Mojtaba Sadegh

List of Publications by Year
in descending order

65 papers	3,330 citations	147801 31 h-index	155660 55 g-index
66 all docs	66 docs citations	66 times ranked	3104 citing authors

#	Article	IF	Citations
1	Climate Extremes and Compound Hazards in a Warming World. Annual Review of Earth and Planetary Sciences, 2020, 48, 519-548.	11.0	330
2	Increasing probability of mortality during Indian heat waves. Science Advances, 2017, 3, e1700066.	10.3	247
3	Multivariate Copula Analysis Toolbox (MvCAT): Describing dependence and underlying uncertainty using a Bayesian framework. Water Resources Research, 2017, 53, 5166-5183.	4.2	226
4	How do natural hazards cascade to cause disasters?. Nature, 2018, 561, 458-460.	27.8	165
5	A century of observations reveals increasing likelihood of continental-scale compound dry-hot extremes. Science Advances, 2020, 6, .	10.3	148
6	Multihazard Scenarios for Analysis of Compound Extreme Events. Geophysical Research Letters, 2018, 45, 5470-5480.	4.0	139
7	Anthropogenic Drought: Definition, Challenges, and Opportunities. Reviews of Geophysics, 2021, 59, e2019RG000683.	23.0	126
8	Toward diagnostic model calibration and evaluation: Approximate Bayesian computation. Water Resources Research, 2013, 49, 4335-4345.	4.2	123
9	Optimal Inter-Basin Water Allocation Using Crisp and Fuzzy Shapley Games. Water Resources Management, 2010, 24, 2291-2310.	3.9	120
10	Approximate Bayesian Computation using Markov Chain Monte Carlo simulation: DREAM$_{(ABC)}$. Water Resources Research, 2014, 50, 6767-6787.	4.2	92
11	Compounding effects of human activities and climatic changes on surface water availability in Iran. Climatic Change, 2019, 152, 379-391.	3.6	84
12	Warming enabled upslope advance in western US forest fires. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	83
13	Climate-informed environmental inflows to revive a drying lake facing meteorological and anthropogenic droughts. Environmental Research Letters, 2018, 13, 084010.	5.2	82
14	Anthropogenic depletion of Iran's aquifers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	82
15	Water Resources Allocation Using Solution Concepts of Fuzzy Cooperative Games: Fuzzy Least Core and Fuzzy Weak Least Core. Water Resources Management, 2011, 25, 2543-2573.	3.9	59
16	A generalized framework for process-informed nonstationary extreme value analysis. Advances in Water Resources, 2019, 130, 270-282.	3.8	56
17	Compound Extremes Drive the Western Oregon Wildfires of September 2020. Geophysical Research Letters, 2021, 48, e2021GL092520.	4.0	53
18	Optimal and objective placement of sensors in water distribution systems using information theory. Water Research, 2018, 143, 218-228.	11.3	48

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19	Climate‐Induced Changes in the Risk of Hydrological Failure of Major Dams in California. Geophysical Research Letters, 2019, 46, 2130-2139.	4.0	48
20	Heat wave Intensity Duration Frequency Curve: A Multivariate Approach for Hazard and Attribution Analysis. Scientific Reports, 2019, 9, 14117.	3.3	46
21	GHWR, a multi-method global heatwave and warm-spell record and toolbox. Scientific Data, 2018, 5, 180206.	5.3	46
22	A game theoretical low impact development optimization model for urban storm water management. Journal of Cleaner Production, 2019, 241, 118323.	9.3	44
23	A new normal for streamflow in California in a warming climate: Wetter wet seasons and drier dry seasons. Journal of Hydrology, 2018, 567, 203-211.	5.4	42
24	Multihazard simulation for coastal flood mapping: Bathtub versus numerical modelling in an open estuary, Eastern Canada. Journal of Flood Risk Management, 2019, 12, .	3.3	42
25	Increasing concurrence of wildfire drivers tripled megafire critical danger days in Southern California between1982 and 2018. Environmental Research Letters, 2020, 15, 104002.	5.2	40
26	The stationarity paradigm revisited: Hypothesis testing using diagnostics, summary metrics, and DREAM$_{(ABC)}$. Water Resources Research, 2015, 51, 9207-9231.	4.2	38
27	Augmented Normalized Difference Water Index for improved surface water monitoring. Environmental Modelling and Software, 2021, 140, 105030.	4.5	38
28	Groundwater Level Modeling with Machine Learning: A Systematic Review and Meta-Analysis. Water (Switzerland), 2022, 14, 949.	2.7	35
29	Unconventional water resources: Global opportunities and challenges. Science of the Total Environment, 2022, 827, 154429.	8.0	35
30	Pressure sensor placement in water distribution networks for leak detection using a hybrid information-entropy approach. Information Sciences, 2020, 516, 56-71.	6.9	34
31	Developing a non-cooperative optimization model for water and crop area allocation based on leader-follower game. Journal of Hydrology, 2018, 567, 51-59.	5.4	33
32	A Multi-Objective Risk-Based Game Theoretic Approach to Reservoir Operation Policy in Potential Future Drought Condition. Water Resources Management, 2019, 33, 1999-2014.	3.9	33
33	Stochastic modeling of suspended sediment load in alluvial rivers. Advances in Water Resources, 2018, 119, 188-196.	3.8	32
34	A robust decision support leader-follower framework for design of contamination warning system in water distribution network. Journal of Cleaner Production, 2019, 214, 666-673.	9.3	32
35	Copulas for hydroclimatic analysis: A practice‐oriented overview. Wiley Interdisciplinary Reviews: Water, 2022, 9, .	6.5	31
36	Increasing Heat‐Stress Inequality in a Warming Climate. Earth's Future, 2022, 10, .	6.3	31

