# Philippe Van Cappellen

List of Publications by Year
in descending order



| 221 | 20,326 | 9234 74 | 11581 135 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 231 | 231 | 231 | 17153 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The ferrozine method revisited: Fe(II)/Fe(III) determination in natural waters. Applied Geochemistry, 2000, 15, 785-790. | 1.4 | 1,086 |
| 2 | Biogeochemical Redox Processes and their Impact on Contaminant Dynamics. Environmental Science & Technology, 2010, 44, 15-23. | 4.6 | 1,037 |
| 3 | Nutrient inputs to the coastal ocean through submarine groundwater discharge: controls and potential impact. Journal of Hydrology, 2004, 295, 64-86. | 2.3 | 780 |
| 4 | Surface catalysis of uranium(VI) reduction by iron(II). Geochimica Et Cosmochimica Acta, 1999, 63, 2939-2955. | 1.6 | 574 |
| 5 | A surface complexation model of the carbonate mineral-aqueous solution interface. Geochimica Et Cosmochimica Acta, 1993, 57, 3505-3518. | 1.6 | 482 |
| 6 | A new kinetic approach to modeling water-rock interaction: The role of nucleation, precursors, and Ostwald ripening. Geochimica Et Cosmochimica Acta, 1990, 54, 2657-2677. | 1.6 | 477 |
| 7 | Degradation of natural organic matter: A thermodynamic analysis. Geochimica Et Cosmochimica Acta, 2011, 75, 2030-2042. | 1.6 | 447 |
| 8 | Benthic phosphorus regeneration, net primary production, and ocean anoxia: A model of the coupled marine biogeochemical cycles of carbon and phosphorus. Paleoceanography, 1994, 9, 677-692. | 3.0 | 413 |
| 9 | Influence of water column anoxia on the burial and preservation of carbon and phosphorus in marine shales. Geochimica Et Cosmochimica Acta, 1993, 57, 303-316. | 1.6 | 404 |
| 10 | A multicomponent reactive transport model of early diagenesis: Application to redox cycling in coastal marine sediments. Geochimica Et Cosmochimica Acta, 1996, 60, 2993-3014. | 1.6 | 336 |
| 11 | Redox Stabilization of the Atmosphere and Oceans by Phosphorus-Limited Marine Productivity. Science, 1996, 271, 493-496. | 6.0 | 328 |
| 12 | Global phosphorus retention by river damming. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15603-15608. | 3.3 | 322 |
| 13 | Plastic debris in the Laurentian Great Lakes: A review. Journal of Great Lakes Research, 2015, 41, 9-19. | 0.8 | 300 |
| 14 | Kinetic modeling of microbially-driven redox chemistry of subsurface environments: coupling transport, microbial metabolism and geochemistry. Journal of Hydrology, 1998, 209, 53-80. | 2.3 | 288 |
| 15 | Structure of peat soils and implications for water storage, flow and solute transport: A review update for geochemists. Chemical Geology, 2016, 429, 75-84. | 1.4 | 278 |
| 16 | Relation between sedimentation rate and burial of organic phosphorus and organic carbon in marine sediments. Geochimica Et Cosmochimica Acta, 1990, 54, 373-386. | 1.6 | 266 |
| 17 | Legacy nitrogen may prevent achievement of water quality goals in the Gulf of Mexico. Science, 2018, 360, 427-430. | 6.0 | 262 |
| 18 | Global perturbation of organic carbon cycling by river damming. Nature Communications, 2017, 8, 15347. | 5.8 | 246 |

| # | Article | IF | Citations |
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| 19 | Microbial reduction of iron(III) oxyhydroxides: effects of mineral solubility and availability. Chemical Geology, 2004, 212, 255-268. | 1.4 | 242 |
