Stephen A Sitch

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8053261/publications.pdf

Version: 2024-02-01

232 papers 61,039 citations

94 h-index 228 g-index

280 all docs

 $\begin{array}{c} 280 \\ \\ \text{docs citations} \end{array}$

times ranked

280

40291 citing authors

#	Article	IF	CITATIONS
1	Methane flux from northern wetlands and tundra. Tellus, Series B: Chemical and Physical Meteorology, 2022, 48, 652.	1.6	57
2	A first-order analysis of the potential rôle of CO ₂ fertilization to affect the global carbon budget: a comparison of four terrestrial biosphere models. Tellus, Series B: Chemical and Physical Meteorology, 2022, 51, 343.	1.6	49
3	Global application of an unoccupied aerial vehicle photogrammetry protocol for predicting aboveground biomass in nonâ€forest ecosystems. Remote Sensing in Ecology and Conservation, 2022, 8, 57-71.	4.3	13
4	Impact of merging of historical and future climate data sets on land carbon cycle projections for South America. Climate Resilience and Sustainability, 2022, 1 , .	2.3	0
5	Are Landâ€Use Change Emissions in Southeast Asia Decreasing or Increasing?. Global Biogeochemical Cycles, 2022, 36, .	4.9	7
6	Disentangling land model uncertainty via Matrix-based Ensemble Model Inter-comparison Platform (MEMIP). Ecological Processes, 2022, 11 , .	3.9	1
7	Fragmentation-Driven Divergent Trends in Burned Area in Amazonia and Cerrado. Frontiers in Forests and Global Change, 2022, 5, .	2.3	8
8	VODCA2GPP – a new, global, long-term (1988–2020) gross primary production dataset from microwave remote sensing. Earth System Science Data, 2022, 14, 1063-1085.	9.9	24
9	Deficiencies of Phenology Models in Simulating Spatial and Temporal Variations in Temperate Spring Leaf Phenology. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	6
10	Are Terrestrial Biosphere Models Fit for Simulating the Global Land Carbon Sink?. Journal of Advances in Modeling Earth Systems, 2022, 14, .	3.8	28
11	How Well Do We Understand the Landâ€Oceanâ€Atmosphere Carbon Cycle?. Reviews of Geophysics, 2022, 60, .	23.0	38
12	Divergent historical GPP trends among state-of-the-art multi-model simulations and satellite-based products. Earth System Dynamics, 2022, 13, 833-849.	7.1	11
13	Comparing national greenhouse gas budgets reported in UNFCCC inventories against atmospheric inversions. Earth System Science Data, 2022, 14, 1639-1675.	9.9	58
14	Global and Regional Trends and Drivers of Fire Under Climate Change. Reviews of Geophysics, 2022, 60,	23.0	182
15	Assessing Model Predictions of Carbon Dynamics in Global Drylands. Frontiers in Environmental Science, 2022, 10, .	3.3	5
16	Investigating the response of leaf area index to droughts in southern African vegetation using observations and model simulations. Hydrology and Earth System Sciences, 2022, 26, 2045-2071.	4.9	5
17	Global Carbon Budget 2021. Earth System Science Data, 2022, 14, 1917-2005.	9.9	663
18	Reduced global fire activity due to human demography slows global warming by enhanced land carbon uptake. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2101186119.	7.1	12

