

Alexander Wacker

List of Publications by Year in descending order

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Version: 2024-02-01

81
papers

2,855
citations

136950

32
h-index

189892

50
g-index

84
all docs

84
docs citations

84
times ranked

2449
citing authors

#	ARTICLE	IF	CITATIONS
1	More Light Please: Daphnia Benefit From Light Pollution by Increased Tolerance Toward Cyanobacterial Chymotrypsin Inhibitors. <i>Frontiers in Ecology and Evolution</i> , 2022, 10, .	2.2	4
2	Ecological impacts of photosynthetic light harvesting in changing aquatic environments: A systematic literature map. <i>Ecology and Evolution</i> , 2022, 12, e8753.	1.9	5
3	A sterol-mediated gleanerâ€™opportunist trade-off underlies the evolution of grazer resistance to cyanobacteria. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2022, 289, 20220178.	2.6	3
4	Geographic clines in <i>Daphnia magna</i> â€™s circadian clock gene expression: Local adaptation to photoperiod. <i>Zoology</i> , 2021, 144, 125856.	1.2	5
5	Field studies on breeding sites of <i>Culicoides Latreille</i> (Diptera: Ceratopogonidae) in agriculturally used and natural habitats. <i>Scientific Reports</i> , 2021, 11, 10007.	3.3	5
6	Crustaceans in a changing world. <i>Zoology</i> , 2021, 146, 125921.	1.2	5
7	Phenotypic Diversity and Plasticity of Photoresponse Across an Environmentally Contrasting Family of Phytoflagellates. <i>Frontiers in Plant Science</i> , 2021, 12, 707541.	3.6	0
8	Evaluating the relevance of species sorting and physiological plasticity of phytoplankton communities grown in a multifactor environment. <i>Freshwater Biology</i> , 2021, 66, 1992-2003.	2.4	4
9	Inter- and intraspecific differences in rotifer fatty acid composition during acclimation to low-quality food. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2020, 375, 20190644.	4.0	8
10	Plantâ€™soil feedback effects altered by aboveground herbivory explain plant species abundance in the landscape. <i>Ecology</i> , 2020, 101, e03023.	3.2	24
11	Discrimination between freshwater and marine fish using fatty acids: ecological implications and future perspectives. <i>Environmental Reviews</i> , 2020, 28, 546-559.	4.5	25
12	Phytoplankton Community Responses to Interactions Between Light Intensity, Light Variations, and Phosphorus Supply. <i>Frontiers in Environmental Science</i> , 2020, 8, .	3.3	12
13	The relative importance of plant-soil feedbacks for plant-species performance increases with decreasing intensity of herbivory. <i>Oecologia</i> , 2019, 190, 651-664.	2.0	16
14	Feeding in the frequency domain: coarserâ€™grained environments increase consumer sensitivity to resource variability, covariance and phase. <i>Ecology Letters</i> , 2019, 22, 1104-1114.	6.4	14
15	Food quantityâ€™quality coâ€™limitation: Interactive effects of dietary carbon and essential lipid supply on population growth of a freshwater rotifer. <i>Freshwater Biology</i> , 2019, 64, 903-912.	2.4	21
16	Nitrate or ammonium: Influences of nitrogen source on the physiology of a green alga. <i>Ecology and Evolution</i> , 2019, 9, 1070-1082.	1.9	41
17	Temperature-induced changes in body lipid composition affect vulnerability to oxidative stress in <i>Daphnia magna</i> . <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2019, 232, 101-107.	1.6	22
18	Fitness response variation within and among consumer species can be co-mediated by food quantity and biochemical quality. <i>Scientific Reports</i> , 2019, 9, 16126.	3.3	11

