Lars Vesterdal

List of Publications by Year in descending order

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112 papers	10,021 citations	47409 49 h-index	42259 96 g-index
123 all docs	123 docs citations	123 times ranked	10109 citing authors

#	Article	IF	Citations
1	Simulating tree growth response to climate change in structurally diverse oak and beech forests. Science of the Total Environment, 2022, 806, 150422.	3.9	15
2	Litter quality, mycorrhizal association, and soil properties regulate effects of tree species on the soil fauna community. Geoderma, 2022, 407, 115570.	2.3	34
3	Climatic conditions, not above- and belowground resource availability and uptake capacity, mediate tree diversity effects on productivity and stability. Science of the Total Environment, 2022, 812, 152560.	3.9	8
4	Forest tree growth is linked to mycorrhizal fungal composition and function across Europe. ISME Journal, 2022, 16, 1327-1336.	4.4	62
5	Physiological and climate controls on foliar mercury uptake by European tree species. Biogeosciences, 2022, 19, 1335-1353.	1.3	18
6	Ecoenzymatic stoichiometry can reflect microbial resource limitation, substrate quality, or both in forest soils. Soil Biology and Biochemistry, 2022, 167, 108613.	4.2	38
7	Do tree species affect decadal changes in soil organic carbon and total nitrogen stocks in Danish common garden experiments?. European Journal of Soil Science, 2022, 73, .	1.8	7
8	Roots and rhizospheric soil microbial community responses to tree species mixtures. Applied Soil Ecology, 2022, 176, 104509.	2.1	1
9	Effects of common European tree species on soil microbial resource limitation, microbial communities and soil carbon. Soil Biology and Biochemistry, 2022, 172, 108754.	4.2	16
10	Tree species identity is the predominant modulator of the effects of soil fauna on leaf litter decomposition. Forest Ecology and Management, 2022, 520, 120396.	1.4	9
11	Effects of Litter Quality Diminish and Effects of Vegetation Type Develop During Litter Decomposition of Two Shrub Species in an Alpine Treeline Ecotone. Ecosystems, 2021, 24, 197-210.	1.6	11
12	Effects of intensive biomass harvesting on forest soils in the Nordic countries and the UK: A meta-analysis. Forest Ecology and Management, 2021, 482, 118877.	1.4	26
13	Old-growth forest carbon sinks overestimated. Nature, 2021, 591, E21-E23.	13.7	65
14	Pedogenic Threshold in Acidity Explains Context-Dependent Tree Species Effects on Soil Carbon. Frontiers in Forests and Global Change, 2021, 4, .	1.0	4
15	Aboveâ€•and belowâ€ground complementarity rather than selection drive tree diversityâ€“productivity relationships in European forests. Functional Ecology, 2021, 35, 1756-1767.	1.7	15
16	Highly comparable metabarcoding results from MGI-Tech and Illumina sequencing platforms. PeerJ, 2021, 9, e12254.	0.9	13
17	Decomposition and transformations along the continuum from litter to soil organic matter in forest soils. Forest Ecology and Management, 2021, 498, 119522.	1.4	96
18	A High-Resolution Digital Elevation Model in Combination With Water Table Depth and Continuous Soil Redox Potential Measurements Explain Soil Respiration and Soil Carbon Stocks at the ICOS Site SorÃ¸. Frontiers in Forests and Global Change, 2021, 3, .	1.0	1

