Ben Poulter

List of Publications by Year
in descending order

266 papers	40,293 citations	5558 82 h-index	2940 189 g-index
390 all docs	390 docs citations	390 times ranked	32525 citing authors

#	Article	IF	Citations
1	Greening of the Earth and its drivers. Nature Climate Change, 2016, 6, 791-795.	8.1	1,675
2	Three decades of global methane sources and sinks. Nature Geoscience, 2013, 6, 813-823.	5.4	1,649
3	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	3.7	1,477
4	The Global Methane Budget 2000â€“2017. Earth System Science Data, 2020, 12, 1561-1623.	3.7	1,199
5	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	3.7	1,167
6	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	3.7	1,159
7	Contribution of semi-arid ecosystems to interannual variability of the global carbon cycle. Nature, 2014, 509, 600-603.	13.7	1,054
8	Human-induced nitrogenâ€“phosphorus imbalances alter natural and managed ecosystems across the globe. Nature Communications, 2013, 4, 2934.	5.8	1,013
9	The dominant role of semi-arid ecosystems in the trend and variability of the land CO ₂ sink. Science, 2015, 348, 895-899.	6.0	1,002
10	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	3.7	905
11	The global methane budget 2000â€“2012. Earth System Science Data, 2016, 8, 697-751.	3.7	824
12	Plant responses to rising vapor pressure deficit. New Phytologist, 2020, 226, 1550-1566.	3.5	814
13	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	3.7	801
14	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. Global Change Biology, 2015, 21, 2861-2880.	4.2	683
15	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	3.7	663
16	Evaluation of terrestrial carbon cycle models for their response to climate variability and to <scp><scp>CO₂</scp></scp> trends. Global Change Biology, 2013, 19, 2117-2132.	4.2	617
17	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	3.7	616
18	Detection and attribution of vegetation greening trend in China over the last 30Âyears. Global Change Biology, 2015, 21, 1601-1609.	4.2	597

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19	Recent trends and drivers of regional sources and sinks of carbon dioxide. Biogeosciences, 2015, 12, 653-679.	1.3	587
20	Terrestrial biosphere models need better representation of vegetation phenology: results from the <scp>N</scp>orth <scp>A</scp>merican <scp>C</scp>arbon <scp>P</scp>rogram <scp>S</scp>ite <scp>S</scp>ynthesis. Global Change Biology, 2012, 18, 566-584.	4.2	583
21	Pervasive shifts in forest dynamics in a changing world. Science, 2020, 368, .	6.0	576
22	The global carbon budget 1959â€“2011. Earth System Science Data, 2013, 5, 165-185.	3.7	527
23	Compensatory water effects link yearly global land CO2 sink changes to temperature. Nature, 2017, 541, 516-520.	13.7	480
24	Present state of global wetland extent and wetland methane modelling: conclusions from a model inter-comparison project (WETCHIMP). Biogeosciences, 2013, 10, 753-788.	1.3	475
25	Global carbon budget 2014. Earth System Science Data, 2015, 7, 47-85.	3.7	463
26	Climate change and European forests: What do we know, what are the uncertainties, and what are the implications for forest management?. Journal of Environmental Management, 2014, 146, 69-83.	3.8	460
27	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. Nature Communications, 2014, 5, 5018.	5.8	414
28	Harmonization of global land use change and management for the period 850â€“2100 (LUH2) for CMIP6. Geoscientific Model Development, 2020, 13, 5425-5464.	1.3	408
29	The terrestrial biosphere as a net source of greenhouse gases to the atmosphere. Nature, 2016, 531, 225-228.	13.7	402
30	Half of global methane emissions come from highly variable aquatic ecosystem sources. Nature Geoscience, 2021, 14, 225-230.	5.4	388
31	Role of forest regrowth in global carbon sink dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4382-4387.	3.3	370
32	Water-use efficiency and transpiration across European forests during the Anthropocene. Nature Climate Change, 2015, 5, 579-583.	8.1	357
33	Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis. Science, 2020, 370, 1295-1300.	6.0	317
34	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	3.7	311
35	Site- and species-specific responses of forest growth to climate across the European continent. Global Ecology and Biogeography, 2013, 22, 706-717.	2.7	297
36	Historical carbon dioxide emissions caused by land-use changes are possibly larger than assumed. Nature Geoscience, 2017, 10, 79-84.	5.4	284

