

Dietmar Straile

List of Publications by Year in descending order

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Version: 2024-02-01

107
papers

9,086
citations

61857

43
h-index

42291

92
g-index

109
all docs

109
docs citations

109
times ranked

8851
citing authors

#	ARTICLE	IF	CITATIONS
1	Lakes as sentinels of climate change. <i>Limnology and Oceanography</i> , 2009, 54, 2283-2297.	1.6	1,314
2	Lake responses to reduced nutrient loading - an analysis of contemporary long-term data from 35 case studies. <i>Freshwater Biology</i> , 2005, 50, 1747-1771.	1.2	1,080
3	Rapid and highly variable warming of lake surface waters around the globe. <i>Geophysical Research Letters</i> , 2015, 42, 10,773.	1.5	767
4	Gross growth efficiencies of protozoan and metazoan zooplankton and their dependence on food concentration, predator-prey weight ratio, and taxonomic group. <i>Limnology and Oceanography</i> , 1997, 42, 1375-1385.	1.6	353
5	Widespread loss of lake ice around the Northern Hemisphere in a warming world. <i>Nature Climate Change</i> , 2019, 9, 227-231.	8.1	301
6	Global impacts of the 1980s regime shift. <i>Global Change Biology</i> , 2016, 22, 682-703.	4.2	225
7	Large-scale climatic signatures in lakes across Europe: a meta-analysis. <i>Global Change Biology</i> , 2007, 13, 1314-1326.	4.2	209
8	Climatic warming causes regime shifts in lake food webs. <i>Limnology and Oceanography</i> , 2001, 46, 1780-1783.	1.6	192
9	Meteorological forcing of plankton dynamics in a large and deep continental European lake. <i>Oecologia</i> , 2000, 122, 44-50.	0.9	178
10	Earlier onset of the spring phytoplankton bloom in lakes of the temperate zone in a warmer climate. <i>Global Change Biology</i> , 2007, 13, 1898-1909.	4.2	169
11	Complex effects of winter warming on the physicochemical characteristics of a deep lake. <i>Limnology and Oceanography</i> , 2003, 48, 1432-1438.	1.6	164
12	Temperature Effects Explain Continental Scale Distribution of Cyanobacterial Toxins. <i>Toxins</i> , 2018, 10, 156.	1.5	159
13	Biogeochemical fluxes through mesozooplankton. <i>Global Biogeochemical Cycles</i> , 2006, 20, n/a-n/a.	1.9	155
14	A global database of lake surface temperatures collected by in situ and satellite methods from 1985-2009. <i>Scientific Data</i> , 2015, 2, 150008.	2.4	153
15	Phosphorus decrease and climate variability: mediators of synchrony in phytoplankton changes among European peri-alpine lakes. <i>Freshwater Biology</i> , 2005, 50, 1731-1746.	1.2	152
16	Storm impacts on phytoplankton community dynamics in lakes. <i>Global Change Biology</i> , 2020, 26, 2756-2784.	4.2	144
17	The North Atlantic Oscillation and plankton dynamics in two European lakes -- two variations on a general theme. <i>Global Change Biology</i> , 2000, 6, 663-670.	4.2	142
18	Scientists's Warning to Humanity: Rapid degradation of the world's large lakes. <i>Journal of Great Lakes Research</i> , 2020, 46, 686-702.	0.8	140

