

D M Lawrence

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3816911/publications.pdf>

Version: 2024-02-01

188
papers

35,971
citations

4942

84
h-index

3476

182
g-index

243
all docs

243
docs citations

243
times ranked

26648
citing authors

#	ARTICLE	IF	CITATIONS
1	Tundra vegetation change and impacts on permafrost. <i>Nature Reviews Earth & Environment</i> , 2022, 3, 68-84.	12.2	87
2	Tripling of western US particulate pollution from wildfires in a warming climate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2111372119.	3.3	29
3	Impacts of a revised surface roughness parameterization in the Community Land Model 5.1. <i>Geoscientific Model Development</i> , 2022, 15, 2365-2393.	1.3	9
4	Improvements in Wintertime Surface Temperature Variability in the Community Earth System Model Version 2 (CESM2) Related to the Representation of Snow Density. <i>Journal of Advances in Modeling Earth Systems</i> , 2022, 14, .	1.3	1
5	Deforestation-induced climate change reduces carbon storage in remaining tropical forests. <i>Nature Communications</i> , 2022, 13, 1964.	5.8	41
6	Future bioenergy expansion could alter carbon sequestration potential and exacerbate water stress in the United States. <i>Science Advances</i> , 2022, 8, eabm8237.	4.7	11
7	Multi-century dynamics of the climate and carbon cycle under both high and net negative emissions scenarios. <i>Earth System Dynamics</i> , 2022, 13, 885-909.	2.7	17
8	Evaluating a reservoir parametrization in the vector-based global routing model mizuRoute (v2.0.1) for Earth system model coupling. <i>Geoscientific Model Development</i> , 2022, 15, 4163-4192.	1.3	11
9	Representing Intercell Lateral Groundwater Flow and Aquifer Pumping in the Community Land Model. <i>Water Resources Research</i> , 2021, 57, .	1.7	22
10	Seasonal to multi-year soil moisture drought forecasting. <i>Npj Climate and Atmospheric Science</i> , 2021, 4, .	2.6	30
11	Impacts of Large-Scale Soil Moisture Anomalies on the Hydroclimate of Southeastern South America. <i>Journal of Hydrometeorology</i> , 2021, 22, 657-669.	0.7	5
12	Representation of Plant Hydraulics in the Noah-CMP Land Surface Model: Model Development and Multiscale Evaluation. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2020MS002214.	1.3	50
13	Compatible Fossil Fuel CO2 Emissions in the CMIP6 Earth System Models' Historical and Shared Socioeconomic Pathway Experiments of the Twenty-First Century. <i>Journal of Climate</i> , 2021, 34, 2853-2875.	1.2	23
14	Strong Local Evaporative Cooling Over Land Due to Atmospheric Aerosols. <i>Journal of Advances in Modeling Earth Systems</i> , 2021, 13, e2021MS002491.	1.3	15
15	Advances in Land Surface Modelling. <i>Current Climate Change Reports</i> , 2021, 7, 45-71.	2.8	43
16	Simulating the Impact of Global Reservoir Expansion on the Present-Day Climate. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD034485.	1.2	9
17	Coupled Climate Responses to Recent Australian Wildfire and COVID-19 Emissions Anomalies Estimated in CESM2. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093841.	1.5	19
18	Worldwide Maize and Soybean Yield Response to Environmental and Management Factors Over the 20th and 21st Centuries. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2021JG006304.	1.3	9

