

# Christopher J Lingle

## List of Publications by Citations

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80  
papers

4,034  
citations

36  
h-index

62  
g-index

90  
ext. papers

4,433  
ext. citations

6.9  
avg, IF

5.46  
L-index

#	Paper	IF	Citations
80	Multiple regulatory sites in large-conductance calcium-activated potassium channels. <i>Nature</i> , <b>2002</b> , 418, 880-4	50.4	310
79	Pharmacological properties of T-type Ca <sup>2+</sup> current in adult rat sensory neurons: effects of anticonvulsant and anesthetic agents. <i>Journal of Neurophysiology</i> , <b>1998</b> , 79, 240-52	3.2	277
78	Molecular basis for the inactivation of Ca <sup>2+</sup> - and voltage-dependent BK channels in adrenal chromaffin cells and rat insulinoma tumor cells. <i>Journal of Neuroscience</i> , <b>1999</b> , 19, 5255-64	6.6	235
77	Calcium sensitivity of BK-type KCa channels determined by a separable domain. <i>Neuron</i> , <b>1994</b> , 13, 671-81	13.9	234
76	Rectification and rapid activation at low Ca <sup>2+</sup> of Ca <sup>2+</sup> -activated, voltage-dependent BK currents: consequences of rapid inactivation by a novel beta subunit. <i>Journal of Neuroscience</i> , <b>2000</b> , 20, 4890-903	6.6	146
75	Deletion of the Slo3 gene abolishes alkalization-activated K <sup>+</sup> current in mouse spermatozoa. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 5879-84	11.5	137
74	Allosteric regulation of BK channel gating by Ca <sup>2+</sup> and Mg <sup>2+</sup> through a nonselective, low affinity divalent cation site. <i>Journal of General Physiology</i> , <b>2001</b> , 118, 607-36	3.4	123
73	A cysteine-rich domain defined by a novel exon in a slo variant in rat adrenal chromaffin cells and PC12 cells. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 11710-7	5.4	121
72	Divalent cation sensitivity of BK channel activation supports the existence of three distinct binding sites. <i>Journal of General Physiology</i> , <b>2005</b> , 125, 273-86	3.4	113
71	Consequences of the stoichiometry of Slo1 alpha and auxiliary beta subunits on functional properties of large-conductance Ca <sup>2+</sup> -activated K <sup>+</sup> channels. <i>Journal of Neuroscience</i> , <b>2002</b> , 22, 1550-61	6.6	104
70	Paxilline inhibits BK channels by an almost exclusively closed-channel block mechanism. <i>Journal of General Physiology</i> , <b>2014</b> , 144, 415-40	3.4	91
69	Anticonvulsants but not general anesthetics have differential blocking effects on different T-type current variants. <i>Molecular Pharmacology</i> , <b>2000</b> , 58, 98-108	4.3	88
68	BK channel activation by brief depolarizations requires Ca <sup>2+</sup> influx through L- and Q-type Ca <sup>2+</sup> channels in rat chromaffin cells. <i>Journal of Neurophysiology</i> , <b>1999</b> , 81, 2267-78	3.2	86
67	Redox-sensitive extracellular gates formed by auxiliary beta subunits of calcium-activated potassium channels. <i>Nature Structural and Molecular Biology</i> , <b>2003</b> , 10, 448-54	17.6	81
66	Inactivation of BK channels by the NH <sub>2</sub> terminus of the beta2 auxiliary subunit: an essential role of a terminal peptide segment of three hydrophobic residues. <i>Journal of General Physiology</i> , <b>2003</b> , 121, 125-48	3.4	71
65	Cysteine scanning and modification reveal major differences between BK channels and Kv channels in the inner pore region. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 12161-6	11.5	62
64	The Ca <sup>2+</sup> -activated K <sup>+</sup> current of human sperm is mediated by Slo3. <i>ELife</i> , <b>2014</b> , 3, e01438	8.9	62

