Antje Boetius

List of Publications by Year
in descending order

201 papers	24,940 citations	8749 75 h-index	7944 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. Nature, 2000, 407, 623-626.	13.7	2,636
2	Anaerobic Oxidation of Methane: Progress with an Unknown Process. Annual Review of Microbiology, 2009, 63, 311-334.	2.9	1,405
3	Scientistsâ€™ warning to humanity: microorganisms and climate change. Nature Reviews Microbiology, 2019, 17, 569-586.	13.6	1,138
4	Microbial Reefs in the Black Sea Fueled by Anaerobic Oxidation of Methane. Science, 2002, 297, 1013-1015.	6.0	673
5	Feast and famine â€” microbial life in the deep-sea bed. Nature Reviews Microbiology, 2007, 5, 770-781.	13.6	577
6	Novel microbial communities of the Haakon Mosby mud volcano and their role as a methane sink. Nature, 2006, 443, 854-858.	13.7	570
7	Diversity and Distribution of Methanotrophic Archaea at Cold Seeps. Applied and Environmental Microbiology, 2005, 71, 467-479.	1.4	556
8	Global Patterns of Bacterial Beta-Diversity in Seafloor and Seawater Ecosystems. PLoS ONE, 2011, 6, e24570.	1.1	525
9	Intercellular wiring enables electron transfer between methanotrophic archaea and bacteria. Nature, 2015, 526, 587-590.	13.7	469
10	The anaerobic oxidation of methane and sulfate reduction in sediments from Gulf of Mexico cold seeps. Chemical Geology, 2004, 205, 219-238.	1.4	466
11	Seafloor oxygen consumption fuelled by methane from cold seeps. Nature Geoscience, 2013, 6, 725-734.	5.4	409
12	In vitro demonstration of anaerobic oxidation of methane coupled to sulphate reduction in sediment from a marine gas hydrate area. Environmental Microbiology, 2002, 4, 296-305.	1.8	404
13	Export of Algal Biomass from the Melting Arctic Sea Ice. Science, 2013, 339, 1430-1432.	6.0	383
14	Microbial ecology of the cryosphere: sea ice and glacial habitats. Nature Reviews Microbiology, 2015, 13, 677-690.	13.6	344
15	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.	1.4	338
16	Anaerobic oxidation of methane above gas hydrates at Hydrate Ridge, NE Pacific Ocean. Marine Ecology - Progress Series, 2003, 264, 1-14.	0.9	296
17	In vitro cell growth of marine archaeal-bacterial consortia during anaerobic oxidation of methane with sulfate. Environmental Microbiology, 2007, 9, 187-196.	1.8	294
18	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

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19	Global Patterns and Predictions of Seafloor Biomass Using Random Forests. PLoS ONE, 2010, 5, e15323.	1.1	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.	1.8	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.	1.0	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.	3.3	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.	13.7	225
25	Diversity and dynamics of rare and of resident bacterial populations in coastal sands. ISME Journal, 2012, 6, 542-553.	4.4	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.	1.0	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.	1.6	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.	1.4	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.	1.6	204
30	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.	1.6	198
31	Thermophilic anaerobic oxidation of methane by marine microbial consortia. ISME Journal, 2011, 5, 1946-1956.	4.4	185
32	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
33	Anaerobic oxidation of methane and sulfate reduction along the Chilean continental margin. Geochimica Et Cosmochimica Acta, 2005, 69, 2767-2779.	1.6	173
34	Microbial methane turnover at mud volcanoes of the Gulf of Cadiz. Geochimica Et Cosmochimica Acta, 2006, 70, 5336-5355.	1.6	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.	0.6	171
