Adrien C Finzi

List of Publications by Year
in descending order

103 papers	14,155 citations	27035 58 h-index	42259 96 g-index
118 all docs	118 docs citations	118 times ranked	13504 citing authors

#	Article	IF	Citations
1	A review of microplastic impacts on seagrasses, epiphytes, and associated sediment communities. Environmental Pollution, 2022, 303, 119108.	3.7	21
2	Ectomycorrhizal fungi are associated with reduced nitrogen cycling rates in temperate forest soils without corresponding trends in bacterial functional groups. Oecologia, 2021, 196, 863-875.	0.9	9
3	An Integrative Model for Soil Biogeochemistry and Methane Processes: I. Model Structure and Sensitivity Analysis. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2019JG005468.	1.3	11
4	Identifying Data Needed to Reduce Parameter Uncertainty in a Coupled Microbial Soil C and N Decomposition Model. Journal of Geophysical Research G: Biogeosciences, 2021, 126, .	1.3	0
5	Carbon budget of the Harvard Forest Longâ€Term Ecological Research site: pattern, process, and response to global change. Ecological Monographs, 2020, 90, e01423.	2.4	67
6	Microbial carbon use efficiency predicted from genome-scale metabolic models. Nature Communications, 2019, 10, 3568.	5.8	87
7	Roots Mediate the Effects of Snowpack Decline on Soil Bacteria, Fungi, and Nitrogen Cycling in a Northern Hardwood Forest. Frontiers in Microbiology, 2019, 10, 926.	1.5	9
8	The Millennial model: in search of measurable pools and transformations for modeling soil carbon in the new century. Biogeochemistry, 2018, 137, 51-71.	1.7	139
9	Winter soil freeze-thaw cycles lead to reductions in soil microbial biomass and activity not compensated for by soil warming. Soil Biology and Biochemistry, 2018, 116, 39-47.	4.2	98
10	Ecosystem responses to elevated <scp>CO</scp>₂ governed by plantâ€“soil interactions and the cost of nitrogen acquisition. New Phytologist, 2018, 217, 507-522.	3.5	139
11	Changes in photosynthesis and soil moisture drive the seasonal soil respiration-temperature hysteresis relationship. Agricultural and Forest Meteorology, 2018, 259, 184-195.	1.9	65
12	Root exudates increase N availability by stimulating microbial turnover of fast-cycling N pools. Soil Biology and Biochemistry, 2017, 106, 119-128.	4.2	222
13	A parsimonious modular approach to building a mechanistic belowground carbon and nitrogen model. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2418-2434.	1.3	36
14	Deep peat warming increases surface methane and carbon dioxide emissions in a black spruceâ€dominated ombrotrophic bog. Global Change Biology, 2017, 23, 5398-5411.	4.2	52
15	Terrestrial nitrogen cycling in Earth system models revisited. New Phytologist, 2016, 210, 1165-1168.	3.5	35
16	Contrasting effects of winter snowpack and soil frost on growing season microbial biomass and enzyme activity in two mixed-hardwood forests. Biogeochemistry, 2016, 128, 141-154.	1.7	49
17	Reduced snow cover alters rootâ€microbe interactions and decreases nitrification rates in a northern hardwood forest. Ecology, 2016, 97, 3359-3368.	1.5	34
18	Belowground carbon flux links biogeochemical cycles and resourceâ€use efficiency at the global scale. Ecology Letters, 2016, 19, 1419-1428.	3.0	95

