Rosario R Rizzuto

List of Publications by Year
in descending order

222 papers	38,947 citations	3874 91 h-index	3171 192 g-index
239 all docs	239 docs citations	239 times ranked	41711 citing authors

#	Article	IF	Citations
1	Molecular mechanisms of cell death: recommendations of the Nomenclature Committee on Cell Death 2018. Cell Death and Differentiation, 2018, 25, 486-541.	5.0	4,036
2	A forty-kilodalton protein of the inner membrane is the mitochondrial calcium uniporter. Nature, 2011, 476, 336-340.	13.7	1,622
3	Mitochondria as sensors and regulators of calcium signalling. Nature Reviews Molecular Cell Biology, 2012, 13, 566-578.	16.1	1,369
4	Microdomains with high Ca2+ close to IP3-sensitive channels that are sensed by neighboring mitochondria. Science, 1993, 262, 744-747.	6.0	1,153
5	Chaperone-mediated coupling of endoplasmic reticulum and mitochondrial Ca2+ channels. Journal of Cell Biology, 2006, 175, 901-911.	2.3	1,107
6	Microdomains of Intracellular Ca2+: Molecular Determinants and Functional Consequences. Physiological Reviews, 2006, 86, 369-408.	13.1	1,067
7	Electron Transfer between Cytochrome c and p66Shc Generates Reactive Oxygen Species that Trigger Mitochondrial Apoptosis. Cell, 2005, 122, 221-233.	13.5	1,041
8	Regulation of autophagy by cytoplasmic p53. Nature Cell Biology, 2008, 10, 676-687.	4.6	1,025
9	Lysosomal calcium signalling regulates autophagy through calcineurin and TFEB. Nature Cell Biology, 2015, 17, 288-299.	4.6	1,006
10	Control of Macroautophagy by Calcium, Calmodulin-Dependent Kinase Kinase-Î², and Bcl-2. Molecular Cell, 2007, 25, 193-205.	4.5	961
11	Rapid changes of mitochondrial Ca2+ revealed by specifically targeted recombinant aequorin. Nature, 1992, 358, 325-327.	13.7	902
12	MAM: more than just a housekeeper. Trends in Cell Biology, 2009, 19, 81-88.	3.6	654
13	Mitochondria as allâ€round players of the calcium game. Journal of Physiology, 2000, 529, 37-47.	1.3	513
14	Cleavage of the Plasma Membrane Na+/Ca2+ Exchanger in Excitotoxicity. Cell, 2005, 120, 275-285.	13.5	511
15	Chimeric green fluorescent protein as a tool for visualizing subcellular organelles in living cells. Current Biology, 1995, 5, 635-642.	1.8	492
16	Bidirectional Ca ²⁺ -dependent control of mitochondrial dynamics by the Miro GTPase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20728-20733.	3.3	474
17	Protein Kinase C Â and Prolyl Isomerase 1 Regulate Mitochondrial Effects of the Life-Span Determinant p66Shc. Science, 2007, 315, 659-663.	6.0	448
18	MICU1 and MICU2 Finely Tune the Mitochondrial Ca2+ Uniporter by Exerting Opposite Effects on MCU Activity. Molecular Cell, 2014, 53, 726-737.	4.5	441

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19	Drp-1-Dependent Division of the Mitochondrial Network Blocks Intraorganellar Ca2+ Waves and Protects against Ca2+-Mediated Apoptosis. Molecular Cell, 2004, 16, 59-68.	4.5	440
20	Calcium and apoptosis: facts and hypotheses. Oncogene, 2003, 22, 8619-8627.	2.6	439
21	Reduced Loading of Intracellular Ca2+ Stores and Downregulation of Capacitative Ca2+Influx in Bcl-2â€"Overexpressing Cells. Journal of Cell Biology, 2000, 148, 857-862.	2.3	435
22	The Golgi apparatus is an inositol 1,4,5-trisphosphate-sensitive Ca2+ store, with functional properties distinct from those of the endoplasmic reticulum. EMBO Journal, 1998, 17, 5298-5308.	3.5	415
23	The mitochondrial calcium uniporter is a multimer that can include a dominant-negative pore-forming subunit. EMBO Journal, 2013, 32, 2362-2376.	3.5	408
24	Recombinant expression of the voltage-dependent anion channel enhances the transfer of Ca2+ microdomains to mitochondria. Journal of Cell Biology, 2002, 159, 613-624.	2.3	400
25	Ca2+ transfer from the ER to mitochondria: When, how and why. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 1342-1351.	0.5	396
26	Calcium at the Center of Cell Signaling: Interplay between Endoplasmic Reticulum, Mitochondria, and Lysosomes. Trends in Biochemical Sciences, 2016, 41, 1035-1049.	3.7	382
27	PML Regulates Apoptosis at Endoplasmic Reticulum by Modulating Calcium Release. Science, 2010, 330, 1247-1251.	6.0	360
28	Enjoy the Trip: Calcium in Mitochondria Back and Forth. Annual Review of Biochemistry, 2016, 85, 161-192.	5.0	348
29	Transfected Aequorin in the Measurement of Cytosolic Ca2+ Concentration ([Ca2+]c). Journal of Biological Chemistry, 1995, 270, 9896-9903.	1.6	342
30	Structural and functional link between the mitochondrial network and the endoplasmic reticulum. International Journal of Biochemistry and Cell Biology, 2009, 41, 1817-1827.	1.2	337
31	Mitochondrial Function, Biology, and Role in Disease. Circulation Research, 2016, 118, 1960-1991.	2.0	330
32	Muscle insulin sensitivity and glucose metabolism are controlled by the intrinsic muscle clock. Molecular Metabolism, 2014, 3, 29-41.	3.0	324
33	Loss-of-function mutations in MICU1 cause a brain and muscle disorder linked to primary alterations in mitochondrial calcium signaling. Nature Genetics, 2014, 46, 188-193.	9.4	311
34	Glucose Generates Sub-plasma Membrane ATP Microdomains in Single Islet Î²-Cells. Journal of Biological Chemistry, 1999, 274, 13281-13291.	1.6	293
35	A Novel Recombinant Plasma Membrane-targeted Luciferase Reveals a New Pathway for ATP Secretion. Molecular Biology of the Cell, 2005, 16, 3659-3665.	0.9	283
36	Increased longevity and refractoriness to Ca2+-dependent neurodegeneration in Surf1 knockout mice. Human Molecular Genetics, 2007, 16, 431-444.	1.4	279

