Kathleen K Treseder

List of Publications by Year
in descending order

#	Article	IF	Citations
1	NITROGEN LIMITATION OF NET PRIMARY PRODUCTIVITY IN TERRESTRIAL ECOSYSTEMS IS GLOBALLY DISTRIBUTED. Ecology, 2008, 89, 371-379.	1.5	2,069
2	Nitrogen additions and microbial biomass: a metaâ€analysis of ecosystem studies. Ecology Letters, 2008, 11, 1111-1120.	3.0	1,221
3	A metaâ€analysis of mycorrhizal responses to nitrogen, phosphorus, and atmospheric CO 2 in field studies. New Phytologist, 2004, 164, 347-355.	3.5	1,025
4	Quantifying global soil carbon losses in response to warming. Nature, 2016, 540, 104-108.	13.7	879
5	The Impact of Boreal Forest Fire on Climate Warming. Science, 2006, 314, 1130-1132.	6.0	765
6	Thermal adaptation of soil microbial respiration to elevated temperature. Ecology Letters, 2008, 11, 1316-1327.	3.0	690
7	Phylogenetic conservatism of functional traits in microorganisms. ISME Journal, 2013, 7, 830-838.	4.4	526
8	Warming and drying suppress microbial activity and carbon cycling in boreal forest soils. Global Change Biology, 2008, 14, 2898-2909.	4.2	511
9	Differential Growth Responses of Soil Bacterial Taxa to Carbon Substrates of Varying Chemical Recalcitrance. Frontiers in Microbiology, 2011, 2, 94.	1.5	504
10	Defining trait-based microbial strategies with consequences for soil carbon cycling under climate change. ISME Journal, 2020, 14, 1-9.	4.4	470
11	Decomposers in disguise: mycorrhizal fungi as regulators of soil C dynamics in ecosystems under global change. Functional Ecology, 2008, 22, 955-963.	1.7	450
12	Direct nitrogen and phosphorus limitation of arbuscular mycorrhizal fungi: a model and field test. New Phytologist, 2002, 155, 507-515.	3.5	416
13	Fungal Traits That Drive Ecosystem Dynamics on Land. Microbiology and Molecular Biology Reviews, 2015, 79, 243-262.	2.9	391
14	EFFECTS OF SOIL NUTRIENT AVAILABILITY ON INVESTMENT IN ACQUISITION OF N AND P IN HAWAIIAN RAIN FORESTS. Ecology, 2001, 82, 946-954.	1.5	384
15	Increases in the flux of carbon belowground stimulate nitrogen uptake and sustain the long-term enhancement of forest productivity under elevated CO2. Ecology Letters, 2011, 14, 349-357.	3.0	374
16	Global diversity and distribution of arbuscular mycorrhizal fungi. Soil Biology and Biochemistry, 2011, 43, 2294-2303.	4.2	356
17	Mycorrhizal fungi have a potential role in soil carbon storage under elevated CO2 and nitrogen deposition. New Phytologist, 2000, 147, 189-200.	3.5	351
18	Microbial abundance and composition influence litter decomposition response to environmental change. Ecology, 2013, 94, 714-725.	1.5	340