#	ARTICLE	IF	CITATIONS
19	Developing a framework for an interdisciplinary and international climate intervention strategies research program. <i>Bulletin of the American Meteorological Society</i> , 2021, , 1-17.	1.7	0
20	Exposure to cold temperature affects the spring phenology of Alaskan deciduous vegetation types. <i>Environmental Research Letters</i> , 2020, 15, 025006.	2.2	6
21	Full Implementation of Matrix Approach to Biogeochemistry Module of CLM5. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2020MS002105.	1.3	8
22	Land Use and Land Cover Change Strongly Modulates Land-Atmosphere Coupling and Warm-Season Precipitation Over the Central United States in CESM2-VR. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001925.	1.3	11
23	Simulating Agriculture in the Community Land Model Version 5. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2020, 125, e2019JG005529.	1.3	53
24	Global Heat Uptake by Inland Waters. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087867.	1.5	31
25	The Community Earth System Model Version 2 (CESM2). <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2019MS001916.	1.3	935
26	Observed changes in dry-season water availability attributed to human-induced climate change. <i>Nature Geoscience</i> , 2020, 13, 477-481.	5.4	132
27	Soil moisture and hydrology projections of the permafrost region – a model intercomparison. <i>Cryosphere</i> , 2020, 14, 445-459.	1.5	85
28	Plant Growth Nullifies the Effect of Increased Water-Use Efficiency on Streamflow Under Elevated CO ₂ in the Southeastern United States. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086940.	1.5	13
29	Warming of hot extremes alleviated by expanding irrigation. <i>Nature Communications</i> , 2020, 11, 290.	5.8	118
30	Towards a multiscale crop modelling framework for climate change adaptation assessment. <i>Nature Plants</i> , 2020, 6, 338-348.	4.7	181
31	Carbon release through abrupt permafrost thaw. <i>Nature Geoscience</i> , 2020, 13, 138-143.	5.4	434
32	Soil carbon sequestration simulated in CMIP6-LUMIP models: implications for climatic mitigation. <i>Environmental Research Letters</i> , 2020, 15, 124061.	2.2	35
33	The GLACE-Hydrology Experiment: Effects of Land-Atmosphere Coupling on Soil Moisture Variability and Predictability. <i>Journal of Climate</i> , 2020, 33, 6511-6529.	1.2	9
34	A machine learning approach to emulation and biophysical parameter estimation with the Community Land Model, version 5. <i>Advances in Statistical Climatology, Meteorology and Oceanography</i> , 2020, 6, 223-244.	0.6	30
35	Carbon-concentration and carbon-climate feedbacks in CMIP6 models and their comparison to CMIP5 models. <i>Biogeosciences</i> , 2020, 17, 4173-4222.	1.3	255
36	Global climate response to idealized deforestation in CMIP6 models. <i>Biogeosciences</i> , 2020, 17, 5615-5638.	1.3	55

#	ARTICLE	IF	CITATIONS
37	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
38	Parametric Controls on Vegetation Responses to Biogeochemical Forcing in the CLM5. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 2879-2895.	1.3	69
39	Infiltration from the Pedon to Global Grid Scales: An Overview and Outlook for Land Surface Modeling. <i>Vadose Zone Journal</i> , 2019, 18, 1-53.	1.3	56
40	Beyond Static Benchmarking: Using Experimental Manipulations to Evaluate Land Model Assumptions. <i>Global Biogeochemical Cycles</i> , 2019, 33, 1289-1309.	1.9	59
41	High Climate Sensitivity in the Community Earth System Model Version 2 (CESM2). <i>Geophysical Research Letters</i> , 2019, 46, 8329-8337.	1.5	249
42	The Community Land Model Version 5: Description of New Features, Benchmarking, and Impact of Forcing Uncertainty. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4245-4287.	1.3	692
43	Representing Intrahillslope Lateral Subsurface Flow in the Community Land Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 4044-4065.	1.3	43
44	Biomass heat storage dampens diurnal temperature variations in forests. <i>Environmental Research Letters</i> , 2019, 14, 084026.	2.2	16
45	Permafrost collapse is accelerating carbon release. <i>Nature</i> , 2019, 569, 32-34.	13.7	237
46	Large influence of soil moisture on long-term terrestrial carbon uptake. <i>Nature</i> , 2019, 565, 476-479.	13.7	409
47	Model Structure and Climate Data Uncertainty in Historical Simulations of the Terrestrial Carbon Cycle (1850â€“2014). <i>Global Biogeochemical Cycles</i> , 2019, 33, 1310-1326.	1.9	53
48	The Global Gridded Crop Model Intercomparison phase 1 simulation dataset. <i>Scientific Data</i> , 2019, 6, 50.	2.4	57
49	The Response of Permafrost and High-Latitude Ecosystems Under Large-Scale Stratospheric Aerosol Injection and Its Termination. <i>Earth's Future</i> , 2019, 7, 605-614.	2.4	17
50	Tracking Seasonal Fluctuations in Land Water Storage Using Global Models and GRACE Satellites. <i>Geophysical Research Letters</i> , 2019, 46, 5254-5264.	1.5	84
51	The Impact of Biomass Heat Storage on the Canopy Energy Balance and Atmospheric Stability in the Community Land Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 83-98.	1.3	21
52	Reconciling Canopy Interception Parameterization and Rainfall Forcing Frequency in the Community Land Model for Simulating Evapotranspiration of Rainforests and Oil Palm Plantations in Indonesia. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 732-751.	1.3	21
53	Implementing Plant Hydraulics in the Community Land Model, Version 5. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 485-513.	1.3	213
54	Hillslope Hydrology in Global Change Research and Earth System Modeling. <i>Water Resources Research</i> , 2019, 55, 1737-1772.	1.7	281

