Bo Elberling

List of Publications by Year
in descending order

223 papers	13,312 citations	23567 58 h-index	29157 104 g-index
253 all docs	253 docs citations	253 times ranked	14402 citing authors

#	Article	IF	Citations
1	Estimated stocks of circumpolar permafrost carbon with quantified uncertainty ranges and identified data gaps. Biogeosciences, 2014, 11, 6573-6593.	3.3	1,079
2	Ecological Dynamics Across the Arctic Associated with Recent Climate Change. Science, 2009, 325, 1355-1358.	12.6	1,043
3	Quantifying global soil carbon losses in response to warming. Nature, 2016, 540, 104-108.	27.8	879
4	Northern Hemisphere permafrost map based on TTOP modelling for 2000â€“2016 at 1â€¯km2 scale. Earth-Science Reviews, 2019, 193, 299-316.	9.1	462
5	Plant functional trait change across a warming tundra biome. Nature, 2018, 562, 57-62.	27.8	451
6	Circumpolar assessment of permafrost C quality and its vulnerability over time using longâ€term incubation data. Global Change Biology, 2014, 20, 641-652.	9.5	231
7	Large loss of CO2 in winter observed across the northern permafrost region. Nature Climate Change, 2019, 9, 852-857.	18.8	225
8	Soil respiration and rates of soil carbon turnover differ among six common European tree species. Forest Ecology and Management, 2012, 264, 185-196.	3.2	219
9	Microbial Oxidation of Pyrite Coupled to Nitrate Reduction in Anoxic Groundwater Sediment. Environmental Science & Technology, 2009, 43, 4851-4857.	10.0	208
10	Long-term CO2 production following permafrost thaw. Nature Climate Change, 2013, 3, 890-894.	18.8	186
11	Uncoupling of microbial CO2 production and release in frozen soil and its implications for field studies of arctic C cycling. Soil Biology and Biochemistry, 2003, 35, 263-272.	8.8	174
12	Greater temperature sensitivity of plant phenology at colder sites: implications for convergence across northern latitudes. Global Change Biology, 2017, 23, 2660-2671.	9.5	171
13	Organic Carbon Dynamics in Different Soil Types After Conversion of Forest to Agriculture. Land Degradation and Development, 2015, 26, 272-283.	3.9	166
14	A new data set for estimating organic carbon storage to 3 m depth in soils of the northern circumpolar permafrost region. Earth System Science Data, 2013, 5, 393-402.	9.9	148
15	Permafrost collapse after shrub removal shifts tundra ecosystem to a methane source. Nature Climate Change, 2015, 5, 67-70.	18.8	147
16	High nitrous oxide production from thawing permafrost. Nature Geoscience, 2010, 3, 332-335.	12.9	141
17	Spatial heterogeneity and environmental predictors of permafrost region soil organic carbon stocks. Science Advances, 2021, 7, .	10.3	130
18	Carbon, nitrogen and temperature controls on microbial activity in soils from an Antarctic dry valley. Soil Biology and Biochemistry, 2006, 38, 3130-3140.	8.8	122

#	Article	IF	Citations
19	Lability of soil organic carbon in tropical soils with different clay minerals. Soil Biology and Biochemistry, 2010, 42, 888-895.	8.8	120
20	Silicon increases the phosphorus availability of Arctic soils. Scientific Reports, 2019, 9, 449.	3.3	115
21	Annual soil CO2 effluxes in the High Arctic: The role of snow thickness and vegetation type. Soil Biology and Biochemistry, 2007, 39, 646-654.	8.8	111
22	Late-Holocene glacier growth in Svalbard, documented by subglacial relict vegetation and living soil microbes. Holocene, 2005, 15, 396-407.	1.7	107
23	Winter warming as an important coâ€driver for BetulaÂnana growth in western Greenland during the past century. Global Change Biology, 2015, 21, 2410-2423.	9.5	104
24	Linking Soil O₂, CO₂, and CH₄ Concentrations in a Wetland Soil: Implications for CO₂ and CH₄ Fluxes. Environmental Science & Technology, 2011, 45, 3393-3399.	10.0	103
25	Temporal trends in <scp><scp>N₂O</scp></scp> flux dynamics in a Danish wetland â€“ effects of plantâ€mediated gas transport of <scp><scp>N₂O</scp></scp> and <scp><scp>O₂</scp></scp> following changes in water level and soil mineralâ€<scp><scp>N</scp></scp> availability. Global Change Biology, 2012, 18, 210-222.	9.5	100
26	Soil and Plant Community-Characteristics and Dynamics at Zackenberg. Advances in Ecological Research, 2008, 40, 223-248.	2.7	99
27	Linking yields of upland rice in shifting cultivation to fallow length and soil properties. Agriculture, Ecosystems and Environment, 2006, 113, 139-149.	5.3	98
28	The importance of winter in annual ecosystem respiration in the High Arctic: effects of snow depth in two vegetation types. Polar Research, 2010, 29, 58-74.	1.6	98
29	Distinct summer and winter bacterial communities in the active layer of Svalbard permafrost revealed by DNA- and RNA-based analyses. Frontiers in Microbiology, 2015, 6, 399.	3.5	94
30	Net regional methane sink in High Arctic soils of northeast Greenland. Nature Geoscience, 2015, 8, 20-23.	12.9	93
31	Bacterial and chemical oxidation of pyritic mine tailings at low temperatures. Journal of Contaminant Hydrology, 2000, 41, 225-238.	3.3	92
32	Deeper snow alters soil nutrient availability and leaf nutrient status in high Arctic tundra. Biogeochemistry, 2015, 124, 81-94.	3.5	90
33	Nitrous oxide emissions from permafrost-affected soils. Nature Reviews Earth & Environment, 2020, 1, 420-434.	29.7	90
34	Meteorological trends (1991â€“2004) at Arctic Station, Central West Greenland (69Â°15'N) in a 130 years perspective. Geografisk Tidsskrift, 2006, 106, 45-55.	0.6	86
35	Controls on the distribution of productivity and organic resources in Antarctic Dry Valley soils. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 2687-2695.	2.6	83
36	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