63	LRRC52 (leucine-rich-repeat-containing protein 52), a testis-specific auxiliary subunit of the alkalization-activated Slo3 channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 19419-24	11.5	61
62	Activation of BK channels in rat chromaffin cells requires summation of Ca(2+) influx from multiple Ca(2+) channels. <i>Journal of Neurophysiology</i> , <b>2000</b> , 84, 1123-35	3.2	61
61	Heterogeneous kinetic properties of acetylcholine receptor channels in <i>Xenopus</i> myocytes. <i>Journal of Physiology</i> , <b>1986</b> , 378, 119-40	3.9	60
60	Calcium-activated potassium channels in adrenal chromaffin cells. <i>Ion Channels</i> , <b>1996</b> , 4, 261-301		56
59	[Ca <sup>2+</sup> ] <sub>i</sub> elevations detected by BK channels during Ca <sup>2+</sup> influx and muscarine-mediated release of Ca <sup>2+</sup> from intracellular stores in rat chromaffin cells. <i>Journal of Neuroscience</i> , <b>1996</b> , 16, 4344-59	6.6	53
58	Blockade of cholinergic channels by chlorisondamine on a crustacean muscle. <i>Journal of Physiology</i> , <b>1983</b> , 339, 395-417	3.9	53
57	Regulation of BK Channels by Beta and Gamma Subunits. <i>Annual Review of Physiology</i> , <b>2019</b> , 81, 113-137	23.1	50
56	Ligand-dependent activation of Slo family channels is defined by interchangeable cytosolic domains. <i>Journal of Neuroscience</i> , <b>2004</b> , 24, 5585-91	6.6	47
55	Block of mouse Slo1 and Slo3 K <sup>+</sup> channels by CTX, IbTX, TEA, 4-AP and quinidine. <i>Channels</i> , <b>2010</b> , 4, 22-41		45
54	Enantioselective blockade of T-type Ca <sup>2+</sup> current in adult rat sensory neurons by a steroid that lacks gamma-aminobutyric acid-modulatory activity. <i>Molecular Pharmacology</i> , <b>1998</b> , 54, 918-27	4.3	44
53	A glutamate-activated chloride conductance on a crustacean muscle. <i>Brain Research</i> , <b>1981</b> , 212, 481-8	3.7	44
52	Knockout of the BK $\beta$ subunit abolishes inactivation of BK currents in mouse adrenal chromaffin cells and results in slow-wave burst activity. <i>Journal of General Physiology</i> , <b>2014</b> , 144, 275-95	3.4	43
51	The sensitivity of decapod foregut muscles to acetylcholine and glutamate. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , <b>1980</b> , 138, 187-199	2.3	43
50	Slo3 K <sup>+</sup> channels: voltage and pH dependence of macroscopic currents. <i>Journal of General Physiology</i> , <b>2006</b> , 128, 317-36	3.4	42
49	Functional regulation of BK potassium channels by $\beta$ auxiliary subunits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 4868-73	11.5	39
48	SLO3 auxiliary subunit LRRC52 controls gating of sperm KSPER currents and is critical for normal fertility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 2599-604	11.5	39
47	Simultaneous knockout of Slo3 and CatSper1 abolishes all alkalization- and voltage-activated current in mouse spermatozoa. <i>Journal of General Physiology</i> , <b>2013</b> , 142, 305-13	3.4	39
46	Activation of skeletal muscle nicotinic acetylcholine receptors. <i>Journal of Membrane Biology</i> , <b>1992</b> , 126, 195-217	2.3	38

