

William A Catterall

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

157
papers

26,791
citations

77
h-index

163
g-index

167
ext. papers

29,971
ext. citations

13.9
avg. IF

7.64
L-index

#	Paper	IF	Citations
157	Autism-associated mutations in K7 channels induce gating pore current. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	1
156	Sharp-Wave Ripple Frequency and Interictal Epileptic Discharges Increase in Tandem During Thermal Induction of Seizures in a Mouse Model of Genetic Epilepsy. <i>Frontiers in Cellular Neuroscience</i> , 2021 , 15, 751762	6.1	0
155	Structural Basis for High-Affinity Trapping of the Na1.7 Channel in Its Resting State by Tarantula Toxin. <i>Molecular Cell</i> , 2021 , 81, 38-48.e4	17.6	17
154	Structural basis for voltage-sensor trapping of the cardiac sodium channel by a deathstalker scorpion toxin. <i>Nature Communications</i> , 2021 , 12, 128	17.4	18
153	Expression and purification of the cardiac sodium channel Na1.5 for cryo-EM structure determination. <i>Methods in Enzymology</i> , 2021 , 653, 89-101	1.7	0
152	Open-state structure and pore gating mechanism of the cardiac sodium channel. <i>Cell</i> , 2021 , 184, 5151-5162.e11	16.2	11
151	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Ion channels. <i>British Journal of Pharmacology</i> , 2021 , 178 Suppl 1, S157-S245	8.6	21
150	Sodium channelopathies of skeletal muscle and brain. <i>Physiological Reviews</i> , 2021 , 101, 1633-1689	47.9	8
149	Structure of the Cardiac Sodium Channel. <i>Cell</i> , 2020 , 180, 122-134.e10	56.2	99
148	The conformational cycle of a prototypical voltage-gated sodium channel. <i>Nature Chemical Biology</i> , 2020 , 16, 1314-1320	11.7	6
147	Computational design of transmembrane pores. <i>Nature</i> , 2020 , 585, 129-134	50.4	56
146	Molecular Determinants of Brevetoxin Binding to Voltage-Gated Sodium Channels. <i>Toxins</i> , 2019 , 11,	4.9	5
145	Hippocampal deletion of Na1.1 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	11.5	25
144	Resting-State Structure and Gating Mechanism of a Voltage-Gated Sodium Channel. <i>Cell</i> , 2019 , 178, 993-1003.e12	30.3	12
143	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	3	4
142	Structural Basis for Diltiazem Block of a Voltage-Gated Ca Channel. <i>Molecular Pharmacology</i> , 2019 , 96, 485-492	4.3	19
141	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Ion channels. <i>British Journal of Pharmacology</i> , 2019 , 176 Suppl 1, S142-S228	8.6	200

140	Impairment of Sharp-Wave Ripples in a Murine Model of Dravet Syndrome. <i>Journal of Neuroscience</i> , 2019 , 39, 9251-9260	6.6	8
139	Voltage-gated sodium channels (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. <i>IUPHAR/BPS Guide To Pharmacology CITE</i> , 2019 , 2019,	1.7	2
138	Voltage-gated calcium channels (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. <i>IUPHAR/BPS Guide To Pharmacology CITE</i> , 2019 , 2019,	1.7	2
137	The Role of Ca _v 2.1 Channel Facilitation in Synaptic Facilitation. <i>Cell Reports</i> , 2019 , 26, 2289-2297.e3	10.6	10
136	IgGs from patients with amyotrophic lateral sclerosis and diabetes target Ca _v 1 subunits impairing islet cell function and survival. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 ,	11.5	9
135	Molecular dissection of multiphase inactivation of the bacterial sodium channel NaAb. <i>Journal of General Physiology</i> , 2019 , 151, 174-185	3.4	13
134	Structural and Functional Analysis of Sodium Channels Viewed from an Evolutionary Perspective. <i>Handbook of Experimental Pharmacology</i> , 2018 , 246, 53-72	3.2	9
133	Progress in Understanding and Treating SCN2A-Mediated Disorders. <i>Trends in Neurosciences</i> , 2018 , 41, 442-456	13.3	128
132	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	6.6	12
131	Dravet Syndrome: A Sodium Channel Interneuronopathy. <i>Current Opinion in Physiology</i> , 2018 , 2, 42-50	2.6	54
130	Calcium Channels, Synaptic Plasticity, and Neuropsychiatric Disease. <i>Neuron</i> , 2018 , 98, 466-481	13.9	200
129	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	11.5	40
128	Structural basis for gating pore current in periodic paralysis. <i>Nature</i> , 2018 , 557, 590-594	50.4	33
127	The AKAP Cypher/Zasp contributes to β -adrenergic/PKA stimulation of cardiac Ca _v 1.2 calcium channels. <i>Journal of General Physiology</i> , 2018 , 150, 883-889	3.4	13
126	Phosphorylation of Ser1928 mediates the enhanced activity of the L-type Ca _v 1.2 channel Cav1.2 by the β -adrenergic receptor in neurons. <i>Science Signaling</i> , 2017 , 10,	8.8	57
125	The chemical basis for electrical signaling. <i>Nature Chemical Biology</i> , 2017 , 13, 455-463	11.7	93
124	Forty Years of Sodium Channels: Structure, Function, Pharmacology, and Epilepsy. <i>Neurochemical Research</i> , 2017 , 42, 2495-2504	4.6	72
123	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	11.5	93

