Donald R Zak

List of Publications by Year in descending order

204 papers	24,924 citations	7561 77 h-index	7944 149 g-index
206 all docs	206 docs citations	206 times ranked	16351 citing authors

#	Article	IF	Citations
1	Stoichiometry of soil enzyme activity at global scale. Ecology Letters, 2008, 11, 1252-1264.	3.0	1,684
2	The effects of long term nitrogen deposition on extracellular enzyme activity in an Acer saccharum forest soil. Soil Biology and Biochemistry, 2002, 34, 1309-1315.	4.2	1,409
3	Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. BioScience, 2004, 54, 731.	2.2	1,092
4	PLANT DIVERSITY, SOIL MICROBIAL COMMUNITIES, AND ECOSYSTEM FUNCTION: ARE THERE ANY LINKS?. Ecology, 2003, 84, 2042-2050.	1.5	991
5	Compositional and Functional Shifts in Microbial Communities Due to Soil Warming. Soil Science Society of America Journal, 1997, 61, 475-481.	1.2	684
6	Elevated atmospheric CO2 and feedback between carbon and nitrogen cycles. Plant and Soil, 1993, 151, 105-117.	1.8	618
7	Ecological Lessons from Free-Air CO₂ Enrichment (FACE) Experiments. Annual Review of Ecology, Evolution, and Systematics, 2011, 42, 181-203.	3.8	558
8	Elevated atmospheric CO2, fine roots and the response of soil microorganisms: a review and hypothesis. New Phytologist, 2000, 147, 201-222.	3.5	413
9	Simulated chronic nitrogen deposition increases carbon storage in Northern Temperate forests. Global Change Biology, 2008, 14, 142-153.	4.2	381
10	Variation in sugar maple root respiration with root diameter and soil depth. Tree Physiology, 1998, 18, 665-670.	1.4	379
11	NITROGEN DEPOSITION MODIFIES SOIL CARBON STORAGE THROUGH CHANGES IN MICROBIAL ENZYMATIC ACTIVITY. , 2004, 14, 1172-1177.		364
12	Mercury isotopes in a forested ecosystem: Implications for airâ€surface exchange dynamics and the global mercury cycle. Global Biogeochemical Cycles, 2013, 27, 222-238.	1.9	364
13	Increases in nitrogen uptake rather than nitrogen-use efficiency support higher rates of temperate forest productivity under elevated CO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14014-14019.	3.3	353
14	Plant Production and Soil Microorganisms in Late-Successional Ecosystems: A Continental-Scale Study. Ecology, 1994, 75, 2333.	1.5	321
15	Atmospheric CO2, soil nitrogen and turnover of fine roots. New Phytologist, 1995, 129, 579-585.	3.5	312
16	Atmospheric Nitrate Deposition, Microbial Community Composition, and Enzyme Activity in Northern Hardwood Forests. Soil Science Society of America Journal, 2004, 68, 132-138.	1.2	312
17	Landscapeâ€Level Patterns of Microbial Community Composition and Substrate Use in Upland Forest Ecosystems. Soil Science Society of America Journal, 2001, 65, 359-367.	1.2	311
18	Extracellular Enzyme Activities and Soil Organic Matter Dynamics for Northern Hardwood Forests receiving Simulated Nitrogen Deposition. Biogeochemistry, 2005, 75, 201-215.	1.7	302

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19	Altered performance of forest pests under atmospheres enriched by CO2 and O3. Nature, 2002, 420, 403-407.	13.7	275
20	Resource availability controls fungal diversity across a plant diversity gradient. Ecology Letters, 2006, 9, 1127-1135.	3.0	273
21	Tropospheric O3 moderates responses of temperate hardwood forests to elevated CO2 : a synthesis of molecular to ecosystem results from the Aspen FACE project. Functional Ecology, 2003, 17, 289-304.	1.7	269
