Michael J Vanni

List of Publications by Year
in descending order

108	11,066	38720 50	30058 103
papers	citations	h-index	g-index

108	108	108	9964
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Estimating pelagic primary production in lakes: Comparison of 14 C incubation and freeâ€water O 2 approaches. Limnology and Oceanography: Methods, 2022, 20, 34-45.	1.0	5
2	Detecting and modeling changes in a time series of proportions. Annals of Applied Statistics, 2022, 16, .	0.5	1
3	Temporal patterns in sediment, carbon, and nutrient burial in ponds associated with changing agricultural tillage. Biogeochemistry, 2022, 159, 87-102.	1.7	3
4	Spatial and Temporal Variability of Nutrient Dynamics and Ecosystem Metabolism in a Hyper-eutrophic Reservoir Differ Between a Wet and Dry Year. Ecosystems, 2021, 24, 68-88.	1.6	19
5	Patterns of CO2 concentration and inorganic carbon limitation of phytoplankton biomass in agriculturally eutrophic lakes. Water Research, 2021, 190, 116715.	5.3	23
6	Invasive mussels regulate nutrient cycling in the largest freshwater ecosystem on Earth. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	4
7	Nutrient excretion by fish supports a variable but significant proportion of lake primary productivity over 15 years. Ecology, 2021, 102, e03364.	1.5	8
8	Global data set of long-term summertime vertical temperature profiles in 153 lakes. Scientific Data, 2021, 8, 200.	2.4	7
9	Phytoplankton and cyanobacteria abundances in midâ€21st century lakes depend strongly on future land use and climate projections. Global Change Biology, 2021, 27, 6409-6422.	4.2	27
10	Temporal trends in methane emissions from a small eutrophic reservoir: the key role of a spring burst. Biogeosciences, 2021, 18, 5291-5311.	1.3	14
11	You Live in a Watershed! Informal Environmental Science Education with a State Park Exhibit. Applied Environmental Education and Communication, 2020, 19, 74-87.	0.6	1
12	Nitrate, ammonium, and phosphorus drive seasonal nutrient limitation of chlorophytes, cyanobacteria, and diatoms in a hyperâ€eutrophic reservoir. Limnology and Oceanography, 2020, 65, 962-978.	1.6	54
13	Precipitation, landscape properties and land use interactively affect water quality of tropical freshwaters. Science of the Total Environment, 2020, 716, 137044.	3.9	68
14	Stream Nitrogen and Phosphorus Loads Are Differentially Affected by Storm Events and the Difference May Be Exacerbated by Conservation Tillage. Environmental Science & Technology, 2019, 53, 5613-5621.	4.6	32
15	Degrees of freedom: Definitions and their minimum and most meaningful combination for the modelling of ecosystem dynamics with the help of physical principles. Ecological Modelling, 2019, 392, 226-235.	1.2	7
16	Assessing uncertainty in annual nitrogen, phosphorus, and suspended sediment load estimates in three agricultural streams using a 21-year dataset. Environmental Monitoring and Assessment, 2018, 190, 91.	1.3	12
17	Stream Nitrogen, Phosphorus, and Sediment Concentrations Show Contrasting Longâ€term Trends Associated with Agricultural Change. Journal of Environmental Quality, 2018, 47, 1513-1521.	1.0	20
18	The importance of nutrient supply by fish excretion and watershed streams to a eutrophic lake varies with temporal scale over 19Âyears. Biogeochemistry, 2018, 140, 233-253.	1.7	15

