

# Rosario R Rizzuto

## List of Publications by Year in descending order

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222  
papers

38,947  
citations

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91  
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192  
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239  
all docs

239  
docs citations

239  
times ranked

38220  
citing authors

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

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19	Drp-1-Dependent Division of the Mitochondrial Network Blocks Intraorganellar Ca <sup>2+</sup> Waves and Protects against Ca <sup>2+</sup> -Mediated Apoptosis. <i>Molecular Cell</i> , 2004, 16, 59-68.	4.5	440
20	Calcium and apoptosis: facts and hypotheses. <i>Oncogene</i> , 2003, 22, 8619-8627.	2.6	439
21	Reduced Loading of Intracellular Ca <sup>2+</sup> Stores and Downregulation of Capacitative Ca <sup>2+</sup> Influx in Bcl-2 Overexpressing Cells. <i>Journal of Cell Biology</i> , 2000, 148, 857-862.	2.3	435
22	The Golgi apparatus is an inositol 1,4,5-trisphosphate-sensitive Ca <sup>2+</sup> store, with functional properties distinct from those of the endoplasmic reticulum. <i>EMBO Journal</i> , 1998, 17, 5298-5308.	3.5	415
23	The mitochondrial calcium uniporter is a multimer that can include a dominant-negative pore-forming subunit. <i>EMBO Journal</i> , 2013, 32, 2362-2376.	3.5	408
24	Recombinant expression of the voltage-dependent anion channel enhances the transfer of Ca <sup>2+</sup> microdomains to mitochondria. <i>Journal of Cell Biology</i> , 2002, 159, 613-624.	2.3	400
25	Ca <sup>2+</sup> transfer from the ER to mitochondria: When, how and why. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2009, 1787, 1342-1351.	0.5	396
26	Calcium at the Center of Cell Signaling: Interplay between Endoplasmic Reticulum, Mitochondria, and Lysosomes. <i>Trends in Biochemical Sciences</i> , 2016, 41, 1035-1049.	3.7	382
27	PML Regulates Apoptosis at Endoplasmic Reticulum by Modulating Calcium Release. <i>Science</i> , 2010, 330, 1247-1251.	6.0	360
28	Enjoy the Trip: Calcium in Mitochondria Back and Forth. <i>Annual Review of Biochemistry</i> , 2016, 85, 161-192.	5.0	348
29	Transfected Aequorin in the Measurement of Cytosolic Ca <sup>2+</sup> Concentration ([Ca <sup>2+</sup> ] <sub>c</sub> ). <i>Journal of Biological Chemistry</i> , 1995, 270, 9896-9903.	1.6	342
30	Structural and functional link between the mitochondrial network and the endoplasmic reticulum. <i>International Journal of Biochemistry and Cell Biology</i> , 2009, 41, 1817-1827.	1.2	337
31	Mitochondrial Function, Biology, and Role in Disease. <i>Circulation Research</i> , 2016, 118, 1960-1991.	2.0	330
32	Muscle insulin sensitivity and glucose metabolism are controlled by the intrinsic muscle clock. <i>Molecular Metabolism</i> , 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. <i>Nature Genetics</i> , 2014, 46, 188-193.	9.4	311
34	Glucose Generates Sub-plasma Membrane ATP Microdomains in Single Islet $\beta$ -Cells. <i>Journal of Biological Chemistry</i> , 1999, 274, 13281-13291.	1.6	293
35	A Novel Recombinant Plasma Membrane-targeted Luciferase Reveals a New Pathway for ATP Secretion. <i>Molecular Biology of the Cell</i> , 2005, 16, 3659-3665.	0.9	283
36	Increased longevity and refractoriness to Ca <sup>2+</sup> -dependent neurodegeneration in Surf1 knockout mice. <i>Human Molecular Genetics</i> , 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. <i>Biochemical and Biophysical Research Communications</i> , 2005, 326, 799-804.	1.0	259
38	Ca <sup>2+</sup> Signaling, Mitochondria and Cell Death. <i>Current Molecular Medicine</i> , 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. <i>Oncogene</i> , 2005, 24, 4921-4933.	2.6	254
40	Mitochondria, calcium and cell death: A deadly triad in neurodegeneration. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2009, 1787, 335-344.	0.5	254
41	p53 at the endoplasmic reticulum regulates apoptosis in a Ca <sup>2+</sup> -dependent manner. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 1779-1784.	3.3	247
42	High glucose induces adipogenic differentiation of muscle-derived stem cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 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. <i>Molecular Biology of the Cell</i> , 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 Ca <sup>2+</sup> . <i>Journal of Biological Chemistry</i> , 1997, 272, 30873-30879.	1.6	241
45	Flirting in Little Space: The ER/Mitochondria Ca <sup>2+</sup> Liaison. <i>Science Signaling</i> , 2004, 2004, re1.	1.6	231
46	Double labelling of subcellular structures with organelle-targeted GFP mutants in vivo. <i>Current Biology</i> , 1996, 6, 183-188.	1.8	225
47	The origin of intermuscular adipose tissue and its pathophysiological implications. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2009, 297, E987-E998.	1.8	215
48	Signaling pathways in mitochondrial dysfunction and aging. <i>Mechanisms of Ageing and Development</i> , 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. <i>Molecular Cell</i> , 2008, 32, 641-651.	4.5	204
50	Downregulation of the Mitochondrial Calcium Uniporter by Cancer-Related miR-25. <i>Current Biology</i> , 2013, 23, 58-63.	1.8	198
51	The mitochondrial calcium uniporter regulates breast cancer progression via HIF-1 $\alpha$ . <i>EMBO Molecular Medicine</i> , 2016, 8, 569-585.	3.3	195
52	Regulation of mitochondrial metabolism by ER Ca <sup>2+</sup> release: an intimate connection. <i>Trends in Biochemical Sciences</i> , 2000, 25, 215-221.	3.7	192
53	Mitochondrial Ca <sup>2+</sup> uptake contributes to buffering cytoplasmic Ca <sup>2+</sup> peaks in cardiomyocytes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 12986-12991.	3.3	192
54	Dense core secretory vesicles revealed as a dynamic Ca <sup>2+</sup> -store in neuroendocrine cells with a vesicle-associated membrane protein aequorin chimera. <i>Journal of Cell Biology</i> , 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. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2007, 92, 4810-4819.	1.8	188
