Jonathan D Herman

List of Publications by Year
in descending order

46 papers	3,438 citations	218677 26 h-index	223800 46 g-index
55 all docs	55 docs citations	55 times ranked	3394 citing authors

#	Article	IF	Citations
1	Bias Correction of Hydrologic Projections Strongly Impacts Inferred Climate Vulnerabilities in Institutionally Complex Water Systems. Journal of Water Resources Planning and Management - ASCE, 2022, 148, .	2.6	8
2	Coupled effects of observation and parameter uncertainty on urban groundwater infrastructure decisions. Hydrology and Earth System Sciences, 2022, 26, 1319-1340.	4.9	1
3	Identifying climate change impacts on surface water supply in the southern Central Valley, California. Science of the Total Environment, 2021, 759, 143429.	8.0	25
4	Dynamics of resilienceâ€"equity interactions in resource-based communities. Communications Earth & Environment, 2021, 2, .	6.8	2
5	Toward Dataâ€Driven Generation and Evaluation of Model Structure for Integrated Representations of Human Behavior in Water Resources Systems. Water Resources Research, 2021, 57, e2020WR028148.	4.2	8
6	How do the properties of training scenarios influence the robustness of reservoir operating policies to climate uncertainty?. Environmental Modelling and Software, 2021, 141, 105047.	4.5	5
7	California's food-energy-water system: An open source simulation model of adaptive surface and groundwater management in the Central Valley. Environmental Modelling and Software, 2021, 141, 105052.	4.5	17
8	Dynamic Adaptation of Water Resources Systems Under Uncertainty by Learning Policy Structure and Indicators. Water Resources Research, 2021, 57, e2021WR030433.	4.2	15
9	Low cost satellite constellations for nearly continuous global coverage. Nature Communications, 2020, 11, 200.	12.8	29
10	Climate Adaptation as a Control Problem: Review and Perspectives on Dynamic Water Resources Planning Under Uncertainty. Water Resources Research, 2020, 56, e24389.	4.2	110
11	Adaptation of Multiobjective Reservoir Operations to Snowpack Decline in the Western United States. Journal of Water Resources Planning and Management - ASCE, 2020, 146, .	2.6	16
12	Bootstrap Aggregation and Crossâ€Validation Methods to Reduce Overfitting in Reservoir Control Policy Search. Water Resources Research, 2020, 56, e2020WR027184.	4.2	26
13	Drought and the Sacramentoâ€"San Joaquin Delta, 2012â€"2016: Environmental Review and Lessons. San Francisco Estuary and Watershed Science, 2020, 18, .	0.4	5
14	Detecting early warning signals of long-term water supply vulnerability using machine learning. Environmental Modelling and Software, 2020, 131, 104781.	4.5	15
15	Urban growth and groundwater sustainability: Evaluating spatially distributed recharge alternatives in the Mexico City Metropolitan Area. Journal of Hydrology, 2020, 586, 124909.	5.4	19
16	Tailoring WRF and Noahâ€MP to Improve Process Representation of Sierra Nevada Runoff: Diagnostic Evaluation and Applications. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001832.	3.8	9
17	Water shortage risks from perennial crop expansion in Californiaâ€™s Central Valley. Environmental Research Letters, 2019, 14, 104014.	5.2	35
18	A framework for testing dynamic classification of vulnerable scenarios in ensemble water supply projections. Climatic Change, 2019, 152, 431-448.	3.6	10

