Jacques C Finlay

List of Publications by Year in Descending Order

124 papers	6,544 citations	48 h-index	78 g-index
129 ext. papers	7,552 ext. citations	7.4 avg, IF	6.1 L-index

#	Paper	IF	Citations
124	Hydrologic processes regulate nutrient retention in stormwater detention ponds.. *Science of the Total Environment*, **2022**, 153722	10.2	0
123	Superlinear scaling of riverine biogeochemical function with watershed size.. *Nature Communications*, **2022**, 13, 1230	17.4	1
122	Longitudinal patterns and linkages in benthic fine particulate organic matter composition, respiration, and nutrient uptake. *Limnology and Oceanography*, **2021**, 66, 2684-2696	4.8	1
121	Integrated assessment modeling reveals near-channel management as cost-effective to improve water quality in agricultural watersheds. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
120	Long-term water color and flow trends in the Mississippi River Headwaters, 1944–2010. *Limnology and Oceanography*, **2021**, 66, 3552-3567	4.8	0
119	Internal loading in stormwater ponds as a phosphorus source to downstream waters. *Limnology and Oceanography Letters*, **2020**, 5, 322-330	7.9	10
118	Prediction of Photochemically Produced Reactive Intermediates in Surface Waters via Satellite Remote Sensing. *Environmental Science & Technology*, **2020**, 54, 6671-6681	10.3	18
117	Combined use of radiocarbon and stable carbon isotopes for the source mixing model in a stream food web. *Limnology and Oceanography*, **2020**, 65, 2688-2696	4.8	3
116	Partial migration alters population ecology and food chain length: evidence from a salmonid fish. *Ecosphere*, **2020**, 11, e03044	3.1	6
115	It Is Not Easy Being Green: Recognizing Unintended Consequences of Green Stormwater Infrastructure. *Water (Switzerland)*, **2020**, 12, 522	3	26
114	Co-limitation by N and P Characterizes Phytoplankton Communities Across Nutrient Availability and Land Use. *Ecosystems*, **2020**, 23, 1121-1137	3.9	2
113	Vegetation trajectories of restored agricultural wetlands following sediment removal. *Restoration Ecology*, **2020**, 28, 612-622	3.1	2
112	Regional measurements and spatial/temporal analysis of CDOM in 10,000+ optically variable Minnesota lakes using Landsat 8 imagery. *Science of the Total Environment*, **2020**, 724, 138141	10.2	16
111	Road dust biases NDVI and alters edaphic properties in Alaskan arctic tundra. *Scientific Reports*, **2019**, 9, 214	4.9	6
110	Unprocessed Atmospheric Nitrate in Waters of the Northern Forest Region in the U.S. and Canada. *Environmental Science & Technology*, **2019**, 53, 3620-3633	10.3	19
109	The Power of Environmental Observatories for Advancing Multidisciplinary Research, Outreach, and Decision Support: The Case of the Minnesota River Basin. *Water Resources Research*, **2019**, 55, 3576-3592	5.4	5
108	Iron influence on dissolved color in lakes of the Upper Great Lakes States. *PLoS ONE*, **2019**, 14, e0211979	3.7	7

