Andreas Kappler

List of Publications by Year
in descending order

321 papers	22,725 citations	8732 75 h-index	11899 134 g-index
344 all docs	344 docs citations	344 times ranked	15286 citing authors

#	Article	IF	Citations
1	Biogeochemical Redox Processes and their Impact on Contaminant Dynamics. Environmental Science & Technology, 2010, 44, 15-23.	4.6	1,037
2	The interplay of microbially mediated and abiotic reactions in the biogeochemical Fe cycle. Nature Reviews Microbiology, 2014, 12, 797-808.	13.6	627
3	Linking N2O emissions from biochar-amended soil to the structure and function of the N-cycling microbial community. ISME Journal, 2014, 8, 660-674.	4.4	484
4	Humic substances as fully regenerable electron acceptors in recurrently anoxic environments. Nature Geoscience, 2014, 7, 195-200.	5.4	439
5	Biochar as an Electron Shuttle between Bacteria and Fe(III) Minerals. Environmental Science and Technology Letters, 2014, 1, 339-344.	3.9	432
6	Extracellular electron transfer through microbial reduction of solid-phase humic substances. Nature Geoscience, 2010, 3, 417-421.	5.4	407
7	Deposition of banded iron formations by anoxygenic phototrophic Fe(II)-oxidizing bacteria. Geology, 2005, 33, 865.	2.0	396
8	Organic coating on biochar explains its nutrient retention and stimulation of soil fertility. Nature Communications, 2017, 8, 1089.	5.8	371
9	Phenazines and Other Redox-Active Antibiotics Promote Microbial Mineral Reduction. Applied and Environmental Microbiology, 2004, 70, 921-928.	1.4	363
10	Geomicrobiological Cycling of Iron. Reviews in Mineralogy and Geochemistry, 2005, 59, 85-108.	2.2	343
11	Magnetite and Green Rust: Synthesis, Properties, and Environmental Applications of Mixed-Valent Iron Minerals. Chemical Reviews, 2018, 118, 3251-3304.	23.0	319
12	Electron shuttling via humic acids in microbial iron(III) reduction in a freshwater sediment. FEMS Microbiology Ecology, 2004, 47, 85-92.	1.3	313
13	An evolving view on biogeochemical cycling of iron. Nature Reviews Microbiology, 2021, 19, 360-374.	13.6	299
14	Shewanella oneidensis MR-1 Uses Overlapping Pathways for Iron Reduction at a Distance and by Direct Contact under Conditions Relevant for Biofilms. Applied and Environmental Microbiology, 2005, 71, 4414-4426.	1.4	292
15	Formation of Fe(III)-minerals by Fe(II)-oxidizing photoautotrophic bacteria 1 1Associate editor: L. G. Benning. Geochimica Et Cosmochimica Acta, 2004, 68, 1217-1226.	1.6	276
16	Redox Transformation of Arsenic by Fe(II)-Activated Goethite (Î±-FeOOH). Environmental Science & Technology, 2010, 44, 102-108.	4.6	266
17	Kinetics of Microbial and Chemical Reduction of Humic Substances: Implications for Electron Shuttling. Environmental Science & Technology, 2008, 42, 3563-3569.	4.6	257
18	Iron biomineralization by anaerobic neutrophilic iron-oxidizing bacteria. Geochimica Et Cosmochimica Acta, 2009, 73, 696-711.	1.6	255

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19	Fe(III) mineral formation and cell encrustation by the nitrate-dependent Fe(II)-oxidizer strain BoFeN1. Geobiology, 2005, 3, 235-245.	1.1	250
20	Fe(II) Redox Chemistry in the Environment. Chemical Reviews, 2021, 121, 8161-8233.	23.0	242
21	Redox cycling of Fe(II) and Fe(III) in magnetite by Fe-metabolizing bacteria. Science, 2015, 347, 1473-1476.	6.0	239