122	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	11.5	180
121	Structural basis for inhibition of a voltage-gated Ca channel by Ca antagonist drugs. <i>Nature</i> , 2016 , 537, 117-121	50.4	121
120	Loss of β adrenergic-stimulated phosphorylation of CaV1.2 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	11.5	24
119	Calcium sensor regulation of the CaV2.1 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	11.5	24
118	K(ATP) 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, 6773-8	11.5	22
117	The IUPHAR/BPS Guide to PHARMACOLOGY in 2016: towards curated quantitative interactions between 1300 protein targets and 6000 ligands. <i>Nucleic Acids Research</i> , 2016 , 44, D1054-68	20.1	1014
116	Calcium sensor regulation of the CaV2.1 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, 1062-7	11.5	27
115	Altered short-term synaptic plasticity and reduced muscle strength in mice with impaired regulation of presynaptic CaV2.1 Ca ²⁺ channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 1068-73	11.5	8
114	Phosphorylation of Cav1.2 on S1928 uncouples the L-type Ca ²⁺ channel from the β adrenergic receptor. <i>EMBO Journal</i> , 2016 , 35, 1330-45	13	40
113	Deciphering voltage-gated Na(+) and Ca(2+) channels by studying prokaryotic ancestors. <i>Trends in Biochemical Sciences</i> , 2015 , 40, 526-34	10.3	48
112	Dissecting the phenotypes of Dravet syndrome by gene deletion. <i>Brain</i> , 2015 , 138, 2219-33	11.2	73
111	Sleep impairment and reduced interneuron excitability in a mouse model of Dravet Syndrome. <i>Neurobiology of Disease</i> , 2015 , 77, 141-54	7.5	55
110	Structural Basis for Pharmacology of Voltage-Gated Sodium and Calcium Channels. <i>Molecular Pharmacology</i> , 2015 , 88, 141-50	4.3	121
109	Phosphorylation sites in the Hook domain of CaV β subunits differentially modulate CaV1.2 channel function. <i>Journal of Molecular and Cellular Cardiology</i> , 2015 , 87, 248-56	5.8	11
108	Genetic background modulates impaired excitability of inhibitory neurons in a mouse model of Dravet syndrome. <i>Neurobiology of Disease</i> , 2015 , 73, 106-17	7.5	55
107	The Concise Guide to PHARMACOLOGY 2015/16: Overview. <i>British Journal of Pharmacology</i> , 2015 , 172, 5729-43	8.6	207
106	The Concise Guide to PHARMACOLOGY 2015/16: Voltage-gated ion channels. <i>British Journal of Pharmacology</i> , 2015 , 172, 5904-41	8.6	164
105	Finding Channels. <i>Journal of Biological Chemistry</i> , 2015 , 290, 28357-28373	5.4	5

