Peter Vangheluwe

List of Publications by Year in descending order

79 papers	3,275 citations	109264 35 h-index	168321 53 g-index
81 all docs	81 docs citations	81 times ranked	4775 citing authors

#	Article	IF	Citations
1	The alkalinizing, lysosomotropic agent ML-9 induces a pH-dependent depletion of ER Ca2+ stores in cellulo. Biochimica Et Biophysica Acta - Molecular Cell Research, 2022, 1869, 119308.	1.9	1
2	Increased superoxide in GCH1 mutant fibroblasts points to a dopamine-independent toxicity mechanism. Parkinsonism and Related Disorders, 2021, 82, 10-12.	1.1	2
3	ATP13A3 is a major component of the enigmatic mammalian polyamine transport system. Journal of Biological Chemistry, 2021, 296, 100182.	1.6	48
4	The endoplasmic reticulum Ca²⁺â€<scp>ATPase SERCA2b</scp> is upregulated in activated microglia and its inhibition causes opposite effects on migration and phagocytosis. Glia, 2021, 69, 842-857.	2.5	10
5	ATP13A2 Regulates Cellular Î±-Synuclein Multimerization, Membrane Association, and Externalization. International Journal of Molecular Sciences, 2021, 22, 2689.	1.8	16
6	BNIP3 promotes HIFâ€1Î±â€driven melanoma growth by curbing intracellular iron homeostasis. EMBO Journal, 2021, 40, e106214.	3.5	38
7	The lysosome as a master regulator of iron metabolism. Trends in Biochemical Sciences, 2021, 46, 960-975.	3.7	79
8	Polyamine Transport Assay Using Reconstituted Yeast Membranes. Bio-protocol, 2021, 11, e3888.	0.2	1
9	LRRK2 mutations impair depolarization-induced mitophagy through inhibition of mitochondrial accumulation of RAB10. Autophagy, 2020, 16, 203-222.	4.3	124
10	Primary Active Ca²⁺ Transport Systems in Health and Disease. Cold Spring Harbor Perspectives in Biology, 2020, 12, a035113.	2.3	55
11	ATP13A2-mediated endo-lysosomal polyamine export counters mitochondrial oxidative stress. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31198-31207.	3.3	57
12	Necroptosis in Immuno-Oncology and Cancer Immunotherapy. Cells, 2020, 9, 1823.	1.8	109
13	Mutated ATP10B increases Parkinsonâ€™s disease risk by compromising lysosomal glucosylceramide export. Acta Neuropathologica, 2020, 139, 1001-1024.	3.9	46
14	CHCHD2 harboring Parkinsonâ€™s disease-linked T61I mutation precipitates inside mitochondria and induces precipitation of wild-type CHCHD2. Human Molecular Genetics, 2020, 29, 1096-1106.	1.4	20
15	ATP13A2 deficiency disrupts lysosomal polyamine export. Nature, 2020, 578, 419-424.	13.7	193
16	Contractile Behavior of Mouse Aorta Depends on SERCA2 Isoform Distribution: Effects of Replacing SERCA2a by SERCA2b. Frontiers in Physiology, 2020, 11, 282.	1.3	5
17	Protein truncating mutations in ATP13A3 promote pulmonary arterial hypertension. , 2020, , .		0
18	Dimethyl fumarate alters intracellular Ca2+ handling in immune cells by redox-mediated pleiotropic effects. Free Radical Biology and Medicine, 2019, 141, 338-347.	1.3	18

