Ahmed Elbeltagi

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5032250/publications.pdf

Version: 2024-02-01

76 papers	2,213 citations	186265 28 h-index	276875 41 g-index
81 all docs	81 docs citations	81 times ranked	687 citing authors

#	Article	IF	Citations
1	Performance of machine learning methods in predicting water quality index based on irregular data set: application on Illizi region (Algerian southeast). Applied Water Science, 2021, 11, 1.	5.6	134
2	Prediction of irrigation groundwater quality parameters using ANN, LSTM, and MLR models. Environmental Science and Pollution Research, 2022, 29, 21067-21091.	5.3	78
3	Estimation of SPEI Meteorological Drought Using Machine Learning Algorithms. IEEE Access, 2021, 9, 65503-65523.	4.2	76
4	Delineation of groundwater potential zones for sustainable development and planning using analytical hierarchy processÂ(AHP), and MIFÂ techniques. Applied Water Science, 2021, 11, .	5.6	73
5	Modeling long-term dynamics of crop evapotranspiration using deep learning in a semi-arid environment. Agricultural Water Management, 2020, 241, 106334.	5.6	70
6	The impact of climate changes on the water footprint of wheat and maize production in the Nile Delta, Egypt. Science of the Total Environment, 2020, 743, 140770.	8.0	67
7	Groundwater level prediction using machine learning algorithms in a drought-prone area. Neural Computing and Applications, 2022, 34, 10751-10773.	5.6	64
8	Spatiotemporal trends in reference evapotranspiration and its driving factors in Bangladesh. Theoretical and Applied Climatology, 2021, 144, 793-808.	2.8	63
9	Methods to estimate evapotranspiration in humid and subtropical climate conditions. Agricultural Water Management, 2022, 261, 107378.	5.6	59
10	Prediction of Combined Terrestrial Evapotranspiration Index (CTEI) over Large River Basin Based on Machine Learning Approaches. Water (Switzerland), 2021, 13, 547.	2.7	57
11	Data Intelligence Model and Meta-Heuristic Algorithms-Based Pan Evaporation Modelling in Two Different Agro-Climatic Zones: A Case Study from Northern India. Atmosphere, 2021, 12, 1654.	2.3	52
12	Application of stacking hybrid machine learning algorithms in delineating multi-type flooding in Bangladesh. Journal of Environmental Management, 2021, 295, 113086.	7.8	51
13	Applications of various data-driven models for the prediction of groundwater quality index in the Akot basin, Maharashtra, India. Environmental Science and Pollution Research, 2022, 29, 17591-17605.	5.3	49
14	Landslide Susceptibility Mapping with Deep Learning Algorithms. Sustainability, 2022, 14, 1734.	3.2	48
15	An Integrated Statistical-Machine Learning Approach for Runoff Prediction. Sustainability, 2022, 14, 8209.	3.2	46
16	Crop Water footprint estimation and modeling using an artificial neural network approach in the Nile Delta, Egypt. Agricultural Water Management, 2020, 235, 106080.	5.6	44
17	Water quality index modeling using random forest and improved SMO algorithm for support vector machine in Saf-Saf river basin. Environmental Science and Pollution Research, 2022, 29, 48491-48508.	5.3	43
18	Development of new machine learning model for streamflow prediction: case studies in Pakistan. Stochastic Environmental Research and Risk Assessment, 2022, 36, 999-1033.	4.0	41

