

William A Catterall

List of Publications by Year in descending order

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166
papers

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citations

5248

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160
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167
all docs

167
docs citations

167
times ranked

23730
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure and Regulation of Voltage-Gated Ca ²⁺ Channels. Annual Review of Cell and Developmental Biology, 2000, 16, 521-555.	4.0	2,115
2	From Ionic Currents to Molecular Mechanisms. Neuron, 2000, 26, 13-25.	3.8	1,920
3	International Union of Pharmacology. XLVII. Nomenclature and Structure-Function Relationships of Voltage-Gated Sodium Channels. Pharmacological Reviews, 2005, 57, 397-409.	7.1	1,481
4	The crystal structure of a voltage-gated sodium channel. Nature, 2011, 475, 353-358.	13.7	1,278
5	Voltage-Gated Calcium Channels. Cold Spring Harbor Perspectives in Biology, 2011, 3, a003947-a003947.	2.3	1,156
6	International Union of Pharmacology. XLVIII. Nomenclature and Structure-Function Relationships of Voltage-Gated Calcium Channels. Pharmacological Reviews, 2005, 57, 411-425.	7.1	1,110
7	The IUPHAR/BPS Guide to PHARMACOLOGY in 2016: towards curated quantitative interactions between 1300 protein targets and 6000 ligands. Nucleic Acids Research, 2016, 44, D1054-D1068.	6.5	1,075
8	Reduced sodium current in GABAergic interneurons in a mouse model of severe myoclonic epilepsy in infancy. Nature Neuroscience, 2006, 9, 1142-1149.	7.1	985
9	Modulation of Ca ²⁺ channels β -subunits by G-protein γ subunits. Nature, 1996, 380, 258-262.	13.7	808
10	Molecular mechanisms of neurotoxin action on voltage-gated sodium channels. Biochimie, 2000, 82, 883-892.	1.3	656
11	Voltage-gated sodium channels at 60: structure, function and pathophysiology. Journal of Physiology, 2012, 590, 2577-2589.	1.3	562
12	Voltage-gated ion channels and gating modifier toxins. Toxicon, 2007, 49, 124-141.	0.8	560
13	Calcium Channel Regulation and Presynaptic Plasticity. Neuron, 2008, 59, 882-901.	3.8	554
14	Autistic-like behaviour in Scn1a ^{+/-} mice and rescue by enhanced GABA-mediated neurotransmission. Nature, 2012, 489, 385-390.	13.7	543
15	Clustering of L-type Ca ²⁺ channels at the base of major dendrites in hippocampal pyramidal neurons. Nature, 1990, 347, 281-284.	13.7	488
16	Ca ²⁺ /calmodulin binds to and modulates P/Q-type calcium channels. Nature, 1999, 399, 155-159.	13.7	457
17	Differential subcellular localization of the RI and RII Na ⁺ channel subtypes in central neurons. Neuron, 1989, 3, 695-704.	3.8	451
18	Ion Channel Voltage Sensors: Structure, Function, and Pathophysiology. Neuron, 2010, 67, 915-928.	3.8	448