#	ARTICLE	IF	CITATIONS
55	The potential to reduce uncertainty in regional runoff projections from climate models. <i>Nature Climate Change</i> , 2019, 9, 926-933.	8.1	75
56	Ground subsidence effects on simulating dynamic high-latitude surface inundation under permafrost thaw using CLM5. <i>Geoscientific Model Development</i> , 2019, 12, 5291-5300.	1.3	13
57	Evaluating the Interplay Between Biophysical Processes and Leaf Area Changes in Land Surface Models. <i>Journal of Advances in Modeling Earth Systems</i> , 2018, 10, 1102-1126.	1.3	22
58	Human impacts on 20th century fire dynamics and implications for global carbon and water trajectories. <i>Global and Planetary Change</i> , 2018, 162, 18-27.	1.6	25
59	Verification of Land-Atmosphere Coupling in Forecast Models, Reanalyses, and Land Surface Models Using Flux Site Observations. <i>Journal of Hydrometeorology</i> , 2018, 19, 375-392.	0.7	66
60	Improving maize growth processes in the community land model: Implementation and evaluation. <i>Agricultural and Forest Meteorology</i> , 2018, 250-251, 64-89.	1.9	71
61	A Comparison of the Diel Cycle of Modeled and Measured Latent Heat Flux During the Warm Season in a Colorado Subalpine Forest. <i>Journal of Advances in Modeling Earth Systems</i> , 2018, 10, 617-651.	1.3	19
62	Dependence of the evolution of carbon dynamics in the northern permafrost region on the trajectory of climate change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3882-3887.	3.3	296
63	Projected changes in tropical cyclone activity under future warming scenarios using a high-resolution climate model. <i>Climatic Change</i> , 2018, 146, 547-560.	1.7	142
64	Matrix approach to land carbon cycle modeling: A case study with the Community Land Model. <i>Global Change Biology</i> , 2018, 24, 1394-1404.	4.2	64
65	The Benefits of Reduced Anthropogenic Climate change (BRACE): a synthesis. <i>Climatic Change</i> , 2018, 146, 287-301.	1.7	27
66	Utilizing SMAP Soil Moisture Data to Constrain Irrigation in the Community Land Model. <i>Geophysical Research Letters</i> , 2018, 45, 12,892.	1.5	33
67	ESM-SnowMIP: assessing snow models and quantifying snow-related climate feedbacks. <i>Geoscientific Model Development</i> , 2018, 11, 5027-5049.	1.3	119
68	The International Land Model Benchmarking (ILAMB) System: Design, Theory, and Implementation. <i>Journal of Advances in Modeling Earth Systems</i> , 2018, 10, 2731-2754.	1.3	175
69	Divergent patterns of experimental and model-derived permafrost ecosystem carbon dynamics in response to Arctic warming. <i>Environmental Research Letters</i> , 2018, 13, 105002.	2.2	31
70	Cover Crops May Cause Winter Warming in Snow-Covered Regions. <i>Geophysical Research Letters</i> , 2018, 45, 9889-9897.	1.5	22
71	Changes in Wood Biomass and Crop Yields in Response to Projected CO ₂ , O ₃ , Nitrogen Deposition, and Climate. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 3262-3282.	1.3	15
72	Detecting the permafrost carbon feedback: talik formation and increased cold-season respiration as precursors to sink-to-source transitions. <i>Cryosphere</i> , 2018, 12, 123-144.	1.5	46

