James A Rusak

List of Publications by Year
in descending order

84	6,158	76326	71685
papers	citations	40 h-index	76 g-index

88	88	88	7613
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rapid and highly variable warming of lake surface waters around the globe. Geophysical Research Letters, 2015, 42, 10,773.	4.0	767
2	HABITAT LOSS, TROPHIC COLLAPSE, AND THE DECLINE OF ECOSYSTEM SERVICES. Ecology, 2006, 87, 1915-1924.	3.2	458
3	Widespread deoxygenation of temperate lakes. Nature, 2021, 594, 66-70.	27.8	267
4	Disturbanceâ€driven changes in the variability of ecological patterns and processes. Ecology Letters, 2008, 11, 756-770.	6.4	239
5	Synchrony in aquatic microbial community dynamics. ISME Journal, 2007, 1, 38-47.	9.8	225
6	Lakeâ€size dependency of wind shear and convection as controls on gas exchange. Geophysical Research Letters, 2012, 39, .	4.0	199
7	Communities contain closely related species during ecosystem disturbance. Ecology Letters, 2010, 13, 162-174.	6.4	179
8	A comparison of the species-time relationship across ecosystems and taxonomic groups. Oikos, 2006, 112, 185-195.	2.7	170
9	The Dual Nature of Community Variability. Oikos, 1999, 85, 161.	2.7	164
10	Paleolimnological evidence of the effects on lakes of energy and mass transfer from climate and humans. Limnology and Oceanography, 2009, 54, 2330-2348.	3.1	163
11	A global database of lake surface temperatures collected by in situ and satellite methods from 1985â€“2009. Scientific Data, 2015, 2, 150008.	5.3	153
12	Integrating aquatic and terrestrial components to construct a complete carbon budget for a north temperate lake district. Global Change Biology, 2011, 17, 1193-1211.	9.5	151
13	Lake sediments record large-scale shifts in moisture regimes across the northern prairies of North America during the past two millennia. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 2483-2488.	7.1	148
14	Storm impacts on phytoplankton community dynamics in lakes. Global Change Biology, 2020, 26, 2756-2784.	9.5	144
15	EVIDENCE FOR A GENERAL SPECIESâ€“TIMEâ€“AREA RELATIONSHIP. Ecology, 2005, 86, 2032-2039.	3.2	135
16	Understanding Regional Change: A Comparison of Two Lake Districts. BioScience, 2007, 57, 323-335.	4.9	129
17	Environmental stability and lake zooplankton diversity â€“ contrasting effects of chemical and thermal variability. Ecology Letters, 2010, 13, 453-463.	6.4	123
18	Patterns and drivers of deep chlorophyll maxima structure in 100 lakes: The relative importance of light and thermal stratification. Limnology and Oceanography, 2018, 63, 628-646.	3.1	119

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19	Determining the probability of cyanobacterial blooms: the application of Bayesian networks in multiple lake systems. Ecological Applications, 2015, 25, 186-199.	3.8	112
20	The Temporal Coherence of Zooplankton Population Abundances in Neighboring Northâ€Temperate Lakes. American Naturalist, 1999, 153, 46-58.	2.1	107
21	Long-term trends in zooplankton of Dorset, Ontario, lakes: the probable interactive effects of changes in pH, total phosphorus, dissolved organic carbon, and predators. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 862-877.	1.4	103
22	A multi-lake comparative analysis of the General Lake Model (GLM): Stress-testing across a global observatory network. Environmental Modelling and Software, 2018, 102, 274-291.	4.5	93
23	Diel Surface Temperature Range Scales with Lake Size. PLoS ONE, 2016, 11, e0152466.	2.5	89
24	Climate change drives widespread shifts in lake thermal habitat. Nature Climate Change, 2021, 11, 521-529.	18.8	87
25	Widespread diminishing anthropogenic effects on calcium in freshwaters. Scientific Reports, 2019, 9, 10450.	3.3	84
26	Widespread Increases in Iron Concentration in European and North American Freshwaters. Global Biogeochemical Cycles, 2017, 31, 1488-1500.	4.9	79
27	Transparency, Geomorphology and Mixing Regime Explain Variability in Trends in Lake Temperature and Stratification across Northeastern North America (1975â€“2014). Water (Switzerland), 2017, 9, 442.	2.7	77
28	Road Salt Impacts Freshwater Zooplankton at Concentrations below Current Water Quality Guidelines. Environmental Science & Technology, 2020, 54, 9398-9407.	10.0	76
29	Increased ecosystem variability and reduced predictability following fertilisation: Evidence from palaeolimnology. Ecology Letters, 2000, 3, 340-348.	6.4	66
30	The jellification of north temperate lakes. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142449.	2.6	65
31	Regional climatic drivers of synchronous zooplankton dynamics in north-temperate lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 878-889.	1.4	59
32	Deeper waters are changing less consistently than surface waters in a global analysis of 102 lakes. Scientific Reports, 2020, 10, 20514.	3.3	56
33	Differential effects of energy and mass influx on the landscape synchrony of lake ecosystems. Ecology, 2011, 92, 1104-1114.	3.2	53
34	Historical Trends, Drivers, and Future Projections of Ice Phenology in Small North Temperate Lakes in the Laurentian Great Lakes Region. Water (Switzerland), 2018, 10, 70.	2.7	51
35	Paired O₂â€“CO₂ measurements provide emergent insights into aquatic ecosystem function. Limnology and Oceanography Letters, 2020, 5, 287-294.	3.9	51
36	Synchronous dynamics of zooplankton competitors prevail in temperate lake ecosystems. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20140633.	2.6	50

