

Antje Boetius

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8194703/publications.pdf>

Version: 2024-02-01

201
papers

24,940
citations

8755

75
h-index

7950

149
g-index

235
all docs

235
docs citations

235
times ranked

15045
citing authors

#	ARTICLE	IF	CITATIONS
1	A marine microbial consortium apparently mediating anaerobic oxidation of methane. <i>Nature</i> , 2000, 407, 623-626.	27.8	2,636
2	Anaerobic Oxidation of Methane: Progress with an Unknown Process. <i>Annual Review of Microbiology</i> , 2009, 63, 311-334.	7.3	1,405
3	Scientistsâ€™ warning to humanity: microorganisms and climate change. <i>Nature Reviews Microbiology</i> , 2019, 17, 569-586.	28.6	1,138
4	Microbial Reefs in the Black Sea Fueled by Anaerobic Oxidation of Methane. <i>Science</i> , 2002, 297, 1013-1015.	12.6	673
5	Feast and famine â€” microbial life in the deep-sea bed. <i>Nature Reviews Microbiology</i> , 2007, 5, 770-781.	28.6	577
6	Novel microbial communities of the Haakon Mosby mud volcano and their role as a methane sink. <i>Nature</i> , 2006, 443, 854-858.	27.8	570
7	Diversity and Distribution of Methanotrophic Archaea at Cold Seeps. <i>Applied and Environmental Microbiology</i> , 2005, 71, 467-479.	3.1	556
8	Global Patterns of Bacterial Beta-Diversity in Seafloor and Seawater Ecosystems. <i>PLoS ONE</i> , 2011, 6, e24570.	2.5	525
9	Intercellular wiring enables electron transfer between methanotrophic archaea and bacteria. <i>Nature</i> , 2015, 526, 587-590.	27.8	469
10	The anaerobic oxidation of methane and sulfate reduction in sediments from Gulf of Mexico cold seeps. <i>Chemical Geology</i> , 2004, 205, 219-238.	3.3	466
11	Seafloor oxygen consumption fuelled by methane from cold seeps. <i>Nature Geoscience</i> , 2013, 6, 725-734.	12.9	409
12	In vitro demonstration of anaerobic oxidation of methane coupled to sulphate reduction in sediment from a marine gas hydrate area. <i>Environmental Microbiology</i> , 2002, 4, 296-305.	3.8	404
13	Export of Algal Biomass from the Melting Arctic Sea Ice. <i>Science</i> , 2013, 339, 1430-1432.	12.6	383
14	Microbial ecology of the cryosphere: sea ice and glacial habitats. <i>Nature Reviews Microbiology</i> , 2015, 13, 677-690.	28.6	344
15	Diversity and Abundance of Aerobic and Anaerobic Methane Oxidizers at the Haakon Mosby Mud Volcano, Barents Sea. <i>Applied and Environmental Microbiology</i> , 2007, 73, 3348-3362.	3.1	338
16	Anaerobic oxidation of methane above gas hydrates at Hydrate Ridge, NE Pacific Ocean. <i>Marine Ecology - Progress Series</i> , 2003, 264, 1-14.	1.9	296
17	In vitro cell growth of marine archaeal-bacterial consortia during anaerobic oxidation of methane with sulfate. <i>Environmental Microbiology</i> , 2007, 9, 187-196.	3.8	294
18	Environmental regulation of the anaerobic oxidation of methane: a comparison of ANME-I and ANME-II communities. <i>Environmental Microbiology</i> , 2005, 7, 98-106.	3.8	289

