Frans-Jan W Parmentier

List of Publications by Year
in descending order

47 papers	4,657 citations	186265 28 h-index	214800 47 g-index
73 all docs	73 docs citations	73 times ranked	7622 citing authors

#	Article	IF	Citations
1	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
2	Current knowledge and uncertainties associated with the Arctic greenhouse gas budget. , 2022, , 159-201.		1
3	The Arctic Carbon Cycle and Its Response to Changing Climate. Current Climate Change Reports, 2021, 7, 14-34.	8.6	38
4	Statistical upscaling of ecosystem CO₂ fluxes across the terrestrial tundra and boreal domain: Regional patterns and uncertainties. Global Change Biology, 2021, 27, 4040-4059.	9.5	83
5	A distributed time-lapse camera network to track vegetation phenology with high temporal detail and at varying scales. Earth System Science Data, 2021, 13, 3593-3606.	9.9	8
6	Model simulations of arctic biogeochemistry and permafrost extent are highly sensitive to the implemented snow scheme in LPJ-GUESS. Biogeosciences, 2021, 18, 5767-5787.	3.3	7
7	The Borealâ€“Arctic Wetland and Lake Dataset (BAWLD). Earth System Science Data, 2021, 13, 5127-5149.	9.9	46
8	Permafrost: den sovende klimakjempen. Naturen, 2021, 145, 230-235.	0.0	0
9	The FLUXNET2015 dataset and the ONEFlux processing pipeline for eddy covariance data. Scientific Data, 2020, 7, 225.	5.3	646
10	Modeled Microbial Dynamics Explain the Apparent Temperature Sensitivity of Wetland Methane Emissions. Global Biogeochemical Cycles, 2020, 34, e2020GB006678.	4.9	34
11	Complexity revealed in the greening of the Arctic. Nature Climate Change, 2020, 10, 106-117.	18.8	447
12	Key indicators of Arctic climate change: 1971â€“2017. Environmental Research Letters, 2019, 14, 045010.	5.2	471
13	Tracing the climate signal: mitigation of anthropogenic methane emissions can outweigh a large Arctic natural emission increase. Scientific Reports, 2019, 9, 1146.	3.3	22
14	Large loss of CO2 in winter observed across the northern permafrost region. Nature Climate Change, 2019, 9, 852-857.	18.8	225
15	Is the Northern Permafrost Zone a Source or a Sink for Carbon?. Eos, 2019, 100, .	0.1	4
16	Vulnerability and resilience of the carbon exchange of a subarctic peatland to an extreme winter event. Environmental Research Letters, 2018, 13, 065009.	5.2	13
17	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.	3.6	43
18	Toward a statistical description of methane emissions from arctic wetlands. Ambio, 2017, 46, 70-80.	5.5	19

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19	A synthesis of the arctic terrestrial and marine carbon cycles under pressure from a dwindling cryosphere. Ambio, 2017, 46, 53-69.	5.5	56
20	Variability and quasi-decadal changes in the methane budget over the period 2000â€“2012. Atmospheric Chemistry and Physics, 2017, 17, 11135-11161.	4.9	85
21	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
22	Year-round CH₄ and CO₂ flux dynamics in two contrasting freshwater ecosystems of the subarctic. Biogeosciences, 2017, 14, 5189-5216.	3.3	55
23	Carbon stocks and fluxes in the high latitudes: using site-level data to evaluate Earth system models. Biogeosciences, 2017, 14, 5143-5169.	3.3	43
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	Snowpack fluxes of methane and carbon dioxide from high Arctic tundra. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2886-2900.	3.0	26
26	The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751.	9.9	824
27	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
28	Rising methane emissions from northern wetlands associated with sea ice decline. Geophysical Research Letters, 2015, 42, 7214-7222.	4.0	20
29	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
30	Low impact of dry conditions on the CO ₂ exchange of a Northern-Norwegian blanket bog. Environmental Research Letters, 2015, 10, 025004.	5.2	21
31	Assessing the spatial variability in peak season CO₂ exchange characteristics across the Arctic tundra using a light response curve parameterization. Biogeosciences, 2014, 11, 4897-4912.	3.3	20
32	Evaluation of a plot-scale methane emission model using eddy covariance observations and footprint modelling. Biogeosciences, 2014, 11, 4651-4664.	3.3	28
33	A satellite data driven biophysical modeling approach for estimating northern peatland and tundra CO₂ and CH₄ fluxes. Biogeosciences, 2014, 11, 1961-1980.	3.3	19
34	Implications of Arctic Sea Ice Decline for the Earth System. Annual Review of Environment and Resources, 2014, 39, 57-89.	13.4	82
35	Improving a plot-scale methane emission model and its performance at a northeastern Siberian tundra site. Biogeosciences, 2014, 11, 3985-3999.	3.3	17
36	Arctic: Speed of methane release. Nature, 2013, 500, 529-529.	27.8	6

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37	Evidence for past variations in methane availability in a Siberian thermokarst lake based on Î´13C of chitinous invertebrate remains. Quaternary Science Reviews, 2013, 66, 74-84.	3.0	49
38	The impact of lower sea-ice extent on Arctic greenhouse-gas exchange. Nature Climate Change, 2013, 3, 195-202.	18.8	119
39	Testing the applicability of neural networks as a gap-filling method using CH₄ flux data from high latitude wetlands. Biogeosciences, 2013, 10, 8185-8200.	3.3	78
40	Tundra in the Rain: Differential Vegetation Responses to Three Years of Experimentally Doubled Summer Precipitation in Siberian Shrub and Swedish Bog Tundra. Ambio, 2012, 41, 269-280.	5.5	30
41	Longer growing seasons do not increase net carbon uptake in the northeastern Siberian tundra. Journal of Geophysical Research, 2011, 116, .	3.3	78
42	The role of endophytic methane-oxidizing bacteria in submerged <I>Sphagnum</I> in determining methane emissions of Northeastern Siberian tundra. Biogeosciences, 2011, 8, 1267-1278.	3.3	46
43	Methane emissions from permafrost thaw lakes limited by lake drainage. Nature Climate Change, 2011, 1, 119-123.	18.8	149
44	Spatial and temporal dynamics in eddy covariance observations of methane fluxes at a tundra site in northeastern Siberia. Journal of Geophysical Research, 2011, 116, .	3.3	66
45	The Cooling Capacity of Mosses: Controls on Water and Energy Fluxes in a Siberian Tundra Site. Ecosystems, 2011, 14, 1055-1065.	3.4	116
46	Modeling regional to global CH₄ emissions of boreal and arctic wetlands. Global Biogeochemical Cycles, 2010, 24, .	4.9	102
47	CO2 fluxes and evaporation on a peatland in the Netherlands appear not affected by water table fluctuations. Agricultural and Forest Meteorology, 2009, 149, 1201-1208.	4.8	45