107	Controls of Methylmercury Bioaccumulation in Forest Floor Food Webs. *Environmental Science & Technology*, **2019**, 53, 2434-2440	10.3	15
106	Color, chlorophyll a, and suspended solids effects on Secchi depth in lakes: implications for trophic state assessment. *Ecological Applications*, **2019**, 29, e01871	4.9	32
105	Phosphorus Transport in Intensively Managed Watersheds. *Water Resources Research*, **2019**, 55, 9148-9172	5.4	17
104	Quantifying cryptic function loss during community disassembly. *Journal of Applied Ecology*, **2019**, 56, 2710-2722	5.8	3
103	Fertilizer, landscape features and climate regulate phosphorus retention and river export in diverse Midwestern watersheds. *Biogeochemistry*, **2019**, 146, 293-309	3.8	10
102	The effects of infiltration-based stormwater best management practices on the hydrology and phosphorus budget of a eutrophic urban lake. *Lake and Reservoir Management*, **2019**, 35, 38-50	1.3	4
101	Social-ecological and technological factors moderate the value of urban nature. *Nature Sustainability*, **2019**, 2, 29-38	22.1	163
100	Contribution of wetlands to nitrate removal at the watershed scale. *Nature Geoscience*, **2018**, 11, 127-132	28.3	101
99	Contextualizing Wetlands Within a River Network to Assess Nitrate Removal and Inform Watershed Management. *Water Resources Research*, **2018**, 54, 1312-1337	5.4	24
98	Limitations on using CDOM as a proxy for DOC in temperate lakes. *Water Research*, **2018**, 144, 719-727	12.5	24
97	Metapopulation stability in branching river networks. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E5963-E5969	11.5	45
96	Uniform shrub growth response to June temperature across the North Slope of Alaska. *Environmental Research Letters*, **2018**, 13, 044013	6.2	20
95	Global dataset for carbon and nitrogen stable isotope ratios of lotic periphyton. *Ecological Research* , **2018**, 33, 1089-1089	1.9	2
94	Effects of the hippopotamus on the chemistry and ecology of a changing watershed. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E5028-E5037	11.5	31
93	Brown trout (Salmo trutta) growth and condition along a winter thermal gradient in temperate streams. *Canadian Journal of Fisheries and Aquatic Sciences*, **2017**, 74, 56-64	2.4	6
92	Flow-related dynamics in suspended algal biomass and its contribution to suspended particulate matter in an agricultural river network of the Minnesota River Basin, USA. *Hydrobiologia*, **2017**, 785, 127-147	2.4	13
91	Contribution of Leaf Litter to Nutrient Export during Winter Months in an Urban Residential Watershed. *Environmental Science & Technology*, **2017**, 51, 3138-3147	10.3	34
90	Arctic shrub growth trajectories differ across soil moisture levels. *Global Change Biology*, **2017**, 23, 4294-4302	11.4	57

89	Contrasting nitrogen and phosphorus budgets in urban watersheds and implications for managing urban water pollution. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 4177-4182	11.5	172
88	Stable Isotopes in Stream Food Webs **2017**, 3-20		5
87	Trees and Streets as Drivers of Urban Stormwater Nutrient Pollution. *Environmental Science & Technology*, **2017**, 51, 9569-9579	10.3	43
86	Comment on Climate and agricultural land use change impacts on streamflow in the upper midwestern United States by Satish C. Gupta et al.. *Water Resources Research*, **2016**, 52, 7536-7539	5.4	9
85	Do wetlands enhance downstream denitrification in agricultural landscapes?. *Ecosphere*, **2016**, 7, e01516	3.1	23
84	Large differences in potential denitrification and sediment microbial communities across the Laurentian great lakes. *Biogeochemistry*, **2016**, 128, 353-368	3.8	27
83	Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. *Environmental Research Letters*, **2016**, 11, 034014	6.2	165
82	Comparison of Landsat 8 and Landsat 7 for regional measurements of CDOM and water clarity in lakes. *Remote Sensing of Environment*, **2016**, 185, 119-128	13.2	119
81	Nitrogen cycling in a freshwater estuary. *Biogeochemistry*, **2016**, 127, 199-216	3.8	19
80	Large eddy simulation of turbulence and solute transport in a forested headwater stream. *Journal of Geophysical Research F: Earth Surface*, **2016**, 121, 146-167	3.8	28
79	Winter diet of brown trout Salmo trutta in groundwater-dominated streams: influence of environmental factors on spatial and temporal variation. *Journal of Fish Biology*, **2016**, 89, 2449-2464	1.9	4
78	Do wetlands enhance downstream denitrification in agricultural landscapes? **2016**, 7, e01516		0
77	Carbon stable isotopes suggest that hippopotamus-vectored nutrients subsidize aquatic consumers in an East African river. *Ecosphere*, **2015**, 6, 1-11	3.1	50
76	Factors affecting the measurement of CDOM by remote sensing of optically complex inland waters. *Remote Sensing of Environment*, **2015**, 157, 199-215	13.2	147
75	Nitrogen transformations at the sediment water interface across redox gradients in the Laurentian Great Lakes. *Hydrobiologia*, **2014**, 731, 95-108	2.4	49
74	Ebullitive methane emissions from oxygenated wetland streams. *Global Change Biology*, **2014**, 20, 3408-22	12.4	52
73	A shift of thermokarst lakes from carbon sources to sinks during the Holocene epoch. *Nature*, **2014**, 511, 452-6	50.4	194
72	Decomposition of tree leaf litter on pavement: implications for urban water quality. *Urban Ecosystems*, **2014**, 17, 369-385	2.8	32

