

# Christopher E Doughty

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9089337/publications.pdf>

Version: 2024-02-01

83  
papers

6,637  
citations

76196

40  
h-index

66788

78  
g-index

91  
all docs

91  
docs citations

91  
times ranked

8869  
citing authors

#	ARTICLE	IF	CITATIONS
1	Death from drought in tropical forests is triggered by hydraulics not carbon starvation. <i>Nature</i> , 2015, 528, 119-122.	13.7	482
2	Drought impact on forest carbon dynamics and fluxes in Amazonia. <i>Nature</i> , 2015, 519, 78-82.	13.7	464
3	Drought sensitivity of Amazonian carbon balance revealed by atmospheric measurements. <i>Nature</i> , 2014, 506, 76-80.	13.7	398
4	Megafauna and ecosystem function from the Pleistocene to the Anthropocene. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 838-846.	3.3	366
5	Drivers and mechanisms of tree mortality in moist tropical forests. <i>New Phytologist</i> , 2018, 219, 851-869.	3.5	341
6	The allocation of ecosystem net primary productivity in tropical forests. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2011, 366, 3225-3245.	1.8	317
7	Global nutrient transport in a world of giants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 868-873.	3.3	308
8	Are tropical forests near a high temperature threshold?. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	207
9	Animals and the zoogeography of the carbon cycle. <i>Science</i> , 2018, 362, .	6.0	197
10	Rewilding: Science, Practice, and Politics. <i>Annual Review of Environment and Resources</i> , 2015, 40, 39-62.	5.6	196
11	Herbivory makes major contributions to ecosystem carbon and nutrient cycling in tropical forests. <i>Ecology Letters</i> , 2014, 17, 324-332.	3.0	176
12	Seasonal patterns of tropical forest leaf area index and CO <sub>2</sub> exchange. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	159
13	The legacy of the Pleistocene megafauna extinctions on nutrient availability in Amazonia. <i>Nature Geoscience</i> , 2013, 6, 761-764.	5.4	149
14	The linkages between photosynthesis, productivity, growth and biomass in lowland Amazonian forests. <i>Global Change Biology</i> , 2015, 21, 2283-2295.	4.2	146
15	Leaf aging of Amazonian canopy trees as revealed by spectral and physiochemical measurements. <i>New Phytologist</i> , 2017, 214, 1049-1063.	3.5	132
16	The variation of productivity and its allocation along a tropical elevation gradient: a whole carbon budget perspective. <i>New Phytologist</i> , 2017, 214, 1019-1032.	3.5	126
17	Temperature and rainfall interact to control carbon cycling in tropical forests. <i>Ecology Letters</i> , 2017, 20, 779-788.	3.0	107
18	Predicting tropical plant physiology from leaf and canopy spectroscopy. <i>Oecologia</i> , 2011, 165, 289-299.	0.9	106

#	ARTICLE	IF	CITATIONS
19	Residence times of woody biomass in tropical forests. <i>Plant Ecology and Diversity</i> , 2013, 6, 139-157.	1.0	104
20	The megabiota are disproportionately important for biosphere functioning. <i>Nature Communications</i> , 2020, 11, 699.	5.8	99
21	Theoretical Impact of Changing Albedo on Precipitation at the Southernmost Boundary of the ITCZ in South America. <i>Earth Interactions</i> , 2012, 16, 1-14.	0.7	93
22	Allocation trade-offs dominate the response of tropical forest growth to seasonal and interannual drought. <i>Ecology</i> , 2014, 95, 2192-2201.	1.5	86
23	Megafauna extinction, tree species range reduction, and carbon storage in Amazonian forests. <i>Ecography</i> , 2016, 39, 194-203.	2.1	86
24	The productivity, metabolism and carbon cycle of two lowland tropical forest plots in south-western Amazonia, Peru. <i>Plant Ecology and Diversity</i> , 2014, 7, 85-105.	1.0	82
25	Lateral Diffusion of Nutrients by Mammalian Herbivores in Terrestrial Ecosystems. <i>PLoS ONE</i> , 2013, 8, e71352.	1.1	76
26	An <i>In Situ</i> Leaf and Branch Warming Experiment in the Amazon. <i>Biotropica</i> , 2011, 43, 658-665.	0.8	71
27	Biophysical feedbacks between the Pleistocene megafauna extinction and climate: The first human-induced global warming?. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	68
28	Productivity and carbon allocation in a tropical montane cloud forest in the Peruvian Andes. <i>Plant Ecology and Diversity</i> , 2014, 7, 107-123.	1.0	63
29	Carbon stocks in central African forests enhanced by elephant disturbance. <i>Nature Geoscience</i> , 2019, 12, 725-729.	5.4	62
30	The impact of the megafauna extinctions on savanna woody cover in South America. <i>Ecography</i> , 2016, 39, 213-222.	2.1	57
31	Megafauna in the Earth system. <i>Ecography</i> , 2016, 39, 99-108.	2.1	57
32	Assessing trait-based scaling theory in tropical forests spanning a broad temperature gradient. <i>Global Ecology and Biogeography</i> , 2017, 26, 1357-1373.	2.7	57
33	A comparison of plot-based satellite and Earth system model estimates of tropical forest net primary production. <i>Global Biogeochemical Cycles</i> , 2015, 29, 626-644.	1.9	55
34	Ecosystem respiration and net primary productivity after 8-10 years of experimental through-fall reduction in an eastern Amazon forest. <i>Plant Ecology and Diversity</i> , 2014, 7, 7-24.	1.0	52
35	Seasonal production, allocation and cycling of carbon in two mid-elevation tropical montane forest plots in the Peruvian Andes. <i>Plant Ecology and Diversity</i> , 2014, 7, 125-142.	1.0	47
36	Can crop albedo be increased through the modification of leaf trichomes, and could this cool regional climate?. <i>Climatic Change</i> , 2011, 104, 379-387.	1.7	46

