Thomas A. Davidson

List of Publications by Year
in descending order

104 papers	4,989 citations	109321 35 h-index	102487 66 g-index
108 all docs	108 docs citations	108 times ranked	5363 citing authors

#	Article	IF	Citations
1	Zooplankton as indicators in lakes: a scientific-based plea for including zooplankton in the ecological quality assessment of lakes according to the European Water Framework Directive (WFD). Hydrobiologia, 2011, 676, 279-297.	2.0	292
2	Climate change impacts on lakes: an integrated ecological perspective based on a multi-faceted approach, with special focus on shallow lakes. Journal of Limnology, 2014, 73, .	1.1	235
3	Rapid evolution of thermal tolerance in the waterÂflea Daphnia. Nature Climate Change, 2015, 5, 665-668.	18.8	230
4	Current-Use Brominated Flame Retardants in Water, Sediment, and Fish from English Lakes. Environmental Science & Technology, 2009, 43, 9077-9083.	10.0	221
5	Biomanipulation as a Restoration Tool to Combat Eutrophication. Advances in Ecological Research, 2012, 47, 411-488.	2.7	211
6	Longâ€term dynamics of submerged macrophytes and algae in a small and shallow, eutrophic lake: implications for the stability of macrophyteâ€dominance. Freshwater Biology, 2010, 55, 565-583.	2.4	157
7	Defining reference conditions and restoration targets for lake ecosystems using palaeolimnology: a synthesis. Journal of Paleolimnology, 2011, 45, 533-544.	1.6	153
8	Seasonal dynamics of macrophytes and phytoplankton in shallow lakes: a eutrophicationâ€driven pathway from plants to plankton?. Freshwater Biology, 2010, 55, 500-513.	2.4	136
9	Eutrophication effects on greenhouse gas fluxes from shallowâ€lake mesocosms override those of climate warming. Global Change Biology, 2015, 21, 4449-4463.	9.5	132
10	Synergy between nutrients and warming enhances methane ebullition from experimental lakes. Nature Climate Change, 2018, 8, 156-160.	18.8	130
11	Meta-analysis Shows a Consistent and Strong Latitudinal Pattern in Fish Omnivory Across Ecosystems. Ecosystems, 2012, 15, 492-503.	3.4	121
12	A framework for testing the ability of models to project climate change and its impacts. Climatic Change, 2014, 122, 271-282.	3.6	104
13	Ecological influences on larval chironomid communities in shallow lakes: implications for palaeolimnological interpretations. Freshwater Biology, 2010, 55, 531-545.	2.4	103
14	A 250 year comparison of historical, macrofossil and pollen records of aquatic plants in a shallow lake. Freshwater Biology, 2005, 50, 1671-1686.	2.4	102
15	Combining contemporary ecology and palaeolimnology to understand shallow lake ecosystem change. Freshwater Biology, 2010, 55, 487-499.	2.4	102
16	How autochthonous dissolved organic matter responds to eutrophication and climate warming: Evidence from a cross-continental data analysis and experiments. Earth-Science Reviews, 2018, 185, 928-937.	9.1	98
17	Response of Submerged Macrophyte Communities to External and Internal Restoration Measures in North Temperate Shallow Lakes. Frontiers in Plant Science, 2018, 9, 194.	3.6	97
18	World distribution, diversity and endemism of aquatic macrophytes. Aquatic Botany, 2019, 158, 103127.	1.6	93

