

Volker Bruchert

List of Publications by Year in descending order

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Version: 2024-02-01

69
papers

4,604
citations

94433

37
h-index

102487

66
g-index

73
all docs

73
docs citations

73
times ranked

5650
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | High spatiotemporal variability of methane concentrations challenges estimates of emissions across vegetated coastal ecosystems. <i>Global Change Biology</i> , 2022, 28, 4308-4322. | 9.5 | 16 |
| 2 | Source apportionment of methane escaping the subsea permafrost system in the outer Eurasian Arctic Shelf. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 7.1 | 40 |
| 3 | The climate sensitivity of northern Greenland fjords is amplified through sea-ice damming. <i>Communications Earth & Environment</i> , 2021, 2, . | 6.8 | 4 |
| 4 | Impacts of bottom trawling on benthic biogeochemistry in muddy sediments: Removal of surface sediment using an experimental field study. <i>Marine Environmental Research</i> , 2021, 169, 105384. | 2.5 | 15 |
| 5 | The Importance of Benthic Nutrient Fluxes in Supporting Primary Production in the Laptev and East Siberian Shelf Seas. <i>Global Biogeochemical Cycles</i> , 2021, 35, e2020GB006849. | 4.9 | 8 |
| 6 | Sea-Air Exchange of Methane in Shallow Inshore Areas of the Baltic Sea. <i>Frontiers in Marine Science</i> , 2021, 8, . | 2.5 | 5 |
| 7 | Physical Disturbance by Bottom Trawling Suspends Particulate Matter and Alters Biogeochemical Processes on and Near the Seafloor. <i>Frontiers in Marine Science</i> , 2021, 8, . | 2.5 | 17 |
| 8 | Ryder Glacier in northwest Greenland is shielded from warm Atlantic water by a bathymetric sill. <i>Communications Earth & Environment</i> , 2020, 1, . | 6.8 | 28 |
| 9 | Ikaite nucleation at 35â€‰%Â°C challenges the use of glendonite as a paleotemperature indicator. <i>Scientific Reports</i> , 2020, 10, 8141. | 3.3 | 27 |
| 10 | Sulfide oxidation in deep Baltic Sea sediments upon oxygenation and colonization by macrofauna. <i>Marine Biology</i> , 2019, 166, 1. | 1.5 | 11 |
| 11 | Application of the isotope pairing technique in sediments: Use, challenges, and new directions. <i>Limnology and Oceanography: Methods</i> , 2019, 17, 112-136. | 2.0 | 27 |
| 12 | Untangling hidden nutrient dynamics: rapid ammonium cycling and single-cell ammonium assimilation in marine plankton communities. <i>ISME Journal</i> , 2019, 13, 1960-1974. | 9.8 | 49 |
| 13 | Can anaerobic oxidation of methane prevent seafloor gas escape in a warming climate?. <i>Solid Earth</i> , 2019, 10, 1541-1554. | 2.8 | 10 |
| 14 | Control of a calcite inhibitor (phosphate) and temperature on ikaite precipitation in Ikka Fjord, southwest Greenland. <i>Applied Geochemistry</i> , 2018, 89, 11-22. | 3.0 | 31 |
| 15 | Reviews and syntheses: Carbon use efficiency from organisms to ecosystems â€“ definitions, theories, and empirical evidence. <i>Biogeosciences</i> , 2018, 15, 5929-5949. | 3.3 | 98 |
| 16 | Carbon mineralization in Laptev and East Siberian sea shelf and slope sediment. <i>Biogeosciences</i> , 2018, 15, 471-490. | 3.3 | 22 |
| 17 | Turbulence simultaneously stimulates small- and large-scale CO ₂ sequestration by chain-forming diatoms in the sea. <i>Nature Communications</i> , 2018, 9, 3046. | 12.8 | 32 |
| 18 | The importance of benthicâ€“pelagic coupling for marine ecosystem functioning in a changing world. <i>Global Change Biology</i> , 2017, 23, 2179-2196. | 9.5 | 294 |

