Mary I O'connor

List of Publications by Year
in descending order

71 papers	14,022 citations	71061 41 h-index	88593 70 g-index
80 all docs	80 docs citations	80 times ranked	19513 citing authors

#	Article	IF	Citations
1	A global synthesis reveals biodiversity loss as a major driver of ecosystem change. Nature, 2012, 486, 105-108.	13.7	1,750
2	Global imprint of climate change on marine life. Nature Climate Change, 2013, 3, 919-925.	8.1	1,602
3	The Pace of Shifting Climate in Marine and Terrestrial Ecosystems. Science, 2011, 334, 652-655.	6.0	1,062
4	The functional role of producer diversity in ecosystems. American Journal of Botany, 2011, 98, 572-592.	0.8	991
5	Function and functional redundancy in microbial systems. Nature Ecology and Evolution, 2018, 2, 936-943.	3.4	912
6	Temperature control of larval dispersal and the implications for marine ecology, evolution, and conservation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1266-1271.	3.3	749
7	Increased temperature variation poses a greater risk to species than climate warming. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132612.	1.2	674
8	Linking the influence and dependence of people on biodiversity across scales. Nature, 2017, 546, 65-72.	13.7	474
9	Geographical limits to species-range shifts are suggested by climate velocity. Nature, 2014, 507, 492-495.	13.7	436
10	Sustainability and Global Seafood. Science, 2010, 327, 784-786.	6.0	388
11	Warming and Resource Availability Shift Food Web Structure and Metabolism. PLoS Biology, 2009, 7, e1000178.	2.6	377
12	Community ecology in a warming world: The influence of temperature on interspecific interactions in marine systems. Journal of Experimental Marine Biology and Ecology, 2011, 400, 218-226.	0.7	361
13	Warming strengthens an herbivoreâ€“plant interaction. Ecology, 2009, 90, 388-398.	1.5	293
14	Linking Biodiversity and Ecosystem Services: Current Uncertainties and the Necessary Next Steps. BioScience, 2014, 64, 49-57.	2.2	285
15	A bioenergetic framework for the temperature dependence of trophic interactions. Ecology Letters, 2014, 17, 902-914.	3.0	268
16	Cascading effects of predator diversity and omnivory in a marine food web. Ecology Letters, 2005, 8, 1048-1056.	3.0	238
17	Estimating local biodiversity change: a critique of papers claiming no net loss of local diversity. Ecology, 2016, 97, 1949-1960.	1.5	224
18	Energy Flux: The Link between Multitrophic Biodiversity and Ecosystem Functioning. Trends in Ecology and Evolution, 2018, 33, 186-197.	4.2	195

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19	Biodiversity mediates topâ€“down control in eelgrass ecosystems: a global comparativeâ€experimental approach. Ecology Letters, 2015, 18, 696-705.	3.0	188
20	Theoretical Predictions for How Temperature Affects the Dynamics of Interacting Herbivores and Plants. American Naturalist, 2011, 178, 626-638.	1.0	162
21	Ecological and methodological drivers of speciesâ€™ distribution and phenology responses to climate change. Global Change Biology, 2016, 22, 1548-1560.	4.2	162
22	Species richness change across spatial scales. Oikos, 2019, 128, 1079-1091.	1.2	160
23	Blue Carbon Storage Capacity of Temperate Eelgrass (<scp>Zostera marina</scp>) Meadows. Global Biogeochemical Cycles, 2018, 32, 1457-1475.	1.9	130
24	Recent Trends in Local-Scale Marine Biodiversity Reflect Community Structure and Human Impacts. Current Biology, 2015, 25, 1938-1943.	1.8	121
25	A general biodiversityâ€“function relationship is mediated by trophic level. Oikos, 2017, 126, 18-31.	1.2	112
26	The Body Size Dependence of Trophic Cascades. American Naturalist, 2015, 185, 354-366.	1.0	110
27	Nonlinear averaging of thermal experience predicts population growth rates in a thermally variable environment. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20181076.	1.2	92
28	Metabolic Theory and the Temperature-Size Rule Explain the Temperature Dependence of Population Carrying Capacity. American Naturalist, 2018, 192, 687-697.	1.0	88
29	The strength of the biodiversityâ€“ecosystem function relationship depends on spatial scale. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180038.	1.2	82
30	Advances in global change research require open science by individual researchers. Global Change Biology, 2012, 18, 2102-2110.	4.2	81
31	Life in fluctuating environments. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190454.	1.8	81
32	Towards a multiâ€trophic extension of metacommunity ecology. Ecology Letters, 2019, 22, 19-33.	3.0	79
33	Climate change impacts on connectivity in the ocean: Implications for conservation. Ecosphere, 2014, 5, 1-18.	1.0	77
34	Toward a conceptual synthesis for climate change responses. Global Ecology and Biogeography, 2012, 21, 693-703.	2.7	74
35	Exploring the role of temperature in the ocean through metabolic scaling. Ecology, 2015, 96, 3126-3140.	1.5	71
36	Latitude, temperature, and habitat complexity predict predation pressure in eelgrass beds across the Northern Hemisphere. Ecology, 2018, 99, 29-35.	1.5	70

