Jason R Treberg

List of Publications by Year
in descending order

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Version: 2024-02-01

68 papers	3,457 citations	218592 26 h-index	143943 57 g-index
73 all docs	73 docs citations	73 times ranked	5117 citing authors

#	Article	IF	Citations
1	A synthesis of senescence predictions for indeterminate growth, and support from multiple tests in wild lake trout. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20212146.	1.2	10
2	Mitochondrial Sirtuin-3 (SIRT3) Prevents Doxorubicin-Induced Dilated Cardiomyopathy by Modulating Protein Acetylation and Oxidative Stress. Circulation: Heart Failure, 2022, 15, 101161CIRCHEARTFAILURE121008547.	1.6	25
3	A chromosomal inversion may facilitate adaptation despite periodic gene flow in a freshwater fish. Ecology and Evolution, 2022, 12, e8898.	0.8	6
4	Morphology and blood metabolites reflect recent spatial and temporal differences among Lake Winnipeg walleye, Sander vitreus. Journal of Great Lakes Research, 2021, 47, 603-613.	0.8	5
5	Life through a wider scope: Brook Trout (Salvelinus fontinalis) exhibit similar aerobic scope across a broad temperature range. Journal of Thermal Biology, 2021, 99, 102929.	1.1	16
6	NADPH supply and the contribution of NAD(P)+ transhydrogenase (NNT) to H2O2 balance in skeletal muscle mitochondria. Archives of Biochemistry and Biophysics, 2021, 707, 108934.	1.4	6
7	Energy and corticosteroid mobilization following an induced stress response in an elasmobranch fish, the North Pacific spiny dogfish (Squalus acanthias suckleyi). General and Comparative Endocrinology, 2021, 310, 113799.	0.8	7
8	Review: Using isolated mitochondria to investigate mitochondrial hydrogen peroxide metabolism. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2021, 256, 110614.	0.7	6
9	Genomic signals found using RNA sequencing show signatures of selection and subtle population differentiation in walleye (Sander vitreus) in a large freshwater ecosystem. Ecology and Evolution, 2020, 10, 7173-7188.	0.8	13
10	The effect of short-term methionine restriction on hydrogen peroxide metabolism in Fischer-344 rat skeletal muscle mitochondria. Mitochondrion, 2020, 55, 1-7.	1.6	3
11	Getting the most out of reductionist approaches in comparative biochemistry and physiology. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2020, 250, 110483.	0.7	9
12	Applying a gene-suite approach to examine the physiological status of wild-caught walleye (Sander) Tj ETQq0 0 0 rgBT /Overlock 10 T	7	
13	Increased reactive oxygen species production and maintenance of membrane potential in VDAC-less Neurospora crassa mitochondria. Journal of Bioenergetics and Biomembranes, 2019, 51, 341-354.	1.0	4
14	The effect of short-term methionine restriction on glutathione synthetic capacity and antioxidant responses at the whole tissue and mitochondrial level in the rat liver. Experimental Gerontology, 2019, 127, 110712.	1.2	14
15	Impact of climate change on the American lobster (Homarus americanus): Physiological responses to combined exposure of elevated temperature and pCO2. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2019, 235, 202-210.	0.8	18
16	The exceptional longevity of the naked moleâ€rat may be explained by mitochondrial antioxidant defenses. Aging Cell, 2019, 18, e12916.	3.0	67
17	Effects of temperature, dissolved oxygen, and substrate on the development of metabolic phenotypes in age-0 lake sturgeon (Acipenser fulvescens): implications for overwintering survival. Canadian Journal of Fisheries and Aquatic Sciences, 2019, 76, 1596-1607.	0.7	17
18	Mitochondria can act as energy-sensing regulators of hydrogen peroxide availability. Redox Biology, 2019, 20, 483-488.	3.9	18