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19	Microbial communities and their relevance for ecosystem models: Decomposition as a case study. Soil Biology and Biochemistry, 2010, 42, 529-535.	4.2	337
20	Microbial activity and soil respiration under nitrogen addition in Alaskan boreal forest. Global Change Biology, 2008, 14, 1156-1168.	4.2	330
21	Interactions among lignin, cellulose, and nitrogen drive litter chemistryâ€“decay relationships. Ecology, 2012, 93, 345-354.	1.5	310
22	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO₂. New Phytologist, 2021, 229, 2413-2445.	3.5	286
23	ECOLOGY OFMYCORRHIZAE: A Conceptual Framework for Complex Interactions Among Plants and Fungi. Annual Review of Phytopathology, 2003, 41, 271-303.	3.5	272
24	Nutrient limitation of soil microbial processes in tropical forests. Ecological Monographs, 2018, 88, 4-21.	2.4	261
25	Nitrogen fertilization reduces diversity and alters community structure of active fungi in boreal ecosystems. Soil Biology and Biochemistry, 2007, 39, 1878-1887.	4.2	255
26	The effect of fire on microbial biomass: a meta-analysis of field studies. Biogeochemistry, 2012, 109, 49-61.	1.7	244
27	Soil microbes and their response to experimental warming over time: A meta-analysis of field studies. Soil Biology and Biochemistry, 2017, 107, 32-40.	4.2	234
28	Glomalin in Ecosystems. Soil Science Society of America Journal, 2007, 71, 1257-1266.	1.2	217
29	The extent of mycorrhizal colonization of roots and its influence on plant growth and phosphorus content. Plant and Soil, 2013, 371, 1-13.	1.8	216
30	Decomposition responses to climate depend on microbial community composition. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11994-11999.	3.3	214
31	Nitrogen stable isotopic composition of leaves and soil: Tropical versus temperate forests. Biogeochemistry, 1999, 46, 45-65.	1.7	207
32	Integrating microbial ecology into ecosystem models: challenges and priorities. Biogeochemistry, 2012, 109, 7-18.	1.7	206
33	RELATIONSHIPS AMONG FIRES, FUNGI, AND SOIL DYNAMICS IN ALASKAN BOREAL FORESTS. , 2004, 14, 1826-1838.		188
34	Fungal Taxa Target Different Carbon Sources in Forest Soil. Ecosystems, 2008, 11, 1157-1167.	1.6	174
35	A meta-analysis of soil microbial biomass responses to forest disturbances. Frontiers in Microbiology, 2013, 4, 163.	1.5	173
36	Environmental filtering affects soil fungal community composition more than dispersal limitation at regional scales. Fungal Ecology, 2014, 12, 14-25.	0.7	173

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37	Fungal functional ecology: bringing a traitâ€based approach to plantâ€associated fungi. Biological Reviews, 2020, 95, 409-433.	4.7	171
38	Litter decay rates are determined by lignin chemistry. Biogeochemistry, 2012, 108, 279-295.	1.7	169
39	Absorption of ant-provided carbon dioxide and nitrogen by a tropical epiphyte. Nature, 1995, 375, 137-139.	13.7	163
40	Global patterns of plant root colonization intensity by mycorrhizal fungi explained by climate and soil chemistry. Global Ecology and Biogeography, 2015, 24, 371-382.	2.7	163
41	Sources of inocula influence mycorrhizal colonization of plants in restoration projects: a metaâ€analysis. Restoration Ecology, 2015, 23, 625-634.	1.4	147
42	Changes in Soil Fungal Communities, Extracellular Enzyme Activities, and Litter Decomposition Across a Fire Chronosequence in Alaskan Boreal Forests. Ecosystems, 2013, 16, 34-46.	1.6	145
43	Global Distributions of Arbuscular Mycorrhizal Fungi. Ecosystems, 2006, 9, 305-316.	1.6	140
44	The brighter side of soils: Quantum dots track organic nitrogen through fungi and plants. Ecology, 2009, 90, 100-108.	1.5	135
45	Functional diversity in resource use by fungi. Ecology, 2010, 91, 2324-2332.	1.5	133
46	Effects of Drought Manipulation on Soil Nitrogen Cycling: A Metaâ€Analysis. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 3260-3272.	1.3	124
47	Microbial response to simulated global change is phylogenetically conserved and linked with functional potential. ISME Journal, 2016, 10, 109-118.	4.4	123
48	Controls over mycorrhizal uptake of organic nitrogen. Pedobiologia, 2010, 53, 169-179.	0.5	121
49	Fungal Community Composition in Neotropical Rain Forests: the Influence of Tree Diversity and Precipitation. Microbial Ecology, 2012, 63, 804-812.	1.4	121
50	Recovery of Aboveground Plant Biomass and Productivity After Fire in Mesic and Dry Black Spruce Forests of Interior Alaska. Ecosystems, 2008, 11, 209-225.	1.6	120
51	Experimental warming alters potential function of theÂfungal community in boreal forest. Global Change Biology, 2016, 22, 3395-3404.	4.2	119
52	Fine roots, arbuscular mycorrhizal hyphae and soil nutrients in four neotropical rain forests: patterns across large geographic distances. New Phytologist, 2005, 165, 913-921.	3.5	114
53	Using lipid analysis and hyphal length to quantify AM and saprotrophic fungal abundance along a soil chronosequence. Soil Biology and Biochemistry, 2005, 37, 601-604.	4.2	114
54	Soil extracellular enzyme activities correspond with abiotic factors more than fungal community composition. Biogeochemistry, 2014, 117, 23-37.	1.7	112

