E S Euskirchen

List of Publications by Year
in descending order

92 papers	10,793 citations	57631 44 h-index	43802 91 g-index
138 all docs	138 docs citations	138 times ranked	12466 citing authors

#	Article	IF	Citations
1	Assessing dynamic vegetation model parameter uncertainty across Alaskan arctic tundra plant communities. Ecological Applications, 2022, 32, e02499.	1.8	3
2	The ABCflux database: Arcticâ€“boreal CO₂ flux observations and ancillary information aggregated to monthly time steps across terrestrial ecosystems. Earth System Science Data, 2022, 14, 179-208.	3.7	22
3	A new approach to simulate peat accumulation, degradation and stability in a global land surface scheme (JULES vn5.8_accumulate_soil) for northern and temperate peatlands. Geoscientific Model Development, 2022, 15, 1633-1657.	1.3	6
4	Potential Satellite Monitoring of Surface Organic Soil Properties in Arctic Tundra From SMAP. Water Resources Research, 2022, 58, .	1.7	6
5	Closing the Winter Gapâ€"Yearâ€Round Measurements of Soil CO₂ Emission Sources in Arctic Tundra. Geophysical Research Letters, 2022, 49, .	1.5	9
6	Earlier snowmelt may lead to late season declines in plant productivity and carbon sequestration in Arctic tundra ecosystems. Scientific Reports, 2022, 12, 3986.	1.6	16
7	Assessing methane emissions for northern peatlands in ORCHIDEE-PEAT revision 7020. Geoscientific Model Development, 2022, 15, 2813-2838.	1.3	8
8	The changing carbon balance of tundra ecosystems: results from a vertically-resolved peatland biosphere model. Environmental Research Letters, 2022, 17, 014019.	2.2	7
9	Current knowledge and uncertainties associated with the Arctic greenhouse gas budget. , 2022, , 159-201.		1
10	Solar position confounds the relationship between ecosystem function and vegetation indices derived from solar and photosynthetically active radiation fluxes. Agricultural and Forest Meteorology, 2021, 298-299, 108291.	1.9	10
11	Synergies Among Environmental Science Research and Monitoring Networks: A Research Agenda. Earth's Future, 2021, 9, e2020EF001631.	2.4	5
12	Carbon Fluxes and Microbial Activities From Boreal Peatlands Experiencing Permafrost Thaw. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005869.	1.3	18
13	Substantial hysteresis in emergent temperature sensitivity of global wetland CH4 emissions. Nature Communications, 2021, 12, 2266.	5.8	34
14	Identifying dominant environmental predictors of freshwater wetland methane fluxes across diurnal to seasonal time scales. Global Change Biology, 2021, 27, 3582-3604.	4.2	59
15	The Biophysical Role of Water and Ice Within Permafrost Nearing Collapse: Insights From Novel Geophysical Observations. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2021JF006104.	1.0	8
16	Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649.	3.7	65
17	Statistical upscaling of ecosystem CO₂ fluxes across the terrestrial tundra and boreal domain: Regional patterns and uncertainties. Global Change Biology, 2021, 27, 4040-4059.	4.2	83
18	FLUXNET-CH₄: a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. Earth System Science Data, 2021, 13, 3607-3689.	3.7	79