36	Biological and chemical sulfide oxidation in a Beggiatoa inhabited marine sediment. ISME Journal, 2007, 1, 341-353.	4.4	170

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37	Evidence for anaerobic oxidation of methane in sediments of â€ƒa freshwater system (Lago di Cadagno). FEMS Microbiology Ecology, 2011, 76, 26-38.	1.3	166
38	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
39	Time- and sediment depth-related variations in bacterial diversity and community structure in subtidal sands. ISME Journal, 2009, 3, 780-791.	4.4	159
40	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
41	Effects of Temperature and Pressure on Sulfate Reduction and Anaerobic Oxidation of Methane in Hydrothermal Sediments of Guaymas Basin. Applied and Environmental Microbiology, 2004, 70, 1231-1233.	1.4	150
42	Anaerobic oxidation of methane at different temperature regimes in Guaymas Basin hydrothermal sediments. ISME Journal, 2012, 6, 1018-1031.	4.4	149
43	Photosynthetic production in the central Arctic Ocean during the record sea-ice minimum in 2012. Biogeosciences, 2015, 12, 3525-3549.	1.3	149
44	Bacterial taxaâ€"area and distanceâ€"decay relationships in marine environments. Molecular Ecology, 2014, 23, 954-964.	2.0	147
45	Hypoxia causes preservation of labile organic matter and changes seafloor microbial community composition (Black Sea). Science Advances, 2017, 3, e1601897.	4.7	145
46	Biodiversity of Cold Seep Ecosystems Along the European Margins. Oceanography, 2009, 22, 110-127.	0.5	140
47	Biogeochemistry and Community Composition of Iron- and Sulfur-Precipitating Microbial Mats at the Chefren Mud Volcano (Nile Deep Sea Fan, Eastern Mediterranean). Applied and Environmental Microbiology, 2008, 74, 3198-3215.	1.4	137
48	Assimilation of methane and inorganic carbon by microbial communities mediating the anaerobic oxidation of methane. Environmental Microbiology, 2008, 10, 2287-2298.	1.8	136
49	Diversity and Biogeography of Bathyal and Abyssal Seafloor Bacteria. PLoS ONE, 2016, 11, e0148016.	1.1	132
50	The energyâ€"diversity relationship of complex bacterial communities in Arctic deep-sea sediments. ISME Journal, 2012, 6, 724-732.	4.4	131
51	Methane emission and consumption at a North Sea gas seep (Tommeliten area). Biogeosciences, 2005, 2, 335-351.	1.3	129
52	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
53	Regulation of microbial enzymatic degradation of organic matter in deep-sea sediments. Marine Ecology - Progress Series, 1994, 104, 299-307.	0.9	119
54	Intact polar lipids of anaerobic methanotrophic archaea and associated bacteria. Organic Geochemistry, 2008, 39, 992-999.	0.9	118

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55	Biogeochemistry of a deep-sea whale fall: sulfate reduction, sulfide efflux and methanogenesis. Marine Ecology - Progress Series, 2009, 382, 1-21.	0.9	117
56	<i>Candidatus</i> Desulfofervidus auxilii, a hydrogenotrophic sulfateâ€reducing bacterium involved in the thermophilic anaerobic oxidation of methane. Environmental Microbiology, 2016, 18, 3073-3091.	1.8	115
57	How Deep-Sea Wood Falls Sustain Chemosynthetic Life. PLoS ONE, 2013, 8, e53590.	1.1	113
58	Effect of organic enrichments on hydrolytic potentials and growth of bacteria in deep-sea sediments. Marine Ecology - Progress Series, 1996, 140, 239-250.	0.9	112
59	Substantial ¹³C/¹²C and D/H fractionation during anaerobic oxidation of methane by marine consortia enriched <i>in vitro</i>. Environmental Microbiology Reports, 2009, 1, 370-376.	1.0	111
60	Factors controlling the distribution of anaerobic methanotrophic communities in marine environments: Evidence from intact polar membrane lipids. Geochimica Et Cosmochimica Acta, 2011, 75, 164-184.	1.6	111
61	Structure and Drivers of Cold Seep Ecosystems. Oceanography, 2009, 22, 92-109.	0.5	110
