Brian O'Rourke

List of Publications by Year
in descending order

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210 papers	21,582 citations	6613 79 h-index	9861 141 g-index
220 all docs	220 docs citations	220 times ranked	16668 citing authors

#	Article	IF	Citations
1	Myocardial brain-derived neurotrophic factor regulates cardiac bioenergetics through the transcription factor Yin Yang 1. Cardiovascular Research, 2023, 119, 571-586.	3.8	12
2	Mitochondrial Creatine Kinase Attenuates Pathologic Remodeling in Heart Failure. Circulation Research, 2022, , CIRCRESAHA121319648.	4.5	6
3	Hydropersulfides (RSSH) Outperform Post-Conditioning and Other Reactive Sulfur Species in Limiting Ischemiaâ€“Reperfusion Injury in the Isolated Mouse Heart. Antioxidants, 2022, 11, 1010.	5.1	13
4	Mitochondrial Ca2+ in heart failure: Not enough or too much?. Journal of Molecular and Cellular Cardiology, 2021, 151, 126-134.	1.9	26
5	Blood-derived mitochondrial DNA copy number is associated with gene expression across multiple tissues and is predictive for incident neurodegenerative disease. Genome Research, 2021, 31, 349-358.	5.5	52
6	Exercise triggers CAPN1-mediated AIF truncation, inducing myocyte cell death in arrhythmogenic cardiomyopathy. Science Translational Medicine, 2021, 13, .	12.4	46
7	Cardiac retinoic acid levels decline in heart failure. JCI Insight, 2021, 6, .	5.0	19
8	MCU Overexpression Rescues Inotropy and Reverses Heart Failure by Reducing SR Ca ²⁺ Leak. Circulation Research, 2021, 128, 1191-1204.	4.5	47
9	MitoWave: Spatiotemporal analysis of mitochondrial membrane potential fluctuations during I/R. Biophysical Journal, 2021, 120, 3261-3271.	0.5	4
10	PDE1 Inhibition Modulates Ca _v 1.2 Channel to Stimulate Cardiomyocyte Contraction. Circulation Research, 2021, 129, 872-886.	4.5	8
11	Mss51 deletion increases endurance and ameliorates histopathology in the mdx mouse model of Duchenne muscular dystrophy. FASEB Journal, 2021, 35, e21276.	0.5	4
12	Inhibition of phosphodiesterase type 9 reduces obesity and cardiometabolic syndrome in mice. Journal of Clinical Investigation, 2021, 131, .	8.2	16
13	The mitochondrial regulator PGC1Î± is induced by cGMPâ€“PKG signaling and mediates the protective effects of phosphodiesterase 5 inhibition in heart failure. FEBS Letters, 2021, 596, 17.	2.8	9
14	Mitochondrial DNA copy number can influence mortality and cardiovascular disease via methylation of nuclear DNA CpGs. Genome Medicine, 2020, 12, 84.	8.2	63
15	Hydrogen peroxide diffusion and scavenging shapes mitochondrial network instability and failure by sensitizing ROS-induced ROS release. Scientific Reports, 2020, 10, 15758.	3.3	16
16	TNNT2 mutations in the tropomyosin binding region of TNT1 disrupt its role in contractile inhibition and stimulate cardiac dysfunction. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18822-18831.	7.1	21
17	Mitochondrial DNA copy number and incident atrial fibrillation. BMC Medicine, 2020, 18, 246.	5.5	21
18	Diabetes Increases the Vulnerability of the Cardiac Mitochondrial Network to Criticality. Frontiers in Physiology, 2020, 11, 175.	2.8	8

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19	Mitochondria Do Not Survive Calcium Overload During Transplantation. Circulation Research, 2020, 126, 784-786.	4.5	32
20	Global knockout of ROMK potassium channel worsens cardiac ischemia-reperfusion injury but cardiomyocyte-specific knockout does not: Implications for the identity of mitoKATP. Journal of Molecular and Cellular Cardiology, 2020, 139, 176-189.	1.9	28
