Reinhold Penner

List of Publications by Year
in descending order

94 papers	15,448 citations	26610 56 h-index	42364 92 g-index
96 all docs	96 docs citations	96 times ranked	8822 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	LTRPC7 is a MgÂ·ATP-regulated divalent cation channel required for cell viability. Nature, 2001, 411, 590-595.	13.7	855
3	ADP-ribose gating of the calcium-permeable LTRPC2 channel revealed by Nudix motif homology. Nature, 2001, 411, 595-599.	13.7	815
4	Regulation of Vertebrate Cellular Mg2+ Homeostasis by TRPM7. Cell, 2003, 114, 191-200.	13.5	674
5	TRPM4 Is a Ca2+-Activated Nonselective Cation Channel Mediating Cell Membrane Depolarization. Cell, 2002, 109, 397-407.	13.5	655
6	A Unified Nomenclature for the Superfamily of TRP Cation Channels. Molecular Cell, 2002, 9, 229-231.	4.5	620
7	Amplification of CRAC current by STIM1 and CRACM1 (Orai1). Nature Cell Biology, 2006, 8, 771-773.	4.6	536
8	TRPM2-mediated Ca2+ influx induces chemokine production in monocytes that aggravates inflammatory neutrophil infiltration. Nature Medicine, 2008, 14, 738-747.	15.2	526
9	CRACM1 Multimers Form the Ion-Selective Pore of the CRAC Channel. Current Biology, 2006, 16, 2073-2079.	1.8	516
10	Regulation of calcium influx by second messengers in rat mast cells. Nature, 1988, 334, 499-504.	13.7	510
11	TRPM7 Provides an Ion Channel Mechanism for Cellular Entry of Trace Metal Ions. Journal of General Physiology, 2003, 121, 49-60.	0.9	462
12	CRACM1, CRACM2, and CRACM3 Are Store-Operated Ca2+ Channels with Distinct Functional Properties. Current Biology, 2007, 17, 794-800.	1.8	353
13	TRPM5 is a transient Ca2+-activated cation channel responding to rapid changes in [Ca2+]i. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 15166-15171.	3.3	329
14	TRPM4 Regulates Calcium Oscillations After T Cell Activation. Science, 2004, 306, 1374-1377.	6.0	295
15	Cyclic ADP-Ribose and Hydrogen Peroxide Synergize with ADP-Ribose in the Activation of TRPM2 Channels. Molecular Cell, 2005, 18, 61-69.	4.5	284
16	The TRPM ion channel subfamily: molecular, biophysical and functional features. Trends in Pharmacological Sciences, 2004, 25, 633-639.	4.0	261
17	TRPM2 Functions as a Lysosomal Ca ²⁺ -Release Channel in Î² Cells. Science Signaling, 2009, 2, ra23.	1.6	253
18	The Store-Operated Calcium Current ICRAC: Nonlinear Activation by InsP3 and Dissociation from Calcium Release. Cell, 1997, 89, 973-980.	13.5	232

