Lars Kutzbach

List of Publications by Year
in descending order

		159525	168321
66 papers	3,376 citations	30 h-index	53 g-index
111 all docs	111 docs citations	111 times ranked	3756 citing authors

#	Article	IF	Citations
1	Diurnal dynamics of CH_4 from a boreal peatland during snowmelt. Tellus, Series B: Chemical and Physical Meteorology, 2022, 62, 133.	0.8	32
2	The ABCflux database: Arctic–boreal CO_2 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	Ignoring carbon emissions from thermokarst ponds results in overestimation of tundra net carbon uptake. Biogeosciences, 2022, 19, 1225-1244.	1.3	10
4	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
5	Assessing methane emissions for northern peatlands in ORCHIDEE-PEAT revision 7020. Geoscientific Model Development, 2022, 15, 2813-2838.	1.3	8
6	Introduction of a guideline for measurements of greenhouse gas fluxes from soils using non-steady-state chambers. Journal of Plant Nutrition and Soil Science, 2022, 185, 447-461.	1.1	13
7	Identifying Drivers Behind Spatial Variability of Methane Concentrations in East Siberian Ponds. Frontiers in Earth Science, 2021, 9, .	0.8	7
8	Cushion bog plant community responses to passive warming in southern Patagonia. Biogeosciences, 2021, 18, 4817-4839.	1.3	3
9	Are Remote Sensing Evapotranspiration Models Reliable Across South American Ecoregions?. Water Resources Research, 2021, 57, e2020WR028752.	1.7	17
10	Soil Chamber Measurements. Springer Handbooks, 2021, , 1603-1624.	0.3	5
11	Modeled Microbial Dynamics Explain the Apparent Temperature Sensitivity of Wetland Methane Emissions. Global Biogeochemical Cycles, 2020, 34, e2020GB006678.	1.9	34
12	Increasing contribution of peatlands to boreal evapotranspiration in a warming climate. Nature Climate Change, 2020, 10, 555-560.	8.1	106
13	Comparison of eddy covariance CO_2 and CH_4 fluxes from mined and recently rewetted sections in a northwestern German cutover bog. Biogeosciences, 2020, 17, 2853-2874.	1.3	11
14	The biophysical climate mitigation potential of boreal peatlands during the growing season. Environmental Research Letters, 2020, 15, 104004.	2.2	31
15	Analyzing links between simulated Laptev Sea sea ice and atmospheric conditions over adjoining landmasses using causal-effect networks. Cryosphere, 2020, 14, 4201-4215.	1.5	3
16	Effects of disturbance on the carbon dioxide balance of an anthropogenic peatland in northern Patagonia. Wetlands Ecology and Management, 2019, 27, 635-650.	0.7	7
17	Scaling and balancing carbon dioxide fluxes in a heterogeneous tundra ecosystem of the Lena River Delta. Biogeosciences, 2019, 16, 2591-2615.	1.3	7
18	Evaluating closed chamber evapotranspiration estimates against eddy covariance measurements in an arctic wetland. Journal of Hydrology, 2019, 578, 124030.	2.3	4

