William H Mcdowell

List of Publications by Year in descending order

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272 papers

30,832 citations

81 h-index 4885 168 g-index

276 all docs

276 docs citations

times ranked

276

22289 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	Biogeochemical Hot Spots and Hot Moments at the Interface of Terrestrial and Aquatic Ecosystems. Ecosystems, 2003, 6, 301-312.	3.4	1,874
3	Nitrogen Saturation in Temperate Forest Ecosystems. BioScience, 1998, 48, 921-934.	4.9	1,630
4	The global abundance and size distribution of lakes, ponds, and impoundments. Limnology and Oceanography, 2006, 51, 2388-2397.	3.1	1,426
5	Control of Nitrogen Export from Watersheds by Headwater Streams. Science, 2001, 292, 86-90.	12.6	1,209
6	Stream denitrification across biomes and its response to anthropogenic nitrate loading. Nature, 2008, 452, 202-205.	27.8	1,097
7	Origin, Composition, and Flux of Dissolved Organic Carbon in the Hubbard Brook Valley. Ecological Monographs, 1988, 58, 177-195.	5.4	595
8	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
9	An integrated conceptual framework for longâ€ŧerm social–ecological research. Frontiers in Ecology and the Environment, 2011, 9, 351-357.	4.0	462
10	Scaling the gas transfer velocity and hydraulic geometry in streams and small rivers. Limnology & Oceanography Fluids & Environments, 2012, 2, 41-53.	1.7	444
11	Soil C:N ratio as a predictor of annual riverine DOC flux at local and global scales. Global Biogeochemical Cycles, 2000, 14, 127-138.	4.9	411
12	â€~Acid rain', dissolved aluminum and chemical weathering at the Hubbard Brook Experimental Forest, New Hampshire. Geochimica Et Cosmochimica Acta, 1981, 45, 1421-1437.	3.9	392
13	Spatial and temporal variations in DOM composition in ecosystems: The importance of longâ€term monitoring of optical properties. Journal of Geophysical Research, 2008, 113, .	3.3	388
14	Ecosystem response to 15 years of chronic nitrogen additions at the Harvard Forest LTER, Massachusetts, USA. Forest Ecology and Management, 2004, 196, 7-28.	3.2	387
15	Inter-biome comparison of factors controlling stream metabolism. Freshwater Biology, 2001, 46, 1503-1517.	2.4	360
16	The globalization of N deposition: ecosystem consequences in tropical environments. Biogeochemistry, 1999, 46, 67-83.	3.5	350
17	Vertical transport of dissolved organic C and N under long-term N amendments in pine and hardwood forests. Biogeochemistry, 1996, 35, 471-505.	3 . 5	325
18	PODZOLIZATION. Soil Science, 1984, 137, 23-32.	0.9	320

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19	Chronic nitrogen additions suppress decomposition and sequester soil carbon in temperate forests. Biogeochemistry, 2014, 121, 305-316.	3.5	302
20	Long-Term Nitrogen Additions and Nitrogen Saturation in Two Temperate Forests. Ecosystems, 2000, 3, 238-253.	3.4	301
21	Title is missing!. Biogeochemistry, 2002, 57, 99-136.	3. 5	293
22	Export of carbon, nitrogen, and major ions from three tropical montane watersheds. Limnology and Oceanography, 1994, 39, 111-125.	3.1	287
23	Macrosystems ecology: understanding ecological patterns and processes at continental scales. Frontiers in Ecology and the Environment, 2014, 12, 5-14.	4.0	285
24	Interâ€regional comparison of landâ€use effects on stream metabolism. Freshwater Biology, 2010, 55, 1874-1890.	2.4	267
25	Global abundance and size distribution of streams and rivers. Inland Waters, 2012, 2, 229-236.	2.2	257
26	The metabolic regimes of flowing waters. Limnology and Oceanography, 2018, 63, S99.	3.1	247
27	Factors affecting ammonium uptake in streams - an inter-biome perspective. Freshwater Biology, 2003, 48, 1329-1352.	2.4	233
28	N uptake as a function of concentration in streams. Journal of the North American Benthological Society, 2002, 21, 206-220.	3.1	222
29	Nitrogen stable isotopic composition of leaves and soil: Tropical versus temperate forests. Biogeochemistry, 1999, 46, 45-65.	3 . 5	207
30	Dissolved organic matter in soilsâ€"future directions and unanswered questions. Geoderma, 2003, 113, 179-186.	5.1	203
31	Dissolved organic nitrogen budgets for upland, forested ecosystems in New England. Biogeochemistry, 2000, 49, 123-142.	3.5	200
32	A Cross-System Comparison of Bacterial and Fungal Biomass in Detritus Pools of Headwater Streams. Microbial Ecology, 2002, 43, 55-66.	2.8	193
33	The importance of nutrient pulses in tropical forests. Trends in Ecology and Evolution, 1994, 9, 384-387.	8.7	192
34	Genesis, goals and achievements of Long-Term Ecological Research at the global scale: A critical review of ILTER and future directions. Science of the Total Environment, 2018, 626, 1439-1462.	8.0	191
35	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
36	The Long-term Effects of Disturbance on Organic and Inorganic Nitrogen Export in the White Mountains, New Hampshire. Ecosystems, 2000, 3, 433-450.	3.4	185