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19	TRPM2: a multifunctional ion channel for calcium signalling. Journal of Physiology, 2011, 589, 1515-1525.	1.3	219
20	CaT1 and the Calcium Release-activated Calcium Channel Manifest Distinct Pore Properties. Journal of Biological Chemistry, 2001, 276, 47767-47770.	1.6	212
21	Transient Receptor Potential 1 Regulates Capacitative Ca2+ Entry and Ca2+ Release from Endoplasmic Reticulum in B Lymphocytesâœª. Journal of Experimental Medicine, 2002, 195, 673-681.	4.2	193
22	Intracellularly injected tetanus toxin inhibits exocytosis in bovine adrenal chromaffin cells. Nature, 1986, 324, 76-78.	13.7	183
23	2â€Aminoethoxydiphenyl borate directly facilitates and indirectly inhibits STIM1â€dependent gating of CRAC channels. Journal of Physiology, 2008, 586, 3061-3073.	1.3	177
24	TRPM7 Channel Is Regulated by Magnesium Nucleotides via its Kinase Domain. Journal of General Physiology, 2006, 127, 421-434.	0.9	171
25	TRPM4 controls insulin secretion in pancreatic Î²-cells. Cell Calcium, 2007, 41, 51-61.	1.1	171
26	Receptor-mediated regulation of the TRPM7 channel through its endogenous protein kinase domain. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6009-6014.	3.3	170
27	Dissociation of the storeâ€operated calcium currentICRACand the Mgâ€nucleotideâ€regulated metal ion current MagNuM. Journal of Physiology, 2002, 539, 445-458.	1.3	163
28	Calcium influx and its control by calcium release. Current Opinion in Neurobiology, 1993, 3, 368-374.	2.0	160
29	Nicotinic acid adenine dinucleotide phosphate and cyclic ADPâ€ribose regulate TRPM2 channels in T lymphocytes. FASEB Journal, 2006, 20, 962-964.	0.2	160
30	Non-specific effects of calcium entry antagonists in mast cells. Pflugers Archiv European Journal of Physiology, 1994, 428, 433-438.	1.3	154
31	Two different presynaptic calcium currents in mouse motor nerve terminals. Pflugers Archiv European Journal of Physiology, 1986, 406, 190-197.	1.3	141
32	STIM2 protein mediates distinct storeâ€dependent and storeâ€independent modes of CRAC channel activation. FASEB Journal, 2008, 22, 752-761.	0.2	140
33	A Pyrazole Derivative Potently Inhibits Lymphocyte Ca2+ Influx and Cytokine Production by Facilitating Transient Receptor Potential Melastatin 4 Channel Activity. Molecular Pharmacology, 2006, 69, 1413-1420.	1.0	139
34	Waixenicin A Inhibits Cell Proliferation through Magnesium-dependent Block of Transient Receptor Potential Melastatin 7 (TRPM7) Channels. Journal of Biological Chemistry, 2011, 286, 39328-39335.	1.6	124
35	Dendritic cell maturation and chemotaxis is regulated by TRPM2â€mediated lysosomal Ca²⁺release. FASEB Journal, 2011, 25, 3529-3542.	0.2	123
36	Functional expression of the calcium release channel from skeletal muscle ryanodine receptor cDNA. FEBS Letters, 1989, 259, 217-221.	1.3	115

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37	Calcium Release-activated Calcium Current (I CRAC) Is a Direct Target for Sphingosine. Journal of Biological Chemistry, 1998, 273, 25020-25030.	1.6	108
38	TRPM5 regulates glucose-stimulated insulin secretion. Pflugers Archiv European Journal of Physiology, 2010, 460, 69-76.	1.3	105
39	Regulation of TRPM2 by Extra- and Intracellular Calcium. Journal of General Physiology, 2007, 130, 427-440.	0.9	103
40	Synergistic regulation of endogenous TRPM2 channels by adenine dinucleotides in primary human neutrophils. Cell Calcium, 2008, 44, 604-615.	1.1	103
41	Discrimination of intracellular calcium store subcompartments using TRPV1 (transient receptor) Tj ETQq1 1 0.784314 rgBT /Overlock 10 371, 341-350.	1.7	102
42	Clofazimine Inhibits Human Kv1.3 Potassium Channel by Perturbing Calcium Oscillation in T Lymphocytes. PLoS ONE, 2008, 3, e4009.	1.1	101
43	InsP4 facilitates store-operated calcium influx by inhibition of InsP3 5-phosphatase. Nature, 2000, 408, 735-740.	13.7	99
44	The patch-clamp technique in the study of secretion. Trends in Neurosciences, 1989, 12, 159-163.	4.2	97
45	Distinct sites of action of clostridial neurotoxins revealed by double-poisoning of mouse motor nerve terminals. Pflugers Archiv European Journal of Physiology, 1987, 409, 533-539.	1.3	94
46	Two novel 2-aminoethyl diphenylborinate (2-APB) analogues differentially activate and inhibit store-operated Ca2+ entry via STIM proteins. Cell Calcium, 2010, 47, 1-10.	1.1	90
47	The TRPM7 channel kinase regulates storeâ€operated calcium entry. Journal of Physiology, 2017, 595, 3165-3180.	1.3	89
48	ORAI3 silencing alters cell proliferation and cell cycle progression via c-myc pathway in breast cancer cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2013, 1833, 752-760.	1.9	88
49	A single lysine in the N-terminal region of store-operated channels is critical for STIM1-mediated gating. Journal of General Physiology, 2010, 136, 673-686.	0.9	86
50	Stimulation of Ca ²⁺ â€channel Orai1/STIM1 by serumâ€and glucocorticoidâ€inducible kinase 1 (SGK1). FASEB Journal, 2011, 25, 2012-2021.	0.2	82
51	Cell cycle-dependent regulation of store-operated ICRAC and Mg2+-nucleotide-regulated MagNuM (TRPM7) currents. Cell Calcium, 2007, 41, 249-260.	1.1	72
52	The calciumâ€permeable nonâ€selective cation channel TRPM2 is modulated by cellular acidification. Journal of Physiology, 2010, 588, 1227-1240.	1.3	71
53	The TRPM6 Kinase Domain Determines the MgÂ·ATP Sensitivity of TRPM7/M6 Heteromeric Ion Channels. Journal of Biological Chemistry, 2014, 289, 5217-5227.	1.6	67
54	Activation of store-operated ICRAC by hydrogen peroxide. Cell Calcium, 2010, 48, 1-9.	1.1	66