#	ARTICLE	IF	CITATIONS
73	Global patterns of crop yield stability under additional nutrient and water inputs. PLoS ONE, 2018, 13, e0198748.	1.1	40
74	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
75	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
76	Present-day irrigation mitigates heat extremes. Journal of Geophysical Research D: Atmospheres, 2017, 122, 1403-1422.	1.2	194
77	Terrestrial ecosystem model performance in simulating productivity and its vulnerability to climate change in the northern permafrost region. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 430-446.	1.3	47
78	Impact of fire on global land surface air temperature and energy budget for the 20th century due to changes within ecosystems. Environmental Research Letters, 2017, 12, 044014.	2.2	45
79	Interactions between land use change and carbon cycle feedbacks. Global Biogeochemical Cycles, 2017, 31, 96-113.	1.9	46
80	Role of Fire in the Global Land Water Budget during the Twentieth Century due to Changing Ecosystems. Journal of Climate, 2017, 30, 1893-1908.	1.2	54
81	Higher climatological temperature sensitivity of soil carbon in cold than warm climates. Nature Climate Change, 2017, 7, 817-822.	8.1	195
82	Sensitivities of Land Cover-Precipitation Feedback to Convective Triggering. Journal of Hydrometeorology, 2017, 18, 2265-2283.	0.7	12
83	Representing subgrid convective initiation in the Community Earth System Model. Journal of Advances in Modeling Earth Systems, 2017, 9, 1740-1758.	1.3	10
84	Global gridded crop model evaluation: benchmarking, skills, deficiencies and implications. Geoscientific Model Development, 2017, 10, 1403-1422.	1.3	213
85	Improving the Representation of Polar Snow and Firn in the Community Earth System Model. Journal of Advances in Modeling Earth Systems, 2017, 9, 2583-2600.	1.3	78
86	Process-level model evaluation: a snow and heat transfer metric. Cryosphere, 2017, 11, 989-996.	1.5	34
87	Evaluation of air-soil temperature relationships simulated by land surface models during winter across the permafrost region. Cryosphere, 2016, 10, 1721-1737.	1.5	38
88	Evaluating the strength of the land-atmosphere moisture feedback in Earth system models using satellite observations. Hydrology and Earth System Sciences, 2016, 20, 4837-4856.	1.9	36
89	Diagnostic and model dependent uncertainty of simulated Tibetan permafrost area. Cryosphere, 2016, 10, 287-306.	1.5	29
90	LS3MIP (v1.0) contribution to CMIP6: the Land Surface, Snow and Soil moisture Model Intercomparison Project - aims, setup and expected outcome. Geoscientific Model Development, 2016, 9, 2809-2832.	1.3	152

#	ARTICLE	IF	CITATIONS
91	The Land Use Model Intercomparison Project (LUMIP) contribution to CMIP6: rationale and experimental design. <i>Geoscientific Model Development</i> , 2016, 9, 2973-2998.	1.3	343
92	Are GRACE-era Terrestrial Water Trends Driven by Anthropogenic Climate Change?. <i>Advances in Meteorology</i> , 2016, 2016, 1-9.	0.6	14
93	Simulated high-latitude soil thermal dynamics during the past 4 decades. <i>Cryosphere</i> , 2016, 10, 179-192.	1.5	17
94	Influence of land-atmosphere feedbacks on temperature and precipitation extremes in the GLACE-CMIP5 ensemble. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 607-623.	1.2	102
95	Assessing the use of subgrid land model output to study impacts of land cover change. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 6133-6147.	1.2	57
96	Implementing and Evaluating Variable Soil Thickness in the Community Land Model, Version 4.5 (CLM4.5). <i>Journal of Climate</i> , 2016, 29, 3441-3461.	1.2	49
97	Variability in the sensitivity among model simulations of permafrost and carbon dynamics in the permafrost region between 1960 and 2009. <i>Global Biogeochemical Cycles</i> , 2016, 30, 1015-1037.	1.9	116
98	Modeling the Arctic freshwater system and its integration in the global system: Lessons learned and future challenges. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 540-566.	1.3	79
99	Diagnostic evaluation of the Community Earth System Model in simulating mineral dust emission with insight into large-scale dust storm mobilization in the Middle East and North Africa (MENA). <i>Aeolian Research</i> , 2016, 21, 21-35.	1.1	24
100	Detecting regional patterns of changing CO ₂ flux in Alaska. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 7733-7738.	3.3	33
101	Terrestrial contribution to the heterogeneity in hydrological changes under global warming. <i>Water Resources Research</i> , 2016, 52, 3127-3142.	1.7	60
102	Confronting Weather and Climate Models with Observational Data from Soil Moisture Networks over the United States. <i>Journal of Hydrometeorology</i> , 2016, 17, 1049-1067.	0.7	83
103	A GRACE-based assessment of interannual groundwater dynamics in the Community Land and Model. <i>Water Resources Research</i> , 2015, 51, 8817-8833.	1.7	57
104	Revisiting trends in wetness and dryness in the presence of internal climate variability and water limitations over land. <i>Geophysical Research Letters</i> , 2015, 42, 10,867.	1.5	58
105	Improving the representation of hydrologic processes in Earth System Models. <i>Water Resources Research</i> , 2015, 51, 5929-5956.	1.7	366
106	Assessment of model estimates of land-atmosphere CO ₂ exchange across Northern Eurasia. <i>Biogeosciences</i> , 2015, 12, 4385-4405.	1.3	25
107	Taking off the training wheels: the properties of a dynamic vegetation model without climate envelopes, CLM4.5(ED). <i>Geoscientific Model Development</i> , 2015, 8, 3593-3619.	1.3	192
108	Effects of model structural uncertainty on carbon cycle projections: biological nitrogen fixation as a case study. <i>Environmental Research Letters</i> , 2015, 10, 044016.	2.2	109

