Jens-Arne Subke

List of Publications by Year
in descending order

54 papers	4,950 citations	257450 24 h-index	182427 51 g-index
57 all docs	57 docs citations	57 times ranked	6523 citing authors

#	Article	IF	Citations
1	Reduction of forest soil respiration in response to nitrogen deposition. Nature Geoscience, 2010, 3, 315-322.	12.9	1,254
2	Temperature sensitivity of soil respiration rates enhanced by microbial community response. Nature, 2014, 513, 81-84.	27.8	528
3	Trends and methodological impacts in soil CO2 efflux partitioning: A metaanalytical review. Global Change Biology, 2006, 12, 921-943.	9.5	524
4	Comparison of different chamber techniques for measuring soil CO2 efflux. Agricultural and Forest Meteorology, 2004, 123, 159-176.	4.8	420
5	The moisture response of soil heterotrophic respiration: interaction with soil properties. Biogeosciences, 2012, 9, 1173-1182.	3.3	224
6	Does the temperature sensitivity of decomposition of soil organic matter depend upon water content, soil horizon, or incubation time?. Global Change Biology, 2005, 11, 1754-1767.	9.5	205
7	Feedback interactions between needle litter decomposition and rhizosphere activity. Oecologia, 2004, 139, 551-559.	2.0	193
8	Ecosystemâ€level controls on rootâ€rhizosphere respiration. New Phytologist, 2013, 199, 339-351.	7.3	175
9	Explaining temporal variation in soil CO2 efflux in a mature spruce forest in Southern Germany. Soil Biology and Biochemistry, 2003, 35, 1467-1483.	8.8	174
10	On the â€˜temperature sensitivityâ€™ of soil respiration: Can we use the immeasurable to predict the unknown?. Soil Biology and Biochemistry, 2010, 42, 1653-1656.	8.8	150
11	Rapid carbon turnover beneath shrub and tree vegetation is associated with low soil carbon stocks at a subarctic treeline. Global Change Biology, 2015, 21, 2070-2081.	9.5	110
12	Shortâ€term dynamics of abiotic and biotic soilÂ¹³CO₂ effluxes after <i>in situ</i>Â¹³CO₂ pulse labelling of a boreal pine forest. New Phytologist, 2009, 183, 349-357.	7.3	93
13	Exploring the "overflow tap" theory: linking forest soil CO₂ fluxes and individual mycorrhizosphere components to photosynthesis. Biogeosciences, 2012, 9, 79-95.	3.3	85
14	Dynamics and pathways of autotrophic and heterotrophic soil CO₂ efflux revealed by forest girdling. Journal of Ecology, 2011, 99, 186-193.	4.0	80
15	The role of mosses in carbon uptake and partitioning in arctic vegetation. New Phytologist, 2013, 199, 163-175.	7.3	65
16	Tree planting in organic soils does not result in net carbon sequestration on decadal timescales. Global Change Biology, 2020, 26, 5178-5188.	9.5	61
17	Detritivore conversion of litter into faeces accelerates organic matter turnover. Communications Biology, 2020, 3, 660.	4.4	54
18	Exploring drivers of litter decomposition in a greening Arctic: results from a transplant experiment across a treeline. Ecology, 2018, 99, 2284-2294.	3.2	38

