Martial Taillefert

List of Publications by Year
in descending order

43 papers	2,338 citations	218677 26 h-index	254184 43 g-index
43 all docs	43 docs citations	43 times ranked	2425 citing authors

#	Article	IF	Citations
1	Chemical speciation drives hydrothermal vent ecology. Nature, 2001, 410, 813-816.	27.8	337
2	Uranium Biomineralization as a Result of Bacterial Phosphatase Activity:â€‰ Insights from Bacterial Isolates from a Contaminated Subsurface. Environmental Science & Technology, 2007, 41, 5701-5707.	10.0	176
3	Aerobic uranium (VI) bioprecipitation by metalâ€resistant bacteria isolated from radionuclideâ€and metalâ€contaminated subsurface soils. Environmental Microbiology, 2007, 9, 3122-3133.	3.8	156
4	Use of voltammetric solid-state (micro)electrodes for studying biogeochemical processes: Laboratory measurements to real time measurements with an in situ electrochemical analyzer (ISEA). Marine Chemistry, 2008, 108, 221-235.	2.3	156
5	Shewanella putrefaciens produces an Fe(III)-solubilizing organic ligand during anaerobic respiration on insoluble Fe(III) oxides. Journal of Inorganic Biochemistry, 2007, 101, 1760-1767.	3.5	102
6	Speciation, reactivity, and cycling of Fe and Pb in a meromictic lake. Geochimica Et Cosmochimica Acta, 2000, 64, 169-183.	3.9	97
7	The Application of Electrochemical Tools for In Situ Measurements in Aquatic Systems. Electroanalysis, 2000, 12, 401-412.	2.9	95
8	Association of cobalt and manganese in aquatic systems: Chemical and microscopic evidence. Geochimica Et Cosmochimica Acta, 1997, 61, 1437-1446.	3.9	89
9	Nonreductive Biomineralization of Uranium(VI) Phosphate Via Microbial Phosphatase Activity in Anaerobic Conditions. Geomicrobiology Journal, 2009, 26, 431-441.	2.0	89
10	The effect of tidal forcing on biogeochemical processes in intertidal salt marsh sediments. Geochemical Transactions, 2007, 8, 6.	0.7	74
11	The effect of pH and natural microbial phosphatase activity on the speciation of uranium in subsurface soils. Geochimica Et Cosmochimica Acta, 2011, 75, 5648-5663.	3.9	64
12	Remote in situ voltammetric techniques to characterize the biogeochemical cycling of trace metals in aquatic systems. Journal of Environmental Monitoring, 2008, 10, 30-54.	2.1	62
13	Microbial Mn(IV) reduction requires an initial one-electron reductive solubilization step. Geochimica Et Cosmochimica Acta, 2012, 99, 179-192.	3.9	57
14	The role of anaerobic respiration in the immobilization of uranium through biomineralization of phosphate minerals. Geochimica Et Cosmochimica Acta, 2013, 106, 344-363.	3.9	57
15	Microbial Colonization of an In Situ Sediment Cap and Correlation to Stratified Redox Zones. Environmental Science & Technology, 2009, 43, 66-74.	10.0	48
16	Evidence for a Dynamic Cycle between Mn and Co in the Water Column of a Stratified Lake. Environmental Science & Technology, 2002, 36, 468-476.	10.0	44
17	The role of soluble Fe(III) in the cycling of iron and sulfur in coastal marine sediments. Limnology and Oceanography, 2005, 50, 1129-1141.	3.1	42
18	The flux of soluble organicâ€iron(III) complexes from sediments represents a source of stable iron(III) to estuarine waters and to the continental shelf. Limnology and Oceanography, 2011, 56, 1811-1823.	3.1	42