21	Response by Bertero et al to Letter Regarding Article, â€œMitochondria Do Not Survive Calcium Overload". Circulation Research, 2020, 126, e58-e59.	4.5	7
22	Nuclear-mitochondrial communication involving miR-181c plays an important role in cardiac dysfunction during obesity. Journal of Molecular and Cellular Cardiology, 2020, 144, 87-96.	1.9	12
23	Precisely Control Mitochondria with Light to Manipulate Cell Fate Decision. Biophysical Journal, 2019, 117, 631-645.	0.5	23
24	Metformin Improves Mitochondrial Respiratory Activity through Activation of AMPK. Cell Reports, 2019, 29, 1511-1523.e5.	6.4	244
25	Unlocking the Secrets of Mitochondria in the Cardiovascular System. Circulation, 2019, 140, 1205-1216.	1.6	91
26	L-Type Calcium Channels are a Major Source of Plasmalemmel Calcium Influx for Drosophila Cardiomyocytes. Biophysical Journal, 2019, 116, 152a-153a.	0.5	1
27	Single-Channel Properties of the ROMK-Pore-Forming Subunit of the Mitochondrial ATP-Sensitive Potassium Channel. International Journal of Molecular Sciences, 2019, 20, 5323.	4.1	30
28	miRâ€181c Activates Mitochondrial Calcium Uptake by Regulating MICU1 in the Heart. Journal of the American Heart Association, 2019, 8, e012919.	3.7	18
29	Building Leadership Capacity for Mission Execution in a Large Academic Department of Medicine. American Journal of Medicine, 2019, 132, 535-543.	1.5	2
30	Mss51 deletion enhances muscle metabolism and glucose homeostasis in mice. JCI Insight, 2019, 4, .	5.0	16
31	Conservation of cardiac L-type Ca2+ channels and their regulation in Drosophila: A novel genetically-pliable channelopathic model. Journal of Molecular and Cellular Cardiology, 2018, 119, 64-74.	1.9	9
32	Protein S -Nitrosylation Controls Glycogen Synthase Kinase 3Î² Function Independent of Its Phosphorylation State. Circulation Research, 2018, 122, 1517-1531.	4.5	40
33	Assessing Spatiotemporal and Functional Organization of Mitochondrial Networks. Methods in Molecular Biology, 2018, 1782, 383-402.	0.9	11
34	Mitochondrial ROS Drive Sudden Cardiac Death and Chronic Proteome Remodeling in Heart Failure. Circulation Research, 2018, 123, 356-371.	4.5	189
35	Allele-specific differences in transcriptome, miRNome, and mitochondrial function in two hypertrophic cardiomyopathy mouse models. JCI Insight, 2018, 3, .	5.0	33
36	Mitochondrial transplantation in humans: â€œmagicalâ€•cure or cause for concern?. Journal of Clinical Investigation, 2018, 128, 5191-5194.	8.2	66

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37	Neonatal Transplantation Confers Maturation of PSC-Derived Cardiomyocytes Conducive to Modeling Cardiomyopathy. Cell Reports, 2017, 18, 571-582.	6.4	90
38	Cdon deficiency causes cardiac remodeling through hyperactivation of WNT/Î²-catenin signaling. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E1345-E1354.	7.1	45
39	Myocardial oxidative stress correlates with left ventricular dysfunction on strain echocardiography in a rodent model of sepsis. Intensive Care Medicine Experimental, 2017, 5, 21.	1.9	41
40	Functional Implications of Cardiac Mitochondria Clustering. Advances in Experimental Medicine and Biology, 2017, 982, 1-24.	1.6	10
41	Cardiosphere-Derived Cells DemonstrateÂMetabolic Flexibility ThatÂIsÂInfluenced by Adhesion Status. JACC Basic To Translational Science, 2017, 2, 543-560.	4.1	11
