Jiafu Mao

List of Publications by Year in descending order

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106	9,422	57631	40881
papers	citations	44 h-index	93 g-index

120	120	120	10058
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Deficient precipitation sensitivity to Sahel land surface forcings among <scp>CMIP5</scp> models. International Journal of Climatology, 2023, 43, 99-122.	1.5	1
2	Decadal trends in the seasonal-cycle amplitude of terrestrial CO₂ exchange resulting from the ensemble of terrestrial biosphere models. Tellus, Series B: Chemical and Physical Meteorology, 2022, 68, 28968.	0.8	31
3	Machine learningâ€“based observation-constrained projections reveal elevated global socioeconomic risks from wildfire. Nature Communications, 2022, 13, 1250.	5.8	19
4	Artificial light at night: an underappreciated effect on phenology of deciduous woody plants. , 2022, 1, .		18
5	Photosynthesis phenology, as defined by solar-induced chlorophyll fluorescence, is overestimated by vegetation indices in the extratropical Northern Hemisphere. Agricultural and Forest Meteorology, 2022, 323, 109027.	1.9	17
6	Decoupling of greenness and gross primary productivity as aridity decreases. Remote Sensing of Environment, 2022, 279, 113120.	4.6	34
7	Moisture availability mediates the relationship between terrestrial gross primary production and solarâ€induced chlorophyll fluorescence: Insights from globalâ€scale variations. Global Change Biology, 2021, 27, 1144-1156.	4.2	57
8	Extending a land-surface model with <i>Sphagnum</i> moss to simulate responses of a northern temperate bog to whole ecosystem warming and elevated CO₂. Biogeosciences, 2021, 18, 467-486.	1.3	17
9	Photoperiod decelerates the advance of spring phenology of six deciduous tree species under climate warming. Global Change Biology, 2021, 27, 2914-2927.	4.2	48
10	Unusual characteristics of the carbon cycle during the 2015â˜2016 El NiÃ±o. Global Change Biology, 2021, 27, 3798-3809.	4.2	6
11	Seasonal changes in GPP/SIF ratios and their climatic determinants across the Northern Hemisphere. Global Change Biology, 2021, 27, 5186-5197.	4.2	34
12	An Integrative Model for Soil Biogeochemistry and Methane Processes: I. Model Structure and Sensitivity Analysis. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2019JG005468.	1.3	11
13	Decisions and coordination of retailer-led low-carbon supply chain under altruistic preference. European Journal of Operational Research, 2021, 293, 910-925.	3.5	99
14	Development of observation-based global multilayer soil moisture products for 1970 to 2016. Earth System Science Data, 2021, 13, 4385-4405.	3.7	9
15	Evaluation and modification of ELM seasonal deciduous phenology against observations in a southern boreal peatland forest. Agricultural and Forest Meteorology, 2021, 308-309, 108556.	1.9	7
16	Land cover change-induced decline in terrestrial gross primary production over the conterminous United States from 2001 to 2016. Agricultural and Forest Meteorology, 2021, 308-309, 108609.	1.9	10
17	Interannual variability and climatic sensitivity of global wildfire activity. Advances in Climate Change Research, 2021, 12, 686-695.	2.1	9
18	Human-caused long-term changes in global aridity. Npj Climate and Atmospheric Science, 2021, 4, .	2.6	18

