

Eric A Davidson

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

217
papers

34,817
citations

92
h-index

186
g-index

248
ext. papers

39,179
ext. citations

9.7
avg, IF

7.37
L-index

#	Paper	IF	Citations
217	Effects of Drainage Water Management in a Corn/Soy Rotation on Soil N ₂ O and CH ₄ Fluxes. <i>Nitrogen</i> , 2022 , 3, 128-148	1.8	1
216	Magnitude and Uncertainty of Nitrous Oxide Emissions From North America Based on Bottom-Up and Top-Down Approaches: Informing Future Research and National Inventories. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL095264	4.9	1
215	Concurrent Measurements of Soil and Ecosystem Respiration in a Mature Eucalypt Woodland: Advantages, Lessons, and Questions. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021 , 126, e2020JG006221	3.7	1
214	Different quantification approaches for nitrogen use efficiency lead to divergent estimates with varying advantages. <i>Nature Food</i> , 2021 , 2, 241-245	14.4	10
213	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	7.9	8
212	Equitable Exchange: A Framework for Diversity and Inclusion in the Geosciences. <i>AGU Advances</i> , 2021 , 2, e2020AV000359	5.4	8
211	The increasing global environmental consequences of a weakening US-China crop trade relationship. <i>Nature Food</i> , 2021 , 2, 578-586	14.4	1
210	Multi-Decadal Carbon Cycle Measurements Indicate Resistance to External Drivers of Change at the Howland Forest AmeriFlux Site. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021 , 126, e2021JG006276	3.7	1
209	Quantitative assessment of agricultural sustainability reveals divergent priorities among nations. <i>One Earth</i> , 2021 , 4, 1262-1277	8.1	5
208	Quantifying Nutrient Budgets for Sustainable Nutrient Management. <i>Global Biogeochemical Cycles</i> , 2020 , 34, e2018GB006060	5.9	39
207	The INI North American Regional Nitrogen Center: 2011-2015 Nitrogen Activities in North America 2020 , 489-497		1
206	Global Nitrogen and Phosphorus Pollution 2020 , 421-431		1
205	A comprehensive quantification of global nitrous oxide sources and sinks. <i>Nature</i> , 2020 , 586, 248-256	50.4	270
204	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	11.4	22
203	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	9	26
202	Quantifying On-Farm Nitrous Oxide Emission Reductions in Food Supply Chains. <i>Earth's Future</i> , 2020 , 8, e2020EF001504	7.9	11
201	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	11.4	11

200	Biogeochemical recuperation of lowland tropical forest during succession. <i>Ecology</i> , 2019 , 100, e02641	4.6	10
199	Prolonged tropical forest degradation due to compounding disturbances: Implications for CO and H O fluxes. <i>Global Change Biology</i> , 2019 , 25, 2855-2868	11.4	27
198	Six years of ecosystem-atmosphere greenhouse gas fluxes measured in a sub-boreal forest. <i>Scientific Data</i> , 2019 , 6, 117	8.2	15
197	A world of co-benefits: Solving the global nitrogen challenge. <i>Earth's Future</i> , 2019 , 7, 1-8	7.9	61
196	Acceleration of global N ₂ O emissions seen from two decades of atmospheric inversion. <i>Nature Climate Change</i> , 2019 , 9, 993-998	21.4	106
195	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	11.4	111
194	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	5.8	27
193	Nitrogen Fixation Inputs in Pasture and Early Successional Forest in the Brazilian Amazon Region: Evidence From a Claybox Mesocosm Study. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018 , 123, 712-721	3.7	10
192	Soil Carbon Dynamics in Soybean Cropland and Forests in Mato Grosso, Brazil. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018 , 123, 18-31	3.7	14
191	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	3.8	85
190	Nitrogen Mineralization, Immobilization, and Nitrification. <i>Soil Science Society of America Book Series</i> , 2018 , 985-1018		159
189	Partitioning soil respiration: quantifying the artifacts of the trenching method. <i>Biogeochemistry</i> , 2018 , 140, 53-63	3.8	20
188	Deep soils modify environmental consequences of increased nitrogen fertilizer use in intensifying Amazon agriculture. <i>Scientific Reports</i> , 2018 , 8, 13478	4.9	37
187	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	3.7	25
186	Nitrogen-induced terrestrial eutrophication: cascading effects and impacts on ecosystem services. <i>Ecosphere</i> , 2017 , 8, e01877	3.1	32
185	Constrained partitioning of autotrophic and heterotrophic respiration reduces model uncertainties of forest ecosystem carbon fluxes but not stocks. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016 , 121, 2476-2492	3.7	23
184	Key ecological responses to nitrogen are altered by climate change. <i>Nature Climate Change</i> , 2016 , 6, 836-843	21.4	159
183	Isotopically constrained soil carbon and nitrogen budgets in a soybean field chronosequence in the Brazilian Amazon region. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016 , 121, 2520-2529	3.7	9