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19	An N-terminal Ca2+-binding motif regulates the secretory pathway Ca2+/Mn2+-transport ATPase SPCA1. Journal of Biological Chemistry, 2019, 294, 7878-7891.	1.6	14
20	Structures of the heart specific <scp>SERCA</scp> 2a Ca ²⁺ â€•<scp>ATP</scp> ase. EMBO Journal, 2019, 38, .	3.5	37
21	Role of SIRT1 in Modulating Acetylation of the Sarco-Endoplasmic Reticulum Ca ²⁺ -ATPase in Heart Failure. Circulation Research, 2019, 124, e63-e80.	2.0	84
22	A Darier disease mutation relieves kinetic constraints imposed by the tail of sarco(endo)plasmic reticulum Ca2+-ATPase 2b. Journal of Biological Chemistry, 2018, 293, 3880-3889.	1.6	7
23	Store-independent coupling between the Secretory Pathway Ca2+ transport ATPase SPCA1 and Orai1 in Golgi stress and Hailey-Hailey disease. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 855-862.	1.9	23
24	Extracellular and ER-stored Ca2+ contribute to BIRD-2-induced cell death in diffuse large B-cell lymphomaÂcells. Cell Death Discovery, 2018, 4, 101.	2.0	8
25	Negative chronotropism, positive inotropism and lusitropism of 3,5-di-t-butyl-4-hydroxyanisole (DTBHA) on rat heart preparations occur through reduction of RyR2 Ca2+ leak. Biochemical Pharmacology, 2018, 155, 434-443.	2.0	9
26	Parkinson disease related ATP13A2 evolved early in animal evolution. PLoS ONE, 2018, 13, e0193228.	1.1	47
27	A novel approach to analyze lysosomal dysfunctions through subcellular proteomics and lipidomics: the case of NPC1 deficiency. Scientific Reports, 2017, 7, 41408.	1.6	93
28	Structure/activity relationship of thapsigargin inhibition on the purified Golgi/secretory pathway Ca2+/Mn2+-transport ATPase (SPCA1a). Journal of Biological Chemistry, 2017, 292, 6938-6951.	1.6	20
29	DPB162-AE, an inhibitor of store-operated Ca2+ entry, can deplete the endoplasmic reticulum Ca2+ store. Cell Calcium, 2017, 62, 60-70.	1.1	21
30	Loss-of-function mutations in theATP13A2/PARK9 gene cause complicated hereditary spastic paraplegia (SPG78). Brain, 2017, 140, 287-305.	3.7	135
31	ATP13A2/PARK9 regulates endo-/lysosomal cargo sorting and proteostasis through a novel PI(3,) Tj ETQq1 1 0.784314 rgBT /Overlock	1.4	48
32	An autophagy-driven pathway of ATP secretion supports the aggressive phenotype of BRAF^{V600E} inhibitor-resistant metastatic melanoma cells. Autophagy, 2017, 13, 1512-1527.	4.3	70
33	SPCA2 couples Ca 2+ influx via Orai1 to Ca 2+ uptake into the Golgi/secretory pathway. Tissue and Cell, 2017, 49, 141-149.	1.0	28
34	Protection against Mitochondrial and Metal Toxicity Depends on Functional Lipid Binding Sites in ATP13A2. Parkinson's Disease, 2016, 2016, 1-11.	0.6	18
35	Regulation of Ca2+ Transport ATPases by Amino- and Carboxy-Terminal Extensions: Mechanisms and (Patho)Physiological Implications. , 2016, , 243-279.		1
36	Time-Dependent Protein Thermostability Assay. Methods in Molecular Biology, 2016, 1377, 79-85.	0.4	1