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19	Soil respiration strongly offsets carbon uptake in Alaska and Northwest Canada. Environmental Research Letters, 2021, 16, 084051.	2.2	23
20	Reanalysis in Earth System Science: Toward Terrestrial Ecosystem Reanalysis. Reviews of Geophysics, 2021, 59, e2020RG000715.	9.0	24
21	Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH4 wetlands. Agricultural and Forest Meteorology, 2021, 308-309, 108528.	1.9	33
22	Diagnosis of Atmospheric Drivers of High-Latitude Evapotranspiration Using Structural Equation Modeling. Atmosphere, 2021, 12, 1359.	1.0	2
23	Greenhouse Gases and Energy Fluxes at Permafrost Zone. , 2021, , 527-558.		0
24	The Borealâ€"Arctic Wetland and Lake Dataset (BAWLD). Earth System Science Data, 2021, 13, 5127-5149.	3.7	46
25	Increased highâ€latitude photosynthetic carbon gain offset by respiration carbon loss during an anomalous warm winter to spring transition. Global Change Biology, 2020, 26, 682-696.	4.2	41
26	Exposure to cold temperature affects the spring phenology of Alaskan deciduous vegetation types. Environmental Research Letters, 2020, 15, 025006.	2.2	6
27	When the Source of Flooding Matters: Divergent Responses in Carbon Fluxes in an Alaskan Rich Fen to Two Types of Inundation. Ecosystems, 2020, 23, 1138-1153.	1.6	13
28	Local-scale Arctic tundra heterogeneity affects regional-scale carbon dynamics. Nature Communications, 2020, 11, 4925.	5.8	25
29	Permafrost Mapping with Electrical Resistivity Tomography: A Case Study in Two Wetland Systems in Interior Alaska. Journal of Environmental and Engineering Geophysics, 2020, 25, 199-209.	1.0	7
30	Impacts of Arctic Shrubs on Root Traits and Belowground Nutrient Cycles Across a Northern Alaskan Climate Gradient. Frontiers in Plant Science, 2020, 11, 588098.	1.7	7
31	Increasing contribution of peatlands to boreal evapotranspiration in a warming climate. Nature Climate Change, 2020, 10, 555-560.	8.1	106
32	Inferring CO₂ fertilization effect based on global monitoring land-atmosphere exchange with a theoretical model. Environmental Research Letters, 2020, 15, 084009.	2.2	38
33	Coâ€producing knowledge: the Integrated Ecosystem Model for resource management in Arctic Alaska. Frontiers in Ecology and the Environment, 2020, 18, 447-455.	1.9	3
34	The biophysical climate mitigation potential of boreal peatlands during the growing season. Environmental Research Letters, 2020, 15, 104004.	2.2	31
35	A portable miniaturized laser heterodyne radiometer (mini-LHR) for remote measurements of column CH4 and CO2. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	19
36	Key indicators of Arctic climate change: 1971â€"2017. Environmental Research Letters, 2019, 14, 045010.	2.2	471

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37	Large loss of CO2 in winter observed across the northern permafrost region. Nature Climate Change, 2019, 9, 852-857.	8.1	225
38	Warming Effects of Spring Rainfall Increase Methane Emissions From Thawing Permafrost. Geophysical Research Letters, 2019, 46, 1393-1401.	1.5	68
39	Monthly gridded data product of northern wetland methane emissions based on upscaling eddy covariance observations. Earth System Science Data, 2019, 11, 1263-1289.	3.7	69
40	Spring photosynthetic onset and net <scp>CO</scp>₂ uptake in Alaska triggered by landscape thawing. Global Change Biology, 2018, 24, 3416-3435.	4.2	48
41	The role of driving factors in historical and projected carbon dynamics of upland ecosystems in Alaska. Ecological Applications, 2018, 28, 5-27.	1.8	25
42	The Sphagnome Project: enabling ecological and evolutionary insights through a genusâ€level sequencing project. New Phytologist, 2018, 217, 16-25.	3.5	54
43	Resource selection and movement of male moose in response to varying levels of offâ€road vehicle access. Ecosphere, 2018, 9, e02405.	1.0	11
44	The role of environmental driving factors in historical and projected carbon dynamics of wetland ecosystems in Alaska. Ecological Applications, 2018, 28, 1377-1395.	1.8	11
45	ORCHIDEE-PEAT (revision 4596), a model for northern peatland CO₂, water, and energy fluxes on daily to annual scales. Geoscientific Model Development, 2018, 11, 497-519.	1.3	43
46	A decade of boreal rich fen greenhouse gas fluxes in response to natural and experimental water table variability. Global Change Biology, 2017, 23, 2428-2440.	4.2	74
47	Tundra photosynthesis captured by satelliteâ€observed solarâ€induced chlorophyll fluorescence. Geophysical Research Letters, 2017, 44, 1564-1573.	1.5	62
48	Carbon dioxide sources from Alaska driven by increasing early winter respiration from Arctic tundra. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5361-5366.	3.3	149
49	The Exceptionally Warm Winter of 2015/16 in Alaska. Journal of Climate, 2017, 30, 2069-2088.	1.2	38
50	Retrieving landscape freeze/thaw state from Soil Moisture Active Passive (SMAP) radar and radiometer measurements. Remote Sensing of Environment, 2017, 194, 48-62.	4.6	113
51	New dataâ€driven estimation of terrestrial CO₂ fluxes in Asia using a standardized database of eddy covariance measurements, remote sensing data, and support vector regression. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 767-795.	1.3	90
52	Long-Term Release of Carbon Dioxide from Arctic Tundra Ecosystems in Alaska. Ecosystems, 2017, 20, 960-974.	1.6	102
53	The SMAP Level 4 Carbon Product for Monitoring Ecosystem Landâ€"Atmosphere CO₂ Exchange. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6517-6532.	2.7	69
54	Interannual and Seasonal Patterns of Carbon Dioxide, Water, and Energy Fluxes From Ecotonal and Thermokarstâ€Impacted Ecosystems on Carbonâ€Rich Permafrost Soils in Northeastern Siberia. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2651-2668.	1.3	19

