

Michael R Duchen

List of Publications by Year in Descending Order

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Version: 2024-04-28

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

212
papers

26,495
citations

90
h-index

161
g-index

236
ext. papers

30,041
ext. citations

7.8
avg, IF

7.24
L-index

#	Paper	IF	Citations
212	Investigating Mitochondrial Ca ²⁺ Dynamics in Isolated Mitochondria and Intact Cells: Application of Fluorescent Dyes and Genetic Reporters. <i>Methods in Molecular Biology</i> , 2022 , 325-332	1.4	
211	Assessing the Redox Status of Mitochondria Through the NADH/FAD ²⁺ Ratio in Intact Cells. <i>Methods in Molecular Biology</i> , 2022 , 313-318	1.4	
210	Monitoring Mitochondrial Membrane Potential in Live Cells Using Time-Lapse Fluorescence Imaging. <i>Methods in Molecular Biology</i> , 2022 , 319-324	1.4	
209	A Plate Reader-Based Measurement of the Cellular ROS Production Using Dihydroethidium and MitoSOX. <i>Methods in Molecular Biology</i> , 2022 , 333-337	1.4	
208	Constitutive activation of the PI3K-Akt-mTORC1 pathway sustains the m.3243 A > G mtDNA mutation. <i>Nature Communications</i> , 2021 , 12, 6409	17.4	2
207	Excitotoxicity Revisited: Mitochondria on the Verge of a Nervous Breakdown. <i>Trends in Neurosciences</i> , 2021 , 44, 342-351	13.3	6
206	Activation of the Integrated Stress Response and ER Stress Protect from Fluorizoline-Induced Apoptosis in HEK293T and U2OS Cell Lines. <i>International Journal of Molecular Sciences</i> , 2021 , 22,	6.3	1
205	The spectrum of neurodevelopmental, neuromuscular and neurodegenerative disorders due to defective autophagy. <i>Autophagy</i> , 2021 , 1-22	10.2	2
204	Selective mitochondrial antioxidant MitoTEMPO reduces renal dysfunction and systemic inflammation in experimental sepsis in rats. <i>British Journal of Anaesthesia</i> , 2021 , 127, 577-586	5.4	2
203	Allosteric activation of Hsp70 reduces mutant huntingtin levels, the clustering of N-terminal fragments, and their nuclear accumulation. <i>Life Sciences</i> , 2021 , 285, 120009	6.8	0
202	Mitochondria: An Integrative Hub Coordinating Circadian Rhythms, Metabolism, the Microbiome, and Immunity. <i>Frontiers in Cell and Developmental Biology</i> , 2020 , 8, 51	5.7	19
201	Impaired cellular bioenergetics caused by GBA1 depletion sensitizes neurons to calcium overload. <i>Cell Death and Differentiation</i> , 2020 , 27, 1588-1603	12.7	15
200	MitoSegNet: Easy-to-use Deep Learning Segmentation for Analyzing Mitochondrial Morphology. <i>iScience</i> , 2020 , 23, 101601	6.1	4
199	Mitochondrial Signature in Human Monocytes and Resistance to Infection in During Fumarate-Induced Innate Immune Training. <i>Frontiers in Immunology</i> , 2020 , 11, 1715	8.4	4
198	Diabetes causes marked inhibition of mitochondrial metabolism in pancreatic β -cells. <i>Nature Communications</i> , 2019 , 10, 2474	17.4	102
197	Investigating the Mitochondrial Permeability Transition Pore in Disease Phenotypes and Drug Screening. <i>Current Protocols in Pharmacology</i> , 2019 , 85, e59	4.1	9
196	Polarized Two-Photon Absorption and Heterogeneous Fluorescence Dynamics in NAD(P)H. <i>Journal of Physical Chemistry B</i> , 2019 , 123, 4705-4717	3.4	11

