

# Peter E Thornton

## List of Publications by Year in descending order

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Version: 2024-02-01

156  
papers

26,249  
citations

13068

68  
h-index

8138

148  
g-index

193  
all docs

193  
docs citations

193  
times ranked

24810  
citing authors

#	ARTICLE	IF	CITATIONS
1	TRY â€“ a global database of plant traits. <i>Global Change Biology</i> , 2011, 17, 2905-2935.	4.2	2,002
2	Generating surfaces of daily meteorological variables over large regions of complex terrain. <i>Journal of Hydrology</i> , 1997, 190, 214-251.	2.3	1,168
3	Harmonization of land-use scenarios for the period 1500â€“2100: 600Âyears of global gridded annual land-use transitions, wood harvest, and resulting secondary lands. <i>Climatic Change</i> , 2011, 109, 117-161.	1.7	1,080
4	TRY plant trait database â€“ enhanced coverage and open access. <i>Global Change Biology</i> , 2020, 26, 119-188.	4.2	1,038
5	A continental phenology model for monitoring vegetation responses to interannual climatic variability. <i>Global Biogeochemical Cycles</i> , 1997, 11, 217-234.	1.9	1,004
6	Modeling and measuring the effects of disturbance history and climate on carbon and water budgets in evergreen needleleaf forests. <i>Agricultural and Forest Meteorology</i> , 2002, 113, 185-222.	1.9	765
7	A global analysis of soil microbial biomass carbon, nitrogen and phosphorus in terrestrial ecosystems. <i>Global Ecology and Biogeography</i> , 2013, 22, 737-749.	2.7	762
8	Parameterization improvements and functional and structural advances in Version 4 of the Community Land Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2011, 3, .	1.3	666
9	Parameterization and Sensitivity Analysis of the BIOMEâ€“BGC Terrestrial Ecosystem Model: Net Primary Production Controls. <i>Earth Interactions</i> , 2000, 4, 1-85.	0.7	654
10	Improvements to the Community Land Model and their impact on the hydrological cycle. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	649
11	An improved algorithm for estimating incident daily solar radiation from measurements of temperature, humidity, and precipitation. <i>Agricultural and Forest Meteorology</i> , 1999, 93, 211-228.	1.9	637
12	Influence of carbonâ€“nitrogen cycle coupling on land model response to CO <sub>2</sub> fertilization and climate variability. <i>Global Biogeochemical Cycles</i> , 2007, 21, .	1.9	624
13	Contribution of Increasing CO <sub>2</sub> and Climate to Carbon Storage by Ecosystems in the United States. <i>Science</i> , 2000, 287, 2004-2006.	6.0	526
14	Harmonization of global land use change and management for the period 850â€“2100 (LUH2) for CMIP6. <i>Geoscientific Model Development</i> , 2020, 13, 5425-5464.	1.3	408
15	The DOE E3SM Coupled Model Version 1: Overview and Evaluation at Standard Resolution. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2089-2129.	1.3	404
16	The Partitioning of Evapotranspiration into Transpiration, Soil Evaporation, and Canopy Evaporation in a GCM: Impacts on Landâ€“Atmosphere Interaction. <i>Journal of Hydrometeorology</i> , 2007, 8, 862-880.	0.7	399
17	Carbon-nitrogen interactions regulate climate-carbon cycle feedbacks: results from an atmosphere-ocean general circulation model. <i>Biogeosciences</i> , 2009, 6, 2099-2120.	1.3	399
18	Evaluation of 11 terrestrial carbonâ€“nitrogen cycle models against observations from two temperate <sc>F</sc>reeâ€“<sc>A</sc>ir <sc>CO</sc><sub>2</sub><sc> E</sc>richment studies. <i>New Phytologist</i> , 2014, 202, 803-822.	3.5	378

