Raija Laiho

List of Publications by Year
in descending order

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100	5,315	71097	88628
papers	citations	41 h-index	70 g-index

110	110	110	4667
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Decomposition in peatlands: Reconciling seemingly contrasting results on the impacts of lowered water levels. Soil Biology and Biochemistry, 2006, 38, 2011-2024.	8.8	371
2	Decay and nutrient dynamics of coarse woody debris in northern coniferous forests: a synthesis. Canadian Journal of Forest Research, 2004, 34, 763-777.	1.7	316
3	Long-Term Effects of Water Level Drawdown on the Vegetation of Drained Pine Mires in Southern Finland. Journal of Applied Ecology, 1995, 32, 785.	4.0	236
4	Humus in northern forests: friend or foe?. Forest Ecology and Management, 2000, 133, 23-36.	3.2	204
5	The contribution of coarse woody debris to carbon, nitrogen, and phosphorus cycles in three Rocky Mountain coniferous forests. Canadian Journal of Forest Research, 1999, 29, 1592-1603.	1.7	179
6	Effects of short- and long-term water-level drawdown on the populations and activity of aerobic decomposers in a boreal peatland. Global Change Biology, 2007, 13, 491-510.	9.5	157
7	Carbon and nitrogen release from decomposing Scots pine, Norway spruce and silver birch stumps. Forest Ecology and Management, 2010, 259, 390-398.	3.2	142
8	Dynamics of plant-mediated organic matter and nutrient cycling following water-level drawdown in boreal peatlands. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	4.9	141
9	Wood decomposition model for boreal forests. Ecological Modelling, 2011, 222, 709-718.	2.5	135
10	Indirect regulation of heterotrophic peat soil respiration by water level via microbial community structure and temperature sensitivity. Soil Biology and Biochemistry, 2009, 41, 695-703.	8.8	130
11	Disentangling direct and indirect effects of water table drawdown on aboveâ€•and belowground plant litter decomposition: consequences for accumulation of organic matter in boreal peatlands. Global Change Biology, 2012, 18, 322-335.	9.5	119
12	High nitrogen deposition alters the decomposition of bog plant litter and reduces carbon accumulation. Global Change Biology, 2012, 18, 1163-1172.	9.5	113
13	Responses of aerobic microbial communities and soil respiration to waterâ€level drawdown in a northern boreal fen. Environmental Microbiology, 2008, 10, 339-353.	3.8	108
14	Actual state of European wetlands and their possible future in the context of global climate change. Aquatic Sciences, 2013, 75, 3-26.	1.5	106
15	Recycling of ash â€“ For the good of the environment?. Forest Ecology and Management, 2015, 348, 226-240.	3.2	103
16	Responses of methanogenic and methanotrophic communities to warming in varying moisture regimes of two boreal fens. Soil Biology and Biochemistry, 2016, 97, 144-156.	8.8	92
17	Modeling Moisture Retention in Peat Soils. Soil Science Society of America Journal, 1998, 62, 305-313.	2.2	91
18	Tree stand biomass and carbon content in an age sequence of drained pine mires in southern Finland. Forest Ecology and Management, 1997, 93, 161-169.	3.2	90

