Marisa Brini

List of Publications by Year
in descending order

122 papers	15,033 citations	36271 51 h-index	22808 112 g-index
126 all docs	126 docs citations	126 times ranked	23589 citing authors

#	Article	IF	Citations
1	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	4.3	4,701
2	Rapid changes of mitochondrial Ca2+ revealed by specifically targeted recombinant aequorin. Nature, 1992, 358, 325-327.	13.7	902
3	Transient and Long-Lasting Openings of the Mitochondrial Permeability Transition Pore Can Be Monitored Directly in Intact Cells by Changes in Mitochondrial Calcein Fluorescence. Biophysical Journal, 1999, 76, 725-734.	0.2	628
4	Calcium Pumps in Health and Disease. Physiological Reviews, 2009, 89, 1341-1378.	13.1	553
5	Neuronal calcium signaling: function and dysfunction. Cellular and Molecular Life Sciences, 2014, 71, 2787-2814.	2.4	501
6	Chimeric green fluorescent protein as a tool for visualizing subcellular organelles in living cells. Current Biology, 1995, 5, 635-642.	1.8	492
7	Generation, Control, and Processing of Cellular Calcium Signals. Critical Reviews in Biochemistry and Molecular Biology, 2001, 36, 107-260.	2.3	459
8	Transfected Aequorin in the Measurement of Cytosolic Ca2+ Concentration ([Ca2+]c). Journal of Biological Chemistry, 1995, 270, 9896-9903.	1.6	342
9	Î±-Synuclein Controls Mitochondrial Calcium Homeostasis by Enhancing Endoplasmic Reticulum-Mitochondria Interactions. Journal of Biological Chemistry, 2012, 287, 17914-17929.	1.6	256
10	Mitochondria, calcium and cell death: A deadly triad in neurodegeneration. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 335-344.	0.5	254
11	The Plasma Membrane Ca2+ ATPase and the Plasma Membrane Sodium Calcium Exchanger Cooperate in the Regulation of Cell Calcium. Cold Spring Harbor Perspectives in Biology, 2011, 3, a004168-a004168.	2.3	237
12	Double labelling of subcellular structures with organelle-targeted GFP mutants in vivo. Current Biology, 1996, 6, 183-188.	1.8	225
13	Enhanced parkin levels favor ER-mitochondria crosstalk and guarantee Ca2+ transfer to sustain cell bioenergetics. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2013, 1832, 495-508.	1.8	185
14	The Parkinson disease-related protein DJ-1 counteracts mitochondrial impairment induced by the tumour suppressor protein p53 by enhancing endoplasmic reticulum-mitochondria tethering. Human Molecular Genetics, 2013, 22, 2152-2168.	1.4	177
15	SPLICS: a split green fluorescent protein-based contact site sensor for narrow and wide heterotypic organelle juxtaposition. Cell Death and Differentiation, 2018, 25, 1131-1145.	5.0	174
16	Calcium Homeostasis and Mitochondrial Dysfunction in Striatal Neurons of Huntington Disease. Journal of Biological Chemistry, 2008, 283, 5780-5789.	1.6	168
17	Mitochondria as biosensors of calcium microdomains. Cell Calcium, 1999, 26, 193-200.	1.1	164
18	A calcium signaling defect in the pathogenesis of a mitochondrial DNA inherited oxidative phosphorylation deficiency. Nature Medicine, 1999, 5, 951-954.	15.2	154