195	Metabolic Profiling of Live Cancer Tissues Using NAD(P)H Fluorescence Lifetime Imaging. <i>Methods in Molecular Biology</i> , 2019 , 1928, 365-387	1.4	6
194	AMPK activation protects against diet induced obesity through Ucp1-independent thermogenesis in subcutaneous white adipose tissue. <i>Nature Metabolism</i> , 2019 , 1, 340-349	14.6	35
193	Modelling mitochondrial dysfunction in Alzheimer's disease using human induced pluripotent stem cells. <i>World Journal of Stem Cells</i> , 2019 , 11, 236-253	5.6	6
192	A key metabolic integrator, coenzyme A, modulates the activity of peroxiredoxin 5 via covalent modification. <i>Molecular and Cellular Biochemistry</i> , 2019 , 461, 91-102	4.2	14
191	Fantastic beasts and how to find them-Molecular identification of the mitochondrial ATP-sensitive potassium channel. <i>Cell Calcium</i> , 2019 , 84, 102-100	4	1
190	Multiphoton NAD(P)H FLIM reveals metabolic changes in individual cell types of the intact cochlea upon sensorineural hearing loss. <i>Scientific Reports</i> , 2019 , 9, 18907	4.9	1
189	The role of mitochondria in sepsis-induced cardiomyopathy. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2019 , 1865, 759-773	6.9	58
188	Targeting the proteostasis network in Huntington's disease. <i>Ageing Research Reviews</i> , 2019 , 49, 92-103	12	34
187	Mitochondrial Permeability Transition: A Molecular Lesion with Multiple Drug Targets. <i>Trends in Pharmacological Sciences</i> , 2019 , 40, 50-70	13.2	93
186	A genetic modifier suggests that endurance exercise exacerbates Huntington's disease. <i>Human Molecular Genetics</i> , 2018 , 27, 1723-1731	5.6	8
185	Three-Dimensional Human iPSC-Derived Artificial Skeletal Muscles Model Muscular Dystrophies and Enable Multilineage Tissue Engineering. <i>Cell Reports</i> , 2018 , 23, 899-908	10.6	141
184	The APP ^{swe} /PS1 ^{A246E} mutations in an astrocytic cell line leads to increased vulnerability to oxygen and glucose deprivation, Ca dysregulation, and mitochondrial abnormalities. <i>Journal of Neurochemistry</i> , 2018 , 145, 170-182	6	2
183	Renal Tubular Cell Mitochondrial Dysfunction Occurs Despite Preserved Renal Oxygen Delivery in Experimental Septic Acute Kidney Injury. <i>Critical Care Medicine</i> , 2018 , 46, e318-e325	1.4	27
182	Inositol trisphosphate receptor-mediated Ca ²⁺ signalling stimulates mitochondrial function and gene expression in core myopathy patients. <i>Human Molecular Genetics</i> , 2018 , 27, 2367-2382	5.6	9
181	Decellularized Cartilage Directs Chondrogenic Differentiation: Creation of a Fracture Callus Mimetic. <i>Tissue Engineering - Part A</i> , 2018 , 24, 1364-1376	3.9	11
180	Mitochondrial damage and "plugging" of transport selectively in myelinated, small-diameter axons are major early events in peripheral neuroinflammation. <i>Journal of Neuroinflammation</i> , 2018 , 15, 61	10.1	10
179	Promoting the clearance of neurotoxic proteins in neurodegenerative disorders of ageing. <i>Nature Reviews Drug Discovery</i> , 2018 , 17, 660-688	64.1	232
178	Imaging Mitochondrial Calcium Fluxes with Fluorescent Probes and Single- or Two-Photon Confocal Microscopy. <i>Methods in Molecular Biology</i> , 2018 , 1782, 171-186	1.4	4