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19	Crystal structure of a voltage-gated sodium channel in two potentially inactivated states. <i>Nature</i> , 2012, 486, 135-139.	13.7	435
20	Identification of a syntaxin-binding site on N-Type calcium channels. <i>Neuron</i> , 1994, 13, 1303-1313.	3.8	417
21	Molecular Determinants of High Affinity Binding of $\hat{I}\pm$ -Scorpion Toxin and Sea Anemone Toxin in the S3-S4 Extracellular Loop in Domain IV of the Na ⁺ Channel $\hat{I}\pm$ Subunit. <i>Journal of Biological Chemistry</i> , 1996, 271, 15950-15962.	1.6	388
22	Na _V 1.1 channels and epilepsy. <i>Journal of Physiology</i> , 2010, 588, 1849-1859.	1.3	357
23	MOLECULAR DETERMINANTS OF DRUG BINDING AND ACTION ON L-TYPE CALCIUM CHANNELS. <i>Annual Review of Pharmacology and Toxicology</i> , 1997, 37, 361-396.	4.2	355
24	Calcium Channels, Synaptic Plasticity, and Neuropsychiatric Disease. <i>Neuron</i> , 2018, 98, 466-481.	3.8	346
25	Calcium-dependent interaction of N-type calcium channels with the synaptic core complex. <i>Nature</i> , 1996, 379, 451-454.	13.7	340
26	Voltage Sensorâ€“Trapping. <i>Neuron</i> , 1998, 21, 919-931.	3.8	335
27	Neuromodulation of Na ⁺ channels: An unexpected form of cellular plasticity. <i>Nature Reviews Neuroscience</i> , 2001, 2, 397-407.	4.9	334
28	Structural basis for Ca ²⁺ selectivity of a voltage-gated calcium channel. <i>Nature</i> , 2014, 505, 56-61.	13.7	288
29	Cannabidiol attenuates seizures and social deficits in a mouse model of Dravet syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11229-11234.	3.3	283
30	Specific Phosphorylation of a Site in the Full-Length Form of the $\hat{I}\pm$ 1 Subunit of the Cardiac L-Type Calcium Channel by Adenosine 3â€™,5â€™-Cyclic Monophosphate- Dependent Protein Kinaseâ€“. <i>Biochemistry</i> , 1996, 35, 10392-10402.	1.2	271
31	Voltage-dependent potentiation of L-type Ca ²⁺ channels due to phosphorylation by cAMP-dependent protein kinase. <i>Nature</i> , 1993, 364, 240-243.	13.7	270
32	Gating pore current in an inherited ion channelopathy. <i>Nature</i> , 2007, 446, 76-78.	13.7	269
33	Specific deletion of Na _V 1.1 sodium channels in inhibitory interneurons causes seizures and premature death in a mouse model of Dravet syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14646-14651.	3.3	266
34	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Ion channels. <i>British Journal of Pharmacology</i> , 2019, 176, S142-S228.	2.7	242
35	Interactions of Presynaptic Ca ²⁺ Channels and Snare Proteins in Neurotransmitter Release. <i>Annals of the New York Academy of Sciences</i> , 1999, 868, 144-159.	1.8	240
36	Sudden unexpected death in a mouse model of Dravet syndrome. <i>Journal of Clinical Investigation</i> , 2013, 123, 1798-1808.	3.9	237

