## Kimberly P Wickland

List of Publications by Year in descending order

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117571 161767 5,911 53 34 54 citations g-index h-index papers 63 63 63 6490 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	A synthesis of methane emissions from 71 northern, temperate, and subtropical wetlands. Global Change Biology, 2014, 20, 2183-2197.	4.2	389
2	Reviews and syntheses: Effects of permafrost thaw on Arctic aquatic ecosystems. Biogeosciences, 2015, 12, 7129-7167.	1.3	354
3	Vulnerability of high-latitude soil organic carbon in North America to disturbance. Journal of Geophysical Research, 2011, 116, .	3.3	337
4	A decrease in discharge-normalized DOC export by the Yukon River during summer through autumn. Geophysical Research Letters, 2005, 32, .	1.5	334
5	Dissolved Organic Carbon in Alaskan Boreal Forest: Sources, Chemical Characteristics, and Biodegradability. Ecosystems, 2007, 10, 1323-1340.	1.6	293
6	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. Nature Climate Change, 2016, 6, 950-953.	8.1	288
7	Seasonal and spatial variability in dissolved organic matter quantity and composition from the Yukon River basin, Alaska. Global Biogeochemical Cycles, 2008, 22, .	1.9	268
8	Expert assessment of vulnerability of permafrost carbon to climate change. Climatic Change, 2013, 119, 359-374.	1.7	257
9	Permafrost Stores a Globally Significant Amount of Mercury. Geophysical Research Letters, 2018, 45, 1463-1471.	1.5	245
10	Ancient low–molecular-weight organic acids in permafrost fuel rapid carbon dioxide production upon thaw. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13946-13951.	3.3	201
11	Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. Environmental Research Letters, 2016, 11, 034014.	2.2	199
12	Carbon export and cycling by the Yukon, Tanana, and Porcupine rivers, Alaska, 2001-2005. Water Resources Research, 2007, 43, .	1.7	197
13	Biodegradability of dissolved organic carbon in the Yukon River and its tributaries: Seasonality and importance of inorganic nitrogen. Global Biogeochemical Cycles, 2012, 26, .	1.9	191
14	The Effects of Permafrost Thaw on Soil Hydrologic, Thermal, and Carbon Dynamics in an Alaskan Peatland. Ecosystems, 2012, 15, 213-229.	1.6	162
15	Carbon dioxide partial pressure and 13C content of north temperate and boreal lakes at spring ice melt. Limnology and Oceanography, 2001, 46, 941-945.	1.6	160
16	Molecular investigations into a globally important carbon pool: permafrostâ€protected carbon in Alaskan soils. Global Change Biology, 2010, 16, 2543-2554.	4.2	158
17	Biodegradability of dissolved organic carbon in permafrost soils and aquatic systems: a meta-analysis. Biogeosciences, 2015, 12, 6915-6930.	1.3	153
18	Impact of fire on active layer and permafrost microbial communities and metagenomes in an upland Alaskan boreal forest. ISME Journal, 2014, 8, 1904-1919.	4.4	150

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19	Emissions of carbon dioxide and methane from a headwater stream network of interior Alaska. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 482-494.	1.3	141
20	Winter fluxes of CO2and CH4from subalpine soils in Rocky Mountain National Park, Colorado. Global Biogeochemical Cycles, 1998, 12, 607-620.	1.9	135
21	Effects of a clear-cut harvest on soil respiration in a jack pine - lichen woodland. Canadian Journal of Forest Research, 1998, 28, 534-539.	0.8	114
22	Decomposition of soil organic matter from boreal black spruce forest: environmental and chemical controls. Biogeochemistry, 2008, 87, 29-47.	1.7	102
23	Effects of permafrost melting on CO2and CH4exchange of a poorly drained black spruce lowland. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	97
24	Carbon gas exchange at a southern Rocky Mountain wetland, 1996-1998. Global Biogeochemical Cycles, 2001, 15, 321-335.	1.9	91
25	Dissolved organic carbon and nitrogen release from boreal Holocene permafrost and seasonally frozen soils of Alaska. Environmental Research Letters, 2018, 13, 065011.	2.2	84
26	Potential impacts of mercury released from thawing permafrost. Nature Communications, 2020, $11$ , 4650.	5.8	77
27	Negligible cycling of terrestrial carbon in many lakes of the arid circumpolar landscape. Nature Geoscience, 2019, 12, 180-185.	5.4	60
28	Boreal soil carbon dynamics under a changing climate: A model inversion approach. Journal of Geophysical Research, 2008, $113$ , .	3.3	59
29	Runoff sources and flow paths in a partially burned, upland boreal catchment underlain by permafrost. Water Resources Research, 2014, 50, 8141-8158.	1.7	54
30	Dissolved Organic Carbon Turnover in Permafrost-Influenced Watersheds of Interior Alaska: Molecular Insights and the Priming Effect. Frontiers in Earth Science, 2019, 7, .	0.8	46
31	Effect of permafrost thaw on CO <sub>2</sub> and CH <sub>4</sub> exchange in a western Alaska peatland chronosequence. Environmental Research Letters, 2014, 9, 085004.	2.2	45
32	Methane flux in subalpine wetland and unsaturated soils in the southern Rocky Mountains. Global Biogeochemical Cycles, 1999, 13, 101-113.	1.9	39
33	Methane emissions from oceans, coasts, and freshwater habitats: New perspectives and feedbacks on climate. Limnology and Oceanography, 2016, 61, S3.	1.6	39
34	Hydrologic connectivity determines dissolved organic matter biogeochemistry in northern highâ€latitude lakes. Limnology and Oceanography, 2020, 65, 1764-1780.	1.6	37
35	Surface-air mercury fluxes across Western North America: A synthesis of spatial trends and controlling variables. Science of the Total Environment, 2016, 568, 651-665.	3.9	36
36	Stream Dissolved Organic Matter in Permafrost Regions Shows Surprising Compositional Similarities but Negative Priming and Nutrient Effects. Global Biogeochemical Cycles, 2021, 35, e2020GB006719.	1.9	30

