Stuart A Ludsin

List of Publications by Year
in descending order

106 papers	4,864 citations	109321 35 h-index	114465 63 g-index
107 all docs	107 docs citations	107 times ranked	4537 citing authors

#	Article	IF	Citations
1	Assessing and addressing the re-eutrophication of Lake Erie: Central basin hypoxia. Journal of Great Lakes Research, 2014, 40, 226-246.	1.9	421
2	The re-eutrophication of Lake Erie: Harmful algal blooms and hypoxia. Harmful Algae, 2016, 56, 44-66.	4.8	389
3	Patterns and processes in reef fish diversity. Nature, 2003, 421, 933-936.	27.8	302
4	Changing Ecosystem Dynamics in the Laurentian Great Lakes: Bottom-Up and Top-Down Regulation. BioScience, 2014, 64, 26-39.	4.9	222
5	FIRST-YEAR RECRUITMENT OF LARGEMOUTH BASS: THE INTERDEPENDENCY OF EARLY LIFE STAGES. , 1997, 7, 1024-1038.		204
6	LIFE AFTER DEATH IN LAKE ERIE: NUTRIENT CONTROLS DRIVE FISH SPECIES RICHNESS, REHABILITATION. , 2001, 11, 731-746.		167
7	FUZZY COGNITIVE MAPPING AS A TOOL TO DEFINE MANAGEMENT OBJECTIVES FOR COMPLEX ECOSYSTEMS. , 2002, 12, 1548-1565.		130
8	Hypoxia-avoidance by planktivorous fish in Chesapeake Bay: Implications for food web interactions and fish recruitment. Journal of Experimental Marine Biology and Ecology, 2009, 381, S121-S131.	1.5	125
9	Short winters threaten temperate fish populations. Nature Communications, 2015, 6, 7724.	12.8	123
10	Seasonal and interannual effects of hypoxia on fish habitat quality in central Lake Erie. Freshwater Biology, 2011, 56, 366-383.	2.4	122
11	Hypoxia affects spatial distributions and overlap of pelagic fish, zooplankton, and phytoplankton in Lake Erie. Journal of Experimental Marine Biology and Ecology, 2009, 381, S92-S107.	1.5	111
12	Utilization of stomach content DNA to determine diet diversity in piscivorous fishes. Journal of Fish Biology, 2011, 78, 1170-1182.	1.6	111
13	Hypoxia-driven changes in the behavior and spatial distribution of pelagic fish and mesozooplankton in the northern Gulf of Mexico. Journal of Experimental Marine Biology and Ecology, 2009, 381, S80-S91.	1.5	97
14	Effects of hypolimnetic hypoxia on foraging and distributions of Lake Erie yellow perch. Journal of Experimental Marine Biology and Ecology, 2009, 381, S132-S142.	1.5	94
15	<i>assign<scp>POP</scp>:</i> An <scp>r</scp> package for population assignment using genetic, nonâ€genetic, or integrated data in a machineâ€learning framework. Methods in Ecology and Evolution, 2018, 9, 439-446.	5.2	86
16	Effects of crystal structure on the uptake of metals by lake trout (Salvelinus namaycush) otoliths. Canadian Journal of Fisheries and Aquatic Sciences, 2005, 62, 2609-2619.	1.4	83
17	Comparison of Solution-Based versus Laser Ablation Inductively Coupled Plasma Mass Spectrometry for Analysis of Larval Fish Otolith Microelemental Composition. Transactions of the American Fisheries Society, 2006, 135, 218-231.	1.4	81
18	Lake Erie hypoxia prompts Canada-U.S. study. Eos, 2006, 87, 313.	0.1	76

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19	Otolith microchemistry as a stock identification tool for freshwater fishes: testing its limits in Lake Erie. Canadian Journal of Fisheries and Aquatic Sciences, 2010, 67, 1475-1489.	1.4	72
20	River-plume use during the pelagic larval stage benefits recruitment of a lentic fish. Canadian Journal of Fisheries and Aquatic Sciences, 2010, 67, 987-1004.	1.4	68
21	Physicalâ€“biological coupling and the challenge of understanding fish recruitment in freshwater lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2014, 71, 775-794.	1.4	66
