Richard J Norby

List of Publications by Year
in descending order

205 papers	25,307 citations	6254 80 h-index	7160 153 g-index
214 all docs	214 docs citations	214 times ranked	17241 citing authors

#	Article	IF	Citations
1	A meta-analysis of the response of soil respiration, net nitrogen mineralization, and aboveground plant growth to experimental ecosystem warming. Oecologia, 2001, 126, 543-562.	2.0	1,877
2	Redefining fine roots improves understanding of belowâ€ground contributions to terrestrial biosphere processes. New Phytologist, 2015, 207, 505-518.	7.3	906
3	Forest response to elevated CO2 is conserved across a broad range of productivity. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18052-18056.	7.1	880
4	CO ₂ enhancement of forest productivity constrained by limited nitrogen availability. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19368-19373.	7.1	814
5	Tree responses to rising CO2in field experiments: implications for the future forest. Plant, Cell and Environment, 1999, 22, 683-714.	5.7	691
6	Soil Microbial Community Responses to Multiple Experimental Climate Change Drivers. Applied and Environmental Microbiology, 2010, 76, 999-1007.	3.1	690
7	The likely impact of elevated [CO 2], nitrogen deposition, increased temperature and management on carbon sequestration in temperate and boreal forest ecosystems: a literature review. New Phytologist, 2007, 173, 463-480.	7.3	579
8	Ecological Lessons from Free-Air CO₂ Enrichment (FACE) Experiments. Annual Review of Ecology, Evolution, and Systematics, 2011, 42, 181-203.	8.3	558
9	Impacts of Fine Root Turnover on Forest NPP and Soil C Sequestration Potential. Science, 2003, 302, 1385-1387.	12.6	440
10	Elevated CO2, litter chemistry, and decomposition: a synthesis. Oecologia, 2001, 127, 153-165.	2.0	400
11	Evaluating ecosystem responses to rising atmospheric CO 2 and global warming in a multiâ€factor world. New Phytologist, 2004, 162, 281-293.	7.3	386
12	Effects of Atmospheric CO₂ Enrichment on the Growth and Mineral Nutrition of <i>Quercus alba</i> Seedlings in Nutrient-Poor Soil. Plant Physiology, 1986, 82, 83-89.	4.8	378
13	Evaluation of 11 terrestrial carbonâ€"nitrogen cycle models against observations from two temperate <scp>F</scp>reeâ€<scp>A</scp>ir <scp>CO</scp>₂<scp> E</scp>nrichment studies. New Phytologist, 2014, 202, 803-822.	7.3	378
14	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.	7.1	353
15	Plant water relations at elevated CO2 - implications for water-limited environments. Plant, Cell and Environment, 2002, 25, 319-331.	5.7	352
16	Fine-root production dominates response of a deciduous forest to atmospheric CO2 enrichment. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9689-9693.	7.1	349
17	Productivity and compensatory responses of yellow-poplar trees in elevated C02. Nature, 1992, 357, 322-324.	27.8	343
18	Sensitivity of plants to changing atmospheric <scp>CO</scp>₂ concentration: from the geological past to the next century. New Phytologist, 2013, 197, 1077-1094.	7.3	336

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19	Root dynamics and global change: seeking an ecosystem perspective. New Phytologist, 2000, 147, 3-12.	7.3	333
20	Forest water use and water use efficiency at elevated <scp><scp>CO₂</scp></scp>: a modelâ€data intercomparison at two contrasting temperate forest <scp>FACE</scp> sites. Global Change Biology, 2013, 19, 1759-1779.	9.5	314
21	A meta-analysis of 1,119 manipulative experiments on terrestrial carbon-cycling responses to global change. Nature Ecology and Evolution, 2019, 3, 1309-1320.	7.8	304
22	Responses of soil respiration to elevated CO₂, air warming, and changing soil water availability in a model oldâ€field grassland. Global Change Biology, 2007, 13, 2411-2424.	9.5	295
23	Potential carbon emissions dominated by carbon dioxide from thawed permafrost soils. Nature Climate Change, 2016, 6, 950-953.	18.8	288
