Adrian D Bonev

List of Publications by Year
in descending order

67 papers	6,539 citations	101543 36 h-index	149698 56 g-index
68 all docs	68 docs citations	68 times ranked	4498 citing authors

#	Article	IF	Citations
1	Adenosine signaling activates ATP-sensitive K ⁺ channels in endothelial cells and pericytes in CNS capillaries. Science Signaling, 2022, 15, eabl5405.	3.6	33
2	Traumatic Brain Injury Impairs Systemic Vascular Function through Disruption of Inward-Rectifier Potassium Channels. Function, 2021, 2, .	2.3	9
3	A mechanism linking perinatal 2,3,7,8 tetrachlorodibenzo-p-dioxin exposure to lower urinary tract dysfunction in adulthood. DMM Disease Models and Mechanisms, 2021, 14, .	2.4	4
4	Extracellular histones induce calcium signals in the endothelium of resistance-sized mesenteric arteries and cause loss of endothelium-dependent dilation. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H1309-H1322.	3.2	29
5	The K V 7 channel activator retigabine suppresses mouse urinary bladder afferent nerve activity without affecting detrusor smooth muscle K + channel currents. Journal of Physiology, 2019, 597, 935-950.	2.9	13
6	Oxidation of cysteine 117 stimulates constitutive activation of the type Iî± cGMP-dependent protein kinase. Journal of Biological Chemistry, 2018, 293, 16791-16802.	3.4	30
7	Inhibition of vascular smooth muscle inward-rectifier K⁺channels restores myogenic tone in mouse urinary bladder arterioles. American Journal of Physiology - Renal Physiology, 2017, 312, F836-F847.	2.7	13
8	Lack of direct effect of adiponectin on vascular smooth muscle cell BKCa channels or Ca2+ signaling in the regulation of small artery pressure-induced constriction. Physiological Reports, 2017, 5, e13337.	1.7	12
9	Inward rectifier potassium (Kir2.1) channels as endâ€stage boosters of endotheliumâ€dependent vasodilators. Journal of Physiology, 2016, 594, 3271-3285.	2.9	97
10	Uncoupling of neurovascular communication after transient global cerebral ischemia is caused by impaired parenchymal smooth muscle K_{ir} channel function. Journal of Cerebral Blood Flow and Metabolism, 2016, 36, 1195-1201.	4.3	22
11	Pressure-induced oxidative activation of PKG enables vasoregulation by Ca ²⁺ sparks and BK channels. Science Signaling, 2016, 9, ra100.	3.6	35
12	Potassium channelopathy-like defect underlies early-stage cerebrovascular dysfunction in a genetic model of small vessel disease. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E796-805.	7.1	77
13	Impairment of IKCa channels contributes to uteroplacental endothelial dysfunction in rat diabetic pregnancy. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H592-H604.	3.2	15
14	AKAP150-dependent cooperative TRPV4 channel gating is central to endothelium-dependent vasodilation and is disrupted in hypertension. Science Signaling, 2014, 7, ra66.	3.6	151
15	NS19504: A Novel BK Channel Activator with Relaxing Effect on Bladder Smooth Muscle Spontaneous Phasic Contractions. Journal of Pharmacology and Experimental Therapeutics, 2014, 350, 520-530.	2.5	29
16	Elementary Ca2+signals through endothelial TRPV4 channels regulate vascular function. BMC Pharmacology & Toxicology, 2013, 14, .	2.4	1
17	Role of impaired endothelial cell Ca²⁺signaling in uteroplacental vascular dysfunction during diabetic rat pregnancy. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H935-H945.	3.2	15
18	Subarachnoid Blood Converts Neurally Evoked Vasodilation to Vasoconstriction in Rat Brain Cortex. , 2013, 115, 167-171.		21

