Jay Lund

List of Publications by Year
in descending order

89 papers	4,704 citations	117625 34 h-index	98798 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.	2.1	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.	2.1	3
3	Quantification of Off-Channel Inundated Habitat for Pacific Chinook Salmon (Oncorhynchus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 2022, 14, 1443.	4.0	3
4	An Improved Peaks-Over-Threshold Method and its Application in the Time-Varying Design Flood. Water Resources Management, 2021, 35, 933-948.	3.9	1
5	Hybrid Linear and Nonlinear Programming Model for Hydropower Reservoir Optimization. Journal of Water Resources Planning and Management - ASCE, 2021, 147, .	2.6	12
6	Fuzzy Representation of Environmental Flow in Multi-Objective Risk Analysis of Reservoir Operation. Water Resources Management, 2021, 35, 2845-2861.	3.9	11
7	Approaches to Planning Water Resources. Journal of Water Resources Planning and Management - ASCE, 2021, 147, 04021058.	2.6	4
8	Pareto Optimality and Compromise for Environmental Water Management. Water Resources Research, 2021, 57, .	4.2	12
9	Linear Versus Nonlinear (Convex and Concave) Hedging Rules for Reservoir Optimization Operation. Water Resources Research, 2021, 57, e2020WR029160.	4.2	9
10	Systems engineering knowledge and skills for water and environmental problems. Civil Engineering and Environmental Systems, 2020, 37, 183-196.	0.9	5
11	Drought and the Sacramentoâ€“San Joaquin Delta, 2012â€“2016: Environmental Review and Lessons. San Francisco Estuary and Watershed Science, 2020, 18, .	0.4	5
12	Climate Change Impacts on Hydropower in Yunnan, China. Water (Switzerland), 2020, 12, 197.	2.7	11
13	An open-source data manager for network models. Environmental Modelling and Software, 2019, 122, 104538.	4.5	6
14	Does More Storage Give California More Water?. Journal of the American Water Resources Association, 2019, 55, 759-771.	2.4	11
15	Domestic well reliability: evaluating supply interruptions from groundwater overdraft, estimating costs and managing economic externalities. Hydrogeology Journal, 2019, 27, 1159-1182.	2.1	17
16	The California water model: Resilience through failure. Hydrological Processes, 2019, 33, 1775-1779.	2.6	9
17	Maximizing on-farm groundwater recharge with surface reservoir releases: a planning approach and case study in California, USA. Hydrogeology Journal, 2019, 27, 1183-1206.	2.1	13
18	Optimizing Hydropower Reservoirs Operation via an Orthogonal Progressive Optimality Algorithm. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	2.6	26

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19	Estimating the Economic Value of Interannual Reservoir Storage in Water Resource Systems. Water Resources Research, 2018, 54, 8890-8908.	4.2	14
20	Lessons from Californiaâ€™s 2012â€“2016 Drought. Journal of Water Resources Planning and Management - ASCE, 2018, 144, .	2.6	178
21	An open-source Python implementation of California's hydroeconomic optimization model. Environmental Modelling and Software, 2018, 108, 8-13.	4.5	24
22	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
23	Economic and Water Supply Effects of Ending Groundwater Overdraft in California's Central Valley. San Francisco Estuary and Watershed Science, 2016, 14, .	0.4	16
24	Riskâ€based planning analysis for a single levee. Water Resources Research, 2016, 52, 2513-2528.	4.2	37
25	Optimal Pre-storm Flood Hedging Releases for a Single Reservoir. Water Resources Management, 2016, 30, 5113-5129.	3.9	31
26	Climate Change Impacts on Maize Production in the Warm Heart of Africa. Water Resources Management, 2016, 30, 5299-5312.	3.9	69
27	Game theory and riskâ€based leveed river system planning with noncooperation. Water Resources Research, 2016, 52, 119-134.	4.2	22
28	Valuing yearâ€toâ€go hydrologic forecast improvements for a peaking hydropower system in the Sierra Nevada. Water Resources Research, 2016, 52, 3815-3828.	4.2	15
29	Optimal Hedging Rule for Reservoir Refill. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	28
30	Centralized versus Distributed Cooperative Operating Rules for Multiple Cascaded Hydropower Reservoirs. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	19
31	Network Analysis and Visualizations of Water Resources Infrastructure in California: Linking Connectivity and Resilience. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	26
32	Decision Support System for Water and Environmental Resources in the Connecticut River Basin. Journal of Water Resources Planning and Management - ASCE, 2016, 142, .	2.6	12
33	Optimal Flood Pre-Releasesâ€”Flood Hedging for a Single Reservoir. , 2015, , .		2
34	The future of water resources systems analysis: Toward a scientific framework for sustainable water management. Water Resources Research, 2015, 51, 6110-6124.	4.2	214
35	Water and climate: Recognize anthropogenic drought. Nature, 2015, 524, 409-411.	27.8	278
36	Network structure, complexity, and adaptation in water resource systems. Civil Engineering and Environmental Systems, 2015, 32, 143-156.	0.9	14

