Salim Heddam

List of Publications by Year in Descending Order

86 papers	1,528 citations	23 h-index	35 g-index
95 ext. papers	2,061 ext. citations	3.4 avg, IF	6.04 L-index

#	Paper	IF	Citations
86	Predicting dissolved oxygen concentration in river using new advanced machines learning: Long-short term memory (LSTM) deep learning **2022**, 1-20		1
85	A long short-term memory deep learning approach for river water temperature prediction **2022**, 243-270		0
84	Modeling Multistep Ahead Dissolved Oxygen Concentration Using Improved Support Vector Machines by a Hybrid Metaheuristic Algorithm. *Sustainability*, **2022**, 14, 3470	3.6	2
83	Prediction of index rainfall in ungauged regions of Algeria: survey of rule-based models using geographic predictors. *Arabian Journal of Geosciences*, **2022**, 15, 1	1.8	
82	Real-time porosity prediction using gas-while-drilling data and machine learning with reservoir associated gas: Case study for Hassi Messaoud field, Algeria. *Marine and Petroleum Geology*, **2022**, 140, 105631	4.7	0
81	Groundwater level prediction using machine learning models: A comprehensive review. *Neurocomputing*, **2022**, 489, 271-308	5.4	12
80	Predicting Daily Streamflow in a Cold Climate Using a Novel Data Mining Technique: Radial M5 Model Tree. *Water (Switzerland)*, **2022**, 14, 1449	3	2
79	Multi-step Ahead Forecasting of River Water Temperature Using Advance Artificial Intelligence Models: Voting Based Extreme Learning Machine Based on Empirical Mode Decomposition. *Studies in Computational Intelligence*, **2022**, 377-407	0.8	
78	Parallel Chaos Search Based Incremental Extreme Learning Machine Based Empirical Wavelet Transform: A New Hybrid Machine Learning Model for River Dissolved Oxygen Forecasting. *Studies in Computational Intelligence*, **2022**, 355-376	0.8	
77	Estimating reference evapotranspiration using hybrid adaptive fuzzy inferencing coupled with heuristic algorithms. *Computers and Electronics in Agriculture*, **2021**, 191, 106541	6.5	10
76	Prediction of Potential Evapotranspiration Using Temperature-Based Heuristic Approaches. *Sustainability*, **2021**, 13, 297	3.6	8
75	Predictability performance enhancement for suspended sediment in rivers: Inspection of newly developed hybrid adaptive neuro-fuzzy system model. *International Journal of Sediment Research*, **2021**, 37, 383-383	3	3
74	Suspended Sediment Modeling Using a Heuristic Regression Method Hybridized with Kmeans Clustering. *Sustainability*, **2021**, 13, 4648	3.6	5
73	Modeling reference evapotranspiration using a novel regression-based method: radial basis M5 model tree. *Theoretical and Applied Climatology*, **2021**, 145, 639-659	3	8
72	Cumulative infiltration and infiltration rate prediction using optimized deep learning algorithms: A study in Western Iran. *Journal of Hydrology: Regional Studies*, **2021**, 35, 100825	3.6	8
71	Kernel extreme learning machines (KELM): a new approach for modeling monthly evaporation (EP) from dams reservoirs. *Physical Geography*, **2021**, 42, 351-373	1.8	3
70	Intelligent Data Analytics Approaches for Predicting Dissolved Oxygen Concentration in River: Extremely Randomized Tree Versus Random Forest, MLPNN and MLR. *Springer Transactions in Civil and Environmental Engineering*, **2021**, 89-107	0.4	6

