Babak Mohammadi

List of Publications by Year
in descending order

54 papers	2,092 citations	201575 27 h-index	243529 44 g-index
55 all docs	55 docs citations	55 times ranked	1371 citing authors

#	Article	IF	Citations
1	Prediction of soil cation exchange capacity using enhanced machine learning approaches in the southern region of the Caspian Sea. Ain Shams Engineering Journal, 2023, 14, 101876.	3.5	14
2	Application of ERA-Interim, empirical models, and an artificial intelligence-based model for estimating daily solar radiation. Ain Shams Engineering Journal, 2022, 13, 101498.	3.5	11
3	Improving generalisation capability of artificial intelligence-based solar radiation estimator models using a bio-inspired optimisation algorithm and multi-model approach. Environmental Science and Pollution Research, 2022, 29, 27719-27737.	2.7	10
4	Establishing Coupled Models for Estimating Daily Dew Point Temperature Using Nature-Inspired Optimization Algorithms. Hydrology, 2022, 9, 9.	1.3	11
5	Soil moisture estimation using novel bio-inspired soft computing approaches. Engineering Applications of Computational Fluid Mechanics, 2022, 16, 826-840.	1.5	8
6	Evaluating the impact of the environment on depleting groundwater resources: a case study from a semi-arid and arid climatic region. Hydrological Sciences Journal, 2022, 67, 791-805.	1.2	2
7	Estimation of actual evapotranspiration: A novel hybrid method based on remote sensing and artificial intelligence. Journal of Hydrology, 2022, 609, 127774.	2.3	33
8	Application of Machine Learning and Remote Sensing in Hydrology. Sustainability, 2022, 14, 7586.	1.6	4
9	Comparison of machine learning and process-based SWAT model in simulating streamflow in the Upper Indus Basin. Applied Water Science, 2022, 12, .	2.8	20
10	IHACRES, GR4J and MISD-based multi conceptual-machine learning approach for rainfall-runoff modeling. Scientific Reports, 2022, 12, .	1.6	44
11	Developing hybrid time series and artificial intelligence models for estimating air temperatures. Stochastic Environmental Research and Risk Assessment, 2021, 35, 1189-1204.	1.9	30
12	Implementation of hybrid particle swarm optimization-differential evolution algorithms coupled with multi-layer perceptron for suspended sediment load estimation. Catena, 2021, 198, 105024.	2.2	80
13	Application of an artificial intelligence technique enhanced with intelligent water drops for monthly reference evapotranspiration estimation. Agricultural Water Management, 2021, 244, 106622.	2.4	57
14	A new hybrid model based on relevance vector machine with flower pollination algorithm for phycocyanin pigment concentration estimation. Environmental Science and Pollution Research, 2021, 28, 32564-32579.	2.7	18
15	Performance Analysis of Daily Global Solar Radiation Models in Peru by Regression Analysis. Atmosphere, 2021, 12, 389.	1.0	17
16	Machine learning algorithm-based risk assessment of riparian wetlands in Padma River Basin of Northwest Bangladesh. Environmental Science and Pollution Research, 2021, 28, 34450-34471.	2.7	49
17	A novel hybrid dragonfly optimization algorithm for agricultural drought prediction. Stochastic Environmental Research and Risk Assessment, 2021, 35, 2459-2477.	1.9	39
18	Improving streamflow simulation by combining hydrological process-driven and artificial intelligence-based models. Environmental Science and Pollution Research, 2021, 28, 65752-65768.	2.7	51

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19	Development of Bio-Inspired- and Wavelet-Based Hybrid Models for Reconnaissance Drought Index Modeling. Water Resources Management, 2021, 35, 4127-4147.	1.9	38
20	Assessing the potential and hydrological usefulness of the CHIRPS precipitation dataset over a complex topography in Pakistan. Hydrological Sciences Journal, 2021, 66, 1664-1684.	1.2	12
21	New hybrid nature-based algorithm to integration support vector machine for prediction of soil cation exchange capacity. Soft Computing, 2021, 25, 13451-13464.	2.1	34
22	A review on the applications of machine learning for runoff modeling. Sustainable Water Resources Management, 2021, 7, .	1.0	46
23	Development of Boosted Machine Learning Models for Estimating Daily Reference Evapotranspiration and Comparison with Empirical Approaches. Water (Switzerland), 2021, 13, 3489.	1.2	20
24	Letter to the editor â€œGenerating electrical demand time series applying SRA technique to complement NAR and sARIMA modelsâ€•by Jorge L. Tena GarcÃa, Erasmo Cadenas CalderÃ³n, Eduardo Rangel Heras, Christian Morales Ontiveros. Energy Efficiency, 2020, 13, 157-158.	1.3	3
25	Invasive weed optimization-based adaptive neuro-fuzzy inference system hybrid model for sediment transport with a bed deposit. Journal of Cleaner Production, 2020, 276, 124267.	4.6	19
26	A novel approach for predicting daily pan evaporation in the coastal regions of Iran using support vector regression coupled with krill herd algorithm model. Theoretical and Applied Climatology, 2020, 142, 349-367.	1.3	32
27	Developing Novel Robust Models to Improve the Accuracy of Daily Streamflow Modeling. Water Resources Management, 2020, 34, 3387-3409.	1.9	60
28	A Theoretical Approach for Forecasting Different Types of Drought Simultaneously, Using Entropy Theory and Machine-Learning Methods. ISPRS International Journal of Geo-Information, 2020, 9, 701.	1.4	39
29	A spatiotemporal teleconnection study between Peruvian precipitation and oceanic oscillations. Quaternary International, 2020, 565, 1-11.	0.7	17
30	ENN-SA: A novel neuro-annealing model for multi-station drought prediction. Computers and Geosciences, 2020, 145, 104622.	2.0	22
31	Simulation of Titicaca Lake Water Level Fluctuations Using Hybrid Machine Learning Technique Integrated with Grey Wolf Optimizer Algorithm. Water (Switzerland), 2020, 12, 3015.	1.2	48
32	Using the MODIS Sensor for Snow Cover Modeling and the Assessment of Drought Effects on Snow Cover in a Mountainous Area. Remote Sensing, 2020, 12, 3437.	1.8	26
33	Estimation of solar radiation using neighboring stations through hybrid support vector regression boosted by Krill Herd algorithm. Arabian Journal of Geosciences, 2020, 13, 1.	0.6	46
34	Hybrid model to improve the river streamflow forecasting utilizing multi-layer perceptron-based intelligent water drop optimization algorithm. Soft Computing, 2020, 24, 18039-18056.	2.1	34
35	Implementing novel hybrid models to improve indirect measurement of the daily soil temperature: Elman neural network coupled with gravitational search algorithm and ant colony optimization. Measurement: Journal of the International Measurement Confederation, 2020, 165, 108127.	2.5	30
36	Modeling daily reference evapotranspiration via a novel approach based on support vector regression coupled with whale optimization algorithm. Agricultural Water Management, 2020, 237, 106145.	2.4	177

