Wilfred M Wollheim

List of Publications by Year
in descending order

71	7,515	66343	88630
papers	citations	42 h-index	70 g-index

73	73	73	6919
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	High-Frequency Concurrent Measurements in Watershed and Impaired Estuary Reveal Coupled DOC and Decoupled Nitrate Dynamics. Estuaries and Coasts, 2022, 45, 445-461.	2.2	0
2	Dominance of Diffusive Methane Emissions From Lowland Headwater Streams Promotes Oxidation and Isotopic Enrichment. Frontiers in Environmental Science, 2022, 9, .	3.3	5
3	Removal of Fecal Indicator Bacteria by River Networks. Water (Switzerland), 2022, 14, 617.	2.7	1
4	Superlinear scaling of riverine biogeochemical function with watershed size. Nature Communications, 2022, 13, 1230.	12.8	9
5	Longâ€term ecological research and the <scp>COVID</scp>â€19 anthropause: A window to understanding socialâ€“ecological disturbance. Ecosphere, 2022, 13, e4019.	2.2	4
6	The Seasonality of Inâ€Stream Nutrient Concentrations and Uptake in Arctic Headwater Streams in the Northern Foothills of Alaska's Brooks Range. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG005949.	3.0	2
7	Spatial and temporal heterogeneity of methane ebullition in lowland headwater streams and the impact on sampling design. Limnology and Oceanography, 2021, 66, 4063-4076.	3.1	6
8	The overlooked role of diffuse household livestock production in nitrogen pollution at the watershed scale. Journal of Cleaner Production, 2020, 272, 122758.	9.3	16
9	Supply, Demand, and In-Stream Retention of Dissolved Organic Carbon and Nitrate During Storms in Mediterranean Forested Headwater Streams. Frontiers in Environmental Science, 2019, 7, .	3.3	24
10	Controls of Chloride Loading and Impairment at the River Network Scale in New England. Journal of Environmental Quality, 2018, 47, 839-847.	2.0	11
11	River network saturation concept: factors influencing the balance of biogeochemical supply and demand of river networks. Biogeochemistry, 2018, 141, 503-521.	3.5	96
12	Continental-scale decrease in net primary productivity in streams due to climate warming. Nature Geoscience, 2018, 11, 415-420.	12.9	99
13	The impact of flooding on aquatic ecosystem services. Biogeochemistry, 2018, 141, 439-461.	3.5	142
14	Influences of agricultural land use composition and distribution on nitrogen export from a subtropical watershed in China. Science of the Total Environment, 2018, 642, 21-32.	8.0	37
15	Lateral Marsh Edge Erosion as a Source of Sediments for Vertical Marsh Accretion. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2444-2465.	3.0	104
16	Stream tracer breakthrough curve decomposition into mass fractions: A simple framework to analyze and compare conservative solute transport processes. Limnology and Oceanography: Methods, 2017, 15, 140-153.	2.0	16
17	A longer vernal window: the role of winter coldness and snowpack in driving spring transitions and lags. Global Change Biology, 2017, 23, 1610-1625.	9.5	57
18	Nitrification increases nitrogen export from a tropical river network. Freshwater Science, 2017, 36, 698-712.	1.8	15

