Ben Poulter

List of Publications by Citations

305 papers	26,029 citations	76 h-index	157 g-index
390 ext. papers	33,297 ext. citations	8.5 avg, IF	6.53 L-index

#	Paper	IF	Citations
305	Three decades of global methane sources and sinks. *Nature Geoscience*, **2013**, 6, 813-823	18.3	1293
304	Greening of the Earth and its drivers. *Nature Climate Change*, **2016**, 6, 791-795	21.4	1036
303	Global Carbon Budget 2018. *Earth System Science Data*, **2018**, 10, 2141-2194	10.5	831
302	Contribution of semi-arid ecosystems to interannual variability of the global carbon cycle. *Nature*, **2014**, 509, 600-3	50.4	778
301	Global Carbon Budget 2019. *Earth System Science Data*, **2019**, 11, 1783-1838	10.5	776
300	Global Carbon Budget 2016. *Earth System Science Data*, **2016**, 8, 605-649	10.5	730
299	Carbon cycle. The dominant role of semi-arid ecosystems in the trend and variability of the land CO sink. *Science*, **2015**, 348, 895-9	33.3	684
298	Human-induced nitrogen-phosphorus imbalances alter natural and managed ecosystems across the globe. *Nature Communications*, **2013**, 4, 2934	17.4	679
297	The global methane budget 2000–2012. *Earth System Science Data*, **2016**, 8, 697-751	10.5	641
296	Global Carbon Budget 2017. *Earth System Science Data*, **2018**, 10, 405-448	10.5	614
295	Global Carbon Budget 2020. *Earth System Science Data*, **2020**, 12, 3269-3340	10.5	533
294	Global Carbon Budget 2015. *Earth System Science Data*, **2015**, 7, 349-396	10.5	513
293	Terrestrial biosphere models need better representation of vegetation phenology: results from the North American Carbon Program Site Synthesis. *Global Change Biology*, **2012**, 18, 566-584	11.4	481
292	Evaluation of terrestrial carbon cycle models for their response to climate variability and to CO2 trends. *Global Change Biology*, **2013**, 19, 2117-32	11.4	481
291	The Global Methane Budget 2000–2017. *Earth System Science Data*, **2020**, 12, 1561-1623	10.5	463
290	Effects of climate extremes on the terrestrial carbon cycle: concepts, processes and potential future impacts. *Global Change Biology*, **2015**, 21, 2861-80	11.4	454
289	The global carbon budget 1959–2011. *Earth System Science Data*, **2013**, 5, 165-185	10.5	436

288	Recent trends and drivers of regional sources and sinks of carbon dioxide. *Biogeosciences*, **2015**, 12, 653-679	4.6	432
287	Present state of global wetland extent and wetland methane modelling: conclusions from a model inter-comparison project (WETCHIMP). *Biogeosciences*, **2013**, 10, 753-788	4.6	382
286	Detection and attribution of vegetation greening trend in China over the last 30 years. *Global Change Biology*, **2015**, 21, 1601-9	11.4	373
285	Global carbon budget 2014. *Earth System Science Data*, **2015**, 7, 47-85	10.5	367
284	Compensatory water effects link yearly global land CO sink changes to temperature. *Nature*, **2017**, 541, 516-520	50.4	341
283	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	7.9	334
282	The terrestrial biosphere as a net source of greenhouse gases to the atmosphere. *Nature*, **2016**, 531, 225-8	50.4	278
281	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. *Nature Communications*, **2014**, 5, 5018	17.4	274
280	Water-use efficiency and transpiration across European forests during the Anthropocene. *Nature Climate Change*, **2015**, 5, 579-583	21.4	271
279	Global carbon budget 2013. *Earth System Science Data*, **2014**, 6, 235-263	10.5	264
278	Plant responses to rising vapor pressure deficit. *New Phytologist*, **2020**, 226, 1550-1566	9.8	249
277	Site- and species-specific responses of forest growth to climate across the European continent. *Global Ecology and Biogeography*, **2013**, 22, 706-717	6.1	248
276	A model-data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		239
275	Pervasive shifts in forest dynamics in a changing world. *Science*, **2020**, 368,	33.3	227
274	A model-data intercomparison of CO2 exchange across North America: Results from the North American Carbon Program site synthesis. *Journal of Geophysical Research*, **2010**, 115,		216
273	Raster modelling of coastal flooding from sea-level rise. *International Journal of Geographical Information Science*, **2008**, 22, 167-182	4.1	199
272	Historical carbon dioxide emissions caused by land-use changes are possibly larger than assumed. *Nature Geoscience*, **2017**, 10, 79-84	18.3	195
271	Terrestrial biosphere model performance for inter-annual variability of land-atmosphere CO2 exchange. *Global Change Biology*, **2012**, 18, 1971-1987	11.4	191

