

Christian Knoblauch

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

3,551
citations

218592

26
h-index

206029

48
g-index

66
all docs

66
docs citations

66
times ranked

4270
citing authors

#	ARTICLE	IF	CITATIONS
1	Sources of CO ₂ Produced in Freshly Thawed Pleistocene-Age Yedoma Permafrost. <i>Frontiers in Earth Science</i> , 2022, 9, .	0.8	5
2	Development of permafrost-affected peatlands in the southern limit of the European Russian cryolithozone and their vulnerability to future warming. <i>Science of the Total Environment</i> , 2022, 828, 154350.	3.9	4
3	Microbiome assembly in thawing permafrost and its feedbacks to climate. <i>Global Change Biology</i> , 2022, 28, 5007-5026.	4.2	34
4	Dissolved organic matter characterization in soils and streams in a small coastal low-Arctic catchment. <i>Biogeosciences</i> , 2022, 19, 3073-3097.	1.3	9
5	Impact of biochar on nutrient supply, crop yield and microbial respiration on sandy soils of northern Germany. <i>European Journal of Soil Science</i> , 2021, 72, 1885-1901.	1.8	19
6	Greenhouse gas production and lipid biomarker distribution in Yedoma and Alas thermokarst lake sediments in Eastern Siberia. <i>Global Change Biology</i> , 2021, 27, 2822-2839.	4.2	21
7	Permafrost Carbon and CO ₂ Pathways Differ at Contrasting Coastal Erosion Sites in the Canadian Arctic. <i>Frontiers in Earth Science</i> , 2021, 9, .	0.8	21
8	Effects of a long-term anoxic warming scenario on microbial community structure and functional potential of permafrost-affected soil. <i>Permafrost and Periglacial Processes</i> , 2021, 32, 641-656.	1.5	11
9	Carbon Dioxide and Methane Release Following Abrupt Thaw of Pleistocene Permafrost Deposits in Arctic Siberia. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, .	1.3	17
10	Thawing Yedoma permafrost is a neglected nitrous oxide source. <i>Nature Communications</i> , 2021, 12, 7107.	5.8	24
11	Methanogenic response to long-term permafrost thaw is determined by paleoenvironment. <i>FEMS Microbiology Ecology</i> , 2020, 96, .	1.3	23
12	Spatial Variability of Dissolved Organic Carbon, Solutes, and Suspended Sediment in Disturbed Low Arctic Coastal Watersheds. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005505.	1.3	10
13	Rapid CO ₂ Release From Eroding Permafrost in Seawater. <i>Geophysical Research Letters</i> , 2019, 46, 11244-11252.	1.5	54
14	Partitioning net ecosystem exchange of CO ₂ on the pedon scale in the Lena River Delta, Siberia. <i>Biogeosciences</i> , 2019, 16, 1543-1562.	1.3	15
15	Influence of Anthropogenic Activities on Metals in Arctic Permafrost: A Characterization of Benchmark Soils on the Yamal and Gydan Peninsulas in Russia. <i>Archives of Environmental Contamination and Toxicology</i> , 2019, 76, 540-553.	2.1	22
16	Gas production from dredged sediment. <i>Waste Management</i> , 2019, 85, 82-89.	3.7	7
17	Anaerobic methanotrophic communities thrive in deep submarine permafrost. <i>Scientific Reports</i> , 2018, 8, 1291.	1.6	58
18	Methane production as key to the greenhouse gas budget of thawing permafrost. <i>Nature Climate Change</i> , 2018, 8, 309-312.	8.1	194

