Hong-Yi Li

List of Publications by Year
in descending order

79 papers	4,329 citations	136940 32 h-index	114455 63 g-index
88 all docs	88 docs citations	88 times ranked	5986 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.	3.8	692
2	The DOE E3SM Coupled Model Version 1: Overview and Evaluation at Standard Resolution. Journal of Advances in Modeling Earth Systems, 2019, 11, 2089-2129.	3.8	404
3	Real‐time global flood estimation using satellite‐based precipitation and a coupled land surface and routing model. Water Resources Research, 2014, 50, 2693-2717.	4.2	271
4	A Physically Based Runoff Routing Model for Land Surface and Earth System Models. Journal of Hydrometeorology, 2013, 14, 808-828.	1.9	187
5	A comprehensive view of global potential for hydro-generated electricity. Energy and Environmental Science, 2015, 8, 2622-2633.	30.8	129
6	21st century United States emissions mitigation could increase water stress more than the climate change it is mitigating. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10635-10640.	7.1	128
7	A new global river network database for macroscale hydrologic modeling. Water Resources Research, 2012, 48, .	4.2	122
8	Investigating the nexus of climate, energy, water, and land at decision-relevant scales: the Platform for Regional Integrated Modeling and Analysis (PRIMA). Climatic Change, 2015, 129, 573-588.	3.6	119
9	The DOE E3SM Coupled Model Version 1: Description and Results at High Resolution. Journal of Advances in Modeling Earth Systems, 2019, 11, 4095-4146.	3.8	112
10	Evaluating runoff simulations from the Community Land Model 4.0 using observations from flux towers and a mountainous watershed. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	111
11	On an improved sub-regional water resources management representation for integration into earth system models. Hydrology and Earth System Sciences, 2013, 17, 3605-3622.	4.9	109
12	Impacts of climate change, policy and Water-Energy-Food nexus on hydropower development. Renewable Energy, 2018, 116, 827-834.	8.9	108
13	Evaluating Global Streamflow Simulations by a Physically Based Routing Model Coupled with the Community Land Model. Journal of Hydrometeorology, 2015, 16, 948-971.	1.9	81
14	Dam Construction in Lancang‐Mekong River Basin Could Mitigate Future Flood Risk From Warming‐Induced Intensified Rainfall. Geophysical Research Letters, 2017, 44, 10,378.	4.0	79
15	Development of high resolution land surface parameters for the Community Land Model. Geoscientific Model Development, 2012, 5, 1341-1362.	3.6	78
16	Vulnerability of US thermoelectric power generation to climate change when incorporating state-level environmental regulations. Nature Energy, 2017, 2, .	39.5	74
17	Water Balance in the Amazon Basin from a Land Surface Model Ensemble. Journal of Hydrometeorology, 2014, 15, 2586-2614.	1.9	66
18	One-way coupling of an integrated assessment model and a water resources model: evaluation and implications of future changes over the US Midwest. Hydrology and Earth System Sciences, 2013, 17, 4555-4575.	4.9	61