270	The growing role of methane in anthropogenic climate change. *Environmental Research Letters*, **2016**, 11, 120207	6.2	190
269	North American Carbon Program (NACP) regional interim synthesis: Terrestrial biospheric model intercomparison. *Ecological Modelling*, **2012**, 232, 144-157	3	180
268	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	11.5	178
267	The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project Part 1: Overview and experimental design. *Geoscientific Model Development*, **2013**, 6, 2121-2133	6.3	164
266	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	5.9	159
265	Environmental change and the carbon balance of Amazonian forests. *Biological Reviews*, **2014**, 89, 913-31	13.5	150
264	Twentieth century redistribution in climatic drivers of global tree growth. *Science Advances*, **2019**, 5, eaat4313	14.3	150
263	Change in terrestrial ecosystem water-use efficiency over the last three decades. *Global Change Biology*, **2015**, 21, 2366-78	11.4	144
262	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	6.3	143
261	Harmonization of global land use change and management for the period 850 2100 (LUH2) for CMIP6. *Geoscientific Model Development*, **2020**, 13, 5425-5464	6.3	143
260	Spatial variability and temporal trends in water-use efficiency of European forests. *Global Change Biology*, **2014**, 20, 3700-12	11.4	140
259	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. *Biogeosciences*, **2014**, 11, 3547-3602	4.6	136
258	A full greenhouse gases budget of Africa: synthesis, uncertainties, and vulnerabilities. *Biogeosciences*, **2014**, 11, 381-407	4.6	134
257	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	6.3	128
256	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	11.5	124
255	The global carbon budget 1959 2011 **2012**,		122
254	Global carbon budget 2014		121
253	Plant functional type mapping for earth system models. *Geoscientific Model Development*, **2011**, 4, 993-1010	6.3	119

252	Sea-level rise impact models and environmental conservation: A review of models and their applications. *Ocean and Coastal Management*, **2010**, 53, 507-517	3.9	118
251	Impact of large-scale climate extremes on biospheric carbon fluxes: An intercomparison based on MsTMIP data. *Global Biogeochemical Cycles*, **2014**, 28, 585-600	5.9	112
250	Large loss of CO in winter observed across the northern permafrost region.. *Nature Climate Change*, **2019**, 9, 852-857	21.4	112
249	Observed forest sensitivity to climate implies large changes in 21st century North American forest growth. *Ecology Letters*, **2016**, 19, 1119-28	10	109
248	Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. *Scientific Reports*, **2017**, 7, 4765	4.9	108
247	Recent global decline of CO fertilization effects on vegetation photosynthesis. *Science*, **2020**, 370, 1295-1300	33.9	107
246	Accelerating net terrestrial carbon uptake during the warming hiatus due to reduced respiration. *Nature Climate Change*, **2017**, 7, 148-152	21.4	106
245	A tree-ring perspective on the terrestrial carbon cycle. *Oecologia*, **2014**, 176, 307-22	2.9	106
244	Land-use emissions play a critical role in land-based mitigation for Paris climate targets. *Nature Communications*, **2018**, 9, 2938	17.4	99
243	Increasing anthropogenic methane emissions arise equally from agricultural and fossil fuel sources. *Environmental Research Letters*, **2020**, 15, 071002	6.2	99
242	Global wetland contribution to 2000 2012 atmospheric methane growth rate dynamics. *Environmental Research Letters*, **2017**, 12, 094013	6.2	97
241	Tropical forest responses to increasing atmospheric CO: current knowledge and opportunities for future research. *Functional Plant Biology*, **2013**, 40, 531-551	2.7	97
240	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. *Environmental Research Letters*, **2015**, 10, 094008	6.2	93
239	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	5.8	92
238	Modelling the role of fires in the terrestrial carbon balance by incorporating SPITFIRE into the global vegetation model ORCHIDEE Part 1: simulating historical global burned area and fire regimes. *Geoscientific Model Development*, **2014**, 7, 2747-2767	6.3	90
237	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. *Biogeosciences*, **2012**, 9, 3571-3586	4.6	83
236	When tree rings go global: Challenges and opportunities for retro- and prospective insight. *Quaternary Science Reviews*, **2018**, 197, 1-20	3.9	81
235	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	5.8	81

