Jerod S Denton

List of Publications by Year
in descending order

83 papers	2,273 citations	218677 26 h-index	233421 45 g-index
83 all docs	83 docs citations	83 times ranked	2274 citing authors

#	Article	IF	Citations
1	A PDZ-interacting domain in CFTR is an apical membrane polarization signal. Journal of Clinical Investigation, 1999, 104, 1353-1361.	8.2	259
2	G-protein-independent coupling of MC4R to Kir7.1 in hypothalamic neurons. Nature, 2015, 520, 94-98.	27.8	152
3	The PDZ-interacting Domain of Cystic Fibrosis Transmembrane Conductance Regulator Is Required for Functional Expression in the Apical Plasma Membrane. Journal of Biological Chemistry, 2000, 275, 27069-27074.	3.4	141
4	ML297 (VU0456810), the First Potent and Selective Activator of the GIRK Potassium Channel, Displays Antiepileptic Properties in Mice. ACS Chemical Neuroscience, 2013, 4, 1278-1286.	3.5	135
5	Ste20-Type Kinases: Evolutionarily Conserved Regulators of Ion Transport and Cell Volume. Physiology, 2006, 21, 61-68.	3.1	91
6	High-Throughput Screening Reveals a Small-Molecule Inhibitor of the Renal Outer Medullary Potassium Channel and Kir7.1. Molecular Pharmacology, 2009, 76, 1094-1103.	2.3	85
7	A 30-year journey from volume-regulated anion currents to molecular structure of the LRRC8 channel. Journal of General Physiology, 2019, 151, 100-117.	1.9	76
8	Development of a Selective Small-Molecule Inhibitor of Kir1.1, the Renal Outer Medullary Potassium Channel. Molecular Pharmacology, 2011, 79, 42-50.	2.3	72
9	GCK-3, a Newly Identified Ste20 Kinase, Binds To and Regulates the Activity of a Cell Cycleâ€“dependent ClC Anion Channel. Journal of General Physiology, 2005, 125, 113-125.	1.9	63
10	The inwardly rectifying K⁺ channel <scp>KIR</scp>7.1 controls uterine excitability throughout pregnancy. EMBO Molecular Medicine, 2014, 6, 1161-1174.	6.9	59
11	Eliciting Renal Failure in Mosquitoes with a Small-Molecule Inhibitor of Inward-Rectifying Potassium Channels. PLoS ONE, 2013, 8, e64905.	2.5	57
12	An insecticide resistance-breaking mosquitocide targeting inward rectifier potassium channels in vectors of Zika virus and malaria. Scientific Reports, 2016, 6, 36954.	3.3	55
13	Small-molecule modulators of inward rectifier K⁺ channels: recent advances and future possibilities. Future Medicinal Chemistry, 2010, 2, 757-774.	2.3	47
14	The NH2 Terminus of the Epithelial Sodium Channel Contains an Endocytic Motif. Journal of Biological Chemistry, 1999, 274, 32889-32896.	3.4	46
15	Cell cycleâ€“ and swelling-induced activation of a Caenorhabditis elegans ClC channel is mediated by CeGLC-7Î±/Î²2 phosphatases. Journal of Cell Biology, 2002, 158, 435-444.	5.2	46
16	Discovery and Characterization of a Potent and Selective Inhibitor of Aedes aegypti Inward Rectifier Potassium Channels. PLoS ONE, 2014, 9, e110772.	2.5	40
17	Discovery, Characterization, and Structure?Activity Relationships of an Inhibitor of Inward Rectifier Potassium (Kir) Channels with Preference for Kir2.3, Kir3.X, and Kir7.1. Frontiers in Pharmacology, 2011, 2, 75.	3.5	39
18	Discovery, Characterization, and Effects on Renal Fluid and Electrolyte Excretion of the Kir4.1 Potassium Channel Pore Blocker, VU0134992. Molecular Pharmacology, 2018, 94, 926-937.	2.3	39