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19	Seasonality and partitioning of root allocation to rhizosphere soils in a midlatitude forest. Ecosphere, 2016, 7, e01547.	1.0	33
20	Inverse analysis of coupled carbonâ€“nitrogen cycles against multiple datasets at ambient and elevated CO₂. Journal of Plant Ecology, 2016, 9, 285-295.	1.2	28
21	Multi-criteria evaluation of the suitability of growth functions for modeling remotely sensed phenology. Ecological Modelling, 2016, 323, 123-132.	1.2	16
22	Are aboveâ€•and belowâ€ground phenology in sync?. New Phytologist, 2015, 205, 1054-1061.	3.5	162
23	Rhizosphere processes are quantitatively important components of terrestrial carbon and nutrient cycles. Global Change Biology, 2015, 21, 2082-2094.	4.2	424
24	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.	3.5	378
25	Fungal functioning in a pine forest: evidence from a ¹⁵<scp>N</scp>â€labeled global change experiment. New Phytologist, 2014, 201, 1431-1439.	3.5	37
26	Mycorrhiza-mediated competition between plants and decomposers drives soil carbon storage. Nature, 2014, 505, 543-545.	13.7	743
27	Chronic nitrogen additions suppress decomposition and sequester soil carbon in temperate forests. Biogeochemistry, 2014, 121, 305-316.	1.7	302
28	A bigâ€microsite framework for soil carbon modeling. Global Change Biology, 2014, 20, 3610-3620.	4.2	60
29	Correction factors for dissolved organic carbon extracted from soil, measured using the Mn(III)-pyrophosphate colorimetric method adapted for a microplate reader. Soil Biology and Biochemistry, 2014, 78, 284-287.	4.2	20
30	Fungal carbon sources in a pine forest: evidence from a 13C-labeled global change experiment. Fungal Ecology, 2014, 10, 91-100.	0.7	17
31	Net primary production and soil respiration in New England hemlock forests affected by the hemlock woolly adelgid. Ecosphere, 2014, 5, 1-16.	1.0	24
32	Does elevated CO2 alter silica uptake in trees?. Frontiers in Plant Science, 2014, 5, 793.	1.7	20
33	Field and remotely sensed measures of soil and vegetation carbon and nitrogen across an urbanization gradient in the Boston metropolitan area. Urban Ecosystems, 2013, 16, 593-616.	1.1	32
34	Intentional versus unintentional nitrogen use in the United States: trends, efficiency and implications. Biogeochemistry, 2013, 114, 11-23.	1.7	72
35	Reprint of â€œPlant regulation of microbial enzyme production in situâ€ Soil Biology and Biochemistry, 2013, 56, 49-52.	4.2	5
36	Stoichiometry constrains microbial response to root exudation- insights from a model and a field experiment in a temperate forest. Biogeosciences, 2013, 10, 821-838.	1.3	197

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37	Root carbon inputs to the rhizosphere stimulate extracellular enzyme activity and increase nitrogen availability in temperate forest soils. Biogeochemistry, 2013, 115, 65-76.	1.7	176
38	Seasonal plasticity in the temperature sensitivity of microbial activity in three temperate forest soils. Ecosphere, 2013, 4, 1-21.	1.0	24
39	Soil respiration in a northeastern US temperate forest: a 22â€year synthesis. Ecosphere, 2013, 4, 1-28.	1.0	83
40	Hemlock loss due to the hemlock woolly adelgid does not affect ecosystem C storage but alters its distribution. Ecosphere, 2013, 4, 1-16.	1.0	19
41	Seasonal variation in the temperature sensitivity of proteolytic enzyme activity in temperate forest soils. Journal of Geophysical Research, 2012, 117, .	3.3	46
42	Trenching reduces soil heterotrophic activity in a loblolly pine (Pinus taeda) forest exposed to elevated atmospheric [CO 2] and N fertilization. Agricultural and Forest Meteorology, 2012, 165, 43-52.	1.9	27
43	Inconsistent definitions of â€œurbanâ€•result in different conclusions about the size of urban carbon and nitrogen stocks. Ecological Applications, 2012, 22, 1015-1035.	1.8	89
44	Depleted soil carbon and nitrogen pools beneath impervious surfaces. Environmental Pollution, 2012, 164, 248-251.	3.7	101
45	The effect of experimental warming and precipitation change on proteolytic enzyme activity: positive feedbacks to nitrogen availability are not universal. Global Change Biology, 2012, 18, 2617-2625.	4.2	80
46	Roots and fungi accelerate carbon and nitrogen cycling in forests exposed to elevated CO₂. Ecology Letters, 2012, 15, 1042-1049.	3.0	251
47	Research frontiers in the analysis of coupled biogeochemical cycles. Frontiers in Ecology and the Environment, 2011, 9, 74-80.	1.9	42
48	Introduction to coupled biogeochemical cycles. Frontiers in Ecology and the Environment, 2011, 9, 5-8.	1.9	111
49	Enhanced root exudation induces microbial feedbacks to N cycling in a pine forest under longâ€term CO₂ fumigation. Ecology Letters, 2011, 14, 187-194.	3.0	618
50	Increases in the flux of carbon belowground stimulate nitrogen uptake and sustain the long-term enhancement of forest productivity under elevated CO2. Ecology Letters, 2011, 14, 349-357.	3.0	374
51	Sources of increased N uptake in forest trees growing under elevated CO2: results of a large-scale 15N study. Global Change Biology, 2011, 17, 3338-3350.	4.2	40
52	Carbon and nitrogen dynamics during forest stand development: a global synthesis. New Phytologist, 2011, 190, 977-989.	3.5	221
53	Plant regulation of microbial enzyme production in situ. Soil Biology and Biochemistry, 2011, 43, 2457-2460.	4.2	21
54	Improving biogeochemical knowledge through technological innovation. Frontiers in Ecology and the Environment, 2011, 9, 37-43.	1.9	4