22	Formation of Binary and Ternary Colloids and Dissolved Complexes of Organic Matter, Fe and As. Environmental Science & Technology, 2010, 44, 4479-4485.	4.6	238
23	Decoupling photochemical Fe(II) oxidation from shallow-water BIF deposition. Earth and Planetary Science Letters, 2007, 258, 87-100.	1.8	227
24	Abiotic oxidation of Fe(<scp>II</scp>) by reactive nitrogen species in cultures of the nitrateâ€reducing Fe(<scp>II</scp>) oxidizer <i><scp>A</scp>cidovorax</i> sp. BoFeN1 â€“ questioning the existence of enzymatic Fe(<scp>II</scp>) oxidation. Geobiology, 2013, 11, 180-190.	1.1	224
25	Linking Genes to Microbial Biogeochemical Cycling: Lessons from Arsenic. Environmental Science & Technology, 2017, 51, 7326-7339.	4.6	223
26	The potential significance of microbial Fe(III) reduction during deposition of Precambrian banded iron formations. Geobiology, 2005, 3, 167-177.	1.1	212
27	IRON IN MICROBIAL METABOLISMS. Elements, 2011, 7, 89-93.	0.5	203
28	Isolation and Characterization of a Genetically Tractable Photoautotrophic Fe(II)-Oxidizing Bacterium, Rhodopseudomonas palustris Strain TIE-1. Applied and Environmental Microbiology, 2005, 71, 4487-4496.	1.4	194
29	Effects of Humic Substances and Quinones at Low Concentrations on Ferrihydrite Reduction by <i>Geobacter metallireducens</i>. Environmental Science & Technology, 2009, 43, 5679-5685.	4.6	180
30	Anaerobic Fe(II)-Oxidizing Bacteria Show As Resistance and Immobilize As during Fe(III) Mineral Precipitation. Environmental Science & Technology, 2010, 44, 94-101.	4.6	180
31	Dissimilatory Reduction and Transformation of Ferrihydrite-Humic Acid Coprecipitates. Environmental Science & Technology, 2013, 47, 13375-13384.	4.6	180
32	Physiology of phototrophic iron(II)-oxidizing bacteria: implications for modern and ancient environments. FEMS Microbiology Ecology, 2008, 66, 250-260.	1.3	175
33	Green Rust Formation during Fe(II) Oxidation by the Nitrate-Reducing <i>Acidovorax</i> sp. Strain BoFeN1. Environmental Science & Technology, 2012, 46, 1439-1446.	4.6	173
34	Natural Organic Matter as Reductant for Chlorinated Aliphatic Pollutants. Environmental Science & Technology, 2003, 37, 2714-2719.	4.6	171
35	Petrography and geochemistry of the Dales Gorge banded iron formation: Paragenetic sequence, source and implications for palaeo-ocean chemistry. Precambrian Research, 2009, 172, 163-187.	1.2	170
36	Influence of humic acid imposed changes of ferrihydrite aggregation on microbial Fe(III) reduction. Geochimica Et Cosmochimica Acta, 2012, 85, 326-341.	1.6	167

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37	Microbial anaerobic Fe(II) oxidation â€“ Ecology, mechanisms and environmental implications. Environmental Microbiology, 2018, 20, 3462-3483.	1.8	165
38	Potential Role of Nitrite for Abiotic Fe(II) Oxidation and Cell Encrustation during Nitrate Reduction by Denitrifying Bacteria. Applied and Environmental Microbiology, 2014, 80, 1051-1061.	1.4	161
39	Formation of Cell-Iron-Mineral Aggregates by Phototrophic and Nitrate-Reducing Anaerobic Fe(II)-Oxidizing Bacteria. Geomicrobiology Journal, 2009, 26, 93-103.	1.0	157
40	Extracellular Iron Biomineralization by Photoautotrophic Iron-Oxidizing Bacteria. Applied and Environmental Microbiology, 2009, 75, 5586-5591.	1.4	152
41	Ecophysiology and the energetic benefit of mixotrophic Fe(II) oxidation by various strains of nitrate-reducing bacteria. FEMS Microbiology Ecology, 2009, 70, 335-343.	1.3	152