22	The Vernal Dam: Plant-Microbe Competition for Nitrogen in Northern Hardwood Forests. Ecology, 1990, 71, 651-656.	1.5	262
23	Belowground carbon allocation in forests estimated from litterfall and IRGA-based soil respiration measurements. Agricultural and Forest Meteorology, 2002, 113, 39-51.	1.9	260
24	Microbial community response to nitrogen deposition in northern forest ecosystems. Soil Biology and Biochemistry, 2004, 36, 1443-1451.	4.2	249
25	Soil nutrients and beta diversity in the Bornean Dipterocarpaceae: evidence for niche partitioning by tropical rain forest trees. Journal of Ecology, 2006, 94, 157-170.	1.9	239
26	Plant species richness, elevated CO2, and atmospheric nitrogen deposition alter soil microbial community composition and function. Global Change Biology, 2007, 13, 980-989.	4.2	238
27	Scaling ozone responses of forest trees to the ecosystem level in a changing climate. Plant, Cell and Environment, 2005, 28, 965-981.	2.8	236
28	Elevated atmospheric CO₂ affects soil microbial diversity associated with trembling aspen. Environmental Microbiology, 2008, 10, 926-941.	1.8	235
29	Dynamics of vesicular-arbuscular mycorrhizae during old field succession. Oecologia, 1991, 86, 349-358.	0.9	232
30	Microbial Community Structure and Oxidative Enzyme Activity in Nitrogen-amended North Temperate Forest Soils. Microbial Ecology, 2004, 48, 218-229.	1.4	212
31	Changes in Soil Microbial Community Structure in a Tallgrass Prairie Chronosequence. Soil Science Society of America Journal, 2005, 69, 1412-1421.	1.2	209
32	Soil Temperature, Matric Potential, and the Kinetics of Microbial Respiration and Nitrogen Mineralization. Soil Science Society of America Journal, 1999, 63, 575-584.	1.2	204
33	Soil Microbial Communities Beneath Populus Grandidentata Grown Under Elevated Atmospheric CO2. , 1996, 6, 257-262.		195
34	Simulated chronic NO3 âˆ’ deposition reduces soil respiration in northern hardwood forests. Global Change Biology, 2004, 10, 1080-1091.	4.2	194
35	Sinks for nitrogen inputs in terrestrial ecosystems: a metaâ€analysis of ¹⁵N tracer field studies. Ecology, 2012, 93, 1816-1829.	1.5	192
36	Chronic nitrate additions dramatically increase the export of carbon and nitrogen from northern hardwood ecosystems. Biogeochemistry, 2004, 68, 179-197.	1.7	187

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37	Carbon and nitrogen cycling during old-field succession: Constraints on plant and microbial biomass. Biogeochemistry, 1990, 11, 111.	1.7	186
38	Response of Oxidative Enzyme Activities to Nitrogen Deposition Affects Soil Concentrations of Dissolved Organic Carbon. Ecosystems, 2006, 9, 921-933.	1.6	180
39	Interpreting Ecological Diversity Indices Applied to Terminal Restriction Fragment Length Polymorphism Data: Insights from Simulated Microbial Communities. Applied and Environmental Microbiology, 2007, 73, 5276-5283.	1.4	174
40	SIMULATED ATMOSPHERIC NO₃^{âˆ'} DEPOSITION INCREASES SOIL ORGANIC MATTER BY SLOWING DECOMPOSITION. Ecological Applications, 2008, 18, 2016-2027.	1.8	174
41	Temperature Effects on Kinetics of Microbial Respiration and Net Nitrogen and Sulfur Mineralization. Soil Science Society of America Journal, 1995, 59, 233-240.	1.2	171
42	Microbial community composition and function beneath temperate trees exposed to elevated atmospheric carbon dioxide and ozone. Oecologia, 2002, 131, 236-244.	0.9	167
