Zong-Liang Yang

List of Publications by Citations

187 papers	15,533 citations	56 h-index	122 g-index
214 ext. papers	17,556 ext. citations	5.1 avg, IF	6.37 L-index

#	Paper	IF	Citations
187	The Community Climate System Model Version 4. *Journal of Climate*, **2011**, 24, 4973-4991	4.4	2037
186	The community Noah land surface model with multiparameterization options (Noah-MP): 1. Model description and evaluation with local-scale measurements. *Journal of Geophysical Research*, **2011**, 116,		1106
185	The Common Land Model. *Bulletin of the American Meteorological Society*, **2003**, 84, 1013-1024	6.1	897
184	Parameterization improvements and functional and structural advances in Version 4 of the Community Land Model. *Journal of Advances in Modeling Earth Systems*, **2011**, 3,	7.1	581
183	Improvements to the Community Land Model and their impact on the hydrological cycle. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		568
182	The Land Surface Climatology of the Community Land Model Coupled to the NCAR Community Climate Model*. *Journal of Climate*, **2002**, 15, 3123-3149	4.4	499
181	Development of a simple groundwater model for use in climate models and evaluation with Gravity Recovery and Climate Experiment data. *Journal of Geophysical Research*, **2007**, 112,		370
180	The community Noah land surface model with multiparameterization options (Noah-MP): 2. Evaluation over global river basins. *Journal of Geophysical Research*, **2011**, 116,		329
179	Effects of Frozen Soil on Snowmelt Runoff and Soil Water Storage at a Continental Scale. *Journal of Hydrometeorology*, **2006**, 7, 937-952	3.7	315
178	A simple TOPMODEL-based runoff parameterization (SIMTOP) for use in global climate models. *Journal of Geophysical Research*, **2005**, 110,		303
177	The Community Land Model and Its Climate Statistics as a Component of the Community Climate System Model. *Journal of Climate*, **2006**, 19, 2302-2324	4.4	296
176	The Project for Intercomparison of Land-surface Parameterization Schemes. *Bulletin of the American Meteorological Society*, **1993**, 74, 1335-1349	6.1	278
175	Cabauw Experimental Results from the Project for Intercomparison of Land-Surface Parameterization Schemes. *Journal of Climate*, **1997**, 10, 1194-1215	4.4	271
174	Regional scale flood modeling using NEXRAD rainfall, GIS, and HEC-HMS/RAS: a case study for the San Antonio River Basin Summer 2002 storm event. *Journal of Environmental Management*, **2005**, 75, 325-36	7.9	262
173	The Representation of Snow in Land Surface Schemes: Results from PILPS 2(d). *Journal of Hydrometeorology*, **2001**, 2, 7-25	3.7	259
172	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	7.1	258
171	Assessment of three dynamical climate downscaling methods using the Weather Research and Forecasting (WRF) model. *Journal of Geophysical Research*, **2008**, 113,		257

170	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) Phase 2(c) Red–Arkansas River basin experiment:: 1. Experiment description and summary intercomparisons. *Global and Planetary Change*, **1998**, 19, 115-135	4.2	243
169	Validation of the Snow Submodel of the Biosphere–Atmosphere Transfer Scheme with Russian Snow Cover and Meteorological Observational Data. *Journal of Climate*, **1997**, 10, 353-373	4.4	221
168	Use of FLUXNET in the Community Land Model development. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		196
167	Simulation of high-latitude hydrological processes in the Torne–Kalix basin: PILPS Phase 2(e): 1: Experiment description and summary intercomparisons. *Global and Planetary Change*, **2003**, 38, 1-30	4.2	177
166	Validation of the energy budget of an alpine snowpack simulated by several snow models (Snow MIP project). *Annals of Glaciology*, **2004**, 38, 150-158	2.5	176
165	The Rhône-Aggregation Land Surface Scheme Intercomparison Project: An Overview. *Journal of Climate*, **2004**, 17, 187-208	4.4	161
164	An observation-based formulation of snow cover fraction and its evaluation over large North American river basins. *Journal of Geophysical Research*, **2007**, 112,		147
