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	Control of Nitrogen Export from Watersheds by Headwater Streams. Science, 2001, 292, 86-90.	12.6	1,209
2	Coastal eutrophication as a driver of salt marsh loss. Nature, 2012, 490, 388-392.	27.8	814
3	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
4	The regional and global significance of nitrogen removal in lakes and reservoirs. Biogeochemistry, 2009, 93, 143-157.	3.5	326
5	Factors affecting ammonium uptake in streams - an inter-biome perspective. Freshwater Biology, 2003, 48, 1329-1352.	2.4	233
6	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
7	N uptake as a function of concentration in streams. Journal of the North American Benthological Society, 2002, 21, 206-220.	3.1	222
8	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
9	NITROGEN CYCLING IN A FOREST STREAM DETERMINED BY A15N TRACER ADDITION. Ecological Monographs, 2000, 70, 471-493.	5.4	211
10	Relationship between river size and nutrient removal. Geophysical Research Letters, 2006, 33, .	4.0	208
11	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
12	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
13	Global N removal by freshwater aquatic systems using a spatially distributed, withinâ€basin approach. Global Biogeochemical Cycles, 2008, 22, .	4.9	152
14	The impact of flooding on aquatic ecosystem services. Biogeochemistry, 2018, 141, 439-461.	3.5	142
15	Influence of stream size on ammonium and suspended particulate nitrogen processing. Limnology and Oceanography, 2001, 46, 1-13.	3.1	138
16	Quantification of the Nitrogen Cycle in a Prairie Stream. Ecosystems, 2000, 3, 574-589.	3.4	125
17	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
18	Tracking evolution of urban biogeochemical cycles: past, present, and future. Biogeochemistry, 2014, 121, 1-21.	3.5	122

#	Article	IF	Citations
19	The application of electrical conductivity as a tracer for hydrograph separation in urban catchments. Hydrological Processes, 2008, 22, 1810-1818.	2.6	114
20	N Retention in Urbanizing Headwater Catchments. Ecosystems, 2005, 8, 871-884.	3.4	109
21	Thinking outside the channel: modeling nitrogen cycling in networked river ecosystems. Frontiers in Ecology and the Environment, 2011, 9, 229-238.	4.0	104
22	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
23	Continental-scale decrease in net primary productivity in streams due to climate warming. Nature Geoscience, 2018, 11, 415-420.	12.9	99
24	River network saturation concept: factors influencing the balance of biogeochemical supply and demand of river networks. Biogeochemistry, 2018, 141, 503-521.	3.5	96
25	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
26	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
27	Nitrogen uptake and transformation in a midwestern U.S. stream: A stable isotope enrichment study. Biogeochemistry, 2001, 54, 297-340.	3.5	76
28	Dynamics of N removal over annual time periods in a suburban river network. Journal of Geophysical Research, 2008, 113, .	3.3	72
29	Separation of river networkâ€“scale nitrogen removal among the main channel and two transient storage compartments. Water Resources Research, 2011, 47, .	4.2	72
30	Urban Evolution: The Role of Water. Water (Switzerland), 2015, 7, 4063-4087.	2.7	72
31	A STABLE ISOTOPE TRACER STUDY OF NITROGEN UPTAKE AND TRANSFORMATION IN AN OLD-GROWTH FOREST STREAM. Ecology, 2004, 85, 1725-1739.	3.2	71
32	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
33	Removal of terrestrial DOC in aquatic ecosystems of a temperate river network. Geophysical Research Letters, 2015, 42, 6671-6679.	4.0	61
34	Legacy Effects in Material Flux: Structural Catchment Changes Predate Long-Term Studies. BioScience, 2012, 62, 575-584.	4.9	59
35	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
36	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

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37	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
38	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
39	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
40	Surface and hyporheic transient storage dynamics throughout a coastal stream network. Water Resources Research, 2010, 46, .	4.2	45
41	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
42	Climate variability masks the impacts of land use change on nutrient export in a suburbanizing watershed. Biogeochemistry, 2014, 121, 45-59.	3.5	45
43	Longer thaw seasons increase nitrogen availability for leaching during fall in tundra soils. Environmental Research Letters, 2016, 11, 064013.	5.2	44
44	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
45	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
46	Nitrate uptake dynamics of surface transient storage in stream channels and fluvial wetlands. Biogeochemistry, 2014, 120, 239-257.	3.5	30
47	Residence time distributions in surface transient storage zones in streams: Estimation via signal deconvolution. Water Resources Research, 2011, 47, .	4.2	26
48	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
49	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
50	Nitrogen Cycling in a Forest Stream Determined by a 15 N Tracer Addition. Ecological Monographs, 2000, 70, 471.	5.4	17
51	History of nutrient inputs to the northeastern United States, 1930â€“2000. Global Biogeochemical Cycles, 2013, 27, 578-591.	4.9	16
52	Ecosystem metabolism and nutrient uptake in an urban, piped headwater stream. Biogeochemistry, 2014, 121, 167-187.	3.5	16
53	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
54	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

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55	Baseflow physical characteristics differ at multiple spatial scales in stream networks across diverse biomes. Landscape Ecology, 2016, 31, 119-136.	4.2	15
56	Nitrification increases nitrogen export from a tropical river network. Freshwater Science, 2017, 36, 698-712.	1.8	15
57	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
58	A Scale-Explicit Framework for Conceptualizing the Environmental Impacts of Agricultural Land Use Changes. Sustainability, 2014, 6, 8432-8451.	3.2	14
59	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
60	Hotbeds of Biogeochemical Diversity: Insights from Urban Long-Term Ecological Research Sites. Elements, 2012, 8, 435-438.	0.5	11
61	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
62	Effective denitrification scales predictably with water residence time across diverse systems. Nature Precedings, 2009, , .	0.1	9
63	Effects of suburbanization on foodweb stoichiometry of detritus-based streams. Freshwater Science, 2012, 31, 1202-1213.	1.8	9
64	Causes and Consequences of Ecosystem Service Regionalization in a Coastal Suburban Watershed. Estuaries and Coasts, 2015, 38, 19-34.	2.2	9
65	Superlinear scaling of riverine biogeochemical function with watershed size. Nature Communications, 2022, 13, 1230.	12.8	9
66	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
67	Dominance of Diffusive Methane Emissions From Lowland Headwater Streams Promotes Oxidation and Isotopic Enrichment. Frontiers in Environmental Science, 2022, 9, .	3.3	5
68	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
69	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
70	Removal of Fecal Indicator Bacteria by River Networks. Water (Switzerland), 2022, 14, 617.	2.7	1
71	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