Hyun-Han Kwon

List of Publications by Year
in descending order

107 papers	2,899 citations	147726 31 h-index	206029 48 g-index
123 all docs	123 docs citations	123 times ranked	3014 citing authors

#	ARTICLE	IF	CITATIONS
1	Changing Frequency and Intensity of Rainfall Extremes over India from 1951 to 2003. Journal of Climate, 2009, 22, 4737-4746.	1.2	160
2	A Streamflow Forecasting Framework using Multiple Climate and Hydrological Models[1]. Journal of the American Water Resources Association, 2009, 45, 828-843.	1.0	156
3	Spatial scaling in a changing climate: A hierarchical bayesian model for non-stationary multi-site annual maximum and monthly streamflow. Journal of Hydrology, 2010, 383, 307-318.	2.3	115
4	Climate informed flood frequency analysis and prediction in Montana using hierarchical Bayesian modeling. Geophysical Research Letters, 2008, 35, .	1.5	109
5	A copula–based nonstationary frequency analysis for the 2012–2015 drought in California. Water Resources Research, 2016, 52, 5662-5675.	1.7	106
6	Quantifying Changes in Future Intensity–Duration–Frequency Curves Using Multimodel Ensemble Simulations. Water Resources Research, 2018, 54, 1751-1764.	1.7	105
7	Stochastic simulation model for nonstationary time series using an autoregressive wavelet decomposition: Applications to rainfall and temperature. Water Resources Research, 2007, 43, .	1.7	89
8	Performance Comparison of an LSTM-based Deep Learning Model versus Conventional Machine Learning Algorithms for Streamflow Forecasting. Water Resources Management, 2021, 35, 4167-4187.	1.9	79
9	Drought frequency analysis using cluster analysis and bivariate probability distribution. Journal of Hydrology, 2012, 420-421, 102-111.	2.3	71
10	A climate informed model for nonstationary flood risk prediction: Application to Negro River at Manaus, Amazonia. Journal of Hydrology, 2015, 522, 594-602.	2.3	64
11	South Asian perspective on temperature and rainfall extremes: A review. Atmospheric Research, 2019, 225, 110-120.	1.8	63
12	Improvement of overtopping risk evaluations using probabilistic concepts for existing dams. Stochastic Environmental Research and Risk Assessment, 2006, 20, 223-237.	1.9	56
13	Assessment of the impact of climate change on the flow regime of the Han River basin using indicators of hydrologic alteration. Hydrological Processes, 2011, 25, 691-704.	1.1	53
14	The unusual 2013–2015 drought in South Korea in the context of a multicentury precipitation record: Inferences from a nonstationary, multivariate, Bayesian copula model. Geophysical Research Letters, 2016, 43, 8534-8544.	1.5	52
15	A modified support vector machine based prediction model on streamflow at the Shihmen Reservoir, Taiwan. International Journal of Climatology, 2010, 30, 1256-1268.	1.5	51
16	A Bayesian beta distribution model for estimating rainfall IDF curves in a changing climate. Journal of Hydrology, 2016, 540, 744-756.	2.3	50
17	Assessment of change in design flood frequency under climate change using a multivariate downscaling model and a precipitation-runoff model. Stochastic Environmental Research and Risk Assessment, 2011, 25, 567-581.	1.9	49
18	El Niño–Southern Oscillation–based index insurance for floods: Statistical risk analyses and application to Peru. Water Resources Research, 2007, 43, .	1.7	48

#	Article	IF	Citations
19	Simulation of daily rainfall scenarios with interannual and multidecadal climate cycles for South Florida. Stochastic Environmental Research and Risk Assessment, 2009, 23, 879-896.	1.9	47
20	Locally weighted polynomial regression: Parameter choice and application to forecasts of the Great Salt Lake. Water Resources Research, 2006, 42, .	1.7	46
