Luis G Cuello

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/92259/publications.pdf

Version: 2024-02-01

35 papers	3,442 citations	331538 21 h-index	360920 35 g-index
37 all docs	37 docs citations	37 times ranked	2111 citing authors

#	Article	IF	Citations
1	Structural Rearrangements Underlying K+-Channel Activation Gating. Science, 1999, 285, 73-78.	6.0	545
2	Structural mechanism of C-type inactivation in K+ channels. Nature, 2010, 466, 203-208.	13.7	437
3	Molecular determinants of gating at the potassium-channel selectivity filter. Nature Structural and Molecular Biology, 2006, 13, 311-318.	3.6	399
4	Three-dimensional architecture and gating mechanism of a K+ channel studied by EPR spectroscopy. Nature Structural Biology, 1998, 5, 459-469.	9.7	282
5	Structural basis for the coupling between activation and inactivation gates in K+ channels. Nature, 2010, 466, 272-275.	13.7	267
6	Molecular Architecture of Full-Length KcsA. Journal of General Physiology, 2001, 117, 165-180.	0.9	235
7	pH-Dependent Gating in theStreptomyces lividansK+Channelâ€. Biochemistry, 1998, 37, 3229-3236.	1.2	233
8	Molecular Architecture of the KvAP Voltage-Dependent K+ Channel in a Lipid Bilayer. Science, 2004, 306, 491-495.	6.0	219
9	Detection of the Opening of the Bundle Crossing in KcsA with Fluorescence Lifetime Spectroscopy Reveals the Existence of Two Gates for Ion Conduction. Journal of General Physiology, 2006, 128, 569-581.	0.9	97
10	The gating cycle of a K+ channel at atomic resolution. ELife, 2017, 6, .	2.8	85
11	Mechanism of activation gating in the full-length KcsA K ⁺ channel. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11896-11899.	3.3	65
12	Rapid constriction of the selectivity filter underlies C-type inactivation in the KcsA potassium channel. Journal of General Physiology, 2018, 150, 1408-1420.	0.9	64
13	Thermodynamic coupling between activation and inactivation gating in potassium channels revealed by free energy molecular dynamics simulations. Journal of General Physiology, 2011, 138, 571-580.	0.9	49
14	A molecular mechanism for protonâ€dependent gating in KcsA. FEBS Letters, 2010, 584, 1126-1132.	1.3	48
15	Thioredoxin reverses age-related hypertension by chronically improving vascular redox and restoring eNOS function. Science Translational Medicine, 2017, 9, .	5.8	45
16	Inverted allosteric coupling between activation and inactivation gates in K ⁺ channels. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5426-5431.	3.3	44
17	Hysteresis of KcsA potassium channel's activationâ€“ deactivation gating is caused by structural changes at the channelâ€™s selectivity filter. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3234-3239.	3.3	43
18	A lipid site shapes the agonist response of a pentameric ligand-gated ion channel. Nature Chemical Biology, 2019, 15, 1156-1164.	3.9	43

#	Article	IF	Citations
19	Activation of the mechanosensitive ion channel MscL by mechanical stimulation of supported Droplet-Hydrogel bilayers. Scientific Reports, 2017, 7, 45180.	1.6	35
20	Structural Dynamics of the Magnesium-Bound Conformation of CorA in a Lipid Bilayer. Structure, 2010, 18, 868-878.	1.6	30
21	Functional analysis and regulation of purified connexin hemichannels. Frontiers in Physiology, 2014, 5, 71.	1.3	29
22	Design and characterization of a constitutively open KcsA. FEBS Letters, 2010, 584, 1133-1138.	1.3	25
23	Electrostatic Interaction of a K+Channel RCK Domain with Charged Membrane Surfacesâ€. Biochemistry, 2005, 44, 62-71.	1.2	22
24	Voltage-dependent BK and Hv1 channels expressed in non-excitable tissues: New therapeutics opportunities as targets in human diseases. Pharmacological Research, 2015, 101, 56-64.	3.1	17
25	Structure, function, and ion-binding properties of a K ⁺ channel stabilized in the 2,4-ionâ€“bound configuration. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16829-16834.	3.3	17
26	An improved method for the cost-effective expression and purification of large quantities of KcsA. Protein Expression and Purification, 2016, 127, 53-60.	0.6	13
27	Functional hemichannels formed by human connexin 26 expressed in bacteria. Bioscience Reports, 2015, 35, .	1.1	11
28	Inhibition by Commercial Aminoglycosides of Human Connexin Hemichannels Expressed in Bacteria. Molecules, 2017, 22, 2063.	1.7	11
29	An Escherichia coli-Based Assay to Assess the Function of Recombinant Human Hemichannels. SLAS Discovery, 2017, 22, 135-143.	1.4	8
30	The Selectivity Filter Is Involved in the U-Type Inactivation Process of Kv2.1 and Kv3.1 Channels. Biophysical Journal, 2020, 118, 2612-2620.	0.2	8
31	A cost-effective protocol for the over-expression and purification of fully-functional and more stable Erwinia chrysanthemi ligand-gated ion channel. Protein Expression and Purification, 2017, 133, 177-186.	0.6	3
32	A Simple Assay to Evaluate the Function of Human Connexin Hemichannels Expressed in Escherichia coli that Can Be Used for Drug Discovery and Mutant Analysis. Current Protocols in Pharmacology, 2019, 87, e68.	4.0	3
33	TOK channels use the two gates in classical K ⁺ channels to achieve outward rectification. FASEB Journal, 2020, 34, 8902-8919.	0.2	3
34	CW-EPR Spectroscopy and Site-Directed Spin Labeling to Study the Structural Dynamics of Ion Channels. Methods in Molecular Biology, 2018, 1684, 279-288.	0.4	3
35	A Cell-Based Assay to Assess Hemichannel Function. Yale Journal of Biology and Medicine, 2017, 90, 87-95.	0.2	3