182	Seasonality of temperate forest photosynthesis and daytime respiration. <i>Nature</i> , 2016 , 534, 680-3	50.4	147
181	Toward more realistic projections of soil carbon dynamics by Earth system models. <i>Global Biogeochemical Cycles</i> , 2016 , 30, 40-56	5.9	251
180	Nutrients in the nexus. <i>Journal of Environmental Studies and Sciences</i> , 2016 , 6, 25-38	0.9	22
179	Biogeochemistry: Projections of the soil-carbon deficit. <i>Nature</i> , 2016 , 540, 47-48	50.4	6
178	The Susceptibility of Southeastern Amazon Forests to Fire: Insights from a Large-Scale Burn Experiment. <i>BioScience</i> , 2015 , 65, 893-905	5.7	66
177	Managing nitrogen for sustainable development. <i>Nature</i> , 2015 , 528, 51-9	50.4	971
176	The economic and environmental consequences of implementing nitrogen-efficient technologies and management practices in agriculture. <i>Journal of Environmental Quality</i> , 2015 , 44, 312-24	3.4	35
175	More food, low pollution (mo fo lo Po): a grand challenge for the 21st century. <i>Journal of Environmental Quality</i> , 2015 , 44, 305-11	3.4	86
174	Explicitly representing soil microbial processes in Earth system models. <i>Global Biogeochemical Cycles</i> , 2015 , 29, 1782-1800	5.9	197
173	Using O ₂ to study the relationships between soil CO ₂ efflux and soil respiration. <i>Biogeosciences</i> , 2015 , 12, 2089-2099	4.6	45
172	Processes for Production and Consumption of Gaseous Nitrogen Oxides in Soil. <i>ASA Special Publication</i> , 2015 , 79-93	1.1	16
171	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	7.1	178
170	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, 6347-52	11.5	438
169	A big-microsite framework for soil carbon modeling. <i>Global Change Biology</i> , 2014 , 20, 3610-20	11.4	46
168	N-related greenhouse gases in North America: innovations for a sustainable future. <i>Current Opinion in Environmental Sustainability</i> , 2014 , 9-10, 1-8	7.2	22
167	Modeling the impact of net primary production dynamics on post-disturbance Amazon savannization. <i>Anais Da Academia Brasileira De Ciencias</i> , 2014 , 86, 621-632	1.4	5
166	High temporal frequency measurements of greenhouse gas emissions from soils. <i>Biogeosciences</i> , 2014 , 11, 2709-2720	4.6	74
165	Nitrogen Deposition Effects on Ecosystem Services and Interactions with other Pollutants and Climate Change 2014 , 493-505		5

