Peter J Lawrence

List of Publications by Year
in descending order

46 papers	8,025 citations	109137 35 h-index	223531 46 g-index
50 all docs	50 docs citations	50 times ranked	9831 citing authors

#	Article	IF	Citations
1	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. Journal of Advances in Modeling Earth Systems, 2019, 11, 4245-4287.	1.3	692
2	Parameterization improvements and functional and structural advances in Version 4 of the Community Land Model. Journal of Advances in Modeling Earth Systems, 2011, 3, .	1.3	666
3	Improvements to the Community Land Model and their impact on the hydrological cycle. Journal of Geophysical Research, 2008, 113, .	3.3	649
4	Improving canopy processes in the Community Land Model version 4 (CLM4) using global flux fields empirically inferred from FLUXNET data. Journal of Geophysical Research, 2011, 116, .	3.3	522
5	Vegetation demographics in Earth System Models: A review of progress and priorities. Global Change Biology, 2018, 24, 35-54.	4.2	478
6	Representing a new MODIS consistent land surface in the Community Land Model (CLM 3.0). Journal of Geophysical Research, 2007, 112, .	3.3	460
7	Uncertainties in climate responses to past land cover change: First results from the LUCID intercomparison study. Geophysical Research Letters, 2009, 36, .	1.5	444
8	Harmonization of global land use change and management for the period 850â€“2100 (LUH2) for CMIP6. Geoscientific Model Development, 2020, 13, 5425-5464.	1.3	408
9	Parameterization improvements and functional and structural advances in Version 4 of the Community Land Model. Journal of Advances in Modeling Earth Systems, 2011, 3, n/a-n/a.	1.3	367
10	The Land Use Model Intercomparison Project (LUMIP) contribution to CMIP6: rationale and experimental design. Geoscientific Model Development, 2016, 9, 2973-2998.	1.3	343
11	Determining Robust Impacts of Land-Use-Induced Land Cover Changes on Surface Climate over North America and Eurasia: Results from the First Set of LUCID Experiments. Journal of Climate, 2012, 25, 3261-3281.	1.2	313
12	The CCSM4 Land Simulation, 1850â€“2005: Assessment of Surface Climate and New Capabilities. Journal of Climate, 2012, 25, 2240-2260.	1.2	276
13	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. Journal of Climate, 2012, 25, 3071-3095.	1.2	255
14	Global gridded crop model evaluation: benchmarking, skills, deficiencies and implications. Geoscientific Model Development, 2017, 10, 1403-1422.	1.3	213
15	Last Millennium Climate and Its Variability in CCSM4. Journal of Climate, 2013, 26, 1085-1111.	1.2	198
16	Investigating the climate impacts of global land cover change in the community climate system model. International Journal of Climatology, 2010, 30, 2066-2087.	1.5	192
17	State-of-the-art global models underestimate impacts from climate extremes. Nature Communications, 2019, 10, 1005.	5.8	168
18	Increased control of vegetation on global terrestrial energy fluxes. Nature Climate Change, 2020, 10, 356-362.	8.1	152

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19	Effects of irrigation and vegetation activity on early Indian summer monsoon variability. International Journal of Climatology, 2009, 29, 573-581.	1.5	117
20	Modeling the impact of historical land cover change on Australia's regional climate. Geophysical Research Letters, 2007, 34, .	1.5	78
21	Global satellite data highlights the diurnal asymmetry of the surface temperature response to deforestation. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 903-917.	1.3	74
22	Spatial and temporal uncertainty of crop yield aggregations. European Journal of Agronomy, 2017, 88, 10-21.	1.9	63
23	Simulating the mid-Pliocene Warm Period with the CCSM4 model. Geoscientific Model Development, 2013, 6, 549-561.	1.3	62
24	Societal decisions about climate mitigation will have dramatic impacts on eutrophication in the 21st century. Nature Communications, 2019, 10, 939.	5.8	61
25	Assessing the use of subgrid land model output to study impacts of land cover change. Journal of Geophysical Research D: Atmospheres, 2016, 121, 6133-6147.	1.2	57
26	The Global Gridded Crop Model Intercomparison phase 1 simulation dataset. Scientific Data, 2019, 6, 50.	2.4	57
27	Global climate response to idealized deforestation in CMIP6 models. Biogeosciences, 2020, 17, 5615-5638.	1.3	55
28	Environmental drivers of drought deciduous phenology in the Community Land Model. Biogeosciences, 2015, 12, 5061-5074.	1.3	53
29	Simulating Agriculture in the Community Land Model Version 5. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005529.	1.3	53
30	Interactions between land use change and carbon cycle feedbacks. Global Biogeochemical Cycles, 2017, 31, 96-113.	1.9	46
31	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.	3.7	46
32	Land use change exacerbates tropical South American drought by sea surface temperature variability. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	44
33	Impact of land cover characterization on regional climate modeling over West Africa. Climate Dynamics, 2016, 46, 637-650.	1.7	43
34	Parameterization-induced uncertainties and impacts of crop management harmonization in a global gridded crop model ensemble. PLoS ONE, 2019, 14, e0221862.	1.1	42
35	Global patterns of crop yield stability under additional nutrient and water inputs. PLoS ONE, 2018, 13, e0198748.	1.1	40
36	Avoided economic impacts of climate change on agriculture: integrating a land surface model (CLM) with a global economic model (iPETS). Climatic Change, 2018, 146, 517-531.	1.7	36

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37	Climate Impacts of Making Evapotranspiration in the Community Land Model (CLM3) Consistent with the Simple Biosphere Model (SiB). Journal of Hydrometeorology, 2009, 10, 374-394.	0.7	32
38	The impact of nitrogen and phosphorous limitation on the estimated terrestrial carbon balance and warming of land use change over the last 156 yr. Earth System Dynamics, 2013, 4, 333-345.	2.7	32
39	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.	1.3	22
40	Attributing the Carbon Cycle Impacts of CMIP5 Historical and Future Land Use and Land Cover Change in the Community Earth System Model (CESM1). Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1732-1755.	1.3	20
41	Strong regional influence of climatic forcing datasets on global crop model ensembles. Agricultural and Forest Meteorology, 2021, 300, 108313.	1.9	17
42	A Comparison of the CMIP6midHoloceneandlig127kSimulations in CESM2. Paleoceanography and Paleoclimatology, 2020, 35, e2020PA003957.	1.3	14
43	Land Use and Land Cover Change Strongly Modulates Landâ€Atmosphere Coupling and Warmâ€Season Precipitation Over the Central United States in CESM2â€VR. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001925.	1.3	11
44	Worldwide Maize and Soybean Yield Response to Environmental and Management Factors Over the 20th and 21st Centuries. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006304.	1.3	9
45	Exposure to cold temperature affects the spring phenology of Alaskan deciduous vegetation types. Environmental Research Letters, 2020, 15, 025006.	2.2	6
46	A Comparison of Land Surface Phenology in the Northern Hemisphere Derived from Satellite Remote Sensing and the Community Land Model. Journal of Hydrometeorology, 2022, 23, 859-873.	0.7	5