22	A comprehensive approach to evaluating watershed models for predicting river flow regimes critical to downstream ecosystem services. Environmental Modelling and Software, 2014, 61, 121-134.	4.5	64
23	Fresh produce and their soils accumulate cyanotoxins from irrigation water: Implications for public health and food security. Food Research International, 2017, 102, 234-245.	6.2	64
24	Hypoxic zones as habitat for zooplankton in Lake Erie: Refuges from predation or exclusion zones?. Journal of Experimental Marine Biology and Ecology, 2009, 381, S108-S120.	1.5	63
25	Comparison of three microquantity techniques for measuring total lipids in fish. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 2233-2241.	1.4	59
26	Water Temperature and Prey Size Effects on the Rate of Digestion of Larval and Early Juvenile Fish. Transactions of the American Fisheries Society, 2010, 139, 868-875.	1.4	57
27	Climate change as a long-term stressor for the fisheries of the Laurentian Great Lakes of North America. Reviews in Fish Biology and Fisheries, 2017, 27, 363-391.	4.9	57
28	Feeding ecology of emerald shiners and rainbow smelt in central Lake Erie. Journal of Great Lakes Research, 2009, 35, 190-198.	1.9	55
29	Biological Invasion Theory: Darwin's Contributions from The Origin of Species. BioScience, 2001, 51, 780.	4.9	54
30	Portfolio theory as a management tool to guide conservation and restoration of multiâ€stock fish populations. Ecosphere, 2015, 6, 1-21.	2.2	53
31	A comparative analysis of zooplankton field collection and sample enumeration methods. Limnology and Oceanography: Methods, 2012, 10, 41-53.	2.0	52
32	Effect of hypoxia on habitat quality of striped bass (<i>Morone saxatilis</i>) in Chesapeake Bay. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 989-1002.	1.4	51
33	Does hypoxia reduce habitat quality for Lake Erie walleye (<i>Sander vitreus</i>)? A bioenergetics perspective. Canadian Journal of Fisheries and Aquatic Sciences, 2011, 68, 857-879.	1.4	47
34	Western Lake Erie Basin: Soft-data-constrained, NHDPlus resolution watershed modeling and exploration of applicable conservation scenarios. Science of the Total Environment, 2016, 569-570, 1265-1281.	8.0	46
35	Anticipated impacts of climate change on 21st century Maumee River discharge and nutrient loads. Journal of Great Lakes Research, 2016, 42, 1332-1342.	1.9	43
36	Effects of Hypoxia on Consumption, Growth, and RNA:DNA Ratios of Young Yellow Perch. Transactions of the American Fisheries Society, 2011, 140, 1574-1586.	1.4	40

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37	First-Summer Survival of Largemouth Bass Cohorts: Is Early Spawning Really Best?. Transactions of the American Fisheries Society, 2000, 129, 504-513.	1.4	39
38	Coastal largemouth bass (Micropterus salmoides) movement in response to changing salinity. Canadian Journal of Fisheries and Aquatic Sciences, 2009, 66, 2174-2188.	1.4	38
39	Contextâ€dependent planktivory: interacting effects of turbidity and predation risk on adaptive foraging. Ecosphere, 2012, 3, 1-18.	2.2	37
40	Evidence of hypoxic foraging forays by yellow perch (<i>Perca flavescens</i>) and potential consequences for prey consumption. Freshwater Biology, 2012, 57, 922-937.	2.4	34
41	Thinking outside of the lake: Can controls on nutrient inputs into Lake Erie benefit stream conservation in its watershed?. Journal of Great Lakes Research, 2016, 42, 1322-1331.	1.9	34
42	Highâ€turbidity events in Western Lake Erie during iceâ€free cycles: Contributions of riverâ€loaded vs. resuspended sediments. Limnology and Oceanography, 2018, 63, 2545-2562.	3.1	34
43	Statolith microchemistry as a technique for discriminating among Great Lakes sea lamprey (Petromyzon marinus) spawning tributaries. Canadian Journal of Fisheries and Aquatic Sciences, 2008, 65, 1153-1164.	1.4	33
