Christopher J Lingle

List of Publications by Year
in descending order

82	4,799	87888 38	98798 67
papers	citations	h-index	g-index

90	90	90	2650
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The LRRC family of BK channel regulatory subunits: potential roles in health and disease. Journal of Physiology, 2022, 600, 1357-1371.	2.9	13
2	Goblet cell LRRC26 regulates BK channel activation and protects against colitis in mice. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	14
3	Fast inactivation of Nav current in rat adrenal chromaffin cells involves two independent inactivation pathways. Journal of General Physiology, 2021, 153, .	1.9	5
4	Nav1.3 and FGF14 are primary determinants of the TTX-sensitive sodium current in mouse adrenal chromaffin cells. Journal of General Physiology, 2021, 153, .	1.9	7
5	Slow recovery from fast inactivation of Nav1.3 channels: a common gating mechanism shared in sweet- and sour-sensing cells. Pflugers Archiv European Journal of Physiology, 2021, 473, 855-857.	2.8	0
6	The functionally relevant site for paxilline inhibition of BK channels. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1021-1026.	7.1	26
7	LRRC52 regulates BK channel function and localization in mouse cochlear inner hair cells. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18397-18403.	7.1	24
8	Regulation of BK Channels by Beta and Gamma Subunits. Annual Review of Physiology, 2019, 81, 113-137.	13.1	88
9	Roles of Na+, Ca2+, and K+ channels in the generation of repetitive firing and rhythmic bursting in adrenal chromaffin cells. Pflugers Archiv European Journal of Physiology, 2018, 470, 39-52.	2.8	36
10	Regulatory Î³1 subunits defy symmetry in functional modulation of BK channels. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9923-9928.	7.1	14
11	BK channel inhibition by strong extracellular acidification. ELife, 2018, 7, .	6.0	12
12	Knockout of the LRRC26 subunit reveals a primary role of LRRC26-containing BK channels in secretory epithelial cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3739-E3747.	7.1	29
13	Threading the biophysics of mammalian Slo1 channels onto structures of an invertebrate Slo1 channel. Journal of General Physiology, 2017, 149, 985-1007.	1.9	30
14	Engineering differential charge selectivity from a single structural template. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 12610-12612.	7.1	0
15	NAVigating a transition from single action potential firing to bursting in chromaffin cells. Journal of Physiology, 2015, 593, 761-762.	2.9	2
16	Two classes of regulatory subunits coassemble in the same BK channel and independently regulate gating. Nature Communications, 2015, 6, 8341.	12.8	29
17	SLO3 auxiliary subunit LRRC52 controls gating of sperm KSPER currents and is critical for normal fertility. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2599-2604.	7.1	61
18	Cadmiumâ€“cysteine coordination in the BK inner pore region and its structural and functional implications. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5237-5242.	7.1	51

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19	Knockout of Slo2.2 enhances itch, abolishes KNa current, and increases action potential firing frequency in DRG neurons. ELife, 2015, 4, .	6.0	66
20	Paxilline inhibits BK channels by an almost exclusively closed-channel block mechanism. Journal of General Physiology, 2014, 144, 415-440.	1.9	117
21	Knockout of the BK Î²2 subunit abolishes inactivation of BK currents in mouse adrenal chromaffin cells and results in slow-wave burst activity. Journal of General Physiology, 2014, 144, 275-295.	1.9	58
22	Functional regulation of BK potassium channels by Î³1 auxiliary subunits. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 4868-4873.	7.1	53
23	The Ca2+-activated K+ current of human sperm is mediated by Slo3. ELife, 2014, 3, e01438.	6.0	94
24	Simultaneous knockout of Slo3 and CatSper1 abolishes all alkalization- and voltage-activated current in mouse spermatozoa. Journal of General Physiology, 2013, 142, 305-313.	1.9	65
25	Barium ions selectively activate BK channels via the Ca2+-bowl site. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11413-11418.	7.1	47
26	Stereospecific binding of a disordered peptide segment mediates BK channel inactivation. Nature, 2012, 485, 133-136.	27.8	21
27	Cysteine scanning and modification reveal major differences between BK channels and Kv channels in the inner pore region. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12161-12166.	7.1	72
28	LRRC52 (leucine-rich-repeat-containing protein 52), a testis-specific auxiliary subunit of the alkalization-activated Slo3 channel. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19419-19424.	7.1	83
29	Deletion of the Slo3 gene abolishes alkalization-activated K ⁺ current in mouse spermatozoa. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5879-5884.	7.1	182
30	Glycine311, a determinant of paxilline block in BK channels: a novel bend in the BK S6 helix. Journal of General Physiology, 2010, 135, 481-494.	1.9	25
31	Inhibition of Large-Conductance Ca²⁺-Activated K⁺ Channels by Nanomolar Concentrations of Ag⁺. Molecular Pharmacology, 2010, 78, 952-960.	2.3	5
32	Block of mouse Slo1 and Slo3 K⁺channels by CTX, IbTX, TEA, 4-AP and quinidine. Channels, 2010, 4, 22-41.	2.8	56
33	Interactions between Î² Subunits of the KCNMB Family and Slo3: Î²4 Selectively Modulates Slo3 Expression and Function. PLoS ONE, 2009, 4, e6135.	2.5	36
34	N-terminal Inactivation Domains of Î² Subunits Are Protected from Trypsin Digestion by Binding within the Antechamber of BK Channels. Journal of General Physiology, 2009, 133, 263-282.	1.9	10
35	Closed-channel block of BK potassium channels by bbTBA requires partial activation. Journal of General Physiology, 2009, 134, 409-436.	1.9	38
36	Differential Regulation of Action Potentials by Inactivating and Noninactivating BK Channels in Rat Adrenal Chromaffin Cells. Biophysical Journal, 2009, 97, 1832-1842.	0.5	33