| 20 | Processes controlling solubility of biogenic silica and pore water build-up of silicic acid in marine sediments. Marine Chemistry, 2001, 73, 333-352. | 0.9 | 236 |
| 21 | Why is the Eastern Mediterranean phosphorus limited?. Progress in Oceanography, 2010, 85, 236-244. | 1.5 | 232 |
| 22 | Two centuries of nitrogen dynamics: Legacy sources and sinks in the Mississippi and Susquehanna River Basins. Global Biogeochemical Cycles, 2017, 31, 2-23. | 1.9 | 199 |
| 23 | Biogenic silica dissolution in sediments of the Southern Ocean. I. Solubility. Deep-Sea Research Part II: Topical Studies in Oceanography, 1997, 44, 1109-1128. | 0.6 | 196 |
| 24 | A global model for the early diagenesis of organic carbon and organic phosphorus in marine sediments. Geochimica Et Cosmochimica Acta, 1995, 59, 1259-1284. | 1.6 | 187 |
| 25 | Kinetics of microbial sulfate reduction in estuarine sediments. Geochimica Et Cosmochimica Acta, 2006, 70, 1148-1162. | 1.6 | 179 |
| 26 | Biogenic silica dissolution in sediments of the Southern Ocean. II. Kinetics. Deep-Sea Research Part II: Topical Studies in Oceanography, 1997, 44, 1129-1149. | 0.6 | 177 |
| 27 | Sorption of Arsenite, Arsenate, and Thioarsenates to Iron Oxides and Iron Sulfides: A Kinetic and Spectroscopic Investigation. Environmental Science & Technology, 2013, 47, 5652-5659. | 4.6 | 175 |
| 28 | Biogenic silica dissolution in the oceans: Reconciling experimental and field-based dissolution rates. Global Biogeochemical Cycles, 2002, 16, 23-1-23-10. | 1.9 | 173 |
| 29 | 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. Numerische Mathematik, 2008, 308, 905-941. | 0.7 | 170 |
| 30 | Quantitative analysis of anaerobic oxidation of methane (AOM) in marine sediments: A modeling perspective. Earth-Science Reviews, 2011, 106, 105-130. | 4.0 | 159 |
| 31 | Anthropogenic perturbations of the silicon cycle at the global scale: Key role of the landâ€ocean transition. Global Biogeochemical Cycles, 2009, 23, . | 1.9 | 158 |
| 32 | Silica Precipitation in Fractures and the Evolution of Permeability in Hydrothermal Upflow Zones. Science, 1993, 260, 192-194. | 6.0 | 157 |
| 33 | Atmospheric acidification of mineral aerosols: a source of bioavailable phosphorus for the oceans. Atmospheric Chemistry and Physics, 2011, 11, 6265-6272. | 1.9 | 156 |
| 34 | An authigenic iron phosphate phase in estuarine sediments: composition, formation and chemical reactivity. Marine Chemistry, 2004, 91, 227-251. | 0.9 | 155 |
| 35 | Solubility and dissimilatory reduction kinetics of iron(III) oxyhydroxides: A linear free energy relationship. Geochimica Et Cosmochimica Acta, 2009, 73, 5273-5282. | 1.6 | 154 |
| 36 | Title is missing!. Biogeochemistry, 2002, 60, 49-76. | 1.7 | 146 |

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| 37 | Dissolved inorganic carbon and alkalinity fluxes from coastal marine sediments: model estimates for different shelf environments and sensitivity to global change. Biogeosciences, 2013, 10, 371-398. | 1.3 | 142 |
| 38 | Dependence of calcite growth rate and Sr partitioning on solution stoichiometry: Non-Kossel crystal growth. Geochimica Et Cosmochimica Acta, 2007, 71, 2240-2249. | 1.6 | 140 |
| 39 | Fluorapatite crystal growth from modified seawater solutions. Geochimica Et Cosmochimica Acta, 1991, 55, 1219-1234. | 1.6 | 139 |
| 40 | The global marine phosphorus cycle: sensitivity to oceanic circulation. Biogeosciences, 2007, 4, 155-171. | 1.3 | 134 |