43	Fine-root biomass and fluxes of soil carbon in young stands of paper birch and trembling aspen as affected by elevated atmospheric CO2 and tropospheric O3. Oecologia, 2001, 128, 237-250.	0.9	163
44	Simulated Atmospheric N Deposition Alters Fungal Community Composition and Suppresses Ligninolytic Gene Expression in a Northern Hardwood Forest. PLoS ONE, 2011, 6, e20421.	1.1	163
45	Soil microbial communities are shaped by plantâ€driven changes in resource availability during secondary succession. Ecology, 2015, 96, 3374-3385.	1.5	162
46	Atmospheric nitrate deposition and the microbial degradation of cellobiose and vanillin in a northern hardwood forest. Soil Biology and Biochemistry, 2004, 36, 965-971.	4.2	151
47	Exploring the role of ectomycorrhizal fungi in soil carbon dynamics. New Phytologist, 2019, 223, 33-39.	3.5	147
48	Soil microbial activity in a Liquidambar plantation unresponsive to CO2-driven increases in primary production. Applied Soil Ecology, 2003, 24, 263-271.	2.1	139
49	DROUGHT REDUCES ROOT RESPIRATION IN SUGAR MAPLE FORESTS. , 1998, 8, 771-778.		138
50	MICROBIAL IMMOBILIZATION AND THE RETENTION OF ANTHROPOGENIC NITRATE IN A NORTHERN HARDWOOD FOREST. Ecology, 2000, 81, 1858-1866.	1.5	137
51	Molecular analysis of fungal communities and laccase genes in decomposing litter reveals differences among forest types but no impact of nitrogen deposition. Environmental Microbiology, 2007, 9, 1306-1316.	1.8	137
52	Soil respiration, root biomass, and root turnover following longâ€term exposure of northern forests to elevated atmospheric CO₂ and tropospheric O₃. New Phytologist, 2008, 180, 153-161.	3.5	134
53	Differential responses of total and active soil microbial communities to long-term experimental N deposition. Soil Biology and Biochemistry, 2015, 90, 275-282.	4.2	130
54	Regional variability in nitrogen mineralization, nitrification, and overstory biomass in northern Lower Michigan. Canadian Journal of Forest Research, 1989, 19, 1521-1526.	0.8	124

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55	Soil fertility increases with plant species diversity in a long-term biodiversity experiment. Oecologia, 2008, 158, 85-93.	0.9	124
56	Extracellular Enzyme Activity Beneath Temperate Trees Growing Under Elevated Carbon Dioxide and Ozone. Soil Science Society of America Journal, 2002, 66, 1848-1856.	1.2	117
57	Ectomycorrhizal fungi and the enzymatic liberation of nitrogen from soil organic matter: why evolutionary history matters. New Phytologist, 2018, 217, 68-73.	3.5	117
58	Nitrogen deposition effects on soil organic matter chemistry are linked to variation in enzymes, ecosystems and size fractions. Biogeochemistry, 2008, 91, 37-49.	1.7	116
59	SOIL NITROGEN CYCLING UNDER ELEVATED CO2: A SYNTHESIS OF FOREST FACE EXPERIMENTS. , 2003, 13, 1508-1514.		114
60	Seasonal patterns of soil respiration in intact and clear-cut northern hardwood forests. Canadian Journal of Forest Research, 1994, 24, 1711-1716.	0.8	113
61	Photosynthetic adaptation and acclimation to exploit seasonal periods of direct irradiance in three temperate, deciduous-forest herbs. Functional Ecology, 2001, 15, 722-731.	1.7	112
62	Interacting effects of soil fertility and atmospheric CO 2 on leaf area growth and carbon gain physiology in Populus Ã— euramericana (Dode) Guinier. New Phytologist, 1995, 129, 253-263.	3.5	111
63	Anthropogenic N deposition increases soil organic matterÂaccumulation without altering its biochemical composition. Global Change Biology, 2017, 23, 933-944.	4.2	111
