, 287, 528-530.	0.7	73
161	Bioenergetic Controls on Anaerobic Oxidation of Methane (AOM) in Coastal Marine Sediments: A Theoretical Analysis. <i>Numerische Mathematik</i> , 2006, 306, 246-294.	0.7	83
162	Salt marsh pore water geochemistry does not correlate with microbial community structure. <i>Estuarine, Coastal and Shelf Science</i> , 2005, 62, 233-251.	0.9	88

#	ARTICLE	IF	CITATIONS
163	Biogeochemistry of Major Redox Elements and Mercury in a Tropical Reservoir Lake (Petit Saut, French) Tj ETQq1 1 0,784314,rgBT /Oyer	1.5	16
164	Incorporating ecological and biogeochemical information into irrigation models. Coastal and Estuarine Studies, 2005, , 341-358.	0.4	4
165	Solute-specific pore water irrigation: Implications for chemical cycling in early diagenesis. Journal of Marine Research, 2005, 63, 601-621.	0.3	55
166	Quantitative interpretation of pH distributions in aquatic sediments: A reaction-transport modeling approach. Numerische Mathematik, 2005, 305, 919-956.	0.7	100
167	Modeling the impact of microbial activity on redox dynamics in porous media. Geochimica Et Cosmochimica Acta, 2005, 69, 5005-5019.	1.6	99
168	Competition between enzymatic and abiotic reduction of uranium(VI) under iron reducing conditions. Chemical Geology, 2005, 220, 315-327.	1.4	117
169	Particle age distributions and O2 exposure times: Timescales in bioturbated sediments. Global Biogeochemical Cycles, 2005, 19, .	1.9	32
170	Incorporating geomicrobial processes in reactive transport models of subsurface environments. , 2005, , 109-125.		4
171	A NEW IDEA IN MARSH CORING. Soil Science Society of America Journal, 2004, 68, 705-708.	1.2	6
172	What do acid-base titrations of live bacteria tell us? A preliminary assessment. Aquatic Sciences, 2004, 66, 19-26.	0.6	44
173	An authigenic iron phosphate phase in estuarine sediments: composition, formation and chemical reactivity. Marine Chemistry, 2004, 91, 227-251.	0.9	155
174	Microbial reduction of iron(III) oxyhydroxides: effects of mineral solubility and availability. Chemical Geology, 2004, 212, 255-268.	1.4	242
175	Nutrient inputs to the coastal ocean through submarine groundwater discharge: controls and potential impact. Journal of Hydrology, 2004, 295, 64-86.	2.3	780
176	Title is missing!. Biogeochemistry, 2003, 64, 179-203.	1.7	105
177	Kinetics of microbially mediated reactions: dissimilatory sulfate reduction in saltmarsh sediments (Sapelo Island, Georgia, USA). Estuarine, Coastal and Shelf Science, 2003, 56, 1001-1010.	0.9	41
178	Pyritization: a palaeoenvironmental and redox proxy reevaluated. Estuarine, Coastal and Shelf Science, 2003, 57, 1183-1193.	0.9	82
179	Predicting benthic fluxes of silicic acid from deep-sea sediments. Journal of Geophysical Research, 2003, 108, .	3.3	26
180	Aqueous cadmium uptake by calcite: a stirred flow-through reactor study. Geochimica Et Cosmochimica Acta, 2003, 67, 2763-2774.	1.6	79

#	ARTICLE	IF	CITATIONS
181	Carbon geochemistry of cold seeps: Methane fluxes and transformation in sediments from Kazan mud volcano, eastern Mediterranean Sea. <i>Earth and Planetary Science Letters</i> , 2003, 212, 361-375.	1.8	86
182	Explicit representation of spatial heterogeneity in reactive transport models: application to bioirrigated sediments. <i>Journal of Geochemical Exploration</i> , 2003, 78-79, 231-234.	1.5	15
183	Biom mineralization and Global Biogeochemical Cycles. <i>Reviews in Mineralogy and Geochemistry</i> , 2003, 54, 357-381.	2.2	71
184	Global estimates of enhanced solute transport in marine sediments. <i>Limnology and Oceanography</i> , 2003, 48, 777-786.	1.6	76
185	12. Biom mineralization and Global Biogeochemical Cycles. , 2003, , 357-382.		8
186	Surface chemistry and reactivity of biogenic silica. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 2559-2568.	1.6	103
187	Biogenic silica dissolution in the oceans: Reconciling experimental and field-based dissolution rates. <i>Global Biogeochemical Cycles</i> , 2002, 16, 23-1-23-10.	1.9	173
188	Quantifying bioirrigation using ecological parameters: a stochastic approach. <i>Geochemical Transactions</i> , 2002, 3, 1.	1.8	66
189	Title is missing!. <i>Biogeochemistry</i> , 2002, 60, 49-76.	1.7	146
190	Quantifying bioirrigation in aquatic sediments: An inverse modeling approach. <i>Limnology and Oceanography</i> , 2001, 46, 164-177.	1.6	74
191	Processes controlling solubility of biogenic silica and pore water build-up of silicic acid in marine sediments. <i>Marine Chemistry</i> , 2001, 73, 333-352.	0.9	236
192	The role of biologically-enhanced pore water transport in early diagenesis: An example from carbonate sediments in the vicinity of North Key Harbor, Dry Tortugas National Park, Florida. <i>Journal of Marine Research</i> , 2000, 58, 493-522.	0.3	32
193	Microbiological and Geochemical Characterization of Microbial Fe(III) Reduction in Salt Marsh Sediments. <i>Geomicrobiology Journal</i> , 2000, 17, 163-178.	1.0	72
194	The ferrozine method revisited: Fe(II)/Fe(III) determination in natural waters. <i>Applied Geochemistry</i> , 2000, 15, 785-790.	1.4	1,086
195	Reply to "Comment on kinetic modeling of microbially-driven redox chemistry of subsurface environments: coupling transport, microbial metabolism and geochemistry" by J. Griffioen. <i>Journal of Hydrology</i> , 2000, 227, 292-294.	2.3	0
196	Surface catalysis of uranium(VI) reduction by iron(II). <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 2939-2955.	1.6	574
197	A plug flow-through reactor for studying biogeochemical reactions in undisturbed aquatic sediments. <i>Applied Geochemistry</i> , 1998, 13, 269-280.	1.4	68
198	Kinetic modeling of microbially-driven redox chemistry of subsurface environments: coupling transport, microbial metabolism and geochemistry. <i>Journal of Hydrology</i> , 1998, 209, 53-80.	2.3	288