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37	Twentieth century redistribution in climatic drivers of global tree growth. Science Advances, 2019, 5, eaat4313.	4.7	282
38	A modelâ€data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2012, 117, .	3.3	274
39	The growing role of methane in anthropogenic climate change. Environmental Research Letters, 2016, 11, 120207.	2.2	274
40	A modelâ€data intercomparison of CO₂ exchange across North America: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2010, 115, .	3.3	247
41	Global patterns and controls of soil organic carbon dynamics as simulated by multiple terrestrial biosphere models: Current status and future directions. Global Biogeochemical Cycles, 2015, 29, 775-792.	1.9	241
42	Raster modelling of coastal flooding from seaâ€level rise. International Journal of Geographical Information Science, 2008, 22, 167-182.	2.2	235
43	Terrestrial biosphere model performance for interâ€annual variability of landâ€atmosphere <scp><scp>CO₂</scp></scp> exchange. Global Change Biology, 2012, 18, 1971-1987.	4.2	232
44	Increasing anthropogenic methane emissions arise equally from agricultural and fossil fuel sources. Environmental Research Letters, 2020, 15, 071002.	2.2	232
45	Large loss of CO2 in winter observed across the northern permafrost region. Nature Climate Change, 2019, 9, 852-857.	8.1	225
46	Change in terrestrial ecosystem waterâ€use efficiency over the last three decades. Global Change Biology, 2015, 21, 2366-2378.	4.2	215
47	The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project â€“ Part 1: Overview and experimental design. Geoscientific Model Development, 2013, 6, 2121-2133.	1.3	212
48	Environmental change and the carbon balance of <scp>A</scp>mazonian forests. Biological Reviews, 2014, 89, 913-931.	4.7	208
49	North American Carbon Program (NACP) regional interim synthesis: Terrestrial biospheric model intercomparison. Ecological Modelling, 2012, 232, 144-157.	1.2	207
50	Emerging role of wetland methane emissions in driving 21st century climate change. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9647-9652.	3.3	201
51	Plant functional type classification for earth system models: results from the European Space Agency's Land Cover Climate Change Initiative. Geoscientific Model Development, 2015, 8, 2315-2328.	1.3	197
52	Land-use emissions play a critical role in land-based mitigation for Paris climate targets. Nature Communications, 2018, 9, 2938.	5.8	194
53	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. Biogeosciences, 2014, 11, 3547-3602.	1.3	189
54	Impact of largeâ€scale climate extremes on biospheric carbon fluxes: An intercomparison based on MsTMIP data. Global Biogeochemical Cycles, 2014, 28, 585-600.	1.9	181