#	Article	IF	Citations
37	Field determination of sulphide oxidation rates in mine tailings. Water Resources Research, 1996, 32, 1773-1784.	4.2	82
38	Future active layer dynamics and carbon dioxide production from thawing permafrost layers in Northeast Greenland. Global Change Biology, 2011, 17, 911-926.	9.5	80
39	Distribution and dynamics of soil organic matter in an Antarctic dry valley. Soil Biology and Biochemistry, 2006, 38, 3095-3106.	8.8	79
40	Warming shortens flowering seasons of tundra plant communities. Nature Ecology and Evolution, 2019, 3, 45-52.	7.8	79
41	A combined kinetic and diffusion model for pyrite oxidation in tailings: a change in controls with time. Journal of Hydrology, 1994, 157, 47-60.	5.4	78
42	Emission of CO2, CH4 and N2O from lakeshore soils in an Antarctic dry valley. Soil Biology and Biochemistry, 2006, 38, 3120-3129.	8.8	75
43	Delta progradation in Greenland driven by increasing glacial mass loss. Nature, 2017, 550, 101-104.	27.8	74
44	Evaluation of sulphide oxidation rates: a laboratory study comparing oxygen fluxes and rates of oxidation product release. Canadian Geotechnical Journal, 1994, 31, 375-383.	2.8	72
45	Applying foraminiferal stratigraphy as a biomarker for heavy metal contamination and mining impact in a fiord in West Greenland. Marine Environmental Research, 2003, 55, 235-256.	2.5	72
46	Storage, Landscape Distribution, and Burial History of Soil Organic Matter in Contrasting Areas of Continuous Permafrost. Arctic, Antarctic, and Alpine Research, 2015, 47, 71-88.	1.1	71
47	Enhanced summer warming reduces fungal decomposer diversity and litter mass loss more strongly in dry than in wet tundra. Global Change Biology, 2017, 23, 406-420.	9.5	71
48	Reduced net methane emissions due to microbial methane oxidation in a warmer Arctic. Nature Climate Change, 2020, 10, 317-321.	18.8	70
49	Gas transport in a confined unsaturated zone during atmospheric pressure cycles. Water Resources Research, 1998, 34, 2855-2862.	4.2	68
50	Optically stimulated luminescence dating of a Holocene beach ridge plain in Northern Jutland, Denmark. Quaternary Geochronology, 2006, 1, 305-312.	1.4	68
51	Holocene environmental reconstruction from deltaic deposits in northeast Greenland. Journal of Quaternary Science, 2002, 17, 145-160.	2.1	67
52	Enzymatic activities and microbial communities in an Antarctic dry valley soil: Responses to C and N supplementation. Soil Biology and Biochemistry, 2008, 40, 2130-2136.	8.8	67
53	Annual carbon fixation in terrestrial populations of Nostoc commune (Cyanobacteria) from an Antarctic dry valley is driven by temperature regime. Global Change Biology, 2007, 13, 1224-1237.	9.5	66
54	High Arctic plant phenology is determined by snowmelt patterns but duration of phenological periods is fixed: an example of periodicity. Environmental Research Letters, 2016, 11, 125006.	5.2	66

