Ben Livneh

List of Publications by Year
in descending order

74 papers	5,812 citations	101496 36 h-index	88593 70 g-index
86 all docs	86 docs citations	86 times ranked	6547 citing authors

#	Article	IF	Citations
1	Continentalâ€scale water and energy flux analysis and validation for the North American Land Data Assimilation System project phase 2 (NLDASâ€2): 1. Intercomparison and application of model products. Journal of Geophysical Research, 2012, 117, .	3.3	530
2	Large contribution from anthropogenic warming to an emerging North American megadrought. Science, 2020, 368, 314-318.	6.0	527
3	A Long-Term Hydrologically Based Dataset of Land Surface Fluxes and States for the Conterminous United States: Update and Extensions. Journal of Climate, 2013, 26, 9384-9392.	1.2	499
4	Hillslope Hydrology in Global Change Research and Earth System Modeling. Water Resources Research, 2019, 55, 1737-1772.	1.7	281
5	A spatially comprehensive, hydrometeorological data set for Mexico, the U.S., and Southern Canada 1950â€“2013. Scientific Data, 2015, 2, 150042.	2.4	277
6	Skill in streamflow forecasts derived from large-scale estimates of soil moisture and snow. Nature Geoscience, 2010, 3, 613-616.	5.4	231
7	Continentalâ€scale water and energy flux analysis and validation for North American Land Data Assimilation System project phase 2 (NLDASâ€2): 2. Validation of modelâ€simulated streamflow. Journal of Geophysical Research, 2012, 117, .	3.3	229
8	Spatial variation of the rainâ€“snow temperature threshold across the Northern Hemisphere. Nature Communications, 2018, 9, 1148.	5.8	210
9	Snowmelt rate dictates streamflow. Geophysical Research Letters, 2016, 43, 8006-8016.	1.5	206
10	An assessment of differences in gridded precipitation datasets in complex terrain. Journal of Hydrology, 2018, 556, 1205-1219.	2.3	201
11	Assimilation of Remotely Sensed Soil Moisture and Snow Depth Retrievals for Drought Estimation. Journal of Hydrometeorology, 2014, 15, 2446-2469.	0.7	167
12	Global evaluation of MTCLIM and related algorithms for forcing of ecological and hydrological models. Agricultural and Forest Meteorology, 2013, 176, 38-49.	1.9	163
13	Axial testing and numerical modeling of square shaft helical piles under compressive and tensile loading. Canadian Geotechnical Journal, 2008, 45, 1142-1155.	1.4	152
14	Noah LSM Snow Model Diagnostics and Enhancements. Journal of Hydrometeorology, 2010, 11, 721-738.	0.7	137
15	Noah land surface model modifications to improve snowpack prediction in the Colorado Rocky Mountains. Journal of Geophysical Research, 2010, 115, .	3.3	122
16	Soil Moisture, Snow, and Seasonal Streamflow Forecasts in the United States. Journal of Hydrometeorology, 2012, 13, 189-203.	0.7	113
17	Reservoir Evaporation in the Western United States: Current Science, Challenges, and Future Needs. Bulletin of the American Meteorological Society, 2018, 99, 167-187.	1.7	107
18	Modeling seasonal snowpack evolution in the complex terrain and forested Colorado Headwaters region: A model intercomparison study. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,795.	1.2	95