177	Diazepam-induced loss of inhibitory synapses mediated by PLC β /Ca/calmodulin signalling downstream of GABA _A receptors. <i>Molecular Psychiatry</i> , 2018 , 23, 1851-1867	15.1	29
176	Guidelines on experimental methods to assess mitochondrial dysfunction in cellular models of neurodegenerative diseases. <i>Cell Death and Differentiation</i> , 2018 , 25, 542-572	12.7	64
175	Mitochondrial Dysfunction and Neurodegeneration in Lysosomal Storage Disorders. <i>Trends in Molecular Medicine</i> , 2017 , 23, 116-134	11.5	74
174	Pathological consequences of MICU1 mutations on mitochondrial calcium signalling and bioenergetics. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2017 , 1864, 1009-1017	4.9	32
173	Cell competition with normal epithelial cells promotes apical extrusion of transformed cells through metabolic changes. <i>Nature Cell Biology</i> , 2017 , 19, 530-541	23.4	112
172	Characterizing Metabolic States Using Fluorescence Lifetime Imaging Microscopy (FLIM) of NAD(P)H. <i>Neuromethods</i> , 2017 , 133-150	0.4	3
171	Improved Survival in a Long-Term Rat Model of Sepsis Is Associated With Reduced Mitochondrial Calcium Uptake Despite Increased Energetic Demand. <i>Critical Care Medicine</i> , 2017 , 45, e840-e848	1.4	9
170	Protein CoAlation: a redox-regulated protein modification by coenzyme A in mammalian cells. <i>Biochemical Journal</i> , 2017 , 474, 2489-2508	3.8	53
169	Investigating State Restriction in Fluorescent Protein FRET Using Time-Resolved Fluorescence and Anisotropy. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 1507-1514	3.8	7
168	Assessment of Cellular Redox State Using NAD(P)H Fluorescence Intensity and Lifetime. <i>Bio-protocol</i> , 2017 , 7,	0.9	8
167	Mitochondrial permeability transition pore: sensitivity to opening and mechanistic dependence on substrate availability. <i>Scientific Reports</i> , 2017 , 7, 10492	4.9	78
166	Simultaneous Measurement of Mitochondrial Calcium and Mitochondrial Membrane Potential in Live Cells by Fluorescent Microscopy. <i>Journal of Visualized Experiments</i> , 2017 ,	1.6	11
165	Imaging the Neutrophil Phagosome and Cytoplasm Using a Ratiometric pH Indicator. <i>Journal of Visualized Experiments</i> , 2017 ,	1.6	5
164	Crosstalk between Lysosomes and Mitochondria in Parkinson's Disease. <i>Frontiers in Cell and Developmental Biology</i> , 2017 , 5, 110	5.7	50
163	Identification of ER-000444793, a Cyclophilin D-independent inhibitor of mitochondrial permeability transition, using a high-throughput screen in cryopreserved mitochondria. <i>Scientific Reports</i> , 2016 , 6, 37798	4.9	14
162	Mitochondrial dysfunction is an important cause of neurological deficits in an inflammatory model of multiple sclerosis. <i>Scientific Reports</i> , 2016 , 6, 33249	4.9	62
161	NRF2 Orchestrates the Metabolic Shift during Induced Pluripotent Stem Cell Reprogramming. <i>Cell Reports</i> , 2016 , 14, 1883-91	10.6	97
160	PPAR δ is a therapeutic target to rescue mitochondrial function in neurological disease. <i>Free Radical Biology and Medicine</i> , 2016 , 100, 153-163	7.8	111

