Timothy J Fahey

List of Publications by Year
in descending order

85 papers	7,172 citations	50276 46 h-index	58581 82 g-index
86 all docs	86 docs citations	86 times ranked	6185 citing authors

#	Article	IF	Citations
1	Colder soils in a warmer world: A snow manipulation study in a northern hardwood forest ecosystem. Biogeochemistry, 2001, 56, 135-150.	3.5	501
2	Soil freezing alters fine root dynamics in a northern hardwood forest. Biogeochemistry, 2001, 56, 175-190.	3.5	327
3	Fine Root Dynamics in a Northern Hardwood Forest Ecosystem, Hubbard Brook Experimental Forest, NH. Journal of Ecology, 1994, 82, 533.	4.0	272
4	Title is missing!. Biogeochemistry, 2001, 56, 151-174.	3.5	248
5	The Biogeochemistry of Carbon at Hubbard Brook. Biogeochemistry, 2005, 75, 109-176.	3.5	246
6	Forest carbon storage: ecology, management, and policy. Frontiers in Ecology and the Environment, 2010, 8, 245-252.	4.0	237
7	Effects of mild winter freezing on soil nitrogen and carbon dynamics in a northern hardwood forest. Biogeochemistry, 2001, 56, 191-213.	3.5	231
8	Ecosystem Consequences of Exotic Earthworm Invasion of North Temperate Forests. Ecosystems, 2004, 7, 1-12.	3.4	228
9	TREE SPECIES AND MYCORRHIZAL ASSOCIATIONS INFLUENCE THE MAGNITUDE OF RHIZOSPHERE EFFECTS. Ecology, 2006, 87, 1302-1313.	3.2	226
10	Snow depth, soil freezing, and fluxes of carbon dioxide, nitrous oxide and methane in a northern hardwood forest. Global Change Biology, 2006, 12, 1748-1760.	9.5	225
11	RESPONSE OF SUGAR MAPLE TO CALCIUM ADDITION TO NORTHERN HARDWOOD FOREST. Ecology, 2006, 87, 1267-1280.	3.2	209
12	Fine root heterogeneity by branch order: exploring the discrepancy in root turnover estimates between minirhizotron and carbon isotopic methods. New Phytologist, 2008, 177, 443-456.	7.3	175
13	Fertilization effects on fineroot biomass, rhizosphere microbes and respiratory fluxes in hardwood forest soils. New Phytologist, 2007, 176, 655-664.	7.3	150
14	Effects of an intense ice storm on the structure of a northern hardwood forest. Canadian Journal of Forest Research, 2002, 32, 1763-1775.	1.7	147
15	Environmental control of fine root dynamics in a northern hardwood forest. Global Change Biology, 2003, 9, 670-679.	9.5	139
16	PLANTâ€“SOILâ€“MICROBIAL INTERACTIONS IN A NORTHERN HARDWOOD FOREST. Ecology, 2001, 82, 965-978.	3.2	135
17	Long-Term Integrated Studies Show Complex and Surprising Effects of Climate Change in the Northern Hardwood Forest. BioScience, 2012, 62, 1056-1066.	4.9	117
18	Past, Present, and Future Roles of Long-Term Experiments in the LTER Network. BioScience, 2012, 62, 377-389.	4.9	116

#	Article	IF	Citations
19	Influence of nonnative earthworms on mycorrhizal colonization of sugar maple (Acer saccharum). New Phytologist, 2003, 157, 145-153.	7.3	115
20	Fine root turnover in a northern hardwood forest: a direct comparison of the radiocarbon and minirhizotron methods. Canadian Journal of Forest Research, 2002, 32, 1692-1697.	1.7	114
21	The nitrogen cycle in lodgepole pine forests, southeastern Wyoming. Biogeochemistry, 1985, 1, 257-275.	3.5	107
22	The unseen invaders: introduced earthworms as drivers of change in plant communities in North American forests (a metaâ€analysis). Global Change Biology, 2017, 23, 1065-1074.	9.5	107
23	Effects of soil freezing on fine roots in a northern hardwood forest. Canadian Journal of Forest Research, 2008, 38, 82-91.	1.7	106
24	Nitrogen Dynamics in Ice Storm-Damaged Forest Ecosystems: Implications for Nitrogen Limitation Theory. Ecosystems, 2003, 6, 431-443.	3.4	105
25	Exotic Earthworm Invasion and Microbial Biomass in Temperate Forest Soils. Ecosystems, 2004, 7, 45-54.	3.4	103
26	Restoring Soil Calcium Reverses Forest Decline. Environmental Science and Technology Letters, 2014, 1, 15-19.	8.7	103
27	Exotic earthworms alter soil microbial community composition and function. Soil Biology and Biochemistry, 2013, 67, 263-270.	8.8	99
28	RESPONSES OF EARLY SUCCESSIONAL NORTHERN HARDWOOD FORESTS TO CHANGES IN NUTRIENT AVAILABILITY. Ecological Monographs, 1998, 68, 183-212.	5.4	97
29	Patterns Of Litter Disappearance In A Northern Hardwood Forest Invaded By Exotic Earthworms. , 2006, 16, 154-165.		96
30	Effects of Soil Disturbance on Vegetation Recovery and Nutrient Accumulation Following Whole-Tree Harvest of a Northern Hardwood Ecosystem. Journal of Applied Ecology, 1993, 30, 661.	4.0	93
31	Earthworm Invasion, Fine-root Distributions, and Soil Respiration in North Temperate Forests. Ecosystems, 2004, 7, 55-62.	3.4	93
32	Soil nitrogen affects phosphorus recycling: foliar resorption and plantâ€“soil feedbacks in a northern hardwood forest. Ecology, 2015, 96, 2488-2498.	3.2	88
33	Effects of Exotic Earthworms on Soil Phosphorus Cycling in Two Broadleaf Temperate Forests. Ecosystems, 2004, 7, 28-44.	3.4	82
34	Title is missing!. Plant and Soil, 2001, 229, 167-176.	3.7	81
35	Influence of earthworm invasion on soil microbial biomass and activity in a northern hardwood forest. Soil Biology and Biochemistry, 2002, 34, 1929-1937.	8.8	80
36	Patterns of rhizosphere carbon flux in sugar maple (Acer saccharum) and yellow birch (Betula) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 T	9.5	80

