

Eric A Davidson

List of Publications by Year in descending order

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Version: 2024-02-01

230
papers

44,192
citations

3874

91
h-index

2634

200
g-index

248
all docs

248
docs citations

248
times ranked

33504
citing authors

#	ARTICLE	IF	CITATIONS
1	Temperature sensitivity of soil carbon decomposition and feedbacks to climate change. <i>Nature</i> , 2006, 440, 165-173.	13.7	5,114
2	Global assessment of nitrogen deposition effects on terrestrial plant diversity: a synthesis. <i>Ecological Applications</i> , 2010, 20, 30-59.	1.8	2,063
3	Managing nitrogen for sustainable development. <i>Nature</i> , 2015, 528, 51-59.	13.7	1,635
4	Soil water content and temperature as independent or confounded factors controlling soil respiration in a temperate mixed hardwood forest. <i>Global Change Biology</i> , 1998, 4, 217-227.	4.2	1,598
5	The role of deep roots in the hydrological and carbon cycles of Amazonian forests and pastures. <i>Nature</i> , 1994, 372, 666-669.	13.7	1,232
6	Temperature and soil organic matter decomposition rates - synthesis of current knowledge and a way forward. <i>Global Change Biology</i> , 2011, 17, 3392-3404.	4.2	1,143
7	On the variability of respiration in terrestrial ecosystems: moving beyond Q ₁₀ . <i>Global Change Biology</i> , 2006, 12, 154-164.	4.2	1,055
8	The Amazon basin in transition. <i>Nature</i> , 2012, 481, 321-328.	13.7	922
9	Positive Feedbacks in the Fire Dynamic of Closed Canopy Tropical Forests. <i>Science</i> , 1999, 284, 1832-1835.	6.0	847
10	The contribution of manure and fertilizer nitrogen to atmospheric nitrous oxide since 1860. <i>Nature Geoscience</i> , 2009, 2, 659-662.	5.4	842
11	A comprehensive quantification of global nitrous oxide sources and sinks. <i>Nature</i> , 2020, 586, 248-256.	13.7	814
12	Changes in soil carbon inventories following cultivation of previously untilled soils. <i>Biogeochemistry</i> , 1993, 20, 161-193.	1.7	781
13	Testing a Conceptual Model of Soil Emissions of Nitrous and Nitric Oxides. <i>BioScience</i> , 2000, 50, 667.	2.2	743
14	Global agriculture and nitrous oxide emissions. <i>Nature Climate Change</i> , 2012, 2, 410-416.	8.1	729
15	Title is missing!. <i>Biogeochemistry</i> , 2000, 48, 53-69.	1.7	705
16	Satellite-based modeling of gross primary production in an evergreen needleleaf forest. <i>Remote Sensing of Environment</i> , 2004, 89, 519-534.	4.6	682
17	Minimizing artifacts and biases in chamber-based measurements of soil respiration. <i>Agricultural and Forest Meteorology</i> , 2002, 113, 21-37.	1.9	622
18	Abrupt increases in Amazonian tree mortality due to drought–fire interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 6347-6352.	3.3	576