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19	Environmental concentrations of pharmaceuticals directly affect phytoplankton and effects propagate through trophic interactions. <i>Ecotoxicology and Environmental Safety</i> , 2018, 156, 271-278.	6.0	31
20	One man's trash is another man's treasure—the effect of bacteria on phytoplankton–zooplankton interactions in chemostat systems. <i>Limnology and Oceanography: Methods</i> , 2018, 16, 629-639.	2.0	14
21	Sex-Specific Differences in Essential Lipid Requirements of <i>Daphnia magna</i> . <i>Frontiers in Ecology and Evolution</i> , 2018, 6, .	2.2	9
22	Diet quality determines lipase gene expression and lipase/esterase activity in <i>Daphnia pulex</i> . <i>Biology Open</i> , 2017, 6, 210-216.	1.2	13
23	High food quality of prey lowers its risk of extinction. <i>Oikos</i> , 2017, 126, 1501-1510.	2.7	16
24	Understanding and predicting physiological performance of organisms in fluctuating and multifactorial environments. <i>Ecological Monographs</i> , 2017, 87, 178-197.	5.4	51
25	Linking primary producer diversity and food quality effects on herbivores: A biochemical perspective. <i>Scientific Reports</i> , 2017, 7, 11035.	3.3	37
26	Ecophysiological strategies for growth under varying light and organic carbon supply in two species of green microalgae differing in their motility. <i>Phytochemistry</i> , 2017, 144, 43-51.	2.9	9
27	Planktotrons: A novel indoor mesocosm facility for aquatic biodiversity and food web research. <i>Limnology and Oceanography: Methods</i> , 2017, 15, 663-677.	2.0	20
28	A fundamental dichotomy in long-chain polyunsaturated fatty acid abundance between and within marine and terrestrial ecosystems. <i>Environmental Reviews</i> , 2017, 25, 163-174.	4.5	101
29	Light-Induced Changes in Fatty Acid Profiles of Specific Lipid Classes in Several Freshwater Phytoplankton Species. <i>Frontiers in Plant Science</i> , 2016, 7, 264.	3.6	43
30	Bridging factorial and gradient concepts of resource co-limitation: towards a general framework applied to consumers. <i>Ecology Letters</i> , 2016, 19, 201-215.	6.4	65
31	Covariance modulates the effect of joint temperature and food variance on ectotherm life-history traits. <i>Ecology Letters</i> , 2016, 19, 143-152.	6.4	22
32	Photosynthetic sensitivity of phytoplankton to commonly used pharmaceuticals and its dependence on cellular phosphorus status. <i>Ecotoxicology</i> , 2016, 25, 697-707.	2.4	25
33	Measuring bacterial activity and community composition at high hydrostatic pressure using a novel experimental approach: a pilot study. <i>FEMS Microbiology Ecology</i> , 2015, 91, .	2.7	20
34	Melatonin synthesis follows a daily cycle in <i>Daphnia</i> . <i>Journal of Plankton Research</i> , 2015, 37, 636-644.	1.8	13
35	Maternal diet of <i>Daphnia magna</i> affects offspring growth responses to supplementation with particular polyunsaturated fatty acids. <i>Hydrobiologia</i> , 2015, 755, 267-282.	2.0	15
36	Photosynthetic and fatty acid acclimation of four phytoplankton species in response to light intensity and phosphorus availability. <i>European Journal of Phycology</i> , 2015, 50, 288-300.	2.0	23