64	Landscape variation in nitrogen mineralization and nitrification. Canadian Journal of Forest Research, 1986, 16, 1258-1263.	0.8	103
65	Aspen Harvest Intensity Decreases Microbial Biomass, Extracellular Enzyme Activity, and Soil Nitrogen Cycling. Soil Science Society of America Journal, 2005, 69, 227-235.	1.2	101
66	Chronic <scp><scp>N</scp></scp> deposition alters root respirationâ€tissue <scp><scp>N</scp></scp> relationship in northern hardwood forests. Global Change Biology, 2012, 18, 258-266.	4.2	101
67	Nitrogen mineralization, nitrification and denitrification in upland and wetland ecosystems. Oecologia, 1991, 88, 189-196.	0.9	100
68	Microbial responses to a changing environment: implications for the future functioning of terrestrial ecosystems. Fungal Ecology, 2011, 4, 386-395.	0.7	99
69	Title is missing!. Plant and Soil, 1999, 217, 119-130.	1.8	98
70	Isolation of Fungal Cellobiohydrolase I Genes from Sporocarps and Forest Soils by PCR. Applied and Environmental Microbiology, 2008, 74, 3481-3489.	1.4	96
71	Forest productivity under elevated CO2 and O3: positive feedbacks to soil N cycling sustain decade-long net primary productivity enhancement by CO2. Ecology Letters, 2011, 14, 1220-1226.	3.0	96
72	A molecular dawn for biogeochemistry. Trends in Ecology and Evolution, 2006, 21, 288-295.	4.2	95

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73	Early Spring Nitrogen Dynamics in a Temperate Forest Landscape. Ecology, 1993, 74, 1579-1585.	1.5	92
74	Growth and C allocation of Populus tremuloides genotypes in response to atmospheric CO 2 and soil N availability. New Phytologist, 1998, 140, 251-260.	3.5	91
75	Widespread Occurrence of Expressed Fungal Secretory Peroxidases in Forest Soils. PLoS ONE, 2014, 9, e95557.	1.1	91
76	Fungi Unearthed: Transcripts Encoding Lignocellulolytic and Chitinolytic Enzymes in Forest Soil. PLoS ONE, 2010, 5, e10971.	1.1	86
77	Soil bacterial communities are shaped by temporal and environmental filtering: evidence from a longâ€term chronosequence. Environmental Microbiology, 2015, 17, 3208-3218.	1.8	85
78	Slowed decomposition is biotically mediated in an ectomycorrhizal, tropical rain forest. Oecologia, 2010, 164, 785-795.	0.9	84
79	Effect of measurement CO2 concentration on sugar maple root respiration. Tree Physiology, 1997, 17, 421-427.	1.4	83
80	MICROBIAL COMMUNITY COMPOSITION AND FUNCTION ACROSS AN ARCTIC TUNDRA LANDSCAPE. Ecology, 2006, 87, 1659-1670.	1.5	83
81	Simulated Atmospheric Nitrogen Deposition Alters Actinobacterial Community Composition in Forest Soils. Soil Science Society of America Journal, 2010, 74, 1157-1166.	1.2	81
82	Fungal community composition and metabolism under elevated CO2 and O3. Oecologia, 2006, 147, 143-154.	0.9	80
83	SOIL MICROBIAL CONTROL OF NITROGEN LOSS FOLLOWING CLEAR-CUT HARVEST IN NORTHERN HARDWOOD ECOSYSTEMS. , 1999, 9, 202-215.		79
84	Common bacterial responses in six ecosystems exposed to 10 years of elevated atmospheric carbon dioxide. Environmental Microbiology, 2012, 14, 1145-1158.	1.8	79
85	Forest floor community metatranscriptomes identify fungal and bacterial responses to N deposition in two maple forests. Frontiers in Microbiology, 2015, 6, 337.	1.5	79
86	Microbial Mechanisms Mediating Increased Soil C Storage under Elevated Atmospheric N Deposition. Applied and Environmental Microbiology, 2013, 79, 1191-1199.	1.4	75
