Juul Limpens

List of Publications by Year
in descending order

66 papers	3,732 citations	136950 32 h-index	133252 59 g-index
75 all docs	75 docs citations	75 times ranked	4106 citing authors

#	Article	IF	Citations
1	Atmospheric nitrogen deposition promotes carbon loss from peat bogs. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19386-19389.	7.1	367
2	Nutritional constraints in ombrotrophic Sphagnum plants under increasing atmospheric nitrogen deposition in Europe. New Phytologist, 2004, 163, 609-616.	7.3	169
3	Nitrogen concentration and delta15N signature of ombrotrophic Sphagnum mosses at different N deposition levels in Europe. Global Change Biology, 2005, 11, 106-114.	9.5	164
4	N deposition affects N availability in interstitial water, growth of Sphagnum and invasion of vascular plants in bog vegetation. New Phytologist, 2003, 157, 339-347.	7.3	151
5	Permafrost collapse after shrub removal shifts tundra ecosystem to a methane source. Nature Climate Change, 2015, 5, 67-70.	18.8	147
6	Expansion of invasive species on ombrotrophic bogs: desiccation or high N deposition?. Journal of Applied Ecology, 2004, 41, 139-150.	4.0	145
7	Cell-wall polysaccharides play an important role in decay resistance of Sphagnum and actively depressed decomposition in vitro. Biogeochemistry, 2011, 103, 45-57.	3.5	133
8	Ecosystem responses to reduced and oxidised nitrogen inputs in European terrestrial habitats. Environmental Pollution, 2011, 159, 665-676.	7.5	132
9	How litter quality affects mass loss and N loss from decomposing Sphagnum. Oikos, 2003, 103, 537-547.	2.7	128
10	How Phosphorus Availability Affects the Impact of Nitrogen Deposition on Sphagnum and Vascular Plants in Bogs. Ecosystems, 2004, 7, 793-804.	3.4	128
11	Decreased summer water table depth affects peatland vegetation. Basic and Applied Ecology, 2009, 10, 330-339.	2.7	124
12	Growth reduction of Sphagnum magellanicum subjected to high nitrogen deposition: the role of amino acid nitrogen concentration. Oecologia, 2003, 135, 339-345.	2.0	118
13	Climatic modifiers of the response to nitrogen deposition in peatâ€forming <i>Sphagnum</i> mosses: a metaâ€analysis. New Phytologist, 2011, 191, 496-507.	7.3	117
14	Interactive effects of water table and precipitation on net CO₂ assimilation of three coâ€occurring <i>Sphagnum</i> mosses differing in distribution above the water table. Global Change Biology, 2009, 15, 680-691.	9.5	104
15	Effects of water level and temperature on performance of four Sphagnum mosses. Plant Ecology, 2007, 190, 97-107.	1.6	95
16	Tundra vegetation change and impacts on permafrost. Nature Reviews Earth & Environment, 2022, 3, 68-84.	29.7	87
17	Persistent versus transient tree encroachment of temperate peat bogs: effects of climate warming and drought events. Global Change Biology, 2013, 19, 2240-2250.	9.5	70
18	The Nitrogen Cycle in Boreal Peatlands. , 2006, , 195-230.		69

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19	Positive shrubâ€“tree interactions facilitate woody encroachment in boreal peatlands. Journal of Ecology, 2015, 103, 58-66.	4.0	63
20	The effect of increased temperature and nitrogen deposition on decomposition in bogs. Oikos, 2008, 117, 1258-1268.	2.7	60
21	Can frequent precipitation moderate the impact of drought on peatmoss carbon uptake in northern peatlands?. New Phytologist, 2014, 203, 70-80.	7.3	57
22	Rain events decrease boreal peatland net <scp>CO</scp>₂ uptake through reduced light availability. Global Change Biology, 2015, 21, 2309-2320.	9.5	57
23	The Sphagnome Project: enabling ecological and evolutionary insights through a genusâ€level sequencing project. New Phytologist, 2018, 217, 16-25.	7.3	54
24	Expansion ofSphagnum fallaxin bogs: striking the balance between N and P availability. Journal of Bryology, 2003, 25, 83-90.	1.2	53
25	Dissolved organic nitrogen dominates in European bogs under increasing atmospheric N deposition. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	4.9	49
26	Aboveâ€•and belowâ€ground responses of four tundra plant functional types to deep soil heating and surface soil fertilization. Journal of Ecology, 2017, 105, 947-957.	4.0	49
27	Background invertebrate herbivory on dwarf birch (Betula glandulosa-nana complex) increases with temperature and precipitation across the tundra biome. Polar Biology, 2017, 40, 2265-2278.	1.2	47
28	Interspecific competition between Sphagnum mosses at different water tables. Functional Ecology, 2007, 21, 805-812.	3.6	46
29	Glasshouse vs field experiments: do they yield ecologically similar results for assessing N impacts on peat mosses?. New Phytologist, 2012, 195, 408-418.	7.3	46
30	Embryo dune development drivers: beach morphology, growing season precipitation, and storms. Earth Surface Processes and Landforms, 2017, 42, 1733-1744.	2.5	44
31	The interaction between epiphytic algae, a parasitic fungus and Sphagnum as affected by N and P. Oikos, 2003, 103, 59-68.	2.7	43
32	Exploring the contributions of vegetation and dune size to early dune development using unmanned aerial vehicle (UAV) imaging. Biogeosciences, 2017, 14, 5533-5549.	3.3	36
33	Peatland vegetation composition and phenology drive the seasonal trajectory of maximum gross primary production. Scientific Reports, 2018, 8, 8012.	3.3	34
34	UAV-imaging to model growth response of marram grass to sand burial: Implications for coastal dune development. Aeolian Research, 2018, 31, 50-61.	2.7	33
35	Environmental drivers of <i>Sphagnum</i> growth in peatlands across the Holarctic region. Journal of Ecology, 2021, 109, 417-431.	4.0	32
36	Sphagnum re-introduction in degraded peatlands: The effects of aggregation, species identity and water table. Basic and Applied Ecology, 2009, 10, 697-706.	2.7	30