#	ARTICLE	IF	CITATIONS
109	Permafrost carbonâ€™ climate feedback is sensitive to deep soil carbon decomposability but not deep soil nitrogen dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3752-3757.	3.3	233
110	Climate change and the permafrost carbon feedback. Nature, 2015, 520, 171-179.	13.7	2,369
111	The Community Earth System Model (CESM) Large Ensemble Project: A Community Resource for Studying Climate Change in the Presence of Internal Climate Variability. Bulletin of the American Meteorological Society, 2015, 96, 1333-1349.	1.7	1,723
112	A simplified, data-constrained approach to estimate the permafrost carbonâ€™ climate feedback. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140423.	1.6	149
113	Permafrost thaw and resulting soil moisture changes regulate projected high-latitude CO ₂ and CH ₄ emissions. Environmental Research Letters, 2015, 10, 094011.	2.2	208
114	Interannual Coupling between Summertime Surface Temperature and Precipitation over Land: Processes and Implications for Climate Change*. Journal of Climate, 2015, 28, 1308-1328.	1.2	135
115	Effects of excess ground ice on projections of permafrost in a warming climate. Environmental Research Letters, 2014, 9, 124006.	2.2	71
116	A new synoptic scale resolving global climate simulation using the Community Earth System Model. Journal of Advances in Modeling Earth Systems, 2014, 6, 1065-1094.	1.3	262
117	Preindustrial-Control and Twentieth-Century Carbon Cycle Experiments with the Earth System Model CESM1(BGC). Journal of Climate, 2014, 27, 8981-9005.	1.2	156
118	Assessing a dry surface layerâ€based soil resistance parameterization for the Community Land Model using GRACE and FLUXNETâ€MTE data. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10,299.	1.2	107
119	Effects of realistic land surface initializations on subseasonal to seasonal soil moisture and temperature predictability in North America and in changing climate simulated by CCSM4. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,250.	1.2	13
120	Less reliable water availability in the 21st century climate projections. Earth's Future, 2014, 2, 152-160.	2.4	59
121	Expert assessment of vulnerability of permafrost carbon to climate change. Climatic Change, 2013, 119, 359-374.	1.7	257
122	Spin-up processes in the Community Land Model version 4 with explicit carbon and nitrogen components. Ecological Modelling, 2013, 263, 308-325.	1.2	27
123	The Community Earth System Model: A Framework for Collaborative Research. Bulletin of the American Meteorological Society, 2013, 94, 1339-1360.	1.7	1,848
124	How Important is Vegetation Phenology for European Climate and Heat Waves?. Journal of Climate, 2013, 26, 10077-10100.	1.2	29
125	Climate Change Projections in CESM1(CAM5) Compared to CCSM4. Journal of Climate, 2013, 26, 6287-6308.	1.2	243
126	Impact of soil moistureâ€™ climate feedbacks on CMIP5 projections: First results from the GLACEâ€™CMIP5 experiment. Geophysical Research Letters, 2013, 40, 5212-5217.	1.5	314

