## Hubert H G Savenije

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3465507/publications.pdf

Version: 2024-02-01

244 papers

17,058 citations

72 h-index 20961 115 g-index

394 all docs

394 docs citations

times ranked

394

12668 citing authors

#	Article	IF	CITATIONS
1	Socioâ€hydrology: A new science of people and water. Hydrological Processes, 2012, 26, 1270-1276.	2.6	822
2	Origin and fate of atmospheric moisture over continents. Water Resources Research, 2010, 46, .	4.2	586
3	The water footprint of cotton consumption: An assessment of the impact of worldwide consumption of cotton products on the water resources in the cotton producing countries. Ecological Economics, 2006, 60, 186-203.	5.7	568
4	Twenty-three unsolved problems in hydrology (UPH) – a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.	2.6	474
5	Towards an automated SAR-based flood monitoring system: Lessons learned from two case studies. Physics and Chemistry of the Earth, 2011, 36, 241-252.	2.9	356
6	Water saving through international trade of agricultural products. Hydrology and Earth System Sciences, 2006, 10, 455-468.	4.9	325
7	The importance of interception and why we should delete the term evapotranspiration from our vocabulary. Hydrological Processes, 2004, 18, 1507-1511.	2.6	305
8	Elements of a flexible approach for conceptual hydrological modeling: 1. Motivation and theoretical development. Water Resources Research, 2011, 47, .	4.2	269
9	What can flux tracking teach us about water age distribution patterns and their temporal dynamics?. Hydrology and Earth System Sciences, 2013, 17, 533-564.	4.9	217
10	A framework to assess the realism of model structures using hydrological signatures. Hydrology and Earth System Sciences, 2013, 17, 1893-1912.	4.9	197
11	Spatial and temporal variability of canopy and forest floor interception in a beech forest. Hydrological Processes, 2010, 24, 3011-3025.	2.6	188
12	A distributed stream temperature model using high resolution temperature observations. Hydrology and Earth System Sciences, 2007, 11, 1469-1480.	4.9	184
13	Learning from model improvement: On the contribution of complementary data to process understanding. Water Resources Research, 2008, 44, .	4.2	184
14	Analytical derivation of the Budyko curve based on rainfall characteristics and a simple evaporation model. Water Resources Research, 2009, 45, .	4.2	179
15	Understanding catchment behavior through stepwise model concept improvement. Water Resources Research, 2008, 44, .	4.2	178
16	Food consumption patterns and their effect on water requirement in China. Hydrology and Earth System Sciences, 2008, 12, 887-898.	4.9	176
17	Process consistency in models: The importance of system signatures, expert knowledge, and process complexity. Water Resources Research, 2014, 50, 7445-7469.	4.2	170
18	New definitions for moisture recycling and the relationship with land-use changes in the Sahel. Journal of Hydrology, 1995, 167, 57-78.	5.4	169

#	Article	IF	Citations
19	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
20	Integrated water resources management: Concepts and issues. Physics and Chemistry of the Earth, 2008, 33, 290-297.	2.9	165
21	Length and time scales of atmospheric moisture recycling. Atmospheric Chemistry and Physics, 2011, 11, 1853-1863.	4.9	163
22	On the calibration of hydrological models in ungauged basins: A framework for integrating hard and soft hydrological information. Water Resources Research, 2009, 45, .	4.2	162
23	Uncertainties in transpiration estimates. Nature, 2014, 506, E1-E2.	27.8	157
24	Water as an Economic Good and Demand Management <i>Paradigms with Pitfalls</i> International, 2002, 27, 98-104.	1.0	150
25	The design of an optimal filter for monthly GRACE gravity models. Geophysical Journal International, 2008, 175, 417-432.	2.4	145
26	HESS Opinions & amp; quot; Topography driven conceptual modelling (FLEX-Topo) & amp; quot;. Hydrology and Earth System Sciences, 2010, 14, 2681-2692.	4.9	145
27	Is the groundwater reservoir linear? Learning from data in hydrological modelling. Hydrology and Earth System Sciences, 2006, 10, 139-150.	4.9	144
28	HESS Opinions & Earth System Sciences, 2009, 13, 157-161.	4.9	139
29	Water demand management: A case study of the Heihe River Basin in China. Physics and Chemistry of the Earth, 2005, 30, 408-419.	2.9	138
30	Climate controls how ecosystems size the root zone storage capacity at catchment scale. Geophysical Research Letters, 2014, 41, 7916-7923.	4.0	138
31	Hydroclimatology of the Volta River Basin in West Africa: Trends and variability from 1901 to 2002. Physics and Chemistry of the Earth, 2006, 31, 1180-1188.	2.9	136
32	Socio-hydrologic modeling to understand and mediate the competition for water between agriculture development and environmental health: Murrumbidgee River basin, Australia. Hydrology and Earth System Sciences, 2014, 18, 4239-4259.	4.9	136
33	Analyzing precipitationsheds to understand the vulnerability of rainfall dependent regions. Biogeosciences, 2012, 9, 733-746.	3.3	135
34	Catchment properties, function, and conceptual model representation: is there a correspondence?. Hydrological Processes, 2014, 28, 2451-2467.	2.6	135
35	Towards the sequential assimilation of SAR-derived water stages into hydraulic models using the Particle Filter: proof of concept. Hydrology and Earth System Sciences, 2010, 14, 1773-1785.	4.9	133
36	The influence of river discharge on tidal damping in alluvial estuaries. Journal of Hydrology, 2004, 294, 213-228.	5.4	129

