Yves Prairie

List of Publications by Year in descending order

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Version: 2024-02-01

107	15 600	31976	17592
127	15,609	53	121
papers	citations	h-index	g-index
132	132	132	11477
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Plumbing the Global Carbon Cycle: Integrating Inland Waters into the Terrestrial Carbon Budget. Ecosystems, 2007, 10, 172-185.	3.4	2,836
2	Lakes and reservoirs as regulators of carbon cycling and climate. Limnology and Oceanography, 2009, 54, 2298-2314.	3.1	1,977
3	The global abundance and size distribution of lakes, ponds, and impoundments. Limnology and Oceanography, 2006, 51, 2388-2397.	3.1	1,426
4	Carbon emission from hydroelectric reservoirs linked to reservoir age and latitude. Nature Geoscience, 2011, 4, 593-596.	12.9	600
5	Sediment organic carbon burial in agriculturally eutrophic impoundments over the last century. Global Biogeochemical Cycles, 2008, 22, .	4.9	399
6	Patterns and regulation of dissolved organic carbon: An analysis of 7,500 widely distributed lakes. Limnology and Oceanography, 2007, 52, 1208-1219.	3.1	391
7	Flow cytometric determination of bacterial abundance in lake plankton with the green nucleic acid stain SYTO 13. Limnology and Oceanography, 1996, 41, 783-789.	3.1	326
8	Prevalence of Heterotrophy and Atmospheric CO2 Emissions from Aquatic Ecosystems. Ecosystems, 2005, 8, 862-870.	3.4	307
9	What's in an EEM? Molecular Signatures Associated with Dissolved Organic Fluorescence in Boreal Canada. Environmental Science & Technology, 2014, 48, 10598-10606.	10.0	292
10	Global abundance and size distribution of streams and rivers. Inland Waters, 2012, 2, 229-236.	2.2	257
11	Change of fire frequency in the eastern Canadian boreal forests during the Holocene: does vegetation composition or climate trigger the fire regime?. Journal of Ecology, 2001, 89, 930-946.	4.0	232
12	Oxic water column methanogenesis as a major component of aquatic CH4 fluxes. Nature Communications, 2014, 5, 5350.	12.8	222
13	The relationship between nearâ€surface turbulence and gas transfer velocity in freshwater systems and its implications for floating chamber measurements of gas exchange. Limnology and Oceanography, 2010, 55, 1723-1732.	3.1	203
14	Methane ebullition and diffusion from northern ponds and lakes regulated by the interaction between temperature and system productivity. Limnology and Oceanography, 2016, 61, S62.	3.1	188
15	The summer metabolic balance in the epilimnion of southeastern Quebec lakes. Limnology and Oceanography, 2002, 47, 316-321.	3.1	185
16	Bacterial metabolism and growth efficiency in lakes: The importance of phosphorus availability. Limnology and Oceanography, 2004, 49, 137-147.	3.1	184
17	Unifying Nutrient–Chlorophyll Relationships in Lakes. Canadian Journal of Fisheries and Aquatic Sciences, 1989, 46, 1176-1182.	1.4	181
18	Change of fire frequency in the eastern Canadian boreal forests during the Holocene: does vegetation composition or climate trigger the fire regime?. Journal of Ecology, 2001, 89, 930-946.	4.0	172

