Kenneth R Olson

List of Publications by Year
in descending order

118 papers	5,874 citations	71102 41 h-index	79698 73 g-index
121 all docs	121 docs citations	121 times ranked	4327 citing authors

#	Article	IF	Citations
1	The Effects of Antioxidant Nutraceuticals on Cellular Sulfur Metabolism and Signaling. Antioxidants and Redox Signaling, 2023, 38, 68-94.	5.4	2
2	Coenzyme Q10 and related quinones oxidize H2S to polysulfides and thiosulfate. Free Radical Biology and Medicine, 2022, 182, 119-131.	2.9	9
3	The biological legacy of sulfur: A roadmap to the future. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2021, 252, 110824.	1.8	12
4	Oxidation of Hydrogen Sulfide by Quinones: How Polyphenols Initiate Their Cytoprotective Effects. International Journal of Molecular Sciences, 2021, 22, 961.	4.1	15
5	â€˜Antioxidantâ€™ berries, anthocyanins, resveratrol and rosmarinic acid oxidize hydrogen sulfide to polysulfides and thiosulfate: A novel mechanism underlying their biological actions. Free Radical Biology and Medicine, 2021, 165, 67-78.	2.9	14
6	Comment on â€œEvidence that the ProPerDP method is inadequate for protein persulfidation detection due to lack of specificityâ€ Science Advances, 2021, 7, .	10.3	3
7	A Case for Hydrogen Sulfide Metabolism as an Oxygen Sensing Mechanism. Antioxidants, 2021, 10, 1650.	5.1	19
8	Extended hypoxiaâ€mediated H₂S production provides for longâ€term oxygen sensing. Acta Physiologica, 2020, 228, e13368.	3.8	14
9	Are the beneficial effects of â€˜antioxidantâ€™ lipoic acid mediated through metabolism of reactive sulfur species?. Free Radical Biology and Medicine, 2020, 146, 139-149.	2.9	12
10	Green tea polyphenolic antioxidants oxidize hydrogen sulfide to thiosulfate and polysulfides: A possible new mechanism underpinning their biological action. Redox Biology, 2020, 37, 101731.	9.0	25
11	Human Mesenchymal Stem Cell Hydrogen Sulfide Production Critically Impacts the Release of Other Paracrine Mediators After Injury. Journal of Surgical Research, 2020, 254, 75-82.	1.6	6
12	Are Reactive Sulfur Species the New Reactive Oxygen Species?. Antioxidants and Redox Signaling, 2020, 33, 1125-1142.	5.4	32
13	The spleen as an unlikely source of red blood cells during activity in fishes. Journal of Experimental Biology, 2020, 223, .	1.7	5
14	Reactive oxygen species or reactive sulfur species: why we should consider the latter. Journal of Experimental Biology, 2020, 223, .	1.7	47
15	Effects of Manganese Porphyrins on Cellular Sulfur Metabolism. Molecules, 2020, 25, 980.	3.8	8
16	Hydrogen sulfide, reactive sulfur species and coping with reactive oxygen species. Free Radical Biology and Medicine, 2019, 140, 74-83.	2.9	65
17	Inhibiting hydrogen sulfide production in umbilical stem cells reduces their protective effects during experimental necrotizing enterocolitis. Journal of Pediatric Surgery, 2019, 54, 1168-1173.	1.6	15
18	Effects of inhibiting antioxidant pathways on cellular hydrogen sulfide and polysulfide metabolism. Free Radical Biology and Medicine, 2019, 135, 1-14.	2.9	31

