GretchenÂ E Hofmann

List of Publications by Year
in descending order

61 papers	5,705 citations	101543 36 h-index	133252 59 g-index
66 all docs	66 docs citations	66 times ranked	5364 citing authors

#	Article	IF	Citations
1	High-Frequency Dynamics of Ocean pH: A Multi-Ecosystem Comparison. PLoS ONE, 2011, 6, e28983.	2.5	782
2	Living in the Now: Physiological Mechanisms to Tolerate a Rapidly Changing Environment. Annual Review of Physiology, 2010, 72, 127-145.	13.1	497
3	The Effect of Ocean Acidification on Calcifying Organisms in Marine Ecosystems: An Organism-to-Ecosystem Perspective. Annual Review of Ecology, Evolution, and Systematics, 2010, 41, 127-147.	8.3	434
4	MOSAIC PATTERNS OF THERMAL STRESS IN THE ROCKY INTERTIDAL ZONE: IMPLICATIONS FOR CLIMATE CHANGE. Ecological Monographs, 2006, 76, 461-479.	5.4	392
5	Transcriptomic response of sea urchin larvae<i>Strongylocentrotus purpuratus</i>to CO2-driven seawater acidification. Journal of Experimental Biology, 2009, 212, 2579-2594.	1.7	276
6	Natural variation and the capacity to adapt to ocean acidification in the keystone sea urchin <i><scp>S</scp>trongylocentrotus purpuratus</i>. Global Change Biology, 2013, 19, 2536-2546.	9.5	177
7	Adaptation and the physiology of ocean acidification. Functional Ecology, 2013, 27, 980-990.	3.6	153
8	Defining the limits of physiological plasticity: how gene expression can assess and predict the consequences of ocean change. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1733-1745.	4.0	145
9	Constitutive expression of a stress-inducible heat shock protein gene, hsp70, in phylogenetically distant Antarctic fish. Polar Biology, 2005, 28, 261-267.	1.2	131
10	Improving Conservation Outcomes with a New Paradigm for Understanding Speciesâ€™ Fundamental and Realized Adaptive Capacity. Conservation Letters, 2016, 9, 131-137.	5.7	125
11	Is cold the new hot? Elevated ubiquitin-conjugated protein levels in tissues of Antarctic fish as evidence for cold-denaturation of proteins in vivo. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2007, 177, 857-866.	1.5	123
12	Transcriptomic responses to ocean acidification in larval sea urchins from a naturally variable <scp>pH</scp> environment. Molecular Ecology, 2013, 22, 1609-1625.	3.9	118
13	Interacting environmental mosaics drive geographic variation in mussel performance and predation vulnerability. Ecology Letters, 2016, 19, 771-779.	6.4	118
14	Patterns of Hsp gene expression in ectothermic marine organisms on small to large biogeographic scales. Integrative and Comparative Biology, 2005, 45, 247-255.	2.0	115
15	Predicted impact of ocean acidification on a marine invertebrate: elevated CO2 alters response to thermal stress in sea urchin larvae. Marine Biology, 2009, 156, 439-446.	1.5	115
16	Assessing the components of adaptive capacity to improve conservation and management efforts under global change. Conservation Biology, 2015, 29, 1268-1278.	4.7	114
17	Constitutive roles for inducible genes: evidence for the alteration in expression of the induciblehsp70gene in Antarctic notothenioid fishes. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2004, 287, R429-R436.	1.8	106
18	The ocean acidification seascape and its relationship to the performance of calcifying marine invertebrates: Laboratory experiments on the development of urchin larvae framed by environmentally-relevant pCO2/pH. Journal of Experimental Marine Biology and Ecology, 2011, 400, 288-295.	1.5	105

