## Forty Years of Sodium Channels: Structure, Function, P

Neurochemical Research 42, 2495-2504 DOI: 10.1007/s11064-017-2314-9

Citation Report

#	Article	IF	CITATIONS
1	Probing Ion Channel Structure and Function Using Light-Sensitive Amino Acids. Trends in Biochemical Sciences, 2018, 43, 436-451.	3.7	26
2	Mechanism-specific assay design facilitates the discovery of Nav1.7-selective inhibitors. Proceedings of the United States of America, 2018, 115, E792-E801.	3.3	25
3	Integration of biological/pathophysiological contexts to help clarify genotype-phenotype mismatches in monogenetic diseases. Childhood epilepsies associated with SCN2A as a case study. Biochemical Pharmacology, 2018, 151, 252-262.	2.0	7
4	Scorpion toxins to unravel the conundrum of ion channel structure and functioning. Toxicon, 2018, 150, 17-27.	0.8	23
5	The Voltage-Dependent Sodium Channel Family. , 0, , 198-223.		1
6	Subtype Specificity of β-Toxin Tf1a from Tityus fasciolatus in Voltage Gated Sodium Channels. Toxins, 2018, 10, 339.	1.5	2
7	Structure of the human PKD1-PKD2 complex. Science, 2018, 361, .	6.0	173
8	Scn2a Haploinsufficiency in Mice Suppresses Hippocampal Neuronal Excitability, Excitatory Synaptic Drive, and Long-Term Potentiation, and Spatial Learning and Memory. Frontiers in Molecular Neuroscience, 2019, 12, 145.	1.4	39
9	Spider Knottin Pharmacology at Voltage-Gated Sodium Channels and Their Potential to Modulate Pain Pathways. Toxins, 2019, 11, 626.	1.5	29
10	Cannabis for Pediatric and Adult Epilepsy. , 0, , .		0
10		5.0	0 92
	Cannabis for Pediatric and Adult Epilepsy. , 0, , . Sodium Channels in Human Pain Disorders: Genetics and Pharmacogenomics. Annual Review of	5.0	
11	Cannabis for Pediatric and Adult Epilepsy. , 0, , . Sodium Channels in Human Pain Disorders: Genetics and Pharmacogenomics. Annual Review of Neuroscience, 2019, 42, 87-106. Discovery of novel 4-phenyl-2-(pyrrolidinyl)nicotinamide derivatives as potent Nav1.1 activators.		92
11 12	<ul> <li>Cannabis for Pediatric and Adult Epilepsy., 0, , .</li> <li>Sodium Channels in Human Pain Disorders: Genetics and Pharmacogenomics. Annual Review of Neuroscience, 2019, 42, 87-106.</li> <li>Discovery of novel 4-phenyl-2-(pyrrolidinyl)nicotinamide derivatives as potent Nav1.1 activators. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 815-820.</li> <li>Melatonin Reduces Excitability in Dorsal Root Ganglia Neurons with Inflection on the Repolarization</li> </ul>	1.0	92 4
11 12 13	<ul> <li>Cannabis for Pediatric and Adult Epilepsy., 0, , .</li> <li>Sodium Channels in Human Pain Disorders: Genetics and Pharmacogenomics. Annual Review of Neuroscience, 2019, 42, 87-106.</li> <li>Discovery of novel 4-phenyl-2-(pyrrolidinyl)nicotinamide derivatives as potent Nav1.1 activators. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 815-820.</li> <li>Melatonin Reduces Excitability in Dorsal Root Ganglia Neurons with Inflection on the Repolarization Phase of the Action Potential. International Journal of Molecular Sciences, 2019, 20, 2611.</li> <li>Voltage- and calcium-gated ion channels of neurons in the vertebrate retina. Progress in Retinal and</li> </ul>	1.0 1.8	92 4 11
11 12 13 14	<ul> <li>Cannabis for Pediatric and Adult Epilepsy., 0, , .</li> <li>Sodium Channels in Human Pain Disorders: Genetics and Pharmacogenomics. Annual Review of Neuroscience, 2019, 42, 87-106.</li> <li>Discovery of novel 4-phenyl-2-(pyrrolidinyl)nicotinamide derivatives as potent Nav1.1 activators. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 815-820.</li> <li>Melatonin Reduces Excitability in Dorsal Root Ganglia Neurons with Inflection on the Repolarization Phase of the Action Potential. International Journal of Molecular Sciences, 2019, 20, 2611.</li> <li>Voltage- and calcium-gated ion channels of neurons in the vertebrate retina. Progress in Retinal and Eye Research, 2019, 72, 100760.</li> <li>Genetic mechanisms of regression in autism spectrum disorder. Neuroscience and Biobehavioral</li> </ul>	1.0 1.8 7.3	92 4 11 56
11 12 13 14 15	<ul> <li>Cannabis for Pediatric and Adult Epilepsy., 0, , .</li> <li>Sodium Channels in Human Pain Disorders: Genetics and Pharmacogenomics. Annual Review of Neuroscience, 2019, 42, 87-106.</li> <li>Discovery of novel 4-phenyl-2-(pyrrolidinyl)nicotinamide derivatives as potent Nav1.1 activators. Bioorganic and Medicinal Chemistry Letters, 2019, 29, 815-820.</li> <li>Melatonin Reduces Excitability in Dorsal Root Ganglia Neurons with Inflection on the Repolarization Phase of the Action Potential. International Journal of Molecular Sciences, 2019, 20, 2611.</li> <li>Voltage- and calcium-gated ion channels of neurons in the vertebrate retina. Progress in Retinal and Eye Research, 2019, 72, 100760.</li> <li>Genetic mechanisms of regression in autism spectrum disorder. Neuroscience and Biobehavioral Reviews, 2019, 102, 208-220.</li> <li>Use of Cannabidiol in the Treatment of Epilepsy: Efficacy and Security in Clinical Trials. Molecules,</li> </ul>	1.0 1.8 7.3 2.9	92 4 11 56 26