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19	North Atlantic Oscillation synchronizes food-web interactions in central European lakes. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2002, 269, 391-395.	1.2	132
20	Patterns and drivers of deep chlorophyll maxima structure in 100 lakes: The relative importance of light and thermal stratification. <i>Limnology and Oceanography</i> , 2018, 63, 628-646.	1.6	119
21	Seasonal and inter-annual scales of variability in phytoplankton assemblages: comparison of phytoplankton dynamics in three peri-alpine lakes over a period of 28 years. <i>Freshwater Biology</i> , 2004, 49, 98-115.	1.2	113
22	The impact of human-made ecological changes on the genetic architecture of <i>Daphnia</i> species. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 4758-4763.	3.3	112
23	The response of freshwater ecosystems to climate variability associated with the North Atlantic Oscillation. <i>Geophysical Monograph Series</i> , 2003, , 263-279.	0.1	102
24	Compensatory dynamics and the stability of phytoplankton biomass during four decades of eutrophication and oligotrophication. <i>Ecology Letters</i> , 2013, 16, 81-89.	3.0	100
25	Climate change drives widespread shifts in lake thermal habitat. <i>Nature Climate Change</i> , 2021, 11, 521-529.	8.1	87
26	Turbulent mixing and phytoplankton spring bloom development in a deep lake. <i>Limnology and Oceanography</i> , 2007, 52, 286-298.	1.6	86
27	INTERPLAY BETWEEN ENERGY LIMITATION AND NUTRITIONAL DEFICIENCY: EMPIRICAL DATA AND FOOD WEB MODELS. <i>Ecological Monographs</i> , 2002, 72, 251-270.	2.4	82
28	Combating cyanobacterial proliferation by avoiding or treating inflows with high P load—experiences from eight case studies. <i>Aquatic Ecology</i> , 2016, 50, 367-383.	0.7	82
29	Consequences of lake and river ice loss on cultural ecosystem services. <i>Limnology and Oceanography Letters</i> , 2019, 4, 119-131.	1.6	81
30	A comparison of egg-bank and long-term plankton dynamics of two <i>Daphnia</i> species, <i>D. hyalina</i> and <i>D. galeata</i> : Potentials and limits of reconstruction. <i>Limnology and Oceanography</i> , 2003, 48, 1948-1955.	1.6	73
31	Cross-ecosystem fluxes: Export of polyunsaturated fatty acids from aquatic to terrestrial ecosystems via emerging insects. <i>Science of the Total Environment</i> , 2017, 577, 174-182.	3.9	71
32	Assessing resilience in long-term ecological data sets. <i>Ecological Indicators</i> , 2016, 65, 10-43.	2.6	70
33	Indirect facilitation promotes macrophyte survival and growth in freshwater ecosystems threatened by eutrophication. <i>Journal of Ecology</i> , 2012, 100, 530-538.	1.9	68
34	Food quality triggers the reproductive mode in the cyclical parthenogen <i>Daphnia</i> (Cladocera). <i>Oecologia</i> , 2009, 159, 317-324.	0.9	65
35	Single dietary amino acids control resting egg production and affect population growth of a key freshwater herbivore. <i>Oecologia</i> , 2011, 167, 981-989.	0.9	63
36	Nitrate-depleted conditions on the increase in shallow northern European lakes. <i>Limnology and Oceanography</i> , 2007, 52, 1346-1353.	1.6	61