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19	Bottom-up approaches for estimating terrestrial GHG budgets: Bookkeeping, process-based modeling, and data-driven methods., 2022,, 59-85.		0
20	CO ₂ fertilization of crops offsets yield losses due to future surface ozone damage and climate change. Environmental Research Letters, 2022, 17, 074007.	5.2	12
21	Regional and seasonal partitioning of water and temperature controls on global land carbon uptake variability. Nature Communications, 2022, 13, .	12.8	18
22	Representation of the phosphorus cycle in the Joint UK Land Environment Simulator (vn5.5_JULES-CNP). Geoscientific Model Development, 2022, 15, 5241-5269.	3.6	12
23	Integrating the evidence for a terrestrial carbon sink caused by increasing atmospheric CO ₂ . New Phytologist, 2021, 229, 2413-2445.	7.3	286
24	Large carbon sink potential of secondary forests in the Brazilian Amazon to mitigate climate change. Nature Communications, 2021, 12, 1785.	12.8	99
25	Peak growing season patterns and climate extremes-driven responses of gross primary production estimated by satellite and process based models over North America. Agricultural and Forest Meteorology, 2021, 298-299, 108292.	4.8	12
26	Carbon loss from forest degradation exceeds that from deforestation in the Brazilian Amazon. Nature Climate Change, 2021, 11, 442-448.	18.8	166
27	JULES-CN: a coupled terrestrial carbon–nitrogen scheme (JULES vn5.1). Geoscientific Model Development, 2021, 14, 2161-2186.	3.6	32
28	Historical and future global burned area with changing climate and human demography. One Earth, 2021, 4, 517-530.	6.8	43
29	Modelled land use and land cover change emissions – a spatio-temporal comparison of different approaches. Earth System Dynamics, 2021, 12, 635-670.	7.1	29
30	Greening drylands despite warming consistent with carbon dioxide fertilization effect. Global Change Biology, 2021, 27, 3336-3349.	9.5	50
31	Linking global terrestrial CO ₂ fluxes and environmental drivers: inferences from the Orbiting Carbon ObservatoryÂ2 satellite and terrestrial biospheric models. Atmospheric Chemistry and Physics, 2021, 21, 6663-6680.	4.9	10
32	Regional variation in the effectiveness of methane-based and land-based climate mitigation options. Earth System Dynamics, 2021, 12, 513-544.	7.1	6
33	Five years of variability in the global carbon cycle: comparing an estimate from the Orbiting Carbon Observatory-2 and process-based models. Environmental Research Letters, 2021, 16, 054041.	5.2	8
34	A multi-data assessment of land use and land cover emissions from Brazil during 2000–2019. Environmental Research Letters, 2021, 16, 074004.	5.2	33
35	Increasing impact of warm droughts on northern ecosystem productivity over recent decades. Nature Climate Change, 2021, 11, 772-779.	18.8	148
36	Land-use harmonization datasets for annual global carbon budgets. Earth System Science Data, 2021, 13, 4175-4189.	9.9	37

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37	Dynamic global vegetation models underestimate net CO ₂ flux mean and inter-annual variability in dryland ecosystems. Environmental Research Letters, 2021, 16, 094023.	5.2	23
38	Amazonian forest degradation must be incorporated into the COP26 agenda. Nature Geoscience, 2021, 14, 634-635.	12.9	32
39	Response to Comments on "Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis― Science, 2021, 373, eabg7484.	12.6	15
40	Slowdown of the greening trend in natural vegetation with further rise in atmospheric CO ₂ . Biogeosciences, 2021, 18, 4985-5010.	3.3	49
41	Vulnerability of European ecosystems to two compound dry and hot summers in 2018 and 2019. Earth System Dynamics, 2021, 12, 1015-1035.	7.1	49
42	Response of global land evapotranspiration to climate change, elevated CO2, and land use change. Agricultural and Forest Meteorology, 2021, 311, 108663.	4.8	39
43	Assessing the representation of the Australian carbon cycle in global vegetation models. Biogeosciences, 2021, 18, 5639-5668.	3.3	21
44	Aerosol–light interactions reduce the carbon budget imbalance. Environmental Research Letters, 2021, 16, 124072.	5.2	10
45	Interannual variation of terrestrial carbon cycle: Issues and perspectives. Global Change Biology, 2020, 26, 300-318.	9.5	214
46	Stomatal optimization based on xylem hydraulics (SOX) improves land surface model simulation of vegetation responses to climate. New Phytologist, 2020, 226, 1622-1637.	7.3	95
47	State of the science in reconciling topâ€down and bottomâ€up approaches for terrestrial CO ₂ budget. Global Change Biology, 2020, 26, 1068-1084.	9.5	43
48	Forest production efficiency increases with growth temperature. Nature Communications, 2020, 11, 5322.	12.8	57
49	Climateâ€Driven Variability and Trends in Plant Productivity Over Recent Decades Based on Three Global Products. Global Biogeochemical Cycles, 2020, 34, e2020GB006613.	4.9	36
50	Impacts of extreme summers on European ecosystems: a comparative analysis of 2003, 2010 and 2018. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190507.	4.0	64
51	Recent global decline of CO ₂ fertilization effects on vegetation photosynthesis. Science, 2020, 370, 1295-1300.	12.6	317
52	Comparison of forest aboveâ€ground biomass from dynamic global vegetation models with spatially explicit remotely sensed observationâ€based estimates. Global Change Biology, 2020, 26, 3997-4012.	9.5	25
53	How Climate Shapes the Functioning of Tropical Montane Cloud Forests. Current Forestry Reports, 2020, 6, 97-114.	7.4	17
54	Global ecosystems and fire: Multiâ€model assessment of fireâ€induced treeâ€cover and carbon storage reduction. Global Change Biology, 2020, 26, 5027-5041.	9.5	55

