Mikhail A Mastepanov

List of Publications by Year
in descending order

47 papers	4,103 citations	186265 28 h-index	206112 48 g-index
61 all docs	61 docs citations	61 times ranked	5194 citing authors

#	Article	IF	Citations
1	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. Scientific Data, 2020, 7, 225.	5.3	646
2	The effect of vascular plants on carbon turnover and methane emissions from a tundra wetland. Global Change Biology, 2003, 9, 1185-1192.	9.5	284
3	Large tundra methane burst during onset of freezing. Nature, 2008, 456, 628-630.	27.8	283
4	Species-specific Effects of Vascular Plants on Carbon Turnover and Methane Emissions from Wetlands. Biogeochemistry, 2005, 75, 65-82.	3.5	282
5	Ancient bacteria show evidence of DNA repair. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14401-14405.	7.1	249
6	Decadal vegetation changes in a northern peatland, greenhouse gas fluxes and net radiative forcing. Global Change Biology, 2006, 12, 2352-2369.	9.5	214
7	Microbial activity in soils frozen to below â˜’39Â°C. Soil Biology and Biochemistry, 2006, 38, 785-794.	8.8	202
8	The uncertain climate footprint of wetlands under human pressure. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4594-4599.	7.1	171
9	Annual cycle of methane emission from a subarctic peatland. Journal of Geophysical Research, 2010, 115, .	3.3	128
10	Increased nitrous oxide emissions from Arctic peatlands after permafrost thaw. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6238-6243.	7.1	119
11	Annual carbon gas budget for a subarctic peatland, Northern Sweden. Biogeosciences, 2010, 7, 95-108.	3.3	118
12	Presence of Eriophorum scheuchzeri enhances substrate availability and methane emission in an Arctic wetland. Soil Biology and Biochemistry, 2012, 45, 61-70.	8.8	116
13	Biotic controls on CO2 and CH4 exchange in wetlands â€“ a closed environment study. Biogeochemistry, 2003, 64, 337-354.	3.5	107
14	Revisiting factors controlling methane emissions from high-Arctic tundra. Biogeosciences, 2013, 10, 5139-5158.	3.3	103
15	Landâ€atmosphere exchange of methane from soil thawing to soil freezing in a highâ€<scp>A</scp>rctic wet tundra ecosystem. Global Change Biology, 2012, 18, 1928-1940.	9.5	89
16	A catchment-scale carbon and greenhouse gas budget of a subarctic landscape. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1643-1656.	3.4	76
17	Effects of N and P fertilization on the greenhouse gas exchange in two northern peatlands with contrasting N deposition rates. Biogeosciences, 2009, 6, 2135-2144.	3.3	68
18	BVOC ecosystem flux measurements at a high latitude wetland site. Atmospheric Chemistry and Physics, 2010, 10, 1617-1634.	4.9	62

#	Article	IF	Citations
19	Monitoring the Multi-Year Carbon Balance of a Subarctic Palsa Mire with Micrometeorological Techniques. Ambio, 2012, 41, 207-217.	5.5	60
20	Ecosystem carbon response of an Arctic peatland to simulated permafrost thaw. Global Change Biology, 2019, 25, 1746-1764.	9.5	52
21	Moisture Effects on Temperature Sensitivity of CO2 Exchange in a Subarctic Heath Ecosystem. Biogeochemistry, 2004, 70, 315-330.	3.5	48
22	Quantification of C uptake in subarctic birch forest after setback by an extreme insect outbreak. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	42
23	Total hydrocarbon flux dynamics at a subarctic mire in northern Sweden. Journal of Geophysical Research, 2008, 113, .	3.3	41
24	Calculations of automatic chamber flux measurements of methane and carbon dioxide using short time series of concentrations. Biogeosciences, 2016, 13, 903-912.	3.3	41
25	Non-methane volatile organic compound flux from a subarctic mire in Northern Sweden. Tellus, Series B: Chemical and Physical Meteorology, 2022, 60, 226.	1.6	33
26	Two years with extreme and little snowfall: effects on energy partitioning and surface energy exchange in a high-Arctic tundra ecosystem. Cryosphere, 2016, 10, 1395-1413.	3.9	32
27	High-resolution satellite data reveal an increase in peak growing season gross primary production in a high-Arctic wet tundra ecosystem 1992â€“2008. International Journal of Applied Earth Observation and Geoinformation, 2012, 18, 407-416.	2.8	31
28	Methane emission bursts from permafrost environments during autumn freezeâ€in: New insights from groundâ€penetrating radar. Geophysical Research Letters, 2015, 42, 6732-6738.	4.0	30
29	Controls of spatial and temporal variability in CH4 flux in a high arctic fen over three years. Biogeochemistry, 2015, 125, 21-35.	3.5	30
30	Multiple Ecosystem Effects of Extreme Weather Events in the Arctic. Ecosystems, 2021, 24, 122-136.	3.4	29
31	Snowpack fluxes of methane and carbon dioxide from high Arctic tundra. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2886-2900.	3.0	26
32	Spatial variability of CO₂ uptake in polygonal tundra: assessing low-frequency disturbances in eddy covariance flux estimates. Biogeosciences, 2017, 14, 3157-3169.	3.3	25
33	Modelling of growing season methane fluxes in a high-Arctic wet tundra ecosystem 1997â€“2010 using in situ and high-resolution satellite data. Tellus, Series B: Chemical and Physical Meteorology, 2013, 65, 19722.	1.6	24
34	Membrane probe array: Technique development and observation of CO2 and CH4 diurnal oscillations in peat profile. Soil Biology and Biochemistry, 2007, 39, 1712-1723.	8.8	22
35	Multi-year data-model evaluation reveals the importance of nutrient availability over climate in arctic ecosystem C dynamics. Environmental Research Letters, 2020, 15, 094007.	5.2	22
36	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.	9.9	22

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37	Toward a statistical description of methane emissions from arctic wetlands. Ambio, 2017, 46, 70-80.	5.5	19
38	A New Processâ€Based Soil Methane Scheme: Evaluation Over Arctic Field Sites With the ISBA Land Surface Model. Journal of Advances in Modeling Earth Systems, 2019, 11, 293-326.	3.8	16
39	Earlier snowmelt may lead to late season declines in plant productivity and carbon sequestration in Arctic tundra ecosystems. Scientific Reports, 2022, 12, 3986.	3.3	16
40	Tundra permafrost thaw causes significant shifts in energy partitioning. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 30467.	1.6	15
41	Bimembrane diffusion probe for continuous recording of dissolved and entrapped bubble gas concentrations in peat. Soil Biology and Biochemistry, 2008, 40, 2992-3003.	8.8	9
42	Toward UAV-based methane emission mapping of Arctic terrestrial ecosystems. Science of the Total Environment, 2022, 819, 153161.	8.0	9
43	Methane in Zackenberg Valley, NE Greenland: multidecadal growing season fluxes of a high-Arctic tundra. Biogeosciences, 2021, 18, 6093-6114.	3.3	5
44	Correction for Johnson <i>et al.</i> , Ancient bacteria show evidence of DNA repair. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10631-10631.	7.1	4
45	Laboratory Investigations of Methane Buildup in, and Release from, Shallow Peats. Geophysical Monograph Series, 0, , 205-218.	0.1	4
46	Correction for Johnson et al., Ancient bacteria show evidence of DNA repair. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20635-20635.	7.1	4
47	A new dataset of soil carbon and nitrogen stocks and profiles from an instrumented Greenlandic fen designed to evaluate land-surface models. Earth System Science Data, 2020, 12, 2365-2380.	9.9	1