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19	Regulation of ER-mitochondria contacts by Parkin via Mfn2. Pharmacological Research, 2018, 138, 43-56.	3.1	152
20	Calcium pumps: structural basis for and mechanism of calcium transmembrane transport. Current Opinion in Chemical Biology, 2000, 4, 152-161.	2.8	147
21	The plasma membrane calcium pump in health and disease. FEBS Journal, 2013, 280, 5385-5397.	2.2	139
22	A functional study of plasma-membrane calcium-pump isoform 2 mutants causing digenic deafness. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1516-1521.	3.3	116
23	Intracellular Calcium Homeostasis and Signaling. Metal Ions in Life Sciences, 2013, 12, 119-168.	2.8	116
24	Mutation of plasma membrane Ca ²⁺ ATPase isoform 3 in a family with X-linked congenital cerebellar ataxia impairs Ca ²⁺ homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14514-14519.	3.3	113
25	Mitochondrial Ca2+ and neurodegeneration. Cell Calcium, 2012, 52, 73-85.	1.1	110
26	PINK1/Parkin Mediated Mitophagy, Ca2+ Signalling, and ERâ€“Mitochondria Contacts in Parkinsonâ€™s Disease. International Journal of Molecular Sciences, 2020, 21, 1772.	1.8	105
27	Calcium in Health and Disease. Metal Ions in Life Sciences, 2013, 13, 81-137.	2.8	105
28	Mitochondria, calcium, and endoplasmic reticulum stress in Parkinson's disease. BioFactors, 2011, 37, 228-240.	2.6	101
29	Calcium signaling in Parkinsonâ€™s disease. Cell and Tissue Research, 2014, 357, 439-454.	1.5	100
30	The Close Encounter Between Alpha-Synuclein and Mitochondria. Frontiers in Neuroscience, 2018, 12, 388.	1.4	99
31	Ca2+ signalling in mitochondria: mechanism and role in physiology and pathology. Cell Calcium, 2003, 34, 399-405.	1.1	95
32	A Comparative Functional Analysis of Plasma Membrane Ca2+ Pump Isoforms in Intact Cells. Journal of Biological Chemistry, 2003, 278, 24500-24508.	1.6	90
33	Nuclear targeting of aequorin. Cell Calcium, 1994, 16, 259-268.	1.1	88
34	Alphaâ€synuclein aggregates activate calcium pump SERCA leading to calcium dysregulation. EMBO Reports, 2018, 19, .	2.0	88
35	Tau localises within mitochondrial sub-compartments and its caspase cleavage affects ER-mitochondria interactions and cellular Ca2+ handling. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 3247-3256.	1.8	88
36	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

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37	Targeted recombinant aequorins: Tools for monitoring [Ca2+] in the various compartments of a living cell. , 1999, 46, 380-389.		81
38	[30] Photoprotein-mediated measurement of calcium ion concentration in mitochondria of living cells. Methods in Enzymology, 1995, 260, 417-428.	0.4	77
39	Plasma membrane Ca2+-ATPase: from a housekeeping function to a versatile signaling role. Pflugers Archiv European Journal of Physiology, 2009, 457, 657-664.	1.3	73
40	The role of calcium in oligogalacturonide-activated signalling in soybean cells. Planta, 2002, 215, 596-605.	1.6	69
41	Targeting Recombinant Aequorin to Specific Intracellular Organelles. Methods in Cell Biology, 1994, 40, 339-358.	0.5	68
42	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
43	Doubleâ€stranded DNA can be translocated across a planar membrane containing purified mitochondrial porin. FASEB Journal, 1998, 12, 495-502.	0.2	62
44	Targeting aequorin and green fluorescent protein to intracellular organelles. Gene, 1996, 173, 113-117.	1.0	61
45	Ryanodine receptor defects in muscle genetic diseases. Biochemical and Biophysical Research Communications, 2004, 322, 1245-1255.	1.0	60
46	DNA Translocation Across Planar Bilayers Containing Bacillus subtilis Ion Channels. Journal of Biological Chemistry, 1997, 272, 25275-25282.	1.6	58
47	Ca2+ Signaling in HEK-293 and Skeletal Muscle Cells Expressing Recombinant Ryanodine Receptors Harboring Malignant Hyperthermia and Central Core Disease Mutations. Journal of Biological Chemistry, 2005, 280, 15380-15389.	1.6	58
48	Expression, partial purification and functional properties of themuscle-specific calpain isoform p94. FEBS Journal, 1999, 265, 839-846.	0.2	56
49	Calcium-sensitive photoproteins. Methods, 2008, 46, 160-166.	1.9	56
50	The Novel Mouse Mutation Oblivion Inactivates the PMCA2 Pump and Causes Progressive Hearing Loss. PLoS Genetics, 2008, 4, e1000238.	1.5	56
51	Impaired Mitochondrial ATP Production Downregulates Wnt Signaling via ER Stress Induction. Cell Reports, 2019, 28, 1949-1960.e6.	2.9	56
52	The Novel PMCA2 Pump Mutation Tommy Impairs Cytosolic Calcium Clearance in Hair Cells and Links to Deafness in Mice. Journal of Biological Chemistry, 2010, 285, 37693-37703.	1.6	53
53	Calcium and Endoplasmic Reticulum-Mitochondria Tethering in Neurodegeneration. DNA and Cell Biology, 2013, 32, 140-146.	0.9	53
54	Reduced mitochondrial Ca2+ transients stimulate autophagy in human fibroblasts carrying the 13514A>G mutation of the ND5 subunit of NADH dehydrogenase. Cell Death and Differentiation, 2016, 23, 231-241.	5.0	51