#	ARTICLE	IF	CITATIONS
19	Global Patterns and Predictions of Seafloor Biomass Using Random Forests. PLoS ONE, 2010, 5, e15323.	2.5	287
20	Methane discharge from a deep-sea submarine mud volcano into the upper water column by gas hydrate-coated methane bubbles. Earth and Planetary Science Letters, 2006, 243, 354-365.	4.4	268
21	Activity, Distribution, and Diversity of Sulfate Reducers and Other Bacteria in Sediments above Gas Hydrate (Cascadia Margin, Oregon). Geomicrobiology Journal, 2003, 20, 269-294.	2.0	254
22	Global dispersion and local diversification of the methane seep microbiome. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4015-4020.	7.1	248
23	The Anaerobic Oxidation of Methane: New Insights in Microbial Ecology and Biogeochemistry. , 2002, , 457-477.		244
24	In situ experimental evidence of the fate of a phytodetritus pulse at the abyssal sea floor. Nature, 2003, 424, 763-766.	27.8	225
25	Diversity and dynamics of rare and of resident bacterial populations in coastal sands. ISME Journal, 2012, 6, 542-553.	9.8	224
26	Characterization of Specific Membrane Fatty Acids as Chemotaxonomic Markers for Sulfate-Reducing Bacteria Involved in Anaerobic Oxidation of Methane. Geomicrobiology Journal, 2003, 20, 403-419.	2.0	222
27	Control of sulfate pore-water profiles by sedimentary events and the significance of anaerobic oxidation of methane for the burial of sulfur in marine sediments. Geochimica Et Cosmochimica Acta, 2003, 67, 2631-2647.	3.9	220
28	Hydrate Ridge: a natural laboratory for the study of microbial life fueled by methane from near-surface gas hydrates. Chemical Geology, 2004, 205, 291-310.	3.3	210
29	Molecular biogeochemistry of sulfate reduction, methanogenesis and the anaerobic oxidation of methane at Gulf of Mexico cold seeps. Geochimica Et Cosmochimica Acta, 2005, 69, 4267-4281.	3.9	204
30	In situ fluxes and zonation of microbial activity in surface sediments of the Håkon Mosby Mud Volcano. Limnology and Oceanography, 2006, 51, 1315-1331.	3.1	198
31	Thermophilic anaerobic oxidation of methane by marine microbial consortia. ISME Journal, 2011, 5, 1946-1956.	9.8	185
32	Environmental control on anaerobic oxidation of methane in the gassy sediments of Eckernförde Bay (German Baltic). Limnology and Oceanography, 2005, 50, 1771-1786.	3.1	181
33	Anaerobic oxidation of methane and sulfate reduction along the Chilean continental margin. Geochimica Et Cosmochimica Acta, 2005, 69, 2767-2779.	3.9	173
34	Microbial methane turnover at mud volcanoes of the Gulf of Cadiz. Geochimica Et Cosmochimica Acta, 2006, 70, 5336-5355.	3.9	173
35	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.	1.4	171
36	Biological and chemical sulfide oxidation in a Beggiatoa inhabited marine sediment. ISME Journal, 2007, 1, 341-353.	9.8	170

#	ARTICLE	IF	CITATIONS
37	Evidence for anaerobic oxidation of methane in sediments of a freshwater system (Lago di Cadagno). <i>FEMS Microbiology Ecology</i> , 2011, 76, 26-38.	2.7	166
38	Microbial community in a sediment-hosted CO ₂ lake of the southern Okinawa Trough hydrothermal system. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 14164-14169.	7.1	159
39	Time- and sediment depth-related variations in bacterial diversity and community structure in subtidal sands. <i>ISME Journal</i> , 2009, 3, 780-791.	9.8	159
40	Consumption of Methane and CO ₂ by Methanotrophic Microbial Mats from Gas Seeps of the Anoxic Black Sea. <i>Applied and Environmental Microbiology</i> , 2007, 73, 2271-2283.	3.1	157
41	Effects of Temperature and Pressure on Sulfate Reduction and Anaerobic Oxidation of Methane in Hydrothermal Sediments of Guaymas Basin. <i>Applied and Environmental Microbiology</i> , 2004, 70, 1231-1233.	3.1	150
42	Anaerobic oxidation of methane at different temperature regimes in Guaymas Basin hydrothermal sediments. <i>ISME Journal</i> , 2012, 6, 1018-1031.	9.8	149
43	Photosynthetic production in the central Arctic Ocean during the record sea-ice minimum in 2012. <i>Biogeosciences</i> , 2015, 12, 3525-3549.	3.3	149
44	Bacterial taxa area and distance decay relationships in marine environments. <i>Molecular Ecology</i> , 2014, 23, 954-964.	3.9	147
45	Hypoxia causes preservation of labile organic matter and changes seafloor microbial community composition (Black Sea). <i>Science Advances</i> , 2017, 3, e1601897.	10.3	145
46	Biodiversity of Cold Seep Ecosystems Along the European Margins. <i>Oceanography</i> , 2009, 22, 110-127.	1.0	140
47	Biogeochemistry and Community Composition of Iron- and Sulfur-Precipitating Microbial Mats at the Chefren Mud Volcano (Nile Deep Sea Fan, Eastern Mediterranean). <i>Applied and Environmental Microbiology</i> , 2008, 74, 3198-3215.	3.1	137
48	Assimilation of methane and inorganic carbon by microbial communities mediating the anaerobic oxidation of methane. <i>Environmental Microbiology</i> , 2008, 10, 2287-2298.	3.8	136
49	Diversity and Biogeography of Bathyal and Abyssal Seafloor Bacteria. <i>PLoS ONE</i> , 2016, 11, e0148016.	2.5	132
50	The energy diversity relationship of complex bacterial communities in Arctic deep-sea sediments. <i>ISME Journal</i> , 2012, 6, 724-732.	9.8	131
51	Methane emission and consumption at a North Sea gas seep (Tommeliten area). <i>Biogeosciences</i> , 2005, 2, 335-351.	3.3	129
52	Spatial variations of methanotrophic consortia at cold methane seeps: implications from a high-resolution molecular and isotopic approach. <i>Geobiology</i> , 2005, 3, 195-209.	2.4	121
53	Regulation of microbial enzymatic degradation of organic matter in deep-sea sediments. <i>Marine Ecology - Progress Series</i> , 1994, 104, 299-307.	1.9	119
54	Intact polar lipids of anaerobic methanotrophic archaea and associated bacteria. <i>Organic Geochemistry</i> , 2008, 39, 992-999.	1.8	118