234	Five decades of northern land carbon uptake revealed by the interhemispheric CO gradient. *Nature*, **2019**, 568, 221-225	50.4	77
233	Sunlight mediated seasonality in canopy structure and photosynthetic activity of Amazonian rainforests. *Environmental Research Letters*, **2015**, 10, 064014	6.2	77
232	FLUXNET-CH4 Synthesis Activity: Objectives, Observations, and Future Directions. *Bulletin of the American Meteorological Society*, **2019**, 100, 2607-2632	6.1	77
231	Half of global methane emissions come from highly variable aquatic ecosystem sources. *Nature Geoscience*, **2021**, 14, 225-230	18.3	77
230	The El Niño Southern Oscillation and wetland methane interannual variability. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	76
229	Global carbon budget 2013 **2013**,		75
228	The carbon balance of South America: a review of the status, decadal trends and main determinants. *Biogeosciences*, **2012**, 9, 5407-5430	4.6	70
227	Variability and quasi-decadal changes in the methane budget over the period 2000–2012. *Atmospheric Chemistry and Physics*, **2017**, 17, 11135-11161	6.8	69
226	Carbon cycle uncertainty in the Alaskan Arctic. *Biogeosciences*, **2014**, 11, 4271-4288	4.6	69
225	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	5	69
224	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,		66
223	Top-down assessment of the Asian carbon budget since the mid 1990s. *Nature Communications*, **2016**, 7, 10724	17.4	64
222	Impacts of land cover and climate data selection on understanding terrestrial carbon dynamics and the CO₂ airborne fraction. *Biogeosciences*, **2011**, 8, 2027-2036	4.6	64
221	Evaluation of continental carbon cycle simulations with North American flux tower observations. *Ecological Monographs*, **2013**, 83, 531-556	9	63
220	Global patterns and climate drivers of water-use efficiency in terrestrial ecosystems deduced from satellite-based datasets and carbon cycle models. *Global Ecology and Biogeography*, **2016**, 25, 311-323	6.1	63
219	The influence of local spring temperature variance on temperature sensitivity of spring phenology. *Global Change Biology*, **2014**, 20, 1473-80	11.4	61
218	Global Carbon Budget 2017		60
217	Drought rapidly diminishes the large net CO uptake in 2011 over semi-arid Australia. *Scientific Reports*, **2016**, 6, 37747	4.9	58

216	Seasonal responses of terrestrial ecosystem water-use efficiency to climate change. *Global Change Biology*, **2016**, 22, 2165-77	11.4	57
215	Methane emissions from tree stems: a new frontier in the global carbon cycle. *New Phytologist*, **2019**, 222, 18-28	9.8	57
214	Net biome production of the Amazon Basin in the 21st century. *Global Change Biology*, **2010**, 16, 2062-2075	11.4	54
213	Important role of forest disturbances in the global biomass turnover and carbon sinks. *Nature Geoscience*, **2019**, 12, 730-735	18.3	53
212	Carbon emissions from a temperate peat fire and its relevance to interannual variability of trace atmospheric greenhouse gases. *Journal of Geophysical Research*, **2006**, 111,		53
211	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	4.3	52
210	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	5.5	52
209	Comparing tree-ring and permanent plot estimates of aboveground net primary production in three eastern U.S. forests. *Ecosphere*, **2016**, 7, e01454	3.1	50
208	Improved tree-ring archives will support earth-system science. *Nature Ecology and Evolution*, **2017**, 1, 8	12.3	49
207	Overview of the Large-Scale Biosphere–Atmosphere Experiment in Amazonia Data Model Intercomparison Project (LBA-DMIP). *Agricultural and Forest Meteorology*, **2013**, 182-183, 111-127	5.8	49
206	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	6	49
205	500 years of regional forest growth variability and links to climatic extreme events in Europe. *Environmental Research Letters*, **2012**, 7, 045705	6.2	48
204	Seasonal leaf dynamics for tropical evergreen forests in a process-based global ecosystem model. *Geoscientific Model Development*, **2012**, 5, 1091-1108	6.3	47
203	Global Carbon Budget 2021. *Earth System Science Data*, **2022**, 14, 1917-2005	10.5	47
202	Potential effects of climate change on inundation patterns in the Amazon Basin. *Hydrology and Earth System Sciences*, **2013**, 17, 2247-2262	5.5	44
201	Trends and drivers of regional sources and sinks of carbon dioxide over the past two decades		44
200	Interannual variability of ecosystem carbon exchange: From observation to prediction. *Global Ecology and Biogeography*, **2017**, 26, 1225-1237	6.1	42
199	Benchmarking the seasonal cycle of CO2 fluxes simulated by terrestrial ecosystem models. *Global Biogeochemical Cycles*, **2015**, 29, 46-64	5.9	42