#	Article	IF	CITATIONS
37	Assimilating SAR-derived water level data into a hydraulic model: a case study. Hydrology and Earth System Sciences, 2011, 15, 2349-2365.	4.9	129
38	Contrasting roles of interception and transpiration in the hydrological cycle – Part 2: Moisture recycling. Earth System Dynamics, 2014, 5, 471-489.	7.1	127
39	Hydrological landscape classification: investigating the performance of HAND based landscape classifications in a central European meso-scale catchment. Hydrology and Earth System Sciences, 2011, 15, 3275-3291.	4.9	121
40	Evolving water science in the Anthropocene. Hydrology and Earth System Sciences, 2014, 18, 319-332.	4.9	121
41	A comparison of alternative multiobjective calibration strategies for hydrological modeling. Water Resources Research, 2007, 43, .	4.2	120
42	Model complexity control for hydrologic prediction. Water Resources Research, 2008, 44, .	4.2	120
43	Impact of climate change and development scenarios on flow patterns in the Okavango River. Journal of Hydrology, 2006, 331, 43-57.	5.4	117
44	Spatial variability of evaporation and moisture storage in the swamps of the upper Nile studied by remote sensing techniques. Journal of Hydrology, 2004, 289, 145-164.	5.4	113
45	Should we use a simple or complex model for moisture recycling and atmospheric moisture tracking?. Hydrology and Earth System Sciences, 2013, 17, 4869-4884.	4.9	108
46	The bias in GRACE estimates of continental water storage variations. Hydrology and Earth System Sciences, 2007, 11, 1227-1241.	4.9	107
47	Global root zone storage capacity from satellite-based evaporation. Hydrology and Earth System Sciences, 2016, 20, 1459-1481.	4.9	107
48	Analytical description of tidal dynamics in convergent estuaries. Journal of Geophysical Research, 2008, 113, .	3.3	106
49	Using expert knowledge to increase realism in environmental system models can dramatically reduce the need for calibration. Hydrology and Earth System Sciences, 2014, 18, 4839-4859.	4.9	106
50	A watershed approach to upgrade rainfed agriculture in water scarce regions through Water System Innovations: an integrated research initiative on water for food and rural livelihoods in balance with ecosystem functions. Physics and Chemistry of the Earth, 2004, 29, 1109-1118.	2.9	104
51	Contrasting roles of interception and transpiration in the hydrological cycle – Part 1: Temporal characteristics over land. Earth System Dynamics, 2014, 5, 441-469.	7.1	104
52	Why water is not an ordinary economic good, or why the girl is special. Physics and Chemistry of the Earth, 2002, 27, 741-744.	2.9	101
53	Testing the realism of a topography-driven model (FLEX-Topo) in the nested catchments of the Upper Heihe, China. Hydrology and Earth System Sciences, 2014, 18, 1895-1915.	4.9	101
54	Equifinality, a blessing in disguise?. Hydrological Processes, 2001, 15, 2835-2838.	2.6	100

#	Article	IF	CITATIONS
55	Regional calibration of the Pitman model for the Okavango River. Journal of Hydrology, 2006, 331, 30-42.	5.4	99
56	An approach to identify time consistent model parameters: sub-period calibration. Hydrology and Earth System Sciences, 2013, 17, 149-161.	4.9	98
57	Modelling of the flooding in the Okavango Delta, Botswana, using a hybrid reservoir-GIS model. Journal of Hydrology, 2006, 331, 58-72.	5.4	97
58	Oceanic sources of continental precipitation and the correlation with sea surface temperature. Water Resources Research, 2013, 49, 3993-4004.	4.2	97
59	Improving the Predictive Skill of a Distributed Hydrological Model by Calibration on Spatial Patterns With Multiple Satellite Data Sets. Water Resources Research, 2020, 56, e2019WR026085.	4.2	93
60	Analytical solution for salt intrusion in the Yangtze Estuary, China. Estuarine, Coastal and Shelf Science, 2011, 91, 492-501.	2.1	91
61	Water balance modeling of Upper Blue Nile catchments using a top-down approach. Hydrology and Earth System Sciences, 2011, 15, 2179-2193.	4.9	90
62	Linking the river to the estuary: influence of river discharge on tidal damping. Hydrology and Earth System Sciences, 2014, 18, 287-304.	4.9	89
63	Recent revisions of phosphate rock reserves and resources: a critique. Earth System Dynamics, 2014, 5, 491-507.	7.1	89
64	Predictive model for salt intrusion in estuaries. Journal of Hydrology, 1993, 148, 203-218.	5.4	87
65	Conceptual framework for the management of shared river basins; with special reference to the SADC and EU. Water Policy, 2000, 2, 9-45.	1.5	87
66	Forecast of water demand in Weinan City in China using WDF-ANN model. Physics and Chemistry of the Earth, 2003, 28, 219-224.	2.9	86
67	Constraining Conceptual Hydrological Models With Multiple Information Sources. Water Resources Research, 2018, 54, 8332-8362.	4.2	85
68	Assessing the impact of mixing assumptions on the estimation of streamwater mean residence time. Hydrological Processes, 2010, 24, 1730-1741.	2.6	83
69	Hydroclimatology of the Nile: results from a regional climate model. Hydrology and Earth System Sciences, 2005, 9, 263-278.	4.9	82
70	Using salt intrusion measurements to determine the freshwater discharge distribution over the branches of a multi-channel estuary: The Mekong Delta case. Estuarine, Coastal and Shelf Science, 2008, 77, 433-445.	2.1	81
71	New technique to measure forest floor interception $\hat{a}\in$ an application in a beech forest in Luxembourg. Hydrology and Earth System Sciences, 2007, 11, 695-701.	4.9	79
72	Remote land use impacts on river flows through atmospheric teleconnections. Hydrology and Earth System Sciences, 2018, 22, 4311-4328.	4.9	79