#	ARTICLE	IF	CITATIONS
55	Biogeochemistry of a deep-sea whale fall: sulfate reduction, sulfide efflux and methanogenesis. <i>Marine Ecology - Progress Series</i> , 2009, 382, 1-21.	1.9	117
56	<i>Candidatus</i> <i>Desulfofervidus auxilii</i> , a hydrogenotrophic sulfate-reducing bacterium involved in the thermophilic anaerobic oxidation of methane. <i>Environmental Microbiology</i> , 2016, 18, 3073-3091.	3.8	115
57	How Deep-Sea Wood Falls Sustain Chemosynthetic Life. <i>PLoS ONE</i> , 2013, 8, e53590.	2.5	113
58	Effect of organic enrichments on hydrolytic potentials and growth of bacteria in deep-sea sediments. <i>Marine Ecology - Progress Series</i> , 1996, 140, 239-250.	1.9	112
59	Substantial ¹³ C/ ¹² C and D/H fractionation during anaerobic oxidation of methane by marine consortia enriched <i>in vitro</i> . <i>Environmental Microbiology Reports</i> , 2009, 1, 370-376.	2.4	111
60	Factors controlling the distribution of anaerobic methanotrophic communities in marine environments: Evidence from intact polar membrane lipids. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 164-184.	3.9	111
61	Structure and Drivers of Cold Seep Ecosystems. <i>Oceanography</i> , 2009, 22, 92-109.	1.0	110
62	Arctic warming interrupts the Transpolar Drift and affects long-range transport of sea ice and ice-rafted matter. <i>Scientific Reports</i> , 2019, 9, 5459.	3.3	108
63	Endosymbioses between bacteria and deep-sea siboglinid tubeworms from an Arctic Cold Seep (Haakon Tjøtta). <i>Environmental Microbiology</i> , 2011, 13, 107-114.	3.8	107
64	Quantification of seep-related methane gas emissions at Tommeliten, North Sea. <i>Continental Shelf Research</i> , 2011, 31, 867-878.	1.8	107
65	Formation of carbonate chimneys in the Mediterranean Sea linked to deep-water oxygen depletion. <i>Nature Geoscience</i> , 2013, 6, 755-760.	12.9	105
66	Deep-Water Chemosynthetic Ecosystem Research during the Census of Marine Life Decade and Beyond: A Proposed Deep-Ocean Road Map. <i>PLoS ONE</i> , 2011, 6, e23259.	2.5	105
67	Benthic oxygen uptake, hydrolytic potentials and microbial biomass at the Arctic continental slope. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1998, 45, 239-275.	1.4	104
68	Carbon and sulfur back flux during anaerobic microbial oxidation of methane and coupled sulfate reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, E1484-90.	7.1	104
69	Niche differentiation among mat-forming, sulfide-oxidizing bacteria at cold seeps of the Nile Deep Sea Fan (Eastern Mediterranean Sea). <i>Geobiology</i> , 2011, 9, 330-348.	2.4	101
70	Composition, Buoyancy Regulation and Fate of Ice Algal Aggregates in the Central Arctic Ocean. <i>PLoS ONE</i> , 2014, 9, e107452.	2.5	101
71	Microbial biomass and activities in deep-sea sediments of the Eastern Mediterranean: trenches are benthic hotspots. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1996, 43, 1439-1460.	1.4	98
72	Bacterial activity in sediments of the deep Arabian Sea in relation to vertical flux. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2000, 47, 2835-2875.	1.4	95