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37	Production, distribution, and abundance of long-chain omega-3 polyunsaturated fatty acids: a fundamental dichotomy between freshwater and terrestrial ecosystems. <i>Environmental Reviews</i> , 2015, 23, 414-424.	4.5	186
38	Interspecific competition in phytoplankton drives the availability of essential mineral and biochemical nutrients. <i>Ecology</i> , 2015, 96, 2467-2477.	3.2	11
39	Longevity of <i>Daphnia</i> and the attenuation of stress responses by melatonin. <i>BMC Physiology</i> , 2014, 14, 8.	3.6	19
40	Thresholds for Sterol-Limited Growth of <i>Daphnia magna</i> : A Comparative Approach Using 10 Different Sterols. <i>Journal of Chemical Ecology</i> , 2014, 40, 1039-1050.	1.8	39
41	Constraints by oxygen and food quality on carbon pathway regulation: a co-limitation study with an aquatic key herbivore. <i>Ecology</i> , 2014, 95, 3068-3079.	3.2	9
42	Acclimation to dietary shifts impacts the carbon budgets of <i>Daphnia magna</i> . <i>Journal of Plankton Research</i> , 2014, 36, 848-858.	1.8	5
43	Seasonal changes in the accumulation of polyunsaturated fatty acids in zooplankton. <i>Journal of Plankton Research</i> , 2013, 35, 121-134.	1.8	36
44	Nutritional indicators and their uses in ecology. <i>Ecology Letters</i> , 2013, 16, 535-544.	6.4	74
45	<i>Daphnia</i> 's dilemma of adjusting carbon budgets when facing limitations by food quantity and the essential organic compound cholesterol. <i>Journal of Experimental Biology</i> , 2013, 217, 1079-86.	1.7	15
46	The neonate nutrition hypothesis: early feeding affects the body stoichiometry of <i>Daphnia</i> offspring. <i>Freshwater Biology</i> , 2013, 58, 2333-2344.	2.4	6
47	Biochemical nutrient requirements of the rotifer <i>Bosmina longirostris</i> : co-limitation by sterols and amino acids. <i>Functional Ecology</i> , 2012, 26, 1135-1143.	3.6	45
48	Phytoplankton sterol contents vary with temperature, phosphorus and silicate supply: a study on three freshwater species. <i>European Journal of Phycology</i> , 2012, 47, 138-145.	2.0	32
49	Elemental and fatty acid composition of snow algae in Arctic habitats. <i>Frontiers in Microbiology</i> , 2012, 3, 380.	3.5	74
50	Dietary lipid quality affects temperature-mediated reaction norms of a freshwater key herbivore. <i>Oecologia</i> , 2012, 168, 901-912.	2.0	59
51	SPECIES-SPECIFIC VARIATION IN FATTY ACID CONCENTRATIONS OF FOUR PHYTOPLANKTON SPECIES: DOES PHOSPHORUS SUPPLY INFLUENCE THE EFFECT OF LIGHT INTENSITY OR TEMPERATURE? <i>Journal of Phycology</i> , 2012, 48, 64-73.	2.3	61
52	Multiple resource limitation theory applied to herbivorous consumers: Liebig's minimum rule vs. interactive co-limitation. <i>Ecology Letters</i> , 2012, 15, 142-150.	6.4	88
53	Temperature affects the limitation of <i>Daphnia magna</i> by eicosapentaenoic acid, and the fatty acid composition of body tissue and eggs. <i>Freshwater Biology</i> , 2012, 57, 497-508.	2.4	54
54	Use of ciliate and phytoplankton taxonomic composition for the estimation of eicosapentaenoic acid concentration in lakes. <i>Freshwater Biology</i> , 2012, 57, 1385-1398.	2.4	7

