

Jay Lund

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5920694/publications.pdf>

Version: 2024-02-01

89
papers

4,704
citations

117453

34
h-index

98622

67
g-index

91
all docs

91
docs citations

91
times ranked

4058
citing authors

#	ARTICLE	IF	CITATIONS
1	Economic tradeoff between domestic well impact and reduced agricultural production with groundwater drought management: Tulare County, California (USA), case study. Hydrogeology Journal, 2022, 30, 3-19.	0.9	6
2	Domestic-well failure mitigation and costs in groundwater management planning: observations from recent groundwater sustainability plans in California, USA. Hydrogeology Journal, 2022, 30, 417.	0.9	3
3	Quantification of Off-Channel Inundated Habitat for Pacific Chinook Salmon (<i>Oncorhynchus tshawytscha</i>) in the Overlooked 100-Year Floodplain. <i>Journal of Hydrologic Engineering</i> , 2022, 14, 1443.	1.8	3
4	An Improved Peaks-Over-Threshold Method and its Application in the Time-Varying Design Flood. <i>Water Resources Management</i> , 2021, 35, 933-948.	1.9	1
5	Hybrid Linear and Nonlinear Programming Model for Hydropower Reservoir Optimization. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2021, 147, .	1.3	12
6	Fuzzy Representation of Environmental Flow in Multi-Objective Risk Analysis of Reservoir Operation. <i>Water Resources Management</i> , 2021, 35, 2845-2861.	1.9	11
7	Approaches to Planning Water Resources. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2021, 147, 04021058.	1.3	4
8	Pareto Optimality and Compromise for Environmental Water Management. <i>Water Resources Research</i> , 2021, 57, .	1.7	12
9	Linear Versus Nonlinear (Convex and Concave) Hedging Rules for Reservoir Optimization Operation. <i>Water Resources Research</i> , 2021, 57, e2020WR029160.	1.7	9
10	Systems engineering knowledge and skills for water and environmental problems. <i>Civil Engineering and Environmental Systems</i> , 2020, 37, 183-196.	0.4	5
11	Drought and the Sacramento-San Joaquin Delta, 2012-2016: Environmental Review and Lessons. <i>San Francisco Estuary and Watershed Science</i> , 2020, 18, .	0.2	5
12	Climate Change Impacts on Hydropower in Yunnan, China. <i>Water (Switzerland)</i> , 2020, 12, 197.	1.2	11
13	An open-source data manager for network models. <i>Environmental Modelling and Software</i> , 2019, 122, 104538.	1.9	6
14	Does More Storage Give California More Water?. <i>Journal of the American Water Resources Association</i> , 2019, 55, 759-771.	1.0	11
15	Domestic well reliability: evaluating supply interruptions from groundwater overdraft, estimating costs and managing economic externalities. <i>Hydrogeology Journal</i> , 2019, 27, 1159-1182.	0.9	17
16	The California water model: Resilience through failure. <i>Hydrological Processes</i> , 2019, 33, 1775-1779.	1.1	9
17	Maximizing on-farm groundwater recharge with surface reservoir releases: a planning approach and case study in California, USA. <i>Hydrogeology Journal</i> , 2019, 27, 1183-1206.	0.9	13
18	Optimizing Hydropower Reservoirs Operation via an Orthogonal Progressive Optimality Algorithm. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2018, 144, .	1.3	26

