Sebastian Diehl

List of Publications by Year
in descending order

73 papers	6,797 citations	71102 41 h-index	79698 73 g-index
73 all docs	73 docs citations	73 times ranked	6059 citing authors

#	Article	IF	Citations
1	The interaction between predation and competition: a review and synthesis. Ecology Letters, 2002, 5, 302-315.	6.4	596
2	Fish Predation and Benthic Community Structure: The Role of Omnivory and Habitat Complexity. Ecology, 1992, 73, 1646-1661.	3.2	388
3	Foraging Efficiency of Three Freshwater Fishes: Effects of Structural Complexity and Light. Oikos, 1988, 53, 207.	2.7	376
4	Temperature dependence of the functional response. Ecology Letters, 2011, 14, 914-921.	6.4	328
5	Shifts in fish communities along the productivity gradient of temperate lakes-patterns and the importance of size-structured interactions. Journal of Fish Biology, 1991, 38, 281-293.	1.6	302
6	EFFECTS OF POPULATION DENSITY ON INDIVIDUAL GROWTH OF BROWN TROUT IN STREAMS. Ecology, 1999, 80, 941-956.	3.2	296
7	Trophic Interactions in Temperate Lake Ecosystems: A Test of Food Chain Theory. American Naturalist, 1992, 140, 59-84.	2.1	232
8	Effects of Enrichment on Threeâ€Level Food Chains with Omnivory. American Naturalist, 2000, 155, 200-218.	2.1	207
9	PHYTOPLANKTON, LIGHT, AND NUTRIENTS IN A GRADIENT OF MIXING DEPTHS: FIELD EXPERIMENTS. Ecology, 2002, 83, 399-411.	3.2	185
10	Copepods act as a switch between alternative trophic cascades in marine pelagic food webs. Ecology Letters, 2004, 7, 321-328.	6.4	166
11	Implications of scale for patterns and processes in stream ecology. Austral Ecology, 1998, 23, 27-40.	1.5	157
12	Spectral Niche Complementarity and Carbon Dynamics in Pelagic Ecosystems. American Naturalist, 2009, 174, 141-147.	2.1	156
13	Quantifying Spatial Heterogeneity in Streams. Journal of the North American Benthological Society, 1997, 16, 174-188.	3.1	152
14	Piscivore efficiency and refuging prey: the importance of predator search mode. Oecologia, 1994, 98, 344-353.	2.0	141
15	Influence of Submerged Macrophytes on Trophic Interactions Among Fish and Macroinvertebrates. Ecological Studies, 1998, , 24-46.	1.2	134
16	PHYTOPLANKTON, LIGHT, AND NUTRIENTS IN A GRADIENT OF MIXING DEPTHS: THEORY. Ecology, 2002, 83, 386-398.	3.2	134
17	Relative Consumer Sizes and the Strengths of Direct and Indirect Interactions in Omnivorous Feeding Relationships. Oikos, 1993, 68, 151.	2.7	133
18	Effects of Piscivore-Mediated Habitat Use on Resources, Diet, and Growth of Perch. Ecology, 1995, 76, 1712-1726.	3.2	133

