George N Somero

List of Publications by Year
in descending order

61	6,627	87888 38	133252 59
papers	citations	h-index	g-index

61	61	61	5801
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Goldilocks Principle: A Unifying Perspective on Biochemical Adaptation to Abiotic Stressors in the Sea. Annual Review of Marine Science, 2022, 14, 1-23.	11.6	11
2	An integrated, multiâ€level analysis of thermal effects on intertidal molluscs for understanding species distribution patterns. Biological Reviews, 2022, 97, 554-581.	10.4	32
3	Effects of heat acclimation on cardiac function in the intertidal mussel Mytilus californianus: can laboratory-based indices predict survival in the field?. Journal of Experimental Biology, 2022, 225, .	1.7	5
4	A tribute to Dr. Serge N. Timasheff, our mentor. Biophysical Reviews, 2021, 13, 459-484.	3.2	1
5	Thermal adaptation of mRNA secondary structure: stability versus lability. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
6	Mussels' acclimatization to high, variable temperatures is lost slowly upon transfer to benign conditions. Journal of Experimental Biology, 2020, 223, .	1.7	16
7	Establishing typical values for hemocyte mortality in individual California mussels, Mytilus californianus. Fish and Shellfish Immunology, 2020, 100, 70-79.	3.6	4
8	Introduction to the special issue: Comparative biology of cellular stress responses in animals. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 345-349.	1.9	10
9	The cellular stress response and temperature: Function, regulation, and evolution. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2020, 333, 379-397.	1.9	111
10	A single heat-stress bout induces rapid and prolonged heat acclimation in the California mussel,Mytilus californianus. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20202561.	2.6	17
11	Impact of heating rate on cardiac thermal tolerance in the California mussel, Mytilus californianus. Journal of Experimental Biology, 2019, 222, .	1.7	28
12	Comparing mutagenesis and simulations as tools for identifying functionally important sequence changes for protein thermal adaptation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 679-688.	7.1	39
13	Present and Future Adaptation of Marine Species Assemblages: DNA-Based Insights into Climate Change from Studies of Physiology, Genomics, and Evolution. Oceanography, 2019, 32, 82-93.	1.0	28
14	RNA thermosensors: how might animals exploit their regulatory potential?. Journal of Experimental Biology, 2018, 221, .	1.7	26
15	Structural flexibility and protein adaptation to temperature: Molecular dynamics analysis of malate dehydrogenases of marine molluscs. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1274-1279.	7.1	204
16	Thermal history and gape of individual Mytilus californianus correlate with oxidative damage and thermoprotective osmolytes. Journal of Experimental Biology, 2017, 220, 4292-4304.	1.7	30
17	Untangling the roles of microclimate, behaviour and physiological polymorphism in governing vulnerability of intertidal snails to heat stress. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162367.	2.6	73
18	Heat-resistant cytosolic malate dehydrogenases (cMDHs) of thermophilic intertidal snails (genus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Journal of Experimental Biology, 2017, 220, 2066-2075.	1.7	27