#	Article	IF	CITATIONS
19	Riluzole promotes neurological function recovery and inhibits damage extension in rats following spinal cord injury: a metaâ€analysis and systematic review. Journal of Neurochemistry, 2019, 150, 6-27.	2.1	15
20	Gating control of the cardiac sodium channel Nav1.5 by its β3-subunit involves distinct roles for a transmembrane glutamic acid and the extracellular domain. Journal of Biological Chemistry, 2019, 294, 19752-19763.	1.6	12
21	Mapping the knowledge structure and trends of epilepsy genetics over the past decade. Medicine (United States), 2019, 98, e16782.	0.4	29
22	Voltage-gated Sodium Channels and Blockers: An Overview and Where Will They Go?. Current Medical Science, 2019, 39, 863-873.	0.7	13
23	Functional validation of target-site resistance mutations against sodium channel blocker insecticides (SCBIs) via molecular modeling and genome engineering in Drosophila. Insect Biochemistry and Molecular Biology, 2019, 104, 73-81.	1.2	19
24	Lidocaine, a Non–selective Inhibitor of Voltage-Gated Sodium Channels, Blocks Chemically-Induced Cough in Awake NaÃ⁻ve Guinea Pigs. Advances in Experimental Medicine and Biology, 2019, 1160, 1-9.	0.8	8
25	Pediatric Neuropsychiatry. , 2019, , .		1
26	Dopamine D2 Receptor-Mediated Modulation of Rat Retinal Ganglion Cell Excitability. Neuroscience Bulletin, 2020, 36, 230-242.	1.5	11
27	Substituted cysteine scanning in D1-S6 of the sodium channel hNav1.4 alters kinetics and structural interactions of slow inactivation. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183129.	1.4	2
28	Two for the Price of One: Heterobivalent Ligand Design Targeting Two Binding Sites on Voltage-Gated Sodium Channels Slows Ligand Dissociation and Enhances Potency. Journal of Medicinal Chemistry, 2020, 63, 12773-12785.	2.9	15
29	Voltage-Gated K+/Na+ Channels and Scorpion Venom Toxins in Cancer. Frontiers in Pharmacology, 2020, 11, 913.	1.6	29
30	Epilepsy-Related Voltage-Gated Sodium Channelopathies: A Review. Frontiers in Pharmacology, 2020, 11, 1276.	1.6	76
31	Changes in Ion Selectivity Following the Asymmetrical Addition of Charge to the Selectivity Filter of Bacterial Sodium Channels. Entropy, 2020, 22, 1390.	1.1	1
32	A Potential Mechanism of Sodium Channel Mediating the General Anesthesia Induced by Propofol. Frontiers in Cellular Neuroscience, 2020, 14, 593050.	1.8	4
33	Length Polymorphism and Methylation Status of UPS29 Minisatellite of the ACAP3 Gene as Molecular Biomarker of Epilepsy. Sex Differences in Seizure Types and Symptoms. International Journal of Molecular Sciences, 2020, 21, 9206.	1.8	8
34	Parabens inhibit hNaV 1.2 channels. Biomedicine and Pharmacotherapy, 2020, 128, 110250.	2.5	6
35	Non-peptide molecules in the pedicellariae of Toxopneustes roseus. Toxicon, 2020, 184, 143-151.	0.8	0
36	Employing NaChBac for cryo-EM analysis of toxin action on voltage-gated Na <sup>+</sup> channels in nanodisc. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14187-14193.	3.3	33