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55	NAD+ Levels Control Ca2+ Store Replenishment and Mitogen-induced Increase of Cytosolic Ca2+ by Cyclic ADP-ribose-dependent TRPM2 Channel Gating in Human T Lymphocytes. Journal of Biological Chemistry, 2012, 287, 21067-21081.	1.6	50
56	Alpha-synuclein at the intracellular and the extracellular side: functional and dysfunctional implications. Biological Chemistry, 2017, 398, 77-100.	1.2	50
57	Regulation of Cell Calcium and Role of Plasma Membrane Calcium ATPases. International Review of Cell and Molecular Biology, 2017, 332, 259-296.	1.6	49
58	Ca2+ handling at the mitochondria-ER contact sites in neurodegeneration. Cell Calcium, 2021, 98, 102453.	1.1	49
59	The plasma membrane calcium pumps: focus on the role in (neuro)pathology. Biochemical and Biophysical Research Communications, 2017, 483, 1116-1124.	1.0	44
60	New light on mitochondrial calcium. BioFactors, 1998, 8, 243-253.	2.6	43
61	An expanded palette of improved SPLICS reporters detects multiple organelle contacts in vitro and in vivo. Nature Communications, 2020, 11, 6069.	5.8	43
62	Chapter 5: Targeting GFP to Organelles. Methods in Cell Biology, 1998, 58, 75-85.	0.5	42
63	Emerging (and converging) pathways in Parkinson's disease: keeping mitochondrial wellness. Biochemical and Biophysical Research Communications, 2017, 483, 1020-1030.	1.0	42
64	A Novel Mutation in Isoform 3 of the Plasma Membrane Ca2+ Pump Impairs Cellular Ca2+ Homeostasis in a Patient with Cerebellar Ataxia and Laminin Subunit 1Î± Mutations. Journal of Biological Chemistry, 2015, 290, 16132-16141.	1.6	41
65	A new split-GFP-based probe reveals DJ-1 translocation into the mitochondrial matrix to sustain ATP synthesis upon nutrient deprivation. Human Molecular Genetics, 2015, 24, 1045-1060.	1.4	38
66	Mitochondrial Ca2+ as a Key Regulator of Mitochondrial Activities. Advances in Experimental Medicine and Biology, 2012, 942, 53-73.	0.8	36
67	Methods to Measure Intracellular Ca2+ Fluxes with Organelle-Targeted Aequorin-Based Probes. Methods in Enzymology, 2014, 543, 21-45.	0.4	35
68	Inhibitory interaction of the 14-3-3 proteins with ubiquitous (PMCA1) and tissue-specific (PMCA3) isoforms of the plasma membrane Ca2+ pump. Cell Calcium, 2008, 43, 550-561.	1.1	34
69	Calcium Pumps: Why So Many?. , 2012, 2, 1045-1060.		34
70	splitGFP Technology Reveals Dose-Dependent ER-Mitochondria Interface Modulation by Î±-Synuclein A53T and A30P Mutants. Cells, 2019, 8, 1072.	1.8	34
71	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
72	Plasma Membrane Ca2+-ATPase Overexpression Depletes Both Mitochondrial and Endoplasmic Reticulum Ca2+ Stores and Triggers Apoptosis in Insulin-secreting BRIN-BD11 Cells. Journal of Biological Chemistry, 2010, 285, 30634-30643.	1.6	33

