

# Karl L Magleby

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10649293/publications.pdf>

Version: 2024-02-01

36  
papers

2,660  
citations

279798

23  
h-index

345221

36  
g-index

39  
all docs

39  
docs citations

39  
times ranked

1540  
citing authors

#	ARTICLE	IF	CITATIONS
1	Single apamin-blocked Ca-activated K <sup>+</sup> channels of small conductance in cultured rat skeletal muscle. <i>Nature</i> , 1986, 323, 718-720.	27.8	527
2	Single channel recordings of Ca <sup>2+</sup> -activated K <sup>+</sup> currents in rat muscle cell culture. <i>Nature</i> , 1981, 293, 471-474.	27.8	405
3	Gating Mechanism of BK (Slo1) Channels. <i>Journal of General Physiology</i> , 2003, 121, 81-96.	1.9	172
4	Linker-Gating Ring Complex as Passive Spring and Ca <sup>2+</sup> -Dependent Machine for a Voltage- and Ca <sup>2+</sup> -Activated Potassium Channel. <i>Neuron</i> , 2004, 42, 745-756.	8.1	162
5	Voltage and Ca <sup>2+</sup> Activation of Single Large-Conductance Ca <sup>2+</sup> -Activated K <sup>+</sup> Channels Described by a Two-Tiered Allosteric Gating Mechanism. <i>Journal of General Physiology</i> , 2000, 116, 75-100.	1.9	143
6	A ring of eight conserved negatively charged amino acids doubles the conductance of BK channels and prevents inward rectification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 9017-9022.	7.1	127
7	The $\hat{I}^2$ Subunit Increases the Ca <sup>2+</sup> Sensitivity of Large Conductance Ca <sup>2+</sup> -activated Potassium Channels by Retaining the Gating in the Bursting States. <i>Journal of General Physiology</i> , 1999, 113, 425-440.	1.9	120
8	Gating Kinetics of Single Large-Conductance Ca <sup>2+</sup> -Activated K <sup>+</sup> Channels in High Ca <sup>2+</sup> Suggest a Two-Tiered Allosteric Gating Mechanism <sup>a</sup> . <i>Journal of General Physiology</i> , 1999, 114, 93-124.	1.9	119
9	Functional Coupling of the $\hat{I}^2$ Subunit to the Large Conductance Ca <sup>2+</sup> -Activated K <sup>+</sup> Channel in the Absence of Ca <sup>2+</sup> . <i>Journal of General Physiology</i> , 2000, 115, 719-736.	1.9	83
10	Stepwise contribution of each subunit to the cooperative activation of BK channels by Ca <sup>2+</sup> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 11441-11446.	7.1	69
11	Kinetic Structure of Large-Conductance Ca <sup>2+</sup> -activated K <sup>+</sup> Channels Suggests that the Gating Includes Transitions through Intermediate or Secondary States. <i>Journal of General Physiology</i> , 1998, 111, 751-780.	1.9	60
12	Intra- and Intersubunit Cooperativity in Activation of BK Channels by Ca <sup>2+</sup> . <i>Journal of General Physiology</i> , 2006, 128, 389-404.	1.9	60
13	Voltage- and cold-dependent gating of single TRPM8 ion channels. <i>Journal of General Physiology</i> , 2011, 137, 173-195.	1.9	60
14	Properties of Slo1 K <sup>+</sup> channels with and without the gating ring. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 16657-16662.	7.1	47
15	Slo1 Tail Domains, but Not the Ca <sup>2+</sup> Bowl, Are Required for the $\hat{I}^2$ Subunit to Increase the Apparent Ca <sup>2+</sup> Sensitivity of BK Channels. <i>Journal of General Physiology</i> , 2002, 120, 829-843.	1.9	40
16	Is the quantum of transmitter release composed of subunits?. <i>Nature</i> , 1978, 274, 388-390.	27.8	37
17	Ring of Negative Charge in BK Channels Facilitates Block by Intracellular Mg <sup>2+</sup> and Polyamines through Electrostatics. <i>Journal of General Physiology</i> , 2006, 128, 185-202.	1.9	37
18	A genetic variant of the sperm-specific SLO3 K <sup>+</sup> channel has altered pH and Ca <sup>2+</sup> sensitivities. <i>Journal of Biological Chemistry</i> , 2017, 292, 8978-8987.	3.4	35

#	ARTICLE	IF	CITATIONS
19	Voltage-induced slow activation and deactivation of mechanosensitive channels in <i>Xenopus</i> oocytes. <i>Journal of Physiology</i> , 1997, 505, 551-569.	2.9	34
20	$\alpha 1$ subunits facilitate gating of BK channels by acting through the $Ca^{2+}$ , but not the $Mg^{2+}$ , activating mechanisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 10061-10066.	7.1	32
21	Gating and Conductance Properties of Bk Channels Are Modulated by the S9-S10 Tail Domain of the $\alpha 1$ Subunit. <i>Journal of General Physiology</i> , 2001, 118, 711-734.	1.9	30
22	Low resistance, large dimension entrance to the inner cavity of BK channels determined by changing side-chain volume. <i>Journal of General Physiology</i> , 2011, 137, 533-548.	1.9	27
23	Single-channel kinetics of BK (Slo1) channels. <i>Frontiers in Physiology</i> , 2015, 5, 532.	2.8	27
24	Linking Exponential Components to Kinetic States in Markov Models for Single-Channel Gating. <i>Journal of General Physiology</i> , 2008, 132, 295-312.	1.9	26
25	Coupling and cooperativity in voltage activation of a limited-state BK channel gating in saturating $Ca^{2+}$ . <i>Journal of General Physiology</i> , 2010, 135, 461-480.	1.9	24
26	Deletion of cytosolic gating ring decreases gate and voltage sensor coupling in BK channels. <i>Journal of General Physiology</i> , 2017, 149, 373-387.	1.9	24
27	Modal gating of NMDA receptors. <i>Trends in Neurosciences</i> , 2004, 27, 231-233.	8.6	20
28	Coupling of $Ca^{2+}$ and voltage activation in BK channels through the $\alpha 1$ helix/voltage sensor interface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 14512-14521.	7.1	19
29	$Mg^{2+}$ binding to open and closed states can activate BK channels provided that the voltage sensors are elevated. <i>Journal of General Physiology</i> , 2011, 138, 593-607.	1.9	18
30	Time-irreversible Subconductance Gating Associated with $Ba^{2+}$ Block of Large Conductance $Ca^{2+}$ -activated $K^{+}$ Channels. <i>Journal of General Physiology</i> , 1998, 111, 343-362.	1.9	17
31	Short Isoforms of the Cold Receptor TRPM8 Inhibit Channel Gating by Mimicking Heat Action Rather than Chemical Inhibitors. <i>Journal of Biological Chemistry</i> , 2012, 287, 2963-2970.	3.4	15
32	Kinetic Gating Mechanisms for Bk Channels. <i>Journal of General Physiology</i> , 2001, 118, 583-588.	1.9	14
33	Ion-channel mechanisms revealed. <i>Nature</i> , 2017, 541, 33-34.	27.8	10
34	Exponential Sum-Fitting of Dwell-Time Distributions without Specifying Starting Parameters. <i>Biophysical Journal</i> , 2013, 104, 2383-2391.	0.5	9
35	Lack of negative slope in I-V plots for BK channels at positive potentials in the absence of intracellular blockers. <i>Journal of General Physiology</i> , 2013, 141, 493-497.	1.9	7
36	Modal gating of endplate acetylcholine receptors: A proposed mechanism. <i>Journal of General Physiology</i> , 2015, 146, 435-439.	1.9	2