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19	Aquatic Nitrate Retention at River Network Scales Across Flow Conditions Determined Using Nested In Situ Sensors. Water Resources Research, 2017, 53, 9740-9756.	4.2	57
20	A coupled terrestrial and aquatic biogeophysical model of the Upper Merrimack River watershed, New Hampshire, to inform ecosystem services evaluation and management under climate and land-cover change. Ecology and Society, 2017, 22, .	2.3	22
21	Longer thaw seasons increase nitrogen availability for leaching during fall in tundra soils. Environmental Research Letters, 2016, 11, 064013.	5.2	44
22	Dissolved organic carbon uptake in streams: A review and assessment of reachâ€scale measurements. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2019-2029.	3.0	83
23	Baseflow physical characteristics differ at multiple spatial scales in stream networks across diverse biomes. Landscape Ecology, 2016, 31, 119-136.	4.2	15
24	An index to characterize the spatial distribution of land use within watersheds and implications for river network nutrient removal and export. Geophysical Research Letters, 2015, 42, 6688-6695.	4.0	37
25	Removal of terrestrial DOC in aquatic ecosystems of a temperate river network. Geophysical Research Letters, 2015, 42, 6671-6679.	4.0	61
26	Urban Evolution: The Role of Water. Water (Switzerland), 2015, 7, 4063-4087.	2.7	72
27	Causes and Consequences of Ecosystem Service Regionalization in a Coastal Suburban Watershed. Estuaries and Coasts, 2015, 38, 19-34.	2.2	9
28	A Scale-Explicit Framework for Conceptualizing the Environmental Impacts of Agricultural Land Use Changes. Sustainability, 2014, 6, 8432-8451.	3.2	14
29	Characterizing Storm-Event Nitrate Fluxes in a Fifth Order Suburbanizing Watershed Using In Situ Sensors. Environmental Science & Technology, 2014, 48, 7756-7765.	10.0	56
30	Temperature and peat type control <scp>CO</scp>₂ and <scp>CH</scp>₄ production in Alaskan permafrost peats. Global Change Biology, 2014, 20, 2674-2686.	9.5	158
31	Tracking evolution of urban biogeochemical cycles: past, present, and future. Biogeochemistry, 2014, 121, 1-21.	3.5	122
32	Ecosystem metabolism and nutrient uptake in an urban, piped headwater stream. Biogeochemistry, 2014, 121, 167-187.	3.5	16
33	Nitrate uptake dynamics of surface transient storage in stream channels and fluvial wetlands. Biogeochemistry, 2014, 120, 239-257.	3.5	30
34	Climate variability masks the impacts of land use change on nutrient export in a suburbanizing watershed. Biogeochemistry, 2014, 121, 45-59.	3.5	45
35	Controls on dissolved organic carbon quantity and chemical character in temperate rivers of North America. Global Biogeochemical Cycles, 2013, 27, 492-504.	4.9	45
36	Horizontal cooling towers: riverine ecosystem services and the fate of thermoelectric heat in the contemporary Northeast US. Environmental Research Letters, 2013, 8, 025010.	5.2	52

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37	History of nutrient inputs to the northeastern United States, 1930â€“2000. Global Biogeochemical Cycles, 2013, 27, 578-591.	4.9	16
38	Legacy Effects in Material Flux: Structural Catchment Changes Predate Long-Term Studies. BioScience, 2012, 62, 575-584.	4.9	59
39	Effects of suburbanization on foodweb stoichiometry of detritus-based streams. Freshwater Science, 2012, 31, 1202-1213.	1.8	9
40	Coastal eutrophication as a driver of salt marsh loss. Nature, 2012, 490, 388-392.	27.8	814
41	Hotbeds of Biogeochemical Diversity: Insights from Urban Long-Term Ecological Research Sites. Elements, 2012, 8, 435-438.	0.5	11
42	Taking the pulse of snowmelt: in situ sensors reveal seasonal, event and diurnal patterns of nitrate and dissolved organic matter variability in an upland forest stream. Biogeochemistry, 2012, 108, 183-198.	3.5	226
43	Separation of river networkâ€“scale nitrogen removal among the main channel and two transient storage compartments. Water Resources Research, 2011, 47, .	4.2	72
44	Residence time distributions in surface transient storage zones in streams: Estimation via signal deconvolution. Water Resources Research, 2011, 47, .	4.2	26
45	Thinking outside the channel: modeling nitrogen cycling in networked river ecosystems. Frontiers in Ecology and the Environment, 2011, 9, 229-238.	4.0	104
46	Nitrous oxide emission from denitrification in stream and river networks. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 214-219.	7.1	517
47	Surface and hyporheic transient storage dynamics throughout a coastal stream network. Water Resources Research, 2010, 46, .	4.2	45
48	Effective denitrification scales predictably with water residence time across diverse systems. Nature Precedings, 2009, , .	0.1	9
49	The regional and global significance of nitrogen removal in lakes and reservoirs. Biogeochemistry, 2009, 93, 143-157.	3.5	326
50	Dynamic modeling of nitrogen losses in river networks unravels the coupled effects of hydrological and biogeochemical processes. Biogeochemistry, 2009, 93, 91-116.	3.5	212
51	The biogeochemical influences of NO₃^{â^'}, dissolved O₂, and dissolved organic C on stream NO₃^{â^'} uptake. Journal of the North American Benthological Society, 2009, 28, 894-907.	3.1	14
52	The application of electrical conductivity as a tracer for hydrograph separation in urban catchments. Hydrological Processes, 2008, 22, 1810-1818.	2.6	114
53	Global N removal by freshwater aquatic systems using a spatially distributed, withinâ€basin approach. Global Biogeochemical Cycles, 2008, 22, .	4.9	152
54	Dynamics of N removal over annual time periods in a suburban river network. Journal of Geophysical Research, 2008, 113, .	3.3	72