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37	A comparison of methods to determine the biodegradable dissolved organic carbon from different terrestrial sources. Soil Biology and Biochemistry, 2006, 38, 1933-1942.	8.8	184
38	Nitrate removal in stream ecosystems measured by 15N addition experiments: Denitrification. Limnology and Oceanography, 2009, 54, 666-680.	3.1	181
39	Novel ecosystems in the Anthropocene: a revision of the novel ecosystem concept for pragmatic applications. Ecology and Society, 2014, 19, .	2.3	180
40	Cloudwater chemistry from ten sites in North America. Environmental Science &	10.0	179
41	Elemental Dynamics in Streams. Journal of the North American Benthological Society, 1988, 7, 410-432.	3.1	178
42	Can't See the Forest for the Stream? In-stream Processing and Terrestrial Nitrogen Exports. BioScience, 2005, 55, 219.	4.9	178
43	Early stage litter decomposition across biomes. Science of the Total Environment, 2018, 628-629, 1369-1394.	8.0	177
44	FRESHWATER SHRIMP EFFECTS ON DETRITAL PROCESSING AND NUTRIENTS IN A TROPICAL HEADWATER STREAM. Ecology, 2001, 82, 775-783.	3.2	175
45	Increased Dissolved Organic Carbon (DOC) in Central European Streams is Driven by Reductions in Ionic Strength Rather than Climate Change or Decreasing Acidity. Environmental Science & Eamp; Technology, 2009, 43, 4320-4326.	10.0	168
46	Nitrate removal in stream ecosystems measured by 15N addition experiments: Total uptake. Limnology and Oceanography, 2009, 54, 653-665.	3.1	165
47	Autumnal Processing of Dissolved Organic Matter in a Small Woodland Stream Ecosystem. Ecology, 1976, 57, 561-569.	3.2	160
48	Disturbance and long-term patterns of rainfall and throughfall nutrient fluxes in a subtropical wet forest in Puerto Rico. Journal of Hydrology, 2007, 333, 472-485.	5.4	146
49	Effects of nitrogen additions on above- and belowground carbon dynamics in two tropical forests. Biogeochemistry, 2011, 104, 203-225.	3.5	145
50	The effect of permafrost on stream biogeochemistry: A case study of two streams in the Alaskan (U.S.A.) taiga. Biogeochemistry, 1999, 47, 239-267.	3.5	144
51	Nitrogen yields from undisturbed watersheds in the Americas. Biogeochemistry, 1999, 46, 149-162.	3.5	143
52	The next generation of site-based long-term ecological monitoring: Linking essential biodiversity variables and ecosystem integrity. Science of the Total Environment, 2018, 613-614, 1376-1384.	8.0	143
53	The globalization of N deposition: ecosystem consequences in tropical environments. Biogeochemistry, 1999, 46, 67-83.	3.5	134
54	Merging aquatic and terrestrial perspectives of nutrient biogeochemistry. Oecologia, 2003, 137, 485-501.	2.0	134

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55	Twelve testable hypotheses on the geobiology of weathering. Geobiology, 2011, 9, 140-165.	2.4	133
56	Riparian nitrogen dynamics in two geomorphologically distinct tropical rain forest watersheds: subsurface solute patterns. Biogeochemistry, 1992, 18, 53-75.	3.5	132
57	Biological Nitrogen Fixation in Two Tropical Forests: Ecosystem-Level Patterns and Effects of Nitrogen Fertilization. Ecosystems, 2009, 12, 1299-1315.	3.4	131
58	Biodegradable dissolved organic carbon in forest soil solution and effects of chronic nitrogen deposition. Soil Biology and Biochemistry, 2000, 32, 1743-1751.	8.8	130
59	The response of heterotrophic activity and carbon cycling to nitrogen additions and warming in two tropical soils. Global Change Biology, 2010, 16, 2555-2572.	9.5	130
60	Effects of chronic nitrogen amendment on dissolved organic matter and inorganic nitrogen in soil solution. Forest Ecology and Management, 2004, 196, 29-41.	3.2	125
61	Tracking evolution of urban biogeochemical cycles: past, present, and future. Biogeochemistry, 2014, 121, 1-21.	3.5	122
62	Effects of nutrient availability and other elevational changes on bromeliad populations and their invertebrate communities in a humid tropical forest in Puerto Rico. Journal of Tropical Ecology, 2000, 16, 167-188.	1.1	120
63	Influence of sea salt aerosols and long range transport on precipitation chemistry at El Verde, Puerto Rico. Atmospheric Environment Part A General Topics, 1990, 24, 2813-2821.	1.3	113
64	Internal nutrient fluxes in a Puerto Rican rain forest. Journal of Tropical Ecology, 1998, 14, 521-536.	1.1	109
65	Carbon and nitrogen stoichiometry and nitrogen cycling rates in streams. Oecologia, 2004, 140, 458-467.	2.0	108
66	When Wet Gets Wetter: Decoupling of Moisture, Redox Biogeochemistry, and Greenhouse Gas Fluxes in a Humid Tropical Forest Soil. Ecosystems, 2013, 16, 576-589.	3.4	108
67	New perspectives in ecotoxicology. Environmental Management, 1984, 8, 375-442.	2.7	104
68	Title is missing!. Water, Air, and Soil Pollution, 1998, 105, 175-182.	2.4	104
69	Thinking outside the channel: modeling nitrogen cycling in networked river ecosystems. Frontiers in Ecology and the Environment, 2011, 9, 229-238.	4.0	104
70	Indirect Upstream Effects Of Dams: Consequences Of Migratory Consumer Extirpation In Puerto Rico. , 2006, 16, 339-352.		102
71	Salinization of urbanizing New Hampshire streams and groundwater: effects of road salt and hydrologic variability. Journal of the North American Benthological Society, 2009, 28, 929-940.	3.1	102
72	LAGOS-NE: a multi-scaled geospatial and temporal database of lake ecological context and water quality for thousands of US lakes. GigaScience, 2017, 6, 1-22.	6.4	102