#	ARTICLE	IF	CITATIONS
19	Hydrological Drought in the Anthropocene: Impacts of Local Water Extraction and Reservoir Regulation in the U.S.. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,313.	3.3	58
20	Comparative diagnostic analysis of runoff generation processes in Oklahoma DMIP2 basins: The Blue River and the Illinois River. Journal of Hydrology, 2012, 418-419, 90-109.	5.4	56
21	Panta Rhei 2013â€"2015: global perspectives on hydrology, society and change. Hydrological Sciences Journal, 0, , 1-18.	2.6	53
22	Interpretable tree-based ensemble model for predicting beach water quality. Water Research, 2022, 211, 118078.	11.3	53
23	Modeling surface water dynamics in the Amazon Basin using MOSART-Inundation v1.0: impacts of geomorphological parameters and river flow representation. Geoscientific Model Development, 2017, 10, 1233-1259.	3.6	48
24	Water and nutrient balances in a large tile-drained agricultural catchment: a distributed modeling study. Hydrology and Earth System Sciences, 2010, 14, 2259-2275.	4.9	45
25	Dissolved nutrient retention dynamics in river networks: A modeling investigation of transient flows and scale effects. Water Resources Research, 2012, 48, .	4.2	45
26	Understanding Flood Seasonality and Its Temporal Shifts within the Contiguous United States. Journal of Hydrometeorology, 2017, 18, 1997-2009.	1.9	45
27	Effect of spatial heterogeneity of runoff generation mechanisms on the scaling behavior of event runoff responses in a natural river basin. Water Resources Research, 2011, 47, .	4.2	44
28	Vegetation regulation on streamflow intraâ€annual variability through adaption to climate variations. Geophysical Research Letters, 2015, 42, 10,307.	4.0	42
29	Historical and future drought in Bangladesh using copula-based bivariate regional frequency analysis. Theoretical and Applied Climatology, 2019, 135, 855-871.	2.8	42
30	Model diagnostic analysis of seasonal switching of runoff generation mechanisms in the Blue River basin, Oklahoma. Journal of Hydrology, 2012, 418-419, 136-149.	5.4	41
31	Links between flood frequency and annual water balance behaviors: A basis for similarity and regionalization. Water Resources Research, 2014, 50, 937-953.	4.2	37
32	A New Global Storageâ€Areaâ€Depth Data Set for Modeling Reservoirs in Land Surface and Earth System Models. Water Resources Research, 2018, 54, 10,372.	4.2	35
33	Nonlinear Filtering Effects of Reservoirs on Flood Frequency Curves at the Regional Scale. Water Resources Research, 2017, 53, 8277-8292.	4.2	34
34	A subbasin-based framework to represent land surface processes in an Earth system model. Geoscientific Model Development, 2014, 7, 947-963.	3.6	33
35	Regionalization of subsurface stormflow parameters of hydrologic models: Derivation from regional analysis of streamflow recession curves. Journal of Hydrology, 2014, 519, 670-682.	5.4	33
36	Functional approach to exploring climatic and landscape controls of runoff generation: 1. Behavioral constraints on runoff volume. Water Resources Research, 2014, 50, 9300-9322.	4.2	32

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37	Effects of spatially distributed sectoral water management on the redistribution of water resources in an integrated water model. Water Resources Research, 2017, 53, 4253-4270.	4.2	30
38	Modeling Sediment Yield in Land Surface and Earth System Models: Model Comparison, Development, and Evaluation. Journal of Advances in Modeling Earth Systems, 2018, 10, 2192-2213.	3.8	30
39	A substantial role of soil erosion in the land carbon sink and its future changes. Global Change Biology, 2020, 26, 2642-2655.	9.5	30
40	Modeling stream temperature in the <scp>A</scp>nthropocene: An earth system modeling approach. Journal of Advances in Modeling Earth Systems, 2015, 7, 1661-1679.	3.8	29
41	Attributing runoff changes to climate variability and human activities: uncertainty analysis using four monthly water balance models. Stochastic Environmental Research and Risk Assessment, 2016, 30, 251-269.	4.0	25
42	A Holistic View of Water Management Impacts on Future Droughts: A Global Multimodel Analysis. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5947-5972.	3.3	25
43	Sensitivity of drought resilience-vulnerability- exposure to hydrologic ratios in contiguous United States. Journal of Hydrology, 2018, 564, 294-306.	5.4	24
44	AÂhydrological emulator for global applications â€" HE v1.0.0. Geoscientific Model Development, 2018, 11, 1077-1092.	3.6	22
45	Enhancing the representation of subgrid land surface characteristics in land surface models. Geoscientific Model Development, 2013, 6, 1609-1622.	3.6	20
46	Flood Inundation Generation Mechanisms and Their Changes in 1953â€"2004 in Global Major River Basins. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11672-11692.	3.3	18
47	Improving Land Surface Temperature Simulation in CoLM Over the Tibetan Plateau Through Fractional Vegetation Cover Derived From a Remotely Sensed Clumping Index and Modelâ€Simulated Leaf Area Index. Journal of Geophysical Research D: Atmospheres, 2019, 124, 2620-2642.	3.3	18
48	A Global Data Analysis for Representing Sediment and Particulate Organic Carbon Yield in Earth System Models. Water Resources Research, 2017, 53, 10674-10700.	4.2	17
49	Identifying the dominant controls on macropore flow velocity in soils: A meta-analysis. Journal of Hydrology, 2018, 567, 590-604.	5.4	17
50	On the variable effects of climate change on Pacific salmon. Ecological Modelling, 2019, 397, 95-106.	2.5	17
51	Scalability of grid- and subbasin-based land surface modeling approaches for hydrologic simulations. Journal of Geophysical Research D: Atmospheres, 2014, 119, 3166-3184.	3.3	16
52	Global Irrigation Characteristics and Effects Simulated by Fully Coupled Land Surface, River, and Water Management Models in E3SM. Journal of Advances in Modeling Earth Systems, 2020, 12, e2020MS002069.	3.8	16
53	Streamflow prediction in â€œgeopolitically ungaugedâ€•basins using satellite observations and regionalization at subcontinental scale. Journal of Hydrology, 2020, 588, 125016.	5.4	16
54	Riverine Carbon Cycling Over the Past Century in the Midâ€Atlantic Region of the United States. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005968.	3.0	16

