Markus Waldeck-Weiermair

List of Publications by Year
in descending order

54 papers	2,428 citations	186265 28 h-index	206112 48 g-index
55 all docs	55 docs citations	55 times ranked	3573 citing authors

#	Article	IF	Citations
1	Integrin clustering enables anandamide-induced Ca2+ signaling in endothelial cells via GPR55 by protection against CB1-receptor-triggered repression. Journal of Cell Science, 2008, 121, 1704-1717.	2.0	160
2	Novel genetically encoded fluorescent probes enable real-time detection of potassium in vitro and in vivo. Nature Communications, 2017, 8, 1422.	12.8	130
3	Mitochondrial Ca2+ Uptake 1 (MICU1) and Mitochondrial Ca2+ Uniporter (MCU) Contribute to Metabolism-Secretion Coupling in Clonal Pancreatic Î²-Cells. Journal of Biological Chemistry, 2012, 287, 34445-34454.	3.4	120
4	Inhibition of Autophagy Rescues Palmitic Acid-induced Necroptosis of Endothelial Cells. Journal of Biological Chemistry, 2012, 287, 21110-21120.	3.4	118
5	pH-Lemon, a Fluorescent Protein-Based pH Reporter for Acidic Compartments. ACS Sensors, 2019, 4, 883-891.	7.8	99
6	Endothelial mitochondriaâ€”less respiration, more integration. Pflugers Archiv European Journal of Physiology, 2012, 464, 63-76.	2.8	96
7	Real-Time Imaging of Mitochondrial ATP Dynamics Reveals the Metabolic Setting of Single Cells. Cell Reports, 2018, 25, 501-512.e3.	6.4	91
8	MICU1 controls cristae junction and spatially anchors mitochondrial Ca2+ uniporter complex. Nature Communications, 2019, 10, 3732.	12.8	90
9	Leucine Zipper EF Hand-containing Transmembrane Protein 1 (Letm1) and Uncoupling Proteins 2 and 3 (UCP2/3) Contribute to Two Distinct Mitochondrial Ca2+ Uptake Pathways. Journal of Biological Chemistry, 2011, 286, 28444-28455.	3.4	86
10	Development of novel FP-based probes for live-cell imaging of nitric oxide dynamics. Nature Communications, 2016, 7, 10623.	12.8	84
11	Resveratrol Specifically Kills Cancer Cells by a Devastating Increase in the Ca2+ Coupling Between the Greatly Tethered Endoplasmic Reticulum and Mitochondria. Cellular Physiology and Biochemistry, 2016, 39, 1404-1420.	1.6	84
12	Mitochondrial Ca2+ uptake and not mitochondrial motility is required for STIM1-Orai1-dependent store-operated Ca2+ entry. Journal of Cell Science, 2010, 123, 2553-2564.	2.0	76
13	Live-Cell Imaging of Physiologically Relevant Metal Ions Using Genetically Encoded FRET-Based Probes. Cells, 2019, 8, 492.	4.1	71
14	ATP increases within the lumen of the endoplasmic reticulum upon intracellular Ca²⁺release. Molecular Biology of the Cell, 2014, 25, 368-379.	2.1	65
15	The contribution of UCP2 and UCP3 to mitochondrial Ca2+ uptake is differentially determined by the source of supplied Ca2+. Cell Calcium, 2010, 47, 433-440.	2.4	59
16	GPR55â€dependent and â€independent ion signalling in response to lysophosphatidylinositol in endothelial cells. British Journal of Pharmacology, 2010, 161, 308-320.	5.4	59
17	PRMT1-mediated methylation of MICU1 determines the UCP2/3 dependency of mitochondrial Ca2+ uptake in immortalized cells. Nature Communications, 2016, 7, 12897.	12.8	59
18	Inositol-1,4,5-trisphosphate (IP3)-mediated STIM1 oligomerization requires intact mitochondrial Ca2+ uptake. Journal of Cell Science, 2014, 127, 2944-55.	2.0	50