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19	Title is missing!. Biogeochemistry, 2000, 51, 33-69.	1.7	524
20	Measuring gross nitrogen mineralization, and nitrification by ¹⁵ N isotopic pool dilution in intact soil cores. Journal of Soil Science, 1991, 42, 335-349.	1.2	500
21	Belowground cycling of carbon in forests and pastures of eastern Amazonia. Global Biogeochemical Cycles, 1995, 9, 515-528.	1.9	429
22	Soil warming and organic carbon content. Nature, 2000, 408, 789-790.	13.7	413
23	Processes Regulating Soil Emissions of NO and N ² O in a Seasonally Dry Tropical Forest. Ecology, 1993, 74, 130-139.	1.5	410
24	A global inventory of nitric oxide emissions from soils. , 1997, 48, 37-50.		403
25	Chronic nitrogen additions reduce total soil respiration and microbial respiration in temperate forest soils at the Harvard Forest. Forest Ecology and Management, 2004, 196, 43-56.	1.4	400
26	Recuperation of nitrogen cycling in Amazonian forests following agricultural abandonment. Nature, 2007, 447, 995-998.	13.7	381
27	Internal Cycling of Nitrate in Soils of a Mature Coniferous Forest. Ecology, 1992, 73, 1148-1156.	1.5	377
28	Sources of Nitric Oxide and Nitrous Oxide following Wetting of Dry Soil. Soil Science Society of America Journal, 1992, 56, 95-102.	1.2	370
29	The Michaelis-Menten kinetics model for decomposition of soil organic matter at hourly to seasonal time scales. Global Change Biology, 2012, 18, 371-384.	4.2	349
30	Toward more realistic projections of soil carbon dynamics by Earth system models. Global Biogeochemical Cycles, 2016, 30, 40-56.	1.9	343
31	Nitrogen Mineralization, Immobilization, and Nitrification. Soil Science Society of America Book Series, 0, , 985-1018.	0.3	329
32	Spatial and temporal variability in forest-atmosphere CO ₂ exchange. Global Change Biology, 2004, 10, 1689-1706.	4.2	318
33	The effects of partial throughfall exclusion on canopy processes, aboveground production, and biogeochemistry of an Amazon forest. Journal of Geophysical Research, 2002, 107, LBA 53-1.	3.3	316
34	Process modeling of controls on nitrogen trace gas emissions from soils worldwide. Journal of Geophysical Research, 1996, 101, 1361-1377.	3.3	312
35	Drought effects on litterfall, wood production and belowground carbon cycling in an Amazon forest: results of a throughfall reduction experiment. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1839-1848.	1.8	286
36	Explicitly representing soil microbial processes in Earth system models. Global Biogeochemical Cycles, 2015, 29, 1782-1800.	1.9	286

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37	A mechanism of abiotic immobilization of nitrate in forest ecosystems: the ferrous wheel hypothesis. <i>Global Change Biology</i> , 2003, 9, 228-236.	4.2	277
38	Seasonal patterns and environmental control of carbon dioxide and water vapour exchange in an ecotonal boreal forest. <i>Global Change Biology</i> , 1999, 5, 891-902.	4.2	275
39	Land use change and biogeochemical controls of nitrogen oxide emissions from soils in eastern Amazonia. <i>Global Biogeochemical Cycles</i> , 1999, 13, 31-46.	1.9	275
40	Key ecological responses to nitrogen are altered by climate change. <i>Nature Climate Change</i> , 2016, 6, 836-843.	8.1	261
41	Belowground carbon allocation in forests estimated from litterfall and IRGA-based soil respiration measurements. <i>Agricultural and Forest Meteorology</i> , 2002, 113, 39-51.	1.9	260
42	Effects of experimental drought on soil respiration and radiocarbon efflux from a temperate forest soil. <i>Global Change Biology</i> , 2006, 12, 177-193.	4.2	252
43	Sensitivity of decomposition rates of soil organic matter with respect to simultaneous changes in temperature and moisture. <i>Journal of Advances in Modeling Earth Systems</i> , 2015, 7, 335-356.	1.3	252
44	NITROGEN AND PHOSPHORUS LIMITATION OF BIOMASS GROWTH IN A TROPICAL SECONDARY FOREST. , 2004, 14, 150-163.		250
45	Deep root function in soil water dynamics in cerrado savannas of central Brazil. <i>Functional Ecology</i> , 2005, 19, 574-581.	1.7	246
46	Inventories and scenarios of nitrous oxide emissions. <i>Environmental Research Letters</i> , 2014, 9, 105012.	2.2	243
47	Effects of an experimental drought on soil emissions of carbon dioxide, methane, nitrous oxide, and nitric oxide in a moist tropical forest. <i>Global Change Biology</i> , 2004, 10, 718-730.	4.2	239
48	The age of fine-root carbon in three forests of the eastern United States measured by radiocarbon. <i>Oecologia</i> , 2001, 129, 420-429.	0.9	235
49	Acceleration of global N ₂ O emissions seen from two decades of atmospheric inversion. <i>Nature Climate Change</i> , 2019, 9, 993-998.	8.1	229
50	Land-Use Change and Biogeochemical Controls of Methane Fluxes in Soils of Eastern Amazonia. <i>Ecosystems</i> , 2000, 3, 41-56.	1.6	225
51	Missing sinks, feedbacks, and understanding the role of terrestrial ecosystems in the global carbon balance. <i>Global Biogeochemical Cycles</i> , 1998, 12, 25-34.	1.9	222
52	Interannual variation of soil respiration in two New England forests. <i>Global Biogeochemical Cycles</i> , 2001, 15, 337-350.	1.9	220
53	Global soil nitrous oxide emissions since the preindustrial era estimated by an ensemble of terrestrial biosphere models: Magnitude, attribution, and uncertainty. <i>Global Change Biology</i> , 2019, 25, 640-659.	4.2	214
54	Seasonality of temperate forest photosynthesis and daytime respiration. <i>Nature</i> , 2016, 534, 680-683.	13.7	196

