Mordecai P Blaustein

List of Publications by Year
in descending order

76 papers	6,225 citations	109264 35 h-index	91828 69 g-index
76 all docs	76 docs citations	76 times ranked	3960 citing authors

#	Article	IF	Citations
1	Sodium/Calcium Exchange: Its Physiological Implications. Physiological Reviews, 1999, 79, 763-854.	13.1	1,551
2	A circulating inhibitor of (Na+ + K+) ATPase associated with essential hypertension. Nature, 1982, 300, 650-652.	13.7	585
3	The interrelationship between sodium and calcium fluxes across cell membranes. , 1974, 70, 33-82.		534
4	Salt-sensitive hypertension is triggered by Ca2+ entry via Na+/Ca2+ exchanger type-1 in vascular smooth muscle. Nature Medicine, 2004, 10, 1193-1199.	15.2	252
5	How NaCl raises blood pressure: a new paradigm for the pathogenesis of salt-dependent hypertension. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H1031-H1049.	1.5	216
6	Na⁺/Ca²⁺ exchange and Na⁺/K⁺â€ATPase in the heart. Journal of Physiology, 2015, 593, 1361-1382.	1.3	160
7	Sodium pump Î±2 subunits control myogenic tone and blood pressure in mice. Journal of Physiology, 2005, 569, 243-256.	1.3	154
8	Basis of Tetrodotoxin's Selectivity in Blockage of Squid Axons. Journal of General Physiology, 1967, 50, 1401-1411.	0.9	132
9	The Pump, the Exchanger, and Endogenous Ouabain. Hypertension, 2009, 53, 291-298.	1.3	124
10	Ouabain augments Ca²⁺ transients in arterial smooth muscle without raising cytosolic Na⁺. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H679-H691.	1.5	120
11	How does salt retention raise blood pressure?. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 290, R514-R523.	0.9	118
12	Plasma Membrane-Cytoskeleton-Endoplasmic Reticulum Complexes in Neurons and Astrocytes. Journal of Biological Chemistry, 2004, 279, 2885-2893.	1.6	115
13	Na⁺entry via store-operated channels modulates Ca²⁺signaling in arterial myocytes. American Journal of Physiology - Cell Physiology, 2000, 278, C163-C173.	2.1	110
14	Na⁺pump Î±₂-subunit expression modulates Ca²⁺signaling. American Journal of Physiology - Cell Physiology, 2003, 284, C475-C486.	2.1	110
15	Distinct Distribution of Different Na+Pump ? Subunit Isoforms in Plasmalemma.. Annals of the New York Academy of Sciences, 1997, 834, 524-536.	1.8	104
16	Local subplasma membrane Ca2+ signals detected by a tethered Ca2+ sensor. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13232-13237.	3.3	86
17	Localization of the Na+-Ca2+ Exchanger in Vascular Smooth Muscle, and in Neurons and Astrocytesa. Annals of the New York Academy of Sciences, 1996, 779, 318-335.	1.8	84
18	Location of calcium transporters at presynaptic terminals. European Journal of Neuroscience, 2000, 12, 839-846.	1.2	78