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55	Spatial variability and temporal trends in waterâ€use efficiency of European forests. Global Change Biology, 2014, 20, 3700-3712.	4.2	175
56	Present state of global wetland extent and wetland methane modelling: methodology of a model inter-comparison project (WETCHIMP). Geoscientific Model Development, 2013, 6, 617-641.	1.3	165
57	A full greenhouse gases budget of Africa: synthesis, uncertainties, and vulnerabilities. Biogeosciences, 2014, 11, 381-407.	1.3	162
58	Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. Scientific Reports, 2017, 7, 4765.	1.6	156
59	Accelerating net terrestrial carbon uptake during the warming hiatus due to reduced respiration. Nature Climate Change, 2017, 7, 148-152.	8.1	151
60	Observed forest sensitivity to climate implies large changes in 21st century North American forest growth. Ecology Letters, 2016, 19, 1119-1128.	3.0	148
61	NASA's surface biology and geology designated observable: A perspective on surface imaging algorithms. Remote Sensing of Environment, 2021, 257, 112349.	4.6	148
62	Sea-level rise impact models and environmental conservation: A review of models and their applications. Ocean and Coastal Management, 2010, 53, 507-517.	2.0	144
63	Plant functional type mapping for earth system models. Geoscientific Model Development, 2011, 4, 993-1010.	1.3	140
64	A tree-ring perspective on the terrestrial carbon cycle. Oecologia, 2014, 176, 307-322.	0.9	131
65	When tree rings go global: Challenges and opportunities for retro- and prospective insight. Quaternary Science Reviews, 2018, 197, 1-20.	1.4	131
66	Evaluation of global terrestrial evapotranspiration using state-of-the-art approaches in remote sensing, machine learning and land surface modeling. Hydrology and Earth System Sciences, 2020, 24, 1485-1509.	1.9	130
67	Global wetland contribution to 2000â€"2012 atmospheric methane growth rate dynamics. Environmental Research Letters, 2017, 12, 094013.	2.2	129
68	Five decades of northern land carbon uptake revealed by the interhemispheric CO2 gradient. Nature, 2019, 568, 221-225.	13.7	124
69	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Environmental Research Letters, 2015, 10, 094008.	2.2	119
70	Tropical forest responses to increasing atmospheric CO2: current knowledge and opportunities for future research. Functional Plant Biology, 2013, 40, 531.	1.1	118
71	Modelling the role of fires in the terrestrial carbon balance by incorporating SPITFIRE into the global vegetation model ORCHIDEE â€" Part 1: simulating historical global burned area and fire regimes. Geoscientific Model Development, 2014, 7, 2747-2767.	1.3	109
72	Recent trends in Inner Asian forest dynamics to temperature and precipitation indicate high sensitivity to climate change. Agricultural and Forest Meteorology, 2013, 178-179, 31-45.	1.9	108

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73	Mechanisms of water supply and vegetation demand govern the seasonality and magnitude of evapotranspiration in Amazonia and Cerrado. Agricultural and Forest Meteorology, 2014, 191, 33-50.	1.9	105
74	Important role of forest disturbances in the global biomass turnover and carbon sinks. Nature Geoscience, 2019, 12, 730-735.	5.4	105
75	Methane emissions from tree stems: a new frontier in the global carbon cycle. New Phytologist, 2019, 222, 18-28.	3.5	104
76	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. Biogeosciences, 2012, 9, 3571-3586.	1.3	103
77	Global patterns and climate drivers of waterâ€use efficiency in terrestrial ecosystems deduced from satelliteâ€based datasets and carbon cycle models. Global Ecology and Biogeography, 2016, 25, 311-323.	2.7	102
78	Seasonal responses of terrestrial ecosystem waterâ€use efficiency to climate change. Global Change Biology, 2016, 22, 2165-2177.	4.2	100
79	Topâ€"down assessment of the Asian carbon budget since the mid 1990s. Nature Communications, 2016, 7, 10724.	5.8	93
80	Carbon cycle uncertainty in the Alaskan Arctic. Biogeosciences, 2014, 11, 4271-4288.	1.3	92
81	The influence of local spring temperature variance on temperature sensitivity of spring phenology. Global Change Biology, 2014, 20, 1473-1480.	4.2	90
82	Sunlight mediated seasonality in canopy structure and photosynthetic activity of Amazonian rainforests. Environmental Research Letters, 2015, 10, 064014.	2.2	90
83	The El NiÃ±o-Southern Oscillation and wetland methane interannual variability. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	89
84	Variability and quasi-decadal changes in the methane budget over the period 2000â€"2012. Atmospheric Chemistry and Physics, 2017, 17, 11135-11161.	1.9	85
85	Drought rapidly diminishes the large net CO2 uptake in 2011 over semi-arid Australia. Scientific Reports, 2016, 6, 37747.	1.6	83
86	Evaluation of Land Surface Models in Reproducing Satellite-Derived LAI over the High-Latitude Northern Hemisphere. Part I: Uncoupled DGVMs. Remote Sensing, 2013, 5, 4819-4838.	1.8	82
87	FLUXNET-CH₄: a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. Earth System Science Data, 2021, 13, 3607-3689.	3.7	79
88	The carbon balance of South America: a review of the status, decadal trends and main determinants. Biogeosciences, 2012, 9, 5407-5430.	1.3	78
89	Impacts of land cover and climate data selection on understanding terrestrial carbon dynamics and the CO₂ airborne fraction. Biogeosciences, 2011, 8, 2027-2036.	1.3	75
90	Evaluation of continental carbon cycle simulations with North American flux tower observations. Ecological Monographs, 2013, 83, 531-556.	2.4	75