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73	Long-term influence of deforestation on tree species composition and litter dynamics of a tropical rain forest in Puerto Rico. Forest Ecology and Management, 1995, 78, 147-157.	3.2	99
74	Continental-scale decrease in net primary productivity in streams due to climate warming. Nature Geoscience, 2018, 11, 415-420.	12.9	99
75	Seasonal variation of tropical precipitation chemistry: La Selva, Costa Rica. Atmospheric Environment, 1997, 31, 3903-3910.	4.1	97
76	Decadal Trends Reveal Recent Acceleration in the Rate of Recovery from Acidification in the Northeastern U.S Environmental Science & Environmental S	10.0	93
77	Designing a network of critical zone observatories to explore the living skin of the terrestrial Earth. Earth Surface Dynamics, 2017, 5, 841-860.	2.4	92
78	Does Anthropogenic Nitrogen Enrichment Increase Organic Nitrogen Concentrations in Runoff from Forested and Human-dominated Watersheds?. Ecosystems, 2006, 9, 852-864.	3.4	90
79	Long-term Decreases in Stream Nitrate: Successional Causes Unlikely; Possible Links to DOC?. Ecosystems, 2005, 8, 334-337.	3.4	89
80	Surprises and Insights from Long-Term Aquatic Data Sets and Experiments. BioScience, 2012, 62, 709-721.	4.9	89
81	LINKING SPECIES AND ECOSYSTEMS: DIFFERENT BIOTIC ASSEMBLAGES CAUSE INTERSTREAM DIFFERENCES IN ORGANIC MATTER. Ecology, 1999, 80, 1860-1872.	3.2	85
82	Nitrogen and phosphorus budgets for a tropical watershed impacted by agricultural land use: Guayas, Ecuador. Biogeochemistry, 2006, 79, 135-161.	3 . 5	84
83	Stream geochemistry, chemical weathering and CO2 consumption potential of andesitic terrains, Dominica, Lesser Antilles. Geochimica Et Cosmochimica Acta, 2010, 74, 85-103.	3.9	84
84	A new framework for selecting environmental surrogates. Science of the Total Environment, 2015, 538, 1029-1038.	8.0	84
85	Moisture and substrate availability constrain soil trace gas fluxes in an eastern Amazonian regrowth forest. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	4.9	83
86	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
87	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
88	Two roles for ecological surrogacy: Indicator surrogates and management surrogates. Ecological Indicators, 2016, 63, 121-125.	6.3	79
89	Sources and the flux pattern of dissolved carbon in rivers of the Yenisey basin draining the Central Siberian Plateau. Environmental Research Letters, 2011, 6, 045212.	5.2	77
90	Global carbon dioxide efflux from rivers enhanced by high nocturnal emissions. Nature Geoscience, 2021, 14, 289-294.	12.9	76

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91	Reducing bias and quantifying uncertainty in watershed flux estimates: the R package loadflex. Ecosphere, 2015, 6, 1-25.	2.2	75
92	Chemical constituents in clouds and rainwater in the Puerto Rican rainforest: Potential sources and seasonal drivers. Atmospheric Environment, 2013, 68, 208-220.	4.1	73
93	Solute deposition from cloud water to the canopy of a puerto rican montane forest. Atmospheric Environment, 1994, 28, 1773-1780.	4.1	72
94	A Highâ€Temperature Catalytic Oxidation Technique for Determining Total Dissolved Nitrogen. Soil Science Society of America Journal, 1996, 60, 1050-1055.	2.2	72
95	Predator–prey interactions in river networks: comparing shrimp spatial refugia in two drainage basins. Freshwater Biology, 2009, 54, 450-465.	2.4	72
96	Urban Evolution: The Role of Water. Water (Switzerland), 2015, 7, 4063-4087.	2.7	72
97	Foliar free polyamine and inorganic ion content in relation to soil and soil solution chemistry in two fertilized forest stands at the Harvard Forest, Massachusetts. Plant and Soil, 2000, 222, 119-137.	3.7	67
98	Summary of Ecosystem-Level Effects of Caribbean Hurricanes. Biotropica, 1991, 23, 373.	1.6	66
99	Characterizing nitrogen dynamics, retention and transport in a tropical rainforest stream using an in situ 15 N addition. Freshwater Biology, 2002, 47, 143-160.	2.4	66
100	Longâ€ŧerm patterns and shortâ€ŧerm dynamics of stream solutes and suspended sediment in a rapidly weathering tropical watershed. Water Resources Research, 2011, 47, .	4.2	66
101	Nitrogen transformations in a small mountain stream. Hydrobiologia, 1985, 124, 129-139.	2.0	64
102	Nitrogen yields from undisturbed watersheds in the Americas. Biogeochemistry, 1999, 46, 149-162.	3.5	64
103	Effects of hurricane disturbance on stream water concentrations and fluxes in eight tropical forest watersheds of the Luquillo Experimental Forest, Puerto Rico. Journal of Tropical Ecology, 2000, 16, 189-207.	1.1	63
104	Consequence of altered nitrogen cycles in the coupled human and ecological system under changing climate: The need for long-term and site-based research. Ambio, 2015, 44, 178-193.	5.5	63
105	Sources and Molecular Weight of "Dissolved" Organic Carbon in an Oligotrophic Lake. Oikos, 1984, 42, 1.	2.7	62
106	Deconstructing the Effects of Flow on DOC, Nitrate, and Major Ion Interactions Using a Highâ€Frequency Aquatic Sensor Network. Water Resources Research, 2017, 53, 10655-10673.	4.2	62
107	Light and flow regimes regulate the metabolism of rivers. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119 , .	7.1	62
108	Riparian nitrogen dynamics in two geomorphologically distinct tropical rain forest watersheds: nitrous oxide fluxes. Biogeochemistry, 1992, 18, 77-99.	3.5	61