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37	Forage plants of an Arcticâ€nesting herbivore show larger warming response in breeding than wintering grounds, potentially disrupting migration phenology. Ecology and Evolution, 2017, 7, 2652-2660.	1.9	29
38	Including hydrological self-regulating processes in peatland models: Effects on peatmoss drought projections. Science of the Total Environment, 2017, 580, 1389-1400.	8.0	26
39	Phylogenetic or environmental control on the elemental and organo-chemical composition of Sphagnum mosses?. Plant and Soil, 2017, 417, 69-85.	3.7	26
40	Environmental and taxonomic controls of carbon and oxygen stable isotope composition in <i>Sphagnum</i> across broad climatic and geographic ranges. Biogeosciences, 2018, 15, 5189-5202.	3.3	25
41	Extremely wet summer events enhance permafrost thaw for multiple years in Siberian tundra. Nature Communications, 2022, 13, 1556.	12.8	24
42	How Does Tree Density Affect Water Loss of Peatlands? A Mesocosm Experiment. PLoS ONE, 2014, 9, e91748.	2.5	23
43	Swift recovery of Sphagnum nutrient concentrations after excess supply. Oecologia, 2008, 157, 153-61.	2.0	21
44	Spatio-temporal trends of nitrogen deposition and climate effects on Sphagnum productivity in European peatlands. Environmental Pollution, 2014, 187, 73-80.	7.5	20
45	Does salt stress constrain spatial distribution of dune building grasses <i>Ammophila arenaria</i> and <i>Elytrichia juncea</i> on the beach?. Ecology and Evolution, 2017, 7, 7290-7303.	1.9	20
46	Plant functional types and temperature control carbon input via roots in peatland soils. Plant and Soil, 2019, 438, 19-38.	3.7	20
47	Rapid Vegetation Succession and Coupled Permafrost Dynamics in Arctic Thaw Ponds in the Siberian Lowland Tundra. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005618.	3.0	20
48	Dead wood diversity promotes fungal diversity. Oikos, 2021, 130, 2202-2216.	2.7	20
49	Shrub decline and expansion of wetland vegetation revealed by very high resolution land cover change detection in the Siberian lowland tundra. Science of the Total Environment, 2021, 782, 146877.	8.0	19
50	Precipitation determines the persistence of hollow Sphagnum species on hummocks. Wetlands, 2007, 27, 979-986.	1.5	17
51	Do plant traits explain tree seedling survival in bogs?. Functional Ecology, 2014, 28, 283-290.	3.6	17
52	Depthâ€based differentiation in nitrogen uptake between graminoids and shrubs in an Arctic tundra plant community. Journal of Vegetation Science, 2018, 29, 34-41.	2.2	17
53	Vascular plants affect properties and decomposition of moss-dominated peat, particularly at elevated temperatures. Biogeosciences, 2020, 17, 4797-4813.	3.3	16
54	Highâ€resolution peat volume change in a northern peatland: Spatial variability, main drivers, and impact on ecohydrology. Ecohydrology, 2019, 12, e2114.	2.4	14

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55	Shrubs and Degraded Permafrost Pave the Way for Tree Establishment in Subarctic Peatlands. Ecosystems, 2021, 24, 370-383.	3.4	13
56	A modification of the constant-head permeameter to measure saturated hydraulic conductivity of highly permeable media. MethodsX, 2017, 4, 134-142.	1.6	11
57	Post-thaw variability in litter decomposition best explained by microtopography at an ice-rich permafrost peatland. Arctic, Antarctic, and Alpine Research, 2018, 50, .	1.1	9
58	Exploring near-surface ground ice distribution in patterned-ground tundra: correlations with topography, soil and vegetation. Plant and Soil, 2019, 444, 251-265.	3.7	9
59	Can ash from smoldering fires increase peatland soil pH?. International Journal of Wildland Fire, 2022, 31, 607-620.	2.4	9
60	Mixing ratio and species affect the use of substrateâ€derived CO₂ by <i>Sphagnum</i>. Journal of Vegetation Science, 2008, 19, 841-848.	2.2	5
61	Monitoring Impact of Salt-Marsh Vegetation Characteristics on Sedimentation: an Outlook for Nature-Based Flood Protection. Wetlands, 2021, 41, 1.	1.5	5
62	Global CO2 fertilization of Sphagnum peat mosses via suppression of photorespiration during the twentieth century. Scientific Reports, 2021, 11, 24517.	3.3	5
63	Aboveâ€•to belowground carbon allocation in peatlands shifts with plant functional type and temperature[#]. Journal of Plant Nutrition and Soil Science, 2022, 185, 98-109.	1.9	4
64	Determinants of tree seedling establishment in alpine tundra. Journal of Vegetation Science, 2021, 32, e12948.	2.2	2
65	Green beach vegetation dynamics explained by embryo dune development. Basic and Applied Ecology, 2021, 56, 45-57.	2.7	2
66	Peatlands and the Carbon Cycle. Bulletin of the Ecological Society of America, 2008, 89, 79-80.	0.2	0