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19	Modulation of two functionally distinct Ca2+ stores in astrocytes: Role of the plasmalemmal Na/Ca exchanger. Glia, 1996, 16, 296-305.	2.5	77
20	Unloading and refilling of two classes of spatially resolved endoplasmic reticulum Ca2+ stores in astrocytes. Glia, 2000, 31, 15-28.	2.5	77
21	Na+/Ca2+ Exchange Inhibitors: A New Class of Calcium Regulators. Cardiovascular & Hematological Disorders Drug Targets, 2007, 7, 188-198.	0.2	76
22	Knockout of Na⁺/Ca²⁺ exchanger in smooth muscle attenuates vasoconstriction and L-type Ca²⁺ channel current and lowers blood pressure. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H1472-H1483.	1.5	71
23	Upregulation of Na+ and Ca2+ transporters in arterial smooth muscle from ouabain-induced hypertensive rats. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 298, H263-H274.	1.5	69
24	ATP-dependent calcium storage in presynaptic nerve terminals. Nature, 1977, 265, 246-248.	13.7	66
25	Heterogeneity of mitochondrial matrix free Ca²⁺: resolution of Ca²⁺dynamics in individual mitochondria in situ. American Journal of Physiology - Cell Physiology, 1999, 276, C1193-C1204.	2.1	64
26	Signaling mechanisms that link salt retention to hypertension: Endogenous ouabain, the Na+ pump, the Na+/Ca2+ exchanger and TRPC proteins. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2010, 1802, 1219-1229.	1.8	60
27	Endogenous Ouabain. Hypertension, 2016, 68, 526-532.	1.3	58
28	Synaptic vesicle recycling in synaptosomes in vitro. Nature, 1976, 261, 255-256.	13.7	56
29	An N-terminal Sequence Targets and Tethers Na+ Pump Î±2 Subunits to Specialized Plasma Membrane Microdomains. Journal of Biological Chemistry, 2006, 281, 12929-12940.	1.6	53
30	Pivotal role of Î±2 Na⁺ pumps and their high affinity ouabain binding site in cardiovascular health and disease. Journal of Physiology, 2016, 594, 6079-6103.	1.3	50
31	Ouabain, endogenous ouabain and ouabain-like factors: The Na+ pump/ouabain receptor, its linkage to NCX, and its myriad functions. Cell Calcium, 2020, 86, 102159.	1.1	47
32	Ouabainâ€“digoxin antagonism in rat arteries and neurones. Journal of Physiology, 2014, 592, 941-969.	1.3	43
33	TTX-sensitive voltage-gated Na+ channels are expressed in mesenteric artery smooth muscle cells. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H137-H145.	1.5	41
34	The pump, the exchanger, and the holy spirit: origins and 40-year evolution of ideas about the ouabain-Na⁺pump endocrine system. American Journal of Physiology - Cell Physiology, 2018, 314, C3-C26.	2.1	41
35	Increased arterial smooth muscle Ca²⁺ signaling, vasoconstriction, and myogenic reactivity in Milan hypertensive rats. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H611-H620.	1.5	37
36	Calcium Buffering and Free Ca2+in Rat Brain Synaptosomes. Journal of Neurochemistry, 1993, 60, 843-850.	2.1	36

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37	Salt sensitivity, endogenous ouabain and hypertension. Current Opinion in Nephrology and Hypertension, 2012, 22, 1.	1.0	36
38	Evolution of our understanding of cell volume regulation by the pump-leak mechanism. Journal of General Physiology, 2019, 151, 407-416.	0.9	35
39	Why isn't endogenous ouabain more widely accepted?. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H635-H639.	1.5	34
40	Neuroendocrine Humoral and Vascular Components in the Pressor Pathway for Brain Angiotensin II: A New Axis in Long Term Blood Pressure Control. PLoS ONE, 2014, 9, e108916.	1.1	31
41	Organization of Ca2+ Stores in Vascular Smooth Muscle: Functional Implications. Novartis Foundation Symposium, 2008, , 125-141.	1.2	30
42	Update on angiotensin II: new endocrine connections between the brain, adrenal glands and the cardiovascular system. Endocrine Connections, 2017, 6, R131-R145.	0.8	30
43	Low-dose ouabain constricts small arteries from ouabain-hypertensive rats: implications for sustained elevation of vascular resistance. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 297, H1140-H1150.	1.5	28
44	Nanomolar ouabain increases NCX1 expression and enhances Ca²⁺signaling in human arterial myocytes: a mechanism that links salt to increased vascular resistance?. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 303, H784-H794.	1.5	27
45	Nanomolar ouabain augments Ca²⁺ signalling in rat hippocampal neurones and glia. Journal of Physiology, 2013, 591, 1671-1689.	1.3	27
46	Sex, Digitalis, and the Sodium Pump. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2003, 3, 68-72.	3.4	27
47	Cross Talk Between Plasma Membrane Na+/Ca2+ Exchanger-1 and TRPC/Orai-Containing Channels: Key Players in Arterial Hypertension. Advances in Experimental Medicine and Biology, 2013, 961, 365-374.	0.8	26
48	Commentary: What is the Link Between Vascular Smooth Muscle Sodium Pumps and Hypertension?. Clinical and Experimental Hypertension, 1981, 3, 173-178.	1.2	25
49	Chronic ouabain treatment induces vasa recta endothelial dysfunction in the rat. American Journal of Physiology - Renal Physiology, 2009, 296, F98-F106.	1.3	23
50	In vivo assessment of artery smooth muscle [Ca²⁺]_i and MLCK activation in FRET-based biosensor mice. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H946-H956.	1.5	23
51	Central and peripheral slow-pressor mechanisms contributing to Angiotensin II-salt hypertension in rats. Cardiovascular Research, 2018, 114, 233-246.	1.8	20
52	Local Sodium, Global Reach. Circulation Research, 2007, 101, 959-961.	2.0	17
53	How does pressure overload cause cardiac hypertrophy and dysfunction? High-ouabain affinity cardiac Na⁺pumps are crucial. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 313, H919-H930.	1.5	16
54	Organization of Ca2+ stores in vascular smooth muscle: functional implications. Novartis Foundation Symposium, 2002, 246, 125-37; discussion 137-41, 221-7.	1.2	15

