

Marcus Elvert

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9030604/publications.pdf>

Version: 2024-02-01

90
papers

7,727
citations

66343

42
h-index

54911

84
g-index

99
all docs

99
docs citations

99
times ranked

5701
citing authors

#	ARTICLE	IF	CITATIONS
1	Catabolic protein degradation in marine sediments confined to distinct archaea. <i>ISME Journal</i> , 2022, 16, 1617-1626.	9.8	12
2	Long-term incubations provide insight into the mechanisms of anaerobic oxidation of methane in methanogenic lake sediments. <i>Biogeosciences</i> , 2022, 19, 2313-2331.	3.3	6
3	Activity of Ancillary Heterotrophic Community Members in Anaerobic Methane-Oxidizing Cultures. <i>Frontiers in Microbiology</i> , 2022, 13, .	3.5	3
4	Crystalline iron oxides stimulate methanogenic benzoate degradation in marine sediment-derived enrichment cultures. <i>ISME Journal</i> , 2021, 15, 965-980.	9.8	25
5	Subgroup level differences of physiological activities in marine Lokiarchaeota. <i>ISME Journal</i> , 2021, 15, 848-861.	9.8	23
6	Sulfate-dependent reversibility of intracellular reactions explains the opposing isotope effects in the anaerobic oxidation of methane. <i>Science Advances</i> , 2021, 7, .	10.3	16
7	Respiration by marine snow at high hydrostatic pressure: Insights from continuous oxygen measurements in a rotating pressure tank. <i>Limnology and Oceanography</i> , 2021, 66, 2797-2809.	3.1	13
8	Stable carbon isotopic compositions of archaeal lipids constrain terrestrial, planktonic, and benthic sources in marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 307, 319-337.	3.9	6
9	Macroalgae degradation promotes microbial iron reduction via electron shuttling in coastal Antarctic sediments. <i>Environment International</i> , 2021, 156, 106602.	10.0	9
10	Vertical stratification patterns of methanotrophs and their genetic controllers in water columns of oxygen-stratified boreal lakes. <i>FEMS Microbiology Ecology</i> , 2021, 97, .	2.7	29
11	Disrupted Coherence Between Upwelling Strength and Redox Conditions Reflects Source Water Change in Santa Barbara Basin During the 20th Century. <i>Paleoceanography and Paleoclimatology</i> , 2021, 36, .	2.9	3
12	Substrate-dependent incorporation of carbon and hydrogen for lipid biosynthesis by <i>Methanosarcina barkeri</i> . <i>Environmental Microbiology Reports</i> , 2020, 12, 555-567.	2.4	9
13	Soothsaying DOM: A Current Perspective on the Future of Oceanic Dissolved Organic Carbon. <i>Frontiers in Marine Science</i> , 2020, 7, .	2.5	44
14	Lipid analysis of CO ₂ -rich subsurface aquifers suggests an autotrophy-based deep biosphere with lysolipids enriched in CPR bacteria. <i>ISME Journal</i> , 2020, 14, 1547-1560.	9.8	29
15	An annually resolved record of Western European vegetation response to Younger Dryas cooling. <i>Quaternary Science Reviews</i> , 2020, 231, 106198.	3.0	19
16	Evidence for preferential protein depolymerization in wetland soils in response to external nitrogen availability provided by a novel FTIR routine. <i>Biogeosciences</i> , 2020, 17, 499-514.	3.3	11
17	Substrate characteristic bacterial fatty acid production based on amino acid assimilation and transformation in marine sediments. <i>FEMS Microbiology Ecology</i> , 2019, 95, .	2.7	11
18	Assessing the carbon assimilation and production of benthic archaeal lipid biomarkers using lipid-RIP. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 265, 431-442.	3.9	11

