Marisa Brini

List of Publications by Citations

119 papers	12,246 citations	48 h-index	110 g-index
126 ext. papers	13,785 ext. citations	6.6 avg, IF	6.09 L-index

#	Paper	IF	Citations
119	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*, **2016**, 12, 1-222	10.2	3838
118	Rapid changes of mitochondrial Ca2+ revealed by specifically targeted recombinant aequorin. *Nature*, **1992**, 358, 325-7	50.4	839
117	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, 725-34	2.9	584
116	Calcium pumps in health and disease. *Physiological Reviews*, **2009**, 89, 1341-78	47.9	458
115	Chimeric green fluorescent protein as a tool for visualizing subcellular organelles in living cells. *Current Biology*, **1995**, 5, 635-42	6.3	439
114	Generation, control, and processing of cellular calcium signals. *Critical Reviews in Biochemistry and Molecular Biology*, **2001**, 36, 107-260	8.7	392
113	Transfected aequorin in the measurement of cytosolic Ca2+ concentration ([Ca2+]c). A critical evaluation. *Journal of Biological Chemistry*, **1995**, 270, 9896-903	5.4	313
112	Neuronal calcium signaling: function and dysfunction. *Cellular and Molecular Life Sciences*, **2014**, 71, 2787-814	8.3	298
111	Double labelling of subcellular structures with organelle-targeted GFP mutants in vivo. *Current Biology*, **1996**, 6, 183-8	6.3	214
110	Synuclein controls mitochondrial calcium homeostasis by enhancing endoplasmic reticulum-mitochondria interactions. *Journal of Biological Chemistry*, **2012**, 287, 17914-29	5.4	210
109	Mitochondria, calcium and cell death: a deadly triad in neurodegeneration. *Biochimica Et Biophysica Acta - Bioenergetics*, **2009**, 1787, 335-44	4.6	206
108	The plasma membrane Ca+ ATPase and the plasma membrane sodium calcium exchanger cooperate in the regulation of cell calcium. *Cold Spring Harbor Perspectives in Biology*, **2011**, 3,	10.2	167
107	Enhanced parkin levels favor ER-mitochondria crosstalk and guarantee Ca(2+) transfer to sustain cell bioenergetics. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2013**, 1832, 495-508	6.9	155
106	Mitochondria as biosensors of calcium microdomains. *Cell Calcium*, **1999**, 26, 193-9	4	151
105	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, 2152-68	5.6	149
104	Calcium homeostasis and mitochondrial dysfunction in striatal neurons of Huntington disease. *Journal of Biological Chemistry*, **2008**, 283, 5780-9	5.4	144
103	A calcium signaling defect in the pathogenesis of a mitochondrial DNA inherited oxidative phosphorylation deficiency. *Nature Medicine*, **1999**, 5, 951-4	50.5	135

102	Calcium pumps: structural basis for and mechanism of calcium transmembrane transport. *Current Opinion in Chemical Biology*, **2000**, 4, 152-61	9.7	130
101	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	12.7	108
100	The plasma membrane calcium pump in health and disease. *FEBS Journal*, **2013**, 280, 5385-97	5.7	107
99	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, 1516-21	11.5	104
98	Regulation of ER-mitochondria contacts by Parkin via Mfn2. *Pharmacological Research*, **2018**, 138, 43-56	10.2	97
97	Mutation of plasma membrane Ca2+ ATPase isoform 3 in a family with X-linked congenital cerebellar ataxia impairs Ca2+ homeostasis. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 14514-9	11.5	93
96	Mitochondrial Ca(2+) and neurodegeneration. *Cell Calcium*, **2012**, 52, 73-85	4	92
95	Mitochondria, calcium, and endoplasmic reticulum stress in Parkinson's disease. *BioFactors*, **2011**, 37, 228-40	6.1	87
94	Ca(2+) signalling in mitochondria: mechanism and role in physiology and pathology. *Cell Calcium*, **2003**, 34, 399-405	4	86
93	A comparative functional analysis of plasma membrane Ca2+ pump isoforms in intact cells. *Journal of Biological Chemistry*, **2003**, 278, 24500-8	5.4	86
92	Nuclear targeting of aequorin. A new approach for measuring nuclear Ca2+ concentration in intact cells. *Cell Calcium*, **1994**, 16, 259-68	4	86
91	SERCA1 truncated proteins unable to pump calcium reduce the endoplasmic reticulum calcium concentration and induce apoptosis. *Journal of Cell Biology*, **2001**, 153, 1301-14	7.3	76
90	Calcium signaling in Parkinson's disease. *Cell and Tissue Research*, **2014**, 357, 439-54	4.2	75
89	Calcium in health and disease. *Metal Ions in Life Sciences*, **2013**, 13, 81-137	2.6	75
88	Intracellular calcium homeostasis and signaling. *Metal Ions in Life Sciences*, **2013**, 12, 119-68	2.6	73
87	Photoprotein-mediated measurement of calcium ion concentration in mitochondria of living cells. *Methods in Enzymology*, **1995**, 260, 417-28	1.7	73
86	Targeted recombinant aequorins: tools for monitoring [Ca2+] in the various compartments of a living cell. *Microscopy Research and Technique*, **1999**, 46, 380-9	2.8	66
85	The Close Encounter Between Alpha-Synuclein and Mitochondria. *Frontiers in Neuroscience*, **2018**, 12, 388	5.1	64