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109	Long-Term Trends in Stream Nitrate Concentrations and Losses Across Watersheds Undergoing Recovery from Acidification in the Czech Republic. Ecosystems, 2008, 11, 410-425.	3.4	61
110	Seasonal observations of surface waters in two Gulf of Maine estuary-plume systems: Relationships between watershed attributes, optical measurements and surface pCO2. Estuarine, Coastal and Shelf Science, 2008, 77, 245-252.	2.1	61
111	Partitioning assimilatory nitrogen uptake in streams: an analysis of stable isotope tracer additions across continents. Ecological Monographs, 2018, 88, 120-138.	5.4	60
112	Effects of Hurricane Disturbance on Groundwater Chemistry and Riparian Function in a Tropical Rain Forest. Biotropica, 1996, 28, 577.	1.6	59
113	Cross-stream comparison of substrate-specific denitrification potential. Biogeochemistry, 2011, 104, 381-392.	3.5	59
114	The origin, composition and rates of organic nitrogen deposition: A missing piece of the nitrogen cycle?., 2002,, 99-136.		59
115	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
116	Recovery from acidification alters concentrations and fluxes of solutes from Czech catchments. Biogeochemistry, 2017, 132, 251-272.	3.5	57
117	Greenhouse gas flux from headwater streams in New Hampshire, USA: Patterns and drivers. Limnology and Oceanography, 2016, 61, S165.	3.1	56
118	Critical zone structure controls concentrationâ€discharge relationships and solute generation in forested tropical montane watersheds. Water Resources Research, 2017, 53, 6279-6295.	4.2	56
119	Dissolved Organic Matter: Linking Soils and Aquatic Systems. Vadose Zone Journal, 2014, 13, 1-4.	2.2	55
120	C and N dynamics in the riparian and hyporheic zones of a tropical stream, Luquillo Mountains, Puerto Rico. Journal of the North American Benthological Society, 2000, 19, 199-214.	3.1	54
121	Trends in stream nitrogen concentrations for forested reference catchments across the USA. Environmental Research Letters, 2013, 8, 014039.	5.2	54
122	The globalization of N deposition: ecosystem consequences in tropical environments., 1999,, 67-83.		52
123	Soil microbial biomass and activity in tropical riparian forests. Soil Biology and Biochemistry, 2001, 33, 1339-1348.	8.8	50
124	Spectroscopic characterization of hot-water extractable organic matter from soils under four different vegetation types along an elevation gradient in the Wuyi Mountains. Geoderma, 2010, 159, 139-146.	5.1	49
125	Concentrationâ€Discharge Relations in the Critical Zone: Implications for Resolving Critical Zone Structure, Function, and Evolution. Water Resources Research, 2017, 53, 8654-8659.	4.2	48
126	Biotic and abiotic controls on the ecosystem significance of consumer excretion in two contrasting tropical streams. Freshwater Biology, 2010, 55, 2047-2061.	2.4	46

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127	Quantification of Biodegradable Dissolved Organic Carbon in Soil Solution with Flow-Through Bioreactors. Soil Science Society of America Journal, 1998, 62, 1556-1564.	2.2	45
128	Remote sensing of foliar nitrogen in cultivated grasslands of human dominated landscapes. Remote Sensing of Environment, 2015, 167, 88-97.	11.0	45
129	An Evaluation of Nitrate, fDOM, and Turbidity Sensors in New Hampshire Streams. Water Resources Research, 2018, 54, 2466-2479.	4.2	45
130	You are not always what we think you eat: selective assimilation across multiple wholeâ€stream isotopic tracer studies. Ecology, 2014, 95, 2757-2767.	3.2	44
131	Export of Nutrients and Major Ions from Caribbean Catchments. Journal of the North American Benthological Society, 1995, 14, 12-20.	3.1	43
132	Extreme weather years drive episodic changes in lake chemistry: implications for recovery from sulfate deposition and long-term trends in dissolved organic carbon. Biogeochemistry, 2016, 127, 353-365.	3.5	43
133	Source―and substrateâ€specific export of dissolved organic matter from permafrostâ€dominated forested watershed in central Siberia. Global Biogeochemical Cycles, 2007, 21, .	4.9	42
134	DOC:NO ₃ ^{â^'} ratios and NO ₃ ^{â^'} uptake in forested headwater streams. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 205-217.	3.0	42
135	Mass mortality of a dominant invasive species in response to an extreme climate event: Implications for ecosystem function. Limnology and Oceanography, 2017, 62, 177-188.	3.1	42
136	Groundwater–surface water interactions, nutrient fluxes and ecological response in river corridors: Translating science into effective environmental management. Hydrological Processes, 2008, 22, 151-157.	2.6	41
137	Nitrogen additions mobilize soil base cations in two tropical forests. Biogeochemistry, 2016, 128, 67-88.	3.5	41
138	Wildfires lead to decreased carbon and increased nitrogen concentrations in upland arctic streams. Scientific Reports, 2020, 10, 8722.	3.3	41
139	Simplified Version of the Ampoule–Persulfate Method for Determination of Dissolved Organic Carbon. Canadian Journal of Fisheries and Aquatic Sciences, 1987, 44, 214-218.	1.4	40
140	A nitrogen budget for late-successional hillslope tabonuco forest, Puerto Rico. Biogeochemistry, 1999, 46, 85-108.	3.5	40
141	Climatic factors influencing fluxes of dissolved organic carbon from the forest floor in a continuous-permafrost Siberian watershed. Canadian Journal of Forest Research, 2005, 35, 2130-2140.	1.7	40
142	Urban influences on the nitrogen cycle in Puerto Rico. Biogeochemistry, 2006, 79, 109-133.	3.5	37
143	Spatial and temporal variation of dissolved organic carbon export from gauged and ungauged watersheds of Dee Valley, Scotland: Effect of land cover and C:N. Water Resources Research, 2007, 43,	4.2	37
144	Twenty years apart: Comparisons of DOM uptake during leaf leachate releases to Hubbard Brook Valley streams in 1979 versus 2000. Journal of Geophysical Research, 2008, 113, .	3.3	37

