Dietmar Straile

List of Publications by Year
in descending order

107 papers	9,086 citations	61984 43 h-index	42399 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. Limnology and Oceanography, 2009, 54, 2283-2297.	3.1	1,314
2	Lake responses to reduced nutrient loading - an analysis of contemporary long-term data from 35 case studies. Freshwater Biology, 2005, 50, 1747-1771.	2.4	1,080
3	Rapid and highly variable warming of lake surface waters around the globe. Geophysical Research Letters, 2015, 42, 10,773.	4.0	767
4	Gross growth efficiencies of protozoan and metazoan zooplankton and their dependence on food concentration, predatorâ€prey weight ratio, and taxonomic group. Limnology and Oceanography, 1997, 42, 1375-1385.	3.1	353
5	Widespread loss of lake ice around the Northern Hemisphere in a warming world. Nature Climate Change, 2019, 9, 227-231.	18.8	301
6	Global impacts of the 1980s regime shift. Global Change Biology, 2016, 22, 682-703.	9.5	225
7	Largeâ€scale climatic signatures in lakes across Europe: a metaâ€analysis. Global Change Biology, 2007, 13, 1314-1326.	9.5	209
8	Climatic warming causes regime shifts in lake food webs. Limnology and Oceanography, 2001, 46, 1780-1783.	3.1	192
9	Meteorological forcing of plankton dynamics in a large and deep continental European lake. Oecologia, 2000, 122, 44-50.	2.0	178
10	Earlier onset of the spring phytoplankton bloom in lakes of the temperate zone in a warmer climate. Global Change Biology, 2007, 13, 1898-1909.	9.5	169
11	Complex effects of winter warming on the physicochemical characteristics of a deep lake. Limnology and Oceanography, 2003, 48, 1432-1438.	3.1	164
12	Temperature Effects Explain Continental Scale Distribution of Cyanobacterial Toxins. Toxins, 2018, 10, 156.	3.4	159
13	Biogeochemical fluxes through mesozooplankton. Global Biogeochemical Cycles, 2006, 20, n/a-n/a.	4.9	155
14	A global database of lake surface temperatures collected by in situ and satellite methods from 1985â€“2009. Scientific Data, 2015, 2, 150008.	5.3	153
15	Phosphorus decrease and climate variability: mediators of synchrony in phytoplankton changes among European peri-alpine lakes. Freshwater Biology, 2005, 50, 1731-1746.	2.4	152
16	Storm impacts on phytoplankton community dynamics in lakes. Global Change Biology, 2020, 26, 2756-2784.	9.5	144
17	The North Atlantic Oscillation and plankton dynamics in two European lakes -- two variations on a general theme. Global Change Biology, 2000, 6, 663-670.	9.5	142
18	Scientistsâ€™ Warning to Humanity: Rapid degradation of the worldâ€™s large lakes. Journal of Great Lakes Research, 2020, 46, 686-702.	1.9	140

