Gaute Lavik

List of Publications by Year
in descending order

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86 papers	10,382 citations	44069 48 h-index	54911 84 g-index
89 all docs	89 docs citations	89 times ranked	7949 citing authors

#	Article	IF	Citations
1	Niche partitioning by photosynthetic plankton as a driver of CO2-fixation across the oligotrophic South Pacific Subtropical Ocean. ISME Journal, 2022, 16, 465-476.	9.8	10
2	Diverse methylotrophic methanogenic archaea cause high methane emissions from seagrass meadows. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	36
3	Response of benthic nitrogen cycling to estuarine hypoxia. Limnology and Oceanography, 2021, 66, 652-666.	3.1	27
4	Nitrate respiration and diel migration patterns of diatoms are linked in sediments underneath a microbial mat. Environmental Microbiology, 2021, 23, 1422-1435.	3.8	12
5	Accumulation of DOC in the South Pacific Subtropical Gyre from a molecular perspective. Marine Chemistry, 2021, 231, 103955.	2.3	18
6	Sulfur cycling in oceanic oxygen minimum zones. Limnology and Oceanography, 2021, 66, 2360-2392.	3.1	34
7	Small sinking particles control anammox rates in the Peruvian oxygen minimum zone. Nature Communications, 2021, 12, 3235.	12.8	33
8	The fate of upwelled nitrate off Peru shaped by submesoscale filaments and fronts. Biogeosciences, 2021, 18, 3605-3629.	3.3	7
9	Advection Drives Nitrate Past the Microphytobenthos in Intertidal Sands, Fueling Deeper Denitrification. Frontiers in Microbiology, 2021, 12, 556268.	3.5	0
10	Anaerobic ammonium oxidation is a major N-sink in aquifer systems around the world. ISME Journal, 2020, 14, 151-163.	9.8	54
11	Metabolic activity analyses demonstrate that Lokiarchaeon exhibits homoacetogenesis in sulfidic marine sediments. Nature Microbiology, 2020, 5, 248-255.	13.3	48
12	Versatile cyanobacteria control the timing and extent of sulfide production in a Proterozoic analog microbial mat. ISME Journal, 2020, 14, 3024-3037.	9.8	14
13	Rapid microbial diversification of dissolved organic matter in oceanic surface waters leads to carbon sequestration. Scientific Reports, 2020, 10, 13025.	3.3	32
14	Massive Nitrogen Loss Over the Western Indian Continental Shelf During Seasonal Anoxia: Evidence From Isotope Pairing Technique. Frontiers in Marine Science, 2020, 7, .	2.5	10
15	Arcobacter peruensis sp. nov., a Chemolithoheterotroph Isolated from Sulfide- and Organic-Rich Coastal Waters off Peru. Applied and Environmental Microbiology, 2019, 85, .	3.1	36
16	Methane stimulates massive nitrogen loss from freshwater reservoirs in India. Nature Communications, 2018, 9, 1265.	12.8	56
17	Metabolic versatility of a novel N₂â€fixing Alphaproteobacterium isolated from a marine oxygen minimum zone. Environmental Microbiology, 2018, 20, 755-768.	3.8	29
18	Carbon and nitrogen turnover in the Arctic deep sea: in situ benthic community response to diatom and coccolithophorid phytodetritus. Biogeosciences, 2018, 15, 6537-6557.	3.3	13

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19	Oxygen minimum zone cryptic sulfur cycling sustained by offshore transport of key sulfur oxidizing bacteria. Nature Communications, 2018, 9, 1729.	12.8	93
20	Metabolic specialization of denitrifiers in permeable sediments controls N₂O emissions. Environmental Microbiology, 2018, 20, 4486-4502.	3.8	27
21	H2S events in the Peruvian oxygen minimum zone facilitate enhanced dissolved Fe concentrations. Scientific Reports, 2018, 8, 12642.	3.3	32
22	Turbulence simultaneously stimulates small- and large-scale CO2 sequestration by chain-forming diatoms in the sea. Nature Communications, 2018, 9, 3046.	12.8	32
23	Filamentous Giant Beggiatoaceae from the Guaymas Basin Are Capable of both Denitrification and Dissimilatory Nitrate Reduction to Ammonium. Applied and Environmental Microbiology, 2018, 84, .	3.1	30
24	Denitrifying community in coastal sediments performs aerobic and anaerobic respiration simultaneously. ISME Journal, 2017, 11, 1799-1812.	9.8	126
25	Mechanisms of P* Reduction in the Eastern Tropical South Pacific. Frontiers in Marine Science, 2017, 4, .	2.5	11
26	Enhanced Nitrogen Loss by Eddy-Induced Vertical Transport in the Offshore Peruvian Oxygen Minimum Zone. PLoS ONE, 2017, 12, e0170059.	2.5	20
27	Water column biogeochemistry of oxygen minimum zones in the eastern tropical North Atlantic and eastern tropical South Pacific oceans. Biogeosciences, 2016, 13, 3585-3606.	3.3	27
28	The formation of a subsurface anticyclonic eddy in the <scp>P</scp>eruâ€<scp>C</scp>hile <scp>U</scp>ndercurrent and its impact on the nearâ€coastal salinity, oxygen, and nutrient distributions. Journal of Geophysical Research: Oceans, 2016, 121, 476-501.	2.6	95
29	Extensive nitrogen loss from permeable sediments off Northâ€West Africa. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1144-1157.	3.0	19
30	Integrating biogeochemistry with multiomic sequence information in a model oxygen minimum zone. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5925-E5933.	7.1	94
31	The small unicellular diazotrophic symbiont, UCYN-A, is a key player in the marine nitrogen cycle. Nature Microbiology, 2016, 1, 16163.	13.3	194
32	Phenotypic heterogeneity driven by nutrient limitation promotes growth in fluctuating environments. Nature Microbiology, 2016, 1, 16055.	13.3	154
33	Coupled nitrificationâ€“denitrification leads to extensive N loss in subtidal permeable sediments. Limnology and Oceanography, 2016, 61, 1033-1048.	3.1	90
34	N2-fixation, ammonium release and N-transfer to the microbial and classical food web within a plankton community. ISME Journal, 2016, 10, 450-459.	9.8	87
35	High cell-specific rates of nitrogen and carbon fixation by the cyanobacteriumAphanizomenonsp. at low temperatures in the Baltic Sea. FEMS Microbiology Ecology, 2015, 91, fiv131.	2.7	20
36	Use of carbon monoxide and hydrogen by a bacteriaâ€“animal symbiosis from seagrass sediments. Environmental Microbiology, 2015, 17, 5023-5035.	3.8	37