#	Article	IF	CITATIONS
73	From spatially variable streamflow to distributed hydrological models: Analysis of key modeling decisions. Water Resources Research, 2016, 52, 954-989.	4.2	78
74	China's move to higher-meat diet hits water security. Nature, 2008, 454, 397-397.	27.8	77
75	The runoff coefficient as the key to moisture recycling. Journal of Hydrology, 1996, 176, 219-225.	5.4	76
76	Towards more systematic perceptual model development: a case study using 3 Luxembourgish catchments. Hydrological Processes, 2015, 29, 2731-2750.	2.6	75
77	Constraining model parameters on remotely sensed evaporation: justification for distribution in ungauged basins?. Hydrology and Earth System Sciences, 2008, 12, 1403-1413.	4.9	72
78	On the value of combined event runoff and tracer analysis to improve understanding of catchment functioning in a data-scarce semi-arid area. Hydrology and Earth System Sciences, 2011, 15, 2007-2024.	4.9	72
79	Transit time distributions, legacy contamination and variability in biogeochemical $1/f$ <sup><math>\hat{l}\pm </math> scaling: how are hydrological response dynamics linked to water quality at the catchment scale?. Hydrological Processes, 2015, 29, 5241-5256.</sup>	2.6	72
80	Longâ€term morphodynamic evolution and energy dissipation in a coastal plain, tidal embayment. Journal of Geophysical Research, 2008, 113, .	3.3	71
81	Relation between tidal damping and wave celerity in estuaries. Journal of Geophysical Research, 2005, 110, .	3.3	69
82	Dynamics of floodplain-island groundwater flow in the Okavango Delta, Botswana. Journal of Hydrology, 2006, 320, 283-301.	5.4	68
83	Comparison of two model approaches in the Zambezi river basin with regard to model reliability and identifiability. Hydrology and Earth System Sciences, 2006, 10, 339-352.	4.9	66
84	Agro-hydrological evaluation of on-farm rainwater storage systems for supplemental irrigation in Laikipia district, Kenya. Agricultural Water Management, 2005, 73, 21-41.	5.6	65
85	A monthly interception equation based on the statistical characteristics of daily rainfall. Water Resources Research, 2006, 42, .	4.2	65
86	Determinants of tillage frequency among smallholder farmers in two semi-arid areas in Ethiopia. Physics and Chemistry of the Earth, 2008, 33, 183-191.	2.9	65
87	Rainfall-runoff modelling in a catchment with a complex groundwater flow system: application of the Representative Elementary Watershed (REW) approach. Hydrology and Earth System Sciences, 2005, 9, 243-261.	4.9	63
88	Hydro-economic evaluation of rainwater harvesting and management technologies: Farmers' investment options and risks in semi-arid Laikipia district of Kenya. Physics and Chemistry of the Earth, 2005, 30, 772-782.	2.9	63
89	Influence of River Discharge and Dredging on Tidal Wave Propagation: Modaomen Estuary Case. Journal of Hydraulic Engineering, 2012, 138, 885-896.	1.5	63
90	Can ASCAT-derived soil wetness indices reduce predictive uncertainty in well-gauged areas? A comparison with in situ observed soil moisture in an assimilation application. Advances in Water Resources, 2012, 44, 49-65.	3.8	63

