Mohammad Zounemat-Kermani

List of Publications by Citations

104 papers	2,691 citations	30 h-index	48 g-index
110 ext. papers	3,350 ext. citations	3.9 avg, IF	6.09 L-index

#	Paper	IF	Citations
104	Daily suspended sediment concentration simulation using ANN and neuro-fuzzy models. *Science of the Total Environment*, **2009**, 407, 4916-27	10.2	184
103	Solar radiation prediction using different techniques: model evaluation and comparison. *Renewable and Sustainable Energy Reviews*, **2016**, 61, 384-397	16.2	175
102	Using adaptive neuro-fuzzy inference system for hydrological time series prediction. *Applied Soft Computing Journal*, **2008**, 8, 928-936	7.5	116
101	Estimation of current-induced scour depth around pile groups using neural network and adaptive neuro-fuzzy inference system. *Applied Soft Computing Journal*, **2009**, 9, 746-755	7.5	99
100	River Suspended Sediment Load Prediction: Application of ANN and Wavelet Conjunction Model. *Journal of Hydrologic Engineering - ASCE*, **2011**, 16, 613-627	1.8	94
99	Daily streamflow prediction using optimally pruned extreme learning machine. *Journal of Hydrology* , **2019**, 577, 123981	6	90
98	Pan evaporation modeling using six different heuristic computing methods in different climates of China. *Journal of Hydrology*, **2017**, 544, 407-427	6	84
97	Least square support vector machine and multivariate adaptive regression splines for streamflow prediction in mountainous basin using hydro-meteorological data as inputs. *Journal of Hydrology*, **2020**, 586, 124371	6	81
96	Long-term monthly evapotranspiration modeling by several data-driven methods without climatic data. *Computers and Electronics in Agriculture*, **2015**, 115, 66-77	6.5	77
95	Evaluation of data driven models for river suspended sediment concentration modeling. *Journal of Hydrology*, **2016**, 535, 457-472	6	74
94	Prediction of solar radiation in China using different adaptive neuro-fuzzy methods and M5 model tree. *International Journal of Climatology*, **2017**, 37, 1141-1155	3.5	66
93	Performance of radial basis and LM-feed forward artificial neural networks for predicting daily watershed runoff. *Applied Soft Computing Journal*, **2013**, 13, 4633-4644	7.5	63
92	Modeling soil temperatures at different depths by using three different neural computing techniques. *Theoretical and Applied Climatology*, **2015**, 121, 377-387	3	59
91	Drought forecasting using novel heuristic methods in a semi-arid environment. *Journal of Hydrology* , **2019**, 578, 124053	6	57
90	Comparison of Two Different Adaptive Neuro-Fuzzy Inference Systems in Modelling Daily Reference Evapotranspiration. *Water Resources Management*, **2014**, 28, 2655-2675	3.7	54
89	Evaporation modelling using different machine learning techniques. *International Journal of Climatology*, **2017**, 37, 1076-1092	3.5	52
88	Daily pan evaporation modeling using chi-squared automatic interaction detector, neural networks, classification and regression tree. *Computers and Electronics in Agriculture*, **2016**, 122, 112-117	6.5	51

