

# Helmut Brgmann

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

76  
papers

5,804  
citations

32  
h-index

76  
g-index

83  
ext. papers

7,325  
ext. citations

7  
avg, IF

5.55  
L-index

#	Paper	IF	Citations
76	Successful mainstream nitrification through NOB inactivation.. <i>Science of the Total Environment</i> , <b>2022</b> , 822, 153546	10.2	1
75	Long-read metagenomic sequencing reveals shifts in associations of antibiotic resistance genes with mobile genetic elements from sewage to activated sludge.. <i>Microbiome</i> , <b>2022</b> , 10, 20	16.6	2
74	Microbial Nitrogen Transformation Potential in Sediments of Two Contrasting Lakes Is Spatially Structured but Seasonally Stable.. <i>MSphere</i> , <b>2022</b> , e0101321	5	1
73	Microeukaryotic gut parasites in wastewater treatment plants: diversity, activity, and removal.. <i>Microbiome</i> , <b>2022</b> , 10, 27	16.6	0
72	Wastewater bypass is a major temporary point-source of antibiotic resistance genes and multi-resistance risk factors in a Swiss river. <i>Water Research</i> , <b>2022</b> , 208, 117827	12.5	2
71	Microbial methane oxidation efficiency and robustness during lake overturn. <i>Limnology and Oceanography Letters</i> , <b>2021</b> , 6, 320	7.9	2
70	Nitrogen isotope effects can be used to diagnose N transformations in wastewater anammox systems. <i>Scientific Reports</i> , <b>2021</b> , 11, 7850	4.9	1
69	Linking seasonal NO emissions and nitrification failures to microbial dynamics in a SBR wastewater treatment plant. <i>Water Research X</i> , <b>2021</b> , 11, 100098	8.1	6
68	Unraveling the riverine antibiotic resistome: The downstream fate of anthropogenic inputs. <i>Water Research</i> , <b>2021</b> , 197, 117050	12.5	9
67	Distinct growth stages controlled by the interplay of deterministic and stochastic processes in functional anammox biofilms. <i>Water Research</i> , <b>2021</b> , 200, 117225	12.5	9
66	Pathogenic and Indigenous Denitrifying Bacteria are Transcriptionally Active and Key Multi-Antibiotic-Resistant Players in Wastewater Treatment Plants. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 10862-10874	10.3	8
65	Temperature modulates stress response in mainstream anammox reactors. <i>Communications Biology</i> , <b>2021</b> , 4, 23	6.7	6
64	Growth and rapid succession of methanotrophs effectively limit methane release during lake overturn. <i>Communications Biology</i> , <b>2020</b> , 3, 108	6.7	20
63	Lake mixing regime selects apparent methane oxidation kinetics of the methanotroph assemblage. <i>Biogeosciences</i> , <b>2020</b> , 17, 4247-4259	4.6	4
62	A global multinational survey of cefotaxime-resistant coliforms in urban wastewater treatment plants. <i>Environment International</i> , <b>2020</b> , 144, 106035	12.9	17
61	Environmental and Microbial Interactions Shape Methane-Oxidizing Bacterial Communities in a Stratified Lake. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 579427	5.7	5
60	Niche partitioning of methane-oxidizing bacteria along the oxygen-methane counter gradient of stratified lakes. <i>ISME Journal</i> , <b>2020</b> , 14, 274-287	11.9	22