#	Article	IF	Citations
91	Influence of soil and climate on root zone storage capacity. Water Resources Research, 2016, 52, 2009-2024.	4.2	62
92	The evolution of root-zone moisture capacities after deforestation: a step towards hydrological predictions under change?. Hydrology and Earth System Sciences, 2016, 20, 4775-4799.	4.9	61
93	A sociohydrological model for smallholder farmers in <scp>M</scp> aharashtra, <scp>I</scp> ndia. Water Resources Research, 2016, 52, 1923-1947.	4.2	61
94	The width of a bankfull channel; Lacey's formula explained. Journal of Hydrology, 2003, 276, 176-183.	5.4	58
95	Towards measurable criteria for the equitable sharing of international water resources. Water Policy, 2002, 4, 19-32.	1.5	57
96	Quantifying hyporheic exchange at high spatial resolution using natural temperature variations along a firstâ€order stream. Water Resources Research, 2011, 47, .	4.2	57
97	Prediction in ungauged estuaries: An integrated theory. Water Resources Research, 2015, 51, 2464-2476.	4.2	57
98	Adaptation of water resources systems to changing society and environment: a statement by the International Association of Hydrological Sciences. Hydrological Sciences Journal, 2016, 61, 2803-2817.	2.6	57
99	A simple analytical expression to describe tidal damping or amplification. Journal of Hydrology, 2001, 243, 205-215.	5.4	55
100	Land use changes and hydrological impacts related to up-scaling of rainwater harvesting and management in upper Ewaso Ng'iro river basin, Kenya. Land Use Policy, 2007, 24, 129-140.	5.6	55
101	A new analytical framework for assessing the effect of seaâ€level rise and dredging on tidal damping in estuaries. Journal of Geophysical Research, 2012, 117, .	3.3	55
102	A Comparison of Global and Regional GRACE Models for Land Hydrology. Surveys in Geophysics, 2008, 29, 335-359.	4.6	54
103	Prediction of flow characteristics using multiple regression and neural networks: A case study in Zimbabwe. Physics and Chemistry of the Earth, 2005, 30, 639-647.	2.9	53
104	Assessment of Gravity Recovery and Climate Experiment (GRACE) temporal signature over the upper Zambezi. Water Resources Research, 2006, 42, .	4.2	53
105	Panta Rhei 2013–2015: global perspectives on hydrology, society and change. Hydrological Sciences Journal, 0, , 1-18.	2.6	53
106	Hydrograph separation using hydrochemical tracers in the Makanya catchment, Tanzania. Physics and Chemistry of the Earth, 2008, 33, 151-156.	2.9	52
107	Salt intrusion model for high-water slack, low-water slack, and mean tide on spread sheet. Journal of Hydrology, 1989, 107, 9-18.	5.4	51
108	Hypersalinity: a dramatic change in the hydrology of Sahelian estuaries. Journal of Hydrology, 1992, 135, 157-174.	5.4	50

#	Article	IF	CITATIONS
109	Water flow dynamics in the Okavango River Basin and Delta––a prerequisite for the ecosystems of the Delta. Physics and Chemistry of the Earth, 2003, 28, 1165-1172.	2.9	50
110	Analytical approach for predicting fresh water discharge in an estuary based on tidal water level observations. Hydrology and Earth System Sciences, 2014, 18, 4153-4168.	4.9	50
111	The protective and attractive covering of a vegetated embankment using coir geotextiles. Hydrology and Earth System Sciences, 2006, 10, 565-574.	4.9	49
112	Water and sustainable development. Natural Resources Forum, 1992, 16, 277-290.	3.6	48
113	An analytical solution for tidal propagation in the Yangtze Estuary, China. Hydrology and Earth System Sciences, 2012, 16, 3327-3339.	4.9	48
114	Impacts of conservation tillage on the hydrological and agronomic performance of & amp;lt;i>Fanya juus in the upper Blue Nile (Abbay) river basin. Hydrology and Earth System Sciences, 2012, 16, 4725-4735.	4.9	48
115	New lessons on the Sudd hydrology learned from remote sensing and climate modeling. Hydrology and Earth System Sciences, 2006, 10, 507-518.	4.9	47
116	Soft combination of local models in a multi-objective framework. Hydrology and Earth System Sciences, 2007, 11, 1797-1809.	4.9	47
117	The effect of system innovations on water productivity in subsistence rainfed agricultural systems in semi-arid Tanzania. Agricultural Water Management, 2011, 98, 1696-1703.	5.6	47
118	The importance of topography-controlled sub-grid process heterogeneity and semi-quantitative prior constraints in distributed hydrological models. Hydrology and Earth System Sciences, 2016, 20, 1151-1176.	4.9	47
119	Global phosphorus recovery from wastewater for agricultural reuse. Hydrology and Earth System Sciences, 2018, 22, 5781-5799.	4.9	47
120	On the potential of MetOp ASCATâ€derived soil wetness indices as a new aperture for hydrological monitoring and prediction: a field evaluation over Luxembourg. Hydrological Processes, 2012, 26, 2346-2359.	2.6	46
121	Redressing the balance: quantifying net intercatchment groundwater flows. Hydrology and Earth System Sciences, 2018, 22, 6415-6434.	4.9	45
122	The water footprint of bioenergy from Jatropha curcas L Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, E92-E92.	7.1	44
123	The importance of aspect for modelling the hydrological response in a glacier catchment in Central Asia. Hydrological Processes, 2017, 31, 2842-2859.	2.6	44
124	Revisiting linearized oneâ€dimensional tidal propagation. Journal of Geophysical Research, 2011, 116, .	3.3	43
125	The effect of spatial throughfall patterns on soil moisture patterns at the hillslope scale. Hydrology and Earth System Sciences, 2013, 17, 1749-1763.	4.9	42
126	HESS Opinions Catchments as meta-organisms – a new blueprint for hydrological modelling. Hydrology and Earth System Sciences, 2017, 21, 1107-1116.	4.9	42