42	Abstract 21327: In vivo Reduction of Mitochondrial Oxidative Stress Abolishes Arrhythmic Sudden Cardiac Death (SCD) in Non-Ischemic Heart Failure. Circulation, 2017, 136, .	1.6	0
43	Hibernating Squirrels. Anesthesiology, 2016, 124, 1215-1217.	2.5	2
44	Seeing the Forest for the Trees. Circulation Research, 2016, 119, 1170-1172.	4.5	4
45	Comparative Proteomics Reveals Dysregulated Mitochondrial O-GlcNAcylation in Diabetic Hearts. Journal of Proteome Research, 2016, 15, 2254-2264.	3.7	68
46	Integrated Omic Analysis of a Guinea Pig Model of Heart Failure and Sudden Cardiac Death. Journal of Proteome Research, 2016, 15, 3009-3028.	3.7	37
47	Mitochondrial redox and pH signaling occurs in axonal and synaptic organelle clusters. Scientific Reports, 2016, 6, 23251.	3.3	22
48	Compartment-specific Control of Reactive Oxygen Species Scavenging by Antioxidant Pathway Enzymes. Journal of Biological Chemistry, 2016, 291, 11185-11197.	3.4	87
49	Beyond the power of mitochondria. Nature Reviews Cardiology, 2016, 13, 386-388.	13.7	17
50	Impaired mitochondrial network excitability in failing guinea-pig cardiomyocytes. Cardiovascular Research, 2016, 109, 79-89.	3.8	59
51	Impaired mitochondrial energy supply coupled to increased H2O2 emission under energy/redox stress leads to myocardial dysfunction during TypeÂI diabetes. Clinical Science, 2015, 129, 561-574.	4.3	37
52	Restoring redox balance enhances contractility in heart trabeculae from type 2 diabetic rats exposed to high glucose. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H291-H302.	3.2	42
53	O-GlcNAcomic Profiling Identifies Widespread O-Linked Î²-N-Acetylglucosamine Modification (O-GlcNAcylation) in Oxidative Phosphorylation System Regulating Cardiac Mitochondrial Function. Journal of Biological Chemistry, 2015, 290, 29141-29153.	3.4	90
54	From Metabolomics to Fluxomics: A Computational Procedure to Translate Metabolite Profiles into Metabolic Fluxes. Biophysical Journal, 2015, 108, 163-172.	0.5	76

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55	Mitochondria-derived ROS bursts disturb Ca²⁺ cycling and induce abnormal automaticity in guinea pig cardiomyocytes: a theoretical study. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 308, H623-H636.	3.2	43
56	Cardiac Resynchronization Therapy Restores Sympathovagal Balance in the Failing Heart by Differential Remodeling of Cholinergic Signaling. Circulation Research, 2015, 116, 1691-1699.	4.5	37
57	Dual Effect of Phosphate Transport on Mitochondrial Ca2+ Dynamics. Journal of Biological Chemistry, 2015, 290, 16088-16098.	3.4	19
58	Mitochondrial Networks in Cardiac Myocytes Reveal Dynamic Coupling Behavior. Biophysical Journal, 2015, 108, 1922-1933.	0.5	46
59	Deranged sodium to sudden death. Journal of Physiology, 2015, 593, 1331-1345.	2.9	46
60	Harnessing the Power of Integrated Mitochondrial Biology and Physiology. Circulation Research, 2015, 117, 234-238.	4.5	9
61	Mitochondrial instability during regional ischemiaâ€“reperfusion underlies arrhythmias in monolayers of cardiomyocytes. Journal of Molecular and Cellular Cardiology, 2015, 78, 90-99.	1.9	36
62	Combined effects of aging and inflammation on renin-angiotensin system mediate mitochondrial dysfunction and phenotypic changes in cardiomyopathies. Oncotarget, 2015, 6, 11979-11993.	1.8	15