#	ARTICLE	IF	CITATIONS
199	Biogeochemical Cycles of Manganese and Iron at the Oxidic-Anoxic Transition of a Stratified Marine Basin (Orca Basin, Gulf of Mexico). <i>Environmental Science & Technology</i> , 1998, 32, 2931-2939.	4.6	122
200	Redox Stabilization of the Atmosphere and Oceans and Marine Productivity. <i>Science</i> , 1997, 275, 406-408.	6.0	35
201	Biogenic silica dissolution in sediments of the Southern Ocean. II. Kinetics. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 1997, 44, 1129-1149.	0.6	177
202	Biogenic silica dissolution in sediments of the Southern Ocean. I. Solubility. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 1997, 44, 1109-1128.	0.6	196
203	A new direction for the Journal of Hydrology. <i>Journal of Hydrology</i> , 1997, 199, 1-2.	2.3	0
204	Probing the charge of reactive sites at the mineral-water interface: Effect of ionic strength on crystal growth kinetics of fluorite. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 1871-1877.	1.6	8
205	A multicomponent reactive transport model of early diagenesis: Application to redox cycling in coastal marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 2993-3014.	1.6	336
206	Reactive surface area control of the dissolution kinetics of biogenic silica in deep-sea sediments. <i>Chemical Geology</i> , 1996, 132, 125-130.	1.4	53
207	Redox Stabilization of the Atmosphere and Oceans by Phosphorus-Limited Marine Productivity. <i>Science</i> , 1996, 271, 493-496.	6.0	328
208	Chapter 8. BIOGEOCHEMICAL DYNAMICS IN AQUATIC SEDIMENTS. , 1996, , 335-376.		54
209	A global model for the early diagenesis of organic carbon and organic phosphorus in marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 1259-1284.	1.6	187
210	Benthic phosphorus regeneration, net primary production, and ocean anoxia: A model of the coupled marine biogeochemical cycles of carbon and phosphorus. <i>Paleoceanography</i> , 1994, 9, 677-692.	3.0	413
211	Silica Precipitation in Fractures and the Evolution of Permeability in Hydrothermal Upflow Zones. <i>Science</i> , 1993, 260, 192-194.	6.0	157
212	A surface complexation model of the carbonate mineral-aqueous solution interface. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 3505-3518.	1.6	482
213	Influence of water column anoxia on the burial and preservation of carbon and phosphorus in marine shales. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 303-316.	1.6	404
214	Biogeochemical Transformations in Sediments: Kinetic Models of Early Diagenesis. , 1993, , 401-445.		29
215	Reductive dissolution of manganese(III, IV) (hydr)oxides by oxalate: the effect of pH and light. <i>Langmuir</i> , 1992, 8, 95-103.	1.6	104
216	Fluorapatite crystal growth from modified seawater solutions. <i>Geochimica Et Cosmochimica Acta</i> , 1991, 55, 1219-1234.	1.6	139

#	ARTICLE	IF	CITATIONS
217	A new kinetic approach to modeling water-rock interaction: The role of nucleation, precursors, and Ostwald ripening. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 2657-2677.	1.6	477
218	Relation between sedimentation rate and burial of organic phosphorus and organic carbon in marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 373-386.	1.6	266
219	Nutrient Cycling in the Mediterranean Sea: The Key to Understanding How the Unique Marine Ecosystem Functions and Responds to Anthropogenic Pressures. , 0, , .		9
220	Ten Best Practices to Strengthen Stewardship and Sharing of Water Science Data in Canada. <i>Hydrological Processes</i> , 0, , e14385.	1.1	3
221	Current State of Microplastic Pollution Research Data: Trends in Availability and Sources of Open Data. <i>Frontiers in Environmental Science</i> , 0, 10, .	1.5	16