Bo Barker JÃ¸rgensen

List of Publications by Year
in descending order

127 papers	23,138 citations	15503 65 h-index	17104 122 g-index
128 all docs	128 docs citations	128 times ranked	12665 citing authors

#	Article	IF	Citations
1	Response to substrate limitation by a marine sulfate-reducing bacterium. ISME Journal, 2022, 16, 200-210.	9.8	7
2	Multiple sulfur isotopes discriminate organoclastic and methane-based sulfate reduction by sub-seafloor pyrite formation. Geochimica Et Cosmochimica Acta, 2022, 316, 309-330.	3.9	28
3	Influence of Fe(III) source, light quality, photon flux and presence of oxygen on photoreduction of Fe(III)-organic complexes â€" Implications for light-influenced coastal freshwater and marine sediments. Science of the Total Environment, 2022, 814, 152767.	8.0	5
4	Sediment oxygen consumption: Role in the global marine carbon cycle. Earth-Science Reviews, 2022, 228, 103987.	9.1	50
5	Psychrophilic properties of sulfateâ€reducing bacteria in Arctic marine sediments. Limnology and Oceanography, 2021, 66, S293.	3.1	8
6	Benthic iron flux influenced by climateâ€sensitive interplay between organic carbon availability and sedimentation rate in Arctic fjords. Limnology and Oceanography, 2021, 66, 3374-3392.	3.1	11
7	Tight benthic-pelagic coupling drives seasonal and interannual changes in ironâ€'sulfur cycling in Arctic fjord sediments (Kongsfjorden, Svalbard). Journal of Marine Systems, 2021, , 103645.	2.1	5
8	Early diagenesis of sulfur in Bornholm Basin sediments: The role of upward diffusion of isotopically â€œheavyâ€•sulfide. Geochimica Et Cosmochimica Acta, 2021, 313, 359-377.	3.9	7
9	Glacial controls on redox-sensitive trace element cycling in Arctic fjord sediments (Spitsbergen,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.9	19
10	Early diagenesis of iron and sulfur in Bornholm Basin sediments: The role of near-surface pyrite formation. Geochimica Et Cosmochimica Acta, 2020, 284, 43-60.	3.9	33
11	Macrofaunal control of microbial community structure in continental margin sediments. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15911-15922.	7.1	40
12	The multiple sulphur isotope fingerprint of a sub-seafloor oxidative sulphur cycle driven by iron. Earth and Planetary Science Letters, 2020, 536, 116165.	4.4	29
13	Glacial influence on the iron and sulfur cycles in Arctic fjord sediments (Svalbard). Geochimica Et Cosmochimica Acta, 2020, 280, 423-440.	3.9	20
14	Quantification of sulphide oxidation rates in marine sediment. Geochimica Et Cosmochimica Acta, 2020, 280, 441-452.	3.9	27
15	Factors controlling the carbon isotope composition of dissolved inorganic carbon and methane in marine porewater: An evaluation by reaction-transport modelling. Journal of Marine Systems, 2019, 200, 103227.	2.1	35
16	Sulphur and carbon isotopes as tracers of past sub-seafloor microbial activity. Scientific Reports, 2019, 9, 604.	3.3	19
17	Unravelling the sulphur cycle of marine sediments. Environmental Microbiology, 2019, 21, 3533-3538.	3.8	12
18	Controls on volatile fatty acid concentrations in marine sediments (Baltic Sea). Geochimica Et Cosmochimica Acta, 2019, 258, 226-241.	3.9	38

