

Holger Daims

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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.

91
papers

13,632
citations

53
h-index

92
g-index

92
ext. papers

16,726
ext. citations

9.4
avg, IF

6.27
L-index

#	Paper	IF	Citations
91	The domain-specific probe EUB338 is insufficient for the detection of all Bacteria: development and evaluation of a more comprehensive probe set. <i>Systematic and Applied Microbiology</i> , 1999 , 22, 434-442	4.2	1815
90	Complete nitrification by Nitrospira bacteria. <i>Nature</i> , 2015 , 528, 504-9	50.4	1148
89	Deciphering the evolution and metabolism of an anammox bacterium from a community genome. <i>Nature</i> , 2006 , 440, 790-4	50.4	861
88	In situ characterization of Nitrospira-like nitrite-oxidizing bacteria active in wastewater treatment plants. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 5273-84	4.8	615
87	A moderately thermophilic ammonia-oxidizing crenarchaeote from a hot spring. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 2134-9	11.5	548
86	A Nitrospira 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, 13479-84	11.5	488
85	daime, a novel image analysis program for microbial ecology and biofilm research. <i>Environmental Microbiology</i> , 2006 , 8, 200-13	5.2	454
84	A New Perspective on Microbes Formerly Known as Nitrite-Oxidizing Bacteria. <i>Trends in Microbiology</i> , 2016 , 24, 699-712	12.4	362
83	Kinetic analysis of a complete nitrifier reveals an oligotrophic lifestyle. <i>Nature</i> , 2017 , 549, 269-272	50.4	349
82	Fluorescence in situ hybridisation for the identification and characterisation of prokaryotes. <i>Current Opinion in Microbiology</i> , 2003 , 6, 302-9	7.9	298
81	Microbial community composition and function in wastewater treatment plants. <i>Antonie Van Leeuwenhoek</i> , 2002 , 81, 665-80	2.1	287
80	Expanded metabolic versatility of ubiquitous nitrite-oxidizing bacteria from the genus Nitrospira. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 11371-6	11.5	265
79	Raman-FISH: combining stable-isotope Raman spectroscopy and fluorescence in situ hybridization for the single cell analysis of identity and function. <i>Environmental Microbiology</i> , 2007 , 9, 1878-89	5.2	257
78	Thaumarchaeotes abundant in refinery nitrifying sludges express amoA but are not obligate autotrophic ammonia oxidizers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 16771-6	11.5	239
77	Microbial landscapes: new paths to biofilm research. <i>Nature Reviews Microbiology</i> , 2007 , 5, 76-81	22.2	239
76	Nitrification expanded: discovery, physiology and genomics of a nitrite-oxidizing bacterium from the phylum Chloroflexi. <i>ISME Journal</i> , 2012 , 6, 2245-56	11.9	216
75	-Targeted Polymerase Chain Reaction Primers for the Specific Detection and Quantification of Comammox in the Environment. <i>Frontiers in Microbiology</i> , 2017 , 8, 1508	5.7	210