71	CO2 and CH4 emissions from streams in a lake-rich landscape: Patterns, controls, and regional significance. *Global Biogeochemical Cycles*, **2014**, 28, 197-210	5.9	82
70	Bioavailability of dissolved organic carbon across a hillslope chronosequence in the Kuparuk River region, Alaska. *Soil Biology and Biochemistry*, **2014**, 79, 25-33	7.5	7
69	Variation in terrestrial and aquatic sources of methylmercury in stream predators as revealed by stable mercury isotopes. *Environmental Science & Technology*, **2014**, 48, 10128-35	10.3	42
68	Subcanopy Solar Radiation model: Predicting solar radiation across a heavily vegetated landscape using LiDAR and GIS solar radiation models. *Remote Sensing of Environment*, **2014**, 154, 387-397	13.2	52
67	Measurement and Modeling of Denitrification in Sand-Bed Streams under Various Land Uses. *Journal of Environmental Quality*, **2014**, 43, 1013-23	3.4	8
66	Winter feeding, growth and condition of brown trout Salmo trutta in a groundwater-dominated stream. *Journal of Freshwater Ecology*, **2014**, 29, 187-200	1.4	15
65	Selective feeding determines patterns of nutrient release by stream invertebrates. *Freshwater Science*, **2014**, 33, 1093-1107	2	29
64	An Ecological Network Analysis of nitrogen cycling in the Laurentian Great Lakes. *Ecological Modelling*, **2014**, 293, 150-160	3	20
63	Contrasting influences of stormflow and baseflow pathways on nitrogen and phosphorus export from an urban watershed. *Biogeochemistry*, **2014**, 121, 209-228	3.8	60
62	Measurement and Modeling of Denitrification in Sand-Bed Streams under Various Land Uses **2014**, 43, 1013		0
61	The interactive effects of excess reactive nitrogen and climate change on aquatic ecosystems and water resources of the United States. *Biogeochemistry*, **2013**, 114, 71-92	3.8	118
60	Human influences on nitrogen removal in lakes. *Science*, **2013**, 342, 247-50	33.3	217
59	Relative importance of breakage and decay as processes depleting large wood from streams. *Geomorphology*, **2013**, 190, 40-47	4.3	29
58	Estimating and scaling stream ecosystem metabolism along channels with heterogeneous substrate. *Ecohydrology*, **2013**, 6, 679-688	2.5	14
57	Rates and controls of nitrification in a large oligotrophic lake. *Limnology and Oceanography*, **2013**, 58, 276-286	4.8	48
56	Photodegradation of methylmercury in stream ecosystems. *Limnology and Oceanography*, **2013**, 58, 13-22	4.8	27
55	Predator-driven nutrient recycling in California stream ecosystems. *PLoS ONE*, **2013**, 8, e58542	3.7	13
54	Sources and transfers of methylmercury in adjacent river and forest food webs. *Environmental Science & Technology*, **2012**, 46, 10957-64	10.3	72

