Dominik Martin-Creuzburg

List of Publications by Year
in descending order

72 papers	3,066 citations	147801 31 h-index	175258 52 g-index
73 all docs	73 docs citations	73 times ranked	2235 citing authors

#	Article	IF	Citations
1	Absence of sterols constrains carbon transfer between cyanobacteria and a freshwater herbivore () Tj ETQq1 1 0.784314 rgBT /Overlock	2.6	258
2	Nutritional constraints at the cyanobacteriaâ€"<i>Daphnia magna</i> interface: The role of sterols. Limnology and Oceanography, 2008, 53, 456-468.	3.1	184
3	Allocation of essential lipids in <i>Daphnia magna</i> during exposure to poor food quality. Functional Ecology, 2007, 21, 738-747.	3.6	132
4	Life history consequences of sterol availability in the aquatic keystone species Daphnia. Oecologia, 2005, 144, 362-372.	2.0	116
5	Colimitation of a freshwater herbivore by sterols and polyunsaturated fatty acids. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 1805-1814.	2.6	114
6	Differing <i>Daphnia magna</i> assimilation efficiencies for terrestrial, bacterial, and algal carbon and fatty acids. Ecology, 2014, 95, 563-576.	3.2	100
7	Trophic upgrading of autotrophic picoplankton by the heterotrophic nanoflagellate <i>Paraphysomonas</i> sp.. Limnology and Oceanography, 2006, 51, 1699-1707.	3.1	98
8	Good food versus bad food: the role of sterols and polyunsaturated fatty acids in determining growth and reproduction of Daphnia magna. Aquatic Ecology, 2009, 43, 943-950.	1.5	90
9	Ecological significance of sterols in aquatic food webs. , 2009, , 43-64.		90
10	Multiple resource limitation theory applied to herbivorous consumers: Liebigâ€™s minimum rule vs. interactive coâ€limitation. Ecology Letters, 2012, 15, 142-150.	6.4	88
11	Interactions between limiting nutrients: Consequences for somatic and population growth of <i>Daphnia magna</i>. Limnology and Oceanography, 2010, 55, 2597-2607.	3.1	80
12	Ecdysteroid levels in Daphnia magna during a molt cycle: Determination by radioimmunoassay (RIA) and liquid chromatographyâ€"mass spectrometry (LCâ€"MS). General and Comparative Endocrinology, 2007, 151, 66-71.	1.8	79
13	Food quality of heterotrophic bacteria for Daphnia magna: evidence for a limitation by sterols. FEMS Microbiology Ecology, 2011, 76, 592-601.	2.7	77
14	Impact of 10 Dietary Sterols on Growth and Reproduction of Daphnia galeata. Journal of Chemical Ecology, 2004, 30, 483-500.	1.8	71
15	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
16	Sterols of freshwater microalgae: potential implications for zooplankton nutrition. Journal of Plankton Research, 2016, 38, 865-877.	1.8	66
17	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
18	Stable isotopes of fatty acids: current and future perspectives for advancing trophic ecology. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190641.	4.0	61