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55	Causes of slowingâ€down seasonal CO ₂ amplitude at Mauna Loa. Global Change Biology, 2020, 26, 4462-4477.	9.5	14
56	Direct and seasonal legacy effects of the 2018 heat wave and drought on European ecosystem productivity. Science Advances, 2020, 6, eaba2724.	10.3	229
57	Increased control of vegetation on global terrestrial energy fluxes. Nature Climate Change, 2020, 10, 356-362.	18.8	152
58	Pathway dependence of ecosystem responses in China to 1.5 °C global warming. Atmospheric Chemistry and Physics, 2020, 20, 2353-2366.	4.9	9
59	Enhanced regional terrestrial carbon uptake over Korea revealed by atmospheric CO 2 measurements from 1999 to 2017. Global Change Biology, 2020, 26, 3368-3383.	9.5	7
60	Shifts in national land use and food production in Great Britain after a climate tipping point. Nature Food, 2020, 1, 76-83.	14.0	25
61	Scaling carbon fluxes from eddy covariance sites to globe: synthesis and evaluation of the FLUXCOM approach. Biogeosciences, 2020, 17, 1343-1365.	3.3	323
62	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.	4.9	130
63	Sources of Uncertainty in Regional and Global Terrestrial CO ₂ Exchange Estimates. Global Biogeochemical Cycles, 2020, 34, e2019GB006393.	4.9	59
64	Vegetation biomass change in China in the 20th century: an assessment based on a combination of multi-model simulations and field observations. Environmental Research Letters, 2020, 15, 094026.	5.2	6
65	Global Carbon Budget 2020. Earth System Science Data, 2020, 12, 3269-3340.	9.9	1,477
66	Quantitative assessment of fire and vegetation properties in simulations with fire-enabled vegetation models from the Fire Model Intercomparison Project. Geoscientific Model Development, 2020, 13, 3299-3318.	3.6	63
67	Calibrating soybean parameters in JULES 5.0 from the US-Ne2/3 FLUXNET sites and the SoyFACE-O ₃ experiment. Geoscientific Model Development, 2020, 13, 6201-6213.	3.6	3
68	Increased atmospheric vapor pressure deficit reduces global vegetation growth. Science Advances, 2019, 5, eaax1396.	10.3	755
69	Contrasting effects of CO ₂ fertilization, land-use change and warming on seasonal amplitude of Northern Hemisphere CO ₂ exchange. Atmospheric Chemistry and Physics, 2019, 19, 12361-12375.	4.9	30
70	Historical (1700–2012) global multi-model estimates of the fire emissions from the Fire Modeling Intercomparison Project (FireMIP). Atmospheric Chemistry and Physics, 2019, 19, 12545-12567.	4.9	64
71	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.	4.8	40
72	Studying the impact of biomass burning aerosol radiative and climate effects on the Amazon rainforest productivity with an Earth system model. Atmospheric Chemistry and Physics, 2019, 19, 1301-1326.	4.9	41

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73	Emergent relationships with respect to burned area in global satellite observations and fire-enabled vegetation models. Biogeosciences, 2019, 16, 57-76.	3.3	85
74	Growing season extension affects ozone uptake by European forests. Science of the Total Environment, 2019, 669, 1043-1052.	8.0	27
75	Response of simulated burned area to historical changes in environmental and anthropogenic factors: a comparison of seven fire models. Biogeosciences, 2019, 16, 3883-3910.	3.3	32
76	Compensatory climate effects link trends in global runoff to rising atmospheric CO ₂ concentration. Environmental Research Letters, 2019, 14, 124075.	5.2	14
77	Global trends in carbon sinks and their relationships with CO2 and temperature. Nature Climate Change, 2019, 9, 73-79.	18.8	163
78	Global Carbon Budget 2019. Earth System Science Data, 2019, 11, 1783-1838.	9.9	1,159
79	Evaluating the Interplay Between Biophysical Processes and Leaf Area Changes in Land Surface Models. Journal of Advances in Modeling Earth Systems, 2018, 10, 1102-1126.	3.8	22
80	Large sensitivity in land carbon storage due to geographical and temporal variation in the thermal response of photosynthetic capacity. New Phytologist, 2018, 218, 1462-1477.	7.3	67
81	Large uncertainty in carbon uptake potential of landâ€based climateâ€change mitigation efforts. Global Change Biology, 2018, 24, 3025-3038.	9.5	56
82	Sources of Uncertainty in Modeled Land Carbon Storage within and across Three MIPs: Diagnosis with Three New Techniques. Journal of Climate, 2018, 31, 2833-2851.	3.2	24
83	Land use change and El Ni $ ilde{A}\pm$ o-Southern Oscillation drive decadal carbon balance shifts in Southeast Asia. Nature Communications, 2018, 9, 1154.	12.8	28
84	On the causes of trends in the seasonal amplitude of atmospheric <scp>CO</scp> ₂ . Global Change Biology, 2018, 24, 608-616.	9.5	48
85	Increased importance of methane reduction for a 1.5 degree target. Environmental Research Letters, 2018, 13, 054003.	5.2	61
86	Simulated Global Climate Response to Tropospheric Ozoneâ€Induced Changes in Plant Transpiration. Geophysical Research Letters, 2018, 45, 13070-13079.	4.0	20
87	Large but decreasing effect of ozone on the European carbon sink. Biogeosciences, 2018, 15, 4245-4269.	3.3	44
88	Widespread seasonal compensation effects of spring warming on northern plant productivity. Nature, 2018, 562, 110-114.	27.8	240
89	Reconciling global-model estimates and country reporting of anthropogenic forest CO2 sinks. Nature Climate Change, 2018, 8, 914-920.	18.8	101
90	Impact of the 2015/2016 El Ni $\tilde{A}\pm o$ 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.	4.0	63

