Michael J Shattock

List of Publications by Year
in descending order

127	6,209	87888 38	74163 75
papers	citations	h-index	g-index

131	131	131	8773
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ischaemic accumulation of succinate controls reperfusion injury through mitochondrial ROS. Nature, 2014, 515, 431-435.	27.8	1,989
2	Mitochondrial uncoupling, with low concentration FCCP, induces ROS-dependent cardioprotection independent of KATP channel activation. Cardiovascular Research, 2006, 72, 313-321.	3.8	205
3	â€˜Autonomic conflictâ€™: a different way to die during cold water immersion?. Journal of Physiology, 2012, 590, 3219-3230.	2.9	180
4	Na⁺/Ca²⁺ exchange and Na⁺/K⁺â€ATPase in the heart. Journal of Physiology, 2015, 593, 1361-1382.	2.9	160
5	Detection, Quantitation, Purification, and Identification of Cardiac Proteins S-Thiolated during Ischemia and Reperfusion. Journal of Biological Chemistry, 2002, 277, 9806-9811.	3.4	157
6	Glyceraldehyde Phosphate Dehydrogenase Oxidation During Cardiac Ischemia and Reperfusion. Journal of Molecular and Cellular Cardiology, 2002, 34, 1549-1560.	1.9	116
7	Selective superoxide generation within mitochondria by the targeted redox cycler MitoParaquat. Free Radical Biology and Medicine, 2015, 89, 883-894.	2.9	111
8	Serine 68 phosphorylation of phospholemman: acute isoform-specific activation of cardiac Na/K ATPase. Cardiovascular Research, 2005, 65, 93-103.	3.8	108
9	Substrate recognition by the cell surface palmitoyl transferase DHHC5. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17534-17539.	7.1	108
10	Ischemiaâ€induced phosphorylation of phospholemman directly activates rat cardiac Na/K ATPase. FASEB Journal, 2004, 18, 197-199.	0.5	107
11	Differential distribution and regulation of mouse cardiac Na+/K+-ATPase Î±1 and Î±2 subunits in T-tubule and surface sarcolemmal membranes. Cardiovascular Research, 2007, 73, 92-100.	3.8	90
12	Cardiac ischemia causes inhibition of the Na/K ATPase by a labile cytosolic compound whose production is linked to oxidant stress. Cardiovascular Research, 2003, 57, 1044-1051.	3.8	87
13	Pivotal role of NOXâ€2â€containing NADPH oxidase in early ischemic preconditioning. FASEB Journal, 2005, 19, 2037-2039.	0.5	86
14	Off-target effects of sodium-glucose co-transporter 2 blockers: empagliflozin does not inhibit Na+/H+ exchanger-1 or lower [Na+]i in the heart. Cardiovascular Research, 2021, 117, 2794-2806.	3.8	84
15	Exercise at depth alters bradycardia and incidence of cardiac anomalies in deep-diving marine mammals. Nature Communications, 2015, 6, 6055.	12.8	83
16	Mouse isolated perfused heart: Characteristics and cautions. Clinical and Experimental Pharmacology and Physiology, 2003, 30, 867-878.	1.9	79
17	FCCP is cardioprotective at concentrations that cause mitochondrial oxidation without detectable depolarisation. Cardiovascular Research, 2006, 72, 322-330.	3.8	78
18	The Inhibitory Effect of Phospholemman on the Sodium Pump Requires Its Palmitoylation. Journal of Biological Chemistry, 2011, 286, 36020-36031.	3.4	68

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19	FXYD1 phosphorylation in vitro and in adult rat cardiac myocytes: threonine 69 is a novel substrate for protein kinase C. American Journal of Physiology - Cell Physiology, 2009, 296, C1346-C1355.	4.6	66
20	S-Thiolation of HSP27 Regulates Its Multimeric Aggregate Size Independently of Phosphorylation. Journal of Biological Chemistry, 2002, 277, 21189-21196.	3.4	65
21	Effects of potassium channel modulation during global ischaemia in isolated rat heart with and without cardioplegia. Cardiovascular Research, 1992, 26, 1063-1068.	3.8	62
