

# Sebastian LÃ¼cker

## List of Publications by Year in descending order

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Version: 2024-02-01

58  
papers

8,776  
citations

101543

36  
h-index

144013

57  
g-index

68  
all docs

68  
docs citations

68  
times ranked

7550  
citing authors

#	ARTICLE	IF	CITATIONS
1	A general approach to explore prokaryotic protein glycosylation reveals the unique surface layer modulation of an anammox bacterium. <i>ISME Journal</i> , 2022, 16, 346-357.	9.8	8
2	Universal activity-based labeling method for ammonia- and alkane-oxidizing bacteria. <i>ISME Journal</i> , 2022, 16, 958-971.	9.8	12
3	Linear polyacrylamide is highly efficient in precipitating and purifying environmental and ancient DNA. <i>Methods in Ecology and Evolution</i> , 2022, 13, 653-667.	5.2	4
4	Distinct comammox <i>Nitrospira</i> catalyze ammonia oxidation in a full-scale groundwater treatment bioreactor under copper limited conditions. <i>Water Research</i> , 2022, 210, 117986.	11.3	24
5	Some like it cold: the cellular organization and physiological limits of cold-tolerant nitrite-oxidizing <i>Nitrotoga</i> . <i>Environmental Microbiology</i> , 2022, 24, 2059-2077.	3.8	9
6	Enrichment and physiological characterization of a novel comammox <i>Nitrospira</i> indicates ammonium inhibition of complete nitrification. <i>ISME Journal</i> , 2021, 15, 1010-1024.	9.8	117
7	Metabolic versatility of the nitrite-oxidizing bacterium <i>Nitrospira marina</i> and its proteomic response to oxygen-limited conditions. <i>ISME Journal</i> , 2021, 15, 1025-1039.	9.8	62
8	Ammonia oxidation at pH 2.5 by a new gammaproteobacterial ammonia-oxidizing bacterium. <i>ISME Journal</i> , 2021, 15, 1150-1164.	9.8	39
9	Autotrophic and mixotrophic metabolism of an anammox bacterium revealed by in vivo <sup>13</sup> C and <sup>2</sup> H metabolic network mapping. <i>ISME Journal</i> , 2021, 15, 673-687.	9.8	64
10	Selective enrichment and metagenomic analysis of three novel comammox <i>Nitrospira</i> in a urine-fed membrane bioreactor. <i>ISME Communications</i> , 2021, 1, .	4.2	27
11	Cyclic Conversions in the Nitrogen Cycle. <i>Frontiers in Microbiology</i> , 2021, 12, 622504.	3.5	6
12	Proteogenomic analysis of <i>Georgfuchsia toluolica</i> revealed unexpected concurrent aerobic and anaerobic toluene degradation. <i>Environmental Microbiology Reports</i> , 2021, 13, 841-851.	2.4	3
13	Investigating the Chemolithoautotrophic and Formate Metabolism of <i>Nitrospira moscoviensis</i> by Constraint-Based Metabolic Modeling and <sup>13</sup> C-Tracer Analysis. <i>MSystems</i> , 2021, 6, e0017321.	3.8	8
14	Extremophilic nitrite-oxidizing <i>Chloroflexi</i> from Yellowstone hot springs. <i>ISME Journal</i> , 2020, 14, 364-379.	9.8	93
15	Cultivation and functional characterization of 79 planctomycetes uncovers their unique biology. <i>Nature Microbiology</i> , 2020, 5, 126-140.	13.3	164
16	Metagenomic profiling of ammonia- and methane-oxidizing microorganisms in two sequential rapid sand filters. <i>Water Research</i> , 2020, 185, 116288.	11.3	52
17	Defining Culture Conditions for the Hidden Nitrite-Oxidizing Bacterium <i>Nitrolancea</i> . <i>Frontiers in Microbiology</i> , 2020, 11, 1522.	3.5	30
18	Metabolic Overlap in Environmentally Diverse Microbial Communities. <i>Frontiers in Genetics</i> , 2019, 10, 989.	2.3	33