CITATION REPORT

CITATION REPORT

#	Article	IF	CITATIONS
37	Painful and painless mutations of SCN9A and SCN11A voltage-gated sodium channels. Pflugers Archiv European Journal of Physiology, 2020, 472, 865-880.	1.3	25
38	Association of SCN1A, SCN2A, and UGT2B7 Polymorphisms with Responsiveness to Valproic Acid in the Treatment of Epilepsy. BioMed Research International, 2020, 2020, 1-8.	0.9	8
39	Tau Reduction Prevents Key Features of Autism in Mouse Models. Neuron, 2020, 106, 421-437.e11.	3.8	60
40	Mechanisms of action of currently used antiseizure drugs. Neuropharmacology, 2020, 168, 107966.	2.0	252
41	SCN2A channelopathies in the autism spectrum of neuropsychiatric disorders: a role for pluripotent stem cells?. Molecular Autism, 2020, 11, 23.	2.6	16
42	Structural determination of human Nav1.4 and Nav1.7 using single particle cryo-electron microscopy. Methods in Enzymology, 2021, 653, 103-120.	0.4	5
43	Drosophila parabss Flies as a Screening Model for Traditional Medicine: Anticonvulsant Effects of Annona senegalensis. Frontiers in Neurology, 2020, 11, 606919.	1.1	7
44	Genetic Factors Underlying Sudden Infant Death Syndrome. The Application of Clinical Genetics, 2021, Volume 14, 61-76.	1.4	10
45	Deficiency of intellectual disability-related gene <i>Brpf1</i> reduced inhibitory neurotransmission in MGE-derived GABAergic interneurons. G3: Genes, Genomes, Genetics, 2021, 11, .	0.8	3
46	Cardiac Late Sodium Channel Current Is a Molecular Target for the Sodium/Glucose Cotransporter 2 Inhibitor Empagliflozin. Circulation, 2021, 143, 2188-2204.	1.6	105
47	Distinctive Properties and Powerful Neuromodulation of Nav1.6 Sodium Channels Regulates Neuronal Excitability. Cells, 2021, 10, 1595.	1.8	16
48	Development of Allosteric Modulators of Voltage-Gated Na+ Channels: A Novel Approach for an Old Target. Current Topics in Medicinal Chemistry, 2021, 21, 841-848.	1.0	5
49	Regulation and drug modulation of a voltage-gated sodium channel: Pivotal role of the S4–S5 linker in activation and slow inactivation. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	12
50	Derivative of Scorpion Neurotoxin BeM9 Is Selective for Insect Voltage-Gated Sodium Channels. Russian Journal of Bioorganic Chemistry, 2021, 47, 854-863.	0.3	0
51	Case Report: Mutant SCN9A Susceptible to Charcot Neuroarthropathy in a Patient With Congenital Insensitivity to Pain. Frontiers in Neuroscience, 2021, 15, 697167.	1.4	0
52	New application of an old drug proparacaine in treating epilepsy via liposomal hydrogel formulation. Pharmacological Research, 2021, 169, 105636.	3.1	8
53	Seizure Phenotype and Underlying Cellular Defects in <i>Drosophila</i> Knock-In Models of DS (R1648C) and GEFS+ (R1648H) <i>SCN1A</i> Epilepsy. ENeuro, 2021, 8, ENEURO.0002-21.2021.	0.9	5
54	Engineering of a Spider Peptide via Conserved Structure-Function Traits Optimizes Sodium Channel Inhibition In Vitro and Anti-Nociception In Vivo. Frontiers in Molecular Biosciences, 2021, 8, 742457.	1.6	5

