Raziyeh Farmani

List of Publications by Year
in descending order

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Version: 2024-02-01

92 papers	4,299 citations	117571 34 h-index	114418 63 g-index
92 all docs	92 docs citations	92 times ranked	3859 citing authors

#	Article	IF	Citations
1	Optimization of building thermal design and control by multi-criterion genetic algorithm. Energy and Buildings, 2002, 34, 959-972.	3.1	384
2	Self-adaptive fitness formulation for constrained optimization. IEEE Transactions on Evolutionary Computation, 2003, 7, 445-455.	7.5	297
3	Trade-off between Total Cost and Reliability for Anytown Water Distribution Network. Journal of Water Resources Planning and Management - ASCE, 2005, 131, 161-171.	1.3	235
4	A global analysis approach for investigating structural resilience in urban drainage systems. Water Research, 2015, 81, 15-26.	5.3	213
5	Reliable, resilient and sustainable water management: the Safe & SuRe approach. Global Challenges, 2017, 1, 63-77.	1.8	176
6	Evolutionary multi-objective optimization in water distribution network design. Engineering Optimization, 2005, 37, 167-183.	1.5	171
7	Global resilience analysis of water distribution systems. Water Research, 2016, 106, 383-393.	5.3	148
8	Scenario Archetypes: Converging Rather than Diverging Themes. Sustainability, 2012, 4, 740-772.	1.6	136
9	Evolutionary multi-objective optimization of the design and operation of water distribution network: total cost vs. reliability vs. water quality. Journal of Hydroinformatics, 2006, 8, 165-179.	1.1	131
10	Bayesian networks in environmental and resource management. Integrated Environmental Assessment and Management, 2012, 8, 418-429.	1.6	131
11	A New Approach to Urban Water Management: Safe and Sure. Procedia Engineering, 2014, 89, 347-354.	1.2	125
12	Assessing pipe failure rate and mechanical reliability of water distribution networks using data-driven modeling. Journal of Hydroinformatics, 2009, 11, 1-17.	1.1	123
13	Topological attributes of network resilience: A study in water distribution systems. Water Research, 2018, 143, 376-386.	5.3	123
14	Benchmarking sustainability in cities: The role of indicators and future scenarios. Global Environmental Change, 2012, 22, 245-254.	3.6	105
15	A hybrid intelligent genetic algorithm. Advanced Engineering Informatics, 2005, 19, 255-262.	4.0	81
16	An evolutionary Bayesian belief network methodology for optimum management of groundwater contamination. Environmental Modelling and Software, 2009, 24, 303-310.	1.9	80
17	A comparison between performance of support vector regression and artificial neural network in prediction of pipe burst rate in water distribution networks. KSCE Journal of Civil Engineering, 2014, 18, 941-948.	0.9	79
18	Reliability Indicators for Water Distribution System Design: Comparison. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 160-168.	1.3	69

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19	A surrogate model for simulationâ€“optimization of aquifer systems subjected to seawater intrusion. Journal of Hydrology, 2015, 523, 542-554.	2.3	68
20	Intermittent water supply systems: causal factors, problems and solution options. Urban Water Journal, 2018, 15, 488-500.	1.0	62
21	Multi-objective Optimization of Different Management Scenarios to Control Seawater Intrusion in Coastal Aquifers. Water Resources Management, 2015, 29, 1843-1857.	1.9	60
22	A framework to support decision making in the selection of sustainable drainage system design alternatives. Journal of Environmental Management, 2017, 201, 145-152.	3.8	51
23	The Analytical Hierarchy Process for contaminated land management. Advanced Engineering Informatics, 2009, 23, 433-441.	4.0	48
24	Identification of parameters for air permeability of shotcrete tunnel lining using a genetic algorithm. Computers and Geotechnics, 1999, 25, 1-24.	2.3	44
25	Pipe Failure Prediction in Water Distribution Systems Considering Static and Dynamic Factors. Procedia Engineering, 2017, 186, 117-126.	1.2	42
26	A simulationâ€•optimization model to control seawater intrusion in coastal aquifers using abstraction/recharge wells. International Journal for Numerical and Analytical Methods in Geomechanics, 2012, 36, 1757-1779.	1.7	41
27	Forecasting Domestic Water Consumption from Smart Meter Readings Using Statistical Methods and Artificial Neural Networks. Procedia Engineering, 2015, 119, 1419-1428.	1.2	41
28	Pipeline failure prediction in water distribution networks using evolutionary polynomial regression combined with K-means clustering. Urban Water Journal, 2017, 14, 737-742.	1.0	41
29	Optimum Design and Management of Pressurized Branched Irrigation Networks. Journal of Irrigation and Drainage Engineering - ASCE, 2007, 133, 528-537.	0.6	39
30	Clustering analysis of water distribution systems: identifying critical components and community impacts. Water Science and Technology, 2014, 70, 1764-1773.	1.2	39
31	Water Distribution Networks Resilience Analysis: a Comparison between Graph Theory-Based Approaches and Global Resilience Analysis. Water Resources Management, 2019, 33, 2925-2940.	1.9	39
32	Enhancing resilience in urban water systems for future cities. Water Science and Technology: Water Supply, 2015, 15, 1343-1352.	1.0	37
33	Design and optimization of microstructure of auxetic materials. Engineering Computations, 2012, 29, 260-276.	0.7	36
34	Pressure-Discharge Relations with Application to Head-Driven Simulation of Water Distribution Networks. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 660-670.	1.3	36
35	State of SuDS delivery in the United Kingdom. Water and Environment Journal, 2018, 32, 9-16.	1.0	36
36	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