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145	Homogenization of dissolved organic matter within a river network occurs in the smallest headwaters. Biogeochemistry, 2019, 143, 85-104.	3.5	37
146	Hurricanes, people, and riparian zones: controls on nutrient losses from forested Caribbean watersheds. Forest Ecology and Management, 2001, 154, 443-451.	3.2	36
147	Microbial immobilization and mineralization of dissolved organic nitrogen from forest floors. Soil Biology and Biochemistry, 2011, 43, 1742-1745.	8.8	35
148	Acidification and Climate Linkages to Increased Dissolved Organic Carbon in Highâ€Elevation Lakes. Water Resources Research, 2018, 54, 5376-5393.	4.2	35
149	Experimental nitrogen and phosphorus enrichment stimulates multiple trophic levels of algal and detritalâ€based food webs: a global metaâ€analysis from streams and rivers. Biological Reviews, 2021, 96, 692-715.	10.4	35
150	Factors Limiting Primary Productivity in Lake Ontario Tributaries Receiving Salmon Migrations. Canadian Journal of Fisheries and Aquatic Sciences, 1992, 49, 2377-2385.	1.4	34
151	Dissolved Organic Carbon and Nitrate Concentrationâ€Discharge Behavior Across Scales: Land Use, Excursions, and Misclassification. Water Resources Research, 2020, 56, e2019WR027028.	4.2	34
152	Direct response of dissolved organic nitrogen to nitrate availability in headwater streams. Biogeochemistry, 2015, 126, 1-10.	3.5	33
153	A Research Framework to Integrate Cross-Ecosystem Responses to Tropical Cyclones. BioScience, 2020, 70, 477-489.	4.9	33
154	Interactions between lithology and biology drive the long-term response of stream chemistry to major hurricanes in a tropical landscape. Biogeochemistry, 2013, 116, 175-186.	3.5	32
155	Chemistry of the heavily urbanized Bagmati River system in Kathmandu Valley, Nepal: export of organic matter, nutrients, major ions, silica, and metals. Environmental Earth Sciences, 2014, 71, 911-922.	2.7	32
156	Leaf-litter leachate is distinct in optical properties and bioavailability to stream heterotrophs. Freshwater Science, 2015, 34, 857-866.	1.8	31
157	Title is missing!. Biogeochemistry, 2001, 56, 265-286.	3.5	30
158	Nutrient uptake along a fire gradient in boreal streams of Central Siberia. Freshwater Science, 2015, 34, 1443-1456.	1.8	30
159	Nitrate uptake across biomes and the influence of elemental stoichiometry: A new look at LINX II. Global Biogeochemical Cycles, 2016, 30, 1183-1191.	4.9	30
160	Hysteretic Response of Solutes and Turbidity at the Event Scale Across Forested Tropical Montane Watersheds. Frontiers in Earth Science, 2019, 7, .	1.8	30
161	Controls on major solutes within the drainage network of a rapidly weathering tropical watershed. Water Resources Research, 2007, 43, .	4.2	29
162	Modelling DOC export from watersheds in Scotland using neural networks. Computers and Geosciences, 2007, 33, 423-436.	4.2	29