198	Land-use and land-cover change carbon emissions between 1901 and 2012 constrained by biomass observations. *Biogeosciences*, **2017**, 14, 5053-5067	4.6	42
197	Toward optimal integration of terrestrial biosphere models. *Geophysical Research Letters*, **2015**, 42, 4418-4428	4.9	42
196	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,		42
195	The dry season intensity as a key driver of NPP trends. *Geophysical Research Letters*, **2016**, 43, 2632-2639	4.9	42
194	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	6.3	42
193	Comment on "The global tree restoration potential". *Science*, **2019**, 366,	33.3	41
192	Modeling the Sensitivity of the Seasonal Cycle of GPP to Dynamic LAI and Soil Depths in Tropical Rainforests. *Ecosystems*, **2009**, 12, 517-533	3.9	41
191	Impact of the 2015/2016 El Niño on the terrestrial carbon cycle constrained by bottom-up and top-down approaches. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2018**, 373,	5.8	41
190	Soil carbon pools in Swiss forests show legacy effects from historic forest litter raking. *Landscape Ecology*, **2013**, 28, 835-846	4.3	40
189	Advancing Scientific Understanding of the Global Methane Budget in Support of the Paris Agreement. *Global Biogeochemical Cycles*, **2019**, 33, 1475-1512	5.9	40
188	Missing pieces to modeling the Arctic-Boreal puzzle. *Environmental Research Letters*, **2018**, 13, 020202	6.2	39
187	African tropical rainforest net carbon dioxide fluxes in the twentieth century. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2013**, 368, 20120376	5.8	39
186	Sea-level rise research and dialogue in North Carolina: Creating windows for policy change. *Ocean and Coastal Management*, **2009**, 52, 147-153	3.9	39
185	The relative importance of intrinsic and extrinsic factors in the decline of obligate seeder forests. *Global Ecology and Biogeography*, **2016**, 25, 1166-1172	6.1	38
184	Response of Water Use Efficiency to Global Environmental Change Based on Output From Terrestrial Biosphere Models. *Global Biogeochemical Cycles*, **2017**, 31, 1639-1655	5.9	38
183	Reviews and syntheses: An empirical spatiotemporal description of the global surface–atmosphere carbon fluxes: opportunities and data limitations. *Biogeosciences*, **2017**, 14, 3685-3703	4.6	37
182	Robust dynamics of Amazon dieback to climate change with perturbed ecosystem model parameters. *Global Change Biology*, **2010**, 16, 2476	11.4	37
181	NASA's surface biology and geology designated observable: A perspective on surface imaging algorithms. *Remote Sensing of Environment*, **2021**, 257, 112349	13.2	37