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19	Changes in root biomass after waterâ€level drawdown on pine mires in southern Finland. Scandinavian Journal of Forest Research, 1996, 11, 251-260.	1.4	86
20	Litter quality and its response to water level drawdown in boreal peatlands at plant species and community level. Plant and Soil, 2010, 335, 501-520.	3.7	80
21	Responses of phenology and biomass production of boreal fens to climate warming under different waterâ€table level regimes. Global Change Biology, 2018, 24, 944-956.	9.5	80
22	Towards developmental modelling of tree root systems. Plant Biosystems, 2007, 141, 481-501.	1.6	75
23	Effects of Water Table Drawdown on Root Production and Aboveground Biomass in a Boreal Bog. Ecosystems, 2009, 12, 1268-1282.	3.4	73
24	Relationship between biomass and percentage cover in understorey vegetation of boreal coniferous forests. Silva Fennica, 2006, 40, .	1.3	73
25	Contrasting vulnerability of drained tropical and highâ€latitude peatlands to fluvial loss of stored carbon. Global Biogeochemical Cycles, 2014, 28, 1215-1234.	4.9	69
26	Litter type affects the activity of aerobic decomposers in a boreal peatland more than site nutrient and water table regimes. Biogeosciences, 2011, 8, 2741-2755.	3.3	67
27	How water-level drawdown modifies litter-decomposing fungal and actinobacterial communities in boreal peatlands. Soil Biology and Biochemistry, 2012, 51, 20-34.	8.8	65
28	Scots pine litter decomposition along drainage succession and soil nutrient gradients in peatland forests, and the effects of inter-annual weather variation. Soil Biology and Biochemistry, 2004, 36, 1095-1109.	8.8	64
29	Response of fungal and actinobacterial communities to water-level drawdown in boreal peatland sites. Soil Biology and Biochemistry, 2009, 41, 1902-1914.	8.8	63
30	Microbial ecology in a future climate: effects of temperature and moisture on microbial communities of two boreal fens. FEMS Microbiology Ecology, 2015, 91, .	2.7	62
31	The effect of forestry drainage on vertical distributions of major plant nutrients in peat soils. Plant and Soil, 1998, 207, 169-181.	3.7	60
32	Light responses of mire mosses â€“ a key to survival after waterâ€level drawdown?. Oikos, 2009, 118, 240-250.	2.7	60
33	Could continuous cover forestry be an economically and environmentally feasible management option on drained boreal peatlands?. Forest Ecology and Management, 2018, 424, 78-84.	3.2	57
34	Nutrient dynamics of drained peatland forests. Biogeochemistry, 2003, 63, 269-298.	3.5	56
35	Warming impacts on boreal fen CO₂ exchange under wet and dry conditions. Global Change Biology, 2019, 25, 1995-2008.	9.5	56
36	Impacts of intensive forestry on early rotation trends in site carbon pools in the southeastern US. Forest Ecology and Management, 2003, 174, 177-189.	3.2	55

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37	Simulation of water table level and peat temperatures in boreal peatlands. Ecological Modelling, 2006, 192, 441-456.	2.5	52
38	Environmental control and spatial structures in peatland vegetation. Journal of Vegetation Science, 2011, 22, 878-890.	2.2	51
39	Nitrogen and phosphorus stores in Peatlands drained for forestry in Finland. Scandinavian Journal of Forest Research, 1994, 9, 251-260.	1.4	49
40	Decomposition of Scots pine fine woody debris in boreal conditions: Implications for estimating carbon pools and fluxes. Forest Ecology and Management, 2009, 257, 401-412.	3.2	47
41	Effects of water level and nutrients on spatial distribution of soil mesofauna in peatlands drained for forestry in Finland. Applied Soil Ecology, 2001, 16, 1-9.	4.3	46
42	Changes in mesofauna abundance in peat soils drained for forestry. Forest Ecology and Management, 2000, 133, 127-133.	3.2	44
43	Longâ€term drainage for forestry inhibits extracellular phenol oxidase activity in Finnish boreal mire peat. European Journal of Soil Science, 2010, 61, 950-957.	3.9	44
44	Estimating fine-root production by tree species and understorey functional groups in two contrasting peatland forests. Plant and Soil, 2017, 412, 299-316.	3.7	44
45	Deforested and drained tropical peatland sites show poorer peat substrate quality and lower microbial biomass and activity than unmanaged swamp forest. Soil Biology and Biochemistry, 2018, 123, 229-241.	8.8	43
46	Phosphorus and base cation accumulation and release patterns in decomposing Scots pine, Norway spruce and silver birch stumps. Forest Ecology and Management, 2010, 260, 1478-1489.	3.2	40
47	The impact of logging residue on soil GHG fluxes in a drained peatland forest. Soil Biology and Biochemistry, 2012, 48, 1-9.	8.8	39
48	Stand structural dynamics on drained peatlands dominated by Scots pine. Forest Ecology and Management, 2005, 206, 135-152.	3.2	38
49	Influence of climate change factors on carbon dynamics in northern forested peatlands. Canadian Journal of Soil Science, 2006, 86, 269-280.	1.2	38
50	Temperature sensitivity of decomposition in a peat profile. Soil Biology and Biochemistry, 2013, 67, 47-54.	8.8	38
51	Do decomposing Scots pine, Norway spruce, and silver birch stems retain nitrogen?. Canadian Journal of Forest Research, 2008, 38, 3047-3055.	1.7	35
52	Decomposition of Scots pine litter and the fate of released carbon in pristine and drained pine mires. Soil Biology and Biochemistry, 2000, 32, 1571-1580.	8.8	33
53	Land use increases the recalcitrance of tropical peat. Wetlands Ecology and Management, 2016, 24, 717-731.	1.5	33
54	Methanogen activity in relation to water table level in two boreal fens. Biology and Fertility of Soils, 2010, 46, 567-575.	4.3	31