#	ARTICLE	IF	CITATIONS
73	Gene expression and ultrastructure of meso- and thermophilic methanotrophic consortia. <i>Environmental Microbiology</i> , 2018, 20, 1651-1666.	3.8	90
74	Seafloor geological studies above active gas chimneys off Egypt (Central Nile Deep Sea Fan). <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2007, 54, 1146-1172.	1.4	89
75	Subsurface Microbial Methanotrophic Mats in the Black Sea. <i>Applied and Environmental Microbiology</i> , 2005, 71, 6375-6378.	3.1	87
76	Microbial methane turnover in different marine habitats. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2005, 227, 6-17.	2.3	86
77	Responses of deep-sea benthos to sedimentation patterns in the North-East Atlantic in 1992. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1999, 46, 573-596.	1.4	85
78	Microbial Communities of Deep-Sea Methane Seeps at Hikurangi Continental Margin (New Zealand). <i>PLoS ONE</i> , 2013, 8, e72627.	2.5	78
79	Comparison of Two 16S rRNA Primers (V3 and V4) for Studies of Arctic Microbial Communities. <i>Frontiers in Microbiology</i> , 2021, 12, 637526.	3.5	77
80	Ecological coherence of diversity patterns derived from classical fingerprinting and next-generation sequencing techniques. <i>Environmental Microbiology</i> , 2014, 16, 2672-2681.	3.8	73
81	Benthic metabolism and degradation of natural particulate organic matter in carbonate and silicate reef sands of the northern Red Sea. <i>Marine Ecology - Progress Series</i> , 2005, 298, 69-78.	1.9	72
82	Anaerobic Biodegradation of Hydrocarbons Including Methane. , 2006, , 1028-1049.		70
83	Assessing subsurface seafloor microbial activity by combined stable isotope probing with deuterated water and ¹³ C-bicarbonate. <i>Environmental Microbiology</i> , 2012, 14, 1517-1527.	3.8	70
84	Methane-Carbon Flow into the Benthic Food Web at Cold Seeps – A Case Study from the Costa Rica Subduction Zone. <i>PLoS ONE</i> , 2013, 8, e74894.	2.5	70
85	Influence of ice thickness and surface properties on light transmission through Arctic sea ice. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 5932-5944.	2.6	70
86	Microbial methane oxidation and sulfate reduction at cold seeps of the deep Eastern Mediterranean Sea. <i>Marine Geology</i> , 2009, 261, 114-127.	2.1	69
87	Spatial scales of bacterial community diversity at cold seeps (Eastern Mediterranean Sea). <i>ISME Journal</i> , 2015, 9, 1306-1318.	9.8	69
88	Diversity and distribution of cold-seep fauna associated with different geological and environmental settings at mud volcanoes and pockmarks of the Nile Deep-Sea Fan. <i>Marine Biology</i> , 2011, 158, 1187-1210.	1.5	67
89	On the relationship between methane production and oxidation by anaerobic methanotrophic communities from cold seeps of the Gulf of Mexico. <i>Environmental Microbiology</i> , 2008, 10, 1108-1117.	3.8	66
90	Thermophilic Genus of Archaea Mediating the Anaerobic Oxidation of Ethane. <i>MBio</i> , 2020, 11, .	4.1	66