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19	Enhanced inter-compartmental Ca2+ flux modulates mitochondrial metabolism and apoptotic threshold during aging. Redox Biology, 2019, 20, 458-466.	9.0	50
20	Studying mitochondrial Ca2+ uptake â€“ A revisit. Molecular and Cellular Endocrinology, 2012, 353, 114-127.	3.2	48
21	Rearrangement of MICU1 multimers for activation of MCU is solely controlled by cytosolic Ca2+. Scientific Reports, 2015, 5, 15602.	3.3	45
22	TRPV1 mediates cellular uptake of anandamide and thus promotes endothelial cell proliferation and network-formation. Biology Open, 2014, 3, 1164-1172.	1.2	43
23	Spatiotemporal Correlations between Cytosolic and Mitochondrial Ca2+ Signals Using a Novel Red-Shifted Mitochondrial Targeted Cameleon. PLoS ONE, 2012, 7, e45917.	2.5	41
24	Live cell imaging of signaling and metabolic activities. , 2019, 202, 98-119.		41
25	Targeting Mitochondria to Counteract Age-Related Cellular Dysfunction. Genes, 2018, 9, 165.	2.4	40
26	Genetic biosensors for imaging nitric oxide in single cells. Free Radical Biology and Medicine, 2018, 128, 50-58.	2.9	36
27	Molecularly Distinct Routes of Mitochondrial Ca2+ Uptake Are Activated Depending on the Activity of the Sarco/Endoplasmic Reticulum Ca2+ ATPase (SERCA). Journal of Biological Chemistry, 2013, 288, 15367-15379.	3.4	34
28	Formation of Nitric Oxide by Aldehyde Dehydrogenase-2 Is Necessary and Sufficient for Vascular Bioactivation of Nitroglycerin. Journal of Biological Chemistry, 2016, 291, 24076-24084.	3.4	31
29	Uncoupling protein 3 adjusts mitochondrial Ca2+ uptake to high and low Ca2+ signals. Cell Calcium, 2010, 48, 288-301.	2.4	30
30	Mitochondrial Ca2+ uniporter (MCU)-dependent and MCU-independent Ca2+ channels coexist in the inner mitochondrial membrane. Pflugers Archiv European Journal of Physiology, 2014, 466, 1411-1420.	2.8	29
31	UCP2 modulates single-channel properties of a MCU-dependent Ca2+ inward current in mitochondria. Pflugers Archiv European Journal of Physiology, 2015, 467, 2509-2518.	2.8	28
32	Intact mitochondrial Ca 2+ uniport is essential for agonist-induced activation of endothelial nitric oxide synthase (eNOS). Free Radical Biology and Medicine, 2017, 102, 248-259.	2.9	28
33	Generation of Red-Shifted Cameleons for Imaging Ca2+ Dynamics of the Endoplasmic Reticulum. Sensors, 2015, 15, 13052-13068.	3.8	26
34	AQP8 is a crucial H2O2 transporter in insulin-producing RINm5F cells. Redox Biology, 2021, 43, 101962.	9.0	26
35	Glycogen Synthase Kinase 3 Beta Controls Presenilin-1-Mediated Endoplasmic Reticulum Ca2+ Leak Directed to Mitochondria in Pancreatic Islets and beta-Cells. Cellular Physiology and Biochemistry, 2019, 52, 57-75.	1.6	25
36	Intracellular Ca2+ release decelerates mitochondrial cristae dynamics within the junctions to the endoplasmic reticulum. Pflugers Archiv European Journal of Physiology, 2018, 470, 1193-1203.	2.8	24

#	Article	IF	Citations
37	Differential endothelial signaling responses elicited by chemogenetic H2O2 synthesis. Redox Biology, 2020, 36, 101605.	9.0	24
38	Real-time visualization of distinct nitric oxide generation of nitric oxide synthase isoforms in single cells. Nitric Oxide - Biology and Chemistry, 2017, 70, 59-67.	2.7	22
39	Visualization of Sirtuin 4 Distribution between Mitochondria and the Nucleus, Based on Bimolecular Fluorescence Self-Complementation. Cells, 2019, 8, 1583.	4.1	20
40	UCP2 and PRMT1 are key prognostic markers for lung carcinoma patients. Oncotarget, 2017, 8, 80278-80285.	1.8	20
41	Application of Genetically Encoded Fluorescent Nitric Oxide (NO•) Probes, the geNOps, for Real-time Imaging of NO• Signals in Single Cells. Journal of Visualized Experiments, 2017, , .	0.3	16
42	The contribution of uncoupling protein 2 to mitochondrial Ca2+ homeostasis in health and disease â€" A short revisit. Mitochondrion, 2020, 55, 164-173.	3.4	15
43	Presenilin-1 Established ER-Ca2+ Leak: a Follow Up on Its Importance for the Initial Insulin Secretion in Pancreatic Islets and Î²-Cells Upon Elevated Glucose. Cellular Physiology and Biochemistry, 2019, 53, 573-586.	1.6	15
44	Dissecting in vivo and in vitro redox responses using chemogenetics. Free Radical Biology and Medicine, 2021, 177, 360-369.	2.9	14
45	Metabolomic and transcriptomic signatures of chemogenetic heart failure. American Journal of Physiology - Heart and Circulatory Physiology, 2022, 322, H451-H465.	3.2	14
46	Development and Application of Sub-Mitochondrial Targeted Ca2 + Biosensors. Frontiers in Cellular Neuroscience, 2019, 13, 449.	3.7	11
47	MICU1 controls spatial membrane potential gradients and guides Ca2+ fluxes within mitochondrial substructures. Communications Biology, 2022, 5, .	4.4	11
48	The importance of aquaporin-8 for cytokine-mediated toxicity in rat insulin-producing cells. Free Radical Biology and Medicine, 2021, 174, 135-143.	2.9	8
49	Sustained Formation of Nitroglycerin-Derived Nitric Oxide by Aldehyde Dehydrogenase-2 in Vascular Smooth Muscle without Added Reductants: Implications for the Development of Nitrate Tolerance. Molecular Pharmacology, 2018, 93, 335-343.	2.3	7
50	Assessment of Mitochondrial Ca2+ Uptake. Methods in Molecular Biology, 2015, 1264, 421-439.	0.9	4
51	Mitochondrial Ca2+ uptake 1 (MICU1) and mitochondrial Ca2+ uniporter (MCU) contribute to metabolism-secretion coupling in clonal pancreatic Î²-cells.. Journal of Biological Chemistry, 2012, 287, 42453.	3.4	2
52	Filling a GAPâ€"An Optimized Probe for ER Ca 2+ Imaging InÂVivo. Cell Chemical Biology, 2016, 23, 641-643.	5.2	2
53	High-Resolution Imaging of STIM/Orai Subcellular Localization Using Array Confocal Laser Scanning Microscopy. Methods in Molecular Biology, 2018, 1843, 175-187.	0.9	1
54	Assessment of Mitochondrial Ca2+ Uptake. Methods in Molecular Biology, 2021, 2276, 173-191.	0.9	0