#	Article	IF	Citations
19	The simultaneous inference of zooplanktivorous fish and macrophyte density from subâ€fossil cladoceran assemblages: a multivariate regression tree approach. Freshwater Biology, 2010, 55, 546-564.	2.4	87
20	Are the controls of species composition similar for contemporary and sub-fossil cladoceran assemblages? A study of 39 shallow lakes of contrasting trophic status. Journal of Paleolimnology, 2007, 38, 117-134.	1.6	80
21	Seasonal Dynamics of CO2 Flux Across the Surface of Shallow Temperate Lakes. Ecosystems, 2012, 15, 336-347.	3.4	75
22	Seasonal and spatial hydrological variability drives aquatic biodiversity in a floodâ€pulsed, subâ€tropical wetland. Freshwater Biology, 2012, 57, 1253-1265.	2.4	62
23	The role of palaeolimnology in assessing eutrophication and its impact on lakes. Journal of Paleolimnology, 2013, 49, 391-410.	1.6	61
24	Back to the future: using palaeolimnology to infer longâ€term changes in shallow lake food webs. Freshwater Biology, 2010, 55, 600-613.	2.4	60
25	Inferring past zooplanktivorous fish and macrophyte density in a shallow lake: application of a new regression tree model. Freshwater Biology, 2010, 55, 584-599.	2.4	59
26	Small birds, big effects: the little auk (Alle alle) transforms high Arctic ecosystems. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162572.	2.6	57
27	Ecological resilience in lakes and the conjunction fallacy. Nature Ecology and Evolution, 2017, 1, 1616-1624.	7.8	52
28	Assessing aquatic macrophyte community change through the integration of palaeolimnological and historical data at Loch Leven, Scotland. Journal of Paleolimnology, 2010, 43, 191-204.	1.6	51
29	Autochthonous dissolved organic matter potentially fuels methane ebullition from experimental lakes. Water Research, 2019, 166, 115048.	11.3	48
30	The role of cladocerans in tracking long-term change in shallow lake trophic status. Hydrobiologia, 2011, 676, 299-315.	2.0	45
31	Zooplankton response to climate warming: a mesocosm experiment at contrasting temperatures and nutrient levels. Hydrobiologia, 2015, 742, 185-203.	2.0	45
32	Taxonomic or ecological approaches? Searching for phytoplankton surrogates in the determination of richness and assemblage composition in ponds. Ecological Indicators, 2012, 18, 575-585.	6.3	44
33	The application of palaeolimnology to evidenceâ€based lake management and conservation: examples from UK lakes. Aquatic Conservation: Marine and Freshwater Ecosystems, 2012, 22, 165-180.	2.0	41
34	Palaeolimnological records of shallow lake biodiversity change: exploring the merits of single versus multi-proxy approaches. Journal of Paleolimnology, 2013, 49, 431-446.	1.6	41
35	Feedback between climate change and eutrophication: revisiting the allied attack concept and how to strike back. Inland Waters, 2022, 12, 187-204.	2.2	41
36	Paleolimnological records reveal biotic homogenization driven by eutrophication in tropical reservoirs. Journal of Paleolimnology, 2018, 60, 299-309.	1.6	38

#	Article	IF	Citations
37	Strong altitudinal control on the response of local glaciers to Holocene climate change in southwest Greenland. Quaternary Science Reviews, 2017, 168, 69-78.	3.0	37
38	Eutrophication homogenizes shallow lake macrophyte assemblages over space and time. Ecosphere, 2018, 9, e02406.	2.2	37
39	Crossâ€taxon congruence in lake plankton largely independent of environmental gradients. Ecology, 2014, 95, 2778-2788.	3.2	35
40	Relationships between fish feeding guild and trophic structure in English lowland shallow lakes subject to anthropogenic influence: implications for lake restoration. Aquatic Ecology, 2006, 40, 391-405.	1.5	34
41	Spatial and Seasonal Variability in Surface Water Chemistry in the Okavango Delta, Botswana: A Multivariate Approach. Wetlands, 2011, 31, 815-829.	1.5	34
42	Homogenization of fish assemblages in different lake depth strata at local and regional scales. Freshwater Biology, 2015, 60, 745-757.	2.4	34
43	Recent Sedimentation Rates of Shallow Lakes in the Middle and Lower Reaches of the Yangtze River: Patterns, Controlling Factors and Implications for Lake Management. Water (Switzerland), 2017, 9, 617.	2.7	34
44	Predictability of the impact of multiple stressors on the keystone species Daphnia. Scientific Reports, 2018, 8, 17572.	3.3	32
45	Representation of fish communities by scale sub-fossils in shallow lakes: implications for inferring percidâ€“cyprinid shifts. Journal of Paleolimnology, 2003, 30, 441-449.	1.6	31
46	Similarity between contemporary vegetation and plant remains in the surface sediment in Mediterranean lakes. Freshwater Biology, 2014, 59, 724-736.	2.4	31
47	On the crucial importance of a small bird: The ecosystem services of the little auk (Alle alle) population in Northwest Greenland in a long-term perspective. Ambio, 2018, 47, 226-243.	5.5	31
48	Long-Term Trends and Temporal Synchrony in Plankton Richness, Diversity and Biomass Driven by Re-Oligotrophication and Climate across 17 Danish Lakes. Water (Switzerland), 2016, 8, 427.	2.7	30
49	Vulnerability of the North Water ecosystem to climate change. Nature Communications, 2021, 12, 4475.	12.8	30
50	Stable isotope analysis confirms substantial differences between subtropical and temperate shallow lake food webs. Hydrobiologia, 2017, 784, 111-123.	2.0	29
51	Hydrological alterations as the major driver on environmental change in a floodplain Lake Poyang (China): Evidence from monitoring and sediment records. Journal of Great Lakes Research, 2018, 44, 377-387.	1.9	29
52	Phytoplankton Community Response to Nutrients, Temperatures, and a Heat Wave in Shallow Lakes: An Experimental Approach. Water (Switzerland), 2020, 12, 3394.	2.7	29
53	Using palaeolimnological data and historical records to assess long-term dynamics of ecosystem services in typical Yangtze shallow lakes (China). Science of the Total Environment, 2017, 584-585, 791-802.	8.0	28
54	The structuring role of fish in Greenland lakes: an overview based on contemporary and paleoecological studies of 87 lakes from the low and the high Arctic. Hydrobiologia, 2017, 800, 99-113.	2.0	28