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19	Parameterization improvements and functional and structural advances in Version 4 of the Community Land Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2011, 3, n/a-n/a.	1.3	367
20	Global Terrestrial Gross and Net Primary Productivity from the Earth Observing System. , 2000, , 44-57.		357
21	Carbon storage and fluxes in ponderosa pine forests at different developmental stages. <i>Global Change Biology</i> , 2001, 7, 755-777.	4.2	356
22	Observed 20th century desert dust variability: impact on climate and biogeochemistry. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10875-10893.	1.9	355
23	Simultaneous estimation of daily solar radiation and humidity from observed temperature and precipitation: an application over complex terrain in Austria. <i>Agricultural and Forest Meteorology</i> , 2000, 104, 255-271.	1.9	333
24	Changes in carbon storage and fluxes in a chronosequence of ponderosa pine. <i>Global Change Biology</i> , 2003, 9, 510-524.	4.2	333
25	The impact of growing-season length variability on carbon assimilation and evapotranspiration over 88 years in the eastern US deciduous forest. <i>International Journal of Biometeorology</i> , 1999, 42, 139-145.	1.3	328
26	Systematic assessment of terrestrial biogeochemistry in coupled climate-carbon models. <i>Global Change Biology</i> , 2009, 15, 2462-2484.	4.2	324
27	The Community Land Model and Its Climate Statistics as a Component of the Community Climate System Model. <i>Journal of Climate</i> , 2006, 19, 2302-2324.	1.2	320
28	Forest water use and water use efficiency at elevated $\text{CO}_2$ : a model-data intercomparison at two contrasting temperate forest FACE sites. <i>Global Change Biology</i> , 2013, 19, 1759-1779.	4.2	314
29	Ecosystem model spin-up: Estimating steady state conditions in a coupled terrestrial carbon and nitrogen cycle model. <i>Ecological Modelling</i> , 2005, 189, 25-48.	1.2	312
30	A model-data comparison of gross primary productivity: Results from the North American Carbon Program site synthesis. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	274
31	Assessing future nitrogen deposition and carbon cycle feedback using a multimodel approach: Analysis of nitrogen deposition. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	266
32	Where does the carbon go? A model-data intercomparison of vegetation carbon allocation and turnover processes at two temperate forest free-air $\text{CO}_2$ enrichment sites. <i>New Phytologist</i> , 2014, 203, 883-899.	3.5	263
33	Simulating the Biogeochemical and Biogeophysical Impacts of Transient Land Cover Change and Wood Harvest in the Community Climate System Model (CCSM4) from 1850 to 2100. <i>Journal of Climate</i> , 2012, 25, 3071-3095.	1.2	255
34	Using ecosystem experiments to improve vegetation models. <i>Nature Climate Change</i> , 2015, 5, 528-534.	8.1	249
35	Photoperiodic regulation of the seasonal pattern of photosynthetic capacity and the implications for carbon cycling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 8612-8617.	3.3	247
36	OAK FOREST CARBON AND WATER SIMULATIONS: MODEL INTERCOMPARISONS AND EVALUATIONS AGAINST INDEPENDENT DATA. <i>Ecological Monographs</i> , 2004, 74, 443-489.	2.4	225