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37	Reduced Sodium Current in Purkinje Neurons from Na ^v 1.1 Mutant Mice: Implications for Ataxia in Severe Myoclonic Epilepsy in Infancy. <i>Journal of Neuroscience</i> , 2007, 27, 11065-11074.	1.7	226
38	Inherited Neuronal Ion Channelopathies: New Windows on Complex Neurological Diseases. <i>Journal of Neuroscience</i> , 2008, 28, 11768-11777.	1.7	225
39	Structural basis for gating charge movement in the voltage sensor of a sodium channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E93-102.	3.3	223
40	The Concise Guide to PHARMACOLOGY 2015/16: Overview. <i>British Journal of Pharmacology</i> , 2015, 172, 5729-5743.	2.7	220
41	Structure of the Cardiac Sodium Channel. <i>Cell</i> , 2020, 180, 122-134.e10.	13.5	217
42	Impaired excitability of somatostatin- and parvalbumin-expressing cortical interneurons in a mouse model of Dravet syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3139-48.	3.3	216
43	Progress in Understanding and Treating SCN2A-Mediated Disorders. <i>Trends in Neurosciences</i> , 2018, 41, 442-456.	4.2	210
44	Enhancement of Inhibitory Neurotransmission by GABA A Receptors Having $\alpha 2,3$ -Subunits Ameliorates Behavioral Deficits in a Mouse Model of Autism. <i>Neuron</i> , 2014, 81, 1282-1289.	3.8	207
45	Temperature- and age-dependent seizures in a mouse model of severe myoclonic epilepsy in infancy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 3994-3999.	3.3	200
46	International Union of Basic and Clinical Pharmacology. XC. Multisite Pharmacology: Recommendations for the Nomenclature of Receptor Allosterism and Allosteric Ligands. <i>Pharmacological Reviews</i> , 2014, 66, 918-947.	7.1	189
47	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Ion channels. <i>British Journal of Pharmacology</i> , 2021, 178, S157-S245.	2.7	187
48	Ca ²⁺ /Calmodulin-Dependent Facilitation and Inactivation of P/Q-Type Ca ²⁺ Channels. <i>Journal of Neuroscience</i> , 2000, 20, 6830-6838.	1.7	185
49	Structure and function of voltage-gated sodium channels at atomic resolution. <i>Experimental Physiology</i> , 2014, 99, 35-51.	0.9	182
50	The voltage-gated sodium channel Scn8a is a genetic modifier of severe myoclonic epilepsy of infancy. <i>Human Molecular Genetics</i> , 2007, 16, 2892-2899.	1.4	180
51	An emerging consensus on voltage-dependent gating from computational modeling and molecular dynamics simulations. <i>Journal of General Physiology</i> , 2012, 140, 587-594.	0.9	179
52	Differential modulation of Cav2.1 channels by calmodulin and Ca ²⁺ -binding protein 1. <i>Nature Neuroscience</i> , 2002, 5, 210-217.	7.1	176
53	The Concise Guide to PHARMACOLOGY 2015/16: Voltage-gated ion channels. <i>British Journal of Pharmacology</i> , 2015, 172, 5904-5941.	2.7	176
54	A sodium channel signaling complex: modulation by associated receptor protein tyrosine phosphatase $\beta 2$. <i>Nature Neuroscience</i> , 2000, 3, 437-444.	7.1	172

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55	Sodium channel α_1 and α_3 subunits associate with neurofascin through their extracellular immunoglobulin-like domain. <i>Journal of Cell Biology</i> , 2001, 154, 427-434.	2.3	167
56	A Critical Role for the S4-S5 Intracellular Loop in Domain IV of the Sodium Channel α -Subunit in Fast Inactivation. <i>Journal of Biological Chemistry</i> , 1998, 273, 1121-1129.	1.6	165
57	Structural basis for inhibition of a voltage-gated Ca^{2+} channel by Ca^{2+} antagonist drugs. <i>Nature</i> , 2016, 537, 117-121.	13.7	162
58	A Critical Role for Transmembrane Segment IVS6 of the Sodium Channel α Subunit in Fast Inactivation. <i>Journal of Biological Chemistry</i> , 1995, 270, 12025-12034.	1.6	160
59	Structural Basis for Pharmacology of Voltage-Gated Sodium and Calcium Channels. <i>Molecular Pharmacology</i> , 2015, 88, 141-150.	1.0	154
60	Sodium Channels, Inherited Epilepsy, and Antiepileptic Drugs. <i>Annual Review of Pharmacology and Toxicology</i> , 2014, 54, 317-338.	4.2	153
61	Molecular determinants of Ca^{2+} /calmodulin-dependent regulation of Cav2.1 channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 16059-16064.	3.3	150
62	Reciprocal regulation of P/Q-type Ca^{2+} channels by SNAP-25, syntaxin and synaptotagmin. <i>Nature Neuroscience</i> , 1999, 2, 939-941.	7.1	147
63	The chemical basis for electrical signaling. <i>Nature Chemical Biology</i> , 2017, 13, 455-463.	3.9	147
64	Regulation of Presynaptic Cav2.1 Channels by Ca^{2+} Sensor Proteins Mediates Short-Term Synaptic Plasticity. <i>Neuron</i> , 2008, 57, 210-216.	3.8	144
65	Resting-State Structure and Gating Mechanism of a Voltage-Gated Sodium Channel. <i>Cell</i> , 2019, 178, 993-1003.e12.	13.5	142
66	Structures of closed and open states of a voltage-gated sodium channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E3051-E3060.	3.3	139
67	Sequential formation of ion pairs during activation of a sodium channel voltage sensor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 22498-22503.	3.3	133
68	Solution Structure of the Sodium Channel Inactivation Gate. <i>Biochemistry</i> , 1999, 38, 855-861.	1.2	130
69	Structure and Function of the Voltage Sensor of Sodium Channels Probed by a α_2 -Scorpion Toxin. <i>Journal of Biological Chemistry</i> , 2006, 281, 21332-21344.	1.6	128
70	Ion Permeation through a Voltage-Sensitive Gating Pore in Brain Sodium Channels Having Voltage Sensor Mutations. <i>Neuron</i> , 2005, 47, 183-189.	3.8	127
71	Mapping the receptor site for α -scorpion toxins on a Na ⁺ channel voltage sensor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 15426-15431.	3.3	125
72	Forty Years of Sodium Channels: Structure, Function, Pharmacology, and Epilepsy. <i>Neurochemical Research</i> , 2017, 42, 2495-2504.	1.6	125