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37	Species-specific Differences among KCNMB3 BK Î²3 Auxiliary Subunits: Some Î²3 N-terminal Variants May Be Primate-specific Subunits. Journal of General Physiology, 2008, 132, 115-129.	1.9	20
38	Mg2+-dependent Regulation of BK Channels: Importance of Electrostatics. Journal of General Physiology, 2008, 131, 5-11.	1.9	10
39	Gating Rings Formed by RCK Domains: Keys to Gate Opening. Journal of General Physiology, 2007, 129, 101-107.	1.9	28
40	BK Channels with Â3a Subunits Generate Use-Dependent Slow Afterhyperpolarizing Currents by an Inactivation-Coupled Mechanism. Journal of Neuroscience, 2007, 27, 4707-4715.	3.6	13
41	Empirical considerations regarding the use of ensemble-variance analysis of macroscopic currents. Journal of Neuroscience Methods, 2006, 158, 121-132.	2.5	17
42	Slo3 K+ Channels: Voltage and pH Dependence of Macroscopic Currents. Journal of General Physiology, 2006, 128, 317-336.	1.9	50
43	A Limited Access Compartment between the Pore Domain and Cytosolic Domain of the BK Channel. Journal of Neuroscience, 2006, 26, 11833-11843.	3.6	18
44	Direct Observation of a Preinactivated, Open State in BK Channels with Î²2 Subunits. Journal of General Physiology, 2006, 127, 119-131.	1.9	23
45	pH-regulated Slo3 K+ Channels: Properties of Unitary Currents. Journal of General Physiology, 2006, 128, 301-315.	1.9	27
46	Divalent Cation Sensitivity of BK Channel Activation Supports the Existence of Three Distinct Binding Sites. Journal of General Physiology, 2005, 125, 273-286.	1.9	137
47	Ligand-Dependent Activation of Slo Family Channels Is Defined by Interchangeable Cytosolic Domains. Journal of Neuroscience, 2004, 24, 5585-5591.	3.6	52
48	Redox-sensitive extracellular gates formed by auxiliary Î² subunits of calcium-activated potassium channels. Nature Structural and Molecular Biology, 2003, 10, 448-454.	8.2	87
49	Inactivation of BK Channels by the NH2 Terminus of the Î²2 Auxiliary Subunit: An Essential Role of a Terminal Peptide Segment of Three Hydrophobic Residues. Journal of General Physiology, 2003, 121, 125-148.	1.9	80
50	Setting the Stage for Molecular Dissection of the Regulatory Components of BK Channels. Journal of General Physiology, 2002, 120, 261-265.	1.9	13
51	Steady-State and Closed-State Inactivation Properties of Inactivating BK Channels. Biophysical Journal, 2002, 82, 2448-2465.	0.5	22
52	Consequences of the Stoichiometry ofSlo1Î± and Auxiliary Î² Subunits on Functional Properties of Large-Conductance Ca²⁺-Activated K⁺Channels. Journal of Neuroscience, 2002, 22, 1550-1561.	3.6	121
53	Multiple regulatory sites in large-conductance calcium-activated potassium channels. Nature, 2002, 418, 880-884.	27.8	347
54	Allosteric Regulation of Bk Channel Gating by Ca2+ and Mg2+ through a Nonselective, Low Affinity Divalent Cation Site. Journal of General Physiology, 2001, 118, 607-636.	1.9	131

