Christopher D G Harley

List of Publications by Year
in descending order

85 papers	10,335 citations	66343 42 h-index	54911 84 g-index
90 all docs	90 docs citations	90 times ranked	10287 citing authors

#	Article	IF	Citations
1	The impacts of climate change in coastal marine systems. Ecology Letters, 2006, 9, 228-241.	6.4	1,997
2	Increased temperature variation poses a greater risk to species than climate warming. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132612.	2.6	674
3	Climate Change and Latitudinal Patterns of Intertidal Thermal Stress. Science, 2002, 298, 1015-1017.	12.6	603
4	Can we predict ectotherm responses to climate change using thermal performance curves and body temperatures?. Ecology Letters, 2016, 19, 1372-1385.	6.4	587
5	EFFECTS OF CLIMATE CHANGE ON GLOBAL SEAWEED COMMUNITIES. Journal of Phycology, 2012, 48, 1064-1078.	2.3	531
6	Climate Change, Keystone Predation, and Biodiversity Loss. Science, 2011, 334, 1124-1127.	12.6	441
7	MOSAIC PATTERNS OF THERMAL STRESS IN THE ROCKY INTERTIDAL ZONE: IMPLICATIONS FOR CLIMATE CHANGE. Ecological Monographs, 2006, 76, 461-479.	5.4	392
8	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.	1.5	361
9	A bioenergetic framework for the temperature dependence of trophic interactions. Ecology Letters, 2014, 17, 902-914.	6.4	268
10	Ocean acidification through the lens of ecological theory. Ecology, 2015, 96, 3-15.	3.2	237
11	Localâ€•and regionalâ€scale effects of wave exposure, thermal stress, and absolute versus effective shore level on patterns of intertidal zonation. Limnology and Oceanography, 2003, 48, 1498-1508.	3.1	226
12	Quantifying Rates of Evolutionary Adaptation in Response to Ocean Acidification. PLoS ONE, 2011, 6, e22881.	2.5	212
13	Elevated water temperature and carbon dioxide concentration increase the growth of a keystone echinoderm. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9316-9321.	7.1	202
14	Tidal dynamics, topographic orientation, and temperature-mediated mass mortalities on rocky shores. Marine Ecology - Progress Series, 2008, 371, 37-46.	1.9	193
15	TROUBLE ON OILED WATERS: Lessons from theExxon ValdezOil Spill. Annual Review of Ecology, Evolution, and Systematics, 1996, 27, 197-235.	6.7	164
16	Ocean acidification can mediate biodiversity shifts by changing biogenic habitat. Nature Climate Change, 2017, 7, 81-85.	18.8	164
17	On the prediction of extreme ecological events. Ecological Monographs, 2009, 79, 397-421.	5.4	136
18	Embracing interactions in ocean acidification research: confronting multiple stressor scenarios and context dependence. Biology Letters, 2017, 13, 20160802.	2.3	121

#	Article	IF	Citations
19	QUANTIFYING SCALE IN ECOLOGY: LESSONS FROM AWAVE-SWEPT SHORE. Ecological Monographs, 2004, 74, 513-532.	5.4	117
20	The role of temperature and desiccation stress in limiting the localâ€scale distribution of the owl limpet, <i>Lottia gigantea</i>. Functional Ecology, 2009, 23, 756-767.	3.6	115
21	Plants Versus Animals: Do They Deal with Stress in Different Ways?. Integrative and Comparative Biology, 2002, 42, 415-423.	2.0	110
22	The Body Size Dependence of Trophic Cascades. American Naturalist, 2015, 185, 354-366.	2.1	110
23	Effects of temperature, season and locality on wasting disease in the keystone predatory sea star Pisaster ochraceus. Diseases of Aquatic Organisms, 2009, 86, 245-251.	1.0	109
24	Beyond long-term averages: making biological sense of a rapidly changing world. Climate Change Responses, 2014, 1, .	2.6	106
25	Elevated seawater CO2 concentrations impair larval development and reduce larval survival in endangered northern abalone (Haliotis kamtschatkana). Journal of Experimental Marine Biology and Ecology, 2011, 400, 272-277.	1.5	103
26	Contingencies and compounded rare perturbations dictate sudden distributional shifts during periods of gradual climate change. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11172-11176.	7.1	101
27	ABIOTIC STRESS AND HERBIVORY INTERACT TO SET RANGE LIMITS ACROSS A TWO-DIMENSIONAL STRESS GRADIENT. Ecology, 2003, 84, 1477-1488.	3.2	95
28	Hot limpets: predicting body temperature in a conductance-mediated thermal system. Journal of Experimental Biology, 2006, 209, 2409-2419.	1.7	95
29	Positive effects of a dominant invader on introduced and native mudflat species. Marine Ecology - Progress Series, 2005, 289, 109-116.	1.9	91
30	Elevated CO 2 affects shell dissolution rate but not calcification rate in a marine snail. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 2553-2558.	2.6	91
31	Thermal stress on intertidal limpets: long-term hindcasts and lethal limits. Journal of Experimental Biology, 2006, 209, 2420-2431.	1.7	85
32	Large-scale impacts of sea star wasting disease (SSWD) on intertidal sea stars and implications for recovery. PLoS ONE, 2018, 13, e0192870.	2.5	81
33	Thermal stress and morphological adaptations in limpets. Functional Ecology, 2009, 23, 292-301.	3.6	72
34	Elevated pCO2 increases sperm limitation and risk of polyspermy in the red sea urchin Strongylocentrotus franciscanus. Global Change Biology, 2011, 17, 163-171.	9.5	71
35	Long-term, high frequency in situ measurements of intertidal mussel bed temperatures using biomimetic sensors. Scientific Data, 2016, 3, 160087.	5.3	69
36	How ocean acidification can benefit calcifiers. Current Biology, 2017, 27, R95-R96.	3.9	67