#	Article	IF	Citations
127	The effect of forcing and landscape distribution on performance and consistency of model structures. Hydrological Processes, 2015, 29, 3727-3743.	2.6	41
128	Impact of the Sudd wetland on the Nile hydroclimatology. Water Resources Research, 2005, 41, .	4.2	39
129	Evaluation of community-driven smallholder irrigation in dryland South Pare Mountains, Tanzania: A case study of Manoo micro dam. Physics and Chemistry of the Earth, 2007, 32, 1090-1097.	2.9	39
130	Investigating the water balance of on-farm techniques for improved crop productivity in rainfed systems: A case study of Makanya catchment, Tanzania. Physics and Chemistry of the Earth, 2009, 34, 93-98.	2.9	39
131	Mixing in alluvial estuaries. , 2005, , 109-136.		38
132	Analytical Expression for Tidal Damping in Alluvial Estuaries. Journal of Hydraulic Engineering, 1998, 124, 615-618.	1.5	37
133	A simple topography-driven and calibration-free runoff generation module. Hydrology and Earth System Sciences, 2019, 23, 787-809.	4.9	37
134	Determination of evaporation from a catchment water balance at a monthly time scale. Hydrology and Earth System Sciences, 1997, 1, 93-100.	4.9	36
135	Looking beyond general metrics for model comparison – lessons from an international model intercomparison study. Hydrology and Earth System Sciences, 2017, 21, 423-440.	4.9	34
136	Lagrangian Solution of St. Venant's Equations for Alluvial Estuary. Journal of Hydraulic Engineering, 1992, 118, 1153-1163.	1.5	33
137	Comparing the Normalized Difference Infrared Index (NDII) with root zone storage in a lumped conceptual model. Hydrology and Earth System Sciences, 2016, 20, 3361-3377.	4.9	33
138	Salt intrusion in alluvial estuaries. , 2005, , 137-184.		31
139	Tree rainfall interception measured by stem compression. Water Resources Research, 2008, 44, .	4.2	31
140	Composition and driving mechanisms of longitudinal tidal average salinity dispersion in estuaries. Journal of Hydrology, 1993, 144, 127-141.	5.4	30
141	Determination of Estuary Parameters on Basis of Lagrangian Analysis. Journal of Hydraulic Engineering, 1993, 119, 628-642.	1.5	30
142	Time to break the silence around virtual-water imports. Nature, 2008, 453, 587-587.	27.8	30
143	Estimating bankfull discharge and depth in ungauged estuaries. Water Resources Research, 2015, 51, 2298-2316.	4.2	30
144	Quantifying the effect of in-stream rock clasts on the retardation of heat along a stream. Advances in Water Resources, 2010, 33, 1417-1425.	3.8	29

#	Article	IF	CITATIONS
145	Inferring catchment precipitation by doing hydrology backward: A test in 24 small and mesoscale catchments in Luxembourg. Water Resources Research, 2012, 48, .	4.2	29
146	Water abstraction along the lower Yangtze River, China, and its impact on water discharge into the estuary. Physics and Chemistry of the Earth, 2012, 47-48, 76-85.	2.9	29
147	Analytical approach for determining the mean water level profile in an estuary with substantial fresh water discharge. Hydrology and Earth System Sciences, 2016, 20, 1177-1195.	4.9	29
148	Modelling subsurface storm flow with the Representative Elementary Watershed (REW) approach: application to the Alzette River Basin. Hydrology and Earth System Sciences, 2006, 10, 937-955.	4.9	28
149	A predictive model for salt intrusion in estuaries applied to the Yangtze estuary. Journal of Hydrology, 2015, 529, 1336-1349.	5.4	28
150	Hydroclimatic variability and predictability: a survey of recent research. Hydrology and Earth System Sciences, 2017, 21, 3777-3798.	4.9	28
151	Assessment of rainwater retention in agricultural land and crop yield increase due to conservation tillage in Ewaso Ng'iro river basin, Kenya. Physics and Chemistry of the Earth, 2006, 31, 910-918.	2.9	27
152	Measurement and modelling of transpiration of a rain-fed citrus orchard under subhumid tropical conditions. Agricultural Water Management, 2007, 87, 200-208.	5.6	26
153	A constraint-based search algorithm for parameter identification of environmental models. Hydrology and Earth System Sciences, 2014, 18, 4861-4870.	4.9	26
154	Behind the scenes of streamflow model performance. Hydrology and Earth System Sciences, 2021, 25, 1069-1095.	4.9	26
155	Spatial rainfall variability and runoff response during an extreme event in a semi-arid catchment in the South Pare Mountains, Tanzania. Hydrology and Earth System Sciences, 2009, 13, 1659-1670.	4.9	26
156	Hydrological Impacts of Flood Storage and Management on Irrigation Water Abstraction in Upper Ewaso Ng'iro River Basin, Kenya. Water Resources Management, 2008, 22, 1859-1879.	3.9	25
157	Predicting the ungauged basin: model validation and realism assessment. Frontiers in Earth Science, 2015, 3, .	1.8	25
158	Accounting for the influence of vegetation and landscape improves model transferability in a tropical savannah region. Water Resources Research, 2016, 52, 7999-8022.	4.2	25
159	Towards improved management of shared river basins: lessons from the Maseru Conference. Water Policy, 2000, 2, 47-63.	1.5	24
160	Coupling of digital elevation model and rainfall-runoff model in storm drainage network design. Physics and Chemistry of the Earth, 2002, 27, 755-764.	2.9	24
161	Technical note: Using distributed temperature sensing for Bowen ratio evaporation measurements. Hydrology and Earth System Sciences, 2018, 22, 819-830.	4.9	24
162	Towards a better understanding of water partitioning processes for improved smallholder rainfed agricultural systems: A case study of Makanya catchment, Tanzania. Physics and Chemistry of the Earth, 2007, 32, 1082-1089.	2.9	23