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37	pH difference across the outer mitochondrial membrane measured with a green fluorescent protein mutant. Biochemical and Biophysical Research Communications, 2005, 326, 799-804.	1.0	259
38	Ca2+ Signaling, Mitochondria and Cell Death. Current Molecular Medicine, 2008, 8, 119-130.	0.6	258
39	Hepatitis C virus core triggers apoptosis in liver cells by inducing ER stress and ER calcium depletion. Oncogene, 2005, 24, 4921-4933.	2.6	254
40	Mitochondria, calcium and cell death: A deadly triad in neurodegeneration. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 335-344.	0.5	254
41	p53 at the endoplasmic reticulum regulates apoptosis in a Ca ²⁺ -dependent manner. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1779-1784.	3.3	247
42	High glucose induces adipogenic differentiation of muscle-derived stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1226-1231.	3.3	243
43	Basal Activation of the P2X7 ATP Receptor Elevates Mitochondrial Calcium and Potential, Increases Cellular ATP Levels, and Promotes Serum-independent Growth. Molecular Biology of the Cell, 2005, 16, 3260-3272.	0.9	242
44	BiP, a Major Chaperone Protein of the Endoplasmic Reticulum Lumen, Plays a Direct and Important Role in the Storage of the Rapidly Exchanging Pool of Ca2+. Journal of Biological Chemistry, 1997, 272, 30873-30879.	1.6	241
45	Flirting in Little Space: The ER/Mitochondria Ca ²⁺ Liaison. Science Signaling, 2004, 2004, re1.	1.6	231
46	Double labelling of subcellular structures with organelle-targeted GFP mutants in vivo. Current Biology, 1996, 6, 183-188.	1.8	225
47	The origin of intermuscular adipose tissue and its pathophysiological implications. American Journal of Physiology - Endocrinology and Metabolism, 2009, 297, E987-E998.	1.8	215
48	Signaling pathways in mitochondrial dysfunction and aging. Mechanisms of Ageing and Development, 2010, 131, 536-543.	2.2	211
49	Role of SERCA1 Truncated Isoform in the Proapoptotic Calcium Transfer from ER to Mitochondria during ER Stress. Molecular Cell, 2008, 32, 641-651.	4.5	204
50	Downregulation of the Mitochondrial Calcium Uniporter by Cancer-Related miR-25. Current Biology, 2013, 23, 58-63.	1.8	198
51	The mitochondrial calcium uniporter regulates breast cancer progression via <scp>HIF</scp> â€•1Î±. EMBO Molecular Medicine, 2016, 8, 569-585.	3.3	195
52	Regulation of mitochondrial metabolism by ER Ca 2+ release: an intimate connection. Trends in Biochemical Sciences, 2000, 25, 215-221.	3.7	192
53	Mitochondrial Ca ²⁺ uptake contributes to buffering cytoplasmic Ca ²⁺ peaks in cardiomyocytes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12986-12991.	3.3	192
54	Dense core secretory vesicles revealed as a dynamic Ca2+store in neuroendocrine cells with a vesicle-associated membrane protein aequorin chimaera. Journal of Cell Biology, 2001, 155, 41-52.	2.3	188

