Stefan Uhlenbrook

List of Publications by Year
in descending order

72 papers	3,662 citations	109264 35 h-index	138417 58 g-index
73 all docs	73 docs citations	73 times ranked	4374 citing authors

#	Article	IF	Citations
1	Prediction uncertainty of conceptual rainfall-runoff models caused by problems in identifying model parameters and structure. Hydrological Sciences Journal, 1999, 44, 779-797.	1.2	226
2	Hydrograph separations in a mesoscale mountainous basin at event and seasonal timescales. Water Resources Research, 2002, 38, 31-1-31-14.	1.7	197
3	Hydrological process representation at the meso-scale: the potential of a distributed, conceptual catchment model. Journal of Hydrology, 2004, 291, 278-296.	2.3	145
4	Understanding recent land use and land cover dynamics in the source region of the Upper Blue Nile, Ethiopia: Spatially explicit statistical modeling of systematic transitions. Agriculture, Ecosystems and Environment, 2013, 165, 98-117.	2.5	142
5	Quantifying uncertainties in tracer-based hydrograph separations: a case study for two-, three- and five-component hydrograph separations in a mountainous catchment. Hydrological Processes, 2003, 17, 431-453.	1.1	140
6	Sensitivity analyses of a distributed catchment model to verify the model structure. Journal of Hydrology, 2005, 310, 216-235.	2.3	136
7	Climate-change impact assessment for inlet-interrupted coastlines. Nature Climate Change, 2013, 3, 83-87.	8.1	126
8	Streamflow trends and climate linkages in the source region of the Yellow River, China. Hydrological Processes, 2011, 25, 3399-3411.	1.1	120
9	Trends in temperature and rainfall extremes in the Yellow River source region, China. Climatic Change, 2012, 110, 403-429.	1.7	116
10	Modeling spatial patterns of saturated areas: An evaluation of different terrain indices. Water Resources Research, 2004, 40, .	1.7	107
11	Ecosystem-based water security and the Sustainable Development Goals (SDGs). Ecohydrology and Hydrobiology, 2018, 18, 317-333.	1.0	102
12	Assessing the Impact of Areal Precipitation Input on Streamflow Simulations Using the SWAT Model1. Journal of the American Water Resources Association, 2011, 47, 179-195.	1.0	100
13	Future hydrology and climate in the River Nile basin: a review. Hydrological Sciences Journal, 2011, 56, 199-211.	1.2	98
14	Rethinking water for SDG 6. Nature Sustainability, 2020, 3, 346-347.	11.5	87
15	An analysis of snow cover changes in the Himalayan region using MODIS snow products and in-situ temperature data. Climatic Change, 2011, 108, 391-400.	1.7	84
16	Experimental evidence of fast groundwater responses in a hillslope/floodplain area in the Black Forest Mountains, Germany. Hydrological Processes, 2004, 18, 3305-3322.	1.1	75
17	Catchment hydrologyâ€"a science in which all processes are preferential. Hydrological Processes, 2006, 20, 3581-3585.	1.1	75
18	Towards more systematic perceptual model development: a case study using 3 Luxembourgish catchments. Hydrological Processes, 2015, 29, 2731-2750.	1.1	75