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55	Inactivation of Bk Channels Mediated by the Nh2 Terminus of the Î²3b Auxiliary Subunit Involves a Two-Step Mechanism. Journal of General Physiology, 2001, 117, 583-606.	1.9	38
56	Gating Properties Conferred on Bk Channels by the Î²3b Auxiliary Subunit in the Absence of Its Nh2- and Cooh Termini. Journal of General Physiology, 2001, 117, 607-628.	1.9	30
57	Activation of BK Channels in Rat Chromaffin Cells Requires Summation of Ca²⁺ Influx From Multiple Ca²⁺Channels. Journal of Neurophysiology, 2000, 84, 1123-1135.	1.8	66
58	Anticonvulsants But Not General Anesthetics Have Differential Blocking Effects on Different T-Type Current Variants. Molecular Pharmacology, 2000, 58, 98-108.	2.3	96
59	Rectification and Rapid Activation at Low Ca²⁺of Ca²⁺-Activated, Voltage-Dependent BK Currents: Consequences of Rapid Inactivation by a Novel Î² Subunit. Journal of Neuroscience, 2000, 20, 4890-4903.	3.6	157
60	RINm5f Cells Express Inactivating BK Channels Whereas HIT Cells Express Noninactivating BK Channels. Journal of Neurophysiology, 1999, 81, 611-624.	1.8	33
61	BK Channel Activation by Brief Depolarizations Requires Ca²⁺ Influx Through L- and Q-Type Ca²⁺ Channels in Rat Chromaffin Cells. Journal of Neurophysiology, 1999, 81, 2267-2278.	1.8	94
62	Molecular Basis for the Inactivation of Ca²⁺- and Voltage-Dependent BK Channels in Adrenal Chromaffin Cells and Rat Insulinoma Tumor Cells. Journal of Neuroscience, 1999, 19, 5255-5264.	3.6	252
63	Blockade of Ba2+ current through human Î±1E channels by two steroid analogs, (+)-ACN and (+)-ECN. Neuropharmacology, 1999, 38, 843-855.	4.1	11
64	Properties of Ba2+ currents arising from human Î±1E and Î±1EÎ²3 constructs expressed in HEK293 cells: physiology, pharmacology, and comparison to native T-type Ba2+ currents. Neuropharmacology, 1998, 37, 957-972.	4.1	41
65	Enantioselective Blockade of T-type Ca²⁺ Current in Adult Rat Sensory Neurons by a Steroid That Lacks Î³-Aminobutyric Acid-Modulatory Activity. Molecular Pharmacology, 1998, 54, 918-927.	2.3	50
66	The Anesthetic Steroid (+)-3Î±-Hydroxy-5Î±-androstane-17Î²-carbonitrile Blocks N-, Q-, and R-Type, but Not L- and P-Type, High Voltage-Activated Ca2+Current in Hippocampal and Dorsal Root Ganglion Neurons of the Rat. Molecular Pharmacology, 1998, 54, 559-568.	2.3	29
67	Pharmacological Properties of T-Type Ca²⁺ Current in Adult Rat Sensory Neurons: Effects of Anticonvulsant and Anesthetic Agents. Journal of Neurophysiology, 1998, 79, 240-252.	1.8	301
68	A Cysteine-rich Domain Defined by a Novel Exon in aSlo Variant in Rat Adrenal Chromaffin Cells and PC12 Cells. Journal of Biological Chemistry, 1997, 272, 11710-11717.	3.4	130
69	The cytosolic inactivation domains of BKi channels in rat chromaffin cells do not behave like simple, open-channel blockers. Biophysical Journal, 1997, 73, 819-830.	0.5	28
70	[Ca²⁺]_iElevations Detected by BK Channels during Ca²⁺Influx and Muscarine-Mediated Release of Ca²⁺from Intracellular Stores in Rat Chromaffin Cells. Journal of Neuroscience, 1996, 16, 4344-4359.	3.6	55
71	Calcium-Activated Potassium Channels in Adrenal Chromaffin Cells. , 1996, 4, 261-301.		63
72	Calcium sensitivity of BK-type KCa channels determined by a separable domain. Neuron, 1994, 13, 671-681.	8.1	248

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73	Activation of skeletal muscle nicotinic acetylcholine receptors. Journal of Membrane Biology, 1992, 126, 195-217.	2.1	43
74	Halothane Reduces Calcium Currents in Clonal (GH3) Pituitary Cells. Annals of the New York Academy of Sciences, 1991, 625, 290-292.	3.8	6
75	NEUROMUSCULAR BLOCKING AGENTS. International Anesthesiology Clinics, 1988, 26, 288-301.	0.8	32
76	A GABAâ€activated chlorideâ€conductance not blocked by picrotoxin on spiny lobster neuromuscular preparations. British Journal of Pharmacology, 1986, 87, 771-779.	5.4	29
77	Heterogeneous kinetic properties of acetylcholine receptor channels in Xenopus myocytes.. Journal of Physiology, 1986, 378, 119-140.	2.9	66
78	Comparison of excitatory currents activated by different transmitters on crustacean muscle. I. Acetylcholine-activated channels.. Journal of General Physiology, 1983, 81, 547-569.	1.9	8
79	Blockade of cholinergic channels by chlorisondamine on a crustacean muscle.. Journal of Physiology, 1983, 339, 395-417.	2.9	58
80	Different types of blockade of crustacean acetylcholineâ€induced currents.. Journal of Physiology, 1983, 339, 419-437.	2.9	38
81	A glutamate-activated chloride conductance on a crustacean muscle. Brain Research, 1981, 212, 481-488.	2.2	47
82	The sensitivity of decapod foregut muscles to acetylcholine and glutamate. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1980, 138, 187-199.	1.6	48