Markus Hoth

List of Publications by Year
in descending order

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123 papers	10,321 citations	44042 48 h-index	33869 99 g-index
154 all docs	154 docs citations	154 times ranked	10815 citing authors

#	Article	IF	Citations
1	Depletion of intracellular calcium stores activates a calcium current in mast cells. Nature, 1992, 355, 353-356.	13.7	1,696
2	Calcium releaseâ€activated calcium current in rat mast cells.. Journal of Physiology, 1993, 465, 359-386.	1.3	671
3	Overcoming Intrinsic Multidrug Resistance in Melanoma by Blocking the Mitochondrial Respiratory Chain of Slow-Cycling JARID1Bhigh Cells. Cancer Cell, 2013, 23, 811-825.	7.7	553
4	Mitochondrial Regulation of Store-operated Calcium Signaling in T Lymphocytes. Journal of Cell Biology, 1997, 137, 633-648.	2.3	482
5	Reversal of Mitochondrial Transhydrogenase Causes Oxidative Stress in Heart Failure. Cell Metabolism, 2015, 22, 472-484.	7.2	307
6	T cell activation requires mitochondrial translocation to the immunological synapse. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14418-14423.	3.3	289
7	Potent Inhibition of Ca2+ Release-activated Ca2+ Channels and T-lymphocyte Activation by the Pyrazole Derivative BTP2. Journal of Biological Chemistry, 2004, 279, 12427-12437.	1.6	257
8	Differential Redox Regulation of ORAI Ion Channels: A Mechanism to Tune Cellular Calcium Signaling. Science Signaling, 2010, 3, ra24.	1.6	214
9	Red fluorescent genetically encoded indicator for intracellular hydrogen peroxide. Nature Communications, 2014, 5, 5222.	5.8	207
10	Squareâ€Wave Voltammetry: A Review on the Recent Progress. Electroanalysis, 2013, 25, 2411-2422.	1.5	184
11	Calcium microdomains at the immunological synapse: how ORAI channels, mitochondria and calcium pumps generate local calcium signals for efficient T-cell activation. EMBO Journal, 2011, 30, 3895-3912.	3.5	181
12	Characterization of T cell mutants with defects in capacitative calcium entry: genetic evidence for the physiological roles of CRAC channels.. Journal of Cell Biology, 1995, 131, 655-667.	2.3	177
13	TRP4 (CCE1) Protein Is Part of Native Calcium Release-activated Ca2+-like Channels in Adrenal Cells. Journal of Biological Chemistry, 2000, 275, 23965-23972.	1.6	170
14	Calcium influx and its control by calcium release. Current Opinion in Neurobiology, 1993, 3, 368-374.	2.0	160
15	Non-specific effects of calcium entry antagonists in mast cells. Pflugers Archiv European Journal of Physiology, 1994, 428, 433-438.	1.3	154
16	Ca2+ and Mn2+ influx through receptor-mediated activation of nonspecific cation channels in mast cells.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 3068-3072.	3.3	152
17	NFATc1 controls the cytotoxicity of CD8+ T cells. Nature Communications, 2017, 8, 511.	5.8	150
18	Sustained Activity of Calcium Release-activated Calcium Channels Requires Translocation of Mitochondria to the Plasma Membrane. Journal of Biological Chemistry, 2006, 281, 40302-40309.	1.6	135

