

Paul C Frost

List of Publications by Year in descending order

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Version: 2024-02-01

100
papers

4,210
citations

117625

34
h-index

123424

61
g-index

101
all docs

101
docs citations

101
times ranked

4445
citing authors

#	ARTICLE	IF	CITATIONS
1	Ecological stoichiometry in freshwater benthic systems: recent progress and perspectives. <i>Freshwater Biology</i> , 2005, 50, 1895-1912.	2.4	353
2	Threshold elemental ratios of carbon and phosphorus in aquatic consumers. <i>Ecology Letters</i> , 2006, 9, 774-779.	6.4	284
3	Are you what you eat? Physiological constraints on organismal stoichiometry in an elementally imbalanced world. <i>Oikos</i> , 2005, 109, 18-28.	2.7	240
4	The interaction between cyanobacteria and zooplankton in a more eutrophic world. <i>Harmful Algae</i> , 2016, 54, 128-144.	4.8	218
5	Growth responses of littoral mayflies to the phosphorus content of their food. <i>Ecology Letters</i> , 2002, 5, 232-240.	6.4	217
6	Human activities cause distinct dissolved organic matter composition across freshwater ecosystems. <i>Global Change Biology</i> , 2016, 22, 613-626.	9.5	161
7	ROSEMARY MACKAY FLIND ARTICLE: Ecological stoichiometry of trophic interactions in the benthos: understanding the role of C:N:P ratios in lentic and lotic habitats. <i>Journal of the North American Benthological Society</i> , 2002, 21, 515-528.	3.1	148
8	Global patterns and drivers of ecosystem functioning in rivers and riparian zones. <i>Science Advances</i> , 2019, 5, eaav0486.	10.3	133
9	JOINT EFFECTS OF UV RADIATION AND PHOSPHORUS SUPPLY ON ALGAL GROWTH RATE AND ELEMENTAL COMPOSITION. <i>Ecology</i> , 2002, 83, 423-435.	3.2	100
10	RESPONSES OF A BACTERIAL PATHOGEN TO PHOSPHORUS LIMITATION OF ITS AQUATIC INVERTEBRATE HOST. <i>Ecology</i> , 2008, 89, 313-318.	3.2	88
11	Beyond best management practices: pelagic biogeochemical dynamics in urban stormwater ponds. <i>Ecological Applications</i> , 2013, 23, 1384-1395.	3.8	82
12	Landscape predictors of stream dissolved organic matter concentration and physicochemistry in a Lake Superior river watershed. <i>Aquatic Sciences</i> , 2006, 68, 40-51.	1.5	76
13	Nutritional indicators and their uses in ecology. <i>Ecology Letters</i> , 2013, 16, 535-544.	6.4	74
14	Low algal carbon content and its effect on the C : P stoichiometry of periphyton. <i>Freshwater Biology</i> , 2005, 50, 1800-1807.	2.4	71
15	Transgenerational effects of poor elemental food quality on <i>Daphnia magna</i> . <i>Oecologia</i> , 2010, 162, 865-872.	2.0	70
16	Effects of upstream lakes on dissolved organic matter in streams. <i>Limnology and Oceanography</i> , 2007, 52, 60-69.	3.1	67
17	Thermal stratification patterns in urban ponds and their relationships with vertical nutrient gradients. <i>Journal of Environmental Management</i> , 2013, 127, 317-323.	7.8	61
18	Effects of light and nutrients on the net accumulation and elemental composition of epilithon in boreal lakes. <i>Freshwater Biology</i> , 2002, 47, 173-183.	2.4	57

