

Murali Prakriya

List of Publications by Year in descending order

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papers

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57758

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docs citations

83
times ranked

10793
citing authors

#	ARTICLE	IF	CITATIONS
1	Cav ² 1 regulates T cell expansion and apoptosis independently of voltage-gated Ca ²⁺ channel function. Nature Communications, 2022, 13, 2033.	12.8	18
2	Extracellular Nucleotides and Histamine Suppress TLR3- and RIG-I-Mediated Release of Antiviral IFNs from Human Airway Epithelial Cells. Journal of Immunology, 2022, 208, 2390-2402.	0.8	0
3	Mapping interactions between the CRAC activation domain and CC1 regulating the activity of the ER Ca ²⁺ sensor STIM1. Journal of Biological Chemistry, 2022, 298, 102157.	3.4	8
4	Interrogating permeation and gating of Orai channels using chemical modification of cysteine residues. Methods in Enzymology, 2021, 652, 213-239.	1.0	1
5	An open pore structure of the Orai channel, finally. Cell Calcium, 2021, 94, 102366.	2.4	1
6	Orai1 is in neurons: Reply to "where have all the Orais gone?". Cell Calcium, 2021, 96, 102389.	2.4	2
7	Differential Regulation of ATP- and UTP-Evoked Prostaglandin E2 and IL-6 Production from Human Airway Epithelial Cells. Journal of Immunology, 2021, 207, 1275-1287.	0.8	12
8	Molecular basis of allosteric Orai1 channel activation by STIM1. Journal of Physiology, 2020, 598, 1707-1723.	2.9	55
9	MCU meets cardiolipin: Calcium and disease follow form. Cell Calcium, 2020, 92, 102287.	2.4	2
10	Orai1 Channels Are Essential for Amplification of Glutamate-Evoked Ca ²⁺ Signals in Dendritic Spines to Regulate Working and Associative Memory. Cell Reports, 2020, 33, 108464.	6.4	24
11	Calcium and cell function. Journal of Physiology, 2020, 598, 1647-1648.	2.9	14
12	Regulation of chemoconvulsant-induced seizures by store-operated Orai1 channels. Journal of Physiology, 2020, 598, 5391-5409.	2.9	9
13	The basic residues in the Orai1 channel inner pore promote opening of the outer hydrophobic gate. Journal of General Physiology, 2020, 152, .	1.9	21
14	A sulfur-aromatic gate latch is essential for opening of the Orai1 channel pore. ELife, 2020, 9, .	6.0	13
15	CRAC channels regulate astrocyte Ca ²⁺ signaling and gliotransmitter release to modulate hippocampal GABAergic transmission. Science Signaling, 2019, 12, .	3.6	68
16	Metformin Targets Mitochondrial Electron Transport to Reduce Air-Pollution-Induced Thrombosis. Cell Metabolism, 2019, 29, 335-347.e5.	16.2	75
17	The exquisitely cooperative nature of Orai1 channel activation. Journal of General Physiology, 2018, 150, 1352-1355.	1.9	8
18	Mapping the functional anatomy of Orai1 transmembrane domains for CRAC channel gating. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E5193-E5202.	7.1	52