#	ARTICLE	IF	CITATIONS
91	Methane fluxes and carbonate deposits at a cold seep area of the Central Nile Deep Sea Fan, Eastern Mediterranean Sea. <i>Marine Geology</i> , 2014, 347, 27-42.	2.1	65
92	Biogeography of Deep-Sea Benthic Bacteria at Regional Scale (LTER HAUSGARTEN, Fram Strait, Arctic). <i>PLoS ONE</i> , 2013, 8, e72779.	2.5	65
93	Effects of a deep-sea mining experiment on seafloor microbial communities and functions after 26 years. <i>Science Advances</i> , 2020, 6, eaaz5922.	10.3	64
94	Relationships between Host Phylogeny, Host Type and Bacterial Community Diversity in Cold-Water Coral Reef Sponges. <i>PLoS ONE</i> , 2013, 8, e55505.	2.5	64
95	Anaerobic Degradation of Non-Methane Alkanes by <i>Candidatus Methanoliparia</i> in Hydrocarbon Seeps of the Gulf of Mexico. <i>MBio</i> , 2019, 10, .	4.1	63
96	Comparative genomics reveals electron transfer and syntrophic mechanisms differentiating methanotrophic and methanogenic archaea. <i>PLoS Biology</i> , 2022, 20, e3001508.	5.6	62
97	In situ development of a methanotrophic microbiome in deep-sea sediments. <i>ISME Journal</i> , 2019, 13, 197-213.	9.8	61
98	Benthic community responses to pulses in pelagic food supply: North Pacific Subtropical Gyre. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2002, 49, 971-990.	1.4	60
99	Mind the seafloor. <i>Science</i> , 2018, 359, 34-36.	12.6	60
100	Hotspot Ecosystem Research on Europe's Deep-Ocean Margins. <i>Oceanography</i> , 2004, 17, 132-143.	1.0	60
101	Biogeochemistry of a low-activity cold seep in the Larsen B area, western Weddell Sea, Antarctica. <i>Biogeosciences</i> , 2009, 6, 2383-2395.	3.3	58
102	Inter- and intra-habitat bacterial diversity associated with cold-water corals. <i>ISME Journal</i> , 2009, 3, 756-759.	9.8	57
103	Life at the edge of methane ice: microbial cycling of carbon and sulfur in Gulf of Mexico gas hydrates. <i>Chemical Geology</i> , 2004, 205, 239-251.	3.3	56
104	Molecular characterization of bacteria associated with the trophosome and the tube of <i>Lamellibrachia</i> sp., a siboglinid annelid from cold seeps in the eastern Mediterranean. <i>FEMS Microbiology Ecology</i> , 2009, 69, 395-409.	2.7	56
105	Dissolved organic matter in pore water of Arctic Ocean sediments: Environmental influence on molecular composition. <i>Organic Geochemistry</i> , 2016, 97, 41-52.	1.8	56
106	Influence of the physical environment on polar phytoplankton blooms: A case study in the Fram Strait. <i>Journal of Marine Systems</i> , 2014, 132, 196-207.	2.1	55
107	Biogeochemical processes and microbial diversity of the Gullfaks and Tommeliten methane seeps (Northern North Sea). <i>Biogeosciences</i> , 2008, 5, 1127-1144.	3.3	54
108	Transport and consumption of oxygen and methane in different habitats of the Håkon Mosby Mud Volcano (HMMV). <i>Limnology and Oceanography</i> , 2010, 55, 2366-2380.	3.1	54

#	ARTICLE	IF	CITATIONS
109	Marine microbes in 4D " using time series observation to assess the dynamics of the ocean microbiome and its links to ocean health. <i>Current Opinion in Microbiology</i> , 2018, 43, 169-185.	5.1	54
110	Ocean Floor Observation and Bathymetry System (OFOBS): A New Towed Camera/Sonar System for Deep-Sea Habitat Surveys. <i>IEEE Journal of Oceanic Engineering</i> , 2019, 44, 87-99.	3.8	54
111	High-resolution mapping of large gas emitting mud volcanoes on the Egyptian continental margin (Nile Deep Sea Fan) by AUV surveys. <i>Marine Geophysical Researches</i> , 2008, 29, 275-290.	1.2	53
112	Macroecological patterns of marine bacteria on a global scale. <i>Journal of Biogeography</i> , 2013, 40, 800-811.	3.0	53
113	Microbial Communities in the East and West Fram Strait During Sea Ice Melting Season. <i>Frontiers in Marine Science</i> , 2018, 5, .	2.5	53
114	Effects of Ice-Algal Aggregate Export on the Connectivity of Bacterial Communities in the Central Arctic Ocean. <i>Frontiers in Microbiology</i> , 2018, 9, 1035.	3.5	53
115	Metabolically active microbial communities in marine sediment under high-CO ₂ and low-pH extremes. <i>ISME Journal</i> , 2013, 7, 555-567.	9.8	51
116	Diversity and metabolism of <i>Woeseiales</i> bacteria, global members of marine sediment communities. <i>ISME Journal</i> , 2020, 14, 1042-1056.	9.8	51
117	Eruption of a deep-sea mud volcano triggers rapid sediment movement. <i>Nature Communications</i> , 2014, 5, 5385.	12.8	50
118	Association of deep-sea incirrate octopods with manganese crusts and nodule fields in the Pacific Ocean. <i>Current Biology</i> , 2016, 26, R1268-R1269.	3.9	50
119	Digestive enzymes in marine invertebrates from hydrothermal vents and other reducing environments. <i>Marine Biology</i> , 1995, 122, 105-113.	1.5	49
120	Diversity and distribution of methane-oxidizing microbial communities associated with different faunal assemblages in a giant pockmark of the Gabon continental margin. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2009, 56, 2248-2258.	1.4	49
121	Menes caldera, a highly active site of brine seepage in the Eastern Mediterranean sea: " observations from the NAUTINIL expedition (2003). <i>Marine Geology</i> , 2009, 261, 138-152.	2.1	48
122	Mats of psychrophilic thiotrophic bacteria associated with cold seeps of the Barents Sea. <i>Biogeosciences</i> , 2012, 9, 2947-2960.	3.3	47
123	Microbial hydrolytic enzyme activities in deep-sea sediments. <i>Helgolâ€šnder Meeresuntersuchungen</i> , 1995, 49, 177-187.	0.2	44
124	Spatial Scales of Bacterial Diversity in Cold-Water Coral Reef Ecosystems. <i>PLoS ONE</i> , 2012, 7, e32093.	2.5	44
125	Geochemical processes and chemosynthetic primary production in different thiotrophic mats of the HÅƒkon Mosby Mud Volcano (Barents Sea). <i>Limnology and Oceanography</i> , 2010, 55, 931-949.	3.1	43
126	Bacterial diversity and biogeochemistry of different chemosynthetic habitats of the REGAB cold seep (West African margin, 3160 m water depth). <i>Biogeosciences</i> , 2012, 9, 5031-5048.	3.3	43