159	Selective Inhibition of the Mitochondrial Permeability Transition Pore Protects against Neurodegeneration in Experimental Multiple Sclerosis. <i>Journal of Biological Chemistry</i> , 2016 , 291, 4356-734	5.4	48
158	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). <i>Autophagy</i> , 2016 , 12, 1-222	10.2	3838
157	Hypothermia protects brain mitochondrial function from hypoxemia in a murine model of sepsis. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2016 , 36, 1955-1964	7.3	17
156	Endoplasmic reticulum and lysosomal Ca ²⁺ stores are remodelled in GBA1-linked Parkinson disease patient fibroblasts. <i>Cell Calcium</i> , 2016 , 59, 12-20	4	50
155	Mitochondrial dynamics and quality control in Huntington ^Q disease. <i>Neurobiology of Disease</i> , 2016 , 90, 51-7	7.5	76
154	Impaired Cellular Bioenergetics Causes Mitochondrial Calcium Handling Defects in MT-ND5 Mutant Cybrids. <i>PLoS ONE</i> , 2016 , 11, e0154371	3.7	17
153	In Vivo Imaging of Flavoprotein Fluorescence During Hypoxia Reveals the Importance of Direct Arterial Oxygen Supply to Cerebral Cortex Tissue. <i>Advances in Experimental Medicine and Biology</i> , 2016 , 876, 233-239	3.6	9
152	The mitochondrial calcium uniporter regulates breast cancer progression via HIF-1 α . <i>EMBO Molecular Medicine</i> , 2016 , 8, 569-85	12	155
151	Investigating mitochondrial redox state using NADH and NADPH autofluorescence. <i>Free Radical Biology and Medicine</i> , 2016 , 100, 53-65	7.8	179
150	Skeletal muscle dysfunction is associated with derangements in mitochondrial bioenergetics (but not UCP3) in a rodent model of sepsis. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2015 , 308, E713-25	6	20
149	Reversal of Mitochondrial Transhydrogenase Causes Oxidative Stress in Heart Failure. <i>Cell Metabolism</i> , 2015 , 22, 472-84	24.6	206
148	PPAR δ and PGC-1 β as therapeutic targets in Parkinson ^Q . <i>Neurochemical Research</i> , 2015 , 40, 308-16	4.6	91
147	The regulation of neuronal mitochondrial metabolism by calcium. <i>Journal of Physiology</i> , 2015 , 593, 3447-53	5.9	97
146	Signal transducer and activator of transcription 2 deficiency is a novel disorder of mitochondrial fission. <i>Brain</i> , 2015 , 138, 2834-46	11.2	59
145	Inhibition of NAADP signalling on reperfusion protects the heart by preventing lethal calcium oscillations via two-pore channel 1 and opening of the mitochondrial permeability transition pore. <i>Cardiovascular Research</i> , 2015 , 108, 357-66	9.9	29
144	Impaired mitochondrial homeostasis and neurodegeneration: towards new therapeutic targets?. <i>Journal of Bioenergetics and Biomembranes</i> , 2015 , 47, 89-99	3.7	28
143	Calcium signaling as a mediator of cell energy demand and a trigger to cell death. <i>Annals of the New York Academy of Sciences</i> , 2015 , 1350, 107-16	6.5	72
142	Knockdown of aquaporin-8 induces mitochondrial dysfunction in 3T3-L1 cells. <i>Biochemistry and Biophysics Reports</i> , 2015 , 4, 187-195	2.2	5