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91	Advancing Scientific Understanding of the Global Methane Budget in Support of the Paris Agreement. Global Biogeochemical Cycles, 2019, 33, 1475-1512.	1.9	73
92	Characterizing the performance of ecosystem models across time scales: A spectral analysis of the North American Carbon Program site-level synthesis. Journal of Geophysical Research, 2011, 116, .	3.3	72
93	Empirical estimates of regional carbon budgets imply reduced global soil heterotrophic respiration. National Science Review, 2021, 8, nwaa145.	4.6	70
94	Improved tree-ring archives will support earth-system science. Nature Ecology and Evolution, 2017, 1, 8.	3.4	68
95	Interannual variability of ecosystem carbon exchange: From observation to prediction. Global Ecology and Biogeography, 2017, 26, 1225-1237.	2.7	68
96	Carbon emissions from a temperate peat fire and its relevance to interannual variability of trace atmospheric greenhouse gases. Journal of Geophysical Research, 2006, 111, .	3.3	66
97	Response of Water Use Efficiency to Global Environmental Change Based on Output From Terrestrial Biosphere Models. Global Biogeochemical Cycles, 2017, 31, 1639-1655.	1.9	63
98	Impact of the 2015/2016 El NiÃ±o on the terrestrial carbon cycle constrained by bottom-up and top-down approaches. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170304.	1.8	63
99	Applications of network analysis for adaptive management of artificial drainage systems in landscapes vulnerable to sea level rise. Journal of Hydrology, 2008, 357, 207-217.	2.3	62
100	Maximum carbon uptake rate dominates the interannual variability of global net ecosystem exchange. Global Change Biology, 2019, 25, 3381-3394.	4.2	62
101	Net biome production of the Amazon Basin in the 21st century. Global Change Biology, 2010, 16, 2062-2075.	4.2	61
102	500 years of regional forest growth variability and links to climatic extreme events in Europe. Environmental Research Letters, 2012, 7, 045705.	2.2	61
103	Missing pieces to modeling the Arctic-Boreal puzzle. Environmental Research Letters, 2018, 13, 020202.	2.2	61
104	A protocol for an intercomparison of biodiversity and ecosystem services models using harmonized land-use and climate scenarios. Geoscientific Model Development, 2018, 11, 4537-4562.	1.3	61
105	The dry season intensity as a key driver of NPP trends. Geophysical Research Letters, 2016, 43, 2632-2639.	1.5	60
106	Sensitivity of Portuguese forest fires to climatic, human, and landscape variables: subnational differences between fire drivers in extreme fire years and decadal averages. Regional Environmental Change, 2011, 11, 543-551.	1.4	59
107	Comparing treeâ€ring and permanent plot estimates of aboveground net primary production in three eastern U.S. forests. Ecosphere, 2016, 7, e01454.	1.0	59
108	Diagnosing phosphorus limitations in natural terrestrial ecosystems in carbon cycle models. Earth's Future, 2017, 5, 730-749.	2.4	59