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19	North Atlantic Oscillation synchronizes food-web interactions in central European lakes. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 391-395.	2.6	132
20	Patterns and drivers of deep chlorophyll maxima structure in 100 lakes: The relative importance of light and thermal stratification. Limnology and Oceanography, 2018, 63, 628-646.	3.1	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. Freshwater Biology, 2004, 49, 98-115.	2.4	113
22	The impact of human-made ecological changes on the genetic architecture of Daphnia species. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4758-4763.	7.1	112
23	The response of freshwater ecosystems to climate variability associated with the North Atlantic Oscillation. Geophysical Monograph Series, 2003, , 263-279.	0.1	102
24	Compensatory dynamics and the stability of phytoplankton biomass during four decades of eutrophication and oligotrophication. Ecology Letters, 2013, 16, 81-89.	6.4	100
25	Climate change drives widespread shifts in lake thermal habitat. Nature Climate Change, 2021, 11, 521-529.	18.8	87
26	Turbulent mixing and phytoplankton spring bloom development in a deep lake. Limnology and Oceanography, 2007, 52, 286-298.	3.1	86
27	INTERPLAY BETWEEN ENERGY LIMITATION AND NUTRITIONAL DEFICIENCY: EMPIRICAL DATA AND FOOD WEB MODELS. Ecological Monographs, 2002, 72, 251-270.	5.4	82
28	Combating cyanobacterial proliferation by avoiding or treating inflows with high P loadâ€"experiences from eight case studies. Aquatic Ecology, 2016, 50, 367-383.	1.5	82
29	Consequences of lake and river ice loss on cultural ecosystem services. Limnology and Oceanography Letters, 2019, 4, 119-131.	3.9	81
30	A comparison of egg-bank and long-term plankton dynamics of two Daphnia species, D. hyalina and D. galeata : Potentials and limits of reconstruction. Limnology and Oceanography, 2003, 48, 1948-1955.	3.1	73
31	Cross-ecosystem fluxes: Export of polyunsaturated fatty acids from aquatic to terrestrial ecosystems via emerging insects. Science of the Total Environment, 2017, 577, 174-182.	8.0	71
32	Assessing resilience in long-term ecological data sets. Ecological Indicators, 2016, 65, 10-43.	6.3	70
33	Indirect facilitation promotes macrophyte survival and growth in freshwater ecosystems threatened by eutrophication. Journal of Ecology, 2012, 100, 530-538.	4.0	68
34	Food quality triggers the reproductive mode in the cyclical parthenogen Daphnia (Cladocera). Oecologia, 2009, 159, 317-324.	2.0	65
35	Single dietary amino acids control resting egg production and affect population growth of a key freshwater herbivore. Oecologia, 2011, 167, 981-989.	2.0	63
36	Nitrateâ€depleted conditions on the increase in shallow northern European lakes. Limnology and Oceanography, 2007, 52, 1346-1353.	3.1	61

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37	Temperature is the key factor explaining interannual variability of Daphnia development in spring: a modelling study. Oecologia, 2008, 157, 531-543.	2.0	57
38	Seasonal changes of trophic transfer efficiencies in a plankton food web derived from biomass size distributions and network analysis. Ecological Modelling, 1994, 75-76, 435-445.	2.5	56
39	Deeper waters are changing less consistently than surface waters in a global analysis of 102 lakes. Scientific Reports, 2020, 10, 20514.	3.3	56
40	LIFE HISTORY AND MULTIPLE ANTIPREDATOR DEFENSES OF AN INVERTEBRATE PELAGIC PREDATOR,BYTHOTREPHES LONGIMANUS. Ecology, 2000, 81, 150-163.	3.2	51
41	Release from competition and protection determine the outcome of plant interactions along a grazing gradient. Oikos, 2012, 121, 95-101.	2.7	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. Limnologica, 2004, 34, 15-21.	1.5	49
44	Influence of climate variability on whitefish (Coregonus lavaretus) year-class strength in a deep, warm monomictic lake. Oecologia, 2007, 151, 521-529.	2.0	46
45	The response ofDaphniato changes in trophic status and weather patterns: a case study from Lake Constance. ICES Journal of Marine Science, 1998, 55, 775-782.	2.5	44
46	Copepod life cycle adaptations and success in response to phytoplankton spring bloom phenology. Global Change Biology, 2009, 15, 1394-1404.	9.5	43
47	Zooplankton biomass dynamics in oligotrophic versus eutrophic conditions: a test of the <scp>PEG</scp> model. Freshwater Biology, 2015, 60, 174-183.	2.4	42
48	Spatio-temporal dynamics and plasticity of clonal architecture in Potamogeton perfoliatus. Aquatic Botany, 2004, 78, 307-318.	1.6	37
49	The North Atlantic Oscillation and ecology: links between historical time-series, and lessons regarding future climate warming. Climate Research, 2007, 34, 259-262.	1.1	37
50	Allochronic differentiation among Daphnia species, hybrids and backcrosses: the importance of sexual reproduction for population dynamics and genetic architecture. Journal of Evolutionary Biology, 2004, 17, 312-321.	1.7	35
51	Population dynamics of a freshwater calanoid copepod: Complex responses to changes in trophic status and climate variability. Limnology and Oceanography, 2007, 52, 2364-2372.	3.1	35
52	Effects of a half a millennium winter on a deep lake â€“ a shape of things to come?. Global Change Biology, 2010, 16, 2844-2856.	9.5	35
53	Facilitation displaces hotspots of diversity and allows communities to persist in heavily stressed and disturbed environments. Journal of Vegetation Science, 2014, 25, 66-76.	2.2	33
54	A single Thaumarchaeon drives nitrification in deep oligotrophic Lake Constance. Environmental Microbiology, 2020, 22, 212-228.	3.8	33