62	Arctic warming interrupts the Transpolar Drift and affects long-range transport of sea ice and ice-rafted matter. Scientific Reports, 2019, 9, 5459.	1.6	108
63	Endosymbioses between bacteria and deepâ€sea siboglinid tubeworms from an Arctic Cold Seep (Haakon) Tj ETQq1 1 0.784314 rgBT /C	1.8	107
64	Quantification of seep-related methane gas emissions at Tommeliten, North Sea. Continental Shelf Research, 2011, 31, 867-878.	0.9	107
65	Formation of carbonate chimneys in the Mediterranean Sea linked to deep-water oxygen depletion. Nature Geoscience, 2013, 6, 755-760.	5.4	105
66	Deep-Water Chemosynthetic Ecosystem Research during the Census of Marine Life Decade and Beyond: A Proposed Deep-Ocean Road Map. PLoS ONE, 2011, 6, e23259.	1.1	105
67	Benthic oxygen uptake, hydrolytic potentials and microbial biomass at the Arctic continental slope. Deep-Sea Research Part I: Oceanographic Research Papers, 1998, 45, 239-275.	0.6	104
68	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.	3.3	104
69	Niche differentiation among mat-forming, sulfide-oxidizing bacteria at cold seeps of the Nile Deep Sea Fan (Eastern Mediterranean Sea). Geobiology, 2011, 9, 330-348.	1.1	101
70	Composition, Buoyancy Regulation and Fate of Ice Algal Aggregates in the Central Arctic Ocean. PLoS ONE, 2014, 9, e107452.	1.1	101
71	Microbial biomass and activities in deep-sea sediments of the Eastern Mediterranean: trenches are benthic hotspots. Deep-Sea Research Part I: Oceanographic Research Papers, 1996, 43, 1439-1460.	0.6	98
72	Bacterial activity in sediments of the deep Arabian Sea in relation to vertical flux. Deep-Sea Research Part II: Topical Studies in Oceanography, 2000, 47, 2835-2875.	0.6	95

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73	Gene expression and ultrastructure of mesoâ€•and thermophilic methanotrophic consortia. Environmental Microbiology, 2018, 20, 1651-1666.	1.8	90
74	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.	0.6	89
75	Subsurface Microbial Methanotrophic Mats in the Black Sea. Applied and Environmental Microbiology, 2005, 71, 6375-6378.	1.4	87
76	Microbial methane turnover in different marine habitats. Palaeogeography, Palaeoclimatology, Palaeoecology, 2005, 227, 6-17.	1.0	86
77	Responses of deep-sea benthos to sedimentation patterns in the North-East Atlantic in 1992. Deep-Sea Research Part I: Oceanographic Research Papers, 1999, 46, 573-596.	0.6	85
78	Microbial Communities of Deep-Sea Methane Seeps at Hikurangi Continental Margin (New Zealand). PLoS ONE, 2013, 8, e72627.	1.1	78
79	Comparison of Two 16S rRNA Primers (V3â€“V4 and V4â€“V5) for Studies of Arctic Microbial Communities. Frontiers in Microbiology, 2021, 12, 637526.	1.5	77
80	Ecological coherence of diversity patterns derived from classical fingerprinting and <scp>N</scp>ext <scp>G</scp>eneration <scp>S</scp>equencing techniques. Environmental Microbiology, 2014, 16, 2672-2681.	1.8	73
81	Benthic metabolism and degradation of natural particulate organic matter in carbonate and silicate reef sands of the northern Red Sea. Marine Ecology - Progress Series, 2005, 298, 69-78.	0.9	72
82	Anaerobic Biodegradation of Hydrocarbons Including Methane. , 2006, , 1028-1049.		70
83	Assessing subâ€seafloor microbial activity by combined stable isotope probing with deuterated water and ¹³Câ€bicarbonate. Environmental Microbiology, 2012, 14, 1517-1527.	1.8	70
84	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.	1.1	70
85	Influence of ice thickness and surface properties on light transmission through <scp>A</scp>rctic sea ice. Journal of Geophysical Research: Oceans, 2015, 120, 5932-5944.	1.0	70
86	Microbial methane oxidation and sulfate reduction at cold seeps of the deep Eastern Mediterranean Sea. Marine Geology, 2009, 261, 114-127.	0.9	69
