Wenyan Wu

List of Publications by Year
in descending order

60 papers	1,860 citations	304602 22 h-index	265120 42 g-index
64 all docs	64 docs citations	64 times ranked	1866 citing authors

#	Article	IF	Citations
1	Protocol for developing ANN models and its application to the assessment of the quality of the ANN model development process in drinking water quality modelling. Environmental Modelling and Software, 2014, 54, 108-127.	1.9	229
2	Efficient Object Localization Using Sparsely Distributed Passive RFID Tags. IEEE Transactions on Industrial Electronics, 2013, 60, 5914-5924.	5.2	156
3	Accounting for Greenhouse Gas Emissions in Multiobjective Genetic Algorithm Optimization of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 146-155.	1.3	105
4	Efficient Particle Filter Localization Algorithm in Dense Passive RFID Tag Environment. IEEE Transactions on Industrial Electronics, 2014, 61, 5641-5651.	5.2	105
5	Ensemble flood forecasting: Current status and future opportunities. Wiley Interdisciplinary Reviews: Water, 2020, 7, e1432.	2.8	96
6	Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	1.3	92
7	An ANN-based emulation modelling framework for flood inundation modelling: Application, challenges and future directions. Environmental Modelling and Software, 2020, 124, 104587.	1.9	79
8	A benchmarking approach for comparing data splitting methods for modeling water resources parameters using artificial neural networks. Water Resources Research, 2013, 49, 7598-7614.	1.7	76
9	On Lack of Robustness in Hydrological Model Development Due to Absence of Guidelines for Selecting Calibration and Evaluation Data: Demonstration for Dataâ€Driven Models. Water Resources Research, 2018, 54, 1013-1030.	1.7	71
10	Mapping Dependence Between Extreme Rainfall and Storm Surge. Journal of Geophysical Research: Oceans, 2018, 123, 2461-2474.	1.0	68
11	Guidelines for Studying Diverse Types of Compound Weather and Climate Events. Earth's Future, 2021, 9, e2021EF002340.	2.4	66
12	Single-Objective versus Multiobjective Optimization of Water Distribution Systems Accounting for Greenhouse Gas Emissions by Carbon Pricing. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 555-565.	1.3	64
13	Multiobjective optimization of water distribution systems accounting for economic cost, hydraulic reliability, and greenhouse gas emissions. Water Resources Research, 2013, 49, 1211-1225.	1.7	61
14	Incorporation of Variable-Speed Pumping in Multiobjective Genetic Algorithm Optimization of the Design of Water Transmission Systems. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 543-552.	1.3	54
15	Improved validation framework and R-package for artificial neural network models. Environmental Modelling and Software, 2017, 92, 82-106.	1.9	49
16	Artificial neural network based hybrid modeling approach for flood inundation modeling. Journal of Hydrology, 2021, 592, 125605.	2.3	44
17	Including stakeholder input in formulating and solving real-world optimisation problems: Generic framework and case study. Environmental Modelling and Software, 2016, 79, 197-213.	1.9	35
18	Sensitivity of Optimal Tradeoffs between Cost and Greenhouse Gas Emissions for Water Distribution Systems to Electricity Tariff and Generation. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 182-186.	1.3	34