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55	The Endogenous Cannabinoid System Stimulates Glucose Uptake in Human Fat Cells via Phosphatidylinositol 3-Kinase and Calcium-Dependent Mechanisms. Journal of Clinical Endocrinology and Metabolism, 2007, 92, 4810-4819.	1.8	188
56	Looking forward to seeing calcium. Nature Reviews Molecular Cell Biology, 2003, 4, 579-586.	16.1	187
57	Ero1Î± Regulates Ca²⁺Fluxes at the Endoplasmic Reticulumâ€“Mitochondria Interface (MAM). Antioxidants and Redox Signaling, 2012, 16, 1077-1087.	2.5	180
58	A Role for Calcium Influx in the Regulation of Mitochondrial Calcium in Endothelial Cells. Journal of Biological Chemistry, 1996, 271, 10753-10759.	1.6	173
59	The Mitochondrial Calcium Uniporter Controls Skeletal Muscle Trophism InÂVivo. Cell Reports, 2015, 10, 1269-1279.	2.9	170
60	A calcium signaling defect in the pathogenesis of a mitochondrial DNA inherited oxidative phosphorylation deficiency. Nature Medicine, 1999, 5, 951-954.	15.2	154
61	Structure and function of the mitochondrial calcium uniporter complex. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 2006-2011.	1.9	154
62	The m -AAA Protease Associated with Neurodegeneration Limits MCU Activity in Mitochondria. Molecular Cell, 2016, 64, 148-162.	4.5	153
63	Endoplasmic reticulum stress and alteration in calcium homeostasis are involved in cadmium-induced apoptosis. Cell Calcium, 2008, 43, 184-195.	1.1	151
64	Subcellular calcium measurements in mammalian cells using jellyfish photoprotein aequorin-based probes. Nature Protocols, 2013, 8, 2105-2118.	5.5	149
65	Bcl-2 and Bax modulate adenine nucleotide translocase activity. Cancer Research, 2003, 63, 541-6.	0.4	147
66	The Mitochondrial Ca2+ Uniporter MCU Is Essential for Glucose-Induced ATP Increases in Pancreatic Î²-Cells. PLoS ONE, 2012, 7, e39722.	1.1	146
67	MICU3 is a tissue-specific enhancer of mitochondrial calcium uptake. Cell Death and Differentiation, 2019, 26, 179-195.	5.0	145
68	Recombinant Expression of the Ca2+-sensitive Aspartate/Glutamate Carrier Increases Mitochondrial ATP Production in Agonist-stimulated Chinese Hamster Ovary Cells. Journal of Biological Chemistry, 2003, 278, 38686-38692.	1.6	138
69	Nuclear Poly(ADP-ribose) Polymerase-1 Rapidly Triggers Mitochondrial Dysfunction. Journal of Biological Chemistry, 2005, 280, 17227-17234.	1.6	134
70	The Mitochondrial Calcium Uniporter (MCU): Molecular Identity and Physiological Roles. Journal of Biological Chemistry, 2013, 288, 10750-10758.	1.6	131
71	Helicobacter pylori toxin VacA induces vacuole formation by acting in the cell cytosol. Molecular Microbiology, 1997, 26, 665-674.	1.2	128
72	Recombinant aequorin and green fluorescent protein as valuable tools in the study of cell signalling. Biochemical Journal, 2001, 355, 1-12.	1.7	125