87	Spatial scales of bacterial community diversity at cold seeps (Eastern Mediterranean Sea). ISME Journal, 2015, 9, 1306-1318.	4.4	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. Marine Biology, 2011, 158, 1187-1210.	0.7	67
89	On the relationship between methane production and oxidation by anaerobic methanotrophic communities from cold seeps of the Gulf of Mexico. Environmental Microbiology, 2008, 10, 1108-1117.	1.8	66
90	â€œ <i>Candidatus</i> Ethanoperedens,â€•a Thermophilic Genus of <i>Archaea</i> Mediating the Anaerobic Oxidation of Ethane. MBio, 2020, 11, .	1.8	66

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91	Methane fluxes and carbonate deposits at a cold seep area of the Central Nile Deep Sea Fan, Eastern Mediterranean Sea. Marine Geology, 2014, 347, 27-42.	0.9	65
92	Biogeography of Deep-Sea Benthic Bacteria at Regional Scale (LTER HAUSGARTEN, Fram Strait, Arctic). PLoS ONE, 2013, 8, e72779.	1.1	65
93	Effects of a deep-sea mining experiment on seafloor microbial communities and functions after 26 years. Science Advances, 2020, 6, eaaz5922.	4.7	64
94	Relationships between Host Phylogeny, Host Type and Bacterial Community Diversity in Cold-Water Coral Reef Sponges. PLoS ONE, 2013, 8, e55505.	1.1	64
95	Anaerobic Degradation of Non-Methane Alkanes by â€œ <i>Candidatus</i> Methanolipariaâ€•in Hydrocarbon Seeps of the Gulf of Mexico. MBio, 2019, 10, .	1.8	63
96	Comparative genomics reveals electron transfer and syntrophic mechanisms differentiating methanotrophic and methanogenic archaea. PLoS Biology, 2022, 20, e3001508.	2.6	62
97	In situ development of a methanotrophic microbiome in deep-sea sediments. ISME Journal, 2019, 13, 197-213.	4.4	61
98	Benthic community responses to pulses in pelagic food supply: North Pacific Subtropical Gyre. Deep-Sea Research Part I: Oceanographic Research Papers, 2002, 49, 971-990.	0.6	60
99	Mind the seafloor. Science, 2018, 359, 34-36.	6.0	60
100	Hotspot Ecosystem Research on Europe's Deep-Ocean Margins. Oceanography, 2004, 17, 132-143.	0.5	60
101	Biogeochemistry of a low-activity cold seep in the Larsen B area, western Weddell Sea, Antarctica. Biogeosciences, 2009, 6, 2383-2395.	1.3	58
102	Inter- and intra-habitat bacterial diversity associated with cold-water corals. ISME Journal, 2009, 3, 756-759.	4.4	57
103	Life at the edge of methane ice: microbial cycling of carbon and sulfur in Gulf of Mexico gas hydrates. Chemical Geology, 2004, 205, 239-251.	1.4	56
104	Molecular characterization of bacteria associated with the trophosome and the tube of Lamellibrachia sp., a siboglinid annelid from cold seeps in the eastern Mediterranean. FEMS Microbiology Ecology, 2009, 69, 395-409.	1.3	56
105	Dissolved organic matter in pore water of Arctic Ocean sediments: Environmental influence on molecular composition. Organic Geochemistry, 2016, 97, 41-52.	0.9	56
106	Influence of the physical environment on polar phytoplankton blooms: A case study in the Fram Strait. Journal of Marine Systems, 2014, 132, 196-207.	0.9	55
107	Biogeochemical processes and microbial diversity of the Gullfaks and Tommeliten methane seeps (Northern North Sea). Biogeosciences, 2008, 5, 1127-1144.	1.3	54
108	Transport and consumption of oxygen and methane in different habitats of the HÃ¥kon Mosby Mud Volcano (HMMV). Limnology and Oceanography, 2010, 55, 2366-2380.	1.6	54

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109	Marine microbes in 4D â€” using time series observation to assess the dynamics of the ocean microbiome and its links to ocean health. Current Opinion in Microbiology, 2018, 43, 169-185.	2.3	54
110	Ocean Floor Observation and Bathymetry System (OFOBS): A New Towed Camera/Sonar System for Deep-Sea Habitat Surveys. IEEE Journal of Oceanic Engineering, 2019, 44, 87-99.	2.1	54