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163	Linking soils and streams: Response of soil solution chemistry to simulated hurricane disturbance mirrors stream chemistry following a severe hurricane. Forest Ecology and Management, 2014, 332, 56-63.	3.2	29
164	Total carbon analysis may overestimate organic carbon content of fresh waters in the presence of high dissolved inorganic carbon. Limnology and Oceanography: Methods, 2010, 8, 196-201.	2.0	28
165	Long-term trends of changes in pine and oak foliar nitrogen metabolism in response to chronic nitrogen amendments at Harvard Forest, MA. Tree Physiology, 2015, 35, 894-909.	3.1	28
166	Nitrogen yields from undisturbed watersheds in the Americas. , 1999, , 149-162.		28
167	Using Inâ€Situ Optical Sensors to Understand the Biogeochemistry of Dissolved Organic Matter Across a Stream Network. Water Resources Research, 2018, 54, 2949-2958.	4.2	27
168	Distinctive Patterns and Controls of Nitrous Oxide Concentrations and Fluxes from Urban Inland Waters. Environmental Science &	10.0	26
169	A general pattern of trade-offs between ecosystem resistance and resilience to tropical cyclones. Science Advances, 2022, 8, eabl9155.	10.3	26
170	Short-Term Disappearance of Foliar Litter in Three Species Before and After a Hurricane 1. Biotropica, 1999, 31, 382-393.	1.6	25
171	Permafrost and fire as regulators of stream chemistry in basins of the Central Siberian Plateau. Biogeochemistry, 2013, 116, 55-68.	3.5	25
172	Tropical river suspended sediment and solute dynamics in storms during an extreme drought. Water Resources Research, 2017, 53, 3695-3712.	4.2	25
173	Nitrogen removal rates in a frigid high-altitude river estimated by measuring dissolved N2 and N2O. Science of the Total Environment, 2018, 645, 318-328.	8.0	25
174	NEON and STREON: opportunities and challenges for the aquatic sciences. Freshwater Science, 2015, 34, 386-391.	1.8	24
175	Qualitative differences in headwater stream dissolved organic matter and riparian water-extractable soil organic matter under four different vegetation types along an altitudinal gradient in the Wuyi Mountains of China. Applied Geochemistry, 2015, 52, 67-75.	3.0	24
176	Ideas and perspectives: Strengthening the biogeosciences in environmental research networks. Biogeosciences, 2018, 15, 4815-4832.	3.3	24
177	Divergent Controls on Stream Greenhouse Gas Concentrations Across a Land-Use Gradient. Ecosystems, 2021, 24, 1299-1316.	3.4	24
178	Geographic and Ecological Setting of the Luquillo Mountains. , 2012, , 72-163.		24
179	Influence of land use changes on water chemistry in streams in the State of São Paulo, southeast Brazil. Anais Da Academia Brasileira De Ciencias, 2012, 84, 919-930.	0.8	23
180	Effects of Sewage Effluents on Water Quality in Tropical Streams. Journal of Environmental Quality, 2014, 43, 2053-2063.	2.0	23

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181	Incorporating urban infrastructure into biogeochemical assessment of urban tropical streams in Puerto Rico. Biogeochemistry, 2014, 121, 271-286.	3.5	23
182	Denitrification and total nitrate uptake in streams of a tropical landscape. Ecological Applications, 2010, 20, 2104-2115.	3.8	22
183	Permafrost Regime Affects the Nutritional Status and Productivity of Larches in Central Siberia. Forests, 2018, 9, 314.	2.1	22
184	Nutrient export and elemental stoichiometry in an urban tropical river. Ecological Applications, 2019, 29, e01839.	3.8	22
185	Predicting highâ€frequency variation in stream solute concentrations with water quality sensors and machine learning. Hydrological Processes, 2021, 35, .	2.6	22
186	Gradients of Anthropogenic Nutrient Enrichment Alter N Composition and DOM Stoichiometry in Freshwater Ecosystems. Global Biogeochemical Cycles, 2021, 35, e2021GB006953.	4.9	22
187	Shifting stoichiometry: Longâ€ŧerm trends in streamâ€dissolved organic matter reveal altered C:N ratios due to history of atmospheric acid deposition. Global Change Biology, 2022, 28, 98-114.	9.5	22
188	Organic Matter Dynamics in Bear Brook, Hubbard Brook Experimental Forest, New Hampshire, USA. Journal of the North American Benthological Society, 1997, 16, 43-46.	3.1	21
189	Quantifying the production of dissolved organic nitrogen in headwater streams using ¹⁵ N tracer additions. Limnology and Oceanography, 2013, 58, 1271-1285.	3.1	21
190	Variation of organic matter quantity and quality in streams at Critical Zone Observatory watersheds. Water Resources Research, 2016, 52, 8202-8216.	4.2	21
191	Connecting tropical river DOM and POM to the landscape with lignin. Geochimica Et Cosmochimica Acta, 2017, 219, 143-159.	3.9	21
192	Fire severity, time since fire, and site-level characteristics influence streamwater chemistry at baseflow conditions in catchments of the Sierra Nevada, California, USA. Fire Ecology, 2019, 15, .	3.0	21
193	Analysis of Nitrogen Dynamics in the Lye Brook Wilderness Area, Vermont, USA. Water, Air, and Soil Pollution, 2000, 122, 63-75.	2.4	20
194	Variation in Detrital Resource Stoichiometry Signals Differential Carbon to Nutrient Limitation for Stream Consumers Across Biomes. Ecosystems, 2018, 21, 1676-1691.	3.4	19
195	Dissolved Organic Carbon Retention in Soils. Soil Science Society of America Journal, 2002, 66, 563-568.	2.2	18
196	Do small-scale exclosure/enclosure experiments predict the effects of large-scale extirpation of freshwater migratory fauna?. Oecologia, 2006, 149, 709-717.	2.0	18
197	Evolution of Chemistry along the Bagmati Drainage Network in Kathmandu Valley. Water, Air, and Soil Pollution, 2007, 185, 165-176.	2.4	18
198	Limited effects of suburbanization on the genetic structure of an abundant vernal pool-breeding amphibian. Conservation Genetics, 2013, 14, 1083-1097.	1.5	18