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55	Vegetation controls of water and energy balance of a drained peatland forest: Responses to alternative harvesting practices. Agricultural and Forest Meteorology, 2020, 295, 108198.	4.8	31
56	Decomposition andÂnitrogen dynamics ofÂlitter inÂpeat soils from twoÂclimatic regions under different temperature regimes. European Journal of Soil Biology, 2006, 42, 74-81.	3.2	30
57	The contribution of coarse woody debris to carbon, nitrogen, and phosphorus cycles in three Rocky Mountain coniferous forests. Canadian Journal of Forest Research, 1999, 29, 1592-1603.	1.7	29
58	Changes in structural inequality in Norway spruce stands on peatland sites after water-level drawdown. Canadian Journal of Forest Research, 2003, 33, 222-231.	1.7	27
59	Modified ingrowth core method plus infrared calibration models for estimating fine root production in peatlands. Plant and Soil, 2014, 385, 311-327.	3.7	25
60	Changes in mineral element concentrations in peat soils drained for forestry in Finland. Scandinavian Journal of Forest Research, 1995, 10, 218-224.	1.4	24
61	Relocation of carbon from decaying litter in drained peat soils. Soil Biology and Biochemistry, 1998, 30, 1529-1536.	8.8	24
62	Selection Cuttings as a Tool to Control Water Table Level in Boreal Drained Peatland Forests. Frontiers in Earth Science, 2020, 8, .	1.8	23
63	Drainage and Stand Growth Response in Peatland Forestsâ€”Description, Testing, and Application of Mechanistic Peatland Simulator SUSI. Forests, 2021, 12, 293.	2.1	22
64	Variation in soil nutrient concentrations and bulk density within peatland forest sites. Silva Fennica, 2004, 38, .	1.3	20
65	Forestry and Boreal Peatlands. , 2006, , 331-357.		19
66	Profitability of continuous-cover forestry in Norway spruce dominated peatland forest and the role of water table. Canadian Journal of Forest Research, 2021, 51, 859-870.	1.7	19
67	Long-term forest utilization can decrease forest floor microhabitat diversity: evidence from boreal Fennoscandia. Canadian Journal of Forest Research, 2004, 34, 303-309.	1.7	18
68	Studying the impact of living roots on the decomposition of soil organic matter in two different forestry-drained peatlands. Plant and Soil, 2015, 396, 59-72.	3.7	17
69	Boreal bog plant communities along a water table gradient differ in their standing biomass but not their biomass production. Journal of Vegetation Science, 2018, 29, 136-146.	2.2	17
70	Microbial communities after wood ash fertilization in a boreal drained peatland forest. European Journal of Soil Biology, 2016, 76, 95-102.	3.2	16
71	Reviews and syntheses: Greenhouse gas exchange data from drained organic forest soils â€“ a review of current approaches and recommendations for future research. Biogeosciences, 2019, 16, 4687-4703.	3.3	13
72	Quantification of Plant Root Species Composition in Peatlands Using FTIR Spectroscopy. Frontiers in Plant Science, 2020, 11, 597.	3.6	13

