Timothy G Ferdelman

List of Publications by Year
in descending order

102 papers	9,533 citations	44042 48 h-index	39638 94 g-index
110 all docs	110 docs citations	110 times ranked	8322 citing authors

#	Article	IF	Citations
1	Distributions of Microbial Activities in Deep Subseafloor Sediments. Science, 2004, 306, 2216-2221.	6.0	681
2	Zero-valent sulphur is a key intermediate in marine methane oxidation. Nature, 2012, 491, 541-546.	13.7	498
3	Dense Populations of a Giant Sulfur Bacterium in Namibian Shelf Sediments. Science, 1999, 284, 493-495.	6.0	453
4	Deep sub-seafloor prokaryotes stimulated at interfaces over geological time. Nature, 2005, 436, 390-394.	13.7	414
5	Prokaryotic cells of the deep sub-seafloor biosphere identified as living bacteria. Nature, 2005, 433, 861-864.	13.7	413
6	The environmental controls that govern the end product of bacterial nitrate respiration. Science, 2014, 345, 676-679.	6.0	391
7	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.	1.6	288
8	A cold chromium distillation procedure for radiolabeled sulfide applied to sulfate reduction measurements. Limnology and Oceanography: Methods, 2004, 2, 171-180.	1.0	263
9	Subseafloor sedimentary life in the South Pacific Gyre. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11651-11656.	3.3	261
10	Structural and Functional Dynamics of Sulfate-Reducing Populations in Bacterial Biofilms. Applied and Environmental Microbiology, 1998, 64, 3731-3739.	1.4	250
11	Presence of oxygen and aerobic communities from sea floor to basement in deep-sea sediments. Nature Geoscience, 2015, 8, 299-304.	5.4	226
12	Microbial sequestration of phosphorus in anoxic upwelling sediments. Nature Geoscience, 2010, 3, 557-561.	5.4	214
13	Endosymbiotic sulphate-reducing and sulphide-oxidizing bacteria in an oligochaete worm. Nature, 2001, 411, 298-302.	13.7	196
14	A Constant Flux of Diverse Thermophilic Bacteria into the Cold Arctic Seabed. Science, 2009, 325, 1541-1544.	6.0	189
15	Transport and mineralization rates in North Sea sandy intertidal sediments, Sylt-RÃ¸mÃ¸ Basin, Wadden Sea. Limnology and Oceanography, 2005, 50, 113-127.	1.6	188
16	Mechanisms of damage to corals exposed to sedimentation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1558-67.	3.3	184
17	Distribution of bacterial populations in a stratified fjord (Mariager Fjord, Denmark) quantified by in situ hybridization and related to chemical gradients in the water column. Applied and Environmental Microbiology, 1996, 62, 1391-1404.	1.4	177
18	Sulfate reduction and methanogenesis in a Thioploca-dominated sediment off the coast of Chile. Geochimica Et Cosmochimica Acta, 1997, 61, 3065-3079.	1.6	176