#	Article	IF	Citations
199	Effects of headwater wetlands on dissolved nitrogen and dissolved organic carbon concentrations in a suburban New Hampshire watershed. Freshwater Science, 2015, 34, 456-471.	1.8	18
200	Multiyear Trends in Solute Concentrations and Fluxes From a Suburban Watershed: Evaluating Effects of 100â€Year Flood Events. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 3072-3087.	3.0	18
201	When the rainforest dries: Drought effects on a montane tropical stream ecosystem in Puerto Rico. Freshwater Science, 2020, 39, 197-212.	1.8	18
202	Impact of Long-Range Transported African Dust on Cloud Water Chemistry at a Tropical Montane Cloud Forest in Northeastern Puerto Rico. Aerosol and Air Quality Research, 2016, 16, 653-664.	2.1	17
203	African dust deposition in Puerto Rico: Analysis of a 20-year rainfall chemistry record and comparison with models. Atmospheric Environment, 2019, 216, 116907.	4.1	17
204	Land Use Overrides Stream Order and Season in Driving Dissolved Organic Matter Dynamics Throughout the Year in a River Network. Environmental Science & Environmental Science & 2022, 56, 2009-2020.	10.0	17
205	Ecosystem metabolism and nutrient uptake in an urban, piped headwater stream. Biogeochemistry, 2014, 121, 167-187.	3.5	16
206	SIPCO2: A simple, inexpensive surface water pCO ₂ sensor. Limnology and Oceanography: Methods, 2017, 15, 291-301.	2.0	16
207	Give and Take: A Watershed Acid Rain Mitigation Experiment Increases Baseflow Nitrogen Retention but Increases Stormflow Nitrogen Export. Environmental Science & Export Science & 2018, 52, 13155-13165.	10.0	16
208	Baseflow physical characteristics differ at multiple spatial scales in stream networks across diverse biomes. Landscape Ecology, 2016, 31, 119-136.	4.2	15
209	Nitrification increases nitrogen export from a tropical river network. Freshwater Science, 2017, 36, 698-712.	1.8	15
210	Linking Foliar Chemistry to Forest Floor Solid and Solution Phase Organic C and N in Picea abies [L.] Karst Stands in Northern Bohemia. Plant and Soil, 2006, 283, 187-201.	3.7	14
211	The biogeochemical influences of NO ₃ ^{â^'} , dissolved O ₂ , and dissolved organic C on stream NO ₃ ^{â^'} uptake. Journal of the North American Benthological Society, 2009, 28, 894-907.	3.1	14
212	Dissolved Organic Carbon in Headwater Streams and Riparian Soil Organic Carbon along an Altitudinal Gradient in the Wuyi Mountains, China. PLoS ONE, 2013, 8, e78973.	2.5	14
213	Dissolved Organic Carbon Retention in Soils. Soil Science Society of America Journal, 2002, 66, 563.	2.2	14
214	Upstream Transport of Mirex by Migrating Salmonids. Canadian Journal of Fisheries and Aquatic Sciences, 1989, 46, 1484-1488.	1.4	13
215	Spectral analysis of coniferous foliage and possible links to soil chemistry: Are spectral chlorophyll indices related to forest floor dissolved organic C and N?. Science of the Total Environment, 2008, 404, 424-432.	8.0	13
216	Drivers of nitrogen transfer in stream food webs across continents. Ecology, 2017, 98, 3044-3055.	3.2	13

#	Article	IF	CITATIONS
217	Quantifying the frequency of synchronous carbon and nitrogen export to the river network. Biogeochemistry, 2021, 152, 1-12.	3.5	13
218	Landslides, hurricanes, and sediment sourcing impact basin-scale erosion estimates in Luquillo, Puerto Rico. Earth and Planetary Science Letters, 2021, 562, 116821.	4.4	13
219	Persistent effects of acidification on stream ecosystem structure and function. Freshwater Science, 2013, 32, 586-596.	1.8	12
220	Luquillo Experimental Forest: Catchment science in the montane tropics. Hydrological Processes, 2021, 35, e14146.	2.6	12
221	Mirex – Photomirex Relationships in Lake Ontario. Journal of Great Lakes Research, 1992, 18, 405-414.	1.9	11
222	A nitrogen budget for late-successional hillslope tabonuco forest, Puerto Rico. Biogeochemistry, 1999, 46, 85-108.	3 . 5	11
223	A case study characterizing animal fecal sources in surface water using a mitochondrial DNA marker. Environmental Monitoring and Assessment, 2017, 189, 406.	2.7	10
224	Watershed studies at the Hubbard Brook Experimental Forest: Building on a long legacy of research with new approaches and sources of data. Hydrological Processes, 2021, 35, .	2.6	10
225	The Lamprey River Hydrological Observatory: Suburbanization and changing seasonality. Hydrological Processes, 2021, 35, e14131.	2.6	10
226	Assessing the Ecological Significance of Throughfall in Forest Ecosystems. Ecological Studies, 2020, , 299-318.	1.2	10
227	Climate Variability Drives Watersheds Along a Transporterâ€Transformer Continuum. Geophysical Research Letters, 2021, 48, e2021GL094050.	4.0	10
228	Chemical characteristics of leachate from pulp and paper mill residuals used to reclaim a sandy soil. Water, Air, and Soil Pollution, 1996, 89, 167-187.	2.4	9
229	Effects of suburbanization on foodweb stoichiometry of detritus-based streams. Freshwater Science, 2012, 31, 1202-1213.	1.8	9
230	Chemistry of Urban, Suburban, and Rural Surface Waters. Agronomy, 0, , 297-339.	0.2	9
231	Limited uptake of nutrient input from sewage effluent in a tropical landscape. Freshwater Science, 2016, 35, 12-24.	1.8	9
232	Effects of plant species on stream bacterial communities via leachate from leaf litter. Hydrobiologia, 2018, 807, 131-144.	2.0	9
233	Trace metals in Northern New England streams: Evaluating the role of road salt across broad spatial scales with synoptic snapshots. PLoS ONE, 2019, 14, e0212011.	2.5	9
234	Effects of Chronic Nitrogen Amendments on Production of Dissolved Organic Carbon and Nitrogen in Forest Soils., 1998,, 175-182.		9