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19	Manganese Porphyrin-Based SOD Mimetics Produce Polysulfides from Hydrogen Sulfide. Antioxidants, 2019, 8, 639.	5.1	17
20	H2S and polysulfide metabolism: Conventional and unconventional pathways. Biochemical Pharmacology, 2018, 149, 77-90.	4.4	100
21	Metabolism of hydrogen sulfide (H2S) and Production of Reactive Sulfur Species (RSS) by superoxide dismutase. Redox Biology, 2018, 15, 74-85.	9.0	125
22	The Reactive Species Interactome: Evolutionary Emergence, Biological Significance, and Opportunities for Redox Metabolomics and Personalized Medicine. Antioxidants and Redox Signaling, 2017, 27, 684-712.	5.4	244
23	Hydrogen Sulfide: A Potential Novel Therapy for the Treatment of Ischemia. Shock, 2017, 48, 511-524.	2.1	16
24	Catalase as a sulfide-sulfur oxido-reductase: An ancient (and modern?) regulator of reactive sulfur species (RSS). Redox Biology, 2017, 12, 325-339.	9.0	123
25	Fluorescence quenching by metal centered porphyrins and poryphyrin enzymes. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2017, 313, R340-R346.	1.8	16
26	Hydrogen Sulfide: Biogenesis, Physiology, and Pathology. Oxidative Medicine and Cellular Longevity, 2016, 2016, 1-2.	4.0	23
27	Hydrogen sulfide contributes to hypoxic inhibition of airway transepithelial sodium absorption. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R607-R617.	1.8	13
28	A case of mistaken identity: are reactive oxygen species actually reactive sulfide species?. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R549-R560.	1.8	70
29	Garlic oil polysulfides: H₂S- and O₂-independent prooxidants in buffer and antioxidants in cells. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R1212-R1225.	1.8	29
30	The Role of Hydrogen Sulfide in Evolution and the Evolution of Hydrogen Sulfide in Metabolism and Signaling. Physiology, 2016, 31, 60-72.	3.1	181
31	Hydrogen sulfide decreases Î²-adrenergic agonist-stimulated lung liquid clearance by inhibiting ENaC-mediated transepithelial sodium absorption. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 308, R636-R649.	1.8	19
32	Hydrogen Sulfide as an Oxygen Sensor. Antioxidants and Redox Signaling, 2015, 22, 377-397.	5.4	97
33	Crossâ€Sensitivities of Amperometric Sensors Designed for Specific Gaseous Signaling Molecules. FASEB Journal, 2015, 29, 979.11.	0.5	0
34	Controversies and conundrums in hydrogen sulfide biology. Nitric Oxide - Biology and Chemistry, 2014, 41, 11-26.	2.7	114
35	Hydrogen sulfide as an oxygen sensor. Clinical Chemistry and Laboratory Medicine, 2013, 51, 623-32.	2.3	48
36	Biology and therapeutic potential of hydrogen sulfide and hydrogen sulfide-releasing chimeras. Biochemical Pharmacology, 2013, 85, 689-703.	4.4	270