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19	Environmental Fate of Silver Nanoparticles in Boreal Lake Ecosystems. <i>Environmental Science & Technology</i> , 2015, 49, 8441-8450.	10.0	55
20	Ecological stoichiometry in freshwater benthic ecosystems: an introduction. <i>Freshwater Biology</i> , 2005, 50, 1781-1785.	2.4	52
21	Temperature and the effects of elemental food quality on <i>Daphnia</i> . <i>Freshwater Biology</i> , 2011, 56, 1447-1455.	2.4	51
22	Ecological stoichiometry of indirect grazer effects on periphyton nutrient content. <i>Oecologia</i> , 2008, 155, 619-630.	2.0	50
23	The persistence and transformation of silver nanoparticles in littoral lake mesocosms monitored using various analytical techniques. <i>Environmental Chemistry</i> , 2014, 11, 419.	1.5	49
24	Nutrient loading associated with agriculture land use dampens the importance of consumer-mediated niche construction. <i>Ecology Letters</i> , 2013, 16, 1115-1125.	6.4	47
25	UV RADIATION, PHOSPHORUS, AND THEIR COMBINED EFFECTS ON THE TAXONOMIC COMPOSITION OF PHYTOPLANKTON IN A BOREAL LAKE ¹ . <i>Journal of Phycology</i> , 2003, 39, 291-302.	2.3	46
26	Watershed discharge modulates relationships between landscape components and nutrient ratios in stream seston. <i>Ecology</i> , 2009, 90, 1631-1640.	3.2	44
27	Changes in riverine benthic diatom community structure along a chloride gradient. <i>Ecological Indicators</i> , 2013, 32, 97-106.	6.3	43
28	Metabolomic Differentiation of Nutritional Stress in an Aquatic Invertebrate. <i>Physiological and Biochemical Zoology</i> , 2015, 88, 43-52.	1.5	43
29	Monitoring water quality in Toronto's urban stormwater ponds: Assessing participation rates and data quality of water sampling by citizen scientists in the FreshWater Watch. <i>Science of the Total Environment</i> , 2017, 592, 738-744.	8.0	42
30	Thermal and chemical stratification of urban ponds: Are they "completely mixed reactors"? <i>Urban Ecosystems</i> , 2013, 16, 327-339.	2.4	39
31	The fingerprints of urban nutrients: dynamics of phosphorus speciation in water flowing through developed landscapes. <i>Biogeochemistry</i> , 2015, 125, 1-10.	3.5	39
32	Bacterial infection changes the elemental composition of <i>Daphnia magna</i> . <i>Journal of Animal Ecology</i> , 2008, 77, 1265-1272.	2.8	38
33	Poor elemental food quality reduces the toxicity of fluoxetine on <i>Daphnia magna</i> . <i>Aquatic Toxicology</i> , 2008, 86, 99-103.	4.0	37
34	The stoichiometry of dissolved organic carbon, nitrogen, and phosphorus release by a planktonic grazer, <i>Daphnia</i> . <i>Limnology and Oceanography</i> , 2004, 49, 1802-1808.	3.1	36
35	Photodegradation of dissolved organic matter in forested streams of the northern Great Lakes region. <i>Journal of the North American Benthological Society</i> , 2007, 26, 416-425.	3.1	36
36	Relationships Between Land Cover and Dissolved Organic Matter Change Along the River to Lake Transition. <i>Ecosystems</i> , 2014, 17, 1413-1425.	3.4	35

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37	Effects of calcium and phosphorus limitation on the nutritional ecophysiology of <i>Daphnia</i> . <i>Limnology and Oceanography</i> , 2016, 61, 268-278.	3.1	35
38	Variation in particulate N:P stoichiometry across the Lake Erie watershed from tributaries to its outflow. <i>Limnology and Oceanography</i> , 2017, 62, S194.	3.1	32
39	Phosphorus cycling in urban aquatic ecosystems: connecting biological processes and water chemistry to sediment P fractions in urban stormwater management ponds. <i>Biogeochemistry</i> , 2017, 132, 203-212.	3.5	30
40	Attenuation of ultraviolet radiation in streams of northern Michigan. <i>Journal of the North American Benthological Society</i> , 2005, 24, 246-255.	3.1	28
41	Shifts in aquatic macrophyte abundance and community composition in cottage developed lakes of the Canadian Shield. <i>Aquatic Botany</i> , 2011, 94, 9-16.	1.6	28
42	Interactive effects of genotype and food quality on consumer growth rate and elemental content. <i>Ecology</i> , 2017, 98, 1399-1408.	3.2	28
43	Responses of alkaline phosphatase activity to phosphorus stress in <i>Daphnia magna</i> . <i>Journal of Experimental Biology</i> , 2010, 213, 256-261.	1.7	27
44	Responses of alkaline phosphatase activity in <i>Daphnia</i> to poor nutrition. <i>Oecologia</i> , 2012, 170, 1-10.	2.0	26
45	Effects of periphyton stoichiometry on mayfly excretion rates and nutrient ratios. <i>Journal of the North American Benthological Society</i> , 2008, 27, 497-508.	3.1	24
46	Do rivermouths alter nutrient and seston delivery to the nearshore?. <i>Freshwater Biology</i> , 2016, 61, 1935-1949.	2.4	24
47	Accumulation of Silver in Yellow Perch (<i>Perca flavescens</i>) and Northern Pike (<i>Esox</i>) 11114-11122.	10.0	24
48	The effect of cadmium on fulvic acid adsorption to <i>Bacillus subtilis</i> . <i>Chemical Geology</i> , 2003, 200, 217-224.	3.3	23
49	Distinct Optical Chemistry of Dissolved Organic Matter in Urban Pond Ecosystems. <i>PLoS ONE</i> , 2013, 8, e80334.	2.5	23
50	Variable toxicity of silver nanoparticles to <i>Daphnia magna</i> : effects of algal particles and animal nutrition. <i>Ecotoxicology</i> , 2017, 26, 118-126.	2.4	23
51	Human shoreline development and the nutrient stoichiometry of aquatic plant communities in Canadian Shield lakes. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2012, 69, 1642-1650.	1.4	22
52	Effects of dissolved organic matter and ultraviolet radiation on the accrual, stoichiometry and algal taxonomy of stream periphyton. <i>Freshwater Biology</i> , 2007, 52, 319-330.	2.4	21
53	Land use controls nutrient excretion by stream invertebrates along a gradient of agriculture. <i>Journal of the North American Benthological Society</i> , 2007, 26, 523-531.	3.1	20
54	Wetland types and wetland maps differ in ability to predict dissolved organic carbon concentrations in streams. <i>Science of the Total Environment</i> , 2008, 404, 326-334.	8.0	20