163	Effects of vegetation canopy processes on snow surface energy and mass balances. *Journal of Geophysical Research*, **2004**, 109,		141
162	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) phase 2(c) Red–Arkansas River basin experiment:. *Global and Planetary Change*, **1998**, 19, 161-179	4.2	137
161	Effects of Frozen Soil on Soil Temperature, Spring Infiltration, and Runoff: Results from the PILPS 2(d) Experiment at Valdai, Russia. *Journal of Hydrometeorology*, **2003**, 4, 334-351	3.7	132
160	Simulations of a Boreal Grassland Hydrology at Valdai, Russia: PILPS Phase 2(d). *Monthly Weather Review*, **2000**, 128, 301-321	2.4	121
159	Sensitivity of regional climates to localized precipitation in global models. *Nature*, **1990**, 346, 734-737	50.4	121
158	River Network Routing on the NHDPlus Dataset. *Journal of Hydrometeorology*, **2011**, 12, 913-934	3.7	117
157	Quantifying parameter sensitivity, interaction, and transferability in hydrologically enhanced versions of the Noah land surface model over transition zones during the warm season. *Journal of Geophysical Research*, **2010**, 115,		111
156	An Improved Dynamical Downscaling Method with GCM Bias Corrections and Its Validation with 30 Years of Climate Simulations. *Journal of Climate*, **2012**, 25, 6271-6286	4.4	110
155	Preliminary study of spin-up processes in land surface models with the first stage data of Project for Intercomparison of Land Surface Parameterization Schemes Phase 1(a). *Journal of Geophysical Research*, **1995**, 100, 16553		106
154	Hydrological evaluation of the Noah-MP land surface model for the Mississippi River Basin. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 23-38	4.4	105
153	Assessment of simulated water balance from Noah, Noah-MP, CLM, and VIC over CONUS using the NLDAS test bed. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 13,751-13,770	4.4	101

152	Comparison of seasonal and spatial variations of albedos from Moderate-Resolution Imaging Spectroradiometer (MODIS) and Common Land Model. *Journal of Geophysical Research*, **2003**, 108,		100
151	Simulation of high latitude hydrological processes in the Torne-Kalix basin: PILPS Phase 2(e). *Global and Planetary Change*, **2003**, 38, 31-53	4.2	100
150	Sensitivity of the Modeled North American Monsoon Regional Climate to Convective Parameterization. *Monthly Weather Review*, **2002**, 130, 1282-1298	2.4	95
149	Impacts of vegetation and groundwater dynamics on warm season precipitation over the Central United States. *Journal of Geophysical Research*, **2009**, 114,		93
148	Key results and implications from phase 1(c) of the Project for Intercomparison of Land-surface Parametrization Schemes. *Climate Dynamics*, **1999**, 15, 673-684	4.2	92
147	Mechanisms of water supply and vegetation demand govern the seasonality and magnitude of evapotranspiration in Amazonia and Cerrado. *Agricultural and Forest Meteorology*, **2014**, 191, 33-50	5.8	81
146	The effect of groundwater interaction in North American regional climate simulations with WRF/Noah-MP. *Climatic Change*, **2015**, 129, 485-498	4.5	79
145	The Project for Intercomparison of Land-surface Parameterization Schemes (PILPS) phase 2(c) Red-Arkansas River basin experiment:. *Global and Planetary Change*, **1998**, 19, 137-159	4.2	79
144	The Versatile Integrator of Surface and Atmosphere processes: Part 1. Model description. *Global and Planetary Change*, **2003**, 38, 175-189	4.2	78
143	Positive response of Indian summer rainfall to Middle East dust. *Geophysical Research Letters*, **2014**, 41, 4068-4074	4.9	76
142	Multisensor snow data assimilation at the continental scale: The value of Gravity Recovery and Climate Experiment terrestrial water storage information. *Journal of Geophysical Research*, **2010**, 115,		74
141	Predicted impacts of climate and land use change on surface ozone in the Houston, Texas, area. *Journal of Geophysical Research*, **2008**, 113,		73
140	Modeling seasonal snowpack evolution in the complex terrain and forested Colorado Headwaters region: A model intercomparison study. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 13,795-13,819	4.4	69