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91	Modelling tropical forest responses to drought and El Niñ0 with a stomatal optimization model based on xylem hydraulics. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170315.	4.0	69
92	Technical note: A simple theoretical model framework to describe plant stomatal "sluggishness―in response to elevated ozone concentrations. Biogeosciences, 2018, 15, 5415-5422.	3.3	6
93	A Large Committed Longâ€Term Sink of Carbon due to Vegetation Dynamics. Earth's Future, 2018, 6, 1413-1432.	6.3	24
94	Contrasting interannual atmospheric CO ₂ variabilities and their terrestrial mechanisms for two types of El Niños. Atmospheric Chemistry and Physics, 2018, 18, 10333-10345.	4.9	17
95	The ecology of peace: preparing Colombia for new political and planetary climates. Frontiers in Ecology and the Environment, 2018, 16, 525-531.	4.0	41
96	Sensitivity of atmospheric CO2 growth rate to observed changes in terrestrial water storage. Nature, 2018, 560, 628-631.	27.8	295
97	Land-use emissions play a critical role in land-based mitigation for Paris climate targets. Nature Communications, 2018, 9, 2938.	12.8	194
98	Asymmetric responses of primary productivity to altered precipitation simulated by ecosystem models across three long-term grassland sites. Biogeosciences, 2018, 15, 3421-3437.	3.3	55
99	Carbon budgets for 1.5 and 2 °C targets lowered by natural wetland and permafrost feedbacks. Nature Geoscience, 2018, 11, 568-573.	12.9	74
100	Vegetation distribution and terrestrial carbon cycle in a carbon cycle configuration of JULES4.6 with new plant functional types. Geoscientific Model Development, 2018, 11, 2857-2873.	3.6	49
101	Lower land-use emissions responsible for increased net land carbon sink during the slow warming period. Nature Geoscience, 2018, 11, 739-743.	12.9	110
102	Largeâ€Scale Droughts Responsible for Dramatic Reductions of Terrestrial Net Carbon Uptake Over North America in 2011 and 2012. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2053-2071.	3.0	35
103	Biophysics and vegetation cover change: a process-based evaluation framework for confronting land surface models with satellite observations. Earth System Science Data, 2018, 10, 1265-1279.	9.9	46
104	Global Carbon Budget 2018. Earth System Science Data, 2018, 10, 2141-2194.	9.9	1,167
105	Global Carbon Budget 2017. Earth System Science Data, 2018, 10, 405-448.	9.9	801
106	Historical carbon dioxide emissions caused by land-use changes are possibly larger than assumed. Nature Geoscience, 2017, 10, 79-84.	12.9	284
107	Compensatory water effects link yearly global land CO2 sink changes to temperature. Nature, 2017, 541, 516-520.	27.8	480
108	A roadmap for improving the representation of photosynthesis in Earth system models. New Phytologist, 2017, 213, 22-42.	7.3	365