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109	Identifying dominant environmental predictors of freshwater wetland methane fluxes across diurnal to seasonal time scales. Global Change Biology, 2021, 27, 3582-3604.	4.2	59
110	Sources of Uncertainty in Regional and Global Terrestrial CO₂ Exchange Estimates. Global Biogeochemical Cycles, 2020, 34, e2019GB006393.	1.9	59
111	Seasonal leaf dynamics for tropical evergreen forests in a process-based global ecosystem model. Geoscientific Model Development, 2012, 5, 1091-1108.	1.3	58
112	Land-use and land-cover change carbon emissions between 1901 and 2012 constrained by biomass observations. Biogeosciences, 2017, 14, 5053-5067.	1.3	58
113	Reviews and syntheses: An empirical spatiotemporal description of the global surfaceâ€"atmosphere carbon fluxes: opportunities and data limitations. Biogeosciences, 2017, 14, 3685-3703.	1.3	58
114	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. Nature Geoscience, 2019, 12, 809-814.	5.4	58
115	Comparing national greenhouse gas budgets reported in UNFCCC inventories against atmospheric inversions. Earth System Science Data, 2022, 14, 1639-1675.	3.7	58
116	Regional trends and drivers of the global methane budget. Global Change Biology, 2022, 28, 182-200.	4.2	56
117	Overview of the Large-Scale Biosphereâ€"Atmosphere Experiment in Amazonia Data Model Intercomparison Project (LBA-DMIP). Agricultural and Forest Meteorology, 2013, 182-183, 111-127.	1.9	55
118	Modeling spatiotemporal dynamics of global wetlands: comprehensive evaluation of a new sub-grid TOPMODEL parameterization and uncertainties. Biogeosciences, 2016, 13, 1387-1408.	1.3	55
119	Asymmetric responses of primary productivity to altered precipitation simulated by ecosystem models across three long-term grassland sites. Biogeosciences, 2018, 15, 3421-3437.	1.3	55
120	Comment on â€œThe global tree restoration potentialâ€. Science, 2019, 366, .	6.0	55
121	The relative importance of intrinsic and extrinsic factors in the decline of obligate seeder forests. Global Ecology and Biogeography, 2016, 25, 1166-1172.	2.7	54
122	A Combined Tree Ring and Vegetation Model Assessment of European Forest Growth Sensitivity to Interannual Climate Variability. Global Biogeochemical Cycles, 2018, 32, 1226-1240.	1.9	54
123	Robust dynamics of Amazon dieback to climate change with perturbed ecosystem model parameters. Global Change Biology, 2010, 16, 2476-2495.	4.2	53
124	Opportunities and Trade-offs among BECCS and the Food, Water, Energy, Biodiversity, and Social Systems Nexus at Regional Scales. BioScience, 2018, 68, 100-111.	2.2	53
125	Modeling the Sensitivity of the Seasonal Cycle of GPP to Dynamic LAI and Soil Depths in Tropical Rainforests. Ecosystems, 2009, 12, 517-533.	1.6	51
126	Potential effects of climate change on inundation patterns in the Amazon Basin. Hydrology and Earth System Sciences, 2013, 17, 2247-2262.	1.9	51