87	Nitrogen Loss from Coffee Agroecosystems in Costa Rica: Leaching and Denitrification in the Presence and Absence of Shade Trees. Journal of Environmental Quality, 1995, 24, 227-233.	1.0	70
88	NITROGEN STORAGE AND CYCLING IN OLD- AND SECOND-GROWTH NORTHERN HARDWOOD FORESTS. Ecology, 2002, 83, 73-87.	1.5	70
89	Nitrogen cycling in coffee agroecosystems: net N mineralization and nitrification in the presence and absence of shade trees. Agriculture, Ecosystems and Environment, 1994, 48, 107-113.	2.5	69
90	PHOSPHORUS EFFICIENCY OF BORNEAN RAIN FOREST PRODUCTIVITY: EVIDENCE AGAINST THE UNIMODAL EFFICIENCY HYPOTHESIS. Ecology, 2005, 86, 1548-1561.	1.5	69

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91	Active microorganisms in forest soils differ from the total community yet are shaped by the same environmental factors: the influence of pH and soil moisture. FEMS Microbiology Ecology, 2016, 92, fiw149.	1.3	69
92	Decadal biomass increment in early secondary succession woody ecosystems is increased by CO2 enrichment. Nature Communications, 2019, 10, 454.	5.8	68
93	INTERACTIVE EFFECTS OF ATMOSPHERIC CO2AND SOIL-N AVAILABILITY ON FINE ROOTS OFPOPULUS TREMULOIDES. , 2000, 10, 18-33.		67
94	Above- and belowground response of Populus grandidentata to elevated atmospheric CO2 and soil N availability. Plant and Soil, 1994, 165, 45-51.	1.8	66
95	Nitrogen deposition and dissolved organic carbon production in northern temperate forests. Soil Biology and Biochemistry, 2004, 36, 1509-1515.	4.2	66
96	Soil Microbial Biomass Dynamics and Net Nitrogen Mineralization in Northern Hardwood Ecosystems. Soil Science Society of America Journal, 1994, 58, 238-243.	1.2	65
97	Elevated Atmospheric Carbon Dioxide and Leaf Litter Chemistry: Influences on Microbial Respiration and Net Nitrogen Mineralization. Soil Science Society of America Journal, 1996, 60, 1571-1577.	1.2	64
98	Anthropogenic N Deposition Slows Decay by Favoring Bacterial Metabolism: Insights from Metagenomic Analyses. Frontiers in Microbiology, 2016, 7, 259.	1.5	64
99	Dispersal limitation structures fungal community assembly in a longâ€term glacial chronosequence. Environmental Microbiology, 2014, 16, 1538-1548.	1.8	62
100	Genotypic variation for condensed tannin production in trembling aspen (POPULUS TREMULOIDES,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 1154-1159.	0.8	61
101	Elevated carbon dioxide and ozone alter productivity and ecosystem carbon content in northern temperate forests. Global Change Biology, 2014, 20, 2492-2504.	4.2	60
102	Anthropogenic N Deposition Increases Soil C Storage by Decreasing the Extent of Litter Decay: Analysis of Field Observations with an Ecosystem Model. Ecosystems, 2012, 15, 450-461.	1.6	59
103	Anthropogenic N deposition increases soil C storage by reducing the relative abundance of lignolytic fungi. Ecological Monographs, 2018, 88, 225-244.	2.4	58
104	Belowground responses to rising atmospheric CO2: Implications for plants, soil biota and ecosystem processes. Plant and Soil, 1994, 165, 1-6.	1.8	57
105	Soil nitrogen transformations under Populus tremuloides, Betula papyrifera and Acer saccharum following 3 years exposure to elevated CO2 and O3. Global Change Biology, 2003, 9, 1743-1750.	4.2	57
106	Changes in forest soil organic matter pools after a decade of elevated CO2 and O3. Soil Biology and Biochemistry, 2011, 43, 1518-1527.	4.2	57
107	Geostatistical analysis of soil properties in a secondary tropical dry forest, St. Lucia, West Indies. Plant and Soil, 1994, 163, 45-54.	1.8	56
