Enrico Creaco

List of Publications by Year
in descending order

118	2,573	182225	286692
papers	citations	30 h-index	43 g-index

118	118	118	1564
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unsteady flow modelling of hydraulic and electrical RTC of PATs for hydropower generation and service pressure regulation in WDN. Urban Water Journal, 2022, 19, 233-243.	1.0	3
2	The in situ approach to model identification and control design for pressure regulation in Water Distribution Networks: An in silico evaluation. Control Engineering Practice, 2022, 120, 105016.	3.2	2
3	High-Order Global Algorithm for the Pressure-Driven Modeling of Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	1.3	13
4	Comparison of Techniques for Maintaining Adequate Disinfectant Residuals in a Full-Scale Water Distribution Network. Water (Switzerland), 2022, 14, 1029.	1.2	4
5	Minimum transport-driven algorithm for water distribution network partitioning. Journal of Water Supply: Research and Technology - AQUA, 2022, 71, 120-138.	0.6	3
6	Multi-criteria method for the realistic placement of water quality sensors on pipes of water distribution systems. Environmental Modelling and Software, 2022, 152, 105405.	1.9	15
7	Smart Urban Water Networks: Solutions, Trends and Challenges. Water (Switzerland), 2021, 13, 501.	1.2	13
8	Novel Comprehensive Approach for Phasing Design and Rehabilitation of Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	6
9	Improving Spatial Landslide Prediction with 3D Slope Stability Analysis and Genetic Algorithm Optimization: Application to the OltrepÃ² Pavese. Water (Switzerland), 2021, 13, 801.	1.2	22
10	Exploring the Effectiveness of Clustering Algorithms for Capturing Water Consumption Behavior at Household Level. Sustainability, 2021, 13, 2603.	1.6	5
11	Innovative approach and design for environmental protection from arising threats. Environmental Science and Pollution Research, 2021, 28, 33806-33808.	2.7	0
12	Assessing the Impact of Partitioning on Optimal Installation of Control Valves for Leakage Minimization in WDNs. Water (Switzerland), 2021, 13, 1003.	1.2	2
13	Optimal Location of Valves to Improve Equity in Intermittent Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	17
14	Sum-of-delay models for pressure control in Water Distribution Networks. Control Engineering Practice, 2021, 113, 104844.	3.2	6
15	Water quality modeling in sewer networks: Review and future research directions. Water Research, 2021, 202, 117419.	5.3	35
16	A Simplified Methodology for Optimal Location and Setting of Valves to Improve Equity in Intermittent Water Distribution Systems. Water Resources Management, 2021, 35, 4477-4494.	1.9	9
17	Comparison of PAT Installation Layouts for Energy Recovery from Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	1.3	9
18	Bottom-Up Generation of Peak Demand Scenarios in Water Distribution Networks. Sustainability, 2021, 13, 31.	1.6	7

#	Article	IF	Citations
19	Bottom-Up Generation of Water Demands to Preserve Basic Statistics and Rank Cross-Correlations of Measured Time Series. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	12
20	Closure to â€œPeak Demand Assessment and Hydraulic Analysis in WDN Designâ€•by E. Creaco, P. Signori, S. Papiri, and C. Ciaponi. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 07019004.	1.3	0
21	Bi-objective optimisation based tuning of pressure control algorithms for water distribution networks. Control Engineering Practice, 2020, 104, 104632.	3.2	8
22	A gain scheduling approach to improve pressure control in water distribution networks. Control Engineering Practice, 2020, 103, 104612.	3.2	11
23	Comparison of topological, empirical and optimization-based approaches for locating quality detection points in water distribution networks. Environmental Science and Pollution Research, 2020, 28, 33844-33853.	2.7	12
24	Post-Failure Dynamics of Rainfall-Induced Landslide in OltrepÃ² Pavese. Water (Switzerland), 2020, 12, 2555.	1.2	8
25	Advances in Modeling and Management of Urban Water Networks. Water (Switzerland), 2020, 12, 2956.	1.2	2
26	Modulating Nodal Outflows to Guarantee Sufficient Disinfectant Residuals in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 04020066.	1.3	15
27	Battle of Postdisaster Response and Restoration. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 04020067.	1.3	14
28	Identification of Influential User Locations for Smart Meter Installation to Reconstruct the Urban Demand Pattern. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 04020070.	1.3	11
29	Developments in Multi-Objective Dynamic Optimization Algorithm for Design of Water Distribution Mains. Water Resources Management, 2020, 34, 2699-2716.	1.9	13
30	A unified framework for the assessment of multiple source urban flash flood hazard: the case study of Monza, Italy. Urban Water Journal, 2020, 17, 65-77.	1.0	12
31	Indirect Impact Assessment of Pluvial Flooding in Urban Areas Using a Graph-Based Approach: The Mexico City Case Study. Water (Switzerland), 2020, 12, 1753.	1.2	11
32	A Bi-Objective Approach for Optimizing the Installation of PATs in Systems of Transmission Mains. Water (Switzerland), 2020, 12, 330.	1.2	22
33	Stability and Robustness of Real-Time Pressure Control in Water Distribution Systems. Journal of Hydraulic Engineering, 2020, 146, 04020023.	0.7	28
34	Comparison of Bottom-Up and Top-Down Procedures for Water Demand Reconstruction. Water (Switzerland), 2020, 12, 922.	1.2	7
35	Topological Placement of Quality Sensors in Water-Distribution Networks without the Recourse to Hydraulic Modeling. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	1.3	49
36	Drinking Water Temperature around the Globe: Understanding, Policies, Challenges and Opportunities. Water (Switzerland), 2020, 12, 1049.	1.2	58