139	Improving land-surface model hydrology: Is an explicit aquifer model better than a deeper soil profile?. *Geophysical Research Letters*, **2007**, 34,	4.9	66
138	Impact of moisture flux convergence and soil moisture on precipitation: a case study for the southern United States with implications for the globe. *Climate Dynamics*, **2016**, 46, 467-481	4.2	64
137	Description of the Biosphere-Atmosphere Transfer Scheme (BATS) for the Soil Moisture Workshop and evaluation of its performance. *Global and Planetary Change*, **1996**, 13, 117-134	4.2	63
136	Comparative Analyses of Physically Based Snowmelt Models for Climate Simulations. *Journal of Climate*, **1999**, 12, 2643-2657	4.4	62
135	Consistent response of Indian summer monsoon to Middle East dust in observations and simulations. *Atmospheric Chemistry and Physics*, **2015**, 15, 9897-9915	6.8	60

134	Analysis of transpiration results from the RICE and PILPS workshop. *Global and Planetary Change*, **1996**, 13, 73-88	4.2	60
133	Decadal Modulation of Precipitation Patterns over Eastern China by Sea Surface Temperature Anomalies. *Journal of Climate*, **2017**, 30, 7017-7033	4.4	59
132	A new dynamical downscaling approach with GCM bias corrections and spectral nudging. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 3063-3084	4.4	56
131	Effects of water table dynamics on regional climate: A case study over east Asian monsoon area. *Journal of Geophysical Research*, **2008**, 113,		55
130	Divergent effects of climate change on future groundwater availability in key mid-latitude aquifers. *Nature Communications*, **2020**, 11, 3710	17.4	53
129	Mapping erodibility in dust source regions based on geomorphology, meteorology, and remote sensing. *Journal of Geophysical Research F: Earth Surface*, **2014**, 119, 1977-1994	3.8	52
128	Overview of the Large-Scale Biosphere–Atmosphere Experiment in Amazonia Data Model Intercomparison Project (LBA-DMIP). *Agricultural and Forest Meteorology*, **2013**, 182-183, 111-127	5.8	49
127	Enhancing the estimation of continental-scale snow water equivalent by assimilating MODIS snow cover with the ensemble Kalman filter. *Journal of Geophysical Research*, **2008**, 113,		49
126	Future precipitation changes and their implications for tropical peatlands. *Geophysical Research Letters*, **2007**, 34,	4.9	49
125	Assimilation of MODIS snow cover through the Data Assimilation Research Testbed and the Community Land Model version 4. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 7091-7103	4.4	48
124	RAPID applied to the SIM-France model. *Hydrological Processes*, **2011**, 25, 3412-3425	3.3	47
123	Assessing a land surface model's improvements with GRACE estimates. *Geophysical Research Letters*, **2006**, 33,	4.9	46
122	Seasonal Responses of Indian Summer Monsoon to Dust Aerosols in the Middle East, India, and China. *Journal of Climate*, **2016**, 29, 6329-6349	4.4	43
121	Evaluation of the Snow Simulations from the Community Land Model, Version 4 (CLM4). *Journal of Hydrometeorology*, **2016**, 17, 153-170	3.7	43
120	The scale-dependence of SMOS soil moisture accuracy and its improvement through land data assimilation in the central Tibetan Plateau. *Remote Sensing of Environment*, **2014**, 152, 345-355	13.2	43
119	Investigating diurnal and seasonal climatic response to land use and land cover change over monsoon Asia with the Community Earth System Model. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 1137-1152	4.4	43
118	Retrieving snow mass from GRACE terrestrial water storage change with a land surface model. *Geophysical Research Letters*, **2007**, 34,	4.9	42
117	Missing pieces to modeling the Arctic-Boreal puzzle. *Environmental Research Letters*, **2018**, 13, 020202	6.2	39

116	The versatile integrator of surface atmospheric processes: Part 2: evaluation of three topography-based runoff schemes. *Global and Planetary Change*, **2003**, 38, 191-208	4.2	39
115	Evaluating Enhanced Hydrological Representations in Noah LSM over Transition Zones: Implications for Model Development. *Journal of Hydrometeorology*, **2009**, 10, 600-622	3.7	38