#	ARTICLE	IF	CITATIONS
19	Estimating the Economic Value of Interannual Reservoir Storage in Water Resource Systems. <i>Water Resources Research</i> , 2018, 54, 8890-8908.	1.7	14
20	Lessons from California's 2012-2016 Drought. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2018, 144, .	1.3	178
21	An open-source Python implementation of California's hydroeconomic optimization model. <i>Environmental Modelling and Software</i> , 2018, 108, 8-13.	1.9	24
22	Environmental hedging: A theory and method for reconciling reservoir operations for downstream ecology and water supply. <i>Water Resources Research</i> , 2017, 53, 7816-7831.	1.7	33
23	Economic and Water Supply Effects of Ending Groundwater Overdraft in California's Central Valley. <i>San Francisco Estuary and Watershed Science</i> , 2016, 14, .	0.2	16
24	Risk-based planning analysis for a single levee. <i>Water Resources Research</i> , 2016, 52, 2513-2528.	1.7	37
25	Optimal Pre-storm Flood Hedging Releases for a Single Reservoir. <i>Water Resources Management</i> , 2016, 30, 5113-5129.	1.9	31
26	Climate Change Impacts on Maize Production in the Warm Heart of Africa. <i>Water Resources Management</i> , 2016, 30, 5299-5312.	1.9	69
27	Game theory and risk-based leveed river system planning with noncooperation. <i>Water Resources Research</i> , 2016, 52, 119-134.	1.7	22
28	Valuing year-to-year hydrologic forecast improvements for a peaking hydropower system in the Sierra Nevada. <i>Water Resources Research</i> , 2016, 52, 3815-3828.	1.7	15
29	Optimal Hedging Rule for Reservoir Refill. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .	1.3	28
30	Centralized versus Distributed Cooperative Operating Rules for Multiple Cascaded Hydropower Reservoirs. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .	1.3	19
31	Network Analysis and Visualizations of Water Resources Infrastructure in California: Linking Connectivity and Resilience. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .	1.3	26
32	Decision Support System for Water and Environmental Resources in the Connecticut River Basin. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2016, 142, .	1.3	12
33	Optimal Flood Pre-Releases Flood Hedging for a Single Reservoir. , 2015, , .		2
34	The future of water resources systems analysis: Toward a scientific framework for sustainable water management. <i>Water Resources Research</i> , 2015, 51, 6110-6124.	1.7	214
35	Water and climate: Recognize anthropogenic drought. <i>Nature</i> , 2015, 524, 409-411.	13.7	278
36	Network structure, complexity, and adaptation in water resource systems. <i>Civil Engineering and Environmental Systems</i> , 2015, 32, 143-156.	0.4	14

#	ARTICLE	IF	CITATIONS
37	Hydroeconomic optimization of integrated water management and transfers under stochastic surface water supply. <i>Water Resources Research</i> , 2015, 51, 3568-3587.	1.7	30
38	Flood Storage Allocation Rules for Parallel Reservoirs. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2015, 141, .	1.3	19
39	Optimizing Selective Withdrawal from Reservoirs to Manage Downstream Temperatures with Climate Warming. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2015, 141, .	1.3	72
40	Optimal Hedging Rules for Reservoir Flood Operation from Forecast Uncertainties. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2014, 140, .	1.3	64
41	Optimizing the dammed: Water supply losses and fish habitat gains from dam removal in California. <i>Journal of Environmental Management</i> , 2014, 136, 121-131.	3.8	55
42	Some Curious Things about Water Management. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2013, 139, 1-2.	1.3	5
43	Provoking More Productive Discussion of Wicked Problems. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2012, 138, 193-195.	1.3	19
44	California's Sacramento-San Joaquin Delta Conflict: From Cooperation to Chicken. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2012, 138, 90-99.	1.3	56
45	Flood Management in California. <i>Water (Switzerland)</i> , 2012, 4, 157-169.	1.2	18
46	FISH HABITAT OPTIMIZATION TO PRIORITIZE RIVER RESTORATION DECISIONS. <i>River Research and Applications</i> , 2012, 28, 1378-1393.	0.7	19
47	Adapting California's water system to warm vs. dry climates. <i>Climatic Change</i> , 2011, 109, 133-149.	1.7	71
48	Economic impacts of climate-related changes to California agriculture. <i>Climatic Change</i> , 2011, 109, 387-405.	1.7	58
49	Economic Costs and Adaptations for Alternative Regulations of California's Sacramento-San Joaquin Delta. <i>San Francisco Estuary and Watershed Science</i> , 2011, 9, .	0.2	10
50	Estimated impacts of climate warming on California's high-elevation hydropower. <i>Climatic Change</i> , 2010, 102, 521-538.	1.7	104
51	Modeling Conjunctive Use Operations and Farm Decisions with Two-Stage Stochastic Quadratic Programming. <i>Journal of Water Resources Planning and Management - ASCE</i> , 2010, 136, 386-394.	1.3	45
52	Basin-scale water system operations with uncertain future climate conditions: Methodology and case studies. <i>Water Resources Research</i> , 2010, 46, .	1.7	58
53	Economic consequences of optimized water management for a prolonged, severe drought in California. <i>Water Resources Research</i> , 2010, 46, .	1.7	84
54	Hydro-economic models: Concepts, design, applications, and future prospects. <i>Journal of Hydrology</i> , 2009, 375, 627-643.	2.3	538