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19	Marine Deep Biosphere Microbial Communities Assemble in Near-Surface Sediments in Aarhus Bay. Frontiers in Microbiology, 2019, 10, 758.	3.5	54
20	Environmental filtering determines family-level structure of sulfate-reducing microbial communities in subsurface marine sediments. ISME Journal, 2019, 13, 1920-1932.	9.8	40
21	Organoclastic sulfate reduction in the sulfate-methane transition of marine sediments. Geochimica Et Cosmochimica Acta, 2019, 254, 231-245.	3.9	56
22	The Biogeochemical Sulfur Cycle of Marine Sediments. Frontiers in Microbiology, 2019, 10, 849.	3.5	375
23	Preservation of microbial DNA in marine sediments: insights from extracellular DNA pools. Environmental Microbiology, 2018, 20, 4526-4542.	3.8	48
24	Global diffusive fluxes of methane in marine sediments. Nature Geoscience, 2018, 11, 421-425.	12.9	192
25	Bacterial interactions during sequential degradation of cyanobacterial necromass in a sulfidic arctic marine sediment. Environmental Microbiology, 2018, 20, 2927-2940.	3.8	50
26	Iron oxide reduction in methane-rich deep Baltic Sea sediments. Geochimica Et Cosmochimica Acta, 2017, 207, 256-276.	3.9	95
27	Iron-controlled oxidative sulfur cycling recorded in the distribution and isotopic composition of sulfur species in glacially influenced fjord sediments of west Svalbard. Chemical Geology, 2017, 466, 678-695.	3.3	33
28	Depth Distribution and Assembly of Sulfate-Reducing Microbial Communities in Marine Sediments of Aarhus Bay. Applied and Environmental Microbiology, 2017, 83, .	3.1	53
29	Thriving or surviving? Evaluating active microbial guilds in Baltic Sea sediment. Environmental Microbiology Reports, 2017, 9, 528-536.	2.4	39
30	Bioturbation as a key driver behind the dominance of Bacteria over Archaea in near-surface sediment. Scientific Reports, 2017, 7, 2400.	3.3	73
31	Microbial turnover times in the deep seabed studied by amino acid racemization modelling. Scientific Reports, 2017, 7, 5680.	3.3	61
32	The marine sulfate reducer Desulfobacterium autotrophicum HRM2 can switch between low and high apparent half-saturation constants for dissimilatory sulfate reduction. FEMS Microbiology Ecology, 2017, 93, .	2.7	24
33	Estimating the Abundance of Endospores of Sulfate-Reducing Bacteria in Environmental Samples by Inducing Germination and Exponential Growth. Geomicrobiology Journal, 2017, 34, 338-345.	2.0	11
34	Anaerobic microbial Fe(II) oxidation and Fe(III) reduction in coastal marine sediments controlled by organic carbon content. Environmental Microbiology, 2016, 18, 3159-3174.	3.8	42
35	Transcriptional analysis of sulfate reducing and chemolithoautotrophic sulfur oxidizing bacteria in the deep subseafloor. Environmental Microbiology Reports, 2016, 8, 452-460.	2.4	32
36	Single-Cell Genome and Group-Specific <i>dsrAB</i> Sequencing Implicate Marine Members of the Class <i>Dehalococcoidia</i> (Phylum <i>Chloroflexi</i>) in Sulfur Cycling. MBio, 2016, 7, .	4.1	78

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37	Controls on subsurface methane fluxes and shallow gas formation in Baltic Sea sediment (Aarhus) Tj ETQq1 1 0.784314 rgBT /Overlo	3.9	57
38	Coexistence of Microaerophilic, Nitrate-Reducing, and Phototrophic Fe(II) Oxidizers and Fe(III) Reducers in Coastal Marine Sediment. Applied and Environmental Microbiology, 2016, 82, 1433-1447.	3.1	76
39	Activity and community structures of sulfate-reducing microorganisms in polar, temperate and tropical marine sediments. ISME Journal, 2016, 10, 796-809.	9.8	85
40	Slow Microbial Life in the Seabed. Annual Review of Marine Science, 2016, 8, 311-332.	11.6	134
41	Life under extreme energy limitation: a synthesis of laboratory- and field-based investigations. FEMS Microbiology Reviews, 2015, 39, 688-728.	8.6	288
42	Origin, dynamics, and implications of extracellular DNA pools in marine sediments. Marine Genomics, 2015, 24, 185-196.	1.1	255
43	Uncultured <scp><i>D</i></scp><i>esulfobacteraceae</i> and <scp>C</scp>renarchaeotal group <scp>C</scp>3 incorporate ¹³<scp>C</scp>â€acetate in coastal marine sediment. Environmental Microbiology Reports, 2015, 7, 614-622.	2.4	51
44	Genome sequencing of a single cell of the widely distributed marine subsurface <i>Dehalococcoidia,</i> phylum <i>Chloroflexi</i>. ISME Journal, 2014, 8, 383-397.	9.8	172
45	Sulfidization of lacustrine glacial clay upon Holocene marine transgression (Arkona Basin, Baltic) Tj ETQq1 1 0.784314 rgBT /Overlock	3.9	38
46	Direct analysis of volatile fatty acids in marine sediment porewater by twoâ€dimensional ion chromatographyâ€mass spectrometry. Limnology and Oceanography: Methods, 2014, 12, 455-468.	2.0	46
47	Desulfoconvexum algidum gen. nov., sp. nov., a psychrophilic sulfate-reducing bacterium isolated from a permanently cold marine sediment. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 959-964.	1.7	36
48	Dispersal of thermophilic <i>Desulfotomaculum</i> endospores into Baltic Sea sediments over thousands of years. ISME Journal, 2013, 7, 72-84.	9.8	82
49	Microbial life under extreme energy limitation. Nature Reviews Microbiology, 2013, 11, 83-94.	28.6	582
50	The Impact of Sediment and Carbon Fluxes on the Biogeochemistry of Methane and Sulfur in Littoral Baltic Sea Sediments (HimmerfjÃrden, Sweden). Estuaries and Coasts, 2013, 36, 98-115.	2.2	42
51	Control of sulphate and methane distributions in marine sediments by organic matter reactivity. Geochimica Et Cosmochimica Acta, 2013, 104, 183-193.	3.9	72
52	Cyclic 100-ka (glacial-interglacial) migration of subseafloor redox zonation on the Peruvian shelf. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18098-18103.	7.1	35
53	Shrinking majority of the deep biosphere. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15976-15977.	7.1	55
54	Estimation of biogeochemical rates from concentration profiles: A novel inverse method. Estuarine, Coastal and Shelf Science, 2012, 100, 26-37.	2.1	32