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19	Partitioning net ecosystem exchange of CO_2 on the pedon scale in the Lena River Delta, Siberia. Biogeosciences, 2019, 16, 1543-1562.	1.3	15
20	Assessing the long‐term carbon‐sequestration potential of the semi‐natural salt marshes in the European Wadden Sea. Ecosphere, 2019, 10, e02556.	1.0	42
21	Cushion bogs are stronger carbon dioxide net sinks than moss-dominated bogs as revealed by eddy covariance measurements on Tierra del Fuego, Argentina. Biogeosciences, 2019, 16, 3397-3423.	1.3	16
22	Large loss of CO2 in winter observed across the northern permafrost region. Nature Climate Change, 2019, 9, 852-857.	8.1	225
23	Scaling and balancing methane fluxes in a heterogeneous tundra ecosystem of the Lena River Delta. Agricultural and Forest Meteorology, 2019, 266-267, 243-255.	1.9	7
24	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
25	A long-term (2002 to 2017) record of closed-path and open-path eddy covariance CO_2 net ecosystem exchange fluxes from the Siberian Arctic. Earth System Science Data, 2019, 11, 221-240.	3.7	20
26	A 16-year record (2002–2017) of permafrost, active-layer, and meteorological conditions at the Samoylov Island Arctic permafrost research site, Lena River delta, northern Siberia: an opportunity to validate remote-sensing data and land surface, snow, and permafrost models. Earth System Science Data, 2019, 11, 261-299.	3.7	69
27	ORCHIDEE-PEAT (revision 4596), a model for northern peatland CO_2, water, and energy fluxes on daily to annual scales. Geoscientific Model Development, 2018, 11, 497-519.	1.3	43
28	Permafrost Thaw and Liberation of Inorganic Nitrogen in Eastern Siberia. Permafrost and Periglacial Processes, 2017, 28, 605-618.	1.5	43
29	Carbon stocks and fluxes in the high latitudes: using site-level data to evaluate Earth system models. Biogeosciences, 2017, 14, 5143-5169.	1.3	43
30	Dissolved organic matter dynamics during the spring snowmelt at a boreal river valley mire complex in Northwest Russia. Hydrological Processes, 2016, 30, 1727-1741.	1.1	7
31	Russian boreal peatlands dominate the natural European methane budget. Environmental Research Letters, 2016, 11, 014004.	2.2	10
32	Environmental Impacts—Terrestrial Ecosystems. Regional Climate Studies, 2016, , 341-372.	1.2	2
33	Regulation of methane production, oxidation, and emission by vascular plants and bryophytes in ponds of the northeast Siberian polygonal tundra. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2525-2541.	1.3	60
34	Modeling micro-topographic controls on boreal peatland hydrology and methane fluxes. Biogeosciences, 2015, 12, 5689-5704.	1.3	30
35	High methane emissions dominated annual greenhouse gas balances 30 years after bog rewetting. Biogeosciences, 2015, 12, 4361-4371.	1.3	58
36	Stoichiometric analysis of nutrient availability (N, P, K) within soils of polygonal tundra. Biogeochemistry, 2015, 122, 211-227.	1.7	38

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37	Analysing uncertainties in the calculation of fluxes using whole-plant chambers: random and systematic errors. Plant and Soil, 2015, 393, 229-244.	1.8	29
38	Assessing the spatial variability in peak season CO_2 exchange characteristics across the Arctic tundra using a light response curve parameterization. Biogeosciences, 2014, 11, 4897-4912.	1.3	20
39	Trace metal distribution in pristine permafrost-affected soils of the Lena River delta and its hinterland, northern Siberia, Russia. Biogeosciences, 2014, 11, 1-15.	1.3	57
40	Permafrost-affected soils and their carbon pools with a focus on the Russian Arctic. Solid Earth, 2014, 5, 595-609.	1.2	55
41	Spatial Variations in Pore-Water Biogeochemistry Greatly Exceed Temporal Changes During Baseflow Conditions in a Boreal River Valley Mire Complex, Northwest Russia. Wetlands, 2014, 34, 1171-1182.	0.7	14
42	Comparative modeling of annual CO2 flux of temperate peat soils under permanent grassland management. Agriculture, Ecosystems and Environment, 2014, 186, 64-76.	2.5	32
43	The surface energy balance and its drivers in a boreal peatland fen of northwestern Russia. Journal of Hydrology, 2014, 511, 359-373.	2.3	48
44	Application of high-resolution spectral absorbance measurements to determine dissolved organic carbon concentration in remote areas. Journal of Hydrology, 2014, 517, 435-446.	2.3	53
45	Hydrology-driven ecosystem respiration determines the carbon balance of a boreal peatland. Science of the Total Environment, 2013, 463-464, 675-682.	3.9	24
46	Spatial and seasonal variability of polygonal tundra water balance: Lena River Delta, northern Siberia (Russia). Hydrogeology Journal, 2013, 21, 133-147.	0.9	71
47	A stochastic model for the polygonal tundra based on Poisson–Voronoi diagrams. Earth System Dynamics, 2013, 4, 187-198.	2.7	29
48	Baseline characteristics of climate, permafrost and land cover from a new permafrost observatory in the Lena River Delta, Siberia (1998–2011). Biogeosciences, 2013, 10, 2105-2128.	1.3	144
49	Bulk partitioning the growing season net ecosystem exchange of CO_2 in Siberian tundra reveals the seasonality of its carbon sequestration strength. Biogeosciences, 2013, 10, 1337-1349.	1.3	39
50	Organic carbon and total nitrogen stocks in soils of the Lena River Delta. Biogeosciences, 2013, 10, 3507-3524.	1.3	81
51	Carbon dioxide exchange fluxes of a boreal peatland over a complete growing season, Komi Republic, NW Russia. Biogeochemistry, 2012, 111, 485-513.	1.7	32
52	Attenuation Correction Procedures for Water Vapour Fluxes from Closed-Path Eddy-Covariance Systems. Boundary-Layer Meteorology, 2012, 142, 401-423.	1.2	25
53	Cross-evaluation of measurements of peatland methane emissions on microform and ecosystem scales using high-resolution landcover classification and source weight modelling. Agricultural and Forest Meteorology, 2011, 151, 864-874.	1.9	56
54	Identification of linear relationships from noisy data using errors-in-variables models—relevance for reconstruction of past climate from tree-ring and other proxy information. Climatic Change, 2011, 105, 155-177.	1.7	13

