Stefano Alvisi

List of Publications by Year
in descending order

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90 papers	2,185 citations	201575 27 h-index	243529 44 g-index
90 all docs	90 docs citations	90 times ranked	1618 citing authors

#	Article	IF	Citations
1	A short-term, pattern-based model for water-demand forecasting. Journal of Hydroinformatics, 2007, 9, 39-50.	1.1	150
2	Water level forecasting through fuzzy logic and artificial neural network approaches. Hydrology and Earth System Sciences, 2006, 10, 1-17.	1.9	136
3	Battle of the Water Calibration Networks. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 523-532.	1.3	134
4	Fuzzy neural networks for water level and discharge forecasting with uncertainty. Environmental Modelling and Software, 2011, 26, 523-537.	1.9	101
5	Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	1.3	92
6	A Stochastic Model for Representing Drinking Water Demand at Residential Level. Water Resources Management, 2003, 17, 197-222.	1.9	87
7	Optimal Placement of Isolation Valves in Water Distribution Systems Based on Valve Cost and Weighted Average Demand Shortfall. Water Resources Management, 2010, 24, 4317-4338.	1.9	84
8	A heuristic procedure for the automatic creation of district metered areas in water distribution systems. Urban Water Journal, 2014, 11, 137-159.	1.0	77
9	Optimizing the operation of the Haifa-A water-distribution network. Journal of Hydroinformatics, 2007, 9, 51-64.	1.1	62
10	Segment identification in water distribution systems. Urban Water Journal, 2011, 8, 203-217.	1.0	62
11	Optimizing the operation of the Valencia water-distribution network. Journal of Hydroinformatics, 2007, 9, 65-78.	1.1	60
12	Multiobjective Optimization of Rehabilitation and Leakage Detection Scheduling in Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2009, 135, 426-439.	1.3	58
13	Near-optimal rehabilitation scheduling of water distribution systems based on a multi-objective genetic algorithm. Civil Engineering and Environmental Systems, 2006, 23, 143-160.	0.4	56
14	A multi-objective approach for detecting and responding to accidental and intentional contamination events in water distribution systems. Urban Water Journal, 2009, 6, 115-135.	1.0	43
15	Wireless Middleware Solutions for Smart Water Metering. Sensors, 2019, 19, 1853.	2.1	39
16	A Probabilistic Short-Term Water Demand Forecasting Model Based on the Markov Chain. Water (Switzerland), 2017, 9, 507.	1.2	36
17	Three Methods for Estimating the Entropy Parameter M Based on a Decreasing Number of Velocity Measurements in a River Cross-Section. Entropy, 2014, 16, 2512-2529.	1.1	34
18	A Comparison of Short-Term Water Demand Forecasting Models. Water Resources Management, 2019, 33, 1481-1497.	1.9	34

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19	Pipe roughness calibration in water distribution systems using grey numbers. Journal of Hydroinformatics, 2010, 12, 424-445.	1.1	33
20	Grey neural networks for river stage forecasting with uncertainty. Physics and Chemistry of the Earth, 2012, 42-44, 108-118.	1.2	33
21	A New Procedure for Optimal Design of District Metered Areas Based on the Multilevel Balancing and Refinement Algorithm. Water Resources Management, 2015, 29, 4397-4409.	1.9	33
22	Evaluating Water Demand Shortfalls in Segment Analysis. Water Resources Management, 2012, 26, 2301-2321.	1.9	32
23	Development of a physics-based model to predict the performance of pumps as turbines. Applied Energy, 2018, 231, 343-354.	5.1	32
24	Comparative analysis of two probabilistic pipe breakage models applied to a real water distribution system. Civil Engineering and Environmental Systems, 2010, 27, 1-22.	0.4	31
25	Generation of synthetic water demand time series at different temporal and spatial aggregation levels. Urban Water Journal, 2014, 11, 297-310.	1.0	31
26	Green Smart Technology for Water (GST4Water): Water Loss Identification at User Level by Using Smart Metering Systems. Water (Switzerland), 2019, 11, 405.	1.2	31
27	Fault tolerant control of a simulated hydroelectric system. Control Engineering Practice, 2016, 51, 13-25.	3.2	29
28	A Short-Term Water Demand Forecasting Model Using a Moving Window on Previously Observed Data. Water (Switzerland), 2017, 9, 172.	1.2	27
29	Assessment of predictive uncertainty within the framework of water demand forecasting using the Model Conditional Processor (MCP). Urban Water Journal, 2017, 14, 1-10.	1.0	25
30	Energy Production by Means of Pumps As Turbines in Water Distribution Networks. Energies, 2017, 10, 1666.	1.6	25
31	A Procedure for the Design of District Metered Areas in Water Distribution Systems. Procedia Engineering, 2014, 70, 41-50.	1.2	24
32	Measurement of surface velocity in open channels using a lightweight remotely piloted aircraft system. Geomatics, Natural Hazards and Risk, 2017, 8, 73-86.	2.0	22
33	Effects of the COVID-19 Lockdown on Water Consumptions: Northern Italy Case Study. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	22
34	Leakage Detection and Localization in a Water Distribution Network through Comparison of Observed and Simulated Pressure Data. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	19
35	Optimal placement of valves in a water distribution network with CLP(FD). Theory and Practice of Logic Programming, 2011, 11, 731-747.	1.1	17
36	Estimation of bathymetry (and discharge) in natural river cross-sections by using an entropy approach. Journal of Hydrology, 2015, 527, 20-29.	2.3	17