63	Regional Oxidative Stress Disrupts the Normal Propagation of Voltage Waves and Promotes Reentry in Monolayers of Cardiac Myocytes. FASEB Journal, 2015, 29, 1049.8.	0.5	0
64	Inhibiting Mitochondrial Na ⁺ /Ca ²⁺ Exchange Prevents Sudden Death in a Guinea Pig Model of Heart Failure. Circulation Research, 2014, 115, 44-54.	4.5	152
65	Cardiac mitochondria exhibit dynamic functional clustering. Frontiers in Physiology, 2014, 5, 329.	2.8	22
66	Metabolism leaves its mark on the powerhouse: recent progress in post-translational modifications of lysine in mitochondria. Frontiers in Physiology, 2014, 5, 301.	2.8	71
67	Redox-Optimized ROS Balance and the relationship between mitochondrial respiration and ROS. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 287-295.	1.0	129
68	Effects of Regional Mitochondrial Depolarization on Electrical Propagation. Circulation: Arrhythmia and Electrophysiology, 2014, 7, 143-151.	4.8	60
69	Effect of Isoflurane on Myocardial Energetic and Oxidative Stress in Cardiac Muscle from Zucker Diabetic Fatty Rat. Journal of Pharmacology and Experimental Therapeutics, 2014, 349, 21-28.	2.5	7
70	Anti-hypertrophic and anti-oxidant effect of beta3-adrenergic stimulation in myocytes requires differential neuronal NOS phosphorylation. Journal of Molecular and Cellular Cardiology, 2013, 62, 8-17.	1.9	40
71	Integrating Mitochondrial Energetics, Redox and ROS Metabolic Networks: A Two-Compartment Model. Biophysical Journal, 2013, 104, 332-343.	0.5	94
72	HNO Enhances SERCA2a Activity and Cardiomyocyte Function by Promoting Redox-Dependent Phospholamban Oligomerization. Antioxidants and Redox Signaling, 2013, 19, 1185-1197.	5.4	74

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73	A Computational Model of Reactive Oxygen Species and Redox Balance in Cardiac Mitochondria. Biophysical Journal, 2013, 105, 1045-1056.	0.5	55
74	Manipulability of Î²-Adrenergic Responsiveness in Adult Guniea-Pig Cardiomyocyte Cultures. Biophysical Journal, 2013, 104, 281a.	0.5	1
75	Structural and functional plasticity in long-term cultures of adult ventricular myocytes. Journal of Molecular and Cellular Cardiology, 2013, 65, 76-87.	1.9	13
76	An Integrated Mitochondrial ROS Production and Scavenging Model: Implications for Heart Failure. Biophysical Journal, 2013, 105, 2832-2842.	0.5	36
77	Enhanced Tissue Production through Redox Control in Stem Cell-Laden Hydrogels. Tissue Engineering - Part A, 2013, 19, 2014-2023.	3.1	13
78	Regulation of the Na+/Ca2+ Exchanger by Pyridine Nucleotide Redox Potential in Ventricular Myocytes. Journal of Biological Chemistry, 2013, 288, 31984-31992.	3.4	26
79	Cellular Bioenergetics Is an Important Determinant of the Molecular Imaging Signal Derived From Luciferase and the Sodium-Iodide Symporter. Circulation Research, 2013, 112, 441-450.	4.5	8
80	The Cardiac Acetyl-Lysine Proteome. PLoS ONE, 2013, 8, e67513.	2.5	86
81	Cardiac mitochondrial network excitability: insights from computational analysis. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H2178-H2189.	3.2	33
82	Functional Impairment of Human Resident Cardiac Stem Cells by the Cardiotoxic Antineoplastic Agent Trastuzumab. Stem Cells Translational Medicine, 2012, 1, 289-297.	3.3	36
83	Hyaluronic acid-human blood hydrogels for stem cell transplantation. Biomaterials, 2012, 33, 8026-8033.	11.4	56
84	Bioenergetics of Contractile Function in Heart Trabeculae from Diabetic Rats. Biophysical Journal, 2012, 102, 571a.	0.5	1