#	Article	IF	Citations
19	A Review of the SDG 6 Synthesis Report 2018 from an Education, Training, and Research Perspective. Water (Switzerland), 2018, 10, 1353.	1.2	69
20	Downscaling daily precipitation over the Yellow River source region in China: a comparison of three statistical downscaling methods. Theoretical and Applied Climatology, 2013, 112, 447-460.	1.3	67
21	On the value of experimental data to reduce the prediction uncertainty of a process-oriented catchment model. Environmental Modelling and Software, 2005, 20, 19-32.	1.9	66
22	Is the current flood of data enough? A treatise on research needs for the improvement of flood modelling. Hydrological Processes, 2012, 26, 153-158.	1.1	65
23	Climate trends and impacts on crop production in the Koshi River basin of Nepal. Regional Environmental Change, 2014, 14, 1291-1301.	1.4	62
24	Scaling of dominant runoff generation processes: Nested catchments approach using multiple tracers. Water Resources Research, 2008, 44, .	1.7	59
25	Comparison of groundwater recharge estimation methods for the semi-arid Nyamandhlovu area, Zimbabwe. Hydrogeology Journal, 2009, 17, 1427-1441.	0.9	59
26	Identification of runoff generation processes using combined hydrometric, tracer and geophysical methods in a headwater catchment in South Africa / Identification des processus de formation du dÃ©bit en combinat la mÃ©thodes hydromÃ©trique, traceur et gÃ©ophysiques dans un bassin versant sud-africain. Hydrological Sciences Journal, 2008, 53, 65-80.	1.2	57
27	Rainfall Characteristics and Regionalization in Peninsular Malaysia Based on a High Resolution Gridded Data Set. Water (Switzerland), 2016, 8, 500.	1.2	54
28	Hydrograph separation using hydrochemical tracers in the Makanya catchment, Tanzania. Physics and Chemistry of the Earth, 2008, 33, 151-156.	1.2	52
29	Analysing streamflow variability and water allocation for sustainable management of water resources in the semi-arid Karkheh river basin, Iran. Physics and Chemistry of the Earth, 2009, 34, 329-340.	1.2	52
30	Rainfallâ€“interceptionâ€“evaporationâ€“runoff relationships in a semi-arid catchment, northern Limpopo basin, Zimbabwe. Hydrological Sciences Journal, 2010, 55, 687-703.	1.2	51
31	Global phosphorus recovery from wastewater for agricultural reuse. Hydrology and Earth System Sciences, 2018, 22, 5781-5799.	1.9	47
32	Joint interpretation of hydrological and geophysical data: electrical resistivity tomography results from a process hydrological research site in the Black Forest Mountains, Germany. Hydrological Processes, 2009, 23, 1501-1513.	1.1	45
33	Experimental investigations of water fluxes within the soilâ€“vegetationâ€“atmosphere system: Stable isotope mass-balance approach to partition evaporation and transpiration. Physics and Chemistry of the Earth, 2010, 35, 565-570.	1.2	44
34	Towards understanding inter-strain attachment variations of Escherichia coli during transport in saturated quartz sand. Water Research, 2010, 44, 1202-1212.	5.3	44
35	Source areas and mixing of runoff components at the hillslope scaleâ€”a multi-technical approach. Hydrological Sciences Journal, 2008, 53, 741-753.	1.2	37
36	Hydrograph separation using tracers and digital filters to quantify runoff components in a semiâ€arid mesoscale catchment. Hydrological Processes, 2018, 32, 1334-1350.	1.1	37

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37	Water level monitoring using radar remote sensing data: Application to Lake Kivu, central Africa. Physics and Chemistry of the Earth, 2009, 34, 722-728.	1.2	35
38	Citizens AND HYdrology (CANDHY): conceptualizing a transdisciplinary framework for citizen science addressing hydrological challenges. Hydrological Sciences Journal, 2022, 67, 2534-2551.	1.2	33
39	Sediment related impacts of climate change and reservoir development in the Lower Mekong River Basin: a case study of the Nam Ou Basin, Lao PDR. Climatic Change, 2018, 149, 13-27.	1.7	31
40	Impacts of Sea Level Rise and Groundwater Extraction Scenarios on Fresh Groundwater Resources in the Nile Delta Governorates, Egypt. Water (Switzerland), 2018, 10, 1690.	1.2	31
41	Using multiple artificial DNA tracers in hydrology. Hydrological Processes, 2011, 25, 3101-3106.	1.1	30
42	A multi-method approach to quantify groundwater/surface water-interactions in the semi-arid Hailiutu River basin, northwest China. Hydrogeology Journal, 2014, 22, 527-541.	0.9	30
43	Groundwater and surface-water interactions and impacts of human activities in the Hailiutu catchment, northwest China. Hydrogeology Journal, 2017, 25, 1341-1355.	0.9	30
44	Biofuel and water cycle dynamics: what are the related challenges for hydrological processes research?. Hydrological Processes, 2007, 21, 3647-3650.	1.1	29
45	Analysis of streamflow response to land use and land cover changes using satellite data and hydrological modelling: case study of Dinder and Rahad tributaries of the Blue Nile (Ethiopiaâ€"Sudan). Hydrology and Earth System Sciences, 2017, 21, 5217-5242.	1.9	29
46	An empirical approach for delineating spatial units with the same dominating runoff generation processes. Physics and Chemistry of the Earth, 2003, 28, 297-303.	1.2	24
47	Optimising the water we eatâ€"rethinking policy to enhance productive and sustainable use of water in agri-food systems across scales. Lancet Planetary Health, The, 2022, 6, e59-e65.	5.1	23
48	Distributed, high-resolution modelling of 18O signals in a meso-scale catchment. Journal of Hydrology, 2007, 332, 497-510.	2.3	22
49	Optimal Operation of the Eastern Nile System Using Genetic Algorithm, and Benefits Distribution of Water Resources Development. Water (Switzerland), 2018, 10, 921.	1.2	20
50	Assessing the Freshâ€"Saline Groundwater Distribution in the Nile Delta Aquifer Using a 3D Variable-Density Groundwater Flow Model. Water (Switzerland), 2019, 11, 1946.	1.2	20
51	Runoff generation and implications for river basin modelling special issue. Hydrological Processes, 2003, 17, 197-198.	1.1	19
52	Regionalisierungsverfahren zur Ausweisung von Hydrotopen in von periglazialem Hangschutt geprÃgten Gebieten. Grundwasser, 2002, 7, 206-216.	1.4	17
53	Comparison of flood management options for the Yang River Basin, Thailand. Irrigation and Drainage, 2011, 60, 526-543.	0.8	17
54	Distributed conceptual modelling in a Swedish lowland catchment: a multi-criteria model assessment. Hydrology Research, 2013, 44, 318-333.	1.1	17