56	Looking forward to seeing calcium. <i>Nature Reviews Molecular Cell Biology</i> , 2003, 4, 579-586.	16.1	187
57	Ero1 $\beta$ Regulates Ca <sup>2+</sup> Fluxes at the Endoplasmic Reticulum-Mitochondria Interface (MAM). <i>Antioxidants and Redox Signaling</i> , 2012, 16, 1077-1087.	2.5	180
58	A Role for Calcium Influx in the Regulation of Mitochondrial Calcium in Endothelial Cells. <i>Journal of Biological Chemistry</i> , 1996, 271, 10753-10759.	1.6	173
59	The Mitochondrial Calcium Uniporter Controls Skeletal Muscle Trophism In Vivo. <i>Cell Reports</i> , 2015, 10, 1269-1279.	2.9	170
60	A calcium signaling defect in the pathogenesis of a mitochondrial DNA inherited oxidative phosphorylation deficiency. <i>Nature Medicine</i> , 1999, 5, 951-954.	15.2	154
61	Structure and function of the mitochondrial calcium uniporter complex. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2015, 1853, 2006-2011.	1.9	154
62	The m-AAA Protease Associated with Neurodegeneration Limits MCU Activity in Mitochondria. <i>Molecular Cell</i> , 2016, 64, 148-162.	4.5	153
63	Endoplasmic reticulum stress and alteration in calcium homeostasis are involved in cadmium-induced apoptosis. <i>Cell Calcium</i> , 2008, 43, 184-195.	1.1	151
64	Subcellular calcium measurements in mammalian cells using jellyfish photoprotein aequorin-based probes. <i>Nature Protocols</i> , 2013, 8, 2105-2118.	5.5	149
65	Bcl-2 and Bax modulate adenine nucleotide translocase activity. <i>Cancer Research</i> , 2003, 63, 541-6.	0.4	147
66	The Mitochondrial Ca <sup>2+</sup> Uniporter MCU Is Essential for Glucose-Induced ATP Increases in Pancreatic $\beta$ -Cells. <i>PLoS ONE</i> , 2012, 7, e39722.	1.1	146
67	MICU3 is a tissue-specific enhancer of mitochondrial calcium uptake. <i>Cell Death and Differentiation</i> , 2019, 26, 179-195.	5.0	145
68	Recombinant Expression of the Ca <sup>2+</sup> -sensitive Aspartate/Glutamate Carrier Increases Mitochondrial ATP Production in Agonist-stimulated Chinese Hamster Ovary Cells. <i>Journal of Biological Chemistry</i> , 2003, 278, 38686-38692.	1.6	138
69	Nuclear Poly(ADP-ribose) Polymerase-1 Rapidly Triggers Mitochondrial Dysfunction. <i>Journal of Biological Chemistry</i> , 2005, 280, 17227-17234.	1.6	134
70	The Mitochondrial Calcium Uniporter (MCU): Molecular Identity and Physiological Roles. <i>Journal of Biological Chemistry</i> , 2013, 288, 10750-10758.	1.6	131
71	<i>Helicobacter pylori</i> toxin VacA induces vacuole formation by acting in the cell cytosol. <i>Molecular Microbiology</i> , 1997, 26, 665-674.	1.2	128
72	Recombinant aequorin and green fluorescent protein as valuable tools in the study of cell signalling. <i>Biochemical Journal</i> , 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. <i>Molecular Biology of the Cell</i> , 2003, 14, 2655-2664.	0.9	124
74	Guidelines on experimental methods to assess mitochondrial dysfunction in cellular models of neurodegenerative diseases. <i>Cell Death and Differentiation</i> , 2018, 25, 542-572.	5.0	120
75	Mitochondrial calcium uptake in organ physiology: from molecular mechanism to animal models. <i>Pflugers Archiv European Journal of Physiology</i> , 2018, 470, 1165-1179.	1.3	119
76	Participation of endoplasmic reticulum and mitochondrial calcium handling in apoptosis: more than just neighborhood?. <i>FEBS Letters</i> , 2004, 567, 111-115.	1.3	118
77	The Coxsackievirus 2B Protein Suppresses Apoptotic Host Cell Responses by Manipulating Intracellular Ca <sup>2+</sup> Homeostasis. <i>Journal of Biological Chemistry</i> , 2004, 279, 18440-18450.	1.6	116
78	Calcium and mitochondria: mechanisms and functions of a troubled relationship. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2004, 1742, 119-131.	1.9	115
79	Crosstalk between Calcium and ROS in Pathophysiological Conditions. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-18.	1.9	115
80	Intracellular Ca <sup>2+</sup> pools in neuronal signalling. <i>Current Opinion in Neurobiology</i> , 2001, 11, 306-311.	2.0	111
81	Ca <sup>2+</sup> Homeostasis in the Endoplasmic Reticulum: Coexistence of High and Low [Ca <sup>2+</sup> ] Subcompartments in Intact HeLa Cells. <i>Journal of Cell Biology</i> , 1997, 139, 601-611.	2.3	110
82	Akt kinase reducing endoplasmic reticulum Ca <sup>2+</sup> release protects cells from Ca <sup>2+</sup> -dependent apoptotic stimuli. <i>Biochemical and Biophysical Research Communications</i> , 2008, 375, 501-505.	1.0	109
83	The versatility of mitochondrial calcium signals: From stimulation of cell metabolism to induction of cell death. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2008, 1777, 808-816.	0.5	106
84	Withdrawal of Essential Amino Acids Increases Autophagy by a Pathway Involving Ca <sup>2+</sup> /Calmodulin-dependent Kinase Kinase- $\beta^2$ (CaMKK- $\beta^2$ ). <i>Journal of Biological Chemistry</i> , 2012, 287, 38625-38636.	1.6	103
85	<sc>FATE</sc> 1 antagonizes calcium&and drug&induced apoptosis by uncoupling <sc>ER</sc> and mitochondria. <i>EMBO Reports</i> , 2016, 17, 1264-1280.	2.0	102
86	Controlling metabolism and cell death: At the heart of mitochondrial calcium signalling. <i>Journal of Molecular and Cellular Cardiology</i> , 2009, 46, 781-788.	0.9	101
87	Bcl-2 and Bax Exert Opposing Effects on Ca <sup>2+</sup> Signaling, Which Do Not Depend on Their Putative Pore-forming Region. <i>Journal of Biological Chemistry</i> , 2004, 279, 54581-54589.	1.6	98
88	Metformin Prevents Glucose-Induced Protein Kinase C- $\beta^2$ Activation in Human Umbilical Vein Endothelial Cells Through an Antioxidant Mechanism. <i>Diabetes</i> , 2005, 54, 1123-1131.	0.3	97
89	A MICU1 Splice Variant Confers High Sensitivity to the Mitochondrial Ca <sup>2+</sup> Uptake Machinery of Skeletal Muscle. <i>Molecular Cell</i> , 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. <i>Molecular and Cellular Endocrinology</i> , 2014, 383, 137-146.	1.6	96

