Iman Ahmadianfar

List of Publications by Year
in descending order

46 papers	2,598 citations	279701 23 h-index	243529 44 g-index
46 all docs	46 docs citations	46 times ranked	1168 citing authors

#	Article	IF	Citations
1	RUN beyond the metaphor: An efficient optimization algorithm based on Runge Kutta method. Expert Systems With Applications, 2021, 181, 115079.	4.4	552
2	Gradient-based optimizer: A new metaheuristic optimization algorithm. Information Sciences, 2020, 540, 131-159.	4.0	462
3	INFO: An efficient optimization algorithm based on weighted mean of vectors. Expert Systems With Applications, 2022, 195, 116516.	4.4	356
4	Prediction of nanofluids viscosity using random forest (RF) approach. Chemometrics and Intelligent Laboratory Systems, 2020, 201, 104010.	1.8	80
5	Prediction of surface water total dissolved solids using hybridized wavelet-multigene genetic programming: New approach. Journal of Hydrology, 2020, 589, 125335.	2.3	67
6	On the assessment of specific heat capacity of nanofluids for solar energy applications: Application of Gaussian process regression (GPR) approach. Journal of Energy Storage, 2021, 33, 102067.	3.9	61
7	A novel Hybrid Wavelet-Locally Weighted Linear Regression (W-LWLR) Model for Electrical Conductivity (EC) Prediction in Surface Water. Journal of Contaminant Hydrology, 2020, 232, 103641.	1.6	53
8	On the Thermal Conductivity Assessment of Oil-Based Hybrid Nanofluids using Extended Kalman Filter integrated with feed-forward neural network. International Journal of Heat and Mass Transfer, 2021, 172, 121159.	2.5	52
9	On the specific heat capacity estimation of metal oxide-based nanofluid for energy perspective â€" A comprehensive assessment of data analysis techniques. International Communications in Heat and Mass Transfer, 2021, 123, 105217.	2.9	51
10	Optimizing Multireservoir Operation: Hybrid of Bat Algorithm and Differential Evolution. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	1.3	50
11	Gradient-based optimization with ranking mechanisms for parameter identification of photovoltaic systems. Energy Reports, 2021, 7, 3979-3997.	2.5	47
12	Specific heat capacity of molten salt-based nanofluids in solar thermal applications: A paradigm of two modern ensemble machine learning methods. Journal of Molecular Liquids, 2021, 335, 116434.	2.3	44
13	Optimizing operating rules for multi-reservoir hydropower generation systems: An adaptive hybrid differential evolution algorithm. Renewable Energy, 2021, 167, 774-790.	4.3	43
14	Prediction of flyrock induced by mine blasting using a novel kernel-based extreme learning machine. Journal of Rock Mechanics and Geotechnical Engineering, 2021, 13, 1438-1451.	3.7	41
15	Developing optimal policies for reservoir systems using a multi-strategy optimization algorithm. Applied Soft Computing Journal, 2019, 80, 888-903.	4.1	38
16	Accurate prediction of thermal conductivity of ethylene glycol-based hybrid nanofluids using artificial intelligence techniques. International Communications in Heat and Mass Transfer, 2020, 116, 104624.	2.9	38
17	Prediction of Maximum Scour Depth near Spur Dikes in Uniform Bed Sediment Using Stacked Generalization Ensemble Tree-Based Frameworks. Journal of Irrigation and Drainage Engineering - ASCE, 2021, 147, .	0.6	38
18	Extracting Optimal Policies of Hydropower Multi-Reservoir Systems Utilizing Enhanced Differential Evolution Algorithm. Water Resources Management, 2017, 31, 4375-4397.	1.9	36