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55	The use of longâ€term monitoring data for studies of planktonic diversity: a cautionary tale from two Swiss lakes. Freshwater Biology, 2013, 58, 1292-1301.	2.4	31
56	A European Multi Lake Survey dataset of environmental variables, phytoplankton pigments and cyanotoxins. Scientific Data, 2018, 5, 180226.	5.3	30
57	Role of phytoplankton cell size on the competition for nutrients and light in incompletely mixed systems. Journal of Theoretical Biology, 2012, 300, 330-343.	1.7	29
58	Influence of bacteria on cell size development and morphology of cultivated diatoms. Phycological Research, 2014, 62, 269-281.	1.6	29
59	European large perialpine lakes under anthropogenic pressures and climate change: present status, research gaps and future challenges. Hydrobiologia, 2018, 824, 1-32.	2.0	28
60	Modelling the clonal growth of the rhizomatous macrophyte Potamogeton perfoliatus. Ecological Modelling, 2006, 192, 67-82.	2.5	27
61	Allochthonous contribution to seasonal and spatial variability of organic matter sedimentation in a deep oligotrophic lake (Lake Constance). Limnologica, 2013, 43, 122-130.	1.5	27
62	Trophic mismatch requires seasonal heterogeneity of warming. Ecology, 2015, 96, 2794-2805.	3.2	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. Ecology, 2013, 94, 1776-1784.	3.2	26
65	Uniform Temperature Dependency in the Phenology of a Keystone Herbivore in Lakes of the Northern Hemisphere. PLoS ONE, 2012, 7, e45497.	2.5	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. Journal of Plankton Research, 2013, 35, 22-32.	1.8	22
68	Implications of seasonal mixing for phytoplankton production and bloom development. Theoretical Ecology, 2013, 6, 115-129.	1.0	21
69	Dynamics and drivers of phytoplankton richness and composition along productivity gradient. Science of the Total Environment, 2018, 625, 275-284.	8.0	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. PLoS ONE, 2020, 15, e0241222.	2.5	21
72	How to cope with a superior enemy? Plant defence strategies in response to annual herbivore outbreaks. Journal of Ecology, 2010, 98, 900-907.	4.0	20

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73	To share or not to share: clonal integration in a submerged macrophyte in response to light stress. Hydrobiologia, 2012, 684, 261-269.	2.0	19
74	Seasonal, interâ€annual and long term variation in topâ€“down versus bottomâ€“up regulation of primary production. Oikos, 2013, 122, 223-234.	2.7	19
75	Influence of low and decreasing food levels on Daphnia-algal interactions: Numerical experiments with a new dynamic energy budget model. Ecological Modelling, 2010, 221, 2642-2655.	2.5	17
76	Large and deep perialpine lakes: a paleolimnological perspective for the advance of ecosystem science. Hydrobiologia, 2018, 824, 291-321.	2.0	16
77	Importance of allochthonous matter for profundal macrozoobenthic communities in a deep oligotrophic lake. International Review of Hydrobiology, 2013, 98, 1-13.	0.9	15
78	Reversed evolution of grazer resistance to cyanobacteria. Nature Communications, 2021, 12, 1945.	12.8	12
79	Response of Bosmina to climate variability and reduced nutrient loading in a large lake. Limnologica, 2010, 40, 92-96.	1.5	11
80	Local and continentalâ€scale controls of the onset of spring phytoplankton blooms: Conclusions from a proxyâ€based model. Global Change Biology, 2021, 27, 1976-1990.	9.5	11
81	Calanoid copepod zooplankton density is positively associated with water residence time across the continental United States. PLoS ONE, 2019, 14, e0209567.	2.5	10
82	Calanoid copepod grazing affects plankton size structure and composition in a deep, large lake. Journal of Plankton Research, 2019, 41, 955-966.	1.8	10
83	The extent and variability of stormâ€induced temperature changes in lakes measured with longâ€term and highâ€frequency data. Limnology and Oceanography, 2021, 66, 1979-1992.	3.1	10
84	Food webs in lakesâ€”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. Journal of Plankton Research, 2009, 31, 899-907.	1.8	9
86	Methods for constructing and balancing ecosystem flux charts: new techniques and software. Environmental Modeling and Assessment, 1997, 2, 23-28.	2.2	8
87	The contribution of differential hatching success to the fitness of species and interspecific hybrids. Hydrobiologia, 2007, 594, 83-89.	2.0	8
88	Climatic effects on regime shifts in lakes: A reply. Limnology and Oceanography, 2003, 48, 1353-1356.	3.1	7
89	Use of ciliate and phytoplankton taxonomic composition for the estimation of eicosapentaenoic acid concentration in lakes. Freshwater Biology, 2012, 57, 1385-1398.	2.4	7
90	Longâ€term changes in littoral fish community structure and resilience of total catch to reâ€oligotrophication in a large, periâ€alpine European lake. Freshwater Biology, 2020, 65, 1325-1336.	2.4	7

