Leigh D Plant

List of Publications by Year in descending order

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44 papers

2,448 citations

257357 24 h-index 302012 39 g-index

46 all docs

46 docs citations

46 times ranked

3679 citing authors

#	Article	IF	CITATIONS
1	The Production of Amyloid \hat{l}^2 Peptide Is a Critical Requirement for the Viability of Central Neurons. Journal of Neuroscience, 2003, 23, 5531-5535.	1.7	255
2	Sumoylation Silences the Plasma Membrane Leak K+ Channel K2P1. Cell, 2005, 121, 37-47.	13.5	247
3	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Ion channels. British Journal of Pharmacology, 2019, 176, S142-S228.	2.7	242
4	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Ion channels. British Journal of Pharmacology, 2021, 178, S157-S245.	2.7	187
5	A common cardiac sodium channel variant associated with sudden infant death in African Americans, SCN5A S1103Y. Journal of Clinical Investigation, 2006, 116, 430-435.	3.9	181
6	Alternative Translation Initiation in Rat Brain Yields K2P2.1 Potassium Channels Permeable to Sodium. Neuron, 2008, 58, 859-870.	3.8	134
7	Glyoxalase 1 increases anxiety by reducing GABAA receptor agonist methylglyoxal. Journal of Clinical Investigation, 2012, 122, 2306-2315.	3.9	124
8	SUMO modification of cell surface Kv2.1 potassium channels regulates the activity of rat hippocampal neurons. Journal of General Physiology, 2011, 137, 441-454.	0.9	100
9	Amyloid β peptide as a physiological modulator of neuronal â€~A'-type K+ current. Neurobiology of Aging, 2006, 27, 1673-1683.	1.5	93
10	Hypoxic Depolarization of Cerebellar Granule Neurons by Specific Inhibition of TASK-1. Stroke, 2002, 33, 2324-2328.	1.0	76
11	One SUMO is sufficient to silence the dimeric potassium channel K2P1. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10743-10748.	3.3	75
12	Individual I _{Ks} channels at the surface of mammalian cells contain two KCNE1 accessory subunits. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1438-46.	3.3	72
13	SUMOylation Silences Heterodimeric TASK Potassium Channels Containing K2P1 Subunits in Cerebellar Granule Neurons. Science Signaling, 2012, 5, ra84.	1.6	71
14	Differential effects of unaggregated and aggregated amyloid \hat{l}^2 protein (1-40) on K+ channel currents in primary cultures of rat cerebellar granule and cortical neurones. Journal of Neurochemistry, 2008, 79, 699-712.	2.1	65
15	K2P channels and their protein partners. Current Opinion in Neurobiology, 2005, 15, 326-333.	2.0	61
16	Twoâ€pore domain potassium channels: emerging targets for novel analgesic drugs: IUPHAR Review 26. British Journal of Pharmacology, 2019, 176, 256-266.	2.7	52
17	Exploring the Nanotoxicology of MoS ₂ : A Study on the Interaction of MoS ₂ Nanoflakes and K ⁺ Channels. ACS Nano, 2018, 12, 705-717.	7.3	44
18	A Role for K2P Channels in the Operation of Somatosensory Nociceptors. Frontiers in Molecular Neuroscience, 2012, 5, 21.	1.4	40

