R A Woods

List of Publications by Year
in descending order

80 papers	9,713 citations	41344 49 h-index	69250 77 g-index
113 all docs	113 docs citations	113 times ranked	7801 citing authors

#	Article	IF	Citations
1	An Objective Timeâ€Seriesâ€Analysis Method for Rainfallâ€Runoff Event Identification. Water Resources Research, 2022, 58, .	4.2	6
2	A Practical, Objective, and Robust Technique to Directly Estimate Catchment Response Time. Water Resources Research, 2021, 57, e2020WR028201.	4.2	10
3	Including Regional Knowledge Improves Baseflow Signature Predictions in Large Sample Hydrology. Water Resources Research, 2021, 57, e2020WR028354.	4.2	30
4	How Do Climate and Catchment Attributes Influence Flood Generating Processes? A Largeâ€Sample Study for 671 Catchments Across the Contiguous USA. Water Resources Research, 2021, 57, e2020WR028300.	4.2	46
5	TOSSH: A Toolbox for Streamflow Signatures in Hydrology. Environmental Modelling and Software, 2021, 138, 104983.	4.5	26
6	On doing hydrology with dragons: Realizing the value of perceptual models and knowledge accumulation. Wiley Interdisciplinary Reviews: Water, 2021, 8, e1550.	6.5	26
7	Eventâ€based classification for global study of river flood generating processes. Hydrological Processes, 2020, 34, 1514-1529.	2.6	80
8	A Brief Analysis of Conceptual Model Structure Uncertainty Using 36 Models and 559 Catchments. Water Resources Research, 2020, 56, e2019WR025975.	4.2	72
9	Invigorating Hydrological Research Through Journal Publications. Water Resources Research, 2020, 56, .	4.2	5
10	Hydrological signatures describing the translation of climate seasonality into streamflow seasonality. Hydrology and Earth System Sciences, 2020, 24, 561-580.	4.9	20
11	CAMELS-GB: hydrometeorological time series and landscape attributes for 671 catchments in Great Britain. Earth System Science Data, 2020, 12, 2459-2483.	9.9	87
12	DECIPHeR v1: Dynamic fluxEs and ConnectIvity for Predictions of HydRology. Geoscientific Model Development, 2019, 12, 2285-2306.	3.6	51
13	Modular Assessment of Rainfallâ€"Runoff Models Toolbox (MARRMoT) v1.2: an open-source, extendable framework providing implementations of 46 conceptual hydrologic models as continuous state-space formulations. Geoscientific Model Development, 2019, 12, 2463-2480.	3.6	74
14	Global bimodal precipitation seasonality: A systematic overview. International Journal of Climatology, 2019, 39, 558-567.	3.5	31
15	Is There a Baseflow Budyko Curve?. Water Resources Research, 2019, 55, 2838-2855.	4.2	45
16	Technical note: Inherent benchmark or not? Comparing Nashâ€"Sutcliffe and Klingâ€"Gupta efficiency scores. Hydrology and Earth System Sciences, 2019, 23, 4323-4331.	4.9	582
17	Simulating Runoff Under Changing Climatic Conditions: A Framework for Model Improvement. Water Resources Research, 2018, 54, 9812-9832.	4.2	58
18	A Quantitative Hydrological Climate Classification Evaluated With Independent Streamflow Data. Water Resources Research, 2018, 54, 5088-5109.	4.2	100