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19	Heterotrophic organisms dominate nitrogen fixation in the South Pacific Gyre. ISME Journal, 2012, 6, 1238-1249.	4.4	162
20	Sulfate reduction and methane oxidation in continental margin sediments influenced by irrigation (South-East Atlantic off Namibia). Geochimica Et Cosmochimica Acta, 2000, 64, 897-910.	1.6	160
21	Sulfur enrichment of humic substances in a Delaware salt marsh sediment core. Geochimica Et Cosmochimica Acta, 1991, 55, 979-988.	1.6	142
22	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.	0.9	142
23	Age constraints on the origin and growth history of a deep-water coral mound in the northeast Atlantic drilled during Integrated Ocean Drilling Program Expedition 307. Geology, 2007, 35, 1051.	2.0	124
24	Shallow gas in shelf sediments of the Namibian coastal upwelling ecosystem. Continental Shelf Research, 2004, 24, 627-642.	0.9	112
25	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
26	Turnover of microbial lipids in the deep biosphere and growth of benthic archaeal populations. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6010-6014.	3.3	99
27	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
28	Oxygen minimum zone cryptic sulfur cycling sustained by offshore transport of key sulfur oxidizing bacteria. Nature Communications, 2018, 9, 1729.	5.8	93
29	Sulfate reduction in surface sediments of the southeast Atlantic continental margin between 15Â°38'S and 27Â°57'S (Angola and Namibia). Limnology and Oceanography, 1999, 44, 650-661.	1.6	92
30	Impact of Nitrate on the Structure and Function of Bacterial Biofilm Communities in Pipelines Used for Injection of Seawater into Oil Fields. Applied and Environmental Microbiology, 2008, 74, 2841-2851.	1.4	90
31	Iron and manganese speciation and cycling in glacially influenced high-latitude fjord sediments (West) Tj ETQq1 1 0.784314 rgBT /Ov Cosmochimica Acta, 2014, 141, 628-655.	1.6	88
32	Temporal and spatial variability of reduced sulfur species (FeS2, S2O3 2â˜) and porewater parameters in salt marsh sediments. Biogeochemistry, 1991, 14, 57-88.	1.7	87
33	Coupled organic and inorganic carbon cycling in the deep subseafloor sediment of the northeastern Bering Sea Slope (IODP Exp. 323). Chemical Geology, 2011, 284, 251-261.	1.4	79
34	Protocol for Quantitative Detection of Elemental Sulfur and Polysulfide Zeroâ€Valent Sulfur Distribution in Natural Aquatic Samples. Geostandards and Geoanalytical Research, 2009, 33, 415-435.	1.7	77
35	Interstitial fluid chemistry of sediments underlying the North Atlantic gyre and the influence of subsurface fluid flow. Earth and Planetary Science Letters, 2012, 323-324, 79-91.	1.8	77
36	Determination of dissimilatory sulfate reduction rates in marine sediment via radioactive ‹sup›35‹/sup›S tracer. Limnology and Oceanography: Methods, 2014, 12, 196-211.	1.0	75

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37	Control of sulphate and methane distributions in marine sediments by organic matter reactivity. Geochimica Et Cosmochimica Acta, 2013, 104, 183-193.	1.6	72
38	Sulfate reduction below the sulfateâ€“methane transition in Black Sea sediments. Deep-Sea Research Part I: Oceanographic Research Papers, 2011, 58, 493-504.	0.6	70
39	Subsurface microbiology and biogeochemistry of a deep, coldâ€water carbonate mound from the Porcupine Seabight (IODP Expedition 307). Environmental Microbiology, 2009, 11, 239-257.	1.8	68
40	Phosphate oxygen isotopes: Insights into sedimentary phosphorus cycling from the Benguela upwelling system. Geochimica Et Cosmochimica Acta, 2011, 75, 3741-3756.	1.6	68
41	Iodine chemistry in the water column of the Chesapeake Bay: Evidence for organic iodine forms. Estuarine, Coastal and Shelf Science, 1991, 32, 267-279.	0.9	66
42	Salt marshes: An important coastal sink for dissolved uranium. Geochimica Et Cosmochimica Acta, 1996, 60, 3879-3887.	1.6	65
43	Voltammetric characterization of iron(II) sulfide complexes in laboratory solutions and in marine waters and porewaters. Environmental Science & Technology, 1993, 27, 1154-1163.	4.6	62
44	Oxygen penetration deep into the sediment of the South Pacific gyre. Biogeosciences, 2009, 6, 1467-1478.	1.3	58
45	Marine Deep Biosphere Microbial Communities Assemble in Near-Surface Sediments in Aarhus Bay. Frontiers in Microbiology, 2019, 10, 758.	1.5	54
46	Spatial patterns of aerobic and anaerobic mineralization rates and oxygen penetration dynamics in coral reef sediments. Marine Ecology - Progress Series, 2006, 309, 93-105.	0.9	53
47	Chlorin Index: A new parameter for organic matter freshness in sediments. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	1.0	52
48	Dynamics of zero-valent sulfur species including polysulfides at seep sites on intertidal sand flats (Wadden Sea, North Sea). Marine Chemistry, 2010, 121, 17-26.	0.9	51
49	Highâ€pressure systems for gasâ€phase free continuous incubation of enriched marine microbial communities performing anaerobic oxidation of methane. Biotechnology and Bioengineering, 2010, 105, 524-533.	1.7	51
50	Metabolic activity analyses demonstrate that Lokiarchaeon exhibits homoacetogenesis in sulfidic marine sediments. Nature Microbiology, 2020, 5, 248-255.	5.9	48
51	Bio-volatilization of polonium: Results from laboratory analyses. Aquatic Geochemistry, 1995, 1, 175-188.	1.5	47
52	Organic matter composition and sulfate reduction rates in sediments off Chile. Organic Geochemistry, 2000, 31, 351-361.	0.9	47
53	How depositional conditions control input, composition, and degradation of organic matter in sediments from the Chilean coastal upwelling region. Geochimica Et Cosmochimica Acta, 2007, 71, 1513-1527.	1.6	46
54	Biogeochemical sulfur cycling in the water column of a shallow stratified sea-water lake: Speciation and quadruple sulfur isotope composition. Marine Chemistry, 2011, 127, 144-154.	0.9	45