22	Regulation of the cardiac sodium pump. Cellular and Molecular Life Sciences, 2013, 70, 1357-1380.	5.4	61
23	Mechanism of succinate efflux upon reperfusion of the ischaemic heart. Cardiovascular Research, 2021, 117, 1188-1201.	3.8	59
24	Novel regulation of cardiac Na pump via phospholemman. Journal of Molecular and Cellular Cardiology, 2013, 61, 83-93.	1.9	57
25	Î± B Crystallin Translocation and Phosphorylation: Signal Transduction Pathways and Preconditioning in the Isolated Rat Heart. Journal of Molecular and Cellular Cardiology, 2001, 33, 1659-1671.	1.9	54
26	The role of voltage gated T-type Ca2+ channel isoforms in mediating â€œcapacitativeâ€• Ca2+ entry in cancer cells. Cell Calcium, 2004, 36, 489-497.	2.4	54
27	Control of protein palmitoylation by regulating substrate recruitment to a zDHHC-protein acyltransferase. Communications Biology, 2020, 3, 411.	4.4	54
28	Reversible Cysteine-Targeted Oxidation of Proteins during Renal Oxidative Stress. Journal of the American Society of Nephrology: JASN, 2003, 14, S290-S296.	6.1	53
29	Electrophysiological Characteristics of Repetitive Ischemic Preconditioning in the Pig Heart. Journal of Molecular and Cellular Cardiology, 1996, 28, 1339-1347.	1.9	47
30	Cardioprotection initiated by reactive oxygen species is dependent on activation of PKCÎµ. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H1893-H1899.	3.2	47
31	Disulfide-activated protein kinase G IÎ± regulates cardiac diastolic relaxation and fine-tunes the Frankâ€“Starling response. Nature Communications, 2016, 7, 13187.	12.8	46
32	The intracellular region of FXYD1 is sufficient to regulate cardiac Na/K ATPase. FASEB Journal, 2007, 21, 1539-1546.	0.5	45
33	Restitution slope is principally determined by steady-state action potential duration. Cardiovascular Research, 2017, 113, 817-828.	3.8	45
34	Intracellular sodium elevation reprograms cardiac metabolism. Nature Communications, 2020, 11, 4337.	12.8	44
35	Experimental Hyperleptinemia in Neonatal Rats Leads to Selective Leptin Responsiveness, Hypertension, and Altered Myocardial Function. Hypertension, 2013, 62, 627-633.	2.7	43
36	Characterization of the phospholemman knockout mouse heart: depressed left ventricular function with increased Na-K-ATPase activity. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H613-H621.	3.2	42

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37	Nitric oxide regulates cardiac intracellular Na+ and Ca2+ by modulating Na/K ATPase via PKCÎµ and phospholemman-dependent mechanism. Journal of Molecular and Cellular Cardiology, 2013, 61, 164-171.	1.9	41
38	Cardiac hypertrophy in mice expressing unphosphorylatable phospholemman. Cardiovascular Research, 2014, 104, 72-82.	3.8	41
39	Differential Centrifugation Separates Cardiac Sarcolemmal and Endosomal Membranes from Langendorff-Perfused Rat Hearts. Analytical Biochemistry, 2001, 293, 216-223.	2.4	40
40	Non-steroidal anti-inflammatory drugs (NSAIDs) inhibit vascular smooth muscle cell proliferation via differential effects on the cell cycle. Journal of Pharmacy and Pharmacology, 2010, 55, 519-526.	2.4	40
41	Increased oxidative metabolism following hypoxia in the type 2 diabetic heart, despite normal hypoxia signalling and metabolic adaptation. Journal of Physiology, 2016, 594, 307-320.	2.9	40
42	The rate of loss of Tâ€tubules in cultured adult ventricular myocytes is species dependent. Experimental Physiology, 2010, 95, 518-527.	2.0	39