24	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO₂. New Phytologist, 2021, 229, 2413-2445.	7.3	286
25	A framework for benchmarking land models. Biogeosciences, 2012, 9, 3857-3874.	3.3	267
26	Where does the carbon go? A modelâ€“data intercomparison of vegetation carbon allocation and turnover processes at two temperate forest freeâ€air CO₂ enrichment sites. New Phytologist, 2014, 203, 883-899.	7.3	263
27	The unseen iceberg: plant roots in arctic tundra. New Phytologist, 2015, 205, 34-58.	7.3	260
28	Using ecosystem experiments to improve vegetation models. Nature Climate Change, 2015, 5, 528-534.	18.8	249
29	Plant functional types in Earth system models: past experiences and future directions for application of dynamic vegetation models in high-latitude ecosystems. Annals of Botany, 2014, 114, 1-16.	2.9	240
30	Elevated atmospheric carbon dioxide increases soil carbon. Global Change Biology, 2005, 11, 2057-2064.	9.5	221
31	Climate change effects on plant biomass alter dominance patterns and community evenness in an experimental oldâ€field ecosystem. Global Change Biology, 2010, 16, 2676-2687.	9.5	210
32	Elevated <scp>CO</scp>₂ increases treeâ€level intrinsic water use efficiency: insights from carbon and oxygen isotope analyses in tree rings across three forest <scp>FACE</scp> sites. New Phytologist, 2013, 197, 544-554.	7.3	210
33	Issues and perspectives for investigating root responses to elevated atmospheric carbon dioxide. Plant and Soil, 1994, 165, 9-20.	3.7	209
34	Acclimation of photosynthesis and respiration to simulated climatic warming in northern and southern populations of Acer saccharum: laboratory and field evidence. Tree Physiology, 2000, 20, 87-96.	3.1	185
35	Modelâ€“data synthesis for the next generation of forest freeâ€air <scp>CO</scp>₂ enrichment (<scp>FACE</scp>) experiments. New Phytologist, 2016, 209, 17-28.	7.3	178
36	The climatic impacts of land surface change and carbon management, and the implications for climate-change mitigation policy. Climate Policy, 2003, 3, 149-157.	5.1	177

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37	Amazon forest response to CO2 fertilization dependent on plant phosphorus acquisition. Nature Geoscience, 2019, 12, 736-741.	12.9	177
38	Climate change effects on soil microarthropod abundance and community structure. Applied Soil Ecology, 2011, 47, 37-44.	4.3	175
39	Coordinated approaches to quantify longâ€term ecosystem dynamics in response to global change. Global Change Biology, 2011, 17, 843-854.	9.5	165
40	Foliar gas exchange responses of two deciduous hardwoods during 3 years of growth in elevated CO2: no loss of photosynthetic enhancement. Plant, Cell and Environment, 1993, 16, 797-807.	5.7	164
41	Leaf area compensation and nutrient interactions in CO2-enriched seedlings of yellow-poplar (Liriodendron tulipifera L.). New Phytologist, 1991, 117, 515-528.	7.3	161
42	Sensitivity of stomatal and canopy conductance to elevated CO 2 concentrationÂâ€“Âinteracting variables and perspectives of scale. New Phytologist, 2002, 153, 485-496.	7.3	158
43	Increases in mycorrhizal colonization and seedling growth in Pinusechinata and Quercusalba in an enriched CO2 atmosphere. Canadian Journal of Forest Research, 1987, 17, 878-883.	1.7	156
44	Allometric determination of tree growth in a CO2 -enriched sweetgum stand. New Phytologist, 2001, 150, 477-487.	7.3	155
45	A multiyear synthesis of soil respiration responses to elevated atmospheric CO2 from four forest FACE experiments. Global Change Biology, 2004, 10, 1027-1042.	9.5	155
46	Next generation of elevated [CO₂] experiments with crops: a critical investment for feeding the future world. Plant, Cell and Environment, 2008, 31, 1317-1324.	5.7	154
47	Carbon-nitrogen interactions in CO2-enriched white oak: physiological and long-term perspectives. Tree Physiology, 1986, 2, 233-241.	3.1	153
48	A question of litter quality. Nature, 1998, 396, 17-18.	27.8	153