111	High-resolution mapping of large gas emitting mud volcanoes on the Egyptian continental margin (Nile Deep Sea Fan) by AUV surveys. Marine Geophysical Researches, 2008, 29, 275-290.	0.5	53
112	Macroecological patterns of marine bacteria on a global scale. Journal of Biogeography, 2013, 40, 800-811.	1.4	53
113	Microbial Communities in the East and West Fram Strait During Sea Ice Melting Season. Frontiers in Marine Science, 2018, 5, .	1.2	53
114	Effects of Ice-Algal Aggregate Export on the Connectivity of Bacterial Communities in the Central Arctic Ocean. Frontiers in Microbiology, 2018, 9, 1035.	1.5	53
115	Metabolically active microbial communities in marine sediment under high-CO2 and low-pH extremes. ISME Journal, 2013, 7, 555-567.	4.4	51
116	Diversity and metabolism of <i>Woeseiales</i> bacteria, global members of marine sediment communities. ISME Journal, 2020, 14, 1042-1056.	4.4	51
117	Eruption of a deep-sea mud volcano triggers rapid sediment movement. Nature Communications, 2014, 5, 5385.	5.8	50
118	Association of deep-sea incirrate octopods with manganese crusts and nodule fields in the Pacific Ocean. Current Biology, 2016, 26, R1268-R1269.	1.8	50
119	Digestive enzymes in marine invertebrates from hydrothermal vents and other reducing environments. Marine Biology, 1995, 122, 105-113.	0.7	49
120	Diversity and distribution of methane-oxidizing microbial communities associated with different faunal assemblages in a giant pockmark of the Gabon continental margin. Deep-Sea Research Part II: Topical Studies in Oceanography, 2009, 56, 2248-2258.	0.6	49
121	Menes caldera, a highly active site of brine seepage in the Eastern Mediterranean sea: â€œIn situâ€• observations from the NAUTINIL expedition (2003). Marine Geology, 2009, 261, 138-152.	0.9	48
122	Mats of psychrophilic thiotrophic bacteria associated with cold seeps of the Barents Sea. Biogeosciences, 2012, 9, 2947-2960.	1.3	47
123	Microbial hydrolytic enzyme activities in deep-sea sediments. Helgolâ̂šÂ§nder Meeresuntersuchungen, 1995, 49, 177-187.	0.2	44
124	Spatial Scales of Bacterial Diversity in Cold-Water Coral Reef Ecosystems. PLoS ONE, 2012, 7, e32093.	1.1	44
125	Geochemical processes and chemosynthetic primary production in different thiotrophic mats of the HÃ¥kon Mosby Mud Volcano (Barents Sea). Limnology and Oceanography, 2010, 55, 931-949.	1.6	43
126	Bacterial diversity and biogeochemistry of different chemosynthetic habitats of the REGAB cold seep (West African margin, 3160 m water depth). Biogeosciences, 2012, 9, 5031-5048.	1.3	43

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127	What Feeds the Benthos in the Arctic Basins? Assembling a Carbon Budget for the Deep Arctic Ocean. Frontiers in Marine Science, 2020, 7, .	1.2	42
128	Temporal and Spatial Variations of Bacterial and Faunal Communities Associated with Deep-Sea Wood Falls. PLoS ONE, 2017, 12, e0169906.	1.1	41
129	Biomarker indicators for anaerobic oxidizers of methane in brackish-marine sediments with diffusive methane fluxes. Organic Geochemistry, 2010, 41, 414-426.	0.9	40
130	Oxygen dynamics in the Black Sea as seen by Argo profiling floats. Geophysical Research Letters, 2013, 40, 3085-3090.	1.5	39
131	Diazotroph Diversity in the Sea Ice, Melt Ponds, and Surface Waters of the Eurasian Basin of the Central Arctic Ocean. Frontiers in Microbiology, 2016, 7, 1884.	1.5	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. Biogeosciences, 2009, 6, 1149-1165.	1.3	38
134	OCEAN SCIENCE: Lost City Life. Science, 2005, 307, 1420-1422.	6.0	37
135	Thriving in Salt. Science, 2009, 324, 1523-1525.	6.0	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. Geobiology, 2011, 9, 481-491.	1.1	34