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37	Comparing ice and temperature simulations by four dynamic lake models in Harp Lake: past performance and future predictions. Hydrological Processes, 2014, 28, 4587-4601.	2.6	50
38	Current water quality guidelines across North America and Europe do not protect lakes from salinization. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	49
39	Geographic and temporal variations in turbulent heat loss from lakes: A global analysis across 45 lakes. Limnology and Oceanography, 2018, 63, 2436-2449.	3.1	47
40	The unique methodological challenges of winter limnology. Limnology and Oceanography: Methods, 2019, 17, 42-57.	2.0	47
41	Climate warming alters thermal stability but not stratification phenology in a small north-temperate lake. Hydrological Processes, 2014, 28, 6309-6319.	2.6	46
42	Modeling Water Yield: Assessing the Role of Site and Region-Specific Attributes in Determining Model Performance of the InVEST Seasonal Water Yield Model. Water (Switzerland), 2018, 10, 1496.	2.7	45
43	Temporal, spatial, and taxonomic patterns of crustacean zooplankton variability in unmanipulated northâ€temperate lakes. Limnology and Oceanography, 2002, 47, 613-625.	3.1	40
44	Quantifying lake allochthonous organic carbon budgets using a simple equilibrium model. Limnology and Oceanography, 2014, 59, 167-181.	3.1	40
45	A framework for ensemble modelling of climate change impacts on lakes worldwide: the ISIMIP Lake Sector. Geoscientific Model Development, 2022, 15, 4597-4623.	3.6	37
46	Latitude and lake size are important predictors of overâ€lake atmospheric stability. Geophysical Research Letters, 2017, 44, 8875-8883.	4.0	31
47	A New Thermal Categorization of Iceâ€Covered Lakes. Geophysical Research Letters, 2021, 48, e2020GL091374.	4.0	31
48	Millennial-scale relationships of diatom species richness and production in two prairie lakes. Limnology and Oceanography, 2004, 49, 1290-1299.	3.1	26
49	Altered pH and reduced calcium levels drive near extirpation of native crayfish,Cambarus bartonii, in Algonquin Park, Ontario, Canada. Freshwater Science, 2015, 34, 918-932.	1.8	25
50	Long-term variation in isotopic baselines and implications for estimating consumer trophic niches. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 2191-2200.	1.4	24
51	Wind and trophic status explain within and amongâ€lake variability of algal biomass. Limnology and Oceanography Letters, 2018, 3, 409-418.	3.9	24
52	The interplay of local and regional factors in generating temporal changes in the ice phenology of Dickie Lake, south-central Ontario, Canada. Inland Waters, 2013, 3, 1-14.	2.2	23
53	Earlier winter/spring runoff and snowmelt during warmer winters lead to lower summer chlorophyllâ€a in north temperate lakes. Global Change Biology, 2021, 27, 4615-4629.	9.5	22
54	Homage to Hutchinson: does inter-annual climate variability affect zooplankton density and diversity?. Hydrobiologia, 2010, 653, 165-177.	2.0	21