49	Elevated CO2 enhances leaf senescence during extreme drought in a temperate forest. Tree Physiology, 2011, 31, 117-130.	3.1	152
50	Phenological responses in maple to experimental atmospheric warming and CO2 enrichment. Global Change Biology, 2003, 9, 1792-1801.	9.5	148
51	CO₂ enrichment increases carbon and nitrogen input from fine roots in a deciduous forest. New Phytologist, 2008, 179, 837-847.	7.3	146
52	Elevated atmospheric CO2 effects on seedling growth, nutrient uptake, and rhizosphere bacterial populations ofLiriodendron tulipifera L.. Plant and Soil, 1987, 104, 3-11.	3.7	144
53	Soil microbial activity in a Liquidambar plantation unresponsive to CO2-driven increases in primary production. Applied Soil Ecology, 2003, 24, 263-271.	4.3	139
54	A panâ€Arctic synthesis of CH₄ and CO₂ production from anoxic soil incubations. Global Change Biology, 2015, 21, 2787-2803.	9.5	138

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55	Nitrogen resorption in senescing tree leaves in a warmer, CO2-enriched atmosephere. Plant and Soil, 2000, 224, 15-29.	3.7	133
56	Why is plant-growth response to elevated CO2 amplified when water is limiting, but reduced when nitrogen is limiting? A growth-optimisation hypothesis. Functional Plant Biology, 2008, 35, 521.	2.1	133
57	Environmental and stomatal control of photosynthetic enhancement in the canopy of a sweetgum (Liquidambar styraciflua L.) plantation during 3 years of CO2 enrichment. Plant, Cell and Environment, 2002, 25, 379-393.	5.7	131
58	Impact of mesophyll diffusion on estimated global land CO ₂ fertilization. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15774-15779.	7.1	129
59	Nodulation and nitrogenase activity in nitrogen-fixing woody plants stimulated by CO2 enrichment of the atmosphere. Physiologia Plantarum, 1987, 71, 77-82.	5.2	128
60	Isoprene emission from terrestrial ecosystems in response to global change: minding the gap between models and observations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1677-1695.	3.4	121
61	Tropical forest responses to increasing atmospheric CO2: current knowledge and opportunities for future research. Functional Plant Biology, 2013, 40, 531.	2.1	118
62	NITROGEN UPTAKE, DISTRIBUTION, TURNOVER, AND EFFICIENCY OF USE IN A CO2-ENRICHED SWEETGUM FOREST. Ecology, 2006, 87, 5-14.	3.2	117
63	Temperatureâ€controlled openâ€top chambers for global change research. Global Change Biology, 1997, 3, 259-267.	9.5	115
64	SOIL NITROGEN CYCLING UNDER ELEVATED CO2: A SYNTHESIS OF FOREST FACE EXPERIMENTS. , 2003, 13, 1508-1514.		114
65	The photosynthesis - leaf nitrogen relationship at ambient and elevated atmospheric carbon dioxide: a meta-analysis. Global Change Biology, 1999, 5, 331-346.	9.5	109
66	Hierarchy theory as a guide to mycorrhizal research on large-scale problems. Environmental Pollution, 1991, 73, 271-284.	7.5	108
67	Leaf dynamics of a deciduous forest canopy: no response to elevated CO 2. Oecologia, 2003, 136, 574-584.	2.0	106
68	CO 2 enrichment and warming of the atmosphere enhance both productivity and mortality of maple tree fine roots. New Phytologist, 2004, 162, 437-446.	7.3	102
69	Sap velocity and canopy transpiration in a sweetgum stand exposed to free-air CO2 enrichment (FACE). New Phytologist, 2001, 150, 489-498.	7.3	101
70	How do elevated [CO2], warming, and reduced precipitation interact to affect soil moisture and LAI in an old field ecosystem?. Plant and Soil, 2007, 301, 255-266.	3.7	101
71	Predicting longâ€term carbon sequestration in response to CO₂ enrichment: How and why do current ecosystem models differ?. Global Biogeochemical Cycles, 2015, 29, 476-495.	4.9	99
72	Effects of elevated CO2on nutrient cycling in a sweetgum plantation. Biogeochemistry, 2004, 69, 379-403.	3.5	98

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73	Growth and maintenance respiration in leaves of Liriodendron tulipifera L. exposed to long-term carbon dioxide enrichment in the field. New Phytologist, 1992, 121, 515-523.	7.3	96