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19	POLARIS Soil Properties: 30â€m Probabilistic Maps of Soil Properties Over the Contiguous United States. Water Resources Research, 2019, 55, 2916-2938.	4.2	77
20	Spatially distributed sensitivity of simulated global groundwater heads and flows to hydraulic conductivity, groundwater recharge, and surface water body parameterization. Hydrology and Earth System Sciences, 2019, 23, 4561-4582.	4.9	29
21	Scalable Multiobjective Control for Large-Scale Water Resources Systems Under Uncertainty. IEEE Transactions on Control Systems Technology, 2018, 26, 1492-1499.	5.2	56
22	Policy tree optimization for threshold-based water resources management over multiple timescales. Environmental Modelling and Software, 2018, 99, 39-51.	4.5	47
23	Balancing Flood Risk and Water Supply in California: Policy Search Integrating Shortâ€Term Forecast Ensembles With Conjunctive Use. Water Resources Research, 2018, 54, 7557-7576.	4.2	47
24	Modeling the behavior of water reservoir operators via eigenbehavior analysis. Advances in Water Resources, 2018, 122, 228-237.	3.8	16
25	Adaptive water infrastructure planning for nonstationary hydrology. Advances in Water Resources, 2018, 118, 83-94.	3.8	53
26	Diagnostic Assessment of Preference Constraints for Simulation Optimization in Water Resources. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	2.6	7
27	An open-source Python implementation of California's hydroeconomic optimization model. Environmental Modelling and Software, 2018, 108, 8-13.	4.5	24
28	Reducing regional drought vulnerabilities and multi-city robustness conflicts using many-objective optimization under deep uncertainty. Advances in Water Resources, 2017, 104, 195-209.	3.8	63
29	Environmental hedging: A theory and method for reconciling reservoir operations for downstream ecology and water supply. Water Resources Research, 2017, 53, 7816-7831.	4.2	33
30	SALib: An open-source Python library for Sensitivity Analysis. Journal of Open Source Software, 2017, 2, 97.	4.6	704
31	A diagnostic assessment of evolutionary algorithms for multi-objective surface water reservoir control. Advances in Water Resources, 2016, 92, 172-185.	3.8	105
32	Cooperative drought adaptation: Integrating infrastructure development, conservation, and water transfers into adaptive policy pathways. Water Resources Research, 2016, 52, 7327-7346.	4.2	84
33	Synthetic Drought Scenario Generation to Support Bottom-Up Water Supply Vulnerability Assessments. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	70
34	Deriving global parameter estimates for the Noah land surface model using FLUXNET and machine learning. Journal of Geophysical Research D: Atmospheres, 2016, 121, 13,218.	3.3	34
35	An open source framework for many-objective robust decision making. Environmental Modelling and Software, 2015, 74, 114-129.	4.5	114
36	Flood and drought hydrologic monitoring: the role of model parameter uncertainty. Hydrology and Earth System Sciences, 2015, 19, 3239-3251.	4.9	46

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37	Internationally coordinated multi-mission planning is now critical to sustain the space-based rainfall observations needed for managing floods globally. Environmental Research Letters, 2015, 10, 024010.	5.2	17
38	How Should Robustness Be Defined for Water Systems Planning under Change?. Journal of Water Resources Planning and Management - ASCE, 2015, 141, .	2.6	253
39	Manyâ€objective reservoir policy identification and refinement to reduce policy inertia and myopia in water management. Water Resources Research, 2014, 50, 3355-3377.	4.2	130
40	Beyond optimality: Multistakeholder robustness tradeoffs for regional water portfolio planning under deep uncertainty. Water Resources Research, 2014, 50, 7692-7713.	4.2	170
41	Navigating financial and supply reliability tradeoffs in regional drought management portfolios. Water Resources Research, 2014, 50, 4906-4923.	4.2	87
42	Evolutionary multiobjective optimization in water resources: The past, present, and future. Advances in Water Resources, 2013, 51, 438-456.	3.8	406
43	Timeâ€varying sensitivity analysis clarifies the effects of watershed model formulation on model behavior. Water Resources Research, 2013, 49, 1400-1414.	4.2	115
44	From maps to movies: high-resolution time-varying sensitivity analysis for spatially distributed watershed models. Hydrology and Earth System Sciences, 2013, 17, 5109-5125.	4.9	50
45	Technical Note: Method of Morris effectively reduces the computational demands of global sensitivity analysis for distributed watershed models. Hydrology and Earth System Sciences, 2013, 17, 2893-2903.	4.9	142
46	A critical evaluation of unconventional gas recovery from the marcellus shale, northeastern United States. KSCE Journal of Civil Engineering, 2011, 15, 679-687.	1.9	93