85	What yeast and cardiomyocytes share: ultradian oscillatory redox mechanisms of cellular coherence and survival. Integrative Biology (United Kingdom), 2012, 4, 65-74.	1.3	33
86	Glutathione/thioredoxin systems modulate mitochondrial H2O2 emission: An experimental-computational study. Journal of General Physiology, 2012, 139, 479-491.	1.9	180
87	Dynamics of Early Afterdepolarization-Mediated Triggered Activity in Cardiac Monolayers. Biophysical Journal, 2012, 102, 2706-2714.	0.5	35
88	GSH or Palmitate Preserves Mitochondrial Energetic/Redox Balance, Preventing Mechanical Dysfunction in Metabolically Challenged Myocytes/Hearts From Type 2 Diabetic Mice. Diabetes, 2012, 61, 3094-3105.	0.6	77
89	Bax regulates primary necrosis through mitochondrial dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6566-6571.	7.1	250
90	Dynamics of matrix-free Ca2+ in cardiac mitochondria: two components of Ca2+ uptake and role of phosphate buffering. Journal of General Physiology, 2012, 139, 465-478.	1.9	69

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91	Mitochondrial ROMK Channel Is a Molecular Component of MitoK _{ATP}. Circulation Research, 2012, 111, 446-454.	4.5	184
92	Mitochondrial Energetics, pH Regulation, and Ion Dynamics: AÂComputational-Experimental Approach. Biophysical Journal, 2011, 100, 2894-2903.	0.5	63
93	Dynamic modulation of Ca2+ sparks by mitochondrial oscillations in isolated guinea pig cardiomyocytes under oxidative stress. Journal of Molecular and Cellular Cardiology, 2011, 51, 632-639.	1.9	67
94	Mitochondrial Protein Phosphorylation as a Regulatory Modality: Implications for Mitochondrial Dysfunction in Heart Failure. Congestive Heart Failure, 2011, 17, 269-282.	2.0	36
95	Mitochondria are sources of metabolic sink and arrhythmias. , 2011, 131, 287-294.		62
96	Mitochondrial Ca2+ influx and efflux rates in guinea pig cardiac mitochondria:Low and high affinity effects of cyclosporine A. Biochimica Et Biophysica Acta - Molecular Cell Research, 2011, 1813, 1373-1381.	4.1	51
97	Myocardial substrate and route of administration determine acute cardiac retention and lung bio-distribution of cardiosphere-derived cells. Journal of Nuclear Cardiology, 2011, 18, 443-450.	2.1	69
98	Integrative modeling of the cardiac ventricular myocyte. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2011, 3, 392-413.	6.6	30
99	Metabolic control analysis applied to mitochondrial networks. , 2011, 2011, 4673-6.		1
100	Parallel Proteomics to Improve Coverage and Confidence in the Partially Annotated Oryctolagus cuniculus Mitochondrial Proteome. Molecular and Cellular Proteomics, 2011, 10, S1-S15.	3.8	27
101	Redox Regulation of Mitochondrial ATP Synthase. Circulation Research, 2011, 109, 750-757.	4.5	143
102	Identification and characterization of a functional mitochondrial angiotensin system. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14849-14854.	7.1	238
103	Bcl-xL regulates mitochondrial energetics by stabilizing the inner membrane potential. Journal of Cell Biology, 2011, 195, 263-276.	5.2	182
104	A Mighty Small Heart: The Cardiac Proteome of Adult Drosophila melanogaster. PLoS ONE, 2011, 6, e18497.	2.5	81
105	Bcl-x_Lregulates mitochondrial energetics by stabilizing the inner membrane potential. Journal of Experimental Medicine, 2011, 208, i29-i29.	8.5	0
106	Energetic performance is improved by specific activation of K+ fluxes through KCa channels in heart mitochondria. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 71-80.	1.0	81
