Hyungjun Kim

List of Publications by Year
in descending order

88 papers	8,994 citations	109321 35 h-index	58581 82 g-index
118 all docs	118 docs citations	118 times ranked	11621 citing authors

#	Article	IF	Citations
1	Global flood risk under climate change. Nature Climate Change, 2013, 3, 816-821.	18.8	1,892
2	Multimodel assessment of water scarcity under climate change. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3245-3250.	7.1	1,282
3	Hydrological droughts in the 21st century, hotspots and uncertainties from a global multimodel ensemble experiment. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3262-3267.	7.1	583
4	A physically based description of floodplain inundation dynamics in a global river routing model. Water Resources Research, 2011, 47, .	4.2	527
5	Global terrestrial water storage and drought severity under climate change. Nature Climate Change, 2021, 11, 226-233.	18.8	345
6	Water scarcity hotspots travel downstream due to human interventions in the 20th and 21st century. Nature Communications, 2017, 8, 15697.	12.8	287
7	First look at changes in flood hazard in the Inter-Sectoral Impact Model Intercomparison Project ensemble. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3257-3261.	7.1	246
8	Incorporating Anthropogenic Water Regulation Modules into a Land Surface Model. Journal of Hydrometeorology, 2012, 13, 255-269.	1.9	226
9	Observed controls on resilience of groundwater to climate variability in sub-Saharan Africa. Nature, 2019, 572, 230-234.	27.8	168
10	State-of-the-art global models underestimate impacts from climate extremes. Nature Communications, 2019, 10, 1005.	12.8	168
11	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.	3.6	152
12	Variations of global and continental water balance components as impacted by climate forcing uncertainty and human water use. Hydrology and Earth System Sciences, 2016, 20, 2877-2898.	4.9	151
13	Multisectoral climate impact hotspots in a warming world. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3233-3238.	7.1	149
14	State of the Climate in 2015. Bulletin of the American Meteorological Society, 2016, 97, Si-S275.	3.3	142
15	Abrupt shift to hotter and drier climate over inner East Asia beyond the tipping point. Science, 2020, 370, 1095-1099.	12.6	141
16	Role of rivers in the seasonal variations of terrestrial water storage over global basins. Geophysical Research Letters, 2009, 36, .	4.0	140
17	State of the Climate in 2013. Bulletin of the American Meteorological Society, 2014, 95, S1-S279.	3.3	138
18	ORCHIDEE-MICT (v8.4.1), aÂland surface model for the high latitudes: model description and validation. Geoscientific Model Development, 2018, 11, 121-163.	3.6	135

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19	Observed changes in dry-season water availability attributed to human-induced climate change. Nature Geoscience, 2020, 13, 477-481.	12.9	132
20	State of the Climate in 2016. Bulletin of the American Meteorological Society, 2017, 98, Si-S280.	3.3	132
21	ESM-SnowMIP: assessing snow models and quantifying snow-related climate feedbacks. Geoscientific Model Development, 2018, 11, 5027-5049.	3.6	119
22	Recent progresses in incorporating human landâ€“water management into global land surface models toward their integration into Earth system models. Wiley Interdisciplinary Reviews: Water, 2016, 3, 548-574.	6.5	110
23	The critical role of the routing scheme in simulating peak river discharge in global hydrological models. Environmental Research Letters, 2017, 12, 075003.	5.2	105
24	Analysis of the water level dynamics simulated by a global river model: A case study in the Amazon River. Water Resources Research, 2012, 48, .	4.2	94
25	Worldwide evaluation of mean and extreme runoff from six global-scale hydrological models that account for human impacts. Environmental Research Letters, 2018, 13, 065015.	5.2	85
26	The timing of unprecedented hydrological drought under climate change. Nature Communications, 2022, 13, .	12.8	77
27	Evapotranspiration seasonality across the Amazon Basin. Earth System Dynamics, 2017, 8, 439-454.	7.1	71
28	Event-to-event intensification of the hydrologic cycle from 1.5â€‰Â°C to a 2â€‰Â°C warmer world. Scientific Reports, 2019, 9, 3483.	3.3	67
29	Dynamics of surface water storage in the Amazon inferred from measurements of interâ€satellite distance change. Geophysical Research Letters, 2009, 36, .	4.0	56
30	Estimating monthly total nitrogen concentration in streams by using artificial neural network. Journal of Environmental Management, 2011, 92, 172-177.	7.8	51
31	Relative contributions of weather systems to mean and extreme global precipitation. Journal of Geophysical Research D: Atmospheres, 2017, 122, 152-167.	3.3	51
32	Water Governance Contribution to Water and Sanitation Access Equality in Developing Countries. Water Resources Research, 2020, 56, e2019WR025330.	4.2	43
33	Consecutive extreme flooding and heat wave in Japan: Are they becoming a norm?. Atmospheric Science Letters, 2019, 20, e933.	1.9	42
34	Evapotranspiration simulations in ISIMIP2aâ€”Evaluation of spatio-temporal characteristics with a comprehensive ensemble of independent datasets. Environmental Research Letters, 2018, 13, 075001.	5.2	38
35	Scientific and Human Errors in a Snow Model Intercomparison. Bulletin of the American Meteorological Society, 2021, 102, E61-E79.	3.3	38
36	GMD perspective: The quest to improve the evaluation of groundwater representation in continental- to global-scale models. Geoscientific Model Development, 2021, 14, 7545-7571.	3.6	38