164	Inventories and scenarios of nitrous oxide emissions. <i>Environmental Research Letters</i> , 2014 , 9, 105012	6.2	178
163	The Effects of Atmospheric Nitrogen Deposition on Terrestrial and Freshwater Biodiversity 2014 , 465-480		7
162	Interactions between repeated fire, nutrients, and insect herbivores affect the recovery of diversity in the southern Amazon. <i>Oecologia</i> , 2013 , 172, 219-29	2.9	26
161	Roads as nitrogen deposition hot spots. <i>Biogeochemistry</i> , 2013 , 114, 149-163	3.8	39
160	Impacts of human alteration of the nitrogen cycle in the US on radiative forcing. <i>Biogeochemistry</i> , 2013 , 114, 25-40	3.8	41
159	Watershed responses to Amazon soya bean cropland expansion and intensification. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2013 , 368, 20120425	5.8	55
158	Rate my data: quantifying the value of ecological data for the development of models of the terrestrial carbon cycle 2013 , 23, 273-86		63
157	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	3.8	79
156	Diel patterns of autotrophic and heterotrophic respiration among phenological stages. <i>Global Change Biology</i> , 2013 , 19, 1151-9	11.4	85
155	Long-term changes in forest carbon under temperature and nitrogen amendments in a temperate northern hardwood forest. <i>Global Change Biology</i> , 2013 , 19, 2389-400	11.4	37
154	Soil respiration in a northeastern US temperate forest: a 22-year synthesis. <i>Ecosphere</i> , 2013 , 4, art140	3.1	61
153	Foundation species loss affects vegetation structure more than ecosystem function in a northeastern USA forest. <i>PeerJ</i> , 2013 , 1, e41	3.1	53
152	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	11.4	135
151	Stoichiometric patterns in foliar nutrient resorption across multiple scales. <i>New Phytologist</i> , 2012 , 196, 173-180	9.8	150
150	Soil and tree response to P fertilization in a secondary tropical forest supported by an Oxisol. <i>Biology and Fertility of Soils</i> , 2012 , 48, 665-678	6.1	7
149	Predicting decadal trends and transient responses of radiocarbon storage and fluxes in a temperate forest soil. <i>Biogeosciences</i> , 2012 , 9, 3013-3028	4.6	21
148	Global agriculture and nitrous oxide emissions. <i>Nature Climate Change</i> , 2012 , 2, 410-416	21.4	542
147	The Amazon basin in transition. <i>Nature</i> , 2012 , 481, 321-8	50.4	729

146	The Dual Arrhenius and Michaelis-Menten kinetics model for decomposition of soil organic matter at hourly to seasonal time scales. <i>Global Change Biology</i> , 2012 , 18, 371-384	11.4	275
145	Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems. <i>Global Change Biology</i> , 2012 , 18, 1956-1970	11.4	30
144	Representative concentration pathways and mitigation scenarios for nitrous oxide. <i>Environmental Research Letters</i> , 2012 , 7, 024005	6.2	43
143	Climate change impacts of US reactive nitrogen. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 7671-5	11.5	102
142	Equivalent water thickness in savanna ecosystems: MODIS estimates based on ground and EO-1 Hyperion data. <i>International Journal of Remote Sensing</i> , 2011 , 32, 7423-7440	3.1	15
141	Coordinated approaches to quantify long-term ecosystem dynamics in response to global change. <i>Global Change Biology</i> , 2011 , 17, 843-854	11.4	144
140	Temperature and soil organic matter decomposition rates: synthesis of current knowledge and a way forward. <i>Global Change Biology</i> , 2011 , 17, 3392-3404	11.4	883
139	Phosphorus cycling in a small watershed in the Brazilian Cerrado: impacts of frequent burning. <i>Biogeochemistry</i> , 2011 , 105, 105-118	3.8	37
138	Land-Water interactions in the amazon. <i>Biogeochemistry</i> , 2011 , 105, 1-5	3.8	10
137	Soil moisture depletion under simulated drought in the Amazon: impacts on deep root uptake. <i>New Phytologist</i> , 2010 , 187, 592-607	9.8	145
136	Nonfrontier Deforestation in the Eastern Amazon. <i>Earth Interactions</i> , 2010 , 14, 1-15	1.5	12
135	Permafrost and wetland carbon stocks. <i>Science</i> , 2010 , 330, 1176-7; author reply 1177	33.3	6
134	Nitrogen and phosphorus additions negatively affect tree species diversity in tropical forest regrowth trajectories. <i>Ecology</i> , 2010 , 91, 2121-31	4.6	50
133	Global assessment of nitrogen deposition effects on terrestrial plant diversity: a synthesis 2010 , 20, 30-59		1624
132	Land-use effects on the chemical attributes of low-order streams in the eastern Amazon. <i>Journal of Geophysical Research</i> , 2010 , 115,		34
131	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,		32
130	Soil respiration at mean annual temperature predicts annual total across vegetation types and biomes. <i>Biogeosciences</i> , 2010 , 7, 2147-2157	4.6	87
129	Estimating parameters of a forest ecosystem C model with measurements of stocks and fluxes as joint constraints. <i>Oecologia</i> , 2010 , 164, 25-40	2.9	129