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55	Distinguishing between Nitrification and Denitrification as Sources of Gaseous Nitrogen Production in Soil. <i>Applied and Environmental Microbiology</i> , 1986, 52, 1280-1286.	1.4	194
56	A comparison of manual and automated systems for soil CO ₂ flux measurements: trade-offs between spatial and temporal resolution. <i>Journal of Experimental Botany</i> , 2003, 54, 891-899.	2.4	193
57	Drying and Wetting Effects on Carbon Dioxide Release from Organic Horizons. <i>Soil Science Society of America Journal</i> , 2003, 67, 1888-1896.	1.2	192
58	Stoichiometric patterns in foliar nutrient resorption across multiple scales. <i>New Phytologist</i> , 2012, 196, 173-180.	3.5	190
59	Soil moisture depletion under simulated drought in the Amazon: impacts on deep root uptake. <i>New Phytologist</i> , 2010, 187, 592-607.	3.5	181
60	A distinct seasonal pattern of the ratio of soil respiration to total ecosystem respiration in a spruce-dominated forest. <i>Global Change Biology</i> , 2006, 12, 230-239.	4.2	170
61	Site and temporal variation of soil respiration in European beech, Norway spruce, and Scots pine forests. <i>Global Change Biology</i> , 2002, 8, 1205-1216.	4.2	167
62	Classifying successional forests using Landsat spectral properties and ecological characteristics in eastern Amazonia. <i>Remote Sensing of Environment</i> , 2003, 87, 470-481.	4.6	165
63	Coordinated approaches to quantify long-term ecosystem dynamics in response to global change. <i>Global Change Biology</i> , 2011, 17, 843-854.	4.2	165
64	Gas diffusivity and production of CO ₂ in deep soils of the eastern Amazon. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 1995, 47, 550-565.	0.8	163
65	Environmental Parameters Regulating Gaseous Nitrogen Losses from Two Forested Ecosystems via Nitrification and Denitrification. <i>Applied and Environmental Microbiology</i> , 1986, 52, 1287-1292.	1.4	163
66	Using model-data fusion to interpret past trends, and quantify uncertainties in future projections, of terrestrial ecosystem carbon cycling. <i>Global Change Biology</i> , 2012, 18, 2555-2569.	4.2	161
67	Testing the Hole-in-the-Pipe Model of nitric and nitrous oxide emissions from soils using the TRAGNET Database. <i>Global Biogeochemical Cycles</i> , 2000, 14, 1035-1043.	1.9	158
68	Rapid abiotic transformation of nitrate in an acid forest soil. <i>Biogeochemistry</i> , 2001, 54, 131-146.	1.7	157
69	The potential ecological costs and cobenefits of REDD: a critical review and case study from the Amazon region. <i>Global Change Biology</i> , 2009, 15, 2803-2824.	4.2	157
70	Soil emissions of nitric oxide in a seasonally dry tropical forest of Mexico. <i>Journal of Geophysical Research</i> , 1991, 96, 15439-15445.	3.3	156
71	Estimating parameters of a forest ecosystem C model with measurements of stocks and fluxes as joint constraints. <i>Oecologia</i> , 2010, 164, 25-40.	0.9	153
72	Carbon dioxide and nitrogenous gases in the soil atmosphere. <i>Journal of Geochemical Exploration</i> , 1990, 38, 13-41.	1.5	145