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37	Satellite Evidence of Phenological Differences Between Urbanized and Rural Areas of the Eastern United States Deciduous Broadleaf Forest. <i>Ecosystems</i> , 2002, 5, 260-273.	1.6	220
38	Use of FLUXNET in the Community Land Model development. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	210
39	North American Carbon Program (NACP) regional interim synthesis: Terrestrial biospheric model intercomparison. <i>Ecological Modelling</i> , 2012, 232, 144-157.	1.2	207
40	DAYCENT National-Scale Simulations of Nitrous Oxide Emissions from Cropped Soils in the United States. <i>Journal of Environmental Quality</i> , 2006, 35, 1451-1460.	1.0	204
41	Fire dynamics during the 20th century simulated by the Community Land Model. <i>Biogeosciences</i> , 2010, 7, 1877-1902.	1.3	194
42	An Improved Canopy Integration Scheme for a Land Surface Model with Prognostic Canopy Structure. <i>Journal of Climate</i> , 2007, 20, 3902-3923.	1.2	183
43	The distribution of soil phosphorus for global biogeochemical modeling. <i>Biogeosciences</i> , 2013, 10, 2525-2537.	1.3	181
44	The role of phosphorus dynamics in tropical forests – a modeling study using CLM-CNP. <i>Biogeosciences</i> , 2014, 11, 1667-1681.	1.3	179
45	Simulating forest productivity and surface-atmosphere carbon exchange in the BOREAS study region. <i>Tree Physiology</i> , 1997, 17, 589-599.	1.4	163
46	Incorporating phosphorus cycling into global modeling efforts: a worthwhile, tractable endeavor. <i>New Phytologist</i> , 2015, 208, 324-329.	3.5	163
47	Remote sensing data assimilation for a prognostic phenology model. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	160
48	Mapping local and global variability in plant trait distributions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E10937-E10946.	3.3	159
49	Preindustrial-Control and Twentieth-Century Carbon Cycle Experiments with the Earth System Model CESM1(BGC). <i>Journal of Climate</i> , 2014, 27, 8981-9005.	1.2	156
50	Representing the function and sensitivity of coastal interfaces in Earth system models. <i>Nature Communications</i> , 2020, 11, 2458.	5.8	153
51	Substrate and environmental controls on microbial assimilation of soil organic carbon: a framework for Earth system models. <i>Ecology Letters</i> , 2014, 17, 547-555.	3.0	148
52	Human-induced greening of the northern extratropical land surface. <i>Nature Climate Change</i> , 2016, 6, 959-963.	8.1	145
53	Interactive Crop Management in the Community Earth System Model (CESM1): Seasonal Influences on Land–Atmosphere Fluxes. <i>Journal of Climate</i> , 2012, 25, 4839-4859.	1.2	140
54	Recent trends in hydrologic balance have enhanced the terrestrial carbon sink in the United States. <i>Geophysical Research Letters</i> , 2002, 29, 106-1-106-4.	1.5	139

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55	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. <i>Environmental Research Letters</i> , 2015, 10, 094008.	2.2	119
56	DIMENSIONALITY REDUCTION FOR COMPLEX MODELS VIA BAYESIAN COMPRESSIVE SENSING. , 2014, 4, 63-93.		118
57	Global Latitudinal-Asymmetric Vegetation Growth Trends and Their Driving Mechanisms: 1982â€“2009. <i>Remote Sensing</i> , 2013, 5, 1484-1497.	1.8	117
58	Urban warming advances spring phenology but reduces the response of phenology to temperature in the conterminous United States. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 4228-4233.	3.3	109
59	Global pattern and controls of soil microbial metabolic quotient. <i>Ecological Monographs</i> , 2017, 87, 429-441.	2.4	106
60	Reviews and syntheses: Four decades of modeling methane cycling in terrestrial ecosystems. <i>Biogeosciences</i> , 2016, 13, 3735-3755.	1.3	102
61	Analyzing the Ecosystem Carbon Dynamics of Four European Coniferous Forests Using a Biogeochemistry Model. <i>Ecosystems</i> , 2003, 6, 168-184.	1.6	101
62	Ecohydrologic impact of reduced stomatal conductance in forests exposed to elevated CO <sub>2</sub> . <i>Ecohydrology</i> , 2011, 4, 196-210.	1.1	96
63	Comprehensive ecosystem modelâ€“data synthesis using multiple data sets at two temperate forest freeâ€“air CO <sub>2</sub> enrichment experiments: Model performance at ambient CO <sub>2</sub> concentration. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2014, 119, 937-964.	1.3	95
64	Validating daily climate interpolations over complex terrain in Austria. <i>Agricultural and Forest Meteorology</i> , 2003, 119, 87-107.	1.9	88
65	BGC-model parameters for tree species growing in central European forests. <i>Forest Ecology and Management</i> , 2005, 211, 264-295.	1.4	88
66	Remote Sensing Evaluation of CLM4 GPP for the Period 2000â€“09*. <i>Journal of Climate</i> , 2012, 25, 5327-5342.	1.2	85
67	Gridded daily weather data for North America with comprehensive uncertainty quantification. <i>Scientific Data</i> , 2021, 8, 190.	2.4	85
68	The Impact of Parametric Uncertainties on Biogeochemistry in the E3SM Land Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2018, 10, 297-319.	1.3	80
69	Climatic and biophysical controls on conifer species distributions in mountain forests of Washington State, USA. <i>Journal of Biogeography</i> , 2003, 30, 1093-1108.	1.4	79
70	Big data visual analytics for exploratory earth system simulation analysis. <i>Computers and Geosciences</i> , 2013, 61, 71-82.	2.0	75
71	Simulating coupled carbon and nitrogen dynamics following mountain pine beetle outbreaks in the western United States. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	73
72	Analysis of transpiration results from the RICE and PILPS workshop. <i>Global and Planetary Change</i> , 1996, 13, 73-88.	1.6	71