141	Alkalinity of neutrophil phagocytic vacuoles is modulated by HVCN1 and has consequences for myeloperoxidase activity. <i>PLoS ONE</i> , 2015 , 10, e0125906	3.7	60
140	Cellular glutathione content in the organ of Corti and its role during ototoxicity. <i>Frontiers in Cellular Neuroscience</i> , 2015 , 9, 143	6.1	14
139	HDAC6 inhibition induces mitochondrial fusion, autophagic flux and reduces diffuse mutant huntingtin in striatal neurons. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2015 , 1852, 2484-93	6.9	59
138	Unexpected low-dose toxicity of the universal solvent DMSO. <i>FASEB Journal</i> , 2014 , 28, 1317-30	0.9	349
137	Loss-of-function mutations in MICU1 cause a brain and muscle disorder linked to primary alterations in mitochondrial calcium signaling. <i>Nature Genetics</i> , 2014 , 46, 188-93	36.3	242
136	The Mitoflash probe cpYFP does not respond to superoxide. <i>Nature</i> , 2014 , 514, E12-4	50.4	103
135	Ischaemic accumulation of succinate controls reperfusion injury through mitochondrial ROS. <i>Nature</i> , 2014 , 515, 431-435	50.4	1360
134	Mitochondrial quality control and communications with the nucleus are important in maintaining mitochondrial function and cell health. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2014 , 1840, 1254-65	4.65	121
133	Separating NADH and NADPH fluorescence in live cells and tissues using FLIM. <i>Nature Communications</i> , 2014 , 5, 3936	17.4	304
132	The compound BTB06584 is an IF1 -dependent selective inhibitor of the mitochondrial F1 Fo-ATPase. <i>British Journal of Pharmacology</i> , 2014 , 171, 4193-206	8.6	18
131	PPAR α activation rescues mitochondrial function from inhibition of complex I and loss of PINK1. <i>Experimental Neurology</i> , 2014 , 253, 16-27	5.7	44
130	Mitochondrial Bioenergetics Assessed by Functional Fluorescence Dyes. <i>NeuroMethods</i> , 2014 , 161-176	0.4	2
129	Mitochondria and quality control defects in a mouse model of Gaucher disease--links to Parkinson disease. <i>Cell Metabolism</i> , 2013 , 17, 941-953	24.6	228
128	RyR1 deficiency in congenital myopathies disrupts excitation-contraction coupling. <i>Human Mutation</i> , 2013 , 34, 986-96	4.7	33
127	Glucocerebrosidase inhibition causes mitochondrial dysfunction and free radical damage. <i>Neurochemistry International</i> , 2013 , 62, 1-7	4.4	142
126	Sulforaphane preconditioning of the Nrf2/HO-1 defense pathway protects the cerebral vasculature against blood-brain barrier disruption and neurological deficits in stroke. <i>Free Radical Biology and Medicine</i> , 2013 , 65, 1012-1022	7.8	154
125	Activated barrier crossing dynamics in the non-radiative decay of NADH and NADPH. <i>Chemical Physics</i> , 2013 , 422, 184-194	2.3	38
124	Impulse conduction increases mitochondrial transport in adult mammalian peripheral nerves in vivo. <i>PLoS Biology</i> , 2013 , 11, e1001754	9.7	61