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19	Patterns in <i>p</i> CO ₂ in boreal streams and rivers of northern Quebec, Canada. Global Biogeochemical Cycles, 2009, 23, .	4.9	152
20	The ecosystem size and shape dependence of gas transfer velocity versus wind speed relationships in lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 1757-1764.	1.4	151
21	Greenhouse Gas Emissions from Freshwater Reservoirs: What Does the Atmosphere See?. Ecosystems, 2018, 21, 1058-1071.	3.4	145
22	Carbocentric limnology: looking back, looking forward. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 543-548.	1.4	139
23	Respiration in lakes. , 2005, , 103-121.		139
24	CO ₂ emissions from saline lakes: A global estimate of a surprisingly large flux. Journal of Geophysical Research, 2008, 113, .	3.3	137
25	Fluorescent dissolved organic matter in lakes: Relationships with heterotrophicmetabolism. Limnology and Oceanography, 2004, 49, 2034-2045.	3.1	135
26	Browning of Boreal Freshwaters Coupled to Carbon-Iron Interactions along the Aquatic Continuum. PLoS ONE, 2014, 9, e88104.	2.5	134
27	Some aspects of the analysis of size spectra in aquatic ecology. Limnology and Oceanography, 1997, 42, 184-192.	3.1	132
28	Large increases in carbon burial in northern lakes during the Anthropocene. Nature Communications, 2015, 6, 10016.	12.8	124
29	The study of carbon in inland waters—from isolated ecosystems to players in the global carbon cycle. Limnology and Oceanography Letters, 2018, 3, 41-48.	3.9	118
30	The net carbon footprint of a newly created boreal hydroelectric reservoir. Global Biogeochemical Cycles, 2012, 26, .	4.9	117
31	Largeâ€scale patterns in summer diffusive <scp>CH</scp> ₄ fluxes across boreal lakes, and contribution to diffusive C emissions. Global Change Biology, 2015, 21, 1124-1139.	9.5	116
32	Some misconceptions about the spurious correlation problem in the ecological literature. Oecologia, 1989, 81, 285-288.	2.0	113
33	Coupling Between Rates of Bacterial Production and the Abundance of Metabolically Active Bacteria in Lakes, Enumerated Using CTC Reduction and Flow Cytometry. Microbial Ecology, 1997, 34, 144-154.	2.8	111
34	Evaluating the predictive power of regression models. Canadian Journal of Fisheries and Aquatic Sciences, 1996, 53, 490-492.	1.4	109
35	Regulation of spatial and temporal variability of carbon flux in six hardâ€water lakes of the northern Great Plains. Limnology and Oceanography, 2009, 54, 2553-2564.	3.1	105
36	Element export in runoff from eastern Canadian Boreal Shield drainage basins following forest harvesting and wildfires. Canadian Journal of Fisheries and Aquatic Sciences, 2000, 57, 118-128.	1.4	102

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37	Spatial Heterogeneity of Surface CO2 Fluxes in a Newly Created Eastmain-1 Reservoir in Northern Quebec, Canada. Ecosystems, 2011, 14, 28-46.	3.4	92
38	Whole-system metabolism and CO& lt; sub& gt; 2& lt; /sub& gt; fluxes in a Mediterranean Bay dominated by seagrass beds (Palma Bay, NW Mediterranean). Biogeosciences, 2005, 2, 43-60.	3.3	91
39	Empirical study of cyanobacterial toxicity along a trophic gradient of lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 2100-2109.	1.4	91
40	pH change induces shifts in the size and light absorption of dissolved organic matter. Biogeochemistry, 2012, 108, 109-118.	3.5	91
41	The <i>p</i> CO ₂ dynamics in lakes in the boreal region of northern Québec, Canada. Global Biogeochemical Cycles, 2009, 23, .	4.9	88
42	Effects of thermocline deepening on lake plankton communities. Canadian Journal of Fisheries and Aquatic Sciences, 2011, 68, 260-276.	1.4	85
43	Linking organic carbon sedimentation, burial efficiency, and longâ€ŧerm accumulation in boreal lakes. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 836-847.	3.0	84
44	No Longer a Paradox: The Interaction Between Physical Transport and Biological Processes Explains the Spatial Distribution of Surface Water Methane Within and Across Lakes. Ecosystems, 2018, 21, 1073-1087.	3.4	81
45	Longâ€ŧerm C accumulation and total C stocks in boreal lakes in northern Québec. Global Biogeochemical Cycles, 2012, 26, .	4.9	80
46	Anthropogenic alteration of nutrient supply increases the global freshwater carbon sink. Science Advances, 2020, 6, eaaw2145.	10.3	80
47	Practical guidelines for the use of zooplankton length-weight regression equations. Journal of Plankton Research, 1985, 7, 955-960.	1.8	77
48	The NSERC Canadian Lake Pulse Network: A national assessment of lake health providing science for water management in a changing climate. Science of the Total Environment, 2019, 695, 133668.	8.0	68
49	Methane oxidation kinetics in northern freshwater lakes. Biogeochemistry, 2019, 143, 105-116.	3.5	64
50	EFFECT OF CATCHMENT SIZE ON PHOSPHORUS EXPORT. Journal of the American Water Resources Association, 1986, 22, 465-470.	2.4	62
51	The Relative Contribution of Winter Under-Ice and Summer Hypolimnetic CO2 Accumulation to the Annual CO2 Emissions from Northern Lakes. Ecosystems, 2015, 18, 547-559.	3.4	61
52	Modeling Allochthonous Dissolved Organic Carbon Mineralization Under Variable Hydrologic Regimes in Boreal Lakes. Ecosystems, 2017, 20, 781-795.	3.4	60
53	Subsurface viruses and bacteria in Holocene/Late Pleistocene sediments of Saanich Inlet, BC: ODP Holes 1033B and 1034B, Leg 169S. Marine Geology, 2001, 174, 227-239.	2.1	58
54	A new pathway of freshwater methane emissions and the putative importance of microbubbles. Inland Waters, 2013, 3, 311-320.	2.2	55