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19	Rhizosphere carbon supply accelerates soil organic matter decomposition in the presence of fresh organic substrates. Plant and Soil, 2019, 440, 473-490.	3.7	38
20	Plant carbon allocation drives turnover of old soil organic matter in permafrost tundra soils. Global Change Biology, 2020, 26, 4559-4571.	9.5	31
21	Direct measurements of CO2 flux below a spruce forest canopy. Agricultural and Forest Meteorology, 2004, 126, 157-168.	4.8	30
22	Slowed Biogeochemical Cycling in Sub-arctic Birch Forest Linked to Reduced Mycorrhizal Growth and Community Change after a Defoliation Event. Ecosystems, 2017, 20, 316-330.	3.4	29
23	Redox dynamics in the active layer of an Arctic headwater catchment; examining the potential for transfer of dissolved methane from soils to stream water. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2776-2792.	3.0	28
24	Shrub expansion in the Arctic may induce largeâ€scale carbon losses due to changes in plantâ€soil interactions. Plant and Soil, 2021, 463, 643-651.	3.7	28
25	Abundant pre-industrial carbon detected in Canadian Arctic headwaters: implications for the permafrost carbon feedback. Environmental Research Letters, 2018, 13, 034024.	5.2	25
26	Rhizosphere activity and atmospheric methane concentrations drive variations of methane fluxes in a temperate forest soil. Soil Biology and Biochemistry, 2018, 116, 323-332.	8.8	24
27	Multi-site calibration and validation of a net ecosystem carbon exchange model for croplands. Ecological Modelling, 2017, 363, 137-156.	2.5	23
28	Application of nitrogen fertilizer to a boreal pine forest has a negative impact on the respiration of ectomycorrhizal hyphae. Plant and Soil, 2012, 352, 405-417.	3.7	22
29	Sampling soil-derived CO2for analysis of isotopic composition: a comparison of different techniques. Isotopes in Environmental and Health Studies, 2006, 42, 57-65.	1.0	21
30	Biotic carbon feedbacks in a materially closed soilâ€"vegetationâ€"atmosphere system. Nature Climate Change, 2012, 2, 281-284.	18.8	19
31	Editorial: Rhizosphere Functioning and Structural Development as Complex Interplay Between Plants, Microorganisms and Soil Minerals. Frontiers in Environmental Science, 2019, 7, .	3.3	19
32	Fast assimilate turnover revealed by in situ 13CO2 pulse-labelling in Subarctic tundra. Polar Biology, 2012, 35, 1209-1219.	1.2	17
33	Biogeochemistry of â€œpristineâ€• freshwater stream and lake systems in the western Canadian Arctic. Biogeochemistry, 2016, 130, 191-213.	3.5	17
34	Rhizosphere allocation by canopyâ€forming species dominates soil CO₂ efflux in a subarctic landscape. New Phytologist, 2020, 227, 1818-1830.	7.3	16
35	A new technique to measure soil CO2 efflux at constant CO2 concentration. Soil Biology and Biochemistry, 2004, 36, 1013-1015.	8.8	15
36	Turnover of recently assimilated carbon in arctic bryophytes. Oecologia, 2011, 167, 325-337.	2.0	13

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37	A fieldâ€compatible method for measuring alternative respiratory pathway activities <i>in vivo</i> using stable O₂ isotopes. Plant, Cell and Environment, 2012, 35, 1518-1532.	5.7	13
38	Ecosystem carbon dynamics differ between tundra shrub types in the western Canadian Arctic. Environmental Research Letters, 2018, 13, 084014.	5.2	12
39	A new stable isotope approach identifies the fate of ozone in plantâ€“soil systems. New Phytologist, 2009, 182, 85-90.	7.3	11
40	Editorial "Ecosystems in transition: interactions and feedbacks with an emphasis on the initial development". Biogeosciences, 2014, 11, 195-200.	3.3	9
41	Spatial patterns in soil organic matter dynamics are shaped by mycorrhizosphere interactions in a treeline forest. Plant and Soil, 2020, 447, 521-535.	3.7	8
42	Net soil carbon balance in afforested peatlands and separating autotrophic and heterotrophic soil CO₂ effluxes. Biogeosciences, 2022, 19, 313-327.	3.3	8
43	Reverse engineering model structures for soil and ecosystem respiration: the potential of gene expression programming. Geoscientific Model Development, 2017, 10, 3519-3545.	3.6	7
44	Synergistic interactions between detritivores disappear under reduced rainfall. Ecology, 2021, 102, e03299.	3.2	6
45	Predicting Soil Respiration from Plant Productivity (NDVI) in a Sub-Arctic Tundra Ecosystem. Remote Sensing, 2021, 13, 2571.	4.0	6
46	Carbon stability in a Scottish lowland raised bog: potential legacy effects of historical land use and implications for global change. Soil Biology and Biochemistry, 2021, 154, 108124.	8.8	5
47	Soil Chamber Measurements. Springer Handbooks, 2021, , 1603-1624.	0.6	5
48	A new method for using ¹⁸O to trace ozone deposition. Rapid Communications in Mass Spectrometry, 2009, 23, 980-984.	1.5	3
49	Tracing photosynthetic isotope discrimination from leaves to soil. New Phytologist, 2010, 188, 309-311.	7.3	2
50	Preface "Biotic interactions and biogeochemical processes in the soil environment". Biogeosciences, 2012, 9, 1823-1825.	3.3	2
51	Experimental design: scaling up in time and space, and its statistical considerations. , 2010, , 34-48.		0
52	Greenhouse gas emissions from soil under changing environmental conditions. European Journal of Soil Science, 2013, 64, 547-549.	3.9	0
53	Whole-crown 13C-pulse labelling in a sub-arctic woodland to target canopy-specific carbon fluxes. Trees - Structure and Function, 0, , 1.	1.9	0
54	The Bizarre Role of Soil Animals in the Decomposition of Dead Leaves. Frontiers for Young Minds, 0, 10, .	0.8	0