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55	Water quality: the missing dimension of water in the water–energy–food nexus. Hydrological Sciences Journal, 2021, 66, 745-758.	2.6	15
56	A new large-scale suspended sediment model and its application over the United States. Hydrology and Earth System Sciences, 2022, 26, 665-688.	4.9	14
57	Regionalization of subsurface stormflow parameters of hydrologic models: Up-scaling from physically based numerical simulations at hillslope scale. Journal of Hydrology, 2014, 519, 683-698.	5.4	13
58	Uncertainty propagation in coupled hydrological models using winding stairs and null-space Monte Carlo methods. Journal of Hydrology, 2020, 589, 125341.	5.4	13
59	A Multilayer Reservoir Thermal Stratification Module for Earth System Models. Journal of Advances in Modeling Earth Systems, 2019, 11, 3265-3283.	3.8	12
60	Effects of Groundwater Pumping on Ground Surface Temperature: A Regional Modeling Study in the North China Plain. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031764.	3.3	12
61	Increased extreme rains intensify erosional nitrogen and phosphorus fluxes to the northern Gulf of Mexico in recent decades. Environmental Research Letters, 2021, 16, 054080.	5.2	12
62	Searching for an Optimized Single-objective Function Matching Multiple Objectives with Automatic Calibration of Hydrological Models. Chinese Geographical Science, 2019, 29, 934-948.	3.0	11
63	Examining the Food-Energy-Water-Environment Nexus in Transboundary River Basins through a Human Dimension Lens: Columbia River Basin. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	2.6	11
64	Simulations of ecosystem hydrological processes using a unified multi-scale model. Ecological Modelling, 2015, 296, 93-101.	2.5	10
65	Representing Global Soil Erosion and Sediment Flux in Earth System Models. Journal of Advances in Modeling Earth Systems, 2022, 14, e2021MS002756.	3.8	9
66	Advances in hexagon mesh-based flow direction modeling. Advances in Water Resources, 2022, 160, 104099.	3.8	9
67	Median bed-material sediment particle size across rivers in the contiguous US. Earth System Science Data, 2022, 14, 929-942.	9.9	9
68	Functional approach to exploring climatic and landscape controls on runoff generation: 2 Timing of runoff storm response. Water Resources Research, 2014, 50, 9323-9342.	4.2	8
69	Hierarchical mixture of experts and diagnostic modeling approach to reduce hydrologic model structural uncertainty. Water Resources Research, 2016, 52, 2551-2570.	4.2	8
70	River Regulation Alleviates the Impacts of Climate Change on U.S. Thermoelectricity Production. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031618.	3.3	8
71	HyRiver: Hydroclimate Data Retriever. Journal of Open Source Software, 2021, 6, 3175.	4.6	8
72	A generic biogeochemical module for Earth system models: Next Generation BioGeoChemical Module (NGBGC), version 1.0. Geoscientific Model Development, 2013, 6, 1977-1988.	3.6	7

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73	Aquatic Carbon–Nutrient Dynamics as Emergent Properties of Hydrological, Biogeochemical, and Ecological Interactions: Scientific Advances. Water Resources Research, 2018, 54, 7138-7142.	4.2	7
74	A Comprehensive Review of the Nexus of Food, Energy, and Water Systems: What the Models Tell Us. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	2.6	7
75	Steady state estimation of soil organic carbon using satellite–derived canopy leaf area index. Journal of Advances in Modeling Earth Systems, 2014, 6, 1049-1064.	3.8	6
76	Horton Index: Conceptual Framework for Exploring Multi–Scale Links Between Catchment Water Balance and Vegetation Dynamics. Water Resources Research, 2021, 57, e2020WR029343.	4.2	6
77	Temporal and Spatial Signatures of Sediment Transport at the Watershed Scale: An Approach to Understand the Behavior of the Watershed. Tecnologia Y Ciencias Del Agua, 2019, 10, 18-45.	0.3	2
78	A Novel Framework for Parametric Analysis of Coastal Transition Zone Modeling. Journal of the American Water Resources Association, 0, , .	2.4	2
79	Ensuring consideration of water quality in nexus approaches in the science–practice continuum: reply to discussion of "Water quality: the missing dimension of water in the water–energy–food nexus?" Hydrological Sciences Journal, 2022, 67, 1291-1293.	2.6	0