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37	Soil respiration and photosynthetic uptake of carbon dioxide by ground-cover plants in four ages of jack pine forest. Canadian Journal of Forest Research, 2001, 31, 1540-1550.	0.8	27
38	The role of soil drainage class in carbon dioxide exchange and decomposition in boreal black spruce ( <i>Picea mariana</i> ) forest stands. Canadian Journal of Forest Research, 2010, 40, 2123-2134.	0.8	27
39	Ice Wedge Degradation and Stabilization Impact Water Budgets and Nutrient Cycling in Arctic Trough Ponds. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2604-2616.	1.3	26
40	Variation in Soil Carbon Dioxide Efflux at Two Spatial Scales in a Topographically Complex Boreal Forest. Arctic, Antarctic, and Alpine Research, 2012, 44, 457-468.	0.4	22
41	Biological and land use controls on the isotopic composition of aquatic carbon in the Upper Mississippi River Basin. Global Biogeochemical Cycles, 2017, 31, 1271-1288.	1.9	22
42	Modeling the Production, Decomposition, and Transport of Dissolved Organic Carbon in Boreal Soils. Soil Science, 2010, 175, 223-232.	0.9	20
43	The implications of microbial and substrate limitation for the fates of carbon in different organic soil horizon types of boreal forest ecosystems: a mechanistically based model analysis. Biogeosciences, 2014, 11, 4477-4491.	1.3	20
44	Satellite and airborne remote sensing of gross primary productivity in boreal Alaskan lakes. Environmental Research Letters, 2020, 15, 105001.	2.2	20
45	Anthropogenic landcover impacts fluvial dissolved organic matter composition in the Upper Mississippi River Basin. Biogeochemistry, 2023, 164, 117-141.	1.7	16
46	Carbon Dioxide and Methane Flux in a Dynamic Arctic Tundra Landscape: Decadalâ€Scale Impacts of Ice Wedge Degradation and Stabilization. Geophysical Research Letters, 2020, 47, .	1.5	16
47	The Importance of Lake Emergent Aquatic Vegetation for Estimating Arcticâ€Boreal Methane Emissions. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	11
48	Wind Sheltering Impacts on Land-Atmosphere Fluxes Over Fens. Frontiers in Environmental Science, 2019, 7, .	1.5	8
49	Carbon and geochemical properties of cryosols on the North Slope of Alaska. Cold Regions Science and Technology, 2014, 100, 59-67.	1.6	7
50	Lagged Wetland CH <sub>4</sub> Flux Response in a Historically Wet Year. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006458.	1.3	6
51	Heterogeneous Patterns of Aged Organic Carbon Export Driven by Hydrologic Flow Paths, Soil Texture, Fire, and Thaw in Discontinuous Permafrost Headwaters. Global Biogeochemical Cycles, 2022, 36, .	1.9	5
52	The ASLO Awards Program Primer: How it Works, Historical Trends, and How You Can Get Involved. Limnology and Oceanography Bulletin, 2019, 28, 70-74.	0.2	3
53	Patterns and isotopic composition of greenhouse gases under ice in lakes of interior Alaska. Environmental Research Letters, 2020, 15, 105016.	2.2	3