#	Article	IF	Citations
19	Assessing the impacts of agricultural drought (SPI/SPEI) on maize and wheat yields across Hungary. Scientific Reports, 2022, 12, .	3.3	39
20	Data intelligence and hybrid metaheuristic algorithms-based estimation of reference evapotranspiration. Applied Water Science, 2022, 12, 1.	5.6	38
21	Combination of Limited Meteorological Data for Predicting Reference Crop Evapotranspiration Using Artificial Neural Network Method. Agronomy, 2022, 12, 516.	3.0	36
22	Applications of Gaussian process regression for predicting blue water footprint: Case study in Ad Daqahliyah, Egypt. Agricultural Water Management, 2021, 255, 107052.	5.6	35
23	Groundwater flow modeling in the basaltic hard rock area of Maharashtra, India. Applied Water Science, 2022, 12, 1.	5.6	35
24	Modeling monthly crop coefficients of maize based on limited meteorological data: A case study in Nile Delta, Egypt. Computers and Electronics in Agriculture, 2020, 173, 105368.	7.7	34
25	Spatiotemporal changes and modulations of extreme climatic indices in monsoon-dominated climate region linkage with large-scale atmospheric oscillation. Atmospheric Research, 2021, 264, 105840.	4.1	34
26	Water spread mapping of multiple lakes using remote sensing and satellite data. Arabian Journal of Geosciences, 2021, 14, 1.	1.3	34
27	Assessment of Climate Change Impact on Snowmelt Runoff in Himalayan Region. Sustainability, 2022, 14, 1150.	3.2	31
28	Novel Genetic Algorithm (GA) based hybrid machine learning-pedotransfer Function (ML-PTF) for prediction of spatial pattern of saturated hydraulic conductivity. Engineering Applications of Computational Fluid Mechanics, 2022, 16, 1082-1099.	3.1	31
29	Spatial and temporal variability analysis of green and blue evapotranspiration of wheat in the Egyptian Nile Delta from 1997 to 2017. Journal of Hydrology, 2021, 594, 125662.	5.4	30
30	Novel Ensemble Forecasting of Streamflow Using Locally Weighted Learning Algorithm. Sustainability, 2021, 13, 5877.	3.2	30
31	Superiority of Hybrid Soft Computing Models in Daily Suspended Sediment Estimation in Highly Dynamic Rivers. Sustainability, 2021, 13, 542.	3.2	30
32	Modelling daily reference evapotranspiration based on stacking hybridization of ANN with meta-heuristic algorithms under diverse agro-climatic conditions. Stochastic Environmental Research and Risk Assessment, 2022, 36, 3311-3334.	4.0	30
33	Pre- and post-dam river water temperature alteration prediction using advanced machine learning models. Environmental Science and Pollution Research, 2022, 29, 83321-83346.	5.3	29
34	Prediction of irrigation water quality indices based on machine learning and regression models. Applied Water Science, 2022, 12, 1.	5.6	27
35	Evaluation of the effect of climate change on maize water footprint under RCPs scenarios in Qazvin plain, Iran. Agricultural Water Management, 2021, 254, 106969.	5.6	25
36	Modelling the reference crop evapotranspiration in the Beas-Sutlej basin (India): an artificial neural network approach based on different combinations of meteorological data. Environmental Monitoring and Assessment, 2022, 194, 141.	2.7	25

#	Article	IF	Citations
37	Modeling stageâ€“dischargeâ€“sediment using support vector machine and artificial neural network coupled with wavelet transform. Applied Water Science, 2022, 12, 1.	5.6	24
38	Daily pan-evaporation estimation in different agro-climatic zones using novel hybrid support vector regression optimized by Salp swarm algorithm in conjunction with gamma test. Engineering Applications of Computational Fluid Mechanics, 2021, 15, 1075-1094.	3.1	23
39	Evaluation of soil erosion and sediment yield spatio-temporal pattern during 1990â€“2019. Geomatics, Natural Hazards and Risk, 2021, 12, 2676-2707.	4.3	21
40	Comparative study on morphometric analysis and RUSLE-based approaches for micro-watershed prioritization using remote sensing and GIS. Arabian Journal of Geosciences, 2022, 15, 1.	1.3	21
41	The Superiority of Data-Driven Techniques for Estimation of Daily Pan Evaporation. Atmosphere, 2021, 12, 701.	2.3	20
42	Potential of hybrid wavelet-coupled data-driven-based algorithms for daily runoff prediction in complex river basins. Theoretical and Applied Climatology, 2021, 145, 1207-1231.	2.8	19
43	River flow rate prediction in the Des Moines watershed (Iowa, USA): a machine learning approach. Stochastic Environmental Research and Risk Assessment, 2022, 36, 3835-3855.	4.0	19
44	Cost-effective management measures for coastal aquifers affected by saltwater intrusion and climate change. Science of the Total Environment, 2022, 836, 155656.	8.0	19
45	Evaluation of Data-driven Hybrid Machine Learning Algorithms for Modelling Daily Reference Evapotranspiration. Atmosphere - Ocean, 2022, 60, 519-540.	1.6	19
46	A comparative analysis of data mining techniques for agricultural and hydrological drought prediction in the eastern Mediterranean. Computers and Electronics in Agriculture, 2022, 197, 106925.	7.7	18
47	An Enhanced Innovative Triangular Trend Analysis of Rainfall Based on a Spectral Approach. Water (Switzerland), 2021, 13, 727.	2.7	16
48	Assessment of the effects of spatiotemporal characteristics of drought on crop yields in southwest China. International Journal of Climatology, 2022, 42, 3056-3075.	3.5	16
49	Potentially toxic elemental contamination in Wainivesi River, Fiji impacted by gold-mining activities using chemometric tools and SOM analysis. Environmental Science and Pollution Research, 2022, 29, 42742-42767.	5.3	16
50	Determining the Hydrological Behaviour of Catchment Based on Quantitative Morphometric Analysis in the Hard Rock Area of Nand Samand Catchment, Rajasthan, India. Hydrology, 2022, 9, 31.	3.0	16
51	Investigating Relationships between Runoffâ€“Erosion Processes and Land Use and Land Cover Using Remote Sensing Multiple Gridded Datasets. ISPRS International Journal of Geo-Information, 2022, 11, 272.	2.9	16
52	Artificial intelligence approach to estimating rice yield*. Irrigation and Drainage, 2021, 70, 732-742.	1.7	15
53	Understanding temporary reduction in atmospheric pollution and its impacts on coastal aquatic system during COVID-19 lockdown: a case study of South Asia. Geomatics, Natural Hazards and Risk, 2021, 12, 560-580.	4.3	15
54	Optimizing hyperparameters of deep hybrid learning for rainfall prediction: a case study of a Mediterranean basin. Arabian Journal of Geosciences, 2022, 15, .	1.3	15