123	Defective quality control mechanisms and accumulation of damaged mitochondria link Gaucher and Parkinson diseases. <i>Autophagy</i> , 2013 , 9, 1633-5	10.2	63
122	IF1 limits the apoptotic-signalling cascade by preventing mitochondrial remodelling. <i>Cell Death and Differentiation</i> , 2013 , 20, 686-97	12.7	65
121	Regulation of mitochondrial morphogenesis by annexin A6. <i>PLoS ONE</i> , 2013 , 8, e53774	3.7	40
120	Mild stress of caffeine increased mtDNA content in skeletal muscle cells: the interplay between Ca ²⁺ transients and nitric oxide. <i>Journal of Muscle Research and Cell Motility</i> , 2012 , 33, 327-37	3.5	8
119	Cellular and molecular mechanisms of mitochondrial function. <i>Best Practice and Research in Clinical Endocrinology and Metabolism</i> , 2012 , 26, 711-23	6.5	334
118	Mitochondrial flashes: a radical concept refined. <i>Trends in Cell Biology</i> , 2012 , 22, 503-8	18.3	70
117	Imaging mitochondrial calcium signalling with fluorescent probes and single or two photon confocal microscopy. <i>Methods in Molecular Biology</i> , 2012 , 810, 219-34	1.4	19
116	Activation of PARP by oxidative stress induced by β -amyloid: implications for Alzheimer's disease. <i>Neurochemical Research</i> , 2012 , 37, 2589-96	4.6	55
115	Mitochondria, calcium-dependent neuronal death and neurodegenerative disease. <i>Pflugers Archiv European Journal of Physiology</i> , 2012 , 464, 111-21	4.6	127
114	SCaMC-1 promotes cancer cell survival by desensitizing mitochondrial permeability transition via ATP/ADP-mediated matrix Ca ²⁺ buffering. <i>Cell Death and Differentiation</i> , 2012 , 19, 650-60	12.7	79
113	Mitochondrial dysfunction and Purkinje cell loss in autosomal recessive spastic ataxia of Charlevoix-Saguenay (ARSACS). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 1661-6	11.5	120
112	Dopamine induced neurodegeneration in a PINK1 model of Parkinson's disease. <i>PLoS ONE</i> , 2012 , 7, e37564	5.4	58
111	G2019S leucine-rich repeat kinase 2 causes uncoupling protein-mediated mitochondrial depolarization. <i>Human Molecular Genetics</i> , 2012 , 21, 4201-13	5.6	128
110	Slow calcium waves and redox changes precede mitochondrial permeability transition pore opening in the intact heart during hypoxia and reoxygenation. <i>Cardiovascular Research</i> , 2012 , 93, 445-53	9.9	59
109	Measurements of threshold of mitochondrial permeability transition pore opening in intact and permeabilized cells by flash photolysis of caged calcium. <i>Methods in Molecular Biology</i> , 2011 , 793, 299-309	1.4	10
108	Membrane cholesterol content plays a key role in the neurotoxicity of β -amyloid: implications for Alzheimer's disease. <i>Ageing Cell</i> , 2011 , 10, 595-603	9.9	67
107	Beta-amyloid activates PARP causing astrocytic metabolic failure and neuronal death. <i>Brain</i> , 2011 , 134, 1658-72	11.2	132
106	Multiphoton imaging of the functioning kidney. <i>Journal of the American Society of Nephrology: JASN</i> , 2011 , 22, 1297-304	12.7	39

105	Mitochondria as organizers of the cellular Ca ²⁺ Signaling Network 2010 , 963-972		
104	The legs at odd angles (Loa) mutation in cytoplasmic dynein ameliorates mitochondrial function in SOD1G93A mouse model for motor neuron disease. <i>Journal of Biological Chemistry</i> , 2010 , 285, 18627-39 ^{5.4}	20	
103	Albumin uptake in OK cells exposed to rotenone: a model for studying the effects of mitochondrial dysfunction on endocytosis in the proximal tubule?. <i>Nephron Physiology</i> , 2010 , 115, p9-p19	5	
102	Mechanism of neurodegeneration of neurons with mitochondrial DNA mutations. <i>Brain</i> , 2010 , 133, 797-807	91	
101	Impaired mitochondrial bioenergetics determines glutamate-induced delayed calcium deregulation in neurons. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2010 , 1800, 297-304	4	62
100	The intracellular localization and function of the ATP-sensitive K ⁺ channel subunit Kir6.1. <i>Journal of Membrane Biology</i> , 2010 , 234, 137-47	2.3	19
99	Chloride intracellular channel 1 (CLIC1): Sensor and effector during oxidative stress. <i>FEBS Letters</i> , 2010 , 584, 2076-84	3.8	79
98	Maternal diet-induced obesity alters mitochondrial activity and redox status in mouse oocytes and zygotes. <i>PLoS ONE</i> , 2010 , 5, e10074	3.7	316
97	Roles of mitochondria in human disease. <i>Essays in Biochemistry</i> , 2010 , 47, 115-37	7.6	119
96	Lack of oxygen deactivates mitochondrial complex I: implications for ischemic injury?. <i>Journal of Biological Chemistry</i> , 2009 , 284, 36055-36061	5.4	101
95	Multiphoton imaging reveals differences in mitochondrial function between nephron segments. <i>Journal of the American Society of Nephrology: JASN</i> , 2009 , 20, 1293-302	12.7	106
94	IF(1): setting the pace of the F(1)F(o)-ATP synthase. <i>Trends in Biochemical Sciences</i> , 2009 , 34, 343-50	10.3	102
93	IF1, the endogenous regulator of the F(1)F(o)-ATP synthase, defines mitochondrial volume fraction in HeLa cells by regulating autophagy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2009 , 1787, 393-401	4.6	52
92	Mitochondria modulate the spatio-temporal properties of intra- and intercellular Ca ²⁺ signals in cochlear supporting cells. <i>Cell Calcium</i> , 2009 , 46, 136-46	4	23
91	Mitochondria mediated cell death in diabetes. <i>Apoptosis: an International Journal on Programmed Cell Death</i> , 2009 , 14, 1405-23	5.4	45
90	Extracellular growth factors and mitogens cooperate to drive mitochondrial biogenesis. <i>Journal of Cell Science</i> , 2009 , 122, 4516-25	5.3	42
89	Mitochondrial function and redox state in mammalian embryos. <i>Seminars in Cell and Developmental Biology</i> , 2009 , 20, 346-53	7.5	168
88	PINK1-associated Parkinson disease is caused by neuronal vulnerability to calcium-induced cell death. <i>Molecular Cell</i> , 2009 , 33, 627-38	17.6	507