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19	Tree diversity is key for promoting the diversity and abundance of forestâ€associated taxa in Europe. Oikos, 2020, 129, 133-146.	1.2	80
20	Nitrogen deposition is the most important environmental driver of growth of pure, even-aged and managed European forests. Forest Ecology and Management, 2020, 458, 117762.	1.4	102
21	Mycorrhizal association of common European tree species shapes biomass and metabolic activity of bacterial and fungal communities in soil. Soil Biology and Biochemistry, 2020, 149, 107933.	4.2	31
22	Tree species effects on topsoil carbon stock and concentration are mediated by tree species type, mycorrhizal association, and N-fixing ability at the global scale. Forest Ecology and Management, 2020, 478, 118510.	1.4	37
23	Positive feedback loop between earthworms, humus form and soil pH reinforces earthworm abundance in European forests. Functional Ecology, 2020, 34, 2598-2610.	1.7	24
24	Tamm Review: Influence of forest management activities on soil organic carbon stocks: A knowledge synthesis. Forest Ecology and Management, 2020, 466, 118127.	1.4	327
25	Ecosystem carbon stocks and their temporal resilience in a semi-natural beech-dominated forest. Forest Ecology and Management, 2019, 447, 67-76.	1.4	25
26	Belowground Biodiversity Relates Positively to Ecosystem Services of European Forests. Frontiers in Forests and Global Change, 2019, 2, .	1.0	24
27	Responses of nitrogen concentrations and pools to multiple environmental change drivers: A metaâ€analysis across terrestrial ecosystems. Global Ecology and Biogeography, 2019, 28, 690-724.	2.7	43
28	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.	1.3	13
29	Identifying the tree species compositions that maximize ecosystem functioning in European forests. Journal of Applied Ecology, 2019, 56, 733-744.	1.9	58
30	Tree identity rather than tree diversity drives earthworm communities in European forests. Pedobiologia, 2018, 67, 16-25.	0.5	18
31	Quantifying Carbon and Nutrient Input From Litterfall in European Forests Using Field Observations and Modeling. Global Biogeochemical Cycles, 2018, 32, 784-798.	1.9	77
32	The response of soil solution chemistry in European forests to decreasing acid deposition. Global Change Biology, 2018, 24, 3603-3619.	4.2	77
33	Soil nitrogen explanatory factors across a range of forest ecosystems and climatic conditions in Italy. Forest Ecology and Management, 2018, 408, 25-35.	1.4	10
34	Continental mapping of forest ecosystem functions reveals a high but unrealised potential for forest multifunctionality. Ecology Letters, 2018, 21, 31-42.	3.0	74
35	Context-dependent tree species effects on soil nitrogen transformations and related microbial functional genes. Biogeochemistry, 2018, 140, 145-160.	1.7	21
36	Environment and host as large-scale controls of ectomycorrhizal fungi. Nature, 2018, 558, 243-248.	13.7	282

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37	Tree species diversity affects decomposition through modified microâ€environmental conditions across European forests. New Phytologist, 2017, 214, 1281-1293.	3.5	112
38	Accumulation of soil organic carbon after cropland conversion to shortâ€rotation willow and poplar. GCB Bioenergy, 2017, 9, 1390-1401.	2.5	33
39	Tree species and time since afforestation drive soil C and N mineralization on former cropland. Geoderma, 2017, 305, 153-161.	2.3	32
40	Tree species functional group is a more important driver of soil properties than tree species diversity across major European forest types. Functional Ecology, 2017, 31, 1153-1162.	1.7	72
41	Microbial Communities, Functional Genes, and Nitrogen Cycling Processes as Affected by Tree Species. , 2017, , 209-221.		0
42	Conifer proportion explains fine root biomass more than tree species diversity and site factors in major European forest types. Forest Ecology and Management, 2017, 406, 330-350.	1.4	34
43	Calcium in decomposing foliar litter â€“ A synthesis for boreal and temperate coniferous forests. Forest Ecology and Management, 2017, 403, 137-144.	1.4	18
44	Biodiversity and ecosystem functioning relations in European forests depend on environmental context. Ecology Letters, 2017, 20, 1414-1426.	3.0	244
45	Stability of buried carbon in deep-ploughed forest and cropland soils - implications for carbon stocks. Scientific Reports, 2017, 7, 5511.	1.6	35
46	Tree Species Identity Shapes Earthworm Communities. Forests, 2017, 8, 85.	0.9	60
47	Mixed-Species Effects on Soil C and N Stocks, C/N Ratio and pH Using a Transboundary Approach in Adjacent Common Garden Douglas-Fir and Beech Stands. Forests, 2017, 8, 95.	0.9	17
48	Trends in soil solution dissolved organic carbon (DOC) concentrations across European forests. Biogeosciences, 2016, 13, 5567-5585.	1.3	23
49	Jack-of-all-trades effects drive biodiversityâ€“ecosystem multifunctionality relationships in European forests. Nature Communications, 2016, 7, 11109.	5.8	185
50	Is Tree Species Diversity or Species Identity the More Important Driver of Soil Carbon Stocks, C/N Ratio, and pH?. Ecosystems, 2016, 19, 645-660.	1.6	141
51	Linking microbial communities, functional genes and nitrogen-cycling processes in forest floors under four tree species. Soil Biology and Biochemistry, 2016, 103, 181-191.	4.2	57
52	Drivers of earthworm incidence and abundance across European forests. Soil Biology and Biochemistry, 2016, 99, 167-178.	4.2	53
53	Biotic homogenization can decrease landscape-scale forest multifunctionality. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3557-3562.	3.3	196
54	Manganese in the litter fall-forest floor continuum of boreal and temperate pine and spruce forest ecosystems â€“ A review. Forest Ecology and Management, 2015, 358, 248-260.	1.4	58