#	Article	IF	Citations
37	Multiobjective Optimization of Control Valve Installation and DMA Creation for Reducing Leakage in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	38
38	Using Additional Time Slots for Improving Pump Control Optimization Based on Trigger Levels. Water Resources Management, 2019, 33, 3175-3186.	1.9	13
39	A model for non-uniform sediment transport induced by flushing in sewer channels. Water Research, 2019, 163, 114903.	5.3	13
40	Reducing Impacts of Contamination in Water Distribution Networks: A Combined Strategy Based on Network Partitioning and Installation of Water Quality Sensors. Water (Switzerland), 2019, 11, 1315.	1.2	35
41	Comparison of Flow-Dependent Controllers for Remote Real-Time Pressure Control in a Water Distribution System with Stochastic Consumption. Water (Switzerland), 2019, 11, 422.	1.2	12
42	Dual topology for partitioning of water distribution networks considering actual valve locations. Urban Water Journal, 2019, 16, 469-479.	1.0	15
43	Using Heuristic Techniques to Account for Engineering Aspects in Modularity-Based Water Distribution Network Partitioning Algorithm. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	19
44	Testing an innovative first flush identification methodology against field data from an Italian catchment. Journal of Environmental Management, 2019, 246, 418-425.	3.8	21
45	Real time control of water distribution networks: A state-of-the-art review. Water Research, 2019, 161, 517-530.	5.3	89
46	A Dynamic Adaptive Approach for Water Distribution Network Design. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	1.3	23
47	Service pressure regulation in water distribution networks. Control Engineering Practice, 2019, 86, 70-84.	3.2	26
48	Flowing Blow-Offs: A Solution to Maintain Adequate Disinfectant Residuals of Dead-End Nodes in WDNs. Proceedings (mdpi), 2019, 48, .	0.2	0
49	Peak Demand Assessment and Hydraulic Analysis in WDN Design. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	1.3	9
50	Testing behavior and effects of PRVs and RTC valves during hydrant activation scenarios. Urban Water Journal, 2018, 15, 218-226.	1.0	21
51	Optimal Sensor Placement in a Partitioned Water Distribution Network for the Water Protection from Contamination. Proceedings (mdpi), 2018, 2, .	0.2	6
52	Advances in Water Distribution Networks. Water (Switzerland), 2018, 10, 1546.	1.2	2
53	Nondimensional Simulation-Based Regression Formulas for Slit Dam Design in Mountain Rivers. Journal of Hydraulic Engineering, 2018, 144, 04018057.	0.7	1
54	Comparison of Pressure-Driven Formulations for WDN Simulation. Water (Switzerland), 2018, 10, 523.	1.2	20