#	Article	IF	CITATIONS
163	Revised predictive equations for salt intrusion modelling in estuaries. Hydrology and Earth System Sciences, 2015, 19, 2791-2803.	4.9	23
164	Predicting the salt water intrusion in the Shatt al-Arab estuary using an analytical approach. Hydrology and Earth System Sciences, 2016, 20, 4031-4042.	4.9	23
165	Forest Floor Interception. Ecological Studies, 2011, , 445-454.	1.2	23
166	Water as an economic good and water tariff design. Physics and Chemistry of the Earth, 2003, 28, 209-217.	2.9	22
167	Coir geotextile for slope stabilization and cultivation – A case study in a highland region of Kerala, South India. Physics and Chemistry of the Earth, 2012, 47-48, 135-138.	2.9	22
168	Impact of climate variability on the hydrology of the Sudd wetland: signals derived from long term (1900–2000) water balance computations. Wetlands Ecology and Management, 2014, 22, 191-198.	1.5	22
169	Understanding the Information Content in the Hierarchy of Model Development Decisions: Learning From Data. Water Resources Research, 2021, 57, e2020WR027948.	4.2	22
170	Identification of groundwater flow systems using geological mapping and chemical spring analysis in South Pare Mountains, Tanzania. Physics and Chemistry of the Earth, 2007, 32, 1015-1022.	2.9	21
171	Water valuation at basin scale with application to western India. Ecological Economics, 2011, 70, 2416-2428.	<b>5.7</b>	20
172	C-GEM (v 1.0): a new, cost-efficient biogeochemical model for estuaries and its application to a funnel-shaped system. Geoscientific Model Development, 2014, 7, 1271-1295.	3.6	20
173	Modelling field scale water partitioning using on-site observations in sub-Saharan rainfed agriculture. Hydrology and Earth System Sciences, 2010, 14, 627-638.	4.9	19
174	Seasonal behaviour of tidal damping and residual water level slope in the Yangtze River estuary: identifying the critical position and river discharge for maximum tidal damping. Hydrology and Earth System Sciences, 2019, 23, 2779-2794.	4.9	19
175	Calculation methods to assess the value of upstream water flows and storage as a function of downstream benefits. Physics and Chemistry of the Earth, 2002, 27, 977-982.	2.9	18
176	Anomaly in the rainfall-runoff behaviour of the Meuse catchment. Climate, land-use, or land-use management?. Hydrology and Earth System Sciences, 2009, 13, 1727-1737.	4.9	18
177	Quantifying spatial and temporal discharge dynamics of an event in a first order stream, using distributed temperature sensing. Hydrology and Earth System Sciences, 2011, 15, 1945-1957.	4.9	18
178	Saline water intrusion in relation to strong winds during winter cold outbreaks: North Branch of the Yangtze Estuary. Journal of Hydrology, 2019, 574, 1099-1109.	5.4	18
179	Improved Understanding of the Link Between Catchmentâ€Scale Vegetation Accessible Storage and Satelliteâ€Derived Soil Water Index. Water Resources Research, 2020, 56, e2019WR026365.	4.2	18
180	Learning from satellite observations: increased understanding of catchment processes through stepwise model improvement. Hydrology and Earth System Sciences, 2021, 25, 957-982.	4.9	18