74	Ecohydrologic impact of reduced stomatal conductance in forests exposed to elevated CO₂. Ecohydrology, 2011, 4, 196-210.	2.4	96
75	Comprehensive ecosystem modelâ€data synthesis using multiple data sets at two temperate forest freeâ€air CO₂ enrichment experiments: Model performance at ambient CO₂ concentration. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 937-964.	3.0	95
76	Rapid loss of an ecosystem engineer: <i>Sphagnum</i> decline in an experimentally warmed bog. Ecology and Evolution, 2019, 9, 12571-12585.	1.9	92
77	Title is missing!. Plant and Soil, 1998, 206, 85-97.	3.7	91
78	NET PRIMARY PRODUCTIVITY OF A CO2-ENRICHED DECIDUOUS FOREST AND THE IMPLICATIONS FOR CARBON STORAGE. , 2002, 12, 1261-1266.		91
79	Asymmetrical effects of mesophyll conductance on fundamental photosynthetic parameters and their relationships estimated from leaf gas exchange measurements. Plant, Cell and Environment, 2014, 37, 978-994.	5.7	90
80	Response of an understory plant community to elevated [CO 2] depends on differential responses of dominant invasive species and is mediated by soil water availability. New Phytologist, 2004, 161, 827-835.	7.3	88
81	Growth dynamics and water use of seedlings of Quercus alba L. in CO 2 â€enriched atmospheres. New Phytologist, 1989, 111, 491-500.	7.3	87
82	Induction of nitrate reductase activity in red spruce needles by NO2 and HNO3 vapor. Canadian Journal of Forest Research, 1989, 19, 889-896.	1.7	86
83	Soil moisture surpasses elevated CO2 and temperature as a control on soil carbon dynamics in a multi-factor climate change experiment. Plant and Soil, 2009, 319, 85-94.	3.7	86
84	Importance of changing CO2, temperature, precipitation, and ozone on carbon and water cycles of an upland-oak forest: incorporating experimental results into model simulations. Global Change Biology, 2005, 11, 1402-1423.	9.5	83
85	Nutrient cycling and fertility management in temperate short rotation forest systems. Biomass and Bioenergy, 1998, 14, 361-370.	5.7	82
86	Benchmarking and parameter sensitivity of physiological and vegetation dynamics using the Functionally Assembled Terrestrial Ecosystem Simulator (FATES) at Barro Colorado Island, Panama. Biogeosciences, 2020, 17, 3017-3044.	3.3	82
87	Increased growth efficiency of Quercus alba trees in a CO 2 â€enriched atmosphere. New Phytologist, 1995, 131, 91-97.	7.3	80
88	Carbon dioxide assimilation and growth of red spruce (Picea rubens Sarg.) seedlings in response to ozone, precipitation chemistry, and soil type. Oecologia, 1986, 70, 163-171.	2.0	79
89	Consequences of Rising Atmospheric Carbon Dioxide Levels for the Belowground Microbiota Associated with White Oak. Journal of Environmental Quality, 1997, 26, 495-503.	2.0	79
90	Using models to guide field experiments: <i>a priori</i> predictions for the <scp>CO</scp>₂ response of a nutrientâ€and waterâ€limited native Eucalypt woodland. Global Change Biology, 2016, 22, 2834-2851.	9.5	77

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91	Effects of multiple climate change factors on the tall fescueâ€“fungal endophyte symbiosis: infection frequency and tissue chemistry. New Phytologist, 2011, 189, 797-805.	7.3	76
92	Fineâ€root respiration in a loblolly pine and sweetgum forest growing in elevated CO 2. New Phytologist, 2003, 160, 511-522.	7.3	75
93	Interactions between drought and elevated CO 2 on growth and gas exchange of seedlings of three deciduous tree species. New Phytologist, 1995, 129, 63-71.	7.3	74
94	Development of gypsy moth larvae feeding on red maple saplings at elevated CO 2 and temperature. Oecologia, 2003, 137, 114-122.	2.0	74
95	Soil carbon and nitrogen cycling and storage throughout the soil profile in a sweetgum plantation after 11Âyears of CO₂â€enrichment. Global Change Biology, 2012, 18, 1684-1697.	9.5	74
96	Contrasting responses of forest ecosystems to rising atmospheric CO2: Implications for the global C cycle. Global Biogeochemical Cycles, 2005, 19, .	4.9	72