42	Anaerobic Degradation of 2-Methylnaphthalene by a Sulfate-Reducing Enrichment Culture. Applied and Environmental Microbiology, 2000, 66, 5329-5333.	1.4	140
43	Biomineralization of lepidocrocite and goethite by nitrate-reducing Fe(II)-oxidizing bacteria: Effect of pH, bicarbonate, phosphate, and humic acids. Geochimica Et Cosmochimica Acta, 2010, 74, 3721-3734.	1.6	139
44	Impact of Organic Matter on Iron(II)-Catalyzed Mineral Transformations in Ferrihydriteâ€“Organic Matter Coprecipitates. Environmental Science & Technology, 2018, 52, 12316-12326.	4.6	139
45	Alternating Si and Fe deposition caused byÂtemperature fluctuations in PrecambrianÂoceans. Nature Geoscience, 2008, 1, 703-708.	5.4	138
46	Biogeochemistry and Community Composition of Iron- and Sulfur-Precipitating Microbial Mats at the Chefren Mud Volcano (Nile Deep Sea Fan, Eastern Mediterranean). Applied and Environmental Microbiology, 2008, 74, 3198-3215.	1.4	137
47	Influence of Natural Organic Matter on As Transport and Retention. Environmental Science & Technology, 2011, 45, 546-553.	4.6	136
48	Transformation of vivianite by anaerobic nitrateâ€reducing ironâ€oxidizing bacteria. Geobiology, 2009, 7, 373-384.	1.1	133
49	Products of abiotic U(VI) reduction by biogenic magnetite and vivianite. Geochimica Et Cosmochimica Acta, 2011, 75, 2512-2528.	1.6	130
50	Arsenic Redox Changes by Microbially and Chemically Formed Semiquinone Radicals and Hydroquinones in a Humic Substance Model Quinone. Environmental Science & Technology, 2009, 43, 3639-3645.	4.6	129
51	Nitrate capture and slow release in biochar amended compost and soil. PLoS ONE, 2017, 12, e0171214.	1.1	128
52	Rates and Extent of Reduction of Fe(III) Compounds and O₂ by Humic Substances. Environmental Science & Technology, 2009, 43, 4902-4908.	4.6	123
53	Rhizosphere Microbial Community Composition Affects Cadmium and Zinc Uptake by the Metal-Hyperaccumulating Plant Arabidopsis halleri. Applied and Environmental Microbiology, 2015, 81, 2173-2181.	1.4	122
54	Soil biochar amendment shapes the composition of N2O-reducing microbial communities. Science of the Total Environment, 2016, 562, 379-390.	3.9	117

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55	Metagenomic Analyses of the Autotrophic Fe(II)-Oxidizing, Nitrate-Reducing Enrichment Culture KS. Applied and Environmental Microbiology, 2016, 82, 2656-2668.	1.4	116
56	Organic Carbon and Reducing Conditions Lead to Cadmium Immobilization by Secondary Fe Mineral Formation in a pH-Neutral Soil. Environmental Science & Technology, 2013, 47, 13430-13439.	4.6	114
57	Fate of Cd during Microbial Fe(III) Mineral Reduction by a Novel and Cd-Tolerant <i>Geobacter</i> Species. Environmental Science & Technology, 2013, 47, 14099-14109.	4.6	113
58	Biogenic Fe(III) minerals: From formation to diagenesis and preservation in the rock record. Earth-Science Reviews, 2014, 135, 103-121.	4.0	110
59	Pyrite formation from FeS and H ₂ S is mediated through microbial redox activity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6897-6902.	3.3	106
60	Molecular-level modes of As binding to Fe(III) (oxyhydr)oxides precipitated by the anaerobic nitrate-reducing Fe(II)-oxidizing Acidovorax sp. strain BoFeN1. Geochimica Et Cosmochimica Acta, 2011, 75, 4699-4712.	1.6	99