#	Article	IF	Citations
181	Modeling runoff generation in the Geer river basin with improved model parameterizations to the REW approach. Physics and Chemistry of the Earth, 2005, 30, 285-296.	2.9	17
182	Influence of Rain and Evaporation on Salt Intrusion in Estuaries. Journal of Hydraulic Engineering, 1988, 114, 1509-1524.	1.5	16
183	A Parsimonious Hydrological Model for a Data Scarce Dryland Region. Water Resources Management, 2012, 26, 909-926.	3.9	16
184	A coupled analytical model for salt intrusion and tides in convergent estuaries. Hydrological Sciences Journal, 2016, 61, 402-419.	2.6	16
185	Using altimetry observations combined with GRACE to select parameter sets of a hydrological model in a data-scarce region. Hydrology and Earth System Sciences, 2020, 24, 3331-3359.	4.9	16
186	Sustainability analysis of two participatory watershed projects in Kerala. Physics and Chemistry of the Earth, 2008, 33, 1-12.	2.9	15
187	An Analytical Approach to Determining Resonance in Semi-Closed Convergent Tidal Channels. Coastal Engineering Journal, 2016, 58, 1650009-1-1650009-37.	1.9	15
188	The physics behind Van der Burgh's empirical equation, providing a new predictive equation for salinity intrusion in estuaries. Hydrology and Earth System Sciences, 2017, 21, 3287-3305.	4.9	15
189	New analytical equation for dispersion in estuaries with a distinct ebb-flood channel system. Estuarine, Coastal and Shelf Science, 2008, 79, 7-16.	2.1	14
190	Revisiting wind speed measurements using actively heated fiber optics: a wind tunnel study. Atmospheric Measurement Techniques, 2020, 13, 5423-5439.	3.1	14
191	Ecosystem adaptation to climate change: the sensitivity of hydrological predictions to time-dynamic model parameters. Hydrology and Earth System Sciences, 2022, 26, 1295-1318.	4.9	14
192	Comment on "A note on salt intrusion in funnel-shaped estuaries: Application to the Incomati estuary, Mozambique―by. Estuarine, Coastal and Shelf Science, 2006, 68, 703-706.	2.1	13
193	Hydrological model coupling with ANNs. Hydrology and Earth System Sciences, 2007, 11, 1869-1881.	4.9	13
194	Determining spatial variability of dry spells: a Markov-based method, applied to the Makanya catchment, Tanzania. Hydrology and Earth System Sciences, 2013, 17, 2161-2170.	4.9	13
195	Decoupling of a Douglas fir canopy: a look into the subcanopy with continuous vertical temperature profiles. Biogeosciences, 2020, 17, 6423-6439.	3.3	13
196	Numerical simulations of runoff generation with surface water–groundwater interactions in the Alzette river alluvial plain (Luxembourg). Physics and Chemistry of the Earth, 2005, 30, 277-284.	2.9	12
197	The importance of proper hydrology in the forest coverâ€water yield debate: commentary on Ellison <i>et al</i> . (2012) <i>Global Change Biology</i> , <i>18, 806–820</i> . Global Change Biology, 2012, 18, 2677-2680.	9.5	12
198	On the future of journal publications in hydrology. Hydrology Research, 2014, 45, 515-518.	2.7	12

#	Article	IF	Citations
199	The water value-flow concept. Physics and Chemistry of the Earth, 2003, 28, 175-182.	2.9	11
200	An analytical model for soil-atmosphere feedback. Hydrology and Earth System Sciences, 2012, 16, 1863-1878.	4.9	11
201	Frictional interactions between tidal constituents in tide-dominated estuaries. Ocean Science, 2018, 14, 769-782.	3.4	10
202	Contribution of understory evaporation in aÂtropical wet forest during the dry season. Hydrology and Earth System Sciences, 2020, 24, 2179-2206.	4.9	10
203	Joint Editorialâ€"On the future of journal publications in hydrology. Hydrological Sciences Journal, 2014, 59, 955-958.	2.6	9
204	Joint editorial: Fostering innovation and improving impact assessment for journal publications in hydrology. Water Resources Research, 2016, 52, 2399-2402.	4.2	9
205	Thermodynamics of saline and fresh water mixing in estuaries. Earth System Dynamics, 2018, 9, 241-247.	7.1	9
206	Energy states of soil water – a thermodynamic perspective on soil water dynamics and storage-controlled streamflow generation in different landscapes. Hydrology and Earth System Sciences, 2019, 23, 971-987.	4.9	9
207	Modelling rainfall–runoff processes of the Chemoga and Jedeb meso-scale catchments in the Abay/Upper Blue Nile basin, Ethiopia. Hydrological Sciences Journal, 0, , 1-18.	2.6	8
208	Rainfall-runoff modelling using river-stage time series in the absence of reliable discharge information: a case study in the semi-arid Mara River basin. Hydrology and Earth System Sciences, 2018, 22, 5081-5095.	4.9	8
209	A socio-hydrological comparative assessment explaining regional variances in suicide rate amongst farmers in Maharashtra, India. Proceedings of the International Association of Hydrological Sciences, 0, 373, 115-118.	1.0	8
210	On the future of journal publications in hydrology. Water Resources Research, 2014, 50, 2795-2797.	4.2	7
211	Satellite-based drought analysis in the Zambezi River Basin: Was the 2019 drought the most extreme in several decades as locally perceived?. Journal of Hydrology: Regional Studies, 2021, 34, 100789.	2.4	7
212	Improving the Representation of Longâ€Term Storage Variations With Conceptual Hydrological Models in Dataâ€Scarce Regions. Water Resources Research, 2021, 57, e2020WR028837.	4.2	7
213	Watershed development practices for ecorestoration in a tribal area $\hat{a}\in$ A case study in Attappady hills, South India. Physics and Chemistry of the Earth, 2012, 47-48, 58-63.	2.9	6
214	Asymptotic behavior of tidal damping in alluvial estuaries. Journal of Geophysical Research: Oceans, 2013, 118, 6107-6122.	2.6	6
215	Progressive change of tidal wave characteristics from the eastern Yellow Sea to the Asan Bay, a strongly convergent bay in the west coast of Korea. Ocean Dynamics, 2017, 67, 1137-1150.	2.2	6
216	Socio-hydrologic modeling to understand and mediate the competition for water between agriculture development and environmental health: Murrumbidgee River basin, Australia. Hydrology and Earth System Sciences, 2014, 18, 4239-4259.	4.9	6