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19	The Neglected CRAC Proteins. Current Topics in Membranes, 2013, 71, 237-271.	0.5	121
20	TRPC3 Mediates T-cell Receptor-dependent Calcium Entry in Human T-lymphocytes. Journal of Biological Chemistry, 2003, 278, 26629-26638.	1.6	118
21	Enhancement of calcium signalling dynamics and stability by delayed modulation of the plasmaâ€membrane calciumâ€ATPase in human T cells. Journal of Physiology, 2002, 541, 877-894.	1.3	116
22	Calcium and barium permeation through calcium release-activated calcium (CRAC) channels. Pflugers Archiv European Journal of Physiology, 1995, 430, 315-322.	1.3	115
23	Calcium, cancer and killing: The role of calcium in killing cancer cells by cytotoxic T lymphocytes and natural killer cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2013, 1833, 1603-1611.	1.9	113
24	The PDZ-interacting domain of TRPC4 controls its localization and surface expression in HEK293 cells. Journal of Cell Science, 2002, 115, 3497-3508.	1.2	109
25	Redox regulation of calcium ion channels: Chemical and physiological aspects. Cell Calcium, 2011, 50, 407-423.	1.1	108
26	Mitochondria Positioning Controls Local Calcium Influx in T Cells. Journal of Immunology, 2010, 184, 184-190.	0.4	100
27	The PDZ-interacting domain of TRPC4 controls its localization and surface expression in HEK293 cells. Journal of Cell Science, 2002, 115, 3497-508.	1.2	100
28	Absence of the Î³ Subunit of the Skeletal Muscle Dihydropyridine Receptor Increases L-type Ca2+ Currents and Alters Channel Inactivation Properties. Journal of Biological Chemistry, 2000, 275, 14476-14481.	1.6	95
29	TRPV6 potentiates calcium-dependent cell proliferation. Cell Calcium, 2006, 39, 163-173.	1.1	95
30	Calcium-dependent activation of T-lymphocytes. Pflugers Archiv European Journal of Physiology, 2005, 450, 1-12.	1.3	89
31	TRP expression pattern and the functional importance of TRPC3 in primary human T-cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2011, 1813, 412-423.	1.9	88
32	Recognition of Bacterial Signal Peptides by Mammalian Formyl Peptide Receptors. Journal of Biological Chemistry, 2015, 290, 7369-7387.	1.6	85
33	Molecular regulation of CRAC channels and their role in lymphocyte function. Cellular and Molecular Life Sciences, 2013, 70, 2637-2656.	2.4	84
34	Inverse regulation of melanoma growth and migration by <scp>O</scp>rai1/<scp>STIM</scp>2â€dependent calcium entry. Pigment Cell and Melanoma Research, 2014, 27, 442-453.	1.5	84
35	Natural killer cells induce distinct modes of cancer cell death: Discrimination, quantification, and modulation of apoptosis, necrosis, and mixed forms. Journal of Biological Chemistry, 2018, 293, 16348-16363.	1.6	78
36	VAMP8-dependent fusion of recycling endosomes with the plasma membrane facilitates T lymphocyte cytotoxicity. Journal of Cell Biology, 2015, 210, 135-151.	2.3	74

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37	Protein film voltammetry: electrochemical enzymatic spectroscopy. A review on recent progress. Journal of Solid State Electrochemistry, 2012, 16, 2315-2328.	1.2	69
38	Mitochondrial dynamics and their impact on T cell function. Cell Calcium, 2012, 52, 57-63.	1.1	69
39	ORAI-mediated calcium influx in T cell proliferation, apoptosis and tolerance. Cell Calcium, 2011, 50, 261-269.	1.1	66
40	Calcium Binding and Transport by Coenzyme Q. Journal of the American Chemical Society, 2011, 133, 9293-9303.	6.6	64
41	A calcium optimum for cytotoxic T lymphocyte and natural killer cell cytotoxicity. Journal of Physiology, 2018, 596, 2681-2698.	1.3	64
42	miR-34a: a new player in the regulation of T cell function by modulation of NF-Î²B signaling. Cell Death and Disease, 2019, 10, 46.	2.7	58
43	Multiple mechanisms of manganese-induced quenching of fura-2 fluorescence in rat mast cells. Pflugers Archiv European Journal of Physiology, 1993, 423, 225-231.	1.3	55
44	Docking of Lytic Granules at the Immunological Synapse in Human CTL Requires Vti1b-Dependent Pairing with CD3 Endosomes. Journal of Immunology, 2011, 186, 6894-6904.	0.4	55
45	A simple, economic, timeâ€resolved killing assay. European Journal of Immunology, 2014, 44, 1870-1872.	1.6	55
46	AXER is an ATP/ADP exchanger in the membrane of the endoplasmic reticulum. Nature Communications, 2018, 9, 3489.	5.8	55
47	ORAI1 Ca2+ Channels Control Endothelin-1-Induced Mitogenesis and Melanogenesis in Primary Human Melanocytes. Journal of Investigative Dermatology, 2012, 132, 1443-1451.	0.3	54
48	Ion Channels and Calcium Signaling in Mast Cells. Annals of the New York Academy of Sciences, 1993, 707, 198-209.	1.8	53
49	<scp>DNA</scp> methylation array analyses identified breast cancerâ€associated <scp>HYAL2</scp> methylation in peripheral blood. International Journal of Cancer, 2015, 136, 1845-1855.	2.3	53
50	How ORAI and TRP channels interfere with each other: Interaction models and examples from the immune system and the skin. European Journal of Pharmacology, 2014, 739, 49-59.	1.7	51
51	Thapsigargin Induces Expression of Activating Transcription Factor 3 in Human Keratinocytes Involving Ca²⁺ Ions and c-Jun N-Terminal Protein Kinase. Molecular Pharmacology, 2010, 78, 865-876.	1.0	49
52	Calcium dependence of T cell proliferation following focal stimulation. European Journal of Immunology, 2007, 37, 2723-2733.	1.6	48
53	The immunological synapse controls local and global calcium signals in T lymphocytes. Immunological Reviews, 2009, 231, 132-147.	2.8	48
54	Syntaxin7 Is Required for Lytic Granule Release from Cytotoxic T Lymphocytes. Traffic, 2011, 12, 890-901.	1.3	44