43	Phospholemman Ser69 phosphorylation contributes to sildenafil-induced cardioprotection against reperfusion injury. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H827-H836.	3.2	39
44	Phospholemman: its role in normal cardiac physiology and potential as a drugable target in disease. Current Opinion in Pharmacology, 2009, 9, 160-166.	3.5	37
45	Phospholemmanâ€dependent regulation of the cardiac Na/Kâ€ATPase activity is modulated by inhibitorâ€1 sensitive typeâ€1 phosphatase. FASEB Journal, 2011, 25, 4467-4475.	0.5	37
46	Haemoglobin oxygen affinity in patients with severe COVIDâ€19 infection. British Journal of Haematology, 2020, 190, e126-e127.	2.5	36
47	The role of the Na⁺/Ca²⁺ exchanger, I_{Na} and I_{CaL} in the genesis of dofetilideâ€induced torsades de pointes in isolated, AVâ€blocked rabbit hearts. British Journal of Pharmacology, 2009, 156, 920-932.	5.4	35
48	Cardiac Dysautonomia in Huntington's Disease. Journal of Huntington's Disease, 2013, 2, 251-261.	1.9	35
49	Investigating the potential role of <scp>TRPA</scp>1 in locomotion and cardiovascular control during hypertension. Pharmacology Research and Perspectives, 2014, 2, e00052.	2.4	33
50	Effects of Hydrogen Peroxide on Cardiac Function and Post-Ischaemic Functional Recovery in the Isolated ‘Working’ Rat Heart. Pharmacology, 1982, 24, 118-122.	2.2	32
51	Heart failure leads to altered Î²2-adrenoceptor/cyclic adenosine monophosphate dynamics in the sarcolemmal phospholemman/Na,K ATPase microdomain. Cardiovascular Research, 2019, 115, 546-555.	3.8	31
52	Lipid hydroperoxide modification of proteins during myocardial ischaemia. Cardiovascular Research, 2001, 51, 294-303.	3.8	30
53	Is there a transient rise in sub-sarcolemmal Na and activation of Na/K pump current following activation of INa in ventricular myocardium?. Cardiovascular Research, 2003, 57, 1025-1034.	3.8	30
54	Esmolol cardioplegia: the cellular mechanism of diastolic arrest. Cardiovascular Research, 2010, 87, 552-560.	3.8	30

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55	Ablation of Toll-like receptor 9 attenuates myocardial ischemia/reperfusion injury in mice. Biochemical and Biophysical Research Communications, 2019, 515, 442-447.	2.1	30
56	A Separate Pool of Cardiac Phospholemman That Does Not Regulate or Associate with the Sodium Pump. Journal of Biological Chemistry, 2013, 288, 13808-13820.	3.4	29
57	Autonomic conflict exacerbates long QT associated ventricular arrhythmias. Journal of Molecular and Cellular Cardiology, 2018, 116, 145-154.	1.9	29
58	Ischemic Preconditioning: a Potential Role for Constitutive Low Molecular Weight Stress Protein Translocation and Phosphorylation?. Journal of Molecular and Cellular Cardiology, 2000, 32, 961-971.	1.9	28
59	Effects of Endothelin-1 on K+ Currents from Rat Ventricular Myocytes. Biochemical and Biophysical Research Communications, 2001, 284, 1048-1055.	2.1	27
60	Regulation of the cardiac Na+ pump by palmitoylation of its catalytic and regulatory subunits. Biochemical Society Transactions, 2013, 41, 95-100.	3.4	24
61	ROLE OF p38-MITOGEN-ACTIVATED PROTEIN KINASE IN ISCHAEMIC PRECONDITIONING IN RAT HEART. Clinical and Experimental Pharmacology and Physiology, 2007, 35, 070924173348001-???.	1.9	23
62	Preconditioning and reperfusion arrhythmias in the isolated rat heart: true protection or temporal shift in vulnerability?. Cardiovascular Research, 1993, 27, 2274-2281.	3.8	22
63	Multiple quantum filtered 23Na NMR in the Langendorff perfused mouse heart: Ratio of triple/double quantum filtered signals correlates with [Na]i. Journal of Molecular and Cellular Cardiology, 2015, 86, 95-101.	1.9	22