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55	Oligotrophication of a large, deep lake alters food quantity and quality constraints at the primary producer–consumer interface. <i>Oikos</i> , 2012, 121, 1702-1712.	2.7	43
56	Growth Rate Hypothesis does not apply across colimiting conditions: cholesterol limitation affects phosphorus homeostasis of an aquatic herbivore. <i>Functional Ecology</i> , 2011, 25, 1206-1214.	3.6	39
57	Interactions between P-limitation and different C conditions on the fatty acid composition of an extremophile microalga. <i>Extremophiles</i> , 2011, 15, 597-609.	2.3	47
58	Temperature- and cholesterol-induced changes in eicosapentaenoic acid limitation of <i>Daphnia magna</i> determined by a promising method to estimate growth saturation thresholds. <i>Limnology and Oceanography</i> , 2011, 56, 1273-1284.	3.1	44
59	Interactions between limiting nutrients: Consequences for somatic and population growth of <i>Daphnia magna</i> . <i>Limnology and Oceanography</i> , 2010, 55, 2597-2607.	3.1	80
60	Simultaneous Effects of Light Intensity and Phosphorus Supply on the Sterol Content of Phytoplankton. <i>PLoS ONE</i> , 2010, 5, e15828.	2.5	54
61	Changes in the competitive abilities of two rotifers feeding on mixotrophic flagellates. <i>Journal of Plankton Research</i> , 2010, 32, 1727-1731.	1.8	8
62	Effects of temperature and dietary sterol availability on growth and cholesterol allocation of the aquatic keystone species <i>Daphnia</i> . <i>Journal of Experimental Biology</i> , 2009, 212, 3051-3059.	1.7	52
63	Colimitation of a freshwater herbivore by sterols and polyunsaturated fatty acids. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 1805-1814.	2.6	114
64	Carbon assimilation mode in mixotrophs and the fatty acid composition of their rotifer consumers. <i>Freshwater Biology</i> , 2009, 54, 2189-2199.	2.4	28
65	Body size and food thresholds for zero growth in <i>Dreissena polymorpha</i> : a mechanism underlying intraspecific competition. <i>Freshwater Biology</i> , 2008, 53, 2356-2363.	2.4	17
66	Impact of parasitic mite infection on a terrestrial snail. <i>Invertebrate Reproduction and Development</i> , 2008, 51, 69-75.	0.8	1
67	The mode of nutrition of mixotrophic flagellates determines the food quality for their consumers. <i>Functional Ecology</i> , 2007, 21, 1092-1098.	3.6	31
68	Allocation of essential lipids in <i>Daphnia magna</i> during exposure to poor food quality. <i>Functional Ecology</i> , 2007, 21, 738-747.	3.6	132
69	Life history consequences of sterol availability in the aquatic keystone species <i>Daphnia</i> . <i>Oecologia</i> , 2005, 144, 362-372.	2.0	116
70	Lipids in the food of a terrestrial snail. <i>Invertebrate Reproduction and Development</i> , 2005, 47, 205-212.	0.8	8
71	Food quality controls egg quality of the zebra mussel <i>Dreissena polymorpha</i> : The role of fatty acids. <i>Limnology and Oceanography</i> , 2004, 49, 1794-1801.	3.1	49
72	Effects of protein and calcium concentrations of artificial diets on the growth and survival of the land snail <i>Arianta arbustorum</i> . <i>Invertebrate Reproduction and Development</i> , 2004, 46, 47-53.	0.8	11

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73	Food quality controls reproduction of the zebra mussel (<i>Dreissena polymorpha</i>). <i>Oecologia</i> , 2003, 135, 332-338.	2.0	59
74	Settlement pattern of the zebra mussel, <i>Dreissena polymorpha</i> , as a function of depth in Lake Constance. <i>Archiv für Hydrobiologie</i> , 2003, 158, 289-301.	1.1	20
75	Food quality effects of unsaturated fatty acids on larvae of the zebra mussel <i>Dreissena polymorpha</i> . <i>Limnology and Oceanography</i> , 2002, 47, 1242-1248.	3.1	72
76	Strong influences of larval diet history on subsequent post-settlement growth in the freshwater mollusc <i>Dreissena polymorpha</i> . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2002, 269, 2113-2119.	2.6	37
77	POLYUNSATURATED FATTY ACIDS: EVIDENCE FOR NON-SUBSTITUTABLE BIOCHEMICAL RESOURCES IN <i>DAPHNIA GALEATA</i> . <i>Ecology</i> , 2001, 82, 2507-2520.	3.2	151
78	Polyunsaturated Fatty Acids: Evidence for Non-Substitutable Biochemical Resources in <i>Daphnia galeata</i> . <i>Ecology</i> , 2001, 82, 2507.	3.2	49
79	Light causes selection among two phycoerythrin-rich <i>Synechococcus</i> isolates from Lake Constance. <i>FEMS Microbiology Ecology</i> , 1998, 25, 171-178.	2.7	16
80	A comment on "Variability in plant nutrients reduces insect herbivore performance". <i>Rethinking Ecology</i> , 0, 4, 79-87.	0.0	4
81	Thermal Fluctuations Yield Sex-Specific Differences of Ingestion Rates of the Littoral Mysid <i>Neomysis integer</i> . <i>Frontiers in Marine Science</i> , 0, 9, .	2.5	1