69	Evolving Connectionist Systems Versus Neuro-Fuzzy System for Estimating Total Dissolved Gas at Forebay and Tailwater of Dams Reservoirs. *Springer Transactions in Civil and Environmental Engineering*, **2021**, 109-126	0.4	1
68	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
67	On the implementation of a novel data-intelligence model based on extreme learning machine optimized by bat algorithm for estimating daily chlorophyll-a concentration: Case studies of river and lake in USA. *Journal of Cleaner Production*, **2021**, 285, 124868	10.3	19
66	Short term rainfall-runoff modelling using several machine learning methods and a conceptual event-based model. *Stochastic Environmental Research and Risk Assessment*, **2021**, 35, 597-616	3.5	19
65	A new heuristic model for monthly streamflow forecasting **2021**, 281-303		1
64	Extremely randomized tree: a new machines learning method for predicting coagulant dosage in drinking water treatment plant **2021**, 475-489		1
63	New formulation for predicting soil moisture content using only soil temperature as predictor: multivariate adaptive regression splines versus random forest, multilayer perceptron neural network, M5Tree, and multiple linear regression **2021**, 45-62		1
62	Comparison of different methodologies for rainfall runoff modeling: machine learning vs conceptual approach. *Natural Hazards*, **2021**, 105, 2987-3011	3	9
61	Entropy analysis and pattern recognition in rainfall data, north Algeria. *Theoretical and Applied Climatology*, **2021**, 144, 317-326	3	5
60	Modeling wetting front redistribution of drip irrigation systems using a new machine learning method: Adaptive neuro- fuzzy system improved by hybrid particle swarm optimization Gravity search algorithm. *Agricultural Water Management*, **2021**, 256, 107067	5.9	7
59	River Water Salinity Prediction Using Hybrid Machine Learning Models. *Water (Switzerland)*, **2020**, 12, 2951	3	23
58	Abundance and spatial distribution of the structure supporting the nest of White Stork Ciconia ciconia in Guerbes-Sanhadja wetland eco-complex, northeastern of Algeria. *Environmental Science and Pollution Research*, **2020**, 27, 45974-45982	5.1	0
57	Modelling of daily lake surface water temperature from air temperature: Extremely randomized trees (ERT) versus Air2Water, MARS, M5Tree, RF and MLPNN. *Journal of Hydrology*, **2020**, 588, 125130	6	38
56	Comparison of Evolving Connectionist Systems (ECoS) and Neural Networks for Modelling Daily Pan Evaporation from Algerian Dam Reservoirs. *Handbook of Environmental Chemistry*, **2020**, 161-179	0.8	
55	Pan Evaporation Estimation in Uttarakhand and Uttar Pradesh States, India: Validity of an Integrative Data Intelligence Model. *Atmosphere*, **2020**, 11, 553	2.7	17
54	Lithofacies prediction in non-cored wells from the Sif Fatima oil field (Berkine basin, southern Algeria): A comparative study of multilayer perceptron neural network and cluster analysis-based approaches. *Journal of African Earth Sciences*, **2020**, 166, 103826	2.2	12
53	Breeding ecology of the Cattle Egret (Bubulcus ibis) in Guerbes-Sanhadja wetlands of Algeria. *Regional Studies in Marine Science*, **2020**, 33, 100979	1.5	1
52	Modeling of Seepage Flow Through Concrete Face Rockfill and Embankment Dams Using Three Heuristic Artificial Intelligence Approaches: a Comparative Study. *Environmental Processes*, **2020**, 7, 367-381	2.8	5

51	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
50	Monthly evapotranspiration estimation using optimal climatic parameters: efficacy of hybrid support vector regression integrated with whale optimization algorithm. *Environmental Monitoring and Assessment*, **2020**, 192, 696	3.1	30
49	Kernel Extreme Learning Machine: An Efficient Model for Estimating Daily Dew Point Temperature Using Weather Data. *Water (Switzerland)*, **2020**, 12, 2600	3	8
48	A novel method for lake level prediction: deep echo state network. *Arabian Journal of Geosciences*, **2020**, 13, 1	1.8	2
47	New Formulation for Predicting Daily Reference Evapotranspiration (ET0) in the Mediterranean Region of Algeria Country: Optimally Pruned Extreme Learning Machine (OPELM) Versus Online Sequential Extreme Learning Machine (OSELM). *Handbook of Environmental Chemistry*, **2020**, 181-199	0.8	2
46	Prediction of dissolved oxygen in urban rivers at the Three Gorges Reservoir, China: extreme learning machines (ELM) versus artificial neural network (ANN). *Water Quality Research Journal of Canada*, **2020**, 55, 106-118	1.7	21
45	Predicting Total Dissolved Gas Concentration on a Daily Scale Using Kriging Interpolation, Response Surface Method and Artificial Neural Network: Case Study of Columbia River Basin Dams, USA. *Natural Resources Research*, **2020**, 29, 1801-1818	4.9	14
44	Modeling total dissolved gas (TDG) concentration at Columbia river basin dams: high-order response surface method (H-RSM) vs. M5Tree, LSSVM, and MARS. *Arabian Journal of Geosciences*, **2019**, 12, 1	1.8	15
43	Application of artificial intelligence to estimate phycocyanin pigment concentration using water quality data: a comparative study. *Applied Water Science*, **2019**, 9, 1	5	12
42	Predicting Water Quality Indicators from Conventional and Nonconventional Water Resources in Algeria Country: Adaptive Neuro-Fuzzy Inference Systems Versus Artificial Neural Networks. *Handbook of Environmental Chemistry*, **2019**, 13-34	0.8	3
41	Extreme learning machine-based prediction of daily water temperature for rivers. *Environmental Earth Sciences*, **2019**, 78, 1	2.9	35
40	Evaporation modelling by heuristic regression approaches using only temperature data. *Hydrological Sciences Journal*, **2019**, 64, 653-672	3.5	33
39	The implementation of univariable scheme-based air temperature for solar radiation prediction: New development of dynamic evolving neural-fuzzy inference system model. *Applied Energy*, **2019**, 241, 184-195	10.7	44
38	Designing a New Data Intelligence Model for Global Solar Radiation Prediction: Application of Multivariate Modeling Scheme. *Energies*, **2019**, 12, 1365	3.1	8
37	Modelling of Maximum Daily Water Temperature for Streams: Optimally Pruned Extreme Learning Machine (OPELM) versus Radial Basis Function Neural Networks (RBFNN). *Environmental Processes*, **2019**, 6, 789-804	2.8	9
36	SVR-RSM: a hybrid heuristic method for modeling monthly pan evaporation. *Environmental Science and Pollution Research*, **2019**, 26, 35807-35826	5.1	19
35	A hybrid model for modelling the salinity of the Tafna River in Algeria. *Journal of Water and Land Development*, **2019**, 40, 127-135	1.4	2
34	Assessing the performance of a suite of machine learning models for daily river water temperature prediction. *PeerJ*, **2019**, 7, e7065	3.1	23