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55	Linking forest fires to lake metabolism and carbon dioxide emissions in the boreal region of Northern Québec. Global Change Biology, 2009, 15, 2861-2873.	9.5	54
56	The Optical, Chemical, and Molecular Dissolved Organic Matter Succession Along a Boreal Soilâ€Streamâ€River Continuum. Journal of Geophysical Research G: Biogeosciences, 2017, 122, 2892-2908.	3.0	49
57	Fractal dimension estimates of a fragmented landscape: sources of variability. Landscape Ecology, 1994, 9, 279-286.	4.2	48
58	The Extent and Regulation of Summer Methane Oxidation in Northern Lakes. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3216-3230.	3.0	48
59	Improving the accuracy of electricity carbon footprint: Estimation of hydroelectric reservoir greenhouse gas emissions. Renewable and Sustainable Energy Reviews, 2021, 136, 110433.	16.4	47
60	The relative importance of biological and chemical processes in the release of phosphorus from a highly organic sediment. Hydrobiologia, 1993, 253, 141-150.	2.0	44
61	Yearâ€2020 Global Distribution and Pathways of Reservoir Methane and Carbon Dioxide Emissions According to the Greenhouse Gas From Reservoirs (Gâ€res) Model. Global Biogeochemical Cycles, 2021, 35, e2020GB006888.	4.9	44
62	Title is missing!. Journal of Paleolimnology, 2002, 27, 151-171.	1.6	43
63	Direct and indirect metabolic CO ₂ release by humanity. Biogeosciences, 2007, 4, 215-217.	3.3	41
64	Temporal variability in the chemical characteristics along the Rivi \tilde{A} "re de l'Achigan: How many samples are necessary to describe stream chemistry?. Canadian Journal of Fisheries and Aquatic Sciences, 1995, 52, 828-835.	1.4	40
65	Predicting bathymetric features of lakes from the topography of their surrounding landscape. Canadian Journal of Fisheries and Aquatic Sciences, 2015, 72, 643-650.	1.4	40
66	Variability in Fire Frequency and Forest Composition in Canada's Southeastern Boreal Forest: A Challenge for Sustainable Forest Management. Ecology and Society, 1998, 2, .	0.9	38
67	Influence of ultraviolet-B radiation, stratospheric ozone variability, and thermal stratification on the phytoplankton biomass dynamics in a mesohumic lake. Canadian Journal of Fisheries and Aquatic Sciences, 2000, 57, 600-609.	1.4	36
68	In situ dissolved organic carbon (DOC) release by submerged macrophyte–epiphyte communities in southern Quebec lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2009, 66, 1522-1531.	1.4	36
69	Technical note: CO ₂ is not like CH ₄ – limits of and corrections to the headspace method to analyse <i>p</i> CO ₂ in fresh water. Biogeosciences, 2021, 18, 1619-1627.	3.3	36
70	Title is missing!. Journal of Paleolimnology, 2001, 26, 411-422.	1.6	35
71	Risk analysis of dissolved organic matter-mediated ultraviolet B exposure in Canadian inland waters. Canadian Journal of Fisheries and Aquatic Sciences, 2004, 61, 2511-2521.	1.4	35
72	Thermocline deepening and mixing alter zooplankton phenology, biomass and body size in a wholeâ€lake experiment. Freshwater Biology, 2014, 59, 998-1011.	2.4	35