74	Cohn ³ Crenothrix is a filamentous methane oxidizer with an unusual methane monooxygenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 2363-7	11.5	196
73	Comparison of oxidation kinetics of nitrite-oxidizing bacteria: nitrite availability as a key factor in niche differentiation. <i>Applied and Environmental Microbiology</i> , 2015 , 81, 745-53	4.8	194
72	NxrB encoding the beta subunit of nitrite oxidoreductase as functional and phylogenetic marker for nitrite-oxidizing Nitrospira. <i>Environmental Microbiology</i> , 2014 , 16, 3055-71	5.2	193
71	Use of stable-isotope probing, full-cycle rRNA analysis, and fluorescence in situ hybridization-microautoradiography to study a methanol-fed denitrifying microbial community. <i>Applied and Environmental Microbiology</i> , 2004 , 70, 588-96	4.8	192
70	Wastewater treatment: a model system for microbial ecology. <i>Trends in Biotechnology</i> , 2006 , 24, 483-9	15.1	174
69	Nitrite concentration influences the population structure of Nitrospira-like bacteria. <i>Environmental Microbiology</i> , 2006 , 8, 1487-95	5.2	171
68	Cyanate as an energy source for nitrifiers. <i>Nature</i> , 2015 , 524, 105-8	50.4	160
67	The Genome of Nitrospina gracilis Illuminates the Metabolism and Evolution of the Major Marine Nitrite Oxidizer. <i>Frontiers in Microbiology</i> , 2013 , 4, 27	5.7	158
66	Giant viruses with an expanded complement of translation system components. <i>Science</i> , 2017 , 356, 82-85	33.3	148
65	Cultivation-independent, semiautomatic determination of absolute bacterial cell numbers in environmental samples by fluorescence in situ hybridization. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 5810-8	4.8	147
64	Linking microbial community structure with function: fluorescence in situ hybridization-microautoradiography and isotope arrays. <i>Current Opinion in Biotechnology</i> , 2006 , 17, 83-91	11.4	146
63	Nitrification in terrestrial hot springs of Iceland and Kamchatka. <i>FEMS Microbiology Ecology</i> , 2008 , 64, 167-74	4.3	138
62	Double labeling of oligonucleotide probes for fluorescence in situ hybridization (DOPE-FISH) improves signal intensity and increases rRNA accessibility. <i>Applied and Environmental Microbiology</i> , 2010 , 76, 922-6	4.8	121
61	Functionally relevant diversity of closely related Nitrospira in activated sludge. <i>ISME Journal</i> , 2015 , 9, 643-55	11.9	112
60	Selective enrichment and molecular characterization of a previously uncultured Nitrospira-like bacterium from activated sludge. <i>Environmental Microbiology</i> , 2006 , 8, 405-15	5.2	111
59	Initial effects of experimental warming on carbon exchange rates, plant growth and microbial dynamics of a lichen-rich dwarf shrub tundra in Siberia. <i>Plant and Soil</i> , 2008 , 307, 191-205	4.2	105
58	An automated Raman-based platform for the sorting of live cells by functional properties. <i>Nature Microbiology</i> , 2019 , 4, 1035-1048	26.6	104
57	Quantification of target molecules needed to detect microorganisms by fluorescence in situ hybridization (FISH) and catalyzed reporter deposition-FISH. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 5068-77	4.8	104

56	Novel Nitrospira-like bacteria as dominant nitrite-oxidizers in biofilms from wastewater treatment plants: diversity and in situ physiology. <i>Water Science and Technology</i> , 2000 , 41, 85-90	2.2	100
55	Growth of nitrite-oxidizing bacteria by aerobic hydrogen oxidation. <i>Science</i> , 2014 , 345, 1052-4	33.3	99
54	Nitrotoga-like bacteria are previously unrecognized key nitrite oxidizers in full-scale wastewater treatment plants. <i>ISME Journal</i> , 2015 , 9, 708-20	11.9	93
53	Crenothrix are major methane consumers in stratified lakes. <i>ISME Journal</i> , 2017 , 11, 2124-2140	11.9	87
52	Nitrification in sequencing biofilm batch reactors: lessons from molecular approaches. <i>Water Science and Technology</i> , 2001 , 43, 9-18	2.2	87
51	Environmental genomics reveals a functional chlorite dismutase in the nitrite-oxidizing bacterium <i>Candidatus Nitrospira defluvii</i> . <i>Environmental Microbiology</i> , 2008 , 10, 3043-56	5.2	86
50	Isolation and characterization of a moderately thermophilic nitrite-oxidizing bacterium from a geothermal spring. <i>FEMS Microbiology Ecology</i> , 2011 , 75, 195-204	4.3	80
49	<i>Nitrospira</i> . <i>Trends in Microbiology</i> , 2018 , 26, 462-463	12.4	77
48	Spatial distribution analyses of natural phyllosphere-colonizing bacteria on <i>Arabidopsis thaliana</i> revealed by fluorescence in situ hybridization. <i>Environmental Microbiology</i> , 2014 , 16, 2329-40	5.2	75
47	Quantification of uncultured microorganisms by fluorescence microscopy and digital image analysis. <i>Applied Microbiology and Biotechnology</i> , 2007 , 75, 237-48	5.7	73
46	Enrichment and genome sequence of the group I.1a ammonia-oxidizing Archaeon " <i>Candidatus Nitrosotenuis uzonensis</i> " representing a clade globally distributed in thermal habitats. <i>PLoS ONE</i> , 2013 , 8, e80835	3.7	68
45	Structural and functional characterisation of the chlorite dismutase from the nitrite-oxidizing bacterium " <i>Candidatus Nitrospira defluvii</i> ": identification of a catalytically important amino acid residue. <i>Journal of Structural Biology</i> , 2010 , 172, 331-42	3.4	68
44	Interactions of nitrifying bacteria and heterotrophs: identification of a <i>Micavibrio</i> -like putative predator of <i>Nitrospira</i> spp. <i>Applied and Environmental Microbiology</i> , 2013 , 79, 2027-37	4.8	67
43	Linking Microbial and Ecosystem Ecology Using Ecological Stoichiometry: A Synthesis of Conceptual and Empirical Approaches. <i>Ecosystems</i> , 2011 , 14, 261-273	3.9	66
42	Unexpected diversity of chlorite dismutases: a catalytically efficient dimeric enzyme from <i>Nitrobacter winogradskyi</i> . <i>Journal of Bacteriology</i> , 2011 , 193, 2408-17	3.5	66
41	Physiological and phylogenetic characterization of a novel lithoautotrophic nitrite-oxidizing bacterium, <i>Candidatus Nitrospira bockiana</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2008 , 58, 242-50	2.2	64
40	Low yield and abiotic origin of NO formed by the complete nitrifier <i>Nitrospira inopinata</i> . <i>Nature Communications</i> , 2019 , 10, 1836	17.4	62
39	Characterization of the First " <i>Nitrotoga</i> " Isolate Reveals Metabolic Versatility and Separate Evolution of Widespread Nitrite-Oxidizing Bacteria. <i>MBio</i> , 2018 , 9,	7.8	58

