Igor Pottosin

List of Publications by Year
in descending order

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77 papers	5,179 citations	94269 37 h-index	88477 70 g-index
78 all docs	78 docs citations	78 times ranked	4973 citing authors

#	Article	IF	Citations
1	Cannabidiol on the Path from the Lab to the Cancer Patient: Opportunities and Challenges. Pharmaceuticals, 2022, 15, 366.	1.7	11
2	Overcoming Glucocorticoid Resistance in Acute Lymphoblastic Leukemia: Repurposed Drugs Can Improve the Protocol. Frontiers in Oncology, 2021, 11, 617937.	1.3	25
3	Tamoxifen Sensitizes Acute Lymphoblastic Leukemia Cells to Cannabidiol by Targeting Cyclophilin-D and Altering Mitochondrial Ca2+ Homeostasis. International Journal of Molecular Sciences, 2021, 22, 8688.	1.8	5
4	Phenolic Compounds Cannabidiol, Curcumin and Quercetin Cause Mitochondrial Dysfunction and Suppress Acute Lymphoblastic Leukemia Cells. International Journal of Molecular Sciences, 2021, 22, 204.	1.8	31
5	The energy cost of the tonoplast futile sodium leak. New Phytologist, 2020, 225, 1105-1110.	3.5	86
6	What is the role of putrescine accumulated under potassium deficiency?. Plant, Cell and Environment, 2020, 43, 1331-1347.	2.8	51
7	Modulation of Ion Transport Across Plant Membranes by Polyamines: Understanding Specific Modes of Action Under Stress. Frontiers in Plant Science, 2020, 11, 616077.	1.7	21
8	Kv1.3 channel is a potential marker for B acute lymphoblastic leukemia. FASEB Journal, 2020, 34, 1-1.	0.2	1
9	Kv1.3 Current Voltage Dependence in Lymphocytes is Modulated by Co-Culture with Bone Marrow-Derived Stromal Cells: B and T Cells Respond Differentially. Cellular Physiology and Biochemistry, 2020, 54, 842-852.	1.1	4
10	Cannabidiol directly targets mitochondria and disturbs calcium homeostasis in acute lymphoblastic leukemia. Cell Death and Disease, 2019, 10, 779.	2.7	85
11	Mitochondria as emerging targets for therapies against T cell acute lymphoblastic leukemia. Journal of Leukocyte Biology, 2019, 105, 935-946.	1.5	33
12	Two-pore cation (TPC) channel: not a shorthanded one. Functional Plant Biology, 2018, 45, 83.	1.1	18
13	Methods Related to Polyamine Control of Cation Transport Across Plant Membranes. Methods in Molecular Biology, 2018, 1694, 257-276.	0.4	4
14	Powering the plasma membrane Ca2+-ROS self-amplifying loop. Journal of Experimental Botany, 2018, 69, 3317-3320.	2.4	13
15	Differential Activity of Voltage- and Ca2+-Dependent Potassium Channels in Leukemic T Cell Lines: Jurkat Cells Represent an Exceptional Case. Frontiers in Physiology, 2018, 9, 499.	1.3	16
16	An Anion Conductance, the Essential Component of the Hydroxyl-Radical-Induced Ion Current in Plant Roots. International Journal of Molecular Sciences, 2018, 19, 897.	1.8	14
17	Calcium transport across plant membranes: mechanisms and functions. New Phytologist, 2018, 220, 49-69.	3.5	289
18	Cholinergic Machinery as Relevant Target in Acute Lymphoblastic T Leukemia. Frontiers in Pharmacology, 2016, 7, 290.	1.6	6