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19	How Has Human-Induced Climate Change Affected California Drought Risk?. Journal of Climate, 2016, 29, 111-120.	1.2	84
20	Drought less predictable under declining future snowpack. Nature Climate Change, 2020, 10, 452-458.	8.1	84
21	High-Elevation Precipitation Patterns: Using Snow Measurements to Assess Daily Gridded Datasets across the Sierra Nevada, California*. Journal of Hydrometeorology, 2015, 16, 1773-1792.	0.7	83
22	Toward computationally efficient large-scale hydrologic predictions with a multiscale regionalization scheme. Water Resources Research, 2013, 49, 5700-5714.	1.7	81
23	The Physics of Drought in the U.S. Central Great Plains. Journal of Climate, 2016, 29, 6783-6804.	1.2	78
24	The 2015 drought in Washington State: a harbinger of things to come?. Environmental Research Letters, 2017, 12, 114008.	2.2	60
25	Assessing the Impacts of Global Warming on Snowpack in the Washington Cascades*. Journal of Climate, 2009, 22, 2758-2772.	1.2	60
26	Implications of the Methodological Choices for Hydrologic Portrayals of Climate Change over the Contiguous United States: Statistically Downscaled Forcing Data and Hydrologic Models. Journal of Hydrometeorology, 2016, 17, 73-98.	0.7	59
27	Catchment response to bark beetle outbreak and dust-on-snow in the Colorado Rocky Mountains. Journal of Hydrology, 2015, 523, 196-210.	2.3	58
28	How Does Availability of Meteorological Forcing Data Impact Physically Based Snowpack Simulations?*. Journal of Hydrometeorology, 2016, 17, 99-120.	0.7	56
29	Validation of Noah-Simulated Soil Temperature in the North American Land Data Assimilation System Phase 2. Journal of Applied Meteorology and Climatology, 2013, 52, 455-471.	0.6	49
30	Influence of soil textural properties on hydrologic fluxes in the Mississippi river basin. Hydrological Processes, 2015, 29, 4638-4655.	1.1	48
31	Growing impact of wildfire on western US water supply. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	46
32	Controls on surface soil drying rates observed by SMAP and simulated by the Noah land surface model. Hydrology and Earth System Sciences, 2018, 22, 1649-1663.	1.9	45
33	Representation of Terrestrial Hydrology and Large-Scale Drought of the Continental United States from the North American Regional Reanalysis. Journal of Hydrometeorology, 2012, 13, 856-876.	0.7	42
34	Filling in the gaps: Inferring spatially distributed precipitation from gauge observations over complex terrain. Water Resources Research, 2014, 50, 8589-8610.	1.7	40
35	Causes for the Century-Long Decline in Colorado River Flow. Journal of Climate, 2019, 32, 8181-8203.	1.2	40
36	Soil Moisture Data Assimilation to Estimate Irrigation Water Use. Journal of Advances in Modeling Earth Systems, 2019, 11, 3670-3690.	1.3	40

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37	Overcoming early career barriers to interdisciplinary climate change research. Wiley Interdisciplinary Reviews: Climate Change, 2018, 9, e530.	3.6	35
38	Remotely sensed ensembles of the terrestrial water budget over major global river basins: An assessment of three closure techniques. Remote Sensing of Environment, 2021, 252, 112191.	4.6	35
39	Development of a Unified Land Model for Prediction of Surface Hydrology and Landâ€“Atmosphere Interactions. Journal of Hydrometeorology, 2011, 12, 1299-1320.	0.7	33
40	Multi-criteria parameter estimation for the Unified Land Model. Hydrology and Earth System Sciences, 2012, 16, 3029-3048.	1.9	30
41	Impacts of increasing aridity and wildfires on aerosol loading in the intermountain Western US. Environmental Research Letters, 2017, 12, 014006.	2.2	28
42	Emerging investigators series: a critical review of decision support systems for water treatment: making the case for incorporating climate change and climate extremes. Environmental Science: Water Research and Technology, 2017, 3, 18-36.	1.2	24
43	Key landscape and biotic indicators of watersheds sensitivity to forest disturbance identified using remote sensing and historical hydrography data. Environmental Research Letters, 2017, 12, 074028.	2.2	23
44	Assessing the Contributions of East African and West Pacific Warming to the 2014 Boreal Spring East African Drought. Bulletin of the American Meteorological Society, 2015, 96, S77-S82.	1.7	22
45	Regional parameter estimation for the unified land model. Water Resources Research, 2013, 49, 100-114.	1.7	19
46	Exploring snow model parameter sensitivity using Sobol' variance decomposition. Environmental Modelling and Software, 2017, 89, 144-158.	1.9	19
47	Development of a gridded meteorological dataset over Java island, Indonesia 1985â€“2014. Scientific Data, 2017, 4, 170072.	2.4	19
48	Hydrological model application under data scarcity for multiple watersheds, Java Island, Indonesia. Journal of Hydrology: Regional Studies, 2017, 9, 127-139.	1.0	19
49	Potential Reemergence of Seasonal Soil Moisture Anomalies in North America. Journal of Climate, 2019, 32, 2707-2734.	1.2	19
50	Projected Changes of Precipitation Characteristics Depend on Downscaling Method and Training Data: MACA versus LOCA Using the U.S. Northeast as an Example. Journal of Hydrometeorology, 2020, 21, 2739-2758.	0.7	19
51	Projections of Mountain Snowpack Loss for Wolverine Denning Elevations in the Rocky Mountains. Earth's Future, 2020, 8, e2020EF001537.	2.4	17
52	Decomposing supply-side and demand-side impacts of climate change on the US electricity system through 2050. Climatic Change, 2020, 158, 125-139.	1.7	16
53	Potential Effects of Forest Disturbances and Management on Water Resources in a Warmer Climate. Forest Science, 2015, 61, 895-903.	0.5	13
54	PEMIP: Post-fire erosion model inter-comparison project. Journal of Environmental Management, 2020, 268, 110704.	3.8	11