61	Effect of biochar amendment on compost organic matter composition following aerobic composting of manure. Science of the Total Environment, 2018, 613-614, 20-29.	3.9	96
62	Iron mineral dissolution releases iron and associated organic carbon during permafrost thaw. Nature Communications, 2020, 11, 6329.	5.8	96
63	Cobalt and marine redox evolution. Earth and Planetary Science Letters, 2014, 390, 253-263.	1.8	95
64	Simulating Precambrian banded iron formation diagenesis. Chemical Geology, 2013, 362, 66-73.	1.4	88
65	Arsenic(V) Incorporation in Vivianite during Microbial Reduction of Arsenic(V)-Bearing Biogenic Fe(III) (Oxyhydr)oxides. Environmental Science & Technology, 2016, 50, 2281-2291.	4.6	87
66	Abundance, Distribution, and Activity of Fe(II)-Oxidizing and Fe(III)-Reducing Microorganisms in Hypersaline Sediments of Lake Kasin, Southern Russia. Applied and Environmental Microbiology, 2012, 78, 4386-4399.	1.4	86
67	Dependence of microbial magnetite formation on humic substance and ferrihydrite concentrations. Geochimica Et Cosmochimica Acta, 2011, 75, 6844-6858.	1.6	85
68	Biological carbon precursor to diagenetic siderite with spherical structures in iron formations. Nature Communications, 2013, 4, 1741.	5.8	85
69	Electron Transfer from Humic Substances to Biogenic and Abiogenic Fe(III) Oxyhydroxide Minerals. Environmental Science & Technology, 2014, 48, 1656-1664.	4.6	84
70	Microbial community composition of a household sand filter used for arsenic, iron, and manganese removal from groundwater in Vietnam. Chemosphere, 2015, 138, 47-59.	4.2	84
71	Nanoscale analyses of the surface structure and composition of biochars extracted from field trials or after co-composting using advanced analytical electron microscopy. Geoderma, 2017, 294, 70-79.	2.3	84
72	Water quality deterioration at a karst spring (Gallusquelle, Germany) due to combined sewer overflow: evidence of bacterial and micro-pollutant contamination. Environmental Geology, 2009, 57, 797-808.	1.2	82

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73	Linking environmental processes to the <i>in situ</i> functioning of microorganisms by highâ€resolution secondary ion mass spectrometry (NanoSIMS) and scanning transmission Xâ€ray microscopy (STXM). Environmental Microbiology, 2012, 14, 2851-2869.	1.8	81
74	Effects of different forms of nitrogen fertilizers on arsenic uptake by rice plants. Environmental Toxicology and Chemistry, 2008, 27, 881-887.	2.2	79
75	Experimental diagenesis of organo-mineral structures formed by microaerophilic Fe(II)-oxidizing bacteria. Nature Communications, 2015, 6, 6277.	5.8	79
76	Initiation of Anaerobic Degradation of p -Cresol by Formation of 4-Hydroxybenzylsuccinate in Desulfobacterium cetonicum. Journal of Bacteriology, 2001, 183, 752-757.	1.0	78
77	Influence of gut alkalinity and oxygen status on mobilization and size-class distribution of humic acids in the hindgut of soil-feeding termites. Applied Soil Ecology, 1999, 13, 219-229.	2.1	76
78	Coexistence of Microaerophilic, Nitrate-Reducing, and Phototrophic Fe(II) Oxidizers and Fe(III) Reducers in Coastal Marine Sediment. Applied and Environmental Microbiology, 2016, 82, 1433-1447.	1.4	76
79	The distribution of active ironâ€cycling bacteria in marine and freshwater sediments is decoupled from geochemical gradients. Environmental Microbiology, 2018, 20, 2483-2499.	1.8	76