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19	Dietary lipid quality affects temperature-mediated reaction norms of a freshwater key herbivore. Oecologia, 2012, 168, 901-912.	2.0	59
20	Simultaneous Effects of Light Intensity and Phosphorus Supply on the Sterol Content of Phytoplankton. PLoS ONE, 2010, 5, e15828.	2.5	54
21	Trophic upgrading of picocyanobacterial carbon by ciliates for nutrition of Daphnia magna. Aquatic Microbial Ecology, 2005, 41, 271-280.	1.8	54
22	The potential of dietary polyunsaturated fatty acids to modulate eicosanoid synthesis and reproduction in Daphnia magna: A gene expression approach. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2012, 162, 449-454.	1.8	51
23	Comparison of sterol and fatty acid profiles of chytrids and their hosts reveals trophic upgrading of nutritionally inadequate phytoplankton by fungal parasites. Environmental Microbiology, 2019, 21, 949-958.	3.8	48
24	Biochemical nutrient requirements of the rotifer <i><scp>B</scp>rachionus calyciflorus</i>: coâ€limitation by sterols and amino acids. Functional Ecology, 2012, 26, 1135-1143.	3.6	45
25	Oligotrophication of a large, deep lake alters food quantity and quality constraints at the primary producerâ€"consumer interface. Oikos, 2012, 121, 1702-1712.	2.7	43
26	Dietary supply with polyunsaturated fatty acids and resulting maternal effects influence host â€" parasite interactions. BMC Ecology, 2013, 13, 41.	3.0	43
27	Thresholds for Sterol-Limited Growth of Daphnia magna: A Comparative Approach Using 10 Different Sterols. Journal of Chemical Ecology, 2014, 40, 1039-1050.	1.8	39
28	Effects of adult nutrition on female reproduction in a fruit-feeding butterfly: The role of fruit decay and dietary lipids. Journal of Insect Physiology, 2007, 53, 964-973.	2.0	37
29	Linking primary producer diversity and food quality effects on herbivores: A biochemical perspective. Scientific Reports, 2017, 7, 11035.	3.3	37
30	Seasonal changes in the accumulation of polyunsaturated fatty acids in zooplankton. Journal of Plankton Research, 2013, 35, 121-134.	1.8	36
31	Food quality of mixed bacteriaâ€"algae diets for Daphnia magna. Hydrobiologia, 2013, 715, 63-76.	2.0	36
32	Knowing the Enemy: Inducible Defences in Freshwater Zooplankton. Diversity, 2020, 12, 147.	1.7	35
33	Tracking Diet Preferences of Bats Using Stable Isotope and Fatty Acid Signatures of Faeces. PLoS ONE, 2013, 8, e83452.	2.5	34
34	Climate change shifts the timing of nutritional flux from aquatic insects. Current Biology, 2022, 32, 1342-1349.e3.	3.9	33
35	Phytoplankton sterol contents vary with temperature, phosphorus and silicate supply: a study on three freshwater species. European Journal of Phycology, 2012, 47, 138-145.	2.0	32
36	Flux of the biogenic volatiles isoprene and dimethyl sulfide from an oligotrophic lake. Scientific Reports, 2018, 8, 630.	3.3	32

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37	Role of essential lipids in determining food quality for the invasive freshwater clam <i>Corbicula fluminea</i>. Journal of the North American Benthological Society, 2011, 30, 653-664.	3.1	29
38	Population genetic dynamics of an invasion reconstructed from the sediment egg bank. Molecular Ecology, 2015, 24, 4074-4093.	3.9	26
39	Absence of sterols constrains food quality of cyanobacteria for an invasive freshwater bivalve. Oecologia, 2012, 170, 57-64.	2.0	24
40	Temperature-induced changes in body lipid composition affect vulnerability to oxidative stress in Daphnia magna. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2019, 232, 101-107.	1.6	22
41	Supplementation with Sterols Improves Food Quality of a Ciliate for Daphnia magna. Protist, 2006, 157, 477-486.	1.5	21
42	Food quantityâ€“quality coâ€limitation: Interactive effects of dietary carbon and essential lipid supply on population growth of a freshwater rotifer. Freshwater Biology, 2019, 64, 903-912.	2.4	21
43	A comparative analysis of the fatty acid composition of sexual and asexual eggs of<i>Daphnia magna</i>and its plasticity as a function of food quality. Journal of Plankton Research, 2015, 37, 752-763.	1.8	19
44	Fatty acid composition of the heterotrophic nanoflagellate Paraphysomonas sp.: influence of diet and de novo biosynthesis. Aquatic Biology, 2010, 9, 107-112.	1.4	19
45	Phytoplankton food quality effects on gammarids: benthicâ€“pelagic coupling mediated by an invasive freshwater clam. Canadian Journal of Fisheries and Aquatic Sciences, 2013, 70, 198-207.	1.4	18
46	Combined effects of dietary polyunsaturated fatty acids and parasite exposure on eicosanoid-related gene expression in an invertebrate model. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2016, 201, 115-123.	1.8	18
47	Hydrogen isotopes (Î´²H) of polyunsaturated fatty acids track bioconversion by zooplankton. Functional Ecology, 2022, 36, 538-549.	3.6	17
48	Dietary lipid quality mediates salt tolerance of a freshwater keystone herbivore. Science of the Total Environment, 2021, 769, 144657.	8.0	15
49	Use of Fatty Acids From Aquatic Prey Varies With Foraging Strategy. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	15
50	Dietary availability determines metabolic conversion of longâ€chain polyunsaturated fatty acids in spiders: a dual compoundâ€specific stable isotope approach. Oikos, 2022, 2022, .	2.7	15
51	A dietary polyunsaturated fatty acid improves consumer performance during challenge with an opportunistic bacterial pathogen. FEMS Microbiology Ecology, 2014, 90, n/a-n/a.	2.7	14
52	Dietary supply with essential lipids affects growth and survival of the amphipod Gammarus roeselii. Limnologica, 2014, 46, 109-115.	1.5	14
53	Toward Disentangling the Multiple Nutritional Constraints Imposed by Planktothrix: The Significance of Harmful Secondary Metabolites and Sterol Limitation. Frontiers in Microbiology, 2020, 11, 586120.	3.5	14
54	Interdisciplinary Reservoir Managementâ€"A Tool for Sustainable Water Resources Management. Sustainability, 2021, 13, 4498.	3.2	13

