Yves Prairie

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7760610/publications.pdf

Version: 2024-02-01

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

#	Article	IF	Citations
1	The role of methanotrophy in the microbial carbon metabolism of temperate lakes. Nature Communications, 2022, 13, 43.	12.8	9
2	Longâ€Term Trends in pCO₂ in Lake Surface Water Following Rebrowning. Geophysical Research Letters, 2022, 49, .	4.0	8
3	Magnitude and Drivers of Oxic Methane Production in Small Temperate Lakes. Environmental Science & Technology, 2022, 56, 11041-11050.	10.0	16
4	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
5	Changing sources and processes sustaining surface CO₂ and CH₄ fluxes along a tropical river to reservoir system. Biogeosciences, 2021, 18, 1333-1350.	3.3	14
6	Technical note: CO₂ is not like CH₄ â€“ limits of and corrections to the headspace method to analyse <i>p</i>CO₂ in fresh water. Biogeosciences, 2021, 18, 1619-1627.	3.3	36
7	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
8	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
9	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
10	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 QuÃ©bec. Aquatic Sciences, 2021, 83, 1.	1.5	3
11	The Carbon Cycle in Lakes: A Biogeochemical Perspective. , 2021, , .		2
12	Niche separation within aerobic methanotrophic bacteria across lakes and its link to methane oxidation rates. Environmental Microbiology, 2020, 22, 738-751.	3.8	30
13	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
14	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
15	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
16	Magnitude and drivers of integrated fluvial network greenhouse gas emissions across the boreal landscape in QuÃ©bec. Water Research, 2020, 173, 115556.	11.3	16
17	Anthropogenic alteration of nutrient supply increases the global freshwater carbon sink. Science Advances, 2020, 6, eaaw2145.	10.3	80
18	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

#	Article	IF	Citations
19	Largeâ€scale biogeography and environmental regulation of methanotrophic bacteria across boreal inland waters. Molecular Ecology, 2019, 28, 4181-4196.	3.9	23
20	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
21	Methane oxidation kinetics in northern freshwater lakes. Biogeochemistry, 2019, 143, 105-116.	3.5	64
22	Improving estimates and forecasts of lake carbon dynamics using data assimilation. Limnology and Oceanography: Methods, 2019, 17, 97-111.	2.0	3
23	Largeâ€Scale Landscape Drivers of CO₂, CH₄, DOC, and DIC in Boreal River Networks. Global Biogeochemical Cycles, 2019, 33, 125-142.	4.9	35
24	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
25	The potential of Earth Observation in modelling nutrient loading and water quality in lakes of southern QuÃ©bec, Canada. Aquatic Sciences, 2018, 80, 1.	1.5	10
26	Modelling CO2 emissions from water surface of a boreal hydroelectric reservoir. Science of the Total Environment, 2018, 612, 392-404.	8.0	8
27	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
28	Greenhouse Gas Emissions from Freshwater Reservoirs: What Does the Atmosphere See?. Ecosystems, 2018, 21, 1058-1071.	3.4	145
29	The Extent and Regulation of Summer Methane Oxidation in Northern Lakes. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3216-3230.	3.0	48
30	The study of carbon in inland watersâ€”from isolated ecosystems to players in the global carbon cycle. Limnology and Oceanography Letters, 2018, 3, 41-48.	3.9	118
31	Modeling Allochthonous Dissolved Organic Carbon Mineralization Under Variable Hydrologic Regimes in Boreal Lakes. Ecosystems, 2017, 20, 781-795.	3.4	60
32	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
33	Simulating carbon dioxide exchange in boreal ecosystems flooded by reservoirs. Ecological Modelling, 2016, 327, 1-17.	2.5	11
34	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
35	Large increases in carbon burial in northern lakes during the Anthropocene. Nature Communications, 2015, 6, 10016.	12.8	124
36	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