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55	Responses and feedbacks of coupled biogeochemical cycles to climate change: examples from terrestrial ecosystems. Frontiers in Ecology and the Environment, 2011, 9, 61-67.	1.9	214
56	Substrate supply, fine roots, and temperature control proteolytic enzyme activity in temperate forest soils. Ecology, 2011, 92, 892-902.	1.5	86
57	Increasing plant use of organic nitrogen with elevation is reflected in nitrogen uptake rates and ecosystem Î´¹⁵N. Ecology, 2011, 92, 883-891.	1.5	90
58	Reâ€assessment of plant carbon dynamics at the Duke freeâ€air CO₂ enrichment site: interactions of atmospheric [CO₂] with nitrogen and water availability over stand development. New Phytologist, 2010, 185, 514-528.	3.5	242
59	Greater seed production in elevated CO₂ is not accompanied by reduced seed quality in <i>Pinus taeda</i> L.. Global Change Biology, 2010, 16, 1046-1056.	4.2	50
60	Intact amino acid uptake by northern hardwood and conifer trees. Oecologia, 2009, 160, 129-138.	0.9	69
61	Decades of atmospheric deposition have not resulted in widespread phosphorus limitation or saturation of tree demand for nitrogen in southern New England. Biogeochemistry, 2009, 92, 217-229.	1.7	72
62	Bottom-up rather than top-down processes regulate the abundance and activity of nitrogen fixing plants in two Connecticut old-field ecosystems. Biogeochemistry, 2009, 95, 309-321.	1.7	12
63	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.	4.2	72
64	The invasive species Alliaria petiolata (garlic mustard) increases soil nutrient availability in northern hardwood-conifer forests. Oecologia, 2008, 157, 459-471.	0.9	102
65	Increased mercury in forest soils under elevated carbon dioxide. Oecologia, 2008, 158, 343-354.	0.9	16
66	Differential effects of sugar maple, red oak, and hemlock tannins on carbon and nitrogen cycling in temperate forest soils. Oecologia, 2008, 155, 583-592.	0.9	55
67	Fine root dynamics in a loblolly pine forest are influenced by freeâ€airâ€CO₂â€enrichment: a sixâ€yearâ€minirhizotron study. Global Change Biology, 2008, 14, 588-602.	4.2	132
68	Soil carbon sequestration in a pine forest after 9 years of atmospheric CO₂ enrichment. Global Change Biology, 2008, 14, 2910-2922.	4.2	82
69	Ready or Not, Garlic Mustard Is Moving In: Alliaria petiolata as a Member of Eastern North American Forests. BioScience, 2008, 58, 426-436.	2.2	116
70	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
71	ATMOSPHERIC DEPOSITION MAY AFFECT NORTHERN HARDWOOD FOREST COMPOSITION BY ALTERING SOIL NUTRIENT SUPPLY. Ecological Applications, 2007, 17, 1929-1941.	1.8	36
72	Temporal dynamics and spatial variability in the enhancement of canopy leaf area under elevated atmospheric CO₂. Global Change Biology, 2007, 13, 2479-2497.	4.2	107

