J Thad Scott

List of Publications by Year
in descending order

78 papers	3,614 citations	159585 30 h-index	144013 57 g-index
78 all docs	78 docs citations	78 times ranked	3886 citing authors

#	ARTICLE	IF	CITATIONS
1	It Takes Two to Tango: When and Where Dual Nutrient (N & P) Reductions Are Needed to Protect Lakes and Downstream Ecosystems. Environmental Science & Technology, 2016, 50, 10805-10813.	10.0	483
2	Mitigating cyanobacterial harmful algal blooms in aquatic ecosystems impacted by climate change and anthropogenic nutrients. Harmful Algae, 2016, 54, 213-222.	4.8	453
3	Phosphorus Mitigation to Control River Eutrophication: Murky Waters, Inconvenient Truths, and â€œPostnormalâ€•Science. Journal of Environmental Quality, 2013, 42, 295-304.	2.0	238
4	Throwing Fuel on the Fire: Synergistic Effects of Excessive Nitrogen Inputs and Global Warming on Harmful Algal Blooms. Environmental Science & Technology, 2010, 44, 7756-7758.	10.0	194
5	Nitrogen fixation may not balance the nitrogen pool in lakes over timescales relevant to eutrophication management. Limnology and Oceanography, 2010, 55, 1265-1270.	3.1	176
6	Denitrification, dissimilatory nitrate reduction to ammonium, and nitrogen fixation along a nitrate concentration gradient in a created freshwater wetland. Biogeochemistry, 2008, 87, 99-111.	3.5	167
7	Mitigating eutrophication and toxic cyanobacterial blooms in large lakes:ÂThe evolution of a dual nutrient (N and P) reduction paradigm. Hydrobiologia, 2020, 847, 4359-4375.	2.0	100
8	Within-River Phosphorus Retention: Accounting for a Missing Piece in the Watershed Phosphorus Puzzle. Environmental Science & Technology, 2012, 46, 13284-13292.	10.0	94
9	Does nutrient enrichment decouple algalâ€“bacterial production in periphyton?. Journal of the North American Benthological Society, 2008, 27, 332-344.	3.1	91
10	Variable Stoichiometry and Homeostatic Regulation of Bacterial Biomass Elemental Composition. Frontiers in Microbiology, 2012, 3, 42.	3.5	88
11	Freshwater Bacteria are Stoichiometrically Flexible with a Nutrient Composition Similar to Seston. Frontiers in Microbiology, 2010, 1, 132.	3.5	86
12	Particulate organic matter quality influences nitrate retention and denitrification in stream sediments: evidence from a carbon burial experiment. Biogeochemistry, 2014, 119, 387-402.	3.5	66
13	A Review of Stream Nutrient Criteria Development in the United States. Journal of Environmental Quality, 2013, 42, 1002-1014.	2.0	64
14	Stoichiometric imbalance in rates of nitrogen and phosphorus retention, storage, and recycling can perpetuate nitrogen deficiency in highlyâ€productive reservoirs. Limnology and Oceanography, 2014, 59, 2203-2216.	3.1	57
15	Nitrogen transformations differentially affect nutrientâ€limited primary production in lakes of varying trophic state. Limnology and Oceanography Letters, 2019, 4, 96-104.	3.9	51
16	Nitrogen fixation and phosphatase activity in periphyton growing on nutrient diffusing substrata: evidence for differential nutrient limitation in stream periphyton. Journal of the North American Benthological Society, 2009, 28, 57-68.	3.1	45
17	Partitioning wholeâ€lake denitrification using in situ dinitrogen gas accumulation and intact sediment core experiments. Limnology and Oceanography, 2012, 57, 925-935.	3.1	44
18	ARE WATERSHED AND LACUSTRINE CONTROLS ON PLANKTONIC N₂FIXATION HIERARCHICALLY STRUCTURED. , 2008, 18, 805-819.		43