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55	Single-cell imaging of phosphorus uptake shows that key harmful algae rely on different phosphorus sources for growth. Scientific Reports, 2018, 8, 17182.	1.6	44
56	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.	1.0	42
57	Geochemical processes in the Lake Fryxell Basin (Victoria Land, Antarctica). Hydrobiologia, 1989, 172, 129-148.	1.0	40
58	Spatial distribution of calcification and photosynthesis in the scleractinian coral Galaxea fascicularis. Coral Reefs, 2005, 24, 173-180.	0.9	39
59	Intermediate sulfur oxidation state compounds in the euxinic surface sediments of the Dvurechenskii mud volcano (Black Sea). Geochimica Et Cosmochimica Acta, 2013, 105, 130-145.	1.6	38
60	Sulfidization of lacustrine glacial clay upon Holocene marine transgression (Arkona Basin, Baltic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	1.6	38
61	Shelfbreak frontal structure on the continental shelf north of Cape Hatteras. Continental Shelf Research, 1996, 16, 1751-1773.	0.9	37
62	The evolution of early diagenetic signals in Bering Sea subseafloor sediments in response to varying organic carbon deposition over the last 4.3Ma. Geochimica Et Cosmochimica Acta, 2013, 109, 175-196.	1.6	37
63	Arcobacter peruensis sp. nov., a Chemolithoheterotroph Isolated from Sulfide- and Organic-Rich Coastal Waters off Peru. Applied and Environmental Microbiology, 2019, 85, .	1.4	36
64	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.	3.3	35
65	Cryptic Cross-Linkages Among Biogeochemical Cycles: Novel Insights from Reactive Intermediates. Elements, 2015, 11, 409-414.	0.5	35
66	The pH and pCO2 dependence of sulfate reduction in shallow-sea hydrothermal CO2 â€“ venting sediments (Milos Island, Greece). Frontiers in Microbiology, 2013, 4, 111.	1.5	34
67	Evidence Suggesting Anaerobic Oxidation of the Bisulfide Ion in Chesapeake Bay. Estuaries and Coasts, 1988, 11, 281.	1.7	33
68	A high-pressure thermal gradient block for investigating microbial activity in multiple deep-sea samples. Journal of Microbiological Methods, 2003, 55, 165-172.	0.7	33
69	Oxidative sulfur cycling in the deep biosphere of the Nankai Trough, Japan. Geology, 2010, 38, 851-854.	2.0	33
70	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.	1.4	33
71	Variability in upwelling intensity and nutrient regime in the coastal upwelling system offshore Namibia: results from sediment archives. International Journal of Earth Sciences, 2009, 98, 309-326.	0.9	31
72	The imprint of methane seepage on the geochemical record and early diagenetic processes in cold-water coral mounds on Pen Duick Escarpment, Gulf of Cadiz. Marine Geology, 2011, 282, 118-137.	0.9	31