#	Article	IF	Citations
55	Harnessing the potential of the multiâ€indicator palaeoecological approach: an assessment of the nature and causes of ecological change in a eutrophic shallow lake. Freshwater Biology, 2015, 60, 1423-1442.	2.4	27
56	Consequences of Fish Kills for Long-Term Trophic Structure in Shallow Lakes: Implications for Theory and Restoration. Ecosystems, 2016, 19, 1289-1309.	3.4	25
57	Big Ben: a new wide-bore piston corer for multi-proxy palaeolimnology. Journal of Paleolimnology, 2014, 51, 79-86.	1.6	24
58	Latitudinal variation in global rangeâ€size of aquatic macrophyte species shows evidence for a Rapoport effect. Freshwater Biology, 2020, 65, 1622-1640.	2.4	24
59	Diatom sensitivity to hydrological and nutrient variability in a subtropical, floodâ€pulse wetland. Ecohydrology, 2012, 5, 491-502.	2.4	23
60	Major changes in CO2 efflux when shallow lakes shift from a turbid to a clear water state. Hydrobiologia, 2016, 778, 33-44.	2.0	22
61	Heatâ€wave effects on greenhouse gas emissions from shallow lake mesocosms. Freshwater Biology, 2017, 62, 1130-1142.	2.4	22
62	Ecological sensitivity of marl lakes to nutrient enrichment: evidence from Hawes Water, UK. Freshwater Biology, 2015, 60, 2226-2247.	2.4	21
63	The history of seabird colonies and the North Water ecosystem: Contributions from palaeoecological and archaeological evidence. Ambio, 2018, 47, 175-192.	5.5	21
64	Heat wave effects on biomass and vegetative growth of macrophytes after long-term adaptation to different temperatures: a mesocosm study. Climate Research, 2015, 66, 265-274.	1.1	21
65	Preface: Shallow lakes in a fast changing world. Hydrobiologia, 2016, 778, 9-11.	2.0	20
66	Eutrophication erodes inter-basin variation in macrophytes and co-occurring invertebrates in a shallow lake: combining ecology and palaeoecology. Journal of Paleolimnology, 2018, 60, 311-328.	1.6	20
67	Contrasting evidence of Holocene ice margin retreat, southâ€western Greenland. Journal of Quaternary Science, 2017, 32, 604-616.	2.1	19
68	Sedimentary macrofossil records reveal ecological change in English lakes: implications for conservation. Journal of Paleolimnology, 2018, 60, 329-348.	1.6	19
69	Effects of warming and nutrients on the microbial food web in shallow lake mesocosms. European Journal of Protistology, 2018, 64, 1-12.	1.5	18
70	Relatedness between contemporary and subfossil cladoceran assemblages in Turkish lakes. Journal of Paleolimnology, 2014, 52, 367-383.	1.6	17
71	Polybrominated diphenyl ethers (PBDEs) in English freshwater lakes, 2008â€“2012. Chemosphere, 2014, 110, 41-47.	8.2	17
72	Fish determine macroinvertebrate food webs and assemblage structure in Greenland subarctic streams. Freshwater Biology, 2014, 59, 1830-1842.	2.4	17