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55	CRAC channels, calcium, and cancer in light of the driver and passenger concept. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 1408-1417.	1.9	43
56	Human profilin 1 is a negative regulator of CTL mediated cellâ€killing and migration. European Journal of Immunology, 2017, 47, 1562-1572.	1.6	43
57	STIM-Orai Channels and Reactive Oxygen Species in the Tumor Microenvironment. Cancers, 2019, 11, 457.	1.7	43
58	Morphological changes of T cells following formation of the immunological synapse modulate intracellular calcium signals. Cell Calcium, 2009, 45, 109-122.	1.1	42
59	Nonsteroidal Anti-inflammatory Drugs Inhibit Vascular Smooth Muscle Cell Proliferation by Enabling the Ca2+-dependent Inactivation of Calcium Release-activated Calcium/Orai Channels Normally Prevented by Mitochondria. Journal of Biological Chemistry, 2011, 286, 16186-16196.	1.6	40
60	Hydroxylated derivatives of dimethoxy-1,4-benzoquinone as redox switchable earth-alkaline metal ligands and radical scavengers. Scientific Reports, 2013, 3, 1865.	1.6	40
61	Efficiency of Tâ€cell costimulation by CD80 and CD86 crossâ€linking correlates with calcium entry. Immunology, 2010, 129, 28-40.	2.0	39
62	Deterministic actin waves as generators of cell polarization cues. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 826-835.	3.3	39
63	Reviewâ€"Quantification of Hydrogen Peroxide by Electrochemical Methods and Electron Spin Resonance Spectroscopy. Journal of the Electrochemical Society, 2019, 166, G82-G101.	1.3	38
64	SNARE protein expression and localization in human cytotoxic T lymphocytes. European Journal of Immunology, 2012, 42, 470-475.	1.6	37
65	P2X7 receptor stimulation upregulates Egr-1 biosynthesis involving a cytosolic Ca2+ rise, transactivation of the EGF receptor and phosphorylation of ERK and Elk-1. Journal of Cellular Physiology, 2007, 213, 36-44.	2.0	36
66	Migration of Cytotoxic T Lymphocytes in 3D Collagen Matrices. Biophysical Journal, 2020, 119, 2141-2152.	0.2	35
67	Syntaxin11 serves as a tâ€<scp>SNARE</scp> for the fusion of lytic granules in human cytotoxic <scp>T</scp> lymphocytes. European Journal of Immunology, 2014, 44, 573-584.	1.6	34
68	DNA methylation array analysis identifies breast cancer associated RPTOR, MGRN1 and RAPSN hypomethylation in peripheral blood DNA. Oncotarget, 2016, 7, 64191-64202.	0.8	33
69	Ca2+ Signaling in Identified T-lymphocytes from Human Intestinal Mucosa. Journal of Biological Chemistry, 2004, 279, 5641-5647.	1.6	31
70	CaMKII does not control mitochondrial Ca²⁺ uptake in cardiac myocytes. Journal of Physiology, 2020, 598, 1361-1376.	1.3	31
71	Loss of Mitochondrial Ca ²⁺ Uniporter Limits Inotropic Reserve and Provides Trigger and Substrate for Arrhythmias in Barth Syndrome Cardiomyopathy. Circulation, 2021, 144, 1694-1713.	1.6	30
72	Redox Chemistry of Ca-Transporter 2-Palmitoylhydroquinone in an Artificial Thin Organic Film Membrane. Journal of Physical Chemistry C, 2007, 111, 6068-6076.	1.5	29