#	Article	IF	Citations
19	What Changes in the Carbonate System, Oxygen, and Temperature Portend for the Northeastern Pacific Ocean: A Physiological Perspective. BioScience, 2016, 66, 14-26.	4.9	63
20	Adaptations of protein structure and function to temperature: there is more than one way to â€˜skin a catâ€™. Journal of Experimental Biology, 2015, 218, 1801-1811.	1.7	139
21	The impact of ocean warming on marine organisms. Science Bulletin, 2014, 59, 468-479.	1.7	44
22	Master of all trades: thermal acclimation and adaptation of cardiac function in a broadly distributed marine invasive species, the European green crab, Carcinus maenas. Journal of Experimental Biology, 2014, 217, 1129-1138.	1.7	118
23	New Frontiers for Organismal Biology. BioScience, 2013, 63, 464-471.	4.9	30
24	Food availability, more than body temperature, drives correlated shifts in ATP-generating and antioxidant enzyme capacities in a population of intertidal mussels (Mytilus californianus). Journal of Experimental Marine Biology and Ecology, 2013, 449, 171-185.	1.5	40
25	Effects of temperature acclimation on cardiorespiratory performance of the Antarctic notothenioid Trematomus bernacchii. Polar Biology, 2013, 36, 1047-1057.	1.2	38
26	Thermal stress and cellular signaling processes in hemocytes of native (Mytilus californianus) and invasive (M. galloprovincialis) mussels: Cell cycle regulation and DNA repair. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2013, 165, 159-168.	1.8	42
27	The impact of acute temperature stress on hemocytes of invasive and native mussels (Mytilus) Tj ETQq1 1 0.784314 rgBT /Overloc signalling pathways. Journal of Experimental Biology, 2012, 215, 4267-77.	1.7	72
28	Functional Determinants of Temperature Adaptation in Enzymes of Cold- versus Warm-Adapted Mussels (Genus Mytilus). Molecular Biology and Evolution, 2012, 29, 3061-3070.	8.9	47
29	Behavior and survival of Mytilus congeners following episodes of elevated body temperature in air and seawater. Journal of Experimental Biology, 2012, 216, 502-14.	1.7	68
30	The Physiology of Global Change: Linking Patterns to Mechanisms. Annual Review of Marine Science, 2012, 4, 39-61.	11.6	397
31	Comparative physiology: a â€œcrystal ballâ€• for predicting consequences of global change. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R1-R14.	1.8	132
32	Transcriptomic responses to salinity stress in invasive and native blue mussels (genus Mytilus). Molecular Ecology, 2011, 20, 517-529.	3.9	155
33	Invasive and native blue mussels (genus Mytilus) on the California coast: The role of physiology in a biological invasion. Journal of Experimental Marine Biology and Ecology, 2011, 400, 167-174.	1.5	100
34	Bruce D. Sidell 20 March 1948 â€“ 8 February 2011. Journal of Experimental Biology, 2011, 214, 2453-2454.	1.7	0
35	Effects of thermal acclimation on transcriptional responses to acute heat stress in the eurythermal fish Gillichthys mirabilis (Cooper). American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R1373-R1383.	1.8	107
36	Transcriptomic responses to heat stress in invasive and native blue mussels (genus Mytilus): molecular correlates of invasive success. Journal of Experimental Biology, 2010, 213, 3548-3558.	1.7	220