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73	Extracellular ATP Causes ROCK I-dependent Bleb Formation in P2X7-transfected HEK293 Cells. Molecular Biology of the Cell, 2003, 14, 2655-2664.	0.9	124
74	Guidelines on experimental methods to assess mitochondrial dysfunction in cellular models of neurodegenerative diseases. Cell Death and Differentiation, 2018, 25, 542-572.	5.0	120
75	Mitochondrial calcium uptake in organ physiology: from molecular mechanism to animal models. Pflugers Archiv European Journal of Physiology, 2018, 470, 1165-1179.	1.3	119
76	Participation of endoplasmic reticulum and mitochondrial calcium handling in apoptosis: more than just neighborhood?. FEBS Letters, 2004, 567, 111-115.	1.3	118
77	The Coxsackievirus 2B Protein Suppresses Apoptotic Host Cell Responses by Manipulating Intracellular Ca2+ Homeostasis. Journal of Biological Chemistry, 2004, 279, 18440-18450.	1.6	116
78	Calcium and mitochondria: mechanisms and functions of a troubled relationship. Biochimica Et Biophysica Acta - Molecular Cell Research, 2004, 1742, 119-131.	1.9	115
79	Crosstalk between Calcium and ROS in Pathophysiological Conditions. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-18.	1.9	115
80	Intracellular Ca2+ pools in neuronal signalling. Current Opinion in Neurobiology, 2001, 11, 306-311.	2.0	111
81	Ca2+ Homeostasis in the Endoplasmic Reticulum: Coexistence of High and Low [Ca2+] Subcompartments in Intact HeLa Cells. Journal of Cell Biology, 1997, 139, 601-611.	2.3	110
82	Akt kinase reducing endoplasmic reticulum Ca2+ release protects cells from Ca2+-dependent apoptotic stimuli. Biochemical and Biophysical Research Communications, 2008, 375, 501-505.	1.0	109
83	The versatility of mitochondrial calcium signals: From stimulation of cell metabolism to induction of cell death. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 808-816.	0.5	106
84	Withdrawal of Essential Amino Acids Increases Autophagy by a Pathway Involving Ca2+/Calmodulin-dependent Kinase Kinase-Î² (CaMKK-Î²). Journal of Biological Chemistry, 2012, 287, 38625-38636.	1.6	103
85	<scp>FATE</scp> 1 antagonizes calciumâ€•and drugâ€induced apoptosis by uncoupling <scp>ER</scp> and mitochondria. EMBO Reports, 2016, 17, 1264-1280.	2.0	102
86	Controlling metabolism and cell death: At the heart of mitochondrial calcium signalling. Journal of Molecular and Cellular Cardiology, 2009, 46, 781-788.	0.9	101
87	Bcl-2 and Bax Exert Opposing Effects on Ca2+ Signaling, Which Do Not Depend on Their Putative Pore-forming Region. Journal of Biological Chemistry, 2004, 279, 54581-54589.	1.6	98
88	Metformin Prevents Glucose-Induced Protein Kinase C-Â2 Activation in Human Umbilical Vein Endothelial Cells Through an Antioxidant Mechanism. Diabetes, 2005, 54, 1123-1131.	0.3	97
89	A MICU1 Splice Variant Confers High Sensitivity to the Mitochondrial Ca2+ Uptake Machinery of Skeletal Muscle. Molecular Cell, 2016, 64, 760-773.	4.5	97
90	Human white adipocytes express the cold receptor TRPM8 which activation induces UCP1 expression, mitochondrial activation and heat production. Molecular and Cellular Endocrinology, 2014, 383, 137-146.	1.6	96

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91	Expression of the P2X7 Receptor Increases the Ca2+ Content of the Endoplasmic Reticulum, Activates NFATc1, and Protects from Apoptosis. Journal of Biological Chemistry, 2009, 284, 10120-10128.	1.6	95
92	Caspase-dependent Alterations of Ca2+ Signaling in the Induction of Apoptosis by Hepatitis B Virus X Protein. Journal of Biological Chemistry, 2003, 278, 31745-31755.	1.6	94
93	Recombinant aequorin and green fluorescent protein as valuable tools in the study of cell signalling. Biochemical Journal, 2001, 355, 1.	1.7	92
94	Cytopathic effects of the cytomegalovirus-encoded apoptosis inhibitory protein vMIA. Journal of Cell Biology, 2006, 174, 985-996.	2.3	90
95	The contribution of the SPCA1 Ca2+ pump to the Ca2+ accumulation in the Golgi apparatus of HeLa cells assessed via RNA-mediated interference. Biochemical and Biophysical Research Communications, 2003, 306, 430-436.	1.0	89
96	Digital imaging microscopy of living cells. Trends in Cell Biology, 1998, 8, 288-292.	3.6	87
97	Serca1 Truncated Proteins Unable to Pump Calcium Reduce the Endoplasmic Reticulum Calcium Concentration and Induce Apoptosis. Journal of Cell Biology, 2001, 153, 1301-1314.	2.3	87
98	Dynamics of Glucose-induced Membrane Recruitment of Protein Kinase C Î²II in Living Pancreatic Islet Î²-Cells. Journal of Biological Chemistry, 2002, 277, 37702-37710.	1.6	86
99	When calcium goes wrong: genetic alterations of a ubiquitous signaling route. Nature Genetics, 2003, 34, 135-141.	9.4	85
100	Bcl-2-associated autophagy regulator Naf-1 required for maintenance of skeletal muscle. Human Molecular Genetics, 2012, 21, 2277-2287.	1.4	84
101	Targeted recombinant aequorins: Tools for monitoring [Ca2+] in the various compartments of a living cell. , 1999, 46, 380-389.		81
102	Structure, Activity Regulation, and Role of the Mitochondrial Calcium Uniporter in Health and Disease. Frontiers in Oncology, 2017, 7, 139.	1.3	80
103	Mitochondrial Ca2+ Uptake Requires Sustained Ca2+ Release from the Endoplasmic Reticulum. Journal of Biological Chemistry, 2003, 278, 15153-15161.	1.6	79
104	Long-term modulation of mitochondrial Ca2+ signals by protein kinase C isozymes. Journal of Cell Biology, 2004, 165, 223-232.	2.3	79
105	p66Shc, oxidative stress and aging: Importing a lifespan determinant into mitochondria. Cell Cycle, 2008, 7, 304-308.	1.3	78
106	[30] Photoprotein-mediated measurement of calcium ion concentration in mitochondria of living cells. Methods in Enzymology, 1995, 260, 417-428.	0.4	77
107	Biosensors for the Detection of Calcium and pH. Methods in Cell Biology, 2007, 80, 297-325.	0.5	75
108	Mitochondrial â€˜flashesâ€™: a radical concept repHined. Trends in Cell Biology, 2012, 22, 503-508.	3.6	74