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19	STIM1 activates CRAC channels through rotation of the pore helix to open a hydrophobic gate. Nature Communications, 2017, 8, 14512.	12.8	87
20	Interactions between Transmembrane Helices in Orai1 Regulate CRAC Channel Gating. Biophysical Journal, 2017, 112, 537a-538a.	0.5	0
21	ORAI2 modulates store-operated calcium entry and T cell-mediated immunity. Nature Communications, 2017, 8, 14714.	12.8	158
22	Pore opening mechanism of CRAC channels. Cell Calcium, 2017, 63, 14-19.	2.4	33
23	16th FASEB Science Research Conference on Calcium and Cell Function: Calcium channels and signaling in health and disease. Journal of General Physiology, 2016, 148, 359-365.	1.9	0
24	Regulation of neurogenesis by calcium signaling. Cell Calcium, 2016, 59, 124-134.	2.4	157
25	Allergens stimulate store-operated calcium entry and cytokine production in airway epithelial cells. Scientific Reports, 2016, 6, 32311.	3.3	44
26	Conformational Changes in the Orai1 C-Terminus Evoked by STIM1 Binding. PLoS ONE, 2015, 10, e0128622.	2.5	38
27	Depletion of H ₂ S during obesity enhances store-operated Ca ²⁺ entry in adipose tissue macrophages to increase cytokine production. Science Signaling, 2015, 8, ra128.	3.6	40
28	Structural and Functional Mechanisms of CRAC Channel Regulation. Journal of Molecular Biology, 2015, 427, 77-93.	4.2	79
29	Store-Operated Ca ²⁺ Release-Activated Ca ²⁺ Channels Regulate PAR2-Activated Ca ²⁺ Signaling and Cytokine Production in Airway Epithelial Cells. Journal of Immunology, 2015, 195, 2122-2133.	0.8	47
30	Missense mutation in immunodeficient patients shows the multifunctional roles of coiled-coil domain 3 (CC3) in STIM1 activation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6206-6211.	7.1	52
31	Store-Operated Calcium Channels. Physiological Reviews, 2015, 95, 1383-1436.	28.8	922
32	Calcium release-activated calcium (CRAC) channels mediate the \hat{I}^2 -adrenergic regulation of Na,K-ATPase. FEBS Letters, 2014, 588, 4686-4693.	2.8	6
33	Store-Operated CRAC Channels Regulate Gene Expression and Proliferation in Neural Progenitor Cells. Journal of Neuroscience, 2014, 34, 9107-9123.	3.6	123
34	Divergence of Ca ²⁺ selectivity and equilibrium Ca ²⁺ blockade in a Ca ²⁺ release-activated Ca ²⁺ channel. Journal of General Physiology, 2014, 143, 325-343.	1.9	30
35	Store-Operated Orai Channels. Current Topics in Membranes, 2013, 71, 1-32.	0.9	66
36	Preface. Current Topics in Membranes, 2013, 71, xi-xii.	0.9	3

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37	Conformational dynamics of STIM1 activation. <i>Nature Structural and Molecular Biology</i> , 2013, 20, 918-919.	8.2	35
38	The C- and N-terminal STIM1 binding sites on Orai1 are required for both trapping and gating CRAC channels. <i>Journal of Physiology</i> , 2013, 591, 2833-2850.	2.9	111
39	Distinct Functional Roles of the N- and C-Terminal STIM1 Binding Sites in Orai1 for Trapping and Gating of CRAC Channels. <i>Biophysical Journal</i> , 2013, 104, 101a.	0.5	0
40	Mitochondria Are Required for Antigen-Specific T Cell Activation through Reactive Oxygen Species Signaling. <i>Immunity</i> , 2013, 38, 225-236.	14.3	981
41	Molecular pharmacology of store-operated CRAC channels. <i>Channels</i> , 2013, 7, 402-414.	2.8	77
42	Permeation, selectivity and gating in store-operated CRAC channels. <i>Journal of Physiology</i> , 2012, 590, 4179-4191.	2.9	51
43	Ion channels and transporters in lymphocyte function and immunity. <i>Nature Reviews Immunology</i> , 2012, 12, 532-547.	22.7	364
44	Gated regulation of CRAC channel ion selectivity by STIM1. <i>Nature</i> , 2012, 482, 241-245.	27.8	198
45	Permeation and gating mechanisms in store-operated CRAC channels. <i>Frontiers in Bioscience - Landmark</i> , 2012, 17, 1613.	3.0	13
46	Hypoxia Leads to Na,K-ATPase Downregulation via Ca ²⁺ Release-Activated Ca ²⁺ Channels and AMPK Activation. <i>Molecular and Cellular Biology</i> , 2011, 31, 3546-3556.	2.3	127
47	Hypoxia Triggers AMPK Activation through Reactive Oxygen Species-Mediated Activation of Calcium Release-Activated Calcium Channels. <i>Molecular and Cellular Biology</i> , 2011, 31, 3531-3545.	2.3	329
48	Competitive Modulation of Ca ²⁺ Release-activated Ca ²⁺ Channel Gating by STIM1 and 2-Aminoethyl-diphenyl Borate. <i>Journal of Biological Chemistry</i> , 2011, 286, 9429-9442.	3.4	50
49	The calcium ATPase SERCA2 regulates desmoplakin dynamics and intercellular adhesive strength through modulation of PKC ζ signaling. <i>FASEB Journal</i> , 2011, 25, 990-1001.	0.5	55
50	Store-Operated Ca ²⁺ Entry through ORAI1 Is Critical for T Cell-Mediated Autoimmunity and Allograft Rejection. <i>Journal of Immunology</i> , 2010, 185, 5845-5858.	0.8	133
51	Epac2 induces synapse remodeling and depression and its disease-associated forms alter spines. <i>Nature Neuroscience</i> , 2009, 12, 1275-1284.	14.8	148
52	The molecular physiology of CRAC channels. <i>Immunological Reviews</i> , 2009, 231, 88-98.	6.0	111
53	Structural determinants of ion permeation in CRAC channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22516-22521.	7.1	137
54	Oligomerization of STIM1 couples ER calcium depletion to CRAC channel activation. <i>Nature</i> , 2008, 454, 538-542.	27.8	501