128	Nitrogen in Runoff from Residential Roads in a Coastal Area. <i>Water, Air, and Soil Pollution</i> , 2010 , 210, 3-13	2.6	30
127	Distribution of nitrogen-15 tracers applied to the canopy of a mature spruce-hemlock stand, Howland, Maine, USA. <i>Oecologia</i> , 2009 , 160, 589-99	2.9	62
126	New approaches to modeling denitrification. <i>Biogeochemistry</i> , 2009 , 93, 1-5	3.8	24
125	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	11.4	136
124	The contribution of manure and fertilizer nitrogen to atmospheric nitrous oxide since 1860. <i>Nature Geoscience</i> , 2009 , 2, 659-662	18.3	671
123	Linking woody species diversity with plant available water at a landscape scale in a Brazilian savanna. <i>Journal of Vegetation Science</i> , 2009 , 20, 826-835	3.1	7
122	Three scales of temporal resolution from automated soil respiration measurements. <i>Agricultural and Forest Meteorology</i> , 2009 , 149, 2012-2021	5.8	68
121	Nutrient Limitations to Secondary Forest Regrowth. <i>Geophysical Monograph Series</i> , 2009 , 293-297	1.1	5
120	Is Temporal Variation of Soil Respiration Linked to the Phenology of Photosynthesis? 2009 , 187-199		19
119	The Maintenance of Soil Fertility in Amazonian Managed Systems. <i>Geophysical Monograph Series</i> , 2009 , 299-309	1.1	7
118	Soil Carbon Dynamics. <i>Geophysical Monograph Series</i> , 2009 , 429-449	1.1	34
117	The Effects of Drought on Amazonian Rain Forests. <i>Geophysical Monograph Series</i> , 2009 , 409-428	1.1	8
116	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	5.6	83
115	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	11.4	81
114	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	11.4	117
113	Objective indicators of pasture degradation from spectral mixture analysis of Landsat imagery. <i>Journal of Geophysical Research</i> , 2008 , 113, n/a-n/a		16
112	Estimating Seasonal Changes in Volumetric Soil Water Content at Landscape Scales in a Savanna Ecosystem Using Two-Dimensional Resistivity Profiling. <i>Earth Interactions</i> , 2008 , 12, 1-25	1.5	18
111	Drought effects on litterfall, wood production and belowground carbon cycling in an Amazon forest: results of a throughfall reduction experiment. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2008 , 363, 1839-48	5.8	251

