Volker Bruchert

List of Publications by Year
in descending order

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69	4,604	94433	102487
papers	citations	37 h-index	66 g-index

73	73	73	5650
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Diversity of Sulfur Isotope Fractionations by Sulfate-Reducing Prokaryotes. Applied and Environmental Microbiology, 2001, 67, 888-894.	3.1	346
2	Detoxification of sulphidic African shelf waters by blooming chemolithotrophs. Nature, 2009, 457, 581-584.	27.8	297
3	The importance of benthicâ€“pelagic coupling for marine ecosystem functioning in a changing world. Global Change Biology, 2017, 23, 2179-2196.	9.5	294
4	Microbial sequestration of phosphorus in anoxic upwelling sediments. Nature Geoscience, 2010, 3, 557-561.	12.9	214
5	A Constant Flux of Diverse Thermophilic Bacteria into the Cold Arctic Seabed. Science, 2009, 325, 1541-1544.	12.6	189
6	Meiofauna increases bacterial denitrification in marine sediments. Nature Communications, 2014, 5, 5133.	12.8	182
7	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
8	Contemporaneous early diagenetic formation of organic and inorganic sulfur in estuarine sediments from St. Andrew Bay, Florida, USA. Geochimica Et Cosmochimica Acta, 1996, 60, 2325-2332.	3.9	127
9	Aerobic and anaerobic nitrogen transformation processes in N2-fixing cyanobacterial aggregates. ISME Journal, 2015, 9, 1456-1466.	9.8	126
10	Shallow gas in shelf sediments of the Namibian coastal upwelling ecosystem. Continental Shelf Research, 2004, 24, 627-642.	1.8	112
11	Trophic Structure and Community Stability in an Overfished Ecosystem. Science, 2010, 329, 333-336.	12.6	111
12	Controls on stable sulfur isotope fractionation during bacterial sulfate reduction in Arctic sediments. Geochimica Et Cosmochimica Acta, 2001, 65, 763-776.	3.9	106
13	An integrated sulfur isotope model for Namibian shelf sediments. Geochimica Et Cosmochimica Acta, 2009, 73, 1924-1944.	3.9	104
14	Paradox reconsidered: Methane oversaturation in wellâ€oxygenated lake waters. Limnology and Oceanography, 2014, 59, 275-284.	3.1	104
15	Reviews and syntheses: Carbon use efficiency from organisms to ecosystems â€“ definitions, theories, and empirical evidence. Biogeosciences, 2018, 15, 5929-5949.	3.3	98
16	Kinetic oxygen isotope effects during dissimilatory sulfate reduction: A combined theoretical and experimental approach. Geochimica Et Cosmochimica Acta, 2010, 74, 2011-2024.	3.9	89
17	Activity and community structures of sulfate-reducing microorganisms in polar, temperate and tropical marine sediments. ISME Journal, 2016, 10, 796-809.	9.8	85
18	The impact of temperature change on the activity and community composition of sulfateâ€reducing bacteria in arctic versus temperate marine sediments. Environmental Microbiology, 2009, 11, 1692-1703.	3.8	82