107	From bioblasts to mitochondria: ever expanding roles of mitochondria in cell physiology. Frontiers in Physiology, 2010, 1, 7.	2.8	13
108	Elevated Cytosolic Na ⁺ Increases Mitochondrial Formation of Reactive Oxygen Species in Failing Cardiac Myocytes. Circulation, 2010, 121, 1606-1613.	1.6	273

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109	Wavelet analysis reveals heterogeneous time-dependent oscillations of individual mitochondria. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H1736-H1740.	3.2	33
110	Spatio-temporal oscillations of individual mitochondria in cardiac myocytes reveal modulation of synchronized mitochondrial clusters. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 14315-14320.	7.1	96
111	Be Still, My Beating Heart. Circulation Research, 2010, 106, 238-239.	4.5	5
112	Na+ channel regulation by Ca2+/calmodulin and Ca2+/calmodulin-dependent protein kinase II in guinea-pig ventricular myocytesâ€. Cardiovascular Research, 2010, 85, 454-463.	3.8	108
113	A Reaction-Diffusion Model of ROS-Induced ROS Release in a Mitochondrial Network. PLoS Computational Biology, 2010, 6, e1000657.	3.2	131
114	Cardiac mitochondria and arrhythmias. Cardiovascular Research, 2010, 88, 241-249.	3.8	183
115	Cardiac arrhythmias induced by glutathione oxidation can be inhibited by preventing mitochondrial depolarization. Journal of Molecular and Cellular Cardiology, 2010, 48, 673-679.	1.9	96
116	Role of mitochondrial dysfunction in cardiac glycoside toxicity. Journal of Molecular and Cellular Cardiology, 2010, 49, 728-736.	1.9	77
117	Optical imaging of mitochondrial function uncovers actively propagating waves of mitochondrial membrane potential collapse across intact heart. Journal of Molecular and Cellular Cardiology, 2010, 49, 565-575.	1.9	51
118	Two-Photon Laser Scanning Microscopy of the Transverse-Axial Tubule System in Ventricular Cardiomyocytes from Failing and Non-Failing Human Hearts. Cardiology Research and Practice, 2009, 2009, 1-9.	1.1	32
119	Electrophysiological Consequences of Dyssynchronous Heart Failure and Its Restoration by Resynchronization Therapy. Circulation, 2009, 119, 1220-1230.	1.6	181
120	Control and Regulation of Integrated Mitochondrial Function in Metabolic and Transport Networks. International Journal of Molecular Sciences, 2009, 10, 1500-1513.	4.1	25
121	Regulation of mitochondrial Ca2+ and its effects on energetics and redox balance in normal and failing heart. Journal of Bioenergetics and Biomembranes, 2009, 41, 127-132.	2.3	93
122	Redox signaling and protein phosphorylation in mitochondria: progress and prospects. Journal of Bioenergetics and Biomembranes, 2009, 41, 159-168.	2.3	50
123	From mitochondrial dynamics to arrhythmias. International Journal of Biochemistry and Cell Biology, 2009, 41, 1940-1948.	2.8	106
124	Mitochondrial Ca2+ uptake: Tortoise or hare?. Journal of Molecular and Cellular Cardiology, 2009, 46, 767-774.	1.9	88
125	Control and Regulation of Mitochondrial Energetics in an Integrated Model of Cardiomyocyte Function. Biophysical Journal, 2009, 96, 2466-2478.	0.5	70
126	Modeling Cardiac Action Potential Shortening Driven by Oxidative Stress-Induced Mitochondrial Oscillations in Guinea Pig Cardiomyocytes. Biophysical Journal, 2009, 97, 1843-1852.	0.5	77