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55	Quantitative model-data comparison of mid-Holocene lake-level change in the central Rocky Mountains. Climate Dynamics, 2019, 53, 1077-1094.	1.7	10
56	Estimating Soil Evaporation Using Drying Rates Determined from Satellite-Based Soil Moisture Records. Remote Sensing, 2018, 10, 1945.	1.8	9
57	The GLACE-Hydrology Experiment: Effects of Landâ€“Atmosphere Coupling on Soil Moisture Variability and Predictability. Journal of Climate, 2020, 33, 6511-6529.	1.2	9
58	How Can We Better Understand Low River Flows as Climate Changes?. Eos, 2015, 96, .	0.1	8
59	The sensitivity of runoff generation to spatial snowpack uniformity in an alpine watershed: Green Lakes Valley, Niwot Ridge Longâ€Term Ecological Research station. Hydrological Processes, 2021, 35, e14331.	1.1	7
60	Modeling streamflow sensitivity to climate warming and surface water inputs in a montane catchment. Journal of Hydrology: Regional Studies, 2022, 39, 100976.	1.0	7
61	Record Low North American Monsoon Rainfall in 2020 Reignites Drought over the American Southwest. Bulletin of the American Meteorological Society, 2022, 103, S26-S32.	1.7	6
62	A Multialgorithm Approach to Land Surface Modeling of Suspended Sediment in the Colorado Front Range. Journal of Advances in Modeling Earth Systems, 2017, 9, 2526-2544.	1.3	5
63	A continental-scale soil evaporation dataset derived from Soil Moisture Active Passive satellite drying rates. Scientific Data, 2020, 7, 406.	2.4	5
64	Understanding the 2011 Upper Missouri River Basin floods in the context of a changing climate. Journal of Hydrology: Regional Studies, 2018, 19, 110-123.	1.0	4
65	Investigating the Relationship Between Peak Snowâ€Water Equivalent and Snow Timing Indices in the Western United States and Alaska. Water Resources Research, 2021, 57, e2020WR029395.	1.7	4
66	A multiâ€sensor evaluation of precipitation uncertainty for landslideâ€triggering storm events. Hydrological Processes, 2021, 35, e14260.	1.1	3
67	Catchmentâ€scale observations at the Niwot Ridge <scp>longâ€term</scp> ecological research site. Hydrological Processes, 2021, 35, e14320.	1.1	3
68	New Interest in Reservoir Evaporation in Western United States. Eos, 2016, 97, .	0.1	2
69	Emerging Ideas and Interdisciplinary Perspectives on Climate Change. Eos, 2014, 95, 65-65.	0.1	1
70	The Use of Ensemble Modeling of Suspended Sediment to Characterize Uncertainty. , 2017, , .		1
71	On the Role of Spatial Snow Distribution on Alpine Catchment Hydrology. , 2019, , .		1
72	Assessing the Robustness of Snow-Based Drought Indicators in the Upper Colorado River Basin under Future Climate Change. , 2017, , .		0

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73	Evaluating the Potential to Regionalize Station-Observed SWE across the Western U.S.. , 2019, , .		0
74	Assessing the Contributions of East African and West Pacific Warming to the 2014 Boreal Spring East African Drought. Bulletin of the American Meteorological Society, 2015, 96, S77-S82.	1.7	0