| 41 | Twelve testable hypotheses on the geobiology of weathering. Geobiology, 2011, 9, 140-165. | 1.1 | 133 |
| 42 | Reactive iron(III) in sediments: Chemical versus microbial extractions. Geochimica Et Cosmochimica Acta, 2006, 70, 4166-4180. | 1.6 | 126 |
| 43 | The legacy of surface mining: Remediation, restoration, reclamation and rehabilitation. Environmental Science and Policy, 2016, 66, 227-233. | 2.4 | 126 |
| 44 | Biogeochemical Cycles of Manganese and Iron at the Oxicâ"Anoxic Transition of a Stratified Marine Basin (Orca Basin, Gulf of Mexico). Environmental Science & Technology, 1998, 32, 2931-2939. | 4.6 | 122 |
| 45 | Calcite growth kinetics: Modeling the effect of solution stoichiometry. Geochimica Et Cosmochimica Acta, 2012, 77, 121-134. | 1.6 | 121 |
| 46 | Nitrous oxide emissions from inland waters: Are IPCC estimates too high?. Global Change Biology, 2019, 25, 473-488. | 4.2 | 119 |
| 47 | Dissolution of biogenic silica from land to ocean: Role of salinity and pH. Limnology and Oceanography, 2008, 53, 1614-1621. | 1.6 | 118 |
| 48 | Competition between enzymatic and abiotic reduction of uranium(VI) under iron reducing conditions. Chemical Geology, 2005, 220, 315-327. | 1.4 | 117 |
| 49 | Managing nitrogen legacies to accelerate water quality improvement. Nature Geoscience, 2022, 15, 97-105. | 5.4 | 112 |
| 50 | Anaerobic oxidation of methane (AOM) in marine sediments from the Skagerrak (Denmark): II. Reaction-transport modeling. Geochimica Et Cosmochimica Acta, 2008, 72, 2880-2894. | 1.6 | 111 |
| 51 | Denitrification coupled to pyrite oxidation and changes in groundwater quality in a shallow sandy aquifer. Geochimica Et Cosmochimica Acta, 2009, 73, 6716-6726. | 1.6 | 110 |
| 52 | Organic matter mineralization in sediment of a coastal freshwater lake and response to salinization. Geochimica Et Cosmochimica Acta, 2006, 70, 2836-2855. | 1.6 | 108 |
| 53 | Rivers in the Anthropocene: Global scale modifications of riverine nutrient fluxes by damming. Ecohydrology and Hydrobiology, 2016, 16, 106-111. | 1.0 | 107 |
| 54 | Title is missing!. Biogeochemistry, 2003, 64, 179-203. | 1.7 | 105 |

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| 55 | Reductive dissolution of manganese(III, IV) (hydr)oxides by oxalate: the effect of pH and light. Langmuir, 1992, 8, 95-103. | 1.6 | 104 |
| 56 | Surface chemistry and reactivity of biogenic silica. Geochimica Et Cosmochimica Acta, 2002, 66, 2559-2568. | 1.6 | 103 |
| 57 | Quantitative interpretation of pH distributions in aquatic sediments: A reaction-transport modeling approach. Numerische Mathematik, 2005, 305, 919-956. | 0.7 | 100 |
| 58 | Modeling the impact of microbial activity on redox dynamics in porous media. Geochimica Et Cosmochimica Acta, 2005, 69, 5005-5019. | 1.6 | 99 |
| 59 | Arsenic Bioremediation by Biogenic Iron Oxides and Sulfides. Applied and Environmental Microbiology, 2013, 79, 4325-4335. | 1.4 | 99 |
| 60 | Silicon isotope fractionation during abiotic silica precipitation at low temperatures: Inferences from flow-through experiments. Geochimica Et Cosmochimica Acta, 2014, 142, 95-114. | 1.6 | 93 |
| 61 | Salt marsh pore water geochemistry does not correlate with microbial community structure. Estuarine, Coastal and Shelf Science, 2005, 62, 233-251. | 0.9 | 88 |
| 62 | Carbon geochemistry of cold seeps: Methane fluxes and transformation in sediments from Kazan mud volcano, eastern Mediterranean Sea. Earth and Planetary Science Letters, 2003, 212, 361-375. | 1.8 | 86 |