		EPORT	
#	Article	IF	Citations
55	Membrane-Mediated Activity of Local Anesthetics. Molecular Pharmacology, 2021, 100, 502-512.	1.0	10
56	Purification and characterization of peptides Ap2, Ap3 and Ap5 (ω-toxins) from the venom of the Brazilian tarantula Acanthoscurria paulensis. Peptides, 2021, 145, 170622.	1.2	0
57	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
58	Inhibitory Effects of Columbianadin on Nociceptive Behaviors in a Neuropathic Pain Model, and on Voltage-Gated Calcium Currents in Dorsal Root Ganglion Neurons in Mice. Frontiers in Pharmacology, 2019, 10, 1522.	1.6	20
59	Possible Interactions of Extracellular Loop IVP2-S6 With Voltage-Sensing Domain III in Cardiac Sodium Channel. Frontiers in Pharmacology, 2021, 12, 742508.	1.6	3
60	When It's Not Just a Febrile Seizure: Epileptic Encephalopathy. , 2019, , 205-210.		0
62	A missense mutation converts the Na+,K+-ATPase into an ion channel and causes therapy-resistant epilepsy. Journal of Biological Chemistry, 2021, 297, 101355.	1.6	9
63	Neurophysiologie. , 2020, , 89-118.		0
64	Epigenomics of neurological disorders. , 2020, , 41-58.		0
65	Action potentials in Xenopus oocytes triggered by blue light. Journal of General Physiology, 2020, 152, ·	0.9	2
67	Pharmacological Inhibition of Wee1 Kinase Selectively Modulates the Voltage-Gated Na+ Channel 1.2 Macromolecular Complex. Cells, 2021, 10, 3103.	1.8	3
68	Pain-related toxins in scorpion and spider venoms: a face to face with ion channels. Journal of Venomous Animals and Toxins Including Tropical Diseases, 2021, 27, e20210026.	0.8	8
69	Nav channels in cancers: Non-classical roles. Global Journal of Cancer Therapy, 2020, , 028-032.	0.4	0
70	A narrative review of molecular mechanism and therapeutic effect of cannabidiol (CBD). Basic and Clinical Pharmacology and Toxicology, 2022, 130, 439-456.	1.2	93
71	Synthesis and characterization of new 5,5′-dimethyl- and 5,5′-diphenylhydantoin-conjugated hemorphin derivatives designed as potential anticonvulsant agents. New Journal of Chemistry, 2022, 46, 2198-2217.	1.4	5
72	The Design of Multi-target Drugs to Treat Cardiovascular Diseases: Two (or more) Birds on One Stone. Current Topics in Medicinal Chemistry, 2022, 22, 366-394.	1.0	5
73	Pharmacologically Targeting the Fibroblast Growth Factor 14 Interaction Site on the Voltage-Gated Na+ Channel 1.6 Enables Isoform-Selective Modulation. International Journal of Molecular Sciences, 2021, 22, 13541.	1.8	4
75	Ion channels and neuronal excitability in polyglutamine neurodegenerative diseases. Biomolecular Concepts, 2022, 13, 183-199.	1.0	0

