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	Metabolomic and transcriptomic signatures of chemogenetic heart failure. American Journal of Physiology - Heart and Circulatory Physiology, 2022, 322, H451-H465.	3.2	14
2	MICU1 controls spatial membrane potential gradients and guides Ca2+ fluxes within mitochondrial substructures. Communications Biology, 2022, 5, .	4.4	11
3	Assessment of Mitochondrial Ca2+ Uptake. Methods in Molecular Biology, 2021, 2276, 173-191.	0.9	0
4	AQP8 is a crucial H2O2 transporter in insulin-producing RINm5F cells. Redox Biology, 2021, 43, 101962.	9.0	26
5	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
6	Dissecting in vivo and in vitro redox responses using chemogenetics. Free Radical Biology and Medicine, 2021, 177, 360-369.	2.9	14
7	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
8	Differential endothelial signaling responses elicited by chemogenetic H2O2 synthesis. Redox Biology, 2020, 36, 101605.	9.0	24
9	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
10	MICU1 controls cristae junction and spatially anchors mitochondrial Ca2+ uniporter complex. Nature Communications, 2019, 10, 3732.	12.8	90
11	Development and Application of Sub-Mitochondrial Targeted Ca2 + Biosensors. Frontiers in Cellular Neuroscience, 2019, 13, 449.	3.7	11
12	Live cell imaging of signaling and metabolic activities. , 2019, 202, 98-119.		41
13	Live-Cell Imaging of Physiologically Relevant Metal Ions Using Genetically Encoded FRET-Based Probes. Cells, 2019, 8, 492.	4.1	71
14	pH-Lemon, a Fluorescent Protein-Based pH Reporter for Acidic Compartments. ACS Sensors, 2019, 4, 883-891.	7.8	99
15	Visualization of Sirtuin 4 Distribution between Mitochondria and the Nucleus, Based on Bimolecular Fluorescence Self-Complementation. Cells, 2019, 8, 1583.	4.1	20
16	Enhanced inter-compartmental Ca2+ flux modulates mitochondrial metabolism and apoptotic threshold during aging. Redox Biology, 2019, 20, 458-466.	9.0	50
17	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
18	Genetic biosensors for imaging nitric oxide in single cells. Free Radical Biology and Medicine, 2018, 128, 50-58.	2.9	36

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19	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
20	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
21	Real-Time Imaging of Mitochondrial ATP Dynamics Reveals the Metabolic Setting of Single Cells. Cell Reports, 2018, 25, 501-512.e3.	6.4	91
22	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
23	Targeting Mitochondria to Counteract Age-Related Cellular Dysfunction. Genes, 2018, 9, 165.	2.4	40
24	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
25	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
26	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
27	Novel genetically encoded fluorescent probes enable real-time detection of potassium in vitro and in vivo. Nature Communications, 2017, 8, 1422.	12.8	130
28	UCP2 and PRMT1 are key prognostic markers for lung carcinoma patients. Oncotarget, 2017, 8, 80278-80285.	1.8	20
29	Development of novel FP-based probes for live-cell imaging of nitric oxide dynamics. Nature Communications, 2016, 7, 10623.	12.8	84
30	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
31	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
32	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
33	Filling a GAPâ€"An Optimized Probe for ER Ca 2+ Imaging InÂVivo. Cell Chemical Biology, 2016, 23, 641-643.	5.2	2
34	Rearrangement of MICU1 multimers for activation of MCU is solely controlled by cytosolic Ca2+. Scientific Reports, 2015, 5, 15602.	3.3	45
35	Generation of Red-Shifted Cameleons for Imaging Ca2+ Dynamics of the Endoplasmic Reticulum. Sensors, 2015, 15, 13052-13068.	3.8	26
36	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

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37	Assessment of Mitochondrial Ca2+ Uptake. Methods in Molecular Biology, 2015, 1264, 421-439.	0.9	4
38	TRPV1 mediates cellular uptake of anandamide and thus promotes endothelial cell proliferation and network-formation. Biology Open, 2014, 3, 1164-1172.	1.2	43
39	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
40	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
41	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
42	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
43	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
44	Inhibition of Autophagy Rescues Palmitic Acid-induced Necroptosis of Endothelial Cells. Journal of Biological Chemistry, 2012, 287, 21110-21120.	3.4	118
45	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
46	Spatiotemporal Correlations between Cytosolic and Mitochondrial Ca2+ Signals Using a Novel Red-Shifted Mitochondrial Targeted Cameleon. PLoS ONE, 2012, 7, e45917.	2.5	41
47	Endothelial mitochondriaâ€”less respiration, more integration. Pflugers Archiv European Journal of Physiology, 2012, 464, 63-76.	2.8	96
48	Studying mitochondrial Ca2+ uptake â€“ A revisit. Molecular and Cellular Endocrinology, 2012, 353, 114-127.	3.2	48
49	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
50	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
51	Uncoupling protein 3 adjusts mitochondrial Ca2+ uptake to high and low Ca2+ signals. Cell Calcium, 2010, 48, 288-301.	2.4	30
52	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
53	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
54	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