87	Deletion of the von Hippel-Lindau gene in pancreatic beta cells impairs glucose homeostasis in mice. <i>Journal of Clinical Investigation</i> , 2009 , 119, 125-35	15.9	93
86	Mitochondrial Channels as Potential Targets for Pharmacological Strategies in Brain Ischemia 2009 , 27-45		
85	Expression of mutant SOD1 in astrocytes induces functional deficits in motoneuron mitochondria. <i>Journal of Neurochemistry</i> , 2008 , 107, 1271-83	6	81
84	Mitochondria and calcium in health and disease. <i>Cell Calcium</i> , 2008 , 44, 1-5	4	116
83	PINK1 is necessary for long term survival and mitochondrial function in human dopaminergic neurons. <i>PLoS ONE</i> , 2008 , 3, e2455	3.7	252
82	Mechanisms underlying the loss of mitochondrial membrane potential in glutamate excitotoxicity. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008 , 1777, 953-64	4.6	142
81	Using multiphoton microscopy to examine the response of the heart to ischaemia and reperfusion injury. <i>Journal of Molecular and Cellular Cardiology</i> , 2008 , 44, 778	5.8	
80	Regulation of mitochondrial structure and function by the F1Fo-ATPase inhibitor protein, IF1. <i>Cell Metabolism</i> , 2008 , 8, 13-25	24.6	206
79	CLIC1 function is required for beta-amyloid-induced generation of reactive oxygen species by microglia. <i>Journal of Neuroscience</i> , 2008 , 28, 11488-99	6.6	92
78	Renal function and mitochondrial cytopathy (MC): more questions than answers?. <i>QJM - Monthly Journal of the Association of Physicians</i> , 2008 , 101, 755-66	2.7	24
77	Mitochondria: the hub of cellular Ca ²⁺ signaling. <i>Physiology</i> , 2008 , 23, 84-94	9.8	296
76	Regulation of redox metabolism in the mouse oocyte and embryo. <i>Development (Cambridge)</i> , 2007 , 134, 455-65	6.6	161
75	Three distinct mechanisms generate oxygen free radicals in neurons and contribute to cell death during anoxia and reoxygenation. <i>Journal of Neuroscience</i> , 2007 , 27, 1129-38	6.6	477
74	Mitochondrial ND5 gene variation associated with encephalomyopathy and mitochondrial ATP consumption. <i>Journal of Biological Chemistry</i> , 2007 , 282, 36845-52	5.4	53
73	Targeted polyphosphatase expression alters mitochondrial metabolism and inhibits calcium-dependent cell death. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 18091-6	11.5	165
72	Assessing mitochondrial potential, calcium, and redox state in isolated mammalian cells using confocal microscopy. <i>Methods in Molecular Biology</i> , 2007 , 372, 421-30	1.4	35
71	The role of mitochondrial function in the oocyte and embryo. <i>Current Topics in Developmental Biology</i> , 2007 , 77, 21-49	5.3	332
70	Endothelial mitochondria: contributing to vascular function and disease. <i>Circulation Research</i> , 2007 , 100, 1128-41	15.7	293