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73	Simulation modelling of greenhouse gas balance in continuous-cover forestry of Norway spruce stands on nutrient-rich drained peatlands. Forest Ecology and Management, 2021, 496, 119479.	3.2	13
74	Nutrient and heavy metals in decaying harvest residue needles on drained blanket peat forests. European Journal of Forest Research, 2014, 133, 969-982.	2.5	10
75	Effect of N addition on root exudation and associated microbial N transformation under Sibiraea angustata in an alpine shrubland. Plant and Soil, 2021, 460, 469-481.	3.7	10
76	Dynamics of Litterfall and Decomposition in Peatland Forests: Towards Reliable Carbon Balance Estimation?. , 2008, , 53-64.		9
77	Relationships between native tree species and soil properties in the indigenous forest fragments of the Eastern Arc Mountains of the Taita Hills, Kenya. Forestry Studies in China, 2011, 13, 198-210.	0.4	9
78	Quality and yield of pulpwood in drained peatland forests: pulpwood properties of Scots pine in stands of first commercial thinnings. Silva Fennica, 2003, 37, .	1.3	9
79	Should harvest residues be left on site in peatland forests to decrease the risk of potassium depletion?. Forest Ecology and Management, 2016, 374, 136-145.	3.2	8
80	Whole-tree, stem-only, and stump harvesting impacts on site nutrient capital of a Norway spruce-dominated peatland forest. European Journal of Forest Research, 2016, 135, 531-538.	2.5	8
81	Reindeer droppings may increase methane production potential in subarctic wetlands. Soil Biology and Biochemistry, 2017, 113, 260-262.	8.8	7
82	Site fertility and soil waterâ€table level affect fungal biomass production and community composition in boreal peatland forests. Environmental Microbiology, 2021, 23, 5733-5749.	3.8	7
83	Impacts of different thinning regimes on the yield of uneven-structured Scots pine stands on drained peatland. Silva Fennica, 2004, 38, .	1.3	7
84	Macroscale variation in peat element concentrations in drained boreal peatland forests. Silva Fennica, 2008, 42, .	1.3	6
85	Near Infrared Reflectance Spectroscopy for Characterization of Plant Litter Quality: Towards a Simpler Way of Predicting Carbon Turnover in Peatlands?. , 2008, , 65-87.		5
86	An optimized method for studying fungal biomass and necromass in peatlands via chitin concentration. Soil Biology and Biochemistry, 2020, 149, 107932.	8.8	4
87	From useless thickets to valuable resource? â€“ Financial performance of downy birch management on drained peatlands. Silva Fennica, 2017, 51, .	1.3	4
88	Exploring the mechanisms by which reindeer droppings induce fen peat methane production. Soil Biology and Biochemistry, 2021, 160, 108318.	8.8	3
89	Harvennusten ja kunnostusojitusten vaikutus puuston kasvuun ja tuotokseen ojitetuilla rÃmeillÃ â€“ simulointitutkimus. Metstieteen Aikakauskirja, 2008, 2008, .	0.0	3
90	Heikkotuottoiset ojitetut suometsÃt â€“ missÃ ja paljonko niitÃ on?. Metstieteen Aikakauskirja, 2016, 2016, .	0.0	3

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91	Jatkuvapeitteisen metsÃnkasvatuksen mahdollisuudet ojitetuilla turvemailla. Metstieteen Aikakauskirja, 2020, 2020, .	0.0	3
92	Decay of Scots pine coarse woody debris in boreal peatland forests: Mass loss and nutrient dynamics. Forest Ecology and Management, 2017, 401, 304-318.	3.2	2
93	Soiden ennallistamisen suoluonto-, vesistÃ¶-, ja ilmastovaikutukset. Vertaisarvioitu raportti.. Suomen Luontopaneelin Julkaisuja, 0, , .	0.0	2
94	Harvennusten ekologiset perusteet ja tuotosvaikutukset ojitetuilla rÃmeillÃ. Metstieteen Aikakauskirja, 2000, 2000, .	0.0	2
95	Response of vegetation and soil biological properties to soil deformation in logging trails of drained boreal peatland forests. Canadian Journal of Forest Research, 2022, 52, 511-526.	1.7	2
96	Turpeen ravinnepitoisuudet ojitetuissa suometsissÃ. Metstieteen Aikakauskirja, 2008, 2008, .	0.0	1
97	SuomÃnnikÃ¶iden ensiharvennukset. Metstieteen Aikakauskirja, 2002, 2002, .	0.0	0
98	RiittÃvÃtkÃ¶ ravinteet suometsissÃ?. Metstieteen Aikakauskirja, 2000, 2000, .	0.0	0
99	OjitusaluemÃnnikÃ¶iden ensiharvennuspuu sellun raaka-aineena. Metstieteen Aikakauskirja, 2002, 2002, .	0.0	0
100	TiheikÃ¶t hyÃ¶tykÃyttÃ¶Ã¶n? â€“ Hieskoivikoiden kasvatusvaihtoehtojen kannattavuus turvemailla. Metstieteen Aikakauskirja, 2017, 2017, .	0.0	0