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19	Biological Stoichiometry Regulates Toxin Production in Microcystis aeruginosa (UTEX 2385). Toxins, 2019, 11, 601.	3.4	43
20	Global scanning of cylindrospermopsin: Critical review and analysis of aquatic occurrence, bioaccumulation, toxicity and health hazards. Science of the Total Environment, 2020, 738, 139807.	8.0	43
21	The effect of periphyton stoichiometry and light on biological phosphorus immobilization and release in streams. Limnology, 2012, 13, 97-106.	1.5	42
22	Periphyton nutrient limitation and nitrogen fixation potential along a wetland nutrient-depletion gradient. Wetlands, 2005, 25, 439-448.	1.5	41
23	Light and dissolved phosphorus interactively affect microbial metabolism, stoichiometry and decomposition of leaf litter. Freshwater Biology, 2016, 61, 1006-1019.	2.4	41
24	Whatâ€™s More Important for Managing Phosphorus: Loads, Concentrations or Both?. Environmental Science & Technology, 2014, 48, 23-24.	10.0	40
25	Riverâ€“reservoir transition zones are nitrogen fixation hot spots regardless of ecosystem trophic state. Hydrobiologia, 2009, 625, 61-68.	2.0	39
26	N₂ fixation exceeds internal nitrogen loading as a phytoplankton nutrient source in perpetually nitrogen-limited reservoirs. Freshwater Science, 2013, 32, 849-861.	1.8	39
27	Nitrogen form, concentration, and micronutrient availability affect microcystin production in cyanobacterial blooms. Harmful Algae, 2021, 103, 102002.	4.8	35
28	Cyanobacteria in Freshwater Benthic Environments. , 2012, , 271-289.		34
29	A stream insect detritivore violates common assumptions of threshold elemental ratio bioenergetics models. Freshwater Science, 2015, 34, 508-518.	1.8	34
30	The role of N2 fixation in alleviating N limitation in wetland metaphyton: enzymatic, isotopic, and elemental evidence. Biogeochemistry, 2007, 84, 207-218.	3.5	33
31	Comment: An alternative interpretation of the relationship between TN:TP and microcystins in Canadian lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 1265-1268.	1.4	33
32	Change Point Analysis of Phosphorus Trends in the Illinois River (Oklahoma) Demonstrates the Effects of Watershed Management. Journal of Environmental Quality, 2011, 40, 1249-1256.	2.0	30
33	Contrasting Nutrient Mitigation and Denitrification Potential of Agricultural Drainage Environments with Different Emergent Aquatic Macrophytes. Journal of Environmental Quality, 2015, 44, 1304-1314.	2.0	30
34	Leaf-litter stoichiometry is affected by streamwater phosphorus concentrations and litter type. Freshwater Science, 2013, 32, 753-761.	1.8	28
35	Physical Factors Control Phytoplankton Production and Nitrogen Fixation in Eight Texas Reservoirs. Ecosystems, 2008, 11, 1181-1197.	3.4	27
36	Optical water quality and human perceptions: a synthesis. Wiley Interdisciplinary Reviews: Water, 2016, 3, 167-180.	6.5	27

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37	Denitrification potential of low-grade weirs and agricultural drainage ditch sediments in the Lower Mississippi Alluvial Valley. Ecological Engineering, 2014, 73, 168-175.	3.6	23
38	Dietary and taxonomic controls on incorporation of microbial carbon and phosphorus by detritivorous caddisflies. Oecologia, 2016, 180, 567-579.	2.0	23
39	A combined watershedâ€“water quality modeling analysis of the Lake Waco reservoir: I. Calibration and confirmation of predicted water quality. Lake and Reservoir Management, 2010, 26, 147-158.	1.3	22
40	Nitrogen fixation: A poorly understood process along the freshwaterâ€marine continuum. Limnology and Oceanography Letters, 2022, 7, 1-10.	3.9	22
41	Divergent responses of biomass and enzyme activities suggest differential nutrient limitation in stream periphyton. Freshwater Science, 2012, 31, 1096-1104.	1.8	19
42	Detrital nutrient content and leaf species differentially affect growth and nutritional regulation of detritivores. Oikos, 2018, 127, 1471-1481.	2.7	19
43	Response to Comment: Nitrogen fixation has not offset declines in the Lake 227 nitrogen pool and shows that nitrogen control deserves consideration in aquatic ecosystems. Limnology and Oceanography, 2011, 56, 1548-1550.	3.1	18
44	Sestonic Chlorophyll-a Shows Hierarchical Structure and Thresholds with Nutrients across the Red River Basin, USA. Journal of Environmental Quality, 2013, 42, 437-445.	2.0	16
45	Buried particulate organic carbon stimulates denitrification and nitrate retention in stream sediments at the groundwaterâ€“surface water interface. Freshwater Science, 2015, 34, 161-171.	1.8	16
46	Optical water quality and human perceptions of rivers: an ethnohydrology study. Ecosystem Health and Sustainability, 2016, 2, .	3.1	16
47	Diazotrophs modulate phycobiliproteins and nitrogen stoichiometry differently than other cyanobacteria in response to light and nitrogen availability. Limnology and Oceanography, 2021, 66, 2333-2345.	3.1	15
48	Seasonal Differences in Relationships between Nitrate Concentration and Denitrification Rates in Ditch Sediments Vegetated with Rice Cutgrass. Journal of Environmental Quality, 2017, 46, 1500-1509.	2.0	14
49	Predicting Nitrate Retention at the Groundwaterâ€Surface Water Interface in Sandplain Streams. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 2824-2838.	3.0	14
50	Allochthonous organic matter supplements and sediment transport in a polymictic reservoir determined using elemental and isotopic ratios. Biogeochemistry, 2009, 96, 87-100.	3.5	13
51	Dynamics of nitrogen-fixing cyanobacteria with heterocysts: a stoichiometric model. Marine and Freshwater Research, 2020, 71, 644.	1.3	13
52	Use of sediment elemental and isotopic compositions to record the eutrophication of a polymictic reservoir in central Texas, USA. Lakes and Reservoirs: Research and Management, 2010, 15, 25-39.	0.9	12
53	The influence of rainfall on taste and odor production in a south-central USA reservoir. Freshwater Science, 2014, 33, 755-764.	1.8	12
54	Interspecific homeostatic regulation and growth across aquatic invertebrate detritivores: a test of ecological stoichiometry theory. Oecologia, 2019, 190, 229-242.	2.0	12