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|----|--|------|-----------|
| 19 | Iron-controlled oxidative sulfur cycling recorded in the distribution and isotopic composition of sulfur species in glacially influenced fjord sediments of west Svalbard. <i>Chemical Geology</i> , 2017, 466, 678-695. | 3.3 | 33 |
| 20 | Methane fluxes from coastal sediments are enhanced by macrofauna. <i>Scientific Reports</i> , 2017, 7, 13145. | 3.3 | 41 |
| 21 | Temporal Trends of $\delta^{13}C$ Chlorinated Paraffins in Swedish Coastal Sediment Cores over the Past 80 Years. <i>Environmental Science & Technology</i> , 2017, 51, 14199-14208. | 10.0 | 68 |
| 22 | Mineral Type Structures Soil Microbial Communities. <i>Geomicrobiology Journal</i> , 2017, 34, 538-545. | 2.0 | 16 |
| 23 | Annual variability and regulation of methane and sulfate fluxes in Baltic Sea estuarine sediments. <i>Biogeosciences</i> , 2017, 14, 325-339. | 3.3 | 27 |
| 24 | The fate of fixed nitrogen in marine sediments with low organic loading: an in situ study. <i>Biogeosciences</i> , 2017, 14, 285-300. | 3.3 | 33 |
| 25 | Denitrification and DNRA at the Baltic Sea oxic-anoxic interface: Substrate spectrum and kinetics. <i>Limnology and Oceanography</i> , 2016, 61, 1900-1915. | 3.1 | 60 |
| 26 | Activity and community structures of sulfate-reducing microorganisms in polar, temperate and tropical marine sediments. <i>ISME Journal</i> , 2016, 10, 796-809. | 9.8 | 85 |
| 27 | Contrasting regimes for organic matter degradation in the East Siberian Sea and the Laptev Sea assessed through microbial incubations and molecular markers. <i>Marine Chemistry</i> , 2015, 170, 11-22. | 2.3 | 23 |
| 28 | Aerobic and anaerobic nitrogen transformation processes in N ₂ -fixing cyanobacterial aggregates. <i>ISME Journal</i> , 2015, 9, 1456-1466. | 9.8 | 126 |
| 29 | Benthic nitrogen metabolism in a macrophyte meadow (<i>Vallisneria spiralis</i> L.) under increasing sedimentary organic matter loads. <i>Biogeochemistry</i> , 2015, 124, 387-404. | 3.5 | 33 |
| 30 | Cytologic and Genetic Characteristics of Endobiotic Bacteria and Kleptoplasts of <i>Virgulina fragilis</i> (Foraminifera). <i>Journal of Eukaryotic Microbiology</i> , 2015, 62, 454-469. | 1.7 | 48 |
| 31 | Seasonal oxygen, nitrogen and phosphorus benthic cycling along an impacted Baltic Sea estuary: regulation and spatial patterns. <i>Biogeochemistry</i> , 2014, 119, 139-160. | 3.5 | 68 |
| 32 | Meiofauna increases bacterial denitrification in marine sediments. <i>Nature Communications</i> , 2014, 5, 5133. | 12.8 | 182 |
| 33 | Sulfidization of lacustrine glacial clay upon Holocene marine transgression (Arkona Basin, Baltic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 | 3.9 | 38 |
| 34 | Paradox reconsidered: Methane oversaturation in well-oxygenated lake waters. <i>Limnology and Oceanography</i> , 2014, 59, 275-284. | 3.1 | 104 |
| 35 | The Impact of Sediment and Carbon Fluxes on the Biogeochemistry of Methane and Sulfur in Littoral Baltic Sea Sediments (Himmerfjärden, Sweden). <i>Estuaries and Coasts</i> , 2013, 36, 98-115. | 2.2 | 42 |
| 36 | Effect of reoxygenation and <i>Marenzelleria</i> spp. bioturbation on Baltic Sea sediment metabolism. <i>Marine Ecology - Progress Series</i> , 2013, 482, 43-55. | 1.9 | 61 |