44	Reliability of Bioelectrical Impedance Analysis for Estimating Whole-Fish Energy Density and Percent Lipids. Transactions of the American Fisheries Society, 2008, 137, 1519-1529.	1.4	31
45	Biophysical modeling assessment of the drivers for plankton dynamics in dreissenid-colonized western Lake Erie. Ecological Modelling, 2015, 308, 18-33.	2.5	31
46	Novel molecular approach demonstrates that turbid river plumes reduce predation mortality on larval fish. Molecular Ecology, 2014, 23, 5366-5377.	3.9	29
47	Optimization of extraction methods for quantification of microcystin-LR and microcystin-RR in fish, vegetable, and soil matrices using UPLCâ€"MS/MS. Harmful Algae, 2018, 76, 47-57.	4.8	28
48	Cyanobacterial blooms modify food web structure and interactions in western Lake Erie. Harmful Algae, 2020, 92, 101586.	4.8	27
49	Otolith Microchemistry Reveals Substantial Use of Freshwater by Southern Flounder in the Northern Gulf of Mexico. Estuaries and Coasts, 2011, 34, 630-639.	2.2	24
50	Microcystin in Lake Erie fish: Risk to human health and relationship to cyanobacterial blooms. Journal of Great Lakes Research, 2017, 43, 1084-1090.	1.9	23
51	Water warming increases aggression in a tropical fish. Scientific Reports, 2020, 10, 20107.	3.3	22
52	Sex-based differences in spawning behavior account for male-biased harvest in Lake Erie walleye (<i>Sander vitreus</i>). Canadian Journal of Fisheries and Aquatic Sciences, 2019, 76, 2003-2012.	1.4	19
53	Mixedâ€stock analysis using Rapture genotyping to evaluate stockâ€specific exploitation of a walleye population despite weak genetic structure. Evolutionary Applications, 2021, 14, 1403-1420.	3.1	19
54	Consequences of changing water clarity on the fish and fisheries of the Laurentian Great Lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 1524-1542.	1.4	18

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55	<scp>RAD</scp>â€Seq Refines Previous Estimates of Genetic Structure in Lake Erie Walleye. Transactions of the American Fisheries Society, 2020, 149, 159-173.	1.4	17
56	A perspective on needed research, modeling, and management approaches that can enhance Great Lakes fisheries management under changing ecosystem conditions. Journal of Great Lakes Research, 2016, 42, 743-752.	1.9	16
57	Ten+years gone: Continued degradation of offshore planktonic communities in U.S. waters of Lake Erie's western and central basins (2003â€"2013). Journal of Great Lakes Research, 2015, 41, 930-933.	1.9	15
58	Stock-specific advection of larval walleye (Sander vitreus) in western Lake Erie: Implications for larval growth, mixing, and stock discrimination. Journal of Great Lakes Research, 2015, 41, 830-845.	1.9	15
59	Forecasting the combined effects of anticipated climate change and agricultural conservation practices on fish recruitment dynamics in Lake Erie. Freshwater Biology, 2020, 65, 1487-1508.	2.4	15
60	Mycosporine-like amino acids (MAAs)â€"producing Microcystis in Lake Erie: Development of a qPCR assay and insight into its ecology. Harmful Algae, 2018, 77, 1-10.	4.8	14
61	Projecting the effects of agricultural conservation practices on stream fish communities in a changing climate. Science of the Total Environment, 2020, 747, 141112.	8.0	14
62	Otolith microchemistry shows natal philopatry of walleye in western Lake Erie. Journal of Great Lakes Research, 2020, 46, 1349-1357.	1.9	14
63	Instability of statolith elemental signatures revealed in newly metamorphosed sea lamprey (<i>Petromyzon marinus</i>). Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 565-573.	1.4	13