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55	Getting a grip on calcium regulation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18349-18350.	3.3	11
56	Arterial Î±₂-Na⁺pump expression influences blood pressure: lessons from novel, genetically engineered smooth muscle-specific Î±₂mice. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H958-H968.	1.5	11
57	Letter to the Editor concerning Baecher et al. (Clin Chim Acta 2014;431:87â€"92). Clinica Chimica Acta, 2015, 448, 248-249.	0.5	10
58	NO-induced vasodilation correlates directly with BP in smooth muscle-Na/Ca exchanger-1-engineered mice: elevated BP does not attenuate endothelial function. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 320, H221-H237.	1.5	10
59	Na⁺/Ca²⁺ exchanger overexpression in smooth muscle augments cytosolic Ca²⁺ in femoral arteries of living mice. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 316, H298-H310.	1.5	9
60	Attenuated renal vascular responses to acute angiotensin II infusion in smooth muscle-specific Na+/Ca2+ exchanger knockout mice. American Journal of Physiology - Renal Physiology, 2011, 301, F574-F579.	1.3	8
61	Multipurpose Na+ ions mediate excitation and cellular homeostasis: Evolution of the concept of Na+ pumps and Na+/Ca2+ exchangers. Cell Calcium, 2020, 87, 102166.	1.1	8
62	Modulation of two functionally distinct Ca2 stores in astrocytes: Role of the plasmalemmal Na/Ca exchanger. Glia, 1996, 16, 296-305.	2.5	6
63	How Does the Brain Talk to the Arteries and Heart?. FASEB Journal, 2015, 29, 984.3.	0.2	6
64	Livinâ€™ with NCX and Lovinâ€™ It: A 45 Year Romance. Advances in Experimental Medicine and Biology, 2013, 961, 3-15.	0.8	5
65	Why publish in the <i>American Journal of Physiology-Heart and Circulatory Physiology</i>?. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 313, H221-H223.	1.5	4
66	Abstract 400: Angiotensin II Triggers the Same Pressor Mechanisms in Salt-sensitive Hypertension and During Salt Depletion. Hypertension, 2013, 62, .	1.3	3
67	Reply to â€œLetter to the editor: â€˜Why isn't clinical experience with ouabain more widely accepted?'â€• American Journal of Physiology - Heart and Circulatory Physiology, 2014, 307, H1264-H1265.	1.5	2
68	Reply to â€œLetter to the editor: Comments on Blaustein (2018): â€˜The pump, the exchanger, and the holy spirit: origins and 40-year evolution of ideas about the ouabain-Na⁺pump endocrine systemâ€™â€• American Journal of Physiology - Cell Physiology, 2018, 314, C641-C642.	2.1	2
69	Essential contributions of the Î±2-Na⁺/K⁺-ATPase ouabain binding site to cardiac remodeling. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 321, H1117-H1118.	1.5	2
70	Unloading and refilling of two classes of spatially resolved endoplasmic reticulum Ca2+ stores in astrocytes. , 0, .		1
71	It was the best of times â€" a postdoctoral experience in the UK in the 1960s. , 2016, , 32-35.		1
72	On the mechanism of myogenic tone in small arteries. Journal of Muscle Research and Cell Motility, 2004, 25, 615.	0.9	1

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73	Cardiovascular Effects of Chronic Intermittent Hypoxia in Mice. FASEB Journal, 2006, 20, .	0.2	0
74	Relationship between Na pump alphaâ€2 subunit, Na/Ca exchanger and ankyrin B expression at plasma membraneâ€"endoplasmic reticulum (PMâ€ER) junctions. FASEB Journal, 2007, 21, A534.	0.2	0
75	Renal Vascular Responses Are Attenuated in Smooth Muscleâ€Specific Na+/Ca2+ Exchanger Knockout Mice during Acute Angiotensin II Infusions. FASEB Journal, 2010, 24, 1059.19.	0.2	0
76	Sorting of Î±2 and Î±3 Na + Pumps in Glia and Neurons: Linkage with Na/Ca Exchangerâ€1. FASEB Journal, 2010, 24, 607.6.	0.2	0