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19	Critical role of Kv channels in cerebrovascular dysfunction associated with ischemic small vessel disease in a mouse genetic model. FASEB Journal, 2013, 27, 925.7.	0.5	0
20	Experimental Diabetes Impairs Endothelial IKCa Channel Function in Uteroplacental Arteries from Pregnant Rats. FASEB Journal, 2013, 27, 687.8.	0.5	0
21	Sympathetic nerve stimulation induces local endothelial Ca²⁺ signals to oppose vasoconstriction of mouse mesenteric arteries. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H594-H602.	3.2	80
22	Inversion of neurovascular coupling by subarachnoid blood depends on large-conductance Ca ²⁺ -activated K ⁺ (BK) channels. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1387-95.	7.1	97
23	Elementary Ca ²⁺ Signals Through Endothelial TRPV4 Channels Regulate Vascular Function. Science, 2012, 336, 597-601.	12.6	479
24	Profound decrease in myogenic tone of parenchymal arterioles in a genetic model of cerebral ischemic small vessel disease. FASEB Journal, 2012, 26, 685.6.	0.5	0
25	Reduced Ca²⁺ Spark Activity after Subarachnoid Hemorrhage Disables BK Channel Control of Cerebral Artery Tone. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 3-16.	4.3	40
26	Endothelial SK_{Ca} and IK_{Ca} Channels Regulate Brain Parenchymal Arteriolar Diameter and Cortical Cerebral Blood Flow. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1175-1186.	4.3	101
27	Elementary TRPV4 Ca ²⁺ events in intact vascular endothelium. FASEB Journal, 2011, 25, 1082.1.	0.5	0
28	Functional evidence of TRPV4â€mediated Ca 2+ signals in cortical astrocytes. FASEB Journal, 2011, 25, 1024.23.	0.5	1
29	Fundamental Change in Neurovascular Coupling after Subarachnoid Hemorrhage. FASEB Journal, 2011, 25, 1021.9.	0.5	0
30	Astrocytic endfoot Ca ²⁺ and BK channels determine both arteriolar dilation and constriction. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3811-3816.	7.1	265
31	Nerveâ€induced smooth muscle to endothelium signaling in small resistance arteries. FASEB Journal, 2010, 24, 598.7.	0.5	0
32	High intravascular pressure decreases endothelial Ca 2+ pulsars and impairs endotheliumâ€dependent vasodilation in mouse mesenteric arteries. FASEB Journal, 2010, 24, 956.6.	0.5	0
33	Differential patterning of cGMP in vascular smooth muscle cells revealed by single GFP-linked biosensors. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 365-370.	7.1	157
34	Ca2+-activated K+ Channels in Murine Endothelial Cells: Block by Intracellular Calcium and Magnesium. Journal of General Physiology, 2008, 131, 125-135.	1.9	83
35	Shiga Toxin 2 Affects the Central Nervous System through Receptor Globotriaosylceramide Localized to Neurons. Journal of Infectious Diseases, 2008, 198, 1398-1406.	4.0	103
36	Functional architecture of inositol 1,4,5-trisphosphate signaling in restricted spaces of myoendothelial projections. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9627-9632.	7.1	252