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73	A diagnostic carbon flux model to monitor the effects of disturbance and interannual variation in climate on regional NEP. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2006, 58, 476-490.	0.8	71
74	Spatiotemporal patterns of evapotranspiration in response to multiple environmental factors simulated by the Community Land Model. <i>Environmental Research Letters</i> , 2013, 8, 024012.	2.2	71
75	Reimplementation of the Biome-BGC model to simulate successional change. <i>Tree Physiology</i> , 2005, 25, 413-424.	1.4	69
76	Representing northern peatland microtopography and hydrology within the Community Land Model. <i>Biogeosciences</i> , 2015, 12, 6463-6477.	1.3	66
77	The DOE E3SM v1.1 Biogeochemistry Configuration: Description and Simulated Ecosystem Climate Responses to Historical Changes in Forcing. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001766.	1.3	65
78	Greenhouse Gas Policy Influences Climate via Direct Effects of Land-Use Change. <i>Journal of Climate</i> , 2013, 26, 3657-3670.	1.2	59
79	The impact of climate, CO <sub>2</sub> , nitrogen deposition and land use change on simulated contemporary global river flow. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	58
80	An observational constraint on stomatal function in forests: evaluating coupled carbon and water vapor exchange with carbon isotopes in the Community Land Model (CLM4.5). <i>Biogeosciences</i> , 2016, 13, 5183-5204.	1.3	57
81	Moisture availability mediates the relationship between terrestrial gross primary production and solar-induced chlorophyll fluorescence: Insights from global-scale variations. <i>Global Change Biology</i> , 2021, 27, 1144-1156.	4.2	57
82	A microbial functional group-based module for simulating methane production and consumption: Application to an incubated permafrost soil. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2015, 120, 1315-1333.	1.3	56
83	Evaluation of the New CNDV Option of the Community Land Model: Effects of Dynamic Vegetation and Interactive Nitrogen on CLM4 Means and Variability. <i>Journal of Climate</i> , 2012, 25, 3702-3714.	1.2	55
84	Evaluating the Community Land Model (CLM4.5) at a coniferous forest site in northwestern United States using flux and carbon-isotope measurements. <i>Biogeosciences</i> , 2017, 14, 4315-4340.	1.3	54
85	Causes of spring vegetation growth trends in the northern mid-high latitudes from 1982 to 2004. <i>Environmental Research Letters</i> , 2012, 7, 014010.	2.2	53
86	On the development of a coupled regional climate-vegetation model RCM-CLM-CN-DV and its validation in Tropical Africa. <i>Climate Dynamics</i> , 2016, 46, 515-539.	1.7	53
87	Terrestrial ecosystem process model Biome-BGCMuSo v4.0: summary of improvements and new modeling possibilities. <i>Geoscientific Model Development</i> , 2016, 9, 4405-4437.	1.3	50
88	From land use to land cover: restoring the afforestation signal in a coupled integrated assessment-earth system model and the implications for CMIP5 RCP simulations. <i>Biogeosciences</i> , 2014, 11, 6435-6450.	1.3	49
89	Assessment of Reanalysis Daily Extreme Temperatures with China's Homogenized Historical Dataset during 1979-2001 Using Probability Density Functions. <i>Journal of Climate</i> , 2010, 23, 6605-6623.	1.2	48
90	Atmospheric Carbon Dioxide Variability in the Community Earth System Model: Evaluation and Transient Dynamics during the Twentieth and Twenty-First Centuries. <i>Journal of Climate</i> , 2013, 26, 4447-4475.	1.2	48