#	Article	IF	Citations
19	Additional empirical evidence on the intrinsic trend to stationarity in the long run and the nested relationship between abiotic, biotic and anthropogenic factors starting from the organic biophysics of ecosystems (OBEC). Ecological Modelling, 2018, 383, 23-30.	1.2	1
20	Microcystin concentrations can be predicted with phytoplankton biomass and watershed morphology. Inland Waters, 2018, 8, 273-283.	1.1	18
21	Increased light availability and nutrient cycling by fish provide resilience against reversing eutrophication in an agriculturally impacted reservoir. Limnology and Oceanography, 2018, 63, 2647-2660.	1.6	19
22	Exploring the analytical consequences of ecological subjects unwittingly neglected by the mainstream of evolutionary thought. Ecological Modelling, 2017, 355, 70-83.	1.2	5
23	Functional ecology of fish: current approaches and future challenges. Aquatic Sciences, 2017, 79, 783-801.	0.6	270
24	Consumerâ€driven nutrient dynamics in freshwater ecosystems: from individuals to ecosystems. Biological Reviews, 2017, 92, 2003-2023.	4.7	159
25	Assessment of ecosystem trophodynamic power: A model based on the power equation for an oscillating string. Ecological Modelling, 2017, 362, 80-86.	1.2	4
26	Thermostatistical distribution of a trophic energy proxy: Extension for modelling energy pyramids at the inter-taxocene scale and under non-stationary conditions. Ecological Modelling, 2017, 361, 113-121.	1.2	5
27	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.	3.3	102
28	Canopy cover and anurans: nutrients are the most important predictor of growth and development. Canadian Journal of Zoology, 2016, 94, 225-232.	0.4	14
29	Ontogenetic diet shifts produce tradeâ€offs in elemental imbalance in bluegill sunfish. Freshwater Biology, 2016, 61, 800-813.	1.2	9
30	Carnivore identity mediates the effects of light and nutrients on aquatic foodâ€chain efficiency. Freshwater Biology, 2016, 61, 1492-1508.	1.2	14
31	Predicting nutrient excretion of aquatic animals with metabolic ecology and ecological stoichiometry: a global synthesis. Ecology, 2016, 97, 3460-3471.	1.5	114
32	Response to comments on â€œUncertainty principle in niche assessment: A solution to the dilemma redundancy vs. competitive exclusion, and some analytical consequencesâ€• Ecological Modelling, 2016, 341, 1-4.	1.2	9
33	Light and nutrient supply mediate intraspecific variation in the nutrient stoichiometry of juvenile fish. Ecosphere, 2016, 7, e01452.	1.0	10
34	Quantifying pelagic phosphorus regeneration using three methods in lakes of varying productivity. Inland Waters, 2016, 6, 509-522.	1.1	6
35	Light and nutrients regulate energy transfer through benthic and pelagic food chains. Oikos, 2015, 124, 1648-1663.	1.2	22
36	Predicting eutrophication status in reservoirs at large spatial scales using landscape and morphometric variables. Inland Waters, 2015, 5, 203-214.	1.1	41

#	Article	IF	Citations
37	The fate of phosphorus in decomposing fish carcasses: a mesocosm experiment. Freshwater Biology, 2015, 60, 479-489.	1.2	17
38	Tubeâ€dwelling invertebrates: tiny ecosystem engineers have large effects in lake ecosystems. Ecological Monographs, 2015, 85, 333-351.	2.4	122
39	Ontogenetic variation in the body stoichiometry of two fish species. Oecologia, 2015, 179, 329-341.	0.9	31
40	Climate and land use interactively affect lake phytoplankton nutrient limitation status. Ecology, 2015, 96, 392-402.	1.5	75
41	Burial rates and stoichiometry of sedimentary carbon, nitrogen and phosphorus in <scp>M</scp>idwestern <scp>US</scp> reservoirs. Freshwater Biology, 2014, 59, 2342-2353.	1.2	32
42	Animating the Carbon Cycle. Ecosystems, 2014, 17, 344-359.	1.6	168
43	Temperate reservoirs are large carbon sinks and small CO₂ sources: Results from highâ€resolution carbon budgets. Global Biogeochemical Cycles, 2013, 27, 52-64.	1.9	73
44	Ecosystem respiration: Drivers of daily variability and background respiration in lakes around the globe. Limnology and Oceanography, 2013, 58, 849-866.	1.6	195
45	Nutrient and sediment concentrations in three agriculturally impacted streams over a 15-year period. Ecology, 2013, 94, 978-978.	1.5	0
46	When are fish sources vs. sinks of nutrients in lake ecosystems?. Ecology, 2013, 94, 2195-2206.	1.5	93
47	Exposure Times to the Spring Atrazine Flush Along a Streamâ€Reservoir System¹. Journal of the American Water Resources Association, 2012, 48, 616-634.	1.0	17
48	Terrestrial support of detritivorous fish populations decreases with watershed size. Ecosphere, 2011, 2, art76.	1.0	38
49	Nutrient stoichiometry of linked catchment-lake systems along a gradient of land use. Freshwater Biology, 2011, 56, 791-811.	1.2	88
50	Moving on up: can results from simple aquatic mesocosm experiments be applied across broad spatial scales?. Freshwater Biology, 2011, 56, 279-291.	1.2	104
51	Phytoplankton communities and stoichiometry are interactively affected by light, nutrients, and fish. Limnology and Oceanography, 2011, 56, 1959-1975.	1.6	26
52	Intraspecific variation in prey quality: a comparison of nutrient presence in prey and nutrient extraction by predators. Oikos, 2010, 119, 350-358.	1.2	37
53	Differential effects of elevated nutrient and sediment inputs on survival, growth and biomass of a common larval fish species (Dorosoma cepedianum). Freshwater Biology, 2010, 55, 654-669.	1.2	7
54	New and regenerated primary production in a productive reservoir ecosystem. Canadian Journal of Fisheries and Aquatic Sciences, 2010, 67, 278-287.	0.7	12