#	Article	IF	Citations
37	Transcriptional responses to thermal acclimation in the eurythermal fish Gillichthys mirabilis (Cooper 1864). American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 299, R843-R852.	1.8	62
38	Phosphorylation Events Catalyzed by Major Cell Signaling Proteins Differ in Response to Thermal and Osmotic Stress among Native (Mytilus californianusandMytilus trossulus) and Invasive (Mytilus galloprovincialis) Species of Mussels. Physiological and Biochemical Zoology, 2010, 83, 984-996.	1.5	33
39	Temperature adaptation of cytosolic malate dehydrogenases of limpets(genus Lottia): differences in stability and function due to minor changes in sequence correlate with biogeographic and vertical distributions. Journal of Experimental Biology, 2009, 212, 169-177.	1.7	101
40	cDNA microarray analysis reveals the capacity of the cold-adapted Antarctic fish Trematomus bernacchii to alter gene expression in response to heat stress. Polar Biology, 2009, 32, 403-415.	1.2	94
41	Can the giant snake predict palaeoclimate?. Nature, 2009, 460, E3-E4.	27.8	3
42	Rhythms of Gene Expression in a Fluctuating Intertidal Environment. Current Biology, 2008, 18, 1501-1507.	3.9	218
43	Heat-Shock Protein 70 (Hsp70) Expression in Four Limpets of the GenusLottia: Interspecific Variation in Constitutive and Inducible Synthesis Correlates Within situExposure to Heat Stress. Biological Bulletin, 2008, 215, 173-181.	1.8	152
44	Extreme anoxia tolerance in embryos of the annual killifish Austrofundulus limnaeus: insights from a metabolomics analysis. Journal of Experimental Biology, 2007, 210, 2253-2266.	1.7	126
45	Biochemical adaptations of notothenioid fishes: Comparisons between cold temperate South American and New Zealand species and Antarctic species. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 147, 799-807.	1.8	62
46	Following the heart: temperature and salinity effects on heart rate in native and invasive species of blue mussels (genus Mytilus). Journal of Experimental Biology, 2006, 209, 2554-2566.	1.7	248
47	Complex patterns of expression of heat-shock protein 70 across the southern biogeographical ranges of the intertidal mussel Mytilus californianus and snail Nucella ostrina. Journal of Biogeography, 2006, 33, 622-630.	3.0	74
48	Inducible heat tolerance in Antarctic notothenioid fishes. Polar Biology, 2006, 30, 39-43.	1.2	97
49	Ecological gradients and relative abundance of native (Mytilus trossulus) and invasive (Mytilus) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.5	97
50	Have your say: welcome to the JEB Forum. Journal of Experimental Biology, 2006, 209, 1785-1785.	1.7	0
51	Temperature sensitivities of cytosolic malate dehydrogenases from native and invasive species of marine mussels (genus Mytilus):sequence-function linkages and correlations with biogeographic distribution. Journal of Experimental Biology, 2006, 209, 656-667.	1.7	90
52	The cellular response to heat stress in the goby Gillichthys mirabilis: a cDNA microarray and protein-level analysis. Journal of Experimental Biology, 2006, 209, 2660-2677.	1.7	227
53	Evolutionary and Acclimation-Induced Variation in the Thermal Limits of Heart Function in Congeneric Marine Snails (Genus Tegula): Implications for Vertical Zonation. Biological Bulletin, 2005, 208, 138-144.	1.8	116
54	Changes in gene expression associated with acclimation to constant temperatures and fluctuating daily temperatures in an annual killifish Austrofundulus limnaeus. Journal of Experimental Biology, 2004, 207, 2237-2254.	1.7	394

#	Article	IF	Citations
55	Base Compositions of Genes Encoding Î±-Actin and Lactate Dehydrogenase-A from Differently Adapted Vertebrates Show No Temperature-Adaptive Variation in G + C Content. Molecular Biology and Evolution, 2003, 20, 105-110.	8.9	31
56	Thermal Physiology and Vertical Zonation of Intertidal Animals: Optima, Limits, and Costs of Living. Integrative and Comparative Biology, 2002, 42, 780-789.	2.0	705
57	Interspecific- and acclimation-induced variation in levels of heat-shock proteins 70 (hsp70) and 90 (hsp90) and heat-shock transcription factor-1 (HSF1) in congeneric marine snails (genusTegula): implications for regulation ofhspgene expression. Journal of Experimental Biology, 2002, 205, 677-685.	1.7	142
58	Interspecific- and acclimation-induced variation in levels of heat-shock proteins 70 (hsp70) and 90 (hsp90) and heat-shock transcription factor-1 (HSF1) in congeneric marine snails (genus Tegula): implications for regulation of hsp gene expression. Journal of Experimental Biology, 2002, 205, 677-85.	1.7	98
59	Time Course and Magnitude of Synthesis of Heatâ€Shock Proteins in Congeneric Marine Snails (GenusTegula) from Different Tidal Heights. Physiological and Biochemical Zoology, 2000, 73, 249-256.	1.5	163
60	Proteins and Temperature. Annual Review of Physiology, 1995, 57, 43-68.	13.1	718
61	Species- and Tissue-Specific Synthesis Patterns for Heat-Shock Proteins HSP70 and HSP90 in Several Marine Teleost Fishes. Physiological Zoology, 1993, 66, 863-880.	1.5	87