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19	Natural variation in primary root growth and K+ retention in roots of habanero pepper (Capsicum) Tj ETQq1 1 0.784314 rgBT /Overlock	1.1	11
20	Cell-Type-Specific H⁺-ATPase Activity in Root Tissues Enables K⁺ Retention and Mediates Acclimation of Barley (<i>Hordeum vulgare</i>) to Salinity Stress. Plant Physiology, 2016, 172, 2445-2458.	2.3	158
21	On a quest for stress tolerance genes: membrane transporters in sensing and adapting to hostile soils. Journal of Experimental Botany, 2016, 67, 1015-1031.	2.4	135
22	Transport Across Chloroplast Membranes: Optimizing Photosynthesis for Adverse Environmental Conditions. Molecular Plant, 2016, 9, 356-370.	3.9	104
23	Ion Channels in Native Chloroplast Membranes: Challenges and Potential for Direct Patch-Clamp Studies. Frontiers in Physiology, 2015, 6, 396.	1.3	32
24	Placing Ion Channels into a Signaling Network of T Cells: From Maturing Thymocytes to Healthy T Lymphocytes or Leukemic T Lymphoblasts. BioMed Research International, 2015, 2015, 1-32.	0.9	14
25	Mechanosensitive Ca2+-permeable channels in human leukemic cells: Pharmacological and molecular evidence for TRPV2. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 51-59.	1.4	44
26	Polyamine Action on Plant Ion Channels and Pumps. , 2015, , 229-241.		6
27	Mechanisms of salt tolerance in habanero pepper plants (Capsicum chinense Jacq.): Proline accumulation, ions dynamics and sodium root-shoot partition and compartmentation. Frontiers in Plant Science, 2014, 5, 605.	1.7	53
28	Polyamines control of cation transport across plant membranes: implications for ion homeostasis and abiotic stress signaling. Frontiers in Plant Science, 2014, 5, 154.	1.7	168
29	Regulation of potassium transport in plants under hostile conditions: implications for abiotic and biotic stress tolerance. Physiologia Plantarum, 2014, 151, 257-279.	2.6	534
30	Cross-talk between reactive oxygen species and polyamines in regulation of ion transport across the plasma membrane: implications for plant adaptive responses. Journal of Experimental Botany, 2014, 65, 1271-1283.	2.4	197
31	Choline but not its derivative betaine blocks slow vacuolar channels in the halophyte <i>Chenopodium quinoa</i>: Implications for salinity stress responses. FEBS Letters, 2014, 588, 3918-3923.	1.3	26
32	Non-selective cation channels in plasma and vacuolar membranes and their contribution to K+ transport. Journal of Plant Physiology, 2014, 171, 732-742.	1.6	79
33	Polyamines Depolarize the Membrane and Initiate a Cross-Talk Between Plasma Membrane Ca2+ and H+ Pumps. Biophysical Journal, 2014, 106, 586a.	0.2	1
34	Kinetics of xylem loading, membrane potential maintenance, and sensitivity of <scp><scp>K⁺</scp></scp>â€permeable channels to reactive oxygen species: physiological traits that differentiate salinity tolerance between pea and barley. Plant, Cell and Environment, 2014, 37, 589-600.	2.8	107
35	Polyamines cause plasma membrane depolarization, activate Ca2+-, and modulate H+-ATPase pump activity in pea roots. Journal of Experimental Botany, 2014, 65, 2463-2472.	2.4	82
36	Potassium and Sodium Transport Channels Under NaCl Stress. , 2014, , 325-359.		3

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37	TRESK potassium channel in human T lymphoblasts. Biochemical and Biophysical Research Communications, 2013, 434, 273-279.	1.0	8
38	Reduced Tonoplast Fast-Activating and Slow-Activating Channel Activity Is Essential for Conferring Salinity Tolerance in a Facultative Halophyte, Quinoa Â Â Â. Plant Physiology, 2013, 162, 940-952.	2.3	138
39	Differential Activity of Plasma and Vacuolar Membrane Transporters Contributes to Genotypic Differences in Salinity Tolerance in a Halophyte Species, Chenopodium quinoa. International Journal of Molecular Sciences, 2013, 14, 9267-9285.	1.8	96
40	Synergism between polyamines and ROS in the induction of Ca²⁺and K⁺fluxes in roots. Plant Signaling and Behavior, 2012, 7, 1084-1087.	1.2	40
41	Salt-sensitive and salt-tolerant barley varieties differ in the extent of potentiation of the ROS-induced K+ efflux by polyamines. Plant Physiology and Biochemistry, 2012, 61, 18-23.	2.8	89
42	Patch-Clamp Protocols to Study Cell Ionic Homeostasis Under Saline Conditions. Methods in Molecular Biology, 2012, 913, 3-18.	0.4	2
43	Polyamines Interact with Hydroxyl Radicals in Activating Ca2+ and K+ Transport across the Root Epidermal Plasma Membranes Â. Plant Physiology, 2011, 157, 2167-2180.	2.3	144
44	Calcium Efflux Systems in Stress Signaling and Adaptation in Plants. Frontiers in Plant Science, 2011, 2, 85.	1.7	206
45	Infection by Trypanosoma cruzi Enhances Anion Conductance in Rat Neonatal Ventricular Cardiomyocytes. Journal of Membrane Biology, 2010, 238, 51-61.	1.0	1
46	Specificity of Polyamine Effects on NaCl-induced Ion Flux Kinetics and Salt Stress Amelioration in Plants. Plant and Cell Physiology, 2010, 51, 422-434.	1.5	80
47	Potassium and Potassium-Permeable Channels in Plant Salt Tolerance. Signaling and Communication in Plants, 2010, , 87-110.	0.5	36
48	K_{bg}and Kv1.3 channels mediate potassium efflux in the early phase of apoptosis in Jurkat T lymphocytes. American Journal of Physiology - Cell Physiology, 2009, 297, C1544-C1553.	2.1	41
49	SV channels dominate the vacuolar Ca²⁺ release during intracellular signaling. FEBS Letters, 2009, 583, 921-926.	1.3	61
50	TRESK-like potassium channels in leukemic T cells. Pflugers Archiv European Journal of Physiology, 2008, 456, 1037-1048.	1.3	30
51	Patch clamp characterization of a non-selective cation channel of ER membranes purified from Beta vulgaris taproots. Physiologia Plantarum, 2008, 132, 399-406.	2.6	3
52	Na+- K+transport in roots under salt stress. Plant Signaling and Behavior, 2008, 3, 401-403.	1.2	53
53	Homeostatic control of slow vacuolar channels by luminal cations and evaluation of the channel-mediated tonoplast Ca2+ fluxes in situ. Journal of Experimental Botany, 2008, 59, 3845-3855.	2.4	50
54	Root Plasma Membrane Transporters Controlling K+/Na+ Homeostasis in Salt-Stressed Barley. Plant Physiology, 2007, 145, 1714-1725.	2.3	458