84	The role of calcium in oligogalacturonide-activated signalling in soybean cells. *Planta*, **2002**, 215, 596-605	4.7	64
83	Targeting recombinant aequorin to specific intracellular organelles. *Methods in Cell Biology*, **1994**, 40, 339-58	1.8	63
82	Plasma membrane Ca(2+)-ATPase: from a housekeeping function to a versatile signaling role. *Pflugers Archiv European Journal of Physiology*, **2009**, 457, 657-64	4.6	59
81	Double-stranded DNA can be translocated across a planar membrane containing purified mitochondrial porin. *FASEB Journal*, **1998**, 12, 495-502	0.9	59
80	Tau localises within mitochondrial sub-compartments and its caspase cleavage affects ER-mitochondria interactions and cellular Ca handling. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2018**, 1864, 3247-3256	6.9	58
79	Inhibitory interaction of the 14-3-3{epsilon} protein with isoform 4 of the plasma membrane Ca(2+)-ATPase pump. *Journal of Biological Chemistry*, **2005**, 280, 37195-203	5.4	58
78	DNA translocation across planar bilayers containing Bacillus subtilis ion channels. *Journal of Biological Chemistry*, **1997**, 272, 25275-82	5.4	55
77	Targeting aequorin and green fluorescent protein to intracellular organelles. *Gene*, **1996**, 173, 113-7	3.8	54
76	The novel mouse mutation Oblivion inactivates the PMCA2 pump and causes progressive hearing loss. *PLoS Genetics*, **2008**, 4, e1000238	6	53
75	Expression, partial purification and functional properties of themuscle-specific calpain isoform p94. *FEBS Journal*, **1999**, 265, 839-46		52
74	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, 37693-703	5.4	51
73	Ryanodine receptor defects in muscle genetic diseases. *Biochemical and Biophysical Research Communications*, **2004**, 322, 1245-55	3.4	51
72	Calcium-sensitive photoproteins. *Methods*, **2008**, 46, 160-6	4.6	49
71	Alpha-synuclein aggregates activate calcium pump SERCA leading to calcium dysregulation. *EMBO Reports*, **2018**, 19,	6.5	48
70	New light on mitochondrial calcium. *BioFactors*, **1998**, 8, 243-53	6.1	41
69	Calcium and endoplasmic reticulum-mitochondria tethering in neurodegeneration. *DNA and Cell Biology*, **2013**, 32, 140-6	3.6	40
68	Reduced mitochondrial Ca(2+) transients stimulate autophagy in human fibroblasts carrying the 13514A>G mutation of the ND5 subunit of NADH dehydrogenase. *Cell Death and Differentiation*, **2016**, 23, 231-41	12.7	39
67	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, 21067-81	5.4	39