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109	Current ambient concentrations of ozone in Panama modulate the leaf chemistry of the tropical tree Ficus insipida. Chemosphere, 2017, 172, 363-372.	8.2	11
110	Narrowing the Range of Future Climate Projections Using Historical Observations of Atmospheric CO ₂ . Journal of Climate, 2017, 30, 3039-3053.	3.2	20
111	Presentâ€day and future contribution of climate and fires to vegetation composition in the boreal forest of China. Ecosphere, 2017, 8, e01917.	2.2	26
112	Implications of improved representations of plant respiration in a changing climate. Nature Communications, 2017, 8, 1602.	12.8	100
113	Towards real-time verification of CO2 emissions. Nature Climate Change, 2017, 7, 848-850.	18.8	168
114	Land-use and land-cover change carbon emissions between 1901 and 2012 constrained by biomass observations. Biogeosciences, 2017, 14, 5053-5067.	3.3	58
115	Current challenges of implementing anthropogenic land-use and land-cover change in models contributing to climate change assessments. Earth System Dynamics, 2017, 8, 369-386.	7.1	69
116	The decreasing range between dry- and wet- season precipitation over land and its effect on vegetation primary productivity. PLoS ONE, 2017, 12, e0190304.	2.5	27
117	The Fire Modeling Intercomparison Project (FireMIP), phase 1: experimental and analytical protocols with detailed model descriptions. Geoscientific Model Development, 2017, 10, 1175-1197.	3.6	159
118	Role of CO ₂ , climate and land use in regulating the seasonal amplitude increase of carbon fluxes in terrestrial ecosystems: a multimodel analysis. Biogeosciences, 2016, 13, 5121-5137.	3.3	26
119	The carbon cycle in Mexico: past, present and future of C stocks and fluxes. Biogeosciences, 2016, 13, 223-238.	3.3	24
120	Improved representation of plant functional types and physiology in the Joint UK Land Environment Simulator (JULES v4.2) using plant trait information. Geoscientific Model Development, 2016, 9, 2415-2440.	3.6	115
121	The status and challenge of global fire modelling. Biogeosciences, 2016, 13, 3359-3375.	3.3	274
122	Conversion from forests to pastures in the Colombian Amazon leads to contrasting soil carbon dynamics depending on land management practices. Global Change Biology, 2016, 22, 3503-3517.	9.5	39
123	Comparing concentrationâ€based (AOT40) and stomatal uptake (PODY) metrics for ozone risk assessment to European forests. Global Change Biology, 2016, 22, 1608-1627.	9.5	83
124	The dry season intensity as a key driver of NPP trends. Geophysical Research Letters, 2016, 43, 2632-2639.	4.0	60
125	The terrestrial carbon budget of South and Southeast Asia. Environmental Research Letters, 2016, 11, 105006.	5.2	39
126	Precipitation and carbon-water coupling jointly control the interannual variability of global land gross primary production. Scientific Reports, 2016, 6, 39748.	3.3	57

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127	Importance of soil thermal regime in terrestrial ecosystem carbon dynamics in the circumpolar north. Global and Planetary Change, 2016, 142, 28-40.	3.5	13
128	Greening of the Earth and its drivers. Nature Climate Change, 2016, 6, 791-795.	18.8	1,675
129	Regional carbon fluxes from land use and land cover change in Asia, 1980–2009. Environmental Research Letters, 2016, 11, 074011.	5.2	31
130	Conversion from forests to pastures in the Colombian Amazon leads to differences in dead wood dynamics depending on land management practices. Journal of Environmental Management, 2016, 171, 42-51.	7.8	13
131	The terrestrial biosphere as a net source of greenhouse gases to the atmosphere. Nature, 2016, 531, 225-228.	27.8	402
132	Global Carbon Budget 2016. Earth System Science Data, 2016, 8, 605-649.	9.9	905
133	INFERNO: a fire and emissions scheme for the UK Met Office's Unified Model. Geoscientific Model Development, 2016, 9, 2685-2700.	3.6	37
134	Spatiotemporal patterns of terrestrial gross primary production: A review. Reviews of Geophysics, 2015, 53, 785-818.	23.0	432
135	Multicriteria evaluation of discharge simulation in Dynamic Global Vegetation Models. Journal of Geophysical Research D: Atmospheres, 2015, 120, 7488-7505.	3.3	25
136	Biomass burning related ozone damage on vegetation over the Amazon forest: a model sensitivity study. Atmospheric Chemistry and Physics, 2015, 15, 2791-2804.	4.9	60
137	Recent trends and drivers of regional sources and sinks of carbon dioxide. Biogeosciences, 2015, 12, 653-679.	3.3	587
138	The dominant role of semi-arid ecosystems in the trend and variability of the land CO ₂ sink. Science, 2015, 348, 895-899.	12.6	1,002
139	Combining the [ABA] and net photosynthesis-based model equations of stomatal conductance. Ecological Modelling, 2015, 300, 81-88.	2.5	34
140	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. New Phytologist, 2015, 206, 614-636.	7.3	350
141	Benchmarking the seasonal cycle of CO ₂ fluxes simulated by terrestrial ecosystem models. Global Biogeochemical Cycles, 2015, 29, 46-64.	4.9	48
142	Water-use efficiency and transpiration across European forests during the Anthropocene. Nature Climate Change, 2015, 5, 579-583.	18.8	357
143	Reconciling Precipitation with Runoff: Observed Hydrological Change in the Midlatitudes. Journal of Hydrometeorology, 2015, 16, 2403-2420.	1.9	7
144	Global Carbon Budget 2015. Earth System Science Data, 2015, 7, 349-396.	9.9	616