#	ARTICLE	IF	CITATIONS
19	Bisnorgammacerane tracers predatory pressure and the persistent rise of algal ecosystems after Snowball Earth. <i>Nature Communications</i> , 2019, 10, 476.	12.8	24
20	Formation of tubular carbonate conduits at Athina mud volcano, eastern Mediterranean Sea. <i>Marine and Petroleum Geology</i> , 2019, 107, 20-31.	3.3	8
21	CO ₂ conversion to methane and biomass in obligate methylophilic methanogens in marine sediments. <i>ISME Journal</i> , 2019, 13, 2107-2119.	9.8	26
22	Marine Transform Faults and Fracture Zones: A Joint Perspective Integrating Seismicity, Fluid Flow and Life. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	46
23	Towards multiproxy, ultra-high resolution molecular stratigraphy: Enabling laser-induced mass spectrometry imaging of diverse molecular biomarkers in sediments. <i>Organic Geochemistry</i> , 2019, 127, 136-145.	1.8	17
24	Rates and Microbial Players of Iron-Driven Anaerobic Oxidation of Methane in Methanic Marine Sediments. <i>Frontiers in Microbiology</i> , 2019, 10, 3041.	3.5	51
25	Isoprenoid Quinones Resolve the Stratification of Redox Processes in a Biogeochemical Continuum from the Photic Zone to Deep Anoxic Sediments of the Black Sea. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	3.1	19
26	Relative importance of methylophilic methanogenesis in sediments of the Western Mediterranean Sea. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 224, 171-186.	3.9	71
27	Pacific Proving Grounds radioisotope imprint in the Philippine Sea sediments. <i>Journal of Environmental Radioactivity</i> , 2018, 186, 131-141.	1.7	6
28	Carbon and nitrogen turnover in the Arctic deep sea: in situ benthic community response to diatom and coccolithophorid phytodetritus. <i>Biogeosciences</i> , 2018, 15, 6537-6557.	3.3	13
29	Lipid biosynthesis of <i>Nitrosopumilus maritimus</i> dissected by lipid specific radioisotope probing (lipid-RIP) under contrasting ammonium supply. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 242, 51-63.	3.9	26
30	Unraveling signatures of biogeochemical processes and the depositional setting in the molecular composition of pore water DOM across different marine environments. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 207, 57-80.	3.9	103
31	Iron-Coupled Anaerobic Oxidation of Methane Performed by a Mixed Bacterial-Archaeal Community Based on Poorly Reactive Minerals. <i>Environmental Science & Technology</i> , 2017, 51, 12293-12301.	10.0	100
32	Distribution and isotopic composition of trimethylamine, dimethylsulfide and dimethylsulfoniopropionate in marine sediments. <i>Marine Chemistry</i> , 2017, 196, 35-46.	2.3	35
33	Direct Analysis of Lignin Phenols in Freshwater Dissolved Organic Matter. <i>Analytical Chemistry</i> , 2017, 89, 13449-13457.	6.5	8
34	Relative Importance of Chemoautotrophy for Primary Production in a Light Exposed Marine Shallow Hydrothermal System. <i>Frontiers in Microbiology</i> , 2017, 8, 702.	3.5	26
35	Tracking activity and function of microorganisms by stable isotope probing of membrane lipids. <i>Current Opinion in Biotechnology</i> , 2016, 41, 43-52.	6.6	41
36	Methane turnover and environmental change from Holocene lipid biomarker records in a thermokarst lake in Arctic Alaska. <i>Holocene</i> , 2016, 26, 1766-1777.	1.7	24