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19	Temperature and CO ₂ additively regulate physiology, morphology and genomic responses of larval sea urchins, <i>Strongylocentrotus purpuratus</i>. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130155.	2.6	98
20	A laboratoryâ€based, experimental system for the study of ocean acidification effects on marine invertebrate larvae. Limnology and Oceanography: Methods, 2010, 8, 441-452.	2.0	89
21	Ocean pH timeâ€series and drivers of variability along the northern <scp>C</scp>hannel <scp>I</scp>slands, <scp>C</scp>alifornia, <scp>USA</scp>. Limnology and Oceanography, 2016, 61, 953-968.	3.1	84
22	Thermotolerance and heat-shock protein expression in Northeastern Pacific Nucella species with different biogeographical ranges. Marine Biology, 2005, 146, 985-993.	1.5	79
23	Ecological Epigenetics in Marine Metazoans. Frontiers in Marine Science, 2017, 4, .	2.5	69
24	Responses of the Metabolism of the Larvae of Pocillopora damicornis to Ocean Acidification and Warming. PLoS ONE, 2014, 9, e96172.	2.5	68
25	Ocean acidification promotes broad transcriptomic responses in marine metazoans: a literature survey. Frontiers in Zoology, 2020, 17, 7.	2.0	68
26	Transcriptomics reveal transgenerational effects in purple sea urchin embryos: Adult acclimation to upwelling conditions alters the response of their progeny to differential <i>p</i>CO₂ levels. Molecular Ecology, 2018, 27, 1120-1137.	3.9	67
27	Transcriptomic responses to seawater acidification among sea urchin populations inhabiting a natural pH mosaic. Molecular Ecology, 2017, 26, 2257-2275.	3.9	62
28	Near-shore Antarctic pH variability has implications for the design of oceanacidification experiments. Scientific Reports, 2015, 5, .	3.3	53
29	Genomics-fueled approaches to current challenges in marine ecology. Trends in Ecology and Evolution, 2005, 20, 305-311.	8.7	52
30	The effect of temperature adaptation on the ubiquitin-proteasome pathway in notothenioid fishes. Journal of Experimental Biology, 2017, 220, 369-378.	1.7	50
31	Physiological tolerances across latitudes: thermal sensitivity of larval marine snails (Nucella spp.). Marine Biology, 2010, 157, 707-714.	1.5	48
32	Thermal tolerance of Strongylocentrotus purpuratus early life history stages: mortality, stress-induced gene expression and biogeographic patterns. Marine Biology, 2010, 157, 2677-2687.	1.5	48
33	Antarctic echinoids and climate change: a major impact on the brooding forms. Global Change Biology, 2011, 17, 734-744.	9.5	45
34	Transcriptomic response of the Antarctic pteropod Limacina helicina antarctica to ocean acidification. BMC Genomics, 2017, 18, 812.	2.8	43
35	Differing patterns of hsp70 gene expression in invasive and native kelp species: evidence for acclimation-induced variation. Journal of Applied Phycology, 2008, 20, 915-924.	2.8	42
36	A transcriptome resource for the Antarctic pteropod Limacina helicina antarctica. Marine Genomics, 2016, 28, 25-28.	1.1	42