38	Adaptability as the key to success for the ubiquitous marine nitrite oxidizer. <i>Science Advances</i> , 2017 , 3, e1700807	14.3	49
37	Cultivation and Genomic Analysis of " Nitrosocaldus islandicus," an Obligately Thermophilic, Ammonia-Oxidizing Thaumarchaeon from a Hot Spring Biofilm in Graendalur Valley, Iceland. <i>Frontiers in Microbiology</i> , 2018 , 9, 193	5.7	49
36	New methods for analysis of spatial distribution and coaggregation of microbial populations in complex biofilms. <i>Applied and Environmental Microbiology</i> , 2013 , 79, 5978-87	4.8	47
35	Nitrolancea hollandica 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	2.2	44
34	Three-dimensional stratification of bacterial biofilm populations in a moving bed biofilm reactor for nitrification-anammox. <i>International Journal of Molecular Sciences</i> , 2014 , 15, 2191-206	6.3	43
33	Improved isolation strategies allowed the phenotypic differentiation of two Nitrospira strains from widespread phylogenetic lineages. <i>FEMS Microbiology Ecology</i> , 2015 , 91,	4.3	42
32	Nitrogen processing and the role of epilithic biofilms downstream of a wastewater treatment plant. <i>Freshwater Science</i> , 2012 , 31, 1057-1069	2	39
31	Relative Abundance of Nitrotoga spp. in a Biofilter of a Cold-Freshwater Aquaculture Plant Appears To Be Stimulated by Slightly Acidic pH. <i>Applied and Environmental Microbiology</i> , 2016 , 82, 1838-45	4.8	38
30	A fiber-deprived diet disturbs the fine-scale spatial architecture of the murine colon microbiome. <i>Nature Communications</i> , 2019 , 10, 4366	17.4	34
29	Drivers of bacterial colonization patterns in stream biofilms. <i>FEMS Microbiology Ecology</i> , 2010 , 72, 47-57	4.3	33
28	A Multicolor Fluorescence Hybridization Approach Using an Extended Set of Fluorophores to Visualize Microorganisms. <i>Frontiers in Microbiology</i> , 2019 , 10, 1383	5.7	32
27	Activity and Metabolic Versatility of Complete Ammonia Oxidizers in Full-Scale Wastewater Treatment Systems. <i>MBio</i> , 2020 , 11,	7.8	32
26	Structure and heme-binding properties of HemQ (chlorite dismutase-like protein) from <i>Listeria monocytogenes</i> . <i>Archives of Biochemistry and Biophysics</i> , 2015 , 574, 36-48	4.1	32
25	Looking inside the box: using Raman microspectroscopy to deconstruct microbial biomass stoichiometry one cell at a time. <i>ISME Journal</i> , 2011 , 5, 196-208	11.9	32
24	Co-localized or randomly distributed? Pair cross correlation of in vivo grown subgingival biofilm bacteria quantified by digital image analysis. <i>PLoS ONE</i> , 2012 , 7, e37583	3.7	31
23	Colonization of freshwater biofilms by nitrifying bacteria from activated sludge. <i>FEMS Microbiology Ecology</i> , 2013 , 85, 104-15	4.3	29
22	Manipulating conserved heme cavity residues of chlorite dismutase: effect on structure, redox chemistry, and reactivity. <i>Biochemistry</i> , 2014 , 53, 77-89	3.2	27
21	Redox thermodynamics of high-spin and low-spin forms of chlorite dismutases with diverse subunit and oligomeric structures. <i>Biochemistry</i> , 2012 , 51, 9501-12	3.2	27