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19	Pharmacological Correction of Trafficking Defects in ATP-sensitive Potassium Channels Caused by Sulfonylurea Receptor 1 Mutations. Journal of Biological Chemistry, 2016, 291, 21971-21983.	3.4	37
20	Direct Activation ofÎ²-Cell K_{ATP}Channels with a Novel Xanthine Derivative. Molecular Pharmacology, 2014, 85, 858-865.	2.3	34
21	Malpighian Tubules as Novel Targets for Mosquito Control. International Journal of Environmental Research and Public Health, 2017, 14, 111.	2.6	34
22	Pharmacological Validation of an Inward-Rectifier Potassium (Kir) Channel as an Insecticide Target in the Yellow Fever Mosquito Aedes aegypti. PLoS ONE, 2014, 9, e100700.	2.5	33
23	The Kir channel immunoglobulin domain is essential for Kir1.1 (ROMK) thermodynamic stability, trafficking and gating. Channels, 2009, 3, 57-68.	2.8	31
24	Development and Validation of Fluorescence-Based and Automated Patch Clampâ€“Based Functional Assays for the Inward Rectifier Potassium Channel Kir4.1. Assay and Drug Development Technologies, 2013, 11, 532-543.	1.2	28
25	Novel diuretic targets. American Journal of Physiology - Renal Physiology, 2013, 305, F931-F942.	2.7	27
26	Molecular and functional characterization of Anopheles gambiae inward rectifier potassium (Kir1) channels: A novel role in egg production. Insect Biochemistry and Molecular Biology, 2014, 51, 10-19.	2.7	27
27	Localization and role of inward rectifier K+ channels in Malpighian tubules of the yellow fever mosquito Aedes aegypti. Insect Biochemistry and Molecular Biology, 2015, 67, 59-73.	2.7	27
28	Alternative splicing of N- and C-termini of aC. elegansClC channel alters gating and sensitivity to external Clâ^'and H+. Journal of Physiology, 2004, 555, 97-114.	2.9	26
29	The shifting landscape of K_{ATP}channelopathies and the need for â€˜sharperâ€™ therapeutics. Future Medicinal Chemistry, 2016, 8, 789-802.	2.3	25
30	Abnormal Electroretinogram after Kir7.1 Channel Suppression Suggests Role in Retinal Electrophysiology. Scientific Reports, 2017, 7, 10651.	3.3	24
31	Carboxy Terminus Splice Variation Alters ClC Channel Gating and Extracellular Cysteine Reactivity. Biophysical Journal, 2006, 90, 3570-3581.	0.5	21
32	Cardiac and renal inward rectifier potassium channel pharmacology: emerging tools for integrative physiology and therapeutics. Current Opinion in Pharmacology, 2014, 15, 7-15.	3.5	21
33	ML418: The First Selective, Sub-Micromolar Pore Blocker of Kir7.1 Potassium Channels. ACS Chemical Neuroscience, 2016, 7, 1013-1023.	3.5	21
34	VU0606170, a Selective Slack Channels Inhibitor, Decreases Calcium Oscillations in Cultured Cortical Neurons. ACS Chemical Neuroscience, 2020, 11, 3658-3671.	3.5	21
35	High-Throughput Screening of Myometrial Calcium-Mobilization to Identify Modulators of Uterine Contractility. PLoS ONE, 2015, 10, e0143243.	2.5	21
36	Computational and Functional Analyses of a Small-Molecule Binding Site in ROMK. Biophysical Journal, 2015, 108, 1094-1103.	0.5	20

