Martijn J Booij

List of Publications by Year
in descending order

96 papers	3,852 citations	136740 32 h-index	138251 58 g-index
114 all docs	114 docs citations	114 times ranked	4254 citing authors

#	Article	IF	Citations
1	The impact of climate change on the water resources of Hindukushâ€“Karakorumâ€“Himalaya region under different glacier coverage scenarios. Journal of Hydrology, 2008, 355, 148-163.	2.3	397
2	Impact of climate change on river flooding assessed with different spatial model resolutions. Journal of Hydrology, 2005, 303, 176-198.	2.3	301
3	Simulation and forecasting of streamflows using machine learning models coupled with base flow separation. Journal of Hydrology, 2018, 564, 266-282.	2.3	177
4	Limits to the worldâ€™s green water resources for food, feed, fiber, timber, and bioenergy. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4893-4898.	3.3	177
5	Identification and classification of uncertainties in the application of environmental models. Environmental Modelling and Software, 2010, 25, 1518-1527.	1.9	126
6	The water footprint of Indonesian provinces related to the consumption of crop products. Hydrology and Earth System Sciences, 2010, 14, 119-128.	1.9	126
7	Review and classification of indicators of green water availability and scarcity. Hydrology and Earth System Sciences, 2015, 19, 4581-4608.	1.9	106
8	Use of regional climate model simulations as input for hydrological models for the Hindukush-Karakorum-Himalaya region. Hydrology and Earth System Sciences, 2009, 13, 1075-1089.	1.9	98
9	Multi-variable calibration of a semi-distributed hydrological model using streamflow data and satellite-based evapotranspiration. Journal of Hydrology, 2013, 505, 276-290.	2.3	94
10	Hydrological response to future land-use change and climate change in a tropical catchment. Hydrological Sciences Journal, 2018, 63, 1368-1385.	1.2	92
11	The influence of conceptual model structure on model performance: a comparative study for 237 French catchments. Hydrology and Earth System Sciences, 2013, 17, 4227-4239.	1.9	88
12	Attribution of changes in the water balance of a tropical catchment to land use change using the SWAT model. Hydrological Processes, 2017, 31, 2029-2040.	1.1	85
13	Spatial soil erosion estimation using an artificial neural network (ANN) and field plot data. Catena, 2018, 163, 210-218.	2.2	80
14	Effect of different uncertainty sources on the skill of 10 day ensemble low flow forecasts for two hydrological models. Water Resources Research, 2013, 49, 4035-4053.	1.7	77
15	Assessment of Roughness Length Schemes Implemented within the Noah Land Surface Model for High-Altitude Regions. Journal of Hydrometeorology, 2014, 15, 921-937.	0.7	55
16	Catchment Variability and Parameter Estimation in Multi-Objective Regionalisation of a Rainfallâ€“Runoff Model. Water Resources Management, 2010, 24, 3961-3985.	1.9	54
17	Augmentations to the Noah Model Physics for Application to the Yellow River Source Area. Part I: Soil Water Flow. Journal of Hydrometeorology, 2015, 16, 2659-2676.	0.7	54
18	The skill of seasonal ensemble low-flow forecasts in the Moselle River for three different hydrological models. Hydrology and Earth System Sciences, 2015, 19, 275-291.	1.9	53