114	Elucidating Diverse Drought Characteristics from Two Meteorological Drought Indices (SPI and SPEI) in China. *Journal of Hydrometeorology*, **2020**, 21, 1513-1530	3.7	37
113	Spatiotemporal Evaluation of Simulated Evapotranspiration and Streamflow over Texas Using the WRF-Hydro-RAPID Modeling Framework. *Journal of the American Water Resources Association*, **2018**, 54, 40-54	2.1	36
112	Impacts of data length on optimal parameter and uncertainty estimation of a land surface model. *Journal of Geophysical Research*, **2004**, 109,		35
111	Continental-Scale River Flow Modeling of the Mississippi River Basin Using High-Resolution NHDPlus Dataset. *Journal of the American Water Resources Association*, **2017**, 53, 258-279	2.1	34
110	On the Sensitivity of the Precipitation Partitioning Into Evapotranspiration and Runoff in Land Surface Parameterizations. *Water Resources Research*, **2019**, 55, 95-111	5.4	34
109	Dynamical downscaling of regional climate: A review of methods and limitations. *Science China Earth Sciences*, **2019**, 62, 365-375	4.6	34
108	Assessing the Capability of a Regional-Scale Weather Model to Simulate Extreme Precipitation Patterns and Flooding in Central Texas. *Weather and Forecasting*, **2008**, 23, 1102-1126	2.1	33
107	Sensitivity of Latent Heat Flux from PILPS Land-Surface Schemes to Perturbations of Surface Air Temperature. *Journals of the Atmospheric Sciences*, **1998**, 55, 1909-1927	2.1	33
106	Simulation of snow mass and extent in general circulation models. *Hydrological Processes*, **1999**, 13, 2097-2113	3.3	33
105	Hydrometeorological Response of the Modeled North American Monsoon to Convective Parameterization. *Journal of Hydrometeorology*, **2003**, 4, 235-250	3.7	33
104	Integration of a Parsimonious Hydrological Model with Recurrent Neural Networks for Improved Streamflow Forecasting. *Water (Switzerland)*, **2018**, 10, 1655	3	33
103	Regional-scale river flow modeling using off-the-shelf runoff products, thousands of mapped rivers and hundreds of stream flow gauges. *Environmental Modelling and Software*, **2013**, 42, 116-132	5.2	32
102	One-dimensional snow water and energy balance model for vegetated surfaces. *Hydrological Processes*, **1999**, 13, 2467-2482	3.3	32
101	Implementation of a vector-based river network routing scheme in the community WRF-Hydro modeling framework for flood discharge simulation. *Environmental Modelling and Software*, **2018**, 107, 1-11	5.2	29
100	A wavelet approach to the short-term to pluri-decennal variability of streamflow in the Mississippi river basin from 1934 to 1998. *International Journal of Climatology*, **2011**, 31, 31-43	3.5	29
99	Impact of field-calibrated vegetation parameters on GCM climate simulations. *Quarterly Journal of the Royal Meteorological Society*, **2001**, 127, 1199-1223	6.4	29

98	Comparison of albedos computed by land surface models and evaluation against remotely sensed data. *Journal of Geophysical Research*, **2001**, 106, 20687-20702		28
97	Snow data assimilation-constrained land initialization improves seasonal temperature prediction. *Geophysical Research Letters*, **2016**, 43, 11,423	4.9	27
96	Inter-annual variability of carbon and water fluxes in Amazonian forest, Cerrado and pasture sites, as simulated by terrestrial biosphere models. *Agricultural and Forest Meteorology*, **2013**, 182-183, 145-155	5.8	27
95	Estimating Snow Water Storage in North America Using CLM4, DART, and Snow Radiance Data Assimilation. *Journal of Hydrometeorology*, **2016**, 17, 2853-2874	3.7	26
94	Aggregation rules for surface parameters in global models. *Hydrology and Earth System Sciences*, **1997**, 1, 217-226	5.5	26
93	Model performance, model robustness, and model fitness scores: A new method for identifying good land-surface models. *Geophysical Research Letters*, **2008**, 35,	4.9	26
92	High Summertime Aerosol Loadings Over the Arabian Sea and Their Transport Pathways. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 10,568	4.4	26