| 63 | Worldwide retention of nutrient silicon by river damming: From sparse data set to global estimate. Global Biogeochemical Cycles, 2014, 28, 842-855. | 1.9 | 85 |
| 64 | Potential rates and pathways of microbial nitrate reduction in coastal sediments. FEMS Microbiology Ecology, 2006, 58, 179-192. | 1.3 | 83 |
| 65 | Bioenergetic Controls on Anaerobic Oxidation of Methane (AOM) in Coastal Marine Sediments: A Theoretical Analysis. Numerische Mathematik, 2006, 306, 246-294. | 0.7 | 83 |
| 66 | Pyritization: a palaeoenvironmental and redox proxy reevaluated. Estuarine, Coastal and Shelf Science, 2003, 57, 1183-1193. | 0.9 | 82 |
| 67 | Surface complexation effects on phosphate adsorption to ferric iron oxyhydroxides along pH and salinity gradients in estuaries and coastal aquifers. Geochimica Et Cosmochimica Acta, 2008, 72, 3431-3445. | 1.6 | 82 |
| 68 | Water table fluctuations and soil biogeochemistry: An experimental approach using an automated soil column system. Journal of Hydrology, 2014, 509, 245-256. | 2.3 | 81 |
| 69 | Selenium as paleo-oceanographic proxy: A first assessment. Geochimica Et Cosmochimica Acta, 2012, 89, 302-317. | 1.6 | 80 |
| 70 | Aqueous cadmium uptake by calcite: a stirred flow-through reactor study. Geochimica Et Cosmochimica Acta, 2003, 67, 2763-2774. | 1.6 | 79 |
| 71 | Phylogenetic and physiological diversity of dissimilatory ferric iron reducers in sediments of the polluted Scheldt estuary, Northwest Europe. Environmental Microbiology, 2007, 9, 1956-1968. | 1.8 | 78 |
| 72 | Thermodynamic limitations on microbially catalyzed reaction rates. Geochimica Et Cosmochimica Acta, 2012, 90, 96-109. | 1.6 | 78 |

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| 73 | Modeling Microbially Induced Carbon Degradation in Redox-Stratified Subsurface Environments: Concepts and Open Questions. Geomicrobiology Journal, 2007, 24, 139-155. | 1.0 | 77 |
| 74 | Global estimates of enhanced solute transport in marine sediments. Limnology and Oceanography, 2003, 48, 777-786. | 1.6 | 76 |
| 75 | Quantifying bioirrigation in aquatic sediments: An inverse modeling approach. Limnology and Oceanography, 2001, 46, 164-177. | 1.6 | 74 |
| 76 | Isotopic and microbiological signatures of pyrite-driven denitrification in a sandy aquifer. Chemical Geology, 2012, 300-301, 123-132. | 1.4 | 74 |
| 77 | Selenium sorption and isotope fractionation: Iron(III) oxides versus iron(II) sulfides. Chemical Geology, 2013, 342, 21-28. | 1.4 | 74 |
| 78 | Sediment phosphorus speciation and mobility under dynamic redox conditions. Biogeosciences, 2017, 14, 3585-3602. | 1.3 | 74 |
| 79 | Reduction of Fe(III) colloids by Shewanella putrefaciens: A kinetic model. Geochimica Et Cosmochimica Acta, 2006, 70, 5842-5854. | 1.6 | 73 |
| 80 | Framboidal vaterite aggregates and their transformation into calcite: A morphological study. Journal of Crystal Growth, 2006, 287, 528-530. | 0.7 | 73 |
| 81 | Geochemistry of trace metals in a fresh water sediment: Field results and diagenetic modeling. Science of the Total Environment, 2007, 381, 263-279. | 3.9 | 73 |
| 82 | Microbiological and Geochemical Characterization of Microbial Fe(III) Reduction in Salt Marsh Sediments. Geomicrobiology Journal, 2000, 17, 163-178. | 1.0 | 72 |
| 83 | Biomineralization and Global Biogeochemical Cycles. Reviews in Mineralogy and Geochemistry, 2003, 54, 357-381. | 2.2 | 71 |