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37	Targeting renal epithelial channels for the control of insect vectors. Tissue Barriers, 2015, 3, e1081861.	3.2	20
38	Discovery and Characterization of VU0529331, a Synthetic Small-Molecule Activator of Homomeric G Protein-Gated, Inwardly Rectifying, Potassium (GIRK) Channels. ACS Chemical Neuroscience, 2019, 10, 358-370.	3.5	20
39	Excretion of NaCl and KCl loads in mosquitoes. 2. Effects of the small molecule Kir channel modulator VU573 and its inactive analog VU342. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R850-R861.	1.8	19
40	LRRC8A homohexameric channels poorly recapitulate VRAC regulation and pharmacology. American Journal of Physiology - Cell Physiology, 2021, 320, C293-C303.	4.6	19
41	Next-generation inward rectifier potassium channel modulators: discovery and molecular pharmacology. American Journal of Physiology - Cell Physiology, 2021, 320, C1125-C1140.	4.6	17
42	Dynamic expression of genes encoding subunits of inward rectifier potassium (Kir) channels in the yellow fever mosquito Aedes aegypti. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2017, 204, 35-44.	1.6	15
43	CysLT1 receptor antagonists pranlukast and zafirlukast inhibit LRRC8-mediated volume regulated anion channels independently of the receptor. American Journal of Physiology - Cell Physiology, 2019, 317, C857-C866.	4.6	15
44	The LRRC8 volumeâ€regulated anion channel inhibitor, DCPIB, inhibits mitochondrial respiration independently of the channel. Physiological Reports, 2019, 7, e14303.	1.7	15
45	Lactate activation of Î±-cell KATP channels inhibits glucagon secretion by hyperpolarizing the membrane potential and reducing Ca2+ entry. Molecular Metabolism, 2020, 42, 101056.	6.5	15
46	G proteinâ€“coupled receptors differentially regulate glycosylation and activity of the inwardly rectifying potassium channel Kir7.1. Journal of Biological Chemistry, 2018, 293, 17739-17753.	3.4	14
47	Altered gating and regulation of a carboxy-terminal ClC channel mutant expressed in the Caenorhabditis elegans oocyte. American Journal of Physiology - Cell Physiology, 2006, 290, C1109-C1118.	4.6	13
48	ROMK inhibitor actions in the nephron probed with diuretics. American Journal of Physiology - Renal Physiology, 2016, 310, F732-F737.	2.7	13
49	Pore Polarity and Charge Determine Differential Block of Kir1.1 and Kir7.1 Potassium Channels by Small-Molecule Inhibitor VU590. Molecular Pharmacology, 2017, 92, 338-346.	2.3	13
50	Structure-Activity Relationships, Pharmacokinetics, and Pharmacodynamics of the Kir6.2/SUR1-Specific Channel Opener VU0071063. Journal of Pharmacology and Experimental Therapeutics, 2019, 370, 350-359.	2.5	13
51	A SWELL time to develop the molecular pharmacology of the volume-regulated anion channel (VRAC). Channels, 2022, 16, 27-36.	2.8	10
52	Inward rectifier potassium (Kir) channels in the soybean aphid Aphis glycines: Functional characterization, pharmacology, and toxicology. Journal of Insect Physiology, 2018, 110, 57-65.	2.0	9
53	Zinc pyrithione activates the volume-regulated anion channel through an antioxidant-sensitive mechanism. American Journal of Physiology - Cell Physiology, 2021, 320, C1088-C1098.	4.6	8
54	Crosstalk between epithelial sodium channels (<scp>ENaC)</scp> and basolateral potassium channels (K_{ir}4.1/K_{ir}5.1) in the cortical collecting duct. British Journal of Pharmacology, 2022, 179, 2953-2968.	5.4	8

