Muhammad Abrar Faiz

List of Publications by Year
in descending order

53 papers	1,004 citations	430874 18 h-index	477307 29 g-index
54 all docs	54 docs citations	54 times ranked	917 citing authors

#	Article	IF	Citations
1	A resilience evaluation method for a combined regional agricultural water and soil resource system based on Weighted Mahalanobis distance and a Gray-TOPSIS model. Journal of Cleaner Production, 2019, 229, 667-679.	9.3	93
2	Random forest regression evaluation model of regional flood disaster resilience based on the whale optimization algorithm. Journal of Cleaner Production, 2020, 250, 119468.	9.3	75
3	ELM evaluation model of regional groundwater quality based on the crow search algorithm. Ecological Indicators, 2017, 81, 302-314.	6.3	58
4	How accurate are the performances of gridded precipitation data products over Northeast China?. Atmospheric Research, 2018, 211, 12-20.	4.1	42
5	Identification and application of the most suitable entropy model for precipitation complexity measurement. Atmospheric Research, 2019, 221, 88-97.	4.1	41
6	Construction and application of a refined index for measuring the regional matching characteristics between water and land resources. Ecological Indicators, 2018, 91, 203-211.	6.3	36
7	Projection Pursuit Evaluation Model of Regional Surface Water Environment Based on Improved Chicken Swarm Optimization Algorithm. Water Resources Management, 2018, 32, 1325-1342.	3.9	36
8	Spatiotemporal variation analysis of regional flood disaster resilience capability using an improved projection pursuit model based on the wind-driven optimization algorithm. Journal of Cleaner Production, 2019, 241, 118406.	9.3	34
9	Assessment of dryness conditions according to transitional ecosystem patterns in an extremely cold region of China. Journal of Cleaner Production, 2020, 255, 120348.	9.3	34
10	Projected Changes of Future Extreme Drought Events under Numerous Drought Indices in the Heilongjiang Province of China. Water Resources Management, 2017, 31, 3921-3937.	3.9	30
11	Application of Particle Swarm Optimization and Extreme Learning Machine Forecasting Models for Regional Groundwater Depth Using Nonlinear Prediction Models as Preprocessor. Journal of Hydrologic Engineering - ASCE, 2018, 23, .	1.9	30
12	Comparative Assessment of Reference Evapotranspiration Estimation Using Conventional Method and Machine Learning Algorithms in Four Climatic Regions. Pure and Applied Geophysics, 2020, 177, 4479-4508.	1.9	30
13	Performance evaluation of hydrological models using ensemble of General Circulation Models in the northeastern China. Journal of Hydrology, 2018, 565, 599-613.	5.4	29
14	Detecting the persistence of drying trends under changing climate conditions using four meteorological drought indices. Meteorological Applications, 2018, 25, 184-194.	2.1	28
15	Recent Climate Trends and Drought Behavioral Assessment Based on Precipitation and Temperature Data Series in the Songhua River Basin of China. Water Resources Management, 2016, 30, 4839-4859.	3.9	26
16	Projection pursuit evaluation model of a regional surface water environment based on an Ameliorative Moth-Flame Optimization algorithm. Ecological Indicators, 2019, 107, 105674.	6.3	26
17	Spatial-temporal characteristics analysis of water resource system resilience in irrigation areas based on a support vector machine model optimized by the modified gray wolf algorithm. Journal of Hydrology, 2021, 597, 125758.	5.4	26
18	Precipitation Complexity Measurement Using Multifractal Spectra Empirical Mode Decomposition Detrended Fluctuation Analysis. Water Resources Management, 2016, 30, 505-522.	3.9	23

