Mohamad I Hejazi

List of Publications by Year
in descending order

71 papers	3,423 citations	136740 32 h-index	149479 56 g-index
73 all docs	73 docs citations	73 times ranked	3487 citing authors

#	Article	IF	Citations
1	Implication of imposing fertilizer limitations on energy, agriculture, and land systems. Journal of Environmental Management, 2022, 305, 114391.	3.8	13
2	Unintended consequences of climate change mitigation for African river basins. Nature Climate Change, 2022, 12, 187-192.	8.1	19
3	GCAM-USA v5.3_water_dispatch: integrated modeling of subnational US energy, water, and land systems within a global framework. Geoscientific Model Development, 2022, 15, 2533-2559.	1.3	10
4	How stable is the stabilization value of groundwater? Examining the behavioral and physical determinants. Water Resources and Economics, 2022, 38, 100195.	0.9	1
5	Power sector investment implications of climate impacts on renewable resources in Latin America and the Caribbean. Nature Communications, 2021, 12, 1276.	5.8	30
6	Evaluating the economic impact of water scarcity in a changing world. Nature Communications, 2021, 12, 1915.	5.8	174
7	Integrated energy-water-land nexus planning in the Colorado River Basin (Argentina). Regional Environmental Change, 2021, 21, 1.	1.4	12
8	The future evolution of energy-water-agriculture interconnectivity across the US. Environmental Research Letters, 2021, 16, 065010.	2.2	11
9	The Implications of Global Change for the Coâ€Evolution of Argentina's Integrated Energyâ€Waterâ€Land Systems. Earth's Future, 2021, 9, e2020EF001970.	2.4	15
10	Agricultural impacts of sustainable water use in the United States. Scientific Reports, 2021, 11, 17917.	1.6	14
11	Assessing the future of global energy-for-water. Environmental Research Letters, 2021, 16, 024031.	2.2	11
12	Water-energy-food nexus in India: A critical review. Energy and Climate Change, 2021, 2, 100060.	2.2	11
13	Future evolution of virtual water trading in the United States electricity sector. Environmental Research Letters, 2021, 16, 124010.	2.2	3
14	Humans drive future water scarcity changes across all Shared Socioeconomic Pathways. Environmental Research Letters, 2020, 15, 014007.	2.2	50
15	Cooperation or rivalry? Impact of alternative development pathways on Indiaâ€™s long-term electricity generation and associated water demands. Energy, 2020, 192, 116708.	4.5	16
16	Global land use for 2015â€"2100 at 0.05Â° resolution under diverse socioeconomic and climate scenarios. Scientific Data, 2020, 7, 320.	2.4	89
17	Future western U.S. building electricity consumption in response to climate and population drivers: A comparative study of the impact of model structure. Energy, 2020, 208, 118312.	4.5	8
18	Impacts of climate change on energy systems in global and regional scenarios. Nature Energy, 2020, 5, 794-802.	19.8	180