66	PINK1/Parkin Mediated Mitophagy, Ca Signalling, and ER-Mitochondria Contacts in Parkinson Disease. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	38
65	Impaired Mitochondrial ATP Production Downregulates Wnt Signaling via ER Stress Induction. *Cell Reports*, **2019**, 28, 1949-1960.e6	10.6	38
64	Targeting GFP to organelles. *Methods in Cell Biology*, **1999**, 58, 75-85	1.8	38
63	Alpha-synuclein at the intracellular and the extracellular side: functional and dysfunctional implications. *Biological Chemistry*, **2017**, 398, 77-100	4.5	37
62	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, 15380-9	5.4	37
61	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 1 Mutations. *Journal of Biological Chemistry*, **2015**, 290, 16132-41	5.4	35
60	The plasma membrane calcium pumps: focus on the role in (neuro)pathology. *Biochemical and Biophysical Research Communications*, **2017**, 483, 1116-1124	3.4	35
59	Emerging (and converging) pathways in Parkinson disease: keeping mitochondrial wellness. *Biochemical and Biophysical Research Communications*, **2017**, 483, 1020-1030	3.4	33
58	Regulation of Cell Calcium and Role of Plasma Membrane Calcium ATPases. *International Review of Cell and Molecular Biology*, **2017**, 332, 259-296	6	32
57	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, 1045-60	5.6	31
56	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, 550-61	4	30
55	Gene transfer into satellite cell from regenerating muscle: bupivacaine allows beta-Gal transfection and expression in vitro and in vivo. *In Vitro Cellular and Developmental Biology - Animal*, **1994**, 30A, 131-3	2.6	30
54	Calcium pumps: why so many?. *Comprehensive Physiology*, **2012**, 2, 1045-60	7.7	28
53	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, 30634-43	5.4	27
52	The prion protein and its paralogue Doppel affect calcium signaling in Chinese hamster ovary cells. *Molecular Biology of the Cell*, **2005**, 16, 2799-808	3.5	27
51	Mitochondrial Ca(2+) as a key regulator of mitochondrial activities. *Advances in Experimental Medicine and Biology*, **2012**, 942, 53-73	3.6	26
50	Mutations in PMCA2 and hereditary deafness: a molecular analysis of the pump defect. *Cell Calcium* , **2011**, 50, 569-76	4	25
49	Functional specificity of PMCA isoforms?. *Annals of the New York Academy of Sciences*, **2007**, 1099, 237-46	6.5	25

48	Methods to measure intracellular Ca(2+) fluxes with organelle-targeted aequorin-based probes. *Methods in Enzymology*, **2014**, 543, 21-45	1.7	24
47	splitGFP Technology Reveals Dose-Dependent ER-Mitochondria Interface Modulation by Synuclein A53T and A30P Mutants. *Cells*, **2019**, 8,	7.9	23
46	Mitochondrial calcium signalling in cell death. *FEBS Journal*, **2005**, 272, 4013-22	5.7	23
45	Interplay of the Ca2+-binding protein DREAM with presenilin in neuronal Ca2+ signaling. *Journal of Biological Chemistry*, **2008**, 283, 27494-27503	5.4	21
44	Inhibitory interaction of the plasma membrane Na+/Ca2+ exchangers with the 14-3-3 proteins. *Journal of Biological Chemistry*, **2006**, 281, 19645-54	5.4	21
43	Hair cells, plasma membrane Ca+ ATPase and deafness. *International Journal of Biochemistry and Cell Biology*, **2012**, 44, 679-83	5.6	20
42	Intracellular targeting of the photoprotein aequorin: A new approach for measuring, in living cells, Ca(2+) concentrations in defined cellular compartments. *Cytotechnology*, **1993**, 11, S44-6	2.2	20
41	Deletions and mutations in the acidic lipid-binding region of the plasma membrane Ca2+ pump: a study on different splicing variants of isoform 2. *Journal of Biological Chemistry*, **2010**, 285, 30779-91	5.4	19
40	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, 100-4		17
39	ER-Mitochondria Calcium Transfer, Organelle Contacts and Neurodegenerative Diseases. *Advances in Experimental Medicine and Biology*, **2020**, 1131, 719-746	3.6	17
38	Parkin-dependent regulation of the MCU complex component MICU1. *Scientific Reports*, **2018**, 8, 14199	4.9	17
37	The ataxia related G1107D mutation of the plasma membrane Ca ATPase isoform 3 affects its interplay with calmodulin and the autoinhibition process. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2017**, 1863, 165-173	6.9	16
36	Calcium, Dopamine and Neuronal Calcium Sensor 1: Their Contribution to Parkinson Disease. *Frontiers in Molecular Neuroscience*, **2019**, 12, 55	6.1	14
35	TAT-mediated aequorin transduction: an alternative approach for effective calcium measurements in plant cells. *Plant and Cell Physiology*, **2011**, 52, 2225-35	4.9	14
34	Spontaneous shaker rat mutant - a new model for X-linked tremor/ataxia. *DMM Disease Models and Mechanisms*, **2016**, 9, 553-62	4.1	14
33	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	6.9	13
32	Recombinant expression of the plasma membrane Na(+)/Ca(2+) exchanger affects local and global Ca(2+) homeostasis in Chinese hamster ovary cells. *Journal of Biological Chemistry*, **2002**, 277, 38693-9	5.4	13
31	An expanded palette of improved SPLICS reporters detects multiple organelle contacts in vitro and in vivo. *Nature Communications*, **2020**, 11, 6069	17.4	13