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37	Simple approach for the preparation of 15â^'15N2-enriched water for nitrogen fixation assessments: evaluation, application and recommendations. Frontiers in Microbiology, 2015, 6, 769.	3.5	59
38	Substrate Use of Pseudovibrio sp. Growing in Ultra-Oligotrophic Seawater. PLoS ONE, 2015, 10, e0121675.	2.5	17
39	Anoxygenic Photosynthesis Controls Oxygenic Photosynthesis in a Cyanobacterium from a Sulfidic Spring. Applied and Environmental Microbiology, 2015, 81, 2025-2031.	3.1	41
40	Aerobic Microbial Respiration In Oceanic Oxygen Minimum Zones. PLoS ONE, 2015, 10, e0133526.	2.5	99
41	Responses of the coastal bacterial community to viral infection of the algae Phaeocystis globosa. ISME Journal, 2014, 8, 212-225.	9.8	68
42	Distribution of a consortium between unicellular algae and the <scp><scp>N₂</scp></scp> fixing cyanobacterium <scp>UCYN</scp>â€<scp>A</scp> in the North Atlantic Ocean. Environmental Microbiology, 2014, 16, 3153-3167.	3.8	38
43	Close association of active nitrifiers with <scp>B</scp>eggiatoa mats covering deepâ€sea hydrothermal sediments. Environmental Microbiology, 2014, 16, 1612-1626.	3.8	29
44	Temperature response of denitrification and anaerobic ammonium oxidation rates and microbial community structure in <scp>A</scp>rctic fjord sediments. Environmental Microbiology, 2014, 16, 3331-3344.	3.8	84
45	Facets of diazotrophy in the oxygen minimum zone waters off Peru. ISME Journal, 2014, 8, 2180-2192.	9.8	121
46	Aquatic Respiration Rate Measurements at Low Oxygen Concentrations. PLoS ONE, 2014, 9, e89369.	2.5	28
47	The Fate of Nitrate in Intertidal Permeable Sediments. PLoS ONE, 2014, 9, e104517.	2.5	74
48	Shell biofilmâ€associated nitrous oxide production in marine molluscs: processes, precursors and relative importance. Environmental Microbiology, 2013, 15, 1943-1955.	3.8	51
49	Nitrogen isotope effects induced by anammox bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18994-18999.	7.1	174
50	Nitrogen cycling driven by organic matter export in the South Pacific oxygen minimum zone. Nature Geoscience, 2013, 6, 228-234.	12.9	295
51	Giant Hydrogen Sulfide Plume in the Oxygen Minimum Zone off Peru Supports Chemolithoautotrophy. PLoS ONE, 2013, 8, e68661.	2.5	158
52	Nitrite oxidation in the Namibian oxygen minimum zone. ISME Journal, 2012, 6, 1200-1209.	9.8	244
53	Doubling of marine dinitrogen-fixation rates based on direct measurements. Nature, 2012, 488, 361-364.	27.8	273
54	Intensive and extensive nitrogen loss from intertidal permeable sediments of the Wadden Sea. Limnology and Oceanography, 2012, 57, 185-198.	3.1	73

