Hessel C Winsemius

List of Publications by Year
in descending order

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57	6,610	87843 38	138417 58
papers	citations	h-index	g-index

80	80	80	6195
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A decade of Predictions in Ungauged Basins (PUB)â€"a review. Hydrological Sciences Journal, 2013, 58, 1198-1255.	1.2	821
2	Global drivers of future river flood risk. Nature Climate Change, 2016, 6, 381-385.	8.1	661
3	A framework for global river flood risk assessments. Hydrology and Earth System Sciences, 2013, 17, 1871-1892.	1.9	327
4	A global reanalysis of storm surges and extreme sea levels. Nature Communications, 2016, 7, 11969.	5.8	323
5	Assessing flood risk at the global scale: model setup, results, and sensitivity. Environmental Research Letters, 2013, 8, 044019.	2.2	279
6	Declining vulnerability to river floods and the global benefits of adaptation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2271-80.	3.3	274
7	A global framework for future costs and benefits of river-flood protection in urban areas. Nature Climate Change, 2017, 7, 642-646.	8.1	231
8	Strong influence of El NiÃ±o Southern Oscillation on flood risk around the world. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15659-15664.	3.3	210
9	Usefulness and limitations of global flood risk models. Nature Climate Change, 2015, 5, 712-715.	8.1	210
10	A framework to assess the realism of model structures using hydrological signatures. Hydrology and Earth System Sciences, 2013, 17, 1893-1912.	1.9	197
11	FLOPROS: an evolving global database of flood protection standards. Natural Hazards and Earth System Sciences, 2016, 16, 1049-1061.	1.5	186
12	Estimation of predictive hydrological uncertainty using quantile regression: examples from the National Flood Forecasting System (England and Wales). Hydrology and Earth System Sciences, 2011, 15, 255-265.	1.9	171
13	On the calibration of hydrological models in ungauged basins: A framework for integrating hard and soft hydrological information. Water Resources Research, 2009, 45, .	1.7	162
14	Disaster risk, climate change, and poverty: assessing the global exposure of poor people to floods and droughts. Environment and Development Economics, 2018, 23, 328-348.	1.3	153
15	Dependence between high sea-level and high river discharge increases flood hazard in global deltas and estuaries. Environmental Research Letters, 2018, 13, 084012.	2.2	152
16	The design of an optimal filter for monthly GRACE gravity models. Geophysical Journal International, 2008, 175, 417-432.	1.0	145
17	The credibility challenge for global fluvial flood risk analysis. Environmental Research Letters, 2016, 11, 094014.	2.2	139
18	Review article: Natural hazard risk assessments at the global scale. Natural Hazards and Earth System Sciences, 2020, 20, 1069-1096.	1.5	132

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19	Automated global water mapping based on wide-swath orbital synthetic-aperture radar. Hydrology and Earth System Sciences, 2013, 17, 651-663.	1.9	130
20	Measuring compound flood potential from river discharge and storm surge extremes at the global scale. Natural Hazards and Earth System Sciences, 2020, 20, 489-504.	1.5	127
21	The bias in GRACE estimates of continental water storage variations. Hydrology and Earth System Sciences, 2007, 11, 1227-1241.	1.9	107
22	Compound simulation of fluvial floods and storm surges in a global coupled riverâ€coast flood model: Model development and its application to 2007 <scp>C</scp>yclone <scp>S</scp>idr in <scp>B</scp>angladesh. Journal of Advances in Modeling Earth Systems, 2017, 9, 1847-1862.	1.3	102
23	Advancing catchment hydrology to deal with predictions under change. Hydrology and Earth System Sciences, 2014, 18, 649-671.	1.9	83
24	Global-scale benefitâ€“cost analysis of coastal flood adaptation to different flood risk drivers using structural measures. Natural Hazards and Earth System Sciences, 2020, 20, 1025-1044.	1.5	80
25	A comparison of two global datasets of extreme sea levels and resulting flood exposure. Earth's Future, 2017, 5, 379-392.	2.4	78
26	Constraining model parameters on remotely sensed evaporation: justification for distribution in ungauged basins?. Hydrology and Earth System Sciences, 2008, 12, 1403-1413.	1.9	72
27	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.	1.9	66
28	Hydrological drought forecasting and skill assessment for the Limpopo River basin, southern Africa. Hydrology and Earth System Sciences, 2015, 19, 1695-1711.	1.9	66
29	A first collective validation of global fluvial flood models for major floods in Nigeria and Mozambique. Environmental Research Letters, 2018, 13, 104007.	2.2	66
30	Influence of soil and climate on root zone storage capacity. Water Resources Research, 2016, 52, 2009-2024.	1.7	62
31	The co-incidence of storm surges and extreme discharges within the Rhineâ€“Meuse Delta. Environmental Research Letters, 2015, 10, 035005.	2.2	61
32	The effect of surge on riverine flood hazard and impact in deltas globally. Environmental Research Letters, 2020, 15, 104007.	2.2	58
33	A Comparison of Global and Regional GRACE Models for Land Hydrology. Surveys in Geophysics, 2008, 29, 335-359.	2.1	54
34	Assessment of Gravity Recovery and Climate Experiment (GRACE) temporal signature over the upper Zambezi. Water Resources Research, 2006, 42, .	1.7	53
35	The potential value of seasonal forecasts in a changing climate in southern Africa. Hydrology and Earth System Sciences, 2014, 18, 1525-1538.	1.9	51
36	Seasonal predictions of agro-meteorological drought indicators for the Limpopo basin. Hydrology and Earth System Sciences, 2015, 19, 2577-2586.	1.9	43

