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	The Molecular Physiology and Toxicology of Inward Rectifier Potassium Channels in Insects. Annual Review of Entomology, 2022, 67, 125-142.	11.8	4
2	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
3	A SWELL time to develop the molecular pharmacology of the volume-regulated anion channel (VRAC). Channels, 2022, 16, 27-36.	2.8	10
4	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
5	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
6	LRRC8A homohexameric channels poorly recapitulate VRAC regulation and pharmacology. American Journal of Physiology - Cell Physiology, 2021, 320, C293-C303.	4.6	19
7	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
8	Next-generation inward rectifier potassium channel modulators: discovery and molecular pharmacology. American Journal of Physiology - Cell Physiology, 2021, 320, C1125-C1140.	4.6	17
9	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
10	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
11	VU0606170, a Selective Slack Channels Inhibitor, Decreases Calcium Oscillations in Cultured Cortical Neurons. ACS Chemical Neuroscience, 2020, 11, 3658-3671.	3.5	21
12	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
13	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
14	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
15	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
16	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
17	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
18	The LRRC8 volumeâ€regulated anion channel inhibitor, DCPIB, inhibits mitochondrial respiration independently of the channel. Physiological Reports, 2019, 7, e14303.	1.7	15

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19	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
20	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
21	Development of Distal Nephron Diuretics Targeting Heteromeric Kir4.1/5.1 Potassium Channels. FASEB Journal, 2019, 33, 824.2.	0.5	0
22	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
23	K ATP channels in ductus arteriosus function and pathophysiology: mechanism of action and therapeutic potential. FASEB Journal, 2019, 33, 827.14.	0.5	0
24	Functional Characterization of Leucineâ€Rich Repeat Containing 8 A (LRRC8A) Homomeric Channel. FASEB Journal, 2019, 33, 707.3.	0.5	0
25	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
26	Discovery and in Vitro Optimization of 3-Sulfamoylbenzamides as ROMK Inhibitors. ACS Medicinal Chemistry Letters, 2018, 9, 125-130.	2.8	5
27	Pharmacological Inhibition of Inward Rectifier Potassium Channels Induces Lethality in Larval Aedes aegypti. Insects, 2018, 9, 163.	2.2	4
28	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
29	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
30	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
31	Development of novel inhibitors of swellingâ€activated LRRC8 anion channels. FASEB Journal, 2018, 32, 567.3.	0.5	0
32	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
33	Abnormal Electroretinogram after Kir7.1 Channel Suppression Suggests Role in Retinal Electrophysiology. Scientific Reports, 2017, 7, 10651.	3.3	24
34	Plight of the pore polar bar(rier). Channels, 2017, 11, 502-503.	2.8	2
35	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
36	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

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37	Malpighian Tubules as Novel Targets for Mosquito Control. International Journal of Environmental Research and Public Health, 2017, 14, 111.	2.6	34
38	The shifting landscape of K_{ATP}channelopathies and the need for â€˜sharperâ€™ therapeutics. Future Medicinal Chemistry, 2016, 8, 789-802.	2.3	25
39	ML418: The First Selective, Sub-Micromolar Pore Blocker of Kir7.1 Potassium Channels. ACS Chemical Neuroscience, 2016, 7, 1013-1023.	3.5	21
40	ROMK inhibitor actions in the nephron probed with diuretics. American Journal of Physiology - Renal Physiology, 2016, 310, F732-F737.	2.7	13
41	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
42	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
43	G-protein-independent coupling of MC4R to Kir7.1 in hypothalamic neurons. Nature, 2015, 520, 94-98.	27.8	152
44	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
45	Computational and Functional Analyses of a Small-Molecule Binding Site in ROMK. Biophysical Journal, 2015, 108, 1094-1103.	0.5	20
46	ROMK (Kir1.1) pharmacology comes of age. Channels, 2015, 9, 119-120.	2.8	1
47	Targeting renal epithelial channels for the control of insect vectors. Tissue Barriers, 2015, 3, e1081861.	3.2	20
48	High-Throughput Screening of Myometrial Calcium-Mobilization to Identify Modulators of Uterine Contractility. PLoS ONE, 2015, 10, e0143243.	2.5	21
49	Direct Activation ofÎ²-Cell K_{ATP}Channels with a Novel Xanthine Derivative. Molecular Pharmacology, 2014, 85, 858-865.	2.3	34
50	Druggability of the inward rectifier family: a hope for rare channelopathies?. Future Medicinal Chemistry, 2014, 6, 971-973.	2.3	0
51	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
52	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
53	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
54	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

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55	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
56	Discovery and Characterization of a Potent and Selective Inhibitor of Aedes aegypti Inward Rectifier Potassium Channels. PLoS ONE, 2014, 9, e110772.	2.5	40
57	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
58	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
59	Novel diuretic targets. American Journal of Physiology - Renal Physiology, 2013, 305, F931-F942.	2.7	27
60	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
61	Eliciting Renal Failure in Mosquitoes with a Small-Molecule Inhibitor of Inward-Rectifying Potassium Channels. PLoS ONE, 2013, 8, e64905.	2.5	57
62	Electrophysiological properties of cardiac myocytes in regenerating zebrafish hearts. FASEB Journal, 2012, 26, 1053.2.	0.5	0
63	Characterization of a Druggable Binding site in the Renal Outer Medullary Potassium Channel. FASEB Journal, 2012, 26, 867.7.	0.5	0
64	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
65	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
66	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
67	Discovery of an inward rectifying potassium channel inhibitor with preference for Kir2.3 and Kir3. FASEB Journal, 2011, 25, .	0.5	0
68	Xâ€ray structureâ€guided analysis of the VU591 binding site in ROMK. FASEB Journal, 2011, 25, 1041.13.	0.5	0
69	Small-molecule modulators of inward rectifier K⁺ channels: recent advances and future possibilities. Future Medicinal Chemistry, 2010, 2, 757-774.	2.3	47
70	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
71	The Kir channel immunoglobulin domain is essential for Kir1.1 (ROMK) thermodynamic stability, trafficking and gating. Channels, 2009, 3, 57-68.	2.8	31
72	Carboxy Terminus Splice Variation Alters ClC Channel Gating and Extracellular Cysteine Reactivity. Biophysical Journal, 2006, 90, 3570-3581.	0.5	21

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73	Ste20-Type Kinases: Evolutionarily Conserved Regulators of Ion Transport and Cell Volume. Physiology, 2006, 21, 61-68.	3.1	91
74	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
75	A novel fluorescenceâ€based assay of ROMK1 K + channel function. FASEB Journal, 2006, 20, LB42.	0.5	0
76	Analysis of Kv7 K + channel function in C. elegans. FASEB Journal, 2006, 20, A800.	0.5	0
77	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
78	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
79	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
80	Cell cycleâ€“ and swelling-induced activation of a Caenorhabditis elegans ClC channel is mediated by CeGLC-7Î±/Î² phosphatases. Journal of Cell Biology, 2002, 158, 435-444.	5.2	46
81	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
82	The NH2 Terminus of the Epithelial Sodium Channel Contains an Endocytic Motif. Journal of Biological Chemistry, 1999, 274, 32889-32896.	3.4	46
83	A PDZ-interacting domain in CFTR is an apical membrane polarization signal. Journal of Clinical Investigation, 1999, 104, 1353-1361.	8.2	259