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19	Chemosymbiotic bivalves contribute to the nitrogen budget of seagrass ecosystems. ISME Journal, 2019, 13, 3131-3134.	9.8	24
20	<i>Methylozetotetrasphaera oryzae</i> Strain C50C1 Is a Novel Type Ib Gammaproteobacterial Methanotroph Adapted to Freshwater Environments. MSphere, 2019, 4, .	2.9	14
21	Cultivation and Transcriptional Analysis of a Canonical Nitrospira Under Stable Growth Conditions. Frontiers in Microbiology, 2019, 10, 1325.	3.5	34
22	Uncultured <i>Nitrospina</i> -like species are major nitrite oxidizing bacteria in oxygen minimum zones. ISME Journal, 2019, 13, 2391-2402.	9.8	67
23	Metagenomic recovery of two distinct comammox <i>Nitrospira</i> from the terrestrial subsurface. Environmental Microbiology, 2019, 21, 3627-3637.	3.8	69
24	In Situ Quantification of Biological N <sub>2</sub> Production Using Naturally Occurring <sup>15</sup> N. Environmental Science & Technology, 2019, 53, 5168-5175.	10.0	14
25	Complete nitrification: insights into the ecophysiology of comammox Nitrospira. Applied Microbiology and Biotechnology, 2019, 103, 177-189.	3.6	224
26	Complete ammonia oxidation: an important control on nitrification in engineered ecosystems?. Current Opinion in Biotechnology, 2018, 50, 158-165.	6.6	115
27	Resolving the complete genome of Kuenenia stuttgartiensis from a membrane bioreactor enrichment using Single-Molecule Real-Time sequencing. Scientific Reports, 2018, 8, 4580.	3.3	48
28	The draft genome sequence of <i>Nitrospira lenta</i> strain BS10, a nitrite oxidizing bacterium isolated from activated sludge. Standards in Genomic Sciences, 2018, 13, 32.	1.5	28
29	Linking Nitrogen Load to the Structure and Function of Wetland Soil and Rhizosphere Microbial Communities. MSystems, 2018, 3, .	3.8	56
30	Characterization of the First <i>Candidatus Nitrotoga</i> Isolate Reveals Metabolic Versatility and Separate Evolution of Widespread Nitrite-Oxidizing Bacteria. MBio, 2018, 9, .	4.1	112
31	Nitrogen-fixing populations of Planctomycetes and Proteobacteria are abundant in surface ocean metagenomes. Nature Microbiology, 2018, 3, 804-813.	13.3	436
32	Adaptability as the key to success for the ubiquitous marine nitrite oxidizer <i>Nitrococcus</i> . Science Advances, 2017, 3, e1700807.	10.3	74
33	AmoA-Targeted Polymerase Chain Reaction Primers for the Specific Detection and Quantification of Comammox Nitrospira in the Environment. Frontiers in Microbiology, 2017, 8, 1508.	3.5	313
34	Genomics of a phototrophic nitrite oxidizer: insights into the evolution of photosynthesis and nitrification. ISME Journal, 2016, 10, 2669-2678.	9.8	32
35	A New Perspective on Microbes Formerly Known as Nitrite-Oxidizing Bacteria. Trends in Microbiology, 2016, 24, 699-712.	7.7	625
36	Relative Abundance of Nitrotoga spp. in a Biofilter of a Cold-Freshwater Aquaculture Plant Appears To Be Stimulated by Slightly Acidic pH. Applied and Environmental Microbiology, 2016, 82, 1838-1845.	3.1	47

