Blake Matthews

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1959407/publications.pdf

Version: 2024-02-01

85 papers	5,638 citations	101543 36 h-index	88630 70 g-index
88 all docs	88 docs citations	88 times ranked	8119 citing authors

#	Article	IF	Citations
1	Genomics and the origin of species. Nature Reviews Genetics, 2014, 15, 176-192.	16.3	850
2	An introduction to niche construction theory. Evolutionary Ecology, 2016, 30, 191-202.	1.2	376
3	Evolutionary diversification in stickleback affects ecosystem functioning. Nature, 2009, 458, 1167-1170.	27.8	309
4	Genetics of ecological divergence during speciation. Nature, 2014, 511, 307-311.	27.8	264
5	The ecological forecast horizon, and examples of its uses and determinants. Ecology Letters, 2015, 18, 597-611.	6.4	242
6	Toward an integration of evolutionary biology and ecosystem science. Ecology Letters, 2011, 14, 690-701.	6.4	232
7	Does human activity impact the natural antibiotic resistance background? Abundance of antibiotic resistance genes in 21 Swiss lakes. Environment International, 2015, 81, 45-55.	10.0	209
8	Ecosystem tipping points in an evolving world. Nature Ecology and Evolution, 2019, 3, 355-362.	7.8	203
9	Under niche construction: an operational bridge between ecology, evolution, and ecosystem science. Ecological Monographs, 2014, 84, 245-263.	5.4	148
10	A critical evaluation of intrapopulation variation of Î´13C and isotopic evidence of individual specialization. Oecologia, 2004, 140, 361-371.	2.0	143
11	Ecoâ€evolutionary feedbacksâ€”Theoretical models and perspectives. Functional Ecology, 2019, 33, 13-30.	3.6	137
12	Evolution in a Community Context: On Integrating Ecological Interactions and Macroevolution. Trends in Ecology and Evolution, 2017, 32, 291-304.	8.7	129
13	Environmental stability and lake zooplankton diversity â€“ contrasting effects of chemical and thermal variability. Ecology Letters, 2010, 13, 453-463.	6.4	123
14	Specialization of trophic position and habitat use by sticklebacks in an adaptive radiation. Ecology, 2010, 91, 1025-1034.	3.2	115
15	A key metabolic gene for recurrent freshwater colonization and radiation in fishes. Science, 2019, 364, 886-889.	12.6	109
16	Estimating Bacterial Diversity for Ecological Studies: Methods, Metrics, and Assumptions. PLoS ONE, 2015, 10, e0125356.	2.5	89
17	Effects of environmental variation and spatial distance on Bacteria, Archaea and viruses in sub-polar and arctic waters. ISME Journal, 2013, 7, 1507-1518.	9.8	88
18	The Ecology and Evolution of Stoichiometric Phenotypes. Trends in Ecology and Evolution, 2017, 32, 108-117.	8.7	83

#	Article	IF	Citations
19	Compositional and interlake variability of zooplankton affect baseline stable isotope signatures. Limnology and Oceanography, 2003, 48, 1977-1987.	3.1	82
20	Temporal variation in body composition (C : N) helps explain seasonal patterns of zooplankton delta13C. Freshwater Biology, 2005, 50, 502-515.	2.4	81
21	Experimental Evidence of an Eco-evolutionary Feedback during Adaptive Divergence. Current Biology, 2016, 26, 483-489.	3.9	75
22	The intrinsic predictability of ecological time series and its potential to guide forecasting. Ecological Monographs, 2019, 89, e01359.	5.4	74
23	Effects of reâ€oligotrophication and climate warming on plankton richness and community stability in a deep mesotrophic lake. Oikos, 2012, 121, 1317-1327.	2.7	72
24	Effects of patch connectivity and heterogeneity on metacommunity structure of planktonic bacteria and viruses. ISME Journal, 2013, 7, 533-542.	9.8	71
25	Detecting the macroevolutionary signal of species interactions. Journal of Evolutionary Biology, 2019, 32, 769-782.	1.7	66
26	Experimental evidence that parasites drive eco-evolutionary feedbacks. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3678-3683.	7.1	62
27	Lipid extraction has little effect on the Î´¹⁵N of aquatic consumers. Limnology and Oceanography: Methods, 2007, 5, 338-342.	2.0	54
28	The evolutionary ecology of fattyâ€acid variation: Implications for consumer adaptation and diversification. Ecology Letters, 2021, 24, 1709-1731.	6.4	53
29	Sympatric and Allopatric Divergence of MHC Genes in Threespine Stickleback. PLoS ONE, 2010, 5, e10948.	2.5	51
30	HABITAT SPECIALIZATION AND THE EXPLOITATION OF ALLOCHTHONOUS CARBON BY ZOOPLANKTON. Ecology, 2006, 87, 2800-2812.	3.2	49
31	Carbon pathways to zooplankton: insights from the combined use of stable isotope and fatty acid biomarkers. Freshwater Biology, 2006, 51, 2041-2051.	2.4	49
32	Adaptive plasticity and genetic divergence in feeding efficiency during parallel adaptive radiation of whitefish (Coregonus spp.). Journal of Evolutionary Biology, 2013, 26, 483-498.	1.7	45
33	Principles of Ecology Revisited: Integrating Information and Ecological Theories for a More Unified Science. Frontiers in Ecology and Evolution, 2019, 7, .	2.2	44
34	Consequences of large temporal variability of zooplankton Î´¹⁵ N for modeling fish trophic position and variation. Limnology and Oceanography, 2005, 50, 1404-1414.	3.1	42
35	Evidence for asymmetric migration load in a pair of ecologically divergent stickleback populations. Biological Journal of the Linnean Society, 2008, 94, 273-287.	1.6	42
36	Using phylogenetics in community assembly and ecosystem functioning research. Functional Ecology, 2015, 29, 589-591.	3.6	40