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55	Citizen science shows systematic changes in the temperature difference between air and inland waters with global warming. Scientific Reports, 2017, 7, 43890.	3.3	21
56	Lake salinization drives consistent losses of zooplankton abundance and diversity across coordinated mesocosm experiments. Limnology and Oceanography Letters, 2023, 8, 19-29.	3.9	21
57	Multimodel simulation of vertical gas transfer in a temperate lake. Hydrology and Earth System Sciences, 2020, 24, 697-715.	4.9	20
58	Terrestrial loads of dissolved organic matter drive inter-annual carbon flux in subtropical lakes during times of drought. Science of the Total Environment, 2020, 717, 137052.	8.0	19
59	Do ecosystem insecurity and social vulnerability lead to failure of water security?. Environmental Development, 2021, 38, 100606.	4.1	17
60	Ulcerative disease outbreak in crayfish Orconectes propinquus linked to Saprolegnia australis in Big Muskellunge Lake, Wisconsin. Diseases of Aquatic Organisms, 2010, 91, 57-66.	1.0	16
61	Asymmetrical food web responses in trophic-level richness, biomass, and function following lake acidification. Aquatic Ecology, 2009, 43, 591-606.	1.5	14
62	Response of temperate lakes to drought: a paleolimnological perspective on the landscape position concept using diatom-based reconstructions. Journal of Paleolimnology, 2016, 55, 339-356.	1.6	11
63	The extent and variability of stormâ€induced temperature changes in lakes measured with longâ€term and highâ€frequency data. Limnology and Oceanography, 2021, 66, 1979-1992.	3.1	10
64	Absence of winter and spring monsoon changes water level and rapidly shifts metabolism in a subtropical lake. Inland Waters, 2016, 6, 436-448.	2.2	9
65	Paleoenvironmental Reconstructions Improve Ecosystem Services Risk Assessment: Case Studies from Two Coastal Lagoons in South America. Water (Switzerland), 2018, 10, 1350.	2.7	9
66	High-frequency lake data benefit society through broader engagement with stakeholders: a synthesis of GLEON data use survey and membe rexperiences. Inland Waters, 2016, 6, 555-564.	2.2	8
67	Forest defoliator outbreaks alter nutrient cycling in northern waters. Nature Communications, 2021, 12, 6355.	12.8	8
68	Global data set of long-term summertime vertical temperature profiles in 153 lakes. Scientific Data, 2021, 8, 200.	5.3	7
69	Could a residential wood ash recycling programme be part of the solution to calcium decline in lakes and forests in Muskoka (Ontario, Canada)?. Facets, 2019, 4, 69-90.	2.4	7
70	Engaging stakeholders across a socio-environmentally diverse network of water research sites in North and South America. Environmental Development, 2021, 38, 100582.	4.1	6
71	Sampling requirements and the implications of reduced sampling effort for the estimation of annual zooplankton population and community dynamics in north temperate lakes. Limnology and Oceanography: Methods, 2009, 7, 535-544.	2.0	5
72	Temporal changes in cladoceran assemblages subjected to a low calcium environment: combining the sediment record with long-term monitoring data. Hydrobiologia, 2016, 776, 85-97.	2.0	5

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73	Stochastic disturbance regimes alter patterns of ecosystem variability and recovery. PLoS ONE, 2020, 15, e0229927.	2.5	5
74	Differential effects of energy and mass influx on the landscape synchrony of lake ecosystems. Ecology, 2011, 92, 1104-1114.	3.2	5
75	Socioeconomic and Environmental Proxies for Comparing Freshwater Ecosystem Service Threats across International Sites: A Diagnostic Approach. Water (Switzerland), 2018, 10, 1578.	2.7	4
76	Calibration of the zooplankton community size spectrum as an indicator of change in Canadian Shield lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2019, 76, 2268-2287.	1.4	3
77	Homage to Hutchinson: does inter-annual climate variability affect zooplankton density and diversity?. , 2010, , 165-177.		3
78	Visual analytics of high-frequency lake monitoring data. International Journal of Data Science and Analytics, 2018, 5, 99-110.	4.1	2
79	Spatial synchrony in microbial community dynamics: testing among-year and lake patterns. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 2009, 30, 936-940.	0.1	1
80	Evaluation of the responsiveness of the crustacean zooplankton community size spectrum to environmental change and an exotic invader in a sample of Canadian Shield lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 197-217.	1.4	1
81	Stochastic disturbance regimes alter patterns of ecosystem variability and recovery. , 2020, 15, e0229927.		0
82	Stochastic disturbance regimes alter patterns of ecosystem variability and recovery. , 2020, 15, e0229927.		0
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84	Stochastic disturbance regimes alter patterns of ecosystem variability and recovery. , 2020, 15, e0229927.		0