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37	Estimation of Soil Temperature Based on Meteorological Parameters by the HYBRID INVASIVE Weed Optimization Algorithm Model. IOP Conference Series: Earth and Environmental Science, 2020, 428, 012059.	0.2	3
38	Letter to the editor â€œModeling daily suspended sediment load using improved support vector machine model and genetic algorithmâ€• Environmental Science and Pollution Research, 2020, 27, 17425-17426.	2.7	2
39	Application of hybrid ANN-whale optimization model in evaluation of the field capacity and the permanent wilting point of the soils. Environmental Science and Pollution Research, 2020, 27, 13131-13141.	2.7	41
40	Letter to the editor â€œcomparing artificial intelligence techniques for chlorophyll-a prediction in US lakesâ€• Environmental Science and Pollution Research, 2020, 27, 22131-22134.	2.7	6
41	Incorporating Rainwater Harvesting Systems in Iranâ€™s Potable Water-Saving Scheme by Using a GIS-Simulation Based Decision Support System. Water (Switzerland), 2020, 12, 752.	1.2	9
42	Adaptive neuro-fuzzy inference system coupled with shuffled frog leaping algorithm for predicting river streamflow time series. Hydrological Sciences Journal, 2020, 65, 1738-1751.	1.2	75
43	Assessment of bio-inspired metaheuristic optimisation algorithms for estimating soil temperature. Geoderma, 2019, 353, 152-171.	2.3	75
44	Predicting total phosphorus levels as indicators for shallow lake management. Ecological Indicators, 2019, 107, 105664.	2.6	16
45	Letter to the editor â€œEstimation of sodium adsorption ratio indicator using data mining methods: a case study in Urmia Lake basin, Iranâ€•by Mohammad Taghi Sattari, Arya Farkhondeh, and John Patrick Abraham. Environmental Science and Pollution Research, 2019, 26, 10439-10440.	2.7	17
46	Long-term monthly average temperature forecasting in some climate types of Iran, using the models SARIMA, SVR, and SVR-FA. Theoretical and Applied Climatology, 2019, 138, 1471-1480.	1.3	95
47	Letter to the Editor â€œDesign of an integrated climatic assessment indicator (ICAI) for wheat production: A case study in Jiangsu Province, Chinaâ€•by Xiangying Xu, Ping Gao, Xinkai Zhu, Wenshan Guo, Jinfeng Ding, Chunyan Li, Min Zhu, Xuanwei Wu. Ecological Indicators, 2019, 103, 493.	2.6	11
48	â€œPrediction of effective climate change indicators using statistical downscaling approach and impact assessment on pearl millet (Pennisetum glaucum L.) yield through genetic algorithm in Punjab, Pakistanâ€•by Asmat Ullah, Nasrin Salehnia, Sohrab Kolsoumi, Ashfaq Ahmad, Tasneem Khaliq. Ecological Indicators, 2019, 101, 973-974.	2.6	13
49	A comparison between the application of empirical and ANN methods for estimation of daily global solar radiation in Iran. Theoretical and Applied Climatology, 2019, 137, 1257-1269.	1.3	88
50	Pan evaporation prediction using a hybrid multilayer perceptron-firefly algorithm (MLP-FFA) model: case study in North Iran. Theoretical and Applied Climatology, 2018, 133, 1119-1131.	1.3	134
51	Forecasting soil temperature at multiple-depth with a hybrid artificial neural network model coupled-hybrid firefly optimizer algorithm. Information Processing in Agriculture, 2018, 5, 465-476.	2.9	45
52	Estimation of the organic carbon content by the pattern recognition method. Communications in Soil Science and Plant Analysis, 2018, 49, 2143-2154.	0.6	12
53	Coupling a firefly algorithm with support vector regression to predict evaporation in northern Iran. Engineering Applications of Computational Fluid Mechanics, 2018, 12, 584-597.	1.5	242
54	Credibility of design rainfall estimates for drainage infrastructures: extent of disregard in Nigeria and proposed framework for practice. Natural Hazards, 0, , 1.	1.6	5