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55	Soil carbon stock change in the forests of Denmark between 1990 and 2008. Geoderma Regional, 2015, 5, 169-180.	0.9	18
56	Exceedance of critical loads and of critical limits impacts tree nutrition across Europe. Annals of Forest Science, 2015, 72, 929-939.	0.8	39
57	Influence of different tree-harvesting intensities on forest soil carbon stocks in boreal and northern temperate forest ecosystems. Forest Ecology and Management, 2015, 351, 9-19.	1.4	97
58	Carbohydrates and thermal properties indicate a decrease in stable aggregate carbon following forest colonization of mountain grassland. Soil Biology and Biochemistry, 2015, 86, 135-145.	4.2	8
59	Benchmark values for forest soil carbon stocks in Europe: Results from a large scale forest soil survey. Geoderma, 2015, 251-252, 33-46.	2.3	101
60	Influences of evergreen gymnosperm and deciduous angiosperm tree species on the functioning of temperate and boreal forests. Biological Reviews, 2015, 90, 444-466.	4.7	267
61	Does species richness affect fine root biomass and production in young forest plantations?. Oecologia, 2015, 177, 581-594.	0.9	61
62	Effects of forest expansion on mountain grassland: changes within soil organic carbon fractions. Plant and Soil, 2014, 385, 373-387.	1.8	41
63	Afforestation effects on <scp>SOC</scp> in former cropland: oak and spruce chronosequences resampled after 13Âyears. Global Change Biology, 2014, 20, 2938-2952.	4.2	50
64	Plant movements and climate warming: intraspecific variation in growth responses to nonlocal soils. New Phytologist, 2014, 202, 431-441.	3.5	29
65	Soil carbon stock change following afforestation in Northern Europe: a metaâ€analysis. Global Change Biology, 2014, 20, 2393-2405.	4.2	172
66	Tree species is the major factor explaining C:N ratios in European forest soils. Forest Ecology and Management, 2014, 311, 3-16.	1.4	207
67	Detection of temporal trends in atmospheric deposition of inorganic nitrogen and sulphate to forests in Europe. Atmospheric Environment, 2014, 95, 363-374.	1.9	144
68	Quantification and valuation of ecosystem services in diverse production systems for informed decision-making. Environmental Science and Policy, 2014, 39, 139-149.	2.4	39
69	Changes in soil organic carbon and nitrogen following forest expansion on grassland in the Southern Alps. Forest Ecology and Management, 2014, 328, 103-116.	1.4	43
70	Conversion of cropland to forest increases soil CH4 oxidation and abundance of CH4 oxidizing bacteria with stand age. Applied Soil Ecology, 2014, 79, 49-58.	2.1	27
71	The natural abundance of 15N in litter and soil profiles under six temperate tree species: N cycling depends on tree species traits and site fertility. Plant and Soil, 2013, 368, 375-392.	1.8	30
72	Manganese dynamics in decomposing needle and leaf litter â€" a synthesis. Canadian Journal of Forest Research, 2013, 43, 1127-1136.	0.8	30

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73	A novel comparative research platform designed to determine the functional significance of tree species diversity in European forests. Perspectives in Plant Ecology, Evolution and Systematics, 2013, 15, 281-291.	1.1	179
74	Soil carbon accumulation and nitrogen retention traits of four tree species grown in common gardens. Forest Ecology and Management, 2013, 309, 47-57.	1.4	64
75	Tree species effects on soils in temperate and boreal forests: Emerging themes and research needs. Forest Ecology and Management, 2013, 309, 1-3.	1.4	55
76	Do tree species influence soil carbon stocks in temperate and boreal forests?. Forest Ecology and Management, 2013, 309, 4-18.	1.4	296
77	Influence of hydromorphic soil conditions on greenhouse gas emissions and soil carbon stocks in a Danish temperate forest. Forest Ecology and Management, 2012, 284, 185-195.	1.4	29
78	Soil respiration and rates of soil carbon turnover differ among six common European tree species. Forest Ecology and Management, 2012, 264, 185-196.	1.4	219
79	Four decades of post-agricultural forest development have caused major redistributions of soil phosphorus fractions. Oecologia, 2012, 169, 221-234.	0.9	75
80	Dramatic changes in ectomycorrhizal community composition, root tip abundance and mycelial production along a standâ€scale nitrogen deposition gradient. New Phytologist, 2012, 194, 278-286.	3.5	149
81	Tree species traits cause divergence in soil acidification during four decades of postagricultural forest development. Global Change Biology, 2012, 18, 1127-1140.	4.2	124
82	Nitrous oxide and methane exchange in two small temperate forest catchmentsâ€"effects of hydrological gradients and implications for global warming potentials of forest soils. Biogeochemistry, 2012, 107, 437-454.	1.7	42
83	Temporal dynamics of soil organic carbon after land-use change in the temperate zone - carbon response functions as a model approach. Global Change Biology, 2011, 17, 2415-2427.	4.2	645
84	Role of six European tree species and landâ€use legacy for nitrogen and water budgets in forests. Global Change Biology, 2010, 16, 2224-2240.	4.2	32
85	A leap forward in geographic scale for forest ectomycorrhizal fungi. Annals of Forest Science, 2010, 67, 200-200.	0.8	8
86	Factors influencing limit values for pine needle litter decomposition: a synthesis for boreal and temperate pine forest systems. Biogeochemistry, 2010, 100, 57-73.	1.7	157
87	Water balance in afforestation chronosequences of common oak and Norway spruce on former arable land in Denmark and southern Sweden. Agricultural and Forest Meteorology, 2010, 150, 196-207.	1.9	32
88	Litterfall and nutrient return in five tree species in a common garden experiment. Forest Ecology and Management, 2009, 257, 2133-2144.	1.4	129
89	Do indicators of nitrogen retention and leaching differ between coniferous and broadleaved forests in Denmark?. Forest Ecology and Management, 2009, 258, 1137-1146.	1.4	75
90	Carbon and nitrogen in forest floor and mineral soil under six common European tree species. Forest Ecology and Management, 2008, 255, 35-48.	1.4	438