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91	Desert dust and anthropogenic aerosol interactions in the Community Climate System Model coupled-carbon-climate model. <i>Biogeosciences</i> , 2011, 8, 387-414.	1.3	47
92	Evaluation and improvement of the Community Land Model (CLM4) in Oregon forests. <i>Biogeosciences</i> , 2013, 10, 453-470.	1.3	47
93	ASSESSING SIMULATED ECOSYSTEM PROCESSES FOR CLIMATE VARIABILITY RESEARCH AT GLACIER NATIONAL PARK, USA. , 1998, 8, 805-823.		46
94	Biospheric feedback effects in a synchronously coupled model of human and Earth systems. <i>Nature Climate Change</i> , 2017, 7, 496-500.	8.1	46
95	The integrated Earth system model version 1: formulation and functionality. <i>Geoscientific Model Development</i> , 2015, 8, 2203-2219.	1.3	44
96	A hierarchical analysis of terrestrial ecosystem model Biome-BGC: Equilibrium analysis and model calibration. <i>Ecological Modelling</i> , 2009, 220, 2009-2023.	1.2	43
97	Interactive Effects of Environmental Change and Management Strategies on Regional Forest Carbon Emissions. <i>Environmental Science &amp; Technology</i> , 2013, 47, 13132-13140.	4.6	43
98	VEMAP Phase 2 bioclimatic database. I. Gridded historical (20th century) climate for modeling ecosystem dynamics across the conterminous USA. <i>Climate Research</i> , 2004, 27, 151-170.	0.4	42
99	Decadal trends in net ecosystem production and net ecosystem carbon balance for a regional socioecological system. <i>Forest Ecology and Management</i> , 2011, 262, 1318-1325.	1.4	41
100	The sensitivity of the forest carbon budget shifts across processes along with stand development and climate change. <i>Ecological Applications</i> , 2019, 29, e01837.	1.8	39
101	Timing and magnitude of C partitioning through a young loblolly pine ( <i>Pinus taeda</i> L.) stand using <sup>13</sup> C labeling and shade treatments. <i>Tree Physiology</i> , 2012, 32, 799-813.	1.4	38
102	Alder Distribution and Expansion Across a Tundra Hillslope: Implications for Local N Cycling. <i>Frontiers in Plant Science</i> , 2019, 10, 1099.	1.7	37
103	Convergence of microbial assimilations of soil carbon, nitrogen, phosphorus and sulfur in terrestrial ecosystems. <i>Scientific Reports</i> , 2015, 5, 17445.	1.6	35
104	Seasonal changes in GPP/SIF ratios and their climatic determinants across the Northern Hemisphere. <i>Global Change Biology</i> , 2021, 27, 5186-5197.	4.2	34
105	Phosphorus feedbacks constraining tropical ecosystem responses to changes in atmospheric CO <sub>2</sub> and climate. <i>Geophysical Research Letters</i> , 2016, 43, 7205-7214.	1.5	32
106	Modeling the spatiotemporal variability in subsurface thermal regimes across a low-relief polygonal tundra landscape. <i>Cryosphere</i> , 2016, 10, 2241-2274.	1.5	29
107	The Effects of Phosphorus Cycle Dynamics on Carbon Sources and Sinks in the Amazon Region: A Modeling Study Using ELM v1. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 3686-3698.	1.3	29
108	Biogeochemical modeling of CO <sub>2</sub> and CH <sub>4</sub> production in anoxic Arctic soil microcosms. <i>Biogeosciences</i> , 2016, 13, 5021-5041.	1.3	27