180	Asymmetric responses of primary productivity to altered precipitation simulated by ecosystem models across three long-term grassland sites. *Biogeosciences*, **2018**, 15, 3421-3437	4.6	36
179	Carbon implications of converting cropland to bioenergy crops or forest for climate mitigation: a global assessment. *GCB Bioenergy*, **2016**, 8, 81-95	5.6	35
178	Maximum carbon uptake rate dominates the interannual variability of global net ecosystem exchange. *Global Change Biology*, **2019**, 25, 3381-3394	11.4	34
177	Anomalous carbon uptake in Australia as seen by GOSAT. *Geophysical Research Letters*, **2015**, 42, 8177-8184	4.9	34
176	Modeling spatiotemporal dynamics of global wetlands: comprehensive evaluation of a new sub-grid TOPMODEL parameterization and uncertainties. *Biogeosciences*, **2016**, 13, 1387-1408	4.6	34
175	Enhanced response of global wetland methane emissions to the 2015-2016 El Niño-Southern Oscillation event. *Environmental Research Letters*, **2018**, 13,	6.2	34
174	Enhanced methane emissions from tropical wetlands during the 2011 La Niña. *Scientific Reports*, **2017**, 7, 45759	4.9	33
173	Diagnosing phosphorus limitations in natural terrestrial ecosystems in carbon cycle models. *Earth's Future*, **2017**, 5, 730-749	7.9	33
172	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. *Nature Geoscience*, **2019**, 12, 809-814	18.3	33
171	A new model of the global biogeochemical cycle of carbonyl sulfide – Part 2: Use of carbonyl sulfide to constrain gross primary productivity in current vegetation models. *Atmospheric Chemistry and Physics*, **2015**, 15, 9285-9312	6.8	33
170	Fire evolution in the radioactive forests of Ukraine and Belarus: future risks for the population and the environment. *Ecological Monographs*, **2015**, 85, 49-72	9	32
169	Emergent climate and CO 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	11.4	31
168	Spatially Resolved Isotopic Source Signatures of Wetland Methane Emissions. *Geophysical Research Letters*, **2018**, 45, 3737-3745	4.9	31
167	Multi-model comparison highlights consistency in predicted effect of warming on a semi-arid shrub. *Global Change Biology*, **2018**, 24, 424-438	11.4	31
166	MEASURING THE IMPACT OF SEA-LEVEL RISE ON COASTAL REAL ESTATE: A HEDONIC PROPERTY MODEL APPROACH*. *Journal of Regional Science*, **2011**, 51, 751-767	1.8	31
165	Predicting pan-tropical climate change induced forest stock gains and losses–Implications for REDD. *Environmental Research Letters*, **2010**, 5, 014013	6.2	31
164	The climatic drivers of normalized difference vegetation index and tree-ring-based estimates of forest productivity are spatially coherent but temporally decoupled in Northern Hemispheric forests. *Global Ecology and Biogeography*, **2018**, 27, 1352-1365	6.1	31
163	Inundation of freshwater peatlands by sea level rise: Uncertainty and potential carbon cycle feedbacks. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		30

162	Empirical estimates of regional carbon budgets imply reduced global soil heterotrophic respiration. *National Science Review*, **2021**, 8, nwaa145	10.8	30
161	Global land carbon sink response to temperature and precipitation varies with ENSO phase. *Environmental Research Letters*, **2017**, 12, 064007	6.2	29
160	Improving the dynamics of Northern Hemisphere high-latitude vegetation in the ORCHIDEE ecosystem model. *Geoscientific Model Development*, **2015**, 8, 2263-2283	6.3	29
159	Land carbon models underestimate the severity and duration of drought's impact on plant productivity. *Scientific Reports*, **2019**, 9, 2758	4.9	28
158	Global priority conservation areas in the face of 21st century climate change. *PLoS ONE*, **2013**, 8, e54839	3.7	28
157	Opportunities and Trade-offs among BECCS and the Food, Water, Energy, Biodiversity, and Social Systems Nexus at Regional Scales. *BioScience*, **2018**, 68, 100-111	5.7	27
156	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	3.7	27
155	Inter-annual variability of carbon and water fluxes in Amazonian forest, Cerrado and pasture sites, as simulated by terrestrial biosphere models. *Agricultural and Forest Meteorology*, **2013**, 182-183, 145-155	5.8	27
154	Methane emissions from global wetlands: An assessment of the uncertainty associated with various wetland extent data sets. *Atmospheric Environment*, **2017**, 165, 310-321	5.3	27
153	A Wood Biology Agenda to Support Global Vegetation Modelling. *Trends in Plant Science*, **2018**, 23, 1006-1015	15.1	27
152	Global Carbon Budget 2021		26
151	The terrestrial carbon budget of South and Southeast Asia. *Environmental Research Letters*, **2016**, 11, 105006	6.2	26
150	A Combined Tree Ring and Vegetation Model Assessment of European Forest Growth Sensitivity to Interannual Climate Variability. *Global Biogeochemical Cycles*, **2018**, 32, 1226	5.9	25
149	Evaluating the agreement between measurements and models of net ecosystem exchange at different times and timescales using wavelet coherence: an example using data from the North American Carbon Program Site-Level Interim Synthesis. *Biogeosciences*, **2013**, 10, 6893-6909	4.6	25
148	Sensitivity of global terrestrial carbon cycle dynamics to variability in satellite-observed burned area. *Global Biogeochemical Cycles*, **2015**, 29, 207-222	5.9	24
147	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*, **2016**, 68, 28968	3.3	24
146	Increased light-use efficiency in northern terrestrial ecosystems indicated by CO2 and greening observations. *Geophysical Research Letters*, **2016**, 43, 11,339	4.9	23
145	Sources of Uncertainty in Regional and Global Terrestrial CO2 Exchange Estimates. *Global Biogeochemical Cycles*, **2020**, 34, e2019GB006393	5.9	23