64	Hypoxiaâ€™s impact on pelagic fish populations in Lake Erie: a tale of two planktivores. Canadian Journal of Fisheries and Aquatic Sciences, 2020, 77, 1131-1148.	1.4	13
65	Influences on Bythotrephes longimanus life-history characteristics in the Great Lakes. Journal of Great Lakes Research, 2012, 38, 134-141.	1.9	12
66	Benefits of Turbid River Plume Habitat for Lake Erie Yellow Perch (Perca flavescens) Recruitment Determined by Juvenile to Larval Genotype Assignment. PLoS ONE, 2015, 10, e0125234.	2.5	12
67	Experimental and field evaluation of otolith strontium as a marker to discriminate between river-spawning populations of walleye in Lake Erie. Canadian Journal of Fisheries and Aquatic Sciences, 2017, 74, 693-701.	1.4	12
68	Discriminating natal origin of spawning adult sea lamprey (Petromyzon marinus) in Lake Champlain using statolith elemental signatures. Journal of Great Lakes Research, 2013, 39, 239-246.	1.9	10
69	Influence of habitat heterogeneity on the foraging ecology of first feeding yellow perch larvae, Perca flavescens, in western Lake Erie. Journal of Great Lakes Research, 2015, 41, 208-214.	1.9	10
70	Larval dispersal underlies demographically important intersystem connectivity in a Great Lakes yellow perch (Perca flavescens) population. Canadian Journal of Fisheries and Aquatic Sciences, 2016, 73, 416-426.	1.4	10
71	The influence of larval growth rate on juvenile recruitment in Lake Erie walleye (<i>Sander) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5	1.4	10
72	Nutrient inputs versus piscivore biomass as the primary driver of reservoir food webs. Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 367-380.	1.4	9

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73	Increasing saugeye (S. vitreusâ€¯Ã—â€¯S. canadensis) production efficiency in a hatchery setting using assisted reproduction technologies. Aquaculture, 2018, 495, 21-26.	3.5	9
74	Hydroacoustic Dataâ€Analysis Recommendations to Quantify Preyâ€Fish Abundance in Shallow, Targetâ€Rich Ecosystems. North American Journal of Fisheries Management, 2019, 39, 270-288.	1.0	9
75	Spatial patterning of walleye recreational harvest in Lake Erie: Role of demographic and environmental factors. Fisheries Research, 2020, 230, 105676.	1.7	9
76	How Much Cleaning is Needed When Processing Otoliths from Fish Larvae for Microchemical Analysis?. Transactions of the American Fisheries Society, 2014, 143, 779-783.	1.4	8
77	Particle Backtracking Improves Breeding Subpopulation Discrimination and Natal-Source Identification in Mixed Populations. PLoS ONE, 2015, 10, e0120752.	2.5	8
78	Testicular collections as a technique to increase milt availability in sauger (sander canadensis). Animal Reproduction Science, 2020, 212, 106240.	1.5	8
79	Interactive Effects of Hypoxia and Temperature on Consumption, Growth, and Condition of Juvenile Hybrid Striped Bass. Transactions of the American Fisheries Society, 2020, 149, 71-83.	1.4	8
80	Fish Diet Shifts Associated with the Northern Gulf of Mexico Hypoxic Zone. Estuaries and Coasts, 2019, 42, 2170-2183.	2.2	7
81	Stress hormone-mediated antipredator morphology improves escape performance in amphibian tadpoles. Scientific Reports, 2021, 11, 4427.	3.3	7
82	Ecosystem change as a driver of fish recruitment dynamics: A case study of two Lake Erie yellow perch populations. Freshwater Biology, 2021, 66, 1149-1168.	2.4	7
83	Interspecific relationships and environmentally driven catchabilities estimated from fisheries data. Canadian Journal of Fisheries and Aquatic Sciences, 2014, 71, 447-463.	1.4	6
84	Projecting future habitat quality of three midwestern reservoir fishes under warming conditions. Ecology of Freshwater Fish, 2021, 30, 31-47.	1.4	6
