

Sinead Collins

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9027433/publications.pdf>

Version: 2024-02-01

53
papers

3,542
citations

186265

28
h-index

182427

51
g-index

63
all docs

63
docs citations

63
times ranked

4062
citing authors

#	ARTICLE	IF	CITATIONS
1	Mucospheres produced by a mixotrophic protist impact ocean carbon cycling. <i>Nature Communications</i> , 2022, 13, 1301.	12.8	27
2	The Population Genetics and Evolutionary Potential of Diatoms. , 2022, , 29-57.		1
3	Predictability of thermal fluctuations influences functional traits of a cosmopolitan marine diatom. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2022, 289, 20212581.	2.6	5
4	The need for unrealistic experiments in global change biology. <i>Current Opinion in Microbiology</i> , 2022, 68, 102151.	5.1	16
5	Rapid evolution allows coexistence of highly divergent lineages within the same niche. <i>Ecology Letters</i> , 2022, 25, 1839-1853.	6.4	7
6	Thermal trait variation may buffer Southern Ocean phytoplankton from anthropogenic warming. <i>Global Change Biology</i> , 2022, 28, 5755-5767.	9.5	13
7	The role of changes in environmental quality in multitrait plastic responses to environmental and social change in the model microalga <i>Chlamydomonas reinhardtii</i> . <i>Ecology and Evolution</i> , 2021, 11, 1888-1901.	1.9	1
8	Surviving Heatwaves: Thermal Experience Predicts Life and Death in a Southern Ocean Diatom. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	17
9	Selective constraints on global plankton dispersal. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	34
10	The evolution of trait correlations constrains phenotypic adaptation to high CO ₂ in a eukaryotic alga. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2021, 288, 20210940.	2.6	14
11	Growth strategies of a model picoplankter depend on social milieu and CO ₂ . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2021, 288, 20211154.	2.6	8
12	Biodiversity of marine microbes is safeguarded by phenotypic heterogeneity in ecological traits. <i>PLoS ONE</i> , 2021, 16, e0254799.	2.5	7
13	Multivariate trait analysis reveals diatom plasticity constrained to a reduced set of biological axes. <i>ISME Communications</i> , 2021, 1, .	4.2	9
14	A High-Throughput Assay for Quantifying Phenotypic Traits of Microalgae. <i>Frontiers in Microbiology</i> , 2021, 12, 706235.	3.5	8
15	Evolution, Microbes, and Changing Ocean Conditions. <i>Annual Review of Marine Science</i> , 2020, 12, 181-208.	11.6	42
16	Microbial evolutionary strategies in a dynamic ocean. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 5943-5948.	7.1	29
17	Quality–quantity tradeoffs drive functional trait evolution in a model microalgal climate change winner™. <i>Ecology Letters</i> , 2020, 23, 780-790.	6.4	32
18	Reduced growth with increased quotas of particulate organic and inorganic carbon in the coccolithophore <i>Emiliana huxleyi</i> under future ocean climate change conditions. <i>Biogeosciences</i> , 2020, 17, 6357-6375.	3.3	9