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55	Estimation of surface energy fluxes in the Arctic tundra using the remote sensing thermal-based Two-Source Energy Balance model. Hydrology and Earth System Sciences, 2017, 21, 1339-1358.	1.9	19
56	A multi-scale comparison of modeled and observed seasonal methane emissions in northern wetlands. Biogeosciences, 2016, 13, 5043-5056.	1.3	24
57	Thermokarst rates intensify due to climate change and forest fragmentation in an Alaskan boreal forest lowland. Global Change Biology, 2016, 22, 816-829.	4.2	69
58	Consequences of changes in vegetation and snow cover for climate feedbacks in Alaska and northwest Canada. Environmental Research Letters, 2016, 11, 105003.	2.2	47
59	Optimization of a biochemical model with eddy covariance measurements in black spruce forests of Alaska for estimating CO2 fertilization effects. Agricultural and Forest Meteorology, 2016, 222, 98-111.	1.9	18
60	Effects of permafrost thaw on nitrogen availability and plantâ€“soil interactions in a boreal Alaskan lowland. Journal of Ecology, 2016, 104, 1542-1554.	1.9	84
61	Interactive effects of wildfire and climate on permafrost degradation in Alaskan lowland forests. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1619-1637.	1.3	113
62	The role of snow cover affecting boreal-arctic soil freezeâ€“thaw and carbon dynamics. Biogeosciences, 2015, 12, 5811-5829.	1.3	48
63	Tundra burning in 2007 â€“ Did sea ice retreat matter?. Polar Science, 2015, 9, 185-195.	0.5	5
64	The unseen iceberg: plant roots in arctic tundra. New Phytologist, 2015, 205, 34-58.	3.5	260
65	Polygonal tundra geomorphological change in response to warming alters future <scp>CO</scp>₂ and <scp>CH</scp>₄ flux on the Barrow Peninsula. Global Change Biology, 2015, 21, 1634-1651.	4.2	100
66	Changes in the structure and function of northern <scp>A</scp>laskan ecosystems when considering variable leafâ€out times across groupings of species in a dynamic vegetation model. Global Change Biology, 2014, 20, 963-978.	4.2	29
67	Change in surface energy balance in Alaska due to fire and spring warming, based on upscaling eddy covariance measurements. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1947-1969.	1.3	18
68	Plant functional types in Earth system models: past experiences and future directions for application of dynamic vegetation models in high-latitude ecosystems. Annals of Botany, 2014, 114, 1-16.	1.4	240
69	Differential response of carbon fluxes to climate in three peatland ecosystems that vary in the presence and stability of permafrost. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1576-1595.	1.3	94
70	Temperature and vegetation seasonality diminishment over northern lands. Nature Climate Change, 2013, 3, 581-586.	8.1	485
71	An estimated cost of lost climate regulation services caused by thawing of the Arctic cryosphere. Ecological Applications, 2013, 23, 1869-1880.	1.8	27
72	Modeling the effects of fire severity and climate warming on active layer thickness and soil carbon storage of black spruce forests across the landscape in interior Alaska. Environmental Research Letters, 2013, 8, 045016.	2.2	66