80	Anaerobic degradation of m -cresol by Desulfobacterium cetonicum is initiated by formation of 3-hydroxybenzylsuccinate. Archives of Microbiology, 1999, 172, 287-294.	1.0	73
81	Transformation and mineralization of synthetic 14C-labeled humic model compounds by soil-feeding termites. Soil Biology and Biochemistry, 2000, 32, 1281-1291.	4.2	73
82	Microbiological processes in banded iron formation deposition. Sedimentology, 2013, 60, 1733-1754.	1.6	73
83	Evidence for equilibrium iron isotope fractionation by nitrate-reducing iron(II)-oxidizing bacteria. Geochimica Et Cosmochimica Acta, 2010, 74, 2826-2842.	1.6	72
84	Binding of heavy metal ions in aggregates of microbial cells, EPS and biogenic iron minerals measured in-situ using metal- and glycoconjugates-specific fluorophores. Geochimica Et Cosmochimica Acta, 2016, 180, 66-96.	1.6	72
85	Size, density and composition of cellâ€“mineral aggregates formed during anoxygenic phototrophic Fe(II) oxidation: Impact on modern and ancient environments. Geochimica Et Cosmochimica Acta, 2010, 74, 3476-3493.	1.6	71
86	Coupled anaerobic methane oxidation and reductive arsenic mobilization in wetland soils. Nature Geoscience, 2020, 13, 799-805.	5.4	71
87	Proton-Binding Capacity of Staphylococcus aureus Wall Teichoic Acid and Its Role in Controlling Autolysin Activity. PLoS ONE, 2012, 7, e41415.	1.1	71
88	Sulfur Species as Redox Partners and Electron Shuttles for Ferrihydrite Reduction by Sulfurospirillum deleyianum. Applied and Environmental Microbiology, 2014, 80, 3141-3149.	1.4	69
89	Iron(II)-Catalyzed Iron Atom Exchange and Mineralogical Changes in Iron-rich Organic Freshwater Flocs: An Iron Isotope Tracer Study. Environmental Science & Technology, 2017, 51, 6897-6907.	4.6	69
90	Modulation of oxygen production in Archaean oceans by episodes of Fe(II) toxicity. Nature Geoscience, 2015, 8, 126-130.	5.4	68

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91	Evidence for the Existence of Autotrophic Nitrate-Reducing Fe(II)-Oxidizing Bacteria in Marine Coastal Sediment. Applied and Environmental Microbiology, 2016, 82, 6120-6131.	1.4	68
92	A biogeochemicalâ€“hydrological framework for the role of redox-active compounds in aquatic systems. Nature Geoscience, 2021, 14, 264-272.	5.4	67
93	Gas entrapment and microbial N2O reduction reduce N2O emissions from a biochar-amended sandy clay loam soil. Scientific Reports, 2016, 6, 39574.	1.6	65
94	Does soil aging affect the N₂O mitigation potential of biochar? A combined microcosm and field study. GCB Bioenergy, 2017, 9, 953-964.	2.5	65
95	Characterization of the physiology and cell-mineral interactions of the marine anoxygenic phototrophic Fe(II) oxidizer<i>Rhodovulum iodosum</i>- implications for Precambrian Fe(II) oxidation. FEMS Microbiology Ecology, 2014, 88, 503-515.	1.3	64
96	Physico-chemical properties of the new generation IV iron preparations ferumoxytol, iron isomaltoside 1000 and ferric carboxymaltose. BioMetals, 2015, 28, 615-635.	1.8	64
97	Insights into Nitrate-Reducing Fe(II) Oxidation Mechanisms through Analysis of Cell-Mineral Associations, Cell Encrustation, and Mineralogy in the Chemolithoautotrophic Enrichment Culture KS. Applied and Environmental Microbiology, 2017, 83, .	1.4	64
98	Primary hematite in Neoarchean to Paleoproterozoic oceans. Bulletin of the Geological Society of America, 2015, 127, 850-861.	1.6	63