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19	Early diagenesis of sulfur in estuarine sediments: the role of sedimentary humic and fulvic acids. Geochimica Et Cosmochimica Acta, 1998, 62, 1567-1586.	3.9	79
20	Effects of freezeâ€“thaw cycles on anaerobic microbial processes in an Arctic intertidal mud flat. ISME Journal, 2010, 4, 585-594.	9.8	76
21	Seasonal oxygen, nitrogen and phosphorus benthic cycling along an impacted Baltic Sea estuary: regulation and spatial patterns. Biogeochemistry, 2014, 119, 139-160.	3.5	68
22	Temporal Trends of C₈â€“C₃₆ Chlorinated Paraffins in Swedish Coastal Sediment Cores over the Past 80 Years. Environmental Science & Technology, 2017, 51, 14199-14208.	10.0	68
23	Thermophilic anaerobes in Arctic marine sediments induced to mineralize complex organic matter at high temperature. Environmental Microbiology, 2010, 12, 1089-1104.	3.8	61
24	Effect of reoxygenation and Marenzelleria spp. bioturbation on Baltic Sea sediment metabolism. Marine Ecology - Progress Series, 2013, 482, 43-55.	1.9	61
25	Denitrification and DNRA at the Baltic Sea oxic-anoxic interface: Substrate spectrum and kinetics. Limnology and Oceanography, 2016, 61, 1900-1915.	3.1	60
26	Hydrogen sulphide and methane emissions on the central Namibian shelf. Progress in Oceanography, 2009, 83, 169-179.	3.2	59
27	Isolation of small-subunit rRNA for stable isotopic characterization. Environmental Microbiology, 2002, 4, 451-464.	3.8	54
28	Coupled primary production, benthic foraminiferal assemblage, and sulfur diagenesis in organic-rich sediments of the Benguela upwelling system. Marine Geology, 2000, 163, 27-40.	2.1	53
29	Untangling hidden nutrient dynamics: rapid ammonium cycling and single-cell ammonium assimilation in marine plankton communities. ISME Journal, 2019, 13, 1960-1974.	9.8	49
30	Cytologic and Genetic Characteristics of Endobiotic Bacteria and Kleptoplasts of Virgulinella fragilis (Foraminifera). Journal of Eukaryotic Microbiology, 2015, 62, 454-469.	1.7	48
31	Microbial Mn(IV) and Fe(III) reduction in northern Barents Sea sediments under different conditions of ice cover and organic carbon deposition. Deep-Sea Research Part II: Topical Studies in Oceanography, 2008, 55, 2390-2398.	1.4	47
32	BIOGEOCHEMICAL AND PHYSICAL CONTROL ON SHELF ANOXIA AND WATER COLUMN HYDROGEN SULPHIDE IN THE BENGUEL A COASTAL UPWELLING SYSTEM OFF NAMIBIA. , 2006, , 161-193.		44
33	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.	3.1	43
34	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
35	Methane fluxes from coastal sediments are enhanced by macrofauna. Scientific Reports, 2017, 7, 13145.	3.3	41
36	Anaerobic carbon transformation: experimental studies with flow-through cells. Marine Chemistry, 2003, 80, 171-183.	2.3	40

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37	Source apportionment of methane escaping the subsea permafrost system in the outer Eurasian Arctic Shelf. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	40
38	Physiological response to temperature changes of the marine, sulfate-reducing bacterium Desulfobacterium autotrophicum. FEMS Microbiology Ecology, 2002, 42, 409-417.	2.7	39
39	Ribosomal DNA shows extremely low genetic divergence in a world-wide distributed, but disjunct and highly adapted marine protozoan (Virgulinella fragilis, Foraminiferida). Marine Micropaleontology, 2009, 70, 8-19.	1.2	39
40	Temperature characteristics of bacterial sulfate reduction in continental shelf and slope sediments. Biogeosciences, 2012, 9, 3425-3435.	3.3	38
41	Sulfidization of lacustrine glacial clay upon Holocene marine transgression (Arkona Basin, Baltic) Tj ETQq1 1 0.784314 rgBT /Overlock	3.9	38
42	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.	3.1	34
43	Benthic nitrogen metabolism in a macrophyte meadow (Vallisneria spiralis L.) under increasing sedimentary organic matter loads. Biogeochemistry, 2015, 124, 387-404.	3.5	33
44	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
45	The fate of fixed nitrogen in marine sediments with low organic loading: an in situ study. Biogeosciences, 2017, 14, 285-300.	3.3	33
46	Turbulence simultaneously stimulates small- and large-scale CO2 sequestration by chain-forming diatoms in the sea. Nature Communications, 2018, 9, 3046.	12.8	32
47	Control of a calcite inhibitor (phosphate) and temperature on ikaite precipitation in Ikka Fjord, southwest Greenland. Applied Geochemistry, 2018, 89, 11-22.	3.0	31
48	Measurement and interpretation of solute concentration gradients in the benthic boundary layer. Limnology and Oceanography: Methods, 2011, 9, 1-13.	2.0	30
49	Ryder Glacier in northwest Greenland is shielded from warm Atlantic water by a bathymetric sill. Communications Earth & Environment, 2020, 1, .	6.8	28
50	Annual variability and regulation of methane and sulfate fluxes in Baltic Sea estuarine sediments. Biogeosciences, 2017, 14, 325-339.	3.3	27
51	Application of the isotope pairing technique in sediments: Use, challenges, and new directions. Limnology and Oceanography: Methods, 2019, 17, 112-136.	2.0	27
52	Ikaite nucleation at 35â€‰Â°C challenges the use of glendonite as a paleotemperature indicator. Scientific Reports, 2020, 10, 8141.	3.3	27
53	Temperature induced decoupling of enzymatic hydrolysis and carbon remineralization in long-term incubations of Arctic and temperate sediments. Geochimica Et Cosmochimica Acta, 2010, 74, 2316-2326.	3.9	26
54	Dietary success of a â€˜newâ€™ key fish in an overfished ecosystem: evidence from fatty acid and stable isotope signatures. Marine Ecology - Progress Series, 2011, 428, 219-233.	1.9	25

