

C David Weaver

List of Publications by Year in descending order

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62
papers

1,961
citations

279798

23
h-index

265206

42
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all docs

64
docs citations

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times ranked

2280
citing authors

#	ARTICLE	IF	CITATIONS
1	A High-Throughput Screening Assay to Identify Drugs that Can Treat Long QT Syndrome Caused by Trafficking-Deficient K _v 11.1 (hERG) Variants. <i>Molecular Pharmacology</i> , 2022, 101, 236-245.	2.3	3
2	VU6036720: The First Potent and Selective In Vitro Inhibitor of Heteromeric Kir4.1/5.1 Inward Rectifier Potassium Channels. <i>Molecular Pharmacology</i> , 2022, 101, 357-370.	2.3	7
3	Discovery, synthesis and biological characterization of a series of N-(1-(1,1-dioxidothiophen-3-yl)-3-methyl-1H-pyrazol-5-yl)acetamide ethers as novel GIRK1/2 potassium channel activators. <i>RSC Medicinal Chemistry</i> , 2021, 12, 1366-1373.	3.9	0
4	Highly Selective Y ₄ Receptor Antagonist Binds in an Allosteric Binding Pocket. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 2801-2814.	6.4	13
5	Ten-Year Retrospective of the Vanderbilt Institute of Chemical Biology Chemical Synthesis Core. <i>ACS Chemical Biology</i> , 2021, 16, 787-793.	3.4	0
6	Next-generation inward rectifier potassium channel modulators: discovery and molecular pharmacology. <i>American Journal of Physiology - Cell Physiology</i> , 2021, 320, C1125-C1140.	4.6	17
7	Characterization of VU0468554, a new selective inhibitor of cardiac GIRK channels. <i>Molecular Pharmacology</i> , 2021, 100, MOLPHARM-AR-2021-000311.	2.3	1
8	VU0606170, a Selective Slack Channels Inhibitor, Decreases Calcium Oscillations in Cultured Cortical Neurons. <i>ACS Chemical Neuroscience</i> , 2020, 11, 3658-3671.	3.5	21
9	Identification of a selective manganese ionophore that enables nonlethal quantification of cellular manganese. <i>Journal of Biological Chemistry</i> , 2020, 295, 3875-3890.	3.4	3
10	Symmetrically substituted dichlorophenes inhibit N-acyl-phosphatidylethanolamine phospholipase D. <i>Journal of Biological Chemistry</i> , 2020, 295, 7289-7300.	3.4	14
11	Sign Inversion in Photopharmacology: Incorporation of Cyclic Azobenzenes in Photoswitchable Potassium Channel Blockers and Openers. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15421-15428.	13.8	66
12	An anthrone-based Kv7.2/7.3 channel blocker with improved properties for the investigation of psychiatric and neurodegenerative disorders. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 126681.	2.2	5
13	Functional Coupling of K ⁺ Cotransporter (KCC) to GABA-Gated Cl ⁻ Channels in the Central Nervous System of <i>Drosophila melanogaster</i> Leads to Altered Drug Sensitivities. <i>ACS Chemical Neuroscience</i> , 2019, 10, 2765-2776.	3.5	4
14	Discovery, synthesis and characterization of a series of (1-alkyl-3-methyl-1H-pyrazol-5-yl)-2-(5-aryl-2H-tetrazol-2-yl)acetamides as novel GIRK1/2 potassium channel activators. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 791-796.	2.2	6
15	Discovery and Characterization of VU0529331, a Synthetic Small-Molecule Activator of Homomeric G Protein-Gated, Inwardly Rectifying, Potassium (GIRK) Channels. <i>ACS Chemical Neuroscience</i> , 2019, 10, 358-370.	3.5	20
16	Direct activation of G-protein-gated inward rectifying K ⁺ channels promotes nonrapid eye movement sleep. <i>Sleep</i> , 2019, 42, .	1.1	12
17	Analgesic Effects of the GIRK Activator, VU0466551, Alone and in Combination with Morphine in Acute and Persistent Pain Models. <i>ACS Chemical Neuroscience</i> , 2019, 10, 1294-1299.	3.5	15
18	Selective Activation of N,N'-Diacyl Rhodamine Profluorophores Paired with Releasing Enzyme, Porcine Liver Esterase (PLE). <i>Chemistry - A European Journal</i> , 2018, 24, 8985-8988.	3.3	4