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91	How strongly can forest management influence soil carbon sequestration?. Geoderma, 2007, 137, 253-268.	2.3	1,076
92	Nitrate leaching from three afforestation chronosequences on former arable land in Denmark. Global Change Biology, 2007, 13, 1250-1264.	4.2	45
93	Are Indicators for Critical Load Exceedance Related to Forest Condition?. Water, Air, and Soil Pollution, 2007, 183, 293-308.	1.1	20
94	Carbon sequestration rates in Swedish forest soils â€“ a comparison of three approaches. Silva Fennica, 2007, 41, .	0.5	11
95	Distribution of biomass and carbon in evenâ€aged stands of Norway spruce (Picea abies (L.) Karst.): A case study on spacing and thinning effects in northern Denmark. Scandinavian Journal of Forest Research, 2006, 21, 470-488.	0.5	44
96	Gap formation in Danish beech (Fagus sylvatica) forests of low management intensity: soil moisture and nitrate in soil solution. European Journal of Forest Research, 2006, 125, 139-150.	1.1	42
97	Losses of nitrate from gaps of different sizes in a managed beech (Fagus sylvatica) forest. Canadian Journal of Forest Research, 2005, 35, 308-319.	0.8	33
98	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.	0.8	54
99	Influence of initial chemistry on decomposition of foliar litter in contrasting forest types in British Columbia. Canadian Journal of Forest Research, 2004, 34, 1714-1729.	0.8	86
100	Title is missing!. Plant and Soil, 2003, 249, 319-330.	1.8	115
101	Soil carbon stores in Nordic well-drained forest soils-relationships with climate and texture class. Global Change Biology, 2003, 9, 358-370.	4.2	215
102	Carbon and Nitrogen in Danish Forest Soilsâ€"Contents and Distribution Determined by Soil Order. Soil Science Society of America Journal, 2003, 67, 335-343.	1.2	49
103	Carbon and Nitrogen in Danish Forest Soilsâ€"Contents and Distribution Determined by Soil Order. Soil Science Society of America Journal, 2003, 67, 335.	1.2	27
104	Availability of nitrogen and phosphorus in Norway spruce forest floors fertilized with nitrogen and other essential nutrients. Soil Biology and Biochemistry, 2002, 34, 1243-1251.	4.2	14
105	Change in soil organic carbon following afforestation of former arable land. Forest Ecology and Management, 2002, 169, 137-147.	1.4	387
106	NITROGEN TURNOVER IN FOREST FLOORS OF COASTAL DOUGLAS-FIR AT SITES DIFFERING IN SOIL NITROGEN CAPITAL. Ecology, 2000, 81, 1878-1886.	1.5	74
107	Influence of soil type on mass loss and nutrient release from decomposing foliage litter of beech and Norway spruce. Canadian Journal of Forest Research, 1999, 29, 95-105.	0.8	87
108	Potential microbial nitrogen and phosphorus availability in forest floors. Soil Biology and Biochemistry, 1998, 30, 2031-2041.	4.2	14

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109	Forest floor chemistry under seven tree species along a soil fertility gradient. Canadian Journal of Forest Research, 1998, 28, 1636-1647.	0.8	148
110	Soil respiration profiles and protozoan enumeration agree as microbial growth indicators. Soil Biology and Biochemistry, 1996, 28, 865-868.	4.2	26
111	Effects of thinning and soil properties on accumulation of carbon, nitrogen and phosphorus in the forest floor of Norway spruce stands. Forest Ecology and Management, 1995, 77, 1-10.	1.4	111
112	Carbon sequestration and forest management.. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources, 0, , .	0.6	31