ARTICLE IF CITATIONS # Effects of Antiarrhythmic Drugs on Antiepileptic Drug Actionâ€"A Critical Review of Experimental 1.8 5 76 Findings. International Journal of Molecular Sciences, 2022, 23, 2891. mTORC1 induces plasma membrane depolarization and promotes preosteoblast senescence by 5.4 9 regulating the sodium channel Scn1a. Bone Research, 2022, 10, 25. Poly-dipeptides produced from <i>C9orf72</i> hexanucleotide repeats cause selective motor neuron hyperexcitability in ALS. Proceedings of the National Academy of Sciences of the United States of 78 3.3 8 America, 2022, 119, e2113813119. Current Trends and New Challenges in Marine Phycotoxins. Marine Drugs, 2022, 20, 198. 79 Equivalent intensity but differential dominance of SCBI resistance conferred by F1845Y and V1848I 80 1.5 2 mutations of the voltageâ€gated sodium channel in <i>Plutella xylostella</i>. Insect Science, 2022, , . Cardiac mechanisms of the beneficial effects of SGLT2 inhibitors in heart failure: Evidence for potential off-target effects. Journal of Molecular and Cellular Cardiology, 2022, 167, 17-31. Hyperexcitability in adult mice with severe deficiency in Na1.2 channels.. International Journal of 91 0.8 0 Physiology, Pathophysiology and Pharmacology, 2022, 14, 55-59. TAU ablation in excitatory neurons and postnatal TAU knockdown reduce epilepsy, SUDEP, and autism 5.8 behaviors in a Dravet syndrome model. Science Translational Medicine, 2022, 14, eabm5527. Paradoxical Hyperexcitability in Disorders of Neurodevelopment. Frontiers in Molecular 93 3 1.4 Neuroscience, 2022, 15, 826679. Immunity, Ion Channels and Epilepsy. International Journal of Molecular Sciences, 2022, 23, 6446. 1.8 Characterization of two kdr mutations at predicted pyrethroid receptor site 2 in the sodium channels 96 1.2 6 of Aedes aegypti and Nilaparvata lugens. Insect Biochemistry and Molecular Biology, 2022, 148, 103814. Lidocaine reduces pain behaviors by inhibiting the expression of Nav1.7 and Nav1.8 and diminishing sympathetic sprouting in SNI rats. Molecular Pain, 2022, 18, 174480692211249. 1.0 Characterization in Effective Stimulation on the Magnitude, Gating, Frequency Dependence, and Hysteresis of INa Exerted by Picaridin (or Icaridin), a Known Insect Repellent. International Journal of 98 1.8 3 Molecular Sciences, 2022, 23, 9696. Inhibition of the human neuronal sodium channel Nav1.9 by ACEA (arachidonyl-2-chloroethylamide), an analogue of anandamide in a hNav1.9/rNav1.4 chimera, an experimental and in silico study. 99 1.1 Neuroscience, 2022, , . Concussion leads to widespread axonal sodium channel loss and disruption of the node of Ranvier. 100 3.9 9 Acta Neuropathologica, 2022, 144, 967-985. Coupling the Cardiac Voltage-Gated Sodium Channel to Channelrhodopsin-2 Generates Novel Optical 1.4 Switches for Action Potential Studies. Membranes, 2022, 12, 907. Therapeutic Potential of Targeting Regulated Intramembrane Proteolysis Mechanisms of Voltage-Gated 102 7.1 1 Ion Channel Subunits and Cell Adhesion Molecules. Pharmacological Reviews, 2022, 74, 1030-1050. NaV1.1 is essential for proprioceptive signaling and motor behaviors. ELife, 0, 11, . 2.8

CITATION REPORT

		CITATION R	CITATION REPORT	
#	Article		IF	CITATIONS
104	Characterization in Potent Modulation on Voltage-Gated Na+ Current Exerted by Delta Pyrethroid Insecticide. International Journal of Molecular Sciences, 2022, 23, 14733.	methrin, a	1.8	3
105	Inhibition of Voltage-Gated Na+ Currents Exerted by KB-R7943 (2-[2-[4-(4-nitrobenzyloxy)phenyl]ethyl]isothiourea), an Inhibitor of Na+-Ca2+ Exchang International Journal of Molecular Sciences, 2023, 24, 1805.	ing Process.	1.8	3
106	<scp> <i>SCN9A</i> </scp> variant in a family of mixed breed dogs with congenital ins Journal of Veterinary Internal Medicine, 0, , .	ensitivity to pain.	0.6	4
107	A Literature Review of Similarities Between and Among Patients With Autism Spectrum Epilepsy. Cureus, 2023, , .	Disorder and	0.2	1
108	Neurophysiology. , 2023, , 87-115.			0
109	Scorpion Peptides and Ion Channels: An Insightful Review of Mechanisms and Drug Dev Toxins, 2023, 15, 238.	velopment.	1.5	6
110	Technology, Science and Culture: A Global Vision, Volume IV. , 0, , .			0
111	The β3â€subunit modulates the effect of venom peptides ProTxâ€l and OD1 on Na <su Journal of Cellular Physiology, 2023, 238, 1354-1367.</su 	ub>V1.7 gating.	2.0	1