#	Article	IF	Citations
37	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
38	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
39	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
40	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
41	Oxic water column methanogenesis as a major component of aquatic CH4 fluxes. Nature Communications, 2014, 5, 5350.	12.8	222
42	Whatâ€™s in an EEM? Molecular Signatures Associated with Dissolved Organic Fluorescence in Boreal Canada. Environmental Science & Technology, 2014, 48, 10598-10606.	10.0	292
43	Linking organic carbon sedimentation, burial efficiency, and longâ€term accumulation in boreal lakes. Journal of Geophysical Research G: Biogeosciences, 2014, 119, 836-847.	3.0	84
44	Browning of Boreal Freshwaters Coupled to Carbon-Iron Interactions along the Aquatic Continuum. PLoS ONE, 2014, 9, e88104.	2.5	134
45	Depositional fluxes and sources of particulate carbon and nitrogen in natural lakes and a young boreal reservoir in Northern QuÃ©bec. Biogeochemistry, 2013, 113, 323-339.	3.5	31
46	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
47	A new pathway of freshwater methane emissions and the putative importance of microbubbles. Inland Waters, 2013, 3, 311-320.	2.2	55
48	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
49	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
50	The net carbon footprint of a newly created boreal hydroelectric reservoir. Global Biogeochemical Cycles, 2012, 26, .	4.9	117
51	Longâ€term C accumulation and total C stocks in boreal lakes in northern QuÃ©bec. Global Biogeochemical Cycles, 2012, 26, .	4.9	80
52	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
53	pH change induces shifts in the size and light absorption of dissolved organic matter. Biogeochemistry, 2012, 108, 109-118.	3.5	91
54	Global abundance and size distribution of streams and rivers. Inland Waters, 2012, 2, 229-236.	2.2	257

#	Article	IF	Citations
55	Carbon emission from hydroelectric reservoirs linked to reservoir age and latitude. Nature Geoscience, 2011, 4, 593-596.	12.9	600
56	ROLE OF AQUATIC NETWORKS IN THE BOREAL CARBON CYCLE: EMERGING ISSUES WORKSHOP REPORT. Limnology and Oceanography Bulletin, 2011, 20, 36-37.	0.4	0
57	THE INFLUENCE OF SUBMERGED MACROPHYTES ON SEDIMENTARY DIATOM ASSEMBLAGES¹. Journal of Phycology, 2011, 47, 1230-1240.	2.3	21
58	Effects of thermocline deepening on lake plankton communities. Canadian Journal of Fisheries and Aquatic Sciences, 2011, 68, 260-276.	1.4	85
59	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
60	Functional diversity is positively associated with biomass for lake diatoms. Freshwater Biology, 2010, 55, 1636-1646.	2.4	30
61	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
62	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
63	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
64	Evidence for surface organic matter modulation of air-sea CO₂ gas exchange. Biogeosciences, 2009, 6, 1105-1114.	3.3	34
65	The pCO₂ dynamics in lakes in the boreal region of northern QuÃ©bec, Canada. Global Biogeochemical Cycles, 2009, 23, .	4.9	88
66	Patterns inpCO₂in boreal streams and rivers of northern Quebec, Canada. Global Biogeochemical Cycles, 2009, 23, .	4.9	152
67	In situ dissolved organic carbon (DOC) release by submerged macrophyteâ€“epiphyte communities in southern Quebec lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2009, 66, 1522-1531.	1.4	36
68	Linking forest fires to lake metabolism and carbon dioxide emissions in the boreal region of Northern QuÃ©bec. Global Change Biology, 2009, 15, 2861-2873.	9.5	54
69	Lakes and reservoirs as regulators of carbon cycling and climate. Limnology and Oceanography, 2009, 54, 2298-2314.	3.1	1,977
70	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
71	Sediment organic carbon burial in agriculturally eutrophic impoundments over the last century. Global Biogeochemical Cycles, 2008, 22, .	4.9	399
72	CO₂ emissions from saline lakes: A global estimate of a surprisingly large flux. Journal of Geophysical Research, 2008, 113, .	3.3	137