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55	Microbial legacies alter decomposition in response to simulated global change. ISME Journal, 2017, 11, 490-499.	4.4	112
56	Potential ecosystem-level effects of genetic variation among populations of Metrosideros polymorpha from a soil fertility gradient in Hawaii. Oecologia, 2001, 126, 266-275.	0.9	111
57	Arbuscular mycorrhizal fungi as mediators of ecosystem responses to nitrogen deposition: A traitâ€based predictive framework. Journal of Ecology, 2018, 106, 480-489.	1.9	110
58	Experimental warming and burn severity alter soil CO2 flux and soil functional groups in a recently burned boreal forest. Global Change Biology, 2004, 10, 1996-2004.	4.2	108
59	Organic nitrogen uptake by arbuscular mycorrhizal fungi in a boreal forest. Soil Biology and Biochemistry, 2012, 55, 7-13.	4.2	99
60	Fire severity influences the response of soil microbes to a boreal forest fire. Environmental Research Letters, 2016, 11, 035004.	2.2	98
61	Nitrogen alters carbon dynamics during early succession in boreal forest. Soil Biology and Biochemistry, 2010, 42, 1157-1164.	4.2	96
62	Amino Acid Uptake in Arbuscular Mycorrhizal Plants. PLoS ONE, 2012, 7, e47643.	1.1	91
63	Climate change feedbacks to microbial decomposition in boreal soils. Fungal Ecology, 2011, 4, 362-374.	0.7	87
64	Litter chemistry influences decomposition through activity of specific microbial functional guilds. Ecological Monographs, 2018, 88, 429-444.	2.4	87
65	Mycorrhizal responses to nitrogen fertilization in boreal ecosystems: potential consequences for soil carbon storage. Global Change Biology, 2007, 13, 78-88.	4.2	86
66	Expansion of Coccidioidomycosis Endemic Regions in the United States in Response to Climate Change. GeoHealth, 2019, 3, 308-327.	1.9	86
67	Evolutionary tradeâ€offs among decomposers determine responses to nitrogen enrichment. Ecology Letters, 2011, 14, 933-938.	3.0	84
68	Mycorrhizal dynamics under elevated CO2 and nitrogen fertilization in a warm temperate forest. Plant and Soil, 2008, 303, 301-310.	1.8	83
69	Resistance of microbial and soil properties to warming treatment seven years after boreal fire. Soil Biology and Biochemistry, 2010, 42, 1872-1878.	4.2	81
70	Evolutionary histories of soil fungi are reflected in their largeâ€scale biogeography. Ecology Letters, 2014, 17, 1086-1093.	3.0	80
71	Temperature sensitivities of extracellular enzyme <i>V</i>_{max} and <i>K</i>_m across thermal environments. Global Change Biology, 2018, 24, 2884-2897.	4.2	72
72	Ectomycorrhizal-Dominated Boreal and Tropical Forests Have Distinct Fungal Communities, but Analogous Spatial Patterns across Soil Horizons. PLoS ONE, 2013, 8, e68278.	1.1	69