#	Article	IF	Citations
55	Microscale measurements of oxygen diffusion and consumption in subaqueous sulfide tailings. Geochimica Et Cosmochimica Acta, 2001, 65, 1897-1905.	3.9	65
56	Snow cover and extreme winter warming events control flower abundance of some, but not all species in high arctic <scp>S</scp>valbard. Ecology and Evolution, 2013, 3, 2586-2599.	1.9	65
57	Seasonal trends of soil CO2 dynamics in a soil subject to freezing. Journal of Hydrology, 2003, 276, 159-175.	5.4	63
58	Initial Stages of Tundra Shrub Litter Decomposition May Be Accelerated by Deeper Winter Snow But Slowed Down by Spring Warming. Ecosystems, 2016, 19, 155-169.	3.4	63
59	Isotopic evidence for the provenance and turnover of organic carbon by soil microorganisms in the Antarctic dry valleys. Environmental Microbiology, 2009, 11, 597-608.	3.8	61
60	Temperature and oxygen control on pyrite oxidation in frozen mine tailings. Cold Regions Science and Technology, 2005, 41, 121-133.	3.5	60
61	Methane oxidation in contrasting soil types: responses to experimental warming with implication for landscapeâ€integrated CH₄ budget. Global Change Biology, 2017, 23, 966-976.	9.5	57
62	Tundra Trait Team: A database of plant traits spanning the tundra biome. Global Ecology and Biogeography, 2018, 27, 1402-1411.	5.8	57
63	Soil carbon stocks, mineralization rates, and CO2 effluxes under 10 tree species on contrasting soil types. Canadian Journal of Forest Research, 2005, 35, 1277-1284.	1.7	54
64	Soil heterogeneity effects on O2 distribution and CH4 emissions from wetlands: In situ and mesocosm studies with planar O2 optodes and membrane inlet mass spectrometry. Soil Biology and Biochemistry, 2010, 42, 2254-2265.	8.8	52
65	Flooding-induced N2O emission bursts controlled by pH and nitrate in agricultural soils. Soil Biology and Biochemistry, 2014, 69, 17-24.	8.8	52
66	Thermokarst dynamics and soil organic matter characteristics controlling initial carbon release from permafrost soils in the Siberian Yedoma region. Sedimentary Geology, 2016, 340, 38-48.	2.1	52
67	Global plant trait relationships extend to the climatic extremes of the tundra biome. Nature Communications, 2020, 11, 1351.	12.8	52
68	Winter carbon dioxide effluxes from Arctic ecosystems: An overview and comparison of methodologies. Global Biogeochemical Cycles, 2010, 24, .	4.9	51
69	Future permafrost conditions along environmental gradients in Zackenberg, Greenland. Cryosphere, 2015, 9, 719-735.	3.9	51
70	Methane fluxes and the functional groups of methanotrophs and methanogens in a young Arctic landscape on Disko Island, West Greenland. Biogeochemistry, 2015, 122, 15-33.	3.5	48
71	Direct current (DC) resistivity and induced polarization (IP) monitoring of active layer dynamics at high temporal resolution. Cold Regions Science and Technology, 2015, 119, 16-28.	3.5	45
72	Changes in soil organic matter following groundnutâ€“millet cropping at three locations in semi-arid Senegal, West Africa. Agriculture, Ecosystems and Environment, 2003, 96, 37-47.	5.3	44

#	Article	IF	Citations
73	Geochemical trends in metal-contaminated fiord sediments near a former leadâ€“zinc mine in West Greenland. Applied Geochemistry, 2002, 17, 493-502.	3.0	43
74	The Importance of Microbial Iron Sulfide Oxidation for Nitrate Depletion in Anoxic Danish Sediments. Aquatic Geochemistry, 2014, 20, 419-435.	1.3	43
75	Flocculated meltwater particles control Arctic land-sea fluxes of labile iron. Scientific Reports, 2016, 6, 24033.	3.3	43
76	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
77	Divergence of Arctic shrub growth associated with sea ice decline. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 33334-33344.	7.1	43
78	Winters are changing: snow effects on Arctic and alpine tundra ecosystems. Arctic Science, 2022, 8, 572-608.	2.3	43
79	Permafrost thawing in organic Arctic soils accelerated by ground heat production. Nature Climate Change, 2015, 5, 574-578.	18.8	42
80	Contrasting temperature trends across the ice-free part of Greenland. Scientific Reports, 2018, 8, 1586.	3.3	40
81	Geomorphological and cryostratigraphical analyses of the Zackenberg Valley, NE Greenland and significance of Holocene alluvial fans. Geomorphology, 2018, 303, 504-523.	2.6	40
82	Deepened winter snow increases stem growth and alters stem Î´ ¹³ C and Î´ ¹⁵ N in evergreen dwarf shrub Cassiope tetragona in high-arctic Svalbard tundra. Environmental Research Letters, 2015, 10, 044008.	5.2	39
83	Mercury exports from a High-Arctic river basin in Northeast Greenland (74Â°N) largely controlled by glacial lake outburst floods. Science of the Total Environment, 2015, 514, 83-91.	8.0	39
84	Biogenic volatile release from permafrost thaw is determined by the soil microbial sink. Nature Communications, 2018, 9, 3412.	12.8	39
85	Shallow soils are warmer under trees and tall shrubs across Arctic and Boreal ecosystems. Environmental Research Letters, 2021, 16, 015001.	5.2	39
86	Field Evaluation of Sulphide Oxidation Rates. Hydrology Research, 1993, 24, 323-338.	2.7	39
87	Environmental controls of the seasonal variation in oxygen uptake in sulfidic tailings deposited in a permafrost-affected area. Water Resources Research, 2001, 37, 99-107.	4.2	38
88	Arctic Vegetation Damage by Winter-Generated Coal Mining Pollution Released upon Thawing. Environmental Science & Technology, 2007, 41, 2407-2413.	10.0	38
89	Upstream Freshwater and Terrestrial Sources Are Differentially Reflected in the Bacterial Community Structure along a Small Arctic River and Its Estuary. Frontiers in Microbiology, 2016, 7, 1474.	3.5	38
90	High Arctic summer warming tracked by increased Cassiope tetragona growth in the world's northernmost polar desert. Global Change Biology, 2017, 23, 5006-5020.	9.5	38

