

Sebastian F Behrens

List of Publications by Year in descending order

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Version: 2024-02-01

39
papers

3,828
citations

218381

26
h-index

288905

40
g-index

40
all docs

40
docs citations

40
times ranked

5023
citing authors

#	ARTICLE	IF	CITATIONS
1	The interplay of microbially mediated and abiotic reactions in the biogeochemical Fe cycle. <i>Nature Reviews Microbiology</i> , 2014, 12, 797-808.	13.6	627
2	Linking N ₂ O emissions from biochar-amended soil to the structure and function of the N-cycling microbial community. <i>ISME Journal</i> , 2014, 8, 660-674.	4.4	484
3	Biochar as an Electron Shuttle between Bacteria and Fe(III) Minerals. <i>Environmental Science and Technology Letters</i> , 2014, 1, 339-344.	3.9	432
4	Organic coating on biochar explains its nutrient retention and stimulation of soil fertility. <i>Nature Communications</i> , 2017, 8, 1089.	5.8	371
5	Monitoring Abundance and Expression of <i>Dehalococcoides</i> Species Chloroethene-Reductive Dehalogenases in a Tetrachloroethene-Dechlorinating Flow Column. <i>Applied and Environmental Microbiology</i> , 2008, 74, 5695-5703.	1.4	133
6	Nitrate capture and slow release in biochar amended compost and soil. <i>PLoS ONE</i> , 2017, 12, e0171214.	1.1	128
7	Rhizosphere Microbial Community Composition Affects Cadmium and Zinc Uptake by the Metal-Hyperaccumulating Plant <i>Arabidopsis halleri</i> . <i>Applied and Environmental Microbiology</i> , 2015, 81, 2173-2181.	1.4	122
8	Soil biochar amendment shapes the composition of N ₂ O-reducing microbial communities. <i>Science of the Total Environment</i> , 2016, 562, 379-390.	3.9	117
9	Metagenomic Analyses of the Autotrophic Fe(II)-Oxidizing, Nitrate-Reducing Enrichment Culture KS. <i>Applied and Environmental Microbiology</i> , 2016, 82, 2656-2668.	1.4	116
10	Organic Carbon and Reducing Conditions Lead to Cadmium Immobilization by Secondary Fe Mineral Formation in a pH-Neutral Soil. <i>Environmental Science & Technology</i> , 2013, 47, 13430-13439.	4.6	114
11	Fate of Cd during Microbial Fe(III) Mineral Reduction by a Novel and Cd-Tolerant <i>Geobacter</i> Species. <i>Environmental Science & Technology</i> , 2013, 47, 14099-14109.	4.6	113
12	Effect of biochar amendment on compost organic matter composition following aerobic composting of manure. <i>Science of the Total Environment</i> , 2018, 613-614, 20-29.	3.9	96
13	Microbial community composition of a household sand filter used for arsenic, iron, and manganese removal from groundwater in Vietnam. <i>Chemosphere</i> , 2015, 138, 47-59.	4.2	84
14	Linking environmental processes to the <i>in situ</i> functioning of microorganisms by high-resolution secondary ion mass spectrometry (NanoSIMS) and scanning transmission X-ray microscopy (STXM). <i>Environmental Microbiology</i> , 2012, 14, 2851-2869.	1.8	81
15	Coexistence of Microaerophilic, Nitrate-Reducing, and Phototrophic Fe(II) Oxidizers and Fe(III) Reducers in Coastal Marine Sediment. <i>Applied and Environmental Microbiology</i> , 2016, 82, 1433-1447.	1.4	76
16	Gas entrapment and microbial N ₂ O reduction reduce N ₂ O emissions from a biochar-amended sandy clay loam soil. <i>Scientific Reports</i> , 2016, 6, 39574.	1.6	65
17	Does soil aging affect the N ₂ O mitigation potential of biochar? A combined microcosm and field study. <i>GCB Bioenergy</i> , 2017, 9, 953-964.	2.5	65
18	Composition and Dynamics of the Activated Sludge Microbiome during Seasonal Nitrification Failure. <i>Scientific Reports</i> , 2019, 9, 4565.	1.6	62

