Helge Niemann

List of Publications by Year
in descending order

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88	5,869	61984	79698
papers	citations	43 h-index	73 g-index

113	113	113	5809
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Novel microbial communities of the Haakon Mosby mud volcano and their role as a methane sink. Nature, 2006, 443, 854-858.	27.8	570
2	Diversity and Abundance of Aerobic and Anaerobic Methane Oxidizers at the Haakon Mosby Mud Volcano, Barents Sea. Applied and Environmental Microbiology, 2007, 73, 3348-3362.	3.1	338
3	Mycorrhizal Networks: Common Goods of Plants Shared under Unequal Terms of Trade Â Â. Plant Physiology, 2012, 159, 789-797.	4.8	332
4	Temporal Constraints on Hydrate-Controlled Methane Seepage off Svalbard. Science, 2014, 343, 284-287.	12.6	219
5	In situ fluxes and zonation of microbial activity in surface sediments of the HÃ¥kon Mosby Mud Volcano. Limnology and Oceanography, 2006, 51, 1315-1331.	3.1	198
6	Microbial methane turnover at mud volcanoes of the Gulf of Cadiz. Geochimica Et Cosmochimica Acta, 2006, 70, 5336-5355.	3.9	173
7	Diagnostic lipid biomarker and stable carbon isotope signatures of microbial communities mediating the anaerobic oxidation of methane with sulphate. Organic Geochemistry, 2008, 39, 1668-1677.	1.8	164
8	Assimilation of methane and inorganic carbon by microbial communities mediating the anaerobic oxidation of methane. Environmental Microbiology, 2008, 10, 2287-2298.	3.8	136
9	Methane emission and consumption at a North Sea gas seep (Tommeliten area). Biogeosciences, 2005, 2, 335-351.	3.3	129
10	Microâ€aerobic bacterial methane oxidation in the chemocline and anoxic water column of deep southâ€Alpine Lake Lugano (Switzerland). Limnology and Oceanography, 2014, 59, 311-324.	3.1	129
11	The fate of plastic in the ocean environment â€“ a minireview. Environmental Sciences: Processes and Impacts, 2021, 23, 198-212.	3.5	120
12	Identification and carbon isotope composition of a novel branched GDGT isomer in lake sediments: Evidence for lacustrine branched GDGT production. Geochimica Et Cosmochimica Acta, 2015, 154, 118-129.	3.9	110
13	Effects of climate change on methane emissions from seafloor sediments in the Arctic Ocean: A review. Limnology and Oceanography, 2016, 61, S283.	3.1	109
14	Endosymbioses between bacteria and deepâ€sea siboglinid tubeworms from an Arctic Cold Seep (Haakon) Tj ETQq0 0 0 rgBT /Overlock	3.8	107
15	Structural and functional analysis of a microbial mat ecosystem from a unique permanent hypersaline inland lake: Ã¢Â€Â˜La Salada de ChipranaÃ¢Â€Â™ (NE Spain). FEMS Microbiology Ecology, 2003, 44, 175-189.	2.7	105
16	Carbon and sulfur back flux during anaerobic microbial oxidation of methane and coupled sulfate reduction. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1484-90.	7.1	104
17	Anaerobic ammonium oxidation (anammox) bacteria and sulfideâ€dependent denitrifiers coexist in the water column of a meromictic southâ€alpine lake. Limnology and Oceanography, 2013, 58, 1-12.	3.1	104
18	Redox-dependent niche differentiation provides evidence for multiple bacterial sources of glycerol tetraether lipids in lakes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10926-10931.	7.1	94