#	Article	IF	Citations
91	Effects of flooding-induced N2O production, consumption and emission dynamics on the annual N2O emission budget in wetland soil. Soil Biology and Biochemistry, 2012, 53, 9-17.	8.8	37
92	Modelling present and future permafrost thermal regimes in Northeast Greenland. Cold Regions Science and Technology, 2018, 146, 199-213.	3.5	37
93	Disentangling the complexity of permafrost soil by using high resolution profiling of microbial community composition, key functions and respiration rates. Environmental Microbiology, 2018, 20, 4328-4342.	3.8	37
94	Influence of Vegetation, Temperature, and Water Content on Soil Carbon Distribution and Mineralization in Four High Arctic Soils. Arctic, Antarctic, and Alpine Research, 2004, 36, 528-538.	1.1	36
95	Modelling water balance and nitrate leaching in temperate Norway spruce and beech forests located on the same soil type with the CoupModel. Forest Ecology and Management, 2006, 237, 545-556.	3.2	36
96	Temporal trends of dissolved weathering products released from a high Arctic coal mine waste rock pile in Svalbard (78Â°N). Applied Geochemistry, 2007, 22, 1025-1038.	3.0	36
97	Foraging deeply: Depthâ€specific plant nitrogen uptake in response to climateâ€induced Nâ€release and permafrost thaw in the High Arctic. Global Change Biology, 2020, 26, 6523-6536.	9.5	36
98	Pb isotopes as tracers of mining-related Pb in lichens, seaweed and mussels near a former Pb-Zn mine in West Greenland. Environmental Pollution, 2010, 158, 1319-1326.	7.5	35
99	Plant-mediated CH4 transport and C gas dynamics quantified in-situ in a Phalaris arundinacea-dominant wetland. Plant and Soil, 2011, 343, 287-301.	3.7	35
100	Footprints from the past: The influence of past human activities on vegetation and soil across five archaeological sites in Greenland. Science of the Total Environment, 2019, 654, 895-905.	8.0	35
101	A comparison of annual and seasonal carbon dioxide effluxes between sub-Arctic Sweden and High-Arctic Svalbard. Polar Research, 2010, 29, 75-84.	1.6	34
102	Longâ€term experimentally deepened snow decreases growingâ€season respiration in a lowâ€and highâ€arctic tundra ecosystem. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1236-1248.	3.0	34
103	Highâ€Arctic Soil CO2 and CH4 Production Controlled by Temperature, Water, Freezing and Snow. Advances in Ecological Research, 2008, 40, 441-472.	2.7	33
104	Degradation of Archaeological Wood Under Freezing and Thawing Conditionsâ€"Effects of Permafrost and Climate Change. Archaeometry, 2014, 56, 479-495.	1.3	33
105	Nitrate-Controlled Anaerobic Oxidation of Pyrite byThiobacillusCultures. Geomicrobiology Journal, 2015, 32, 412-419.	2.0	33
106	Environmental Impact on an Arctic Soilâ€"Plant System Resulting from Metals Released from Coal Mine Waste in Svalbard (78Â° N). Water, Air, and Soil Pollution, 2008, 195, 99-114.	2.4	32
107	Role of six European tree species and landâ€use legacy for nitrogen and water budgets in forests. Global Change Biology, 2010, 16, 2224-2240.	9.5	32
108	Temporal and spatial trends in soil organic carbon stocks following maize cultivation in semi-arid Tanzania, East Africa. Nutrient Cycling in Agroecosystems, 2007, 79, 291-302.	2.2	30