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19	Influence of Seasonal and Geochemical Changes on the Geomicrobiology of an Iron Carbonate Mineral Water Spring. <i>Applied and Environmental Microbiology</i> , 2012, 78, 7185-7196.	1.4	60
20	Soil biochar amendment affects the diversity of nosZ transcripts: Implications for N ₂ O formation. <i>Scientific Reports</i> , 2017, 7, 3338.	1.6	55
21	A metagenomic-based survey of microbial (de)halogenation potential in a German forest soil. <i>Scientific Reports</i> , 2016, 6, 28958.	1.6	51
22	Arsenic removal from drinking water by a household sand filter in Vietnam – Effect of filter usage practices on arsenic removal efficiency and microbiological water quality. <i>Science of the Total Environment</i> , 2015, 502, 526-536.	3.9	50
23	Growth and Population Dynamics of the Anaerobic Fe(II)-Oxidizing and Nitrate-Reducing Enrichment Culture KS. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	1.4	46
24	Biochar affects community composition of nitrous oxide reducers in a field experiment. <i>Soil Biology and Biochemistry</i> , 2018, 119, 143-151.	4.2	46
25	Tillage system affects fertilizer-induced nitrous oxide emissions. <i>Biology and Fertility of Soils</i> , 2017, 53, 49-59.	2.3	37
26	Insights into Carbon Metabolism Provided by Fluorescence <i>In Situ</i> Hybridization-Secondary Ion Mass Spectrometry Imaging of an Autotrophic, Nitrate-Reducing, Fe(II)-Oxidizing Enrichment Culture. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	1.4	32
27	Seasonal Dynamics of the Activated Sludge Microbiome in Sequencing Batch Reactors, Assessed Using 16S rRNA Transcript Amplicon Sequencing. <i>Applied and Environmental Microbiology</i> , 2020, 86, .	1.4	26
28	Secondary Mineral Formation During Ferrihydrite Reduction by <i>Shewanella oneidensis</i> MR-1 Depends on Incubation Vessel Orientation and Resulting Gradients of Cells, Fe ²⁺ and Fe Minerals. <i>Geomicrobiology Journal</i> , 2015, 32, 878-889.	1.0	23
29	Ribosomal Tag Pyrosequencing of DNA and RNA Reveals –Rare–Taxa with High Protein Synthesis Potential in the Sediment of a Hypersaline Lake in Western Australia. <i>Geomicrobiology Journal</i> , 2016, 33, 426-440.	1.0	22
30	Comparison of Humic Substance- and Fe(III)-Reducing Microbial Communities in Anoxic Aquifers. <i>Geomicrobiology Journal</i> , 2014, 31, 917-928.	1.0	19
31	Resiliency of Stable Isotope Fractionation ($\delta^{13}\text{C}$ and $\delta^{37}\text{Cl}$) of Trichloroethene to Bacterial Growth Physiology and Expression of Key Enzymes. <i>Environmental Science & Technology</i> , 2015, 49, 13230-13237.	4.6	19
32	Anaerobic Dehalogenation by Reduced Aqueous Biochars. <i>Environmental Science & Technology</i> , 2020, 54, 15142-15150.	4.6	11
33	Deciphering the Variability of Stable Isotope (C, Cl) Fractionation of Tetrachloroethene Biotransformation by <i>Desulfitobacterium</i> strains Carrying Different Reductive Dehalogenases Enzymes. <i>Environmental Science & Technology</i> , 2020, 54, 1593-1602.	4.6	10
34	Tracking de novo protein synthesis in the activated sludge microbiome using BONCAT-FACS. <i>Water Research</i> , 2021, 205, 117696.	5.3	9
35	Formation of chloroform and tetrachloroethene by <i>Sinorhizobium meliloti</i> strain 1021. <i>Letters in Applied Microbiology</i> , 2015, 61, 346-353.	1.0	7
36	Different Engineering Designs Have Profoundly Different Impacts on the Microbiome and Nitrifying Bacterial Populations in Municipal Wastewater Treatment Bioreactors. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0104421.	1.4	5

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37	Direct Evidence for Deterministic Assembly of Bacterial Communities in Full-Scale Municipal Wastewater Treatment Facilities. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0108621.	1.4	5
38	Microbial Community Composition in Municipal Wastewater Treatment Bioreactors Follows a Distance Decay Pattern Primarily Controlled by Environmental Heterogeneity. <i>MSphere</i> , 2021, 6, e0064821.	1.3	5
39	Evaluating Quantitative PCR Assays to Enumerate Several Bacterial Populations of Importance in Different Municipal Wastewater Treatment Designs. <i>Journal of Environmental Engineering, ASCE</i> , 2021, 147, 04021044.	0.7	1