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127	Spatially Resolved Isotopic Source Signatures of Wetland Methane Emissions. Geophysical Research Letters, 2018, 45, 3737-3745.	1.5	51
128	Impact of hydrological variations on modeling of peatland CO₂ fluxes: Results from the North American Carbon Program site synthesis. Journal of Geophysical Research, 2012, 117, .	3.3	50
129	Soil carbon pools in Swiss forests show legacy effects from historic forest litter raking. Landscape Ecology, 2013, 28, 835-846.	1.9	50
130	African tropical rainforest net carbon dioxide fluxes in the twentieth century. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120376.	1.8	49
131	Toward â€œoptimalâ€•integration of terrestrial biosphere models. Geophysical Research Letters, 2015, 42, 4418-4428.	1.5	48
132	Benchmarking the seasonal cycle of CO₂ fluxes simulated by terrestrial ecosystem models. Global Biogeochemical Cycles, 2015, 29, 46-64.	1.9	48
133	Multiâ€model comparison highlights consistency in predicted effect of warming on a semiâ€arid shrub. Global Change Biology, 2018, 24, 424-438.	4.2	47
134	The climatic drivers of normalized difference vegetation index and treeâ€ringâ€based estimates of forest productivity are spatially coherent but temporally decoupled in Northern Hemispheric forests. Global Ecology and Biogeography, 2018, 27, 1352-1365.	2.7	47
135	Development of the global dataset of Wetland Area and Dynamics for Methane Modeling (WAD2M). Earth System Science Data, 2021, 13, 2001-2023.	3.7	47
136	Enhanced response of global wetland methane emissions to the 2015â€“2016 El NiÃ±o-Southern Oscillation event. Environmental Research Letters, 2018, 13, 074009.	2.2	46
137	Widespread mangrove damage resulting from the 2017 Atlantic mega hurricane season. Environmental Research Letters, 2020, 15, 064010.	2.2	46
138	MEASURING THE IMPACT OF SEA-LEVEL RISE ON COASTAL REAL ESTATE: A HEDONIC PROPERTY MODEL APPROACH*. Journal of Regional Science, 2011, 51, 751-767.	2.1	45
139	Anomalous carbon uptake in Australia as seen by GOSAT. Geophysical Research Letters, 2015, 42, 8177-8184.	1.5	45
140	Methane emissions from global wetlands: An assessment of the uncertainty associated with various wetland extent data sets. Atmospheric Environment, 2017, 165, 310-321.	1.9	44
141	Beyond ecosystem modeling: A roadmap to community cyberinfrastructure for ecological dataâ€model integration. Global Change Biology, 2021, 27, 13-26.	4.2	44
142	Carbon implications of converting cropland to bioenergy crops or forest for climate mitigation: a global assessment. GCB Bioenergy, 2016, 8, 81-95.	2.5	43
143	Emergent climate and <scp>CO</scp>₂ sensitivities of net primary productivity in ecosystem models do not agree with empirical data in temperate forests of eastern North America. Global Change Biology, 2017, 23, 2755-2767.	4.2	43
144	State of the science in reconciling topâ€down and bottomâ€up approaches for terrestrial CO₂ budget. Global Change Biology, 2020, 26, 1068-1084.	4.2	43

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145	Sea-level rise research and dialogue in North Carolina: Creating windows for policy change. Ocean and Coastal Management, 2009, 52, 147-153.	2.0	42
146	A Wood Biology Agenda to Support Global Vegetation Modelling. Trends in Plant Science, 2018, 23, 1006-1015.	4.3	42
147	Land carbon models underestimate the severity and duration of droughtâ€™s impact on plant productivity. Scientific Reports, 2019, 9, 2758.	1.6	42
148	Mapping global forest age from forest inventories, biomass and climate data. Earth System Science Data, 2021, 13, 4881-4896.	3.7	42
149	Societal shifts due to COVID-19 reveal large-scale complexities and feedbacks between atmospheric chemistry and climate change. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	42
150	Fire evolution in the radioactive forests of Ukraine and Belarus: future risks for the population and the environment. Ecological Monographs, 2015, 85, 49-72.	2.4	41
151	Enhanced methane emissions from tropical wetlands during the 2011 La NiÃ±a. Scientific Reports, 2017, 7, 45759.	1.6	41
152	A new model of the global biogeochemical cycle of carbonyl sulfide â€“ Part 2: Use of carbonyl sulfide to constrain gross primary productivity in current vegetation models. Atmospheric Chemistry and Physics, 2015, 15, 9285-9312.	1.9	40
153	Increased lightâ€use efficiency in northern terrestrial ecosystems indicated by CO₂ and greening observations. Geophysical Research Letters, 2016, 43, 11,339.	1.5	40
154	Negative extreme events in gross primary productivity and their drivers in China during the past three decades. Agricultural and Forest Meteorology, 2019, 275, 47-58.	1.9	40
155	The terrestrial carbon budget of South and Southeast Asia. Environmental Research Letters, 2016, 11, 105006.	2.2	39
156	Global land carbon sink response to temperature and precipitation varies with ENSO phase. Environmental Research Letters, 2017, 12, 064007.	2.2	39
157	Precipitation thresholds regulate net carbon exchange at the continental scale. Nature Communications, 2018, 9, 3596.	5.8	39
158	Spaceâ€Based Observations for Understanding Changes in the Arcticâ€Boreal Zone. Reviews of Geophysics, 2020, 58, e2019RG000652.	9.0	39
159	Aboveground carbon loss associated with the spread of ghost forests as sea levels rise. Environmental Research Letters, 2020, 15, 104028.	2.2	39
160	Response of global land evapotranspiration to climate change, elevated CO2, and land use change. Agricultural and Forest Meteorology, 2021, 311, 108663.	1.9	39
161	Predicting pan-tropical climate change induced forest stock gains and lossesâ€”implications for REDD. Environmental Research Letters, 2010, 5, 014013.	2.2	38
162	Vegetation Functional Properties Determine Uncertainty of Simulated Ecosystem Productivity: A Traceability Analysis in the East Asian Monsoon Region. Global Biogeochemical Cycles, 2019, 33, 668-689.	1.9	38