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37	Implications of Urban Form on Water Distribution Systems Performance. Water Resources Management, 2014, 28, 83-97.	1.9	29
38	Study of the Effects of Vent Configuration on Mono-Span Greenhouse Ventilation Using Computational Fluid Dynamics. Sustainability, 2020, 12, 986.	1.6	29
39	Towards a Sustainable Greenhouse: Review of Trends and Emerging Practices in Analysing Greenhouse Ventilation Requirements to Sustain Maximum Agricultural Yield. Sustainability, 2020, 12, 2794.	1.6	28
40	COVIDâ€19 and the water sector: understanding impact, preparedness and resilience in the UK through a sectorâ€wide survey. Water and Environment Journal, 2020, 34, 715-728.	1.0	27
41	Exploring wastewater system performance under future threats: Does enhancing resilience increase sustainability?. Water Research, 2019, 149, 448-459.	5.3	24
42	Delivering a Multi-Functional and Resilient Urban Forest. Sustainability, 2015, 7, 4600-4624.	1.6	23
43	A Resilient and Sustainable Water Sector: Barriers to the Operationalisation of Resilience. Sustainability, 2020, 12, 1797.	1.6	22
44	Optimal Rehabilitation of Water Distribution Systems Using a Cluster-Based Technique. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	21
45	Moving to a future of smart stormwater management: A review and framework for terminology, research, and future perspectives. Water Research, 2022, 218, 118409.	5.3	21
46	A multi expert decision support tool for the evaluation of advanced wastewater treatment trains: A novel approach to improve urban sustainability. Environmental Science and Policy, 2018, 90, 1-10.	2.4	20
47	Pipeline failure prediction in water distribution networks using weather conditions as explanatory factors. Journal of Hydroinformatics, 2018, 20, 1191-1200.	1.1	20
48	Strategic planning of the integrated urban wastewater system using adaptation pathways. Water Research, 2020, 182, 116013.	5.3	20
49	Modelling the future impacts of urban spatial planning on the viability of alternative water supply. Water Research, 2019, 162, 200-213.	5.3	19
50	Modelling seawater intrusion in the Pingtung coastal aquifer in Taiwan, under the influence of sea-level rise and changing abstraction regime. Hydrogeology Journal, 2020, 28, 2085-2103.	0.9	19
51	Attribute-based intervention development for increasing resilience of urban drainage systems. Water Science and Technology, 2018, 77, 1757-1764.	1.2	18
52	Optimal Operation of Water Distribution Systems Using a Graph Theoryâ€“Based Configuration of District Metered Areas. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	1.3	17
53	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
54	An evolutionary Bayesian belief network methodology for participatory decision making under uncertainty: An application to groundwater management. Integrated Environmental Assessment and Management, 2012, 8, 456-461.	1.6	16