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37	Shuffled Complex-Self Adaptive Hybrid EvoLution (SC-SAHEL) optimization framework. Environmental Modelling and Software, 2018, 104, 215-235.	4.5	29
38	The Quest for Hydrological Signatures: Effects of Data Transformation on Bayesian Inference of Watershed Models. Water Resources Management, 2018, 32, 1867-1881.	3.9	24
39	A hybrid clustering-fusion methodology for land subsidence estimation. Natural Hazards, 2018, 94, 905-926.	3.4	22
40	A multi-objective optimal allocation of treated wastewater in urban areas using leader-follower game. Journal of Cleaner Production, 2020, 267, 122189.	9.3	21
41	Coevolution of machine learning and processâ€based modelling to revolutionize Earth and environmental sciences: A perspective. Hydrological Processes, 2022, 36, .	2.6	20
42	The mirage water concept and an index-based approach to quantify causes of hydrological changes in semi-arid regions. Hydrological Sciences Journal, 2020, 65, 311-324.	2.6	19
43	Data and analysis toolbox for modeling the nexus of food, energy, and water. Sustainable Cities and Society, 2020, 61, 102281.	10.4	19
44	A Multi-Model Nonstationary Rainfall-Runoff Modeling Framework: Analysis and Toolbox. Water Resources Management, 2019, 33, 3011-3024.	3.9	18
45	Experimental study and numerical verification of silted-up dam break. Journal of Hydrology, 2020, 590, 125267.	5.4	18
46	A fuzzy multi-stakeholder socio-optimal model for water and waste load allocation. Environmental Monitoring and Assessment, 2019, 191, 359.	2.7	17
47	A deep learning image segmentation model for agricultural irrigation system classification. Computers and Electronics in Agriculture, 2022, 198, 106977.	7.7	17
48	A novel hybrid entropy-clustering approach for optimal placement of pressure sensors for leakage detection in water distribution systems under uncertainty. Urban Water Journal, 2020, 17, 185-198.	2.1	15
49	Quantifying increased fire risk in California in response to different levels of warming and drying. Stochastic Environmental Research and Risk Assessment, 2020, 34, 2023-2031.	4.0	14
50	Changes in the exposure of Californiaâ€™s levee-protected critical infrastructure to flooding hazard in a warming climate. Environmental Research Letters, 2020, 15, 064032.	5.2	14
51	Pooling Data Improves Multimodel IDF Estimates over Median-Based IDF Estimates: Analysis over the Susquehanna and Florida. Journal of Hydrometeorology, 2021, 22, 971-995.	1.9	12
52	Anthropogenic stressors compound climate impacts on inland lake dynamics: The case of Hamun Lakes. Science of the Total Environment, 2022, 829, 154419.	8.0	12
53	A fuzzy multi-objective optimization approach for treated wastewater allocation. Environmental Monitoring and Assessment, 2019, 191, 468.	2.7	11
54	Probabilistic hazard assessment of contaminated sediment in rivers. Science of the Total Environment, 2020, 703, 134875.	8.0	11

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55	Multi-objective conflict resolution optimization model for reservoir's selective depth water withdrawal considering water quality. Environmental Science and Pollution Research, 2021, 28, 3035-3050.	5.3	11
56	Optimal joint deployment of flow and pressure sensors for leak identification in water distribution networks. Urban Water Journal, 2018, 15, 837-846.	2.1	9
57	Polar Ice as an Unconventional Water Resource: Opportunities and Challenges. Water (Switzerland), 2021, 13, 3220.	2.7	9
58	A dataset on human perception of and response to wildfire smoke. Scientific Data, 2019, 6, 229.	5.3	8
59	Multi-type assessment of global droughts and teleconnections. Weather and Climate Extremes, 2021, 34, 100402.	4.1	8
60	A Systematic Multiple Studies Review of Low-Income, First-Generation, and Underrepresented, STEM-Degree Support Programs: Emerging Evidence-Based Models and Recommendations. Education Sciences, 2022, 12, 333.	2.6	8
61	A novel dynamic hydrant flushing framework facilitated by categorizing contamination events. Urban Water Journal, 2020, 17, 199-211.	2.1	7
62	Optimizing chute-flip bucket system based on meta-modelling approach. Canadian Journal of Civil Engineering, 2020, 47, 584-595.	1.3	5
63	A Universal Model of Unsaturated Hydraulic Conductivity With Complementary Adsorptive and Diffusive Process Components. Water Resources Research, 2020, 56, e2019WR025884.	4.2	4
64	Discrepancies in changes in precipitation characteristics over the contiguous United States based on six daily gridded precipitation datasets. Weather and Climate Extremes, 2022, 36, 100433.	4.1	3
65	Design of a high-coverage ground-based CO_2 monitoring layout using a novel information theory-based optimization model. Environmental Monitoring and Assessment, 2021, 193, 150.	2.7	1