Deg-Hyo Bae

List of Publications by Citations

82 papers	1,073 citations	16 h-index	29 g-index
97 ext. papers	1,279 ext. citations	3.9 avg, IF	5.15 L-index

#	Paper	IF	Citations
82	Hydrologic uncertainties in climate change from IPCC AR4 GCM simulations of the Chungju Basin, Korea. *Journal of Hydrology*, **2011**, 401, 90-105	6	144
81	Long-term trend of precipitation and runoff in Korean river basins. *Hydrological Processes*, **2008**, 22, 2644-2656	3.5	116
80	Recent trends of mean and extreme precipitation in Korea. *International Journal of Climatology*, **2011**, 31, 359-370	3.5	104
79	Monthly dam inflow forecasts using weather forecasting information and neuro-fuzzy technique. *Hydrological Sciences Journal*, **2007**, 52, 99-113	3.5	61
78	Single-reservoir operating rules for a year using multiobjective genetic algorithm. *Journal of Hydroinformatics*, **2008**, 10, 163-179	2.6	35
77	Hydroclimatological response to dynamically downscaled climate change simulations for Korean basins. *Climatic Change*, **2010**, 100, 485-508	4.5	33
76	Improving ANFIS Based Model for Long-term Dam Inflow Prediction by Incorporating Monthly Rainfall Forecasts. *Water Resources Management*, **2014**, 28, 1185-1199	3.7	30
75	A comparative assessment of climate change impacts on drought over Korea based on multiple climate projections and multiple drought indices. *Climate Dynamics*, **2019**, 53, 389-404	4.2	28
74	Climate Change Impact Assessment on Green and Blue Water over Asian Monsoon Region. *Water Resources Management*, **2015**, 29, 2407-2427	3.7	23
73	Identification and trend analysis of homogeneous rainfall zones over the East Asia monsoon region. *International Journal of Climatology*, **2015**, 35, 1422-1433	3.5	22
72	Korean Flood Vulnerability Assessment on Climate Change. *Journal of Korea Water Resources Association*, **2011**, 44, 653-666		22
71	Application of Artificial Neural Networks for Accuracy Enhancements of Real-Time Flood Forecasting in the Imjin Basin. *Water (Switzerland)*, **2018**, 10, 1626	3	22
70	Added value of dynamical downscaling for hydrological projections in the Chungju Basin, Korea. *International Journal of Climatology*, **2019**, 39, 516-531	3.5	19
69	Correcting mean areal precipitation forecasts to improve urban flooding predictions by using long short-term memory network. *Journal of Hydrology*, **2020**, 584, 124710	6	19
68	Drought analysis according to shifting of climate zones to arid climate zone over Asia monsoon region. *Journal of Hydrology*, **2015**, 529, 1021-1029	6	17
67	Climate Change Impact Assessment on Water Resources and Susceptible Zones Identification in the Asian Monsoon Region. *Water Resources Management*, **2015**, 29, 5377-5393	3.7	16
66	Investment timing decisions in hydropower adaptation projects using climate scenarios: A case study of South Korea. *Journal of Cleaner Production*, **2017**, 142, 1827-1836	10.3	15

65	Evaluation of Nitrate Load Estimations Using Neural Networks and Canonical Correlation Analysis with K-Fold Cross-Validation. *Sustainability*, **2020**, 12, 400	3.6	15
64	Quantitative Comparison of the Spatial Distribution of Radar and Gauge Rainfall Data. *Journal of Hydrometeorology*, **2012**, 13, 1939-1953	3.7	15
63	Trend Analysis of Long-Term Reference Evapotranspiration and Its Components over the Korean Peninsula. *Water (Switzerland)*, **2018**, 10, 1373	3	15
62	Impact of the spatial variability of daily precipitation on hydrological projections: A comparison of GCM- and RCM-driven cases in the Han River basin, Korea. *Hydrological Processes*, **2019**, 33, 2240	3.3	13
61	Parameter Regionalization of Semi-Distributed Runoff Model Using Multivariate Statistical Analysis. *Journal of Korea Water Resources Association*, **2009**, 42, 149-160		13
60	Development of Continuous Rainfall-Runoff Model for Flood Forecasting on the Large-Scale Basin. *Journal of Korea Water Resources Association*, **2011**, 44, 51-64		13
59	Evaluating the Utility of IPCC AR4 GCMs for Hydrological Application in South Korea. *Water Resources Management*, **2013**, 27, 3227-3246	3.7	12
58	Utilization of the Bayesian Method to Improve Hydrological Drought Prediction Accuracy. *Water Resources Management*, **2017**, 31, 3527-3541	3.7	11
57	Drought Analysis and Assessment by Using Land Surface Model on South Korea. *Journal of Korea Water Resources Association*, **2011**, 44, 667-681		11
56	Causal Links on Interannual Timescale Between ENSO and the IOD in CMIP5 Future Simulations. *Geophysical Research Letters*, **2019**, 46, 2820-2828	4.9	10
55	An Integrated Framework for Extreme Drought Assessments Using the Natural Drought Index, Copula and Gi* Statistic. *Water Resources Management*, **2020**, 34, 1353-1368	3.7	10
54	Utility of Ten-Day Climate Model Ensemble Simulations for Water Resources Applications in Korean Watersheds. *Water Resources Management*, **2005**, 19, 849-872	3.7	10
53	Causal effects of Indian Ocean Dipole on El Niño–Southern Oscillation during 1950–2014 based on high-resolution models and reanalysis data. *Environmental Research Letters*, **2020**, 15, 1040b6	6.2	10
52	Drought prediction over the East Asian monsoon region using the adaptive neuro-fuzzy inference system and the global sea surface temperature anomalies. *International Journal of Climatology*, **2016**, 36, 4767-4777	3.5	10
51	Performance of a coupled atmosphere-streamflow prediction system at the Pyungchang River IHP basin. *Journal of Hydrology*, **2004**, 288, 210-224	6	9
50	Understanding Urban Flood Resilience in the Anthropocene: A Social–Ecological–Technological Systems (SETS) Learning Framework. *Annals of the American Association of Geographers*, **2021**, 111, 837-857	2.6	9
49	Uncertainty estimation of the SURR model parameters and input data for the Imjin River basin using the GLUE method. *Journal of Hydro-Environment Research*, **2018**, 20, 52-62	2.3	9
48	Precipitation Forecast Contribution Assessment in the Coupled Meteo-Hydrological Models. *Atmosphere*, **2020**, 11, 34	2.7	8