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91	Global data set of long-term summertime vertical temperature profiles in 153 lakes. Scientific Data, 2021, 8, 200.	5.3	7
92	Life History and Multiple Antipredator Defenses of an Invertebrate Pelagic Predator, Bythotrephes longimanus. Ecology, 2000, 81, 150.	3.2	6
93	Experimental evidence for a strong influence of stickleback predation on the population dynamics and sex ratio of an aquatic moth. Fundamental and Applied Limnology, 2009, 173, 187-196.	0.7	6
94	Differences in the amino acid content of four green algae and their impact on the reproductive mode of Daphnia pulex. Fundamental and Applied Limnology, 2012, 181, 327-336.	0.7	6
95	Taxonomic aggregation does not alleviate the lack of consistency in analysing diversity in longâ€term phytoplankton monitoring data: a rejoinder to Pomati etÂal. (2015). Freshwater Biology, 2015, 60, 1060-1067.	2.4	6
96	Morphological defences and defenceâ€“cost tradeâ€offs in Daphnia in response to two coâ€occurring invertebrate predators. Freshwater Biology, 2022, 67, 883-892.	2.4	6
97	The trophic position of dead autochthonous organic material and its treatment in trophic analyses. Environmental Modeling and Assessment, 1997, 2, 13-22.	2.2	5
98	Density control in Potamogeton perfoliatus L. and Potamogeton pectinatus L.. Limnologica, 2004, 34, 98-104.	1.5	5
99	Trait selection and co-existence of phytoplankton in partially mixed systems: Trait based modelling and potential of an aggregated approach. PLoS ONE, 2018, 13, e0194076.	2.5	5
100	Resilience to changes in lake trophic state: Nutrient allocation into Daphnia resting eggs. Ecology and Evolution, 2019, 9, 12813-12825.	1.9	5
101	Can youngâ€ofâ€theâ€year invasive fish keep up with youngâ€ofâ€theâ€year native fish? A comparison of feeding rates between invasive sticklebacks and whitefish. Ecology and Evolution, 2022, 12, e8486.	1.9	5
102	Modeling the spring blooms of ciliates in a deep lake. Hydrobiologia, 2014, 731, 173-189.	2.0	4
103	Preface: European large lakesâ€“ecosystem services and management in a changing world. Hydrobiologia, 2016, 780, 1-3.	2.0	4
104	Small-scale variation in sexual size dimorphism and sex ratio in the aquatic mothAcentria ephemerellaDenis and SchiffermÃ¼ller, 1775 (Lepidoptera: Crambidae). Aquatic Insects, 2014, 36, 187-199.	0.9	2
105	History of the Limnological Institutes at Lake Constance. Limnologica, 2021, 86, 125820.	1.5	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