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19	Markers of Soil Organic Matter Transformation in Permafrost Peat Mounds of Northeastern Europe. <i>Eurasian Soil Science</i> , 2018, 51, 42-53.	0.5	8
20	Summer rainfall dissolved organic carbon, solute, and sediment fluxes in a small Arctic coastal catchment on Herschel Island (Yukon Territory, Canada). <i>Arctic Science</i> , 2018, 4, 750-780.	0.9	20
21	Long-term deglacial permafrost carbon dynamics in MPI-ESM. <i>Climate of the Past</i> , 2018, 14, 2011-2036.	1.3	4
22	Greenhouse gas production in degrading ice-rich permafrost deposits in northeastern Siberia. <i>Biogeosciences</i> , 2018, 15, 5423-5436.	1.3	14
23	Ecosystem carbon dynamics differ between tundra shrub types in the western Canadian Arctic. <i>Environmental Research Letters</i> , 2018, 13, 084014.	2.2	12
24	Transformation of terrestrial organic matter along thermokarst-affected permafrost coasts in the Arctic. <i>Science of the Total Environment</i> , 2017, 581-582, 434-447.	3.9	45
25	Regulation of soil organic matter decomposition in permafrost-affected Siberian tundra soils - Impact of oxygen availability, freezing and thawing, temperature, and labile organic matter. <i>Soil Biology and Biochemistry</i> , 2017, 110, 34-43.	4.2	104
26	Deep Yedoma permafrost: A synthesis of depositional characteristics and carbon vulnerability. <i>Earth-Science Reviews</i> , 2017, 172, 75-86.	4.0	236
27	Process-based modelling of the methane balance in periglacial landscapes (JSBACH-methane). <i>Geoscientific Model Development</i> , 2017, 10, 333-358.	1.3	16
28	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. <i>Nature Climate Change</i> , 2016, 6, 950-953.	8.1	288
29	Regulation of methane production, oxidation, and emission by vascular plants and bryophytes in ponds of the northeast Siberian polygonal tundra. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 2525-2541.	1.3	60
30	Methane oxidation following submarine permafrost degradation: Measurements from a central Laptev Sea shelf borehole. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 965-978.	1.3	55
31	Circumpolar assessment of permafrost C quality and its vulnerability over time using long-term incubation data. <i>Global Change Biology</i> , 2014, 20, 641-652.	4.2	231
32	Predicting long-term carbon mineralization and trace gas production from thawing permafrost of northeast Siberia. <i>Global Change Biology</i> , 2013, 19, 1160-1172.	4.2	161
33	Improved quantification of microbial CH ₄ oxidation efficiency in arctic wetland soils using carbon isotope fractionation. <i>Biogeosciences</i> , 2013, 10, 2539-2552.	1.3	49
34	Methane oxidation associated with submerged brown mosses reduces methane emissions from Siberian polygonal tundra. <i>Journal of Ecology</i> , 2011, 99, 914-922.	1.9	91
35	Degradability of black carbon and its impact on trace gas fluxes and carbon turnover in paddy soils. <i>Soil Biology and Biochemistry</i> , 2011, 43, 1768-1778.	4.2	190
36	Effects and fate of biochar from rice residues in rice-based systems. <i>Field Crops Research</i> , 2011, 121, 430-440.	2.3	287

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37	Regional, seasonal and interspecific variation in $\delta^{15}\text{N}$ and $\delta^{13}\text{C}$ in sympatric mouse lemurs. <i>Die Naturwissenschaften</i> , 2011, 98, 909-917.	0.6	20
38	Methanogenic community composition and anaerobic carbon turnover in submarine permafrost sediments of the Siberian Laptev Sea. <i>Environmental Microbiology</i> , 2009, 11, 657-668.	1.8	48
39	Black Carbon (Biochar) in Rice-Based Systems: Characteristics and Opportunities. , 2009, , 445-463.		9
40	Methane turnover and temperature response of methane-oxidizing bacteria in permafrost-affected soils of northeast Siberia. <i>Soil Biology and Biochemistry</i> , 2008, 40, 3004-3013.	4.2	64
41	<i>Desulfovibrio frigidus</i> sp. nov. and <i>Desulfovibrio ferrireducens</i> sp. nov., psychrotolerant bacteria isolated from Arctic fjord sediments (Svalbard) with the ability to reduce Fe(III). <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2006, 56, 681-685.	0.8	47
42	<i>Desulfotomaculum arcticum</i> sp. nov., a novel spore-forming, moderately thermophilic, sulfate-reducing bacterium isolated from a permanently cold fjord sediment of Svalbard. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2006, 56, 687-690.	0.8	42
43	Controls on stable sulfur isotope fractionation during bacterial sulfate reduction in Arctic sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 763-776.	1.6	106
44	Community Structure, Cellular rRNA Content, and Activity of Sulfate-Reducing Bacteria in Marine Arctic Sediments. <i>Applied and Environmental Microbiology</i> , 2000, 66, 3592-3602.	1.4	259
45	Psychrophilic sulfate-reducing bacteria isolated from permanently cold Arctic marine sediments: description of <i>Desulfofrigus oceanense</i> gen. nov., sp. nov., <i>Desulfofrigus fragile</i> sp. nov., <i>Desulfofaba gelida</i> gen. nov., sp. nov., <i>Desulfotalea psychrophila</i> gen. nov., sp. nov. and <i>Desulfotalea arctica</i> sp. nov.. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 1999, 49, 1631-1643.	0.8	221
46	Effect of temperature on sulphate reduction, growth rate and growth yield in five psychrophilic sulphate-reducing bacteria from Arctic sediments. <i>Environmental Microbiology</i> , 1999, 1, 457-467.	1.8	100
47	Phylogenetic Affiliation and Quantification of Psychrophilic Sulfate-Reducing Isolates in Marine Arctic Sediments. <i>Applied and Environmental Microbiology</i> , 1999, 65, 3976-3981.	1.4	85
48	Community Size and Metabolic Rates of Psychrophilic Sulfate-Reducing Bacteria in Arctic Marine Sediments. <i>Applied and Environmental Microbiology</i> , 1999, 65, 4230-4233.	1.4	121