| 84 | Methane efflux from marine sediments in passive and active margins: Estimations from bioenergetic reactionâ€“transport simulations. Earth and Planetary Science Letters, 2008, 265, 329-344. | 1.8 | 71 |
| 85 | A plug flow-through reactor for studying biogeochemical reactions in undisturbed aquatic sediments. Applied Geochemistry, 1998, 13, 269-280. | 1.4 | 68 |
| 86 | Direct Discharges of Domestic Wastewater are a Major Source of Phosphorus and Nitrogen to the Mediterranean Sea. Environmental Science & Technology, 2016, 50, 8722-8730. | 4.6 | 67 |
| 87 | Quantifying bioirrigation using ecological parameters: a stochastic approachâ€. Geochemical Transactions, 2002, 3, 1. | 1.8 | 66 |
| 88 | Potential nitrate removal in a coastal freshwater sediment (Haringvliet Lake, The Netherlands) and response to salinization. Water Research, 2007, 41, 3061-3068. | 5.3 | 64 |
| 89 | The use of flow-through sediment reactors in biogeochemical kinetics: Methodology and examples of applications. Marine Chemistry, 2007, 106, 256-271. | 0.9 | 64 |
| 90 | Reactivity of biogenic silica: Surface versus bulk charge density. Geochimica Et Cosmochimica Acta, 2010, 74, 517-530. | 1.6 | 64 |

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| 91 | Biosorption of metals (Cu2+, Zn2+) and anions (Fâ^', H2PO4â^') by viable and autoclaved cells of the Gram-negative bacterium Shewanella putrefaciens. Colloids and Surfaces B: Biointerfaces, 2008, 65, 126-133. | 2.5 | 63 |
| 92 | Agricultural soil denitrifiers possess extensive nitrite reductase gene diversity. Environmental Microbiology, 2017, 19, 1189-1208. | 1.8 | 61 |
| 93 | Reassessing the role of sulfur geochemistry on arsenic speciation in reducing environments. Journal of Hazardous Materials, 2011, 189, 647-652. | 6.5 | 59 |
| 94 | Modelling the geochemical fate and transport of wastewater-derived phosphorus in contrasting groundwater systems. Journal of Contaminant Hydrology, 2007, 92, 87-108. | 1.6 | 57 |
| 95 | Controls on the Recycling and Preservation of Biogenic Silica from Biomineralization to Burial. Silicon, 2012, 4, 7-22. | 1.8 | 56 |
| 96 | Solute-specific pore water irrigation: Implications for chemical cycling in early diagenesis. Journal of Marine Research, 2005, 63, 601-621. | 0.3 | 55 |
| 97 | Incorporating dormancy in dynamic microbial community models. Ecological Modelling, 2011, 222, 3092-3102. | 1.2 | 55 |
| 98 | Chapter 8. BIOGEOCHEMICAL DYNAMICS IN AQUATIC SEDIMENTS. , 1996, , 335-376. | | 54 |
| 99 | Understanding the unique biogeochemistry of the Mediterranean Sea: Insights from a coupled phosphorus and nitrogen model. Global Biogeochemical Cycles, 2017, 31, 1010-1031. | 1.9 | 54 |
| 100 | Bioretention cells under cold climate conditions: Effects of freezing and thawing on water infiltration, soil structure, and nutrient removal. Science of the Total Environment, 2019, 649, 749-759. | 3.9 | 54 |
| 101 | Pore-scale controls on hydrological and geochemical processes in peat: Implications on interacting processes. Earth-Science Reviews, 2020, 207, 103227. | 4.0 | 54 |
| 102 | Reactive surface area control of the dissolution kinetics of biogenic silica in deep-sea sediments. Chemical Geology, 1996, 132, 125-130. | 1.4 | 53 |
| 103 | Effects of Damming on River Nitrogen Fluxes: A Global Analysis. Global Biogeochemical Cycles, 2019, 33, 1339-1357. | 1.9 | 53 |