137	Sulfurization of dissolved organic matter in the anoxic water column of the Black Sea. Science Advances, 2021, 7, .	4.7	34
138	Geochemical processes and chemosynthetic primary production in different thiotrophic mats of the HÃ¥kon Mosby Mud Volcano (Barents Sea). Limnology and Oceanography, 2010, 55, 931-949.	1.6	34
139	Microbial Diversity and Connectivity in Deep-Sea Sediments of the South Atlantic Polar Front. Frontiers in Microbiology, 2019, 10, 665.	1.5	32
140	Sea-ice derived meltwater stratification slows the biological carbon pump: results from continuous observations. Nature Communications, 2021, 12, 7309.	5.8	31
141	Microbial activity and particulate matter in the benthic nepheloid layer (BNL) of the deep Arabian Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2000, 47, 2687-2706.	0.6	30
142	A novel, matâ€forming <i>Thiomargarita</i> population associated with a sulfidic fluid flow from a deepâ€sea mud volcano. Environmental Microbiology, 2011, 13, 495-505.	1.8	30
143	Scientific Challenges and Present Capabilities in Underwater Robotic Vehicle Design and Navigation for Oceanographic Exploration Under-Ice. Remote Sensing, 2020, 12, 2588.	1.8	30
144	Desulfobacter psychrotolerans sp. nov., a new psychrotolerant sulfate-reducing bacterium and descriptions of its physiological response to temperature changes. Antonie Van Leeuwenhoek, 2006, 89, 109-124.	0.7	29

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145	An experimental study on short-term changes in the anaerobic oxidation of methane in response to varying methane and sulfate fluxes. Biogeosciences, 2009, 6, 867-876.	1.3	28
146	Microbial habitat connectivity across spatial scales and hydrothermal temperature gradients at Guaymas Basin. Frontiers in Microbiology, 2013, 4, 207.	1.5	28
147	Patterns and trends of macrobenthic abundance, biomass and production in the deep Arctic Ocean. Polar Research, 2015, 34, 24008.	1.6	28
148	CO ₂ leakage alters biogeochemical and ecological functions of submarine sands. Science Advances, 2018, 4, eaao2040.	4.7	27
149	The polar night shift: seasonal dynamics and drivers of Arctic Ocean microbiomes revealed by autonomous sampling. ISME Communications, 2021, 1, .	1.7	27
150	Methane and sulfide fluxes in permanent anoxia: In situ studies at the Dvurechenskii mud volcano (Sorokin Trough, Black Sea). Geochimica Et Cosmochimica Acta, 2010, 74, 5002-5018.	1.6	26
151	Summertime Chlorophyll a and Particulate Organic Carbon Standing Stocks in Surface Waters of the Fram Strait and the Arctic Ocean (1991â€“2015). Frontiers in Marine Science, 2020, 7, .	1.2	26
152	The contribution of microbial communities in polymetallic nodules to the diversity of the deep-sea microbiome of the Peru Basin (4130â€“4198â€‰m depth). Biogeosciences, 2020, 17, 3203-3222.	1.3	26
153	Deep-sea megabenthos communities of the Eurasian Central Arctic are influenced by ice-cover and sea-ice algal falls. PLoS ONE, 2019, 14, e0211009.	1.1	25
154	Limitations of microbial hydrocarbon degradation at the Amon mud volcano (Nile deep-sea fan). Biogeosciences, 2013, 10, 3269-3283.	1.3	22
155	Giant sponge grounds of Central Arctic seamounts are associated with extinct seep life. Nature Communications, 2022, 13, 638.	5.8	22
156	Sea ice presence is linked to higher carbon export and vertical microbial connectivity in the Eurasian Arctic Ocean. Communications Biology, 2021, 4, 1255.	2.0	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 â€" big questions about small life for our future. Nature Reviews Microbiology, 2019, 17, 331-332.	13.6	20
159	Mass sedimentation of the swimming crab Charybdis smithii (Crustacea: Decapoda) in the deep Arabian Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2000, 47, 2673-2685.	0.6	19