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37	Climate change and marine life. Biology Letters, 2012, 8, 907-909.	1.0	60
38	Does fish larval dispersal differ between high and low latitudes?. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130327.	1.2	60
39	Opportunities for behavioral rescue under rapid environmental change. Global Change Biology, 2019, 25, 3110-3120.	4.2	53
40	Expert perspectives on global biodiversity loss and its drivers and impacts on people. Frontiers in Ecology and the Environment, 2023, 21, 94-103.	1.9	49
41	Moving beyond the fished or farmed dichotomy. Marine Policy, 2013, 38, 369-374.	1.5	48
42	Strengthening confidence in climate change impact science. Global Ecology and Biogeography, 2015, 24, 64-76.	2.7	45
43	Anthropogenic disturbance homogenizes seagrass fish communities. Global Change Biology, 2018, 24, 1904-1918.	4.2	44
44	Aquatic biodiversity enhances multiple nutritional benefits to humans. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	44
45	Predator richness has no effect in a diverse marine food web. Journal of Animal Ecology, 2009, 78, 732-740.	1.3	40
46	Consumerâ€“plant interaction strength: importance of body size, density and metabolic biomass. Oikos, 2015, 124, 1274-1281.	1.2	30
47	Warming-Induced Changes to Body Size Stabilize Consumer-Resource Dynamics. American Naturalist, 2017, 189, 718-725.	1.0	29
48	Epifaunal diversity patterns within and among seagrass meadows suggest landscapeâ€scale biodiversity processes. Ecosphere, 2018, 9, e02490.	1.0	28
49	From coast to coast to coast: ecology and management of seagrass ecosystems across Canada. Facets, 2021, 6, 139-179.	1.1	28
50	Prior heat accumulation reduces survival during subsequent experimental heat waves. Journal of Experimental Marine Biology and Ecology, 2018, 501, 109-117.	0.7	27
51	Topâ€“down control by great blue herons Ardea herodias regulates seagrassâ€associated epifauna. Oikos, 2015, 124, 1492-1501.	1.2	22
52	Indirect effects of predators control herbivore richness and abundance in a benthic eelgrass (<scp>Z</scp>ostera marina) mesograzer community. Journal of Animal Ecology, 2015, 84, 1092-1102.	1.3	18
53	Do not downplay biodiversity loss. Nature, 2022, 601, E27-E28.	13.7	17
54	Trophic interactions modify the temperature dependence of community biomass and ecosystem function. PLoS Biology, 2019, 17, e2006806.	2.6	15

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55	Climate change and species interactions: beyond local communities. Annals of the New York Academy of Sciences, 2013, 1297, 98-111.	1.8	13
56	An Empiricistâ€™s Guide to Using Ecological Theory. American Naturalist, 2022, 199, 1-20.	1.0	13
57	The metabolic theory of ecology and the cost of parasitism. PLoS Biology, 2018, 16, e2005628.	2.6	12
58	Host-Specificity and Core Taxa of Seagrass Leaf Microbiome Identified Across Tissue Age and Geographical Regions. Frontiers in Ecology and Evolution, 2020, 8, .	1.1	12
59	Microeukaryotic Communities Associated With the Seagrass Zostera marina Are Spatially Structured. Journal of Eukaryotic Microbiology, 2021, 68, e12827.	0.8	12
60	Salt marsh stabilization affects algal primary producers at the marsh edge. Wetlands Ecology and Management, 2011, 19, 131-140.	0.7	11
61	Wildcards in climate change biology. Ecological Monographs, 2021, 91, e01471.	2.4	9
62	The biogeography of community assembly: latitude and predation drive variation in community trait distribution in a guild of epifaunal crustaceans. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20211762.	1.2	9
63	Grand challenges in biodiversityâ€“ecosystem functioning research in the era of scienceâ€“policy platforms require explicit consideration of feedbacks. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210783.	1.2	8
64	Formâ€“function relationships in a marine foundation species depend on scale: a shoot to global perspective from a distributed ecological experiment. Oikos, 2018, 127, 364-374.	1.2	7
65	A reciprocal transplant experiment sheds new light on a classic marine seagrass-algal symbiosis and suggests influence of epiphytic symbiont on seagrass microbiota. Aquatic Botany, 2022, 179, 103511.	0.8	7
66	American Pikas' (Ochotona princeps) Foraging Response to Hikers and Sensitivity to Heat in an Alpine Environment. Arctic, Antarctic, and Alpine Research, 2015, 47, 519-527.	0.4	6
67	A comparison of epifaunal invertebrate communities in native eelgrassZostera marinaand non-nativeZostera japonicaat Tsawwassen, BC. Marine Biology Research, 2015, 11, 564-571.	0.3	5
68	Ecological Synthesis and Its Role in Advancing Knowledge. BioScience, 0, , .	2.2	4
69	A Biophysical Model and Network Analysis of Invertebrate Community Dispersal Reveals Regional Patterns of Seagrass Habitat Connectivity. Frontiers in Marine Science, 2021, 8, .	1.2	4
70	Heat Wave Intensity Drives Sublethal Reproductive Costs in a Tidepool Copepod. Integrative Organismal Biology, 2022, 4, obac005.	0.9	4
71	Invasive Species Unchecked by Climateâ€”Response. Science, 2012, 335, 538-539.	6.0	3