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55	Concurrent low- and high-affinity sulfate reduction kinetics in marine sediment. Geochimica Et Cosmochimica Acta, 2011, 75, 2997-3010.	3.9	61
56	A cryptic sulfur cycle driven by iron in the methane zone of marine sediment (Aarhus Bay, Denmark). Geochimica Et Cosmochimica Acta, 2011, 75, 3581-3599.	3.9	288
57	Sulfate reduction below the sulfateâ€"methane transition in Black Sea sediments. Deep-Sea Research Part I: Oceanographic Research Papers, 2011, 58, 493-504.	1.4	70
58	Phosphate geochemistry, mineralization processes, and Thioploca distribution in shelf sediments off central Chile. Marine Geology, 2010, 277, 61-72.	2.1	22
59	Filamentous sulfur bacteria, Beggiatoa spp., in arctic marine sediments (Svalbard, 79Â°N). FEMS Microbiology Ecology, 2010, 73, no-no.	2.7	31
60	Big sulfur bacteria. ISME Journal, 2010, 4, 1083-1084.	9.8	18
61	Thermophilic anaerobes in Arctic marine sediments induced to mineralize complex organic matter at high temperature. Environmental Microbiology, 2010, 12, 1089-1104.	3.8	61
62	Sulfateâ€reducing bacteria in marine sediment (Aarhus Bay, Denmark): abundance and diversity related to geochemical zonation. Environmental Microbiology, 2009, 11, 1278-1291.	3.8	195
63	Response of fermentation and sulfate reduction to experimental temperature changes in temperate and Arctic marine sediments. ISME Journal, 2008, 2, 815-829.	9.8	68
64	Biogeochemistry of sulfur and iron in Thioploca-colonized surface sediments in the upwelling area off central chile. Geochimica Et Cosmochimica Acta, 2008, 72, 827-843.	3.9	73
65	Microbial ecology of the stratified water column of the Black Sea as revealed by a comprehensive biomarker study. Organic Geochemistry, 2007, 38, 2070-2097.	1.8	184
66	Feast and famine â€" microbial life in the deep-sea bed. Nature Reviews Microbiology, 2007, 5, 770-781.	28.6	577
67	Biological and chemical sulfide oxidation in a Beggiatoa inhabited marine sediment. ISME Journal, 2007, 1, 341-353.	9.8	170
68	Diversity and abundance of sulfate-reducing microorganisms in the sulfate and methane zones of a marine sediment, Black Sea. Environmental Microbiology, 2007, 9, 131-142.	3.8	233
69	Bacteria and Marine Biogeochemistry. , 2006, , 169-206.		86
70	ECOLOGY: A Starving Majority Deep Beneath the Seafloor. Science, 2006, 314, 932-934.	12.6	122
71	Sulfur Cycling and Methane Oxidation. , 2006, , 271-309.		159
72	Desulfovibrio frigidus sp. nov. and Desulfovibrio ferrireducens sp. nov., psychrotolerant bacteria isolated from Arctic fjord sediments (Svalbard) with the ability to reduce Fe(III). International Journal of Systematic and Evolutionary Microbiology, 2006, 56, 681-685.	1.7	47