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37	Hydroeconomic optimization of integrated water management and transfers under stochastic surface water supply. Water Resources Research, 2015, 51, 3568-3587.	4.2	30
38	Flood Storage Allocation Rules for Parallel Reservoirs. Journal of Water Resources Planning and Management - ASCE, 2015, 141, .	2.6	19
39	Optimizing Selective Withdrawal from Reservoirs to Manage Downstream Temperatures with Climate Warming. Journal of Water Resources Planning and Management - ASCE, 2015, 141, .	2.6	72
40	Optimal Hedging Rules for Reservoir Flood Operation from Forecast Uncertainties. Journal of Water Resources Planning and Management - ASCE, 2014, 140, .	2.6	64
41	Optimizing the dammed: Water supply losses and fish habitat gains from dam removal in California. Journal of Environmental Management, 2014, 136, 121-131.	7.8	55
42	Some Curious Things about Water Management. Journal of Water Resources Planning and Management - ASCE, 2013, 139, 1-2.	2.6	5
43	Provoking More Productive Discussion of Wicked Problems. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 193-195.	2.6	19
44	Californiaâ€™s Sacramentoâ€“San Joaquin Delta Conflict: From Cooperation to Chicken. Journal of Water Resources Planning and Management - ASCE, 2012, 138, 90-99.	2.6	56
45	Flood Management in California. Water (Switzerland), 2012, 4, 157-169.	2.7	18
46	FISH HABITAT OPTIMIZATION TO PRIORITIZE RIVER RESTORATION DECISIONS. River Research and Applications, 2012, 28, 1378-1393.	1.7	19
47	Adapting Californiaâ€™s water system to warm vs. dry climates. Climatic Change, 2011, 109, 133-149.	3.6	71
48	Economic impacts of climate-related changes to California agriculture. Climatic Change, 2011, 109, 387-405.	3.6	58
49	Economic Costs and Adaptations for Alternative Regulations of Californias Sacramento-San Joaquin Delta. San Francisco Estuary and Watershed Science, 2011, 9, .	0.4	10
50	Estimated impacts of climate warming on Californiaâ€™s high-elevation hydropower. Climatic Change, 2010, 102, 521-538.	3.6	104
51	Modeling Conjunctive Use Operations and Farm Decisions with Two-Stage Stochastic Quadratic Programming. Journal of Water Resources Planning and Management - ASCE, 2010, 136, 386-394.	2.6	45
52	Basinâ€scale water system operations with uncertain future climate conditions: Methodology and case studies. Water Resources Research, 2010, 46, .	4.2	58
53	Economic consequences of optimized water management for a prolonged, severe drought in California. Water Resources Research, 2010, 46, .	4.2	84
54	Hydro-economic models: Concepts, design, applications, and future prospects. Journal of Hydrology, 2009, 375, 627-643.	5.4	538

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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.	3.9	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.	1.7	31
58	Modeling California's highâ€elevation hydropower systems in energy units. Water Resources Research, 2009, 45, .	4.2	65
59	Adaptability and adaptations of Californiaâ€™s water supply system to dry climate warming. Climatic Change, 2008, 87, 75-90.	3.6	156
60	Ending groundwater overdraft in hydrologic-economic systems. Hydrogeology Journal, 2008, 16, 1039.	2.1	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, .	4.2	34
63	Closure to â€œDrought Storage Allocation Rules for Surface Reservoir Systemsâ€•by Jay R. Lund. Journal of Water Resources Planning and Management - ASCE, 2008, 134, 488-489.	2.6	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.	2.1	5
65	The application of economic-engineering optimisation for water management in Ensenada, Baja California, Mexico. Water Science and Technology, 2007, 55, 339-347.	2.5	25
66	Climate change, urbanization, and optimal long-term floodplain protection. Water Resources Research, 2007, 43, .	4.2	77
67	Modeling integrated water user decisions in intermittent supply systems. Water Resources Research, 2007, 43, .	4.2	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.	3.9	158
69	Optimization of environmental water purchases with uncertainty. Water Resources Research, 2006, 42, .	4.2	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.	3.6	212
72	Extreme Drought and Water Supply Management in California. , 2006, , 1.		3

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73	Economic Engineering of Environmental and Water Resource Systems. Journal of Water Resources Planning and Management - ASCE, 2006, 132, 399-402.	2.6	38
74	Modeling irrigated agricultural production and water use decisions under water supply uncertainty. Water Resources Research, 2005, 41, .	4.2	59
75	Optimization of Californiaâ€™s Water Supply System: Results and Insights. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 271-280.	2.6	154
76	Spatial complexity and reservoir optimization results. Civil Engineering and Environmental Systems, 2004, 21, 1-17.	0.9	2
77	Economic values for conjunctive use and water banking in southern California. Water Resources Research, 2004, 40, .	4.2	78
78	Optimal Hedging and Carryover Storage Value. Journal of Water Resources Planning and Management - ASCE, 2004, 130, 83-87.	2.6	201
79	Economic-Engineering Optimization for California Water Management. Journal of Water Resources Planning and Management - ASCE, 2003, 129, 155-164.	2.6	240
80	Floodplain Planning with Risk-Based Optimization. Journal of Water Resources Planning and Management - ASCE, 2002, 128, 202-207.	2.6	66
81	Southern California Water Markets: Potential and Limitations. Journal of Water Resources Planning and Management - ASCE, 2002, 128, 21-32.	2.6	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.	0.9	25
83	Optimal Reservoir Operation and the Value of Carryover Storage. , 2000, , 1.		0
84	Benefitâ€“Cost Analysis of StormwaterQuality Improvements. Environmental Management, 2000, 26, 615-628.	2.7	16
85	Integrating Yield and Shortage Management under Multiple Uncertainties. Journal of Water Resources Planning and Management - ASCE, 2000, 126, 288-297.	2.6	47
86	Operating Rule Optimization for Missouri River Reservoir System. Journal of Water Resources Planning and Management - ASCE, 1996, 122, 287-295.	2.6	118
87	Water Transfers in Water Resource Systems. Journal of Water Resources Planning and Management - ASCE, 1995, 121, 193-204.	2.6	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.	2.6	18