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145	Global carbon budget 2014. Earth System Science Data, 2015, 7, 47-85.	9.9	463
146	A full greenhouse gases budget of Africa: synthesis, uncertainties, and vulnerabilities. Biogeosciences, 2014, 11, 381-407.	3.3	162
147	Global carbon budget 2013. Earth System Science Data, 2014, 6, 235-263.	9.9	311
148	Analysing Amazonian forest productivity using a new individual and trait-based model (TFS v.1). Geoscientific Model Development, 2014, 7, 1251-1269.	3.6	87
149	Contribution of semi-arid ecosystems to interannual variability of the global carbon cycle. Nature, 2014, 509, 600-603.	27.8	1,054
150	Modeling the Terrestrial Biosphere. Annual Review of Environment and Resources, 2014, 39, 91-123.	13.4	181
151	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. Nature Communications, 2014, 5, 5018.	12.8	414
152	Simulated resilience of tropical rainforests to CO2-induced climate change. Nature Geoscience, 2013, 6, 268-273.	12.9	358
153	Evaluation of terrestrial carbon cycle models for their response to climate variability and to <scp><scp>CO₂</scp> trends. Global Change Biology, 2013, 19, 2117-2132.</scp>	9.5	617
154	African tropical rainforest net carbon dioxide fluxes in the twentieth century. Philosophical Transactions of the Royal Society B: Biological Sciences, 2013, 368, 20120376.	4.0	49
155	The global carbon budget 1959–2011. Earth System Science Data, 2013, 5, 165-185.	9.9	527
156	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.	4.0	82
157	Correction for Wang et al., Variations in atmospheric CO ₂ growth rates coupled with tropical temperature. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15163-15163.	7.1	8
158	Variations in atmospheric CO ₂ growth rates coupled with tropical temperature. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13061-13066.	7.1	144
159	Evaluation of Land Surface Models in Reproducing Satellite Derived Leaf Area Index over the High-Latitude Northern Hemisphere. Part II: Earth System Models. Remote Sensing, 2013, 5, 3637-3661.	4.0	75
160	High sensitivity of future global warming to land carbon cycle processes. Environmental Research Letters, 2012, 7, 024002.	5.2	241
161	The Effects of Tropospheric Ozone on Net Primary Productivity and Implications for Climate Change. Annual Review of Plant Biology, 2012, 63, 637-661.	18.7	661
162	The carbon balance of South America: a review of the status, decadal trends and main determinants. Biogeosciences, 2012, 9, 5407-5430.	3.3	78

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163	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. Biogeosciences, 2012, 9, 3571-3586.	3.3	103
164	Uncertainty analysis of vegetation distribution in the northern high latitudes during the 21st century with a dynamic vegetation model. Ecology and Evolution, 2012, 2, 593-614.	1.9	39
165	A Large and Persistent Carbon Sink in the World's Forests. Science, 2011, 333, 988-993.	12.6	5,393
166	Drought and ecosystem carbon cycling. Agricultural and Forest Meteorology, 2011, 151, 765-773.	4.8	446
167	Corrigendum to "Modelling basin-wide variations in Amazon forest productivity – Part 1: Model calibration, evaluation and upscaling functions for canopy photosynthesis" published in Biogeosciences, 6, 1247–1272, 2009. Biogeosciences, 2011, 8, 653-656.	3.3	1
168	A comprehensive set of benchmark tests for a land surface model of simultaneous fluxes of water and carbon at both the global and seasonal scale. Geoscientific Model Development, 2011, 4, 255-269.	3.6	112
169	Evaluation of a photosynthesis-based biogenic isoprene emission scheme in JULES and simulation of isoprene emissions under present-day climate conditions. Atmospheric Chemistry and Physics, 2011, 11, 4371-4389.	4.9	121
170	Highly contrasting effects of different climate forcing agents on terrestrial ecosystem services. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2026-2037.	3.4	49
171	The Joint UK Land Environment Simulator (JULES), model description – Part 1: Energy and water fluxes. Geoscientific Model Development, 2011, 4, 677-699.	3.6	993
172	Variations in Amazon forest productivity correlated with foliar nutrients and modelled rates of photosynthetic carbon supply. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 3316-3329.	4.0	71
173	Changes in the potential distribution of humid tropical forests on a warmer planet. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 137-160.	3.4	151
174	The Joint UK Land Environment Simulator (JULES), model description – Part 2: Carbon fluxes and vegetation dynamics. Geoscientific Model Development, 2011, 4, 701-722.	3.6	804
175	Development and evaluation of an Earth-System model – HadGEM2. Geoscientific Model Development, 2011, 4, 1051-1075.	3.6	1,141
176	Assessing uncertainties in a secondâ€generation dynamic vegetation model caused by ecological scale limitations. New Phytologist, 2010, 187, 666-681.	7.3	271
177	Multiple mechanisms of Amazonian forest biomass losses in three dynamic global vegetation models under climate change. New Phytologist, 2010, 187, 647-665.	7.3	189
178	Implications of future climate and atmospheric CO ₂ content for regional biogeochemistry, biogeography and ecosystem services across East Africa. Global Change Biology, 2010, 16, 617-640.	9.5	71
179	Robust dynamics of Amazon dieback to climate change with perturbed ecosystem model parameters. Global Change Biology, 2010, 16, 2476-2495.	9.5	53
180	IMOGEN: an intermediate complexity model to evaluate terrestrial impacts of a changing climate. Geoscientific Model Development, 2010, 3, 679-687.	3.6	40