#	Article	IF	Citations
109	Cold-season soil respiration in response to grazing and warming in High-Arctic Svalbard. Polar Research, 2010, 29, 46-57.	1.6	30
110	Ectomycorrhizal and saprotrophic fungi respond differently to longâ€term experimentally increased snow depth in the High Arctic. MicrobiologyOpen, 2016, 5, 856-869.	3.0	30
111	Continuous measurements of nitrous oxide isotopomers during incubation experiments. Biogeosciences, 2018, 15, 767-780.	3.3	30
112	Extreme Emission of N2O from Tropical Wetland Soil (Pantanal, South America). Frontiers in Microbiology, 2012, 3, 433.	3.5	29
113	Correlations between substrate availability, dissolved CH₄, and CH₄ emissions in an arctic wetland subject to warming and plant removal. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 645-660.	3.0	29
114	A phenology-based approach to the classification of Arctic tundra ecosystems in Greenland. ISPRS Journal of Photogrammetry and Remote Sensing, 2018, 146, 518-529.	11.1	29
115	Deepened winter snow significantly influences the availability and forms of nitrogen taken up by plants in High Arctic tundra. Soil Biology and Biochemistry, 2019, 135, 222-234.	8.8	29
116	Frozen cover actions limiting AMD from mine waste deposited on land in Arctic Canada. Cold Regions Science and Technology, 2001, 32, 133-142.	3.5	28
117	Greenland climate change: from the past to the future. Wiley Interdisciplinary Reviews: Climate Change, 2012, 3, 427-449.	8.1	28
118	The Impact of Climate Change on an Archaeological Site in the Arctic. Archaeometry, 2017, 59, 1175-1189.	1.3	28
119	Holocene permafrost history and cryostratigraphy in the Highâ€Arctic Adventdalen Valley, central Svalbard. Boreas, 2018, 47, 423-442.	2.4	26
120	Chemical characterization of microbial-dominated soil organic matter in the Garwood Valley, Antarctica. Geochimica Et Cosmochimica Acta, 2010, 74, 6485-6498.	3.9	24
121	The Fate of the Submarine Ikaite Tufa Columns in Southwest Greenland Under Changing Climate Conditions. Journal of Sedimentary Research, 2011, 81, 553-561.	1.6	24
122	Subsurface CO2 Dynamics in Temperate Beech and Spruce Forest Stands. Biogeochemistry, 2005, 75, 479-506.	3.5	23
123	Cryostratigraphy, sedimentology, and the late Quaternary evolution of the Zackenberg River delta, northeast Greenland. Cryosphere, 2017, 11, 1265-1282.	3.9	23
124	Model-data fusion to assess year-round CO2 fluxes for an arctic heath ecosystem in West Greenland (69Â°N). Agricultural and Forest Meteorology, 2019, 272-273, 176-186.	4.8	23
125	Lability classification of soil organic matter in the northern permafrost region. Biogeosciences, 2020, 17, 361-379.	3.3	23
126	High-Resolution Measurements of Water Discharge, Sediment, and Solute Transport in the River Zackenbergelven, Northeast Greenland. Arctic, Antarctic, and Alpine Research, 2000, 32, 336-345.	1.1	22

#	Article	IF	Citations
127	Hydrology and Transport of Sediment and Solutes at Zackenberg. Advances in Ecological Research, 2008, , 197-221.	2.7	22
128	A comparison of soil organic carbon stock in ancient and modern land use systems in Denmark. European Journal of Soil Science, 2009, 60, 55-63.	3.9	22
129	Paleo-Eskimo kitchen midden preservation in permafrost under future climate conditions at Qajaa, West Greenland. Journal of Archaeological Science, 2011, 38, 1331-1339.	2.4	22
130	Density Effects on Soilâ€Water Characteristics, Soilâ€Gas Diffusivity, and Emissions of N₂O and N₂ from a Reâ€packed Pasture Soil. Soil Science Society of America Journal, 2019, 83, 118-125.	2.2	22
131	Immediate and carryâ€over effects of insect outbreaks on vegetation growth in West Greenland assessed from cells to satellite. Journal of Biogeography, 2020, 47, 87-100.	3.0	22
132	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
133	Soil solution pH measurements using in-line chambers with tension lysimeters. Canadian Journal of Soil Science, 2000, 80, 283-288.	1.2	21
134	An Optode Sensor Array for Long-Term In Situ Oxygen Measurements in Soil and Sediment. Journal of Environmental Quality, 2013, 42, 1267-1273.	2.0	21
135	Short and Longâ€Term Controls on Active Layer and Permafrost Carbon Turnover Across the Arctic. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 372-390.	3.0	21
136	Drivers of net methane uptake across Greenlandic dry heath tundra landscapes. Soil Biology and Biochemistry, 2019, 138, 107605.	8.8	21
137	Preservation Within Log Coffins Before and After Barrow Construction. Journal of Archaeological Science, 2003, 30, 343-350.	2.4	20
138	Greenlandic sheep farming controlled by vegetation response today and at the end of the 21st Century. Science of the Total Environment, 2015, 512-513, 672-681.	8.0	20
139	Climate change and the loss of organic archaeological deposits in the Arctic. Scientific Reports, 2016, 6, 28690.	3.3	20
140	Sea-level proxies in Holocene raised beach ridge deposits (Greenland) revealed by ground-penetrating radar. Scientific Reports, 2017, 7, 46460.	3.3	20
141	Contrasting aboveâ€and belowground organic matter decomposition and carbon and nitrogen dynamics in response to warming in High Arctic tundra. Global Change Biology, 2018, 24, 2660-2672.	9.5	20
142	Spatial and Interâ€Annual Variability of Trace Gas Fluxes in a Heterogeneous Highâ€Arctic Landscape. Advances in Ecological Research, 2008, 40, 473-498.	2.7	19
143	High-Resolution Measurements of Water Discharge, Sediment, and Solute Transport in the River Zackenbergelven, Northeast Greenland. Arctic, Antarctic, and Alpine Research, 2000, 32, 336.	1.1	18
144	Accumulation of Soil Organic Carbon Linked to Holocene Sea Level Changes in West Greenland. Arctic, Antarctic, and Alpine Research, 2006, 38, 378-383.	1.1	18