144	Space-Based Observations for Understanding Changes in the Arctic-Boreal Zone. *Reviews of Geophysics*, **2020**, 58, e2019RG000652	23.1	23
143	FLUXNET-CH₄: a global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. *Earth System Science Data*, **2021**, 13, 3607-3689	10.5	23
142	Hotspots of gross emissions from the land use sector: patterns, uncertainties, and leading emission sources for the period 2000–2005 in the tropics. *Biogeosciences*, **2016**, 13, 4253-4269	4.6	23
141	Uncertainty analysis of terrestrial net primary productivity and net biome productivity in China during 1901–2005. *Journal of Geophysical Research G: Biogeosciences*, **2016**, 121, 1372-1393	3.7	23
140	Evaluating the potential of large-scale simulations to predict carbon fluxes of terrestrial ecosystems over a European Eddy Covariance network. *Biogeosciences*, **2014**, 11, 2661-2678	4.6	22
139	Use of various remote sensing land cover products for plant functional type mapping over Siberia. *Earth System Science Data*, **2013**, 5, 331-348	10.5	22
138	A multi-scale comparison of modeled and observed seasonal methane emissions in northern wetlands. *Biogeosciences*, **2016**, 13, 5043-5056	4.6	22
137	Precipitation thresholds regulate net carbon exchange at the continental scale. *Nature Communications*, **2018**, 9, 3596	17.4	22
136	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	5.9	21
135	Plant Regrowth as a Driver of Recent Enhancement of Terrestrial CO2 Uptake. *Geophysical Research Letters*, **2018**, 45, 4820-4830	4.9	21
134	Regional carbon fluxes from land use and land cover change in Asia, 1980–2009. *Environmental Research Letters*, **2016**, 11, 074011	6.2	21
133	Determinants of coastal treeline and the role of abiotic and biotic interactions. *Plant Ecology*, **2009**, 202, 55-66	1.7	21
132	Converging Climate Sensitivities of European Forests Between Observed Radial Tree Growth and Vegetation Models. *Ecosystems*, **2018**, 21, 410-425	3.9	21
131	The carbon cycle in Mexico: past, present and future of C stocks and fluxes. *Biogeosciences*, **2016**, 13, 223-238	4.6	21
130	Widespread mangrove damage resulting from the 2017 Atlantic mega hurricane season. *Environmental Research Letters*, **2020**, 15, 064010	6.2	20
129	Disentangling competitive vs. climatic drivers of tropical forest mortality. *Journal of Ecology*, **2018**, 106, 1165-1179	6	20
128	Decadal-Scale Vegetation Change Driven by Salinity at Leading Edge of Rising Sea Level. *Ecosystems*, **2019**, 22, 1918-1930	3.9	20
127	Multicriteria evaluation of discharge simulation in Dynamic Global Vegetation Models. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 7488-7505	4.4	20

126	Role of CO₂, climate and land use in regulating the seasonal amplitude increase of carbon fluxes in terrestrial ecosystems: a multimodel analysis. *Biogeosciences*, **2016**, 13, 5121-5137	4.6	19
125	Higher temperature variability reduces temperature sensitivity of vegetation growth in Northern Hemisphere. *Geophysical Research Letters*, **2017**, 44, 6173-6181	4.9	19
124	The Global Methane Budget 2000–2017		19
123	State of the science in reconciling top-down and bottom-up approaches for terrestrial CO budget. *Global Change Biology*, **2020**, 26, 1068-1084	11.4	19
122	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	5.8	17
121	Satellite remote sensing of tropical forest canopies and their seasonal dynamics. *International Journal of Remote Sensing*, **2009**, 30, 6575-6590	3.1	17
120	Disentangling Climate and Disturbance Effects on Regional Vegetation Greening Trends. *Ecosystems*, **2019**, 22, 873-891	3.9	17
119	Carbon and Water Use Efficiencies: A Comparative Analysis of Ten Terrestrial Ecosystem Models under Changing Climate. *Scientific Reports*, **2019**, 9, 14680	4.9	16
118	Critical land change information enhances the understanding of carbon balance in the United States. *Global Change Biology*, **2020**, 26, 3920-3929	11.4	15
117	The Global Methane Budget: 2000–2012		15
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