53	Global meta-analysis for controlling factors on carbon stable isotope ratios of lotic periphyton. *Oecologia*, **2012**, 170, 541-9	2.9	50
52	Linking water quality and well-being for improved assessment and valuation of ecosystem services. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 18619-24	11.5	291
51	Influence of subsurface drainage on quantity and quality of dissolved organic matter export from agricultural landscapes. *Journal of Geophysical Research*, **2011**, 116,		39
50	Influence of dissolved organic carbon on methylmercury bioavailability across Minnesota stream ecosystems. *Environmental Science & Technology*, **2011**, 45, 5981-7	10.3	55
49	Stream size and human influences on ecosystem production in river networks. *Ecosphere*, **2011**, 2, art87	3.1	77
48	The stoichiometry of nitrogen and phosphorus spiralling in heterotrophic and autotrophic streams. *Freshwater Biology*, **2011**, 56, 424-436	3.1	54
47	Isotopic composition of nitrogen in suspended particulate matter of Lake Superior: implications for nutrient cycling and organic matter transformation. *Biogeochemistry*, **2011**, 103, 1-14	3.8	11
46	Environmental controls of wood entrapment in upper Midwestern streams. *Hydrological Processes*, **2011**, 25, 593-602	3.3	10
45	Light-mediated thresholds in stream-water nutrient composition in a river network. *Ecology*, **2011**, 92, 140-50	4.6	68
44	Tracing energy flow in stream food webs using stable isotopes of hydrogen. *Freshwater Biology*, **2010**, 55, 941-951	3.1	54
43	The role of discharge variation in scaling of drainage area and food chain length in rivers. *Science*, **2010**, 330, 965-7	33.3	164
42	In situ production of methylmercury within a stream channel in northern California. *Environmental Science & Technology*, **2010**, 44, 6998-7004	10.3	31
41	Factors influencing wood mobilization in streams. *Water Resources Research*, **2010**, 46,	5.4	59
40	Patterns of hydrologic control over stream water total nitrogen to total phosphorus ratios. *Biogeochemistry*, **2010**, 99, 15-30	3.8	37
39	Food chains in freshwaters. *Annals of the New York Academy of Sciences*, **2009**, 1162, 187-220	6.5	42
38	Mercury bioaccumulation in a stream network. *Environmental Science & Technology*, **2009**, 43, 7016-22	10.3	53
37	Comparison of morphological and biological control of exchange with transient storage zones in a field-scale flume. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		17
36	Effects of stream water chemistry and tree species on release and methylation of mercury during litter decomposition. *Environmental Science & Technology*, **2008**, 42, 8692-7	10.3	18

35	Detecting characteristic hydrological and biogeochemical signals through nonparametric scatter plot analysis of normalized data. *Water Resources Research*, **2008**, 44,	5.4	2
34	Nitrogen and carbon uptake dynamics in Lake Superior. *Journal of Geophysical Research*, **2008**, 113,		14
33	Biogeochemical processes in high-latitude lakes and rivers **2008**, 137-156		17
32	Spatial and Temporal Variation of Ammonium in Lake Superior. *Journal of Great Lakes Research*, **2007**, 33, 581	3	15
31	Increasing stoichiometric imbalance in North America's largest lake: Nitrification in Lake Superior. *Geophysical Research Letters*, **2007**, 34,	4.9	65
30	Grazer traits, competition, and carbon sources to a headwater-stream food web. *Ecology*, **2007**, 88, 391-401	4.6	64
29	Introduced trout sever trophic connections in watersheds: consequences for a declining amphibian. *Ecology*, **2007**, 88, 2187-98	4.6	75
28	Isotopic evidence for in-lake production of accumulating nitrate in Lake Superior **2007**, 17, 2323-32		60
27	Effects of restoration and reflooding on soil denitrification in a leveed Midwestern floodplain **2007**, 17, 2365-76		56
26	The problem of boundaries in defining ecosystems: A potential landmine for uniting geomorphology and ecology. *Geomorphology*, **2007**, 89, 111-126	4.3	90
25	Snowmelt dominance of dissolved organic carbon in high-latitude watersheds: Implications for characterization and flux of river DOC. *Geophysical Research Letters*, **2006**, 33, n/a-n/a	4.9	114
24	Seasonal changes in the age and structure of dissolved organic carbon in Siberian rivers and streams. *Geophysical Research Letters*, **2006**, 33,	4.9	182
23	Quantity-activity relationship of denitrifying bacteria and environmental scaling in streams of a forested watershed. *Journal of Geophysical Research*, **2006**, 111,		19
22	Nitrogen loss from watersheds of interior Alaska underlain with discontinuous permafrost. *Geophysical Research Letters*, **2005**, 32,	4.9	69
21	A high-resolution time series of oxygen isotopes from the Kolyma River: Implications for the seasonal dynamics of discharge and basin-scale water use. *Geophysical Research Letters*, **2005**, 32, n/a-n/a	4.9	32
20	ERADICATION OF INVASIVE TAMARIX RAMOSISSIMA ALONG A DESERT STREAM INCREASES NATIVE FISH DENSITY **2005**, 15, 2072-2083		35
19	Patterns and controls of lotic algal stable carbon isotope ratios. *Limnology and Oceanography*, **2004**, 49, 850-861	4.8	153
18	Controls of streamwater dissolved inorganic carbon dynamics in a forested watershed. *Biogeochemistry*, **2003**, 62, 231-252	3.8	155