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37	Near-optimal scheduling of device activation in water distribution systems to reduce the impact of a contamination event. Journal of Hydroinformatics, 2012, 14, 345-365.	1.1	16
38	Multistep Approach for Optimizing Design and Operation of the C-Town Pipe Network Model. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	15
39	Analysis of MNF and FAVAD Model for Leakage Characterization by Exploiting Smart-Metered Data: The Case of the Gorino Ferrarese (FE-Italy) District. Water (Switzerland), 2021, 13, 643.	1.2	15
40	A robust approach based on time variable trigger levels for pump control. Journal of Hydroinformatics, 2017, 19, 811-822.	1.1	14
41	Experimental analysis of the water consumption effect on the dynamic behaviour of a real pipe network. Journal of Hydraulic Research/De Recherches Hydrauliques, 2021, 59, 477-487.	0.7	14
42	A Methodology for Pumping Control Based on Time Variable Trigger Levels. Procedia Engineering, 2016, 162, 365-372.	1.2	13
43	Analysis of Non-Iterative Methods and Proposal of a New One for Pressure-Driven Snapshot Simulations with EPANET. Water Resources Management, 2017, 31, 75-91.	1.9	13
44	From Water Consumption Smart Metering to Leakage Characterization at District and User Level: The GST4Water Project. Proceedings (mdpi), 2018, 2, .	0.2	13
45	Comparison of Different Approaches to Predict the Performance of Pumps As Turbines (PATs). Energies, 2018, 11, 1016.	1.6	13
46	Stochastic Approach for the Analysis of Demand Induced Transients in Real Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	13
47	A conceptual grey rainfall-runoff model for simulation with uncertainty. Journal of Hydroinformatics, 2013, 15, 1-20.	1.1	12
48	A Multi-step Approach for Optimal Design and Management of the C-Town Pipe Network Model. Procedia Engineering, 2014, 89, 37-44.	1.2	12
49	Water distribution systems: Using linearized hydraulic equations within the framework of ranking-based optimization algorithms to improve their computational efficiency. Environmental Modelling and Software, 2014, 57, 33-39.	1.9	11
50	Using water consumption smart metering for water loss assessment in a DMA: a case study. Urban Water Journal, 2019, 16, 77-83.	1.0	11
51	Study of the Time Response of a Simulated Hydroelectric System. Journal of Physics: Conference Series, 2014, 570, 052003.	0.3	10
52	Crisp discharge forecasts and grey uncertainty bands using data-driven models. Hydrology Research, 2012, 43, 589-602.	1.1	9
53	Model for hydraulic networks with evenly distributed demands along pipes. Civil Engineering and Environmental Systems, 2010, 27, 133-153.	0.4	8
54	Assessment of the Predictive Uncertainty within the Framework of Water Demand Forecasting by Using the Model Conditional Processor. Procedia Engineering, 2014, 89, 893-900.	1.2	8