| 104 | Seawater-mediated interactions between diatomaceous silica and terrigenous sediments: Results from long-term incubation experiments. Chemical Geology, 2010, 270, 68-79. | 1.4 | 52 |
| 105 | Comparative survey of potential nitrate and sulfate reduction rates in aquatic sediments. Geochimica Et Cosmochimica Acta, 2012, 77, 474-488. | 1.6 | 52 |
| 106 | Global Damâ€Driven Changes to Riverine N:P:Si Ratios Delivered to the Coastal Ocean. Geophysical Research Letters, 2020, 47, e2020GL088288. | 1.5 | 52 |
| 107 | Understanding and managing the re-eutrophication of Lake Erie: Knowledge gaps and research priorities. Freshwater Science, 2019, 38, 675-691. | 0.9 | 51 |
| 108 | Transformation of Hematite into Magnetite During Dissimilatory Iron Reductionâ€"Conditions and Mechanisms. Geomicrobiology Journal, 2007, 24, 403-416. | 1.0 | 49 |

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| 109 | Non-Steady State Modeling of Arsenic Diagenesis in Lake Sediments. Environmental Science & Technology, 2010, 44, 197-203. | 4.6 | 45 |
| 110 | Arsenic binding to organic and inorganic sulfur species during microbial sulfate reduction: a sediment flow-through reactor experiment. Environmental Chemistry, 2013, 10, 285. | 0.7 | 45 |
| 111 | Non-steady state diagenesis of organic and inorganic sulfur in lake sediments. Geochimica Et Cosmochimica Acta, 2016, 194, 15-33. | 1.6 | 45 |
| 112 | Linking Spectral Induced Polarization (SIP) and Subsurface Microbial Processes: Results from Sand Column Incubation Experiments. Environmental Science & Technology, 2018, 52, 2081-2090. | 4.6 | 45 |
| 113 | What do acid-base titrations of live bacteria tell us? A preliminary assessment. Aquatic Sciences, 2004, 66, 19-26. | 0.6 | 44 |
| 114 | Acidâ€“base activity of live bacteria: Implications for quantifying cell wall charge. Geochimica Et Cosmochimica Acta, 2006, 70, 267-276. | 1.6 | 44 |
| 115 | Effects of aqueous uranyl speciation on the kinetics of microbial uranium reduction. Geochimica Et Cosmochimica Acta, 2015, 157, 109-124. | 1.6 | 44 |
| 116 | Effects of temperature on rates and mineral products of microbial Fe(II) oxidation by Leptothrix cholodnii at microaerobic conditions. Geochimica Et Cosmochimica Acta, 2013, 108, 107-124. | 1.6 | 42 |
| 117 | Gibbs Energy Dynamic Yield Method (GEDYM): Predicting microbial growth yields under energy-limiting conditions. Geochimica Et Cosmochimica Acta, 2018, 241, 1-16. | 1.6 | 42 |
| 118 | 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 |
| 119 | Oxygen Dependency of Neutrophilic Fe(II) Oxidation byLeptothrixDiffers from Abiotic Reaction. Geomicrobiology Journal, 2012, 29, 550-560. | 1.0 | 40 |
| 120 | Phosphorus binding to soil organic matter via ternary complexes with calcium. Chemosphere, 2020, 260, 127624. | 4.2 | 40 |
| 121 | Sulfate reducing activity and sulfur isotope fractionation by natural microbial communities in sediments of a hypersaline soda lake (Mono Lake, California). Chemical Geology, 2010, 278, 23-30. | 1.4 | 39 |
| 122 | Distribution and Diversity of Gallionella -Like Neutrophilic Iron Oxidizers in a Tidal Freshwater Marsh. Applied and Environmental Microbiology, 2011, 77, 2337-2344. | 1.4 | 37 |
| 123 | Redox Stabilization of the Atmosphere and Oceans and Marine Productivity. Science, 1997, 275, 406-408. | 6.0 | 35 |
| 124 | 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. Journal of Marine Research, 2000, 58, 493-522. | 0.3 | 32 |