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73	International Union of Pharmacology. XXXIX. Compendium of Voltage-Gated Ion Channels: Sodium Channels. <i>Pharmacological Reviews</i> , 2003, 55, 575-578.	7.1	122
74	Disulfide locking a sodium channel voltage sensor reveals ion pair formation during activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 15142-15147.	3.3	121
75	Computational design of transmembrane pores. <i>Nature</i> , 2020, 585, 129-134.	13.7	120
76	Requirement for the synaptic protein interaction site for reconstitution of synaptic transmission by P/Q-type calcium channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 2819-2824.	3.3	117
77	Signaling complexes of voltage-gated sodium and calcium channels. <i>Neuroscience Letters</i> , 2010, 486, 107-116.	1.0	117
78	Calcium Channels and Short-term Synaptic Plasticity. <i>Journal of Biological Chemistry</i> , 2013, 288, 10742-10749.	1.6	116
79	Catalysis of Na ⁺ permeation in the bacterial sodium channel Na ^v Ab. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 11331-11336.	3.3	113
80	Na ⁺ channel subunits and Ig domains. <i>Nature</i> , 1996, 383, 307-308.	13.7	109
81	Dissecting the phenotypes of Dravet syndrome by gene deletion. <i>Brain</i> , 2015, 138, 2219-2233.	3.7	106
82	Dravet syndrome: a sodium channel interneuronopathy. <i>Current Opinion in Physiology</i> , 2018, 2, 42-50.	0.9	103
83	A BAC transgenic mouse model reveals neuron subtype-specific effects of a Generalized Epilepsy with Febrile Seizures Plus (GEFS+) mutation. <i>Neurobiology of Disease</i> , 2009, 35, 91-102.	2.1	91
84	Phosphorylation of Ser ¹⁹²⁸ mediates the enhanced activity of the L-type Ca ²⁺ channel Ca _v 1.2 by the β_2 -adrenergic receptor in neurons. <i>Science Signaling</i> , 2017, 10, .	1.6	91
85	Depolarization-activated gating pore current conducted by mutant sodium channels in potassium-sensitive normokalemic periodic paralysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 19980-19985.	3.3	87
86	Na ^v 1.1 channels are critical for intercellular communication in the suprachiasmatic nucleus and for normal circadian rhythms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, E368-77.	3.3	87
87	The Hodgkin-Huxley Heritage: From Channels to Circuits. <i>Journal of Neuroscience</i> , 2012, 32, 14064-14073.	1.7	86
88	Genetic background modulates impaired excitability of inhibitory neurons in a mouse model of Dravet syndrome. <i>Neurobiology of Disease</i> , 2015, 73, 106-117.	2.1	84
89	Molecular Analysis of the Putative Inactivation Particle in the Inactivation Gate of Brain Type IIA Na ⁺ Channels. <i>Journal of General Physiology</i> , 1997, 109, 589-605.	0.9	80
90	Molecular Determinants for Modulation of Persistent Sodium Current by G-Protein $\beta\gamma$ Subunits. <i>Journal of Neuroscience</i> , 2005, 25, 3341-3349.	1.7	80