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73	Effects of an experimental drought and recovery on soil emissions of carbon dioxide, methane, nitrous oxide, and nitric oxide in a moist tropical forest. <i>Global Change Biology</i> , 2008, 14, 2582-2590.	4.2	145
74	Nitrogen Oxide Fluxes and Nitrogen Cycling during Postagricultural Succession and Forest Fertilization in the Humid Tropics. <i>Ecosystems</i> , 2001, 4, 67-84.	1.6	141
75	Soil Water Content and the Ratio of Nitrous Oxide to Nitric Oxide Emitted from Soil. , 1993, , 369-386.		141
76	The Millennial model: in search of measurable pools and transformations for modeling soil carbon in the new century. <i>Biogeochemistry</i> , 2018, 137, 51-71.	1.7	139
77	NUTRIENT LOSS AND REDISTRIBUTION AFTER FOREST CLEARING ON A HIGHLY WEATHERED SOIL IN AMAZONIA. , 2004, 14, 177-199.		135
78	Vertical partitioning of CO ₂ production within a temperate forest soil. <i>Global Change Biology</i> , 2006, 12, 944-956.	4.2	135
79	Effect of summer throughfall exclusion, summer drought, and winter snow cover on methane fluxes in a temperate forest soil. <i>Soil Biology and Biochemistry</i> , 2006, 38, 1388-1395.	4.2	134
80	Gas diffusivity and production of CO ₂ in deep soils of the eastern Amazon. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2022, 47, 550.	0.8	132
81	ECOLOGICAL RESEARCH IN THE LARGE-SCALE BIOSPHERE“ ATMOSPHERE EXPERIMENT IN AMAZONIA: EARLY RESULTS. , 2004, 14, 3-16.		130
82	Changes in Canopy Processes Following Whole-Forest Canopy Nitrogen Fertilization of a Mature Spruce-Hemlock Forest. <i>Ecosystems</i> , 2007, 10, 1133-1147.	1.6	129
83	Climate change impacts of US reactive nitrogen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 7671-7675.	3.3	126
84	Control of cation concentrations in stream waters by surface soil processes in an Amazonian watershed. <i>Nature</i> , 2001, 410, 802-805.	13.7	125
85	Isotopic variability of N ₂ O emissions from tropical forest soils. <i>Global Biogeochemical Cycles</i> , 2000, 14, 525-535.	1.9	124
86	Assessing available carbon: Comparison of techniques across selected forest soils. <i>Communications in Soil Science and Plant Analysis</i> , 1987, 18, 45-64.	0.6	122
87	INFLUENCE OF LEAF-CUTTING ANT NESTS ON SECONDARY FOREST GROWTH AND SOIL PROPERTIES IN AMAZONIA. <i>Ecology</i> , 2003, 84, 1265-1276.	1.5	122
88	More Food, Low Pollution (Mo Fo Lo Po): A Grand Challenge for the 21st Century. <i>Journal of Environmental Quality</i> , 2015, 44, 305-311.	1.0	122
89	A World of Cobenefits: Solving the Global Nitrogen Challenge. <i>Earth's Future</i> , 2019, 7, 865-872.	2.4	122
90	Comparing simple respiration models for eddy flux and dynamic chamber data. <i>Agricultural and Forest Meteorology</i> , 2006, 141, 219-234.	1.9	120