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37	Unlocking ATP13A2/PARK9 activity. Cell Cycle, 2015, 14, 3341-3342.	1.3	11
38	A lipid switch unlocks Parkinsonâ€™s disease-associated ATP13A2. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9040-9045.	3.3	87
39	The Ca2+-activated cation channel TRPM4 is a negative regulator of angiotensin II-induced cardiac hypertrophy. Basic Research in Cardiology, 2015, 110, 43.	2.5	55
40	Towards defining the substrate of orphan P5A-ATPases. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 524-535.	1.1	40
41	Cellular function and pathological role of ATP13A2 and related P-type transport ATPases in Parkinson's disease and other neurological disorders. Frontiers in Molecular Neuroscience, 2014, 7, 48.	1.4	68
42	Measuring Ca2+ Pump Activity in Overexpression Systems and Cardiac Muscle Preparations. Cold Spring Harbor Protocols, 2014, 2014, pdb.top066134-pdb.top066134.	0.2	4
43	High-Throughput Measurement of the Ca²⁺-Dependent ATPase Activity in COS Microsomes. Cold Spring Harbor Protocols, 2014, 2014, pdb.prot076885.	0.2	8
44	Measuring Ca²⁺-Dependent Ca²⁺-Uptake Activity in the Mouse Heart. Cold Spring Harbor Protocols, 2014, 2014, pdb.prot076893.	0.2	4
45	Structure/Function Analysis of the Ubiquitous Secretory Pathway Ca2+ Pump SPCA1a. Biophysical Journal, 2014, 106, 586a.	0.2	0
46	Regulation of endoplasmic reticulum Ca2+ oscillations in mammalian eggs. Development (Cambridge), 2014, 141, e207-e207.	1.2	0
47	Regulation of endoplasmic reticulum Ca2+ oscillations in mammalian eggs. Journal of Cell Science, 2013, 126, 5714-24.	1.2	64
48	Sarco(endo)plasmic Reticulum Calcium ATPase (SERCA) Inhibition by Sarcolipin Is Encoded in Its Luminal Tail. Journal of Biological Chemistry, 2013, 288, 8456-8467.	1.6	64
49	Phospholamban ablation in hearts expressing the high affinity SERCA2b isoform normalizes global Ca²⁺ homeostasis but not Ca²⁺-dependent hypertrophic signaling. American Journal of Physiology - Heart and Circulatory Physiology, 2012, 302, H2574-H2582.	1.5	11
50	Ca2+ Induces Spontaneous Dephosphorylation of a Novel P5A-type ATPase. Journal of Biological Chemistry, 2012, 287, 28336-28348.	1.6	17
51	Transmembrane Helix 11 Is a Genuine Regulator of the Endoplasmic Reticulum Ca2+ Pump and Acts as a Functional Parallel of Î²-Subunit on Î±-Na+,K+-ATPase. Journal of Biological Chemistry, 2012, 287, 19876-19885.	1.6	18
52	Distinct Roles of the C-terminal 11th Transmembrane Helix and Luminal Extension in the Partial Reactions Determining the High Ca2+ Affinity of Sarco(endo)plasmic Reticulum Ca2+-ATPase Isoform 2b (SERCA2b). Journal of Biological Chemistry, 2012, 287, 39460-39469.	1.6	17
53	Evaluation of manganese uptake and toxicity in mouse brain during continuous MnCl₂ administration using osmotic pumps. Contrast Media and Molecular Imaging, 2012, 7, 426-434.	0.4	44
54	Modeling Ca2+ Dynamics of Mouse Cardiac Cells Points to a Critical Role of SERCA's Affinity for Ca2+. Biophysical Journal, 2011, 100, 1216-1225.	0.2	12