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19	Future changes in the trading of virtual water. Nature Communications, 2020, 11, 3632.	5.8	54
20	100 years of data is not enough to establish reliable drought thresholds. Journal of Hydrology X, 2020, 7, 100052.	0.8	11
21	Integrated energy-water-land nexus planning to guide national policy: an example from Uruguay. Environmental Research Letters, 2020, 15, 094014.	2.2	24
22	River Regulation Alleviates the Impacts of Climate Change on U.S. Thermoelectricity Production. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031618.	1.2	8
23	Metis â€“ A Tool to Harmonize and Analyze Multi-Sectoral Data and Linkages at Variable Spatial Scales. Journal of Open Research Software, 2020, 8, 10.	2.7	12
24	Representing power sector detail and flexibility in a multi-sector model. Energy Strategy Reviews, 2019, 26, 100411.	3.3	13
25	Integrated Solutions for the Water-Energy-Land Nexus: Are Global Models Rising to the Challenge?. Water (Switzerland), 2019, 11, 2223.	1.2	24
26	A Multilayer Reservoir Thermal Stratification Module for Earth System Models. Journal of Advances in Modeling Earth Systems, 2019, 11, 3265-3283.	1.3	12
27	Influence of Groundwater Extraction Costs and Resource Depletion Limits on Simulated Global Nonrenewable Water Withdrawals Over the Twentyâ€First Century. Earth's Future, 2019, 7, 123-135.	2.4	61
28	The Paris pledges and the energy-water-land nexus in Latin America: Exploring implications of greenhouse gas emission reductions. PLoS ONE, 2019, 14, e0215013.	1.1	20
29	Global agricultural green and blue water consumption under future climate and land use changes. Journal of Hydrology, 2019, 574, 242-256.	2.3	63
30	GCAM v5.1: representing the linkages between energy, water, land, climate, and economic systems. Geoscientific Model Development, 2019, 12, 677-698.	1.3	211
31	A pathway of global food supply adaptation in a world with increasingly constrained groundwater. Science of the Total Environment, 2019, 673, 165-176.	3.9	37
32	Implications of water constraints on electricity capacity expansion in the United States. Nature Sustainability, 2019, 2, 206-213.	11.5	33
33	Climate impacts on hydropower in Colombia: A multi-model assessment of power sector adaptation pathways. Energy Policy, 2019, 128, 179-188.	4.2	51
34	<i>gcamdata</i>: An R Package for Preparation, Synthesis, andÂTracking of Input Data for the GCAM Integrated Human-Earth Systems Model. Journal of Open Research Software, 2019, 7, 6.	2.7	17
35	A Global Hydrologic Framework to Accelerate Scientific Discovery. Journal of Open Research Software, 2019, 7, 1.	2.7	18
36	Water for electricity in India: A multi-model study of future challenges and linkages to climate change mitigation. Applied Energy, 2018, 210, 673-684.	5.1	59

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37	Impacts of climate change, policy and Water-Energy-Food nexus on hydropower development. Renewable Energy, 2018, 116, 827-834.	4.3	108
38	A New Global Storageâ€Areaâ€Depth Data Set for Modeling Reservoirs in Land Surface and Earth System Models. Water Resources Research, 2018, 54, 10,372.	1.7	35
39	Interactions between climate change mitigation and adaptation: The case of hydropower in Brazil. Energy, 2018, 164, 1161-1177.	4.5	45
40	A Holistic View of Water Management Impacts on Future Droughts: A Global Multimodel Analysis. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5947-5972.	1.2	25
41	Reconstruction of global gridded monthly sectoral water withdrawals for 1971â€"2010 and analysis of their spatiotemporal patterns. Hydrology and Earth System Sciences, 2018, 22, 2117-2133.	1.9	106
42	AÂhydrological emulator for global applications â€" HE v1.0.0. Geoscientific Model Development, 2018, 11, 1077-1092.	1.3	22
43	Water Sector Assumptions for the Shared Socioeconomic Pathways in an Integrated Modeling Framework. Water Resources Research, 2018, 54, 6423-6440.	1.7	40
44	Tethys â€" A Python Package for Spatial and Temporal Downscaling of Global Water Withdrawals. Journal of Open Research Software, 2018, 6, 9.	2.7	13
45	Effects of spatially distributed sectoral water management on the redistribution of water resources in an integrated water model. Water Resources Research, 2017, 53, 4253-4270.	1.7	30
46	Climate impacts on hydropower and consequences for global electricity supply investment needs. Energy, 2017, 141, 2081-2090.	4.5	108
47	Vulnerability of US thermoelectric power generation to climate change when incorporating state-level environmental regulations. Nature Energy, 2017, 2, .	19.8	74
48	Hydrological Drought in the Anthropocene: Impacts of Local Water Extraction and Reservoir Regulation in the U.S.. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,313.	1.2	58
49	Setting the System Boundaries of â€œEnergy for Waterâ€•for Integrated Modeling. Environmental Science & Technology, 2016, 50, 8930-8931.	4.6	12
50	Global and Regional Evaluation of Energy for Water. Environmental Science & Technology, 2016, 50, 9736-9745.	4.6	78
51	Balancing global water availability and use at basin scale in an integrated assessment model. Climatic Change, 2016, 136, 217-231.	1.7	79
52	Sensitivity of future U.S. Water shortages to socioeconomic and climate drivers: a case study in Georgia using an integrated human-earth system modeling framework. Climatic Change, 2016, 136, 233-246.	1.7	11
53	Modeling stream temperature in the <scp>A</scp>nthropocene: An earth system modeling approach. Journal of Advances in Modeling Earth Systems, 2015, 7, 1661-1679.	1.3	29
54	21st century United States emissions mitigation could increase water stress more than the climate change it is mitigating. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10635-10640.	3.3	128