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37	A theoretical examination of hydrogen sulfide metabolism and its potential in autocrine/paracrine oxygen sensing. Respiratory Physiology and Neurobiology, 2013, 186, 173-179.	1.6	23
38	Thiosulfate: a readily accessible source of hydrogen sulfide in oxygen sensing. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 305, R592-R603.	1.8	111
39	Testing the Rebound Peer Review Concept. Antioxidants and Redox Signaling, 2013, 19, 1-4.	5.4	5
40	Hydrogen sulfide: both feet on the gas and none on the brake?. Frontiers in Physiology, 2013, 4, 2.	2.8	24
41	Hydrogen Sulfide as an Oxygen Sensor. , 2013, , 37-62.		2
42	Precursors and inhibitors of hydrogen sulfide synthesis affect acute hypoxic pulmonary vasoconstriction in the intact lung. Journal of Applied Physiology, 2012, 112, 411-418.	2.5	55
43	Endogenous H2S in hemorrhagic shock: innocent bystander or central player?. Critical Care, 2012, 16, 183.	5.8	3
44	Mitochondrial adaptations to utilize hydrogen sulfide for energy and signaling. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2012, 182, 881-897.	1.5	55
45	NOSHâ€"aspirin (NBS-1120), a novel nitric oxide- and hydrogen sulfide-releasing hybrid is a potent inhibitor of colon cancer cell growth in vitro and in a xenograft mouse model. Biochemical and Biophysical Research Communications, 2012, 419, 523-528.	2.1	113
46	Evolutionary and comparative aspects of nitric oxide, carbon monoxide and hydrogen sulfide. Respiratory Physiology and Neurobiology, 2012, 184, 117-129.	1.6	92
47	A Practical Look at the Chemistry and Biology of Hydrogen Sulfide. Antioxidants and Redox Signaling, 2012, 17, 32-44.	5.4	184
48	Hydrogen sulfide mediates hypoxic vasoconstriction through a production of mitochondrial ROS in trout gills. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2012, 303, R487-R494.	1.8	23
49	Passive loss of hydrogen sulfide in biological experiments. Analytical Biochemistry, 2012, 421, 203-207.	2.4	146
50	Integrating nitric oxide, nitrite and hydrogen sulfide signaling in the physiological adaptations to hypoxia: A comparative approach. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2012, 162, 1-6.	1.8	39
51	The therapeutic potential of hydrogen sulfide: separating hype from hope. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R297-R312.	1.8	154
52	â€œHydrogen sulfide oxidation and the arterial chemoreflex: Effect of methemoglobinâ€•by Haouzi et al. [Respir. Physiol. Neurobiol. (2011)]. Respiratory Physiology and Neurobiology, 2011, 179, 121.	1.6	4
53	Hydrogen sulfide is an oxygen sensor in the carotid body. Respiratory Physiology and Neurobiology, 2011, 179, 103-110.	1.6	39
54	Hydrogen sulfide (H2S) and hypoxia inhibit salmonid gastrointestinal motility: evidence for H2S as an oxygen sensor. Journal of Experimental Biology, 2011, 214, 4030-4040.	1.7	31

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55	Endogenous vascular synthesis of B-type and C-type natriuretic peptides in the rainbow trout. Journal of Experimental Biology, 2011, 214, 2709-2717.	1.7	8
56	Functional morphology of the gills of the shortfin mako, <i>Isurus oxyrinchus</i>, a lamnid shark. Journal of Morphology, 2010, 271, 937-948.	1.2	20
57	H ₂ S and O ₂ sensing. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, E141; author reply E142.	7.1	6
58	Hypoxic pulmonary vasodilation: a paradigm shift with a hydrogen sulfide mechanism. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2010, 298, R51-R60.	1.8	125
59	Hydrogen Sulfide and Oxygen Sensing in the Cardiovascular System. Antioxidants and Redox Signaling, 2010, 12, 1219-1234.	5.4	128
60	Effects of carbon monoxide on trout and lamprey vessels. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R141-R149.	1.8	14
61	Responses of the trout cardiac natriuretic peptide system to manipulation of salt and water balance. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R1170-R1179.	1.8	17
62	The response of non-traditional natriuretic peptide production sites to salt and water manipulations in the rainbow trout. Journal of Experimental Biology, 2009, 212, 2991-2997.	1.7	8
63	Is hydrogen sulfide a circulating â€œgasotransmitterâ€•in vertebrate blood?. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 856-863.	1.0	220
64	Rhythmic contractility in the hepatic portal â€œcorkscrewâ€•vein of the rat snake. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2009, 152, 389-397.	1.8	1
65	Nervous control of circulation â€" The role of gasotransmitters, NO, CO, and H2S. Acta Histochemica, 2009, 111, 244-256.	1.8	96
66	Effects of hypoxia on vertebrate blood vessels. Journal of Experimental Zoology, 2008, 309A, 55-63.	1.2	27
67	Different sensitivities of arteries and veins to vasoactive drugs in a hagfish, Eptatretus cirrhatus. Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology, 2008, 148, 107-111.	2.6	2
68	Comparative physiology of the piscine natriuretic peptide system. General and Comparative Endocrinology, 2008, 157, 21-26.	1.8	23
69	Oxygen dependency of hydrogen sulfide-mediated vasoconstriction in cyclostome aortas. Journal of Experimental Biology, 2008, 211, 2205-2213.	1.7	44
70	Effects of freshwater and saltwater adaptation and dietary salt on fluid compartments, blood pressure, and venous capacitance in trout. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 294, R1061-R1067.	1.8	20
71	Reappraisal of H₂S/sulfide concentration in vertebrate blood and its potential significance in ischemic preconditioning and vascular signaling. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 294, R1930-R1937.	1.8	293
72	Hydrogen sulfide as an oxygen sensor in trout gill chemoreceptors. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 295, R669-R680.	1.8	104