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19	The Membrane-Active Tri-Block Copolymer Pluronic F-68 Profoundly Rescues Rat Hippocampal Neurons from Oxygen-Glucose Deprivation-Induced Death through Early Inhibition of Apoptosis. Journal of Neuroscience, 2013, 33, 12287-12299.	1.7	39
20	Hypoxia Produces Pro-arrhythmic Late Sodium Current in Cardiac Myocytes by SUMOylation of NaV1.5 Channels. Cell Reports, 2020, 30, 2225-2236.e4.	2.9	38
21	SUMOylation of NaV1.2 channels mediates the early response to acute hypoxia in central neurons. ELife, 2016, 5, .	2.8	36
22	SUMOylation determines the voltage required to activate cardiac <i>I</i> _{<i>Ks</i>} channels. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6686-E6694.	3.3	30
23	PIP2 regulation of TRPC5 channel activation and desensitization. Journal of Biological Chemistry, 2021, 296, 100726.	1.6	30
24	Hypoxic Remodeling of Ca2+ Stores in Type I Cortical Astrocytes. Journal of Biological Chemistry, 2003, 278, 4875-4881.	1.6	29
25	The small molecule GAT1508 activates brain-specific GIRK1/2 channel heteromers and facilitates conditioned fear extinction in rodents. Journal of Biological Chemistry, 2020, 295, 3614-3634.	1.6	20
26	Glo1 inhibitors for neuropsychiatric and anti-epileptic drug development. Biochemical Society Transactions, 2014, 42, 461-467.	1.6	19
27	Hydrogen sulfide inhibits Kir2 and Kir3 channels by decreasing sensitivity to the phospholipid phosphatidylinositol 4,5-bisphosphate (PIP2). Journal of Biological Chemistry, 2018, 293, 3546-3561.	1.6	15
28	A novel small-molecule selective activator of homomeric GIRK4 channels. Journal of Biological Chemistry, 2022, 298, 102009.	1.6	11
29	Presenilin-1 mutations alter K+ currents in the human neuroblastoma cell line, SH-SY5Y. NeuroReport, 2002, 13, 1553-1556.	0.6	9
30	Differential expression of two-pore domain potassium channels in rat cerebellar granule neurons. Biochemical and Biophysical Research Communications, 2014, 453, 754-760.	1.0	9
31	A molecular switch controls the impact of cholesterol on a Kir channel. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2109431119.	3.3	9
32	The Pharmacology of Two-Pore Domain Potassium Channels. Handbook of Experimental Pharmacology, 2021, 267, 417-443.	0.9	7
33	A benzopyran with antiarrhythmic activity is an inhibitor of Kir3.1-containing potassium channels. Journal of Biological Chemistry, 2021, 296, 100535.	1.6	7
34	Two P domain potassium channels (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2019, 2019, .	0.2	5
35	An optogenetic tool to recruit individual PKC isozymes to the cell surface and promote specific phosphorylation of membrane proteins. Journal of Biological Chemistry, 2022, 298, 101893.	1.6	5
36	Multifaceted Regulation of Potassium-Ion Channels by Graphene Quantum Dots. ACS Applied Materials & Samp; Interfaces, 2021, 13, 27784-27795.	4.0	4

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#	Article	lF	CITATIONS
37	Potential blockade of the human voltage-dependent anion channel by MoS2 nanoflakes. Physical Chemistry Chemical Physics, 2019, 21, 9520-9530.	1.3	2
38	Modulation of GIRK Channels by Protein Kinase C. Biophysical Journal, 2019, 116, 401a.	0.2	1
39	Cryopreservation and functional analysis of cardiac autonomic neurons. Journal of Neuroscience Methods, 2020, 341, 108724.	1.3	1
40	The Molecular Mechanism of Human Voltage-Dependent Anion Channel 1 Blockade by the Metallofullerenol Gd@C82(OH)22: An In Silico Study. Biomolecules, 2022, 12, 123.	1.8	1
41	K2P1 Assembles with K2P3 or K2P9 to Form SUMO-Regulated Task Background Channels in Cerebellar Granule Neurons. Biophysical Journal, 2012, 102, 412a.	0.2	O
42	Multilevel regulation: Controlling BK channels in central clock neurons. Journal of General Physiology, 2013, 142, 579-583.	0.9	0
43	Two P domain potassium channels in GtoPdb v.2021.2. IUPHAR/BPS Guide To Pharmacology CITE, 2021, 2021, .	0.2	O
44	Two-pore domain potassium channels (K $<$ sub $>$ 2P $<$ /sub $>$) in GtoPdb v.2021.3. IUPHAR/BPS Guide To Pharmacology CITE, 2021, 2021, .	0.2	0