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91	Nutrients in synergy. <i>Nature</i> , 2007, 449, 1000-1001.	13.7	115
92	Short-term soil respiration and nitrogen immobilization response to nitrogen applications in control and nitrogen-enriched temperate forests. <i>Forest Ecology and Management</i> , 2004, 196, 57-70.	1.4	114
93	Legacy of fire slows carbon accumulation in Amazonian forest regrowth. <i>Frontiers in Ecology and the Environment</i> , 2005, 3, 365-369.	1.9	111
94	THE ENIGMA OF PROGRESS IN DENITRIFICATION RESEARCH. , 2006, 16, 2057-2063.		110
95	Quantification of global and national nitrogen budgets for crop production. <i>Nature Food</i> , 2021, 2, 529-540.	6.2	108
96	Soil Carbon stocks and their rates of accumulation and loss in a boreal forest landscape. <i>Global Biogeochemical Cycles</i> , 1998, 12, 687-701.	1.9	106
97	Diel patterns of autotrophic and heterotrophic respiration among phenological stages. <i>Global Change Biology</i> , 2013, 19, 1151-1159.	4.2	106
98	Soil respiration at mean annual temperature predicts annual total across vegetation types and biomes. <i>Biogeosciences</i> , 2010, 7, 2147-2157.	1.3	99
99	Biotic Feedbacks in the Warming of the Earth. <i>Climatic Change</i> , 1998, 40, 495-518.	1.7	98
100	Globally significant changes in biological processes of the Amazon Basin: results of the Large-scale Biosphere-Atmosphere Experiment. <i>Global Change Biology</i> , 2004, 10, 519-529.	4.2	96
101	Quantifying Nutrient Budgets for Sustainable Nutrient Management. <i>Global Biogeochemical Cycles</i> , 2020, 34, e2018GB006060.	1.9	96
102	The role of nitrogen in climate change and the impacts of nitrogen-climate interactions in the United States: foreword to thematic issue. <i>Biogeochemistry</i> , 2013, 114, 1-10.	1.7	95
103	A conceptual and practical approach to data quality and analysis procedures for high-frequency soil respiration measurements. <i>Functional Ecology</i> , 2008, 22, 1000-1007.	1.7	94
104	High temporal frequency measurements of greenhouse gas emissions from soils. <i>Biogeosciences</i> , 2014, 11, 2709-2720.	1.3	92
105	Direct extraction of microbial biomass nitrogen from forest and grassland soils of california. <i>Soil Biology and Biochemistry</i> , 1989, 21, 773-778.	4.2	90
106	An integrated greenhouse gas assessment of an alternative to slash-and-burn agriculture in eastern Amazonia. <i>Global Change Biology</i> , 2008, 14, 998-1007.	4.2	89
107	The Susceptibility of Southeastern Amazon Forests to Fire: Insights from a Large-Scale Burn Experiment. <i>BioScience</i> , 2015, 65, 893-905.	2.2	89
108	Regional application of an ecosystem production model for studies of biogeochemistry in Brazilian Amazonia. <i>Global Change Biology</i> , 1998, 4, 315-333.	4.2	87

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109	CO ₂ flux from soil in pastures and forests in southwestern Amazonia. <i>Global Change Biology</i> , 2004, 10, 833-843.	4.2	87
110	Soil carbon dynamics in regrowing forest of eastern Amazonia. <i>Global Change Biology</i> , 1999, 5, 693-702.	4.2	85
111	Moisture and substrate availability constrain soil trace gas fluxes in an eastern Amazonian regrowth forest. <i>Global Biogeochemical Cycles</i> , 2004, 18, n/a-n/a.	1.9	83
112	Soil respiration in a northeastern US temperate forest: a 22-year synthesis. <i>Ecosphere</i> , 2013, 4, 1-28.	1.0	83
113	Distribution of nitrogen-15 tracers applied to the canopy of a mature spruce-hemlock stand, Howland, Maine, USA. <i>Oecologia</i> , 2009, 160, 589-599.	0.9	80
114	Three scales of temporal resolution from automated soil respiration measurements. <i>Agricultural and Forest Meteorology</i> , 2009, 149, 2012-2021.	1.9	76
115	Rate my data: quantifying the value of ecological data for the development of models of the terrestrial carbon cycle. <i>Ecological Applications</i> , 2013, 23, 273-286.	1.8	74
116	Watershed responses to Amazon soya bean cropland expansion and intensification. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2013, 368, 20120425.	1.8	71
117	Estimating regional carbon stocks and spatially covarying edaphic factors using soil maps at three scales. <i>Biogeochemistry</i> , 1993, 22, 107-131.	1.7	70
118	Former land-use and tree species affect nitrogen oxide emissions from a tropical dry forest. <i>Oecologia</i> , 2002, 130, 297-308.	0.9	68
119	Global mapping of crop-specific emission factors highlights hotspots of nitrous oxide mitigation. <i>Nature Food</i> , 2021, 2, 886-893.	6.2	68
120	Carbon budget of the Harvard Forest Long-Term Ecological Research site: pattern, process, and response to global change. <i>Ecological Monographs</i> , 2020, 90, e01423.	2.4	67
121	Uncertain sinks in the shrubs. <i>Nature</i> , 2002, 418, 593-594.	13.7	64
122	Sources of nitrous oxide production following wetting of dry soil. <i>FEMS Microbiology Ecology</i> , 1991, 8, 117-124.	1.3	63
123	Nitrogen and phosphorus additions negatively affect tree species diversity in tropical forest regrowth trajectories. <i>Ecology</i> , 2010, 91, 2121-2131.	1.5	63
124	Quantitative assessment of agricultural sustainability reveals divergent priorities among nations. <i>One Earth</i> , 2021, 4, 1262-1277.	3.6	63
125	Using $\delta^{13}\text{C}$ to study the relationships between soil CO ₂ efflux and soil respiration. <i>Biogeosciences</i> , 2015, 12, 2089-2099.	1.3	62
126	A big-microsite framework for soil carbon modeling. <i>Global Change Biology</i> , 2014, 20, 3610-3620.	4.2	60