#	Article	IF	Citations
73	Carbocentric limnology: looking back, looking forward. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 543-548.	1.4	139
74	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
75	Direct and indirect metabolic CO₂ release by humanity. Biogeosciences, 2007, 4, 215-217.	3.3	41
76	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
77	Plumbing the Global Carbon Cycle: Integrating Inland Waters into the Terrestrial Carbon Budget. Ecosystems, 2007, 10, 172-185.	3.4	2,836
78	The global abundance and size distribution of lakes, ponds, and impoundments. Limnology and Oceanography, 2006, 51, 2388-2397.	3.1	1,426
79	Prevalence of Heterotrophy and Atmospheric CO2 Emissions from Aquatic Ecosystems. Ecosystems, 2005, 8, 862-870.	3.4	307
80	Whole-system metabolism and CO₂ fluxes in a Mediterranean Bay dominated by seagrass beds (Palma Bay, NW Mediterranean). Biogeosciences, 2005, 2, 43-60.	3.3	91
81	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
82	Respiration in lakes. , 2005, , 103-121.		139
83	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
84	Bacterial metabolism and growth efficiency in lakes: The importance of phosphorus availability. Limnology and Oceanography, 2004, 49, 137-147.	3.1	184
85	Tailoring palaeolimnological diatom-based transfer functions. Canadian Journal of Fisheries and Aquatic Sciences, 2004, 61, 2440-2454.	1.4	24
86	Apparent and real bias in numerical transfer functions in palaeolimnology. Journal of Paleolimnology, 2004, 31, 117-124.	1.6	20
87	Fluorescent dissolved organic matter in lakes: Relationships with heterotrophicmetabolism. Limnology and Oceanography, 2004, 49, 2034-2045.	3.1	135
88	Title is missing!. Journal of Paleolimnology, 2003, 30, 167-181.	1.6	14
89	Title is missing!. Journal of Paleolimnology, 2003, 29, 123-133.	1.6	32
90	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

#	Article	IF	Citations
91	Mesozooplankton grazing and primary production: Reply to the comment by Laws. Limnology and Oceanography, 2003, 48, 1359-1362.	3.1	6
92	The summer metabolic balance in the epilimnion of southeastern Quebec lakes. Limnology and Oceanography, 2002, 47, 316-321.	3.1	185
93	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
94	Title is missing!. Journal of Paleolimnology, 2002, 27, 151-171.	1.6	43
95	Title is missing!. Journal of Paleolimnology, 2002, 27, 465-480.	1.6	30
96	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
97	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
98	Title is missing!. Journal of Paleolimnology, 2001, 26, 411-422.	1.6	35
99	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
100	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
101	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
102	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
103	Paleolimnological reconstruction of forest fire induced changes in lake biogeochemistry (Lac) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.4	17
104	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
105	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
106	Some aspects of the analysis of size spectra in aquatic ecology. Limnology and Oceanography, 1997, 42, 184-192.	3.1	132
107	Weak density-dependence and short-term perturbations as determinants of phytoplankton temporal dynamics. Ecoscience, 1997, 4, 120-120.	1.4	0
108	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

#	Article	IF	Citations
109	Evaluating the predictive power of regression models. Canadian Journal of Fisheries and Aquatic Sciences, 1996, 53, 490-492.	1.4	109
110	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
111	Weak density-dependence and short-term perturbations as determinants of phytoplankton temporal dynamics. Ecoscience, 1996, 3, 451-460.	1.4	5
112	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
113	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
114	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
115	Temporal variability in the chemical characteristics along the RiviÃ¨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
116	Fractal dimension estimates of a fragmented landscape: sources of variability. Landscape Ecology, 1994, 9, 279-286.	4.2	48
117	Adjusting chlorophyll-a estimates through temporal weighting based on the seasonal development of phytobiomass. Aquatic Sciences, 1994, 56, 106-114.	1.5	9
118	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
119	A comment on â€œNutrient status and nutrient competition of phytoplankton in a shallow, hypertrophic lakeâ€•(Sommer). Limnology and Oceanography, 1990, 35, 778-779.	3.1	2
120	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
121	Statistical models for the estimation of net phosphorus sedimentation in lakes. Aquatic Sciences, 1989, 51, 192-210.	1.5	26
122	Some misconceptions about the spurious correlation problem in the ecological literature. Oecologia, 1989, 81, 285-288.	2.0	113
123	Unifying Nutrientâ€“Chlorophyll Relationships in Lakes. Canadian Journal of Fisheries and Aquatic Sciences, 1989, 46, 1176-1182.	1.4	181
124	Particulate Phosphorus Dynamics in Headwater Streams. Canadian Journal of Fisheries and Aquatic Sciences, 1988, 45, 210-215.	1.4	23
125	Dissolved Phosphorus Dynamics in Headwater Streams. Canadian Journal of Fisheries and Aquatic Sciences, 1988, 45, 200-209.	1.4	24
126	EFFECT OF CATCHMENT SIZE ON PHOSPHORUS EXPORT. Journal of the American Water Resources Association, 1986, 22, 465-470.	2.4	62

#	Article	IF	Citations
127	Practical guidelines for the use of zooplankton length-weight regression equations. Journal of Plankton Research, 1985, 7, 955-960.	1.8	77