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19	Decision making under uncertainty in a decision support system for the Red River. Environmental Modelling and Software, 2007, 22, 128-136.	1.9	52
20	Uncertainty analysis in statistical modeling of extreme hydrological events. Stochastic Environmental Research and Risk Assessment, 2010, 24, 567-578.	1.9	51
21	Uncertainty in high and low flows due to model structure and parameter errors. Stochastic Environmental Research and Risk Assessment, 2014, 28, 319-332.	1.9	51
22	Probabilistic flood extent estimates from social media flood observations. Natural Hazards and Earth System Sciences, 2017, 17, 735-747.	1.5	51
23	The influence of parametric uncertainty on the relationships between HBV model parameters and climatic characteristics. Hydrological Sciences Journal, 2015, 60, 1299-1316.	1.2	49
24	Augmentations to the Noah Model Physics for Application to the Yellow River Source Area. Part II: Turbulent Heat Fluxes and Soil Heat Transport. Journal of Hydrometeorology, 2015, 16, 2677-2694.	0.7	49
25	The water footprint of wood for lumber, pulp, paper, fuel and firewood. Advances in Water Resources, 2017, 107, 490-501.	1.7	49
26	Improving GALDIT-based groundwater vulnerability predictive mapping using coupled resampling algorithms and machine learning models. Journal of Hydrology, 2021, 598, 126370.	2.3	46
27	Extreme daily precipitation in Western Europe with climate change at appropriate spatial scales. International Journal of Climatology, 2002, 22, 69-85.	1.5	45
28	Appropriate Spatial Sampling of Rainfall or Flow Simulation/Echantillonnage Spatial de la Pluie AppropriÃ© pour la Simulation D'Ã©coulements. Hydrological Sciences Journal, 2005, 50, .	1.2	41
29	Seasonality of low flows and dominant processes in the Rhine River. Stochastic Environmental Research and Risk Assessment, 2013, 27, 489-503.	1.9	38
30	Trend analysis of hydro-climatic variables in the north of Iran. Theoretical and Applied Climatology, 2019, 136, 85-97.	1.3	38
31	Separation of the Impact of Landuse/Landcover Change and Climate Change on Runoff in the Upstream Area of the Yangtze River, China. Water Resources Management, 2022, 36, 181-201.	1.9	38
32	Determination and integration of appropriate spatial scales for river basin modelling. Hydrological Processes, 2003, 17, 2581-2598.	1.1	36
33	Identification and Quantification of Uncertainties in a Hydrodynamic River Model Using Expert Opinions. Water Resources Management, 2011, 25, 601-622.	1.9	34
34	Adapting Multireservoir Operation to Shifting Patterns of Water Supply and Demand. Water Resources Management, 2014, 28, 625-643.	1.9	32
35	Balance between calibration objectives in a conceptual hydrological model. Hydrological Sciences Journal, 2010, 55, 1017-1032.	1.2	30
36	Improving daily stochastic streamflow prediction: comparison of novel hybrid data-mining algorithms. Hydrological Sciences Journal, 2021, 66, 1457-1474.	1.2	29

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37	Changes in monthly streamflow in the Hindukushâ€“Karakoramâ€“Himalaya Region of Pakistan using innovative polygon trend analysis. Stochastic Environmental Research and Risk Assessment, 2022, 36, 811-830.	1.9	29
38	Attribution of changes in stream flow to land use change and climate change in a mesoscale tropical catchment in Java, Indonesia. Hydrology Research, 2017, 48, 1143-1155.	1.1	28
39	Comparison of Self-Organizing Map, Artificial Neural Network, and Co-Active Neuro-Fuzzy Inference System Methods in Simulating Groundwater Quality: Geospatial Artificial Intelligence. Water Resources Management, 2022, 36, 451-469.	1.9	28
40	An appropriateness framework for the Dutch Meuse decision support system. Environmental Modelling and Software, 2007, 22, 1667-1678.	1.9	27
41	Impacts of climate change on the seasonality of low flows in 134 catchments in the River Rhine basin using an ensemble of bias-corrected regional climate simulations. Hydrology and Earth System Sciences, 2013, 17, 4241-4257.	1.9	26
42	Impacts of Noah model physics on catchmentâ€scale runoff simulations. Journal of Geophysical Research D: Atmospheres, 2016, 121, 807-832.	1.2	26
43	Identification of appropriate lags and temporal resolutions for low flow indicators in the River Rhine to forecast low flows with different lead times. Hydrological Processes, 2013, 27, 2742-2758.	1.1	25
44	Assessment of extreme flows and uncertainty under climate change: disentangling the uncertainty contribution of representative concentration pathways, global climate models and internal climate variability. Hydrology and Earth System Sciences, 2020, 24, 3251-3269.	1.9	25
45	Quantification of uncertainty in design water levels due to uncertain bed form roughness in the Dutch river Waal. Hydrological Processes, 2013, 27, 1646-1663.	1.1	24
46	Underâ€canopy turbulence and root water uptake of a <scp>T</scp>ibetan meadow ecosystem modeled by <scp>N</scp>oahâ€<scp>MP</scp>. Water Resources Research, 2015, 51, 5735-5755.	1.7	23
47	Detection of trends in precipitation extremes in Zhejiang, east China. Theoretical and Applied Climatology, 2012, 107, 201-210.	1.3	22
48	Climatic Variability and Periodicity for Upstream Sub-Basins of the Yangtze River, China. Water (Switzerland), 2020, 12, 842.	1.2	22
49	Modelling the effects of spatial and temporal resolution of rainfall and basin model on extreme river discharge. Hydrological Sciences Journal, 2002, 47, 307-320.	1.2	21
50	Potential water supply of a small reservoir and alluvial aquifer system in southern Zimbabwe. Physics and Chemistry of the Earth, 2008, 33, 633-639.	1.2	21
51	Simulating impacts of climate change on river discharges in the Nile basin. Physics and Chemistry of the Earth, 2011, 36, 696-709.	1.2	21
52	Improved Simulation of Peak Flows under Climate Change: Postprocessing or Composite Objective Calibration?. Journal of Hydrometeorology, 2015, 16, 2187-2208.	0.7	20
53	Impacts of climate change on characteristics of dailyâ€scale rainfall events based on nine selected GCMs under four CMIP5 RCP scenarios in Qu River basin, east China. International Journal of Climatology, 2020, 40, 887-907.	1.5	20
54	Uncertainty of design water levels due to combined bed form and vegetation roughness in the <scp>D</scp>utch <scp>R</scp>iver <scp>W</scp>aal. Journal of Flood Risk Management, 2013, 6, 302-318.	1.6	19