87	Learning from Multiple Models Using Artificial Intelligence to Improve Model Prediction Accuracies: Application to River Flows. *Water Resources Management*, **2018**, 32, 4201-4215	3.7	46
86	Hourly predictive Levenberg□Marquardt ANN and multi linear regression models for predicting of dew point temperature. *Meteorology and Atmospheric Physics*, **2012**, 117, 181-192	2	46
85	A comparative study of several machine learning based non-linear regression methods in estimating solar radiation: Case studies of the USA and Turkey regions. *Energy*, **2020**, 197, 117239	7.9	45
84	Modelling long-term groundwater fluctuations by extreme learning machine using hydro-climatic data. *Hydrological Sciences Journal*, **2018**, 63, 63-73	3.5	45
83	Suspended Sediment Modeling Using Neuro-Fuzzy Embedded Fuzzy c-Means Clustering Technique. *Water Resources Management*, **2016**, 30, 3979-3994	3.7	40
82	Prediction of Suspended Sediment Load Using Data-Driven Models. *Water (Switzerland)*, **2019**, 11, 2060	3	36
81	Modeling groundwater fluctuations by three different evolutionary neural network techniques using hydroclimatic data. *Natural Hazards*, **2017**, 87, 367-381	3	34
80	Ensemble data mining modeling in corrosion of concrete sewer: A comparative study of network-based (MLPNN & RBFNN) and tree-based (RF, CHAID, & CART) models. *Advanced Engineering Informatics*, **2020**, 43, 101030	7.4	34
79	Improving streamflow prediction using a new hybrid ELM model combined with hybrid particle swarm optimization and grey wolf optimization. *Knowledge-Based Systems*, **2021**, 230, 107379	7.3	34
78	Neurocomputing in surface water hydrology and hydraulics: A review of two decades retrospective, current status and future prospects. *Journal of Hydrology*, **2020**, 588, 125085	6	33
77	Groundwater quality modeling using neuro-particle swarm optimization and neuro-differential evolution techniques **2017**, 48, 1508-1519		31
76	Ensemble machine learning paradigms in hydrology: A review. *Journal of Hydrology*, **2021**, 598, 126266	6	31
75	Trend analysis of monthly streamflows using □n's innovative trend method. *Geofizika*, **2018**, 35, 53-68	1.3	31
74	Hybrid meta-heuristics artificial intelligence models in simulating discharge passing the piano key weirs. *Journal of Hydrology*, **2019**, 569, 12-21	6	30
73	Can Decomposition Approaches Always Enhance Soft Computing Models? Predicting the Dissolved Oxygen Concentration in the St. Johns River, Florida. *Applied Sciences (Switzerland)*, **2019**, 9, 2534	2.6	29
72	Modeling and comparison of hourly photosynthetically active radiation in different ecosystems. *Renewable and Sustainable Energy Reviews*, **2016**, 56, 436-453	16.2	27
71	A wavelet□linear genetic programming model for sodium (Na+) concentration forecasting in rivers. *Journal of Hydrology*, **2016**, 537, 398-407	6	27
70	Subset Modeling Basis ANFIS for Prediction of the Reference Evapotranspiration. *Water Resources Management*, **2018**, 32, 1101-1116	3.7	26

69	Time series analysis on marine wind-wave characteristics using chaos theory. *Ocean Engineering*, **2015**, 100, 46-53	3.9	24
68	On the complexities of sediment load modeling using integrative machine learning: Application of the great river of Loza in Puerto Rico. *Journal of Hydrology*, **2020**, 585, 124759	6	24
67	Hydrometeorological Parameters in Prediction of Soil Temperature by Means of Artificial Neural Network: Case Study in Wyoming. *Journal of Hydrologic Engineering - ASCE*, **2013**, 18, 707-718	1.8	23
66	Assessment of Artificial Intelligence-Based Models and Metaheuristic Algorithms in Modeling Evaporation. *Journal of Hydrologic Engineering - ASCE*, **2019**, 24, 04019033	1.8	21
65	Modeling of Dissolved Oxygen Applying Stepwise Regression and a Template-Based Fuzzy Logic System. *Journal of Environmental Engineering, ASCE*, **2014**, 140, 69-76	2	21
64	PRINCIPAL COMPONENT ANALYSIS (PCA) FOR ESTIMATING CHLOROPHYLL CONCENTRATION USING FORWARD AND GENERALIZED REGRESSION NEURAL NETWORKS. *Applied Artificial Intelligence*, **2014**, 28, 16-29	2.3	20
63	Prediction of diffuse photosynthetically active radiation using different soft computing techniques. *Quarterly Journal of the Royal Meteorological Society*, **2017**, 143, 2235-2244	6.4	18
62	Deep echo state network: a novel machine learning approach to model dew point temperature using meteorological variables. *Hydrological Sciences Journal*, **2020**, 65, 1173-1190	3.5	18
61	Assessing the biochemical oxygen demand using neural networks and ensemble tree approaches in South Korea. *Journal of Environmental Management*, **2020**, 270, 110834	7.9	17
60	Sustainability Ranking of Desalination Plants Using Mamdani Fuzzy Logic Inference Systems. *Sustainability*, **2020**, 12, 631	3.6	17
59	Multivariate NARX neural network in prediction gaseous emissions within the influent chamber of wastewater treatment plants. *Atmospheric Pollution Research*, **2019**, 10, 1812-1822	4.5	17
58	Computing Air Demand Using the Takagi-Sugeno Model for Dam Outlets. *Water (Switzerland)*, **2013**, 5, 1441-1456	3	16
57	Estimating the aeration coefficient and air demand in bottom outlet conduits of dams using GEP and decision tree methods. *Flow Measurement and Instrumentation*, **2017**, 54, 9-19	2.2	15
56	Assessment of several nonlinear methods in forecasting suspended sediment concentration in streams **2017**, 48, 1240-1252		15
55	Wavelet-based variability on streamflow at 40-year timescale in the Black Sea region of Turkey. *Arabian Journal of Geosciences*, **2018**, 11, 1	1.8	13
54	Climate Change, Water Quality and Water-Related Challenges: A Review with Focus on Pakistan. *International Journal of Environmental Research and Public Health*, **2020**, 17,	4.6	13
53	Challenging soft computing optimization approaches in modeling complex hydraulic phenomenon of aeration process. *ISH Journal of Hydraulic Engineering*, **2019**, 1-12	1.5	13
52	A new integrated model of the group method of data handling and the firefly algorithm (GMDH-FA): application to aeration modelling on spillways. *Artificial Intelligence Review*, **2020**, 53, 2549-2569	9.7	13