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55	STIM1â€™Orai1 interactions and Orai1 conformational changes revealed by liveâ€™cell FRET microscopy. <i>Journal of Physiology</i> , 2008, 586, 5383-5401.	2.9	195
56	Dual functions for the endoplasmic reticulum calcium sensors STIM1 and STIM2 in T cell activation and tolerance. <i>Nature Immunology</i> , 2008, 9, 432-443.	14.5	528
57	Hair Loss and Defective T- and B-Cell Function in Mice Lacking ORAI1. <i>Molecular and Cellular Biology</i> , 2008, 28, 5209-5222.	2.3	275
58	Orai1 Mutations Alter Ion Permeation and Ca ²⁺ -dependent Fast Inactivation of CRAC Channels: Evidence for Coupling of Permeation and Gating. <i>Journal of General Physiology</i> , 2007, 130, 525-540.	1.9	114
59	A mutation in Orai1 causes immune deficiency by abrogating CRAC channel function. <i>Nature</i> , 2006, 441, 179-185.	27.8	2,016
60	Orai1 is an essential pore subunit of the CRAC channel. <i>Nature</i> , 2006, 443, 230-233.	27.8	1,223
61	Regulation of CRAC Channel Activity by Recruitment of Silent Channels to a High Open-probability Gating Mode. <i>Journal of General Physiology</i> , 2006, 128, 373-386.	1.9	133
62	Activation of GPCRs modulates quantal size in chromaffin cells through G β γ and PKC. <i>Nature Neuroscience</i> , 2005, 8, 1160-1168.	14.8	97
63	A severe defect in CRAC Ca ²⁺ channel activation and altered K ⁺ channel gating in T cells from immunodeficient patients. <i>Journal of Experimental Medicine</i> , 2005, 202, 651-662.	8.5	220
64	Store-operated calcium channels: properties, functions and the search for a molecular mechanism. <i>Advances in Molecular and Cell Biology</i> , 2004, 32, 121-140.	0.1	7
65	CRAC channels: activation, permeation, and the search for a molecular identity. <i>Cell Calcium</i> , 2003, 33, 311-321.	2.4	154
66	Separation and Characterization of Currents through Store-operated CRAC Channels and Mg ²⁺ -inhibited Cation (MIC) Channels. <i>Journal of General Physiology</i> , 2002, 119, 487-508.	1.9	262
67	Potentiation and inhibition of Ca ²⁺ releaseâ€™activated Ca ²⁺ channels by 2â€™aminoethyl diphenyl borate (2â€™APB) occurs independently of IP ₃ receptors. <i>Journal of Physiology</i> , 2001, 536, 3-19.	2.9	463
68	Activation of BK Channels in Rat Chromaffin Cells Requires Summation of Ca ²⁺ Influx From Multiple Ca ²⁺ Channels. <i>Journal of Neurophysiology</i> , 2000, 84, 1123-1135.	1.8	66
69	Selective Depression of Lowâ€™Release Probability Excitatory Synapses by Sodium Channel Blockers. <i>Neuron</i> , 2000, 26, 671-682.	8.1	100
70	BK Channel Activation by Brief Depolarizations Requires Ca ²⁺ Influx Through L- and Q-Type Ca ²⁺ Channels in Rat Chromaffin Cells. <i>Journal of Neurophysiology</i> , 1999, 81, 2267-2278.	1.8	94
71	Enantioselective Blockade of T-type Ca ²⁺ Current in Adult Rat Sensory Neurons by a Steroid That Lacks β -Aminobutyric Acid-Modulatory Activity. <i>Molecular Pharmacology</i> , 1998, 54, 918-927.	2.3	50
72	[Ca ²⁺] _i Elevations Detected by BK Channels during Ca ²⁺ Influx and Muscarine-Mediated Release of Ca ²⁺ from Intracellular Stores in Rat Chromaffin Cells. <i>Journal of Neuroscience</i> , 1996, 16, 4344-4359.	3.6	55

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73	A computerized grid walking system for evaluating the accuracy of locomotion in rats. Journal of Neuroscience Methods, 1993, 48, 15-25.	2.5	16