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37	Ca 2+ pulsars: spatially restricted, IP 3 Râ€mediated Ca 2+ release important for endothelial function. FASEB Journal, 2008, 22, 1181.18.	0.5	0
38	Effect of endogenous and exogenous nitric oxide on calcium sparks as targets for vasodilation in rat cerebral artery. Nitric Oxide - Biology and Chemistry, 2007, 16, 104-109.	2.7	29
39	Basal and AChâ€stimulated intracellular Ca ²⁺ signals in intact endothelium originate from IP ₃ â€sensitive stores. FASEB Journal, 2007, 21, A861.	0.5	0
40	Local potassium signaling couples neuronal activity to vasodilation in the brain. Nature Neuroscience, 2006, 9, 1397-1403.	14.8	487
41	Inositol trisphosphate receptor calcium release is required for cerebral artery smooth muscle cell proliferation. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H240-H247.	3.2	43
42	Spontaneous electrical rhythmicity and the role of the sarcoplasmic reticulum in the excitability of guinea pig gallbladder smooth muscle cells. American Journal of Physiology - Renal Physiology, 2006, 290, G655-G664.	3.4	27
43	Calcium waves in intact guinea pig gallbladder smooth muscle cells. American Journal of Physiology - Renal Physiology, 2006, 291, G717-G727.	3.4	21
44	Dynamic Inositol Trisphosphate-mediated Calcium Signals within Astrocytic Endfeet Underlie Vasodilation of Cerebral Arterioles. Journal of General Physiology, 2006, 128, 659-669.	1.9	88
45	Elementary purinergic Ca2+transients evoked by nerve stimulation in rat urinary bladder smooth muscle. Journal of Physiology, 2005, 564, 201-212.	2.9	56
46	Inhibition of Ca++sparks by oxyhemoglobin in rabbit cerebral arteries. Journal of Neurosurgery, 2004, 100, 295-302.	1.6	23
47	Calcium Dynamics in Cortical Astrocytes and Arterioles During Neurovascular Coupling. Circulation Research, 2004, 95, e73-81.	4.5	230
48	The Î²1 subunit of the Ca2+-sensitive K+ channel protects against hypertension. Journal of Clinical Investigation, 2004, 113, 955-957.	8.2	39
49	Altered Expression of Small-Conductance Ca 2+ -Activated K + (SK3) Channels Modulates Arterial Tone and Blood Pressure. Circulation Research, 2003, 93, 124-131.	4.5	301
50	Ca2+ Sparks and KCa Channels: Novel Mechanisms to Relax Urinary Bladder Smooth Muscle. , 2003, 539, 347-357.		27
51	Modulation of the molecular composition of large conductance, Ca2+ activated K+ channels in vascular smooth muscle during hypertension. Journal of Clinical Investigation, 2003, 112, 717-724.	8.2	124
52	Modulation of the molecular composition of large conductance, Ca2+ activated K+ channels in vascular smooth muscle during hypertension. Journal of Clinical Investigation, 2003, 112, 717-724.	8.2	208
53	Opposing Actions of Inositol 1,4,5-Trisphosphate and Ryanodine Receptors on Nuclear Factor of Activated T-cells Regulation in Smooth Muscle. Journal of Biological Chemistry, 2002, 277, 37756-37764.	3.4	81
54	Ca2+Sparks and Their Function in Human Cerebral Arteries. Stroke, 2002, 33, 802-808.	2.0	90

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55	Alkaline pH shifts Ca²⁺sparks to Ca²⁺waves in smooth muscle cells of pressurized cerebral arteries. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H2169-H2176.	3.2	37
56	Role of phospholamban in the modulation of arterial Ca²⁺sparks and Ca²⁺-activated K⁺channels by cAMP. American Journal of Physiology - Cell Physiology, 2001, 281, C1029-C1037.	4.6	89
57	Micromolar Ca²⁺ from sparks activates Ca²⁺-sensitive K⁺ channels in rat cerebral artery smooth muscle. American Journal of Physiology - Cell Physiology, 2001, 281, C1769-C1775.	4.6	186
58	Low levels of K_{ATP}channel activation decrease excitability and contractility of urinary bladder. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2001, 280, R1427-R1433.	1.8	69
59	Î²1â€Subunit of the Ca 2+ â€activated K + channel regulates contractile activity of mouse urinary bladder smooth muscle. Journal of Physiology, 2001, 537, 443-452.	2.9	134
60	Intracellular calcium events activated by ATP in murine colonic myocytes. American Journal of Physiology - Cell Physiology, 2000, 279, C126-C135.	4.6	91
61	Vasoregulation by the Î²1 subunit of the calcium-activated potassium channel. Nature, 2000, 407, 870-876.	27.8	772
62	Functional Coupling of Ryanodine Receptors to KCa Channels in Smooth Muscle Cells from Rat Cerebral Arteries. Journal of General Physiology, 1999, 113, 229-238.	1.9	261
63	Kir2.1 encodes the inward rectifier potassium channel in rat arterial smooth muscle cells. Journal of Physiology, 1999, 515, 639-651.	2.9	135
64	Ontogeny of Local Sarcoplasmic Reticulum Ca 2+ Signals in Cerebral Arteries. Circulation Research, 1998, 83, 1104-1114.	4.5	103
65	Frequency modulation of Ca²⁺sparks is involved in regulation of arterial diameter by cyclic nucleotides. American Journal of Physiology - Cell Physiology, 1998, 274, C1346-C1355.	4.6	194
66	Activators of protein kinase C decrease Ca²⁺spark frequency in smooth muscle cells from cerebral arteries. American Journal of Physiology - Cell Physiology, 1997, 273, C2090-C2095.	4.6	116
67	Gender Differences in Coronary Artery Diameter Involve Estrogen, Nitric Oxide, and Ca ²⁺ -Dependent K ⁺ Channels. Circulation Research, 1996, 79, 1024-1030.	4.5	214