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73	Environmental control on anaerobic oxidation of methane in the gassy sediments of EckernfÃ¶rde Bay (German Baltic). Limnology and Oceanography, 2005, 50, 1771-1786.	3.1	181
74	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
75	Anaerobic oxidation of methane and sulfate reduction along the Chilean continental margin. Geochimica Et Cosmochimica Acta, 2005, 69, 2767-2779.	3.9	173
76	Distributions of Microbial Activities in Deep Subseafloor Sediments. Science, 2004, 306, 2216-2221.	12.6	681
77	Anaerobic methane oxidation and a deep H2S sink generate isotopically heavy sulfides in Black Sea sediments. Geochimica Et Cosmochimica Acta, 2004, 68, 2095-2118.	3.9	341
78	Phylogeny and distribution of nitrate-storing Beggiatoa spp. in coastal marine sediments. Environmental Microbiology, 2003, 5, 523-533.	3.8	91
79	Quantification of dissimilatory (bi)sulphite reductase gene expression in <i>Desulfobacterium autotrophicum</i> using realâ€time RTâ€PCR. Environmental Microbiology, 2003, 5, 660-671.	3.8	47
80	Anaerobic ammonium oxidation by anammox bacteria in the Black Sea. Nature, 2003, 422, 608-611.	27.8	1,081
81	Regulation of bacterial sulfate reduction and hydrogen sulfide fluxes in the central namibian coastal upwelling zone. Geochimica Et Cosmochimica Acta, 2003, 67, 4505-4518.	3.9	176
82	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
83	Microbial Reefs in the Black Sea Fueled by Anaerobic Oxidation of Methane. Science, 2002, 297, 1013-1015.	12.6	673
84	Biogeochemistry of pyrite and iron sulfide oxidation in marine sediments. Geochimica Et Cosmochimica Acta, 2002, 66, 85-92.	3.9	285
85	Bacterial sulfate reduction in hydrothermal sediments of the Guaymas Basin, Gulf of California, Mexico. Deep-Sea Research Part I: Oceanographic Research Papers, 2002, 49, 827-841.	1.4	78
86	Big Bacteria. Annual Review of Microbiology, 2001, 55, 105-137.	7.3	445
87	Algal and archaeal polyisoprenoids in a recent marine sediment: Molecular isotopic evidence for anaerobic oxidation of methane. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	77
88	Controls on stable sulfur isotope fractionation during bacterial sulfate reduction in Arctic sediments. Geochimica Et Cosmochimica Acta, 2001, 65, 763-776.	3.9	106
89	Sulfate reduction in Black Sea sediments: in situ and laboratory radiotracer measurements from the shelf to 2000m depth. Deep-Sea Research Part I: Oceanographic Research Papers, 2001, 48, 2073-2096.	1.4	43
90	Sulfate reduction and anaerobic methane oxidation in Black Sea sediments. Deep-Sea Research Part I: Oceanographic Research Papers, 2001, 48, 2097-2120.	1.4	222

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91	Influence of water column dynamics on sulfide oxidation and other major biogeochemical processes in the chemocline of Mariager Fjord (Denmark). Marine Chemistry, 2001, 74, 29-51.	2.3	142
92	A marine microbial consortium apparently mediating anaerobic oxidation of methane. Nature, 2000, 407, 623-626.	27.8	2,636
93	Bacteria and Marine Biogeochemistry. , 2000, , 173-207.		110
94	Sulfate Reduction in Marine Sediments. , 2000, , 263-281.		51
95	Effect of temperature on sulphate reduction, growth rate and growth yield in five psychrophilic sulphate-reducing bacteria from Arctic sediments. Environmental Microbiology, 1999, 1, 457-467.	3.8	100
96	Community Size and Metabolic Rates of Psychrophilic Sulfate-Reducing Bacteria in Arctic Marine Sediments. Applied and Environmental Microbiology, 1999, 65, 4230-4233.	3.1	121
97	Temperature dependence of aerobic respiration in a coastal sediment. FEMS Microbiology Ecology, 1998, 25, 189-200.	2.7	114
98	Sulfate-Reducing Bacteria and Their Activities in Cyanobacterial Mats of Solar Lake (Sinai, Egypt). Applied and Environmental Microbiology, 1998, 64, 2943-2951.	3.1	204
99	Material flux in the sediment. Coastal and Estuarine Studies, 1996, , 115-135.	0.4	93
100	Case study â€" Aarhus Bay. Coastal and Estuarine Studies, 1996, , 137-154.	0.4	35
101	Die Mikrowelt der Meeresbakterien. Die Naturwissenschaften, 1995, 82, 269-278.	1.6	5
102	Sulfate reduction and thiosulfate transformations in a cyanobacterial mat during a diel oxygen cycle. FEMS Microbiology Ecology, 1994, 13, 303-312.	2.7	19
103	Diffusive and total oxygen uptake of deep-sea sediments in the eastern South Atlantic Ocean:in situ and laboratory measurements. Deep-Sea Research Part I: Oceanographic Research Papers, 1994, 41, 1767-1788.	1.4	258
104	Microbial sulfate reduction in deep-sea sediments at the Guaymas Basin hydrothermal vent area: Influence of temperature and substrates. Geochimica Et Cosmochimica Acta, 1994, 58, 3335-3343.	3.9	133
105	Thiosulfate and sulfite distributions in porewater of marine sediments related to manganese, iron, and sulfur geochemistry. Geochimica Et Cosmochimica Acta, 1994, 58, 67-73.	3.9	70
106	Manganese, iron and sulfur cycling in a coastal marine sediment, Aarhus bay, Denmark. Geochimica Et Cosmochimica Acta, 1994, 58, 5115-5129.	3.9	584
107	Diffusion processes and boundary layers in microbial mats. , 1994, , 243-253.		24
108	Anoxie transformations of radiolabeled hydrogen sulfide in marine and freshwater sediments. Geochimica Et Cosmochimica Acta, 1992, 56, 2425-2435.	3.9	92