99	Reducing Capacities and Distribution of Redox-Active Functional Groups in Low Molecular Weight Fractions of Humic Acids. Environmental Science & Technology, 2016, 50, 12105-12113.	4.6	62
100	Does a low-pH microenvironment around phototrophic FeII-oxidizing bacteria prevent cell encrustation by FeIII minerals?. FEMS Microbiology Ecology, 2010, 74, 592-600.	1.3	61
101	Mapping of Heavy Metal Ion Sorption to Cell-Extracellular Polymeric Substance-Mineral Aggregates by Using Metal-Selective Fluorescent Probes and Confocal Laser Scanning Microscopy. Applied and Environmental Microbiology, 2013, 79, 6524-6534.	1.4	61
102	Spatial and temporal evolution of groundwater arsenic contamination in the Red River delta, Vietnam: Interplay of mobilisation and retardation processes. Science of the Total Environment, 2020, 717, 137143.	3.9	61
103	Biodegradability and groundwater pollutant potential of organic anti-freeze liquids used in borehole heat exchangers. Geothermics, 2007, 36, 348-361.	1.5	60
104	Influence of Seasonal and Geochemical Changes on the Geomicrobiology of an Iron Carbonate Mineral Water Spring. Applied and Environmental Microbiology, 2012, 78, 7185-7196.	1.4	60
105	Authigenic iron oxide proxies for marine zinc over geological time and implications for eukaryotic metallome evolution. Geobiology, 2013, 11, 295-306.	1.1	60
106	FeII oxidation by molecular O2 during HCl extraction. Environmental Chemistry, 2011, 8, 190.	0.7	59
107	Evaluation of Electron Microscopic Sample Preparation Methods and Imaging Techniques for Characterization of Cell-Mineral Aggregates. Geomicrobiology Journal, 2008, 25, 228-239.	1.0	58
108	Experimental low-grade alteration of biogenic magnetite indicates microbial involvement in generation of banded iron formations. Earth and Planetary Science Letters, 2013, 361, 229-237.	1.8	58

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109	Cryptic biogeochemical cycles: unravelling hidden redox reactions. Environmental Microbiology, 2017, 19, 842-846.	1.8	58
110	Role of in Situ Natural Organic Matter in Mobilizing As during Microbial Reduction of Fe^{III}-Mineral-Bearing Aquifer Sediments from Hanoi (Vietnam). Environmental Science & Technology, 2020, 54, 4149-4159.	4.6	58
111	Mineral precipitation during production of geothermal fluid from a Permian Rotliegend reservoir. Geothermics, 2015, 54, 122-135.	1.5	57
112	Aggregation-dependent electron transfer via redox-active biochar particles stimulate microbial ferrihydrite reduction. Science of the Total Environment, 2020, 703, 135515.	3.9	57
113	Nickel partitioning in biogenic and abiogenic ferrihydrite: The influence of silica and implications for ancient environments. Geochimica Et Cosmochimica Acta, 2014, 140, 65-79.	1.6	56
114	The Archean Nickel Famine Revisited. Astrobiology, 2015, 15, 804-815.	1.5	55
115	Soil biochar amendment affects the diversity of nosZ transcripts: Implications for N2O formation. Scientific Reports, 2017, 7, 3338.	1.6	55
116	Iron Lung: How Rice Roots Induce Iron Redox Changes in the Rhizosphere and Create Niches for Microaerophilic Fe(II)-Oxidizing Bacteria. Environmental Science and Technology Letters, 2019, 6, 600-605.	3.9	55
117	Heterogeneous oxidation of Fe(II) on iron oxides in aqueous systems: Identification and controls of Fe(III) product formation. Geochimica Et Cosmochimica Acta, 2012, 91, 171-186.	1.6	52