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37	Impact of Pacific and Atlantic sea surface temperatures on interannual and decadal variations of GRACE land water storage in tropical South America. Journal of Geophysical Research D: Atmospheres, 2013, 118, 10,811.	3.3	37
38	Meteorological and evaluation datasets for snow modelling at 10 reference sites: description of in situ and bias-corrected reanalysis data. Earth System Science Data, 2019, 11, 865-880.	9.9	36
39	Disruption of hydroecological equilibrium in southwest Amazon mediated by drought. Geophysical Research Letters, 2015, 42, 7546-7553.	4.0	34
40	The PROFOUND Database for evaluating vegetation models and simulating climate impacts on European forests. Earth System Science Data, 2020, 12, 1295-1320.	9.9	33
41	Impacts of spatial resolution and representation of flow connectivity on large-scale simulation of floods. Hydrology and Earth System Sciences, 2017, 21, 5143-5163.	4.9	32
42	Biogeophysical Impacts of Landâ€Use Change on Climate Extremes in Lowâ€Emission Scenarios: Results From HAPPIâ€Land. Earth's Future, 2018, 6, 396-409.	6.3	31
43	Vapor Pressure Deficit and Sunlight Explain Seasonality of Leaf Phenology and Photosynthesis Across Amazonian Evergreen Broadleaved Forest. Global Biogeochemical Cycles, 2021, 35, e2020GB006893.	4.9	31
44	Emergent constraints on future precipitation changes. Nature, 2022, 602, 612-616.	27.8	29
45	Movement of Amazon surface water from timeâ€variable satellite gravity measurements and implications for water cycle parameters in land surface models. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	27
46	On the use of the GRACE normal equation of inter-satellite tracking data for estimation of soil moisture and groundwater in Australia. Hydrology and Earth System Sciences, 2018, 22, 1811-1829.	4.9	27
47	Observed influence of anthropogenic climate change on tropical cyclone heavy rainfall. Nature Climate Change, 2022, 12, 436-440.	18.8	27
48	Assessment of Chlorophyll-a Algorithms Considering Different Trophic Statuses and Optimal Bands. Sensors, 2017, 17, 1746.	3.8	26
49	Intensification of the East Asian summer monsoon lifecycle based on observation and CMIP6. Environmental Research Letters, 2020, 15, 0940b9.	5.2	25
50	The Diurnal Cycle of Precipitation in Regional Spectral Model Simulations over West Africa: Sensitivities to Resolution and Cumulus Schemes. Weather and Forecasting, 2015, 30, 424-445.	1.4	22
51	Evaluation of MERIS Chlorophyll-a Retrieval Processors in a Complex Turbid Lake Kasumigaura over a 10-Year Mission. Remote Sensing, 2017, 9, 1022.	4.0	22
52	Which weather systems are projected to cause future changes in mean and extreme precipitation in CMIP5 simulations?. Journal of Geophysical Research D: Atmospheres, 2016, 121, 10,522.	3.3	21
53	Multi-Algorithm Indices and Look-Up Table for Chlorophyll-a Retrieval in Highly Turbid Water Bodies Using Multispectral Data. Remote Sensing, 2017, 9, 556.	4.0	18
54	Development of a Global River Water Temperature Model Considering Fluvial Dynamics and Seasonal Freezeâ€Thaw Cycle. Water Resources Research, 2019, 55, 1366-1383.	4.2	17