#	ARTICLE	IF	CITATIONS
37	The production, allocation and cycling of carbon in a forest on fertile <i>terra preta</i> soil in eastern Amazonia compared with a forest on adjacent infertile soil. <i>Plant Ecology and Diversity</i> , 2014, 7, 41-53.	1.0	44
38	Effect of smoke on subcanopy shaded light, canopy temperature, and carbon dioxide uptake in an Amazon rainforest. <i>Global Biogeochemical Cycles</i> , 2010, 24, .	1.9	43
39	Seasonal trends of Amazonian rainforest phenology, net primary productivity, and carbon allocation. <i>Global Biogeochemical Cycles</i> , 2016, 30, 700-715.	1.9	43
40	Preindustrial Human Impacts on Global and Regional Environment. <i>Annual Review of Environment and Resources</i> , 2013, 38, 503-527.	5.6	42
41	The Global Ecosystems Monitoring network: Monitoring ecosystem productivity and carbon cycling across the tropics. <i>Biological Conservation</i> , 2021, 253, 108889.	1.9	42
42	Ecosystem productivity and carbon cycling in intact and annually burnt forest at the dry southern limit of the Amazon rainforest (Mato Grosso, Brazil). <i>Plant Ecology and Diversity</i> , 2014, 7, 25-40.	1.0	41
43	ENSO Drives interannual variation of forest woody growth across the tropics. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2018, 373, 20170410.	1.8	41
44	Source and sink carbon dynamics and carbon allocation in the Amazon basin. <i>Global Biogeochemical Cycles</i> , 2015, 29, 645-655.	1.9	40
45	The sensitivity of wood production to seasonal and interannual variations in climate in a lowland Amazonian rainforest. <i>Oecologia</i> , 2014, 174, 295-306.	0.9	38
46	Assessing the role of megafauna in tropical forest ecosystems and biogeochemical cycles – the potential of vegetation models. <i>Ecography</i> , 2018, 41, 1934-1954.	2.1	38
47	Circadian rhythms constrain leaf and canopy gas exchange in an Amazonian forest. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	37
48	Detecting Tree-like Multicellular Life on Extrasolar Planets. <i>Astrobiology</i> , 2010, 10, 869-879.	1.5	37
49	The productivity, allocation and cycling of carbon in forests at the dry margin of the Amazon forest in Bolivia. <i>Plant Ecology and Diversity</i> , 2014, 7, 55-69.	1.0	34
50	Modelling climate change responses in tropical forests: similar productivity estimates across five models, but different mechanisms and responses. <i>Geoscientific Model Development</i> , 2015, 8, 1097-1110.	1.3	31
51	Herbivores increase the global availability of nutrients over millions of years. <i>Nature Ecology and Evolution</i> , 2017, 1, 1820-1827.	3.4	28
52	What controls variation in carbon use efficiency among Amazonian tropical forests?. <i>Biotropica</i> , 2018, 50, 16-25.	0.8	28
53	Andean grasslands are as productive as tropical cloud forests. <i>Environmental Research Letters</i> , 2014, 9, 115011.	2.2	27
54	Interdependency of plants and animals in controlling the sodium balance of ecosystems and the impacts of global defaunation. <i>Ecography</i> , 2016, 39, 204-212.	2.1	27