#	ARTICLE	IF	CITATIONS
37	Toxic effects of lab-grade butyl rubber stoppers on aerobic methane oxidation. <i>Limnology and Oceanography: Methods</i> , 2015, 13, 40-52.	2.0	39
38	Possible roles of uncultured archaea in carbon cycling in methane-seep sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 164, 35-52.	3.9	31
39	Exploring deep microbial life in coal-bearing sediment down to ~2.5 km below the ocean floor. <i>Science</i> , 2015, 349, 420-424.	12.6	376
40	Carbon flow from volcanic CO ₂ into soil microbial communities of a wetland mofette. <i>ISME Journal</i> , 2015, 9, 746-759.	9.8	77
41	<i>Clostridium bornimense</i> sp. nov., isolated from a mesophilic, two-phase, laboratory-scale biogas reactor. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2014, 64, 2792-2797.	1.7	37
42	Identification and significance of unsaturated archaeal tetraether lipids in marine sediments. <i>Rapid Communications in Mass Spectrometry</i> , 2014, 28, 1144-1152.	1.5	31
43	Gas chromatographic analysis of methanol and ethanol in marine sediment pore waters: Validation and implementation of three pretreatment techniques. <i>Marine Chemistry</i> , 2014, 160, 82-90.	2.3	32
44	Ultra-high-resolution paleoenvironmental records via direct laser-based analysis of lipid biomarkers in sediment core samples. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 15669-15674.	7.1	45
45	Carbon isotope equilibration during sulphate-limited anaerobic oxidation of methane. <i>Nature Geoscience</i> , 2014, 7, 190-194.	12.9	147
46	Evidence for Microbial Carbon and Sulfur Cycling in Deeply Buried Ridge Flank Basalt. <i>Science</i> , 2013, 339, 1305-1308.	12.6	210
47	Assessing production of the ubiquitous archaeal diglycosyl tetraether lipids in marine subsurface sediment using intramolecular stable isotope probing. <i>Environmental Microbiology</i> , 2013, 15, 1634-1646.	3.8	37
48	Autotrophy as a predominant mode of carbon fixation in anaerobic methane-oxidizing microbial communities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19321-19326.	7.1	131
49	Symbiont-host relationships in chemosynthetic mussels: A comprehensive lipid biomarker study. <i>Organic Geochemistry</i> , 2012, 43, 112-124.	1.8	32
50	Impact of hot fluid advection on hydrocarbon gas production and seepage in mud volcano sediments of thick Cenozoic deltas. <i>Earth and Planetary Science Letters</i> , 2012, 341-344, 139-157.	4.4	6
51	Novel Cardiolipins from Uncultured Methane-Metabolizing Archaea. <i>Archaea</i> , 2012, 2012, 1-9.	2.3	21
52	Reconstruction of past methane availability in an Arctic Alaska wetland indicates climate influenced methane release during the past ~12,000 years. <i>Journal of Paleolimnology</i> , 2012, 48, 27-42.	1.6	59
53	Diagenetic Transformation of Dissolved Organic Nitrogen Compounds under Contrasting Sedimentary Redox Conditions in the Black Sea. <i>Environmental Science & Technology</i> , 2011, 45, 5223-5229.	10.0	106
54	Factors controlling the distribution of anaerobic methanotrophic communities in marine environments: Evidence from intact polar membrane lipids. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 164-184.	3.9	111

#	ARTICLE	IF	CITATIONS
55	Stable carbon isotopic compositions of intact polar lipids reveal complex carbon flow patterns among hydrocarbon degrading microbial communities at the Chapopote asphalt volcano. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 4399-4415.	3.9	48
56	Petroleum degradation and associated microbial signatures at the Chapopote asphalt volcano, Southern Gulf of Mexico. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 4377-4398.	3.9	41
57	Patterns of carbonate authigenesis at the Kouilou pockmarks on the Congo deep-sea fan. <i>Marine Geology</i> , 2010, 268, 129-136.	2.1	100
58	Sources, transport, and partitioning of organic matter at a highly dynamic continental margin. <i>Marine Chemistry</i> , 2010, 118, 37-55.	2.3	86
59	Intramolecular stable carbon isotopic analysis of archaeal glycosyl tetraether lipids. <i>Rapid Communications in Mass Spectrometry</i> , 2010, 24, 2817-2826.	1.5	28
60	Experimental studies on the stable carbon isotope biogeochemistry of acetate in lake sediments. <i>Organic Geochemistry</i> , 2010, 41, 22-30.	1.8	60
61	Metabolic variability in seafloor brines revealed by carbon and sulphur dynamics. <i>Nature Geoscience</i> , 2009, 2, 349-354.	12.9	111
62	The stable carbon isotope biogeochemistry of acetate and other dissolved carbon species in deep subseafloor sediments at the northern Cascadia Margin. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 3323-3336.	3.9	161
63	Molecular characterization of dissolved organic matter in pore water of continental shelf sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 3337-3358.	3.9	184
64	Assimilation of methane and inorganic carbon by microbial communities mediating the anaerobic oxidation of methane. <i>Environmental Microbiology</i> , 2008, 10, 2287-2298.	3.8	136
65	¹³ C-depleted biphytanic diacids as tracers of past anaerobic oxidation of methane. <i>Organic Geochemistry</i> , 2008, 39, 152-156.	1.8	66
66	Diagnostic lipid biomarker and stable carbon isotope signatures of microbial communities mediating the anaerobic oxidation of methane with sulphate. <i>Organic Geochemistry</i> , 2008, 39, 1668-1677.	1.8	164
67	Occurrence of unusual steroids and hopanoids derived from aerobic methanotrophs at an active marine mud volcano. <i>Organic Geochemistry</i> , 2008, 39, 167-177.	1.8	59
68	Intact polar lipids of anaerobic methanotrophic archaea and associated bacteria. <i>Organic Geochemistry</i> , 2008, 39, 992-999.	1.8	118
69	Extended hydroxyarchaeol, a novel lipid biomarker for anaerobic methanotrophy in cold seepage habitats. <i>Organic Geochemistry</i> , 2008, 39, 1007-1014.	1.8	37
70	In vitro cell growth of marine archaeal-bacterial consortia during anaerobic oxidation of methane with sulfate. <i>Environmental Microbiology</i> , 2007, 9, 187-196.	3.8	294
71	Novel microbial communities of the Haakon Mosby mud volcano and their role as a methane sink. <i>Nature</i> , 2006, 443, 854-858.	27.8	570
72	Microbial methane turnover at mud volcanoes of the Gulf of Cadiz. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 5336-5355.	3.9	173