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55	Intraspecific mass-scaling of field metabolic rates of a freshwater crayfish varies with stream land cover. <i>Ecosphere</i> , 2011, 2, art13.	2.2	20
56	Urban biogeochemistry of trace elements: What can the sediments of stormwater ponds tell us?. <i>Urban Ecosystems</i> , 2015, 18, 763-775.	2.4	20
57	Citizen scientists supporting environmental research priorities. <i>Science of the Total Environment</i> , 2017, 598, 937.	8.0	19
58	Spatial and temporal trends in the fate of silver nanoparticles in a whole-lake addition study. <i>PLoS ONE</i> , 2018, 13, e0201412.	2.5	18
59	Rapid Communication / Communication Rapide Ambient solar ultraviolet radiation and its effects on phosphorus flux into boreal lake phytoplankton communities. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 2002, 59, 1090-1095.	1.4	17
60	Biomass loss and nutrient release from decomposing aquatic macrophytes: effects of detrital mixing. <i>Aquatic Sciences</i> , 2017, 79, 881-890.	1.5	17
61	Seasonal effects of food quality and temperature on body stoichiometry, biochemistry, and biomass production in <i>Daphnia</i> populations. <i>Limnology and Oceanography</i> , 2018, 63, 1727-1740.	3.1	17
62	Phosphorus nutrition alters herbicide toxicity on <i>Daphnia magna</i> . <i>Science of the Total Environment</i> , 2012, 421-422, 124-128.	8.0	16
63	Chronic and pulse exposure effects of silver nanoparticles on natural lake phytoplankton and zooplankton. <i>Ecotoxicology</i> , 2017, 26, 502-515.	2.4	16
64	Antibiotics affect the growth responses of <i>Daphnia magna</i> to poor food quality. <i>Aquatic Ecology</i> , 2011, 45, 493-504.	1.5	15
65	Effects of algal food quality on free amino acid metabolism of <i>Daphnia</i> . <i>Aquatic Sciences</i> , 2017, 79, 127-137.	1.5	15
66	Landscape predictors of stream dissolved organic matter concentration and physicochemistry in a Lake Superior river watershed. <i>Aquatic Sciences</i> , 2006, 68, 40-51.	1.5	15
67	Spatial and Temporal Variability of Phytoplankton and Zooplankton in Western Lake Erie. <i>Journal of Freshwater Ecology</i> , 2001, 16, 435-443.	1.2	14
68	Fear and food: Effects of predator-derived chemical cues and stoichiometric food quality on <i>Daphnia</i> . <i>Limnology and Oceanography</i> , 2019, 64, 1706-1715.	3.1	14
69	Environmental Controls of UV-B Radiation in Forested Streams of Northern Michigan. <i>Photochemistry and Photobiology</i> , 2006, 82, 781.	2.5	13
70	The threshold elemental ratio of carbon and phosphorus of <i>Daphnia magna</i> and its connection to animal growth. <i>Scientific Reports</i> , 2018, 8, 9673.	3.3	13
71	Does infection tilt the scales? Disease effects on the mass balance of an invertebrate nutrient recycler. <i>Oecologia</i> , 2015, 179, 969-979.	2.0	12
72	Effects of silver nanoparticles on bacterioplankton in a boreal lake. <i>Freshwater Biology</i> , 2016, 61, 2211-2220.	2.4	12