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127	Effects Of Mitochondrial Depolarization On Cardiac Electrical Activity In An Integrated Multiscale Model Of The Myocardium. Biophysical Journal, 2009, 96, 663a-664a.	0.5	1
128	Cgp-37157 Abrogates The Adverse Effect Of Ouabain On Mitochondrial Energetics. Biophysical Journal, 2009, 96, 243a.	0.5	2
129	Expression, activity, and pro-hypertrophic effects of PDE5A in cardiac myocytes. Cellular Signalling, 2008, 20, 2231-2236.	3.6	82
130	Glutathione oxidation as a trigger of mitochondrial depolarization and oscillation in intact hearts. Journal of Molecular and Cellular Cardiology, 2008, 45, 650-660.	1.9	88
131	The Ins and Outs of Calcium in Heart Failure. Circulation Research, 2008, 102, 1301-1303.	4.5	10
132	Insulin Effects on Cardiac Na+/Ca2+ Exchanger Activity. Journal of Biological Chemistry, 2008, 283, 16505-16513.	3.4	8
133	Effects of 4'-chlorodiazepam on cellular excitation-contraction coupling and ischaemia-reperfusion injury in rabbit heart. Cardiovascular Research, 2008, 79, 141-149.	3.8	79
134	Enhancing Mitochondrial Ca ²⁺ Uptake in Myocytes From Failing Hearts Restores Energy Supply and Demand Matching. Circulation Research, 2008, 103, 279-288.	4.5	196
135	What can mitochondrial proteomics tell us about cardioprotection afforded by preconditioning?. Expert Review of Proteomics, 2008, 5, 633-636.	3.0	14
136	From mitochondrial ion channels to arrhythmias in the heart: computational techniques to bridge the spatio-temporal scales. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3381-3409.	3.4	126
137	The Scale-Free Dynamics of Eukaryotic Cells. PLoS ONE, 2008, 3, e3624.	2.5	66
138	Mitochondrial Oscillations in Physiology and Pathophysiology. Advances in Experimental Medicine and Biology, 2008, 641, 98-117.	1.6	113
139	A ligand to the mitochondrial benzodiazepine receptor prevents ventricular arrhythmias and LV dysfunction after ischemia or glutathione depletion. FASEB Journal, 2008, 22, 747.7.	0.5	4
140	Sequential Opening of Mitochondrial Ion Channels as a Function of Glutathione Redox Thiol Status. Journal of Biological Chemistry, 2007, 282, 21889-21900.	3.4	185
141	Nitroxyl Improves Cellular Heart Function by Directly Enhancing Cardiac Sarcoplasmic Reticulum Ca 2+ Cycling. Circulation Research, 2007, 100, 96-104.	4.5	209
142	Mitochondrial Ion Channels. , 2007, , 221-238.		0
143	Mitochondrial Ion Channels. Annual Review of Physiology, 2007, 69, 19-49.	13.1	265
144	The role of Na dysregulation in cardiac disease and how it impacts electrophysiology. Drug Discovery Today: Disease Models, 2007, 4, 207-217.	1.2	18

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145	Cellular and molecular determinants of altered Ca2+ handling in the failing rabbit heart: primary defects in SR Ca2+ uptake and release mechanisms. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 292, H1607-H1618.	3.2	59
146	Diallyl disulphide depletes glutathione inCandida albicans: oxidative stress-mediated cell death studied by two-photon microscopy. Yeast, 2007, 24, 695-706.	1.7	69
147	Excitation-contraction coupling and mitochondrial energetics. Basic Research in Cardiology, 2007, 102, 369-392.	5.9	221
148	Mitochondrial Ion Channels in Cardiac Function and Dysfunction. Novartis Foundation Symposium, 2007, 287, 140-156.	1.1	18
149	A Computational Model Integrating Electrophysiology, Contraction, and Mitochondrial Bioenergetics in the Ventricular Myocyte. Biophysical Journal, 2006, 91, 1564-1589.	0.5	198