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109	Integrating Arctic Plant Functional Types in a Land Surface Model Using Above- and Belowground Field Observations. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2020MS002396.	1.3	27
110	On linking an Earth system model to the equilibrium carbon representation of an economically optimizing land use model. <i>Geoscientific Model Development</i> , 2014, 7, 2545-2555.	1.3	26
111	Evaluation of the Community Land Model simulated carbon and water fluxes against observations over ChinaFLUX sites. <i>Agricultural and Forest Meteorology</i> , 2016, 226-227, 174-185.	1.9	26
112	Global sensitivity analysis, probabilistic calibration, and predictive assessment for the data assimilation linked ecosystem carbon model. <i>Geoscientific Model Development</i> , 2015, 8, 1899-1918.	1.3	25
113	Sub-daily Statistical Downscaling of Meteorological Variables Using Neural Networks. <i>Procedia Computer Science</i> , 2012, 9, 887-896.	1.2	24
114	Mechanistic Modeling of Microtopographic Impacts on CO <sub>2</sub> and CH <sub>4</sub> Fluxes in an Alaskan Tundra Ecosystem Using the CLM-Microbe Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4288-4304.	1.3	22
115	A functional test platform for the Community Land Model. <i>Environmental Modelling and Software</i> , 2014, 55, 25-31.	1.9	21
116	Modeling anaerobic soil organic carbon decomposition in Arctic polygon tundra: insights into soil geochemical influences on carbon mineralization. <i>Biogeosciences</i> , 2019, 16, 663-680.	1.3	21
117	Ecosystem sensitivity to land-surface models and leaf area index. <i>Global and Planetary Change</i> , 1996, 13, 89-98.	1.6	20
118	Hydroclimatic Controls on the Means and Variability of Vegetation Phenology and Carbon Uptake. <i>Journal of Climate</i> , 2014, 27, 5632-5652.	1.2	19
119	Evaluating the Community Land Model in a pine stand with shading manipulations and <sup>13</sup> C labeling. <i>Biogeosciences</i> , 2016, 13, 641-657.	1.3	18
120	Interdisciplinary research in climate and energy sciences. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2016, 5, 49-56.	1.9	18
121	Archiving numerical models of biogeochemical dynamics. <i>Eos</i> , 2005, 86, 431.	0.1	17
122	Practical Application of Parallel Coordinates for Climate Model Analysis. <i>Procedia Computer Science</i> , 2012, 9, 877-886.	1.2	17
123	Extending a land-surface model with Sphagnum moss to simulate responses of a northern temperate bog to whole ecosystem warming and elevated CO <sub>2</sub> . <i>Biogeosciences</i> , 2021, 18, 467-486.	1.3	17
124	An Integrative Model for Soil Biogeochemistry and Methane Processes. II: Warming and Elevated CO <sub>2</sub> Effects on Peatland CH <sub>4</sub> Emissions. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2020JG005963.	1.3	16
125	Model Up-scaling in Landscape Research. <i>Landscape Series</i> , 2007, , 249-272.	0.1	16
126	Streamflow in the Columbia River Basin: Quantifying Changes Over the Period 1951-2008 and Determining the Drivers of Those Changes. <i>Water Resources Research</i> , 2019, 55, 6640-6652.	1.7	15