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55	Contrasting regimes for organic matter degradation in the East Siberian Sea and the Laptev Sea assessed through microbial incubations and molecular markers. Marine Chemistry, 2015, 170, 11-22.	2.3	23
56	Carbon mineralization in Laptev and East Siberian sea shelf and slope sediment. Biogeosciences, 2018, 15, 471-490.	3.3	22
57	Title is missing!. Aquatic Geochemistry, 1999, 5, 249-268.	1.3	17
58	Organic Carbon Degradation in Anoxic Organic-Rich Shelf Sediments: Biogeochemical Rates and Microbial Abundance. Geomicrobiology Journal, 2010, 27, 303-314.	2.0	17
59	Physical Disturbance by Bottom Trawling Suspends Particulate Matter and Alters Biogeochemical Processes on and Near the Seafloor. Frontiers in Marine Science, 2021, 8, .	2.5	17
60	Mineral Type Structures Soil Microbial Communities. Geomicrobiology Journal, 2017, 34, 538-545.	2.0	16
61	High spatiotemporal variability of methane concentrations challenges estimates of emissions across vegetated coastal ecosystems. Global Change Biology, 2022, 28, 4308-4322.	9.5	16
62	Impacts of bottom trawling on benthic biogeochemistry in muddy sediments: Removal of surface sediment using an experimental field study. Marine Environmental Research, 2021, 169, 105384.	2.5	15
63	Sulfide oxidation in deep Baltic Sea sediments upon oxygenation and colonization by macrofauna. Marine Biology, 2019, 166, 1.	1.5	11
64	Can anaerobic oxidation of methane prevent seafloor gas escape in a warming climate?. Solid Earth, 2019, 10, 1541-1554.	2.8	10
65	The Importance of Benthic Nutrient Fluxes in Supporting Primary Production in the Laptev and East Siberian Shelf Seas. Global Biogeochemical Cycles, 2021, 35, e2020GB006849.	4.9	8
66	Fe- and Mn-Enrichment in Middle Ordovician Hematitic Argillites Preceding Black Shale and Flysch Deposition: The Shoal Arm Formation, North-Central Newfoundland. Journal of Geology, 1994, 102, 197-214.	1.4	6
67	Sea-Air Exchange of Methane in Shallow Inshore Areas of the Baltic Sea. Frontiers in Marine Science, 2021, 8, .	2.5	5
68	The climate sensitivity of northern Greenland fjords is amplified through sea-ice damming. Communications Earth & Environment, 2021, 2, .	6.8	4
69	Physiological response to temperature changes of the marine, sulfate-reducing bacterium Desulfobacterium autotrophicum. FEMS Microbiology Ecology, 2002, 42, 409-417.	2.7	1