110	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	3.8	31
109	Abiotic immobilization of nitrate in two soils of relic <i>Abies pinsapo</i> -fir forests under Mediterranean climate. <i>Biogeochemistry</i> , 2008 , 91, 1-11	3.8	15
108	Fluxes of CH ₄ , CO ₂ , NO, and N ₂ O in an improved fallow agroforestry system in eastern Amazonia. <i>Agriculture, Ecosystems and Environment</i> , 2008 , 126, 113-121	5.7	24
107	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,	5.4	27
106	Recuperation of nitrogen cycling in Amazonian forests following agricultural abandonment. <i>Nature</i> , 2007 , 447, 995-8	50.4	321
105	Vertical partitioning of CO ₂ production within a temperate forest soil. <i>Global Change Biology</i> , 2007 , 13, 922-922	11.4	2
104	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, 417-30	2.9	40
103	Changes in Canopy Processes Following Whole-Forest Canopy Nitrogen Fertilization of a Mature Spruce-Hemlock Forest. <i>Ecosystems</i> , 2007 , 10, 1133-1147	3.9	110
102	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	7.5	115
101	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	3.3	29
100	The enigma of progress in denitrification research 2006 , 16, 2057-63		95
99	Comparing simple respiration models for eddy flux and dynamic chamber data. <i>Agricultural and Forest Meteorology</i> , 2006 , 141, 219-234	5.8	110
98	CO ₂ -driven cation leaching after tropical forest clearing. <i>Journal of Geochemical Exploration</i> , 2006 , 88, 214-219	3.8	6
97	Denitrification Across Landscapes and Waterscapes ¹ 2006 , 16, 2055-2056		5
96	Effects of experimental drought on soil respiration and radiocarbon efflux from a temperate forest soil. <i>Global Change Biology</i> , 2006 , 12, 177-193	11.4	209
95	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	11.4	151
94	On the variability of respiration in terrestrial ecosystems: moving beyond Q ₁₀ . <i>Global Change Biology</i> , 2006 , 12, 154-164	11.4	889
93	Vertical partitioning of CO ₂ production within a temperate forest soil. <i>Global Change Biology</i> , 2006 , 12, 944-956	11.4	119

92	Temperature sensitivity of soil carbon decomposition and feedbacks to climate change. <i>Nature</i> , 2006 , 440, 165-73	50.4	4106
91	Legacy of fire slows carbon accumulation in Amazonian forest regrowth. <i>Frontiers in Ecology and the Environment</i> , 2005 , 3, 365-369	5.5	97
90	Deep root function in soil water dynamics in cerrado savannas of central Brazil. <i>Functional Ecology</i> , 2005 , 19, 574-581	5.6	208
89	Legacy of fire slows carbon accumulation in Amazonian forest regrowth 2005 , 3, 365		1
88	ECOLOGICAL RESEARCH IN THE LARGE-SCALE BIOSPHERE/ATMOSPHERE EXPERIMENT IN AMAZONIA: EARLY RESULTS 2004 , 14, 3-16		113
87	NITROGEN AND PHOSPHORUS LIMITATION OF BIOMASS GROWTH IN A TROPICAL SECONDARY FOREST 2004 , 14, 150-163		214
86	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	11.4	207
85	Spatial and temporal variability in forest-atmosphere CO ₂ exchange. <i>Global Change Biology</i> , 2004 , 10, 1689-1706	11.4	289
84	CO ₂ flux from soil in pastures and forests in southwestern Amazonia. <i>Global Change Biology</i> , 2004 , 10, 833-843	11.4	72
83	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	11.4	72
82	Changes in Carbon Storage and Net Carbon Exchange One Year After an Initial Shelterwood Harvest at Howland Forest, ME. <i>Environmental Management</i> , 2004 , 33, S9	3.1	22
81	Satellite-based modeling of gross primary production in an evergreen needleleaf forest. <i>Remote Sensing of Environment</i> , 2004 , 89, 519-534	13.2	525
80	Loss of Nutrients from Terrestrial Ecosystems to Streams and the Atmosphere Following Land Use Change in Amazonia. <i>Geophysical Monograph Series</i> , 2004 , 147-158	1.1	20
79	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	5.9	66
78	NUTRIENT LOSS AND REDISTRIBUTION AFTER FOREST CLEARING ON A HIGHLY WEATHERED SOIL IN AMAZONIA 2004 , 14, 177-199		110
77	Chronic nitrogen additions reduce total soil respiration and microbial respiration in temperate forest soils at the Harvard Forest. <i>Forest Ecology and Management</i> , 2004 , 196, 43-56	3.9	349
76	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	3.9	100
75	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, 891-9	7	168

