Tina Treude

List of Publications by Year
in descending order

74 papers	6,280 citations	87723 38 h-index	85405 71 g-index
98 all docs	98 docs citations	98 times ranked	6315 citing authors

#	Article	IF	Citations
1	Microbial Reefs in the Black Sea Fueled by Anaerobic Oxidation of Methane. Science, 2002, 297, 1013-1015.	6.0	673
2	Anaerobic Microbial Degradation of Hydrocarbons: From Enzymatic Reactions to the Environment. Journal of Molecular Microbiology and Biotechnology, 2016, 26, 5-28.	1.0	615
3	Anaerobic oxidation of methane above gas hydrates at Hydrate Ridge, NE Pacific Ocean. Marine Ecology - Progress Series, 2003, 264, 1-14.	0.9	296
4	Environmental regulation of the anaerobic oxidation of methane: a comparison of ANME-I and ANME-II communities. Environmental Microbiology, 2005, 7, 98-106.	1.8	289
5	Rising Arctic Ocean temperatures cause gas hydrate destabilization and ocean acidification. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	247
6	Temporal Constraints on Hydrate-Controlled Methane Seepage off Svalbard. Science, 2014, 343, 284-287.	6.0	219
7	Environmental control on anaerobic oxidation of methane in the gassy sediments of EckernfÃ¶rde Bay (German Baltic). Limnology and Oceanography, 2005, 50, 1771-1786.	1.6	181
8	Whale-Fall Ecosystems: Recent Insights into Ecology, Paleoecology, and Evolution. Annual Review of Marine Science, 2015, 7, 571-596.	5.1	174
9	Anaerobic oxidation of methane and sulfate reduction along the Chilean continental margin. Geochimica Et Cosmochimica Acta, 2005, 69, 2767-2779.	1.6	173
10	Microbial nucleation of Mg-rich dolomite in exopolymeric substances under anoxic modern seawater salinity: New insight into an old enigma. Geology, 2012, 40, 587-590.	2.0	173
11	Ocean currents shape the microbiome of Arctic marine sediments. ISME Journal, 2013, 7, 685-696.	4.4	173
12	Impact of natural oil and higher hydrocarbons on microbial diversity, distribution, and activity in Gulf of Mexico cold-seep sediments. Deep-Sea Research Part II: Topical Studies in Oceanography, 2010, 57, 2008-2021.	0.6	171
13	Microbial community in a sediment-hosted CO2 lake of the southern Okinawa Trough hydrothermal system. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14164-14169.	3.3	159
14	Consumption of Methane and CO2 by Methanotrophic Microbial Mats from Gas Seeps of the Anoxic Black Sea. Applied and Environmental Microbiology, 2007, 73, 2271-2283.	1.4	157
15	Burrowing deeper into benthic nitrogen cycling: the impact of bioturbation on nitrogen fixation coupled to sulfate reduction. Marine Ecology - Progress Series, 2010, 409, 1-15.	0.9	157
16	Microbial colonization and degradation of polyethylene and biodegradable plastic bags in temperate fine-grained organic-rich marine sediments. Marine Pollution Bulletin, 2016, 103, 168-178.	2.3	155
17	Microbiological investigation of methane- and hydrocarbon-discharging mud volcanoes in the Carpathian Mountains, Romania. Environmental Microbiology, 2006, 8, 574-590.	1.8	129
18	Spatial variations of methanotrophic consortia at cold methane seeps: implications from a high-resolution molecular and isotopic approach. Geobiology, 2005, 3, 195-209.	1.1	121