108	Responses of soil cellulolytic fungal communities to elevated atmospheric CO₂ are complex and variable across five ecosystems. Environmental Microbiology, 2011, 13, 2778-2793.	1.8	56

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109	Latitudinal variation in sugar maple fine root respiration. Canadian Journal of Forest Research, 1996, 26, 1761-1768.	0.8	55
110	Soil organic matter and litter chemistry response to experimental N deposition in northern temperate deciduous forest ecosystems. Global Change Biology, 2005, 11, 1514-1521.	4.2	55
111	Forest gene diversity is correlated with the composition and function of soil microbial communities. Population Ecology, 2011, 53, 35-46.	0.7	55
112	Kinetics of Microbial Respiration and Nitrogen Mineralization in Great Lakes Forests. Soil Science Society of America Journal, 1993, 57, 1100-1106.	1.2	54
113	ATMOSPHERIC NITRATE DEPOSITION AND ENHANCED DISSOLVED ORGANIC CARBON LEACHING. Soil Science Society of America Journal, 2005, 69, 1233-1237.	1.2	52
114	Factors controlling denitrification rates in upland and swamp forests. Canadian Journal of Forest Research, 1992, 22, 1597-1604.	0.8	51
115	Kinetics of nitrogen uptake by Populus tremuloides in relation to atmospheric CO2 and soil nitrogen availability. Tree Physiology, 2000, 20, 265-270.	1.4	49
116	Anthropogenic N deposition and the fate of 15NO3- in a northern hardwood ecosystem. Biogeochemistry, 2004, 69, 143-157.	1.7	49
117	Elevated CO2 and O3 Alter Soil Nitrogen Transformations beneath Trembling Aspen, Paper Birch, and Sugar Maple. Ecosystems, 2006, 9, 1354-1363.	1.6	49
118	Fine root chemistry and decomposition in model communities of north-temperate tree species show little response to elevated atmospheric CO2 and varying soil resource availability. Oecologia, 2005, 146, 318-328.	0.9	48
119	Speciesâ€specific responses to atmospheric carbon dioxide and tropospheric ozone mediate changes in soil carbon. Ecology Letters, 2009, 12, 1219-1228.	3.0	48
120	Increased levels of airborne fungal spores in response to <i>Populus tremuloides</i> grown under elevated atmospheric CO₂. Canadian Journal of Botany, 1997, 75, 1670-1673.	1.2	47
121	Soil respiration in northern forests exposed to elevated atmospheric carbon dioxide and ozone. Oecologia, 2006, 148, 503-516.	0.9	46
122	Atmospheric N Deposition Increases Bacterial Laccase-Like Multicopper Oxidases: Implications for Organic Matter Decay. Applied and Environmental Microbiology, 2014, 80, 4460-4468.	1.4	46
123	ATMOSPHERIC CO2AND THE COMPOSITION AND FUNCTION OF SOIL MICROBIAL COMMUNITIES. , 2000, 10, 47-59.		45
124	Fungal community composition and function after long-term exposure of northern forests to elevated atmospheric CO2 and tropospheric O3. Global Change Biology, 2011, 17, 2184-2195.	4.2	45
125	Long-Term Experimental Nitrogen Deposition Alters the Composition of the Active Fungal Community in the Forest Floor. Soil Science Society of America Journal, 2013, 77, 1648-1658.	1.2	45
126	Anthropogenic N deposition, fungal gene expression, and an increasing soil carbon sink in the Northern Hemisphere. Ecology, 2019, 100, e02804.	1.5	45

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127	Initial colonization, community assembly and ecosystem function: fungal colonist traits and litter biochemistry mediate decay rate. Molecular Ecology, 2015, 24, 5045-5058.	2.0	44