#	ARTICLE	IF	CITATIONS
127	Evaluation of the carbon cycle components in the Norwegian Earth System Model (NorESM). Geoscientific Model Development, 2013, 6, 301-325.	1.3	207
128	Implementation and Initial Evaluation of the Glimmer Community Ice Sheet Model in the Community Earth System Model. Journal of Climate, 2013, 26, 7352-7371.	1.2	89
129	Projected Future Changes in Vegetation in Western North America in the Twenty-First Century. Journal of Climate, 2013, 26, 3671-3687.	1.2	81
130	Effects of Soil Moisture on the Responses of Soil Temperatures to Climate Change in Cold Regions*. Journal of Climate, 2013, 26, 3139-3158.	1.2	68
131	Diagnosing Present and Future Permafrost from Climate Models. Journal of Climate, 2013, 26, 5608-5623.	1.2	258
132	The effect of vertically resolved soil biogeochemistry and alternate soil C and N models on C dynamics of CLM4. Biogeosciences, 2013, 10, 7109-7131.	1.3	359
133	Simulation of Present-Day and Future Permafrost and Seasonally Frozen Ground Conditions in CCSM4. Journal of Climate, 2012, 25, 2207-2225.	1.2	207
134	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
135	On the influence of shrub height and expansion on northern high latitude climate. Environmental Research Letters, 2012, 7, 015503.	2.2	140
136	Improved simulation of the terrestrial hydrological cycle in permafrost regions by the Community Land Model. Journal of Advances in Modeling Earth Systems, 2012, 4, .	1.3	135
137	Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. New Phytologist, 2012, 194, 775-783.	3.5	111
138	Contrasting urban and rural heat stress responses to climate change. Geophysical Research Letters, 2012, 39, .	1.5	170
139	A new fractional snow-covered area parameterization for the Community Land Model and its effect on the surface energy balance. Journal of Geophysical Research, 2012, 117, .	3.3	134
140	Estimating the near-surface permafrost-carbon feedback on global warming. Biogeosciences, 2012, 9, 649-665.	1.3	160
141	The CCSM4 Land Simulation, 1850-2005: Assessment of Surface Climate and New Capabilities. Journal of Climate, 2012, 25, 2240-2260.	1.2	276
142	A framework for benchmarking land models. Biogeosciences, 2012, 9, 3857-3874.	1.3	267
143	Sensitivity of wetland methane emissions to model assumptions: application and model testing against site observations. Biogeosciences, 2012, 9, 2793-2819.	1.3	68
144	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

#	ARTICLE	IF	CITATIONS
145	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
146	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
147	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
148	The Community Climate System Model Version 4. <i>Journal of Climate</i> , 2011, 24, 4973-4991.	1.2	2,428
149	Quantifying uncertainties in projections of extremes—a perturbed land surface parameter experiment. <i>Climate Dynamics</i> , 2011, 37, 1381-1398.	1.7	44
150	Barriers to predicting changes in global terrestrial methane fluxes: analyses using CLM4Me, a methane biogeochemistry model integrated in CESM. <i>Biogeosciences</i> , 2011, 8, 1925-1953.	1.3	325
151	Permafrost response to increasing Arctic shrub abundance depends on the relative influence of shrubs on local soil cooling versus large-scale climate warming. <i>Environmental Research Letters</i> , 2011, 6, 045504.	2.2	109
152	Observed 20th century desert dust variability: impact on climate and biogeochemistry. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 10875-10893.	1.9	355
153	The contribution of snow condition trends to future ground climate. <i>Climate Dynamics</i> , 2010, 34, 969-981.	1.7	172
154	Fire dynamics during the 20th century simulated by the Community Land Model. <i>Biogeosciences</i> , 2010, 7, 1877-1902.	1.3	194
155	The Seasonal Atmospheric Response to Projected Arctic Sea Ice Loss in the Late Twenty-First Century. <i>Journal of Climate</i> , 2010, 23, 333-351.	1.2	447
156	The Atmospheric Response to Projected Terrestrial Snow Changes in the Late Twenty-First Century. <i>Journal of Climate</i> , 2010, 23, 6430-6437.	1.2	29
157	Contribution of land surface initialization to subseasonal forecast skill: First results from a multi-model experiment. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	330
158	Arctic Landscapes in Transition: Responses to Thawing Permafrost. <i>Eos</i> , 2010, 91, 229-230.	0.1	230
159	Agricultural intensification and changes in cultivated areas, 1970–2005. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 20675-20680.	3.3	436
160	Simulations of the 2004 North American Monsoon: NAMAP2. <i>Journal of Climate</i> , 2009, 22, 6716-6740.	1.2	33
161	How much climate change can be avoided by mitigation?. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	36
162	Examining the Interaction of Growing Crops with Local Climate Using a Coupled Crop–Climate Model. <i>Journal of Climate</i> , 2009, 22, 1393-1411.	1.2	41