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37	The effect of forcing and landscape distribution on performance and consistency of model structures. Hydrological Processes, 2015, 29, 3727-3743.	1.1	41
38	Cutting the costs of coastal protection by integrating vegetation in flood defences. Nature Communications, 2021, 12, 6533.	5.8	39
39	Spatiotemporal patterns of extreme sea levels along the western North-Atlantic coasts. Scientific Reports, 2019, 9, 3391.	1.6	35
40	Evaluating the impact of model complexity on flood wave propagation and inundation extent with a hydrologicâ€“hydrodynamic model coupling framework. Natural Hazards and Earth System Sciences, 2019, 19, 1723-1735.	1.5	32
41	GLOFRIM v1.0 â€“ A globally applicable computational framework for integrated hydrologicalâ€“hydrodynamic modelling. Geoscientific Model Development, 2017, 10, 3913-3929.	1.3	31
42	Assessing the impact of hydrodynamics on large-scale flood wave propagation â€“ a case study for the Amazon Basin. Hydrology and Earth System Sciences, 2017, 21, 117-132.	1.9	26
43	Benchmarking flexible meshes and regular grids for large-scale fluvial inundation modelling. Advances in Water Resources, 2018, 121, 350-360.	1.7	20
44	A hydrography upscaling method for scale-invariant parametrization of distributed hydrological models. Hydrology and Earth System Sciences, 2021, 25, 5287-5313.	1.9	19
45	Improved Understanding of the Link Between Catchmentâ€Scale Vegetation Accessible Storage and Satelliteâ€Derived Soil Water Index. Water Resources Research, 2020, 56, e2019WR026365.	1.7	18
46	Rapid setup of hydrological and hydraulic models using OpenStreetMap and the SRTM derived digital elevation model. Environmental Modelling and Software, 2014, 61, 98-105.	1.9	17
47	A Review of Coupled Hydrologic-Hydraulic Models for Floodplain Assessments in Africa: Opportunities and Challenges for Floodplain Wetland Management. Hydrology, 2021, 8, 44.	1.3	17
48	Community Mapping Supports Comprehensive Urban Flood Modeling for Flood Risk Management in a Data-Scarce Environment. Frontiers in Earth Science, 2020, 8, .	0.8	16
49	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.	1.9	16
50	Contextualising seasonal climate forecasts by integrating local knowledge on drought in Malawi. Climate Services, 2022, 25, 100268.	1.0	11
51	Future scenarios for earthquake and flood risk in Eastern Europe and Central Asia. Earth's Future, 2017, 5, 693-714.	2.4	9
52	Commentary: The Need for a High-Accuracy, Open-Access Global DEM. Frontiers in Earth Science, 2019, 7, .	0.8	9
53	A Flood Risk Framework Capturing the Seasonality of and Dependence Between Rainfall and Sea Levelsâ€”An Application to Ho Chi Minh City, Vietnam. Water Resources Research, 2022, 58, .	1.7	9
54	Impact of hydraulic model resolution and loss of life model modification on flood fatality risk estimation: Case study of the Bommelerwaard, The Netherlands. Journal of Flood Risk Management, 2021, 14, e12713.	1.6	8

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55	The benefits of coastal adaptation through conservation of foreshore vegetation. Journal of Flood Risk Management, 2022, 15, .	1.6	6
56	Corrigendum to "Seasonal predictions of agro-meteorological drought indicators for the Limpopo basin" published in Hydrol. Earth Syst. Sci., 19, 2577â€“2586, 2015. Hydrology and Earth System Sciences, 2015, 19, 2637-2637.	1.9	0
57	Review article: Natural hazard risk assessments at the global scale. , 0, , .		0