Roland Löwe

List of Publications by Year
in descending order

27 papers	806 citations	566801 15 h-index	552369 26 g-index
35 all docs	35 docs citations	35 times ranked	783 citing authors

#	Article	IF	Citations
1	Machine learning for accelerating <scp>2D</scp> flood models: Potential and challenges. Hydrological Processes, 2021, 35, e14064.	1.1	12
2	FloodStroem: A fast dynamic GIS-based urban flood and damage model. Journal of Hydrology, 2021, 600, 126521.	2.3	21
3	U-FLOOD â€" Topographic deep learning for predicting urban pluvial flood water depth. Journal of Hydrology, 2021, 603, 126898.	2.3	51
4	Approaches for unsupervised identification of data-driven models for flow forecasting in urban drainage systems. Journal of Hydroinformatics, 2021, 23, 1368-1381.	1.1	0
5	Rainwater harvesting for urban flood management â€" An integrated modelling framework. Water Research, 2020, 171, 115372.	5.3	108
6	Impacts of urban development on urban water management â€" Limits of predictability. Computers, Environment and Urban Systems, 2020, 84, 101546.	3.3	10
7	Urban pluvial flood risk assessment â€" data resolution and spatial scale when developing screening approaches on the microscale. Natural Hazards and Earth System Sciences, 2020, 20, 981-997.	1.5	8
8	An interdisciplinary and catchment approach to enhancing urban flood resilience: a Melbourne case. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190201.	1.6	19
9	Incorporating objectives of stakeholders in strategic planning of urban water management. Urban Water Journal, 2020, 17, 87-99.	1.0	14
10	Data-driven approaches to derive parameters for lot-scale urban development models. Cities, 2019, 95, 102374.	2.7	6
11	A Cellular Automata Fast Flood Evaluation (CAâ€ffÃ©) Model. Water Resources Research, 2019, 55, 4936-4953.	1.7	62
12	Flexible adaptation planning process for urban adaptation in Melbourne, Australia. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2019, 172, 393-403.	0.4	5
13	Modelling to Support the Planning of Sustainable Urban Water Systems. Green Energy and Technology, 2019, , 10-19.	0.4	1
14	Initial conditions of urban permeable surfaces in rainfall-runoff models using Horton's infiltration. Water Science and Technology, 2018, 77, 662-669.	1.2	18
15	Simulating flood risk under non-stationary climate and urban development conditions â€" Experimental setup for multiple hazards and a variety of scenarios. Environmental Modelling and Software, 2018, 102, 155-171.	1.9	18
16	Evaluating catchment response to artificial rainfall from four weather generators for present and future climate. Water Science and Technology, 2018, 77, 2578-2588.	1.2	7
17	A rapid urban flood inundation and damage assessment model. Journal of Hydrology, 2018, 564, 1085-1098.	2.3	124
18	Assessment of urban pluvial flood risk and efficiency of adaptation options through simulations â€" A new generation of urban planning tools. Journal of Hydrology, 2017, 550, 355-367.	2.3	138

#	Article	IF	Citations
19	Simplification of one-dimensional hydraulic networks by automated processes evaluated on 1D/2D deterministic flood models. Journal of Hydroinformatics, 2017, 19, 686-700.	1.1	20
20	Objective Classification of Rainfall in Northern Europe for Online Operation of Urban Water Systems Based on Clustering Techniques. Water (Switzerland), 2016, 8, 87.	1.2	9
21	Evaluation of Maximum a Posteriori Estimation as Data Assimilation Method for Forecasting Infiltration-Inflow Affected Urban Runoff with Radar Rainfall Input. Water (Switzerland), 2016, 8, 381.	1.2	7
22	Probabilistic runoff volume forecasting in risk-based optimization for RTC of urban drainage systems. Environmental Modelling and Software, 2016, 80, 143-158.	1.9	35
23	Comparison of two stochastic techniques for reliable urban runoff prediction by modeling systematic errors. Water Resources Research, 2015, 51, 5004-5022.	1.7	21
24	Stochastic rainfall-runoff forecasting: parameter estimation, multi-step prediction, and evaluation of overflow risk. Stochastic Environmental Research and Risk Assessment, 2014, 28, 505-516.	1.9	19
25	Probabilistic online runoff forecasting for urban catchments using inputs from rain gauges as well as statically and dynamically adjusted weather radar. Journal of Hydrology, 2014, 512, 397-407.	2.3	22
26	State-space adjustment of radar rainfall and skill score evaluation of stochastic volume forecasts in urban drainage systems. Water Science and Technology, 2013, 68, 584-590.	1.2	3
27	Implementation of an integrated real-time control system of sewer system and waste water treatment plant in the city of Wilhelmshaven. Urban Water Journal, 2013, 10, 330-341.	1.0	48