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127	Foundation species loss affects vegetation structure more than ecosystem function in a northeastern USA forest. <i>PeerJ</i> , 2013, 1, e41.	0.9	60
128	Deep soils modify environmental consequences of increased nitrogen fertilizer use in intensifying Amazon agriculture. <i>Scientific Reports</i> , 2018, 8, 13478.	1.6	56
129	The Economic and Environmental Consequences of Implementing Nitrogen-Efficient Technologies and Management Practices in Agriculture. <i>Journal of Environmental Quality</i> , 2015, 44, 312-324.	1.0	55
130	Representative concentration pathways and mitigation scenarios for nitrous oxide. <i>Environmental Research Letters</i> , 2012, 7, 024005.	2.2	52
131	Impacts of human alteration of the nitrogen cycle in the US on radiative forcing. <i>Biogeochemistry</i> , 2013, 114, 25-40.	1.7	51
132	COSORE: A community database for continuous soil respiration and other soil-atmosphere greenhouse gas flux data. <i>Global Change Biology</i> , 2020, 26, 7268-7283.	4.2	50
133	Roads as nitrogen deposition hot spots. <i>Biogeochemistry</i> , 2013, 114, 149-163.	1.7	49
134	Different quantification approaches for nitrogen use efficiency lead to divergent estimates with varying advantages. <i>Nature Food</i> , 2021, 2, 241-245.	6.2	49
135	Spatial variation in vegetation structure coupled to plant available water determined by two-dimensional soil resistivity profiling in a Brazilian savanna. <i>Oecologia</i> , 2007, 153, 417-430.	0.9	48
136	Nitrogen-induced terrestrial eutrophication: cascading effects and impacts on ecosystem services. <i>Ecosphere</i> , 2017, 8, e01877.	1.0	48
137	Measurement of Nitrous Oxide Dissolved in Soil Solution. <i>Soil Science Society of America Journal</i> , 1988, 52, 1201-1203.	1.2	47
138	Soil nitrogen cycling and nitrogen oxide emissions along a pasture chronosequence in the humid tropics of Costa Rica. <i>Soil Biology and Biochemistry</i> , 1999, 31, 387-394.	4.2	47
139	Spatial covariation of soil organic carbon, clay content, and drainage class at a regional scale. <i>Landscape Ecology</i> , 1995, 10, 349-362.	1.9	46
140	Pasture soils as carbon sink. <i>Nature</i> , 1995, 376, 472-473.	13.7	46
141	Phosphorus cycling in a small watershed in the Brazilian Cerrado: impacts of frequent burning. <i>Biogeochemistry</i> , 2011, 105, 105-118.	1.7	46
142	Dissolved CO ₂ in small catchment streams of eastern Amazonia: A minor pathway of terrestrial carbon loss. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	43
143	Prolonged tropical forest degradation due to compounding disturbances: Implications for CO ₂ and H ₂ O fluxes. <i>Global Change Biology</i> , 2019, 25, 2855-2868.	4.2	43
144	Nitrous Oxide Emission Controls and Inorganic Nitrogen Dynamics in Fertilized Tropical Agricultural Soils. <i>Soil Science Society of America Journal</i> , 1996, 60, 1145-1152.	1.2	42