21	Stochastic extreme downscaling model for an assessment of changes in rainfall intensity-duration-frequency curves over South Korea using multiple regional climate models. Journal of Hydrology, 2017, 553, 321-337.	2.3	46
22	Climate teleconnections to Yangtze river seasonal streamflow at the Three Gorges Dam, China. International Journal of Climatology, 2007, 27, 771-780.	1.5	44
23	A hierarchical Bayesian GEV model for improving local and regional flood quantile estimates. Journal of Hydrology, 2016, 541, 816-823.	2.3	44
24	A local-regional scaling-invariant Bayesian GEV model for estimating rainfall IDF curves in a future climate. Journal of Hydrology, 2018, 566, 73-88.	2.3	44
25	Seasonal and annual maximum streamflow forecasting using climate information: application to the Three Gorges Dam in the Yangtze River basin, China / Prévision d'écoulements saisonnier et maximum annuel à l'aide d'informations climatiques: application au Barrage des Trois Gorges dans le bassin du Fleuve Yangtze, Chine. Hydrological Sciences Journal, 2009, 54, 582-595.	1.2	43
26	Climate informed monthly streamflow forecasts for the Brazilian hydropower network using a periodic ridge regression model. Journal of Hydrology, 2010, 380, 438-449.	2.3	42
27	Exploration of warm-up period in conceptual hydrological modelling. Journal of Hydrology, 2018, 556, 194-210.	2.3	42
28	Drought in South Asia: A Review of Drought Assessment and Prediction in South Asian Countries. Atmosphere, 2021, 12, 369.	1.0	39
29	Statistical Prediction of ENSO from Subsurface Sea Temperature Using a Nonlinear Dimensionality Reduction. Journal of Climate, 2009, 22, 4501-4519.	1.2	35
30	Uncertainty assessment of hydrologic and climate forecast models in Northeastern Brazil. Hydrological Processes, 2012, 26, 3875-3885.	1.1	35
31	Bias correction methods for regional climate model simulations considering the distributional parametric uncertainty underlying the observations. Journal of Hydrology, 2015, 530, 568-579.	2.3	35
32	Stochastic modeling of chlorophyll-a for probabilistic assessment and monitoring of algae blooms in the Lower Nakdong River, South Korea. Journal of Hazardous Materials, 2020, 400, 123066.	6.5	34
33	Spatio–temporal drought patterns of multiple drought indices based on precipitation and soil moisture: A case study in South Korea. International Journal of Climatology, 2019, 39, 4669-4687.	1.5	33
34	Five Decadal Trends in Averages and Extremes of Rainfall and Temperature in Sri Lanka. Advances in Meteorology, 2018, 2018, 1-13.	0.6	32
35	Predictive downscaling based on non-homogeneous hidden Markov models. Hydrological Sciences Journal, 2010, 55, 333-350.	1.2	30
36	Droughts in Amazonia: Spatiotemporal Variability, Teleconnections, and Seasonal Predictions. Water Resources Research, 2017, 53, 10824-10840.	1.7	26

#	Article	IF	Citations
37	Reassessing the frequency and severity of meteorological drought considering non-stationarity and copula-based bivariate probability. Journal of Hydrology, 2021, 603, 126948.	2.3	26
38	A Bayesian partial pooling approach to mean field bias correction of weather radar rainfall estimates: Application to Osungsan weather radar in South Korea. Journal of Hydrology, 2018, 565, 14-26.	2.3	23
39	Valorization of sewage sludge via non-catalytic transesterification. Environment International, 2019, 131, 105035.	4.8	23
40	Analysis of Extreme Summer Rainfall Using Climate Teleconnections and Typhoon Characteristics in South Korea[1]. Journal of the American Water Resources Association, 2008, 44, 436-448.	1.0	22
41	Spatio-temporal analysis of extreme precipitation regimes across South Korea and its application to regionalization. Journal of Hydro-Environment Research, 2012, 6, 101-110.	1.0	22
42	Probabilistic long‐term hydrological drought forecast using Bayesian networks and drought propagation. Meteorological Applications, 2020, 27, e1827.	0.9	22