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19	Global vegetation biomass production efficiency constrained by models and observations. Global Change Biology, 2020, 26, 1474-1484.	4.2	15
20	Divergent responses of spring phenology to daytime and nighttime warming. Agricultural and Forest Meteorology, 2020, 281, 107832.	1.9	38
21	Evaluation of simulated soil carbon dynamics in Arctic-Boreal ecosystems. Environmental Research Letters, 2020, 15, 025005.	2.2	19
22	Modelling tree stemâ€water dynamics over an Amazonian rainforest. Ecohydrology, 2020, 13, e2180.	1.1	9
23	Rapid Net Carbon Loss From a Wholeâ€Ecosystem Warmed Peatland. AGU Advances, 2020, 1, e2020AV000163.	2.3	69
24	Mapping potentials and bridging regional gaps of renewable resources in China. Renewable and Sustainable Energy Reviews, 2020, 134, 110337.	8.2	30
25	Projected changes in the terrestrial and oceanic regulators of climate variability across sub-Saharan Africa. Climate Dynamics, 2020, 55, 1031-1057.	1.7	4
26	Quantifying the drivers and predictability of seasonal changes in African fire. Nature Communications, 2020, 11, 2893.	5.8	15
27	Impacts of land use change and elevated CO₂ on the interannual variations and seasonal cycles of gross primary productivity in China. Earth System Dynamics, 2020, 11, 235-249.	2.7	16
28	Observed changes in dry-season water availability attributed to human-induced climate change. Nature Geoscience, 2020, 13, 477-481.	5.4	132
29	Urban warming advances spring phenology but reduces the response of phenology to temperature in the conterminous United States. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4228-4233.	3.3	109
30	A Causal Inference Model Based on Random Forests to Identify the Effect of Soil Moisture on Precipitation. Journal of Hydrometeorology, 2020, 21, 1115-1131.	0.7	21
31	Spatiotemporal dynamics of ecosystem fires and biomass burning-induced carbon emissions in China over the past two decades. Geography and Sustainability, 2020, 1, 47-58.	1.9	14
32	Cryptic phenology in plants: Case studies, implications, and recommendations. Global Change Biology, 2019, 25, 3591-3608.	4.2	26
33	Streamflow in the Columbia River Basin: Quantifying Changes Over the Period 1951â€2008 and Determining the Drivers of Those Changes. Water Resources Research, 2019, 55, 6640-6652.	1.7	15
34	Carbon and Water Use Efficiencies: A Comparative Analysis of Ten Terrestrial Ecosystem Models under Changing Climate. Scientific Reports, 2019, 9, 14680.	1.6	37
35	Field-experiment constraints on the enhancement of the terrestrial carbon sink by CO2 fertilization. Nature Geoscience, 2019, 12, 809-814.	5.4	58
36	The paleoclimatic footprint in the soil carbon stock of the Tibetan permafrost region. Nature Communications, 2019, 10, 4195.	5.8	39

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37	Vegetation Functional Properties Determine Uncertainty of Simulated Ecosystem Productivity: A Traceability Analysis in the East Asian Monsoon Region. Global Biogeochemical Cycles, 2019, 33, 668-689.	1.9	38
38	Permafrost response to vegetation greenness variation in the Arctic tundra through positive feedback in surface air temperature and snow cover. Environmental Research Letters, 2019, 14, 044024.	2.2	13
39	Air temperature optima of vegetation productivity across global biomes. Nature Ecology and Evolution, 2019, 3, 772-779.	3.4	316
40	Land carbon models underestimate the severity and duration of droughtâ€™s impact on plant productivity. Scientific Reports, 2019, 9, 2758.	1.6	42
41	Predictability of tropical vegetation greenness using sea surface temperatures*. Environmental Research Communications, 2019, 1, 031003.	0.9	2
42	Vulnerability of existing and planned coal-fired power plants in Developing Asia to changes in climate and water resources. Energy and Environmental Science, 2019, 12, 3164-3181.	15.6	38
43	Contribution of environmental forcings to US runoff changes for the period 1950â€“2010. Environmental Research Letters, 2018, 13, 054023.	2.2	9
44	Validation of a Statistical Methodology for Extracting Vegetation Feedbacks: Focus on North African Ecosystems in the Community Earth System Model. Journal of Climate, 2018, 31, 1565-1586.	1.2	13
45	Impact of Earth Greening on the Terrestrial Water Cycle. Journal of Climate, 2018, 31, 2633-2650.	1.2	142
46	Quantifying the Effects of Historical Land Cover Conversion Uncertainty on Global Carbon and Climate Estimates. Geophysical Research Letters, 2018, 45, 974-982.	1.5	26
47	Asymmetric responses of primary productivity to altered precipitation simulated by ecosystem models across three long-term grassland sites. Biogeosciences, 2018, 15, 3421-3437.	1.3	55
48	Selfâ€Amplifying Feedbacks Accelerate Greening and Warming of the Arctic. Geophysical Research Letters, 2018, 45, 7102-7111.	1.5	35
49	Uncertainty Quantification of Extratropical Forest Biomass in CMIP5 Models over the Northern Hemisphere. Scientific Reports, 2018, 8, 10962.	1.6	7
50	Weakening temperature control on the interannual variations of spring carbon uptake across northern lands. Nature Climate Change, 2017, 7, 359-363.	8.1	183
51	Climate mitigation from vegetation biophysical feedbacks during the past three decades. Nature Climate Change, 2017, 7, 432-436.	8.1	323
52	Biospheric feedback effects in a synchronously coupled model of human and Earth systems. Nature Climate Change, 2017, 7, 496-500.	8.1	46
53	Response of vegetation phenology to urbanization in the conterminous United States. Global Change Biology, 2017, 23, 2818-2830.	4.2	130
54	Global land carbon sink response to temperature and precipitation varies with ENSO phase. Environmental Research Letters, 2017, 12, 064007.	2.2	39