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19	A composite drought index developed for detecting large-scale drought characteristics. Journal of Hydrology, 2022, 605, 127308.	5.4	21
20	Drought indices: aggregation is necessary or is it only the researcher's choice?. Water Science and Technology: Water Supply, 2021, 21, 3987-4002.	2.1	20
21	Extreme precipitation and drought monitoring in northeastern China using general circulation models and pan evaporation-based drought indices. Climate Research, 2018, 74, 231-250.	1.1	17
22	Two-Stage Multi-Water Sources Allocation Model in Regional Water Resources Management under Uncertainty. Water Resources Management, 2017, 31, 3607-3625.	3.9	16
23	Stream flow variability and drought severity in the Songhua River Basin, Northeast China. Stochastic Environmental Research and Risk Assessment, 2018, 32, 1225-1242.	4.0	15
24	Spatial variability and possible cause analysis of regional precipitation complexity based on optimized sample entropy. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 3384-3398.	2.7	15
25	Assessment of precipitation variability and uncertainty of stream flow in the Hindu Kush Himalayan and Karakoram River basins of Pakistan. Meteorology and Atmospheric Physics, 2019, 131, 127-136.	2.0	14
26	Optimization of irrigation water use efficiency evaluation indicators based on DPSIR-ISD model. Water Science and Technology: Water Supply, 2020, 20, 83-94.	2.1	14
27	Precipitation variability assessment of northeast China: Songhua River basin. Journal of Earth System Science, 2016, 125, 957-968.	1.3	13
28	Application of non-conventional soft computing approaches for estimation of reference evapotranspiration in various climatic regions. Theoretical and Applied Climatology, 2020, 139, 1459-1477.	2.8	13
29	Measurement and analysis of regional agricultural water and soil resource composite system harmony with an improved random forest model based on a dragonfly algorithm. Journal of Cleaner Production, 2021, 305, 127217.	9.3	13
30	Connotation analysis and evaluation index system construction of regional agricultural soil and water resource composite system harmony. Journal of Cleaner Production, 2020, 263, 121438.	9.3	12
31	Complexity and trends analysis of hydrometeorological time series for a river streamflow: A case study of <scp>S</scp>onghua <scp>R</scp>iver <scp>B</scp>asin, <scp>C</scp>hina. River Research and Applications, 2018, 34, 101-111.	1.7	11
32	Complexity measurement of precipitation series in urban areas based on particle swarm optimized multiscale entropy. Arabian Journal of Geosciences, 2018, 11, 1.	1.3	9
33	Estimation of the River Flow Synchronicity in the Upper Indus River Basin Using Copula Functions. Sustainability, 2020, 12, 5122.	3.2	9
34	Application of an improved multifractal detrended fluctuation analysis approach for estimation of the complexity of daily precipitation. International Journal of Climatology, 2021, 41, 4653-4671.	3.5	9
35	Multifractal Detrended Fluctuation Analysis of Regional Precipitation Sequences Based on the CEEMDAN-WPT. Pure and Applied Geophysics, 2018, 175, 3069-3084.	1.9	7
36	A novel system of indicators for evaluating system resilience of regional agricultural water resources. Water Science and Technology: Water Supply, 2018, 18, 1-13.	2.1	7

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37	Assessment of characteristics and distinguished hydrological periods of a river regime. Environmental Earth Sciences, 2018, 77, 1.	2.7	7
38	Identification of resilience characteristics of a regional agricultural water resources system based on index optimization and improved support vector machine. Water Science and Technology: Water Supply, 2019, 19, 1899-1910.	2.1	7
39	Comprehensive evaluation of 0.25Â° precipitation datasets combined with MOD10A2 snow cover data in the ice-dominated river basins of Pakistan. Atmospheric Research, 2020, 231, 104653.	4.1	7
40	Development of an integrated weighted drought index and its application for agricultural drought monitoring. Arabian Journal of Geosciences, 2021, 14, 1.	1.3	7
41	Complexity measurement of regional groundwater resources system using improved Lempel-Ziv complexity algorithm. Arabian Journal of Geosciences, 2016, 9, 1.	1.3	6
42	Novel method for measuring regional precipitation complexity characteristics based on multiscale permutation entropy combined with CMFO-PPTTE model. Journal of Hydrology, 2021, 592, 125801.	5.4	6
43	Multi-index drought characteristics in Songhua River basin, Northeast China. Climate Research, 2019, 78, 1-19.	1.1	6
44	Wavelet analysis of the complex precipitation series in the Northern Jiansanjiang Administration of the Heilongjiang land reclamation, China. Journal of Water and Climate Change, 2016, 7, 796-809.	2.9	5
45	Rainfall Extremes: a Novel Modeling Approach for Regionalization. Water Resources Management, 2017, 31, 1975-1994.	3.9	5
46	Identification and interâ€comparison of appropriate longâ€term precipitation datasets using decision tree model and statistical matrix over China. International Journal of Climatology, 2021, 41, 5003-5021.	3.5	5
47	Measurement and analysis of the resilience characteristics for a regional agricultural soil-water resource composite system. Journal of Environmental Management, 2022, 318, 115622.	7.8	4
48	Effects of land use and climate variability on the main stream of the Songhua River Basin, Northeast China. Hydrological Sciences Journal, 2020, 65, 1752-1765.	2.6	2
49	Assessment of the response of climate variability and price anomalies to grain yield and land use in Northeast China. Environmental Science and Pollution Research, 2021, 28, 36559-36572.	5.3	2
50	Indicator system optimization model for evaluating resilience of regional agricultural soilâ€“water resource composite system. Water Science and Technology: Water Supply, 2021, 21, 3251-3266.	2.1	2
51	Utilization of Markov chain Monte Carlo approach for calibration and uncertainty analysis of environmental models. , 2018, , .		1
52	Analysis of the Appropriate Development Scale of Regional Paddy Field Under the Restriction of Water Resources. Agricultural Research, 2016, 5, 324-333.	1.7	0
53	Analysis on the influencing factors of effective utilization coefficient of irrigation water in irrigation districts based on Horton fractal theory. Water Science and Technology: Water Supply, 2019, 19, 1695-1703.	2.1	0