43	Episodic interannual climate oscillations and their influence on seasonal rainfall in the Everglades National Park. Water Resources Research, 2006, 42, .	1.7	21
44	Climate informed long term seasonal forecasts of hydroenergy inflow for the Brazilian hydropower system. Journal of Hydrology, 2010, 381, 65-75.	2.3	21
45	Energy recovery from microalgal biomass via enhanced thermo-chemical process. Biomass and Bioenergy, 2014, 63, 46-53.	2.9	21
46	Modeling of daily rainfall sequence and extremes based on a semiparametric Pareto tail approach at multiple locations. Journal of Hydrology, 2015, 529, 1442-1450.	2.3	21
47	A Hybrid Approach Combining Conceptual Hydrological Models, Support Vector Machines and Remote Sensing Data for Rainfall-Runoff Modeling. Remote Sensing, 2020, 12, 1801.	1.8	21
48	A Bayesian Kriging model applied for spatial downscaling of daily rainfall from GCMs. Journal of Hydrology, 2021, 597, 126095.	2.3	21
49	A hierarchical Bayesian approach to the modified Bartlett-Lewis rectangular pulse model for a joint estimation of model parameters across stations. Journal of Hydrology, 2017, 544, 210-223.	2.3	20
50	A spatial downscaling of soil moisture from rainfall, temperature, and AMSR2 using a Gaussian-mixture nonstationary hidden Markov model. Journal of Hydrology, 2018, 564, 1194-1207.	2.3	20
51	Integrating nonstationary behaviors of typhoon and non-typhoon extreme rainfall events in East Asia. Scientific Reports, 2017, 7, 5097.	1.6	19
52	Unraveling the Role of Temperature and Rainfall on Active Fires in the Brazilian Amazon Using a Nonlinear Poisson Model. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 117-128.	1.3	17
53	Thermo-chemical process with sewage sludge by using CO_2. Journal of Environmental Management, 2013, 128, 435-440.	3.8	16
54	Precipitation ensembles conforming to natural variations derived from a regional climate model using a new bias correction scheme. Hydrology and Earth System Sciences, 2016, 20, 2019-2034.	1.9	16

#	Article	IF	Citations
55	Regionalization of the Modified Bartlettâ€"Lewis rectangular pulse stochastic rainfall model across the Korean Peninsula. Journal of Hydro-Environment Research, 2016, 11, 123-137.	1.0	16
56	Application of the Hidden Markov Bayesian Classifier and Propagation Concept for Probabilistic Assessment of Meteorological and Hydrological Droughts in South Korea. Atmosphere, 2020, 11, 1000.	1.0	16
57	Investigating the influence of natural events and anthropogenic activities on hydrological drought in South Korea. Terrestrial, Atmospheric and Oceanic Sciences, 2020, 31, 85-96.	0.3	16
58	Nonparametric Monte Carlo Simulation for Flood Frequency Curve Derivation: An Application to a Korean Watershed. Journal of the American Water Resources Association, 2007, 43, 1316-1328.	1.0	15
59	Bias correction of daily precipitation over South Korea from the long-term reanalysis using a composite Gamma-Pareto distribution approach. Hydrology Research, 2019, 50, 1138-1161.	1.1	15
60	Future Changes in Drought Characteristics under Extreme Climate Change over South Korea. Advances in Meteorology, 2016, 2016, 1-19.	0.6	13
61	Investigation of trend variations in annual maximum rainfalls in South Korea. KSCE Journal of Civil Engineering, 2012, 16, 215-221.	0.9	12
62	Hydrological modelling under climate change considering nonstationarity and seasonal effects. Hydrology Research, 2016, 47, 260-273.	1.1	12
63	Identifying the role of typhoons as drought busters in South Korea based on hidden Markov chain models. Geophysical Research Letters, 2015, 42, 2797-2804.	1.5	11
64	Classification of mechanisms, climatic context, areal scaling, and synchronization of floods: the hydroclimatology of floods in the Upper ParanÃ¡ River basin, Brazil. Earth System Dynamics, 2017, 8, 1071-1091.	2.7	11