#	Article	IF	Citations
37	Phenotypic plasticity influences the ecoâ€evolutionary dynamics of a predatorâ€“prey system. Ecology, 2014, 95, 3080-3092.	3.2	39
38	Investment in boney defensive traits alters organismal stoichiometry and excretion in fish. Oecologia, 2016, 181, 1209-1220.	2.0	39
39	Climate change shifts the timing of nutritional flux from aquatic insects. Current Biology, 2022, 32, 1342-1349.e3.	3.9	33
40	Ecological speciation and phenotypic plasticity affect ecosystems. Ecology, 2014, 95, 2723-2735.	3.2	31
41	Active learning for anomaly detection in environmental data. Environmental Modelling and Software, 2020, 134, 104869.	4.5	31
42	Deciphering the Interdependence between Ecological and Evolutionary Networks. Trends in Ecology and Evolution, 2018, 33, 504-512.	8.7	28
43	Distinguishing trophic variation from seasonal and size-based isotopic (Î´15N) variation of zooplankton. Canadian Journal of Fisheries and Aquatic Sciences, 2007, 64, 74-83.	1.4	24
44	Detecting trophicâ€level variation in consumer assemblages. Freshwater Biology, 2008, 53, 1942-1953.	2.4	24
45	Rapid Divergence of Predator Functional Traits Affects Prey Composition in Aquatic Communities. American Naturalist, 2019, 193, 331-345.	2.1	21
46	Reversal in the relationship between species richness and turnover in a phytoplankton community. Ecology, 2012, 93, 2435-2447.	3.2	20
47	Challenges and prospects for interpreting longâ€term phytoplankton diversity changes in Lake Zurich (Switzerland). Freshwater Biology, 2015, 60, 1052-1059.	2.4	20
48	Stoichiometric traits of stickleback: Effects of genetic background, rearing environment, and ontogeny. Ecology and Evolution, 2017, 7, 2617-2625.	1.9	20
49	Maintenance of a Genetic Polymorphism with Disruptive Natural Selection in Stickleback. Current Biology, 2014, 24, 1289-1292.	3.9	19
50	Eutrophication and climate warming alter spatial (depth) co-occurrence patterns of lake phytoplankton assemblages. Hydrobiologia, 2017, 787, 375-385.	2.0	19
51	Threespine Stickleback in Lake Constance: The Ecology and Genomic Substrate of a Recent Invasion. Frontiers in Ecology and Evolution, 2021, 8, .	2.2	19
52	Transgenerational selection driven by divergent ecological impacts of hybridizing lineages. Nature Ecology and Evolution, 2017, 1, 1757-1765.	7.8	18
53	Individual Trait Variation and Diversity in Food Webs. Advances in Ecological Research, 2014, 50, 207-241.	2.7	16
54	Zooplankton communities andBythotrephes longimanusin lakes of the montane region of the northern Alps. Inland Waters, 2017, 7, 3-13.	2.2	16