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73	Growing season and spatial variations of carbon fluxes of Arctic and boreal ecosystems in Alaska (USA). Ecological Applications, 2013, 23, 1798-1816.	1.8	74
74	Upscaling terrestrial carbon dioxide fluxes in Alaska with satellite remote sensing and support vector regression. Journal of Geophysical Research G: Biogeosciences, 2013, 118, 1266-1281.	1.3	60
75	The resilience and functional role of moss in boreal and arctic ecosystems. New Phytologist, 2012, 196, 49-67.	3.5	322
76	Upscaling of CO₂ fluxes from heterogeneous tundra plant communities in Arctic Alaska. Journal of Geophysical Research, 2012, 117, .	3.3	21
77	An assessment of the carbon balance of Arctic tundra: comparisons among observations, process models, and atmospheric inversions. Biogeosciences, 2012, 9, 3185-3204.	1.3	258
78	Seasonal patterns of carbon dioxide and water fluxes in three representative tundra ecosystems in northern Alaska. Ecosphere, 2012, 3, 1-19.	1.0	128
79	Towards a Tipping Point in Responding to Change: Rising Costs, Fewer Options for Arctic and Global Societies. Ambio, 2012, 41, 66-74.	2.8	49
80	Evidence and implications of recent and projected climate change in Alaska's forest ecosystems. Ecosphere, 2011, 2, art124.	1.0	87
81	Demography of snowshoe hares in relation to regional climate variability during a 10-year population cycle in interior AlaskaThis article is one of a selection of papers from The Dynamics of Change in Alaskaâ€™s Boreal Forests: Resilience and Vulnerability in Response to Climate Warming.. Canadian Journal of Forest Research, 2010, 40, 1265-1272.	0.8	21
82	The changing global carbon cycle: linking plantâ€"soil carbon dynamics to global consequences. Journal of Ecology, 2009, 97, 840-850.	1.9	262
83	Projected changes in atmospheric heating due to changes in fire disturbance and the snow season in the western Arctic, 2003â€"2100. Journal of Geophysical Research, 2009, 114, .	3.3	45
84	Changes in vegetation in northern Alaska under scenarios of climate change, 2003â€"2100: implications for climate feedbacks. Ecological Applications, 2009, 19, 1022-1043.	1.8	185
85	Vulnerability of Permafrost Carbon to Climate Change: Implications for the Global Carbon Cycle. BioScience, 2008, 58, 701-714.	2.2	1,379
86	The Effects of Different Climate Input Datasets on Simulated Carbon Dynamics in the Western Arctic. Earth Interactions, 2007, 11, 1-24.	0.7	17
87	Energy feedbacks of northern high-latitude ecosystems to the climate system due to reduced snow cover during 20th century warming. Global Change Biology, 2007, 13, 2425-2438.	4.2	138
88	Carbon fluxes in a young, naturally regenerating jack pine ecosystem. Journal of Geophysical Research, 2006, 111, .	3.3	17
89	Importance of recent shifts in soil thermal dynamics on growing season length, productivity, and carbon sequestration in terrestrial high-latitude ecosystems. Global Change Biology, 2006, 12, 731-750.	4.2	292
90	Edge Influence on Forest Structure and Composition in Fragmented Landscapes. Conservation Biology, 2005, 19, 768-782.	2.4	985

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91	Role of Land-Surface Changes in Arctic Summer Warming. Science, 2005, 310, 657-660.	6.0	1,186
92	Carbon cycling and storage in world forests: biome patterns related to forest age. Global Change Biology, 2004, 10, 2052-2077.	4.2	756