59	Every fifth published metagenome is not available to science. <i>PLoS Biology</i> , <b>2020</b> , 18, e3000698	9.7	9
58	Aerobic methane oxidation under copper scarcity in a stratified lake. <i>Scientific Reports</i> , <b>2019</b> , 9, 4817	4.9	11
57	Predator-induced changes in dissolved organic carbon dynamics. <i>Oikos</i> , <b>2019</b> , 128, 430-440	4	9
56	Wastewater treatment plant resistomes are shaped by bacterial composition, genetic exchange, and upregulated expression in the effluent microbiomes. <i>ISME Journal</i> , <b>2019</b> , 13, 346-360	11.9	135
55	Phylogenetic clustering of small low nucleic acid-content bacteria across diverse freshwater ecosystems. <i>ISME Journal</i> , <b>2018</b> , 12, 1344-1359	11.9	47
54	Water and sanitation: an essential battlefield in the war on antimicrobial resistance. <i>FEMS Microbiology Ecology</i> , <b>2018</b> , 94,	4.3	64
53	A historical legacy of antibiotic utilization on bacterial seed banks in sediments. <i>PeerJ</i> , <b>2018</b> , 6, e4197	3.1	5
52	Dissemination of antibiotic resistance genes associated with the sporobiota in sediments impacted by wastewater. <i>PeerJ</i> , <b>2018</b> , 6, e4989	3.1	7
51	Growth of Nitrosococcus-Related Ammonia Oxidizing Bacteria Coincides with Extremely Low pH Values in Wastewater with High Ammonia Content. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 6857-6866	10.3	36
50	The effect of top-predator presence and phenotype on aquatic microbial communities. <i>Ecology and Evolution</i> , <b>2017</b> , 7, 1572-1582	2.8	7
49	Strong impact of anthropogenic contamination on the co-occurrence patterns of a riverine microbial community. <i>Environmental Microbiology</i> , <b>2017</b> , 19, 4993-5009	5.2	110
48	Toward a Comprehensive Strategy to Mitigate Dissemination of Environmental Sources of Antibiotic Resistance. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 13061-13069	10.3	144
47	Bacteria-induced mixing in natural waters. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 9424-9432	4.9	24
46	Inactivation of Antibiotic Resistant Bacteria and Resistance Genes by Ozone: From Laboratory Experiments to Full-Scale Wastewater Treatment. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 11862-11871	10.3	123
45	Microbes as Engines of Ecosystem Function: When Does Community Structure Enhance Predictions of Ecosystem Processes?. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 214	5.7	321
44	Does human activity impact the natural antibiotic resistance background? Abundance of antibiotic resistance genes in 21 Swiss lakes. <i>Environment International</i> , <b>2015</b> , 81, 45-55	12.9	145
43	Tackling antibiotic resistance: the environmental framework. <i>Nature Reviews Microbiology</i> , <b>2015</b> , 13, 310-7	22.2	1092
42	Hydrologic linkages drive spatial structuring of bacterial assemblages and functioning in alpine floodplains. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 1221	5.7	16

41	Estimating bacterial diversity for ecological studies: methods, metrics, and assumptions. <i>PLoS ONE</i> , <b>2015</b> , 10, e0125356	3.7	55
40	Early diagenetic processes generate iron and manganese oxide layers in the sediments of Lake Baikal, Siberia. <i>Environmental Sciences: Processes and Impacts</i> , <b>2014</b> , 16, 879-89	4.3	27
39	Eintrag von Antibiotika und Antibiotikaresistenzen in Wassersysteme der Schweiz. <i>Pravention Und Gesundheitsforderung</i> , <b>2014</b> , 9, 185-190	0.5	
38	Wastewater as a point source of antibiotic-resistance genes in the sediment of a freshwater lake. <i>ISME Journal</i> , <b>2014</b> , 8, 1381-90	11.9	269
37	Spatio-temporal patterns of major bacterial groups in alpine waters. <i>PLoS ONE</i> , <b>2014</b> , 9, e113524	3.7	11
36	Physical extraction of microorganisms from water-saturated, packed sediment. <i>Water Environment Research</i> , <b>2014</b> , 86, 407-16	2.8	1
35	In-situ sonication for enhanced recovery of aquifer microbial communities. <i>Ground Water</i> , <b>2014</b> , 52, 737-47	4.7	6
34	Bacterial structures and ecosystem functions in glaciated floodplains: contemporary states and potential future shifts. <i>ISME Journal</i> , <b>2013</b> , 7, 2361-73	11.9	35
33	Chemical extraction of microorganisms from water-saturated, packed sediment. <i>Water Environment Research</i> , <b>2013</b> , 85, 503-13	2.8	3
32	A brief multi-disciplinary review on antimicrobial resistance in medicine and its linkage to the global environmental microbiota. <i>Frontiers in Microbiology</i> , <b>2013</b> , 4, 96	5.7	189
31	Response of lotic microbial communities to altered water source and nutritional state in a glaciated alpine floodplain. <i>Limnology and Oceanography</i> , <b>2013</b> , 58, 951-965	4.8	15
30	Impact of particulate organic matter composition and degradation state on the vertical structure of particle-associated and planktonic lacustrine bacteria. <i>Aquatic Microbial Ecology</i> , <b>2013</b> , 69, 81-92	1.1	5
29	Contribution of bacterial cells to lacustrine organic matter based on amino sugars and d-amino acids. <i>Geochimica Et Cosmochimica Acta</i> , <b>2012</b> , 89, 159-172	5.5	18
28	Simple absolute quantification method correcting for quantitative PCR efficiency variations for microbial community samples. <i>Applied and Environmental Microbiology</i> , <b>2012</b> , 78, 4481-9	4.8	126
27	Bacterial chitin hydrolysis in two lakes with contrasting trophic statuses. <i>Applied and Environmental Microbiology</i> , <b>2012</b> , 78, 695-704	4.8	16
26	Local conditions structure unique archaeal communities in the anoxic sediments of meromictic Lake Kivu. <i>Microbial Ecology</i> , <b>2012</b> , 64, 291-310	4.4	33
25	Response of sediment microbial community structure in a freshwater reservoir to manipulations in oxygen availability. <i>FEMS Microbiology Ecology</i> , <b>2012</b> , 80, 248-63	4.3	19
24	Increased levels of multiresistant bacteria and resistance genes after wastewater treatment and their dissemination into lake geneva, Switzerland. <i>Frontiers in Microbiology</i> , <b>2012</b> , 3, 106	5.7	249