128	Are Basidiomycete Laccase Gene Abundance and Composition Related to Reduced Lignolytic Activity Under Elevated Atmospheric NO3 âˆ' Deposition in a Northern Hardwood Forest?. Microbial Ecology, 2009, 57, 728-739.	1.4	43
129	Phylogenetic similarity and structure of Agaricomycotina communities across a forested landscape. Molecular Ecology, 2010, 19, 1469-1482.	2.0	43
130	GAS EXCHANGE, LEAF NITROGEN, AND GROWTH EFFICIENCY OFPOPULUS TREMULOIDESIN A CO2-ENRICHED ATMOSPHERE. , 2000, 10, 3-17.		42
131	Biomass accumulation and soil nitrogen availability in an 87-year-old Populus grandidentata chronosequence. Forest Ecology and Management, 2004, 191, 121-127.	1.4	42
132	Nitrate deposition in northern hardwood forests and the nitrogen metabolism of Acer saccharum marsh. Oecologia, 1996, 108, 338-344.	0.9	41
133	ATMOSPHERIC CO₂AND O₃ALTER THE FLOW OF¹⁵N IN DEVELOPING FOREST ECOSYSTEMS. Ecology, 2007, 88, 2630-2639.	1.5	41
134	Atmospheric N deposition alters connectance, but not functional potential among saprotrophic bacterial communities. Molecular Ecology, 2015, 24, 3170-3180.	2.0	41
135	Anthropogenic N deposition alters soil organic matter biochemistry and microbial communities on decaying fine roots. Global Change Biology, 2019, 25, 4369-4382.	4.2	40
136	Dispersal limitation and the assembly of soil <i>Actinobacteria</i> communities in a longâ€term chronosequence. Ecology and Evolution, 2012, 2, 538-549.	0.8	39
137	Chemistry and decomposition of litter from Populus tremuloides Michaux grown at elevated atmospheric CO2 and varying N availability. Global Change Biology, 2001, 7, 65-74.	4.2	38
138	Does Atmospheric NO 3 âˆ' Deposition Alter the Abundance and Activity of Ligninolytic Fungi in Forest Soils?. Ecosystems, 2007, 10, 1278-1286.	1.6	38
139	Towards a molecular understanding of N cycling in northern hardwood forests under future rates of N deposition. Soil Biology and Biochemistry, 2013, 66, 130-138.	4.2	38
140	ATMOSPHERIC CO2, SOIL-N AVAILABILITY, AND ALLOCATION OF BIOMASS AND NITROGEN BYPOPULUS TREMULOIDES. , 2000, 10, 34-46.		37
141	Assembly of Active Bacterial and Fungal Communities Along a Natural Environmental Gradient. Microbial Ecology, 2016, 71, 57-67.	1.4	37
142	Photosynthetic acclimation of overstory Populus tremuloides and understory Acer saccharum to elevated atmospheric CO2 concentration: interactions with shade and soil nitrogen. Tree Physiology, 2002, 22, 321-329.	1.4	36
143	Microbial Community Functional Potential and Composition Are Shaped by Hydrologic Connectivity in Riverine Floodplain Soils. Microbial Ecology, 2017, 73, 630-644.	1.4	36
144	Microbial Cycling of C and N in Northern Hardwood Forests Receiving Chronic Atmospheric NO3âˆ' Deposition. Ecosystems, 2006, 9, 242-253.	1.6	35

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145	Chronic nitrogen deposition alters the structure and function of detrital food webs in a northern hardwood ecosystem. Ecological Applications, 2013, 23, 1311-1321.	1.8	33
146	Anthropogenic nitrogen deposition ameliorates the decline in tree growth caused by a drier climate. Ecology, 2018, 99, 411-420.	1.5	33
147	Decay by ectomycorrhizal fungi couples soil organic matter to nitrogen availability. Ecology Letters, 2022, 25, 391-404.	3.0	32
148	Laccase Gene Composition and Relative Abundance in Oak Forest Soil is not Affected by Short-Term Nitrogen Fertilization. Microbial Ecology, 2009, 57, 50-57.	1.4	31