20	Ecophysiology and niche differentiation of Nitrospira-like bacteria, the key nitrite oxidizers in wastewater treatment plants. <i>Water Science and Technology</i> , 2006 , 54, 21-7	2.2	25
19	Genomics of a phototrophic nitrite oxidizer: insights into the evolution of photosynthesis and nitrification. <i>ISME Journal</i> , 2016 , 10, 2669-2678	11.9	24
18	Soil carbon and nitrogen dynamics along a latitudinal transect in Western Siberia, Russia. <i>Biogeochemistry</i> , 2006 , 81, 239-252	3.8	22
17	Thermophilic biological nitrogen removal in industrial wastewater treatment. <i>Applied Microbiology and Biotechnology</i> , 2014 , 98, 945-56	5.7	20
16	Impact of subunit and oligomeric structure on the thermal and conformational stability of chlorite dismutases. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2012 , 1824, 1031-8	4	18
15	In situ techniques and digital image analysis methods for quantifying spatial localization patterns of nitrifiers and other microorganisms in biofilm and flocs. <i>Methods in Enzymology</i> , 2011 , 496, 185-215	1.7	18
14	Dimeric chlorite dismutase from the nitrogen-fixing cyanobacterium <i>Cyanothece</i> sp. PCC7425. <i>Molecular Microbiology</i> , 2015 , 96, 1053-68	4.1	17
13	Exploring the upper pH limits of nitrite oxidation: diversity, ecophysiology, and adaptive traits of haloalkalitolerant <i>Nitrospira</i> . <i>ISME Journal</i> , 2020 , 14, 2967-2979	11.9	17
12	Diversity, Environmental Genomics, and Ecophysiology of Nitrite-Oxidizing Bacteria 2014 , 295-322		16
11	Structure and community composition of sprout-like bacterial aggregates in a Dinaric Karst subterranean stream. <i>Microbial Ecology</i> , 2013 , 66, 5-18	4.4	15
10	NH ₄ ⁺ ad-/desorption in sequencing batch reactors: simulation, laboratory and full-scale studies. <i>Water Science and Technology</i> , 2008 , 58, 345-50	2.2	15
9	Ammonia-oxidizing archaea possess a wide range of cellular ammonia affinities. <i>ISME Journal</i> , 2021 ,	11.9	15
8	The draft genome sequence of "" strain BS10, a nitrite oxidizing bacterium isolated from activated sludge. <i>Standards in Genomic Sciences</i> , 2018 , 13, 32		13
7	Depletion of unwanted nucleic acid templates by selective cleavage: LNAzymes, catalytically active oligonucleotides containing locked nucleic acids, open a new window for detecting rare microbial community members. <i>Applied and Environmental Microbiology</i> , 2013 , 79, 1534-44	4.8	9
6	A refined set of rRNA-targeted oligonucleotide probes for in situ detection and quantification of ammonia-oxidizing bacteria. <i>Water Research</i> , 2020 , 186, 116372	12.5	9
5	Genomic and kinetic analysis of novel <i>Nitrospinae</i> enriched by cell sorting. <i>ISME Journal</i> , 2021 , 15, 732-745.	9	8
4	Draft Genome Sequence of 26-4b1, an Acidotolerant Peatland Alphaproteobacterium Potentially Involved in Sulfur Cycling. <i>Genome Announcements</i> , 2018 , 6,		6
3	Molecular Analyses Of Microbial Community Structure And Function Of Flocs 2004 , 317-338		1

2	Electrochemical enrichment of marine denitrifying bacteria to enhance nitrate metabolization in seawater. <i>Journal of Environmental Chemical Engineering</i> , 2021 , 9, 105604	6.8	1
1	Nitrogen Kinetic Isotope Effects of Nitrification by the Complete Ammonia Oxidizer <i>Nitrospira inopinata</i> . <i>MSphere</i> , 2021 , e0063421	5	1