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73	Pharmacology of ORAI channels as a tool to understand their physiological functions. Expert Review of Clinical Pharmacology, 2010, 3, 291-303.	1.3	29
74	Different Munc13 Isoforms Function as Priming Factors in Lytic Granule Release from Murine Cytotoxic T Lymphocytes. Traffic, 2013, 14, 798-809.	1.3	28
75	Cytoskeleton rotation relocates mitochondria to the immunological synapse and increases calcium signals. Cell Calcium, 2016, 60, 309-321.	1.1	28
76	Skeletal muscle Lâ€type Ca2+current modulation in Î³1â€deficient and wildtype murine myotubes by the Î³1 subunit and cAMP. Journal of Physiology, 2002, 539, 459-468.	1.3	26
77	A new rapid and simple method to determine the kinetics of electrode reactions of biologically relevant compounds from the half-peak width of the square-wave voltammograms. Biophysical Chemistry, 2008, 138, 130-137.	1.5	26
78	IL-17C-mediated innate inflammation decreases the response to PD-1 blockade in a model of Kras-driven lung cancer. Scientific Reports, 2019, 9, 10353.	1.6	26
79	Protein-film voltammetry: A theoretical study of the temperature effect using square-wave voltammetry. Biophysical Chemistry, 2008, 137, 49-55.	1.5	25
80	Ca2+-induced Ca2+ Release in Chinese Hamster Ovary (CHO) Cells Co-expressing Dihydropyridine and Ryanodine Receptors. Journal of General Physiology, 1997, 109, 619-631.	0.9	23
81	Depletion of intracellular calcium stores activates an outward potassium current in mast and RBL-1 cells that is correlated with CRAC channel activation. FEBS Letters, 1996, 390, 285-288.	1.3	22
82	Human T cells monitored by impedance spectrometry using field-effect transistor arrays: A novel tool for single-cell adhesion and migration studies. Biosensors and Bioelectronics, 2015, 67, 170-176.	5.3	22
83	Apparent cytosolic calcium gradients in T-lymphocytes due to fura-2 accumulation in mitochondria. Cell Calcium, 2004, 36, 99-109.	1.1	21
84	Calcium signal dynamics in T lymphocytes: Comparing in vivo and in vitro measurements. Seminars in Cell and Developmental Biology, 2019, 94, 84-93.	2.3	21
85	Can We See PIP3 and Hydrogen Peroxide with a Single Probe?. Antioxidants and Redox Signaling, 2012, 17, 505-512.	2.5	20
86	Syntaxin 8 is required for efficient lytic granule trafficking in cytotoxic T lymphocytes. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 1653-1664.	1.9	20
87	Plant sterol ester diet supplementation increases serum plant sterols and markers of cholesterol synthesis, but has no effect on total cholesterol levels. Journal of Steroid Biochemistry and Molecular Biology, 2017, 169, 219-225.	1.2	19
88	Quantity, quality, and functionality of peripheral blood cells derived from residual blood of different apheresis kits. Transfusion, 2018, 58, 1516-1526.	0.8	19
89	Oxidative Stress-Induced STIM2 Cysteine Modifications Suppress Store-Operated Calcium Entry. Cell Reports, 2020, 33, 108292.	2.9	19
90	Optoregulated force application to cellular receptors using molecular motors. Nature Communications, 2021, 12, 3580.	5.8	19