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55	TRPM2. Handbook of Experimental Pharmacology, 2014, 222, 403-426.	0.9	62
56	Washout phenomena in dialyzed mast cells allow discrimination of different steps in stimulus-secretion coupling. Bioscience Reports, 1987, 7, 313-321.	1.1	59
57	STIM2 drives Ca²⁺ oscillations through storeâ€operated Ca²⁺ entry caused by mild store depletion. Journal of Physiology, 2013, 591, 1433-1445.	1.3	57
58	Secretory responses of rat peritoneal mast cells to high intracellular calcium. FEBS Letters, 1988, 226, 307-313.	1.3	56
59	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
60	Ion Channels and Calcium Signaling in Mast Cells. Annals of the New York Academy of Sciences, 1993, 707, 198-209.	1.8	53
61	Lipopolysaccharideâ€induced downâ€regulation of Ca²⁺ releaseâ€activated Ca²⁺ currents (I_{CRAC}) but not Ca²⁺â€activated TRPM4â€like currents (I_{CAN}) in cultured mouse microglial cells. Journal of Physiology, 2008, 586, 427-439.	1.3	47
62	The Role of TRPC1 in Modulating Cancer Progression. Cells, 2020, 9, 388.	1.8	47
63	Regulation of endogenous and heterologous Ca2+ release-activated Ca2+ currents by pH. Cell Calcium, 2014, 56, 235-243.	1.1	45
64	Near-visible ultraviolet light induces a novel ubiquitous calcium-permeable cation current in mammalian cell lines. Journal of Physiology, 1998, 507, 365-377.	1.3	44
65	Human CNNM2 is not a Mg2+ transporter per se. Pflugers Archiv European Journal of Physiology, 2016, 468, 1223-1240.	1.3	38
66	Mice sans synaptotagmin. Nature, 1994, 372, 316-317.	13.7	35
67	TRPM7 kinase activity regulates murine mast cell degranulation. Journal of Physiology, 2016, 594, 2957-2970.	1.3	34
68	Acceleration of Membrane Recycling by Axotomy of Cultured Aplysia Neurons. Neuron, 1996, 16, 641-651.	3.8	31
69	TRPM7 is regulated by halides through its kinase domain. Cellular and Molecular Life Sciences, 2013, 70, 2757-2771.	2.4	29
70	N-Myc-induced up-regulation of TRPM6/TRPM7 channels promotes neuroblastoma cell proliferation. Oncotarget, 2014, 5, 7625-7634.	0.8	29
71	Lack of direct evidence for a functional role of voltage-operated calcium channels in juxtaglomerular cells. Pflugers Archiv European Journal of Physiology, 1990, 416, 281-287.	1.3	26
72	Inhibition of TRPM7 suppresses cell proliferation of colon adenocarcinoma in vitro and induces hypomagnesemia in vivo without affecting azoxymethane-induced early colon cancer in mice. Cell Communication and Signaling, 2017, 15, 30.	2.7	25