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109	Frequency-dependent mitochondrial Ca2+ accumulation regulates ATP synthesis in pancreatic Î² cells. Pflugers Archiv European Journal of Physiology, 2013, 465, 543-554.	1.3	73
110	Mitochondrial longevity pathways. Biochimica Et Biophysica Acta - Molecular Cell Research, 2011, 1813, 260-268.	1.9	71
111	Physical exercise in aging human skeletal muscle increases mitochondrial calcium uniporter expression levels and affects mitochondria dynamics. Physiological Reports, 2016, 4, e13005.	0.7	71
112	Content of mitochondrial calcium uniporter (MCU) in cardiomyocytes is regulated by microRNA-1 in physiologic and pathologic hypertrophy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9006-E9015.	3.3	70
113	Adrenergic Signaling Regulates Mitochondrial Ca²⁺ Uptake Through Pyk2-Dependent Tyrosine Phosphorylation of the Mitochondrial Ca²⁺ Uniporter. Antioxidants and Redox Signaling, 2014, 21, 863-879.	2.5	69
114	Targeting Recombinant Aequorin to Specific Intracellular Organelles. Methods in Cell Biology, 1994, 40, 339-358.	0.5	68
115	Inhibitory Interaction of the 14-3-3Ïµ Protein with Isoform 4 of the Plasma Membrane Ca2+-ATPase Pump. Journal of Biological Chemistry, 2005, 280, 37195-37203.	1.6	67
116	Molecular structure and pathophysiological roles of the Mitochondrial Calcium Uniporter. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 2457-2464.	1.9	62
117	The MCU complex in cell death. Cell Calcium, 2018, 69, 73-80.	1.1	62
118	Targeting aequorin and green fluorescent protein to intracellular organelles. Gene, 1996, 173, 113-117.	1.0	61
119	Loss-of-Function Mutation of the<i>GPR40</i>Gene Associates with Abnormal Stimulated Insulin Secretion by Acting on Intracellular Calcium Mobilization. Journal of Clinical Endocrinology and Metabolism, 2008, 93, 3541-3550.	1.8	61
120	The Pathophysiology of LETM1. Journal of General Physiology, 2012, 139, 445-454.	0.9	61
121	The mitochondrial Ca2+ uniporter. Cell Calcium, 2012, 52, 16-21.	1.1	61
122	Molecular diversity and pleiotropic role of the mitochondrial calcium uniporter. Cell Calcium, 2015, 58, 11-17.	1.1	61
123	Mitochondrial Calcium Handling in Physiology and Disease. Advances in Experimental Medicine and Biology, 2017, 982, 25-47.	0.8	61
124	Mitochondrial Calcium Homeostasis: Mechanisms and Molecules. IUBMB Life, 2001, 52, 213-219.	1.5	60
125	The Mitochondrial Ca2+ Uptake and the Fine-Tuning of Aerobic Metabolism. Frontiers in Physiology, 2020, 11, 554904.	1.3	60
126	Expression, Pharmacological Profile, and Functional Coupling of A2B Receptors in a Recombinant System and in Peripheral Blood Cells Using a Novel Selective Antagonist Radioligand, [3H]MRE 2029-F20. Molecular Pharmacology, 2005, 67, 2137-2147.	1.0	58

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127	Intramitochondrial calcium regulation by the FHIT gene product sensitizes to apoptosis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12753-12758.	3.3	58
128	Physiological Characterization of a Plant Mitochondrial Calcium Uniporter in Vitro and in Vivo. Plant Physiology, 2017, 173, 1355-1370.	2.3	54
129	A High-Throughput Screening Identifies MICU1 Targeting Compounds. Cell Reports, 2020, 30, 2321-2331.e6.	2.9	54
130	Loss of mitochondrial calcium uniporter rewires skeletal muscle metabolism and substrate preference. Cell Death and Differentiation, 2019, 26, 362-381.	5.0	53
131	Baseline Cytosolic Ca2+ Oscillations Derived from a Non-endoplasmic Reticulum Ca2+Store. Journal of Biological Chemistry, 2001, 276, 39161-39170.	1.6	51
132	Mitochondrial Calcium Increase Induced by RyR1 and IP3R Channel Activation After Membrane Depolarization Regulates Skeletal Muscle Metabolism. Frontiers in Physiology, 2018, 9, 791.	1.3	51
133	Peroxisomes as Novel Players in Cell Calcium Homeostasis. Journal of Biological Chemistry, 2008, 283, 15300-15308.	1.6	49
134	Respiratory dysfunction by AFG3L2 deficiency causes decreased mitochondrial calcium uptake via organellar network fragmentation. Human Molecular Genetics, 2012, 21, 3858-3870.	1.4	49
135	The renaissance of mitochondrial calcium transport. FEBS Journal, 2000, 267, 5269-5273.	0.2	48
136	Mitochondrial ion channels as targets for cardioprotection. Journal of Cellular and Molecular Medicine, 2020, 24, 7102-7114.	1.6	48
137	A role for calcium in Bcl-2 action?. Biochimie, 2002, 84, 195-201.	1.3	46
138	Recent advances in the molecular mechanism of mitochondrial calcium uptake. F1000Research, 2018, 7, 1858.	0.8	46
139	Mitochondrial Ca2+ homeostasis in health and disease. Biological Research, 2004, 37, 653-60.	1.5	46
140	Molecular defects in cytochrome oxidase in mitochondrial diseases. Journal of Bioenergetics and Biomembranes, 1988, 20, 353-364.	1.0	45
141	New light on mitochondrial calcium. BioFactors, 1998, 8, 243-253.	2.6	43
142	Chapter 5: Targeting GFP to Organelles. Methods in Cell Biology, 1998, 58, 75-85.	0.5	42
143	Overexpression of Mitochondrial Calcium Uniporter Causes Neuronal Death. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-15.	1.9	42
144	Calcium dynamics in catecholamine-containing secretory vesicles. Cell Calcium, 2005, 37, 555-564.	1.1	38