64	Reperfusion kinase phosphorylation is essential but not sufficient in the mediation of pharmacological preconditioning: Characterisation in the bi-phasic profile of early and late protection. Cardiovascular Research, 2007, 73, 153-163.	3.8	21
65	Lâ€type calcium current of isolated rat cardiac myocytes in experimental uraemia. Nephrology Dialysis Transplantation, 2000, 15, 791-798.	0.7	19
66	Intensive training and reduced volume increases muscle FXYD1 expression and phosphorylation at rest and during exercise in athletes. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 310, R659-R669.	1.8	19
67	14-3-3 binding creates a memory of kinase action by stabilizing the modified state of phospholamban. Science Signaling, 2020, 13, .	3.6	19
68	Antimycin A induced cardioprotection is dependent on pre-ischemic p38-MAPK activation but independent of MKK3. Journal of Molecular and Cellular Cardiology, 2005, 39, 709-717.	1.9	18
69	Sympathetic Nervous Regulation of Calcium and Action Potential Alternans in the Intact Heart. Frontiers in Physiology, 2018, 9, 16.	2.8	18
70	Is rate-pressure product of any use in the isolated rat heart? Assessing cardiac â€˜effortâ€™ and oxygen consumption in the Langendorff-perfused heart. Experimental Physiology, 2016, 101, 282-294.	2.0	16
71	SGLT2 inhibitors and the cardiac Na+/H+ exchanger-1: the plot thickens. Cardiovascular Research, 2021, 117, 2702-2704.	3.8	16
72	Evidence for a Novel K+ Channel Modulated by Î±1A-Adrenoceptors in Cardiac Myocytes. Molecular Pharmacology, 2004, 66, 735-748.	2.3	15

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73	Ischemic Preconditioning: A Potential Role for Protein S-Thiolation?. Antioxidants and Redox Signaling, 2005, 7, 882-888.	5.4	15
74	Increased Cardiovascular Reactivity to Acute Stress and Salt-Loading in Adult Male Offspring of Fat Fed Non-Obese Rats. PLoS ONE, 2011, 6, e25250.	2.5	15
75	Anti-Proliferative Actions of T-Type Calcium Channel Inhibition in Thy1 Nephritis. American Journal of Pathology, 2013, 183, 391-401.	3.8	15
76	Is there a causal link between intracellular Na elevation and metabolic remodelling in cardiac hypertrophy?. Biochemical Society Transactions, 2018, 46, 817-827.	3.4	15
77	Geometrical considerations in cardiac electrophysiology and arrhythmogenesis. Europace, 2016, 18, 320-331.	1.7	14
78	Developmental Differences in Superoxide Production in Isolated Guinea-Pig Hearts During Reperfusion. Journal of Molecular and Cellular Cardiology, 1998, 30, 1391-1399.	1.9	13
79	Inhibition of K+ Transport through Na+, K+-ATPase by Capsazepine: Role of Membrane Span 10 of the Î±-Subunit in the Modulation of Ion Gating. PLoS ONE, 2014, 9, e96909.	2.5	13
80	An Altered Repolarizing Potassium Current in Rat Cardiac Myocytes after Subtotal Nephrectomy. Journal of the American Society of Nephrology: JASN, 2000, 11, 1589-1599.	6.1	13
81	Maternal dietary supplementation with saturated, but not monounsaturated or polyunsaturated fatty acids, leads to tissueâ€specific inhibition of offspring Na⁺,K⁺â€ATPase. Journal of Physiology, 2008, 586, 5013-5022.	2.9	12
82	Inhibition of Human Mesangial Cell Proliferation by Targeting T-Type Calcium Channels. Nephron Experimental Nephrology, 2009, 113, e77-e88.	2.2	12
83	Phospholemman Phosphorylation Regulates Vascular Tone, Blood Pressure, and Hypertension in Mice and Humans. Circulation, 2021, 143, 1123-1138.	1.6	12
84	Long-term myocardial preservation: effects of hyperkalemia, sodium channel, and NA+/K+/2CL- cotransport inhibition on extracellular potassium accumulation during hypothermic storage. Journal of Thoracic and Cardiovascular Surgery, 1999, 118, 123-134.	0.8	11