65	Monitoring Water Resources over the Kotmale Reservoir in Sri Lanka Using ENSO Phases. Advances in Meteorology, 2017, 2017, 1-9.	0.6	11
66	Changes in extreme rainfall and its implications for design rainfall using a Bayesian quantile regression approach. Hydrology Research, 2020, 51, 699-719.	1.1	11
67	Influence of evapotranspiration on future drought risk using bivariate drought frequency curves. KSCE Journal of Civil Engineering, 2016, 20, 2059-2069.	0.9	10
68	Non-parametric short-term forecasts of the Great Salt Lake using atmospheric indices. International Journal of Climatology, 2007, 28, 361.	1.5	9
69	Calibration of the reflectivity-rainfall rate (Z-R) relationship using long-term radar reflectivity factor over the entire South Korea region in a Bayesian perspective. Journal of Hydrology, 2021, 593, 125790.	2.3	9
70	A review on water governance in Sri Lanka: the lessons learnt for future water policy formulation. Water Policy, 2021, 23, 255-273.	0.7	9
71	Constructing rainfall depth-frequency curves considering a linear trend in rainfall observations. Stochastic Environmental Research and Risk Assessment, 2012, 26, 419-427.	1.9	8
72	Links between different classes of storm tracks and the flood trends in Spain. Journal of Hydrology, 2018, 567, 71-85.	2.3	8

#	Article	IF	Citations
73	Analysis of CMIP 5 simulations of key climate indices associated with the South America monsoon system. International Journal of Climatology, 2021, 41, 404-422.	1.5	8
74	Evaluation of typhoon-induced rainfall using nonparametric Monte Carlo simulation and locally weighted polynomial regression. Hydrological Processes, 2011, 25, 1765-1777.	1.1	7
75	Analysis of atmospheric moisture transport to the Upper Paraná River basin. International Journal of Climatology, 2018, 38, 5153-5167.	1.5	7
76	Coastal Flood Disaster in Sri Lanka-May 2017: Exploring Distributional Changes in Rainfall and Their Impacts on Flood Risk. Journal of Coastal Research, 2018, 85, 1476-1480.	0.1	7
77	Assessment of regional drought risk under climate change using bivariate frequency analysis. Stochastic Environmental Research and Risk Assessment, 2018, 32, 3439-3453.	1.9	7
78	Bias-correction schemes for calibrated flow in a conceptual hydrological model. Hydrology Research, 2021, 52, 196-211.	1.1	7
79	Predicting foraging wading bird populations in Everglades National Park from seasonal hydrologic statistics under different management scenarios. Water Resources Research, 2011, 47, .	1.7	6
80	Estimation of Maximum Daily Fresh Snow Accumulation Using an Artificial Neural Network Model. Advances in Meteorology, 2019, 2019, 1-11.	0.6	6
81	Strategic disposal of flood debris via CO_2-assisted catalytic pyrolysis. Journal of Hazardous Materials, 2021, 412, 125242.	6.5	6
82	Development of Hazard Map with Probable Maximum Tsunamis. Journal of Coastal Research, 2016, 75, 1057-1061.	0.1	5
83	An integrated Bayesian approach to the probabilistic tsunami risk model for the location and magnitude of earthquakes: application to the eastern coast of the Korean Peninsula. Stochastic Environmental Research and Risk Assessment, 2018, 32, 1243-1257.	1.9	5
84	A Bayesian Quantile Regression Approach for Nonstationary Frequency Analysis of Annual Maximum Sea Level in a Changing Climate. Journal of Coastal Research, 2018, 85, 536-540.	0.1	5
85	Data Driven Water Surface Elevation Forecasting Model with Hybrid Activation Function—A Case Study for Hangang River, South Korea. Applied Sciences (Switzerland), 2020, 10, 1424.	1.3	5
86	A Multiscale Precipitation Forecasting Framework: Linking Teleconnections and Climate Dipoles to Seasonal and 24—hr Extreme Rainfall Prediction. Geophysical Research Letters, 2020, 47, e2019GL085418.	1.5	4