| 125 | Particle age distributions and O2exposure times: Timescales in bioturbated sediments. Global Biogeochemical Cycles, 2005, 19, . | 1.9 | 32 |
| 126 | Competitive Binding of Cu2+and Zn2+to Live Cells ofShewanella putrefaciens. Environmental Science & Technology, 2007, 41, 909-914. | 4.6 | 32 |

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| 127 | Vertical Distribution of Denitrification in an Estuarine Sediment: Integrating Sediment Flowthrough Reactor Experiments and Microprofiling via Reactive Transport Modeling. Applied and Environmental Microbiology, 2007, 73, 40-47. | 1.4 | 31 |
| 128 | Iron Isotope Fractionations Reveal a Finite Bioavailable Fe Pool for Structural Fe(III) Reduction in Nontronite. Environmental Science & Technology, 2016, 50, 8661-8669. | 4.6 | 31 |
| 129 | Kinetics of Substrate Biodegradation under the Cumulative Effects of Bioavailability and Self-Inhibition. Environmental Science & Technology, 2015, 49, 5529-5537. | 4.6 | 30 |
| 130 | Glacialâ€interglacial variations in marine phosphorus cycling: Implications for ocean productivity. Global Biogeochemical Cycles, 2008, 22, . | 1.9 | 29 |
| 131 | Coupling Water Column and Sediment Biogeochemical Dynamics: Modeling Internal Phosphorus Loading, Climate Change Responses, and Mitigation Measures in Lake VansjÃ¸, Norway. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3847-3866. | 1.3 | 29 |
| 132 | Beyond the Mass Balance: Watershed Phosphorus Legacies and the Evolution of the Current Water Quality Policy Challenge. Water Resources Research, 2021, 57, e2020WR029316. | 1.7 | 29 |
| 133 | Biogeochemical Transformations in Sediments: Kinetic Models of Early Diagenesis. , 1993, , 401-445. | | 29 |
| 134 | Reactive transport modeling of early diagenesis in a reservoir lake affected by acid mine drainage: Trace metals, lake overturn, benthic fluxes and remediation. Chemical Geology, 2015, 419, 75-91. | 1.4 | 28 |
| 135 | Solute pools in Nikanotee Fen watershed in the Athabasca oil sands region. Environmental Pollution, 2017, 225, 150-162. | 3.7 | 28 |
| 136 | Circulation and oxygen cycling in the Mediterranean Sea: Sensitivity to future climate change. Journal of Geophysical Research: Oceans, 2016, 121, 8230-8247. | 1.0 | 27 |
| 137 | Microbial selenium sulfide reduction for selenium recovery from wastewater. Journal of Hazardous Materials, 2017, 329, 110-119. | 6.5 | 27 |
| 138 | Predicting benthic fluxes of silicic acid from deep-sea sediments. Journal of Geophysical Research, 2003, 108, . | 3.3 | 26 |
| 139 | The Cold Region Critical Zone in Transition: Responses to Climate Warming and Land Use Change. Annual Review of Environment and Resources, 2021, 46, 111-134. | 5.6 | 26 |
| 140 | Remote quantification of methane fluxes in gassy marine sediments through seismic survey. Geology, 2009, 37, 235-238. | 2.0 | 25 |
| 141 | Fate of Adsorbed U(VI) during Sulfidization of Lepidocrocite and Hematite. Environmental Science & Technology, 2017, 51, 2140-2150. | 4.6 | 25 |
| 142 | Comparative valuation of potential and realized ecosystem services in Southern Ontario, Canada. Environmental Science and Policy, 2019, 100, 105-112. | 2.4 | 24 |
| 143 | Iron isotope fractionation in sediments of an oligotrophic freshwater lake. Earth and Planetary Science Letters, 2015, 423, 164-172. | 1.8 | 23 |