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19	Use of chemical probes to explore the toxicological potential of the K ⁺ /Cl ⁻ cotransporter (KCC) as a novel insecticide target to control the primary vector of dengue and Zika virus, <i>Aedes aegypti</i> . <i>Pesticide Biochemistry and Physiology</i> , 2018, 151, 10-17.	3.6	9
20	Thallium Flux Assay for Measuring the Activity of Monovalent Cation Channels and Transporters. <i>Methods in Molecular Biology</i> , 2018, 1684, 105-114.	0.9	14
21	Label-Free Whole Cell Biosensing for High-Throughput Discovery of Activators and Inhibitors Targeting G Protein-Activated Inwardly Rectifying Potassium Channels. <i>ACS Omega</i> , 2018, 3, 14814-14823.	3.5	10
22	Rhodol-based thallium sensors for cellular imaging of potassium channel activity. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 5575-5579.	2.8	10
23	Discovery, Characterization, and Effects on Renal Fluid and Electrolyte Excretion of the Kir4.1 Potassium Channel Pore Blocker, VU0134992. <i>Molecular Pharmacology</i> , 2018, 94, 926-937.	2.3	39
24	Discovery of a Novel Series of Orally Bioavailable and CNS Penetrant Glucagon-like Peptide-1 Receptor (GLP-1R) Noncompetitive Antagonists Based on a 1,3-Disubstituted-7-aryl-5,5-bis(trifluoromethyl)-5,8-dihydropyrimido[4,5-d]pyrimidine-2,4(1 <i>H</i>),3 <i>H</i> -dione Core. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 1611-1616.	6.4	10
25	Optical control of GIRK channels using visible light. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 76-81.	2.8	24
26	Identification and Characterization of the First Selective Y ₄ Receptor Positive Allosteric Modulator. <i>Journal of Medicinal Chemistry</i> , 2017, 60, 7605-7612.	6.4	11
27	GIRK2 splice variants and neuronal G protein-gated K ⁺ channels: implications for channel function and behavior. <i>Scientific Reports</i> , 2017, 7, 1639.	3.3	18
28	Discovery and Characterization of 1 <i>H</i> -Pyrazol-5-yl-2-phenylacetamides as Novel, Non-Urea-Containing GIRK1/2 Potassium Channel Activators. <i>ACS Chemical Neuroscience</i> , 2017, 8, 1873-1879.	3.5	13
29	Selective Small Molecule Activators of TREK-2 Channels Stimulate Dorsal Root Ganglion c-Fiber Nociceptor Two-Pore-Domain Potassium Channel Currents and Limit Calcium Influx. <i>ACS Chemical Neuroscience</i> , 2017, 8, 558-568.	3.5	32
30	Screening for AMPA receptor auxiliary subunit specific modulators. <i>PLoS ONE</i> , 2017, 12, e0174742.	2.5	24
31	Challenges of Finding Novel Drugs Targeting the K ⁺ /Cl ⁻ Cotransporter. <i>ACS Chemical Neuroscience</i> , 2016, 7, 1624-1627.	3.5	17
32	Optical control of neuronal activity using a light-operated GIRK channel opener (LOGO). <i>Chemical Science</i> , 2016, 7, 2347-2352.	7.4	49
33	Development and Validation of a Thallium Flux-Based Functional Assay for the Sodium Channel NaV1.7 and Its Utility for Lead Discovery and Compound Profiling. <i>ACS Chemical Neuroscience</i> , 2015, 6, 871-878.	3.5	22
34	GIRK Channels Modulate Opioid-Induced Motor Activity in a Cell Type- and Subunit-Dependent Manner. <i>Journal of Neuroscience</i> , 2015, 35, 7131-7142.	3.6	53
35	Identification of Positive Allosteric Modulators VU0155094 (ML397) and VU0422288 (ML396) Reveals New Insights into the Biology of Metabotropic Glutamate Receptor 7. <i>ACS Chemical Neuroscience</i> , 2014, 5, 1221-1237.	3.5	53
36	Mechanisms underlying the activation of G-protein-gated inwardly rectifying K ⁺ (GIRK) channels by the novel anxiolytic drug, ML297. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 10755-10760.	7.1	97

