Tibor Rohacs

List of Publications by Year in descending order

81 papers	6,131 citations	41 h-index	73 g-index
100 all docs	100 docs citations	100 times ranked	5404 citing authors

#	Article	IF	Citations
1	How Many Cell Types Are in the Kidney and What Do They Do?. Annual Review of Physiology, 2022, 84, 507-531.	13.1	69
2	Structural basis of TRPV5 regulation by physiological and pathophysiological modulators. Cell Reports, 2022, 39, 110737.	6.4	22
3	TMEM120A/TACAN inhibits mechanically activated PIEZO2 channels. Journal of General Physiology, 2022, 154, .	1.9	8
4	What structures did, and did not, reveal about the function of the epithelial Ca2+ channels TRPV5 and TRPV6. Cell Calcium, 2022, 106, 102620.	2.4	4
5	The TRPM3 ion channel mediates nociception but not itch evoked by endogenous pruritogenic mediators. Biochemical Pharmacology, 2021, 183, 114310.	4.4	9
6	Dual regulation of TRPV1 channels by phosphatidylinositol via functionally distinct binding sites. Journal of Biological Chemistry, 2021, 296, 100573.	3.4	16
7	TRPM3 Channels Play Roles in Heat Hypersensitivity and Spontaneous Pain after Nerve Injury. Journal of Neuroscience, 2021, 41, 2457-2474.	3.6	30
8	Keeping pain away by distancing the plasma membrane from the endoplasmic reticulum. Journal of Physiology, 2021, 599, 1941-1942.	2.9	0
9	Methods to study phosphoinositide regulation of ion channels. Methods in Enzymology, 2021, 652, 49-79.	1.0	5
10	Crowding-induced opening of the mechanosensitive Piezo1 channel in silico. Communications Biology, 2021, 4, 84.	4.4	35
11	The newest TRP channelopathy: Gain of function TRPM3 mutations cause epilepsy and intellectual disability. Channels, 2021, 15, 386-397.	2.8	11
12	Giâ€coupled receptor activation potentiates Piezo2 currents via GÎ²Î³. EMBO Reports, 2020, 21, e49124.	4.5	20
13	Regulation of the cold-sensing TRPM8 channels by phosphoinositides and G_q-coupled receptors. Channels, 2020, 14, 79-86.	2.8	10
14	Diacylglycerol kinases regulate TRPV1 channel activity. Journal of Biological Chemistry, 2020, 295, 8174-8185.	3.4	15
15	The structural basis for an onâ€“off switch controlling GÎ²Î³-mediated inhibition of TRPM3 channels. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29090-29100.	7.1	17
16	Disease-associated mutations in the human TRPM3 render the channel overactive via two distinct mechanisms. ELife, 2020, 9, .	6.0	29
17	<i>G</i>_{Î±q} Sensitizes TRPM8 to Inhibition by PI(4,5)P₂ Depletion upon Receptor Activation. Journal of Neuroscience, 2019, 39, 6067-6080.	3.6	15
18	The Gâ€proteinâ€biased agents PZM21 and TRV130 are partial agonists of Î¼â€opioid receptorâ€mediated signalling to ion channels. British Journal of Pharmacology, 2019, 176, 3110-3125.	5.4	36