85	Expression and regulation of type 2A protein phosphatases and alpha4 signalling in cardiac health and hypertrophy. Basic Research in Cardiology, 2017, 112, 37.	5.9	11
86	Influence of isoprostane F2Î±-III on reflow after myocardial infarction. European Heart Journal, 2004, 25, 847-853.	2.2	10
87	Cell volume control in phospholemman (PLM) knockout mice: do cardiac myocytes demonstrate a regulatory volume decrease and is this influenced by deletion of PLM?. Experimental Physiology, 2009, 94, 330-343.	2.0	10
88	Differences in action potential configuration in ventricular trabeculae correlate with differences in density of transverse tubule-sarcoplasmic reticulum couplings. Journal of Molecular and Cellular Cardiology, 1988, 20, 539-546.	1.9	9
89	Action potential duration and endocardial modulation of myocardial contraction in the ferret. Cardiovascular Research, 1992, 26, 376-378.	3.8	9
90	Vagal modulation of dispersion of repolarisation in the rabbit heart. Journal of Molecular and Cellular Cardiology, 2015, 85, 89-101.	1.9	9

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91	Ventricular Arrhythmias Induced by Ischaemiaâ€"Reperfusion are Unaffected by Myocardial Glutathione Depletion. Journal of Molecular and Cellular Cardiology, 1996, 28, 679-688.	1.9	8
92	Phospholemman and the Cardiac Sodium Pump. Circulation Research, 2006, 99, 1290-1292.	4.5	8
93	Long-term beta-blockade: prolonged protective action on the ischaemic myocardium. Cardiovascular Research, 1981, 15, 462-467.	3.8	7
94	Responses to ischaemia and reperfusion in the mouse isolated perfused heart and the phenomenon of 'contractile cycling'. Clinical and Experimental Pharmacology and Physiology, 2003, 30, 879-884.	1.9	7
95	With a grain of salt: Sodium elevation and metabolic remodelling in heart failure. Journal of Molecular and Cellular Cardiology, 2021, 161, 106-115.	1.9	7
96	Sodium pump current measured in cardiac ventricular myocytes isolated from control and potassium depleted rabbits. Cardiovascular Research, 1994, 28, 1854-1862.	3.8	6
97	COVIDâ€19 and haemoglobin oxygen affinity: some clarity?. British Journal of Haematology, 2020, 190, 723-724.	2.5	6
98	Hypothermic preservation of isolated rat lungs in modified bicarbonate buffer, EuroCollins solution or St Thomas' Hospital cardioplegic solution. European Journal of Cardio-thoracic Surgery, 1998, 14, 508-515.	1.4	5
99	Realâ€time <i>ex vivo</i> perfusion of human lymph nodes invaded by cancer (REPLICANT): a feasibility study. Journal of Pathology, 2020, 250, 262-274.	4.5	5
100	Two different metabolic responses to ischaemia: inherent variability or artefact?. Cardiovascular Research, 1983, 17, 489-498.	3.8	4
101	Limitations of the Isolated Papillary Muscle as an Experimental Model: A Metabolic, Functional and Ultrastructural Study. Clinical Science, 1983, 64, 4P-4P.	4.3	4
102	Two different electrophysiological responses toryanodine: Evidence for two populations of muscles isolated from the rabbit right ventricle. Journal of Molecular and Cellular Cardiology, 1987, 19, 751-762.	1.9	4
103	The Amplitude-Normalized Area of a Bipolar Electrogram as a Measure of Local Conduction Delay in the Heart. Frontiers in Physiology, 2020, 11, 465.	2.8	4
104	Long-term prenylamine therapy: Effects on responses to myocardial ischaemia in the isolated rat heart. European Journal of Pharmacology, 1982, 77, 33-38.	3.5	3