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73	Hydrogen sulfide and oxygen sensing: implications in cardiorespiratory control. Journal of Experimental Biology, 2008, 211, 2727-2734.	1.7	78
74	The effects of salt-induced hypertension on Î±1-adrenoreceptor expression and cardiovascular physiology in the rainbow trout (Oncorhynchus mykiss). American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R1384-R1392.	1.8	6
75	Fish Endothelium. , 2007, , 59-65.		0
76	Hydrogen sulfide as an oxygen sensor/transducer in vertebrate hypoxic vasoconstriction and hypoxic vasodilation. Journal of Experimental Biology, 2006, 209, 4011-4023.	1.7	249
77	Hydrogen sulfide mediates hypoxia-induced relaxation of trout urinary bladder smooth muscle. Journal of Experimental Biology, 2006, 209, 3234-3240.	1.7	61
78	Effect of pH on trout blood vessels and gill vascular resistance. Journal of Experimental Biology, 2006, 209, 2586-2594.	1.7	10
79	Effect of pH on trout vascular smooth muscle. FASEB Journal, 2006, 20, .	0.5	0
80	Vertebrate phylogeny of hydrogen sulfide vasoactivity. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2005, 288, R243-R252.	1.8	82
81	Vascular Actions of Hydrogen Sulfide in Nonmammalian Vertebrates. Antioxidants and Redox Signaling, 2005, 7, 804-812.	5.4	59
82	Hydrogen sulfide as an endogenous regulator of vascular smooth muscle tone in trout. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2004, 286, R678-R685.	1.8	164
83	Vascular anatomy of the gills in a high energy demand teleost, the skipjack tuna (Katsuwonus pelamis). The Journal of Experimental Zoology, 2003, 297A, 17-31.	1.4	12
84	Transvascular and intravascular fluid transport in the rainbow trout:revisiting Starling's forces, the secondary circulation and interstitial compliance. Journal of Experimental Biology, 2003, 206, 457-467.	1.7	43
85	Dynamic synchronization analysis of venous pressure-driven cardiac output in rainbow trout. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2003, 285, R889-R896.	1.8	15
86	Gill circulation: regulation of perfusion distribution and metabolism of regulatory molecules. The Journal of Experimental Zoology, 2002, 293, 320-335.	1.4	59
87	Vascular anatomy of the fish gill. The Journal of Experimental Zoology, 2002, 293, 214-231.	1.4	86
88	Hypoxic vasoconstriction of cyclostome systemic vessels: the antecedent of hypoxic pulmonary vasoconstriction?. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 280, R198-R206.	1.8	24
89	Intracellular and extracellular calcium utilization during hypoxic vasoconstriction of cyclostome aortas. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 281, R1506-R1513.	1.8	11
90	Scanning electron microscopy of the heart of the climbing perch. Journal of Fish Biology, 2001, 59, 1170-1180.	1.6	15