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19	Desulfuromonas svalbardensis sp. nov. and Desulfuromusa ferrireducens sp. nov., psychrophilic, Fe(III)-reducing bacteria isolated from Arctic sediments, Svalbard. International Journal of Systematic and Evolutionary Microbiology, 2006, 56, 1133-1139.	1.7	93
20	Biogeochemical signatures and microbial activity of different cold-seep habitats along the Gulf of Mexico deep slope. Deep-Sea Research Part II: Topical Studies in Oceanography, 2010, 57, 1990-2001.	1.4	93
21	Seafloor geological studies above active gas chimneys off Egypt (Central Nile Deep Sea Fan). Deep-Sea Research Part I: Oceanographic Research Papers, 2007, 54, 1146-1172.	1.4	89
22	Water column methanotrophy controlled by a rapid oceanographic switch. Nature Geoscience, 2015, 8, 378-382.	12.9	89
23	Methanotrophs: Discoveries, Environmental Relevance, and a Perspective on Current and Future Applications. Frontiers in Microbiology, 2021, 12, 678057.	3.5	80
24	Methane- and dissolved organic carbon-fueled microbial loop supports a tropical subterranean estuary ecosystem. Nature Communications, 2017, 8, 1835.	12.8	79
25	Vertical distribution of methane oxidation and methanotrophic response to elevated methane concentrations in stratified waters of the Arctic fjord Storfjorden (Svalbard, Norway). Biogeosciences, 2013, 10, 6267-6278.	3.3	77
26	Methanobacterium aarhusense sp. nov., a novel methanogen isolated from a marine sediment (Aarhus) Tj ETQq0 0 0 rgBT /Overlock 10	1.7	70
27	Combining sedimentological, trace metal (Mn, Mo) and molecular evidence for reconstructing past water-column redox conditions: The example of meromictic Lake Cadagno (Swiss Alps). Geochimica Et Cosmochimica Acta, 2013, 120, 220-238.	3.9	70
28	Methane-Carbon Flow into the Benthic Food Web at Cold Seeps â€“ A Case Study from the Costa Rica Subduction Zone. PLoS ONE, 2013, 8, e74894.	2.5	70
29	Microbial methane oxidation and sulfate reduction at cold seeps of the deep Eastern Mediterranean Sea. Marine Geology, 2009, 261, 114-127.	2.1	69
30	Bacterial GDGTs in Holocene sediments and catchment soils of a high Alpine lake: application of the MBT/CBT-paleothermometer. Climate of the Past, 2012, 8, 889-906.	3.4	68
31	Effects of low oxygen concentrations on aerobic methane oxidation in seasonally hypoxic coastal waters. Biogeosciences, 2017, 14, 1631-1645.	3.3	66
32	Sources of glycerol dialkyl glycerol tetraethers (GDGTs) in catchment soils, water column and sediments of Lake Rotsee (Switzerland) â€“ Implications for the application of GDGT-based proxies for lakes. Organic Geochemistry, 2014, 66, 164-173.	1.8	64
33	Microbial Communities on Plastic Polymers in the Mediterranean Sea. Frontiers in Microbiology, 2021, 12, 673553.	3.5	64
34	Anaerobic oxidation of methane in hypersaline cold seep sediments. FEMS Microbiology Ecology, 2013, 83, 214-231.	2.7	60
35	Occurrence of unusual steroids and hopanoids derived from aerobic methanotrophs at an active marine mud volcano. Organic Geochemistry, 2008, 39, 167-177.	1.8	59
36	Biogeochemistry of a low-activity cold seep in the Larsen B area, western Weddell Sea, Antarctica. Biogeosciences, 2009, 6, 2383-2395.	3.3	58