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73	Mobility and Bioavailability of Sediment Phosphorus in Urban Stormwater Ponds. <i>Water Resources Research</i> , 2019, 55, 3680-3688.	4.2	12
74	Interactive effects of water temperature and stoichiometric food quality on <i>Daphnia pulicaria</i> . <i>Freshwater Biology</i> , 2021, 66, 256-265.	2.4	12
75	Stoichiometric Ecotoxicology for a Multisubstance World. <i>BioScience</i> , 2021, 71, 132-147.	4.9	12
76	Global Patterns and Controls of Nutrient Immobilization on Decomposing Cellulose in Riverine Ecosystems. <i>Global Biogeochemical Cycles</i> , 2022, 36, .	4.9	12
77	A Beginner's Guide to Nutritional Profiling in Physiology and Ecology. <i>Integrative and Comparative Biology</i> , 2014, 54, 873-879.	2.0	11
78	Exploited and excreting: parasite type affects host nutrient recycling. <i>Ecology</i> , 2016, 97, 2012-2020.	3.2	11
79	Phosphorus, nitrogen and dissolved organic carbon fluxes from sediments in freshwater rivermouths entering Green Bay (Lake Michigan; USA). <i>Biogeochemistry</i> , 2020, 147, 179-197.	3.5	11
80	Phosphorus Availability Alters the Effects of Silver Nanoparticles on Periphyton Growth and Stoichiometry. <i>PLoS ONE</i> , 2015, 10, e0129328.	2.5	10
81	The dual synchronizing influences of precipitation and land use on stream properties in a rapidly urbanizing watershed. <i>Ecosphere</i> , 2016, 7, e01427.	2.2	10
82	Variable silver nanoparticle toxicity to <i>Daphnia</i> in boreal lakes. <i>Aquatic Toxicology</i> , 2017, 192, 1-6.	4.0	10
83	Stoichiometric and growth responses of a freshwater filamentous green alga to varying nutrient supplies: slow and steady wins the race. <i>Freshwater Biology</i> , 2014, 59, 2225-2234.	2.4	9
84	Water column nutrient processing rates in rivermouths of Green Bay (Lake Michigan). <i>Biogeochemistry</i> , 2019, 142, 73-93.	3.5	7
85	Nutrient availability affects the prevalence of a microsporidian parasite. <i>Journal of Animal Ecology</i> , 2019, 88, 579-590.	2.8	7
86	Leaf litter decomposition in boreal lakes: variable mass loss and nutrient release ratios across a geographic gradient. <i>Hydrobiologia</i> , 2020, 847, 819-830.	2.0	7
87	The neonate nutrition hypothesis: early feeding affects the body stoichiometry of <i>Daphnia</i> offspring. <i>Freshwater Biology</i> , 2013, 58, 2333-2344.	2.4	6
88	Dynamic Responses of Phosphorus Metabolism to Acute and Chronic Dietary Phosphorus-Limitation in <i>Daphnia</i> . <i>Frontiers in Environmental Science</i> , 2017, 5, .	3.3	6
89	Episodic Nutrient Addition Affects Water Column Nutrient Processing Rates in Riverine Lake Transitional Zones. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2021JG006374.	3.0	6
90	Addition of silver nanoparticles has no long-term effects on natural phytoplankton community dynamics in a boreal lake. <i>Limnology and Oceanography Letters</i> , 2018, 3, 311-319.	3.9	5

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91	Planktonic algae abundance and diversity are similar in urban stormwater ponds of different geographic locations and natural shallow lakes. <i>Urban Ecosystems</i> , 2020, 23, 841-850.	2.4	5
92	Benthic and planktonic inorganic nutrient processing rates at the interface between a river and lake. <i>Biogeochemistry</i> , 2021, 155, 189-203.	3.5	4
93	The complexity of co-limitation: nutrigenomics reveal non-additive interactions of calcium and phosphorus on gene expression in <i>Daphnia pulex</i> . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2020, 287, 20202302.	2.6	4
94	Calcium stress in <i>Daphnia pulicaria</i> and exposure to predator-derived cues: Making a bad situation worse?. <i>Freshwater Science</i> , 2021, 40, 449-462.	1.8	3
95	Lipid bound phosphorus in the seston of Lake Erie and its tributaries and its use as an indicator of algal P-limitation. <i>Aquatic Sciences</i> , 2021, 83, 1.	1.5	2
96	Muted responses to Ag accumulation by plankton to chronic and pulse exposure to silver nanoparticles in a boreal lake. <i>Facets</i> , 2019, 4, 566-583.	2.4	2
97	Phosphorus export from a small forested stream: Are there effects from human residential development in the riparian zone?. <i>Fundamental and Applied Limnology</i> , 2015, 187, 55-62.	0.7	1
98	The Dawn of a New Era for the Experimental Lakes Area. <i>Limnology and Oceanography Bulletin</i> , 2015, 24, 85-87.	0.4	1
99	Association Between Subcatchment Land Cover and Ecological Stoichiometry Along a Human Modified Stream Network. <i>Frontiers in Water</i> , 2021, 3, .	2.3	0
100	Proteome changes in an aquatic invertebrate consumer in response to different nutritional stressors. <i>Oecologia</i> , 0, , .	2.0	0