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19	A rule based quality control method for hourly rainfall data and a 1â€‰km resolution gridded hourly rainfall dataset for Great Britain: CEH-GEAR1hr. Journal of Hydrology, 2018, 564, 930-943.	5.4	58
20	A Global Assessment of Runoff Sensitivity to Changes in Precipitation, Potential Evaporation, and Other Factors. Water Resources Research, 2017, 53, 8475-8486.	4.2	125
21	Recent changes in extreme floods across multiple continents. Environmental Research Letters, 2017, 12, 114035.	5.2	102
22	Scaling, similarity, and the fourth paradigm for hydrology. Hydrology and Earth System Sciences, 2017, 21, 3701-3713.	4.9	63
23	The evolution of process-based hydrologic models: historical challenges and the collective quest for physical realism. Hydrology and Earth System Sciences, 2017, 21, 3427-3440.	4.9	177
24	Scaling, Similarity, and the Fourth Paradigm for Hydrology. , 2017, 21, 3701-3713.		7
25	mizuRoute version 1: a river network routing tool for a continental domain water resources applications. Geoscientific Model Development, 2016, 9, 2223-2238.	3.6	42
26	Streamflow sensitivity to water storage changes across Europe. Geophysical Research Letters, 2016, 43, 1980-1987.	4.0	59
27	Dominant flood generating mechanisms across the United States. Geophysical Research Letters, 2016, 43, 4382-4390.	4.0	313
28	Contributing factors for drought in United States forest ecosystems under projected future climates and their uncertainty. Forest Ecology and Management, 2016, 380, 299-308.	3.2	43
29	A simple framework to quantitatively describe monthly precipitation and temperature climatology. International Journal of Climatology, 2016, 36, 3161-3174.	3.5	27
30	A novel framework for discharge uncertainty quantification applied to 500 <scp>UK</scp> gauging stations. Water Resources Research, 2015, 51, 5531-5546.	4.2	159
31	Stormflow generation: A metaâ€analysis of field evidence from small, forested catchments. Water Resources Research, 2015, 51, 3730-3753.	4.2	38
32	A unified approach for processâ€based hydrologic modeling: 2. Model implementation and case studies. Water Resources Research, 2015, 51, 2515-2542.	4.2	173
33	A unified approach for processâ€based hydrologic modeling: 1. Modeling concept. Water Resources Research, 2015, 51, 2498-2514.	4.2	354
34	Spatial variability of hydrological processes and model structure diagnostics in a 50â€‰km²catchment. Hydrological Processes, 2014, 28, 4896-4913.	2.6	64
35	Comparing and combining physically-based and empirically-based approaches for estimating the hydrology of ungauged catchments. Journal of Hydrology, 2014, 508, 227-239.	5.4	105
36	Patterns of similarity of seasonal water balances: A window into streamflow variability over a range of time scales. Water Resources Research, 2014, 50, 5638-5661.	4.2	167

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37	A precipitation shift from snow towards rain leads to a decrease in streamflow. Nature Climate Change, 2014, 4, 583-586.	18.8	545
38	A decade of Predictions in Ungauged Basins (PUB)â€"a review. Hydrological Sciences Journal, 2013, 58, 1198-1255.	2.6	821
39	Prediction of low flows in ungauged basins. , 2013, , 163-188.		19
40	Prediction of annual runoff in ungauged basins. , 2013, , 70-101.		14
41	An analytical model for soil-atmosphere feedback. Hydrology and Earth System Sciences, 2012, 16, 1863-1878.	4.9	11
42	Representing spatial variability of snow water equivalent in hydrologic and landâ€surface models: A review. Water Resources Research, 2011, 47, .	4.2	275
43	Climate change and mountain water resources: overview and recommendations for research, management and policy. Hydrology and Earth System Sciences, 2011, 15, 471-504.	4.9	476
44	Rainfall uncertainty in hydrological modelling: An evaluation of multiplicative error models. Journal of Hydrology, 2011, 400, 83-94.	5.4	195
45	Hydrological field data from a modeller's perspective: Part 1. Diagnostic tests for model structure. Hydrological Processes, 2011, 25, 511-522.	2.6	121
46	Hydrological field data from a modeller's perspective: Part 2: processâ€based evaluation of model hypotheses. Hydrological Processes, 2011, 25, 523-543.	2.6	103
47	Hillslope threshold response to rainfall: (1) A field based forensic approach. Journal of Hydrology, 2010, 393, 65-76.	5.4	161
48	Quantifying space-time dynamics of flood event types. Journal of Hydrology, 2010, 394, 213-229.	5.4	82
49	Generalised synthesis of spaceâ€"time variability in flood response: An analytical framework. Journal of Hydrology, 2010, 394, 198-212.	5.4	67
50	Analytical assessment and parameter estimation of a low-dimensional groundwater model. Journal of Hydrology, 2009, 377, 143-154.	5.4	54
51	Consistency between hydrological models and field observations: linking processes at the hillslope scale to hydrological responses at the watershed scale. Hydrological Processes, 2009, 23, 311-319.	2.6	128
52	Analytical model of seasonal climate impacts on snow hydrology: Continuous snowpacks. Advances in Water Resources, 2009, 32, 1465-1481.	3.8	90
53	The Selwyn River of New Zealand: a benchmark system for alluvial plain rivers. River Research and Applications, 2008, 24, 1-21.	1.7	54
54	Increased flexibility in base flow modelling using a power law transmissivity profile. Hydrological Processes, 2008, 22, 2667-2671.	2.6	23