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37	Temperature is the key factor explaining interannual variability of Daphnia development in spring: a modelling study. <i>Oecologia</i> , 2008, 157, 531-543.	0.9	57
38	Seasonal changes of trophic transfer efficiencies in a plankton food web derived from biomass size distributions and network analysis. <i>Ecological Modelling</i> , 1994, 75-76, 435-445.	1.2	56
39	Deeper waters are changing less consistently than surface waters in a global analysis of 102 lakes. <i>Scientific Reports</i> , 2020, 10, 20514.	1.6	56
40	LIFE HISTORY AND MULTIPLE ANTIPREDATOR DEFENSES OF AN INVERTEBRATE PELAGIC PREDATOR, BYTHOTREPHES LONGIMANUS. <i>Ecology</i> , 2000, 81, 150-163.	1.5	51
41	Release from competition and protection determine the outcome of plant interactions along a grazing gradient. <i>Oikos</i> , 2012, 121, 95-101.	1.2	51
42	The Impact of Climate Change on Lakes in Central Europe. , 2010, , 387-409.		51
43	Water level variability and trends in Lake Constance in the light of the 1999 centennial flood. <i>Limnologica</i> , 2004, 34, 15-21.	0.7	49
44	Influence of climate variability on whitefish (<i>Coregonus lavaretus</i>) year-class strength in a deep, warm monomictic lake. <i>Oecologia</i> , 2007, 151, 521-529.	0.9	46
45	The response of Daphnia to changes in trophic status and weather patterns: a case study from Lake Constance. <i>ICES Journal of Marine Science</i> , 1998, 55, 775-782.	1.2	44
46	Copepod life cycle adaptations and success in response to phytoplankton spring bloom phenology. <i>Global Change Biology</i> , 2009, 15, 1394-1404.	4.2	43
47	Zooplankton biomass dynamics in oligotrophic versus eutrophic conditions: a test of the PEG model. <i>Freshwater Biology</i> , 2015, 60, 174-183.	1.2	42
48	Spatio-temporal dynamics and plasticity of clonal architecture in <i>Potamogeton perfoliatus</i> . <i>Aquatic Botany</i> , 2004, 78, 307-318.	0.8	37
49	The North Atlantic Oscillation and ecology: links between historical time-series, and lessons regarding future climate warming. <i>Climate Research</i> , 2007, 34, 259-262.	0.4	37
50	Allochronic differentiation among Daphnia species, hybrids and backcrosses: the importance of sexual reproduction for population dynamics and genetic architecture. <i>Journal of Evolutionary Biology</i> , 2004, 17, 312-321.	0.8	35
51	Population dynamics of a freshwater calanoid copepod: Complex responses to changes in trophic status and climate variability. <i>Limnology and Oceanography</i> , 2007, 52, 2364-2372.	1.6	35
52	Effects of a half a millennium winter on a deep lake – a shape of things to come?. <i>Global Change Biology</i> , 2010, 16, 2844-2856.	4.2	35
53	Facilitation displaces hotspots of diversity and allows communities to persist in heavily stressed and disturbed environments. <i>Journal of Vegetation Science</i> , 2014, 25, 66-76.	1.1	33
54	A single <i>Thaumarchaeon</i> drives nitrification in deep oligotrophic Lake Constance. <i>Environmental Microbiology</i> , 2020, 22, 212-228.	1.8	33

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55	The use of long-term monitoring data for studies of planktonic diversity: a cautionary tale from two Swiss lakes. <i>Freshwater Biology</i> , 2013, 58, 1292-1301.	1.2	31
56	A European Multi Lake Survey dataset of environmental variables, phytoplankton pigments and cyanotoxins. <i>Scientific Data</i> , 2018, 5, 180226.	2.4	30
57	Role of phytoplankton cell size on the competition for nutrients and light in incompletely mixed systems. <i>Journal of Theoretical Biology</i> , 2012, 300, 330-343.	0.8	29
58	Influence of bacteria on cell size development and morphology of cultivated diatoms. <i>Phycological Research</i> , 2014, 62, 269-281.	0.8	29
59	European large perialpine lakes under anthropogenic pressures and climate change: present status, research gaps and future challenges. <i>Hydrobiologia</i> , 2018, 824, 1-32.	1.0	28
60	Modelling the clonal growth of the rhizomatous macrophyte <i>Potamogeton perfoliatus</i> . <i>Ecological Modelling</i> , 2006, 192, 67-82.	1.2	27
61	Allochthonous contribution to seasonal and spatial variability of organic matter sedimentation in a deep oligotrophic lake (Lake Constance). <i>Limnologia</i> , 2013, 43, 122-130.	0.7	27
62	Trophic mismatch requires seasonal heterogeneity of warming. <i>Ecology</i> , 2015, 96, 2794-2805.	1.5	27
63	The Impact of Variations in the Climate on Seasonal Dynamics of Phytoplankton. , 2010, , 253-274.		26
64	Testing the stress gradient hypothesis in herbivore communities: facilitation peaks at intermediate nutrient levels. <i>Ecology</i> , 2013, 94, 1776-1784.	1.5	26
65	Uniform Temperature Dependency in the Phenology of a Keystone Herbivore in Lakes of the Northern Hemisphere. <i>PLoS ONE</i> , 2012, 7, e45497.	1.1	25
66	Regional and Supra-Regional Coherence in Limnological Variables. , 2010, , 311-337.		22
67	Deviations from synchrony: spatio-temporal variability of zooplankton community dynamics in a large lake. <i>Journal of Plankton Research</i> , 2013, 35, 22-32.	0.8	22
68	Implications of seasonal mixing for phytoplankton production and bloom development. <i>Theoretical Ecology</i> , 2013, 6, 115-129.	0.4	21
69	Dynamics and drivers of phytoplankton richness and composition along productivity gradient. <i>Science of the Total Environment</i> , 2018, 625, 275-284.	3.9	21
70	Trophic Structure and Carbon Flow Dynamics in the Pelagic Community of a Large Lake. , 1996, , 60-71.		21
71	Increased winter drownings in ice-covered regions with warmer winters. <i>PLoS ONE</i> , 2020, 15, e0241222.	1.1	21
72	How to cope with a superior enemy? Plant defence strategies in response to annual herbivore outbreaks. <i>Journal of Ecology</i> , 2010, 98, 900-907.	1.9	20