85	Effects of Hypoxia on Habitat Quality of Reservoir Largemouth Bass, Saugeye, and White Crappie. Transactions of the American Fisheries Society, 2021, 150, 75-88.	1.4	6
86	Functional traits reveal the dominant drivers of longâ€term community change across a North American Great Lake. Global Change Biology, 2021, 27, 6232-6251.	9.5	6
87	Temporal scope influences ecosystem driver-response relationships: A case study of Lake Erie with implications for ecosystem-based management. Science of the Total Environment, 2022, 813, 152473.	8.0	6
88	Size-mediated control of perchâ€“midge coupling in Lake Erie transient dead zones. Environmental Biology of Fishes, 2017, 100, 1587-1600.	1.0	5
89	Use of Hypertonic Media to Cryopreserve Sauger Spermatozoa. North American Journal of Aquaculture, 2020, 82, 84-91.	1.4	5
90	First-Year Recruitment of Largemouth Bass: The Interdependency of Early Life Stages. , 1997, 7, 1024.		5

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91	Identifying natal origins of spawning adult sea lamprey (Petromyzon marinus): Re-evaluation of the statolith microchemistry approach. Journal of Great Lakes Research, 2014, 40, 763-770.	1.9	4
92	Effect of Hypoxia on Diet of Atlantic Bumpers in the Northern Gulf of Mexico. Transactions of the American Fisheries Society, 2018, 147, 740-748.	1.4	4
93	Response to â€œComment on â€˜Otolith Microchemistry Reveals Substantial Use of Freshwater by Southern Flounder in the Northern Gulf of Mexicoâ€™â€• by Pedro Morais. Estuaries and Coasts, 2012, 35, 907-910.	2.2	3
94	Towards more robust hydroacoustic estimates of fish abundance in the presence of pelagic macroinvertebrates. Fisheries Research, 2020, 230, 105667.	1.7	3
95	Which factors determine the longâ€term effect of poor earlyâ€life nutrition? A metaâ€analytic review. Ecosphere, 2021, 12, e03694.	2.2	3
96	Evidence that copepod biomass during the larval period regulates recruitment of Lake Erie walleye. Journal of Great Lakes Research, 2021, 47, 1737-1745.	1.9	3
97	Coded Wire Tag Use with Juvenile Channel Catfish: Evaluation of Mortality, Retention, and Growth. North American Journal of Fisheries Management, 2018, 38, 1367.	1.0	2
98	Bottom hypoxia alters the spatial distribution of pelagic intermediate consumers and their prey. Canadian Journal of Fisheries and Aquatic Sciences, 2021, 78, 522-538.	1.4	2
99	Alternative Prey Reduces Largemouth Bass Predation Mortality on Newly Stocked Channel Catfish Fingerlings. North American Journal of Fisheries Management, 2021, 41, 1322.	1.0	2
100	Do models parameterized with observations from the system predict larval yellow perch (Perca) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38 Sciences, 2018, 75, 82-94.	1.4	1
101	Changes to the spermatozoa glycocalyx and its role in fertilization in Sauger (Sander canadensis). Aquaculture, 2021, 539, 736635.	3.5	1
102	Spatial and Temporal Changes in Testis Morphology and Sperm Ultrastructure of the Sportfish Sauger (<i>Sander canadensis</i>). Acta Zoologica, 2023, 104, 106-117.	0.8	1
103	Using Genomic Data to Guide Walleye Management in the Great Lakes. , 2021, , 115-139.		1
104	Experiential legacies of earlyâ€life dietary polyunsaturated fatty acid content on juvenile Walleye: Potential impacts from climate change. Ecology of Freshwater Fish, 2023, 32, 23-36.	1.4	1
105	Gizzard Shad Target Strengthâ€toâ€Body Size Equations at Multiple Hydroacoustic Frequencies. Transactions of the American Fisheries Society, 2021, 150, 242-257.	1.4	0
106	Angler Choices That Help Catch Lots of Big Fish. Fisheries, 0, , .	0.8	0