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91	Sleep impairment and reduced interneuron excitability in a mouse model of Dravet Syndrome. <i>Neurobiology of Disease</i> , 2015, 77, 141-154.	2.1	79
92	Molecular properties of sodium and calcium channels. <i>Journal of Bioenergetics and Biomembranes</i> , 1996, 28, 219-230.	1.0	78
93	Structure-Function Map of the Receptor Site for $\hat{\nu}^2$ -Scorpion Toxins in Domain II of Voltage-gated Sodium Channels. <i>Journal of Biological Chemistry</i> , 2011, 286, 33641-33651.	1.6	76
94	Gating charge interactions with the S1 segment during activation of a Na ⁺ channel voltage sensor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 18825-18830.	3.3	74
95	Fenestrations control resting-state block of a voltage-gated sodium channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 13111-13116.	3.3	74
96	Differential Proteolysis of the Full-length Form of the L-type Calcium Channel $\hat{\nu}1$ Subunit by Calpain. <i>Journal of Neurochemistry</i> , 1994, 63, 1558-1564.	2.1	73
97	Molecular mechanisms of gating and drug block of sodium channels. <i>Novartis Foundation Symposium</i> , 2002, 241, 206-18; discussion 218-32.	1.2	70
98	Subtype-selective reconstitution of synaptic transmission in sympathetic ganglion neurons by expression of exogenous calcium channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 2813-2818.	3.3	69
99	Mapping the Interaction Site for a $\hat{\nu}^2$ -Scorpion Toxin in the Pore Module of Domain III of Voltage-gated Na ⁺ Channels. <i>Journal of Biological Chemistry</i> , 2012, 287, 30719-30728.	1.6	67
100	Basal and $\hat{\nu}^2$ -adrenergic regulation of the cardiac calcium channel Ca _v 1.2 requires phosphorylation of serine 1700. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 16598-16603.	3.3	64
101	Deciphering voltage-gated Na ⁺ and Ca ²⁺ channels by studying prokaryotic ancestors. <i>Trends in Biochemical Sciences</i> , 2015, 40, 526-534.	3.7	64
102	Ion permeation and block of the gating pore in the voltage sensor of NaV1.4 channels with hypokalemic periodic paralysis mutations. <i>Journal of General Physiology</i> , 2010, 136, 225-236.	0.9	63
103	Phosphorylation of Ca _v 1.2 on S1928 uncouples the L-type Ca ²⁺ channel from the $\hat{\nu}^2$ adrenergic receptor. <i>EMBO Journal</i> , 2016, 35, 1330-1345.	3.5	61
104	A 3D view of sodium channels. <i>Nature</i> , 2001, 409, 988-991.	13.7	58
105	Distribution and function of sodium channel subtypes in human atrial myocardium. <i>Journal of Molecular and Cellular Cardiology</i> , 2013, 61, 133-141.	0.9	58
106	Open-state structure and pore gating mechanism of the cardiac sodium channel. <i>Cell</i> , 2021, 184, 5151-5162.e11.	13.5	56
107	Molecular Analysis of Potential Hinge Residues in the Inactivation Gate of Brain Type IIA Na ⁺ Channels. <i>Journal of General Physiology</i> , 1997, 109, 607-617.	0.9	55
108	Correlations in timing of sodium channel expression, epilepsy, and sudden death in Dravet syndrome. <i>Channels</i> , 2013, 7, 468-472.	1.5	55