23	Fundamentals of microbial community resistance and resilience. <i>Frontiers in Microbiology</i> , <b>2012</b> , 3, 417	5.7	759
22	Methane Formation and Future Extraction in Lake Kivu <b>2012</b> , 165-180		12
21	Methane sources and sinks in Lake Kivu. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		68
20	Analysis of sulfur-related transcription by Roseobacter communities using a taxon-specific functional gene microarray. <i>Environmental Microbiology</i> , <b>2011</b> , 13, 453-67	5.2	21
19	Regime shift and microbial dynamics in a sequencing batch reactor for nitrification and anammox treatment of urine. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 5897-907	4.8	64
18	Changes in dimethylsulfoniopropionate demethylase gene assemblages in response to an induced phytoplankton bloom. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 524-31	4.8	35
17	High diversity of diazotrophs in the forefield of a receding alpine glacier. <i>Microbial Ecology</i> , <b>2009</b> , 57, 179-90	4.4	110
16	Microbial communities in contrasting freshwater marsh microhabitats. <i>FEMS Microbiology Ecology</i> , <b>2009</b> , 69, 84-97	4.3	31
15	Large iron isotope fractionation at the oxic-anoxic boundary in Lake Nyos. <i>Earth and Planetary Science Letters</i> , <b>2009</b> , 285, 52-60	5.3	65
14	Progress in the Ecological Genetics and Biodiversity of Freshwater Bacteria. <i>BioScience</i> , <b>2008</b> , 58, 103-113	3.7	26
13	Detection and Quantification of Dehalococcoides-Related Bacteria in a Chlorinated Ethene-Contaminated Aquifer Undergoing Natural Attenuation. <i>Bioremediation Journal</i> , <b>2008</b> , 12, 193-209	2.3	5
12	Transcriptional response of <i>Silicibacter pomeroyi</i> DSS-3 to dimethylsulfoniopropionate (DMSP). <i>Environmental Microbiology</i> , <b>2007</b> , 9, 2742-55	5.2	47
11	Effects of pioneering plants on microbial structures and functions in a glacier forefield. <i>Biology and Fertility of Soils</i> , <b>2007</b> , 44, 289-297	6.1	51
10	Variation in microbial community composition and culturability in the rhizosphere of <i>Leucanthemopsis alpina</i> (L.) Heywood and adjacent bare soil along an alpine chronosequence. <i>Microbial Ecology</i> , <b>2006</b> , 52, 679-92	4.4	57
9	Bacterial taxa that limit sulfur flux from the ocean. <i>Science</i> , <b>2006</b> , 314, 649-52	33.3	247
8	Effects of model root exudates on structure and activity of a soil diazotroph community. <i>Environmental Microbiology</i> , <b>2005</b> , 7, 1711-24	5.2	140
7	New molecular screening tools for analysis of free-living diazotrophs in soil. <i>Applied and Environmental Microbiology</i> , <b>2004</b> , 70, 240-7	4.8	123
6	mRNA extraction and reverse transcription-PCR protocol for detection of <i>nifH</i> gene expression by <i>Azotobacter vinelandii</i> in soil. <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 1928-35	4.8	138

5	Endophytic nifH gene diversity in African sweet potato. <i>Canadian Journal of Microbiology</i> , <b>2003</b> , 49, 549-555	70
4	A strategy for optimizing quality and quantity of DNA extracted from soil. <i>Journal of Microbiological Methods</i> , <b>2001</b> , 45, 7-20	2.8 221
3	Growth and rapid succession of methanotrophs effectively limit methane release during lake overturn	1
2	Lake overturn as a key driver for methane oxidation	5
1	Wastewater Based Epidemiology Enabled Surveillance of Antibiotic Resistance	1