#	Article	IF	CITATIONS
217	Some hydrological challenges in understanding discharge generation processes in the Rhine and Meuse basins. Physics and Chemistry of the Earth, 2005, 30, 262-266.	2.9	5
218	HESS Opinions: Science in today's media landscape $\hat{a}\in$ " challenges and lessons from hydrologists and journalists. Hydrology and Earth System Sciences, 2018, 22, 3589-3599.	4.9	5
219	HESS Opinions: Linking Darcy's equation to the linear reservoir. Hydrology and Earth System Sciences, 2018, 22, 1911-1916.	4.9	5
220	Invigorating Hydrological Research Through Journal Publications. Water Resources Research, 2020, 56, .	4.2	5
221	Vapor plumes in a tropical wet forest: spotting the invisible evaporation. Hydrology and Earth System Sciences, 2021, 25, 619-635.	4.9	5
222	Intercepted by lichens. Nature Geoscience, 2018, 11, 548-549.	12.9	4
223	Evaluating low-cost topographic surveys for computations of conveyance. Geoscientific Instrumentation, Methods and Data Systems, 2022, 11, 1-23.	1.6	4
224	Detecting nighttime inversions in the interior of a Douglas fir canopy. Agricultural and Forest Meteorology, 2022, 321, 108960.	4.8	4
225	Leonardo da Vinci's scriptures as benchmark papers in hydrology. Hydrological Processes, 2006, 20, 1653-1655.	2.6	3
226	Participatory research using coir geotextiles in watershed management – A case study in south India. Physics and Chemistry of the Earth, 2008, 33, 41-47.	2.9	3
227	Joint editorial: Invigorating hydrological research through journal publications. Hydrology and Earth System Sciences, 2018, 22, 5735-5739.	4.9	3
228	How climate variations are reflected in root zone storage capacities. Physics and Chemistry of the Earth, 2019, 112, 83-90.	2.9	3
229	Water Value Flows Upstream. Water (Switzerland), 2020, 12, 2642.	2.7	3
230	Simulating Climate Impacts on Water Resources: Experience from the Okavango River, Southern Africa. Water Science and Technology Library, 2009, , 243-265.	0.3	3
231	Tide and estuary shape. , 2005, , 23-68.		3
232	Preface to the Special Issue on "Hydrology from Space― Surveys in Geophysics, 2008, 29, 241-245.	4.6	2
233	Joint Editorial & Diagrams; Quot; On the future of journal publications in hydrology was and Earth System Sciences, 2014, 18, 2433-2435.	4.9	2
234	Variations in Canopy Cover and Its Relationship with Canopy Water and Temperature in the Miombo Woodland Based on Satellite Data. Hydrology, 2020, 7, 58.	3.0	2

#	Article	IF	CITATIONS
235	Socio-Hydrological Approach to the Evaluation of Global Fertilizer Substitution by Sustainable Struvite Precipitants from Wastewater. Proceedings of the International Association of Hydrological Sciences, 0, 376, 83-86.	1.0	2
236	Joint Editorial: Fostering innovation and improving impact assessment for journal publications in hydrology. Hydrology and Earth System Sciences, 2016, 20, 1081-1084.	4.9	2
237	Maximum power of saline and fresh water mixing in estuaries. Earth System Dynamics, 2019, 10, 667-684.	7.1	2
238	Writing a paper for publication in a journal: Experiences from past WaterNet/Warfsa symposia. Physics and Chemistry of the Earth, 2007, 32, 1406-1412.	2.9	1
239	Corrigendum to "A distributed stream temperature model using high resolution temperature observations" published in Hydrol. Earth Syst. Sci., 11, 1469†1480, 2007. Hydrology and Earth System Sciences, 2011, 15, 3091-3091.	4.9	1
240	5.8 Socio-political impacts of water modellingRapporteur: Hubert Savenije. Participants: 40. Water Policy, 2001, 3, S183.	1.5	0
241	Determining slack tide with a GPS receiver on an anchored buoy. Hydrology and Earth System Sciences, 2014, 18, 2599-2613.	4.9	O
242	Water Storage in Africa from the Optimised GRACE Monthly Models: Iterative Approach. International Association of Geodesy Symposia, 2010, , 579-586.	0.4	0
243	Three creative solutions to the training challenge. Waterlines, 1997, 15, 23-24.	0.4	O
244	Joint editorial: Invigorating hydrological research through journal publications. Proceedings of the International Association of Hydrological Sciences, 0, 380, 3-8.	1.0	0