Angus R Simpson

List of Publications by Year
in descending order

43 papers	2,171 citations	257450 24 h-index	254184 43 g-index
44 all docs	44 docs citations	44 times ranked	1127 citing authors

#	Article	IF	Citations
1	Ant Colony Optimization for Design of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2003, 129, 200-209.	2.6	387
2	Leak Detection in Pipelines using the Damping of Fluid Transients. Journal of Hydraulic Engineering, 2002, 128, 697-711.	1.5	246
3	Genetic Algorithms for Reliability-Based Optimization of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 63-72.	2.6	177
4	Experimental verification of the frequency response method for pipeline leak detection. Journal of Hydraulic Research/De Recherches Hydrauliques, 2006, 44, 693-707.	1.7	145
5	A combined NLPâ€differential evolution algorithm approach for the optimization of looped water distribution systems. Water Resources Research, 2011, 47, .	4.2	103
6	Battle of the Water Networks II. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	2.6	92
7	Comparison of the Searching Behavior of NSGA-II, SAMODE, and Borg MOEAs Applied to Water Distribution System Design Problems. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	74
8	Self-Adaptive Differential Evolution Algorithm Applied to Water Distribution System Optimization. Journal of Computing in Civil Engineering, 2013, 27, 148-158.	4.7	73
9	Multiobjective optimization of water distribution systems accounting for economic cost, hydraulic reliability, and greenhouse gas emissions. Water Resources Research, 2013, 49, 1211-1225.	4.2	61
10	Single-Event Leak Detection in Pipeline Using First Three Resonant Responses. Journal of Hydraulic Engineering, 2013, 139, 645-655.	1.5	60
11	Leak Detection and Topology Identification in Pipelines Using Fluid Transients and Artificial Neural Networks. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	2.6	59
12	Detection of Localized Deterioration Distributed along Single Pipelines by Reconstructive MOC Analysis. Journal of Hydraulic Engineering, 2014, 140, 190-198.	1.5	54
13	Detecting Thinner-Walled Pipe Sections Using a Spark Transient Pressure Wave Generator. Journal of Hydraulic Engineering, 2018, 144, .	1.5	45
14	Dealing with Zero Flows in Solving the Nonlinear Equations for Water Distribution Systems. Journal of Hydraulic Engineering, 2011, 137, 1216-1224.	1.5	44
15	A Robust, Rapidly Convergent Method That Solves the Water Distribution Equations for Pressure-Dependent Models. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	42
16	Reformulated Co-Tree Flows Method Competitive with the Global Gradient Algorithm for Solving Water Distribution System Equations. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	2.6	41
17	A graph decompositionâ€based approach for water distribution network optimization. Water Resources Research, 2013, 49, 2093-2109.	4.2	37
18	An efficient hybrid approach for multiobjective optimization of water distribution systems. Water Resources Research, 2014, 50, 3650-3671.	4.2	37

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19	A decomposition and multistage optimization approach applied to the optimization of water distribution systems with multiple supply sources. Water Resources Research, 2013, 49, 380-399.	4.2	36
20	Experimental verification of pipeline frequency response extraction and leak detection using the inverse repeat signal. Journal of Hydraulic Research/De Recherches Hydrauliques, 2016, 54, 210-219.	1.7	36
21	On-site non-invasive condition assessment for cement mortarâ€“lined metallic pipelines by time-domain fluid transient analysis. Structural Health Monitoring, 2015, 14, 426-438.	7.5	34
22	Optimization of Pump Operation Using Rule-Based Controls in EPANET2: New ETTAR Toolkit and Correction of Energy Computation. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	28
23	Coupled Binary Linear Programmingâ€“Differential Evolution Algorithm Approach for Water Distribution System Optimization. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 585-597.	2.6	27
24	Pressure Surge Suppression Using a Metallic-Plastic-Metallic Pipe Configuration. Journal of Hydraulic Engineering, 2018, 144, .	1.5	27
25	Content-Based Active-Set Method for the Pressure-Dependent Model of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2019, 145, .	2.6	25
26	In-line check valves for water hammer control. Journal of Hydraulic Research/De Recherches Hydrauliques, 2007, 45, 547-554.	1.7	23
27	Paired-IRF Method for Detecting Leaks in Pipe Networks. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	2.6	23
28	Effect of Storage Tank Size on the Minimization of Water Distribution System Cost and Greenhouse Gas Emissions While Considering Time-Dependent Emissions Factors. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	18
29	Merging Fluid Transient Waves and Artificial Neural Networks for Burst Detection and Identification in Pipelines. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	2.6	17
30	Noncrossover Dither Creeping Mutation-Based Genetic Algorithm for Pipe Network Optimization. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 553-557.	2.6	14
31	A Content-Based Active-Set Method for Pressure-Dependent Models of Water Distribution Systems with Flow Controls. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	2.6	14
32	Wave separation and pipeline condition assessment using in-pipe fibre optic pressure sensors. Journal of Hydroinformatics, 2019, 21, 371-379.	2.4	12
33	Leak Detection for Pipelines Using In-Pipe Optical Fiber Pressure Sensors and a Paired-IRF Technique. Journal of Hydraulic Engineering, 2020, 146, 06020013.	1.5	12
34	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, .	2.6	12
35	Stochastic Resonance Enhancement for Leak Detection in Pipelines Using Fluid Transients and Convolutional Neural Networks. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	2.6	11
36	Determination of the linear frequency response of single pipelines using persistent transient excitation: a numerical investigation. Journal of Hydraulic Research/De Recherches Hydrauliques, 2013, 51, 728-734.	1.7	6

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37	Letâ€™s Get Moving and Write Software: An Open Source Project for EPANET. Journal of Water Resources Planning and Management - ASCE, 2018, 144, 01818001.	2.6	6
38	Water Hammer Simulation Method in Pressurized Pipeline with a Moving Isolation Device. Water (Switzerland), 2021, 13, 1794.	2.7	4
39	Closure to â€œJacobian Matrix for Solving Water Distribution System Equations with the Darcy-Weisbach Head-Loss Modelâ€•by Angus Simpson and Sylvan Elhay. Journal of Hydraulic Engineering, 2012, 138, 1001-1002.	1.5	3
40	Influence of connection stub parameters and valve closure time on transient measurement accuracy of a pressure transducer. Water Science and Technology: Water Supply, 2018, 18, 1984-1995.	2.1	2
41	Water Distribution Systems on the Spot: Energy Market Opportunities for Water Utilities. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	2.6	2
42	Optimization of Pumping Costs and Harvested Volume for a Stormwater Harvesting System. Journal of Water Resources Planning and Management - ASCE, 2018, 144, 05018011.	2.6	1
43	Let's Get Moving and Write Software: An Open Source Project for. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	2.6	1