#	ARTICLE	IF	CITATIONS
73	Heterotrophic Archaea dominate sedimentary subsurface ecosystems off Peru. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 3846-3851.	7.1	654
74	Lipid biomarker patterns of methane-seep microbialites from the Mesozoic convergent margin of California. <i>Organic Geochemistry</i> , 2006, 37, 1289-1302.	1.8	98
75	Online $\delta^{13}\text{C}$ analysis of volatile fatty acids in sediment/porewater systems by liquid chromatography-isotope ratio mass spectrometry. <i>Limnology and Oceanography: Methods</i> , 2006, 4, 346-357.	2.0	92
76	Microbiological investigation of methane- and hydrocarbon-discharging mud volcanoes in the Carpathian Mountains, Romania. <i>Environmental Microbiology</i> , 2006, 8, 574-590.	3.8	129
77	Spatial variations of methanotrophic consortia at cold methane seeps: implications from a high-resolution molecular and isotopic approach. <i>Geobiology</i> , 2005, 3, 195-209.	2.4	121
78	The microbial community structure of different permeable sandy sediments characterized by the investigation of bacterial fatty acids and fluorescence in situ hybridization. <i>Environmental Microbiology</i> , 2005, 7, 281-293.	3.8	48
79	Methane emission and consumption at a North Sea gas seep (Tommeliten area). <i>Biogeosciences</i> , 2005, 2, 335-351.	3.3	129
80	Molecular biogeochemistry of sulfate reduction, methanogenesis and the anaerobic oxidation of methane at Gulf of Mexico cold seeps. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 4267-4281.	3.9	204
81	Intact polar membrane lipids in prokaryotes and sediments deciphered by high-performance liquid chromatography/electrospray ionization multistage mass spectrometry—new biomarkers for biogeochemistry and microbial ecology. <i>Rapid Communications in Mass Spectrometry</i> , 2004, 18, 617-628.	1.5	466
82	Intact phospholipids—microbial life markers—in marine deep subsurface sediments. <i>Organic Geochemistry</i> , 2003, 34, 755-769.	1.8	88
83	Characterization of Specific Membrane Fatty Acids as Chemotaxonomic Markers for Sulfate-Reducing Bacteria Involved in Anaerobic Oxidation of Methane. <i>Geomicrobiology Journal</i> , 2003, 20, 403-419.	2.0	222
84	Stromatolitic fabric of authigenic carbonate crusts: result of anaerobic methane oxidation at cold seeps in 4,850 m water depth. <i>International Journal of Earth Sciences</i> , 2002, 91, 698-711.	1.8	87
85	Organic geochemistry of Saanich Inlet, BC, during the Holocene as revealed by Ocean Drilling Program Leg 169S. <i>Marine Geology</i> , 2001, 174, 249-271.	2.1	14
86	Diploptene in varved sediments of Saanich Inlet: indicator of increasing bacterial activity under anaerobic conditions during the Holocene. <i>Marine Geology</i> , 2001, 174, 371-383.	2.1	29
87	Archaea mediating anaerobic methane oxidation in deep-sea sediments at cold seeps of the eastern Aleutian subduction zone. <i>Organic Geochemistry</i> , 2000, 31, 1175-1187.	1.8	197
88	Anaerobic methane oxidation associated with marine gas hydrates: superlight C isotopes from saturated and unsaturated C 20 and C 25 irregular isoprenoids. <i>Die Naturwissenschaften</i> , 1999, 86, 295-300.	1.6	212
89	Carbon Isotopes of Biomarkers Derived from Methane-Oxidizing Microbes at Hydrate Ridge, Cascadia Convergent Margin. <i>Geophysical Monograph Series</i> , 0, , 115-129.	0.1	25
90	IODP Expedition 337: Deep Coalbed Biosphere off Shimokita — Microbial processes and hydrocarbon system associated with deeply buried coalbed in the ocean. <i>Scientific Drilling</i> , 0, 21, 17-28.	0.6	15