#	ARTICLE	IF	CITATIONS
55	The seasonal cycle of productivity, metabolism and carbon dynamics in a wet aseasonal forest in north-west Amazonia (Iquitos, Peru). <i>Plant Ecology and Diversity</i> , 2014, 7, 71-83.	1.0	25
56	Tropical forest leaves may darken in response to climate change. <i>Nature Ecology and Evolution</i> , 2018, 2, 1918-1924.	3.4	23
57	Impacts of fire on sources of soil $\text{CO}_2$ efflux in a dry Amazon rain forest. <i>Global Change Biology</i> , 2018, 24, 3629-3641.	4.2	23
58	Seasonality of above-ground net primary productivity along an Andean altitudinal transect in Peru. <i>Journal of Tropical Ecology</i> , 2014, 30, 503-519.	0.5	22
59	Mapping the Leaf Economic Spectrum across West African Tropical Forests Using UAV-Acquired Hyperspectral Imagery. <i>Remote Sensing</i> , 2018, 10, 1532.	1.8	22
60	Mycorrhizal symbioses influence the trophic structure of the Serengeti. <i>Journal of Ecology</i> , 2018, 106, 536-546.	1.9	20
61	Assessing above-ground woody debris dynamics along a gradient of elevation in Amazonian cloud forests in Peru: balancing above-ground inputs and respiration outputs. <i>Plant Ecology and Diversity</i> , 2014, 7, 143-160.	1.0	19
62	Individual-Based Modeling of Amazon Forests Suggests That Climate Controls Productivity While Traits Control Demography. <i>Frontiers in Earth Science</i> , 2019, 7, .	0.8	19
63	The impact of large animal extinctions on nutrient fluxes in early river valley civilizations. <i>Ecosphere</i> , 2013, 4, 1-17.	1.0	17
64	Can Leaf Spectroscopy Predict Leaf and Forest Traits Along a Peruvian Tropical Forest Elevation Gradient?. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 2952-2965.	1.3	17
65	Agricultural net primary production in relation to that liberated by the extinction of Pleistocene mega-herbivores: an estimate of agricultural carrying capacity?. <i>Environmental Research Letters</i> , 2010, 5, 044001.	2.2	13
66	Fine root dynamics across pantropical rainforest ecosystems. <i>Global Change Biology</i> , 2021, 27, 3657-3680.	4.2	13
67	Montane forest root growth and soil organic layer depth as potential factors stabilizing Cenozoic global change. <i>Geophysical Research Letters</i> , 2014, 41, 983-990.	1.5	12
68	Megafauna decline have reduced pathogen dispersal which may have increased emergent infectious diseases. <i>Ecography</i> , 2020, 43, 1107-1117.	2.1	12
69	Variations of carbon allocation and turnover time across tropical forests. <i>Global Ecology and Biogeography</i> , 2021, 30, 1271-1285.	2.7	12
70	The development of agriculture in the Americas: an ecological perspective. <i>Ecosphere</i> , 2010, 1, 1-11.	1.0	10
71	Large predators can mitigate nutrient losses associated with off-site removal of animals from a wildlife reserve. <i>Journal of Applied Ecology</i> , 2021, 58, 1360-1369.	1.9	8
72	Changing NPP consumption patterns in the Holocene: From megafauna-liberated NPP to ecological bankruptcy. <i>Infrastructure Asset Management</i> , 2016, 3, 174-187.	1.2	7

#	ARTICLE	IF	CITATIONS
73	Greater stem growth, woody allocation, and aboveground biomass in Paleotropical forests than in Neotropical forests. <i>Ecology</i> , 2019, 100, e02589.	1.5	7
74	Improved estimation of gut passage time considerably affects trait-based dispersal models. <i>Functional Ecology</i> , 2021, 35, 860-869.	1.7	6
75	Detecting 3D Vegetation Structure with the Galileo Space Probe: Can a Distant Probe Detect Vegetation Structure on Earth?. <i>PLoS ONE</i> , 2016, 11, e0167188.	1.1	5
76	The Biogeochemistry of the Main Forest Vegetation Types in Amazonia. <i>Ecological Studies</i> , 2016, , 225-266.	0.4	4
77	Hyaenas play unique ecosystem role by recycling key nutrients in bones. <i>African Journal of Ecology</i> , 2022, 60, 81-86.	0.4	3
78	Predicting tropical tree mortality with leaf spectroscopy. <i>Biotropica</i> , 2021, 53, 581-595.	0.8	3
79	The sixth R: Revitalizing the natural phosphorus pump. <i>Science of the Total Environment</i> , 2022, 832, 155023.	3.9	3
80	Forest Thinning in Ponderosa Pines Increases Carbon Use Efficiency and Energy Flow From Primary Producers to Primary Consumers. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG005947.	1.3	2
81	Large contribution of recent photosynthate to soil respiration in tropical dipterocarp forest revealed by girdling. <i>Journal of Ecology</i> , 0, , .	1.9	2
82	Distinguishing multicellular life on exoplanets by testing Earth as an exoplanet. <i>International Journal of Astrobiology</i> , 2020, 19, 492-499.	0.9	1
83	Reply to "Coal geology affects nutrient diffusion modelling in the prehistoric record". <i>Nature Ecology and Evolution</i> , 2019, 3, 507-507.	3.4	0