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145	Measurements of mitochondrial pH in cultured cortical neurons clarify contribution of mitochondrial pore to the mechanism of glutamate-induced delayed Ca2+ deregulation. Cell Calcium, 2008, 43, 602-614.	1.1	37
146	The pore-forming subunit MCU of the mitochondrial Ca2+ uniporter is required for normal glucose-stimulated insulin secretion in vitro and in vivo in mice. Diabetologia, 2020, 63, 1368-1381.	2.9	37
147	Effect of Ca2+, peroxides, SH reagents, phosphate and aging on the permeability of mitochondrial membranes. FEBS Journal, 1987, 162, 239-249.	0.2	36
148	The Mitochondrial Antioxidants MitoE₂and MitoQ₁₀Increase Mitochondrial Ca²⁺Load upon Cell Stimulation by Inhibiting Ca²⁺Efflux from the Organelle. Annals of the New York Academy of Sciences, 2008, 1147, 264-274.	1.8	36
149	Molecules and roles of mitochondrial calcium signaling. BioFactors, 2011, 37, 219-227.	2.6	34
150	Gene transfer into satellite cell from regenerating muscle: Bupivacaine allows Î²-gal transfection and expression in vitro and in vivo. In Vitro Cellular and Developmental Biology - Animal, 1994, 30, 131-133.	0.7	33
151	The Golgi Ca2+-ATPase KlPmr1p Function Is Required for Oxidative Stress Response by Controlling the Expression of the Heat-Shock Element HSP60 in Kluyveromyces lactis. Molecular Biology of the Cell, 2005, 16, 4636-4647.	0.9	31
152	Altered dopamine homeostasis differentially affects mitochondrial voltage-dependent anion channels turnover. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 1816-1822.	1.8	31
153	Parkin-dependent regulation of the MCU complex component MICU1. Scientific Reports, 2018, 8, 14199.	1.6	31
154	The cytoplasmic C-terminus of polycystin-1 increases cell proliferation in kidney epithelial cells through serum-activated and Ca2+-dependent pathway(s). Experimental Cell Research, 2005, 304, 391-406.	1.2	30
155	Targeting of reporter molecules to mitochondria to measure calcium, ATP, and pH. Methods in Cell Biology, 2001, 65, 353-380.	0.5	29
156	Copper and bezafibrate cooperate to rescue cytochrome c oxidase deficiency in cells of patients with sco2 mutations. Orphanet Journal of Rare Diseases, 2012, 7, 21.	1.2	29
157	MCU-knockdown attenuates high glucose-induced inflammation through regulating MAPKs/NF-ÎºB pathways and ROS production in HepG2 cells. PLoS ONE, 2018, 13, e0196580.	1.1	29
158	The molecular complexity of the Mitochondrial Calcium Uniporter. Cell Calcium, 2021, 93, 102322.	1.1	29
159	Mitochondrial K+ channels and their implications for disease mechanisms. , 2021, 227, 107874.		29
160	Recombinant aequorin as tool for monitoring calcium concentration in subcellular compartments. Methods in Enzymology, 2000, 327, 440-456.	0.4	28
161	Identification and functional validation of FDA-approved positive and negative modulators of the mitochondrial calcium uniporter. Cell Reports, 2021, 35, 109275.	2.9	28
162	The p13 protein of human T cell leukemia virus type 1 (HTLV-1) modulates mitochondrial membrane potential and calcium uptake. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 945-951.	0.5	27