#	Article	lF	Citations
181	From biota to chemistry and climate: towards a comprehensive description of trace gas exchange between the biosphere and atmosphere. Biogeosciences, 2010, 7, 121-149.	3.3	84
182	The African contribution to the global climate-carbon cycle feedback of the 21st century. Biogeosciences, 2010, 7, 513-519.	3.3	8
183	How vegetation impacts affect climate metrics for ozone precursors. Journal of Geophysical Research, 2010, 115, .	3.3	70
184	Benchmarking coupled climateâ€carbon models against longâ€term atmospheric CO ₂ measurements. Global Biogeochemical Cycles, 2010, 24, .	4.9	97
185	Carbon cost of plant nitrogen acquisition: A mechanistic, globally applicable model of plant nitrogen uptake, retranslocation, and fixation. Global Biogeochemical Cycles, 2010, 24, .	4.9	182
186	Modelling basin-wide variations in Amazon forest productivity – Part 1: Model calibration, evaluation and upscaling functions for canopy photosynthesis. Biogeosciences, 2009, 6, 1247-1272.	3.3	34
187	Isoprene emissions and climate. Atmospheric Environment, 2009, 43, 6121-6135.	4.1	168
188	The carbon balance of terrestrial ecosystems in China. Nature, 2009, 458, 1009-1013.	27.8	1,243
189	Impact of changes in diffuse radiation on the global land carbon sink. Nature, 2009, 458, 1014-1017.	27.8	858
190	Trends in the sources and sinks of carbon dioxide. Nature Geoscience, 2009, 2, 831-836.	12.9	1,746
191	Vegetation dynamics and plant CO ₂ responses as positive feedbacks in a greenhouse world. Geophysical Research Letters, 2009, 36, .	4.0	35
192	Changing Ecology of Tropical Forests: Evidence and Drivers. Annual Review of Ecology, Evolution, and Systematics, 2009, 40, 529-549.	8.3	229
193	Exploring the likelihood and mechanism of a climate-change-induced dieback of the Amazon rainforest. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20610-20615.	7.1	751
194	Evaluation of the terrestrial carbon cycle, future plant geography and climateâ€carbon cycle feedbacks using five Dynamic Global Vegetation Models (DGVMs). Global Change Biology, 2008, 14, 2015-2039.	9.5	1,097
195	Towards quantifying uncertainty in predictions of Amazon †dieback'. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1857-1864.	4.0	139
196	The Met Office Hadley Centre climate modelling capability: the competing requirements for improved resolution, complexity and dealing with uncertainty. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 2635-2657.	3.4	27
197	ASSESSING THE CARBON BALANCE OF CIRCUMPOLAR ARCTIC TUNDRA USING REMOTE SENSING AND PROCESS MODELING. , 2007, 17, 213-234.		123
198	Indirect radiative forcing of climate change through ozone effects on the land-carbon sink. Nature, 2007, 448, 791-794.	27.8	886