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19	Key geochemical factors regulating Mn(IV)-catalyzed anaerobic nitrification in coastal marine sediments. Geochimica Et Cosmochimica Acta, 2014, 133, 17-33.	3.9	40
20	Siderophores Are Not Involved in Fe(III) Solubilization during Anaerobic Fe(III) Respiration by <i>Shewanella oneidensis</i> MR-1. Applied and Environmental Microbiology, 2010, 76, 2425-2432.	3.1	39
21	<i>Shewanella oneidensis</i> MRâ€1 mutants selected for their inability to produce soluble organicâ€Fe(III) complexes are unable to respire Fe(III) as anaerobic electron acceptor. Environmental Microbiology, 2010, 12, 938-950.	3.8	38
22	Redox Cycling Driven Transformation of Layered Manganese Oxides to Tunnel Structures. Journal of the American Chemical Society, 2020, 142, 2506-2513.	13.7	36
23	VOLTINT: A MatlabÂ®-based program for semi-automated processing of geochemical data acquired by voltammetry. Computers and Geosciences, 2008, 34, 153-162.	4.2	33
24	Spatial and Temporal Evolution of Biogeochemical Processes Following In Situ Capping of Contaminated Sediments. Environmental Science & Technology, 2008, 42, 4113-4120.	10.0	33
25	The effect of riverine discharge on biogeochemical processes in estuarine sediments. Limnology and Oceanography, 2011, 56, 1797-1810.	3.1	28
26	The origin, composition, and reactivity of dissolved iron(III) complexes in coastal organic- and iron-rich sediments. Geochimica Et Cosmochimica Acta, 2015, 152, 72-88.	3.9	27
27	Importance of microbial iron reduction in deep sediments of river-dominated continental-margins. Marine Chemistry, 2016, 178, 22-34.	2.3	26
28	Biomineralization of U(VI) phosphate promoted by microbially-mediated phytate hydrolysis in contaminated soils. Geochimica Et Cosmochimica Acta, 2017, 197, 27-42.	3.9	26
29	Effect of Manganese Oxide Aging and Structure Transformation on the Kinetics of Thiol Oxidation. Environmental Science & Technology, 2018, 52, 13202-13211.	10.0	26
30	Microbial Fe(II) oxidation by<i>Sideroxydans lithotrophicus</i>ES-1 in the presence of SchlÃ¶ppnerbrunnen fen-derived humic acids. FEMS Microbiology Ecology, 2019, 95, .	2.7	25
31	Benthic alkalinity and dissolved inorganic carbon fluxes in the RhÃ´ne River prodelta generated by decoupled aerobic and anaerobic processes. Biogeosciences, 2020, 17, 13-33.	3.3	25
32	Geochemical controls of the microbially mediated redox cycling of uranium and iron. Geochimica Et Cosmochimica Acta, 2018, 235, 431-449.	3.9	23
33	Development of a rate law for arsenite oxidation by manganese oxides. Geochimica Et Cosmochimica Acta, 2019, 250, 251-267.	3.9	21
34	Microbial manganese(III) reduction fuelled by anaerobic acetate oxidation. Environmental Microbiology, 2017, 19, 3475-3486.	3.8	17
35	Early diagenesis in the sediments of the Congo deep-sea fan dominated by massive terrigenous deposits: Part II â€“ Ironâ€“sulfur coupling. Deep-Sea Research Part II: Topical Studies in Oceanography, 2017, 142, 151-166.	1.4	17
36	Development of singleâ€step liquid chromatography methods with ultraviolet detection for the measurement of inorganic anions in marine waters. Limnology and Oceanography: Methods, 2014, 12, 563-576.	2.0	15

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37	Mechanistic investigation of Fe(III) oxide reduction by low molecular weight organic sulfur species. Geochimica Et Cosmochimica Acta, 2017, 215, 173-188.	3.9	15
38	Differential manganese and iron recycling and transport in continental margin sediments of the Northern Gulf of Mexico. Marine Chemistry, 2021, 229, 103908.	2.3	12
39	Seasonal and topographic variations in porewaters of a southeastern USA salt marsh as revealed by voltammetric profilingâ€. Geochemical Transactions, 2001, 2, 104.	0.7	11
40	Effect of arsenic concentration on microbial iron reduction and arsenic speciation in an iron-rich freshwater sediment. Geochimica Et Cosmochimica Acta, 2009, 73, 6008-6021.	3.9	11
41	Early Diagenesis in the Hypoxic and Acidified Zone of the Northern Gulf of Mexico: Is Organic Matter Recycling in Sediments Disconnected From the Water Column?. Frontiers in Marine Science, 2021, 8, .	2.5	4
42	Arsenic Diagenesis at the Sediment-Water Interface of a Recently Flooded Freshwater Sediment. ACS Symposium Series, 2005, , 220-234.	0.5	2
43	Variations in sediment production of dissolved iron across a continental margin not dominated by major upwelling or riverine inputs. Marine Chemistry, 2020, 220, 103750.	2.3	1