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55	Dynamics and stoichiometry of nutrients and phytoplankton in waters influenced by the oxygen minimum zone in the eastern tropical Pacific. Deep-Sea Research Part I: Oceanographic Research Papers, 2012, 62, 20-31.	1.4	56
56	Heterotrophic organisms dominate nitrogen fixation in the South Pacific Gyre. ISME Journal, 2012, 6, 1238-1249.	9.8	162
57	Benthic Nitrogen Loss in the Arabian Sea Off Pakistan. Frontiers in Microbiology, 2012, 3, 395.	3.5	30
58	15N-Labeling Experiments to Dissect the Contributions of Heterotrophic Denitrification and Anammox to Nitrogen Removal in the OMZ Waters of the Ocean. Methods in Enzymology, 2011, 486, 223-251.	1.0	72
59	Carbon, nitrogen and O2 fluxes associated with the cyanobacterium Nodularia spumigena in the Baltic Sea. ISME Journal, 2011, 5, 1549-1558.	9.8	98
60	Oxygen Sensitivity of Anammox and Coupled N-Cycle Processes in Oxygen Minimum Zones. PLoS ONE, 2011, 6, e29299.	2.5	228
61	Diatoms respire nitrate to survive dark and anoxic conditions. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5649-5654.	7.1	177
62	Direct determination of nitrogen cycling rates and pathways in Arctic fjord sediments (Svalbard,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	3.1	27
63	Evidence of nitrification and denitrification in high and low microbial abundance sponges. Marine Biology, 2010, 157, 593-602.	1.5	135
64	Aerobic denitrification in permeable Wadden Sea sediments. ISME Journal, 2010, 4, 417-426.	9.8	189
65	Carbon and nitrogen fluxes associated with the cyanobacterium Aphanizomenon sp. in the Baltic Sea. ISME Journal, 2010, 4, 1215-1223.	9.8	106
66	Impact of Temperature on Ladderane Lipid Distribution in Anammox Bacteria. Applied and Environmental Microbiology, 2010, 76, 1596-1603.	3.1	53
67	Combined Gel Probe and Isotope Labeling Technique for Measuring Dissimilatory Nitrate Reduction to Ammonium in Sediments at Millimeter-Level Resolution. Applied and Environmental Microbiology, 2010, 76, 6239-6247.	3.1	16
68	A rainy northern Atacama Desert during the last interglacial. Geophysical Research Letters, 2010, 37, .	4.0	20
69	Direct determination of nitrogen cycling rates and pathways in Arctic fjord sediments (Svalbard,) Tj ETQq1 1 0.784314 rgBT /Overlock	3.1	30
70	Water column anammox and denitrification in a temperate permanently stratified lake (Lake) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	2.8	90
71	Detoxification of sulphidic African shelf waters by blooming chemolithotrophs. Nature, 2009, 457, 581-584.	27.8	297
72	Coâ€occurrence of denitrification and nitrogen fixation in a meromictic lake, Lake Cadagno (Switzerland). Environmental Microbiology, 2009, 11, 1945-1958.	3.8	119

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73	Complex nitrogen cycling in the sponge Geodia barretti. Environmental Microbiology, 2009, 11, 2228-2243.	3.8	286
74	Co-occurrence of denitrification and nitrogen fixation in a meromictic lake, Lake Cadagno (Switzerland). Environmental Microbiology, 2009, 11, 2190-2190.	3.8	75
75	Anammox bacteria and the anaerobic oxidation of ammonium in the oxygen minimum zone off northern Chile. Deep-Sea Research Part II: Topical Studies in Oceanography, 2009, 56, 1021-1031.	1.4	105
76	Revising the nitrogen cycle in the Peruvian oxygen minimum zone. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4752-4757.	7.1	677
77	Linking crenarchaeal and bacterial nitrification to anammox in the Black Sea. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7104-7109.	7.1	493
78	Anaerobic ammonium oxidation in the Peruvian oxygen minimum zone. Limnology and Oceanography, 2007, 52, 923-933.	3.1	315
79	Biological and chemical sulfide oxidation in a Beggiatoa inhabited marine sediment. ISME Journal, 2007, 1, 341-353.	9.8	170
80	Anammox bacteria disguised as denitrifiers: nitrate reduction to dinitrogen gas via nitrite and ammonium. Environmental Microbiology, 2007, 9, 635-642.	3.8	462
81	Anaerobic ammonium-oxidizing bacteria in marine environments: widespread occurrence but low diversity. Environmental Microbiology, 2007, 9, 1476-1484.	3.8	307
82	ANAEROBIC AMMONIUM OXIDATION IN THE MARINE ENVIRONMENT. , 2006, , 311-335.		23
83	From The Cover: Massive nitrogen loss from the Benguela upwelling system through anaerobic ammonium oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6478-6483.	7.1	664
84	Manganese(II) oxidation driven by lateral oxygen intrusions in the western Black Sea. Geochimica Et Cosmochimica Acta, 2005, 69, 2241-2252.	3.9	61
85	Provenance of present-day eolian dust collected off NW Africa. Journal of Geophysical Research, 2005, 110, .	3.3	174
86	Anaerobic ammonium oxidation by anammox bacteria in the Black Sea. Nature, 2003, 422, 608-611.	27.8	1,081