30	The PMCA pumps in genetically determined neuronal pathologies. *Neuroscience Letters*, **2018**, 663, 2-11	3.3	12
29	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, 33073-82	5.4	12
28	Measurements of Ca□+ concentration with recombinant targeted luminescent probes. *Methods in Molecular Biology*, **2013**, 937, 273-91	1.4	12
27	ER-Mitochondria Contact Sites Reporters: Strengths and Weaknesses of the Available Approaches. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	10
26	A V1143F mutation in the neuronal-enriched isoform 2 of the PMCA pump is linked with ataxia. *Neurobiology of Disease*, **2018**, 115, 157-166	7.5	10
25	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, 18478-91	5.4	10
24	Translocation of signalling proteins to the plasma membrane revealed by a new bioluminescent procedure. *BMC Cell Biology*, **2011**, 12, 27		9
23	Plasma-membrane calcium pumps and hereditary deafness. *Biochemical Society Transactions*, **2007**, 35, 913-8	5.1	9
22	A split-GFP tool reveals differences in the sub-mitochondrial distribution of wt and mutant alpha-synuclein. *Cell Death and Disease*, **2019**, 10, 857	9.8	8
21	Cytosolic free calcium concentration in the mitogenic stimulation of T lymphocytes by anti-CD3 monoclonal antibodies. *Cell Calcium*, **1994**, 16, 167-80	4	8
20	Ca handling at the mitochondria-ER contact sites in neurodegeneration. *Cell Calcium*, **2021**, 98, 102453	4	8
19	Lipid-Mediated Modulation of Intracellular Ion Channels and Redox State: Physiopathological Implications. *Antioxidants and Redox Signaling*, **2018**, 28, 949-972	8.4	7
18	Reduced Mid1 Expression and Delayed Neuromotor Development in daDREAM Transgenic Mice. *Frontiers in Molecular Neuroscience*, **2012**, 5, 58	6.1	7
17	Calcium Handling by Endoplasmic Reticulum and Mitochondria in a Cell Model of Huntington Disease. *PLOS Currents*, **2016**, 8,		7
16	Quantification of organelle contact sites by split-GFP-based contact site sensors (SPLICS) in living cells. *Nature Protocols*, **2021**, 16, 5287-5308	18.8	5
15	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, 376-81	6.5	4
14	Structure of the promoter region of the gene encoding cytochrome c oxidase subunit V in Dictyostelium. *FEBS Journal*, **1993**, 211, 411-4		3
13	Mammalian Calcium Pumps in Health and Disease **2014**, 43-53		2

12	Bioluminescent Ca2+ Indicators. *Neuromethods*, **2010**, 81-100	0.4	2
11	Calcium Pumps **2010**, 943-947		1
10	Plasma Membrane Calcium Pumps **2004**, 211-233		1
9	CHAPTER 27. Mitochondrial Calcium Homeostasis and Implications for Human Health. *Food and Nutritional Components in Focus*,448-467		1
8	Split Green Fluorescent Protein-Based Contact Site Sensor (SPLICS) for Heterotypic Organelle Juxtaposition as Applied to ER -Mitochondria Proximities. *Methods in Molecular Biology*, **2021**, 2275, 363-378	1.4	1
7	Calcium Signaling1		1
6	Special Issue on Mitochondrial DNA in Health and Disease. *DNA and Cell Biology*, **2019**, 38, 1167-1168	3.6	
5	Measuring Ca2+ in the Nucleoplasm of Intact Cells **2001**, 105-130		
4	The Plasma Membrane Ca2+ ATPases: Isoform Specificity and Functional Versatility **2016**, 13-26		
3	Membrane Transport | Plasma Membrane Calcium Pump: Structure and Function **2021**, 1063-1069		
2	Mammalian Calcium Pumps in Health and Disease **2018**, 49-59		
1	Stable Integration of Inducible SPLICS Reporters Enables Spatio-Temporal Analysis of Multiple Organelle Contact Sites upon Modulation of Cholesterol Traffic. *Cells*, **2022**, 11, 1643	7.9	