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55	Framework for Assessing Flood Reliability and Resilience of Wastewater Treatment Plants. Journal of Environmental Engineering, ASCE, 2018, 144, .	0.7	16
56	Self-Adaptive Fitness Formulation for Evolutionary Constrained Optimization of Water Systems. Journal of Computing in Civil Engineering, 2005, 19, 212-216.	2.5	15
57	Urban futures and the code for sustainable homes. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2012, 165, 37-58.	0.4	15
58	A Web-based Platform for Water Efficient Households. Procedia Engineering, 2014, 89, 1128-1135.	1.2	15
59	Twin-Hierarchy Decomposition for Optimal Design of Water Distribution Systems. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	15
60	Application of Bayesian Decision Networks for Groundwater Resources Management Under the Conditions of High Uncertainty and Data Scarcity. Water Resources Management, 2017, 31, 1859-1879.	1.9	15
61	Improving Prediction of Dam Failure Peak Outflow Using Neuroevolution Combined with K-Means Clustering. Journal of Hydrologic Engineering - ASCE, 2017, 22, .	0.8	14
62	Impact of isolation valves location on resilience of water distribution systems. Urban Water Journal, 2020, 17, 560-567.	1.0	14
63	Battle of Postdisaster Response and Restoration. Journal of Water Resources Planning and Management - ASCE, 2020, 146, 04020067.	1.3	14
64	Real-time modelling of a major water supply system. Water Management, 2007, 160, 103-108.	0.4	13
65	Scenario-based sustainable water management and urban regeneration. Proceedings of the Institution of Civil Engineers: Engineering Sustainability, 2012, 165, 89-98.	0.4	13
66	Re-distributed manufacturing and the food-water-energy nexus: opportunities and challenges. Production Planning and Control, 2019, 30, 593-609.	5.8	13
67	Modular interdependency analysis for water distribution systems. Water Research, 2021, 201, 117320.	5.3	11
68	General resilience: Conceptual formulation and quantitative assessment for intervention development in the urban wastewater system. Water Research, 2022, 211, 118108.	5.3	11
69	Aquifers Management through Evolutionary Bayesian Networks: The Altiplano Case Study (SE Spain). Water Resources Management, 2011, 25, 3883-3909.	1.9	10
70	COVIDâ€19 and the UK water sector: Exploring organizational responses through a resilience framework. Water and Environment Journal, 2022, 36, 161-171.	1.0	10
71	Short-term River streamflow modeling using Ensemble-based additive learner approach. Journal of Hydro-Environment Research, 2021, 39, 81-91.	1.0	10
72	A Zero-Liquid Discharge Model for a Transient Solar-Powered Desalination System for Greenhouse. Water (Switzerland), 2020, 12, 1440.	1.2	9

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73	The Local Nexus Network: Exploring the Future of Localised Food Systems and Associated Energy and Water Supply. Smart Innovation, Systems and Technologies, 2016, , 613-624.	0.5	8
74	Analysis of Inlet Configurations on the Microclimate Conditions of a Novel Standalone Agricultural Greenhouse for Egypt Using Computational Fluid Dynamics. Sustainability, 2021, 13, 1446.	1.6	8
75	Hierarchical Decomposition of Water Distribution Systems for Background Leakage Assessment. Procedia Engineering, 2014, 89, 53-58.	1.2	7
76	Redesign of Water Distribution Systems for Passive Containment of Contamination. Journal - American Water Works Association, 2016, 108, E381-E391.	0.2	7
77	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
78	Analysing the Material Suitability and Concentration Ratio of a Solar-Powered Parabolic trough Collector (PTC) Using Computational Fluid Dynamics. Energies, 2020, 13, 5479.	1.6	7
79	Preserving Duration-intensity Correlation on Synthetically Generated Water Demand Pulses. Procedia Engineering, 2015, 119, 1463-1472.	1.2	6
80	Coupled three-dimensional modelling of groundwater-surface water interactions for management of seawater intrusion in Pingtung Plain, Taiwan. Journal of Hydrology: Regional Studies, 2021, 36, 100850.	1.0	6
81	Correlation or not Correlation? This is the Question in Modelling Residential Water Demand Pulses. Procedia Engineering, 2015, 119, 1455-1462.	1.2	4
82	Decarbonisation Using Hybrid Energy Solution: Case Study of Zagazig, Egypt. Energies, 2020, 13, 4680.	1.6	4
83	Estimating Flood Characteristics Using Geomorphologic Flood Index with Regards to Rainfall Intensity-Duration-Frequency-Area Curves and CADDIES-2D Model in Three Iranian Basins. Sustainability, 2020, 12, 7371.	1.6	4
84	Hydroinformatics education â€“ the Water Informatics in Science and Engineering (WISE) Centre for Doctoral Training. Hydrology and Earth System Sciences, 2021, 25, 2721-2738.	1.9	3
85	Towards more resilient and adaptable water distribution systems under future demand uncertainty. Water Science and Technology: Water Supply, 2013, 13, 1495-1506.	1.0	2
86	Energy Optimization Using a Pump Scheduling Tool in Water Distribution Systems. ARO-the Scientific Journal of Koya University, 2020, 8, 112-123.	0.2	2
87	Closure to â€œOptimum Design and Management of Pressurized Branched Irrigation Networksâ€•by Raziyeh Farmani, Ricardo Abadia, and Dragan Savic. Journal of Irrigation and Drainage Engineering - ASCE, 2010, 136, 159-160.	0.6	1
88	An open-source toolbox for investigating functional resilience in sewer networks based on global resilience analysis. Reliability Engineering and System Safety, 2022, 218, 108201.	5.1	1
89	Development of scenarios for evaluating conversion from intermittent to continuous water supply strategiesâ€™ sustainability implications. Urban Water Journal, 0, , 1-12.	1.0	1
90	Water systems modelling, data and control. Urban Water Journal, 2020, 17, 681-681.	1.0	0

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91	On Convergence of Multi-objective Pareto Front: Perturbation Method. , 2007, , 443-456.		0
92	Co-producing research with academics and industry to create a more resilient UK water sector. Research for All, 2020, 4, .	0.1	0