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55	Relationship between river size and nutrient removal. Geophysical Research Letters, 2006, 33, .	4.0	208
56	The Role of Snowmelt and Spring Rainfall in Inorganic Nutrient Fluxes from a Large Temperate Watershed, the Androscoggin River Basin (Maine and New Hampshire). Biogeochemistry, 2006, 80, 191-203.	3.5	12
57	N Retention in Urbanizing Headwater Catchments. Ecosystems, 2005, 8, 871-884.	3.4	109
58	Role of wetlands and developed land use on dissolved organic nitrogen concentrations and DON/TDN in northeastern U.S. rivers and streams. Limnology and Oceanography, 2004, 49, 910-918.	3.1	81
59	A STABLE ISOTOPE TRACER STUDY OF NITROGEN UPTAKE AND TRANSFORMATION IN AN OLD-GROWTH FOREST STREAM. Ecology, 2004, 85, 1725-1739.	3.2	71
60	Factors affecting ammonium uptake in streams - an inter-biome perspective. Freshwater Biology, 2003, 48, 1329-1352.	2.4	233
61	Can uptake length in streams be determined by nutrient addition experiments? Results from an interbiome comparison study. Journal of the North American Benthological Society, 2002, 21, 544-560.	3.1	186
62	N uptake as a function of concentration in streams. Journal of the North American Benthological Society, 2002, 21, 206-220.	3.1	222
63	Control of Nitrogen Export from Watersheds by Headwater Streams. Science, 2001, 292, 86-90.	12.6	1,209
64	Influence of stream size on ammonium and suspended particulate nitrogen processing. Limnology and Oceanography, 2001, 46, 1-13.	3.1	138
65	Nitrogen uptake and transformation in a midwestern U.S. stream: A stable isotope enrichment study. Biogeochemistry, 2001, 54, 297-340.	3.5	76
66	Nitrogen Cycling in a Forest Stream Determined by a 15 N Tracer Addition. Ecological Monographs, 2000, 70, 471.	5.4	17
67	Quantification of the Nitrogen Cycle in a Prairie Stream. Ecosystems, 2000, 3, 574-589.	3.4	125
68	Analysis of nitrogen cycling in a forest stream during autumn using a ¹⁵Nâ€tracer addition. Limnology and Oceanography, 2000, 45, 1013-1029.	3.1	122
69	NITROGEN CYCLING IN A FOREST STREAM DETERMINED BY A15N TRACER ADDITION. Ecological Monographs, 2000, 70, 471-493.	5.4	211
70	Food resources of stream macroinvertebrates determined by natural-abundance stable C and N isotopes and a 15N tracer addition. Journal of the North American Benthological Society, 2000, 19, 145-157.	3.1	67
71	A Coupled Field and Modeling Approach for the Analysis of Nitrogen Cycling in Streams. Journal of the North American Benthological Society, 1999, 18, 199-221.	3.1	45