Mohammad Hadi Afshar

List of Publications by Year
in descending order

74	1,602	279487 23	344852 36
papers	citations	h-index	g-index

75	75	75	935
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Water hammer simulation by implicit method of characteristic. International Journal of Pressure Vessels and Piping, 2008, 85, 851-859.	1.2	94
2	Large scale reservoir operation by Constrained Particle Swarm Optimization algorithms. Journal of Hydro-Environment Research, 2012, 6, 75-87.	1.0	87
3	Extension of the constrained particle swarm optimization algorithm to optimal operation of multi-reservoirs system. International Journal of Electrical Power and Energy Systems, 2013, 51, 71-81.	3.3	71
4	Partially constrained ant colony optimization algorithm for the solution of constrained optimization problems: Application to storm water network design. Advances in Water Resources, 2007, 30, 954-965.	1.7	63
5	Optimal Operation of Hydropower Reservoir Systems Using Weed Optimization Algorithm. Water Resources Management, 2016, 30, 3995-4009.	1.9	58
6	Fuzzy rule-based model for hydropower reservoirs operation. International Journal of Electrical Power and Energy Systems, 2011, 33, 171-178.	3.3	57
7	Hydrograph-based storm sewer design optimization by genetic algorithm. Canadian Journal of Civil Engineering, 2006, 33, 319-325.	0.7	51
8	Application of an ant algorithm for layout optimization of tree networks. Engineering Optimization, 2006, 38, 353-369.	1.5	46
9	Partially and Fully Constrained Ant Algorithms for the Optimal Solution of Large Scale Reservoir Operation Problems. Water Resources Management, 2008, 22, 1835-1857.	1.9	46
10	Simulation of transient flow in pipeline systems due to load rejection and load acceptance by hydroelectric power plants. International Journal of Mechanical Sciences, 2010, 52, 103-115.	3.6	44
11	Simulation of transient flow caused by pump failure: Point-Implicit Method of Characteristics. Annals of Nuclear Energy, 2010, 37, 1742-1750.	0.9	43
12	Risk-Cost Optimization of Hydraulic Structures: Methodology and Case Study. Water Resources Management, 2010, 24, 2833-2851.	1.9	42
13	Optimal design of sewer networks using cellular automata-based hybrid methods: Discrete and continuous approaches. Engineering Optimization, 2012, 44, 1-22.	1.5	39
14	Extension of the constrained ant colony optimization algorithms for the optimal operation of multi-reservoir systems. Journal of Hydroinformatics, 2013, 15, 155-173.	1.1	39
15	Improving the efficiency of ant algorithms using adaptive refinement: Application to storm water network design. Advances in Water Resources, 2006, 29, 1371-1382.	1.7	35
16	Application of cellular automata to sewer network optimization problems. Scientia Iranica, 2011, 18, 304-312.	0.3	35
17	Optimal solution of large-scale reservoir-operation problems: Cellular-automata versus heuristic-search methods. Engineering Optimization, 2009, 41, 275-293.	1.5	32
18	Discrete least squares meshless method with sampling points for the solution of elliptic partial differential equations. Engineering Analysis With Boundary Elements, 2009, 33, 83-92.	2.0	31