#	Article	IF	Citations
145	Modelling temperature-dependent heat production over decades in High Arctic coal waste rock piles. Cold Regions Science and Technology, 2011, 65, 258-268.	3.5	18
146	A scalable model for methane consumption in arctic mineral soils. Geophysical Research Letters, 2016, 43, 5143-5150.	4.0	18
147	Potential microbial contamination during sampling of permafrost soil assessed by tracers. Scientific Reports, 2017, 7, 43338.	3.3	18
148	Suspended sediment in a high-Arctic river: An appraisal of flux estimation methods. Science of the Total Environment, 2017, 580, 582-592.	8.0	18
149	Soilâ€Gas Diffusivity and Soilâ€Moisture effects on N 2 O Emissions from Intact Pasture Soils. Soil Science Society of America Journal, 2019, 83, 1032-1043.	2.2	18
150	Arctic soil carbon turnover controlled by experimental snow addition, summer warming and shrub removal. Soil Biology and Biochemistry, 2020, 142, 107698.	8.8	18
151	Seasonal variations in methane fluxes in response to summer warming and leaf litter addition in a subarctic heath ecosystem. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2137-2153.	3.0	17
152	Predicting the loss of organic archaeological deposits at a regional scale in Greenland. Scientific Reports, 2019, 9, 9097.	3.3	17
153	Estimating meltwater retention and associated nitrate redistribution during snowmelt in an Arctic tundra landscape*. Environmental Research Letters, 2020, 15, 034025.	5.2	17
154	Deepened snow enhances gross nitrogen cycling among Pan-Arctic tundra soils during both winter and summer. Soil Biology and Biochemistry, 2021, 160, 108356.	8.8	17
155	Arctic archaeological sites threatened by climate change: A regional multiâ€threat assessment of sites in southâ€west Greenland. Archaeometry, 2020, 62, 1280-1297.	1.3	17
156	Note: Natural heavy-metal release by sulphide oxidation in the High Arctic. Canadian Geotechnical Journal, 1998, 35, 895-901.	2.8	16
157	The impacts of local farming system development trajectories on greenhouse gas emissions in the northern mountains of Vietnam. Regional Environmental Change, 2007, 7, 187-208.	2.9	16
158	Metal speciation and bioavailability in acid mine drainage from a high Arctic coal mine waste rock pile: Temporal variations assessed through high-resolution water sampling, geochemical modelling and DGT. Cold Regions Science and Technology, 2008, 54, 89-96.	3.5	16
159	Carbon Cycling in Floodplain Ecosystems: Out-Gassing and Photosynthesis Transmit Soil Î´13C Gradient Through Stream Food Webs. Ecosystems, 2011, 14, 583-597.	3.4	16
160	Arctic soil water chemistry in dry and wet tundra subject to snow addition, summer warming and herbivory simulation. Soil Biology and Biochemistry, 2020, 141, 107676.	8.8	16
161	Changes in shifting cultivation systems on small Pacific islands. Geographical Journal, 2012, 178, 175-187.	3.1	15
162	The fate of 13C15N labelled glycine in permafrost and surface soil at simulated thaw in mesocosms from high arctic and subarctic ecosystems. Plant and Soil, 2017, 419, 201-218.	3.7	15