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55	Vacuolar calcium channels. Journal of Experimental Botany, 2007, 58, 1559-1569.	2.4	137
56	Polyamines prevent NaCl-induced K+efflux from pea mesophyll by blocking non-selective cation channels. FEBS Letters, 2007, 581, 1993-1999.	1.3	149
57	Cooperative interaction of high-potential hemes in the cytochrome subunit of the photosynthetic reaction center of bacterium Ectothiorhodospira shaposhnikovii. Biochemistry (Moscow), 2007, 72, 1254-1260.	0.7	0
58	Methyl-Î²-cyclodextrin reversibly alters the gating of lipid rafts-associated Kv1.3 channels in Jurkat T lymphocytes. Pflugers Archiv European Journal of Physiology, 2007, 454, 235-244.	1.3	36
59	Fast-activating Channel Controls Cation Fluxes across the Native Chloroplast Envelope. Journal of Membrane Biology, 2005, 204, 145-156.	1.0	28
60	Regulation of the Slow Vacuolar Channel by Luminal Potassium: Role of Surface Charge. Journal of Membrane Biology, 2005, 205, 103-111.	1.0	22
61	Different properties of SV channels in root vacuoles from near isogenic Al-tolerant and Al-sensitive wheat cultivars. FEBS Letters, 2005, 579, 6890-6894.	1.3	13
62	Mechanism of luminal Ca2+ and Mg2+ action on the vacuolar slowly activating channels. Planta, 2004, 219, 1057-1070.	1.6	56
63	Regulation of the Fast Vacuolar Channel by Cytosolic and Vacuolar Potassium. Biophysical Journal, 2003, 84, 977-986.	0.2	34
64	Conduction of Monovalent and Divalent Cations in the Slow Vacuolar Channel. Journal of Membrane Biology, 2001, 181, 55-65.	1.0	66
65	Inhibition of Vacuolar Ion Channels by Polyamines. Journal of Membrane Biology, 1999, 167, 127-140.	1.0	102
66	Asymmetric block of the plant vacuolar Ca 2+ -permeable channel by organic cations. European Biophysics Journal, 1999, 28, 552-563.	1.2	48
67	Cooperative Block of the Plant Endomembrane Ion Channel by Ruthenium Red. Biophysical Journal, 1999, 77, 1973-1979.	0.2	36
68	Cytoplasmic polyamines block the fast-activating vacuolar cation channel. Plant Journal, 1998, 16, 101-105.	2.8	90
69	Fast-activating cation channel in barley mesophyll vacuoles. Inhibition by calcium. Plant Journal, 1997, 11, 1059-1070.	2.8	70
70	Slowly activating vacuolar channels can not mediate Ca2+-induced Ca2+ release. Plant Journal, 1997, 12, 1387-1398.	2.8	114
71	Ion Channel Permeable for Divalent and Monovalent Cations in Native Spinach Thylakoid Membranes. Journal of Membrane Biology, 1996, 152, 223-233.	1.0	86
72	Patch-clamp study of vascular plant chloroplasts: Ion channels and photocurrents. Journal of Bioenergetics and Biomembranes, 1995, 27, 249-258.	1.0	9

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73	Depolarization-Activated K+ Channel in Chara Droplets. Plant Physiology, 1994, 106, 313-319.	2.3	10
74	One of the chloroplast envelope ion channels is probably related to the mitochondrial VDAC. FEBS Letters, 1993, 330, 211-214.	1.3	16
75	Probing of pore in the Chara gymnophylla K+ channel by blocking cations and by streaming potential measurements. FEBS Letters, 1992, 298, 253-256.	1.3	5
76	Single channel recording in the chloroplast envelope. FEBS Letters, 1992, 308, 87-90.	1.3	34
77	Effects of dehydration and low temperatures on the oxidation of high-potential cytochrome c by photosynthetic reaction centers in Ectothiorhodospira shaposhnikovii. Biochimica Et Biophysica Acta - Bioenergetics, 1986, 848, 402-410.	0.5	15