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73	Metal dynamics in Lake Vanda (Wright Valley, Antarctica). Chemical Geology, 1989, 76, 85-94.	1.4	29
74	Carbon mineralization and carbonate preservation in modern cold-water coral reef sediments on the Norwegian shelf. Biogeosciences, 2009, 6, 663-680.	1.3	29
75	Linking microbial heterotrophic activity and sediment lithology in oxic, oligotrophic sub-seafloor sediments of the North Atlantic Ocean. Frontiers in Microbiology, 2011, 2, 263.	1.5	29
76	Largeâ€scale penetration of Gulf Stream water onto the Continental Shelf north of Cape Hatteras. Geophysical Research Letters, 1992, 19, 373-376.	1.5	27
77	On-Site Analysis of Bacterial Communities of the Ultraoligotrophic South Pacific Gyre. Applied and Environmental Microbiology, 2019, 85, .	1.4	27
78	Instantaneous benthic response to different organic matter quality: In situ experiments in the Benguela Upwelling System. Marine Biology Research, 2007, 3, 342-356.	0.3	25
79	Comparative Study of Subseafloor Microbial Community Structures in Deeply Buried Coral Fossils and Sediment Matrices from the Challenger Mound in the Porcupine Seabight. Frontiers in Microbiology, 2011, 2, 231.	1.5	25
80	Community Structure and Activity of a Highly Dynamic and Nutrient-Limited Hypersaline Microbial Mat in Um Alhool Sabkha, Qatar. PLoS ONE, 2014, 9, e92405.	1.1	25
81	Substrate-specific pressure-dependence of microbial sulfate reduction in deep-sea cold seep sediments of the Japan Trench. Frontiers in Microbiology, 2012, 3, 253.	1.5	23
82	The Residence times of eight trace metals in a closed-basin Antarctic Lake: Lake Hoare. Hydrobiologia, 1986, 134, 249-255.	1.0	22
83	An efficient quantitative technique for the simultaneous analyses of radon daughters 210Pb, 210Bi and 210Po. Talanta, 1994, 41, 243-249.	2.9	22
84	Methane at the sedimentâ€“water transition in Black Sea sediments. Chemical Geology, 2010, 274, 29-37.	1.4	22
85	Carbon recycling efficiency and phosphate turnover by marine nitrifying archaea. Science Advances, 2020, 6, eaba1799.	4.7	19
86	Methane fluxes in marine sediments quantified through core analyses and seismo-acoustic mapping (Bornholm Basin, Baltic Sea). Geochimica Et Cosmochimica Acta, 2018, 239, 255-274.	1.6	18
87	Accumulation of DOC in the South Pacific Subtropical Gyre from a molecular perspective. Marine Chemistry, 2021, 231, 103955.	0.9	18
88	Geochemical processes in the Lake Fryxell Basin (Victoria Land, Antarctica). , 1989, , 129-148.		16
89	Effect of nitrate on sulfur transformations in sulfidogenic sludge of a marine aquaculture biofilter. FEMS Microbiology Ecology, 2010, 72, 476-484.	1.3	16
90	Phosphate availability affects fixed nitrogen transfer from diazotrophs to their epibionts. ISME Journal, 2019, 13, 2701-2713.	4.4	13

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91	Microbial diversity in deep sediments of the Benguela Upwelling System. Aquatic Microbial Ecology, 2007, 50, 1-9.	0.9	13
92	Metal transport and release processes in Lake Vanda: The role of oxide phases. Antarctic Research Series, 1993, , 145-163.	0.2	12
93	Microbial conversion of inorganic carbon to dimethyl sulfide in anoxic lake sediment (PluÃŸsee,) Tj ETQq1 1 0.784314 rgBT /Overlock	1.3	12
94	Niche partitioning by photosynthetic plankton as a driver of CO2-fixation across the oligotrophic South Pacific Subtropical Ocean. ISME Journal, 2022, 16, 465-476.	4.4	10
95	IODP Expedition 307 Drills Cold-Water Coral Mound Along the Irish Continental Margin. Scientific Drilling, 0, 2, 11-16.	1.0	9
96	Calciumâ€“ammonium exchange experiments on clay minerals using a45Ca tracer technique in marine pore water. Isotopes in Environmental and Health Studies, 2014, 50, 1-17.	0.5	6
97	Microbial activity in deep marine sediments: does pressure make the difference?. Journal of Physics: Conference Series, 2012, 377, 012054.	0.3	5
98	Linking sedimentary sulfur and iron biogeochemistry to growth patterns of a coldâ€water coral mound in the Porcupine Basin, S.W. Ireland (IODP Expedition 307). Geobiology, 2015, 13, 424-442.	1.1	5
99	Intense biological phosphate uptake onto particles in subeuphotic continental margin waters. Geophysical Research Letters, 2017, 44, 2825-2834.	1.5	5
100	Biogeochemical Consequences of the Sedimentary Subseafloor Biosphere. Developments in Marine Geology, 2014, 7, 217-252.	0.4	4
101	The Pleistocene Cooling Built Challenger Mound, a Deep-water Coral Mound in the NE Atlantic: Synthesis from IODP Expedition 307. The Sedimentary Record, 2010, 8, 4-9.	0.4	4
102	Effect of the aerenchymatous helophyte Glyceria maxima on the sulfate-reducing communities in two contrasting riparian grassland soils. Plant and Soil, 2013, 370, 73-87.	1.8	2