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19	Biogeochemistry of a deep-sea whale fall: sulfate reduction, sulfide efflux and methanogenesis. Marine Ecology - Progress Series, 2009, 382, 1-21.	0.9	117
20	Effects of climate change on methane emissions from seafloor sediments in the Arctic Ocean: A review. Limnology and Oceanography, 2016, 61, S283.	1.6	109
21	Sulfate reduction and methane oxidation activity below the sulfate-methane transition zone in Alaskan Beaufort Sea continental margin sediments: Implications for deep sulfur cycling. Geochimica Et Cosmochimica Acta, 2014, 144, 217-237.	1.6	104
22	Occurrence of benthic microbial nitrogen fixation coupled to sulfate reduction in the seasonally hypoxic EckernfÃ¶rde Bay, Baltic Sea. Biogeosciences, 2013, 10, 1243-1258.	1.3	98
23	Fluids from the Oceanic Crust Support Microbial Activities within the Deep Biosphere. Geomicrobiology Journal, 2008, 25, 56-66.	1.0	96
24	Water column methanotrophy controlled by a rapid oceanographic switch. Nature Geoscience, 2015, 8, 378-382.	5.4	89
25	Subsurface Microbial Methanotrophic Mats in the Black Sea. Applied and Environmental Microbiology, 2005, 71, 6375-6378.	1.4	87
26	Microbial methane turnover in different marine habitats. Palaeogeography, Palaeoclimatology, Palaeoecology, 2005, 227, 6-17.	1.0	86
27	Organic carbon production, mineralisation and preservation on the Peruvian margin. Biogeosciences, 2015, 12, 1537-1559.	1.3	81
28	Effects of low oxygen concentrations on aerobic methane oxidation in seasonally hypoxic coastal waters. Biogeosciences, 2017, 14, 1631-1645.	1.3	66
29	Temperature limits to deep subseafloor life in the Nankai Trough subduction zone. Science, 2020, 370, 1230-1234.	6.0	65
30	Scavenger assemblages under differing trophic conditions: a case study in the deep Arabian Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2000, 47, 2999-3026.	0.6	61
31	Modeling benthicâ€“pelagic nutrient exchange processes and porewater distributions in a seasonally hypoxic sediment: evidence for massive phosphate release by <i>Beggiatoa</i>?. Biogeosciences, 2013, 10, 629-651.	1.3	57
32	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.	0.9	55
33	Microbial methanogenesis in the sulfate-reducing zone of surface sediments traversing the Peruvian margin. Biogeosciences, 2016, 13, 283-299.	1.3	54
34	Depletion of oxygen, nitrate and nitrite in the Peruvian oxygen minimum zone cause an imbalance of benthic nitrogen fluxes. Deep-Sea Research Part I: Oceanographic Research Papers, 2016, 112, 113-122.	0.6	54
35	Elasmobranch egg capsules associated with modern and ancient cold seeps: a nursery for marine deep-water predators. Marine Ecology - Progress Series, 2011, 437, 175-181.	0.9	54
36	Microbial methanogenesis in the sulfate-reducing zone of sediments in the EckernfÃ¶rde Bay, SW Baltic Sea. Biogeosciences, 2018, 15, 137-157.	1.3	51

#	Article	IF	Citations
37	Rates and regulation of nitrogen cycling in seasonally hypoxic sediments during winter (Boknis Eck,) Tj ETQq1 1 0.784314 rgBT /Over 14-28.	0.9	47
38	Nitrogen fixation in sediments along a depth transect through the Peruvian oxygen minimum zone. Biogeosciences, 2016, 13, 4065-4080.	1.3	47
39	Methanogenic Hydrocarbon Degradation: Evidence from Field and Laboratory Studies. Journal of Molecular Microbiology and Biotechnology, 2016, 26, 227-242.	1.0	45
40	Life on the edge: active microbial communities in the Kryos MgCl2-brine basin at very low water activity. ISME Journal, 2018, 12, 1414-1426.	4.4	42
41	Toxic effects of labâ€grade butyl rubber stoppers on aerobic methane oxidation. Limnology and Oceanography: Methods, 2015, 13, 40-52.	1.0	39
42	Marine ammonification and carbonic anhydrase activity induce rapid calcium carbonate precipitation. Geochimica Et Cosmochimica Acta, 2018, 243, 116-132.	1.6	36
43	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.	1.6	31
44	Metabolism and decompression tolerance of scavenging lysianassoid deep-sea amphipods. Deep-Sea Research Part I: Oceanographic Research Papers, 2002, 49, 1281-1289.	0.6	26
45	Comment on â€œA Persistent Oxygen Anomaly Reveals the Fate of Spilled Methane in the Deep Gulf of Mexicoâ€• Science, 2011, 332, 1033-1033.	6.0	23
46	Bubble Transport Mechanism: Indications for a gas bubble-mediated inoculation of benthic methanotrophs into the water column. Continental Shelf Research, 2015, 103, 70-78.	0.9	21
47	Rapid metabolism fosters microbial survival in the deep, hot subseafloor biosphere. Nature Communications, 2022, 13, 312.	5.8	21
48	Methane oxidation in permeable sediments at hydrocarbon seeps in the Santa Barbara Channel, California. Biogeosciences, 2010, 7, 3095-3108.	1.3	20
49	Benthic Dinitrogen Fixation Traversing the Oxygen Minimum Zone Off Mauritania (NW Africa). Frontiers in Marine Science, 2017, 4, .	1.2	19
50	Microbial Community Response to Simulated Petroleum Seepage in Caspian Sea Sediments. Frontiers in Microbiology, 2017, 8, 764.	1.5	19
51	Occurrence and fate of fatty acyl biomarkers in an ancient whale bone (Oligocene, El Cien Formation,) Tj ETQq1 1 0.784314 rgBT /Ov	0.9	17
52	Ideas and perspectives: A strategic assessment of methane and nitrous oxide measurements in the marine environment. Biogeosciences, 2020, 17, 5809-5828.	1.3	16
53	Biogeochemical Reactions in Marine Sediments Underlying Anoxic Water Bodies. Cellular Origin and Life in Extreme Habitats, 2012, , 17-38.	0.3	10
54	Microbial activity and carbonate isotope signatures as a tool for identification of spatial differences in methane advection: a case study at the Pacific Costa Rican margin. Biogeosciences, 2014, 11, 507-523.	1.3	10

