Kimberly P Wickland

List of Publications by Citations

53 papers	4,627 citations	30 h-index	63 g-index
63 ext. papers	5,296 ext. citations	5.8 avg, IF	5.24 L-index

#	Paper	IF	Citations
53	A decrease in discharge-normalized DOC export by the Yukon River during summer through autumn. *Geophysical Research Letters*, **2005**, 32,	4.9	295
52	Vulnerability of high-latitude soil organic carbon in North America to disturbance. *Journal of Geophysical Research*, **2011**, 116,		292
51	A synthesis of methane emissions from 71 northern, temperate, and subtropical wetlands. *Global Change Biology*, **2014**, 20, 2183-97	11.4	291
50	Reviews and syntheses: Effects of permafrost thaw on Arctic aquatic ecosystems. *Biogeosciences*, **2015**, 12, 7129-7167	4.6	261
49	Dissolved Organic Carbon in Alaskan Boreal Forest: Sources, Chemical Characteristics, and Biodegradability. *Ecosystems*, **2007**, 10, 1323-1340	3.9	249
48	Seasonal and spatial variability in dissolved organic matter quantity and composition from the Yukon River basin, Alaska. *Global Biogeochemical Cycles*, **2008**, 22, n/a-n/a	5.9	231
47	Expert assessment of vulnerability of permafrost carbon to climate change. *Climatic Change*, **2013**, 119, 359-374	4.5	212
46	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. *Nature Climate Change*, **2016**, 6, 950-953	21.4	211
45	Carbon export and cycling by the Yukon, Tanana, and Porcupine rivers, Alaska, 2001–2005. *Water Resources Research*, **2007**, 43,	5.4	170
44	Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. *Environmental Research Letters*, **2016**, 11, 034014	6.2	165
43	Permafrost Stores a Globally Significant Amount of Mercury. *Geophysical Research Letters*, **2018**, 45, 1463-1471	4.9	158
42	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, 13946-51	11.5	155
41	Biodegradability of dissolved organic carbon in the Yukon River and its tributaries: Seasonality and importance of inorganic nitrogen. *Global Biogeochemical Cycles*, **2012**, 26, n/a-n/a	5.9	149
40	The Effects of Permafrost Thaw on Soil Hydrologic, Thermal, and Carbon Dynamics in an Alaskan Peatland. *Ecosystems*, **2012**, 15, 213-229	3.9	143
39	Carbon dioxide partial pressure and 13C content of north temperate and boreal lakes at spring ice melt. *Limnology and Oceanography*, **2001**, 46, 941-945	4.8	133
38	Molecular investigations into a globally important carbon pool: permafrost-protected carbon in Alaskan soils. *Global Change Biology*, **2010**, 16, 2543	11.4	129
37	Winter fluxes of CO2 and CH4 from subalpine soils in Rocky Mountain National Park, Colorado. *Global Biogeochemical Cycles*, **1998**, 12, 607-620	5.9	118