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19	The physiological stress response of the Atlantic stingray (Hypanus sabinus) to aerial exposure. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2018, 219-220, 38-43.	0.8	21
20	Osmolyte Adjustments as a Pressure Adaptation in Deep-Sea Chondrichthyan Fishes: An Intraspecific Test in Arctic Skates (Amblyraja hyperborea) along a Depth Gradient. Physiological and Biochemical Zoology, 2018, 91, 788-796.	0.6	18
21	Ammonia excretion and acid-base regulation in the American horseshoe crab,Limulus polyphemus. Journal of Experimental Biology, 2018, 221, .	0.8	13
22	Multidimensional mitochondrial energetics: Application to the study of electron leak and hydrogen peroxide metabolism. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2018, 224, 121-128.	0.7	20
23	Methionine restriction leads to hyperhomocysteinemia and alters hepatic H2S production capacity in Fischer-344 rats. Mechanisms of Ageing and Development, 2018, 176, 9-18.	2.2	22
24	Comparing Electron Leak in Vertebrate Muscle Mitochondria. Integrative and Comparative Biology, 2018, 58, 495-505.	0.9	11
25	The Mitochondrial Contribution to Animal Performance, Adaptation, and Life-History Variation. Integrative and Comparative Biology, 2018, 58, 480-485.	0.9	39
26	A radical shift in perspective: mitochondria as regulators of reactive oxygen species. Journal of Experimental Biology, 2017, 220, 1170-1180.	0.8	171
27	Environment-phenotype interactions: Influences of brackish-water rearing on lake trout (Salvelinus) Tj ETQq1 1 0.784314 rgBT /Overlo	0.4	13
28	Comparison of Mitochondrial Reactive Oxygen Species Production of Ectothermic and Endothermic Fish Muscle. Frontiers in Physiology, 2017, 8, 704.	1.3	21
29	Protein S-glutathionlyation links energy metabolism to redox signaling in mitochondria. Redox Biology, 2016, 8, 110-118.	3.9	107
30	Does the physiology of chondrichthyan fishes constrain their distribution in the deep sea?. Journal of Experimental Biology, 2016, 219, 615-625.	0.8	37
31	Estimates of metabolic rate and major constituents of metabolic demand in fishes under field conditions: Methods, proxies, and new perspectives. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2016, 202, 10-22.	0.8	70
32	The thioredoxin and glutathione-dependent H2O2 consumption pathways in muscle mitochondria: Involvement in H2O2 metabolism and consequence to H2O2 efflux assays. Free Radical Biology and Medicine, 2016, 96, 334-346.	1.3	60
33	Ammonia excretion in Caenorhabditis elegans: Physiological and molecular characterization of the rhr-2 knock-out mutant. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2016, 195, 46-54.	0.8	16
34	Mitochondrial reactive oxygen species production by fish muscle mitochondria: Potential role in acute heat-induced oxidative stress. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2016, 191, 99-107.	0.7	78
35	Mechanism of ammonia excretion in the freshwater leechNephelopsis obscura: characterization of a primitive Rh protein and effects of high environmental ammonia. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R692-R705.	0.9	21
36	There was more to osmolyte selection than just osmotic balance. Journal of Experimental Biology, 2015, 218, 3532-3533.	0.8	2

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37	Ammonia excretion inCaenorhabditis elegans: mechanism and evidence of ammonia transport of the Rhesus protein CeRhr-1. Journal of Experimental Biology, 2015, 218, 675-683.	0.8	43
38	Differentiating between apparent and actual rates of H2O2 metabolism by isolated rat muscle mitochondria to test a simple model of mitochondria as regulators of H2O2 concentration. Redox Biology, 2015, 5, 216-224.	3.9	36
39	Intertissue Differences for the Role of Glutamate Dehydrogenase in Metabolism. Neurochemical Research, 2014, 39, 516-526.	1.6	13
40	Acidâ€“base regulation in the Dungeness crab (Metacarcinus magister). Marine Biology, 2014, 161, 1179-1193.	0.7	38
41	The pH sensitivity of H₂O₂ metabolism in skeletal muscle mitochondria. FEBS Letters, 2013, 587, 1799-1804.	1.3	24
42	Cutaneous nitrogen excretion in the African clawed frog Xenopus laevis: Effects of high environmental ammonia (HEA). Aquatic Toxicology, 2013, 136-137, 1-12.	1.9	24
43	Mitochondrial Complex II Can Generate Reactive Oxygen Species at High Rates in Both the Forward and Reverse Reactions. Journal of Biological Chemistry, 2012, 287, 27255-27264.	1.6	540
44	Native rates of superoxide production from multiple sites in isolated mitochondria measured using endogenous reporters. Free Radical Biology and Medicine, 2012, 53, 1807-1817.	1.3	133
45	Vanadium accumulation in ascidian coelomic cells is associated with enhanced pentose phosphate pathway capacity but not overall aerobic or anaerobic metabolism. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2012, 161, 323-330.	0.7	15
46	Mechanisms of Mitochondrial Free Radical Production and their Relationship to the Aging Process. , 2011, , 47-61.		10
47	The Mechanism of Superoxide Production by the Antimycin-inhibited Mitochondrial Q-cycle. Journal of Biological Chemistry, 2011, 286, 31361-31372.	1.6	158
48	A Model of the Proton Translocation Mechanism of Complex I. Journal of Biological Chemistry, 2011, 286, 17579-17584.	1.6	37
49	Evidence for Two Sites of Superoxide Production by Mitochondrial NADH-Ubiquinone Oxidoreductase (Complex I). Journal of Biological Chemistry, 2011, 286, 27103-27110.	1.6	168
50	On the reversibility of glutamate dehydrogenase and the source of hyperammonemia in the hyperinsulinism/hyperammonemia syndrome. Advances in Enzyme Regulation, 2010, 50, 34-43.	2.9	36
51	The simultaneous determination of NAD(H) and NADP(H) utilization by glutamate dehydrogenase. Molecular and Cellular Biochemistry, 2010, 344, 253-259.	1.4	7
52	The unusual energy metabolism of elasmobranch fishes. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2010, 155, 417-434.	0.8	91
53	Hydrogen peroxide efflux from muscle mitochondria underestimates matrix superoxide production â€“ a correction using glutathione depletion. FEBS Journal, 2010, 277, 2766-2778.	2.2	78
54	Systemic activation of glutamate dehydrogenase increases renal ammoniagenesis: implications for the hyperinsulinism/hyperammonemia syndrome. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E1219-E1225.	1.8	61