105	The Role of the Rate of Vascular Collapse in Ischemia-induced Acute Contractile Failure and Decreased Diastolic Stiffness. Journal of Molecular and Cellular Cardiology, 1996, 28, 519-529.	1.9	3
106	"Publishers' dawdle" -- a case for treatment?. Cardiovascular Research, 1992, 26, 1-2.	3.8	2
107	Channel "selectivity" and evolution Has evolutionary pressure and natural selection provided the ATP sensitive potassium channel in the myocardium as an endogenous protection against ischaemic heart disease?. Cardiovascular Research, 1992, 26, 1153-1154.	3.8	2
108	Regulation of cardiac Na/K ATPase by FXYD1 (phospholemman). Journal of Molecular and Cellular Cardiology, 2006, 40, 997.	1.9	2

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109	Ion-Channel modulator TH1177 reduces glomerular injury and serum creatinine in chronic mesangial proliferative disease in rats. BMC Nephrology, 2020, 21, 187.	1.8	2
110	Protein S-Thiolation: Emphasis on Cell Signaling and Gene Expression. Antioxidants and Redox Signaling, 2005, 7, 839-840.	5.4	1
111	Characterisation of the Langendorff-perfused phospholemman knockout mouse heart: Effects of calcium concentration and pacing rate on contractility. Journal of Molecular and Cellular Cardiology, 2006, 40, 996.	1.9	1
112	Nitric oxide-induced stimulation of the cardiac Na/K ATPase requires phospholemman. Journal of Molecular and Cellular Cardiology, 2007, 42, S54.	1.9	1
113	Prenylamine and the myocardial response to ischaemia and reperfusion: effects of acute and chronic treatment. Journal of Pharmacy and Pharmacology, 2011, 34, 255-258.	2.4	1
114	EXPRESSION OF TYPE 2A PROTEIN PHOSPHATASES IN CARDIAC HEALTH AND DISEASE. Heart, 2014, 100, A16.2-A16.	2.9	1
115	Phospholemman-Dependent Regulation of Na/K-Atpase Modulates Constriction and Relaxation in Aortic Smooth Muscle. Biophysical Journal, 2014, 106, 725a.	0.5	1
116	Ventricular cycle length irregularity affects the correlation between ventricular rate and coronary flow in isolated, Langendorff perfused guinea pig hearts. Journal of Pharmacological and Toxicological Methods, 2016, 77, 45-52.	0.7	1
117	P1â€...Causal link between intracellular sodium overload and metabolic remodelling in the heart: uncoupling ATP supply and demand?. , 2018, , .		1
118	KATP channel opening and cardioprotection - the authors' response. Cardiovascular Research, 1992, 26, 1156-1157.	3.8	0
119	The salt of the earth: Focus on Na+ regulation in the cardiac myocyte. Journal of Molecular and Cellular Cardiology, 2013, 61, 1.	1.9	0
120	Response to Role of Hyperleptinemia in the Regulation of Blood Pressure and Cardiac Function. Hypertension, 2014, 63, e2.	2.7	0
121	Erratum to â€˜Novel regulation of cardiac Na pump via phospholemmanâ€™ [J Mol Cell Cardiol 61 (2013) 83â€"93]. Journal of Molecular and Cellular Cardiology, 2014, 69, 75.	1.9	0
122	Concomitant vagal and adrenergic stimulation does not precipitate ventricular arrhythmias in a healthy rabbit heart model of autonomic conflict. Extreme Physiology and Medicine, 2015, 4, A39.	2.5	0
123	Reversal of cardiac vagal effects of physostigmine by adjunctive muscarinic blockade. NeuroToxicology, 2016, 57, 174-182.	3.0	0
124	Measurement of Calcium Flux and Intracellular Sodium by Ion-Selective Microelectrodes. Methods in Neurosciences, 1991, 4, 278-300.	0.5	0
125	FXYD1 (Phospholemman). , 2016, , 1-9.		0
126	FXYD1 (Phospholemman). , 2018, , 1875-1883.		0

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127	Stimulated phosphorylation of ERK in mouse kidney mesangial cells is dependent upon expression of Cav3.1. BMC Nephrology, 2022, 23, .	1.8	0