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37	A Duplexed High-Throughput Screen to Identify Allosteric Modulators of the Glucagon-Like Peptide 1 and Glucagon Receptors. <i>Journal of Biomolecular Screening</i> , 2014, 19, 847-858.	2.6	12
38	Discovery of potent and selective GIRK1/2 modulators via α -molecular switches™ within a series of 1-(3-cyclopropyl-1-phenyl-1H-pyrazol-5-yl)ureas. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2014, 24, 5102-5106.	2.2	15
39	Cellular manganese content is developmentally regulated in human dopaminergic neurons. <i>Scientific Reports</i> , 2014, 4, 6801.	3.3	70
40	Discovery and Characterization of a Potent and Selective Inhibitor of <i>Aedes aegypti</i> Inward Rectifier Potassium Channels. <i>PLoS ONE</i> , 2014, 9, e110772.	2.5	40
41	Discovery and SAR of a novel series of GIRK1/2 and GIRK1/4 activators. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 5195-5198.	2.2	22
42	Discovery of α -molecular switches™ within a GIRK activator scaffold that afford selective GIRK inhibitors. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2013, 23, 4562-4566.	2.2	26
43	High-throughput Screening for Small-molecule Modulators of Inward Rectifier Potassium Channels. <i>Journal of Visualized Experiments</i> , 2013, , .	0.3	13
44	ML297 (VU0456810), the First Potent and Selective Activator of the GIRK Potassium Channel, Displays Antiepileptic Properties in Mice. <i>ACS Chemical Neuroscience</i> , 2013, 4, 1278-1286.	3.5	135
45	Development and Validation of Fluorescence-Based and Automated Patch Clamp-Based Functional Assays for the Inward Rectifier Potassium Channel Kir4.1. <i>Assay and Drug Development Technologies</i> , 2013, 11, 532-543.	1.2	28
46	Identification and Characterization of a Compound That Protects Cardiac Tissue from Human Ether- A -go-go-related Gene (hERG)-related Drug-induced Arrhythmias. <i>Journal of Biological Chemistry</i> , 2012, 287, 39613-39625.	3.4	21
47	Further optimization of the K-Cl cotransporter KCC2 antagonist ML077: Development of a highly selective and more potent in vitro probe. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2012, 22, 4532-4535.	2.2	78
48	Discovery of an inward rectifying potassium channel inhibitor with preference for Kir2.3, Kir3.X and Kir7.1. <i>FASEB Journal</i> , 2012, 26, 695.14.	0.5	0
49	The Discovery and Characterization of ML218: A Novel, Centrally Active T-Type Calcium Channel Inhibitor with Robust Effects in STN Neurons and in a Rodent Model of Parkinson's Disease. <i>ACS Chemical Neuroscience</i> , 2011, 2, 730-742.	3.5	80
50	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. <i>Frontiers in Pharmacology</i> , 2011, 2, 75.	3.5	39
51	Discovery and optimization of a novel, selective and brain penetrant M1 positive allosteric modulator (PAM): The development of ML169, an MLPCN probe. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 2697-2701.	2.2	63
52	Development of a Selective Small-Molecule Inhibitor of Kir1.1, the Renal Outer Medullary Potassium Channel. <i>Molecular Pharmacology</i> , 2011, 79, 42-50.	2.3	72
53	Triple-Addition Assay Protocols for Detecting and Characterizing Modulators of Seven Transmembrane Receptors. <i>Current Protocols in Chemical Biology</i> , 2011, 3, 119-140.	1.7	2
54	Small-molecule screen identifies inhibitors of the neuronal K-Cl cotransporter KCC2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 5383-5388.	7.1	139

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55	High-Throughput Screening Reveals a Small-Molecule Inhibitor of the Renal Outer Medullary Potassium Channel and Kir7.1. <i>Molecular Pharmacology</i> , 2009, 76, 1094-1103.	2.3	85
56	Discovery of small-molecule inhibitors of ROMK: one step closer to a potassium-sparing loop diuretic?. <i>FASEB Journal</i> , 2009, 23, 602.10.	0.5	0
57	Discovery and Characterization of a Novel Subtype-Selective M1 Allosteric Agonist for the Treatment of Alzheimer's Disease. <i>FASEB Journal</i> , 2009, 23, 756.12.	0.5	0
58	Initial SAR studies on apamin-displacing 2-aminothiazole blockers of calcium-activated small conductance potassium channels. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008, 18, 5316-5319.	2.2	38
59	Preliminary SAR studies on non-apamin-displacing 4-(aminomethylaryl)pyrazolopyrimidine KCa channel blockers. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008, 18, 5694-5697.	2.2	5
60	A Novel Assay of G _{i/o} -Linked G Protein-Coupled Receptor Coupling to Potassium Channels Provides New Insights into the Pharmacology of the Group III Metabotropic Glutamate Receptors. <i>Molecular Pharmacology</i> , 2008, 73, 1213-1224.	2.3	99
61	A Thallium-Sensitive, Fluorescence-Based Assay for Detecting and Characterizing Potassium Channel Modulators in Mammalian Cells. <i>Journal of Biomolecular Screening</i> , 2004, 9, 671-677.	2.6	158
62	Discovery of Small Molecule KCC2 Potentiators Which Attenuate In Vitro Seizure-Like Activity in Cultured Neurons. <i>Frontiers in Cell and Developmental Biology</i> , 0, 10, .	3.7	3