#	Article	IF	Citations
163	Fast response of fungal and prokaryotic communities to climate change manipulation in two contrasting tundra soils. Environmental Microbiomes, 2019, 14, 6.	5.0	15
164	Methodologically controlled variations in laboratory and field pH measurements in waterlogged soils. European Journal of Soil Science, 2007, 58, 207-214.	3.9	14
165	Redistributed lacustrine detritus as a spatial subsidy of biological resources for soils in an Antarctic dry valley. Geoderma, 2008, 144, 86-92.	5.1	14
166	Modelling subsurface temperatures in a heat producing coal waste rock pile, Svalbard (78Â°N). Cold Regions Science and Technology, 2009, 58, 68-76.	3.5	14
167	Vegetation phenology gradients along the west and east coasts of Greenland from 2001 to 2015. Ambio, 2017, 46, 94-105.	5.5	14
168	Crowther et al. reply. Nature, 2018, 554, E7-E8.	27.8	14
169	An indigenous soil classification system for Bellona Island â€“ a raised atoll in Solomon Islands. Singapore Journal of Tropical Geography, 2010, 31, 85-99.	0.9	13
170	Effect of electrode shape on grounding resistances â€” Part 2: Experimental results and cryospheric monitoring. Geophysics, 2016, 81, WA169-WA182.	2.6	13
171	Linking rhizospheric CH4 oxidation and net CH4 emissions in an arctic wetland based on 13CH4 labeling of mesocosms. Plant and Soil, 2017, 412, 201-213.	3.7	13
172	Fast Responses of Root Dynamics to Increased Snow Deposition and Summer Air Temperature in an Arctic Wetland. Frontiers in Plant Science, 2018, 9, 1258.	3.6	13
173	Soil Carbon and Nitrogen Stocks and Turnover Following 16ÂYears of Warming and Litter Addition. Ecosystems, 2019, 22, 110-124.	3.4	13
174	Effects of denitrification and transport on the isotopic composition of nitrate (Î´18O, Î´15N) in freshwater systems. Science of the Total Environment, 2019, 651, 2228-2234.	8.0	13
175	Temperature sensitivity of willow dwarf shrub growth from two distinct High Arctic sites. International Journal of Biometeorology, 2019, 63, 167-181.	3.0	13
176	Gas phase diffusion coefficient in cemented porous media. Journal of Hydrology, 1996, 178, 93-108.	5.4	12
177	Oxygen depletion and phosphorus release following flooding of a cultivated wetland area in Denmark. Geografisk Tidsskrift, 2008, 108, 17-25.	0.6	12
178	Resource Limitations on Soil Microbial Activity in an Antarctic Dry Valley. Soil Science Society of America Journal, 2011, 75, 2188-2197.	2.2	12
179	Processâ€Oriented Modeling of a High Arctic Tundra Ecosystem: Longâ€Term Carbon Budget and Ecosystem Responses to Interannual Variations of Climate. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1178-1196.	3.0	12
180	Heavy metals in 3300â€yearâ€old agricultural soils used to assess present soil contamination. European Journal of Soil Science, 2010, 61, 74-83.	3.9	11

#	Article	IF	Citations
181	Microbial responses to carbon and nitrogen supplementation in an Antarctic dry valley soil. Antarctic Science, 2013, 25, 55-61.	0.9	11
182	Gasâ€Diffusivity based characterization of aggregated agricultural soils. Soil Science Society of America Journal, 2020, 84, 387-398.	2.2	11
183	Fire increases soil nitrogen retention and alters nitrogen uptake patterns among dominant shrub species in an Arctic dry heath tundra. Science of the Total Environment, 2022, 807, 150990.	8.0	11
184	Increased annual methane uptake driven by warmer winters in an alpine meadow. Global Change Biology, 2022, 28, 3246-3259.	9.5	11
185	Spatial variations and controls of acid mine drainage generation. Environmental Geology, 2003, 43, 806-813.	1.2	10
186	Effects of fire on <scp>CO₂</scp>, <scp>CH₄</scp>, and <scp>N₂O</scp> exchange in a wellâ€drained Arctic heath ecosystem. Global Change Biology, 2022, 28, 4882-4899.	9.5	10
187	Water content and land use history controlling soil CO2 respiration and carbon stock in savanna soil and groundnut fields in semi-arid Senegal. Geografisk Tidsskrift, 2003, 103, 47-56.	0.6	9
188	Zackenberg in a Circumpolar Context. Advances in Ecological Research, 2008, , 499-544.	2.7	9
189	The Future Preservation of a Permanently Frozen Kitchen Midden in Western Greenland. Conservation and Management of Archaeological Sites, 2012, 14, 159-168.	0.5	9
190	Nitrogen transport in a tundra landscape: the effects of early and late growing season lateral N inputs on arctic soil and plant N pools and N2O fluxes. Biogeochemistry, 2022, 157, 69-84.	3.5	9
191	Characterization of diffusivityâ€based oxygen transport in Arctic organic soil. European Journal of Soil Science, 2015, 66, 983-991.	3.9	8
192	Growing season leaf carbon:nitrogen dynamics in Arctic tundra vegetation from ground and Sentinel-2 observations reveal reallocation timing and upscaling potential. Remote Sensing of Environment, 2021, 262, 112512.	11.0	8
193	Effects of experimental fire in combination with climate warming on greenhouse gas fluxes in Arctic tundra soils. Science of the Total Environment, 2021, 795, 148847.	8.0	8
194	Pyrogenic organic matter as a nitrogen source to microbes and plants following fire in an Arctic heath tundra. Soil Biology and Biochemistry, 2022, 170, 108699.	8.8	8
195	Soil development rates from an optically stimulated luminescence-dated beach ridge sequence in Northern Jutland, Denmark. Canadian Journal of Soil Science, 2010, 90, 295-307.	1.2	7
196	The tundra phenology database: more than two decades of tundra phenology responses to climate change. Arctic Science, 2022, 8, 1026-1039.	2.3	7
197	Soil micro-organisms in Antarctic dry valleys: resource supply and utilization. , 0, , 71-84.		6
198	Soilâ€gas diffusivity and soilâ€moisture effects on N₂O emissions from repacked pasture soils. Soil Science Society of America Journal, 2020, 84, 371-386.	2.2	6