51	Polynomial chaos expansion and response surface method for nonlinear modelling of reference evapotranspiration. *Hydrological Sciences Journal*, **2019**, 64, 720-730	3.5	12
50	Groundwater level prediction using machine learning models: A comprehensive review. *Neurocomputing*, **2022**, 489, 271-308	5.4	12
49	Temporal Hydrologic Alterations Coupled with Climate Variability and Drought for Transboundary River Basins. *Water Resources Management*, **2017**, 31, 1489-1502	3.7	11
48	Suspended sediment prediction using integrative soft computing models: on the analogy between the butterfly optimization and genetic algorithms. *Geocarto International*, **2020**, 1-17	2.7	11
47	Modelling daily soil temperature by hydro-meteorological data at different depths using a novel data-intelligence model: deep echo state network model. *Artificial Intelligence Review*, **2021**, 54, 2863-2890	9.7	11
46	Investigating the management performance of disinfection analysis of water distribution networks using data mining approaches. *Environmental Monitoring and Assessment*, **2018**, 190, 397	3.1	10
45	Numerical solution of tidal currents at marine waterways using wet and dry technique on Galerkin finite volume algorithm. *Computers and Fluids*, **2009**, 38, 1876-1886	2.8	10
44	Comprehensive assessment of 12 soft computing approaches for modelling reference evapotranspiration in humid locations. *Meteorological Applications*, **2020**, 27, e1841	2.1	10
43	Numerical modeling based on a finite element method for simulation of flow in furrow irrigation. *Paddy and Water Environment*, **2017**, 15, 879-887	1.6	9
42	Estimating incipient motion velocity of bed sediments using different data-driven methods. *Applied Soft Computing Journal*, **2018**, 69, 165-176	7.5	9
41	Investigating Chaos and Nonlinear Forecasting in Short Term and Mid-term River Discharge. *Water Resources Management*, **2016**, 30, 1851-1865	3.7	9
40	Coupling of two- and three-dimensional hydrodynamic numerical models for simulating wind-induced currents in deep basins. *Computers and Fluids*, **2010**, 39, 994-1011	2.8	9
39	Solution of depth-averaged tidal currents in Persian Gulf on unstructured overlapping finite volumes. *International Journal for Numerical Methods in Fluids*, **2007**, 55, 81-101	1.9	9
38	Irrigation water infiltration modeling using machine learning. *Computers and Electronics in Agriculture*, **2021**, 180, 105921	6.5	9
37	Comparison of six different soft computing methods in modeling evaporation in different climates		8
36	Kernel Extreme Learning Machine: An Efficient Model for Estimating Daily Dew Point Temperature Using Weather Data. *Water (Switzerland)*, **2020**, 12, 2600	3	8
35	Modeling reference evapotranspiration using a novel regression-based method: radial basis M5 model tree. *Theoretical and Applied Climatology*, **2021**, 145, 639-659	3	8
34	Evaluating the application of data-driven intelligent methods to estimate discharge over triangular arced labyrinth weir. *Flow Measurement and Instrumentation*, **2019**, 68, 101573	2.2	7