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73	Mutations in PMCA2 and hereditary deafness: A molecular analysis of the pump defect. Cell Calcium, 2011, 50, 569-576.	1.1	31
74	Parkin-dependent regulation of the MCU complex component MICU1. Scientific Reports, 2018, 8, 14199.	1.6	31
75	ERâ€"Mitochondria Contact Sites Reporters: Strengths and Weaknesses of the Available Approaches. International Journal of Molecular Sciences, 2020, 21, 8157.	1.8	30
76	Quantification of organelle contact sites by split-GFP-based contact site sensors (SPLICS) in living cells. Nature Protocols, 2021, 16, 5287-5308.	5.5	30
77	Calcium, Dopamine and Neuronal Calcium Sensor 1: Their Contribution to Parkinsonâ€™s Disease. Frontiers in Molecular Neuroscience, 2019, 12, 55.	1.4	29
78	ER-Mitochondria Calcium Transfer, Organelle Contacts and Neurodegenerative Diseases. Advances in Experimental Medicine and Biology, 2020, 1131, 719-746.	0.8	29
79	The Prion Protein and Its Paralogue Doppel Affect Calcium Signaling in Chinese Hamster Ovary Cells. Molecular Biology of the Cell, 2005, 16, 2799-2808.	0.9	28
80	Functional Specificity of PMCA Isoforms?. Annals of the New York Academy of Sciences, 2007, 1099, 237-246.	1.8	28
81	Mitochondrial calcium signalling in cell death. FEBS Journal, 2005, 272, 4013-4022.	2.2	25
82	The ataxia related G1107D mutation of the plasma membrane Ca 2+ ATPase isoform 3 affects its interplay with calmodulin and the autoinhibition process. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 165-173.	1.8	25
83	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
84	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
85	Interplay of the Ca2+-binding Protein DREAM with Presenilin in Neuronal Ca2+ Signaling. Journal of Biological Chemistry, 2008, 283, 27494-27503.	1.6	23
86	The most conserved nuclear-encoded polypeptide of cytochrome c oxidase is the putative zinc-binding subunit: primary structure of subunit V from the slime mold Dictyostelium discoideum. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1991, 1129, 100-104.	2.4	22
87	Deletions and Mutations in the Acidic Lipid-binding Region of the Plasma Membrane Ca2+ Pump. Journal of Biological Chemistry, 2010, 285, 30779-30791.	1.6	22
88	The PMCA pumps in genetically determined neuronal pathologies. Neuroscience Letters, 2018, 663, 2-11.	1.0	21
89	Hair cells, plasma membrane Ca2+ ATPase and deafness. International Journal of Biochemistry and Cell Biology, 2012, 44, 679-683.	1.2	20
90	TAT-Mediated Aequorin Transduction: An Alternative Approach for Effective Calcium Measurements in Plant Cells. Plant and Cell Physiology, 2011, 52, 2225-2235.	1.5	17

