Katey Walter Anthony

List of Publications by Year
in descending order

43	3,936	172207	253896
papers	citations	29 h-index	43 g-index

44	44	44	4147
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon release through abrupt permafrost thaw. Nature Geoscience, 2020, 13, 138-143.	5.4	434
2	Climate-sensitive northern lakes and ponds are critical components of methane release. Nature Geoscience, 2016, 9, 99-105.	5.4	357
3	Reviews and syntheses: Effects of permafrost thaw on Arctic aquatic ecosystems. Biogeosciences, 2015, 12, 7129-7167.	1.3	354
4	Expert assessment of vulnerability of permafrost carbon to climate change. Climatic Change, 2013, 119, 359-374.	1.7	257
5	Modern thermokarst lake dynamics in the continuous permafrost zone, northern Seward Peninsula, Alaska. Journal of Geophysical Research, 2011, 116, .	3.3	250
6	A shift of thermokarst lakes from carbon sources to sinks during the Holocene epoch. Nature, 2014, 511, 452-456.	13.7	246
7	Permafrost collapse is accelerating carbon release. Nature, 2019, 569, 32-34.	13.7	237
8	21st-century modeled permafrost carbon emissions accelerated by abrupt thaw beneath lakes. Nature Communications, 2018, 9, 3262.	5.8	187
9	Methane emissions proportional to permafrost carbon thawed in Arctic lakes since the 1950s. Nature Geoscience, 2016, 9, 679-682.	5.4	150
10	Methane and carbon dioxide emissions from 40 lakes along a northâ€“south latitudinal transect in Alaska. Biogeosciences, 2015, 12, 3197-3223.	1.3	142
11	Vulnerability and Feedbacks of Permafrost to Climate Change. Eos, 2011, 92, 73-74.	0.1	121
12	Anaerobic oxidation of methane by aerobic methanotrophs in sub-Arctic lake sediments. Science of the Total Environment, 2017, 607-608, 23-31.	3.9	113
13	Peat accumulation in drained thermokarst lake basins in continuous, iceâ€rich permafrost, northern Seward Peninsula, Alaska. Journal of Geophysical Research, 2012, 117, .	3.3	84
14	Ubiquitous and significant anaerobic oxidation of methane in freshwater lake sediments. Water Research, 2018, 144, 332-340.	5.3	84
15	Simulating the decadalâ€•to millennialâ€scale dynamics of morphology and sequestered carbon mobilization of two thermokarst lakes in NW Alaska. Journal of Geophysical Research, 2012, 117, .	3.3	82
16	Modeling methane emissions from arctic lakes: Model development and siteâ€level study. Journal of Advances in Modeling Earth Systems, 2015, 7, 459-483.	1.3	71
17	Using the deuterium isotope composition of permafrost meltwater to constrain thermokarst lake contributions to atmospheric CH₄ during the last deglaciation. Journal of Geophysical Research, 2012, 117, .	3.3	64
18	Modeling the impediment of methane ebullition bubbles by seasonal lake ice. Biogeosciences, 2014, 11, 6791-6811.	1.3	63

#	Article	IF	Citations
19	In Situ Measurement of Dissolved Methane and Carbon Dioxide in Freshwater Ecosystems by Off-Axis Integrated Cavity Output Spectroscopy. Environmental Science & Technology, 2014, 48, 11421-11428.	4.6	62
20	Circum-Arctic Map of the Yedoma Permafrost Domain. Frontiers in Earth Science, 2021, 9, .	0.8	49
21	Remote sensing northern lake methane ebullition. Nature Climate Change, 2020, 10, 511-517.	8.1	45
22	BAWLD-CH₄: a comprehensive dataset of methane fluxes from boreal and arctic ecosystems. Earth System Science Data, 2021, 13, 5151-5189.	3.7	44
23	Thermokarst lake methanogenesis along a complete talik profile. Biogeosciences, 2015, 12, 4317-4331.	1.3	43
24	Facies analysis of yedoma thermokarst lakes on the northern Seward Peninsula, Alaska. Sedimentary Geology, 2016, 340, 25-37.	1.0	38
25	Modeling <scp>CO</scp>₂ emissions from <scp>A</scp>rctic lakes: Model development and siteâ€level study. Journal of Advances in Modeling Earth Systems, 2017, 9, 2190-2213.	1.3	38
26	Assessing the Potential for Mobilization of Old Soil Carbon After Permafrost Thaw: A Synthesis of ¹⁴C Measurements From the Northern Permafrost Region. Global Biogeochemical Cycles, 2020, 34, e2020GB006672.	1.9	36
27	Characterizing Post-Drainage Succession in Thermokarst Lake Basins on the Seward Peninsula, Alaska with TerraSAR-X Backscatter and Landsat-based NDVI Data. Remote Sensing, 2012, 4, 3741-3765.	1.8	33
28	First evidence for cold-adapted anaerobic oxidation of methane in deep sediments of thermokarst lakes. Environmental Research Communications, 2019, 1, 021002.	0.9	33
29	Synthetic aperture radar (SAR) backscatter response from methane ebullition bubbles trapped by thermokarst lake ice. Canadian Journal of Remote Sensing, 2013, 38, 667-682.	1.1	31
30	Seasonal Sources of Wholeâ€Lake CH₄ and CO₂ Emissions From Interior Alaskan Thermokarst Lakes. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 1209-1229.	1.3	23
31	Methane: A Menace Surfaces. Scientific American, 2009, 301, 68-75.	1.0	22
32	Decadal-scale hotspot methane ebullition within lakes following abrupt permafrost thaw. Environmental Research Letters, 2021, 16, 035010.	2.2	21
33	Characterizing Methane Emission Hotspots From Thawing Permafrost. Global Biogeochemical Cycles, 2021, 35, e2020GB006922.	1.9	19
34	Century-scale time since permafrost thaw affects temperature sensitivity of net methane production in thermokarst-lake and talik sediments. Science of the Total Environment, 2019, 691, 124-134.	3.9	18
35	Nocturnal escape route for marsh gas. Nature, 2016, 535, 363-365.	13.7	16
36	The role of wetland expansion and successional processes in methane emissions from northern wetlands during the Holocene. Quaternary Science Reviews, 2021, 257, 106864.	1.4	15

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37	First pan-Arctic assessment of dissolved organic carbon in lakes of the permafrost region. Biogeosciences, 2021, 18, 3917-3936.	1.3	12
38	Composition and photo-reactivity of organic matter from permafrost soils and surface waters in interior Alaska. Environmental Sciences: Processes and Impacts, 2020, 22, 1525-1539.	1.7	9
39	Utilizing pyrolysis GC-MS to characterize organic matter quality in relation to methane production in a thermokarst lake sediment core. Organic Geochemistry, 2017, 103, 43-50.	0.9	8
40	An Object-Based Classification Method to Detect Methane Ebullition Bubbles in Early Winter Lake Ice. Remote Sensing, 2019, 11, 822.	1.8	8
41	Influence of permafrost thaw on an extreme geologic methane seep. Permafrost and Periglacial Processes, 2021, 32, 484-502.	1.5	8
42	Methane production controls in a young thermokarst lake formed by abrupt permafrost thaw. Global Change Biology, 2022, 28, 3206-3221.	4.2	7
43	Technical note: Mobile open dynamic chamber measurement of methane macroseeps in lakes. Hydrology and Earth System Sciences, 2020, 24, 6047-6058.	1.9	2