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37	Nitrogen oligotrophication in northern hardwood forests. Biogeochemistry, 2018, 141, 523-539.	3.5	80
38	Earthworm effects on the incorporation of litter C and N into soil organic matter in a sugar maple forest. Ecological Applications, 2013, 23, 1185-1201.	3.8	72
39	Earthworms increase soil microbial biomass carrying capacity and nitrogen retention in northern hardwood forests. Soil Biology and Biochemistry, 2015, 87, 51-58.	8.8	71
40	Population and biomass dynamics of trees in a northern hardwood forest at Hubbard Brook. Canadian Journal of Forest Research, 2007, 37, 737-749.	1.7	70
41	Transport of Carbon and Nitrogen Between Litter and Soil Organic Matter in a Northern Hardwood Forest. Ecosystems, 2011, 14, 326-340.	3.4	69
42	Role of Soil Freezing Events in Interannual Patterns of Stream Chemistry at the Hubbard Brook Experimental Forest, New Hampshire. Environmental Science & Technology, 2003, 37, 1575-1580.	10.0	64
43	The Influence of Soil Fertility on Rhizosphere Effects in Northern Hardwood Forest Soils. Soil Science Society of America Journal, 2008, 72, 453-461.	2.2	62
44	Sideâ€swiped: ecological cascades emanating from earthworm invasions. Frontiers in Ecology and the Environment, 2019, 17, 502-510.	4.0	60
45	Earthworms increase the ratio of bacteria to fungi in northern hardwood forest soils, primarily by eliminating the organic horizon. Soil Biology and Biochemistry, 2011, 43, 2135-2141.	8.8	58
46	Fine root decomposition, nutrient mobilization and fungal communities in a pine forest ecosystem. Soil Biology and Biochemistry, 2015, 83, 76-83.	8.8	57
47	Exploring carbon flow through the root channel in a temperate forest soil food web. Soil Biology and Biochemistry, 2014, 76, 45-52.	8.8	54
48	Fifty Years of Change in an Upland Forest in South-Central New York: General Patterns. Bulletin of the Torrey Botanical Club, 1994, 121, 130.	0.6	53
49	Links between biomass and tree demography in a northern hardwood forest: a decade of stability and change in Hubbard Brook Valley, New Hampshire. Canadian Journal of Forest Research, 2011, 41, 1369-1379.	1.7	50
50	Soil Nitrogen Availability Affects Belowground Carbon Allocation and Soil Respiration in Northern Hardwood Forests of New Hampshire. Ecosystems, 2015, 18, 1179-1191.	3.4	44
51	Decreased water flowing from a forest amended with calcium silicate. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5999-6003.	7.1	42
52	Fine Root Dynamics and Forest Production Across a Calcium Gradient in Northern Hardwood and Conifer Ecosystems. Ecosystems, 2008, 11, 325-341.	3.4	39
53	Calcium and aluminum impacts on sugar maple physiology in a northern hardwood forest. Tree Physiology, 2013, 33, 1242-1251.	3.1	39
54	Exploring Patterns of Exotic Earthworm Distribution in a Temperate Hardwood Forest in South-Central New York, USA. Landscape Ecology, 2006, 21, 297-306.	4.2	37