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55	The Ca2+ Pumps of the Endoplasmic Reticulum and Golgi Apparatus. Cold Spring Harbor Perspectives in Biology, 2011, 3, a004184-a004184.	2.3	173
56	Thapsigargin affinity purification of intracellular P2A-type Ca2+ ATPases. Biochimica Et Biophysica Acta - Molecular Cell Research, 2011, 1813, 1118-1127.	1.9	11
57	Improving cardiac Ca2+ transport into the sarcoplasmic reticulum in heart failure: lessons from the ubiquitous SERCA2b Ca2+ pump. Biochemical Society Transactions, 2011, 39, 781-787.	1.6	10
58	Targeting Sarcoplasmic Reticulum Ca ²⁺ Uptake to Improve Heart Failure. Circulation Research, 2010, 106, 230-233.	2.0	15
59	The secretory pathway Ca2+-ATPase 1 is associated with cholesterol-rich microdomains of human colon adenocarcinoma cells. Biochimica Et Biophysica Acta - Biomembranes, 2010, 1798, 1512-1521.	1.4	30
60	Structural basis for the high Ca ²⁺ affinity of the ubiquitous SERCA2b Ca ²⁺ pump. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18533-18538.	3.3	67
61	Foodâ€restriction in obese dyslipidaemic diabetic mice partially restores basal contractility but not contractile reserve. European Journal of Heart Failure, 2009, 11, 1118-1125.	2.9	10
62	Factors controlling the activity of the SERCA2a pump in the normal and failing heart. BioFactors, 2009, 35, 484-499.	2.6	40
63	Intracellular Ca²⁺- and Mn²⁺-Transport ATPases. Chemical Reviews, 2009, 109, 4733-4759.	23.0	79
64	Sarcoplasmic reticulum calcium uptake and speed of relaxation are depressed in nebulinâ€free skeletal muscle. FASEB Journal, 2008, 22, 2912-2919.	0.2	54
65	Dyslipidaemia in type II diabetic mice does not aggravate contractile impairment but increases ventricular stiffness. Cardiovascular Research, 2008, 77, 371-379.	1.8	66
66	Cardiomyocyte Overexpression of Neuronal Nitric Oxide Synthase Delays Transition Toward Heart Failure in Response to Pressure Overload by Preserving Calcium Cycling. Circulation, 2008, 117, 3187-3198.	1.6	73
67	Food-restriction in OB/OB mice restores sarcoplasmic reticulum Ca2+ uptake, but not in vivo Î²-adrenergic responsiveness. Journal of Molecular and Cellular Cardiology, 2007, 42, S25-S26.	0.9	0
68	The expression of the neonatal sarcoplasmic reticulum Ca2+ pump (SERCA1b) hints to a role in muscle growth and development. Cell Calcium, 2007, 41, 379-388.	1.1	26
69	Tight interplay between the Ca2+ affinity of the cardiac SERCA2 Ca2+ pump and the SERCA2 expression level. Cell Calcium, 2007, 42, 281-289.	1.1	15
70	Increased phospholamban phosphorylation limits theÂforceâ€“frequency response inÂtheÂMLPâ€“/â€“ mouse with heart failure. Journal of Molecular and Cellular Cardiology, 2006, 40, 350-360.	0.9	18
71	Altered phosphorylation status of phospholamban and its contribution to the contractile dysfunction in mouse models of type II diabetes. Journal of Molecular and Cellular Cardiology, 2006, 40, 925-926.	0.9	1
72	A SERCA2 pump with an increased Ca2+ affinity can lead to severe cardiac hypertrophy, stress intolerance and reduced life span. Journal of Molecular and Cellular Cardiology, 2006, 41, 308-317.	0.9	54

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73	New perspectives on the role of SERCA2's Ca2+ affinity in cardiac function. Biochimica Et Biophysica Acta - Molecular Cell Research, 2006, 1763, 1216-1228.	1.9	56
74	Sarcolipin and phospholamban mRNA and protein expression in cardiac and skeletal muscle of different species. Biochemical Journal, 2005, 389, 151-159.	1.7	121
75	Modulating sarco(endo)plasmic reticulum Ca2+ ATPase 2 (SERCA2) activity: Cell biological implications. Cell Calcium, 2005, 38, 291-302.	1.1	177
76	Ca2+ transport ATPase isoforms SERCA2a and SERCA2b are targeted to the same sites in the murine heart. Cell Calcium, 2003, 34, 457-464.	1.1	39
77	Ca 2+ Uptake by the Sarcoplasmic Reticulum in Ventricular Myocytes of the SERCA2 b/b Mouse Is Impaired at Higher Ca 2+ Loads Only. Circulation Research, 2003, 92, 881-887.	2.0	26
78	Replacement of the Muscle-Specific Sarcoplasmic Reticulum Ca 2+ -ATPase Isoform SERCA2a by the Nonmuscle SERCA2b Homologue Causes Mild Concentric Hypertrophy and Impairs Contraction-Relaxation of the Heart. Circulation Research, 2001, 89, 838-846.	2.0	93
79	Inter-organellar Communication in Parkinson's and Alzheimer's Disease: Looking Beyond Endoplasmic Reticulum-Mitochondria Contact Sites. Frontiers in Neuroscience, 0, 16, .	1.4	10