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55	Climatological characteristics of fronts in the western North Pacific based on surface weather charts. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9400-9418.	3.3	16
56	Modeling Surface Runoff and Water Fluxes over Contrasted Soils in the Pastoral Sahel: Evaluation of the ALMIP2 Land Surface Models over the Gourma Region in Mali. Journal of Hydrometeorology, 2017, 18, 1847-1866.	1.9	15
57	Sensitivity of Global Hydrological Simulations to Groundwater Capillary Flux Parameterizations. Water Resources Research, 2019, 55, 402-425.	4.2	15
58	Improvement of the Irrigation Scheme in the ORCHIDEE Land Surface Model and Impacts of Irrigation on Regional Water Budgets Over China. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001770.	3.8	15
59	Changes in fire weather climatology under 1.5 Â°C and 2.0 Â°C warming. Environmental Research Letters, 2021, 16, 034058.	5.2	14
60	Snow cover duration trends observed at sites and predicted by multiple models. Cryosphere, 2020, 14, 4687-4698.	3.9	14
61	Streamflows over a West African Basin from the ALMIP2 Model Ensemble. Journal of Hydrometeorology, 2017, 18, 1831-1845.	1.9	13
62	Evaluation of ORCHIDEE-MICT-simulated soil moisture over China and impacts of different atmospheric forcing data. Hydrology and Earth System Sciences, 2018, 22, 5463-5484.	4.9	13
63	Global aridity changes due to differences in surface energy and water balance between 1.5 Â°C and 2 Â°C warming. Environmental Research Letters, 2020, 15, 0940a7.	5.2	13
64	Impact of climate forcing uncertainty and human water use on global and continental water balance components. Proceedings of the International Association of Hydrological Sciences, 0, 374, 53-62.	1.0	11
65	A study on the relationship between Atlantic sea surface temperature and Amazonian greenness. Ecological Informatics, 2010, 5, 367-378.	5.2	10
66	Seasonal Flooding Causes Intensification of the River Breeze in the Central Amazon. Journal of Geophysical Research D: Atmospheres, 2019, 124, 5178-5197.	3.3	10
67	Recurrent pattern of extreme fire weather in California. Environmental Research Letters, 2021, 16, 094031.	5.2	10
68	Emergence of significant soil moisture depletion in the near future. Environmental Research Letters, 2020, 15, 124048.	5.2	9
69	Impacts of Anthropogenic Heat and Building Height on Urban Precipitation Over the Seoul Metropolitan area in Regional Climate Modeling. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035348.	3.3	9
70	Difference in the Priestleyâ€“Taylor coefficients at two different heights of a tall micrometeorological tower. Agricultural and Forest Meteorology, 2013, 180, 97-101.	4.8	7
71	Feasibility Study of the Reconstruction of Historical Weather with Data Assimilation. Monthly Weather Review, 2017, 145, 3563-3580.	1.4	7
72	Chronological Development of Terrestrial Mean Precipitation. Bulletin of the American Meteorological Society, 2017, 98, 2411-2428.	3.3	7

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73	Warm Season Satellite Precipitation Biases for Different Cloud Types Over Western North Pacific. IEEE Geoscience and Remote Sensing Letters, 2018, 15, 808-812.	3.1	6
74	Empirical strategy for stretching probability distribution in neural-network-based regression. Neural Networks, 2021, 140, 113-120.	5.9	6
75	Improving Satellite-Based Subhourly Surface Rain Estimates Using Vertical Rain Profile Information. Journal of Hydrometeorology, 2019, 20, 1015-1026.	1.9	5
76	Development of a coupled simulation framework representing the lake and river continuum of mass and energy (TCHOIR v1.0). Geoscientific Model Development, 2021, 14, 5669-5693.	3.6	5
77	Toward global-scale data assimilation using SWOT: Requirements for global hydrodynamics models. , 2011, , .		3
78	Midlatitude mixed-phase stratocumulus clouds and their interactions with aerosols: how ice processes affect microphysical, dynamic, and thermodynamic development in those clouds and interactions?. Atmospheric Chemistry and Physics, 2021, 21, 16843-16868.	4.9	3
79	Development of a web application for examining climate data of global lake basins: CGLB. Hydrological Research Letters, 2015, 9, 125-132.	0.5	2
80	Evaluation of Groundwater Simulations in Benin from the ALMIP2 Project. Journal of Hydrometeorology, 2019, 20, 339-354.	1.9	2
81	PROJECTION OF THE CHANGES IN WEATHER POTENTIALLY AFFECTING TOURISM IN THE YAEYAMA ISLANDS UNDER GLOBAL WARMING. Journal of Japan Society of Civil Engineers Ser G (Environmental Research), 2018, 74, I_19-I_24.	0.1	2
82	Conversion of surface water coverage to water volume using satellite data. Hydrological Research Letters, 2014, 8, 15-19.	0.5	1
83	VALIDATION OF RIVER DISCHARGE FROM A TERRESTRIAL MODEL WITH 1KM RESOLUTION OVER JAPAN. Journal of Japan Society of Civil Engineers Ser G (Environmental Research), 2017, 73, I_71-I_79.	0.1	1
84	Estimation of glacier mass changes using GRACE satellite and numerical models. Journal of Japan Society of Civil Engineers Ser G (Environmental Research), 2013, 69, I_53-I_59.	0.1	0
85	Validation of Gravity Recovery and Climate Experiment Data for Assessment of Terrestrial Water Storage Variations. , 2012, , 481-506.		0
86	DETERMINANTS OF WATER TEMPERATURE IN THE RIVERS OVER LOW-LATITUDE REGIONS. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2018, 74, I_583-I_588.	0.1	0
87	TOWARD THE GLOBAL-SCALE ESTIMATION OF WATER RESOURCES WITH A COUPLED MODEL FRAMEWORK OF HYDRO- AND THERMODYNAMICS IN RIVERS AND LAKES. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2021, 77, I_241-I_246.	0.1	0
88	EVALUATION OF SNOWFALL DETECTION PERFORMANCE OF SATELLITE- BASED RETRIEVAL PRODUCTS FOR FINNISH SNOWFALL CASES. Journal of Japan Society of Civil Engineers Ser B1 (Hydraulic Engineering), 2021, 77, I_1201-I_1206.	0.1	0