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55	Mitochondrial proton and electron leaks. Essays in Biochemistry, 2010, 47, 53-67.	2.1	601
56	Intracellular Glucose and Binding of Hexokinase and Phosphofructokinase to Particulate Fractions Increase under Hypoxia in Heart of the Amazonian Armored Catfish (Liposarcus pardalis). Physiological and Biochemical Zoology, 2007, 80, 542-550.	0.6	30
57	The accumulation and synthesis of betaine in winter skate (Leucoraja ocellata). Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 147, 475-483.	0.8	18
58	Activation of Liver Carnitine Palmitoyltransferaseâ€1 and Mitochondrial Acetoacetylâ€CoA Thiolase Is Associated with Elevated Ketone Body Levels in the ElasmobranchSqualus acanthias. Physiological and Biochemical Zoology, 2006, 79, 899-908.	0.6	10
59	Maintenance and accumulation of trimethylamine oxide by winter skate (Leucoraja ocellata): reliance on low whole animal losses rather than synthesis. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 291, R1790-R1798.	0.9	17
60	The accumulation of methylamine counteracting solutes in elasmobranchs with differing levels of urea: a comparison of marine and freshwater species. Journal of Experimental Biology, 2006, 209, 860-870.	0.8	67
61	Temperature effects on trimethylamine oxide accumulation and the relationship between plasma concentration and tissue levels in smelt (Osmerus mordax). Journal of Experimental Zoology Part A, Comparative Experimental Biology, 2005, 303A, 283-293.	1.3	16
62	Enhanced protein synthetic capacity in Atlantic cod (Gadus morhua) is associated with temperature-induced compensatory growth. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 288, R205-R211.	0.9	12
63	Fluid Regulation and Physiological Adjustments in the Winter Skate, Leucoraja ocellata, Following Exposure to Reduced Environmental Salinities. Environmental Biology of Fishes, 2003, 66, 339-348.	0.4	25
64	Mitochondrial KATP channels and sarcoplasmic reticulum influence cardiac force development under anoxia in the Amazonian armored catfish Liposarcus pardalis. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2003, 134, 441-448.	0.8	12
65	Muscle enzyme activities in a deep-sea squaloid shark,Centroscyllium fabricii, compared with its shallow-living relative,Squalus acanthias. The Journal of Experimental Zoology, 2003, 300A, 133-139.	1.4	30
66	Elevated levels of trimethylamine oxide in deep-sea fish: evidence for synthesis and intertissue physiological importance. The Journal of Experimental Zoology, 2002, 293, 39-45.	1.4	49
67	The freeze-avoidance response of smeltOsmerus mordax. Journal of Experimental Biology, 2002, 205, 1419-1427.	0.8	35
68	The freeze-avoidance response of smelt Osmerus mordax: initiation and subsequent suppression of glycerol, trimethylamine oxide and urea accumulation. Journal of Experimental Biology, 2002, 205, 1419-27.	0.8	26