#	ARTICLE	IF	CITATIONS
19	Company matters: The presence of other genotypes alters traits and intraspecific selection in an Arctic diatom under climate change. <i>Global Change Biology</i> , 2019, 25, 2869-2884.	9.5	34
20	Experimental strategies to assess the biological ramifications of multiple drivers of global ocean change—A review. <i>Global Change Biology</i> , 2018, 24, 2239-2261.	9.5	285
21	Epigenetic and Genetic Contributions to Adaptation in <i>Chlamydomonas</i> . <i>Molecular Biology and Evolution</i> , 2017, 34, 2285-2306.	8.9	97
22	Evolutionary consequences of multidriver environmental change in an aquatic primary producer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 9930-9935.	7.1	55
23	Decreased photosynthesis and growth with reduced respiration in the model diatom <i>Phaeodactylum tricornutum</i> grown under elevated CO ₂ over 1800 generations. <i>Global Change Biology</i> , 2017, 23, 127-137.	9.5	73
24	Virus Resistance Is Not Costly in a Marine Alga Evolving under Multiple Environmental Stressors. <i>Viruses</i> , 2017, 9, 39.	3.3	12
25	Epigenetic mutations can both help and hinder adaptive evolution. <i>Molecular Ecology</i> , 2016, 25, 1856-1868.	3.9	144
26	Bridging the gap between omics and earth system science to better understand how environmental change impacts marine microbes. <i>Global Change Biology</i> , 2016, 22, 61-75.	9.5	58
27	Mode of resistance to viral lysis affects host growth across multiple environments in the marine picoeukaryote <i>Ostreococcus tauri</i> . <i>Environmental Microbiology</i> , 2016, 18, 4628-4639.	3.8	14
28	Growth rate evolution in improved environments under Prodigal Son dynamics. <i>Evolutionary Applications</i> , 2016, 9, 1179-1188.	3.1	23
29	Environmental stability affects phenotypic evolution in a globally distributed marine picoplankton. <i>ISME Journal</i> , 2016, 10, 75-84.	9.8	66
30	Fundamental shift in vitamin B12 eco-physiology of a model alga demonstrated by experimental evolution. <i>ISME Journal</i> , 2015, 9, 1446-1455.	9.8	65
31	Growth responses of a green alga to multiple environmental drivers. <i>Nature Climate Change</i> , 2015, 5, 892-897.	18.8	98
32	The future of the northeast Atlantic benthic flora in a high CO ₂ world. <i>Ecology and Evolution</i> , 2014, 4, 2787-2798.	1.9	176
33	Plasticity predicts evolution in a marine alga. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20141486.	2.6	152
34	Evolutionary potential of marine phytoplankton under ocean acidification. <i>Evolutionary Applications</i> , 2014, 7, 140-155.	3.1	167
35	FUNCTIONAL GENETIC DIVERGENCE IN HIGH CO ₂ -ADAPTED <i>EMILIANIA HUXLEYI</i> POPULATIONS. <i>Evolution; International Journal of Organic Evolution</i> , 2013, 67, 1892-1900.	2.3	71
36	Variation in plastic responses of a globally distributed picoplankton species to ocean acidification. <i>Nature Climate Change</i> , 2013, 3, 298-302.	18.8	133

#	ARTICLE	IF	CITATIONS
37	Phenotypic plasticity and evolutionary demographic responses to climate change: taking theory out to the field. <i>Functional Ecology</i> , 2013, 27, 967-979.	3.6	152
38	NEW MODEL SYSTEMS FOR EXPERIMENTAL EVOLUTION. <i>Evolution; International Journal of Organic Evolution</i> , 2013, 67, 1847-1848.	2.3	6
39	How epigenetic mutations can affect genetic evolution: Model and mechanism. <i>BioEssays</i> , 2013, 35, 571-578.	2.5	209
40	Fold or hold: experimental evolution <i>in vitro</i> . <i>Journal of Evolutionary Biology</i> , 2013, 26, 2123-2134.	1.7	0
41	Evolution on acid. <i>Nature Geoscience</i> , 2012, 5, 310-311.	12.9	29
42	Many Possible Worlds: Expanding the Ecological Scenarios in Experimental Evolution. <i>Evolutionary Biology</i> , 2011, 38, 3-14.	1.1	66
43	Competition limits adaptation and productivity in a photosynthetic alga at elevated CO ₂ . <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2011, 278, 247-255.	2.6	81
44	Assessing the Influence of Adjacent Gene Orientation on the Evolution of Gene Upstream Regions in <i>Arabidopsis thaliana</i> . <i>Genetics</i> , 2010, 185, 695-701.	2.9	4
45	ADAPTATION TO DIFFERENT RATES OF ENVIRONMENTAL CHANGE IN <i>CHLAMYDOMONAS</i> . <i>Evolution; International Journal of Organic Evolution</i> , 2009, 63, 2952-2965.	2.3	69
46	Integrating physiological, ecological and evolutionary change: a Price equation approach. <i>Ecology Letters</i> , 2009, 12, 744-757.	6.4	57
47	Adaptation, extinction and global change. <i>Evolutionary Applications</i> , 2008, 1, 3-16.	3.1	258
48	Adaptive Walks Toward a Moving Optimum. <i>Genetics</i> , 2007, 176, 1089-1099.	2.9	63
49	Oxygen content of transmembrane proteins over macroevolutionary time scales. <i>Nature</i> , 2007, 445, 47-52.	27.8	57
50	Evolution of natural algal populations at elevated CO ₂ . <i>Ecology Letters</i> , 2006, 9, 129-135.	6.4	67
51	Changes in C uptake in populations of <i>Chlamydomonas reinhardtii</i> selected at high CO ₂ . <i>Plant, Cell and Environment</i> , 2006, 29, 1812-1819.	5.7	63
52	Rewinding the tape: selection of algae adapted to high CO ₂ at current and pleistocene levels of CO ₂ . <i>Evolution; International Journal of Organic Evolution</i> , 2006, 60, 1392-401.	2.3	10
53	Phenotypic consequences of 1,000 generations of selection at elevated CO ₂ in a green alga. <i>Nature</i> , 2004, 431, 566-569.	27.8	337