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19	Phosphatidylinositol Inhibits TRPV1 via its Vanilloid Binding Site. Biophysical Journal, 2019, 116, 536a.	0.5	0
20	Tools for Understanding Nanoscale Lipid Regulation of Ion Channels. Trends in Biochemical Sciences, 2019, 44, 795-806.	7.5	66
21	Molecular mechanism of TRPV2 channel modulation by cannabidiol. ELife, 2019, 8, .	6.0	106
22	Structure-based characterization of novel TRPV5 inhibitors. ELife, 2019, 8, .	6.0	44
23	Ion Channel Sensing: Are Fluctuations the Crux of the Matter?. Journal of Physical Chemistry Letters, 2018, 9, 1260-1264.	4.6	43
24	Structural basis of TRPV5 channel inhibition by econazole revealed by cryo-EM. Nature Structural and Molecular Biology, 2018, 25, 53-60.	8.2	114
25	Inhibitory G_{i/O}-coupled receptors in somatosensory neurons: Potential therapeutic targets for novel analgesics. Molecular Pain, 2018, 14, 174480691876364.	2.1	34
26	Structural insights on TRPV5 gating by endogenous modulators. Nature Communications, 2018, 9, 4198.	12.8	118
27	A hypothetical molecular mechanism for TRPV1 activation that invokes rotation of an S6 asparagine. Journal of General Physiology, 2018, 150, 1554-1566.	1.9	30
28	Transgenic expression of human APOL1 risk variants in podocytes induces kidney disease in mice. Nature Medicine, 2017, 23, 429-438.	30.7	282
29	The Mechanism of Regulation of TRPV6 Channels by PI(4,5)P 2. Biophysical Journal, 2017, 112, 114a-115a.	0.5	0
30	Inhibition of Transient Receptor Potential Melastatin 3 ion channels by G-protein Î²Î³ subunits. ELife, 2017, 6, .	6.0	65
31	TRPV1: A Target for Rational Drug Design. Pharmaceuticals, 2016, 9, 52.	3.8	85
32	Phospholipase C Î´4 regulates cold sensitivity in mice. Journal of Physiology, 2016, 594, 3609-3628.	2.9	25
33	A molecular determinant of phosphoinositide affinity in mammalian TRPV channels. Scientific Reports, 2016, 6, 27652.	3.3	26
34	Phosphoinositide signaling in somatosensory neurons. Advances in Biological Regulation, 2016, 61, 2-16.	2.3	18
35	Understanding TRPV1 activation by ligands: Insights from the binding modes of capsaicin and resiniferatoxin. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E137-45.	7.1	127
36	Activation of TRPV1 channels inhibits mechanosensitive Piezo channel activity by depleting membrane phosphoinositides. Science Signaling, 2015, 8, ra15.	3.6	153

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37	Phosphoinositide regulation of TRPV1 revisited. Pflugers Archiv European Journal of Physiology, 2015, 467, 1851-1869.	2.8	71
38	The Role of PLCÎ´4 in the Activity of TRPM8 Expressing Sensory Neurons. Biophysical Journal, 2015, 108, 284a.	0.5	0
39	Transient receptor potential melastatin 3 is a phosphoinositide-dependent ion channel. Journal of General Physiology, 2015, 146, 65-77.	1.9	62
40	TRPM3 joins the ranks of PI(4,5)P₂ sensitive ion channels. Channels, 2015, 9, 233-234.	2.8	2
41	Regulation of the Ion Channel TRPM3 by Phosphoinositides. Biophysical Journal, 2014, 106, 334a.	0.5	1
42	Phosphoinositide Regulation of TRP Channels. Handbook of Experimental Pharmacology, 2014, 223, 1143-1176.	1.8	104
43	Distinctive Changes in Plasma Membrane Phosphoinositides Underlie Differential Regulation of TRPV1 in Nociceptive Neurons. Journal of Neuroscience, 2013, 33, 11451-11463.	3.6	75
44	Regulation of transient receptor potential channels by the phospholipase C pathway. Advances in Biological Regulation, 2013, 53, 341-355.	2.3	59
45	Polyester Modification of the Mammalian TRPM8 Channel Protein: Implications for Structure and Function. Cell Reports, 2013, 4, 302-315.	6.4	48
46	The Roles Calmodulin and PI(4,5)P2 in Ca2+-Induced Inactivation of TRPV6 Channels. Biophysical Journal, 2013, 104, 457a.	0.5	0
47	Recording Macroscopic Currents in Large Patches from Xenopus Oocytes. Methods in Molecular Biology, 2013, 998, 119-131.	0.9	8
48	Sphingosine and the transient receptor potential channel kinase(s). British Journal of Pharmacology, 2013, 168, 1291-1293.	5.4	3
49	Interplay between Calmodulin and Phosphatidylinositol 4,5-Bisphosphate in Ca2+-induced Inactivation of Transient Receptor Potential Vanilloid 6 Channels*. Journal of Biological Chemistry, 2013, 288, 5278-5290.	3.4	49
50	Promiscuous Activation of Transient Receptor Potential Vanilloid 1 (TRPV1) Channels by Negatively Charged Intracellular Lipids. Journal of Biological Chemistry, 2013, 288, 35003-35013.	3.4	55
51	Molecular Mechanisms of Calmodulin Regulation of TRPV6. Biophysical Journal, 2012, 102, 343a.	0.5	0
52	Phosphoinositide Sensitivity of Ion Channels, a Functional Perspective. Sub-Cellular Biochemistry, 2012, 59, 289-333.	2.4	33
53	Signal termination: how many different ways can you hit the brakes in biological systems?. Acta Physiologica, 2012, 204, 465-465.	3.8	1
54	Regulation of TRPM8 channel activity. Molecular and Cellular Endocrinology, 2012, 353, 68-74.	3.2	65