#	Article	IF	Citations
55	Operation and Cost-Effectiveness of Local and Remote RTC. Journal of Water Resources Planning and Management - ASCE, 2018, 144, 04018068.	1.3	15
56	Comparison of Algorithms for the Optimal Location of Control Valves for Leakage Reduction in WDNs. Water (Switzerland), 2018, 10, 466.	1.2	16
57	The importance of the minimum path criterion in the design of water distribution networks. Water Science and Technology: Water Supply, 2017, 17, 1558-1567.	1.0	8
58	Models for Generating Household Water Demand Pulses: Literature Review and Comparison. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	46
59	Economic Analysis of Pressure Control for Leakage and Pipe Burst Reduction. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	52
60	Sampling Significant Contamination Events for Optimal Sensor Placement in Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	24
61	Unsteady Flow Modeling of Pressure Real-Time Control in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	37
62	Reliability Surrogate Measures for Water Distribution System Design: Comparative Analysis. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	48
63	On the choice of the demand and hydraulic modeling approach to <scp>WDN</scp> realâ€time simulation. Water Resources Research, 2017, 53, 6159-6177.	1.7	32
64	Exploring Numerically the Benefits of Water Discharge Prediction for the Remote RTC of WDNs. Water (Switzerland), 2017, 9, 961.	1.2	21
65	The combined use of resilience and loop diameter uniformity as a good indirect measure of network reliability. Urban Water Journal, 2016, 13, 167-181.	1.0	52
66	Selection of relevant input variables in storm water quality modeling by multiobjective evolutionary polynomial regression paradigm. Water Resources Research, 2016, 52, 2403-2419.	1.7	20
67	Generalized Resilience and Failure Indices for Use with Pressure-Driven Modeling and Leakage. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	63
68	Rehabilitating pressurized irrigation networks for an increased energy efficiency. Agricultural Water Management, 2016, 164, 212-222.	2.4	9
69	Assessing the Applicability of the Bartlett-Lewis Model in Simulating Residential Water Demands. Procedia Engineering, 2016, 154, 123-131.	1.2	7
70	Optimisation of leakage and energy in the Abbiategrasso district. Civil Engineering and Environmental Systems, 2016, 33, 22-34.	0.4	10
71	Selection of Pumping Configuration for Closed Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	19
72	Parameterizing residential water demand pulse models through smart meter readings. Environmental Modelling and Software, 2016, 80, 33-40.	1.9	30

#	Article	IF	Citations
73	Application of Real-Time Control Techniques to Reduce Water Volume Discharges from Quality-Oriented CSO Devices. Journal of Environmental Engineering, ASCE, 2016, 142, .	0.7	18
74	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
75	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
76	Comparison of various phased approaches for the constrained minimum-cost design of water distribution networks. Urban Water Journal, 2016, 13, 270-283.	1.0	12
77	Correlation or not Correlation? This is the Question in Modelling Residential Water Demand Pulses. Procedia Engineering, 2015, 119, 1455-1462.	1.2	4
78	Water distribution network robust design based on energy surplus index maximization. Water Science and Technology: Water Supply, 2015, 15, 1253-1258.	1.0	6
79	Preserving Duration-intensity Correlation on Synthetically Generated Water Demand Pulses. Procedia Engineering, 2015, 119, 1463-1472.	1.2	6
80	The Identification of Loops in Water Distribution Networks. Procedia Engineering, 2015, 119, 506-515.	1.2	9
81	Multiobjective Optimization of Pipe Replacements and Control Valve Installations for Leakage Attenuation in Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2015, 141, .	1.3	66
82	Forecasting Domestic Water Consumption from Smart Meter Readings Using Statistical Methods and Artificial Neural Networks. Procedia Engineering, 2015, 119, 1419-1428.	1.2	41
83	Considering the Mutual Dependence of Pulse Duration and Intensity in Models for Generating Residential Water Demand. Journal of Water Resources Planning and Management - ASCE, 2015, 141, .	1.3	31
84	Taking Account of Uncertainty in Demand Growth When Phasing the Construction of a Water Distribution Network. Journal of Water Resources Planning and Management - ASCE, 2015, 141, .	1.3	31
85	Comparing Low and High-Level Hybrid Algorithms on the Two-Objective Optimal Design of Water Distribution Systems. Water Resources Management, 2015, 29, 1-16.	1.9	66
86	Embedding linear programming in multi objective genetic algorithms for reducing the size of the search space with application to leakage minimization in water distribution networks. Environmental Modelling and Software, 2015, 69, 308-318.	1.9	51
87	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
88	Comparison of Newton-Raphson Global and Loop Algorithms for Water Distribution Network Resolution. Journal of Hydraulic Engineering, 2014, 140, 313-321.	0.7	25
89	Low Level Hybrid Procedure for the Multi-objective Design of Water Distribution Networks. Procedia Engineering, 2014, 70, 369-378.	1.2	7
90	Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	1.3	92