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109	Structural basis for gating pore current in periodic paralysis. <i>Nature</i> , 2018, 557, 590-594.	13.7	55
110	Sodium channelopathies of skeletal muscle and brain. <i>Physiological Reviews</i> , 2021, 101, 1633-1689.	13.1	55
111	Structural basis for voltage-sensor trapping of the cardiac sodium channel by a deathstalker scorpion toxin. <i>Nature Communications</i> , 2021, 12, 128.	5.8	54
112	Protective effect of the ketogenic diet in Scn1a mutant mice. <i>Epilepsia</i> , 2011, 52, 2050-2056.	2.6	51
113	Hippocampal deletion of Na ^V 1.1 channels in mice causes thermal seizures and cognitive deficit characteristic of Dravet Syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16571-16576.	3.3	50
114	Synergistic GABA-Enhancing Therapy against Seizures in a Mouse Model of Dravet Syndrome. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2013, 345, 215-224.	1.3	49
115	Structural Basis for High-Affinity Trapping of the NaV1.7 Channel in Its Resting State by Tarantula Toxin. <i>Molecular Cell</i> , 2021, 81, 38-48.e4.	4.5	40
116	Regulation of Sodium and Calcium Channels by Signaling Complexes. <i>Journal of Receptor and Signal Transduction Research</i> , 2006, 26, 577-598.	1.3	35
117	Calcium sensor regulation of the Ca _v 2.1 Ca ²⁺ channel contributes to long-term potentiation and spatial learning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 13209-13214.	3.3	35
118	Structural Basis for Diltiazem Block of a Voltage-Gated Ca ²⁺ Channel. <i>Molecular Pharmacology</i> , 2019, 96, 485-492.	1.0	35
119	Calcium sensor regulation of the Ca _v 2.1 Ca ²⁺ channel contributes to short-term synaptic plasticity in hippocampal neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1062-1067.	3.3	34
120	The conformational cycle of a prototypical voltage-gated sodium channel. <i>Nature Chemical Biology</i> , 2020, 16, 1314-1320.	3.9	33
121	Molecular Properties of Calcium Channels in Skeletal Muscle and Neurons. <i>Annals of the New York Academy of Sciences</i> , 1993, 681, 342-355.	1.8	31
122	KATP channel gain-of-function leads to increased myocardial L-type Ca ²⁺ current and contractility in Cantu syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 6773-6778.	3.3	29
123	Loss of Î²-adrenergic-stimulated phosphorylation of Ca _v 1.2 channels on Ser1700 leads to heart failure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E7976-E7985.	3.3	28
124	Tracking S4 movement by gating pore currents in the bacterial sodium channel NaChBac. <i>Journal of General Physiology</i> , 2014, 144, 147-157.	0.9	26
125	Molecular dissection of multiphase inactivation of the bacterial sodium channel NaVAβ. <i>Journal of General Physiology</i> , 2019, 151, 174-185.	0.9	23
126	Down regulation of sodium channels in nerve terminals of spontaneously epileptic mice. <i>Cellular and Molecular Neurobiology</i> , 1986, 6, 213-220.	1.7	22