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55	Dietary polyunsaturated fatty acid supply improves <i>Daphnia</i> performance at fluctuating temperatures, simulating diel vertical migration. Freshwater Biology, 2019, 64, 1859-1866.	2.4	12
56	Reversed evolution of grazer resistance to cyanobacteria. Nature Communications, 2021, 12, 1945.	12.8	12
57	Compoundâ€specific Î´¹³C analyses reveal sterol metabolic constraints in an aquatic invertebrate. Rapid Communications in Mass Spectrometry, 2015, 29, 1789-1794.	1.5	11
58	Fitness response variation within and among consumer species can be co-mediated by food quantity and biochemical quality. Scientific Reports, 2019, 9, 16126.	3.3	11
59	Cross-Ecosystem Linkages: Transfer of Polyunsaturated Fatty Acids From Streams to Riparian Spiders via Emergent Insects. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	11
60	Taxonomic composition and lake bathymetry influence fatty acid export via emergent insects. Freshwater Biology, 2021, 66, 2199-2209.	2.4	11
61	Fatty acid signatures of stomach contents reflect inter- and intra-annual changes in diet of a small pelagic seabird, the Thin-billed prion Pachyptila belcheri. Marine Biology, 2011, 158, 1805-1813.	1.5	10
62	Sex-Specific Differences in Essential Lipid Requirements of Daphnia magna. Frontiers in Ecology and Evolution, 2018, 6, .	2.2	9
63	Impact of temperature and nutrient dynamics on growth and survival of <i>Corbicula fluminea</i> : A field study in oligotrophic Lake Constance. International Review of Hydrobiology, 2017, 102, 15-28.	0.9	8
64	Phospholipid-bound eicosapentaenoic acid (EPA) supports higher fecundity than free EPA in Daphnia magna. Journal of Plankton Research, 2017, 39, 843-848.	1.8	8
65	Inter- and intraspecific differences in rotifer fatty acid composition during acclimation to low-quality food. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190644.	4.0	8
66	Daphniaâ€™s Adaptive Molecular Responses to the Cyanobacterial Neurotoxin Anatoxin-Î± Are Maternally Transferred. Toxins, 2021, 13, 326.	3.4	8
67	Fatty acid composition of <i>Turbatrix aceti</i> and its use in feeding regimes of <i>Coregonus maraena</i> (Bloch, 1779): is it really a suitable alternative to <i>Artemia</i> nauplii?. Journal of Applied Ichthyology, 2015, 31, 343-348.	0.7	7
68	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
69	Morphological defences and defenceâ€"cost tradeâ€offs in <i>Daphnia</i> in response to two coâ€occurring invertebrate predators. Freshwater Biology, 2022, 67, 883-892.	2.4	6
70	Resilience to changes in lake trophic state: Nutrient allocation into <i>Daphnia</i> resting eggs. Ecology and Evolution, 2019, 9, 12813-12825.	1.9	5
71	A sterol-mediated gleanerâ€"opportunist trade-off underlies the evolution of grazer resistance to cyanobacteria. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20220178.	2.6	3
72	Nutritional Constraints on Zooplankton. , 2021, , .		0