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55	Advancing a Model-Validated Statistical Method for Decomposing the Key Oceanic Drivers of Regional Climate: Focus on Northern and Tropical African Climate Variability in the Community Earth System Model (CESM). Journal of Climate, 2017, 30, 8517-8537.	1.2	9
56	Uncertainty in the response of terrestrial carbon sink to environmental drivers undermines carbon-climate feedback predictions. Scientific Reports, 2017, 7, 4765.	1.6	156
57	Response of Water Use Efficiency to Global Environmental Change Based on Output From Terrestrial Biosphere Models. Global Biogeochemical Cycles, 2017, 31, 1639-1655.	1.9	63
58	Observed positive vegetation-rainfall feedbacks in the Sahel dominated by a moisture recycling mechanism. Nature Communications, 2017, 8, 1873.	5.8	48
59	Informing climate models with rapid chamber measurements of forest carbon uptake. Global Change Biology, 2017, 23, 2130-2139.	4.2	9
60	Evaluating the Community Land Model in a pine stand with shading manipulations and ¹³CO₂ labeling. Biogeosciences, 2016, 13, 641-657.	1.3	18
61	LS3MIP (v1.0) contribution to CMIP6: the Land Surface, Snow and Soil moisture Model Intercomparison Project â€“ aims, setup and expected outcome. Geoscientific Model Development, 2016, 9, 2809-2832.	1.3	152
62	High Resolution Model Intercomparison Project (HighResMIPÂv1.0) for CMIP6. Geoscientific Model Development, 2016, 9, 4185-4208.	1.3	643
63	Global patterns and climate drivers of waterâ€use efficiency in terrestrial ecosystems deduced from satelliteâ€based datasets and carbon cycle models. Global Ecology and Biogeography, 2016, 25, 311-323.	2.7	102
64	Seasonal responses of terrestrial ecosystem waterâ€use efficiency to climate change. Global Change Biology, 2016, 22, 2165-2177.	4.2	100
65	Uncertainty analysis of terrestrial net primary productivity and net biome productivity in China during 1901â€“2005. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1372-1393.	1.3	35
66	Greening of the Earth and its drivers. Nature Climate Change, 2016, 6, 791-795.	8.1	1,675
67	Evaluation of the Community Land Model simulated carbon and water fluxes against observations over ChinaFLUX sites. Agricultural and Forest Meteorology, 2016, 226-227, 174-185.	1.9	26
68	A scalable framework for the global offline community land model ensemble simulation. International Journal of Computational Science and Engineering, 2016, 12, 73.	0.4	2
69	Increased lightâ€use efficiency in northern terrestrial ecosystems indicated by CO₂ and greening observations. Geophysical Research Letters, 2016, 43, 11,339.	1.5	40
70	Testing a land model in ecosystem functional space via a comparison of observed and modeled ecosystem flux responses to precipitation regimes and associated stresses in a Central U.S. forest. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1884-1902.	1.3	29
71	Human-induced greening of the northern extratropical land surface. Nature Climate Change, 2016, 6, 959-963.	8.1	145
72	Global patterns and controls of soil organic carbon dynamics as simulated by multiple terrestrial biosphere models: Current status and future directions. Global Biogeochemical Cycles, 2015, 29, 775-792.	1.9	241