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163	Molecular control of mitochondrial calcium uptake. Biochemical and Biophysical Research Communications, 2014, 449, 373-376.	1.0	27
164	Chondrocyte protein with a poly-proline region (CHPPR) is a novel mitochondrial protein and promotes mitochondrial fission. Journal of Cellular Physiology, 2004, 201, 470-482.	2.0	25
165	Mitochondrial calcium signalling in cell death. FEBS Journal, 2005, 272, 4013-4022.	2.2	25
166	Overexpression of adenine nucleotide translocase reduces Ca2+ signal transmission between the ER and mitochondria. Biochemical and Biophysical Research Communications, 2006, 348, 393-399.	1.0	25
167	Increased mitochondrial calcium uniporter in adipocytes underlies mitochondrial alterations associated with insulin resistance. American Journal of Physiology - Endocrinology and Metabolism, 2017, 313, E641-E650.	1.8	25
168	Calcium and Organelles: A Two-Sided Story. Biochemical and Biophysical Research Communications, 1998, 253, 549-557.	1.0	24
169	Expression of polycystin-1 C-terminal fragment enhances the ATP-induced Ca2+ release in human kidney cells. Biochemical and Biophysical Research Communications, 2003, 301, 657-664.	1.0	24
170	Calcium mobilization from mitochondria in synaptic transmitter release. Journal of Cell Biology, 2003, 163, 441-443.	2.3	24
171	Inhibitory Interaction of the Plasma Membrane Na+/Ca2+ Exchangers with the 14-3-3 Proteins. Journal of Biological Chemistry, 2006, 281, 19645-19654.	1.6	24
172	Modulation of intracellular Ca2+ signalling in HeLa cells by the apoptotic cell death enhancer PK11195. Biochemical Pharmacology, 2008, 76, 1628-1636.	2.0	24
173	Differential recruitment of PKC isoforms in HeLa cells during redox stress. Cell Stress and Chaperones, 2007, 12, 291.	1.2	24
174	Intracellular targeting of the photoprotein aequorin: A new approach for measuring, in living cells, Ca2+ concentrations in defined cellular compartments. Cytotechnology, 1993, 11, S44-S46.	0.7	23
175	Deficiency of polycystic kidney disease-1 gene (PKD1) expression increases A3 adenosine receptors in human renal cells: Implications for cAMP-dependent signalling and proliferation of PKD1-mutated cystic cells. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2009, 1792, 531-540.	1.8	22
176	Sphingosine 1-phosphate receptors modulate intracellular Ca2+ homeostasis. Biochemical and Biophysical Research Communications, 2007, 353, 268-274.	1.0	21
177	The ER-mitochondria tether at the hub of Ca2+ signaling. Current Opinion in Physiology, 2020, 17, 261-268.	0.9	21
178	Skeletal muscle mitochondria in health and disease. Cell Calcium, 2021, 94, 102357.	1.1	21
179	Endoplasmic Reticulum/Mitochondria Calcium Cross-Talk. Novartis Foundation Symposium, 0, , 122-139.	1.2	21
180	Molecular machinery and signaling events in apoptosis. Drug Development Research, 2001, 52, 558-570.	1.4	19

#	Article	IF	Citations
181	Chaperones as Parts of Organelle Networks. , 2007, 594, 64-77.		19
182	The Use of Aequorin and Its Variants for Ca²⁺ Measurements. Cold Spring Harbor Protocols, 2014, 2014, pdb.top066118.	0.2	18
183	Functional and structural alterations in the endoplasmic reticulum and mitochondria during apoptosis triggered by C2-ceramide and CD95/APO-1/FAS receptor stimulation. Biochemical and Biophysical Research Communications, 2010, 391, 575-581.	1.0	17
184	Measuring Baseline Ca2+ Levels in Subcellular Compartments Using Genetically Engineered Fluorescent Indicators. Methods in Enzymology, 2014, 543, 47-72.	0.4	17
185	From the Identification to the Dissection of the Physiological Role of the Mitochondrial Calcium Uniporter: An Ongoing Story. Biomolecules, 2021, 11, 786.	1.8	17
186	The dominant-negative mitochondrial calcium uniporter subunit MCUb drives macrophage polarization during skeletal muscle regeneration. Science Signaling, 2021, 14, eabf3838.	1.6	17
187	Parvalbumin affects skeletal muscle trophism through modulation of mitochondrial calcium uptake. Cell Reports, 2021, 35, 109087.	2.9	16
188	Gene expression changes of single skeletal muscle fibers in response to modulation of the mitochondrial calcium uniporter (MCU). Genomics Data, 2015, 5, 64-67.	1.3	15
189	NF-ÎºB activation is required for apoptosis in fibrocystin/polyductin-depleted kidney epithelial cells. Apoptosis: an International Journal on Programmed Cell Death, 2010, 15, 94-104.	2.2	14
190	Polycystin-1 promotes PKCÎ±-mediated NF-ÎºB activation in kidney cells. Biochemical and Biophysical Research Communications, 2006, 350, 257-262.	1.0	13
191	Mitochondria: From basic biology to cardiovascular disease. Journal of Molecular and Cellular Cardiology, 2009, 46, 765-766.	0.9	13
192	Using Targeted Variants of Aequorin to Measure Ca²⁺ Levels in Intracellular Organelles. Cold Spring Harbor Protocols, 2014, 2014, pdb.prot072843.	0.2	12
193	Proapoptotic plasma membrane pore: P2X7 receptor. Drug Development Research, 2001, 52, 571-578.	1.4	11
194	The selective inhibition of nuclear PKCÎ¶ restores the effectiveness of chemotherapeutic agents in chemoresistant cells. Cell Cycle, 2012, 11, 1040-1048.	1.3	11
195	Role of p66shc in skeletal muscle function. Scientific Reports, 2017, 7, 6283.	1.6	11
196	Mitofusin 2 Joins the Sarcoplasmic Reticulum and Mitochondria at the Hip to Sustain Cardiac Energetics. Circulation Research, 2012, 111, 821-823.	2.0	10
197	Mitochondria and calcium homeostasis: a tale of three luminescent proteins. Luminescence, 2001, 16, 67-71.	1.5	9
198	The collagen-mitochondria connection. Nature Genetics, 2003, 35, 300-301.	9.4	9