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145	Unexpected results of a pilot throughfall exclusion experiment on soil emissions of CO ₂ , CH ₄ , N ₂ O, and NO in eastern Amazonia. <i>Biology and Fertility of Soils</i> , 2002, 36, 102-108.	2.3	42
146	Leaf-cutting ant (<i>Atta Sexdens</i>) and nutrient cycling: deep soil inorganic nitrogen stocks, mineralization, and nitrification in Eastern Amazonia. <i>Soil Biology and Biochemistry</i> , 2003, 35, 1219-1222.	4.2	42
147	Land-use effects on the chemical attributes of low-order streams in the eastern Amazon. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	41
148	Long-term changes in forest carbon under temperature and nitrogen amendments in a temperate northern hardwood forest. <i>Global Change Biology</i> , 2013, 19, 2389-2400.	4.2	41
149	Fertile forest experiments. <i>Nature</i> , 2001, 411, 431-433.	13.7	40
150	The effects of drought on Amazonian rain forests. <i>Geophysical Monograph Series</i> , 2009, , 429-449.	0.1	39
151	Merging a mechanistic enzymatic model of soil heterotrophic respiration into an ecosystem model in two AmeriFlux sites of northeastern USA. <i>Agricultural and Forest Meteorology</i> , 2018, 252, 155-166.	1.9	39
152	Ecosystem modeling and dynamic effects of deforestation on trace gas fluxes in Amazon tropical forests. <i>Forest Ecology and Management</i> , 2001, 152, 97-117.	1.4	38
153	Processes for Production and Consumption of Gaseous Nitrogen Oxides in Soil. <i>ASA Special Publication</i> , 0, , 79-93.	0.8	38
154	Soil heterogeneity can mask the effects of ammonium availability on nitrification. <i>Soil Biology and Biochemistry</i> , 1994, 26, 1449-1453.	4.2	37
155	Contribution of soil respiration in tropical, temperate, and boreal forests to the ¹⁸ O enrichment of atmospheric O ₂ . <i>Global Biogeochemical Cycles</i> , 2003, 17, n/a-n/a.	1.9	36
156	A parsimonious modular approach to building a mechanistic belowground carbon and nitrogen model. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 2418-2434.	1.3	36
157	Simultaneous numerical representation of soil microsite production and consumption of carbon dioxide, methane, and nitrous oxide using probability distribution functions. <i>Global Change Biology</i> , 2020, 26, 200-218.	4.2	36
158	Nitrogen in Runoff from Residential Roads in a Coastal Area. <i>Water, Air, and Soil Pollution</i> , 2010, 210, 3-13.	1.1	35
159	Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems. <i>Global Change Biology</i> , 2012, 18, 1956-1970.	4.2	35
160	Interactions between repeated fire, nutrients, and insect herbivores affect the recovery of diversity in the southern Amazon. <i>Oecologia</i> , 2013, 172, 219-229.	0.9	35
161	Partitioning soil respiration: quantifying the artifacts of the trenching method. <i>Biogeochemistry</i> , 2018, 140, 53-63.	1.7	34
162	Fates and Use Efficiency of Nitrogen Fertilizer in Maize Cropping Systems and Their Responses to Technologies and Management Practices: A Global Analysis on Field ¹⁵ N Tracer Studies. <i>Earth's Future</i> , 2021, 9, e2020EF001514.	2.4	34

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163	Dissolved rainfall inputs and streamwater outputs in an undisturbed watershed on highly weathered soils in the Brazilian cerrado. <i>Hydrological Processes</i> , 2006, 20, 2615-2639.	1.1	33
164	MODEL ESTIMATES OF REGIONAL NITRIC OXIDE EMISSIONS FROM SOILS OF THE SOUTHEASTERN UNITED STATES. , 1998, 8, 748-759.		32
165	Iron interference in the quantification of nitrate in soil extracts and its effect on hypothesized abiotic immobilization of nitrate. <i>Biogeochemistry</i> , 2008, 90, 65-73.	1.7	31
166	Modeling the effects of throughfall reduction on soil water content in a Brazilian Oxisol under a moist tropical forest. <i>Water Resources Research</i> , 2007, 43, .	1.7	30
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