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55	Direct Activation of TRPV6 Channels by Phosphatidylinositol 4,5-Bisphosphate. Biophysical Journal, 2011, 100, 107a.	0.5	0
56	Decrease in phosphatidylinositol 4,5â€bisphosphate levels mediates desensitization of the cold sensor TRPM8 channels. Journal of Physiology, 2011, 589, 6007-6027.	2.9	72
57	Intracellular ATP supports TRPV6 activity<i>via</i>lipid kinases and the generation of PtdIns(4,5)P₂. FASEB Journal, 2011, 25, 3915-3928.	0.5	50
58	Gating of Transient Receptor Potential Melastatin 8 (TRPM8) Channels Activated by Cold and Chemical Agonists in Planar Lipid Bilayers. Journal of Neuroscience, 2010, 30, 12526-12534.	3.6	140
59	Phosphoinositide regulation of non-canonical transient receptor potential channels. Cell Calcium, 2009, 45, 554-565.	2.4	81
60	Phospholipase C-Mediated Regulation of Transient Receptor Potential Vanilloid 6 Channels: Implications in Active Intestinal Ca²⁺ Transport. Molecular Pharmacology, 2009, 75, 608-616.	2.3	41
61	Inorganic Polyphosphate Modulates TRPM8 Channels. PLoS ONE, 2009, 4, e5404.	2.5	128
62	Phospholipase C Mediated Modulation of TRPV1 Channels. Molecular Neurobiology, 2008, 37, 153-163.	4.0	91
63	Hydrolysis of Phosphatidylinositol 4,5-Bisphosphate Mediates Calcium-induced Inactivation of TRPV6 Channels. Journal of Biological Chemistry, 2008, 283, 14980-14987.	3.4	67
64	Dual Regulation of TRPV1 by Phosphoinositides. Journal of Neuroscience, 2007, 27, 7070-7080.	3.6	241
65	Protein Kinase A Modulates PLC-Dependent Regulation and PIP₂-Sensitivity of K⁺Channels. Channels, 2007, 1, 124-134.	2.8	53
66	Regulation of TRP channels by PIP2. Pflugers Archiv European Journal of Physiology, 2007, 453, 753-762.	2.8	80
67	Regulation of transient receptor potential (TRP) channels by phosphoinositides. Pflugers Archiv European Journal of Physiology, 2007, 455, 157-168.	2.8	104
68	Rapidly inducible changes in phosphatidylinositol 4,5-bisphosphate levels influence multiple regulatory functions of the lipid in intact living cells. Journal of Cell Biology, 2006, 175, 377-382.	5.2	316
69	PI(4,5)P2 regulates the activation and desensitization of TRPM8 channels through the TRP domain. Nature Neuroscience, 2005, 8, 626-634.	14.8	535
70	PIP2hydrolysis underlies agonist-induced inhibition and regulates voltage gating of two-pore domain K+channels. Journal of Physiology, 2005, 564, 117-129.	2.9	164
71	TRP Channels. Science Signaling, 2005, 2005, tr14-tr14.	3.6	7
72	Characteristic Interactions with Phosphatidylinositol 4,5-Bisphosphate Determine Regulation of Kir Channels by Diverse Modulators. Journal of Biological Chemistry, 2004, 279, 37271-37281.	3.4	162

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73	PIP2 Activates KCNQ Channels, and Its Hydrolysis Underlies Receptor-Mediated Inhibition of M Currents. Neuron, 2003, 37, 963-975.	8.1	474
74	Specificity of activation by phosphoinositides determines lipid regulation of Kir channels. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 745-750.	7.1	206
75	Sorcin Regulates Excitation-Contraction Coupling in the Heart. Journal of Biological Chemistry, 2003, 278, 28865-28871.	3.4	46
76	Assaying Phosphatidylinositol Bisphosphate Regulation of Potassium Channels. Methods in Enzymology, 2002, 345, 71-92.	1.0	43
77	Alterations in Conserved Kir Channel-PIP2 Interactions Underlie Channelopathies. Neuron, 2002, 34, 933-944.	8.1	368
78	The Î²Î³ Subunits of G Proteins Gate a K+ Channel by Pivoted Bending of a Transmembrane Segment. Molecular Cell, 2002, 10, 469-481.	9.7	123
79	Stimulus-Secretion Coupling and Mitochondrial Metabolism in Steroid-Secreting Cells. Physiology, 2001, 16, 197-200.	3.1	6
80	Calcium Signal and Mitochondrial Metabolism in Steroid Producing Cells. Endocrine Research, 2000, 26, 615-616.	1.2	0
81	Distinct Specificities of Inwardly Rectifying K+Channels for Phosphoinositides. Journal of Biological Chemistry, 1999, 274, 36065-36072.	3.4	179