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73	Coccidioidomycosis Dynamics in Relation to Climate in the Southwestern United States. GeoHealth, 2018, 2, 6-24.	1.9	69
74	Shifts in soil fungi and extracellular enzyme activity with simulated climate change in a tropical montane cloud forest. Soil Biology and Biochemistry, 2018, 117, 87-96.	4.2	68
75	Global Change and Mycorrhizal Fungi. Ecological Studies, 2002, , 135-160.	0.4	61
76	Fungal Carbon Sequestration. Science, 2013, 339, 1528-1529.	6.0	61
77	An ecosystem-scale radiocarbon tracer to test use of litter carbon by ectomycorrhizal fungi. Soil Biology and Biochemistry, 2006, 38, 1077-1082.	4.2	59
78	Alteration of Soil Carbon Pools and Communities of Mycorrhizal Fungi in Chaparral Exposed to Elevated Carbon Dioxide. Ecosystems, 2003, 6, 786-796.	1.6	57
79	Identities and distributions of the co-invading ectomycorrhizal fungal symbionts of exotic pines in the Hawaiian Islands. Biological Invasions, 2013, 15, 2373-2385.	1.2	56
80	The influence of tree species on canopy soil nutrient status in a tropical lowland wet forest in Costa Rica. Plant and Soil, 2009, 318, 47-61.	1.8	55
81	Possible source of ancient carbon in phytolith concentrates from harvested grasses. Biogeosciences, 2012, 9, 1873-1884.	1.3	55
82	Embracing a new paradigm for temperature sensitivity of soil microbes. Global Change Biology, 2020, 26, 3221-3229.	4.2	54
83	Lifespans of fungal rhizomorphs under nitrogen fertilization in a pinyon-juniper woodland. Plant and Soil, 2005, 270, 249-255.	1.8	53
84	Decreases in soil moisture and organic matter quality suppress microbial decomposition following a boreal forest fire. Soil Biology and Biochemistry, 2015, 87, 1-9.	4.2	49
85	Ectomycorrhizal fungi: A new source of atmospheric methyl halides?. Global Change Biology, 2004, 10, 1009-1016.	4.2	45
86	Belowground responses to elevation in a changing cloud forest. Ecology and Evolution, 2016, 6, 1996-2009.	0.8	42
87	Shifts in fungal communities during decomposition of boreal forest litter. Fungal Ecology, 2014, 10, 58-69.	0.7	40
88	RESPONSES OF SOIL BIOTA TO ELEVATED CO2IN A CHAPARRAL ECOSYSTEM. , 2005, 15, 1701-1711.		39
89	Quantifying fireâ€wide carbon emissions in interior Alaska using field measurements and Landsat imagery. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1608-1629.	1.3	39
90	Neurospora discreta as a model to assess adaptation of soil fungi to warming. BMC Evolutionary Biology, 2015, 15, 198.	3.2	34

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91	Soil Metatranscriptomes Under Long-Term Experimental Warming and Drying: Fungi Allocate Resources to Cell Metabolic Maintenance Rather Than Decay. Frontiers in Microbiology, 2019, 10, 1914.	1.5	34
92	Decomposition of recalcitrant carbon under experimental warming in boreal forest. PLoS ONE, 2017, 12, e0179674.	1.1	34
93	Species-specific measurements of ectomycorrhizal turnover under N-fertilization: combining isotopic and genetic approaches. Oecologia, 2004, 138, 419-425.	0.9	33
94	Model behavior of arbuscular mycorrhizal fungi: predicting soil carbon dynamics under climate change. Botany, 2016, 94, 417-423.	0.5	33
95	Fungal host specificity is not a bottleneck for the germination of <scp>P</scp>yroleae species (<scp>E</scp>ricaceae) in a <scp>B</scp>avarian forest. Molecular Ecology, 2013, 22, 1473-1481.	2.0	28
96	Extracellular enzyme activity in the mycorrhizospheres of a boreal fire chronosequence. Pedobiologia, 2012, 55, 121-127.	0.5	27
97	Slow turnover and production of fungal hyphae during a Californian dry season. Soil Biology and Biochemistry, 2010, 42, 1657-1660.	4.2	26
98	Drought increases the frequencies of fungal functional genes related to carbon and nitrogen acquisition. PLoS ONE, 2018, 13, e0206441.	1.1	24
99	Arbuscular mycorrhizal inoculation in coastal sage scrub restoration. Botany, 2016, 94, 493-499.	0.5	23
100	Decreased mass specific respiration under experimental warming is robust to the microbial biomass method employed. Ecology Letters, 2009, 12, E15.	3.0	19
101	Density dependence and interspecific interactions between arbuscular mycorrhizal fungi mediated plant growth, glomalin production, and sporulation. Canadian Journal of Botany, 2007, 85, 63-75.	1.2	18
102	The Predictive Power of Ecological Niche Modeling for Global Arbuscular Mycorrhizal Fungal Biogeography. Ecological Studies, 2017, , 143-158.	0.4	18
103	Nitrogen enrichment shifts functional genes related to nitrogen and carbon acquisition in the fungal community. Soil Biology and Biochemistry, 2018, 123, 87-96.	4.2	17
104	Temperature acclimation and adaptation of enzyme physiology in Neurospora discreta. Fungal Ecology, 2018, 35, 78-86.	0.7	17
105	Harnessing cross-border resources to confront climate change. Environmental Science and Policy, 2018, 87, 128-132.	2.4	16
106	Nutrient Acquisition Strategies of Fungi and Their Relation to Elevated Atmospheric CO2. Mycology, 2005, , 713-731.	0.5	15
107	Initial Phylogenetic Relatedness of Saprotrophic Fungal Communities Affects Subsequent Litter Decomposition Rates. Microbial Ecology, 2015, 69, 748-757.	1.4	13
108	Fluorescent nanoparticles as tools in ecology and physiology. Biological Reviews, 2021, 96, 2392-2424.	4.7	13