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|----|---|------|-----------|
| 37 | Temperature characteristics of bacterial sulfate reduction in continental shelf and slope sediments. <i>Biogeosciences</i> , 2012, 9, 3425-3435. | 3.3 | 38 |
| 38 | Dietary success of a <i>new</i> key fish in an overfished ecosystem: evidence from fatty acid and stable isotope signatures. <i>Marine Ecology - Progress Series</i> , 2011, 428, 219-233. | 1.9 | 25 |
| 39 | Measurement and interpretation of solute concentration gradients in the benthic boundary layer. <i>Limnology and Oceanography: Methods</i> , 2011, 9, 1-13. | 2.0 | 30 |
| 40 | Organic Carbon Degradation in Anoxic Organic-Rich Shelf Sediments: Biogeochemical Rates and Microbial Abundance. <i>Geomicrobiology Journal</i> , 2010, 27, 303-314. | 2.0 | 17 |
| 41 | Effects of freeze-thaw cycles on anaerobic microbial processes in an Arctic intertidal mud flat. <i>ISME Journal</i> , 2010, 4, 585-594. | 9.8 | 76 |
| 42 | Microbial sequestration of phosphorus in anoxic upwelling sediments. <i>Nature Geoscience</i> , 2010, 3, 557-561. | 12.9 | 214 |
| 43 | Thermophilic anaerobes in Arctic marine sediments induced to mineralize complex organic matter at high temperature. <i>Environmental Microbiology</i> , 2010, 12, 1089-1104. | 3.8 | 61 |
| 44 | Trophic Structure and Community Stability in an Overfished Ecosystem. <i>Science</i> , 2010, 329, 333-336. | 12.6 | 111 |
| 45 | 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 | 43 |
| 46 | Kinetic oxygen isotope effects during dissimilatory sulfate reduction: A combined theoretical and experimental approach. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 2011-2024. | 3.9 | 89 |
| 47 | Temperature induced decoupling of enzymatic hydrolysis and carbon remineralization in long-term incubations of Arctic and temperate sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 2316-2326. | 3.9 | 26 |
| 48 | 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 |
| 49 | Hydrogen sulphide and methane emissions on the central Namibian shelf. <i>Progress in Oceanography</i> , 2009, 83, 169-179. | 3.2 | 59 |
| 50 | Ribosomal DNA shows extremely low genetic divergence in a world-wide distributed, but disjunct and highly adapted marine protozoan (<i>Virgulinema fragilis</i> , Foraminiferida). <i>Marine Micropaleontology</i> , 2009, 70, 8-19. | 1.2 | 39 |
| 51 | Detoxification of sulphidic African shelf waters by blooming chemolithotrophs. <i>Nature</i> , 2009, 457, 581-584. | 27.8 | 297 |
| 52 | The impact of temperature change on the activity and community composition of sulfate-reducing bacteria in arctic versus temperate marine sediments. <i>Environmental Microbiology</i> , 2009, 11, 1692-1703. | 3.8 | 82 |
| 53 | An integrated sulfur isotope model for Namibian shelf sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1924-1944. | 3.9 | 104 |
| 54 | A Constant Flux of Diverse Thermophilic Bacteria into the Cold Arctic Seabed. <i>Science</i> , 2009, 325, 1541-1544. | 12.6 | 189 |

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|----|--|-----|-----------|
| 55 | Microbial Mn(IV) and Fe(III) reduction in northern Barents Sea sediments under different conditions of ice cover and organic carbon deposition. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2008, 55, 2390-2398. | 1.4 | 47 |
| 56 | 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 |
| 57 | Shallow gas in shelf sediments of the Namibian coastal upwelling ecosystem. <i>Continental Shelf Research</i> , 2004, 24, 627-642. | 1.8 | 112 |
| 58 | Anaerobic carbon transformation: experimental studies with flow-through cells. <i>Marine Chemistry</i> , 2003, 80, 171-183. | 2.3 | 40 |
| 59 | Regulation of bacterial sulfate reduction and hydrogen sulfide fluxes in the central namibian coastal upwelling zone. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 4505-4518. | 3.9 | 176 |
| 60 | Isolation of small-subunit rRNA for stable isotopic characterization. <i>Environmental Microbiology</i> , 2002, 4, 451-464. | 3.8 | 54 |
| 61 | Physiological response to temperature changes of the marine, sulfate-reducing bacterium <i>Desulfobacterium autotrophicum</i> . <i>FEMS Microbiology Ecology</i> , 2002, 42, 409-417. | 2.7 | 39 |
| 62 | Physiological response to temperature changes of the marine, sulfate-reducing bacterium <i>Desulfobacterium autotrophicum</i> . <i>FEMS Microbiology Ecology</i> , 2002, 42, 409-417. | 2.7 | 1 |
| 63 | Controls on stable sulfur isotope fractionation during bacterial sulfate reduction in Arctic sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 763-776. | 3.9 | 106 |
| 64 | Diversity of Sulfur Isotope Fractionations by Sulfate-Reducing Prokaryotes. <i>Applied and Environmental Microbiology</i> , 2001, 67, 888-894. | 3.1 | 346 |
| 65 | Coupled primary production, benthic foraminiferal assemblage, and sulfur diagenesis in organic-rich sediments of the Benguela upwelling system. <i>Marine Geology</i> , 2000, 163, 27-40. | 2.1 | 53 |
| 66 | Title is missing!. <i>Aquatic Geochemistry</i> , 1999, 5, 249-268. | 1.3 | 17 |
| 67 | Early diagenesis of sulfur in estuarine sediments: the role of sedimentary humic and fulvic acids. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 1567-1586. | 3.9 | 79 |
| 68 | Contemporaneous early diagenetic formation of organic and inorganic sulfur in estuarine sediments from St. Andrew Bay, Florida, USA. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 2325-2332. | 3.9 | 127 |
| 69 | Fe- and Mn-Enrichment in Middle Ordovician Hematitic Argillites Preceding Black Shale and Flysch Deposition: The Shoal Arm Formation, North-Central Newfoundland. <i>Journal of Geology</i> , 1994, 102, 197-214. | 1.4 | 6 |