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55	A simulation model to evaluate the impacts of invasive earthworms on soil carbon dynamics. Ecological Modelling, 2010, 221, 2447-2457.	2.5	35
56	Chemical composition of interstitial water in decaying lodgepole pine bole wood. Canadian Journal of Forest Research, 1985, 15, 1149-1153.	1.7	34
57	Earthworms, litter and soil carbon in a northern hardwood forest. Biogeochemistry, 2013, 114, 269-280.	3.5	34
58	Structure and composition of three northern hardwoodâ€“conifer forests with differing disturbance histories. Forest Ecology and Management, 2001, 144, 201-212.	3.2	29
59	Spatial and Temporal Dynamics of Exotic Earthworm Communities Along Invasion Fronts in a Temperate Hardwood Forest in South-Central New York (USA). Biological Invasions, 2006, 8, 553-564.	2.4	28
60	Long-term decline of sugar maple following forest harvest, Hubbard Brook Experimental Forest, New Hampshire. Canadian Journal of Forest Research, 2018, 48, 23-31.	1.7	26
61	Patterns of late-season photosynthate movement in sugar maple saplings. Canadian Journal of Forest Research, 2009, 39, 2294-2298.	1.7	22
62	Exotic earthworm distributions did not expand over a decade in a hardwood forest in New York state. Applied Soil Ecology, 2012, 62, 124-130.	4.3	22
63	Simulating effects of changing climate and <scp><scp>CO₂</scp></scp> emissions on soil carbon pools at the Hubbard Brook experimental forest. Global Change Biology, 2014, 20, 1643-1656.	9.5	20
64	The promise and peril of intensiveâ€siteâ€based ecological research: insights from the Hubbard Brook ecosystem study. Ecology, 2015, 96, 885-901.	3.2	19
65	The application of an integrated biogeochemical model to simulate dynamics of vegetation, hydrology and nutrients in soil and streamwater following a whole-tree harvest of a northern hardwood forest. Science of the Total Environment, 2018, 645, 244-256.	8.0	18
66	Partitioning of belowground C in young sugar maple forest. Plant and Soil, 2013, 367, 379-389.	3.7	16
67	Impact of invasive earthworms on Ixodes scapularis and other litter-dwelling arthropods in hardwood forests, central New York state, USA. Applied Soil Ecology, 2014, 84, 148-157.	4.3	16
68	Using metagenomics to reveal landscape scale patterns of denitrifiers in a montane forest ecosystem. Soil Biology and Biochemistry, 2019, 138, 107585.	8.8	16
69	Response of forest soil respiration to nutrient addition depends on site fertility. Biogeochemistry, 2016, 127, 113-124.	3.5	15
70	Local-Scale Carbon Budgets and Mitigation Opportunities for the Northeastern United States. BioScience, 2012, 62, 23-38.	4.9	14
71	An in situ approach for measuring root-associated respiration and nitrate uptake of forest trees. Plant and Soil, 2005, 272, 125-131.	3.7	13
72	Nitrogen Translocation to Fresh Litter in Northern Hardwood Forest. Ecosystems, 2013, 16, 521-528.	3.4	11

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73	Earthworms Reduce Biotic 15-Nitrogen Retention in Northern Hardwood Forests. Ecosystems, 2015, 18, 328-342.	3.4	11
74	Fine root turnover in sugar maple estimated by¹³C isotope labeling. Canadian Journal of Forest Research, 2012, 42, 1792-1795.	1.7	10
75	Effects of Three Years of Regrowth Inhibition on the Resilience of a Clear-cut Northern Hardwood Forest. Ecosystems, 2012, 15, 1351-1362.	3.4	8
76	Demography, biomass and productivity of a northern hardwood forest on the Allegheny Plateau1,2. Journal of the Torrey Botanical Society, 2013, 140, 52-64.	0.3	8
77	Simulation of the effects of forest harvesting under changing climate to inform long-term sustainable forest management using a biogeochemical model. Science of the Total Environment, 2021, 767, 144881.	8.0	8
78	Foliar nutrient concentrations of six northern hardwood species responded to nitrogen and phosphorus fertilization but did not predict tree growth. PeerJ, 2022, 10, e13193.	2.0	8
79	Sampling and processing roots from rocky forest soils. Ecosphere, 2017, 8, e01863.	2.2	6
80	Soil macroinvertebrates alter the fate of root and rhizosphere carbon and nitrogen in a turfgrass lawn. Soil Biology and Biochemistry, 2020, 148, 107903.	8.8	6
81	Fine Root Growth Increases in Response to Nitrogen Addition in Phosphorus-limited Northern Hardwood Forests. Ecosystems, 2022, 25, 1589-1600.	3.4	6
82	Tracing carbon flow through a sugar maple forest and its soil components: role of invasive earthworms. Plant and Soil, 2021, 464, 517-537.	3.7	5
83	Mean annual temperature influences local fine root proliferation and arbuscular mycorrhizal colonization in a tropical wet forest. Ecology and Evolution, 2020, 10, 9635-9646.	1.9	4
84	The Biogeochemical Response of Nitrate and Potassium to Landscape Disturbance in Watersheds of the Hubbard Brook Experimental Forest, New Hampshire, USA. Ecological Studies, 2020, , 537-563.	1.2	4
85	Response of biomass, hydrology and biogeochemistry to alternative approaches of cutting a northern forest: model comparisons. Biogeochemistry, 2022, 157, 131-148.	3.5	1