#	Article	IF	Citations
19	Application of cellular automata to size and topology optimization of truss structures. Scientia Iranica, 2012, 19, 373-380.	0.3	31
20	Simulating free surface problems using Discrete Least Squares Meshless method. Computers and Fluids, 2010, 39, 461-470.	1.3	30
21	Solving Poissonâ€™s equations by the Discrete Least Square meshless method. WIT Transactions on Modelling and Simulation, 2006, , .	0.0	27
22	Collocated discrete leastâ€squares (CDLS) meshless method: Error estimate and adaptive refinement. International Journal for Numerical Methods in Fluids, 2008, 56, 1909-1928.	0.9	26
23	Simultaneous Layout and Size Optimization of Water Distribution Networks: Engineering Approach. Journal of Infrastructure Systems, 2005, 11, 221-230.	1.0	24
24	Application of a maxâ€“min ant system to joint layout and size optimization of pipe networks. Engineering Optimization, 2006, 38, 299-317.	1.5	23
25	Node moving adaptive refinement strategy for planar elasticity problems using discrete least squares meshless method. Finite Elements in Analysis and Design, 2011, 47, 1315-1325.	1.7	23
26	Prediction of current-induced scour depth around pile groups using MARS, CART, and ANN approaches. Marine Georesources and Geotechnology, 2021, 39, 577-588.	1.2	23
27	Constrained Ant Colony Optimisation Algorithm for the layout and size optimisation of sanitary sewer networks. Urban Water Journal, 2013, 10, 154-173.	1.0	21
28	Rebirthing particle swarm optimization algorithm: application to storm water network design. Canadian Journal of Civil Engineering, 2008, 35, 1120-1127.	0.7	20
29	Steadyâ€state solution of incompressible Navierâ€“Stokes equations using discrete leastâ€squares meshless method. International Journal for Numerical Methods in Fluids, 2011, 67, 369-382.	0.9	19
30	A node enrichment adaptive refinement in Discrete Least Squares Meshless method for solution of elasticity problems. Engineering Analysis With Boundary Elements, 2012, 36, 385-393.	2.0	18
31	GAâ€“GHCA model for the optimal design of pumped sewer networks. Canadian Journal of Civil Engineering, 2015, 42, 1-12.	0.7	18
32	A Novel Parallel Cellular Automata Algorithm for Multi-Objective Reservoir Operation Optimization. Water Resources Management, 2018, 32, 785-803.	1.9	18
33	Application of Multivariate Adaptive Regression Splines and Classification and Regression Trees to Estimate Wave-Induced Scour Depth Around Pile Groups. Iranian Journal of Science and Technology - Transactions of Civil Engineering, 2020, 44, 447-459.	1.0	18
34	A new transition rule for ant colony optimization algorithms: application to pipe network optimization problems. Engineering Optimization, 2005, 37, 525-540.	1.5	17
35	Collocated discrete least squares meshless (CDLSM) method for the solution of transient and steadyâ€state hyperbolic problems. International Journal for Numerical Methods in Fluids, 2009, 60, 1055-1078.	0.9	17
36	Efficient simulation of free surface flows with discrete least-squares meshless method usinga priorierror estimator. International Journal of Computational Fluid Dynamics, 2010, 24, 349-367.	0.5	16

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37	Mixed discrete least squares meshless method for planar elasticity problems using regular and irregular nodal distributions. Engineering Analysis With Boundary Elements, 2012, 36, 894-902.	2.0	16
38	Layout optimization of looped networks by constrained ant colony optimisation algorithm. Advances in Engineering Software, 2014, 70, 123-133.	1.8	16
39	Optimal hydropower operation of multi-reservoir systems: hybrid cellular automata-simulated annealing approach. Journal of Hydroinformatics, 2020, 22, 1236-1257.	1.1	16
40	A parameter-free self-adapting boundary genetic search for pipe network optimization. Computational Optimization and Applications, 2007, 37, 83-102.	0.9	15
41	Rebirthing genetic algorithm for storm sewer network design. Scientia Iranica, 2012, 19, 11-19.	0.3	15
42	A cellular automata approach for the hydro-power operation of multi-reservoir systems. Water Management, 2013, 166, 465-478.	0.4	15
43	Adaptive Hybrid Genetic Algorithm and Cellular Automata Method for Reliability-Based Reservoir Operation. Journal of Water Resources Planning and Management - ASCE, 2017, 143, .	1.3	14
44	Application of local and global particle swarm optimization algorithms to optimal design and operation of irrigation pumping systems. Irrigation and Drainage, 2009, 58, 321-331.	0.8	13
45	Adaptive simulation of two dimensional hyperbolic problems by Collocated Discrete Least Squares Meshless method. Computers and Fluids, 2010, 39, 2030-2039.	1.3	13
46	Multi-objective optimization response modeling to contaminated water distribution networks: Pressure driven versus demand driven analysis. KSCE Journal of Civil Engineering, 2017, 21, 2085-2096.	0.9	13
47	A two-phase simulationâ€“optimization cellular automata method for sewer network design optimization. Engineering Optimization, 2020, 52, 620-636.	1.5	12
48	Penalty adapting ant algorithm: application to pipe network optimization. Engineering Optimization, 2008, 40, 969-987.	1.5	11
49	Hybridizing ant colony optimization algorithm with nonlinear programming method for effective optimal design of sewer networks. Water Environment Research, 2019, 91, 300-321.	1.3	11
50	Fuzzy pattern recognition method for assessing soil erosion. Environmental Monitoring and Assessment, 2011, 180, 385-397.	1.3	10
51	Corrected discrete least-squares meshless method for simulating free surface flows. Engineering Analysis With Boundary Elements, 2012, 36, 1581-1594.	2.0	10
52	Multi-period response management to contaminated water distribution networks: dynamic programming versus genetic algorithms. Engineering Optimization, 2018, 50, 415-429.	1.5	9
53	Discrete Least Squares Meshless (DLSM) method for simulation of steady state shallow water flows. Scientia Iranica, 2011, 18, 835-845.	0.3	8
54	A Hybridized <scp>GA</scp> with <scp>LPâ€ŁP</scp> Model for the Management of Confined Groundwater. Ground Water, 2015, 53, 485-492.	0.7	8