#	Article	IF	Citations
55	Feedbacks of consumer nutrient recycling on producer biomass and stoichiometry: separating direct and indirect effects. Oikos, 2009, 118, 1732-1742.	1.2	52
56	Deposition and decomposition of periodical cicadas (Homoptera: Cicadidae:Magicicada) in woodland aquatic ecosystems. Journal of the North American Benthological Society, 2009, 28, 181-195.	3.0	34
57	Lakes and reservoirs as regulators of carbon cycling and climate. Limnology and Oceanography, 2009, 54, 2298-2314.	1.6	1,977
58	The relative importance of heterotrophic bacteria to pelagic ecosystem dynamics varies with reservoir trophic state. Limnology and Oceanography, 2009, 54, 2143-2156.	1.6	12
59	FISH DISTRIBUTIONS AND NUTRIENT CYCLING IN STREAMS: CAN FISH CREATE BIOGEOCHEMICAL HOTSPOTS. Ecology, 2008, 89, 2335-2346.	1.5	249
60	Light, nutrients, and food-chain length constrain planktonic energy transfer efficiency across multiple trophic levels. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18408-18412.	3.3	185
61	COMPARING RESOURCE PULSES IN AQUATIC AND TERRESTRIAL ECOSYSTEMS. Ecology, 2008, 89, 647-659.	1.5	112
62	Hydrogeomorphic features mediate the effects of land use/cover on reservoir productivity and food webs. Limnology and Oceanography, 2008, 53, 1420-1433.	1.6	35
63	Water Quality Trends and Changing Agricultural Practices in a Midwest U.S. Watershed, 1994â€“2006. Journal of Environmental Quality, 2008, 37, 1862-1874.	1.0	52
64	ALLOCHTHONOUS SUBSIDY OF PERIODICAL CICADAS AFFECTS THE DYNAMICS AND STABILITY OF POND COMMUNITIES. Ecology, 2007, 88, 2174-2186.	1.5	66
65	Fish extinctions alter nutrient recycling in tropical freshwaters. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4461-4466.	3.3	301
66	Stoichiometry of nutrient excretion by fish: interspecific variation in a hypereutrophic lake. Oikos, 2007, 116, 259-270.	1.2	70
67	Ontogeny, diet shifts, and nutrient stoichiometry in fish. Oikos, 2007, 116, 1663-1674.	1.2	106
68	Predicting Crappie Recruitment in Ohio Reservoirs with Spawning Stock Size, Larval Density, and Chlorophyll Concentrations. North American Journal of Fisheries Management, 2006, 26, 1-12.	0.5	23
69	Detritivory and the stoichiometry of nutrient cycling by a dominant fish species in lakes of varying productivity. Oikos, 2006, 114, 419-430.	1.2	52
70	NUTRIENT CYCLING BY FISH SUPPORTS RELATIVELY MORE PRIMARY PRODUCTION AS LAKE PRODUCTIVITY INCREASES. Ecology, 2006, 87, 1696-1709.	1.5	112
71	Interactive effects of light and nutrients on phytoplankton stoichiometry. Oecologia, 2006, 149, 676-689.	0.9	92
72	Nutrient and light limitation of reservoir phytoplankton in relation to storm-mediated pulses in stream discharge. Archiv FÃ¼r Hydrobiologie, 2006, 167, 421-445.	1.1	50