97	Forest fineâ€root production and nitrogen use under elevated CO₂: contrasting responses in evergreen and deciduous trees explained by a common principle. Global Change Biology, 2009, 15, 132-144.	9.5	72
98	Litter Quality and Decomposition Rates of Foliar Litter Produced under CO2 Enrichment. , 1996, , 87-103.		71
99	Nitrogen deposition: a component of global change analyses. New Phytologist, 1998, 139, 189-200.	7.3	71
100	Ecosystem Impacts of Geoengineering: A Review for Developing a Science Plan. Ambio, 2012, 41, 350-369.	5.5	69
101	Stored carbon partly fuels fineâ€root respiration but is not used for production of new fine roots. New Phytologist, 2013, 199, 420-430.	7.3	69
102	Rapid Net Carbon Loss From a Wholeâ€Ecosystem Warmed Peatland. AGU Advances, 2020, 1, e2020AV000163.	5.4	69
103	Effects of elevated CO2 and temperature-grown red and sugar maple on gypsy moth performance. Global Change Biology, 2000, 6, 685-695.	9.5	68
104	Persistent stimulation of photosynthesis by elevated CO 2 in a sweetgum (Liquidambar styraciflua) forest stand. New Phytologist, 2004, 162, 343-354.	7.3	68
105	Decadal biomass increment in early secondary succession woody ecosystems is increased by CO2 enrichment. Nature Communications, 2019, 10, 454.	12.8	68
106	Respiratory cost of leaf growth and maintenance in white oak saplings exposed to atmospheric CO₂ enrichment. Canadian Journal of Forest Research, 1992, 22, 1717-1721.	1.7	66
107	Global transpiration data from sap flow measurements: the SAPFLUXNET database. Earth System Science Data, 2021, 13, 2607-2649.	9.9	65
108	CO2 Fertilization: When, Where, How Much?. , 2007, , 9-21.		60

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109	Plant root distributions and nitrogen uptake predicted by a hypothesis of optimal root foraging. Ecology and Evolution, 2012, 2, 1235-1250.	1.9	59
110	Fine-root growth in a forested bog is seasonally dynamic, but shallowly distributed in nutrient-poor peat. Plant and Soil, 2018, 424, 123-143.	3.7	58
111	Issues and perspectives for investigating root responses to elevated atmospheric carbon dioxide. , 1994, , 9-20.		58
112	Leaf age effects of elevated CO 2 â€grown white oak leaves on springâ€feeding lepidopterans. Global Change Biology, 1998, 4, 235-246.	9.5	57
113	A comment on â€œAppropriate experimental ecosystem warming methods by ecosystem, objective, and practicalityâ€• by Aronson and McNulty. Agricultural and Forest Meteorology, 2010, 150, 497-498.	4.8	56
114	Litterfall¹⁵N abundance indicates declining soil nitrogen availability in a free-air CO₂enrichment experiment. Ecology, 2011, 92, 133-139.	3.2	55
115	Root and Rhizosphere Bacterial Phosphatase Activity Varies with Tree Species and Soil Phosphorus Availability in Puerto Rico Tropical Forest. Frontiers in Plant Science, 2017, 8, 1834.	3.6	54
116	Responses of an old-field plant community to interacting factors of elevated [CO2], warming, and soil moisture. Journal of Plant Ecology, 2009, 2, 1-11.	2.3	53
117	Widespread foliage Î´15 N depletion under elevated CO2 : inferences for the nitrogen cycle. Global Change Biology, 2003, 9, 1582-1590.	9.5	52
118	Nitrogen fertilization strategies in a short-rotation sycamore plantation. Forest Ecology and Management, 1994, 64, 13-24.	3.2	51
119	Carbon dioxide stimulation of photosynthesis in Liquidambar styraciflua is not sustained during a 12-year field experiment. AoB PLANTS, 2015, 7, .	2.3	51
120	Effects of elevated atmospheric CO2 and temperature on leaf optical properties in Acer saccharum. Environmental and Experimental Botany, 2000, 43, 267-273.	4.2	49
121	Aboveground Growth and Competition in Forest Gap Models: An Analysis for Studies of Climatic Change. Climatic Change, 2001, 51, 415-447.	3.6	48
122	Net mineralization of N at deeper soil depths as a potential mechanism for sustained forest production under elevated [CO₂]. Global Change Biology, 2011, 17, 1130-1139.	9.5	48