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91	Spontaneous shaker rat mutant â€“ a new model for X-linked tremor-ataxia. DMM Disease Models and Mechanisms, 2016, 9, 553-62.	1.2	17
92	A novel PMCA3 mutation in an ataxic patient with hypomorphic phosphomannomutase 2 (PMM2) heterozygote mutations: Biochemical characterization of the pump defect. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 3303-3312.	1.8	17
93	Reduced Mid1 Expression and Delayed Neuromotor Development in daDREAM Transgenic Mice. Frontiers in Molecular Neuroscience, 2012, 5, 58.	1.4	15
94	A V1143F mutation in the neuronal-enriched isoform 2 of the PMCA pump is linked with ataxia. Neurobiology of Disease, 2018, 115, 157-166.	2.1	15
95	Recombinant Expression of the Plasma Membrane Na+/Ca2+ Exchanger Affects Local and Global Ca2+ Homeostasis in Chinese Hamster Ovary Cells. Journal of Biological Chemistry, 2002, 277, 38693-38699.	1.6	14
96	Inhibition of Ubiquitin Proteasome System Rescues the Defective Sarco(endo)plasmic Reticulum Ca2+-ATPase (SERCA1) Protein Causing Chianina Cattle Pseudomyotonia. Journal of Biological Chemistry, 2014, 289, 33073-33082.	1.6	14
97	A split-GFP tool reveals differences in the sub-mitochondrial distribution of wt and mutant alpha-synuclein. Cell Death and Disease, 2019, 10, 857.	2.7	14
98	Measurements of Ca2+ Concentration with Recombinant Targeted Luminescent Probes. Methods in Molecular Biology, 2013, 937, 273-291.	0.4	13
99	Ca2+-activated Nucleotidase 1, a Novel Target Gene for the Transcriptional Repressor DREAM (Downstream Regulatory Element Antagonist Modulator), Is Involved in Protein Folding and Degradation. Journal of Biological Chemistry, 2012, 287, 18478-18491.	1.6	12
100	Angiotensin II Promotes SARS-CoV-2 Infection via Upregulation of ACE2 in Human Bronchial Cells. International Journal of Molecular Sciences, 2022, 23, 5125.	1.8	11
101	Plasma-membrane calcium pumps and hereditary deafness. Biochemical Society Transactions, 2007, 35, 913-918.	1.6	10
102	Calcium Handling by Endoplasmic Reticulum and Mitochondria in a Cell Model of Huntingtonâ€™s Disease. PLOS Currents, 2016, 8, .	1.4	10
103	Cytosolic free calcium concentration in the mitogenic stimulation of T lymphocytes by anti-CD3 monoclonal antibodies. Cell Calcium, 1994, 16, 167-180.	1.1	9
104	Translocation of signalling proteins to the plasma membrane revealed by a new bioluminescent procedure. BMC Cell Biology, 2011, 12, 27.	3.0	9
105	Lipid-Mediated Modulation of Intracellular Ion Channels and Redox State: Physiopathological Implications. Antioxidants and Redox Signaling, 2018, 28, 949-972.	2.5	8
106	Monitoring calcium handling by the plant endoplasmic reticulum with a lowâ€Ca²⁺â€affinity targeted aequorin reporter. Plant Journal, 2022, 109, 1014-1027.	2.8	5
107	A Study of the Activity of the Plasma Membrane Na/Ca Exchanger in the Cellular Environment. Annals of the New York Academy of Sciences, 2002, 976, 376-381.	1.8	4
108	Structure of the promoter region of the gene encoding cytochrome c oxidase subunit V in Dictyostelium. FEBS Journal, 1993, 211, 411-414.	0.2	3

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109	Stable Integration of Inducible SPLICS Reporters Enables Spatio-Temporal Analysis of Multiple Organelle Contact Sites upon Modulation of Cholesterol Traffic. Cells, 2022, 11, 1643.	1.8	3
110	Bioluminescent Ca2+ Indicators. Neuromethods, 2010, , 81-100.	0.2	2
111	Mammalian Calcium Pumps in Health and Disease. , 2014, , 43-53.		2
112	Split Green Fluorescent Proteinâ€"Based Contact Site Sensor (SPLICS) for Heterotypic Organelle Juxtaposition as Applied to ERâ€"Mitochondria Proximities. Methods in Molecular Biology, 2021, 2275, 363-378.	0.4	2
113	The PLEKHA7â€"PDZD11 complex regulates the localization of the calcium pump PMCA and calcium handling in cultured cells. Journal of Biological Chemistry, 2022, 298, 102138.	1.6	2
114	Calcium Pumps. , 2010, , 943-947.		1
115	Mitochondrial Calcium Homeostasis and Implications for Human Health. Food and Nutritional Components in Focus, 2015, , 448-467.	0.1	1
116	Editorial. Neuroscience Letters, 2018, 663, 1.	1.0	0
117	Mammalian Calcium Pumps in Health and Disease. , 2018, , 49-59.		0
118	<i>Call for Papers:</i> Special Issue on Mitochondrial DNA in Health and Disease. DNA and Cell Biology, 2019, 38, 1167-1168.	0.9	0
119	Play Around with mtDNA. DNA and Cell Biology, 2020, 39, 1369-1369.	0.9	0
120	Membrane Transport | Plasma Membrane Calcium Pump: Structure and Function. , 2021, , 1063-1069.		0
121	Measuring Ca2+ in the Nucleoplasm of Intact Cells. , 2001, , 105-130.		0
122	The Plasma Membrane Ca2+ ATPases: Isoform Specificity and Functional Versatility. , 2016, , 13-26.		0