118	Iron and Arsenic Speciation and Distribution in Organic Flocs from Streambeds of an Arsenic-Enriched Peatland. Environmental Science & Technology, 2014, 48, 13218-13228.	4.6	52
119	A metagenomic-based survey of microbial (de)halogenation potential in a German forest soil. Scientific Reports, 2016, 6, 28958.	1.6	51
120	In-Situ Magnetic Susceptibility Measurements As a Tool to Follow Geomicrobiological Transformation of Fe Minerals. Environmental Science & Technology, 2010, 44, 3846-3852.	4.6	50
121	Arsenic removal from drinking water by a household sand filter in Vietnam â€" Effect of filter usage practices on arsenic removal efficiency and microbiological water quality. Science of the Total Environment, 2015, 502, 526-536.	3.9	50
122	Six-Membered Spirocycle Triggered Probe for Visualizing Hg²⁺ in Living Cells and Bacteriaâ€"EPSâ€"Mineral Aggregates. Organic Letters, 2013, 15, 4334-4337.	2.4	49
123	3â€Ð analysis of bacterial cellâ€(iron)mineral aggregates formed during Fe(<scp>II</scp>) oxidation by the nitrateâ€reducing <i>Acidovorax sp</i>. strain BoFeN1 using complementary microscopy tomography approaches. Geobiology, 2014, 12, 340-361.	1.1	49
124	Photochemistry of iron in aquatic environments. Environmental Sciences: Processes and Impacts, 2020, 22, 12-24.	1.7	49
125	AQDS and Redox-Active NOM Enables Microbial Fe(III)-Mineral Reduction at cm-Scales. Environmental Science & Technology, 2020, 54, 4131-4139.	4.6	49
126	Enrichment and Isolation of Ferricâ€Ironâ€•and Humicâ€Acidâ€Reducing Bacteria. Methods in Enzymology, 2005, 397, 58-77.	0.4	48

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127	Fractionation of Fe isotopes during Fe(II) oxidation by a marine photoferrotroph is controlled by the formation of organic Fe-complexes and colloidal Fe fractions. Geochimica Et Cosmochimica Acta, 2015, 165, 44-61.	1.6	48
128	Are rice (Oryza sativa L.) phosphate transporters regulated similarly by phosphate and arsenate? A comprehensive study. Plant Molecular Biology, 2014, 85, 301-316.	2.0	47
129	Dynamics of redox potential and changes in redox state of iron and humic acids during gut passage in soil-feeding termites (Cubitermes spp.). Soil Biology and Biochemistry, 2002, 34, 221-227.	4.2	46
130	Microbial Iron(II) Oxidation in Littoral Freshwater Lake Sediment: The Potential for Competition between Phototrophic vs. Nitrate-Reducing Iron(II)-Oxidizers. Frontiers in Microbiology, 2012, 3, 197.	1.5	46
131	Investigating Microbe-Mineral Interactions: Recent Advances in X-Ray and Electron Microscopy and Redox-Sensitive Methods. Annual Review of Earth and Planetary Sciences, 2014, 42, 271-289.	4.6	46
132	Growth and Population Dynamics of the Anaerobic Fe(II)-Oxidizing and Nitrate-Reducing Enrichment Culture KS. Applied and Environmental Microbiology, 2018, 84, .	1.4	46
133	Biochar affects community composition of nitrous oxide reducers in a field experiment. Soil Biology and Biochemistry, 2018, 119, 143-151.	4.2	46
134	Oxidation of Fe(II)â€"Organic Matter Complexes in the Presence of the Mixotrophic Nitrate-Reducing Fe(II)-Oxidizing Bacterium <i>Acidovorax</i> sp. BoFeN1. Environmental Science & Technology, 2018, 52, 5753-5763.	4.6	45
135	Microbially Mediated Coupling of Fe and N Cycles by Nitrate-Reducing Fe(II)-Oxidizing Bacteria in Littoral Freshwater Sediments. Applied and Environmental Microbiology, 2018, 84, .	1.4	45