#	Article	IF	Citations
199	Translocation of signalling proteins to the plasma membrane revealed by a new bioluminescent procedure. BMC Cell Biology, 2011, 12, 27.	3.0	9
200	Crosstalk between Mitochondrial Ca²⁺ Uptake and Autophagy in Skeletal Muscle. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-10.	1.9	8
201	Targeting of aequorin for calcium monitoring in intracellular compartments. Luminescence, 1994, 9, 177-184.	1.3	7
202	Intracellular Evaluation of ER Targeting Elucidates a Mild Form of Inherited Coagulation Deficiency. Molecular Medicine, 2006, 12, 137-142.	1.9	6
203	ΚÎ±Î»Ã³Ï, Îºî±Î¹ AÎ³Î±Î¸Ã³Ï,: how mitochondrial beauty translates into biological virtue. Current Opinion in Cell Biology, 2013, 25, 477-482.	2.6	5
204	Tollâ€•like receptors hit calcium. EMBO Reports, 2014, 15, 468-469.	2.0	5
205	Methods to Measure Intracellular Ca2+ Concentration Using Ca2+-Sensitive Dyes. Methods in Molecular Biology, 2019, 1925, 43-58.	0.4	4
206	A Novel Loss of Function Melanocortin-4-Receptor Mutation (MC4R-F313Sfs*29) in Morbid Obesity. Journal of Clinical Endocrinology and Metabolism, 2021, 106, 736-749.	1.8	4
207	Imaging Calcium Dynamics Using Targeted Recombinant Aequorins. Cold Spring Harbor Protocols, 2008, 2008, pdb.top26.	0.2	1
208	Meeting highlights from the 2013 <scp>E</scp>uropean <scp>S</scp>ociety of <scp>C</scp>ardiology <scp>H</scp>eart <scp>F</scp>ailure <scp>A</scp>ssociation <scp>W</scp>inter <scp>M</scp>eeting on <scp>T</scp>ranslational <scp>H</scp>eart <scp>F</scp>ailure <scp>R</scp>esearch. European Journal of Heart Failure, 2014, 16, 6-14.	2.9	1
209	Mitochondria and calcium homeostasis: a tale of three luminescent proteins. , 2001, 16, 67.		1
210	Modulation of Calcium Homeostasis by the Endoplasmic Reticulum in Health and Disease. Molecular Biology Intelligence Unit, 2003, , 105-125.	0.2	1
211	The role of Ca2 in the regulation of intracellular transport. , 2008, , 143-160.		1
212	Symposia lectures. Journal of Biosciences, 1999, 24, 5-31.	0.5	0
213	Sarcoplasmic reticulum: Turning morphological complexity into calcium signals. Rendiconti Lincei, 2002, 13, 325-336.	1.0	0
214	Mitochondrial Ca2+ and cell death. New Comprehensive Biochemistry, 2007, 41, 471-481.	0.1	0
215	Molecular Players of Mitochondrial Calcium Signaling: Similarities and Different Aspects in Various Organisms. Biological and Medical Physics Series, 2017, , 41-65.	0.3	0
216	Measuring Ca2+ in the Nucleoplasm of Intact Cells. , 2001, , 105-130.		0

#	Article	IF	Citations
217	Calcium Transport in Mitochondria. , 2004, , 261-266.		0
218	Targeted Aequorins. , 2005, , 112-123.		0
219	Mitochondria in Cell Life and Death. , 2007, , 145-158.		0
220	Mitochondrial Ca2+ Signalling. , 1998, , 163-175.		0
221	Imaging Green Fluorescent Proteins in Mammalian Cells. , 1999, , 327-350.		0
222	The New Green Fluorescent Protein Mutants and their Applications. , 1999, , 351-361.		0