149	Effects of CO2and nutrient availability on mineral weathering in controlled tree growth experiments. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	1.9	30
150	Trophic stability of soil oribatid mites in the face of environmental change. Soil Biology and Biochemistry, 2014, 68, 71-77.	4.2	29
151	Surface soil fungal and bacterial communities in aspen stands are resilient to eleven years of elevated CO2 and O3. Soil Biology and Biochemistry, 2014, 76, 227-234.	4.2	29
152	Chronic N deposition does not apparently alter the biochemical composition of forest floor and soil organic matter. Soil Biology and Biochemistry, 2012, 54, 7-13.	4.2	28
153	Quantifying direct and indirect effects of fungicide on an old-field plant community: an experimental null-community approach. Plant Ecology, 2007, 190, 53-69.	0.7	27
154	Plant effects on soil N mineralization are mediated by the composition of multiple soil organic fractions. Ecological Research, 2011, 26, 201-208.	0.7	26
155	Integration of Ecophysiological and Biogeochemical Approaches to Ecosystem Dynamics. , 1998, , 372-403.		26
156	Relationships between plant nitrogen economy and life history in three deciduous-forest herbs. Journal of Ecology, 2001, 89, 385-394.	1.9	25
157	Characteristics of DOC Exported from Northern Hardwood Forests Receiving Chronic Experimental NO 3 âˆ’ Deposition. Ecosystems, 2007, 10, 369-379.	1.6	25
158	Above- and belowground response of Populus grandidentata to elevated atmospheric CO2 and soil N availability. , 1994, , 45-51.		25
159	Effects of elevated concentrations of atmospheric CO2 and tropospheric O3 on decomposition of fine roots. Tree Physiology, 2005, 25, 1501-1510.	1.4	24
160	Photosynthetic responses to understory shade and elevated carbon dioxide concentration in four northern hardwood tree species. Tree Physiology, 2006, 26, 1589-1599.	1.4	24
161	Root endophytes and invasiveness: no difference between native and nonâ€native <i>Phragmites</i> in the Great Lakes Region. Ecosphere, 2018, 9, e02526.	1.0	24
162	Populus tremuloides photosynthesis and crown architecture in response to elevated CO2 and soil N availability. Oecologia, 1997, 110, 328-336.	0.9	23

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163	Chronic experimental NO3âˆ’ deposition reduces the retention of leaf litter DOC in a northern hardwood forest soil. Soil Biology and Biochemistry, 2006, 38, 1340-1347.	4.2	23
164	Seedling survival in a northern temperate forest understory is increased by elevated atmospheric carbon dioxide and atmospheric nitrogen deposition. Global Change Biology, 2007, 13, 132-146.	4.2	23
165	Belowground competition and the response of developing forest communities to atmospheric CO2and O3. Global Change Biology, 2007, 13, 2230-2238.	4.2	23
166	Simulated N deposition negatively impacts sugar maple regeneration in a northern hardwood ecosystem. Journal of Applied Ecology, 2012, 49, 155-163.	1.9	23
167	Tropical Dry Forests of St. Lucia, West Indies: Vegetation and Soil Properties. Biotropica, 1996, 28, 618.	0.8	22
168	Soil microbial communities and elk foraging intensity: implications for soil biogeochemical cycling in the sagebrush steppe. Ecology Letters, 2017, 20, 202-211.	3.0	21
169	Environmental filtering structures fungal endophyte communities in tree bark. Molecular Ecology, 2019, 28, 5188-5198.	2.0	21
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