Idel Montalvo arango

List of Publications by Year
in descending order

39	804	623734	501196
papers	citations	14 h-index	28 g-index

42	42	42	698
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Particle Swarm Optimization applied to the design of water supply systems. Computers and Mathematics With Applications, 2008, 56, 769-776.	2.7	152
2	Design optimization of wastewater collection networks by PSO. Computers and Mathematics With Applications, 2008, 56, 777-784.	2.7	78
3	Forecasting pedestrian evacuation times by using swarm intelligence. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 1213-1220.	2.6	67
4	Improved performance of PSO with self-adaptive parameters for computing the optimal design of Water Supply Systems. Engineering Applications of Artificial Intelligence, 2010, 23, 727-735.	8.1	63
5	Multi-objective particle swarm optimization applied to water distribution systems design: An approach with human interaction. Mathematical and Computer Modelling, 2010, 52, 1219-1227.	2.0	48
6	A flexible methodology to sectorize water supply networks based on social network theory concepts and multi-objective optimization. Journal of Hydroinformatics, 2016, 18, 62-76.	2.4	45
7	A diversity-enriched variant of discrete PSO applied to the design of water distribution networks. Engineering Optimization, 2008, 40, 655-668.	2.6	43
8	A Novel Water Supply Network Sectorization Methodology Based on a Complete Economic Analysis, Including Uncertainties. Water (Switzerland), 2016, 8, 179.	2.7	43
9	Tuning metaheuristics: A data mining based approach for particle swarm optimization. Expert Systems With Applications, 2011, 38, 12826-12838.	7.6	42
10	Reliability and Tolerance Comparison in Water Supply Networks. Water Resources Management, 2011, 25, 1437-1448.	3.9	25
11	Iterative Multistage Method for a Large Water Network Sectorization into DMAs under Multiple Design Objectives. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	2.6	20
12	Optimal Placement of Pressure Sensors Using Fuzzy DEMATEL-Based Sensor Influence. Water (Switzerland), 2020, 12, 493.	2.7	19
13	A Digital Twin of a Water Distribution System by Using Graph Convolutional Networks for Pump Speed-Based State Estimation. Water (Switzerland), 2022, 14, 514.	2.7	18
14	Sensitivity analysis to assess the relative importance of pipes in water distribution networks. Mathematical and Computer Modelling, 2008, 48, 268-278.	2.0	16
15	Multi-criteria analysis applied to multi-objective optimal pump scheduling in water systems. Water Science and Technology: Water Supply, 2019, 19, 2338-2346.	2.1	14
16	Near Real Time Pump Optimization and Pressure Management. Procedia Engineering, 2017, 186, 666-675.	1.2	13
17	Identification of surgical practice patterns using evolutionary cluster analysis. Mathematical and Computer Modelling, 2009, 50, 705-712.	2.0	12
18	On the Complexities of the Design of Water Distribution Networks. Mathematical Problems in Engineering, 2012, 2012, 1-25.	1.1	11

#	Article	IF	Citations
19	Water supply system component evaluation from GPR radargrams using a multi-agent approach. Mathematical and Computer Modelling, 2013, 57, 1927-1932.	2.0	9
20	Cloud-based Decision Making in Water Distribution Systems. Procedia Engineering, 2014, 89, 488-494.	1.2	9
21	Water Quality Supervision of Distribution Networks Based on Machine Learning Algorithms and Operator Feedback. Procedia Engineering, 2014, 89, 189-196.	1.2	7
22	Improved Real-time Monitoring and Control of Water Supply Networks by Use of Graph Decomposition. Procedia Engineering, 2014, 89, 1276-1281.	1.2	6
23	Towards the visualization of water supply system components with GPR images. Mathematical and Computer Modelling, 2011, 54, 1818-1822.	2.0	5
24	Injecting problem-dependent knowledge to improve evolutionary optimization search ability. Journal of Computational and Applied Mathematics, 2016, 291, 281-292.	2.0	5
25	Multi-Agent Simulation of Hydraulic Transient Equations in Pressurized Systems. Journal of Computing in Civil Engineering, 2016, 30, 04015071.	4.7	3
26	A hybrid, auto-adaptive and rule-based multi-agent approach using evolutionary algorithms for improved searching. Engineering Optimization, 2016, 48, 1365-1377.	2.6	3
27	Water Distribution System Design Using Agent Swarm Optimization. , 2011, , .		2
28	Error Analysis of Some Demand Simplifications in Hydraulic Models of Water Supply Networks. Abstract and Applied Analysis, 2013, 2013, 1-13.	0.7	2
29	A System Architecture for the Detection and Mitigation of CBRN Related Contamination Events of Drinking Water. Procedia Engineering, 2015, 119, 319-327.	1.2	2
30	Parameterization of Offline and Online Hydraulic Simulation Models. Procedia Engineering, 2015, 119, 545-553.	1.2	2
31	Robust Design of Water Supply Systems through Evolutionary Optimization. Lecture Notes in Control and Information Sciences, 2009, , 321-330.	1.0	2
32	Mining Solution Spaces for Decision Making in Water Distribution Systems. Procedia Engineering, 2014, 70, 864-871.	1.2	1
33	Scrutinizing Changes in the Water Demand Behavior. Lecture Notes in Control and Information Sciences, 2009, , 305-313.	1.0	1
34	Swarm Intelligence for Optimization in the Urban Water Industry. , 2010, , .		0
35	Accreditation and dedication in Coloproctology is associated with good perioperative care. CirugÃa EspaÃ±ola (English Edition), 2011, 89, 94-100.	0.1	0
36	Automating Workflow in Online Water Network Analysis. Procedia Engineering, 2015, 119, 653-659.	1.2	0

#	ARTICLE	IF	CITATIONS
37	A Control Simulation Tool for Online Demand Calibration. Procedia Engineering, 2015, 119, 828-833.	1.2	0
38	Agent Swarm Optimization: Exploding the search space. , 2017, , 55-64.		0
39	LoRaWan for Smarter Management of Water Network: From metering to data analysis. Technologien Fuìr Die Intelligente Automation, 2019, , 133-136.	0.5	0