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73	Largeâ€Scale Landscape Drivers of CO ₂ , CH ₄ , DOC, and DIC in Boreal River Networks. Global Biogeochemical Cycles, 2019, 33, 125-142.	4.9	35
74	Evidence for surface organic matter modulation of air-sea CO ₂ gas exchange. Biogeosciences, 2009, 6, 1105-1114.	3.3	34
75	Natural variability and the estimation of empirical relationships: a reassessment of regression methods. Canadian Journal of Fisheries and Aquatic Sciences, 1995, 52, 788-798.	1.4	33
76	Title is missing!. Journal of Paleolimnology, 2003, 29, 123-133.	1.6	32
77	Depositional fluxes and sources of particulate carbon and nitrogen in natural lakes and a young boreal reservoir in Northern Québec. Biogeochemistry, 2013, 113, 323-339.	3.5	31
78	Title is missing!. Journal of Paleolimnology, 2002, 27, 465-480.	1.6	30
79	Functional diversity is positively associated with biomass for lake diatoms. Freshwater Biology, 2010, 55, 1636-1646.	2.4	30
80	Niche separation within aerobic methanotrophic bacteria across lakes and its link to methane oxidation rates. Environmental Microbiology, 2020, 22, 738-751.	3.8	30
81	Is the introduction of benthic species necessary for open-water chemical reconstruction in diatom-based transfer functions?. Canadian Journal of Fisheries and Aquatic Sciences, 2002, 59, 938-951.	1.4	28
82	Statistical models for the estimation of net phosphorus sedimentation in lakes. Aquatic Sciences, 1989, 51, 192-210.	1.5	26
83	Dissolved Phosphorus Dynamics in Headwater Streams. Canadian Journal of Fisheries and Aquatic Sciences, 1988, 45, 200-209.	1.4	24
84	Tailoring palaeolimnological diatom-based transfer functions. Canadian Journal of Fisheries and Aquatic Sciences, 2004, 61, 2440-2454.	1.4	24
85	A new modelling framework to assess biogenic GHG emissions from reservoirs: The G-res tool. Environmental Modelling and Software, 2021, 143, 105117.	4.5	24
86	Particulate Phosphorus Dynamics in Headwater Streams. Canadian Journal of Fisheries and Aquatic Sciences, 1988, 45, 210-215.	1.4	23
87	Largeâ€scale biogeography and environmental regulation of methanotrophic bacteria across boreal inland waters. Molecular Ecology, 2019, 28, 4181-4196.	3.9	23
88	Benthic and pelagic sources of carbon dioxide in boreal lakes and a young reservoir (Eastmainâ€1) in eastern Canada. Global Biogeochemical Cycles, 2012, 26, .	4.9	22
89	THE INFLUENCE OF SUBMERGED MACROPHYTES ON SEDIMENTARY DIATOM ASSEMBLAGES (sup>1 < /sup>. Journal of Phycology, 2011, 47, 1230-1240.	2.3	21
90	Apparent and real bias in numerical transfer functions in palaeolimnology. Journal of Paleolimnology, 2004, 31, 117-124.	1.6	20

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91	Changes in sediment viral and bacterial abundances with hypolimnetic oxygen depletion in a shallow eutrophic Lac Brome (Quebec, Canada). Canadian Journal of Fisheries and Aquatic Sciences, 2000, 57, 1284-1290.	1.4	19
92	The carbon footprint of a Malaysian tropical reservoir: measured versus modelled estimates highlight the underestimated key role of downstream processes. Biogeosciences, 2020, 17, 515-527.	3.3	19
93	Paleolimnological reconstruction of forest fire induced changes in lake biogeochemistry (Lac) Tj ETQq1 1 0.78431	4 rgBT /O	verlock 10 1
94	Rapid accretion of dissolved organic carbon in the springs of Florida: the most organic-poor natural waters. Biogeosciences, 2010, 7, 4051-4057.	3.3	17
95	Magnitude and drivers of integrated fluvial network greenhouse gas emissions across the boreal landscape in Québec. Water Research, 2020, 173, 115556.	11.3	16
96	Magnitude and Drivers of Oxic Methane Production in Small Temperate Lakes. Environmental Science & Env	10.0	16
97	The carbon footprint of large- and mid-scale hydropower in China: Synthesis from five China's largest hydro-project. Journal of Environmental Management, 2019, 250, 109363.	7.8	15
98	Title is missing!. Journal of Paleolimnology, 2003, 30, 167-181.	1.6	14
99	Changing sources and processes sustaining surface CO ₂ and CH ₄ fluxes along a tropical river to reservoir system. Biogeosciences, 2021, 18, 1333-1350.	3.3	14
100	Landscape heterogeneity influences carbon dioxide production in a young boreal reservoir. Canadian Journal of Fisheries and Aquatic Sciences, 2012, 69, 447-456.	1.4	13
101	Effects of late Holocene wildfires on diatom assemblages in Christina Lake, Alberta, Canada. Canadian Journal of Forest Research, 2003, 33, 2405-2415.	1.7	12
102	Diatom-inferred decline of macrophyte abundance in lakes of southern Quebec, Canada. Canadian Journal of Fisheries and Aquatic Sciences, 2012, 69, 511-524.	1.4	12
103	Changes in fish populations affected by the construction of the La Grande complex (Phase I), James Bay region, Quebec. Canadian Journal of Zoology, 1995, 73, 1860-1877.	1.0	11
104	Simulating carbon dioxide exchange in boreal ecosystems flooded by reservoirs. Ecological Modelling, 2016, 327, 1-17.	2.5	11
105	Coupling of stable carbon isotopic signature of methane and ebullitive fluxes in northern temperate lakes. Science of the Total Environment, 2021, 777, 146117.	8.0	11
106	On the use of structured time-series to detect and test hypotheses about within-lakes relationships. Canadian Journal of Fisheries and Aquatic Sciences, 1995, 52, 799-803.	1.4	10
107	PaleoNet: new software for building, evaluating and applying neural network based transfer functions in paleoecology. Journal of Paleolimnology, 2007, 38, 467-472.	1.6	10
108	The potential of Earth Observation in modelling nutrient loading and water quality in lakes of southern Qu $ ilde{A}$ ©bec, Canada. Aquatic Sciences, 2018, 80, 1.	1.5	10