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55	<scp><i>Escherichia coli</i></scp> strains harvested from springs in Kampala, Uganda: cell characterization and transport in saturated porous media. Hydrological Processes, 2014, 28, 1973-1988.	1.1	11
56	Characterizing the climatic water balance dynamics and different runoff components in a poorly gauged tropical forested catchment, Nicaragua. Hydrological Sciences Journal, 2016, 61, 2465-2480.	1.2	11
57	Regionalising a meso-catchment scale conceptual model for river basin management in the semi-arid environment. Physics and Chemistry of the Earth, 2011, 36, 747-760.	1.2	9
58	Checking a process-based catchment model by artificial neural networks. Hydrological Processes, 2003, 17, 265-277.	1.1	8
59	Hydrological and Geomorphological Controls on the Water Balance Components of a Mangrove Forest During the Dry Season in the Pacific Coast of Nicaragua. Wetlands, 2014, 34, 685-697.	0.7	8
60	Modelling rainfallâ€“runoff processes of the Chemoga and Jedeb meso-scale catchments in the Abay/Upper Blue Nile basin, Ethiopia. Hydrological Sciences Journal, 0, , 1-18.	1.2	8
61	Simulation of Groundwater-Surface Water Interactions under Different Land Use Scenarios in the Bulang Catchment, Northwest China. Water (Switzerland), 2015, 7, 5959-5985.	1.2	7
62	Changing Agricultural Landscapes in Ethiopia: Examining Application of Adaptive Management Approach. Sustainability, 2020, 12, 8939.	1.6	7
63	Improved Process Representation in the Simulation of the Hydrology of a Meso-Scale Semi-Arid Catchment. Water (Switzerland), 2018, 10, 1549.	1.2	5
64	The role of water in transforming food systems. Global Food Security, 2022, 33, 100639.	4.0	4
65	Operational Weather Radar Assessment of Convective Precipitation as an Input to Flood Modelling in Mountainous Basins. , 2006, , 233-246.		3
66	A SCALE AGGREGATED MODEL TO ESTIMATE CLIMATE CHANGE DRIVEN COASTLINE CHANGE ALONG INLET INTERRUPTED COASTS. , 2011, , .		2
67	Modelling the Inundation and Morphology of the Seasonally Flooded Mayas Wetlands in the Dinder National Park-Sudan. Environmental Processes, 2020, 7, 723-747.	1.7	2
68	Analysis of stream flow characteristics of the Hailiutu River in the central Yellow River, China. , 2011, , .		1
69	Effects of Topographic Heterogeneity on Coarse Resolution Grid-Based Runoff Simulationâ€"Assessment for Three River Basins in Peninsular Malaysia. Environmental Modeling and Assessment, 2018, 23, 277-288.	1.2	1
70	On the linkage between hydrology and societyâ€"learning from history about two-way interactions for sustainable development. Water History, 2020, 12, 387-402.	0.5	0
71	Scienceâ€"Policy Engagement to Achieve â€œWater for Societyâ€"Including Allâ€. Water (Switzerland), 2021, 13, 246.	1.2	0
72	The long-term trends in hydro-climatology of the Dinder and Rahad basins, Blue Nile, Ethiopia/Sudan. International Journal of Hydrology Science and Technology, 2019, 9, 690.	0.2	0