Sebastian F Behrens

List of Publications by Year
in descending order

39 papers	3,828 citations	218677 26 h-index	289244 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. Nature Reviews Microbiology, 2014, 12, 797-808.	28.6	627
2	Linking N2O emissions from biochar-amended soil to the structure and function of the N-cycling microbial community. ISME Journal, 2014, 8, 660-674.	9.8	484
3	Biochar as an Electron Shuttle between Bacteria and Fe(III) Minerals. Environmental Science and Technology Letters, 2014, 1, 339-344.	8.7	432
4	Organic coating on biochar explains its nutrient retention and stimulation of soil fertility. Nature Communications, 2017, 8, 1089.	12.8	371
5	Monitoring Abundance and Expression of â€œ <i>Dehalococcoides</i> â€•Species Chloroethene-Reductive Dehalogenases in a Tetrachloroethene-Dechlorinating Flow Column. Applied and Environmental Microbiology, 2008, 74, 5695-5703.	3.1	133
6	Nitrate capture and slow release in biochar amended compost and soil. PLoS ONE, 2017, 12, e0171214.	2.5	128
7	Rhizosphere Microbial Community Composition Affects Cadmium and Zinc Uptake by the Metal-Hyperaccumulating Plant Arabidopsis halleri. Applied and Environmental Microbiology, 2015, 81, 2173-2181.	3.1	122
8	Soil biochar amendment shapes the composition of N2O-reducing microbial communities. Science of the Total Environment, 2016, 562, 379-390.	8.0	117
9	Metagenomic Analyses of the Autotrophic Fe(II)-Oxidizing, Nitrate-Reducing Enrichment Culture KS. Applied and Environmental Microbiology, 2016, 82, 2656-2668.	3.1	116
10	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.	10.0	114
11	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.	10.0	113
12	Effect of biochar amendment on compost organic matter composition following aerobic composting of manure. Science of the Total Environment, 2018, 613-614, 20-29.	8.0	96
13	Microbial community composition of a household sand filter used for arsenic, iron, and manganese removal from groundwater in Vietnam. Chemosphere, 2015, 138, 47-59.	8.2	84
14	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.	3.8	81
15	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.	3.1	76
16	Gas entrapment and microbial N2O reduction reduce N2O emissions from a biochar-amended sandy clay loam soil. Scientific Reports, 2016, 6, 39574.	3.3	65
17	Does soil aging affect the N₂O mitigation potential of biochar? A combined microcosm and field study. GCB Bioenergy, 2017, 9, 953-964.	5.6	65
18	Composition and Dynamics of the Activated Sludge Microbiome during Seasonal Nitrification Failure. Scientific Reports, 2019, 9, 4565.	3.3	62

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19	Influence of Seasonal and Geochemical Changes on the Geomicrobiology of an Iron Carbonate Mineral Water Spring. Applied and Environmental Microbiology, 2012, 78, 7185-7196.	3.1	60
20	Soil biochar amendment affects the diversity of nosZ transcripts: Implications for N2O formation. Scientific Reports, 2017, 7, 3338.	3.3	55
21	A metagenomic-based survey of microbial (de)halogenation potential in a German forest soil. Scientific Reports, 2016, 6, 28958.	3.3	51
22	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.	8.0	50
23	Growth and Population Dynamics of the Anaerobic Fe(II)-Oxidizing and Nitrate-Reducing Enrichment Culture KS. Applied and Environmental Microbiology, 2018, 84, .	3.1	46
24	Biochar affects community composition of nitrous oxide reducers in a field experiment. Soil Biology and Biochemistry, 2018, 119, 143-151.	8.8	46
25	Tillage system affects fertilizer-induced nitrous oxide emissions. Biology and Fertility of Soils, 2017, 53, 49-59.	4.3	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. Applied and Environmental Microbiology, 2018, 84, .	3.1	32
27	Seasonal Dynamics of the Activated Sludge Microbiome in Sequencing Batch Reactors, Assessed Using 16S rRNA Transcript Amplicon Sequencing. Applied and Environmental Microbiology, 2020, 86, .	3.1	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, Fe²⁺and Fe Minerals. Geomicrobiology Journal, 2015, 32, 878-889.	2.0	23
29	Ribosomal Tag Pyrosequencing of DNA and RNA Reveals â€œRareâ€•Taxa with High Protein Synthesis Potential in the Sediment of a Hypersaline Lake in Western Australia. Geomicrobiology Journal, 2016, 33, 426-440.	2.0	22
30	Comparison of Humic Substance- and Fe(III)-Reducing Microbial Communities in Anoxic Aquifers. Geomicrobiology Journal, 2014, 31, 917-928.	2.0	19
31	Resiliency of Stable Isotope Fractionation (Î´¹³C and Î´³⁷Cl) of Trichloroethene to Bacterial Growth Physiology and Expression of Key Enzymes. Environmental Science & Technology, 2015, 49, 13230-13237.	10.0	19
32	Anaerobic Dehalogenation by Reduced Aqueous Biochars. Environmental Science & Technology, 2020, 54, 15142-15150.	10.0	11
33	Deciphering the Variability of Stable Isotope (C, Cl) Fractionation of Tetrachloroethene Biotransformation by <i>Desulfitobacterium</i> strains Carrying Different Reductive Dehalogenases Enzymes. Environmental Science & Technology, 2020, 54, 1593-1602.	10.0	10
34	Tracking de novo protein synthesis in the activated sludge microbiome using BONCAT-FACS. Water Research, 2021, 205, 117696.	11.3	9
35	Formation of chloroform and tetrachloroethene by <i>Sinorhizobium meliloti</i> strain 1021. Letters in Applied Microbiology, 2015, 61, 346-353.	2.2	7
36	Different Engineering Designs Have Profoundly Different Impacts on the Microbiome and Nitrifying Bacterial Populations in Municipal Wastewater Treatment Bioreactors. Applied and Environmental Microbiology, 2021, 87, e0104421.	3.1	5

#	Article	IF	Citations
37	Direct Evidence for Deterministic Assembly of Bacterial Communities in Full-Scale Municipal Wastewater Treatment Facilities. Applied and Environmental Microbiology, 2021, 87, e0108621.	3.1	5
38	Microbial Community Composition in Municipal Wastewater Treatment Bioreactors Follows a Distance Decay Pattern Primarily Controlled by Environmental Heterogeneity. MSphere, 2021, 6, e0064821.	2.9	5
39	Evaluating Quantitative PCR Assays to Enumerate Several Bacterial Populations of Importance in Different Municipal Wastewater Treatment Designs. Journal of Environmental Engineering, ASCE, 2021, 147, 04021044.	1.4	1