#	ARTICLE	IF	CITATIONS
55	Dutch Flood Policy Innovations for California. Journal of Contemporary Water Research and Education, 2009, 141, 45-59.	0.7	2
56	Modeling Integrated Decisions for a Municipal Water System with Recourse and Uncertainties: Amman, Jordan. Water Resources Management, 2009, 23, 85-115.	1.9	35
57	Flow and water temperature simulation for habitat restoration in the Shasta River, California. River Research and Applications, 2009, 26, n/a-n/a.	0.7	31
58	Modeling California's high-elevation hydropower systems in energy units. Water Resources Research, 2009, 45, .	1.7	65
59	Adaptability and adaptations of California's water supply system to dry climate warming. Climatic Change, 2008, 87, 75-90.	1.7	156
60	Ending groundwater overdraft in hydrologic-economic systems. Hydrogeology Journal, 2008, 16, 1039.	0.9	98
61	A Risk Analysis of Risk Analysis. Journal of Contemporary Water Research and Education, 2008, 140, 53-60.	0.7	8
62	Water management with water conservation, infrastructure expansions, and source variability in Jordan. Water Resources Research, 2008, 44, .	1.7	34
63	Closure to "Drought Storage Allocation Rules for Surface Reservoir Systems" by Jay R. Lund. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 488-489.	1.3	0
64	Hydro-economic analysis of water supply for the binational transboundary region of Baja California, Mexico. Water Science and Technology: Water Supply, 2008, 8, 189-196.	1.0	5
65	The application of economic-engineering optimisation for water management in Ensenada, Baja California, Mexico. Water Science and Technology, 2007, 55, 339-347.	1.2	25
66	Climate change, urbanization, and optimal long-term floodplain protection. Water Resources Research, 2007, 43, .	1.7	77
67	Modeling integrated water user decisions in intermittent supply systems. Water Resources Research, 2007, 43, .	1.7	50
68	Hydro-economic Modeling in River Basin Management: Implications and Applications for the European Water Framework Directive. Water Resources Management, 2007, 21, 1103-1125.	1.9	158
69	Optimization of environmental water purchases with uncertainty. Water Resources Research, 2006, 42, .	1.7	22
70	Restoring Hetch Hetchy Valley: The role of modeling in policy. Eos, 2006, 87, 449.	0.1	1
71	Climate Warming and Water Management Adaptation for California. Climatic Change, 2006, 76, 361-387.	1.7	212
72	Extreme Drought and Water Supply Management in California. , 2006, , 1.		3

#	ARTICLE	IF	CITATIONS
73	Economic Engineering of Environmental and Water Resource Systems. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 399-402.	1.3	38
74	Modeling irrigated agricultural production and water use decisions under water supply uncertainty. Water Resources Research, 2005, 41, .	1.7	59
75	Optimization of California's Water Supply System: Results and Insights. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 271-280.	1.3	154
76	Spatial complexity and reservoir optimization results. Civil Engineering and Environmental Systems, 2004, 21, 1-17.	0.4	2
77	Economic values for conjunctive use and water banking in southern California. Water Resources Research, 2004, 40, .	1.7	78
78	Optimal Hedging and Carryover Storage Value. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 83-87.	1.3	201
79	Economic-Engineering Optimization for California Water Management. Journal of Water Resources Planning and Management - ASCE, 2003, 129, 155-164.	1.3	240
80	Floodplain Planning with Risk-Based Optimization. Journal of Water Resources Planning and Management - ASCE, 2002, 128, 202-207.	1.3	66
81	Southern California Water Markets: Potential and Limitations. Journal of Water Resources Planning and Management - ASCE, 2002, 128, 21-32.	1.3	48
82	LEONARDO DA VINCI'S TENSILE STRENGTH TESTS: IMPLICATIONS FOR THE DISCOVERY OF ENGINEERING MECHANICS. Civil Engineering and Environmental Systems, 2001, 18, 243-250.	0.4	25
83	Optimal Reservoir Operation and the Value of Carryover Storage. , 2000, , 1.		0
84	Benefit-Cost Analysis of Stormwater Quality Improvements. Environmental Management, 2000, 26, 615-628.	1.2	16
85	Integrating Yield and Shortage Management under Multiple Uncertainties. Journal of Water Resources Planning and Management - ASCE, 2000, 126, 288-297.	1.3	47
86	Operating Rule Optimization for Missouri River Reservoir System. Journal of Water Resources Planning and Management - ASCE, 1996, 122, 287-295.	1.3	118
87	Water Transfers in Water Resource Systems. Journal of Water Resources Planning and Management - ASCE, 1995, 121, 193-204.	1.3	85
88	UTILITY THEORY VIOLATIONS BY MULTI-CRITERIA HIERARCHICAL WEIGHTING METHODS. Civil Engineering and Environmental Systems, 1994, 11, 197-207.	0.2	5
89	Random Variables versus Uncertain Values: Stochastic Modeling and Design. Journal of Water Resources Planning and Management - ASCE, 1991, 117, 179-194.	1.3	18