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55	Enhanced Calcite Dissolution in the Presence of the Aerobic Methanotroph Methylosinus trichosporium. Geomicrobiology Journal, 2014, 31, 325-337.	1.0	10
56	Anaerobic microbial activity affects earliest diagenetic pathways of bivalve shells. Sedimentology, 2018, 65, 1390-1411.	1.6	10
57	A sediment flow-through system to study the impact of shifting fluid and methane flow regimes on the efficiency of the benthic methane filter. Limnology and Oceanography: Methods, 2014, 12, 25-45.	1.0	9
58	Biogeochemical Consequences of Nonvertical Methane Transport in Sediment Offshore Northwestern Svalbard. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005371.	1.3	9
59	Bubble-mediated transport of benthic microorganisms into the water column: Identification of methanotrophs and implication of seepage intensity on transport efficiency. Scientific Reports, 2020, 10, 4682.	1.6	9
60	Influence of methane seepage on isotopic signatures in living deep-sea benthic foraminifera, 79Â° N. Scientific Reports, 2022, 12, 1169.	1.6	9
61	Response of anaerobic methanotrophs and benthic foraminifera to 20 years of methane emission from a gas blowout in the North Sea. Marine and Petroleum Geology, 2015, 68, 731-742.	1.5	8
62	Hydrocarbon Degradation in Caspian Sea Sediment Cores Subjected to Simulated Petroleum Seepage in a Newly Designed Sediment-Oil-Flow-Through System. Frontiers in Microbiology, 2017, 8, 763.	1.5	7
63	Deciphering cryptic methane cycling: Coupling of methylotrophic methanogenesis and anaerobic oxidation of methane in hypersaline coastal wetland sediment. Geochimica Et Cosmochimica Acta, 2021, 309, 160-174.	1.6	7
64	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mi mathvariant="normal">Î”</mml:mi><mml:msup><mml:mrow /><mml:mrow><mml:mn>13</mml:mn></mml:mrow></mml:msup><mml:msub><mml:mrow><mml:mi mathvariant="normal">CH</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub><mml:mi mathvariant="normal">D</mml:mi></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"><mml:mi mathvariant="normal">Î”	1.8	7
65	Efficiency and adaptability of the benthic methane filter at Quepos Slide cold seeps, offshore of Costa Rica. Biogeosciences, 2015, 12, 6687-6706.	1.3	5
66	In-situ mechanical weakness of subducting sediments beneath a plate boundary dÃ©collement in the Nankai Trough. Progress in Earth and Planetary Science, 2018, 5, .	1.1	5
67	Site C0023. Proceedings of the International Ocean Discovery Program, 0, , .	0.0	5
68	A quantitative study of the degradation of whale bone lipids: Implications for the preservation of fatty acids in marine sediments. Organic Geochemistry, 2015, 89-90, 23-30.	0.9	4
69	Rapid sulfur cycling in sediments from the Peruvian oxygen minimum zone featuring simultaneous sulfate reduction and sulfide oxidation. Limnology and Oceanography, 2021, 66, 2661-2671.	1.6	4
70	Pelagic Methane Sink Enhanced by Benthic Methanotrophs Ejected From a Gas Seep. Geophysical Research Letters, 2021, 48, e2021GL094819.	1.5	3
71	New insights into the physiology and regulation of the anaerobic oxidation of methane. , 0, , 303-320.		2
72	1. Methane seeps in a changing climate. , 2017, , 1-32.		2

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73	Evidence of changes in sedimentation rate and sediment fabric in a low-oxygen setting: Santa Monica Basin, CA. Biogeosciences, 2020, 17, 2381-2396.	1.3	2
74	Microbial activity affects sulphur in biogenic aragonite. Depositional Record, 2021, 7, 500.	0.8	1