#	Article	IF	Citations
37	Conceptualizing ecosystem tipping points within a physiological framework. Ecology and Evolution, 2017, 7, 6035-6045.	1.9	64
38	Color Polymorphism and Genetic Structure in the Sea Star<i>Pisaster ochraceus</i>. Biological Bulletin, 2006, 211, 248-262.	1.8	52
39	Cascading social-ecological costs and benefits triggered by a recovering keystone predator. Science, 2020, 368, 1243-1247.	12.6	52
40	The duality of ocean acidification as a resource and a stressor. Ecology, 2018, 99, 1005-1010.	3.2	51
41	The effects of temperature on producers, consumers, and plantâ€“herbivore interactions in an intertidal community. Journal of Experimental Marine Biology and Ecology, 2007, 348, 162-173.	1.5	45
42	Recruitment tolerance to increased temperature present across multiple kelp clades. Ecology, 2019, 100, e02594.	3.2	43
43	Effects of physical ecosystem engineering and herbivory on intertidal community structure. Marine Ecology - Progress Series, 2006, 317, 29-39.	1.9	43
44	Nitrogen effects on an interaction chain in a salt marsh community. Oecologia, 1998, 117, 266-272.	2.0	42
45	Intertidal community responses to fieldâ€based experimental warming. Oikos, 2015, 124, 888-898.	2.7	39
46	Natural acidification changes the timing and rate of succession, alters community structure, and increases homogeneity in marine biofouling communities. Global Change Biology, 2018, 24, e112-e127.	9.5	37
47	Responses to low salinity by the sea star <i>Pisaster ochraceus</i> from highâ€and lowâ€salinity populations. Invertebrate Biology, 2009, 128, 381-390.	0.9	33
48	Survival of the weakest: increased frond mechanical strength in a waveâ€swept kelp inhibits selfâ€pruning and increases wholeâ€plant mortality. Functional Ecology, 2013, 27, 439-445.	3.6	33
49	Non-linear density-dependent effects of an intertidal ecosystem engineer. Oecologia, 2011, 166, 531-541.	2.0	31
50	The natural history, thermal physiology, and ecological impacts of intertidal mesopredators, <i>Oedoparena</i> spp. (Diptera: Dryomyzidae). Invertebrate Biology, 2003, 122, 61-73.	0.9	29
51	Light availability indirectly limits herbivore growth and abundance in a high rocky intertidal community during the winter. Limnology and Oceanography, 2002, 47, 1217-1222.	3.1	26
52	Divergent growth strategies between red algae and kelps influence biomechanical properties. American Journal of Botany, 2015, 102, 1938-1944.	1.7	26
53	Sea Otters Homogenize Mussel Beds and Reduce Habitat Provisioning in a Rocky Intertidal Ecosystem. PLoS ONE, 2013, 8, e65435.	2.5	22
54	Herbivory enables marine communities to resist warming. Science Advances, 2017, 3, e1701349.	10.3	21