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73	Toward â€œoptimalâ€•integration of terrestrial biosphere models. Geophysical Research Letters, 2015, 42, 4418-4428.	1.5	48
74	Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Environmental Research Letters, 2015, 10, 094008.	2.2	119
75	Representing northern peatland microtopography and hydrology within the Community Land Model. Biogeosciences, 2015, 12, 6463-6477.	1.3	66
76	The integrated Earth system model version 1: formulation and functionality. Geoscientific Model Development, 2015, 8, 2203-2219.	1.3	44
77	Change in terrestrial ecosystem waterâ€•use efficiency over the last three decades. Global Change Biology, 2015, 21, 2366-2378.	4.2	215
78	Comparing Evapotranspiration from Eddy Covariance Measurements, Water Budgets, Remote Sensing, and Land Surface Models over Canadaa,b. Journal of Hydrometeorology, 2015, 16, 1540-1560.	0.7	75
79	Seasonally different response of photosynthetic activity to daytime and nightâ€•time warming in the Northern Hemisphere. Global Change Biology, 2015, 21, 377-387.	4.2	72
80	Detection and attribution of vegetation greening trend in China over the last 30Âyears. Global Change Biology, 2015, 21, 1601-1609.	4.2	597
81	From land use to land cover: restoring the afforestation signal in a coupled integrated assessmentâ€“earth system model and the implications for CMIP5 RCP simulations. Biogeosciences, 2014, 11, 6435-6450.	1.3	49
82	The North American Carbon Program Multi-scale Synthesis and Terrestrial Model Intercomparison Project â€“ Part 2: Environmental driver data. Geoscientific Model Development, 2014, 7, 2875-2893.	1.3	207
83	A worldwide analysis of spatiotemporal changes in water balanceâ€•based evapotranspiration from 1982 to 2009. Journal of Geophysical Research D: Atmospheres, 2014, 119, 1186-1202.	1.2	109
84	Toward verifying fossil fuel CO₂ emissions with the CMAQ model: Motivation, model description and initial simulation. Journal of the Air and Waste Management Association, 2014, 64, 419-435.	0.9	9
85	On linking an Earth system model to the equilibrium carbon representation of an economically optimizing land use model. Geoscientific Model Development, 2014, 7, 2545-2555.	1.3	26
86	Sensitivity of global terrestrial gross primary production to hydrologic states simulated by the Community Land Model using two runoff parameterizations. Journal of Advances in Modeling Earth Systems, 2014, 6, 658-679.	1.3	48
87	Evidence for a weakening relationship between interannual temperature variability and northern vegetation activity. Nature Communications, 2014, 5, 5018.	5.8	414
88	Impact of largeâ€•scale climate extremes on biospheric carbon fluxes: An intercomparison based on MsTMIP data. Global Biogeochemical Cycles, 2014, 28, 585-600.	1.9	181
89	Stochastic Parameterization to Represent Variability and Extremes in Climate Modeling. Procedia Computer Science, 2014, 29, 1146-1155.	1.2	5
90	Greenhouse Gas Policy Influences Climate via Direct Effects of Land-Use Change. Journal of Climate, 2013, 26, 3657-3670.	1.2	59

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91	Spatiotemporal patterns of evapotranspiration in response to multiple environmental factors simulated by the Community Land Model. Environmental Research Letters, 2013, 8, 024012.	2.2	71
92	The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project â€“ Part 1: Overview and experimental design. Geoscientific Model Development, 2013, 6, 2121-2133.	1.3	212
93	Global Latitudinal-Asymmetric Vegetation Growth Trends and Their Driving Mechanisms: 1982â€“2009. Remote Sensing, 2013, 5, 1484-1497.	1.8	117
94	Evaluation of CLM4 Solar Radiation Partitioning Scheme Using Remote Sensing and Site Level FPAR Datasets. Remote Sensing, 2013, 5, 2857-2882.	1.8	14
95	Remote Sensing Evaluation of CLM4 GPP for the Period 2000â€“09*. Journal of Climate, 2012, 25, 5327-5342.	1.2	85
96	Causes of spring vegetation growth trends in the northern midâ€“high latitudes from 1982 to 2004. Environmental Research Letters, 2012, 7, 014010.	2.2	53
97	The carbon budget of terrestrial ecosystems in East Asia over the last two decades. Biogeosciences, 2012, 9, 3571-3586.	1.3	103
98	The impact of climate, CO₂, nitrogen deposition and land use change on simulated contemporary global river flow. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	58
99	Global and regional coupled climate sensitivity to the parameterization of rainfall interception. Climate Dynamics, 2011, 37, 171-186.	1.7	4
100	Coupling a terrestrial biogeochemical model to the common land model. Advances in Atmospheric Sciences, 2011, 28, 1129-1142.	1.9	4
101	The CSIRO Mk3L climate system model v1.0 coupled to the CABLE land surface scheme v1.4b: evaluation of the control climatology. Geoscientific Model Development, 2011, 4, 1115-1131.	1.3	18
102	Simulation and evaluation of terrestrial ecosystem NPP with M-SDGVM over continental China. Advances in Atmospheric Sciences, 2010, 27, 427-442.	1.9	19
103	Assessment of Reanalysis Daily Extreme Temperatures with Chinaâ€™s Homogenized Historical Dataset during 1979â€“2001 Using Probability Density Functions. Journal of Climate, 2010, 23, 6605-6623.	1.2	48
104	Sensitivity of the carbon storage of potential vegetation to historical climate variability and CO2 in continental China. Advances in Atmospheric Sciences, 2009, 26, 87-100.	1.9	11
105	Improvements of a dynamic global vegetation model and simulations of carbon and water at an upland-oak forest. Advances in Atmospheric Sciences, 2007, 24, 311-322.	1.9	9
106	Interannual variability in the onset of the summer monsoon over the Eastern Bay of Bengal. Theoretical and Applied Climatology, 2007, 89, 155-170.	1.3	82