136	Potential Function of Added Minerals as Nucleation Sites and Effect of Humic Substances on Mineral Formation by the Nitrate-Reducing Fe(II)-Oxidizer <i>Acidovorax</i> sp. BoFeN1. Environmental Science & Technology, 2012, 46, 6556-6565.	4.6	44
137	High spatial resolution of distribution and interconnections between <scp>F</scp>eâ€•and <scp>N</scp>â€redox processes in profundal lake sediments. Environmental Microbiology, 2014, 16, 3287-3303.	1.8	44
138	UV radiation limited the expansion of cyanobacteria in early marine photic environments. Nature Communications, 2018, 9, 3088.	5.8	44
139	Co-sorption of metal ions and inorganic anions/organic ligands on environmental minerals: A review. Science of the Total Environment, 2022, 803, 149918.	3.9	44
140	Surface binding site analysis of Ca2+-homoionized clayâ€"humic acid complexes. Journal of Colloid and Interface Science, 2010, 352, 526-534.	5.0	43
141	Oxidation of <scp>F</scp>e(<scp>II</scp>)â€‹<scp>EDTA</scp> by nitrite and by two nitrateâ€reducing Fe(<scp>II</scp>)â€oxidizing <i><scp>A</scp>cidovorax</i> strains. Geobiology, 2015, 13, 198-207.	1.1	43
142	Recovery of precious metals from waste streams. Microbial Biotechnology, 2017, 10, 1194-1198.	2.0	43
143	Photoferrotrophy, deposition of banded iron formations, and methane production in Archean oceans. Science Advances, 2019, 5, eaav2869.	4.7	43
144	Atmospheric hydrogen peroxide and Eoarchean iron formations. Geobiology, 2015, 13, 1-14.	1.1	42

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145	Anaerobic microbial Fe(II) oxidation and Fe(III) reduction in coastal marine sediments controlled by organic carbon content. Environmental Microbiology, 2016, 18, 3159-3174.	1.8	42
146	Microaerophilic Fe(II)-Oxidizing Zetaproteobacteria Isolated from Low-Fe Marine Coastal Sediments: Physiology and Composition of Their Twisted Stalks. Applied and Environmental Microbiology, 2017, 83, .	1.4	42
147	N2O formation by nitrite-induced (chemo)denitrification in coastal marine sediment. Scientific Reports, 2019, 9, 10691.	1.6	42
148	Mineral Defects Enhance Bioavailability of Goethite toward Microbial Fe(III) Reduction. Environmental Science & Technology, 2019, 53, 8883-8891.	4.6	42
149	Desorption of arsenic from clay and humic acid-coated clay by dissolved phosphate and silicate. Journal of Contaminant Hydrology, 2011, 126, 216-225.	1.6	41
150	Fate of Arsenic during Microbial Reduction of Biogenic versus Abiogenic Asâ€“Fe(III)â€“Mineral Coprecipitates. Environmental Science & Technology, 2013, 47, 130711140829002.	4.6	41
151	The Bacteriohopanepolyol Inventory of Novel Aerobic Methane Oxidising Bacteria Reveals New Biomarker Signatures of Aerobic Methanotrophy in Marine Systems. PLoS ONE, 2016, 11, e0165635.	1.1	41
152	Fungus-initiated catalytic reactions at hyphal-mineral interfaces drive iron redox cycling and biomineralization. Geochimica Et Cosmochimica Acta, 2019, 260, 192-203.	1.6	40
153	Contribution of Microaerophilic Iron(II)-Oxidizers to Iron(III) Mineral Formation. Environmental Science & Technology, 2019, 53, 8197-8204.	4.6	40
154	Role of Chemodenitrification for N₂O Emissions from Nitrate Reduction in Rice Paddy Soils. ACS Earth and Space Chemistry, 2020, 4, 122-132.	1.2	39
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