#	Article	IF	Citations
91	Accounting for Phasing of Construction within the Design of Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 598-606.	1.3	44
92	Using EPANET for modelling water distribution systems with users along the pipes. Civil Engineering and Environmental Systems, 2014, 31, 36-50.	0.4	32
93	Comparison between Entropy and Resilience as Indirect Measures of Reliability in the Framework of Water Distribution Network Design. Procedia Engineering, 2014, 70, 379-388.	1.2	37
94	Network Design through the Phasing of Construction Approach. Procedia Engineering, 2014, 89, 823-830.	1.2	4
95	Numerical modelling of sediment bed aggradation in open rectangular drainage channels. Urban Water Journal, 2013, 10, 365-376.	1.0	16
96	A new algorithm for real-time pressure control in water distribution networks. Water Science and Technology: Water Supply, 2013, 13, 875-882.	1.0	61
97	Closure to â€œHead Reconstruction Method to Balance Flux and Source Terms in Shallow Water Equationsâ€•by Enrico Creaco, Alberto Campisano, Alexander Khe, Carlo Modica, and Giovanni Russo. Journal of Engineering Mechanics - ASCE, 2012, 138, 553-554.	1.6	0
98	Fast network multi-objective design algorithm combined with an a posteriori procedure for reliability evaluation under various operational scenarios. Urban Water Journal, 2012, 9, 385-399.	1.0	50
99	Crisp discharge forecasts and grey uncertainty bands using data-driven models. Hydrology Research, 2012, 43, 589-602.	1.1	9
100	A dimensionless procedure for the design of infiltration trenches. Journal - American Water Works Association, 2012, 104, E501.	0.2	10
101	Evaluating Water Demand Shortfalls in Segment Analysis. Water Resources Management, 2012, 26, 2301-2321.	1.9	32
102	Segment identification in water distribution systems. Urban Water Journal, 2011, 8, 203-217.	1.0	62
103	A Fast New Method for Segment Identification in Water Distribution Systems. , 2011, , .		3
104	A simplified approach for the design of infiltration trenches. Water Science and Technology, 2011, 64, 1362-1367.	1.2	18
105	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
106	Head Reconstruction Method to Balance Flux and Source Terms in Shallow Water Equations. Journal of Engineering Mechanics - ASCE, 2010, 136, 517-523.	1.6	6
107	RTC of Valves for Leakage Reduction in Water Supply Networks. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 138-141.	1.3	71
108	Numerical simulation of flushing effect on sewer sediments and comparison of four sediment transport formulas. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 195-202.	0.7	24

#	Article	IF	Citations
109	P controller calibration for the real time control of moveable weirs in (proportional) sewer channels. Water Science and Technology, 2009, 59, 2237-2244.	1.2	8
110	P controller calibration for the real time control of moveable weirs in (proportional) sewer channels. Water Science and Technology, 2009, 60, 2203-2203.	1.2	0
111	Laboratory investigation on the effects of flushes on cohesive sediment beds. Urban Water Journal, 2008, 5, 3-14.	1.0	23
112	Dimensionless Approach for the Design of Flushing Gates in Sewer Channels. Journal of Hydraulic Engineering, 2007, 133, 964-972.	0.7	22
113	Experimental analysis of the Hydrass flushing gate and laboratory validation of flush propagation modelling. Water Science and Technology, 2006, 54, 101-108.	1.2	13
114	Experimental analysis of the Hydrass flushing gate and field validation of flush propagation modelling. Water Science and Technology, 2005, 51, 129-137.	1.2	45
115	Discussion of â€œGate and Vacuum Flushing of Sewer Sediment: Laboratory Testingâ€•by Qizhong Guo, Chi-Yuan Fan, Ramjee Raghaven, and Richard Field. Journal of Hydraulic Engineering, 2005, 131, 1145-1146.	0.7	3
116	Experimental and numerical analysis of the scouring effects of flushing waves on sediment deposits. Journal of Hydrology, 2004, 299, 324-334.	2.3	40
117	Experimental and numerical analysis of the scouring effects of flushing waves on sediment deposits. Journal of Hydrology, 2004, 299, 324-334.	2.3	17
118	Improving Combined Sewer Overflow and Treatment Plant Performance by Real-Time Control Operation. , 2004, , 122-138.		4