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37	Fluxes and fate of dissolved methane released at the seafloor at the landward limit of the gas hydrate stability zone offshore western Svalbard. Journal of Geophysical Research: Oceans, 2015, 120, 6185-6201.	2.6	57
38	Benthic respiration in a seep habitat dominated by dense beds of ampharetid polychaetes at the Hikurangi Margin (New Zealand). Marine Geology, 2010, 272, 223-232.	2.1	55
39	Response of sulfateâ€reducing bacteria to an artificial oilâ€spill in a coastal marine sediment. Environmental Microbiology, 2011, 13, 1488-1499.	3.8	55
40	Biogeochemical processes and microbial diversity of the Gullfaks and Tommeliten methane seeps (Northern North Sea). Biogeosciences, 2008, 5, 1127-1144.	3.3	54
41	Manganese/ironâ€supported sulfateâ€dependent anaerobic oxidation of methane by archaea in lake sediments. Limnology and Oceanography, 2020, 65, 863-875.	3.1	54
42	Community N and O isotope fractionation by sulfide-dependent denitrification and anammox in a stratified lacustrine water column. Geochimica Et Cosmochimica Acta, 2014, 125, 551-563.	3.9	53
43	Reduced methane seepage from Arctic sediments during cold bottom-water conditions. Nature Geoscience, 2020, 13, 144-148.	12.9	53
44	Tracing the methane cycle with lipid biomarkers in Lake Rotsee (Switzerland). Organic Geochemistry, 2014, 66, 174-181.	1.8	49
45	Extremely halophilic microbial communities in anaerobic sediments from a solar saltern. Environmental Microbiology Reports, 2010, 2, 258-271.	2.4	44
46	Life on the edge: active microbial communities in the Kryos MgCl2-brine basin at very low water activity. ISME Journal, 2018, 12, 1414-1426.	9.8	42
47	The Potential Role of Marine Fungi in Plastic Degradation â€“ A Review. Frontiers in Marine Science, 2021, 8, .	2.5	42
48	Toxic effects of labâ€grade butyl rubber stoppers on aerobic methane oxidation. Limnology and Oceanography: Methods, 2015, 13, 40-52.	2.0	39
49	Marinisporobacter balticus gen. nov., sp. nov., Desulfosporosinus nitroreducens sp. nov. and Desulfosporosinus fructosivorans sp. nov., new spore-forming bacteria isolated from subsurface sediments of the Baltic Sea. International Journal of Systematic and Evolutionary Microbiology, 2017, 67, 1887-1893.	1.7	37
50	Red Sea gravity currents cascade near-reef phytoplankton to the twilight zone. Marine Ecology - Progress Series, 2004, 269, 91-99.	1.9	35
51	AlvinExplores the Deep Northern Gulf of Mexico Slope. Eos, 2007, 88, 341.	0.1	33
52	Methane-fuelled biofilms predominantly composed of methanotrophic ANME-1 in Arctic gas hydrate-related sediments. Scientific Reports, 2019, 9, 9725.	3.3	33
53	Spatial variations in surface water methane super-saturation and emission in Lake Lugano, southern Switzerland. Aquatic Sciences, 2015, 77, 535-545.	1.5	32
54	The Impact of Methane on Microbial Communities at Marine Arctic Gas Hydrate Bearing Sediment. Frontiers in Microbiology, 2020, 11, 1932.	3.5	32

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55	Powering up the â€œbiogeochemical engineâ€: the impact of exceptional ventilation of a deep meromictic lake on the lacustrine redox, nutrient, and methane balances. Frontiers in Earth Science, 2015, 3, .	1.8	31
56	Linked sediment and waterâ€column methanotrophy at a manâ€made gas blowout in the North Sea: Implications for methane budgeting in seasonally stratified shallow seas. Limnology and Oceanography, 2016, 61, S367.	3.1	31
57	Partitioning between benthic and pelagic nitrate reduction in the Lake Lugano south basin. Limnology and Oceanography, 2014, 59, 1421-1433.	3.1	30
58	Bacterial methanotrophs drive the formation of a seasonal anoxic benthic nepheloid layer in an alpine lake. Limnology and Oceanography, 2014, 59, 1410-1420.	3.1	27
59	Species-dependent partitioning of C and N stable isotopes between arbuscular mycorrhizal fungi and their C3 and C4 hosts. Soil Biology and Biochemistry, 2015, 82, 52-61.	8.8	26
60	Differential N₂ O dynamics in two oxygen-deficient lake basins revealed by stable isotope and isotopomer distributions. Limnology and Oceanography, 2016, 61, 1735-1749.	3.1	26
61	Labilibaculum manganireducens gen. nov., sp. nov. and Labilibaculum filiforme sp. nov., Novel Bacteroidetes Isolated from Subsurface Sediments of the Baltic Sea. Frontiers in Microbiology, 2017, 8, 2614.	3.5	25
62	Discovery and quantification of a widespread methane ebullition event in a coastal inlet (Baltic Sea) using a novel sonar strategy. Scientific Reports, 2020, 10, 4393.	3.3	24
63	Chemosynthesis influences food web and community structure in high-Arctic benthos. Marine Ecology - Progress Series, 2019, 629, 19-42.	1.9	24
64	Fracture-controlled fluid transport supports microbial methane-oxidizing communities at Vestnesa Ridge. Biogeosciences, 2019, 16, 2221-2232.	3.3	21
65	Biogeochemical evidence of anaerobic methane oxidation on active submarine mud volcanoes on the continental slope of the Canadian Beaufort Sea. Biogeosciences, 2018, 15, 7419-7433.	3.3	20
66	Physical controls of dynamics of methane venting from a shallow seep area west of Svalbard. Continental Shelf Research, 2020, 194, 104030.	1.8	19
67	Distributions and sources of isoprenoidal GDGTs in Lake Lugano and other central European (peri-)alpine lakes: Lessons for their use as paleotemperature proxies. Quaternary Science Reviews, 2022, 277, 107352.	3.0	19
68	Correction for Holler et al., Carbon and sulfur back flux during anaerobic microbial oxidation of methane and coupled sulfate reduction. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 21170-21170.	7.1	13
69	Mud Volcanoes. , 2010, , 205-214.		13
70	Field-scale labelling and activity quantification of methane-oxidizing bacteria in a landfill-cover soil. FEMS Microbiology Ecology, 2013, 83, 392-401.	2.7	12
71	Tracking the carbon source of arbuscular mycorrhizal fungi colonizing C3 and C4 plants using carbon isotope ratios (Î´13C). Soil Biology and Biochemistry, 2013, 58, 341-344.	8.8	12
72	Multi-proxy approach to unravel methane emission history of an Arctic cold seep. Quaternary Science Reviews, 2020, 244, 106490.	3.0	12