#	Article	IF	Citations
73	Environment not dispersal limitation drives clonal composition of Arctic Daphnia in a recently deglaciated area. Molecular Ecology, 2016, 25, 5830-5842.	3.9	17
74	Disturbance from pond management obscures local and regional drivers of assemblages of primary producers. Freshwater Biology, 2014, 59, 1406-1422.	2.4	16
75	The Zambian Macrophyte Trophic Ranking scheme, ZMTR: A new biomonitoring protocol to assess the trophic status of tropical southern African rivers. Aquatic Botany, 2016, 131, 15-27.	1.6	16
76	Greenhouse gas emissions from urban ponds in Denmark. Inland Waters, 2020, 10, 373-385.	2.2	16
77	Towards better integration of ecology in palaeoecology: from proxies to indicators, from inference to understanding. Journal of Paleolimnology, 2018, 60, 109-116.	1.6	15
78	Changes in benthic macroinvertebrate abundance and lake isotope (C, N) signals following biomanipulation: an 18-year study in shallow Lake Vaeng, Denmark. Hydrobiologia, 2012, 686, 135-145.	2.0	14
79	Temperature effects on periphyton, epiphyton and epipelon under a nitrogen pulse in low-nutrient experimental freshwater lakes. Hydrobiologia, 2017, 795, 267-279.	2.0	14
80	Inferring a single variable from an assemblage with multiple controls: getting into deep water with cladoceran lake-depth transfer functions. Hydrobiologia, 2011, 676, 129-142.	2.0	13
81	The coming and going of a marl lake: multi-indicator palaeolimnology reveals abrupt ecological change and alternative views of reference conditions. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	13
82	Impact of Nutrients, Temperatures, and a Heat Wave on Zooplankton Community Structure: An Experimental Approach. Water (Switzerland), 2020, 12, 3416.	2.7	13
83	Warming and eutrophication interactively drive changes in the methane-oxidizing community of shallow lakes. ISME Communications, 2021, 1, .	4.2	13
84	Are rare species rare or just overlooked? Assessing the distribution of the freshwater bryozoan, Lophopus crystallinus. Biological Conservation, 2007, 135, 223-234.	4.1	11
85	Living in an oasis: Rapid transformations, resilience, and resistance in the North Water Area societies and ecosystems. Ambio, 2018, 47, 296-309.	5.5	11
86	Are nitrous oxide emissions indirectly fueled by input of terrestrial dissolved organic nitrogen in a large eutrophic Lake Taihu, China?. Science of the Total Environment, 2020, 722, 138005.	8.0	11
87	Effects of DOC addition from different sources on phytoplankton community in a temperate eutrophic lake: An experimental study exploring lake compartments. Science of the Total Environment, 2022, 803, 150049.	8.0	11
88	Combined effects of eutrophication and warming on polyunsaturated fatty acids in complex phytoplankton communities: A mesocosm experiment. Science of the Total Environment, 2022, 843, 157001.	8.0	11
89	Ecological Instability in Lakes: A Predictable Condition?. Environmental Science & Technology, 2016, 50, 3285-3286.	10.0	10
90	Inferring past environmental changes in three Turkish lakes from sub-fossil Cladocera. Hydrobiologia, 2016, 778, 295-312.	2.0	10

#	Article	IF	Citations
91	Effect of a nitrogen pulse on ecosystem N processing at different temperatures: A mesocosm experiment with ¹⁵NO₃^{â”} addition. Freshwater Biology, 2017, 62, 1232-1243.	2.4	10
92	Environmental drivers of freshwater macrophyte diversity and community composition in calcareous warmâ€water rivers of America and Africa. Freshwater Biology, 2017, 62, 1511-1527.	2.4	10
93	Nutrient Loading, Temperature and Heat Wave Effects on Nutrients, Oxygen and Metabolism in Shallow Lake Mesocosms Pre-Adapted for 11 Years. Water (Switzerland), 2021, 13, 127.	2.7	10
94	Ploidy state of aquatic macrophytes: Global distribution and drivers. Aquatic Botany, 2021, 173, 103417.	1.6	10
95	Quality control in public participation assessments of water quality: the OPAL Water Survey. BMC Ecology, 2016, 16, 14.	3.0	9
96	Consequences of fish for cladoceran, water beetle and macrophyte communities in a farmland pond landscape: implications for conservation. Fundamental and Applied Limnology, 2017, 190, 141-156.	0.7	9
97	Ornamental lakes â€” an overlooked conservation resource?. Aquatic Conservation: Marine and Freshwater Ecosystems, 2008, 18, 1046-1051.	2.0	8
98	Connectivity and zebra mussel invasion offer shortâ€term buffering of eutrophication impacts on floodplain lake landscape biodiversity. Diversity and Distributions, 2019, 25, 1334-1347.	4.1	6
99	Submerged macrophytes in Danish lakes: impact of morphological and chemical factors on abundance and species richness. Hydrobiologia, 0, , 1.	2.0	5
100	Changes in Phytoplankton Community Composition and Phytoplankton Cell Size in Response to Nitrogen Availability Depend on Temperature. Microorganisms, 2022, 10, 1322.	3.6	5
101	Stable isotope signatures of Holocene syngenetic permafrost trace seabird presence in the Thule District (NW Greenland). Biogeosciences, 2019, 16, 4261-4275.	3.3	4
102	Habitat heterogeneity enables spatial and temporal coexistence of native and invasive macrophytes in shallow lake landscapes. River Research and Applications, 2022, 38, 1387-1399.	1.7	4
103	Seabird-mediated transport of organohalogen compounds to remote sites (North West Greenland) Tj ETQq1 1 0.784314 rgBT /Overlock	8.0	4
104	Shallow lake sediments provide evidence for metapopulation dynamics: a pilot study. Aquatic Ecology, 2013, 47, 163-176.	1.5	3