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19	Effects of warming on predatorâ€“prey interactions â€“ a resourceâ€based approach and a theoretical synthesis. Ecology Letters, 2017, 20, 513-523.	6.4	126
20	INTRAGUILD PREY SUFFER FROM ENRICHMENT OF THEIR RESOURCES: A MICROCOSM EXPERIMENT WITH CILIATES. Ecology, 2001, 82, 2977-2983.	3.2	113
21	Water temperature and mixing depth affect timing and magnitude of events during spring succession of the plankton. Oecologia, 2006, 150, 643-654.	2.0	105
22	Adaptive omnivory and species coexistence in tri-trophic food webs. Theoretical Population Biology, 2005, 67, 85-99.	1.1	100
23	Direct and Indirect Effects of Omnivory in a Littoral Lake Community. Ecology, 1995, 76, 1727-1740.	3.2	99
24	Performance of sinking and nonsinking phytoplankton taxa in a gradient of mixing depths. Limnology and Oceanography, 2003, 48, 1903-1912.	3.1	99
25	Effects of Habitat Structure on Resource Availability, Diet and Growth of Benthivorous Perch, Perca fluviatilis. Oikos, 1993, 67, 403.	2.7	97
26	Water temperature and stratification depth independently shift cardinal events during plankton spring succession. Global Change Biology, 2010, 16, 1954-1965.	9.5	92
27	Simple rules describe bottomâ€up and topâ€down control in food webs with alternative energy pathways. Ecology Letters, 2012, 15, 935-946.	6.4	90
28	Light supply, plankton biomass, and seston stoichiometry in a gradient of lake mixing depths. Limnology and Oceanography, 2006, 51, 1898-1905.	3.1	87
29	Size-dependent foraging efficiency, cannibalism and zooplankton community structure. Oecologia, 2000, 123, 138-148.	2.0	85
30	Effects of Multiple, Predatorâ€Induced Behaviors on Shortâ€term Producerâ€Grazer Dynamics in Open Systems. American Naturalist, 2000, 156, 293-313.	2.1	83
31	THE EVOLUTION AND MAINTENANCE OF OMNIVORY: DYNAMIC CONSTRAINTS AND THE ROLE OF FOOD QUALITY. Ecology, 2003, 84, 2557-2567.	3.2	80
32	PRIMARY-PRODUCTIVITY GRADIENTS AND SHORT-TERM POPULATION DYNAMICS IN OPEN SYSTEMS. Ecological Monographs, 1997, 67, 535-553.	5.4	78
33	FLEXIBLE NUTRIENT STOICHIOMETRY MEDIATES ENVIRONMENTAL INFLUENCES ON PHYTOPLANKTON AND ITS RESOURCES. Ecology, 2005, 86, 2931-2945.	3.2	76
34	Influence of waterâ€column depth and mixing on phytoplankton biomass, community composition, and nutrients. Limnology and Oceanography, 2008, 53, 2361-2373.	3.1	75
35	INFLUENCE OF FISH ON HABITAT CHOICE OF WATER BIRDS: A WHOLE SYSTEM EXPERIMENT. Ecology, 2007, 88, 2915-2925.	3.2	67
36	Resource competition across habitat boundaries: asymmetric interactions between benthic and pelagic producers. Ecological Monographs, 2014, 84, 287-302.	5.4	66

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37	Rapid adaptation of herbivore consumers to nutrient limitation: ecoâ€evolutionary feedbacks to population demography and resource control. Ecology Letters, 2015, 18, 553-562.	6.4	66
38	Density Dependent Interactions in Lake Ecosystems: Whole Lake Perturbation Experiments. Oikos, 1993, 66, 193.	2.7	65
39	Spring phenological responses of marine and freshwater plankton to changing temperature and light conditions. Marine Biology, 2012, 159, 2491-2501.	1.5	65
40	Paradoxes of Enrichment: Effects of Increased Light versus Nutrient Supply on Pelagic Producerâ€Grazer Systems. American Naturalist, 2007, 169, E173-E191.	2.1	57
41	Food quality, nutrient limitation of secondary production, and the strength of trophic cascades. Oikos, 2007, 116, 1128-1143.	2.7	47
42	Daphnia-Phytoplankton Interactions in Lakes: Is There a Need for Ratio-Dependent Consumer-Resource Models?. American Naturalist, 1993, 142, 1052-1061.	2.1	41
43	Asymmetrical competition between aquatic primary producers in a warmer and browner world. Ecology, 2016, 97, 2580-2592.	3.2	39
44	Scaling population responses to spatial environmental variability in advection-dominated systems. Ecology Letters, 2005, 8, 933-943.	6.4	38
45	TRANSIENT DYNAMICS OF PELAGIC PRODUCERâ€“GRAZER SYSTEMS IN A GRADIENT OF NUTRIENTS AND MIXING DEPTHS. Ecology, 2008, 89, 1272-1286.	3.2	38
46	Bottomâ€up and topâ€down effects of browning and warming on shallow lake food webs. Global Change Biology, 2019, 25, 504-521.	9.5	37
47	Physical Determinants of Phytoplankton Production, Algal Stoichiometry, and Vertical Nutrient Fluxes. American Naturalist, 2010, 175, E91-E104.	2.1	36
48	Strong invaders are strong defenders â€“ implications for theÂresistance of invaded communities. Ecology Letters, 2016, 19, 487-494.	6.4	35
49	Phytoplankton, light and nutrients along a gradient of mixing depth: a field test of producer-resource theory. Freshwater Biology, 2003, 48, 1050-1063.	2.4	32
50	Separating effects of climatic drivers and biotic feedbacks on seasonal plankton dynamics: no sign of trophic mismatch. Freshwater Biology, 2014, 59, 2204-2220.	2.4	30
51	Effects of grazer immigration and nutrient enrichment on an open algae-grazer system. Oikos, 2005, 108, 386-400.	2.7	25
52	Ontogenetic diet shifts promote predatorâ€mediated coexistence. Ecology, 2013, 94, 2886-2897.	3.2	25
53	When is a type III functional response stabilizing? Theory and practice of predicting plankton dynamics under enrichment. Ecology, 2015, 96, 3243-3256.	3.2	25
54	Effects of Terrestrial Organic Matter on Aquatic Primary Production as Mediated by Pelagicâ€“Benthic Resource Fluxes. Ecosystems, 2018, 21, 1255-1268.	3.4	23