45	Properties of Ba <sup>2+</sup> currents arising from human alpha1E and alpha1Ebeta3 constructs expressed in HEK293 cells: physiology, pharmacology, and comparison to native T-type Ba <sup>2+</sup> currents. <i>Neuropharmacology</i> , <b>1998</b> , 37, 957-72	5.5	37
44	Barium ions selectively activate BK channels via the Ca <sup>2+</sup> -bowl site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 11413-8	11.5	35
43	Inactivation of BK channels mediated by the NH(2) terminus of the beta3b auxiliary subunit involves a two-step mechanism: possible separation of binding and blockade. <i>Journal of General Physiology</i> , <b>2001</b> , 117, 583-606	3.4	34
42	Different types of blockade of crustacean acetylcholine-induced currents. <i>Journal of Physiology</i> , <b>1983</b> , 339, 419-37	3.9	34
41	Knockout of Slo2.2 enhances itch, abolishes KNa current, and increases action potential firing frequency in DRG neurons. <i>ELife</i> , <b>2015</b> , 4,	8.9	34
40	Closed-channel block of BK potassium channels by bbTBA requires partial activation. <i>Journal of General Physiology</i> , <b>2009</b> , 134, 409-36	3.4	33
39	RINm5f cells express inactivating BK channels whereas HIT cells express noninactivating BK channels. <i>Journal of Neurophysiology</i> , <b>1999</b> , 81, 611-24	3.2	32
38	Differential regulation of action potentials by inactivating and noninactivating BK channels in rat adrenal chromaffin cells. <i>Biophysical Journal</i> , <b>2009</b> , 97, 1832-42	2.9	31
37	Gating properties conferred on BK channels by the beta3b auxiliary subunit in the absence of its NH(2)- and COOH termini. <i>Journal of General Physiology</i> , <b>2001</b> , 117, 607-28	3.4	28
36	Neuromuscular blocking agents. <i>International Anesthesiology Clinics</i> , <b>1988</b> , 26, 288-301	0.6	28
35	The cytosolic inactivation domains of BK channels in rat chromaffin cells do not behave like simple, open-channel blockers. <i>Biophysical Journal</i> , <b>1997</b> , 73, 819-30	2.9	27
34	Two classes of regulatory subunits coassemble in the same BK channel and independently regulate gating. <i>Nature Communications</i> , <b>2015</b> , 6, 8341	17.4	26
33	Interactions between beta subunits of the KCNMB family and Slo3: beta4 selectively modulates Slo3 expression and function. <i>PLoS ONE</i> , <b>2009</b> , 4, e6135	3.7	26
32	Gating rings formed by RCK domains: keys to gate opening. <i>Journal of General Physiology</i> , <b>2007</b> , 129, 101-7	3.4	26
31	The anesthetic steroid (+)-3alpha-hydroxy-5alpha-androstane-17beta-carbonitrile blocks N-, Q-, and R-type, but not L- and P-type, high voltage-activated Ca <sup>2+</sup> current in hippocampal and dorsal root ganglion neurons of the rat. <i>Molecular Pharmacology</i> , <b>1998</b> , 54, 559-68	4.3	26
30	A GABA-activated chloride-conductance not blocked by picrotoxin on spiny lobster neuromuscular preparations. <i>British Journal of Pharmacology</i> , <b>1986</b> , 87, 771-9	8.6	26
29	pH-regulated Slo3 K <sup>+</sup> channels: properties of unitary currents. <i>Journal of General Physiology</i> , <b>2006</b> , 128, 301-15	3.4	24
28	Knockout of the LRRC26 subunit reveals a primary role of LRRC26-containing BK channels in secretory epithelial cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E3739-E3747	11.5	23