#	Article	IF	Citations
235	Extreme rainstorms drive exceptional organic carbon export from forested humid-tropical rivers in Puerto Rico. Nature Communications, 2022, 13, 2058.	12.8	9
236	The Dominant Role of the Water Column in Nitrogen Removal and N ₂ O Emissions in Large Rivers. Geophysical Research Letters, 2022, 49, .	4.0	9
237	Improving automated phosphorus measurements in freshwater: an analytical approach to eliminating silica interference. Limnology and Oceanography: Methods, 2014, 12, 223-231.	2.0	8
238	Nitrate decline unlikely to have triggered release of dissolved organic carbon and phosphate to streams. Global Change Biology, 2017, 23, 2535-2536.	9.5	8
239	Resolving a paradox—high mercury deposition, but low bioaccumulation in northeastern Puerto Rico. Ecotoxicology, 2020, 29, 1207-1220.	2.4	8
240	Highâ€frequency multiâ€solute calibration using an in situ <scp>UV</scp> â€"visible sensor. Hydrological Processes, 2021, 35, e14357.	2.6	8
241	Title is missing!. Biogeochemistry, 1999, 47, 237-265.	3.5	7
242	Chapter 11 Distribution and role of mat-forming saprobic basidiomycetes in a tropical forest. British Mycological Society Symposia Series, 2008, 28, 197-209.	0.5	7
243	Interbasin flow of geothermally modified ground water stabilizes stream exports of biologically important solutes against variation in precipitation. Freshwater Science, 2015, 34, 276-286.	1.8	7
244	Northeastern mountain ponds as sentinels of change: Current and emerging research and monitoring in the context of shifting chemistry and climate interactions. Atmospheric Environment, 2021, 264, 118694.	4.1	7
245	Nitrate uptake enhanced by availability of dissolved organic matter in tropical montane streams. Freshwater Science, 2021, 40, 65-76.	1.8	6
246	Ecological Paradigms for the Tropics. , 2012, , 3-41.		6
247	Secondary Minerals Drive Extreme Lithium Isotope Fractionation During Tropical Weathering. Journal of Geophysical Research F: Earth Surface, 2022, 127, .	2.8	6
248	DOM in the long arc of environmental science: looking back and thinking ahead. Biogeochemistry, 2023, 164, 15-27.	3.5	6
249	Patterns of Streamwater Acidity in Lye Brook Wilderness, Vermont, USA. Environmental Management, 2002, 30, 234-248.	2.7	5
250	Impacts of Hurricanes on Forest Hydrology and Biogeochemistry. Ecological Studies, 2011, , 643-657.	1.2	5
251	Identifying Controls on Nitrate Sources and Flowpaths in a Forested Catchment Using a Hydropedological Framework. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	3.0	5
252	Temporal changes in numbers of suspended bacteria in a small woodland stream. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 1984, 22, 1920-1925.	0.1	4

#	Article	IF	Citations
253	Export of dissolved carbon from watersheds of the Central Siberian Plateau. Doklady Earth Sciences, 2011, 441, 1568-1571.	0.7	4
254	Effects of Grazing Pattern on Ecosystem Respiration and Methane Flux in a Sown Pasture in Inner Mongolia, China. Atmosphere, 2019, 10, 5.	2.3	4
255	LINX I and II: Lessons Learned and Emerging Questions. Frontiers in Environmental Science, 2019, 7, .	3.3	4
256	Percentile-Range Indexed Mapping and Evaluation (PRIME): A new tool for long-term data discovery and application. Environmental Modelling and Software, 2020, 124, 104580.	4.5	4
257	Nitrogen and phosphorus budgets for a tropical watershed impacted by agricultural land use: Guayas, Ecuador., 2006,, 135-161.		4
258	A nitrogen budget for late-successional hillslope tabonuco forest, Puerto Rico., 1999,, 85-108.		4
259	The response of heterotrophic activity and carbon cycling to nitrogen additions and warming in two tropical soils. Global Change Biology, 2012, 18, 400-400.	9.5	3
260	Nutrient Export from Tropical Rain Forests. , 2002, , 149-163.		3
261	Lithological Control of Stream Chemistry in the Luquillo Mountains, Puerto Rico. Frontiers in Earth Science, 2022, 10, .	1.8	3
262	Nutrient and major element chemistry of Caribbean rain forest streams. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 1991, 24, 1720-1723.	0.1	2
263	A Comparison of Wet Deposition Collectors at a Coastal Rural Site. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	2
264	Calcium and magnesium biogeochemistry in spruce catchments underlain by felsic, mafic, and ultramafic rocks. E3S Web of Conferences, 2019, 98, 06007.	0.5	2
265	Hydrological Mapping in the Luquillo Experimental Forest: New Local Datum Improves Watershed Ecological Knowledge. Hydrology, 2021, 8, 54.	3.0	2
266	Linking soil phosphorus with forest litterfall resistance and resilience to cyclone disturbance: A pantropical metaâ€analysis. Global Change Biology, 2022, 28, 4633-4654.	9.5	2
267	Context dependence in a tropical forest: Repeated disturbance reduces soil nitrate response but increases phosphate. Ecosphere, 2022, 13, .	2.2	2
268	Understanding Dissolved Organic Matter Biogeochemistry Through In Situ Nutrient Manipulations in Stream Ecosystems. Journal of Visualized Experiments, 2016, , .	0.3	1
269	Urban influences on the nitrogen cycle in Puerto Rico. , 2006, , 109-133.		1
270	Stream Ecology. Ecology, 1983, 64, 967-968.	3.2	0

#	Article	IF	CITATIONS
271	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	O
272	Influence of watershed suburbanization on leaf litter decomposition and microbial activity. Hydrobiologia, 0 , 1 .	2.0	O