47	The Application Assessment of Global Hydrologic Analysis Models on South Korea. *Journal of Korea Water Resources Association*, **2010**, 43, 1063-1074		8
46	Intensified hydroclimatic regime in Korean basins under 1.5 and 2°C global warming. *International Journal of Climatology*, **2020**, 40, 1965-1978	3.5	8
45	Global Warming Impacts on Severe Drought Characteristics in Asia Monsoon Region. *Water (Switzerland)*, **2020**, 12, 1360	3	7
44	Response of global evaporation to major climate modes in historical and future Coupled Model Intercomparison Project Phase 5 simulations. *Hydrology and Earth System Sciences*, **2020**, 24, 1131-1143	5.5	7
43	Generation of High Resolution Scenarios for Climate Change Impacts on Water Resources (II): Runoff Scenarios on Each Sub-basins. *Journal of Korea Water Resources Association*, **2007**, 40, 205-214		7
42	Hydrological Model Response to Climate Change Impact Assessments on Water Resources. *Journal of Korea Water Resources Association*, **2008**, 41, 907-917		7
41	Assessment on Flood Characteristics Changes Using Multi-GCMs Climate Scenario. *Journal of Korea Water Resources Association*, **2010**, 43, 789-799		7
40	Development of an Extreme Gradient Boosting Model Integrated With Evolutionary Algorithms for Hourly Water Level Prediction. *IEEE Access*, **2021**, 9, 125853-125867	3.5	7
39	Intensification characteristics of hydroclimatic extremes in the Asian monsoon region under 1.5 and 2.0 °C of global warming. *Hydrology and Earth System Sciences*, **2020**, 24, 5799-5820	5.5	6
38	Features and interdecadal variability of droughts in the homogeneous rainfall zones over the East Asian monsoon region. *International Journal of Climatology*, **2016**, 36, 1943-1953	3.5	5
37	Improving Radar-Based Rainfall Forecasts by Long Short-Term Memory Network in Urban Basins. *Water (Switzerland)*, **2021**, 13, 776	3	5
36	Quantifying climate internal variability using an hourly ensemble generator over South Korea. *Stochastic Environmental Research and Risk Assessment*, **2018**, 32, 3037-3051	3.5	5
35	Uncertainty assessment of future projections on water resources according to climate downscaling and hydrological models. *Journal of Hydroinformatics*, **2018**, 20, 597-607	2.6	4
34	Changes in future precipitation over South Korea using a global high-resolution climate model. *Asia-Pacific Journal of Atmospheric Sciences*, **2013**, 49, 619-624	2.1	4
33	Hourly streamflow forecasting using a Bayesian additive regression tree model hybridized with a genetic algorithm. *Journal of Hydrology*, **2022**, 606, 127445	6	4
32	Development and Evaluation of Computational Method for Korean Threshold Runoff. *Journal of Korea Water Resources Association*, **2011**, 44, 875-887		4
31	Analyzing the Variability in Low-Flow Projections under GCM CMIP5 Scenarios. *Water Resources Management*, **2019**, 33, 5035-5050	3.7	4
30	Projected response of global runoff to El Niño-Southern oscillation. *Environmental Research Letters*, **2021**, 16, 084037	6.2	4