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127	Quantifying the drivers and predictability of seasonal changes in African fire. <i>Nature Communications</i> , 2020, 11, 2893.	5.8	15
128	Addressing numerical challenges in introducing a reactive transport code into a land surface model: a biogeochemical modeling proof-of-concept with CLMâ€PFLOTRAN 1.0. <i>Geoscientific Model Development</i> , 2016, 9, 927-946.	1.3	14
129	Inter-annual variability of the atmospheric carbon dioxide concentrations as simulated with global terrestrial biosphere models and an atmospheric transport model. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2003, 55, 530-546.	0.8	13
130	Dynamics of Fungal and Bacterial Biomass Carbon in Natural Ecosystems: Siteâ€Level Applications of the CLMâ€Microbe Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2020MS002283.	1.3	11
131	An Integrative Model for Soil Biogeochemistry and Methane Processes: I. Model Structure and Sensitivity Analysis. <i>Journal of Geophysical Research C: Biogeosciences</i> , 2021, 126, e2019JC005468.	1.3	11
132	Characteristics of human-climate feedbacks differ at different radiative forcing levels. <i>Global and Planetary Change</i> , 2019, 180, 126-135.	1.6	10
133	A Scientific Function Test Framework for Modular Environmental Model Development: Application to the Community Land Model. , 2015, , .		9
134	Informing climate models with rapid chamber measurements of forest carbon uptake. <i>Global Change Biology</i> , 2017, 23, 2130-2139.	4.2	9
135	Contribution of environmental forcings to US runoff changes for the period 1950â€2010. <i>Environmental Research Letters</i> , 2018, 13, 054023.	2.2	9
136	Modelling tree stemâ€water dynamics over an Amazonian rainforest. <i>Ecohydrology</i> , 2020, 13, e2180.	1.1	9
137	Volcano impacts on climate and biogeochemistry in a coupled carbonâ€climate model. <i>Earth System Dynamics</i> , 2012, 3, 121-136.	2.7	8
138	Soil-related developments of the Biome-BGCMuSo v6.2 terrestrial ecosystem model. <i>Geoscientific Model Development</i> , 2022, 15, 2157-2181.	1.3	8
139	Results from the carbon-land model intercomparison project (C-LAMP) and availability of the data on the earth system grid (ESG). <i>Journal of Physics: Conference Series</i> , 2007, 78, 012026.	0.3	7
140	Quantifying Humanâ€Mediated Carbon Cycle Feedbacks. <i>Geophysical Research Letters</i> , 2018, 45, 11,370.	1.5	7
141	Considering coasts: Adapting terrestrial models to characterize coastal wetland ecosystems. <i>Ecological Modelling</i> , 2021, 450, 109561.	1.2	7
142	Modelling physiological costs to assess impacts of climate change on amphibians in Yellowstone National Park, U.S.A. <i>Ecological Indicators</i> , 2022, 135, 108575.	2.6	7
143	ParCAT: Parallel Climate Analysis Toolkit. <i>Procedia Computer Science</i> , 2013, 18, 2367-2375.	1.2	6
144	Web-based visual analytics for extreme scale climate science. , 2014, , .		6

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145	Increasing Functional Diversity in a Global Land Surface Model Illustrates Uncertainties Related to Parameter Simplification. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2022, 127, .	1.3	6
146	Hydrological feedbacks on peatland CH <sub>4</sub> emission under warming and elevated CO <sub>2</sub> : A modeling study. <i>Journal of Hydrology</i> , 2021, 603, 127137.	2.3	4
147	Inter-annual variability of the atmospheric carbon dioxide concentrations as simulated with global terrestrial biosphere models and an atmospheric transport model. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2003, 55, 530-546.	0.8	3
148	Leaf respiration ( <i>GlobResp</i> ) – global trait database supports Earth System Models. <i>New Phytologist</i> , 2015, 206, 483-485.	3.5	3
149	Updated respiration routines alter spatio-temporal patterns of carbon cycling in a global land surface model. <i>Environmental Research Letters</i> , 2021, 16, 104015.	2.2	3
150	Developing an ELM Ecosystem Dynamics Model on GPU with OpenACC. <i>Lecture Notes in Computer Science</i> , 2022, , 291-303.	1.0	3
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