# Babak Mohammadi

List of Publications by Year
in descending order



| 54 | 2,092 | 201575 27 | 243529 44 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 55 | 55 | 55 | 1371 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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 |
| 2 | 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 |
| 3 | 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 |
| 4 | 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 |
| 5 | 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 |
| 6 | 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 |
| 7 | Assessment of bio-inspired metaheuristic optimisation algorithms for estimating soil temperature. Geoderma, 2019, 353, 152-171. | 2.3 | 75 |
| 8 | 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 |
| 9 | Developing Novel Robust Models to Improve the Accuracy of Daily Streamflow Modeling. Water Resources Management, 2020, 34, 3387-3409. | 1.9 | 60 |
| 10 | 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 |
| 11 | 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 |
| 12 | 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 |
| 13 | 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 |
| 14 | 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 |
| 15 | A review on the applications of machine learning for runoff modeling. Sustainable Water Resources Management, 2021, 7, . | 1.0 | 46 |
| 16 | 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 |
| 17 | IHACRES, GR4J and MISD-based multi conceptual-machine learning approach for rainfall-runoff modeling. Scientific Reports, 2022, 12, . | 1.6 | 44 |
| 18 | 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 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | 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 |
| 20 | A novel hybrid dragonfly optimization algorithm for agricultural drought prediction. Stochastic Environmental Research and Risk Assessment, 2021, 35, 2459-2477. | 1.9 | 39 |
| 21 | Development of Bio-Inspired- and Wavelet-Based Hybrid Models for Reconnaissance Drought Index Modeling. Water Resources Management, 2021, 35, 4127-4147. | 1.9 | 38 |
| 22 | 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 |
| 23 | 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 |
| 24 | Estimation of actual evapotranspiration: A novel hybrid method based on remote sensing and artificial intelligence. Journal of Hydrology, 2022, 609, 127774. | 2.3 | 33 |
| 25 | 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 |
| 26 | 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 |
| 27 | 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 |
| 28 | 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 |
| 29 | ENN-SA: A novel neuro-annealing model for multi-station drought prediction. Computers and Geosciences, 2020, 145, 104622. | 2.0 | 22 |
| 30 | Development of Boosted Machine Learning Models for Estimating Daily Reference Evapotranspiration and Comparison with Empirical Approaches. Water (Switzerland), 2021, 13, 3489. | 1.2 | 20 |
| 31 | 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 |
| 32 | 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 |
| 33 | 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 |
| 34 | 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 |
| 35 | A spatiotemporal teleconnection study between Peruvian precipitation and oceanic oscillations. Quaternary International, 2020, 565, 1-11. | 0.7 | 17 |
| 36 | Performance Analysis of Daily Global Solar Radiation Models in Peru by Regression Analysis. Atmosphere, 2021, 12, 389. | 1.0 | 17 |

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|---|---|---|---|
| 37 | Predicting total phosphorus levels as indicators for shallow lake management. Ecological Indicators, 2019, 107, 105664. | 2.6 | 16 |
| 38 | 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 |
| 39 | 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 |
| 40 | 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 |
| 41 | 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 |
| 42 | 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 |
| 43 | 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 |
| 44 | Establishing Coupled Models for Estimating Daily Dew Point Temperature Using Nature-Inspired Optimization Algorithms. Hydrology, 2022, 9, 9. | 1.3 | 11 |
| 45 | 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 |
| 46 | 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 |
| 47 | Soil moisture estimation using novel bio-inspired soft computing approaches. Engineering Applications of Computational Fluid Mechanics, 2022, 16, 826-840. | 1.5 | 8 |
| 48 | 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 |
| 49 | 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 |
| 50 | Application of Machine Learning and Remote Sensing in Hydrology. Sustainability, 2022, 14, 7586. | 1.6 | 4 |
| 51 | 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 |
| 52 | 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 |
| 53 | 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 |
| 54 | 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 |