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73	Seasonal shifts of microbial methane oxidation in Arctic shelf waters above gas seeps. Limnology and Oceanography, 2021, 66, 1896-1914.	3.1	12
74	Incomplete recovery of intact polar glycerol dialkyl glycerol tetraethers from lacustrine suspended biomass. Limnology and Oceanography: Methods, 2017, 15, 782-793.	2.0	11
75	Biomarker and Isotopic Composition of Seep Carbonates Record Environmental Conditions in Two Arctic Methane Seeps. Frontiers in Earth Science, 2021, 8, .	1.8	10
76	Geological settings and seafloor morphodynamic evolution linked to methane seepage. Geo-Marine Letters, 2015, 35, 289-304.	1.1	9
77	Biogeochemical Consequences of Nonvertical Methane Transport in Sediment Offshore Northwestern Svalbard. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005371.	3.0	9
78	Microbial Degradation of Marine Plastics: Current State and Future Prospects. , 2021, , 111-154.		9
79	Evaluating radioisotopeâ€based approaches to measure anaerobic methane oxidation rates in lacustrine sediments. Limnology and Oceanography: Methods, 2019, 17, 429-438.	2.0	8
80	Compositional Differences in Dissolved Organic Matter Between Arctic Cold Seeps Versus Non-Seep Sites at the Svalbard Continental Margin and the Barents Sea. Frontiers in Earth Science, 2020, 8, .	1.8	6
81	Discriminative biogeochemical signatures of methanotrophs in different chemosynthetic habitats at an active mud volcano in the Canadian Beaufort Sea. Scientific Reports, 2019, 9, 17592.	3.3	5
82	Sources and sinks of methane in sea ice. Elementa, 2021, 9, .	3.2	5
83	Multiple Groups of Methanotrophic Bacteria Mediate Methane Oxidation in Anoxic Lake Sediments. Frontiers in Microbiology, 2022, 13, .	3.5	4
84	Relationship Between Particle Properties and Immunotoxicological Effects of Environmentally-Sourced Microplastics. Frontiers in Water, 2022, 4, .	2.3	4
85	Microbial activity, methane production, and carbon storage in Early Holocene North Sea peats. Biogeosciences, 2021, 18, 5491-5511.	3.3	3
86	Compositions of dissolved organic matter in the ice-covered waters above the Aurora hydrothermal vent system, Gakkel Ridge, Arctic Ocean. Biogeosciences, 2022, 19, 2101-2120.	3.3	3
87	1. Methane seeps in a changing climate. , 2017, , 1-32.		2
88	Mud Volcano Biogeochemistry. , 2020, , 769-780.		1