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91	Two-photon analysis of calcium signals in T lymphocytes of intact lamina propria from human intestine. European Journal of Immunology, 2004, 34, 3477-3484.	1.6	18
92	Disruption of the cortical actin cytoskeleton does not affect store operated Ca²⁺ channels in human Tâ€cells. FEBS Letters, 2007, 581, 3557-3562.	1.3	17
93	Micropatterned soft hydrogels to study the interplay of receptors and forces in T cell activation. Acta Biomaterialia, 2021, 119, 234-246.	4.1	17
94	Interplay of channels, pumps and organelle location in calcium microdomain formation. New Journal of Physics, 2013, 15, 055022.	1.2	16
95	A calcium optimum for cytotoxic T lymphocyte and natural killer cell cytotoxicity. Seminars in Cell and Developmental Biology, 2021, 115, 10-18.	2.3	16
96	Immune synapses: mitochondrial morphology matters. EMBO Journal, 2011, 30, 1187-1189.	3.5	15
97	Optimality of Spatially Inhomogeneous Search Strategies. Physical Review Letters, 2016, 117, 068101.	2.9	15
98	Deep characterization of blood cell miRNomes by NGS. Cellular and Molecular Life Sciences, 2016, 73, 3169-3181.	2.4	15
99	Electrochemical Quantification of Extracellular Local H2O2 Kinetics Originating from Single Cells. Antioxidants and Redox Signaling, 2018, 29, 501-517.	2.5	14
100	Light-sheet Microscopy for Three-dimensional Visualization of Human Immune Cells. Journal of Visualized Experiments, 2018, , .	0.2	13
101	The extracellular adherence protein (Eap) of Staphylococcus aureus acts as a proliferation and migration repressing factor that alters the cell morphology of keratinocytes. International Journal of Medical Microbiology, 2017, 307, 116-125.	1.5	12
102	Role of Specific B-Cell Receptor Antigens in Lymphomagenesis. Frontiers in Oncology, 2020, 10, 604685.	1.3	11
103	Targeting the Microtubule-Network Rescues CTL Killing Efficiency in Dense 3D Matrices. Frontiers in Immunology, 2021, 12, 729820.	2.2	11
104	Faster cytotoxicity with age: Increased perforin and granzyme levels in cytotoxic <scp>CD8</scp>⁺ T cells boost cancer cell elimination. Aging Cell, 2022, 21, .	3.0	11
105	The Minimal Requirements to Use Calcium Imaging to Analyze I_{CRAC}. Cold Spring Harbor Protocols, 2014, 2014, pdb.prot073262.	0.2	9
106	Excitable T Cells: CaV1.4 Channel Contributions and Controversies. Immunity, 2011, 35, 315-317.	6.6	7
107	Measuring Endogenous I_{CRAC} and ORAI Currents with the Patch-Clamp Technique. Cold Spring Harbor Protocols, 2014, 2014, pdb.prot073254.	0.2	7
108	New insights into the chemistry of Coenzyme Q-0: A voltammetric and spectroscopic study. Bioelectrochemistry, 2016, 111, 100-108.	2.4	7

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109	Cytotoxic Efficiency of Human CD8+ T Cell Memory Subtypes. Frontiers in Immunology, 2022, 13, 838484.	2.2	7
110	Function Follows Form: The Role of Store-Operated Calcium Channels in T-Cell Activation. Cellular Physiology and Biochemistry, 1997, 7, 203-218.	1.1	6
111	Blockade of PD-1 decreases neutrophilic inflammation and lung damage in experimental COPD. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 320, L958-L968.	1.3	5
112	Protein Signatures of NK Cellâ€“Mediated Melanoma Killing Predict Response to Immunotherapies. Cancer Research, 2021, 81, 5540-5554.	0.4	5
113	KIR2DS1â€“HLA-C status as a predictive marker for benefit from rituximab: a post-hoc analysis of the RICOVER-60 and CLL8 trials. Lancet Haematology,the, 2022, 9, e133-e142.	2.2	5
114	Redox properties of the calcium chelator Fura-2 in mimetic biomembranes. Cell Calcium, 2008, 43, 615-621.	1.1	4
115	Patch-Clamp Measurement of I_{CRAC} and ORAI Channel Activity. Cold Spring Harbor Protocols, 2014, 2014, pdb.top066795.	0.2	4
116	Probing the redox activity of T-lymphocytes deposited at electrode surfaces with voltammetric methods. Clinical Chemistry and Laboratory Medicine, 2008, 46, 197-203.	1.4	3
117	Integration of the B-Cell Receptor Antigen Neurabin-I/SAMD14 Into an Antibody Format as New Therapeutic Approach for the Treatment of Primary CNS Lymphoma. Frontiers in Oncology, 2020, 10, 580364.	1.3	3
118	An EPR and DFT study on the primary radical formed in hydroxylation reactions of 2,6-dimethoxy-1,4-benzoquinone. Molecular Physics, 2016, 114, 1856-1866.	0.8	1
119	Light-Sheet Scattering Microscopy to Visualize Long-Term Interactions Between Cells and Extracellular Matrix. Frontiers in Immunology, 2022, 13, 828634.	2.2	1
120	Calcium release-activated calcium channels as signal transducers in T-cells. Signal Transduction, 2006, 6, 233-239.	0.7	0
121	The Fate of Calcium Ions Entering a Cell. , 1998, , 23-33.		0
122	Simultaneous Measurement of Membrane Current and Intracellular Calcium. , 1999, , 140-163.		0
123	Unspecific CTL Killing Is Enhanced by High Glucose via TNF-Related Apoptosis-Inducing Ligand. Frontiers in Immunology, 2022, 13, 831680.	2.2	0