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55	Water demands for electricity generation in the U.S.: Modeling different scenarios for the waterâ€“energy nexus. Technological Forecasting and Social Change, 2015, 94, 318-334.	6.2	88
56	The effects of climate sensitivity and carbon cycle interactions on mitigation policy stringency. Climatic Change, 2015, 131, 35-50.	1.7	4
57	Investigating the nexus of climate, energy, water, and land at decision-relevant scales: the Platform for Regional Integrated Modeling and Analysis (PRIMA). Climatic Change, 2015, 129, 573-588.	1.7	119
58	Climate mitigation policy implications for global irrigation water demand. Mitigation and Adaptation Strategies for Global Change, 2015, 20, 389-407.	1.0	63
59	Incorporating Reanalysis-Based Short-Term Forecasts from a Regional Climate Model in an Irrigation Scheduling Optimization Problem. Journal of Water Resources Planning and Management - ASCE, 2014, 140, 699-713.	1.3	25
60	Long-term global water projections using six socioeconomic scenarios in an integrated assessment modeling framework. Technological Forecasting and Social Change, 2014, 81, 205-226.	6.2	159
61	Influence of climate change mitigation technology on global demands of water for electricity generation. International Journal of Greenhouse Gas Control, 2013, 13, 112-123.	2.3	75
62	Scenarios of global municipal water-use demand projections over the 21st century. Hydrological Sciences Journal, 2013, 58, 519-538.	1.2	42
63	Value of Probabilistic Weather Forecasts: Assessment by Real-Time Optimization of Irrigation Scheduling. Journal of Water Resources Planning and Management - ASCE, 2011, 137, 391-403.	1.3	56
64	Building more realistic reservoir optimization models using data mining â€“ A case study of Shelbyville Reservoir. Advances in Water Resources, 2011, 34, 701-717.	1.7	40
65	Prediction of weekly nitrate-N fluctuations in a small agricultural watershed in Illinois. Journal of Hydroinformatics, 2010, 12, 251-261.	1.1	30
66	Impacts of Urbanization and Climate Variability on Floods in Northeastern Illinois. Journal of Hydrologic Engineering - ASCE, 2009, 14, 606-616.	0.8	102
67	Input variable selection for water resources systems using a modified minimum redundancy maximum relevance (mMRMR) algorithm. Advances in Water Resources, 2009, 32, 582-593.	1.7	78
68	The role of hydrologic information in reservoir operation â€“ Learning from historical releases. Advances in Water Resources, 2008, 31, 1636-1650.	1.7	76
69	Calibrating a watershed simulation model involving human interference: an application of multi-objective genetic algorithms. Journal of Hydroinformatics, 2008, 10, 97-111.	1.1	24
70	Changing estimates of design precipitation in Northeastern Illinois: Comparison between different sources and sensitivity analysis. Journal of Hydrology, 2007, 347, 211-222.	2.3	32
71	Retrieval of irrigated and rainfed crop data using a general maximum entropy approach. Irrigation Science, 2007, 25, 325-338.	1.3	6