#	ARTICLE	IF	CITATIONS
127	What Feeds the Benthos in the Arctic Basins? Assembling a Carbon Budget for the Deep Arctic Ocean. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	42
128	Temporal and Spatial Variations of Bacterial and Faunal Communities Associated with Deep-Sea Wood Falls. <i>PLoS ONE</i> , 2017, 12, e0169906.	2.5	41
129	Biomarker indicators for anaerobic oxidizers of methane in brackish-marine sediments with diffusive methane fluxes. <i>Organic Geochemistry</i> , 2010, 41, 414-426.	1.8	40
130	Oxygen dynamics in the Black Sea as seen by Argo profiling floats. <i>Geophysical Research Letters</i> , 2013, 40, 3085-3090.	4.0	39
131	Diazotroph Diversity in the Sea Ice, Melt Ponds, and Surface Waters of the Eurasian Basin of the Central Arctic Ocean. <i>Frontiers in Microbiology</i> , 2016, 7, 1884.	3.5	39
132	The Benthos of Arctic Seas and its Role for the Organic Carbon Cycle at the Seafloor. , 2004, , 139-167.		38
133	Temporal variations in microbial activities and carbon turnover in subtidal sandy sediments. <i>Biogeosciences</i> , 2009, 6, 1149-1165.	3.3	38
134	OCEAN SCIENCE: Lost City Life. <i>Science</i> , 2005, 307, 1420-1422.	12.6	37
135	Thriving in Salt. <i>Science</i> , 2009, 324, 1523-1525.	12.6	37
136	Relative abundances of methane- and sulphur-oxidising symbionts in the gills of a cold seep mussel and link to their potential energy sources. <i>Geobiology</i> , 2011, 9, 481-491.	2.4	34
137	Sulfurization of dissolved organic matter in the anoxic water column of the Black Sea. <i>Science Advances</i> , 2021, 7, .	10.3	34
138	Geochemical processes and chemosynthetic primary production in different thiotrophic mats of the Håkon Mosby Mud Volcano (Barents Sea). <i>Limnology and Oceanography</i> , 2010, 55, 931-949.	3.1	34
139	Microbial Diversity and Connectivity in Deep-Sea Sediments of the South Atlantic Polar Front. <i>Frontiers in Microbiology</i> , 2019, 10, 665.	3.5	32
140	Sea-ice derived meltwater stratification slows the biological carbon pump: results from continuous observations. <i>Nature Communications</i> , 2021, 12, 7309.	12.8	31
141	Microbial activity and particulate matter in the benthic nepheloid layer (BNL) of the deep Arabian Sea. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2000, 47, 2687-2706.	1.4	30
142	A novel, mat-forming <i>Thiomargarita</i> population associated with a sulfidic fluid flow from a deep-sea mud volcano. <i>Environmental Microbiology</i> , 2011, 13, 495-505.	3.8	30
143	Scientific Challenges and Present Capabilities in Underwater Robotic Vehicle Design and Navigation for Oceanographic Exploration Under-Ice. <i>Remote Sensing</i> , 2020, 12, 2588.	4.0	30
144	<i>Desulfobacter psychrotolerans</i> sp. nov., a new psychrotolerant sulfate-reducing bacterium and descriptions of its physiological response to temperature changes. <i>Antonie Van Leeuwenhoek</i> , 2006, 89, 109-124.	1.7	29