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55	Fitting functional response surfaces to data: a best practice guide. Ecosphere, 2020, 11, e03051.	2.2	23
56	Bottom-up responses of the lower oceanic food web are sensitive to copepod mortality and feeding behavior. Limnology and Oceanography, 2015, 60, 641-656.	3.1	22
57	Disturbance history influences the distribution of stream invertebrates by altering microhabitat parameters: a field experiment. Freshwater Biology, 2008, 53, 996-1011.	2.4	20
58	Determining Selection across Heterogeneous Landscapes: A Perturbation-Based Method and Its Application to Modeling Evolution in Space. American Naturalist, 2017, 189, 381-395.	2.1	19
59	Effects of enrichment on protist abundances and bacterial composition in simple microbial communities. Oikos, 2006, 114, 15-26.	2.7	17
60	Effects of water temperature and mixed layer depth on zooplankton body size. Marine Biology, 2012, 159, 2431-2440.	1.5	17
61	Evolution of resource specialisation in competitive metacommunities. Ecology Letters, 2019, 22, 1746-1756.	6.4	13
62	Interannual variation in seasonal diatom sedimentation reveals the importance of late winter processes and their timing for sediment signal formation. Limnology and Oceanography, 2019, 64, 1186-1199.	3.1	13
63	Spatial Scaling of Consumerâ€Resource Interactions in Advectionâ€Dominated Systems. American Naturalist, 2006, 168, 358-372.	2.1	11
64	Patchy bed disturbance and fish predation independently influence the distribution of stream invertebrates and algae. Journal of Animal Ecology, 2011, 80, 603-614.	2.8	11
65	Inverse relationship of epilithic algae and pelagic phosphorus in unproductive lakes: Roles of N₂ fixers and light. Freshwater Biology, 2018, 63, 662-675.	2.4	11
66	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
67	Carbon sequestration and stoichiometry of motile and nonmotile green algae. Limnology and Oceanography, 2009, 54, 1746-1752.	3.1	10
68	Trophic transfer of biodiversity effects: functional equivalence of prey diversity and enrichment?. Ecology and Evolution, 2012, 2, 3110-3122.	1.9	9
69	An experimental demonstration of the critical depth principle. ICES Journal of Marine Science, 2015, 72, 2051-2060.	2.5	8
70	Stoichiometric mismatch causes a warmingâ€induced regime shift in experimental plankton communities. Ecology, 2022, 103, e3674.	3.2	8
71	Phytoplankton, Light, and Nutrients in a Gradient of Mixing Depths: Field Experiments. Ecology, 2002, 83, 399.	3.2	7
72	Phytoplankton, Light, and Nutrients in a Gradient of Mixing Depths: Theory. Ecology, 2002, 83, 386.	3.2	5

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73	Food quality, nutrient limitation of secondary production, and the strength of trophic cascades. Oikos, 2007, 116, 1128-1143.	2.7	4