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55	A hybrid MILP-LP-LP approach for the optimal design and operation of unconfined groundwater utilization systems. Journal of Water Supply: Research and Technology - AQUA, 2016, 65, 208-219.	0.6	7
56	Reliability-based operation of reservoirs: a hybrid genetic algorithm and cellular automata method. Soft Computing, 2018, 22, 6461-6471.	2.1	7
57	Layout and size optimization of tree-like pipe networks by incremental solution building ants. Canadian Journal of Civil Engineering, 2008, 35, 129-139.	0.7	6
58	Elitist mutated particle swarm optimisation algorithms: application to reservoir operation problems. Water Management, 2009, 162, 409-417.	0.4	6
59	An adaptive node regeneration technique for the efficient solution of elasticity problems using MDLSM method. Engineering Analysis With Boundary Elements, 2015, 50, 198-211.	2.0	5
60	Chance-Constrained Water Supply Operation of Reservoirs Using Cellular Automata. Lecture Notes in Computer Science, 2016, , 201-209.	1.0	5
61	Exploring the Efficiency of Harmony Search Algorithm for Hydropower Operation of Multi-reservoir Systems: A Hybrid Cellular Automat-Harmony Search Approach. Advances in Intelligent Systems and Computing, 2017, , 252-260.	0.5	5
62	Embedded modified Euler method: an efficient and accurate model. Water Management, 2009, 162, 199-209.	0.4	4
63	Error estimate and adaptive refinement for incompressible Navierâ€Stokes equations using the discrete least squares meshless method. International Journal for Numerical Methods in Fluids, 2012, 70, 56-70.	0.9	4
64	AN EFFICIENT HYBRID LPâ€LP METHOD FOR THE OPTIMAL UTILIZATION OF CONFINED AQUIFERS. Irrigation and Drainage, 2013, 62, 120-128.	0.8	4
65	Extension of the hybrid linear programming method to optimize simultaneously the design and operation of groundwater utilization systems. Engineering Optimization, 2015, 47, 550-560.	1.5	4
66	Multi-objective optimisation using cellular automata: application to multi-purpose reservoir operation. Civil Engineering and Environmental Systems, 2019, 36, 115-132.	0.4	4
67	A fully Lagrangian mixed discrete least squares meshfree method for simulating the free surface flow problems. Engineering With Computers, 2022, 38, 331-351.	3.5	3
68	Experimental Study of the Hydraulic Performance of D-Type Triangular Piano Key Weirs. International Journal of Civil Engineering, 2021, 19, 1209-1220.	0.9	3
69	Experimental study on the discharge coefficient of triangular piano key weir*. Irrigation and Drainage, 2022, 71, 333-348.	0.8	3
70	Application of Cellular Automata in Bi-Objective Operation of Multi Reservoir Systems. Water (Switzerland), 2021, 13, 2740.	1.2	2
71	Cascade stilling basin design using continuous ant algorithm. Water Management, 2008, 161, 151-159.	0.4	1
72	Industrial Distribution System Simulation for Optimal Water Resource Assignment Using Probabilistic Tabu Search. , 2009, , .		1

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73	Analysis of Seepage through Dam Foundation Using Smoothed Particle Hydrodynamics (SPH) Meshless Method. , 2010, , .		1
74	Closure to â€œSimultaneous Layout and Size Optimization of Water Distribution Networks: Engineering Approachâ€•by M. H. Afshar, M. Akbari, and M. A. Marino. Journal of Infrastructure Systems, 2009, 15, 137-137.	1.0	0