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19	Streamflow prediction using LASSO-FCM-DBN approach based on hydro-meteorological condition classification. Journal of Hydrology, 2020, 580, 124253.	2.3	30
20	A rapid flood inundation modelling framework using deep learning with spatial reduction and reconstruction. Environmental Modelling and Software, 2021, 143, 105112.	1.9	30
21	A multi-class toll-based approach to reduce total emissions on roads for sustainable urban transportation. Sustainable Cities and Society, 2020, 63, 102435.	5.1	28
22	The changing nature of the waterâ€“energy nexus in urban water supply systems: a critical review of changes and responses. Journal of Water and Climate Change, 2020, 11, 1095-1122.	1.2	26
23	Estimating the probability of compound floods in estuarine regions. Hydrology and Earth System Sciences, 2021, 25, 2821-2841.	1.9	23
24	Identification of Optimal Water Supply Portfolios for a Major City. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	21
25	A classification-based deep belief networks model framework for daily streamflow forecasting. Journal of Hydrology, 2021, 595, 125967.	2.3	18
26	Surplus Power Factor as a Resilience Measure for Assessing Hydraulic Reliability in Water Transmission System Optimization. Journal of Water Resources Planning and Management - ASCE, 2011, 137, 542-546.	1.3	15
27	SLAM Algorithm for 2D Object Trajectory Tracking based on RFID Passive Tags. , 2008, , .		14
28	Which precipitation forecasts to use? Deterministic versus coarserâ€resolution ensemble <scp>NWP</scp> models. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 900-913.	1.0	14
29	Impact of ENSO on dependence between extreme rainfall and storm surge. Environmental Research Letters, 2019, 14, 124043.	2.2	13
30	Impacts of urbanization on precipitation patterns in the greater Beijingâ€“Tianjinâ€“Hebei metropolitan region in northern China. Environmental Research Letters, 2021, 16, 014042.	2.2	13
31	A sensor-based SLAM algorithm for camera tracking in virtual studio. International Journal of Automation and Computing, 2008, 5, 152-162.	4.5	12
32	Minimizing Pumping Energy Cost in Real-Time Operations of Water Distribution Systems Using Economic Model Predictive Control. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	12
33	A basis function approach for exploring the seasonal and spatial features of storm surge events. Geophysical Research Letters, 2017, 44, 7356-7365.	1.5	11
34	Extending a joint probability modelling approach for post-processing ensemble precipitation forecasts from numerical weather prediction models. Journal of Hydrology, 2022, 605, 127285.	2.3	11
35	Non-hydraulic Factors Analysis of Pipe Burst in Water Distribution Systems. Procedia Engineering, 2015, 119, 53-62.	1.2	10
36	Feasibility Study on Wireless Passive SAW Sensor in IoT Enabled Water Distribution System. , 2017, , .		9

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37	Behavioural informatics for improving water hygiene practice based on IoT environment. Journal of Biomedical Informatics, 2018, 78, 156-166.	2.5	9
38	A Wireless Passive SAW Delay Line Temperature and Pressure Sensor for Monitoring Water Distribution System. , 2018, , .		7
39	Water distribution network real-time simulation based on SCADA system using OPC communication. , 2011, , .		6
40	Predicting household water use behaviour for improved hygiene practices in internet of things environment via dynamic behaviour intervention model. IET Networks, 2016, 5, 143-151.	1.1	5
41	Simulation and conservation of the end use water based on behaviour intervention modelling. Procedia Engineering, 2015, 119, 761-770.	1.2	4
42	An Experimental Study of Two-Phase Pulse Flushing Technology in Water Distribution Systems. Water (Switzerland), 2017, 9, 927.	1.2	4
43	Improving Water Pressure Measurement Using Temperature-Compensated Wireless Passive SAW Bidirectional RDL Pressure Sensor. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	2.4	4
44	Effective Communication for Water Resilient Communities: A Conceptual Framework. Water (Switzerland), 2021, 13, 2880.	1.2	4
45	SAW Delay Line Based IoT Smart Sensing in Water Distribution System. , 2018, , .		3
46	A Multi-Iteration Enhanced 2P-SMA Method for Improved Error Reduction on a WP-SAW Water Temperature and Pressure Sensor. IEEE Access, 2021, 9, 48236-48243.	2.6	3
47	An IUWM incorporated model to improve water supply reliability in intermittent and no service areas. Resources, Conservation and Recycling, 2022, 181, 106248.	5.3	3
48	A Hybrid Marker-Based Camera Tracking Approach in Augmented Reality. , 2007, , .		2
49	Implementation of OGC Compliant Framework for Data Integration in Water Distribution System. Procedia Engineering, 2015, 119, 1366-1374.	1.2	2
50	Python program for spatial reduction and reconstruction method in flood inundation modelling. MethodsX, 2021, 8, 101527.	0.7	2
51	Toll and subsidy for freight vehicles on urban roads: A policy decision for City Logistics. Research in Transportation Economics, 2021, , 101132.	2.2	2
52	Establishment of the Scheduling Training System of Water Distribution Network Using Virtual Reality. , 2008, , .		1
53	Multi-objective optimization of water supply network rehabilitation. , 2009, , .		1
54	The water distribution network digital management platform in Harbin, China. , 2009, , .		1

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55	Research on water leakage prediction of urban water supply network based on grey GM (0, N) model. , 2011, , .		1
56	Sustainable Interoperability and Data Integration for the IoT-Based Information Systems. , 2017, , .		1
57	Research on water quality comprehensive evaluation of water supply network using SOM. , 2009, , .		0
58	Research on water supply pipeline failure consequence assessment model. , 2011, , .		0
59	The application of PLC in SBMBR sewage treatment automatic control of the system. , 2011, , .		0
60	Reconstructing climate trends adds skills to seasonal reference crop evapotranspiration forecasting. Hydrology and Earth System Sciences, 2022, 26, 941-954.	1.9	0