

Nathalie Voisin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5673344/publications.pdf>

Version: 2024-02-01

66
papers

4,012
citations

172207

29
h-index

123241

61
g-index

92
all docs

92
docs citations

92
times ranked

4639
citing authors

#	ARTICLE	IF	CITATIONS
1	Core process representation in power system operational models: Gaps, challenges, and opportunities for multisector dynamics research. <i>Energy</i> , 2022, 238, 122049.	4.5	20
2	Simulation of hydropower at subcontinental to global scales: a state-of-the-art review. <i>Environmental Research Letters</i> , 2022, 17, 023002.	2.2	16
3	Technology Pathways Could Help Drive the U.S. West Coast Grid's Exposure to Hydrometeorological Uncertainty. <i>Earth's Future</i> , 2022, 10, .	2.4	7
4	ResOpsUS, a dataset of historical reservoir operations in the contiguous United States. <i>Scientific Data</i> , 2022, 9, 34.	2.4	18
5	Multisector Dynamics: Advancing the Science of Complex Adaptive Human-Earth Systems. <i>Earth's Future</i> , 2022, 10, .	2.4	47
6	The Role of Regional Connections in Planning for Future Power System Operations Under Climate Extremes. <i>Earth's Future</i> , 2022, 10, .	2.4	5
7	A multi-model framework for assessing long- and short-term climate influences on the electric grid. <i>Applied Energy</i> , 2022, 317, 119193.	5.1	7
8	A Typology for Characterizing Human Action in MultiSector Dynamics Models. <i>Earth's Future</i> , 2022, 10, .	2.4	9
9	Effects of Climate Change on Capacity Expansion Decisions of an Electricity Generation Fleet in the Southeast U.S.. <i>Environmental Science & Technology</i> , 2021, 55, 2522-2531.	4.6	30
10	mosartwmpy: A Python implementation of the MOSART-WM coupled hydrologic routing and water management model. <i>Journal of Open Source Software</i> , 2021, 6, 3221.	2.0	2
11	How structural differences influence cross-model consistency: An electric sector case study. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 144, 111009.	8.2	3
12	Climate-Induced Tradeoffs in Planning and Operating Costs of a Regional Electricity System. <i>Environmental Science & Technology</i> , 2021, 55, 11204-11215.	4.6	5
13	A multi-reservoir model for projecting drought impacts on thermoelectric disruption risk across the Texas power grid. <i>Energy</i> , 2021, 231, 120892.	4.5	5
14	cerf: A Python package to evaluate the feasibility and costs of power plant siting for alternative futures. <i>Journal of Open Source Software</i> , 2021, 6, 3601.	2.0	1
15	Water storage and release policies for all large reservoirs of conterminous United States. <i>Journal of Hydrology</i> , 2021, 603, 126843.	2.3	17
16	The Effects of Climate Change on Interregional Electricity Market Dynamics on the U.S. West Coast. <i>Earth's Future</i> , 2021, 9, .	2.4	10
17	Future western U.S. building electricity consumption in response to climate and population drivers: A comparative study of the impact of model structure. <i>Energy</i> , 2020, 208, 118312.	4.5	8
18	Impact of climate change on water availability and its propagation through the Western U.S. power grid. <i>Applied Energy</i> , 2020, 276, 115467.	5.1	38

#	ARTICLE	IF	CITATIONS
19	Thermal extremes in regulated river systems under climate change: an application to the southeastern U.S. rivers. <i>Environmental Research Letters</i> , 2020, 15, 094012.	2.2	5
20	Data-Driven Reservoir Simulation in a Large-Scale Hydrological and Water Resource Model. <i>Water Resources Research</i> , 2020, 56, e2020WR027902.	1.7	28
21	Global Irrigation Characteristics and Effects Simulated by Fully Coupled Land Surface, River, and Water Management Models in E3SM. <i>Journal of Advances in Modeling Earth Systems</i> , 2020, 12, e2020MS002069.	1.3	16
22	Reservoirs Modify River Thermal Regime Sensitivity to Climate Change: A Case Study in the Southeastern United States. <i>Water Resources Research</i> , 2020, 56, e2019WR025784.	1.7	29
23	Inferred inflow forecast horizons guiding reservoir release decisions across the United States. <i>Hydrology and Earth System Sciences</i> , 2020, 24, 1275-1291.	1.9	33
24	Improving consistency among models of overlapping scope in multi-sector studies: The case of electricity capacity expansion scenarios. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 116, 109416.	8.2	12
25	A Multilayer Reservoir Thermal Stratification Module for Earth System Models. <i>Journal of Advances in Modeling Earth Systems</i> , 2019, 11, 3265-3283.	1.3	12
26	Planning for sustained water-electricity resilience over the U.S.: Persistence of current water-electricity operations and long-term transformative plans. <i>Water Security</i> , 2019, 7, 100035.	1.2	10
27	Sensitivity of Western U.S. power system dynamics to droughts compounded with fuel price variability. <i>Applied Energy</i> , 2019, 247, 745-754.	5.1	25
28	A multi-scale calibration approach for process-oriented aggregated building energy demand models. <i>Energy and Buildings</i> , 2019, 191, 82-94.	3.1	10
29	Compound climate events transform electrical power shortfall risk in the Pacific Northwest. <i>Nature Communications</i> , 2019, 10, 8.	5.8	120
30	Opportunities for Joint Water-Energy Management: Sensitivity of the 2010 Western U.S. Electricity Grid Operations to Climate Oscillations. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 299-312.	1.7	29
31	Sensitivity of Regulated Flow Regimes to Climate Change in the Western United States. <i>Journal of Hydrometeorology</i> , 2018, 19, 499-515.	0.7	22
32	Simulated building energy demand biases resulting from the use of representative weather stations. <i>Applied Energy</i> , 2018, 209, 516-528.	5.1	16
33	Non-stationary hydropower generation projections constrained by environmental and electricity grid operations over the western United States. <i>Environmental Research Letters</i> , 2018, 13, 074035.	2.2	21
34	A New Global Storage-Area-Depth Data Set for Modeling Reservoirs in Land Surface and Earth System Models. <i>Water Resources Research</i> , 2018, 54, 10,372.	1.7	35
35	A modeling framework for evaluating the drought resilience of a surface water supply system under non-stationarity. <i>Journal of Hydrology</i> , 2018, 563, 22-32.	2.3	24
36	CERF - A Geospatial Model for Assessing Future Energy Production Technology Expansion Feasibility. <i>Journal of Open Research Software</i> , 2018, 6, 20.	2.7	3