74	Drying and Wetting Effects on Carbon Dioxide Release from Organic Horizons. <i>Soil Science Society of America Journal</i> , 2003 , 67, 1888-1896	2.5	177
73	Classifying successional forests using Landsat spectral properties and ecological characteristics in eastern Amazonia. <i>Remote Sensing of Environment</i> , 2003 , 87, 470-481	13.2	141
72	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	7.5	35
71	A mechanism of abiotic immobilization of nitrate in forest ecosystems: the ferrous wheel hypothesis. <i>Global Change Biology</i> , 2003 , 9, 228-236	11.4	241
70	Contribution of soil respiration in tropical, temperate, and boreal forests to the 18O enrichment of atmospheric O ₂ . <i>Global Biogeochemical Cycles</i> , 2003 , 17, n/a-n/a	5.9	29
69	INFLUENCE OF LEAF-CUTTING ANT NESTS ON SECONDARY FOREST GROWTH AND SOIL PROPERTIES IN AMAZONIA. <i>Ecology</i> , 2003 , 84, 1265-1276	4.6	98
68	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	6.1	37
67	Former land-use and tree species affect nitrogen oxide emissions from a tropical dry forest. <i>Oecologia</i> , 2002 , 130, 297-308	2.9	62
66	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	11.4	140
65	Effects of varying salinity on phytoplankton growth in a low-salinity coastal pond under two nutrient conditions. <i>Biological Bulletin</i> , 2002 , 203, 260-1	1.5	15
64	Nutrient limitation of phytoplankton growth in Vineyard Sound and Oyster Pond, Falmouth, Massachusetts. <i>Biological Bulletin</i> , 2002 , 203, 261-3	1.5	2
63	The effects of partial throughfall exclusion on canopy processes, aboveground production, and biogeochemistry of an Amazon forest. <i>Journal of Geophysical Research</i> , 2002 , 107, LBA 53-1		267
62	Minimizing artifacts and biases in chamber-based measurements of soil respiration. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 21-37	5.8	541
61	Belowground carbon allocation in forests estimated from litterfall and IRGA-based soil respiration measurements. <i>Agricultural and Forest Meteorology</i> , 2002 , 113, 39-51	5.8	224
60	Nitrogen Oxide Fluxes and Nitrogen Cycling during Postagricultural Succession and Forest Fertilization in the Humid Tropics. <i>Ecosystems</i> , 2001 , 4, 67-84	3.9	121
59	The age of fine-root carbon in three forests of the eastern United States measured by radiocarbon. <i>Oecologia</i> , 2001 , 129, 420-429	2.9	217
58	Rapid abiotic transformation of nitrate in an acid forest soil. <i>Biogeochemistry</i> , 2001 , 54, 131-146	3.8	131
57	Control of cation concentrations in stream waters by surface soil processes in an Amazonian watershed. <i>Nature</i> , 2001 , 410, 802-5	50.4	115

56	Interannual variation of soil respiration in two New England forests. <i>Global Biogeochemical Cycles</i> , 2001 , 15, 337-350	5.9	190
55	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	3.9	35
54	Emissions of nitrous oxide and nitric oxide from soils of native and exotic ecosystems of the Amazon and Cerrado regions of Brazil. <i>Scientific World Journal, The</i> , 2001 , 1 Suppl 2, 312-9	2.2	25
53	Soil warming and organic carbon content. <i>Nature</i> , 2000 , 408, 789-90	50.4	328
52	Effects of soil water content on soil respiration in forests and cattle pastures of eastern Amazonia. <i>Biogeochemistry</i> , 2000 , 48, 53-69	3.8	588
51	Soil carbon cycling in a temperate forest: radiocarbon-based estimates of residence times, sequestration rates and partitioning of fluxes. <i>Biogeochemistry</i> , 2000 , 51, 33-69	3.8	425
50	Land-Use Change and Biogeochemical Controls of Methane Fluxes in Soils of Eastern Amazonia. <i>Ecosystems</i> , 2000 , 3, 41-56	3.9	188
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