69	Calcium microdomains and oxidative stress. <i>Cell Calcium</i> , 2006 , 40, 561-74	4	75
68	FCCP is cardioprotective at concentrations that cause mitochondrial oxidation without detectable depolarisation. <i>Cardiovascular Research</i> , 2006 , 72, 322-30	9.9	65
67	Mitochondrial uncoupling, with low concentration FCCP, induces ROS-dependent cardioprotection independent of KATP channel activation. <i>Cardiovascular Research</i> , 2006 , 72, 313-21	9.9	165
66	IL-6 induces PI 3-kinase and nitric oxide-dependent protection and preserves mitochondrial function in cardiomyocytes. <i>Cardiovascular Research</i> , 2006 , 69, 164-77	9.9	91
65	Effects of NO on mitochondrial function in cardiomyocytes: Pathophysiological relevance. <i>Cardiovascular Research</i> , 2006 , 71, 10-21	9.9	61
64	Signalling via the reperfusion injury signalling kinase (RISK) pathway links closure of the mitochondrial permeability transition pore to cardioprotection. <i>International Journal of Biochemistry and Cell Biology</i> , 2006 , 38, 414-9	5.6	152
63	Calcium signals and mitochondria at fertilisation. <i>Seminars in Cell and Developmental Biology</i> , 2006 , 17, 314-23	7.5	107
62	Effects of beauvericin on the metabolic state and ionic homeostasis of ventricular myocytes of the guinea pig. <i>Chemical Research in Toxicology</i> , 2005 , 18, 1661-8	4	25
61	Induction of mitochondrial oxidative stress in astrocytes by nitric oxide precedes disruption of energy metabolism. <i>Journal of Neurochemistry</i> , 2005 , 95, 388-95	6	51
60	Prostaglandin F ₂ α potentiates the calcium dependent activation of mitochondrial metabolism in luteal cells. <i>Cell Calcium</i> , 2005 , 37, 35-44	4	10
59	Expression and modulation of an NADPH oxidase in mammalian astrocytes. <i>Journal of Neuroscience</i> , 2005 , 25, 9176-84	6.6	198
58	Mitochondrial permeability transition pore as a target for cardioprotection in the human heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005 , 289, H237-42	5.2	112
57	The role of an astrocytic NADPH oxidase in the neurotoxicity of amyloid beta peptides. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2005 , 360, 2309-14	5.8	117
56	Transient mitochondrial permeability transition pore opening mediates preconditioning-induced protection. <i>Circulation</i> , 2004 , 109, 1714-7	16.7	296
55	Vascular endothelial growth factor (VEGF)-D and VEGF-A differentially regulate KDR-mediated signaling and biological function in vascular endothelial cells. <i>Journal of Biological Chemistry</i> , 2004 , 279, 36148-57	5.4	63
54	Sperm-triggered [Ca ²⁺] oscillations and Ca ²⁺ homeostasis in the mouse egg have an absolute requirement for mitochondrial ATP production. <i>Development (Cambridge)</i> , 2004 , 131, 3057-67	6.6	174
53	Beta-amyloid peptides induce mitochondrial dysfunction and oxidative stress in astrocytes and death of neurons through activation of NADPH oxidase. <i>Journal of Neuroscience</i> , 2004 , 24, 565-75	6.6	459
52	Preconditioning protects by inhibiting the mitochondrial permeability transition. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2004 , 287, H841-9	5.2	182

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