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127	The AKAP Cypher/Zasp contributes to \hat{I}^2 -adrenergic/PKA stimulation of cardiac CaV1.2 calcium channels. <i>Journal of General Physiology</i> , 2018, 150, 883-889.	0.9	22
128	Structure and Modulation of Voltage-Gated Ion Channels. <i>Annals of the New York Academy of Sciences</i> , 1991, 625, 174-180.	1.8	21
129	Selective Dephosphorylation of the Subunits of Skeletal Muscle Calcium Channels by Purified Phosphoprotein Phosphatases. <i>Journal of Neurochemistry</i> , 1993, 61, 1333-1339.	2.1	21
130	Control of Excitation/Inhibition Balance in a Hippocampal Circuit by Calcium Sensor Protein Regulation of Presynaptic Calcium Channels. <i>Journal of Neuroscience</i> , 2018, 38, 4430-4440.	1.7	20
131	Molecular Properties of Dihydropyridine-Sensitive Calcium Channels. <i>Annals of the New York Academy of Sciences</i> , 1988, 522, 162-175.	1.8	18
132	Impairment of Sharp-Wave Ripples in a Murine Model of Dravet Syndrome. <i>Journal of Neuroscience</i> , 2019, 39, 9251-9260.	1.7	18
133	Interaction of polypeptide neurotoxins with a receptor site associated with voltage-sensitive sodium channels. <i>Journal of Supramolecular Structure</i> , 1980, 14, 295-303.	2.3	16
134	Voltage-Gated Na ⁺ Channels. , 2012, , 41-54.		16
135	Painful Channels. <i>Neuron</i> , 2006, 52, 743-744.	3.8	15
136	Detection of Marine Toxins Using Reconstituted Sodium Channels. <i>Journal of AOAC INTERNATIONAL</i> , 1995, 78, 570-573.	0.7	14
137	The Role of CaV2.1 Channel Facilitation in Synaptic Facilitation. <i>Cell Reports</i> , 2019, 26, 2289-2297.e3.	2.9	14
138	Ins and outs. <i>Nature</i> , 1994, 371, 444-444.	13.7	13
139	Molecular Determinants of CaV2.1 Channel Regulation by Calcium-binding Protein-1*. <i>Journal of Biological Chemistry</i> , 2011, 286, 41917-41923.	1.6	13
140	Phosphorylation sites in the Hook domain of CaV \hat{I}^2 subunits differentially modulate CaV1.2 channel function. <i>Journal of Molecular and Cellular Cardiology</i> , 2015, 87, 248-256.	0.9	13
141	Altered short-term synaptic plasticity and reduced muscle strength in mice with impaired regulation of presynaptic Ca _V 2.1 Ca ²⁺ channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1068-1073.	3.3	13
142	A more efficient conditional mouse model of Dravet syndrome: Implications for epigenetic selection and sex-dependent behaviors. <i>Journal of Neuroscience Methods</i> , 2019, 325, 108315.	1.3	13
143	Molecular Determinants of Brevetoxin Binding to Voltage-Gated Sodium Channels. <i>Toxins</i> , 2019, 11, 513.	1.5	13
144	Structural and Functional Analysis of Sodium Channels Viewed from an Evolutionary Perspective. <i>Handbook of Experimental Pharmacology</i> , 2017, 246, 53-72.	0.9	12

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145	Autism-associated mutations in K _v 7 channels induce gating pore current. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	12
146	IgGs from patients with amyotrophic lateral sclerosis and diabetes target Ca _v 2.1 subunits impairing islet cell function and survival. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26816-26822.	3.3	11
147	Molecular Determinants of Modulation of Ca _v 2.1 Channels by Visinin-like Protein 2*. Journal of Biological Chemistry, 2012, 287, 504-513.	1.6	10
148	Na ⁺ channel mutations and epilepsy. Epilepsia, 2010, 51, 59-59.	2.6	9
149	Finding Channels. Journal of Biological Chemistry, 2015, 290, 28357-28373.	1.6	8
150	Voltage-gated sodium channels (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2019, 2019, .	0.2	7
151	Introduction: Ion channels in plasma membrane signal transduction. Journal of Bioenergetics and Biomembranes, 1996, 28, 217-218.	1.0	6
152	Yeasty brew yields novel calcium channel inhibitor. Nature Biotechnology, 1998, 16, 906-906.	9.4	6
153	Helical motion of an S4 voltage sensor revealed by gating pore currents. Channels, 2010, 4, 75-77.	1.5	6
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