87	Uncertainty Quantification of Water Level Predictions from Radar—based Areal Rainfall Using an Adaptive MCMC Algorithm. Water Resources Management, 2021, 35, 2197-2213.	1.9	4
88	A Bernoulli-Gamma hierarchical Bayesian model for daily rainfall forecasts. Journal of Hydrology, 2021, 599, 126317.	2.3	4
89	Caracterização Espaço-Temporal das Secas no Nordeste a partir da Análise do Índice SPI. Revista Brasileira De Meteorologia, 2020, 35, 233-242.	0.2	4
90	Intercomparison of joint bias correction methods for precipitation and flow from a hydrological perspective. Journal of Hydrology, 2021, 604, 127261.	2.3	4

#	Article	IF	Citations
91	Estimation of return period and its uncertainty for the recent 2013–2015 drought in the Han River watershed in South Korea. Hydrology Research, 2018, 49, 1313-1329.	1.1	3
92	Probabilistic assessment of meteorological drought over South Korea under RCP scenarios using a hidden Markov model. KSCE Journal of Civil Engineering, 2018, 22, 365-372.	0.9	3
93	A Novel Spatial Downscaling Approach for Climate Change Assessment in Regions With Sparse Ground Data Networks. Geophysical Research Letters, 2021, 48, e2021GL095729.	1.5	3
94	Estimating the Accelerated Sea Level Rise along the Korean Peninsula Using Multiscale Analysis. Journal of Coastal Research, 2016, 75, 770-774.	0.1	2
95	Development of Tracking Technique for the Short Term Rainfall Field Forecasting. Procedia Engineering, 2016, 154, 1058-1063.	1.2	2
96	Exploration of Daily Rainfall Intensity Change in South Korea 1900–2010 Using Bias-Corrected ERA-20C. Journal of Hydrologic Engineering - ASCE, 2020, 25, 05020009.	0.8	2
97	Categorization of precipitation changes in China under 1.5 °C and 3 °C global warming using the bivariate joint distribution from a multi-model perspective. Environmental Research Letters, 2020, 15, 124043.	2.2	2
98	Estimating Optimal Design Frequency and Future Hydrological Risk in Local River Basins According to RCP Scenarios. Water (Switzerland), 2022, 14, 945.	1.2	2
99	A Hierarchical Bayesian Model based Nonstationary Frequency Analysis of Extreme Sea Level under Climate Change along the Shorelines in South Korea. Journal of Coastal Research, 2016, 75, 745-749.	0.1	1
100	A Hierarchical Bayesian Model-Based Uncertainty Analysis for Tsunami Heights along Shorelines in Korea. Journal of Coastal Research, 2016, 75, 1157-1161.	0.1	1
101	A Bivariate Frequency Analysis of Extreme Wave Heights and Periods Using a Copula Function in South Korea. Journal of Coastal Research, 2018, 85, 566-570.	0.1	1
102	Estimates of Sediment Pickup Rate induced by Surge Wave within a Multilevel Bayesian Regression Framework. Journal of Coastal Research, 2018, 85, 286-290.	0.1	1
103	Exploring the Combined Risk of Sea Level Rise and Storm Surges Using a Bayesian Network Model: Application to Saemangeum Seawall. Journal of Coastal Research, 2021, 114, .	0.1	1
104	Different Impacts of the Two Phases of El Niño on Variability of Warm Season Rainfall and Frequency of Extreme Events over the Han River Basin. Journal of Korea Water Resources Association, 2013, 46, 123-137.	0.3	1
105	Stochastic Analysis of Typhoon-Induced Storm Surge in the Coastal Area of the Korean Peninsula: Inference from a Nonstationary, Bayesian, Poisson, Generalized Pareto Distribution. Journal of Coastal Research, 2018, 85, 896-900.	0.1	0
106	A Nonstationary Wind Speed Frequency Model over South Korea: In the Context of Bayesian Mixture Distribution Model. Journal of Coastal Research, 2021, 114, .	0.1	0
107	Predictability of Coastal Extreme Wave Heights Based on a Nonstationary Hierarchical Bayesian Model: The Role of the Sea Surface Temperature. Journal of Coastal Research, 2021, 114, .	0.1	0