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

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109	Frequency-dependent mitochondrial Ca <sup>2+</sup> accumulation regulates ATP synthesis in pancreatic $\hat{I}^2$ 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 Ca <sup>2+</sup> Uptake Through Pyk2-Dependent Tyrosine Phosphorylation of the Mitochondrial Ca <sup>2+</sup> 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 14-3-3 $\mu$ Protein with Isoform 4 of the Plasma Membrane Ca <sup>2+</sup> -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 Ca <sup>2+</sup> 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 Ca <sup>2+</sup> 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 Ca <sup>2+</sup> Oscillations Derived from a Non-endoplasmic Reticulum Ca <sup>2+</sup> 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 Ca <sup>2+</sup> 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 Ca <sup>2+</sup> deregulation. <i>Cell Calcium</i> , 2008, 43, 602-614.	1.1	37
146	The pore-forming subunit MCU of the mitochondrial Ca <sup>2+</sup> uniporter is required for normal glucose-stimulated insulin secretion in vitro and in vivo in mice. <i>Diabetologia</i> , 2020, 63, 1368-1381.	2.9	37
147	Effect of Ca <sup>2+</sup> , peroxides, SH reagents, phosphate and aging on the permeability of mitochondrial membranes. <i>FEBS Journal</i> , 1987, 162, 239-249.	0.2	36
148	The Mitochondrial Antioxidants MitoE <sub>2</sub> and MitoQ <sub>10</sub> Increase Mitochondrial Ca <sup>2+</sup> Load upon Cell Stimulation by Inhibiting Ca <sup>2+</sup> Efflux from the Organelle. <i>Annals of the New York Academy of Sciences</i> , 2008, 1147, 264-274.	1.8	36
149	Molecules and roles of mitochondrial calcium signaling. <i>BioFactors</i> , 2011, 37, 219-227.	2.6	34
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