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73	To share or not to share: clonal integration in a submerged macrophyte in response to light stress. <i>Hydrobiologia</i> , 2012, 684, 261-269.	1.0	19
74	Seasonal, interannual and long term variation in top-down versus bottom-up regulation of primary production. <i>Oikos</i> , 2013, 122, 223-234.	1.2	19
75	Influence of low and decreasing food levels on Daphnia-algal interactions: Numerical experiments with a new dynamic energy budget model. <i>Ecological Modelling</i> , 2010, 221, 2642-2655.	1.2	17
76	Large and deep perialpine lakes: a paleolimnological perspective for the advance of ecosystem science. <i>Hydrobiologia</i> , 2018, 824, 291-321.	1.0	16
77	Importance of allochthonous matter for profundal macrozoobenthic communities in a deep oligotrophic lake. <i>International Review of Hydrobiology</i> , 2013, 98, 1-13.	0.5	15
78	Reversed evolution of grazer resistance to cyanobacteria. <i>Nature Communications</i> , 2021, 12, 1945.	5.8	12
79	Response of <i>Bosmina</i> to climate variability and reduced nutrient loading in a large lake. <i>Limnologica</i> , 2010, 40, 92-96.	0.7	11
80	Local and continental-scale controls of the onset of spring phytoplankton blooms: Conclusions from a proxy-based model. <i>Global Change Biology</i> , 2021, 27, 1976-1990.	4.2	11
81	Calanoid copepod zooplankton density is positively associated with water residence time across the continental United States. <i>PLoS ONE</i> , 2019, 14, e0209567.	1.1	10
82	Calanoid copepod grazing affects plankton size structure and composition in a deep, large lake. <i>Journal of Plankton Research</i> , 2019, 41, 955-966.	0.8	10
83	The extent and variability of storm-induced temperature changes in lakes measured with long-term and high-frequency data. <i>Limnology and Oceanography</i> , 2021, 66, 1979-1992.	1.6	10
84	Food webs in lakes—seasonal dynamics and the impact of climate variability. , 2005, , 41-50.		10
85	Response of heterotrophic bacteria, autotrophic picoplankton and heterotrophic nanoflagellates to re-oligotrophication. <i>Journal of Plankton Research</i> , 2009, 31, 899-907.	0.8	9
86	Methods for constructing and balancing ecosystem flux charts: new techniques and software. <i>Environmental Modeling and Assessment</i> , 1997, 2, 23-28.	1.2	8
87	The contribution of differential hatching success to the fitness of species and interspecific hybrids. <i>Hydrobiologia</i> , 2007, 594, 83-89.	1.0	8
88	Climatic effects on regime shifts in lakes: A reply. <i>Limnology and Oceanography</i> , 2003, 48, 1353-1356.	1.6	7
89	Use of ciliate and phytoplankton taxonomic composition for the estimation of eicosapentaenoic acid concentration in lakes. <i>Freshwater Biology</i> , 2012, 57, 1385-1398.	1.2	7
90	Long-term changes in littoral fish community structure and resilience of total catch to re-oligotrophication in a large, perialpine European lake. <i>Freshwater Biology</i> , 2020, 65, 1325-1336.	1.2	7