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55	Comment on â€˜C.-P. Tung, N.-M. Hong, C.-H. Chen and Y.-C. Tan, Regional daily baseflow prediction.Hydrological Processes, 18(2004) 2147â€“2164â€™. Hydrological Processes, 2008, 22, 883-886.	2.6	4
56	Hydrological data assimilation with the ensemble Kalman filter: Use of streamflow observations to update states in a distributed hydrological model. Advances in Water Resources, 2008, 31, 1309-1324.	3.8	395
57	Framework for Understanding Structural Errors (FUSE): A modular framework to diagnose differences between hydrological models. Water Resources Research, 2008, 44, .	4.2	461
58	Choosing Regional Futures: Challenges and choices in building integrated models to support longâ€term regional planning in New Zealand*. Regional Science Policy and Practice, 2008, 1, 85-108.	1.6	32
59	Spatial Interpolation of Daily Potential Evapotranspiration for New Zealand Using a Spline Model. Journal of Hydrometeorology, 2007, 8, 430-438.	1.9	64
60	Catchment Classification and Hydrologic Similarity. Geography Compass, 2007, 1, 901-931.	2.7	602
61	Localized erosion affects national carbon budget. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	35
62	Improved eco-hydrological classification of rivers. River Research and Applications, 2005, 21, 609-628.	1.7	101
63	Scale and scaling in hydrology. Hydrological Processes, 2004, 18, 1369-1371.	2.6	29
64	Application of TOPNET in the distributed model intercomparison project. Journal of Hydrology, 2004, 298, 178-201.	5.4	104
65	Predicting space-time variability of hourly streamflow and the role of climate seasonality: Mahurangi Catchment, New Zealand. Hydrological Processes, 2003, 17, 2171-2193.	2.6	27
66	The relative roles of climate, soil, vegetation and topography in determining seasonal and long-term catchment dynamics. Advances in Water Resources, 2003, 26, 295-309.	3.8	77
67	Dominant physical controls on hourly flow predictions and the role of spatial variability: Mahurangi catchment, New Zealand. Advances in Water Resources, 2003, 26, 219-235.	3.8	31
68	Spatial distribution of soil moisture over 6 and 30cm depth, Mahurangi river catchment, New Zealand. Journal of Hydrology, 2003, 276, 254-274.	5.4	88
69	Climate and landscape controls on water balance model complexity over changing timescales. Water Resources Research, 2002, 38, 50-1-50-17.	4.2	152
70	Ecophysiology of Wetland Plant Roots: A Modelling Comparison of Aeration in Relation to Species Distribution. Annals of Botany, 2000, 86, 675-685.	2.9	100
71	A synthesis of space-time variability in storm response: Rainfall, runoff generation, and routing. Water Resources Research, 1999, 35, 2469-2485.	4.2	112
72	Modeling the spatial variability of subsurface runoff using a topographic index. Water Resources Research, 1997, 33, 1061-1073.	4.2	69

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73	A connection between topographically driven runoff generation and channel network structure. Water Resources Research, 1997, 33, 2939-2950.	4.2	40
74	Variable bucket representation of TOPMODEL and investigation of the effects of rainfall heterogeneity. , 1997, 11, 1307-1330.		25
75	Investigating the representative elementary area concept: An approach based on field data. Hydrological Processes, 1995, 9, 291-312.	2.6	89
76	Predicting catchment-scale soil moisture status with limited field measurements. Hydrological Processes, 1995, 9, 445-467.	2.6	28
77	Evaluation of the effects of general circulation models' subgrid variability and patchiness of rainfall and soil moisture on land surface water balance fluxes. Hydrological Processes, 1995, 9, 697-717.	2.6	46
78	Universities and schools offering post-secondary programs related to the forest sector. Forestry Chronicle, 1991, 67, 378-383.	0.6	0
79	Closure to â€œ Improved Fitting for Threeâ€Parameter Muskingum Procedure â€•by Terence O'Donnell, Charles P. Pearson, and Ross A. Woods (May, 1988, Vol. 114, No. 5). Journal of Hydraulic Engineering, 1990, 116, 1057-1058.	1.5	0
80	Improved Fitting for Threeâ€Parameter Muskingum Procedure. Journal of Hydraulic Engineering, 1988, 114, 516-528.	1.5	19