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73	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
74	Development and Optimization of a High-Throughput Bioassay for TRPM7 Ion Channel Inhibitors. Journal of Biomolecular Screening, 2010, 15, 498-507.	2.6	23
75	Stateâ€dependent blocking mechanism of K_v1.3 channels by the antimycobacterial drug clofazimine. British Journal of Pharmacology, 2015, 172, 5161-5173.	2.7	19
76	Areca nut extracts mobilize calcium and release pro-inflammatory cytokines from various immune cells. Scientific Reports, 2018, 8, 1075.	1.6	19
77	Store-Operated Calcium Entry: A Tough Nut to CRAC. Science Signaling, 2004, 2004, pe38-pe38.	1.6	18
78	IP3 receptor subtype-dependent activation of store-operated calcium entry through ICRAC. Cell Calcium, 2009, 45, 326-330.	1.1	18
79	The coiled-coil domain of zebrafish TRPM7 regulates MgÂ·nucleotide sensitivity. Scientific Reports, 2016, 6, 33459.	1.6	18
80	Scalaradial Is a Potent Inhibitor of Transient Receptor Potential Melastatin 2 (TRPM2) Ion Channels. Journal of Natural Products, 2017, 80, 2741-2750.	1.5	17
81	Pharmacology of JNJ-28583113: A novel TRPM2 antagonist. European Journal of Pharmacology, 2019, 853, 299-307.	1.7	16
82	TRPM2 channels are not required for acute airway inflammation in OVA-induced severe allergic asthma in mice. Journal of Inflammation, 2013, 10, 19.	1.5	15
83	TRPM7 contributes to progressive nephropathy. Scientific Reports, 2020, 10, 2333.	1.6	15
84	Emerging roles of TRPM channels. Novartis Foundation Symposium, 2004, 258, 248-58; discussion 258-66.	1.2	12
85	Emerging Roles of TRPM Channels. Novartis Foundation Symposium, 2008, , 248-262.	1.2	11
86	Small-Conductance Ca2+-Activated Potassium Type 2 Channels Regulate the Formation of Contextual Fear Memory. PLoS ONE, 2015, 10, e0127264.	1.1	8
87	Differential modulation of voltage-dependent Ca2+ currents by EGTA and BAPTA in bovine adrenal chromaffin cells. Pflugers Archiv European Journal of Physiology, 1999, 439, 27-38.	1.3	6
88	d-6-Deoxy-myo-inositol 1,3,4,5-tetrakisphosphate, a mimic of d-myo-inositol 1,3,4,5-tetrakisphosphate: biological activity and pH-dependent conformational properties. Biochemical and Biophysical Research Communications, 2004, 320, 1262-1270.	1.0	6
89	The TRPM7 kinase limits receptor-induced calcium release by regulating heterotrimeric G-proteins. Cellular and Molecular Life Sciences, 2018, 75, 3069-3078.	2.4	6
90	Transient Receptor Potential C 1/4/5 Is a Determinant of MTI-101 Induced Calcium Influx and Cell Death in Multiple Myeloma. Cells, 2021, 10, 1490.	1.8	4

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91	Acidic Cannabinoids Suppress Proinflammatory Cytokine Release by Blocking Store-operated Calcium Entry. Function, 2022, 3, .	1.1	4
92	Role of ICRAC in the Regulation of Secretion. , 1999, , 362-371.		2
93	Sex-dependent effect of aging on calcium signaling and expression of TRPM2 and CRAC channels in human neutrophils. Human Immunology, 2022, , .	1.2	1
94	A GTP Analogue Induces Calcium Release but Not Secretion in Rat Mast Cells. International Archives of Allergy and Immunology, 1991, 94, 74-75.	0.9	0