#	Article	IF	Citations
199	Short communication: a new dataset for estimating organic carbon storage to 3 m depth in soils of the northern circumpolar permafrost region. , 0, , .		6
200	Reduced methane emissions in former permafrost soils driven by vegetation and microbial changes following drainage. Global Change Biology, 2022, 28, 3411-3425.	9.5	6
201	Upslope releaseâ€"Downslope receipt? Multiâ€year plant uptake of permafrostâ€released nitrogen along an arctic hillslope. Journal of Ecology, 2022, 110, 1896-1912.	4.0	6
202	Carbon sequestration in iron-nodules in moist semi-deciduous tropical forest soil. Geoderma, 2013, 200-201, 202-207.	5.1	5
203	Combined effects of glacial retreat and penguin activity on soil greenhouse gas fluxes on South Georgia, sub-Antarctica. Science of the Total Environment, 2020, 718, 135255.	8.0	5
204	Nitrogen isotopes reveal high N retention in plants and soil of old Norse and Inuit deposits along a wet-dry arctic fjord transect in Greenland. Plant and Soil, 2020, 455, 241-255.	3.7	5
205	Warming and Increased Respiration Have Transformed an Alpine Steppe Ecosystem on the Tibetan Plateau From a Carbon Dioxide Sink Into a Source. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	5
206	Arctic soil respiration and microbial community structure driven by silicon and calcium. Science of the Total Environment, 2022, 838, 156152.	8.0	5
207	Composition of characteristic soils on the raised atoll Bellona, Solomon Islands. Geoderma, 2012, 170, 186-194.	5.1	4
208	In situ CH4 oxidation inhibition and 13CH4 labeling reveal methane oxidation and emission patterns in a subarctic heath ecosystem. Biogeochemistry, 2018, 138, 197-213.	3.5	4
209	Disposal of Mine Tailings in Continuous Permafrost Areas: Environmental Aspects and Future Control Strategies. , 2004, , 677-698.		4
210	Modelling impacts of lateral N flows and seasonal warming on an arctic footslope ecosystem N budget and N2O emissions based on species-level responses. Biogeochemistry, 2022, 158, 195-213.	3.5	4
211	Influences of summer warming and nutrient availability on Salix glauca L. growth in Greenland along an ice to sea gradient. Scientific Reports, 2022, 12, 3077.	3.3	4
212	Development of plateau dunes controlled by iron pan formation and changes in land use and climate. Catena, 2018, 171, 580-587.	5.0	3
213	Lability of toxic elements in Submarine Tailings Disposal: The relationship between metal fractionation and metal uptake by sandworms (Alitta virens). Science of the Total Environment, 2019, 696, 133903.	8.0	3
214	Sea animal activity controls CO2, CH4 and N2O emission hotspots on South Georgia, sub-Antarctica. Soil Biology and Biochemistry, 2019, 132, 174-186.	8.8	3
215	Glacial Rock Flour as Soil Amendment in Subarctic Farming in South Greenland. Land, 2020, 9, 198.	2.9	3
216	Comments on â€œAbiotic processes dominate CO2 fluxes in Antarctic soilsâ€•by Shanhun etÂal. Soil Biology & Biochemistry 53, 99â€“111 (2012). Soil Biology and Biochemistry, 2014, 75, 310-311.	8.8	2

#	Article	IF	Citations
217	Methods to Assess High-Resolution Subsurface Gas Concentrations and Gas Fluxes in Wetland Ecosystems. Soil Science Society of America Book Series, 0, , 949-970.	0.3	2
218	The sustainability of cassava-based bioethanol production in southern Mali. Geografisk Tidsskrift, 2015, 115, 14-26.	0.6	2
219	Arctic Soil Microbial Sensitivity to Seasonal Dynamics and Climate Change. , 2017, , 275-307.		2
220	Applying Chemometrics to Determine Dispersion of Mine Tailing-Affected Sediments from Submarine Tailing Disposal in BÃ¸kfjorden, Northern Norway. Water, Air, and Soil Pollution, 2018, 229, 1.	2.4	2
221	Reply to the comment: Northern Hemisphere permafrost extent: Drylands, glaciers and sea floor. Earth-Science Reviews, 2020, 203, 103036.	9.1	1
222	Aluminium release from acidic forest soil following deforestation and maize cultivation in Ghana, West Africa. West African Journal of Applied Ecology, 2009, 8, .	0.1	0
223	Greenland Climates. , 2020, , 539-550.		0