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55	Hydrological responses to climate change in Yarlung Zangbo River basin, Southwest China. Journal of Hydrology, 2021, 597, 125761.	2.3	19
56	Modelling the Influence of Groundwater Abstractions on the Water Level of Lake Naivasha, Kenya Under Data-Scarce Conditions. Water Resources Management, 2015, 29, 4447-4463.	1.9	18
57	Uncertainty in Future High Flows in Qiantang River Basin, China. Journal of Hydrometeorology, 2015, 16, 363-380.	0.7	17
58	Hydrological Assessment of the 1973 Treaty on the Transboundary Helmand River, Using the SWAT Model and a Global Climate Database. Water Resources Management, 2016, 30, 4681-4694.	1.9	17
59	Impact assessment of multiple uncertainty sources on high flows under climate change. Hydrology Research, 2016, 47, 61-74.	1.1	17
60	Quantification of parametric uncertainty of ANN models with GLUE method for different streamflow dynamics. Stochastic Environmental Research and Risk Assessment, 2017, 31, 993-1010.	1.9	17
61	Application and recalibration of soil water retention pedotransfer functions in a tropical upstream catchment: case study in Bengawan Solo, Indonesia. Journal of Hydrology and Hydromechanics, 2017, 65, 307-320.	0.7	17
62	Additional Value of Using Satellite-Based Soil Moisture and Two Sources of Groundwater Data for Hydrological Model Calibration. Water (Switzerland), 2019, 11, 2083.	1.2	17
63	Performance of ensemble streamflow forecasts under varied hydrometeorological conditions. Hydrology and Earth System Sciences, 2017, 21, 5273-5291.	1.9	16
64	Hydrodynamic modelling of a tidal delta wetland using an enhanced quasi-2D model. Journal of Hydrology, 2018, 559, 315-326.	2.3	16
65	Attributing Changes in Streamflow to Land Use and Climate Change for 472 Catchments in Australia and the United States. Water (Switzerland), 2019, 11, 1059.	1.2	15
66	Development and hydrometeorological evaluation of a new stochastic daily rainfall model: Coupling Markov chain with rainfall event model. Journal of Hydrology, 2020, 589, 125337.	2.3	15
67	Impacts of land use changes and climate variability on transboundary Hirmand River using SWAT. Journal of Water and Climate Change, 2020, 11, 1695-1711.	1.2	14
68	Blue water footprint caps per sub-catchment to mitigate water scarcity in a large river basin: The case of the Yellow River in China. Journal of Hydrology, 2021, 603, 126992.	2.3	14
69	Use of machine learning and geographical information system to predict nitrate concentration in an unconfined aquifer in Iran. Journal of Cleaner Production, 2022, 360, 131847.	4.6	14
70	Validation of an ANN Flow Prediction Model Using a Multistation Cluster Analysis. Journal of Hydrologic Engineering - ASCE, 2012, 17, 262-271.	0.8	13
71	Water Footprint, Blue Water Scarcity, and Economic Water Productivity of Irrigated Crops in Peshawar Basin, Pakistan. Water (Switzerland), 2021, 13, 1249.	1.2	12
72	Attribution of Changes in Streamflow to Climate Change and Land Cover Change in Yangtze River Source Region, China. Water (Switzerland), 2022, 14, 259.	1.2	12