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55	Comparison of parametric and nonparametric disaggregation models for the top-down generation of water demand time series. Civil Engineering and Environmental Systems, 2016, 33, 3-21.	0.4	8
56	A comparison between pattern-based and neural network short-term water demand forecasting models. Water Science and Technology: Water Supply, 2017, 17, 1426-1435.	1.0	8
57	Automated Household Water End-Use Disaggregation through Rule-Based Methodology. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	8
58	Dataâ€"Driven Design of a Fault Tolerant Fuzzy Controller for a Simulated Hydroelectric System. IFAC-PapersOnLine, 2015, 48, 1090-1095.	0.5	7
59	Methods for Preserving Durationâ€"Intensity Correlation on Synthetically Generated Water-Demand Pulses. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	7
60	A New Non-iterative Method for Pressure-driven Snapshot Simulations with EPANET. Procedia Engineering, 2017, 186, 135-142.	1.2	7
61	Genetic Algorithms for Scheduling Devices Operation in a Water Distribution System in Response to Contamination Events. Lecture Notes in Computer Science, 2012, , 124-135.	1.0	7
62	Calibration and Sensitivity Analysis of the C-Town Pipe Network Model. , 2011, , .		6
63	A grey-based method for evaluating the effects of rating curve uncertainty on frequency analysis of annual maxima. Journal of Hydroinformatics, 2013, 15, 194-210.	1.1	6
64	Preserving Duration-intensity Correlation on Synthetically Generated Water Demand Pulses. Procedia Engineering, 2015, 119, 1463-1472.	1.2	6
65	Extending the Global-Gradient Algorithm to Solve Pressure-Control Valves. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	6
66	Comparing grey formulations of the velocity-area method and entropy method for discharge estimation with uncertainty. Journal of Hydroinformatics, 2014, 16, 797-811.	1.1	5
67	Exploring the impacts of tourism and weather on water consumption at different spatiotemporal scales: evidence from a coastal area on the Adriatic Sea (northern Italy). Environmental Research: Infrastructure and Sustainability, 2022, 2, 025005.	0.9	5
68	Scheduling countermeasures to contamination events by genetic algorithms. AI Communications, 2015, 28, 259-282.	0.8	4
69	Estimating discharge in drainage channels through measurements of surface velocity alone: A case study. Flow Measurement and Instrumentation, 2017, 54, 205-209.	1.0	4
70	Estimating discharge in rivers through the combined use of dimensionless isovels and point velocity measurements. Hydrology Research, 2017, 48, 616-633.	1.1	4
71	Laboratory Analysis of a Piston-Actuated Pressure-Reducing Valve under Low Flow Conditions. Water (Switzerland), 2020, 12, 940.	1.2	4
72	Neural Network Techniques for Detecting Intra-Domestic Water Leaks of Different Magnitude. IEEE Access, 2021, 9, 126135-126147.	2.6	4

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73	A Fast New Method for Segment Identification in Water Distribution Systems. , 2011, , .		3
74	A Procedure for Spatial Aggregation of Synthetic Water Demand Time Series. Procedia Engineering, 2014, 70, 51-60.	1.2	3
75	A Linearization Approach for Improving the Computational Efficiency of Water Distribution System Ranking-based Optimization Algorithms. Procedia Engineering, 2015, 119, 516-525.	1.2	3
76	Fault tolerant model predictive control applied to a simulated hydroelectric system. , 2016, , .		3
77	Data-Driven Control Techniques for Renewable Energy Conversion Systems: Wind Turbine and Hydroelectric Plants. Electronics (Switzerland), 2019, 8, 237.	1.8	3
78	Fuzzy Control Techniques Applied to Wind Turbine Systems and Hydroelectric Plants. , 2019, , .		3
79	Minimum Night Flow Analysis and Application of the Fixed and Variable Area Discharges Model for Characterizing Leakage in the Gorino Ferrarese (FE-Italy) District. Environmental Sciences Proceedings, 2020, 2, .	0.3	3
80	Generation of synthetic cross-correlated water demand time series. Water Science and Technology: Water Supply, 2013, 13, 977-986.	1.0	2
81	Five variants of a procedure for spatial aggregation of synthetic water demand time series. Journal of Water Supply: Research and Technology - AQUA, 2015, 64, 629-639.	0.6	2
82	Advanced Hydroinformatic Techniques for the Simulation and Analysis of Water Supply and Distribution Systems. Water (Switzerland), 2018, 10, 440.	1.2	2
83	Benchmarking of Advanced Control Strategies for a Simulated Hydroelectric System. Journal of Physics: Conference Series, 2017, 783, 012041.	0.3	1
84	Fuzzy Control Techniques for Energy Conversion Systems: Wind Turbine and Hydroelectric Plants. , 2019, , .		1
85	Laboratory Analysis of a Piston-Actuated Pressure Reducing Valve under Low Flow Conditions. Proceedings (mdpi), 2020, 48, 26.	0.2	1
86	Fuzzy Control Techniques for Energy Conversion Systems. Advances in Intelligent Systems and Computing, 2020, , 943-955.	0.5	1
87	Rehabilitation, Repairing and Leakage Detection Optimization in Water Distribution Systems. , 2008, , .		0
88	Discussion of â€œEffective Approach for Solving Battle of Water Calibration Network Problemâ€•by Zheng Yi Wu and Thomas M. Walski. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 128-131.	1.3	0
89	Closure to â€œExtending the Global-Gradient Algorithm to Solve Pressure-Control Valvesâ€•by Gioia Foglianti, Stefano Alvisi, Marco Franchini, and Ezio Todini. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	0
90	Simulation and Experimental Validation of Fuzzy Control Techniques for Wind Turbine System and Hydroelectric Plant. , 2021, , .		0