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55	A comparison of linear and exponential regression for estimating diffusive CH4 fluxes by closed-chambers in peatlands. Soil Biology and Biochemistry, 2010, 42, 507-515.	4.2	58
56	Environmental controls on CH_4 emission from polygonal tundra on the microsite scale in the Lena river delta, Siberia. Global Change Biology, 2010, 16, 3096-3110.	4.2	97
57	Evapotranspiration dynamics in a boreal peatland and its impact on the water and energy balance. Journal of Geophysical Research, 2010, 115, .	3.3	42
58	A comment on â€˜Vulnerability of permafrost carbon to global warming. Part I: model description and role of heat generated by organic matter decompositionâ€™ by D. V. Khvorostyanov et al. (2008). Tellus, Series B: Chemical and Physical Meteorology, 2009, 61, 577-578.	0.8	1
59	Overestimation of CO_2 respiration fluxes by the closed chamber method in lowâ€turbulence nighttime conditions. Journal of Geophysical Research, 2009, 114, .	3.3	25
60	Methane emission from Siberian arctic polygonal tundra: eddy covariance measurements and modeling. Global Change Biology, 2008, 14, 1395-1408.	4.2	224
61	Environmental controls on ecosystemâ€scale CH_4 emission from polygonal tundra in the Lena River Delta, Siberia. Journal of Geophysical Research, 2008, 113, .	3.3	132
62	Do we miss the hot spots? â€" The use of very high resolution aerial photographs to quantify carbon fluxes in peatlands. Biogeosciences, 2008, 5, 1387-1393.	1.3	32
63	The exchange of carbon dioxide between wet arctic tundra and the atmosphere at the Lena River Delta, Northern Siberia. Biogeosciences, 2007, 4, 869-890.	1.3	82
64	CO_2 flux determination by closed-chamber methods can be seriously biased by inappropriate application of linear regression. Biogeosciences, 2007, 4, 1005-1025.	1.3	254
65	Element Redistribution along Hydraulic and Redox Gradients of Lowâ€Centered Polygons, Lena Delta, Northern Siberia. Soil Science Society of America Journal, 2004, 68, 1002-1011.	1.2	50
66	Effect of microrelief and vegetation on methane emission from wet polygonal tundra, Lena Delta, Northern Siberia. Biogeochemistry, 2004, 69, 341-362.	1.7	207