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55	Biological stoichiometry and growth dynamics of a diazotrophic cyanobacteria in nitrogen sufficient and deficient conditions. Harmful Algae, 2021, 103, 102011.	4.8	12
56	Stoichiometric Ecotoxicology for a Multisubstance World. BioScience, 2021, 71, 132-147.	4.9	12
57	Stoichiometric imbalances complicate prediction of phytoplankton biomass in U.S. lakes: Implications for nutrient criteria. Limnology and Oceanography, 2021, 66, 2967-2978.	3.1	11
58	Competitive superiority of N-fixing cyanobacteria when fixed N is scarce: Reconsiderations based on a model with heterocyst differentiation. Ecological Modelling, 2022, 466, 109904.	2.5	11
59	Black disk visibility, turbidity, and total suspended solids in rivers: A comparative evaluation. Limnology and Oceanography: Methods, 2016, 14, 658-667.	2.0	10
60	Phytoplankton N₂-fixation efficiency and its effect on harmful algal blooms. Freshwater Science, 2018, 37, 264-275.	1.8	8
61	The effects of salinity and NÂ:ÂP on Nâ€rich toxins by both an Nâ€fixing and nonâ€Nâ€fixing cyanobacteria. Limnology and Oceanography Letters, 2023, 8, 162-172.	3.9	8
62	Carbon sink to source: longitudinal gradients of planktonic P:R ratios in subtropical reservoirs. Biogeochemistry, 2012, 107, 81-93.	3.5	7
63	Assessing trichloromethane formation and control in algal-stimulated waters amended with nitrogen and phosphorus. Environmental Sciences: Processes and Impacts, 2014, 16, 1290-1299.	3.5	7
64	Physicochemical Characterization of Sediment in Northwest Arkansas Streams. Journal of Environmental Protection, 2011, 02, 629-638.	0.7	7
65	Hot spots and hot moments of planktonic nitrogen fixation in a eutrophic southern reservoir. Lake and Reservoir Management, 2010, 26, 95-103.	1.3	6
66	Differential influences of (Â±) anatoxin-a on photolocomotor behavior and gene transcription in larval zebrafish and fathead minnows. Environmental Sciences Europe, 2021, 33, .	5.5	6
67	Phosphorus Uptake and Release from Submerged Sediments in a Simulated Stream Channel Inundated with a Poultry Litter Source. Water, Air, and Soil Pollution, 2013, 224, 1.	2.4	5
68	Implementing Effects-Based Water Quality Criteria for Eutrophication in Beaver Lake, Arkansas: Linking Standard Development and Assessment Methodology. Journal of Environmental Quality, 2015, 44, 1503-1512.	2.0	5
69	Risk Indicators for Identifying Critical Source Areas in Five Arkansas Watersheds. Transactions of the ASABE, 2018, 61, 1025-1032.	1.1	4
70	Highest primary production achieved at high nitrogen levels despite strong stoichiometric imbalances with phosphorus in hypereutrophic experimental systems. Limnology and Oceanography, 2021, 66, 4375-4390.	3.1	4
71	Comparing two periphyton collection methods commonly used for stream bioassessment and the development of numeric nutrient standards. Environmental Monitoring and Assessment, 2017, 189, 360.	2.7	3
72	Leaf-litter stoichiometry and microbial phosphatase activity, respiration, and decomposition as phosphorus enrichment endpoints: A laboratory experiment. Freshwater Science, 2020, 39, 665-679.	1.8	3

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73	The synergistic effect of elevated CO2 and phosphorus on reservoir eutrophication. Lake and Reservoir Management, 2016, 32, 373-385.	1.3	2
74	Stream algal biomass response to experimental phosphorus and nitrogen gradients: A case for dual nutrient management in agricultural watersheds. Journal of Environmental Quality, 2020, 49, 140-151.	2.0	2
75	Sediment phosphorus release sustains nuisance periphyton growth when nitrogen is not limiting. Journal of Limnology, 2020, 79, .	1.1	2
76	The microbial role in littoral zone biogeochemical processes: Why Wetzel was right. Verhandlungen Der Internationalen Vereinigung Fur Theoretische Und Angewandte Limnologie International Association of Theoretical and Applied Limnology, 2009, 30, 981-984.	0.1	1
77	Substituting values for censored data from Texas, USA, reservoirs inflated and obscured trends in analyses commonly used for water quality target development. Environmental Monitoring and Assessment, 2018, 190, 394.	2.7	0
78	Dynamic Phycobilin Pigment Variations in Diazotrophic and Non-diazotrophic Cyanobacteria Batch Cultures Under Different Initial Nitrogen Concentrations. Frontiers in Microbiology, 2022, 13, .	3.5	0