33	Comparing data driven models versus numerical models in simulation of waterfront advance in furrow irrigation. *Irrigation Science*, **2019**, 37, 547-560	3.1	7
32	Machine Learning Method in Prediction Streamflow Considering Periodicity Component. *Springer Transactions in Civil and Environmental Engineering*, **2021**, 383-403	0.4	7
31	Influence of collars on reduction in scour depth at two piers in a tandem configuration. *Acta Geophysica*, **2020**, 68, 229-242	2.2	7
30	Development of artificial intelligence models for well groundwater quality simulation: Different modeling scenarios. *PLoS ONE*, **2021**, 16, e0251510	3.7	7
29	Online sequential extreme learning machine in river water quality (turbidity) prediction: a comparative study on different data mining approaches. *Water and Environment Journal*, **2021**, 35, 335-348	1.7	7
28	Seasonal Short-Term Prediction of Dissolved Oxygen in Rivers via Nature-Inspired Algorithms. *Clean - Soil, Air, Water*, **2020**, 48, 1900300	1.6	6
27	Artificial intelligence models for suspended river sediment prediction: state-of-the art, modeling framework appraisal, and proposed future research directions. *Engineering Applications of Computational Fluid Mechanics*, **2021**, 15, 1585-1612	4.5	5
26	Investigation of local scour around tandem piers for different skew-angles. *E3S Web of Conferences*, **2018**, 40, 03008	0.5	5
25	Towards a Comprehensive Assessment of Statistical versus Soft Computing Models in Hydrology: Application to Monthly Pan Evaporation Prediction. *Water (Switzerland)*, **2021**, 13, 2451	3	5
24	Hydrodynamic modelling of free water-surface constructed storm water wetlands using a finite volume technique. *Environmental Technology (United Kingdom)*, **2015**, 36, 2532-47	2.6	4
23	Conjunction of 2D and 3D modified flow solvers for simulating spatio-temporal wind induced hydrodynamics in the Caspian Sea. *Ocean Science Journal*, **2010**, 45, 113-128	1.1	4
22	Concrete corrosion in wastewater systems: Prediction and sensitivity analysis using advanced extreme learning machine. *Frontiers of Structural and Civil Engineering*, **2021**, 15, 444	2.5	4
21	Embedded fuzzy-based models in hydraulic jump prediction. *Journal of Hydroinformatics*, **2021**, 23, 151-170	2.0	3
20	Prediction of Critical Velocity in Pipeline Flow of Slurries Using TLBO Algorithm: A Comprehensive Study. *Journal of Pipeline Systems Engineering and Practice*, **2020**, 11, 04019057	1.5	3
19	Prediction of hydro-suction dredging depth using data-driven methods. *Frontiers of Structural and Civil Engineering*, **2021**, 15, 652-664	2.5	3
18	Using natural element mesh-free numerical method in solving shallow water equations. *European Journal of Environmental and Civil Engineering*, **2017**, 21, 753-767	1.5	2
17	Predicting Sediment transport in sewers using integrative harmony search-ANN model and factor analysis. *IOP Conference Series: Earth and Environmental Science*, **2020**, 491, 012004	0.3	2
16	Prediction of effluent arsenic concentration of wastewater treatment plants using machine learning and kriging-based models. *Environmental Science and Pollution Research*, **2021**, 1	5.1	2

15	Arsenic Contamination in Groundwater Resources of Sirjan Plain, Iran. *Environmental Engineering Science*, **2020**, 37, 658-668	2	2
14	A comprehensive survey on conventional and modern neural networks: application to river flow forecasting. *Earth Science Informatics*, **2021**, 14, 893-911	2.5	2
13	Groundwater quality modeling: On the analogy between integrative PSO and MRFO mathematical and machine learning models. *Environmental Quality Management*,	0.8	2
12	Nature-inspired algorithms in sanitary engineering: modelling sediment transport in sewer pipes. *Soft Computing*, **2021**, 25, 6373-6390	3.5	2
11	Machine Learning and Water Economy: a New Approach to Predicting Dams Water Sales Revenue. *Water Resources Management*, **2020**, 34, 1893-1911	3.7	1
10	Closure to Assessment of Artificial Intelligence Based Models and Metaheuristic Algorithms in Modeling Evaporation by Mohammad Zounemat-Kermani, Ozgur Kisi, Jamshid Piri, and Amin Mahdavi-Meymand. *Journal of Hydrologic Engineering - ASCE*, **2020**, 25, 07020015	1.8	1
9	The performance of collars on scour reduction at tandem piers aligned with different skew angles. *Marine Georesources and Geotechnology*, **2020**, 38, 911-922	2.2	1
8	An experimental study of the geometric performance of the hydrosuction dredging system. *Acta Geophysica*, **2021**, 69, 271-283	2.2	1
7	Predicting dissolved oxygen concentration in river using new advanced machines learning: Long-short term memory (LSTM) deep learning **2022**, 1-20		1
6	A comprehensive study on the application of firefly algorithm in prediction of energy dissipation on block ramps. *Eksploatacja I Niezawodnosc*, **2022**, 24, 200-210	3.5	1
5	A long short-term memory deep learning approach for river water temperature prediction **2022**, 243-270		0
4	Soft Computing Methods and Water Management **2022**, 342-373		
3	Studying the relationship between the hydraulic and geometry characteristics of labyrinth weirs based on the historical memory of reported data. *Flow Measurement and Instrumentation*, **2021**, 82, 102079	2.3	
2	Soil moisture simulation using individual versus ensemble soft computing models. *International Journal of Environmental Science and Technology*,1	3.3	
1	Modeling of wave run-up by applying integrated models of group method of data handling.. *Scientific Reports*, **2022**, 12, 8279	4.9	