91	Projected changes of temperature and precipitation in Texas from downscaled global climate models. *Climate Research*, **2012**, 53, 229-244	1.6	25
90	Global Soil Moisture Estimation by Assimilating AMSR-E Brightness Temperatures in a Coupled CLM4RTMDART System. *Journal of Hydrometeorology*, **2016**, 17, 2431-2454	3.7	24
89	Role of ocean evaporation in California droughts and floods. *Geophysical Research Letters*, **2016**, 43, 6554-6562	4.9	24
88	Sensitivity of biogenic secondary organic aerosols to future climate change at regional scales: An online coupled simulation. *Atmospheric Environment*, **2010**, 44, 4891-4907	5.3	24
87	Sensitivity of ground heat flux to vegetation cover fraction and leaf area index. *Journal of Geophysical Research*, **1999**, 104, 19505-19514		24
86	Integration of nitrogen dynamics into the Noah-MP land surface model v1.1 for climate and environmental predictions. *Geoscientific Model Development*, **2016**, 9, 1-15	6.3	24
85	New insights into the wind-dust relationship in sandblasting and direct aerodynamic entrainment from wind tunnel experiments. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 1776-1792	4.4	23
84	Quantifying local-scale dust emission from the Arabian Red Sea coastal plain. *Atmospheric Chemistry and Physics*, **2017**, 17, 993-1015	6.8	22
83	Use of a Coupled Land Surface General Circulation Model to Examine the Impacts of Doubled Stomatal Resistance on the Water Resources of the American Southwest. *Journal of Climate*, **1999**, 12, 3359-3375	4.4	22
82	Effects of soil-type datasets on regional terrestrial water cycle simulations under different climatic regimes. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 14,387-14,402	4.4	22
81	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). *Aeolian Research*, **2016**, 21, 21-35	3.9	21

80	Multi-sensor land data assimilation: Toward a robust global soil moisture and snow estimation. *Remote Sensing of Environment*, **2018**, 216, 13-27	13.2	21
79	A decade of RAPID: Reflections on the development of an open source geoscience code. *Earth and Space Science*, **2016**, 3, 226-244	3.1	20
78	Spin-up processes in the Community Land Model version 4 with explicit carbon and nitrogen components. *Ecological Modelling*, **2013**, 263, 308-325	3	20
77	Irrigation-Induced Environmental Changes around the Aral Sea: An Integrated View from Multiple Satellite Observations. *Remote Sensing*, **2017**, 9, 900	5	20
76	Deforestation-induced warming over tropical mountain regions regulated by elevation. *Nature Geoscience*, **2021**, 14, 23-29	18.3	20
75	MODELING LAND SURFACE PROCESSES IN SHORT-TERM WEATHER AND CLIMATE STUDIES. *World Scientific Series on Asia-Pacific Weather and Climate*, **2004**, 288-313		19
74	High sensitivity of Indian summer monsoon to Middle East dust absorptive properties. *Scientific Reports*, **2016**, 6, 30690	4.9	18
73	Insights into Hydrometeorological Factors Constraining Flood Prediction Skill during the May and October 2015 Texas Hill Country Flood Events. *Journal of Hydrometeorology*, **2018**, 19, 1339-1361	3.7	18
72	Quantification of the upstream-to-downstream influence in the Muskingum method and implications for speedup in parallel computations of river flow. *Water Resources Research*, **2013**, 49, 2783-2800	5.4	17
71	Parameter estimation in ensemble based snow data assimilation: A synthetic study. *Advances in Water Resources*, **2011**, 34, 407-416	4.7	17
70	Improving the Radiance Assimilation Performance in Estimating Snow Water Storage across Snow and Land-Cover Types in North America. *Journal of Hydrometeorology*, **2017**, 18, 651-668	3.7	16
69	Climate, river network, and vegetation cover relationships across a climate gradient and their potential for predicting effects of decadal-scale climate change. *Journal of Hydrology*, **2013**, 488, 101-109	6	16
68	Treatment of soil, vegetation and snow in land surface models: a test of the Biosphere–Atmosphere Transfer Scheme with the HAPEX-MOBILHY, ABRACOS and Russian data. *Journal of Hydrology*, **1998**, 212-213, 109-127	6	16