36	Biodegradability of dissolved organic carbon in permafrost soils and aquatic systems: a meta-analysis. *Biogeosciences*, **2015**, 12, 6915-6930	4.6	112
35	Impact of fire on active layer and permafrost microbial communities and metagenomes in an upland Alaskan boreal forest. *ISME Journal*, **2014**, 8, 1904-19	11.9	106
34	Emissions of carbon dioxide and methane from a headwater stream network of interior Alaska. *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 482-494	3.7	105
33	Effects of a clear-cut harvest on soil respiration in a jack pine - lichen woodland. *Canadian Journal of Forest Research*, **1998**, 28, 534-539	1.9	102
32	Decomposition of soil organic matter from boreal black spruce forest: environmental and chemical controls. *Biogeochemistry*, **2008**, 87, 29-47	3.8	91
31	Effects of permafrost melting on CO2 and CH4 exchange of a poorly drained black spruce lowland. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a		79
30	Carbon gas exchange at a southern Rocky Mountain wetland, 1996–1998. *Global Biogeochemical Cycles*, **2001**, 15, 321-335	5.9	78
29	Boreal soil carbon dynamics under a changing climate: A model inversion approach. *Journal of Geophysical Research*, **2008**, 113,		57
28	Dissolved organic carbon and nitrogen release from boreal Holocene permafrost and seasonally frozen soils of Alaska. *Environmental Research Letters*, **2018**, 13, 065011	6.2	49
27	Runoff sources and flow paths in a partially burned, upland boreal catchment underlain by permafrost. *Water Resources Research*, **2014**, 50, 8141-8158	5.4	42
26	Negligible cycling of terrestrial carbon in many lakes of the arid circumpolar landscape. *Nature Geoscience*, **2019**, 12, 180-185	18.3	40
25	Effect of permafrost thaw on CO 2 and CH 4 exchange in a western Alaska peatland chronosequence. *Environmental Research Letters*, **2014**, 9, 085004	6.2	39
24	Methane flux in subalpine wetland and unsaturated soils in the southern Rocky Mountains. *Global Biogeochemical Cycles*, **1999**, 13, 101-113	5.9	35
23	Methane emissions from oceans, coasts, and freshwater habitats: New perspectives and feedbacks on climate. *Limnology and Oceanography*, **2016**, 61, S3-S12	4.8	29
22	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	10.2	29
21	Dissolved Organic Carbon Turnover in Permafrost-Influenced Watersheds of Interior Alaska: Molecular Insights and the Priming Effect. *Frontiers in Earth Science*, **2019**, 7,	3.5	29
20	Potential impacts of mercury released from thawing permafrost. *Nature Communications*, **2020**, 11, 4650	17.4	28
19	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	1.9	25

18	The role of soil drainage class in carbon dioxide exchange and decomposition in boreal black spruce (Picea mariana) forest stands. *Canadian Journal of Forest Research*, **2010**, 40, 2123-2134	1.9	22
17	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	1.8	20
16	Modeling the Production, Decomposition, and Transport of Dissolved Organic Carbon in Boreal Soils. *Soil Science*, **2010**, 175, 223-232	0.9	19
15	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	3.7	18
14	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	4.6	18
13	Reviews and Syntheses: Effects of permafrost thaw on arctic aquatic ecosystems		17
12	Hydrologic connectivity determines dissolved organic matter biogeochemistry in northern high-latitude lakes. *Limnology and Oceanography*, **2020**, 65, 1764-1780	4.8	13
11	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	5.9	12
10	Stream Dissolved Organic Matter in Permafrost Regions Shows Surprising Compositional Similarities but Negative Priming and Nutrient Effects. *Global Biogeochemical Cycles*, **2021**, 35, e2020GB006719	5.9	10
9	Satellite and airborne remote sensing of gross primary productivity in boreal Alaskan lakes. *Environmental Research Letters*, **2020**, 15, 105001	6.2	9
8	Biodegradability of dissolved organic carbon in permafrost soils and waterways: a meta-analysis		7
7	Carbon and geochemical properties of cryosols on the North Slope of Alaska. *Cold Regions Science and Technology*, **2014**, 100, 59-67	3.8	6
6	Carbon Dioxide and Methane Flux in a Dynamic Arctic Tundra Landscape: Decadal-Scale Impacts of Ice Wedge Degradation and Stabilization. *Geophysical Research Letters*, **2020**, 47,	4.9	5
5	Wind Sheltering Impacts on Land-Atmosphere Fluxes Over Fens. *Frontiers in Environmental Science*, **2019**, 7,	4.8	4
4	The implications of microbial and substrate limitation for the fates of carbon in different organic soil horizon types: a mechanistically based model analysis		2
3	Lagged Wetland CH4 Flux Response in a Historically Wet Year. *Journal of Geophysical Research G: Biogeosciences*, **2021**, 126, e2021JG006458	3.7	2
2	Anthropogenic landcover impacts fluvial dissolved organic matter composition in the Upper Mississippi River Basin. *Biogeochemistry*,1	3.8	1
1	Patterns and isotopic composition of greenhouse gases under ice in lakes of interior Alaska. *Environmental Research Letters*, **2020**, 15, 105016	6.2	1