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55	VU6036720: The First Potent and Selective In Vitro Inhibitor of Heteromeric Kir4.1/5.1 Inward Rectifier Potassium Channels. Molecular Pharmacology, 2022, 101, 357-370.	2.3	7
56	Discovery and in Vitro Optimization of 3-Sulfamoylbenzamides as ROMK Inhibitors. ACS Medicinal Chemistry Letters, 2018, 9, 125-130.	2.8	5
57	Towards a TREK-1/2 (TWIK-Related K+ Channel 1 and 2) dual activator tool compound: Multi-dimensional optimization of BL-1249. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 1601-1604.	2.2	5
58	Pharmacological Inhibition of Inward Rectifier Potassium Channels Induces Lethality in Larval Aedes aegypti. Insects, 2018, 9, 163.	2.2	4
59	Discovery and Characterization of 2-Nitro-5-(4-(phenylsulfonyl)piperazin-1-yl)-N-(pyridin-4-ylmethyl)anilines as Novel Inhibitors of the Aedes aegypti Kir1 (AeKir1) Channel. ACS Infectious Diseases, 2019, 5, 917-931.	3.8	4
60	The Molecular Physiology and Toxicology of Inward Rectifier Potassium Channels in Insects. Annual Review of Entomology, 2022, 67, 125-142.	11.8	4
61	Further SAR on the (Phenylsulfonyl)piperazine Scaffold as Inhibitors of the Aedes aegypti Kir1 (AeKir) Channel and Larvicides. ChemMedChem, 2021, 16, 319-327.	3.2	3
62	Plight of the pore polar bar(rier). Channels, 2017, 11, 502-503.	2.8	2
63	Contribution of K_{ir}4.1/K_{ir}5.1 Channels to the Control of ENaCâ€Mediated Apical Sodium Transport in the Cortical Collecting Duct. FASEB Journal, 2020, 34, 1-1.	0.5	2
64	ROMK (Kir1.1) pharmacology comes of age. Channels, 2015, 9, 119-120.	2.8	1
65	Druggability of the inward rectifier family: a hope for rare channelopathies?. Future Medicinal Chemistry, 2014, 6, 971-973.	2.3	0
66	Functional and Pore Properties of the LRRC8A Homomeric Channel are Distinct from Those of LRRC8 Chimeras and Heteromres. Biophysical Journal, 2020, 118, 418a.	0.5	0
67	Role of Basolateral K _{ir} 4.1/K _{ir} 5.1 Channel in the Regulation of Electrolyte Balance and ENaC Activity in the Cortical Collecting Duct. FASEB Journal, 2021, 35, .	0.5	0
68	A novel fluorescenceâ€based assay of ROMK1 K + channel function. FASEB Journal, 2006, 20, LB42.	0.5	0
69	Analysis of Kv7 K + channel function in C. elegans. FASEB Journal, 2006, 20, A800.	0.5	0
70	Splice variation of the cytoplasmic Câ€terminus of a C. elegans ClC channel alters functional properties and glutamate gate accessibility to extracellular ions. FASEB Journal, 2006, 20, .	0.5	0
71	Discovery of an inward rectifying potassium channel inhibitor with preference for Kir2.3 and Kir3. FASEB Journal, 2011, 25, .	0.5	0
72	Xâ€ray structureâ€guided analysis of the VU591 binding site in ROMK. FASEB Journal, 2011, 25, 1041.13.	0.5	0

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73	Electrophysiological properties of cardiac myocytes in regenerating zebrafish hearts. FASEB Journal, 2012, 26, 1053.2.	0.5	0
74	Characterization of a Druggable Binding site in the Renal Outer Medullary Potassium Channel. FASEB Journal, 2012, 26, 867.7.	0.5	0
75	Discovery of an inward rectifying potassium channel inhibitor with preference for Kir2.3, Kir3.X and Kir7.1. FASEB Journal, 2012, 26, 695.14.	0.5	0
76	Structureâ€function analysis of a smallâ€molecule binding site in Kir1.1 and Kir7.1 (1062.4). FASEB Journal, 2014, 28, 1062.4.	0.5	0
77	Development of novel inhibitors of swellingâ€activated LRRC8 anion channels. FASEB Journal, 2018, 32, 567.3.	0.5	0
78	Discovery, characterization, and preclinical development of a Kir4.1 (KCNJ10) inhibitor for the treatment of hypertension. FASEB Journal, 2018, 32, 829.8.	0.5	0
79	Development of Distal Nephron Diuretics Targeting Heteromeric Kir4.1/5.1 Potassium Channels. FASEB Journal, 2019, 33, 824.2.	0.5	0
80	Discovery of Pranlukast in a Highâ€Throughput Screen for Novel Inhibitors of LRRC8 Volume Regulated Anion Channels. FASEB Journal, 2019, 33, 824.3.	0.5	0
81	K ATP channels in ductus arteriosus function and pathophysiology: mechanism of action and therapeutic potential. FASEB Journal, 2019, 33, 827.14.	0.5	0
82	Functional Characterization of Leucineâ€Rich Repeat Containing 8 A (LRRC8A) Homomeric Channel. FASEB Journal, 2019, 33, 707.3.	0.5	0
83	Discovery and characterization of a novel class of phenylsulfonylpiperazine containing compounds as inhibitors of the Aedes aegypti Kir1 (Ae Kir1) potassium channel. FASEB Journal, 2019, 33, 862.8.	0.5	0