67	Stable water isotope simulation in different reservoirs of Manaus, Brazil, by Community Land Model incorporating stable isotopic effect. *International Journal of Climatology*, **2009**, 29, 619-628	3.5	15
66	Comparative Evaluation of BATS2, BATS, and SiB2 with Amazon Data. *Journal of Hydrometeorology*, **2000**, 1, 135-153	3.7	15
65	Sub-grid scale precipitation in ALCMs: re-assessing the land surface sensitivity using a single column model. *Climate Dynamics*, **1993**, 9, 33-41	4.2	15
64	Ensemble Evaluation of Hydrologically Enhanced Noah-LSM: Partitioning of the Water Balance in High-Resolution Simulations over the Little Washita River Experimental Watershed. *Journal of Hydrometeorology*, **2011**, 12, 45-64	3.7	14
63	Interannual variation in biogenic emissions on a regional scale. *Journal of Geophysical Research*, **2007**, 112,		14

62	Unprecedented Drought Challenges for Texas Water Resources in a Changing Climate: What Do Researchers and Stakeholders Need to Know?. *Earth's Future*, **2020**, 8, e2020EF001552	7.9	14
61	Implementing surface parameter aggregation rules in the CCM3 global climate model: regional responses at the land surface. *Hydrology and Earth System Sciences*, **1999**, 3, 463-476	5.5	13
60	Improving flood simulation capability of the WRF-Hydro-RAPID model using a multi-source precipitation merging method. *Journal of Hydrology*, **2021**, 592, 125814	6	13
59	Systematic Hydrological Evaluation of the Noah-MP Land Surface Model over China. *Advances in Atmospheric Sciences*, **2019**, 36, 1171-1187	2.9	12
58	Spring soil moisture-precipitation feedback in the Southern Great Plains: How is it related to large-scale atmospheric conditions?. *Geophysical Research Letters*, **2014**, 41, 1283-1289	4.9	12
57	Using NHDPlus as the Land Base for the Noah-distributed Model. *Transactions in GIS*, **2009**, 13, 363-377	2.1	12
56	Evaluation and Intercomparison of Multiple Snow Water Equivalent Products over the Tibetan Plateau. *Journal of Hydrometeorology*, **2019**, 20, 2043-2055	3.7	11
55	. *IEEE Transactions on Geoscience and Remote Sensing*, **2015**, 53, 5247-5268	8.1	11
54	Enhanced fixed-size parallel speedup with the Muskingum method using a trans-boundary approach and a large subbasins approximation. *Water Resources Research*, **2015**, 51, 7547-7571	5.4	11
53	Sensitivity of biogenic emissions simulated by a land-surface model to land-cover representations. *Atmospheric Environment*, **2008**, 42, 4185-4197	5.3	11
52	Using different hydrological variables to assess the impacts of atmospheric forcing errors on optimization and uncertainty analysis of the CHASM surface model at a cold catchment. *Journal of Geophysical Research*, **2005**, 110,		11
51	Representation of Plant Hydraulics in the Noah-MP Land Surface Model: Model Development and Multiscale Evaluation. *Journal of Advances in Modeling Earth Systems*, **2021**, 13, e2020MS002214	7.1	11
50	A GIS Framework for Regional Modeling of Riverine Nitrogen Transport: Case Study, San Antonio and Guadalupe Basins. *Journal of the American Water Resources Association*, **2016**, 52, 1-15	2.1	11
49	An integrated framework to model nitrate contaminants with interactions of agriculture, groundwater, and surface water at regional scales: The STICS–HauDyssè coupled models applied over the Seine River Basin. *Journal of Hydrology*, **2019**, 568, 943-958	6	11
48	Assimilation of Remotely Sensed LAI Into CLM4CN Using DART. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 2768-2786	7.1	10
47	Evaluation of the simulations of the North American Monsoon in the NCAR CCM3. *Geophysical Research Letters*, **2001**, 28, 1211-1214	4.9	10
46	Assessing Noah-MP Parameterization Sensitivity and Uncertainty Interval Across Snow Climates. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD030417	4.4	10
45	A method to study the impact of climate change on variability of river flow: an example from the Guadalupe River in Texas. *Climatic Change*, **2012**, 113, 965-979	4.5	9

44	Development of species-based, regional emission capacities for simulation of biogenic volatile organic compound emissions in land-surface models: An example from Texas, USA. *Atmospheric Environment*, **2006**, 40, 1464-1479	5.3	9