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73	PROGRESSIVE NITROGEN LIMITATION OF ECOSYSTEM PROCESSES UNDER ELEVATED CO2IN A WARM-TEMPERATE FOREST. Ecology, 2006, 87, 15-25.	1.5	210
74	Microbial Community Responses to Atmospheric Carbon Dioxide Enrichment in a Warm-Temperate Forest. Ecosystems, 2006, 9, 215-226.	1.6	95
75	Amino acid cycling in three cold-temperate forests of the northeastern USA. Soil Biology and Biochemistry, 2006, 38, 861-869.	4.2	63
76	Aboveground sink strength in forests controls the allocation of carbon below ground and its [CO2]-induced enhancement. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19362-19367.	3.3	109
77	Canopy leaf area constrains [CO2]-induced enhancement of productivity and partitioning among aboveground carbon pools. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19356-19361.	3.3	94
78	SOIL CARBON SEQUESTRATION AND TURNOVER IN A PINE FOREST AFTER SIX YEARS OF ATMOSPHERIC CO2ENRICHMENT. Ecology, 2005, 86, 1835-1847.	1.5	113
79	THE UPTAKE OF AMINO ACIDS BY MICROBES AND TREES IN THREE COLD-TEMPERATE FORESTS. Ecology, 2005, 86, 3345-3353.	1.5	128
80	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.	3.3	880
81	Progressive Nitrogen Limitation of Ecosystem Responses to Rising Atmospheric Carbon Dioxide. BioScience, 2004, 54, 731.	2.2	1,092
82	Canopy N and P dynamics of a southeastern US pine forest under elevated CO2. Biogeochemistry, 2004, 69, 363-378.	1.7	22
83	Soil?Nitrogen Cycling in a Pine Forest Exposed to 5 Years of Elevated Carbon Dioxide. Ecosystems, 2003, 6, 444-456.	1.6	57
84	Exposure to an enriched CO2 atmosphere alters carbon assimilation and allocation in a pine forest ecosystem. Global Change Biology, 2003, 9, 1378-1400.	4.2	133
85	Sustainability of terrestrial carbon sequestration: A case study in Duke Forest with inversion approach. Global Biogeochemical Cycles, 2003, 17, .	1.9	191
86	SOIL NITROGEN CYCLING UNDER ELEVATED CO2: A SYNTHESIS OF FOREST FACE EXPERIMENTS. , 2003, 13, 1508-1514.		114
87	Forest carbon balance under elevated CO2. Oecologia, 2002, 131, 250-260.	0.9	253
88	The nitrogen budget of a pine forest under free air CO2 enrichment. Oecologia, 2002, 132, 567-578.	0.9	164
89	Species control variation in litter decomposition in a pine forest exposed to elevated CO2. Global Change Biology, 2002, 8, 1217-1229.	4.2	58
90	FOREST LITTER PRODUCTION, CHEMISTRY, AND DECOMPOSITION FOLLOWING TWO YEARS OF FREE-AIR CO2ENRICHMENT. Ecology, 2001, 82, 470-484.	1.5	62

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91	Primary productivity of planet earth: biological determinants and physical constraints in terrestrial and aquatic habitats. Global Change Biology, 2001, 7, 849-882.	4.2	281
92	Forest Litter Production, Chemistry, and Decomposition Following Two Years of Free-Air CO 2 Enrichment. Ecology, 2001, 82, 470.	1.5	144
93	Sapling growth in response to light and nitrogen availability in a southern New England forest. Forest Ecology and Management, 2000, 131, 153-165.	1.4	130
94	Net Primary Production of a Forest Ecosystem with Experimental CO2 Enrichment. Science, 1999, 284, 1177-1179.	6.0	460
95	Non-additive effects of litter mixtures on net N mineralization in a southern New England forest. Forest Ecology and Management, 1998, 105, 129-136.	1.4	87
96	CANOPY TREEâ€"SOIL INTERACTIONS WITHIN TEMPERATE FORESTS: SPECIES EFFECTS ON SOIL CARBON AND NITROGEN. , 1998, 8, 440-446.		161
97	CANOPY TREEâ€"SOIL INTERACTIONS WITHIN TEMPERATE FORESTS: SPECIES EFFECTS ON pH AND CATIONS. , 1998, 8, 447-454.		47
98	Canopy Tree-Soil Interactions within Temperate Forests: Species Effects on Soil Carbon and Nitrogen. , 1998, 8, 440.		16
99	Canopy Tree-Soil Interactions within Temperate Forests: Species Effects on pH and Cations. , 1998, 8, 447.		40
100	CANOPY TREEâ€"SOIL INTERACTIONS WITHIN TEMPERATE FORESTS: SPECIES EFFECTS ON SOIL CARBON AND NITROGEN. , 1998, 8, 440.		1
101	Canopy tree-soil interactions within temperate forests: effects of soil elemental composition and texture on species distributions. Canadian Journal of Forest Research, 1997, 27, 1110-1116.	0.8	103
102	Assessing Why Two Introduced Conyza Differ in Their Ability to Invade Mediterranean Old Fields. Ecology, 1996, 77, 791-804.	1.5	115
103	Causes and consequences of resource heterogeneity in forests: interspecific variation in light transmission by canopy trees. Canadian Journal of Forest Research, 1994, 24, 337-349.	0.8	620