160	Spatial distribution of benthic macrofauna in the Central Arctic Ocean. PLoS ONE, 2018, 13, e0200121.	1.1	19
161	Saturated CO₂ inhibits microbial processes in CO₂-vented deep-sea sediments. Biogeosciences, 2013, 10, 5639-5649.	1.3	18
162	Microfaunaâ€“Macrofauna Interaction in the Seafloor: Lessons from the Tubeworm. PLoS Biology, 2005, 3, e102.	2.6	17

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163	Improved <i>dsrA</i> -Based Terminal Restriction Fragment Length Polymorphism Analysis of Sulfate-Reducing Bacteria. Applied and Environmental Microbiology, 2010, 76, 5308-5311.	1.4	17
164	The Future of Integrated Deep-Sea Research in Europe: The HERMIONE Project. Oceanography, 2009, 22, 178-191.	0.5	16
165	Effects of fluctuating hypoxia on benthic oxygen consumption in the Black Sea (Crimean shelf). Biogeosciences, 2015, 12, 5075-5092.	1.3	16
166	Spatial Distribution of Arctic Bacterioplankton Abundance Is Linked to Distinct Water Masses and Summertime Phytoplankton Bloom Dynamics (Fram Strait, 79Â°N). Frontiers in Microbiology, 2021, 12, 658803.	1.5	16
167	The Microbial Olympics. Nature Reviews Microbiology, 2012, 10, 583-588.	13.6	15
168	Distribution and Composition of Thiotrophic Mats in the Hypoxic Zone of the Black Sea (150â€“170 m) Tj ETQq0 0 0 rgBT /Overlock 10	1.5	15
169	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.	3.3	13
170	Molecular Composition of Dissolved Organic Matter in Sediment Porewater of the Arctic Deep-Sea Observatory HAUSGARTEN (Fram Strait). Frontiers in Marine Science, 2020, 7, .	1.2	13
171	Mud Volcanoes. , 2010, , 205-214.		13
172	From pole to pole: 33Âyears of physical oceanography onboard R/V <i>Polarstern</i>. Earth System Science Data, 2017, 9, 211-220.	3.7	13
173	Novel observations of <i>Thiobacterium</i>, a sulfur-storing Gammaproteobacterium producing gelatinous mats. ISME Journal, 2010, 4, 1031-1043.	4.4	12
174	I'm always drawn back to the ice. New Scientist, 2015, 225, 28-29.	0.0	12
175	Submesoscale physicochemical dynamics directly shape bacterioplankton community structure in space and time. Limnology and Oceanography, 2021, 66, 2901-2913.	1.6	12
176	In Situ Technologies for Studying Deep-Sea Hotspot Ecosystems. Oceanography, 2009, 22, 177-177.	0.5	11
177	Regional variation of total microbial biomass in sediments of the deep Arabian Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2000, 47, 149-168.	0.6	10
178	Responses of an abyssal meiobenthic community to short-term burial with crushed nodule particles in the south-east Pacific. Biogeosciences, 2019, 16, 2329-2341.	1.3	9
179	In situ observation of sponge trails suggests common sponge locomotion in the deep central Arctic. Current Biology, 2021, 31, R368-R370.	1.8	9
180	The Seabed as Natural Laboratory: Lessons From Uncultivated Methanotrophs. Microbiology Monographs, 2009, , 293-316.	0.3	6

#	Article	IF	Citations
181	EXtreme ecosystem studies in the deep OCEan : Technological Developments. , 2007, , .		5
182	Crystal ball â€“ 2009. Environmental Microbiology Reports, 2009, 1, 3-26.	1.0	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.	2.8	4
187	The Seabed as Natural Laboratory: Lessons From Uncultivated Methanotrophs. Microbiology Monographs, 2009, , 59-82.	0.3	4
188	Recovery of Paleodictyon patterns after simulated mining activity on Pacific nodule fields. Marine Biodiversity, 2021, 51, 1.	0.3	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.	1.1	1
196	Microbial Carbon Sequestration â€” An IRCCM Research Project. Energy Exploration and Exploitation, 2003, 21, 323-327.	1.1	0
197	Microbial ecology: Seeing growth without culture. Nature Microbiology, 2016, 1, 16158.	5.9	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.	0.3	0