#	Article	IF	Citations
55	Temporal discontinuity of nutrient limitation in plankton communities. Aquatic Sciences, 2010, 72, 393-402.	1.5	15
56	Contrasting Ecosystem-Effects of Morphologically Similar Copepods. PLoS ONE, 2011, 6, e26700.	2.5	15
57	The association of feeding behaviour with the resistance and tolerance to parasites in recently diverged sticklebacks. Journal of Evolutionary Biology, 2016, 29, 2157-2167.	1.7	15
58	An experimental test of how parasites of predators can influence trophic cascades and ecosystem functioning. Ecology, 2019, 100, e02744.	3.2	14
59	The value of human data annotation for machine learning based anomaly detection in environmental systems. Water Research, 2021, 206, 117695.	11.3	14
60	Climate change creates nutritional phenological mismatches. Trends in Ecology and Evolution, 2022, 37, 736-739.	8.7	14
61	Grazers structure the bacterial and algal diversity of aquatic metacommunities. Ecology, 2016, 97, 3472-3484.	3.2	13
62	Predatorâ€induced changes in dissolved organic carbon dynamics. Oikos, 2019, 128, 430-440.	2.7	13
63	Evolution as an ecosystem process: insights from genomics. Genome, 2018, 61, 298-309.	2.0	11
64	On the evolution of trophic position. Ecology Letters, 2021, 24, 2549-2562.	6.4	11
65	Submerged macrophytes affect the temporal variability of aquatic ecosystems. Freshwater Biology, 2021, 66, 421-435.	2.4	11
66	Food web consequences of size-based predation and vertical migration of an invertebrate predator (Leptodora kindtii). Limnology and Oceanography, 2013, 58, 1790-1801.	3.1	10
67	Ecosystem flux and biotic modification as drivers of metaecosystem dynamics. Ecology, 2017, 98, 1082-1092.	3.2	10
68	Building on 150 Years of Knowledge: The Freshwater Isopod Asellus aquaticus as an Integrative Eco-Evolutionary Model System. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	10
69	Anthropogenic disturbance history influences the temporal coherence of paleoproductivity in two lakes. Journal of Paleolimnology, 2009, 42, 167-181.	1.6	9
70	The effect of topâ€predator presence and phenotype on aquatic microbial communities. Ecology and Evolution, 2017, 7, 1572-1582.	1.9	9
71	On biological evolution and environmental solutions. Science of the Total Environment, 2020, 724, 138194.	8.0	9
72	Dietary-based developmental plasticity affects juvenile survival in an aquatic detritivore. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20203136.	2.6	9

#	Article	IF	Citations
73	Adaptive Evolution Can Both Prevent Ecosystem Collapse and Delay Ecosystem Recovery. American Naturalist, 2021, 198, E185-E197.	2.1	9
74	Variation in Body Shape across Species and Populations in a Radiation of Diaptomid Copepods. PLoS ONE, 2013, 8, e68272.	2.5	9
75	Experimental evidence that evolution by niche construction affects dissipative ecosystem dynamics. Evolutionary Ecology, 2016, 30, 221-234.	1.2	8
76	Proteome evolution under non-substitutable resource limitation. Nature Communications, 2018, 9, 4650.	12.8	8
77	Interactive effects of foundation species on ecosystem functioning and stability in response to disturbance. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191857.	2.6	8
78	The role of plasticity in the evolution of cryptic pigmentation in a freshwater isopod. Journal of Animal Ecology, 2019, 88, 612-623.	2.8	8
79	An integrative paleolimnological approach for studying evolutionary processes. Trends in Ecology and Evolution, 2022, 37, 488-496.	8.7	8
80	Nonâ€additive effects of foundation species determine the response of aquatic ecosystems to nutrient perturbation. Ecology, 2021, 102, e03371.	3.2	6
81	The Legacy of Ecosystem Effects Caused by Adaptive Radiation. Copeia, 2017, 105, 550-557.	1.3	5
82	Fit and fatty freshwater fish: contrasting polyunsaturated fatty acid phenotypes between hybridizing stickleback lineages. Oikos, 2022, 2022, .	2.7	4
83	The influence of predator community composition on photoprotective traits of copepods. Ecology and Evolution, 2022, 12, e8862.	1.9	3
84	Phosphorus limitation does not drive loss of bony lateral plates in freshwater stickleback (Gasterosteus aculeatus). Evolution; International Journal of Organic Evolution, 2020, 74, 2088-2104.	2.3	1
85	Zooplankton communities and in lakes of the montane region of the northern Alps. Inland Waters, 2017, 7, 3-13.	2.2	1