17	A basal aquatic-terrestrial trophic link in rivers: algal subsidies via shore-dwelling grasshoppers. *Oecologia*, **2002**, 131, 261-268	2.9	69
16	SPATIAL SCALES OF CARBON FLOW IN A RIVER FOOD WEB. *Ecology*, **2002**, 83, 1845-1859	4.6	148
15	Stable-Carbon-Isotope Ratios of River Biota: Implications for Energy Flow in Lotic Food Webs. *Ecology*, **2001**, 82, 1052	4.6	211
14	STABLE-CARBON-ISOTOPE RATIOS OF RIVER BIOTA:IMPLICATIONS FOR ENERGY FLOW IN LOTIC FOOD WEBS. *Ecology*, **2001**, 82, 1052-1064	4.6	66
13	Influence of stream size on ammonium and suspended particulate nitrogen processing. *Limnology and Oceanography*, **2001**, 46, 1-13	4.8	110
12	STABLE-CARBON-ISOTOPE RATIOS OF RIVER BIOTA:IMPLICATIONS FOR ENERGY FLOW IN LOTIC FOOD WEBS **2001**, 82, 1052		1
11	Effects of desiccation and temperature/irradiance on the metabolism of 2 arctic stream bryophyte taxa. *Journal of the North American Benthological Society*, **2000**, 19, 263-273		17
10	Roles of Bryophytes in Stream Ecosystems. *Journal of the North American Benthological Society*, **1999**, 18, 151-184		114
9	Effects of water velocity on algal carbon isotope ratios: Implications for river food web studies. *Limnology and Oceanography*, **1999**, 44, 1198-1203	4.8	194
8	Comparison of Epilithic Algal and Bryophyte Metabolism in an Arctic Tundra Stream, Alaska. *Journal of the North American Benthological Society*, **1998**, 17, 210-227		23
7	Biological Responses to Fertilization of Oksrukuyik Creek, a Tundra Stream. *Journal of the North American Benthological Society*, **1998**, 17, 190-209		32
6	Organic Matter Dynamics in the Kuparuk River, a Tundra River in Alaska, USA. *Journal of the North American Benthological Society*, **1997**, 16, 18-23		15
5	Dams and Downstream Aquatic Biodiversity: Potential Food Web Consequences of Hydrologic and Geomorphic Change. *Environmental Management*, **1996**, 20, 887-95	3.1	241
4	Long-term effects of PO4 fertilization on the distribution of bryophytes in an arctic river. *Freshwater Biology*, **1994**, 32, 445-454	3.1	44
3	Controls on production of bryophytes in an arctic tundra stream. *Freshwater Biology*, **1994**, 32, 455-466	3.1	29
2	Epilithic chlorophyll a, photosynthesis, and respiration in control and fertilized reaches of a tundra stream. *Hydrobiologia*, **1992**, 240, 121-131	2.4	26
1	Stable Isotope Tracing of Temporal and Spatial Variability in Organic Matter Sources to Freshwater Ecosystems 283-333		136