27	Cadmium-cysteine coordination in the BK inner pore region and its structural and functional implications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 5237-42	11.5	23
26	Glycine311, a determinant of paxilline block in BK channels: a novel bend in the BK S6 helix. <i>Journal of General Physiology</i> , <b>2010</b> , 135, 481-94	3.4	22
25	Direct observation of a preinactivated, open state in BK channels with beta2 subunits. <i>Journal of General Physiology</i> , <b>2006</b> , 127, 119-31	3.4	22
24	Threading the biophysics of mammalian Slo1 channels onto structures of an invertebrate Slo1 channel. <i>Journal of General Physiology</i> , <b>2017</b> , 149, 985-1007	3.4	21
23	Steady-state and closed-state inactivation properties of inactivating BK channels. <i>Biophysical Journal</i> , <b>2002</b> , 82, 2448-65	2.9	21
22	Species-specific Differences among KCNMB3 BK beta3 auxiliary subunits: some beta3 N-terminal variants may be primate-specific subunits. <i>Journal of General Physiology</i> , <b>2008</b> , 132, 115-29	3.4	19
21	A limited access compartment between the pore domain and cytosolic domain of the BK channel. <i>Journal of Neuroscience</i> , <b>2006</b> , 26, 11833-43	6.6	18
20	Roles of Na, Ca, and K channels in the generation of repetitive firing and rhythmic bursting in adrenal chromaffin cells. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2018</b> , 470, 39-52	4.6	18
19	Stereospecific binding of a disordered peptide segment mediates BK channel inactivation. <i>Nature</i> , <b>2012</b> , 485, 133-6	50.4	16
18	Empirical considerations regarding the use of ensemble-variance analysis of macroscopic currents. <i>Journal of Neuroscience Methods</i> , <b>2006</b> , 158, 121-32	3	16
17	LRRCS2 regulates BK channel function and localization in mouse cochlear inner hair cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 18397-18403	11.5	15
16	BK channels with beta3a subunits generate use-dependent slow afterhyperpolarizing currents by an inactivation-coupled mechanism. <i>Journal of Neuroscience</i> , <b>2007</b> , 27, 4707-15	6.6	11
15	Setting the stage for molecular dissection of the regulatory components of BK channels. <i>Journal of General Physiology</i> , <b>2002</b> , 120, 261-5	3.4	11
14	Blockade of Ba <sup>2+</sup> current through human alpha1E channels by two steroid analogs, (+)-ACN and (+)-ECN. <i>Neuropharmacology</i> , <b>1999</b> , 38, 843-55	5.5	10
13	N-terminal inactivation domains of beta subunits are protected from trypsin digestion by binding within the antechamber of BK channels. <i>Journal of General Physiology</i> , <b>2009</b> , 133, 263-82	3.4	9
12	Comparison of excitatory currents activated by different transmitters on crustacean muscle. I. Acetylcholine-activated channels. <i>Journal of General Physiology</i> , <b>1983</b> , 81, 547-69	3.4	8
11	Regulatory $\beta$ subunits defy symmetry in functional modulation of BK channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 9923-9928	11.5	8
10	The functionally relevant site for paxilline inhibition of BK channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 1021-1026	11.5	6

9	BK channel inhibition by strong extracellular acidification. <i>ELife</i> , <b>2018</b> , 7,	8.9	6
8	Mg <sup>2+</sup> -dependent regulation of BK channels: importance of electrostatics. <i>Journal of General Physiology</i> , <b>2008</b> , 131, 5-11	3.4	5
7	Halothane reduces calcium currents in clonal (GH3) pituitary cells. <i>Annals of the New York Academy of Sciences</i> , <b>1991</b> , 625, 290-2	6.5	5
6	Inhibition of large-conductance Ca <sup>2+</sup> -activated K <sup>+</sup> channels by nanomolar concentrations of Ag <sup>+</sup> . <i>Molecular Pharmacology</i> , <b>2010</b> , 78, 952-60	4.3	4
5	Goblet cell LRRC26 regulates BK channel activation and protects against colitis in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	4
4	Fast inactivation of Nav current in rat adrenal chromaffin cells involves two independent inactivation pathways. <i>Journal of General Physiology</i> , <b>2021</b> , 153,	3.4	2
3	Nav1.3 and FGF14 are primary determinants of the TTX-sensitive sodium current in mouse adrenal chromaffin cells. <i>Journal of General Physiology</i> , <b>2021</b> , 153,	3.4	2
2	NAVigating a transition from single action potential firing to bursting in chromaffin cells. <i>Journal of Physiology</i> , <b>2015</b> , 593, 761-2	3.9	1
1	Engineering differential charge selectivity from a single structural template. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 12610-12612	11.5	