Keith J Buckler

List of Publications by Year
in descending order

39 papers	1,890 citations	393982 19 h-index	377514 34 g-index
39 all docs	39 docs citations	39 times ranked	1555 citing authors

#	Article	IF	Citations
1	Acute Oxygen-Sensing Mechanisms. New England Journal of Medicine, 2005, 353, 2042-2055.	13.9	435
2	An oxygenâ€; acidâ€•and anaestheticâ€sensitive TASKâ€like background potassium channel in rat arterial chemoreceptor cells. Journal of Physiology, 2000, 525, 135-142.	1.3	373
3	TASK-like potassium channels and oxygen sensing in the carotid body. Respiratory Physiology and Neurobiology, 2007, 157, 55-64.	0.7	92
4	Effects of exogenous hydrogen sulphide on calcium signalling, background (TASK) K channel activity and mitochondrial function in chemoreceptor cells. Pflugers Archiv European Journal of Physiology, 2012, 463, 743-754.	1.3	89
5	TASK channels in arterial chemoreceptors and their role in oxygen and acid sensing. Pflugers Archiv European Journal of Physiology, 2015, 467, 1013-1025.	1.3	83
6	Oxygen sensitivity of mitochondrial function in rat arterial chemoreceptor cells. Journal of Physiology, 2013, 591, 3549-3563.	1.3	81
7	Regulation of ventilatory sensitivity and carotid body proliferation in hypoxia by the PHD2/HIFâ€2 pathway. Journal of Physiology, 2016, 594, 1179-1195.	1.3	68
8	Modulation of TASKâ€like background potassium channels in rat arterial chemoreceptor cells by intracellular ATP and other nucleotides. Journal of Physiology, 2007, 583, 521-536.	1.3	65
9	Biophysical properties and metabolic regulation of a TASK-like potassium channel in rat carotid body type 1 cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2004, 286, L221-L230.	1.3	62
10	Oxygen and mitochondrial inhibitors modulate both monomeric and heteromeric TASKâ€1 and TASKâ€3 channels in mouse carotid body typeâ€1 cells. Journal of Physiology, 2013, 591, 5977-5998.	1.3	59
11	Background leak K+-currents and oxygen sensing in carotid body type 1 cells. Respiration Physiology, 1999, 115, 179-187.	2.8	53
12	Carotid body hyperplasia and enhanced ventilatory responses to hypoxia in mice with heterozygous deficiency of PHD2. Journal of Physiology, 2013, 591, 3565-3577.	1.3	53
13	Interactions between hypoxia and hypercapnic acidosis on calcium signaling in carotid body type I cells. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2000, 279, L36-L42.	1.3	50
14	PHD2 inactivation in Type I cells drives HIFâ€2Î±â€dependent multilineage hyperplasia and the formation of paragangliomaâ€like carotid bodies. Journal of Physiology, 2018, 596, 4393-4412.	1.3	37
15	Marked and rapid effects of pharmacological HIF-2Î± antagonism on hypoxic ventilatory control. Journal of Clinical Investigation, 2020, 130, 2237-2251.	3.9	32
16	Effects of anoxia, aglycemia, and acidosis on cytosolic Mg²⁺, ATP, and pH in rat sensory neurons. American Journal of Physiology - Cell Physiology, 2008, 294, C280-C294.	2.1	28
17	Neurotransmitter Switching Coupled to Î²-Adrenergic Signaling in Sympathetic Neurons in Prehypertensive States. Hypertension, 2018, 71, 1226-1238.	1.3	27
18	Effects of Anoxia and Aglycemia on Cytosolic Calcium Regulation in Rat Sensory Neurons. Journal of Neurophysiology, 2008, 100, 456-473.	0.9	23

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19	Differential Effects of Halothane and Isoflurane on Carotid Body Glomus Cell Intracellular Ca2+ and Background K+ Channel Responses to Hypoxia. Advances in Experimental Medicine and Biology, 2010, 669, 205-208.	0.8	21
20	A1899, PK-THPP, ML365, and Doxapram inhibit endogenous TASK channels and excite calcium signaling in carotid body type-1 cells. Physiological Reports, 2018, 6, e13876.	0.7	20
21	Glycogen metabolism protects against metabolic insult to preserve carotid body function during glucose deprivation. Journal of Physiology, 2014, 592, 4493-4506.	1.3	17
22	Moderate inhibition of mitochondrial function augments carotid body hypoxic sensitivity. Pflugers Archiv European Journal of Physiology, 2016, 468, 143-155.	1.3	17
23	Two-Pore Domain K+ Channels and Their Role in Chemoreception. Advances in Experimental Medicine and Biology, 2010, 661, 15-30.	0.8	16
24	The von Hippel-Lindau Chuvash mutation in mice causes carotid-body hyperplasia and enhanced ventilatory sensitivity to hypoxia. Journal of Applied Physiology, 2014, 116, 885-892.	1.2	15
25	Acid-evoked Ca2+ signalling in rat sensory neurones: effects of anoxia and aglycaemia. Pflugers Archiv European Journal of Physiology, 2009, 459, 159-181.	1.3	12
26	RNA Sequencing Reveals Novel Transcripts from Sympathetic Stellate Ganglia During Cardiac Sympathetic Hyperactivity. Scientific Reports, 2018, 8, 8633.	1.6	12
27	Cytosolic calcium regulation in rat afferent vagal neurons during anoxia. Cell Calcium, 2013, 54, 416-427.	1.1	9
28	The Role of TASK-Like K+ Channels in Oxygen Sensing in the Carotid Body. Novartis Foundation Symposium, 0, , 73-94.	1.2	8
29	Influence of propofol on isolated neonatal rat carotid body glomus cell response to hypoxia and hypercapnia. Respiratory Physiology and Neurobiology, 2019, 260, 17-27.	0.7	7
30	Molecular Strategies for Studying Oxygen-Sensitive K+ Channels. Methods in Enzymology, 2004, 381, 233-256.	0.4	6
31	A method for continuous and stable perfusion of tissue and single cell preparations with accurate concentrations of volatile anaesthetics. Journal of Neuroscience Methods, 2016, 258, 87-93.	1.3	5
32	The Effect of Methanandamide on Isolated Type I Cells. Advances in Experimental Medicine and Biology, 2003, 536, 123-127.	0.8	5
33	Competitive Interactions between Halothane and Isoflurane at the Carotid Body and TASK Channels. Anesthesiology, 2020, 133, 1046-1059.	1.3	5
34	Functional Properties of Mitochondria in the Type-1 Cell and Their Role in Oxygen Sensing. Advances in Experimental Medicine and Biology, 2015, 860, 69-80.	0.8	3
35	Effect of Mitochondrial Inhibitors on Type I Cells. Advances in Experimental Medicine and Biology, 2003, 536, 55-58.	0.8	2
36	Calcium Handling in Postganglionic Sympathetic Neurons is enhanced in Prehypertensive Spontaneously Hypertensive rat. FASEB Journal, 2009, 23, 1027.4.	0.2	0

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37	Neurotransmitter Switching in Sympathetic Neurons Coupled to Betaâ€Adrenergic Signalling in Hypertensive States. FASEB Journal, 2018, 32, 591.1.	0.2	0
38	Identification of Novel mRNA Transcripts in the Sympathetic Stellate Ganglia using RNA Sequencing. FASEB Journal, 2018, 32, 596.4.	0.2	0
39	Lack of influence of dexmedetomidine on rat glomus cell response to hypoxia, and on mouse acute hypoxic ventilatory response. Journal of Anaesthesiology Clinical Pharmacology, 2021, 37, 509.	0.2	0