123	Elevated air temperature alters an oldâ€field insect community in a multifactor climate change experiment. Global Change Biology, 2009, 15, 930-942.	9.5	47
124	Stem respiration increases in CO2-enriched sweetgum trees. New Phytologist, 2002, 155, 239-248.	7.3	46
125	Challenges in elevated CO2 experiments on forests. Trends in Plant Science, 2010, 15, 5-10.	8.8	46
126	Informing models through empirical relationships between foliar phosphorus, nitrogen and photosynthesis across diverse woody species in tropical forests of Panama. New Phytologist, 2017, 215, 1425-1437.	7.3	46

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127	Title is missing!. Plant and Soil, 1999, 217, 195-204.	3.7	44
128	Challenging terrestrial biosphere models with data from the longâ€term multifactor Prairie Heating and <scp>CO</scp>₂ Enrichment experiment. Global Change Biology, 2017, 23, 3623-3645.	9.5	42
129	Growth and maintenance respiration in stems of Quercus alba after four years of CO2 enrichment. Physiologia Plantarum, 1995, 93, 47-54.	5.2	41
130	Relative sensitivity of three species of woody plants to SO2 at high or low exposure temperature. Oecologia, 1981, 51, 33-36.	2.0	40
131	Forest canopy productivity index. Nature, 1996, 381, 564-564.	27.8	40
132	Climate Change Alters Seedling Emergence and Establishment in an Old-Field Ecosystem. PLoS ONE, 2010, 5, e13476.	2.5	39
133	Rising CO2 - future ecosystems. New Phytologist, 2001, 150, 215-221.	7.3	38
134	Timing and magnitude of C partitioning through a young loblolly pine (Pinus taeda L.) stand using 13C labeling and shade treatments. Tree Physiology, 2012, 32, 799-813.	3.1	38
135	The role of stomata in sensitivity of Betula papyrifera seedlings to SO2 at different humidities. Oecologia, 1982, 53, 34-39.	2.0	37
136	Role of N2-fixation in Constructed Old-field Communities Under Different Regimes of [CO2], Temperature, and Water Availability. Ecosystems, 2008, 11, 125-137.	3.4	37
137	Nitrogen limitation in a sweetgum plantation: implications for carbon allocation and storage. Canadian Journal of Forest Research, 2008, 38, 1021-1032.	1.7	37
138	Energetic Costs of Tissue Construction in Yellow-poplar and White Oak Trees Exposed to Long-term CO2Enrichment. Annals of Botany, 1997, 80, 289-297.	2.9	36
139	The climatic impacts of land surface change and carbon management, and the implications for climate-change mitigation policy. Climate Policy, 2003, 3, 149-157.	5.1	36
140	Allelopathic potential of ground cover species onPinus resinosa seedlings. Plant and Soil, 1980, 57, 363-374.	3.7	35
141	Mapping Arctic Plant Functional Type Distributions in the Barrow Environmental Observatory Using WorldView-2 and LiDAR Datasets. Remote Sensing, 2016, 8, 733.	4.0	34
142	Temporal and Spatial Variation in Peatland Carbon Cycling and Implications for Interpreting Responses of an Ecosystemâ€Scale Warming Experiment. Soil Science Society of America Journal, 2017, 81, 1668-1688.	2.2	34
143	Fineâ€root dynamics vary with soil depth and precipitation in a lowâ€nutrient tropical forest in the Central Amazonia. Plant-Environment Interactions, 2020, 1, 3-16.	1.5	34
144	Quantifying the response of photosynthesis to changes in leaf nitrogen content and leaf mass per area in plants grown under atmospheric CO 2 enrichment. Plant, Cell and Environment, 1999, 22, 1109-1119.	5.7	33

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145	Modeling soil respiration and variations in source components using a multi-factor global climate change experiment. Climatic Change, 2011, 107, 459-480.	3.6	33
146	Interactions between drought and elevated CO2on osmotic adjustment and solute concentrations of tree seedlings. New Phytologist, 1995, 131, 169-177.	7.3	32
147	Tree Responses to Elevated CO2 and Implications for Forests. , 1996, , 1-21.		29