33	The employment of polynomial chaos expansion approach for modeling dissolved oxygen concentration in river. *Environmental Earth Sciences*, **2019**, 78, 1	2.9	9
32	Modeling daily water temperature for rivers: comparison between adaptive neuro-fuzzy inference systems and artificial neural networks models. *Environmental Science and Pollution Research*, **2019**, 26, 402-420	5.1	53
31	Predicting Daily Pan Evaporation (Epan) from Dam Reservoirs in the Mediterranean Regions of Algeria: OPELM vs OSELM. *Environmental Processes*, **2019**, 6, 309-319	2.8	19
30	Development of air-soil temperature model using computational intelligence paradigms: artificial neural network versus multiple linear regression. *Modeling Earth Systems and Environment*, **2019**, 5, 747-751	3.2	5
29	Modelling daily dissolved oxygen concentration using least square support vector machine, multivariate adaptive regression splines and M5 model tree. *Journal of Hydrology*, **2018**, 559, 499-509	6	90
28	Time series forecasting of river flow using an integrated approach of wavelet multi-resolution analysis and evolutionary data-driven models. A case study: Sebaou River (Algeria). *Physical Geography*, **2018**, 1-17	1.8	10
27	Modeling daily dissolved oxygen concentration using modified response surface method and artificial neural network: a comparative study. *Neural Computing and Applications*, **2018**, 30, 2995-3006	4.8	45
26	Rainfall Pattern Forecasting Using Novel Hybrid Intelligent Model Based ANFIS-FFA. *Water Resources Management*, **2018**, 32, 105-122	3.7	82
25	Evolving connectionist systems (ECoSs): a new approach for modeling daily reference evapotranspiration (ET). *Environmental Monitoring and Assessment*, **2018**, 190, 516	3.1	9
24	Generalized Regression Neural Network Based Approach as a New Tool for Predicting Total Dissolved Gas (TDG) Downstream of Spillways of Dams: a Case Study of Columbia River Basin Dams, USA. *Environmental Processes*, **2017**, 4, 235-253	2.8	15
23	Extreme learning machines: a new approach for modeling dissolved oxygen (DO) concentration with and without water quality variables as predictors. *Environmental Science and Pollution Research*, **2017**, 24, 16702-16724	5.1	58
22	Fuzzy Neural Network (EFuNN) for Modelling Dissolved Oxygen Concentration (DO). *Intelligent Systems Reference Library*, **2017**, 231-253	0.8	10
21	Simultaneous modelling and forecasting of hourly dissolved oxygen concentration (DO) using radial basis function neural network (RBFNN) based approach: a case study from the Klamath River, Oregon, USA. *Modeling Earth Systems and Environment*, **2016**, 2, 1	3.2	18
20	New modelling strategy based on radial basis function neural network (RBFNN) for predicting dissolved oxygen concentration using the components of the Gregorian calendar as inputs: case study of Clackamas River, Oregon, USA. *Modeling Earth Systems and Environment*, **2016**, 2, 1-5	3.2	28
19	Multilayer perceptron neural network-based approach for modeling phycocyanin pigment concentrations: case study from lower Charles River buoy, USA. *Environmental Science and Pollution Research*, **2016**, 23, 17210-25	5.1	21
18	Use of Optimally Pruned Extreme Learning Machine (OP-ELM) in Forecasting Dissolved Oxygen Concentration (DO) Several Hours in Advance: a Case Study from the Klamath River, Oregon, USA. *Environmental Processes*, **2016**, 3, 909-937	2.8	27
17	Rebuttal to Estimation of dissolved oxygen using data-driven techniques in the Tai Po River, Hong Kong Samira Nemati, Mohammad Hasan Fazelifard, Ozlem Terzi and Mohammad Ali Ghorbani. Environ Earth Science (2015). Doi:10.1007/s12665-015-4450-3. *Environmental Earth Sciences*, **2016**, 75, 1	2.9	
16	Predicting Effluent Biochemical Oxygen Demand in a Wastewater Treatment Plant Using Generalized Regression Neural Network Based Approach: A Comparative Study. *Environmental Processes*, **2016**, 3, 153-165	2.8	38