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73	Historical simulation of maize water footprints with a new global gridded crop model ACEA. Hydrology and Earth System Sciences, 2022, 26, 923-940.	1.9	12
74	Propagation of Discharge Uncertainty in a Flood Damage Model For the Meuse River. , 2007, , 293-310.		10
75	Impact of land use and water management on hydrological processes under varying climatic conditions. Physics and Chemistry of the Earth, 2011, 36, 613-614.	1.2	9
76	Impact of uncertainties in discharge determination on the parameter estimation and performance of a hydrological model. Hydrology Research, 2013, 44, 454-466.	1.1	9
77	Effects of differential hillslopeâ€scale water retention characteristics on rainfallâ€"runoff response at the Landscape Evolution Observatory. Hydrological Processes, 2018, 32, 2118-2127.	1.1	9
78	Quantifying relative contribution of land use change and climate change to streamflow alteration in the Bengawan Solo River, Indonesia. Hydrological Sciences Journal, 2021, 66, 1059-1068.	1.2	9
79	Sensitivity of Streamflow Characteristics to Different Spatial Land-Use Configurations in Tropical Catchment. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	8
80	Evaluation of ECMWF mid-range ensemble forecasts of precipitation for the Karun River basin. Theoretical and Applied Climatology, 2020, 141, 61-70.	1.3	6
81	Hydrological Balance of Lake Tana, Upper Blue Nile Basin, Ethiopia. , 2011, , 69-89.		6
82	Extreme value statistics for annual minimum and trough-under-threshold precipitation at different spatio-temporal scales. Hydrological Sciences Journal, 2010, 55, 1289-1301.	1.2	5
83	A Comparison of Nonlinear Stochastic Self-Exciting Threshold Autoregressive and Chaotic k-Nearest Neighbour Models in Daily Streamflow Forecasting. Water Resources Management, 2016, 30, 1515-1531.	1.9	5
84	Satellite rainfall bias assessment for crop growth simulation â€" A case study of maize growth in Kenya. Agricultural Water Management, 2021, 258, 107204.	2.4	5
85	Evaluation of MODIS-Landsat and AVHRR-Landsat NDVI data fusion using a single pair base reference image: a case study in a tropical upstream catchment on Java, Indonesia. International Journal of Digital Earth, 2022, 15, 164-197.	1.6	5
86	Deterministic-statistical Model Coupling in a DSS for River-Basin Management. Environmental Modeling and Assessment, 2009, 14, 595-606.	1.2	4
87	Quantifying the robustness of optimal reservoir operation for the Xinanjiang-Fuchunjiang Reservoir Cascade. Water Science and Technology: Water Supply, 2016, 16, 79-86.	1.0	4
88	Effect of data length, spin-up period and spatial model resolution on fully distributed hydrological model calibration in the Moselle basin. Hydrological Sciences Journal, 2022, 67, 759-772.	1.2	4
89	A new framework for a multi-site stochastic daily rainfall model: Coupling a univariate Markov chain model with a multi-site rainfall event model. Journal of Hydrology, 2021, 598, 126478.	2.3	3
90	Impacts of forestation on the annual and seasonal water balance of a tropical catchment under climate change. Forest Ecosystems, 2021, 8, .	1.3	3

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91	Uncertainty analysis of risk-based flood safety standards in the Netherlands through a scenario-based approach. International Journal of River Basin Management, 2023, 21, 559-574.	1.5	3
92	A two-step approach to investigate the effect of rating curve uncertainty in the Elbe decision support system. Journal of Zhejiang University: Science A, 2008, 9, 1229-1238.	1.3	2
93	Reply to van Noordwijk and Ellison: Moisture recycling: Key to assess hydrological impacts of land cover changes, but not to quantify water allocation to competing demands. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8104-8104.	3.3	2
94	Quantification of uncertainties in a 2D hydraulic model for the Dutch river Rhine using expert opinions. , 2009, , 195-198.		1
95	Arjen Y. Hoekstra: A Water Management Researcher to Be Remembered. Water (Switzerland), 2022, 14, 50.	1.2	0
96	Validation of a Model Appropriateness Framework Using the Elbe Decision Support System. Advances in Environmental Engineering and Green Technologies Book Series, 0, , 193-218.	0.3	0