| 144 | Reactive silicon dynamics in a large prairie reservoir (Lake Diefenbaker, Saskatchewan). Journal of Great Lakes Research, 2015, 41, 100-109. | 0.8 | 23 |

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| 145 | Geological evolution of the marine selenium cycle: Insights from the bulk shale Î´82/76Se record and isotope mass balance modeling. Earth and Planetary Science Letters, 2016, 441, 178-187. | 1.8 | 23 |
| 146 | Changes in Sedimentary Phosphorus Burial Following Artificial Eutrophication of Lake 227, Experimental Lakes Area, Ontario, Canada. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2020JG005713. | 1.3 | 23 |
| 147 | A biogeochemical model for phosphorus and nitrogen cycling in the Eastern Mediterranean Sea. Journal of Marine Systems, 2014, 139, 420-432. | 0.9 | 22 |
| 148 | A diagnostic approach to constraining flow partitioning in hydrologic models using a multiobjective optimization framework. Water Resources Research, 2017, 53, 3279-3301. | 1.7 | 22 |
| 149 | Bioavailability of organic matter in a freshwater estuarine sediment: long-term degradation experiments with and without nitrate supply. Biogeochemistry, 2009, 94, 13-28. | 1.7 | 21 |
| 150 | 34S/32S fractionation by sulfate-reducing microbial communities in estuarine sediments. Geochimica Et Cosmochimica Acta, 2011, 75, 3903-3914. | 1.6 | 21 |
| 151 | A biogeochemical model for phosphorus and nitrogen cycling in the Eastern Mediterranean Sea. Journal of Marine Systems, 2014, 139, 460-471. | 0.9 | 21 |
| 152 | A DNA-based biosensor for aqueous Hg(II): Performance under variable pH, temperature and competing ligand composition. Journal of Hazardous Materials, 2020, 385, 121572. | 6.5 | 20 |
| 153 | Metal Cycling in Surface Sediments: Modeling The Interplay of Transport and Reaction. , 2018, , 21-64. | | 20 |
| 154 | Quantitative interpretation of pore water O2 and pH distributions in deep-sea sediments. Geochimica Et Cosmochimica Acta, 2008, 72, 1350-1364. | 1.6 | 19 |
| 155 | Sensing Coated Iron-Oxide Nanoparticles with Spectral Induced Polarization (SIP): Experiments in Natural Sand Packed Flow-Through Columns. Environmental Science & Technology, 2018, 52, 14256-14265. | 4.6 | 19 |
| 156 | Unique surface density layers promote formation of harmful algal blooms in the Pengxi River, Three Gorges Reservoir. Freshwater Science, 2020, 39, 722-734. | 0.9 | 19 |
| 157 | Sorption of benzene and naphthalene on (semi)-arid coastal soil as a function of salinity and temperature. Journal of Contaminant Hydrology, 2018, 219, 61-71. | 1.6 | 18 |
| 158 | Arsenic Oxidation by Flavin-Derived Reactive Species under Oxic and Anoxic Conditions: Oxidant Formation and pH Dependence. Environmental Science & Technology, 2019, 53, 10897-10905. | 4.6 | 18 |
| 159 | Deconstructing the redox cascade: what role do microbial exudates (flavins) play?. Environmental Chemistry, 2017, 14, 515. | 0.7 | 18 |
| 160 | Sulfidization of lepidocrocite and its effect on uranium phase distribution and reduction. Geochimica Et Cosmochimica Acta, 2014, 142, 570-586. | 1.6 | 17 |
| 161 | Biogeochemistry of Major Redox Elements and Mercury in a Tropical Reservoir Lake (Petit Saut, French) Tj ETQq1 1 0.784314 rgBT /Ov | 1.5 | 16 |
| 162 | Speciation dynamics of oxyanion contaminants (As, Sb, Cr) in argillaceous suspensions during oxic-anoxic cycles. Applied Geochemistry, 2018, 91, 75-88. | 1.4 | 16 |

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