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91	Angiotensin signaling and receptor types in teleost fish. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2001, 128, 41-51.	1.8	54
92	Effects of hypoxia on isolated vessels and perfused gills of rainbow trout. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2001, 130, 171-181.	1.8	31
93	Spontaneous contractions in elasmobranch vessels in vitro. , 2000, 286, 606-614.		7
94	Effects of endothelin-1 and homologous trout endothelin on cardiovascular function in rainbow trout. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2000, 278, R460-R468.	1.8	24
95	Similarity of Vasorelaxant Effects of Natriuretic Peptides in Isolated Blood Vessels of Salmonids. Physiological and Biochemical Zoology, 2000, 73, 494-500.	1.5	16
96	Purification, structural characterization, and myotropic activity of endothelin from trout, Oncorhynchus mykiss. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1999, 277, R1605-R1611.	1.8	14
97	Pharmacological Characterization of Arginine Vasotocin Vascular Smooth Muscle Receptors in the Trout (Oncorhynchus mykiss)in Vitro. General and Comparative Endocrinology, 1999, 114, 36-46.	1.8	29
98	Hormone Metabolism by the Fish Gill. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 1998, 119, 55-65.	1.8	46
99	Catecholaminergic regulation of venous function in the rainbow trout. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1998, 274, R1195-R1202.	1.8	21
100	Effect of atrial natriuretic peptide on fluid volume and glomerular filtration in the rainbow trout. The Journal of Experimental Zoology, 1997, 278, 215-220.	1.4	15
101	Physiological inactivation of vasoactive hormones in rainbow trout. , 1997, 279, 254-264.		5
102	Production of [Asn1,Val5]angiotensin II and [Asp1,Val5]angiotensin II in kallikrein-treated trout plasma (T60K). Peptides, 1996, 17, 527-530.	2.4	28
103	Isolation and cardiovascular activity of a second bradykinin-related peptide ([Arg0,Trp5,Leu8]bradykinin) from trout. Peptides, 1996, 17, 531-537.	2.4	30
104	Arginine Vasotocin Relaxation of Gar (Lepisosteousspp.) Hepatic Veinin Vitro. General and Comparative Endocrinology, 1996, 104, 52-60.	1.8	13
105	Secondary circulation in fish: Anatomical organization and physiological significance. The Journal of Experimental Zoology, 1996, 275, 172-185.	1.4	42
106	Secondary circulation of the vascular heat exchangers in skipjack tuna,Katsuwonus pelamis. The Journal of Experimental Zoology, 1994, 269, 566-570.	1.4	16
107	Circulatory Anatomy in Bimodally Breathing Fish. American Zoologist, 1994, 34, 280-288.	0.7	32
108	Significance of circulating catecholamines in regulation of trout splanchnic vascular resistance. The Journal of Experimental Zoology, 1993, 267, 92-96.	1.4	12

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109	Purification of a vasoactive peptide related to lysylâ€bradykinin from trout plasma. FEBS Letters, 1993, 334, 75-78.	2.8	23
110	3 Blood and Extracellular Fluid Volume Regulation: Role of the Renin-Angiotensin System, Kallikrein-Kinin System, and Atrial Natriuretic Peptides. Fish Physiology, 1992, 12, 135-254.	0.8	81
111	Cardiovascular and renal effects of eel and rat atrial natriuretic peptide in rainbow trout, Salmo gairdneri. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 1992, 162, 408-15.	1.5	26
112	Atrial natriuretic peptide clearance receptors in trout: Effects of receptor inhibition in vivo. The Journal of Experimental Zoology, 1992, 262, 343-346.	1.4	27
113	Vasculature of the fish gill: Anatomical correlates of physiological functions. Journal of Electron Microscopy Technique, 1991, 19, 389-405.	1.1	51
114	Localization of angiotensin-converting enzyme in the trout gill. The Journal of Experimental Zoology, 1989, 250, 109-115.	1.4	18
115	Preparation of fish tissues for electron microscopy. Journal of Electron Microscopy Technique, 1985, 2, 217-228.	1.1	28
116	Localization of3H-norepinephrine binding sites in the trout gill. The Journal of Experimental Zoology, 1985, 235, 309-313.	1.4	12
117	Microvasculature of the avian eye: Studies on the eye of the duckling with microcorrosion casting, scanning electron microscopy, and stereology. American Journal of Anatomy, 1984, 170, 205-221.	1.0	39
118	Tissue Uptake, Subcellular Distribution, and Metabolism of 14CH3HgCl and CH3203HgCl by Rainbow Trout, Salmo gairdneri. Journal of the Fisheries Research Board of Canada, 1978, 35, 381-390.	0.9	55