#	Article	IF	Citations
55	Whole-organism responses to constant temperatures do not predict responses to variable temperatures in the ecosystem engineer <i>Mytilus trossulus</i>. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20202968.	2.6	21
56	Recovery of the brown alga Fucus gardneri following a range of removal intensities. Aquatic Botany, 2001, 71, 273-280.	1.6	19
57	Evaluation of effective shore level as a method of characterizing intertidal wave exposure regimes. Limnology and Oceanography: Methods, 2006, 4, 448-457.	2.0	18
58	Environmental variability and biogeography: the relationship between bathymetric distribution and geographical range size in marine algae and gastropods. Global Ecology and Biogeography, 2003, 12, 499-506.	5.8	17
59	Fieldâ€based experimental acidification alters fouling community structure and reduces diversity. Journal of Animal Ecology, 2016, 85, 1328-1339.	2.8	17
60	Symbiotic endolithic microbes alter host morphology and reduce host vulnerability to high environmental temperatures. Ecosphere, 2019, 10, e02683.	2.2	17
61	Reciprocal abundance shifts of the intertidal sea stars, Evasterias troschelii and Pisaster ochraceus , following sea star wasting disease. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182766.	2.6	17
62	Quantifying the Effects of Predator and Prey Body Size on Sea Star Feeding Behaviors. Biological Bulletin, 2015, 228, 192-200.	1.8	15
63	Increased food supply mitigates ocean acidification effects on calcification but exacerbates effects on growth. Scientific Reports, 2018, 8, 9800.	3.3	14
64	Drivers of plasticity in freeze tolerance in the intertidal mussel, <i>Mytilus trossulus</i>. Journal of Experimental Biology, 2020, 223, .	1.7	13
65	Linking ecomechanics and ecophysiology to interspecific interactions and community dynamics. Annals of the New York Academy of Sciences, 2013, 1297, 73-82.	3.8	12
66	3. Species Importance and Context: Spatial and Temporal Variation in Species Interactions. , 2003, , 44-68.		12
67	Demographic responses of coexisting species to in situ warming. Marine Ecology - Progress Series, 2016, 546, 147-161.	1.9	12
68	The introduction of Littorina littorea to British Columbia, Canada: potential impacts and the importance of biotic resistance by native predators. Marine Biology, 2013, 160, 1529-1541.	1.5	11
69	Shifts in morphological and mechanical traits compensate for performance costs of reproduction in a waveâ€swept seaweed. Journal of Ecology, 2013, 101, 963-970.	4.0	11
70	Aerobic and behavioral flexibility allow estuarine gastropods to flourish in rapidly changing and extreme pH conditions. Marine Biology, 2017, 164, 1.	1.5	11
71	Caprellid amphipods (<i>Caprella</i> spp.) are vulnerable to both physiological and habitat-mediated effects of ocean acidification. PeerJ, 2018, 6, e5327.	2.0	11
72	Elevated pCO2 increases sperm limitation and risk of polyspermy in the red sea urchin Strongylocentrotus franciscanus. Global Change Biology, 2011, 17, 2512-2512.	9.5	9

#	Article	IF	Citations
73	Comparing model parameterizations of the biophysical impacts of ocean acidification to identify limitations and uncertainties. Ecological Modelling, 2018, 385, 1-11.	2.5	9
74	Wildcards in climate change biology. Ecological Monographs, 2021, 91, e01471.	5.4	9
75	Complex and interactive effects of ocean acidification and warming on the life span of a marine trematode parasite. International Journal for Parasitology, 2019, 49, 1015-1021.	3.1	8
76	Impact of temperature on an emerging parasitic association between a sperm-feeding scuticociliate and Northeast Pacific sea stars. Journal of Experimental Marine Biology and Ecology, 2010, 384, 44-50.	1.5	7
77	Ecological and environmental context shape the differential effects of a facilitator in its native and invaded ranges. Ecology, 2021, 102, e03478.	3.2	6
78	Energetic context determines species and community responses to ocean acidification. Ecology, 2020, 101, e03073.	3.2	5
79	The distribution of the orangeâ€striped green anemone,Diadumene lineata, in relation to environmental factors along coastal British Columbia, Canada. Invertebrate Biology, 2019, 138, e12268.	0.9	4
80	The sign and magnitude of the effects of thermal extremes on an intertidal kelp depend on environmental and biological context. Climate Change Ecology, 2021, 2, 100015.	1.9	3
81	Phycology for the ecologist. Journal of Phycology, 2016, 52, 898-900.	2.3	1
82	Shifts in Abiotic Variables and Consequences for Diversity. Ecological Studies, 2009, , 257-268.	1.2	1
83	Climate Change: Coastal Marine Ecosystems. , 2014, , 969-973.		1
84	Multiple stressors drive convergent evolution of performance properties in marine macrophytes. New Phytologist, 2021, 229, 2311-2323.	7.3	0
85	Adapting a propane turkey fryer to manipulate temperature in aquatic environments. Methods in Ecology and Evolution, 2021, 12, 1835-1840.	5.2	0