148	The Effects of Phosphorus Cycle Dynamics on Carbon Sources and Sinks in the Amazon Region: A Modeling Study Using ELM v1. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3686-3698.	3.0	29
149	CO2 enrichment accelerates successional development of an understory plant community. Journal of Plant Ecology, 2010, 3, 33-39.	2.3	28
150	Bringing function to structure: Rootâ€“soil interactions shaping phosphatase activity throughout a soil profile in Puerto Rico. Ecology and Evolution, 2021, 11, 1150-1164.	1.9	28
151	PHYSIOLOGICAL PROCESSES IN SOYBEAN INHIBITED BY GASEOUS POLLUTANTS BUT NOT BY ACID RAIN. New Phytologist, 1985, 100, 79-85.	7.3	26
152	Interactions of SO2-concentration and post-fumigation temperature on growth of five species of woody plants. Environmental Pollution Series A, Ecological and Biological, 1981, 25, 27-39.	0.7	24
153	Grand Challenges in Understanding the Interplay of Climate and Land Changes. Earth Interactions, 2017, 21, 1-43.	1.5	24
154	Isotopic identification of soil and permafrost nitrate sources in an Arctic tundra ecosystem. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1000-1017.	3.0	22
155	Biophysical drivers of seasonal variability in <i>Sphagnum</i> gross primary production in a northern temperate bog. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 1078-1097.	3.0	22
156	Controls on Fine-Scale Spatial and Temporal Variability of Plant-Available Inorganic Nitrogen in a Polygonal Tundra Landscape. Ecosystems, 2019, 22, 528-543.	3.4	21
157	Fine roots stimulate nutrient release during early stages of leaf litter decomposition in a Central Amazon rainforest. Plant and Soil, 2021, 469, 287-303.	3.7	21
158	GROWTH ANALYSIS OF SOYBEAN EXPOSED TO SIMULATED ACID RAIN AND GASEOUS AIR POLLUTANTS. New Phytologist, 1983, 95, 277-287.	7.3	20
159	Genetic variation and spatial structure in sugar maple (Acer saccharumMarsh.) and implications for predicted global-scale environmental change. Global Change Biology, 2000, 6, 335-344.	9.5	19
160	Variation in foliar nitrogen and albedo in response to nitrogen fertilization and elevated CO2. Oecologia, 2012, 169, 915-925.	2.0	19
161	Forest soil carbon oxidation state and oxidative ratio responses to elevated CO 2. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1797-1811.	3.0	19
162	Evaluating the Community Land Model in a pine stand with shading manipulations and ¹³CO₂ labeling. Biogeosciences, 2016, 13, 641-657.	3.3	18

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163	Extending a land-surface model with <i>Sphagnum</i> moss to simulate responses of a northern temperate bog to whole ecosystem warming and elevated CO₂. Biogeosciences, 2021, 18, 467-486.	3.3	17
164	Increased mercury in forest soils under elevated carbon dioxide. Oecologia, 2008, 158, 343-354.	2.0	16
165	Comment on â€œIncreased growing-season productivity drives earlier autumn leaf senescence in temperate treesâ€. Science, 2021, 371, .	12.6	16
166	Ecosystem Responses to Warming and Interacting Global Change Factors. Global Change - the IGBP Series, 2007, , 23-36.	2.1	16
167	Nitrogen fixation in the lichen Lobaria pulmonaria in elevated atmospheric carbon dioxide. Oecologia, 1989, 79, 566-568.	2.0	15
168	Physiological indicators of nitrogen response in a short rotation sycamore plantation. I. CO2 assimilation, photosynthetic pigments and soluble carbohydrates. Physiologia Plantarum, 1991, 82, 117-126.	5.2	15
169	Oaks in a high-CO2 world. Annales Des Sciences ForestiÃ¨res, 1996, 53, 413-429.	1.2	15
170	Nitrogen and phosphorus cycling in an ombrotrophic peatland: a benchmark for assessing change. Plant and Soil, 2021, 466, 649-674.	3.7	15
171	Contrasting responses of woody and grassland ecosystems to increased CO2 as water supply varies. Nature Ecology and Evolution, 2022, 6, 315-323.	7.8	15
172	Changes in leaf functional traits with leaf age: when do leaves decrease their photosynthetic capacity in Amazonian trees?. Tree Physiology, 2022, 42, 922-938.	3.1	14
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