#	ARTICLE	IF	CITATIONS
145	An experimental study on short-term changes in the anaerobic oxidation of methane in response to varying methane and sulfate fluxes. <i>Biogeosciences</i> , 2009, 6, 867-876.	3.3	28
146	Microbial habitat connectivity across spatial scales and hydrothermal temperature gradients at Guaymas Basin. <i>Frontiers in Microbiology</i> , 2013, 4, 207.	3.5	28
147	Patterns and trends of macrobenthic abundance, biomass and production in the deep Arctic Ocean. <i>Polar Research</i> , 2015, 34, 24008.	1.6	28
148	CO ₂ leakage alters biogeochemical and ecological functions of submarine sands. <i>Science Advances</i> , 2018, 4, eaao2040.	10.3	27
149	The polar night shift: seasonal dynamics and drivers of Arctic Ocean microbiomes revealed by autonomous sampling. <i>ISME Communications</i> , 2021, 1, .	4.2	27
150	Methane and sulfide fluxes in permanent anoxia: In situ studies at the Dvurechenskii mud volcano (Sorokin Trough, Black Sea). <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 5002-5018.	3.9	26
151	Summertime Chlorophyll a and Particulate Organic Carbon Standing Stocks in Surface Waters of the Fram Strait and the Arctic Ocean (1991–2015). <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	26
152	The contribution of microbial communities in polymetallic nodules to the diversity of the deep-sea microbiome of the Peru Basin (4130–4198 m depth). <i>Biogeosciences</i> , 2020, 17, 3203-3222.	3.3	26
153	Deep-sea megabenthos communities of the Eurasian Central Arctic are influenced by ice-cover and sea-ice algal falls. <i>PLoS ONE</i> , 2019, 14, e0211009.	2.5	25
154	Limitations of microbial hydrocarbon degradation at the Amon mud volcano (Nile deep-sea fan). <i>Biogeosciences</i> , 2013, 10, 3269-3283.	3.3	22
155	Giant sponge grounds of Central Arctic seamounts are associated with extinct seep life. <i>Nature Communications</i> , 2022, 13, 638.	12.8	22
156	Sea ice presence is linked to higher carbon export and vertical microbial connectivity in the Eurasian Arctic Ocean. <i>Communications Biology</i> , 2021, 4, 1255.	4.4	21
157	FRAM - FRontiers in Arctic marine Monitoring Visions for permanent observations in a gateway to the Arctic Ocean. , 2013, , .		20
158	Global change microbiology – big questions about small life for our future. <i>Nature Reviews Microbiology</i> , 2019, 17, 331-332.	28.6	20
159	Mass sedimentation of the swimming crab <i>Charybdis smithii</i> (Crustacea: Decapoda) in the deep Arabian Sea. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2000, 47, 2673-2685.	1.4	19
160	Spatial distribution of benthic macrofauna in the Central Arctic Ocean. <i>PLoS ONE</i> , 2018, 13, e0200121.	2.5	19
161	Saturated CO ₂ inhibits microbial processes in CO ₂ -vented deep-sea sediments. <i>Biogeosciences</i> , 2013, 10, 5639-5649.	3.3	18
162	Microfauna–Macrofauna Interaction in the Seafloor: Lessons from the Tubeworm. <i>PLoS Biology</i> , 2005, 3, e102.	5.6	17