29	Impacts of Upstream Structures on Downstream Discharge in the Transboundary Imjin River Basin, Korean Peninsula. *Applied Sciences (Switzerland)*, **2020**, 10, 3333	2.6	3
28	Land Use Change, Extreme Precipitation Events, and Flood Damage in South Korea: A Spatial Approach. *Journal of Extreme Events*, **2020**, 07, 2150001	1	3
27	Improving Ensemble Forecasting Using Total Least Squares and Lead-Time Dependent Bias Correction. *Atmosphere*, **2020**, 11, 300	2.7	3
26	Uncertainty Assessment of Future High and Low Flow Projections According to Climate Downscaling and Hydrological Models. *Procedia Engineering*, **2016**, 154, 617-623		3
25	Long-Term Variation of Runoff Coefficient during Dry and Wet Seasons Due to Climate Change. *Water (Switzerland)*, **2019**, 11, 2411	3	3
24	An approach for improving the capability of a coupled meteorological and hydrological model for rainfall and flood forecasts. *Journal of Hydrology*, **2019**, 577, 124014	6	2
23	Spatially-explicit assessment of flood risk caused by climate change in South Korea. *KSCE Journal of Civil Engineering*, **2013**, 17, 233-243	1.9	2
22	Screening the utility of climate information for watershed applications in Korea. *Journal of Hydrology*, **2007**, 336, 38-47	6	2
21	Estimation and assessment of natural drought index using principal component analysis. *Journal of Korea Water Resources Association*, **2016**, 49, 565-577		2
20	Future projection of low flows in the Chungju basin, Korea and their uncertainty decomposition. *International Journal of Climatology*,	3.5	2
19	Effect of the Horizontal Resolution of Climate Simulations on the Hydrological Representation of Extreme Low and High Flows. *Water Resources Management*, **2019**, 33, 4653-4666	3.7	2
18	Accuracy assessment of real-time flood forecasting of coupled hydrological and mesoscale meteorological models **2018**,		2
17	Decreasing causal impacts of El Niño-Southern Oscillation on future fire activities.. *Science of the Total Environment*, **2022**, 826, 154031	10.2	2
16	The Impacts of Water Cycle Components on Streamflow in a Changing Climate of Korea: Historical and Future Trends. *Sustainability*, **2020**, 12, 4260	3.6	1
15	Development of the Water Disaster Vulnerability Index and Evaluation of Water Disaster Vulnerability in the Asian Monsoon Region. *Korean Society of Hazard Mitigation*, **2018**, 18, 457-467	0.2	1
14	Assessment of Climate Change Impacts on the Hydroclimatic Response in Burundi Based on CMIP6 ESMs. *Sustainability*, **2021**, 13, 12037	3.6	1
13	Development of climate change uncertainty assessment method for projecting the water resources. *Journal of Korea Water Resources Association*, **2016**, 49, 657-671		1
12	Development of a Hydrological Drought Forecasting Model Using Weather Forecasting Data from GloSea5. *Water (Switzerland)*, **2020**, 12, 2785	3	1

11	Uncertainty Quantification of Water Level Predictions from Radar-based Areal Rainfall Using an Adaptive MCMC Algorithm. *Water Resources Management*, **2021**, 35, 2197-2213	3.7	1
10	Assessment of the potential changes in low flow projections estimated by Coupled Model Intercomparison Project Phase 5 climate models at monthly and seasonal scales. *International Journal of Climatology*, **2021**, 41, 3222-3236	3.5	1
9	Development of a precipitation□rea curve for warning criteria of short-duration flash flood. *Natural Hazards and Earth System Sciences*, **2018**, 18, 171-183	3.9	1
8	The Impacts of Global Warming on Climate Zone Changes Over Asia Based on CMIP6 Projections. *Earth and Space Science*, **2021**, 8, e2021EA001701	3.1	1
7	Increasing Causal Effects of El Ni□□outhern Oscillation on the Future Carbon Cycle of Terrestrial Ecosystems. *Geophysical Research Letters*, **2021**, 48,	4.9	1
6	Future hydrology and hydrological extremes under climate change in Asian river basins. *Scientific Reports*, **2021**, 11, 17089	4.9	0
5	Reduction of the uncertainties in the hydrological projections in Korean river basins using dynamically downscaled climate projections. *Climate Dynamics*,1	4.2	0
4	Causal influences of El Ni□□outhern Oscillation on global dust activities. *Atmospheric Chemistry and Physics*, **2022**, 22, 5253-5263	6.8	0
3	Climatological screening of climate model output with observations for Korean water resources applications. *International Journal of Climatology*, **2007**, 27, 1775-1790	3.5	
2	The Indian Ocean Dipole response to external forcing in the coupled model intercomparison project phase 5 simulations of the last millennium. *Holocene*, **2021**, 31, 884-891	2.6	
1	Optimizing Parameters for the Downscaling of Daily Precipitation in Normal and Drought Periods in South Korea. *Water (Switzerland)*, **2022**, 14, 1108	3	