#	ARTICLE	IF	CITATIONS
37	Effects of spatially distributed sectoral water management on the redistribution of water resources in an integrated water model. <i>Water Resources Research</i> , 2017, 53, 4253-4270.	1.7	30
38	Projected impacts of climate change on hydropower potential in China. <i>Hydrology and Earth System Sciences</i> , 2016, 20, 3343-3359.	1.9	86
39	Value of long-term streamflow forecasts to reservoir operations for water supply in snow-dominated river catchments. <i>Water Resources Research</i> , 2016, 52, 4209-4225.	1.7	159
40	Emergence of new hydrologic regimes of surface water resources in the conterminous United States under future warming. <i>Environmental Research Letters</i> , 2016, 11, 114003.	2.2	43
41	Vulnerability of the US western electric grid to hydro-climatological conditions: How bad can it get?. <i>Energy</i> , 2016, 115, 1-12.	4.5	65
42	Integrating a reservoir regulation scheme into a spatially distributed hydrological model. <i>Advances in Water Resources</i> , 2016, 98, 16-31.	1.7	94
43	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. <i>Climatic Change</i> , 2016, 136, 233-246.	1.7	11
44	Modeling stream temperature in the Anthropocene: An earth system modeling approach. <i>Journal of Advances in Modeling Earth Systems</i> , 2015, 7, 1661-1679.	1.3	29
45	Evaluating Global Streamflow Simulations by a Physically Based Routing Model Coupled with the Community Land Model. <i>Journal of Hydrometeorology</i> , 2015, 16, 948-971.	0.7	81
46	21st century United States emissions mitigation could increase water stress more than the climate change it is mitigating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10635-10640.	3.3	128
47	A spatially distributed model for the assessment of land use impacts on stream temperature in small urban watersheds. <i>Hydrological Processes</i> , 2015, 29, 2331-2345.	1.1	80
48	Investigating the nexus of climate, energy, water, and land at decision-relevant scales: the Platform for Regional Integrated Modeling and Analysis (PRIMA). <i>Climatic Change</i> , 2015, 129, 573-588.	1.7	119
49	Estuarine response to river flow and sea-level rise under future climate change and human development. <i>Estuarine, Coastal and Shelf Science</i> , 2015, 156, 19-30.	0.9	107
50	Scalability of grid- and subbasin-based land surface modeling approaches for hydrologic simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 3166-3184.	1.2	16
51	A first large-scale flood inundation forecasting model. <i>Water Resources Research</i> , 2013, 49, 6248-6257.	1.7	150
52	On an improved sub-regional water resources management representation for integration into earth system models. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 3605-3622.	1.9	109
53	One-way coupling of an integrated assessment model and a water resources model: evaluation and implications of future changes over the US Midwest. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 4555-4575.	1.9	61
54	The contribution of glacier melt to streamflow. <i>Environmental Research Letters</i> , 2012, 7, 034029.	2.2	116

#	ARTICLE	IF	CITATIONS
55	Value of medium range weather forecasts in the improvement of seasonal hydrologic prediction skill. Hydrology and Earth System Sciences, 2012, 16, 2825-2838.	1.9	23
56	The influence of large dams on surrounding climate and precipitation patterns. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	133
57	Effects of mid-twenty-first century climate and land cover change on the hydrology of the Puget Sound basin, Washington. Hydrological Processes, 2011, 25, 1729-1753.	1.1	60
58	Application of a Medium-Range Global Hydrologic Probabilistic Forecast Scheme to the Ohio River Basin. Weather and Forecasting, 2011, 26, 425-446.	0.5	57
59	Climate change impacts on water management in the Puget Sound region, Washington State, USA. Climatic Change, 2010, 102, 261-286.	1.7	54
60	Implications of 21st century climate change for the hydrology of Washington State. Climatic Change, 2010, 102, 225-260.	1.7	379
61	Climate change impacts on water management and irrigated agriculture in the Yakima River Basin, Washington, USA. Climatic Change, 2010, 102, 287-317.	1.7	104
62	Calibration and Downscaling Methods for Quantitative Ensemble Precipitation Forecasts. Weather and Forecasting, 2010, 25, 1603-1627.	0.5	58
63	Evaluation of Precipitation Products for Global Hydrological Prediction. Journal of Hydrometeorology, 2008, 9, 388-407.	0.7	67
64	The Role of Climate Forecasts in Western U.S. Power Planning. Journal of Applied Meteorology and Climatology, 2006, 45, 653-673.	0.6	41
65	The Effects of Climate Change on the Hydrology and Water Resources of the Colorado River Basin. Climatic Change, 2004, 62, 337-363.	1.7	825
66	Application of a medium range global hydrologic probabilistic forecast scheme to the Ohio River Basin. Weather and Forecasting, 0, , 110324113650092.	0.5	1