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19	A rigorous model for prediction of viscosity of oil-based hybrid nanofluids. Physica A: Statistical Mechanics and Its Applications, 2020, 556, 124827.	1.2	36
20	An improved adaptive neuro fuzzy inference system model using conjoined metaheuristic algorithms for electrical conductivity prediction. Scientific Reports, 2022, 12, 4934.	1.6	33
21	Gradient Evolution Optimization Algorithm to Optimize Reservoir Operation Systems. Water Resources Management, 2019, 33, 603-625.	1.9	32
22	Assessment of scouring around spur dike in cohesive sediment mixtures: A comparative study on three rigorous machine learning models. Journal of Hydrology, 2022, 606, 127330.	2.3	30
23	Prediction of scour depth at piers with debris accumulation effects using linear genetic programming. Marine Georesources and Geotechnology, 2020, 38, 468-479.	1.2	29
24	Discharge coefficient prediction of canal radial gate using neurocomputing models: an investigation of free and submerged flow scenarios. Engineering Applications of Computational Fluid Mechanics, 2022, 16, 1-19.	1.5	27
25	Estimation of triangular side orifice discharge coefficient under a free flow condition using data-driven models. Flow Measurement and Instrumentation, 2021, 77, 101878.	1.0	24
26	A meticulousÂintelligent approach to predict thermal conductivity ratio of hybrid nanofluids for heat transfer applications. Journal of Thermal Analysis and Calorimetry, 2021, 146, 611-628.	2.0	23
27	Assessment of the hedging policy on reservoir operation for future drought conditions under climate change. Climatic Change, 2020, 159, 253-268.	1.7	22
28	An accelerated gradient-based optimization development for multi-reservoir hydropower systems optimization. Energy Reports, 2021, 7, 7854-7877.	2.5	22
29	Optimization of Fuzzified Hedging Rules for Multipurpose and Multireservoir Systems. Journal of Hydrologic Engineering - ASCE, 2016, 21, .	0.8	21
30	Optimization of multi-reservoir operation with a new hedging rule: application of fuzzy set theory and NSGA-II. Applied Water Science, 2017, 7, 3075-3086.	2.8	19
31	Optimizing Multiple Linear Rules for Multi-Reservoir Hydropower Systems Using an Optimization Method with an Adaptation Strategy. Water Resources Management, 2019, 33, 4265-4286.	1.9	19
32	The assessment of emerging data-intelligence technologies for modeling Mg+2 and SO4â˘'2 surface water quality. Journal of Environmental Management, 2021, 300, 113774.	3.8	18
33	Prediction of local scour around circular piles under waves using a novel artificial intelligence approach. Marine Georesources and Geotechnology, 2021, 39, 44-55.	1.2	17
34	Nanofluids thermal conductivity prediction applying a novel hybrid data-driven model validated using Monte Carlo-based sensitivity analysis. Engineering With Computers, 2022, 38, 815-839.	3.5	15
35	Multi-mechanism ensemble interior search algorithm to derive optimal hedging rule curves in multi-reservoir systems. Journal of Hydrology, 2021, 598, 126211.	2.3	15
36	Toward the accurate estimation of elliptical side orifice discharge coefficient applying two rigorous kernel-based data-intelligence paradigms. Scientific Reports, 2021, 11, 19784.	1.6	14

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37	Multi-strategy Slime Mould Algorithm for hydropower multi-reservoir systems optimization. Knowledge-Based Systems, 2022, 250, 109048.	4.0	14
38	Surface water sodium (Na+) concentration prediction using hybrid weighted exponential regression model with gradient-based optimization. Environmental Science and Pollution Research, 2022, 29, 53456-53481.	2.7	13
39	Robust Diversity-based Sine-Cosine Algorithm for Optimizing Hydropower Multi-reservoir Systems. Water Resources Management, 2021, 35, 3513-3538.	1.9	12
40	Adaptive slime mould algorithm for optimal design of photovoltaic models. Energy Science and Engineering, 2022, 10, 2035-2064.	1.9	10
41	Maximizing the Firm Energy Yield Preserving Total Energy Generation Via an Optimal Reservoir Operation. Water Resources Management, 2018, 32, 141-154.	1.9	9
42	Predicting Rock Brittleness Using a Robust Evolutionary Programming Paradigm and Regression-Based Feature Selection Model. Applied Sciences (Switzerland), 2022, 12, 7101.	1.3	9
43	Static models for implementing photovoltaic panels characteristics under various environmental conditions using improved gradient-based optimizer. Sustainable Energy Technologies and Assessments, 2022, 52, 102150.	1.7	3
44	Data Mining Methods for Modeling in Water Science. Studies in Computational Intelligence, 2022, , 157-178.	0.7	2
45	Optimization Algorithms Surpassing Metaphor. Studies in Computational Intelligence, 2022, , 3-33.	0.7	1
46	Evaluation of Clark IUH in rainfall-runoff modelling (case study: Amameh Basin). International Journal of Hydrology Science and Technology, 2019, 9, 137.	0.2	0