#	Article	IF	Citations
55	Analysis of Seasonal Variations in Surface Water Quality over Wet and Dry Regions. Water (Switzerland), 2022, 14, 1058.	2.7	14
56	Evaluation of Karst Spring Discharge Response Using Time-Scale-Based Methods for a Mediterranean Basin of Northern Algeria. Water (Switzerland), 2021, 13, 2946.	2.7	13
57	Variational quantum classifiers through the lens of the Hessian. PLoS ONE, 2022, 17, e0262346.	2.5	13
58	Groundwater level estimation in northern region of Bangladesh using hybrid locally weighted linear regression and Gaussian process regression modeling. Theoretical and Applied Climatology, 2022, 149, 131-151.	2.8	13
59	Applications of Data-driven Models for Daily Discharge Estimation Based on Different Input Combinations. Water Resources Management, 2022, 36, 2201-2221.	3.9	13
60	Estimation of the rice water footprint based on machine learning algorithms. Computers and Electronics in Agriculture, 2021, 191, 106501.	7.7	12
61	Recent changes in temperature extremes in subtropical climate region and the role of large-scale atmospheric oscillation patterns. Theoretical and Applied Climatology, 2022, 148, 329-347.	2.8	12
62	Assessing machine learning models for streamflow estimation: a case study in Oued Sebaou watershed (Northern Algeria). Hydrological Sciences Journal, 2022, 67, 1328-1341.	2.6	12
63	An evapotranspiration deficit-based drought index to detect variability of terrestrial carbon productivity in the Middle East. Environmental Research Letters, 2022, 17, 014051.	5.2	11
64	Variability of climate-induced rice yields in northwest Bangladesh using multiple statistical modeling. Theoretical and Applied Climatology, 2022, 147, 1263-1276.	2.8	10
65	Development of Monthly Reference Evapotranspiration Machine Learning Models and Mapping of Pakistanâ€"A Comparative Study. Water (Switzerland), 2022, 14, 1666.	2.7	10
66	Estimating the Standardized Precipitation Evapotranspiration Index Using Data-Driven Techniques: A Regional Study of Bangladesh. Water (Switzerland), 2022, 14, 1764.	2.7	10
67	Combined Terrestrial Evapotranspiration Index prediction using a hybrid artificial intelligence paradigm integrated with relief algorithm-based feature selection. Computers and Electronics in Agriculture, 2022, 193, 106687.	7.7	8
68	Artificial intelligent-based water and soil management. , 2022, , 129-142.		7
69	Applicability of machine learning techniques for multi-time step ahead runoff forecasting. Acta Geophysica, 2022, 70, 757-776.	2.0	7
70	GHGs Emission from the Agricultural Sector within EU-28: A Multivariate Analysis Approach. Energies, 2021, 14, 6495.	3.1	6
71	Farmersâ€™ Awareness in the Context of Climate Change: An Underutilized Way for Ensuring Sustainable Farmland Adaptation and Surface Water Quality. Sustainability, 2021, 13, 11802.	3.2	6
72	How do multiple kernel functions in machine learning algorithms improve precision in flood probability mapping?. Natural Hazards, 2022, 113, 1543-1562.	3.4	6

#	Article	IF	Citations
73	Rice yield responses in Bangladesh to large-scale atmospheric oscillation using multifactorial model. Theoretical and Applied Climatology, 2021, 146, 29-44.	2.8	5
74	Evaluation of water delivery performance of right main canal of Bhimsagar medium irrigation scheme, Rajasthan. ISH Journal of Hydraulic Engineering, 2023, 29, 378-388.	2.1	4
75	Application of hydrological model to assess river flow in the transboundary cryosphere and data-scarce watershed, a case study: Chitral-Kabul River Basin (C-KRB) in Pakistan. Water Science and Technology: Water Supply, 2022, 22, 3842-3862.	2.1	1
76	Socio-economic analysis of Baroda branch canal of Som Kamla Amba irrigation project, Dungarpur, Rajasthan. Environment Conservation Journal, 2021, 22, 271-279.	0.2	0