43	Effects of Averaging and Separating Soil Moisture and Temperature in the Presence of Snow Cover in a SVAT and Hydrological Model for a Southern Ontario, Canada, Watershed. *Journal of Hydrometeorology*, **2006**, 7, 298-304	3.7	9
42	Improving Land Surface Hydrological Simulations in China Using CLDAS Meteorological Forcing Data. *Journal of Meteorological Research*, **2019**, 33, 1194-1206	2.3	9
41	The aggregate description of semi-arid vegetation with precipitation-generated soil moisture heterogeneity. *Hydrology and Earth System Sciences*, **1997**, 1, 205-212	5.5	8
40	Estimating uncertainties in the newly developed multi-source land snow data assimilation system. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 8254-8268	4.4	8
39	Emergent spectral properties of river network topology: an optimal channel network approach. *Scientific Reports*, **2017**, 7, 11486	4.9	7
38	Development and evaluation of a physically-based lake level model for water resource management: A case study for Lake Buchanan, Texas. *Journal of Hydrology: Regional Studies*, **2015**, 4, 661-674	3.6	7
37	The impact of implementing the bare essentials of surface transfer land surface scheme into the BMRC GCM. *Climate Dynamics*, **1995**, 11, 279-297	4.2	7
36	Multiscale Changes in Snow Over the Tibetan Plateau During 1980–2018 Represented by Reanalysis Data Sets and Satellite Observations. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031914	4.4	7
35	Land–atmosphere–aerosol coupling in North China during 2000–2013. *International Journal of Climatology*, **2017**, 37, 1297-1306	3.5	6
34	Understanding dust emission in the Bodélé region by extracting locally mobilized dust aerosols from satellite Aerosol Optical Depth data using principal component analysis. *Aeolian Research*, **2017**, 24, 105-113	3.9	6
33	Comparison of different sequential assimilation algorithms for satellite-derived leaf area index using the Data Assimilation Research Testbed (version Lanai). *Geoscientific Model Development*, **2019**, 12, 3119-3133	6.3	6
32	Relative impacts of increased greenhouse gas concentrations and land cover change on the surface climate in arid and semi-arid regions of China. *Climatic Change*, **2017**, 144, 491-503	4.5	6
31	Power system resilience to floods: Modeling, impact assessment, and mid-term mitigation strategies. *International Journal of Electrical Power and Energy Systems*, **2022**, 135, 107545	5.1	6
30	Quantifying the impacts of landscape heterogeneity and model resolution on dust emissions in the Arabian Peninsula. *Environmental Modelling and Software*, **2016**, 78, 106-119	5.2	5
29	Bias-corrected CMIP6 global dataset for dynamical downscaling of the historical and future climate (1979-2100). *Scientific Data*, **2021**, 8, 293	8.2	5
28	Consistent response of Indian summer monsoon to Middle East dust in observations and simulations		5
27	Cloud Resolving WRF Simulations of Precipitation and Soil Moisture Over the Central Tibetan Plateau: An Assessment of Various Physics Options. *Earth and Space Science*, **2020**, 7, e2019EA000865	3.1	5

26	Comparison and evaluation of multiple land surface products for the water budget in the Yellow River Basin. *Journal of Hydrology*, **2020**, 584, 124534	6	5
25	A Comprehensive Review of Specific Yield in Land Surface and Groundwater Studies. *Journal of Advances in Modeling Earth Systems*, **2021**, 13, e2020MS002270	7.1	5
24	Investigating impacts of anomalous land-surface conditions on Australian climate with an advanced land-surface model coupled with the BMRC GCM. *International Journal of Climatology*, **1995**, 15, 137-174	3.5	4
23	Assimilating multi-satellite snow data in ungauged Eurasia improves the simulation accuracy of Asian monsoon seasonal anomalies. *Environmental Research Letters*, **2020**, 15, 064033	6.2	4
22	Modeling the Impacts of Nitrogen Dynamics on Regional Terrestrial Carbon and Water Cycles over China with Noah-MP-CN. *Advances in Atmospheric Sciences*, **2020**, 37, 679-695	2.9	3
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