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37	Signals of resilience to ocean change: high thermal tolerance of early stage Antarctic sea urchins (Sterechinus neumayeri) reared under present-day and future pCO2 and temperature. Polar Biology, 2014, 37, 967-980.	1.2	38
38	Variability of Seawater Chemistry in a Kelp Forest Environment Is Linked to in situ Transgenerational Effects in the Purple Sea Urchin, Strongylocentrotus purpuratus. Frontiers in Marine Science, 2019, 6, .	2.5	38
39	Transgenerational effects in an ecological context: Conditioning of adult sea urchins to upwelling conditions alters maternal provisioning and progeny phenotype. Journal of Experimental Marine Biology and Ecology, 2019, 517, 65-77.	1.5	37
40	Ocean Acidification and Fertilization in the Antarctic Sea Urchin <i>Sterechinus neumayeri</i>: the Importance of Polyspermy. Environmental Science & Technology, 2014, 48, 713-722.	10.0	34
41	High pCO2 affects body size, but not gene expression in larvae of the California mussel (Mytilus) Tj ETQq1 1 0.784314 rgBT /Overlock 1	2.5	32
42	Lipid consumption in coral larvae differs among sites: a consideration of environmental history in a global ocean change scenario. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162825.	2.6	32
43	High-frequency observations of pH under Antarctic sea ice in the southern Ross Sea. Antarctic Science, 2011, 23, 607-613.	0.9	30
44	Beyond the benchtop and the benthos: Dataset management planning and design for time series of ocean carbonate chemistry associated with DurafetÂ®-based pH sensors. Ecological Informatics, 2016, 36, 209-220.	5.2	29
45	Effects of temperature and pCO 2 on lipid use and biological parameters of planulae of Pocillopora damicornis. Journal of Experimental Marine Biology and Ecology, 2015, 473, 43-52.	1.5	27
46	Abiotic versus Biotic Drivers of Ocean pH Variation under Fast Sea Ice in McMurdo Sound, Antarctica. PLoS ONE, 2014, 9, e107239.	2.5	26
47	Sensitivity of sea urchin fertilization to pH varies across a natural pH mosaic. Ecology and Evolution, 2017, 7, 1737-1750.	1.9	26
48	Changes in Genome-Wide Methylation and Gene Expression in Response to Future pCO2 Extremes in the Antarctic Pteropod Limacina helicina antarctica. Frontiers in Marine Science, 2020, 6, .	2.5	26
49	Examining the Role of DNA Methylation in Transcriptomic Plasticity of Early Stage Sea Urchins: Developmental and Maternal Effects in a Kelp Forest Herbivore. Frontiers in Marine Science, 2020, 7, .	2.5	25
50	Spatial and temporal variation in distribution and protein ubiquitination for Mytilus congeners in the California hybrid zone. Marine Biology, 2008, 154, 1067-1075.	1.5	21
51	Host and Symbionts in Pocillopora damicornis Larvae Display Different Transcriptomic Responses to Ocean Acidification and Warming. Frontiers in Marine Science, 2018, 5, .	2.5	20
52	Additive effects of pCO2 and temperature on respiration rates of the Antarctic pteropod Limacina helicina antarctica. , 2017, 5, cox064.		19
53	Ocean acidification research in the â€˜post-genomicâ€™ era: Roadmaps from the purple sea urchin Strongylocentrotus purpuratus. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2015, 185, 33-42.	1.8	18
54	Combined stress of ocean acidification and warming influence survival and drives differential gene expression patterns in the Antarctic pteropod, Limacina helicina antarctica. , 2020, 8, coaa013.		13

#	Article	IF	Citations
55	Transcriptional profiles of early stage red sea urchins (Mesocentrotus franciscanus) reveal differential regulation of gene expression across development. Marine Genomics, 2019, 48, 100692.	1.1	12
56	The effects of temperature and pCO2 on the size, thermal tolerance and metabolic rate of the red sea urchin (Mesocentrotus franciscanus) during early development. Marine Biology, 2020, 167, 1.	1.5	12
57	Seasonal transcriptomes of the Antarctic pteropod, Limacina helicina antarctica. Marine Environmental Research, 2019, 143, 49-59.	2.5	8
58	Exploring impacts of marine heatwaves: paternal heat exposure diminishes fertilization success in the purple sea urchin (Strongylocentrotus purpuratus). Marine Biology, 2021, 168, 1.	1.5	7
59	Gene expression patterns of red sea urchins (Mesocentrotus franciscanus) exposed to different combinations of temperature and pCO2 during early development. BMC Genomics, 2021, 22, 32.	2.8	6
60	Mitochondrial genome architecture of the giant red sea urchinMesocentrotus franciscanus(Strongylocentrotidae, Echinoida). Mitochondrial DNA, 2016, 27, 591-592.	0.6	4
61	Calcification in a Changing Ocean: Perspectives on a Virtual Symposium in The Biological Bulletin. Biological Bulletin, 2014, 226, 167-168.	1.8	0