#	ARTICLE	IF	CITATIONS
163	Incorporating organic soil into a global climate model. <i>Climate Dynamics</i> , 2008, 30, 145-160.	1.7	306
164	Sensitivity of a model projection of near-surface permafrost degradation to soil column depth and representation of soil organic matter. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	239
165	Use of FLUXNET in the Community Land Model development. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	210
166	Improvements to the Community Land Model and their impact on the hydrological cycle. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	649
167	Accelerated Arctic land warming and permafrost degradation during rapid sea ice loss. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	195
168	Improved modeling of permafrost dynamics in a GCM land-surface scheme. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	179
169	An evaluation of deep soil configurations in the CLM3 for improved representation of permafrost. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	114
170	The Partitioning of Evapotranspiration into Transpiration, Soil Evaporation, and Canopy Evaporation in a GCM: Impacts on Land-Atmosphere Interaction. <i>Journal of Hydrometeorology</i> , 2007, 8, 862-880.	0.7	399
171	Development and assessment of a coupled crop-climate model. <i>Global Change Biology</i> , 2007, 13, 169-183.	4.2	103
172	GLACE: The Global Land-Atmosphere Coupling Experiment. Part I: Overview. <i>Journal of Hydrometeorology</i> , 2006, 7, 590-610.	0.7	616
173	Reply to comment by C. R. Burn and F. E. Nelson on "A projection of near-surface permafrost degradation during the 21st century". <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	10
174	GLACE: The Global Land-Atmosphere Coupling Experiment. Part II: Analysis. <i>Journal of Hydrometeorology</i> , 2006, 7, 611-625.	0.7	337
175	Soil Moisture Memory in AGCM Simulations: Analysis of Global Land-Atmosphere Coupling Experiment (GLACE) Data. <i>Journal of Hydrometeorology</i> , 2006, 7, 1090-1112.	0.7	257
176	Climate Change Projections for the Twenty-First Century and Climate Change Commitment in the CCSM3. <i>Journal of Climate</i> , 2006, 19, 2597-2616.	1.2	239
177	Monsoon Regimes in the CCSM3. <i>Journal of Climate</i> , 2006, 19, 2482-2495.	1.2	79
178	Weak Land-Atmosphere Coupling Strength in HadAM3: The Role of Soil Moisture Variability. <i>Journal of Hydrometeorology</i> , 2005, 6, 670-680.	0.7	37
179	A projection of severe near-surface permafrost degradation during the 21st century. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	370
180	An annual cycle of vegetation in a GCM. Part I: implementation and impact on evaporation. <i>Climate Dynamics</i> , 2004, 22, 87-105.	1.7	46

#	ARTICLE	IF	CITATIONS
181	An annual cycle of vegetation in a GCM. Part II: global impacts on climate and hydrology. <i>Climate Dynamics</i> , 2004, 22, 107-122.	1.7	36
182	Influence of vegetation on the local climate and hydrology in the tropics: sensitivity to soil parameters. <i>Climate Dynamics</i> , 2004, 23, 45-61.	1.7	80
183	Regions of Strong Coupling Between Soil Moisture and Precipitation. <i>Science</i> , 2004, 305, 1138-1140.	6.0	2,337
184	The Boreal Summer Intraseasonal Oscillation: Relationship between Northward and Eastward Movement of Convection. <i>Journals of the Atmospheric Sciences</i> , 2002, 59, 1593-1606.	0.6	352
185	Dynamical response of equatorial Indian Ocean to intraseasonal winds: Zonal Flow. <i>Geophysical Research Letters</i> , 2001, 28, 4215-4218.	1.5	94
186	Interannual Variations of the Intraseasonal Oscillation in the South Asian Summer Monsoon Region. <i>Journal of Climate</i> , 2001, 14, 2910-2922.	1.2	145
187	Issues Related to Incorporating Northern Peatlands into Global Climate Models. <i>Geophysical Monograph Series</i> , 0, , 19-35.	0.1	30
188	The Community Earth System Model: A Framework for Collaborative Research. <i>Bulletin of the American Meteorological Society</i> , 0, , 130204122247009.	1.7	103