#	Article	IF	Citations
199	FLUXNET and modelling the global carbon cycle. Global Change Biology, 2007, 13, 610-633.	9.5	234
200	Projected Changes in Terrestrial Carbon Storage in Europe under Climate and Land-use Change, 1990–2100. Ecosystems, 2007, 10, 380-401.	3.4	131
201	Dynamic Global Vegetation Modeling: Quantifying Terrestrial Ecosystem Responses to Large-Scale Environmental Change., 2007,, 175-192.		222
202	THE IMPORTANCE OF AGE-RELATED DECLINE IN FOREST NPP FOR MODELING REGIONAL CARBON BALANCES. , 2006, 16 , $1555-1574$.		116
203	Terrestrial biosphere carbon storage under alternative climate projections. Climatic Change, 2006, 74, 97-122.	3.6	140
204	Impact of climate variability on present and Holocene vegetation: A model-based study. Ecological Modelling, 2006, 191, 469-486.	2.5	48
205	Comparing and evaluating process-based ecosystem model predictions of carbon and water fluxes in major European forest biomes. Global Change Biology, 2005, 11, 2211-2233.	9.5	246
206	Ecosystem Service Supply and Vulnerability to Global Change in Europe. Science, 2005, 310, 1333-1337.	12.6	1,355
207	A dynamic global vegetation model for studies of the coupled atmosphere-biosphere system. Global Biogeochemical Cycles, 2005, 19, .	4.9	1,755
208	Multiple constraints on regional CO2flux variations over land and oceans. Global Biogeochemical Cycles, 2005, 19, .	4.9	154
209	Impacts of future land cover changes on atmospheric CO2and climate. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	4.9	148
210	Effects of parameter uncertainties on the modeling of terrestrial biosphere dynamics. Global Biogeochemical Cycles, 2005, 19, .	4.9	274
211	Role of land cover changes for atmospheric CO2 increase and climate change during the last 150 years. Global Change Biology, 2004, 10, 1253-1266.	9.5	244
212	Responses of spring phenology to climate change. New Phytologist, 2004, 162, 295-309.	7.3	761
213	Effects of Changes in Climate on Landscape and Regional Processes, and Feedbacks to the Climate System. Ambio, 2004, 33, 459-468.	5.5	56
214	Tropical forests and the global carbon cycle: impacts of atmospheric carbon dioxide, climate change and rate of deforestation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 331-343.	4.0	184
215	Terrestrial vegetation and water balance—hydrological evaluation of a dynamic global vegetation model. Journal of Hydrology, 2004, 286, 249-270.	5.4	783
216	Constraining temperature variations over the last millennium by comparing simulated and observed atmospheric CO2. Climate Dynamics, 2003, 20, 281-299.	3.8	115

#	Article	IF	CITATIONS
217	Evaluation of ecosystem dynamics, plant geography and terrestrial carbon cycling in the LPJ dynamic global vegetation model. Global Change Biology, 2003, 9, 161-185.	9.5	2,681
218	A dynamic global vegetation model for use with climate models: concepts and description of simulated vegetation dynamics. Global Change Biology, 2003, 9, 1543-1566.	9.5	335
219	Simulating past and future dynamics of natural ecosystems in the United States. Global Biogeochemical Cycles, 2003, 17, n/a-n/a.	4.9	127
220	Climatic Control of the High-Latitude Vegetation Greening Trend and Pinatubo Effect. Science, 2002, 296, 1687-1689.	12.6	672
221	Evaluation of terrestrial carbon cycle models with atmospheric CO2measurements: Results from transient simulations considering increasing CO2, climate, and land-use effects. Global Biogeochemical Cycles, 2002, 16, 39-1-39-15.	4.9	79
222	Simulating fire regimes in human-dominated ecosystems: Iberian Peninsula case study. Global Change Biology, 2002, 8, 984-998.	9.5	151
223	A biogeochemistryâ€based dynamic vegetation model and its application along a moisture gradient in the continental United States. Journal of Vegetation Science, 2002, 13, 369-382.	2.2	21
224	Global warming feedbacks on terrestrial carbon uptake under the Intergovernmental Panel on Climate Change (IPCC) Emission Scenarios. Global Biogeochemical Cycles, 2001, 15, 891-907.	4.9	368
225	Carbon balance of the terrestrial biosphere in the Twentieth Century: Analyses of CO2, climate and land use effects with four process-based ecosystem models. Global Biogeochemical Cycles, 2001, 15, 183-206.	4.9	680
226	The role of fire disturbance for global vegetation dynamics: coupling fire into a Dynamic Global Vegetation Model. Global Ecology and Biogeography, 2001, 10, 661-677.	5.8	545
227	Global response of terrestrial ecosystem structure and function to CO2 and climate change: results from six dynamic global vegetation models. Global Change Biology, 2001, 7, 357-373.	9.5	1,718
228	THE CARBON BALANCE OF THE TERRESTRIAL BIOSPHERE: ECOSYSTEM MODELS AND ATMOSPHERIC OBSERVATIONS. , 2000, 10, 1553-1573.		126
229	A first-order analysis of the potential role of CO2 fertilization to affect the global carbon budget: a comparison of four terrestrial biosphere models. Tellus, Series B: Chemical and Physical Meteorology, 1999, 51, 343-366.	1.6	60
230	Evaluation of terrestrial carbon cycle models through simulations of the seasonal cycle of atmospheric CO2: First results of a model intercomparison study. Global Biogeochemical Cycles, 1998, 12, 1-24.	4.9	132
231	An integrated biosphere model of land surface processes, terrestrial carbon balance, and vegetation dynamics. Global Biogeochemical Cycles, 1996, 10, 603-628.	4.9	1,106
232	Methane flux from northern wetlands and tundra. An ecosystem source modelling approach. Tellus, Series B: Chemical and Physical Meteorology, 1996, 48, 652-661.	1.6	84