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37	<i>Nitrotoga</i> -like bacteria are previously unrecognized key nitrite oxidizers in full-scale wastewater treatment plants. <i>ISME Journal</i> , 2015, 9, 708-720.	9.8	135
38	Complete nitrification by a single microorganism. <i>Nature</i> , 2015, 528, 555-559.	27.8	1,336
39	Expanded metabolic versatility of ubiquitous nitrite-oxidizing bacteria from the genus <i>Nitrospira</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11371-11376.	7.1	439
40	The Family Nitrospinaceae. , 2014, , 231-237.		8
41	<i>NxrB</i> encoding the beta subunit of nitrite oxidoreductase as functional and phylogenetic marker for nitrite-oxidizing <i>Nitrospira</i> . <i>Environmental Microbiology</i> , 2014, 16, 3055-3071.	3.8	280
42	Spatial distribution analyses of natural phyllosphere-colonizing bacteria on <i>Arabidopsis thaliana</i> revealed by fluorescence <i>in situ</i> hybridization. <i>Environmental Microbiology</i> , 2014, 16, 2329-2340.	3.8	125
43	Growth of nitrite-oxidizing bacteria by aerobic hydrogen oxidation. <i>Science</i> , 2014, 345, 1052-1054.	12.6	166
44	<i>Nitrolancea hollandica</i> gen. nov., sp. nov., a chemolithoautotrophic nitrite-oxidizing bacterium isolated from a bioreactor belonging to the phylum Chloroflexi. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2014, 64, 1859-1865.	1.7	82
45	The Genome of <i>Nitrospina gracilis</i> Illuminates the Metabolism and Evolution of the Major Marine Nitrite Oxidizer. <i>Frontiers in Microbiology</i> , 2013, 4, 27.	3.5	243
46	Nitrification expanded: discovery, physiology and genomics of a nitrite-oxidizing bacterium from the phylum Chloroflexi. <i>ISME Journal</i> , 2012, 6, 2245-2256.	9.8	345
47	Isolation and characterization of a moderately thermophilic nitrite-oxidizing bacterium from a geothermal spring. <i>FEMS Microbiology Ecology</i> , 2011, 75, 195-204.	2.7	112
48	First detection of thiotrophic symbiont phylotypes in the pelagic marine environment. <i>FEMS Microbiology Ecology</i> , 2011, 77, 223-227.	2.7	14
49	Deep sequencing reveals exceptional diversity and modes of transmission for bacterial sponge symbionts. <i>Environmental Microbiology</i> , 2010, 12, 2070-2082.	3.8	394
50	A <i>Nitrospira</i> metagenome illuminates the physiology and evolution of globally important nitrite-oxidizing bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 13479-13484.	7.1	732
51	Molecular characterization of the symbionts associated with marine nematodes of the genus <i>Robbea</i> . <i>Environmental Microbiology Reports</i> , 2009, 1, 136-144.	2.4	46
52	Environmental genomics reveals a functional chlorite dismutase in the nitrite-oxidizing bacterium <i>Candidatus Nitrospira defluvia</i> . <i>Environmental Microbiology</i> , 2008, 10, 3043-3056.	3.8	102
53	Improved 16S rRNA-targeted probe set for analysis of sulfate-reducing bacteria by fluorescence <i>in situ</i> hybridization. <i>Journal of Microbiological Methods</i> , 2007, 69, 523-528.	1.6	98
54	Ecophysiology and niche differentiation of <i>Nitrospira</i> -like bacteria, the key nitrite oxidizers in wastewater treatment plants. <i>Water Science and Technology</i> , 2006, 54, 21-27.	2.5	36

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55	<i>daime</i> , a novel image analysis program for microbial ecology and biofilm research. Environmental Microbiology, 2006, 8, 200-213.	3.8	565
56	Lateral Gene Transfer of Dissimilatory (Bi)Sulfite Reductase Revisited. Journal of Bacteriology, 2005, 187, 2203-2208.	2.2	153
57	16S rRNA Gene-Based Oligonucleotide Microarray for Environmental Monitoring of the Betaproteobacterial Order <i>Rhodocyclales</i> . Applied and Environmental Microbiology, 2005, 71, 1373-1386.	3.1	231
58	Diversity, Environmental Genomics, and Ecophysiology of Nitrite-Oxidizing Bacteria. , 0, , 295-322.		20