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109	Dishing the dirt on carbon cycling. Nature Climate Change, 2011, 1, 144-146.	8.1	11
110	Links between plant and fungal diversity in habitat fragments of coastal shrubland. PLoS ONE, 2017, 12, e0184991.	1.1	11
111	Fungi in the Canopy: How Soil Fungi and Extracellular Enzymes Differ Between Canopy and Ground Soils. Ecosystems, 2020, 23, 768-782.	1.6	11
112	Uptake of an amino acid by ectomycorrhizal fungi in a boreal forest. Soil Biology and Biochemistry, 2008, 40, 1964-1966.	4.2	10
113	Microbial community response to a decade of simulated global changes depends on the plant community. Elementa, 2021, 9, .	1.1	10
114	EFFECTS OF SOIL NUTRIENT AVAILABILITY ON INVESTMENT IN ACQUISITION OF N AND P IN HAWAIIAN RAIN FORESTS. , 2001, 82, 946.		10
115	BLACK BOXES AND MISSING SINKS: FUNGI IN GLOBAL CHANGE RESEARCH. Mycological Research, 2000, 104, 1281-1283.	2.5	7
116	Radiocarbon â€“ a lowâ€impact tool to study nutrient transport by soil fungi under field conditions. New Phytologist, 2005, 166, 595-600.	3.5	7
117	Carbon budgets for soil and plants respond to long-term warming in an Alaskan boreal forest. Biogeochemistry, 2020, 150, 345-353.	1.7	7
118	Quantum Dots Reveal Shifts in Organic Nitrogen Uptake by Fungi Exposed to Long-Term Nitrogen Enrichment. PLoS ONE, 2015, 10, e0138158.	1.1	7
119	Exploring Trait Trade-Offs for Fungal Decomposers in a Southern California Grassland. Frontiers in Microbiology, 2021, 12, 655987.	1.5	6
120	Phenotypic plasticity of fungal traits in response to moisture and temperature. ISME Communications, 2021, 1, .	1.7	6
121	Nutrient and stress tolerance traits linked to fungal responses to global change. Elementa, 2021, 9, .	1.1	5
122	Coccidioidomycosis (Valley Fever) Case Data for the Southwestern United States. Open Health Data, 2020, 7, 1.	3.7	5
123	Invasive Plant Management Techniques Alter Arbuscular Mycorrhizal Fungi. Ecological Restoration, 2016, 34, 209-215.	0.5	4
124	The future of microbial ecological niche theory and modeling. New Phytologist, 2021, 231, 508-511.	3.5	3
125	Trade-Offs Between Growth Rate and Other Fungal Traits. Frontiers in Forests and Global Change, 2021, 4, .	1.0	2
126	Trait relationships of fungal decomposers in response to drought using a dual field and laboratory approach. Ecosphere, 2022, 13, .	1.0	2

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127	Unearthing ectomycorrhizal dynamics. New Phytologist, 2005, 166, 358-359.	3.5	1
128	Functional Diversity in Resource Use By Fungi. Ecology, 2010, 91, 100319061621033.	1.5	1