150	The Fundamental Organization of Cardiac Mitochondria as a Network of Coupled Oscillators. Biophysical Journal, 2006, 91, 4317-4327.	0.5	121
151	Mitochondrial criticality: A new concept at the turning point of life or death. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2006, 1762, 232-240.	3.8	135
152	Î²-Adrenergic Stimulation of L-type Ca2+Channels in Cardiac Myocytes Requires the Distal Carboxyl Terminus of Î±1Cbut Not Serine 1928. Circulation Research, 2006, 98, e11-8.	4.5	95
153	Elevated Cytosolic Na + Decreases Mitochondrial Ca 2+ Uptake During Excitation-Contraction Coupling and Impairs Energetic Adaptation in Cardiac Myocytes. Circulation Research, 2006, 99, 172-182.	4.5	335
154	Mitochondrial Ion Channels: Gatekeepers of Life and Death. Physiology, 2005, 20, 303-315.	3.1	218
155	Vascular endothelial growth factor regulation of Weibel-Paladeâ€“body exocytosis. Blood, 2005, 105, 207-214.	1.4	74
156	Molecular correlates of altered expression of potassium currents in failing rabbit myocardium. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 288, H2077-H2087.	3.2	104
157	Cardiac Sodium-Calcium Exchanger Is Regulated by Allosteric Calcium and Exchanger Inhibitory Peptide at Distinct Sites. Circulation Research, 2005, 96, 91-99.	4.5	52
158	Cardioprotective Role of the Mitochondrial ATP-Binding Cassette Protein 1. Circulation Research, 2005, 97, 740-742.	4.5	49
159	Allyl alcohol and garlic (Allium sativum) extract produce oxidative stress in Candida albicans. Microbiology (United Kingdom), 2005, 151, 3257-3265.	1.8	83
160	Reverse engineering the L-type Ca2+ channel Î±1c subunit in adult cardiac myocytes using novel adenoviral vectors. Biochemical and Biophysical Research Communications, 2005, 329, 749-754.	2.1	10
161	Mitochondrial K channels in cell survival and death. Journal of Molecular and Cellular Cardiology, 2005, 39, 7-16.	1.9	199
162	The Role of Stochastic and Modal Gating of Cardiac L-Type Ca2+ Channels on Early After-Depolarizations. Biophysical Journal, 2005, 88, 85-95.	0.5	138

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163	The mitochondrial origin of postischemic arrhythmias. Journal of Clinical Investigation, 2005, 115, 3527-3535.	8.2	301
164	The potential of Na+/Ca2+ exchange blockers in the treatment of cardiac disease. Expert Opinion on Investigational Drugs, 2004, 13, 653-664.	4.1	36
165	Partial Inhibition of Sodium/Calcium Exchange Restores Cellular Calcium Handling in Canine Heart Failure. Circulation Research, 2004, 95, 292-299.	4.5	92
166	Percolation and criticality in a mitochondrial network. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 4447-4452.	7.1	216
167	The fractal architecture of cytoplasmic organization: Scaling, kinetics and emergence in metabolic networks. Molecular and Cellular Biochemistry, 2004, 256, 169-184.	3.1	49
168	Evidence for Mitochondrial K+Channels and Their Role in Cardioprotection. Circulation Research, 2004, 94, 420-432.	4.5	399
169	A Mitochondrial Oscillator Dependent on Reactive Oxygen Species. Biophysical Journal, 2004, 87, 2060-2073.	0.5	206
170	Nitric Oxide Regulates Exocytosis by S-Nitrosylation of N-ethylmaleimide-Sensitive Factor. Cell, 2003, 115, 139-150.	28.9	413
171	An Integrated Model of Cardiac Mitochondrial Energy Metabolism and Calcium Dynamics. Biophysical Journal, 2003, 84, 2734-2755.	0.5	345
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