#	Article	IF	Citations
73	Release rates and potential fates of nitrogen and phosphorus from sediments in a eutrophic reservoir. Freshwater Biology, 2005, 50, 301-322.	1.2	148
74	Ecological responses to simulated benthic-derived nutrient subsidies mediated by omnivorous fish. Freshwater Biology, 2005, 50, 1864-1881.	1.2	39
75	Nutrient recycling by two phosphorus-rich grazing catfish: the potential for phosphorus-limitation of fish growth. Oecologia, 2005, 146, 247-257.	0.9	91
76	Dynamics of a Boreal Lake Ecosystem during a Long-Term Manipulation of Top Predators. Ecosystems, 2005, 8, 603-618.	1.6	39
77	Linking Landscapes and Food Webs: Effects of Omnivorous Fish and Watersheds on Reservoir Ecosystems. BioScience, 2005, 55, 155.	2.2	113
78	Detritus, trophic dynamics and biodiversity. Ecology Letters, 2004, 7, 584-600.	3.0	948
79	Phytoplankton primary production and photosynthetic parameters in reservoirs along a gradient of watershed land use. Limnology and Oceanography, 2003, 48, 608-617.	1.6	109
80	Biomass-Dependent Diet Shifts in Omnivorous Gizzard Shad: Implications for Growth, Food Web, and Ecosystem Effects. Transactions of the American Fisheries Society, 2002, 131, 40-54.	0.6	81
81	INTERACTIONS BETWEEN HERBIVOROUS FISHES AND LIMITING NUTRIENTS IN A TROPICAL STREAM ECOSYSTEM. Ecology, 2002, 83, 1831-1844.	1.5	124
82	Nutrient Cycling by Animals in Freshwater Ecosystems. Annual Review of Ecology, Evolution, and Systematics, 2002, 33, 341-370.	6.7	850
83	Spatial and seasonal variation in nutrient excretion by benthic invertebrates in a eutrophic reservoir. Freshwater Biology, 2002, 47, 1107-1121.	1.2	98
84	Stoichiometry of nutrient recycling by vertebrates in a tropical stream: linking species identity and ecosystem processes. Ecology Letters, 2002, 5, 285-293.	3.0	291
85	2002 ASLO AWARD NOMINATIONS. Limnology and Oceanography Bulletin, 2001, 10, 48-49.	0.2	0
86	Title is missing!. Biogeochemistry, 2001, 54, 85-114.	1.7	184
87	EFFECTS OF GIZZARD SHAD ON PHYTOPLANKTON AND NUTRIENT DYNAMICS: ROLE OF SEDIMENT FEEDING AND FISH SIZE. Ecology, 2000, 81, 1701-1719.	1.5	98
88	Effects of Gizzard Shad on Phytoplankton and Nutrient Dynamics: Role of Sediment Feeding and Fish Size. Ecology, 2000, 81, 1701.	1.5	4
89	â€œTOPâ€“DOWNâ€•TROPHIC INTERACTIONS IN LAKES: EFFECTS OF FISH ON NUTRIENT DYNAMICS. Ecology, 1997, 78, 1-20.	1.5	60
90	"Top-Down" Trophic Interactions in Lakes: Effects of Fish on Nutrient Dynamics. Ecology, 1997, 78, 1.	1.5	101

#	Article	IF	Citations
91	NUTRIENT RECYCLING AND HERBIVORY AS MECHANISMS IN THE â€œTOPâ€“DOWNâ€•EFFECT OF FISH ON ALGAE IN LAKES. Ecology, 1997, 78, 21-40.	1.5	218
92	Regeneration of nitrogen and phosphorus by bluegill and gizzard shad: effect of feeding history. Canadian Journal of Fisheries and Aquatic Sciences, 1995, 52, 2327-2338.	0.7	57
93	Demographic and life history response of the cladoceranBosmina longirostris to variation in predator abundance. Oecologia, 1993, 95, 70-80.	0.9	27
94	Zooplankton Assemblages in Fishless Bog Lakes: Influence of Biotic and Abiotic Factors. Ecology, 1993, 74, 2361-2380.	1.5	113
95	Food quality effects on life history traits and fitness in the generalist herbivore Daphnia. Oecologia, 1992, 92, 48-57.	0.9	98
96	Nutrient regeneration by zooplankton: effects on nutrient limitation of phytoplankton in a eutrophic lake. Journal of Plankton Research, 1991, 13, 573-588.	0.8	21
97	Seasonal regulation of Daphnia populations by planktivorous fish: Implications for the spring clearâ€water phase. Limnology and Oceanography, 1990, 35, 1718-1733.	1.6	132
98	Effects on lower trophic levels of massive fish mortality. Nature, 1990, 344, 333-335.	13.7	129
99	Trophic Cascades and Phytoplankton Community Structure. Ecology, 1990, 71, 921-937.	1.5	186
100	Seasonal patterns of grazing and nutrient limitation of phytoplankton in a eutrophic lake. Limnology and Oceanography, 1990, 35, 697-709.	1.6	135
101	The impact of two Chaoborus species on a zooplankton community. Canadian Journal of Zoology, 1990, 68, 981-985.	0.4	30
102	Freshwater Zooplankton Community Structure: Introduction of Large Invertebrate Predators and Large Herbivores to a Small Species Community. Canadian Journal of Fisheries and Aquatic Sciences, 1988, 45, 1758-1770.	0.7	110
103	Effects of Food Availability and Fish Predation on a Zooplankton Community. Ecological Monographs, 1987, 57, 61-88.	2.4	189
104	Effects of Nutrients and Zooplankton Size on the Structure of a Phytoplankton Community. Ecology, 1987, 68, 624-635.	1.5	158
105	Competition in zooplankton communities: Suppression of small species by Daphnia pulex1. Limnology and Oceanography, 1986, 31, 1039-1056.	1.6	150
106	Fish Predation and Zooplankton Demography Indirect Effects. Ecology, 1986, 67, 337-354.	1.5	70
107	BIOLOGICAL CONTROL OF NUISANCE ALGAE BYDAPHNIA PULEX:EXPERIMENTAL STUDIES. Lake and Reservoir Management, 1984, 1, 151-156.	0.4	6
108	Trophic Transfer Efficiency in Lakes. Ecosystems, 0, , .	1.6	2