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109	Adjusting chlorophyll-a estimates through temporal weighting based on the seasonal development of phytobiomass. Aquatic Sciences, 1994, 56, 106-114.	1.5	9
110	Anaerobic phosphorus release from sediments: a paradigm revisited. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 2001, 27, 4013-4020.	0.1	9
111	The role of methanotrophy in the microbial carbon metabolism of temperate lakes. Nature Communications, 2022, 13, 43.	12.8	9
112	Modelâ€Data Fusion to Test Hypothesized Drivers of Lake Carbon Cycling Reveals Importance of Physical Controls. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 1130-1142.	3.0	8
113	Modelling CO2 emissions from water surface of a boreal hydroelectric reservoir. Science of the Total Environment, 2018, 612, 392-404.	8.0	8
114	Rapid shifts in methanotrophic bacterial communities mitigate methane emissions from a tropical hydropower reservoir and its downstream river. Science of the Total Environment, 2020, 748, 141374.	8.0	8
115	Longâ€Term Trends in pCO ₂ in Lake Surface Water Following Rebrowning. Geophysical Research Letters, 2022, 49, .	4.0	8
116	The relative influence of topography and land cover on inorganic and organic carbon exports from catchments in southern Quebec, Canada. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 2562-2578.	3.0	7
117	Travel Time and Source Variation Explain the Molecular Transformation of Dissolved Organic Matter in an Alpine Stream Network. Journal of Geophysical Research G: Biogeosciences, 2020, 125, e2019JG005616.	3.0	7
118	Mesozooplankton grazing and primary production: Reply to the comment by Laws. Limnology and Oceanography, 2003, 48, 1359-1362.	3.1	6
119	Weak density-dependence and short-term perturbations as determinants of phytoplankton temporal dynamics. Ecoscience, 1996, 3, 451-460.	1.4	5
120	Improving estimates and forecasts of lake carbon dynamics using data assimilation. Limnology and Oceanography: Methods, 2019, 17, 97-111.	2.0	3
121	The relative importance of seasonality versus regional and network-specific properties in determining the variability of fluvial CO\$\$_2\$\$, CH\$\$_4\$\$ and dissolved organic carbon across boreal Québec. Aquatic Sciences, 2021, 83, 1.	1.5	3
122	A comment on "Nutrient status and nutrient competition of phytoplankton in a shallow, hypertrophic lake―(Sommer). Limnology and Oceanography, 1990, 35, 778-779.	3.1	2
123	The Carbon Cycle in Lakes: A Biogeochemical Perspective. , 2021, , .		2
124	Insights on riverine metabolism from continuous measurements of CDOM fluorescence in Eastmain-1 Reservoir, Quebec. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 2010, 30, 1545-1548.	0.1	1
125	Sulfate and nitrate retention in lakes. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 1990, 24, 152-154.	0.1	0
126	Weak density-dependence and short-term perturbations as determinants of phytoplankton temporal dynamics. Ecoscience, 1997, 4, 120-120.	1.4	0

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127	ROLE OF AQUATIC NETWORKS IN THE BOREAL CARBON CYCLE: EMERGING ISSUES WORKSHOP REPORT. Limnology and Oceanography Bulletin, 2011, 20, 36-37.	0.4	0