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91	Global data set of long-term summertime vertical temperature profiles in 153 lakes. <i>Scientific Data</i> , 2021, 8, 200.	2.4	7
92	Life History and Multiple Antipredator Defenses of an Invertebrate Pelagic Predator, <i>Bythotrephes longimanus</i> . <i>Ecology</i> , 2000, 81, 150.	1.5	6
93	Experimental evidence for a strong influence of stickleback predation on the population dynamics and sex ratio of an aquatic moth. <i>Fundamental and Applied Limnology</i> , 2009, 173, 187-196.	0.4	6
94	Differences in the amino acid content of four green algae and their impact on the reproductive mode of <i>Daphnia pulex</i> . <i>Fundamental and Applied Limnology</i> , 2012, 181, 327-336.	0.4	6
95	Taxonomic aggregation does not alleviate the lack of consistency in analysing diversity in long-term phytoplankton monitoring data: a rejoinder to Pomati <i>et al.</i> (2015). <i>Freshwater Biology</i> , 2015, 60, 1060-1067.	1.2	6
96	Morphological defences and defence "cost trade-offs" in <i>Daphnia</i> in response to two co-occurring invertebrate predators. <i>Freshwater Biology</i> , 2022, 67, 883-892.	1.2	6
97	The trophic position of dead autochthonous organic material and its treatment in trophic analyses. <i>Environmental Modeling and Assessment</i> , 1997, 2, 13-22.	1.2	5
98	Density control in <i>Potamogeton perfoliatus</i> L. and <i>Potamogeton pectinatus</i> L.. <i>Limnologica</i> , 2004, 34, 98-104.	0.7	5
99	Trait selection and co-existence of phytoplankton in partially mixed systems: Trait based modelling and potential of an aggregated approach. <i>PLoS ONE</i> , 2018, 13, e0194076.	1.1	5
100	Resilience to changes in lake trophic state: Nutrient allocation into <i>Daphnia</i> resting eggs. <i>Ecology and Evolution</i> , 2019, 9, 12813-12825.	0.8	5
101	Can young-of-the-year invasive fish keep up with young-of-the-year native fish? A comparison of feeding rates between invasive sticklebacks and whitefish. <i>Ecology and Evolution</i> , 2022, 12, e8486.	0.8	5
102	Modeling the spring blooms of ciliates in a deep lake. <i>Hydrobiologia</i> , 2014, 731, 173-189.	1.0	4
103	Preface: European large lakes "ecosystem services and management in a changing world. <i>Hydrobiologia</i> , 2016, 780, 1-3.	1.0	4
104	Small-scale variation in sexual size dimorphism and sex ratio in the aquatic moth <i>Acentria ephemerella</i> Denis and Schiffermüller, 1775 (Lepidoptera: Crambidae). <i>Aquatic Insects</i> , 2014, 36, 187-199.	0.6	2
105	History of the Limnological Institutes at Lake Constance. <i>Limnologica</i> , 2021, 86, 125820.	0.7	0
106	A Fresh (Water) Perspective on the Impacts of the NAO on North Atlantic ecology. , 2005, , 153-158.		0
107	Nutritional Constraints on Zooplankton. , 2021, , .		0