#	ARTICLE	IF	CITATIONS
163	Improved <i>dsrA</i> -Based Terminal Restriction Fragment Length Polymorphism Analysis of Sulfate-Reducing Bacteria. <i>Applied and Environmental Microbiology</i> , 2010, 76, 5308-5311.	3.1	17
164	The Future of Integrated Deep-Sea Research in Europe: The HERMIONE Project. <i>Oceanography</i> , 2009, 22, 178-191.	1.0	16
165	Effects of fluctuating hypoxia on benthic oxygen consumption in the Black Sea (Crimean shelf). <i>Biogeosciences</i> , 2015, 12, 5075-5092.	3.3	16
166	Spatial Distribution of Arctic Bacterioplankton Abundance Is Linked to Distinct Water Masses and Summertime Phytoplankton Bloom Dynamics (Fram Strait, 79°N). <i>Frontiers in Microbiology</i> , 2021, 12, 658803.	3.5	16
167	The Microbial Olympics. <i>Nature Reviews Microbiology</i> , 2012, 10, 583-588.	28.6	15
168	Distribution and Composition of Thiotrophic Mats in the Hypoxic Zone of the Black Sea (150–170 m). <i>Frontiers in Microbiology</i> , 2015, 6, 115.	3.5	15
169	Correction for Holler et al., Carbon and sulfur back flux during anaerobic microbial oxidation of methane and coupled sulfate reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 21170-21170.	7.1	13
170	Molecular Composition of Dissolved Organic Matter in Sediment Porewater of the Arctic Deep-Sea Observatory HAUSGARTEN (Fram Strait). <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	13
171	Mud Volcanoes. <i>Journal of Marine Research</i> , 2010, , 205-214.		13
172	From pole to pole: 33 years of physical oceanography onboard R/V <i>Albatross</i> and <i>Polarstern</i> . <i>Earth System Science Data</i> , 2017, 9, 211-220.	9.9	13
173	Novel observations of <i>Thiobacterium</i> , a sulfur-storing Gammaproteobacterium producing gelatinous mats. <i>ISME Journal</i> , 2010, 4, 1031-1043.	9.8	12
174	I'm always drawn back to the ice. <i>New Scientist</i> , 2015, 225, 28-29.	0.0	12
175	Submesoscale physicochemical dynamics directly shape bacterioplankton community structure in space and time. <i>Limnology and Oceanography</i> , 2021, 66, 2901-2913.	3.1	12
176	In Situ Technologies for Studying Deep-Sea Hotspot Ecosystems. <i>Oceanography</i> , 2009, 22, 177-177.	1.0	11
177	Regional variation of total microbial biomass in sediments of the deep Arabian Sea. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2000, 47, 149-168.	1.4	10
178	Responses of an abyssal meiobenthic community to short-term burial with crushed nodule particles in the south-east Pacific. <i>Biogeosciences</i> , 2019, 16, 2329-2341.	3.3	9
179	In situ observation of sponge trails suggests common sponge locomotion in the deep central Arctic. <i>Current Biology</i> , 2021, 31, R368-R370.	3.9	9
180	The Seabed as Natural Laboratory: Lessons From Uncultivated Methanotrophs. <i>Microbiology Monographs</i> , 2009, , 293-316.	0.6	6

#	ARTICLE	IF	CITATIONS
181	EXtreme ecosystem studies in the deep OCEan : Technological Developments. , 2007, , .		5
182	Crystal ball “ 2009. Environmental Microbiology Reports, 2009, 1, 3-26.	2.4	5
183	Anaerobic Methane Oxidizers. , 2018, , 1-21.		5
184	Anaerobic Methane Oxidizers. , 2010, , 2023-2032.		5
185	The German Contribution to ESONET - Integrating Activities for Setting up an Interoperable Ocean Observation System in Europe. , 2007, , .		4
186	Impact of space, time and complex environments on microbial communities. Clinical Microbiology and Infection, 2009, 15, 60-62.	6.0	4
187	The Seabed as Natural Laboratory: Lessons From Uncultivated Methanotrophs. Microbiology Monographs, 2009, , 59-82.	0.6	4
188	Recovery of Paleodictyon patterns after simulated mining activity on Pacific nodule fields. Marine Biodiversity, 2021, 51, 1.	1.0	4
189	Pelagic-Benthic Coupling in the Laptev Sea Affected by Ice Cover. , 1999, , 143-152.		3
190	Anaerobic Methane Oxidizers. , 2019, , 113-132.		3
191	Microbial Systems in Sedimentary Environments of Continental Margins. , 2002, , 479-495.		3
192	Anaerobic Oxidation of Methane with Sulfate. Encyclopedia of Earth Sciences Series, 2011, , 36-47.	0.1	2
193	A participative tool for sharing, annotating and archiving submarine video data. , 2015, , .		2
194	Habitats of Anaerobic Methane Oxidizers. , 2010, , 2193-2202.		2
195	Acoustic Detection of Methane Plumes. Energy Exploration and Exploitation, 2003, 21, 299-301.	2.3	1
196	Microbial Carbon Sequestration “ An IRCCM Research Project. Energy Exploration and Exploitation, 2003, 21, 323-327.	2.3	0
197	Microbial ecology: Seeing growth without culture. Nature Microbiology, 2016, 1, 16158.	13.3	0
198	Thermophilic Archaea Activate Liquid Alkanes Using Divergent Methyl-Coenzyme M Reductases. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
199	Methods for the Study of Cold Seep Ecosystems. , 2010, , 3443-3451.		0
200	Mikroorganismen des Tiefseebodens: Vielfalt, Verteilung, Funktion. , 2017, , 211-222.		0
201	12 Fragen an Antje Boetius. Gaia, 2019, 28, 254-255.	0.7	0