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109	Sulfur isotope exchange between 35S-labeled inorganic sulfur compounds in anoxic marine sediments. Marine Chemistry, 1992, 38, 117-132.	2.3	36
110	Microsensor Measurements of Sulfate Reduction and Sulfide Oxidation in Compact Microbial Communities of Aerobic Biofilms. Applied and Environmental Microbiology, 1992, 58, 1164-1174.	3.1	252
111	Sulfide oxidation in the anoxic Black Sea chemocline. Deep-sea Research Part A, Oceanographic Research Papers, 1991, 38, S1083-S1103.	1.5	214
112	Pathways and Microbiology of Thiosulfate Transformations and Sulfate Reduction in a Marine Sediment (Kattegat, Denmark). Applied and Environmental Microbiology, 1991, 57, 847-856.	3.1	329
113	Thermophilic bacterial sulfate reduction in deep-sea sediments at the Guaymas Basin hydrothermal vent site (Gulf of California). Deep-sea Research Part A, Oceanographic Research Papers, 1990, 37, 695-710.	1.5	74
114	Oxidation and reduction of radiolabeled inorganic sulfur compounds in an estuarine sediment, Kysing Fjord, Denmark. Geochimica Et Cosmochimica Acta, 1990, 54, 2731-2742.	3.9	107
115	Sulfate reduction in marine sediments from the Baltic Sea-North Sea Transition. Ophelia, 1989, 31, 1-15.	0.3	34
116	Measurement of bacterial sulfate reduction in sediments: Evaluation of a single-step chromium reduction method. Biogeochemistry, 1989, 8, 205.	3.5	702
117	Oxygen uptake, bacterial distribution, and carbon-nitrogen-sulfur cycling in sediments from the baltic sea - North sea transition. Ophelia, 1989, 31, 29-49.	0.3	60
118	Sulfate reduction and the formation of 35Sâ€labeled FeS, FeS2, and S0 in coastal marine sediments. Limnology and Oceanography, 1989, 34, 793-806.	3.1	151
119	Microelectrodes: Their Use in Microbial Ecology. Advances in Microbial Ecology, 1986, , 293-352.	0.1	668
120	Microoxic-Anoxic Niche of <i>Beggiatoa</i> spp.: Microelectrode Survey of Marine and Freshwater Strains. Applied and Environmental Microbiology, 1986, 52, 161-168.	3.1	98
121	Diffusive boundary layers and the oxygen uptake of sediments and detritus1. Limnology and Oceanography, 1985, 30, 111-122.	3.1	638
122	Emissions of biogenic sulfur gases from a danish estuary. Atmospheric Environment, 1985, 19, 1737-1749.	1.0	77
123	Seasonal dynamics of elemental sulfur in two coastal sediments. Estuarine, Coastal and Shelf Science, 1982, 15, 255-266.	2.1	160
124	Mineralization of organic matter in the sea bedâ€"the role of sulphate reduction. Nature, 1982, 296, 643-645.	27.8	1,597
125	A comparison of oxygen, nitrate, and sulfate respiration in coastal marine sediments. Microbial Ecology, 1979, 5, 105-115.	2.8	232
126	The sulfur cycle of a coastal marine sediment (Limfjorden, Denmark)1. Limnology and Oceanography, 1977, 22, 814-832.	3.1	794

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127	Solar Lake (Sinai). 5. The sulfur cycle of the bcnthic cyanobacterial mats1. Limnology and Oceanography, 1977, 22, 657-666.	3.1	184