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163	Global Priority Conservation Areas in the Face of 21st Century Climate Change. PLoS ONE, 2013, 8, e54839.	1.1	38
164	Decadal-Scale Vegetation Change Driven by Salinity at Leading Edge of Rising Sea Level. Ecosystems, 2019, 22, 1918-1930.	1.6	37
165	Carbon and Water Use Efficiencies: A Comparative Analysis of Ten Terrestrial Ecosystem Models under Changing Climate. Scientific Reports, 2019, 9, 14680.	1.6	37
166	Land-use harmonization datasets for annual global carbon budgets. Earth System Science Data, 2021, 13, 4175-4189.	3.7	37
167	Improving the dynamics of Northern Hemisphere high-latitude vegetation in the ORCHIDEE ecosystem model. Geoscientific Model Development, 2015, 8, 2263-2283.	1.3	36
168	Uncertainty analysis of terrestrial net primary productivity and net biome productivity in China during 1901â€“2005. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1372-1393.	1.3	35
169	Postâ€disturbance canopy recovery and the resilience of Europeâ€™s forests. Global Ecology and Biogeography, 2022, 31, 25-36.	2.7	35
170	Substantial hysteresis in emergent temperature sensitivity of global wetland CH4 emissions. Nature Communications, 2021, 12, 2266.	5.8	34
171	Definitions and methods to estimate regional land carbon fluxes for the second phase of the REgional Carbon Cycle Assessment and Processes Project (RECCAP-2). Geoscientific Model Development, 2022, 15, 1289-1316.	1.3	34
172	Inundation of freshwater peatlands by sea level rise: Uncertainty and potential carbon cycle feedbacks. Journal of Geophysical Research, 2008, 113, .	3.3	33
173	Higher temperature variability reduces temperature sensitivity of vegetation growth in Northern Hemisphere. Geophysical Research Letters, 2017, 44, 6173-6181.	1.5	33
174	Disentangling competitive vs. climatic drivers of tropical forest mortality. Journal of Ecology, 2018, 106, 1165-1179.	1.9	33
175	Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH4 wetlands. Agricultural and Forest Meteorology, 2021, 308-309, 108528.	1.9	33
176	Regional impacts of COVID-19 on carbon dioxide detected worldwide from space. Science Advances, 2021, 7, eabf9415.	4.7	33
177	Plant Regrowth as a Driver of Recent Enhancement of Terrestrial CO₂ Uptake. Geophysical Research Letters, 2018, 45, 4820-4830.	1.5	32
178	Converging Climate Sensitivities of European Forests Between Observed Radial Tree Growth and Vegetation Models. Ecosystems, 2018, 21, 410-425.	1.6	32
179	Evaluation of the ORCHIDEE ecosystem model over Africa against 25 years of satellite-based water and carbon measurements. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 1554-1575.	1.3	31
180	Decadal trends in the seasonal-cycle amplitude of terrestrial CO₂ exchange resulting from the ensemble of terrestrial biosphere models. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 28968.	0.8	31

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181	Regional carbon fluxes from land use and land cover change in Asia, 1980â€“2009. Environmental Research Letters, 2016, 11, 074011.	2.2	31
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