15	Secchi Disk Depth Estimation from Water Quality Parameters: Artificial Neural Network versus Multiple Linear Regression Models?. *Environmental Processes*, **2016**, 3, 525-536	2.8	40
14	Comment on "Performance of ANFIS versus MLP-NN dissolved oxygen prediction models in water quality monitoring A. Najah & A. El-Shafie & O. A. Karim & Amr H. El-Shafie. Environ Sci Pollut Res (2014) 21:1658-1670". *Environmental Science and Pollution Research*, **2015**, 22, 3983	5.1	1
13	Generalized regression neural network-based approach for modelling hourly dissolved oxygen concentration in the Upper Klamath River, Oregon, USA. *Environmental Technology (United Kingdom)*, **2014**, 35, 1650-7	2.6	36
12	Modelling hourly dissolved oxygen concentration (DO) using dynamic evolving neural-fuzzy inference system (DENFIS)-based approach: case study of Klamath River at Miller Island Boat Ramp, OR, USA. *Environmental Science and Pollution Research*, **2014**, 21, 9212-27	5.1	41
11	Estimation of Daily Reference Evapotranspiration (ET0) in the North of Algeria Using Adaptive Neuro-Fuzzy Inference System (ANFIS) and Multiple Linear Regression (MLR) Models: A Comparative Study. *Arabian Journal for Science and Engineering*, **2014**, 39, 5959-5969		17
10	Generalized regression neural network (GRNN)-based approach for colored dissolved organic matter (CDOM) retrieval: case study of Connecticut River at Middle Haddam Station, USA. *Environmental Monitoring and Assessment*, **2014**, 186, 7837-48	3.1	16
9	Modeling hourly dissolved oxygen concentration (DO) using two different adaptive neuro-fuzzy inference systems (ANFIS): a comparative study. *Environmental Monitoring and Assessment*, **2014**, 186, 597-619	3.1	42
8	An evaluation of ANN methods for estimating the lengths of hydraulic jumps in U-shaped channel. *Journal of Hydroinformatics*, **2013**, 15, 147-154	2.6	20
7	ANFIS-based modelling for coagulant dosage in drinking water treatment plant: a case study. *Environmental Monitoring and Assessment*, **2012**, 184, 1953-71	3.1	61
6	Modeling daily reference evapotranspiration (ET0) in the north of Algeria using generalized regression neural networks (GRNN) and radial basis function neural networks (RBFNN): a comparative study. *Meteorology and Atmospheric Physics*, **2012**, 118, 163-178	2	65
5	Modélisation de la dose de coagulant par les systèmes à base d'inférence floue (ANFIS) application à la station de traitement des eaux de Boudouaou (Algérie). *Revue Des Sciences De L'Eau*, **2012**, 25, 1-17	0.2	1
4	Applications of Radial-Basis Function and Generalized Regression Neural Networks for Modeling of Coagulant Dosage in a Drinking Water-Treatment Plant: Comparative Study. *Journal of Environmental Engineering, ASCE*, **2011**, 137, 1209-1214	2	39
3	Comparison of the advanced machine learning methods for better prediction accuracy of solar radiation using only temperature data: A case study. *International Journal of Energy Research*,	4.5	2
2	Advanced machine learning models development for suspended sediment prediction: comparative analysis study. *Geocarto International*,1-25	2.7	4
1	Prediction of daily chlorophyll-a concentration in rivers by water quality parameters using an efficient data-driven model: online sequential extreme learning machine. *Acta Geophysica*,1	2.2	1