104	Enhancement of inhibitory neurotransmission by GABAA receptors having α ,3-subunits ameliorates behavioral deficits in a mouse model of autism. <i>Neuron</i> , 2014 , 81, 1282-1289	13.9	159
103	Structure and function of voltage-gated sodium channels at atomic resolution. <i>Experimental Physiology</i> , 2014 , 99, 35-51	2.4	140
102	Sodium channels, inherited epilepsy, and antiepileptic drugs. <i>Annual Review of Pharmacology and Toxicology</i> , 2014 , 54, 317-38	17.9	120
101	Structural basis for Ca ²⁺ selectivity of a voltage-gated calcium channel. <i>Nature</i> , 2014 , 505, 56-61	50.4	231
100	Tracking S4 movement by gating pore currents in the bacterial sodium channel NaChBac. <i>Journal of General Physiology</i> , 2014 , 144, 147-57	3.4	21
99	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, 918-47	22.5	156
98	Basal and β adrenergic regulation of the cardiac calcium channel CaV1.2 requires phosphorylation of serine 1700. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 16598-603	11.5	49
97	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	11.5	142
96	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, 11331-6	11.5	94
95	Distribution and function of sodium channel subtypes in human atrial myocardium. <i>Journal of Molecular and Cellular Cardiology</i> , 2013 , 61, 133-141	5.8	45
94	Synergistic GABA-enhancing therapy against seizures in a mouse model of Dravet syndrome. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2013 , 345, 215-24	4.7	35
93	Calcium channels and short-term synaptic plasticity. <i>Journal of Biological Chemistry</i> , 2013 , 288, 10742-9	5.4	96
92	Correlations in timing of sodium channel expression, epilepsy, and sudden death in Dravet syndrome. <i>Channels</i> , 2013 , 7, 468-72	3	41
91	Sudden unexpected death in a mouse model of Dravet syndrome. <i>Journal of Clinical Investigation</i> , 2013 , 123, 1798-808	15.9	182
90	An emerging consensus on voltage-dependent gating from computational modeling and molecular dynamics simulations. <i>Journal of General Physiology</i> , 2012 , 140, 587-94	3.4	141
89	Specific deletion of NaV1.1 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, 14646-51	11.5	195
88	Mapping the interaction site for a β scorpion toxin in the pore module of domain III of voltage-gated Na ⁽⁺⁾ channels. <i>Journal of Biological Chemistry</i> , 2012 , 287, 30719-28	5.4	55
87	Autistic-like behaviour in Scn1a ^{+/-} mice and rescue by enhanced GABA-mediated neurotransmission. <i>Nature</i> , 2012 , 489, 385-90	50.4	424

86	Voltage-gated sodium channels at 60: structure, function and pathophysiology. <i>Journal of Physiology</i> , 2012 , 590, 2577-89	3.9	434
85	The Hodgkin-Huxley heritage: from channels to circuits. <i>Journal of Neuroscience</i> , 2012 , 32, 14064-73	6.6	55
84	Crystal structure of a voltage-gated sodium channel in two potentially inactivated states. <i>Nature</i> , 2012 , 486, 135-9	50.4	377
83	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	11.5	176
82	Molecular determinants of modulation of CaV2.1 channels by visinin-like protein 2. <i>Journal of Biological Chemistry</i> , 2012 , 287, 504-513	5.4	10
81	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	11.5	73
80	Voltage-Gated Na ⁺ Channels 2012 , 41-54		11
79	Voltage-gated calcium channels. <i>Cold Spring Harbor Perspectives in Biology</i> , 2011 , 3, a003947	10.2	888
78	Protective effect of the ketogenic diet in Scn1a mutant mice. <i>Epilepsia</i> , 2011 , 52, 2050-6	6.4	41
77	Structure-function map of the receptor site for β -scorpion toxins in domain II of voltage-gated sodium channels. <i>Journal of Biological Chemistry</i> , 2011 , 286, 33641-51	5.4	66
76	The crystal structure of a voltage-gated sodium channel. <i>Nature</i> , 2011 , 475, 353-8	50.4	1069
75	Mapping the receptor site for alpha-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, 15426-31	11.5	110
74	Molecular determinants of CaV2.1 channel regulation by calcium-binding protein-1. <i>Journal of Biological Chemistry</i> , 2011 , 286, 41917-41923	5.4	13
73	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, 18825-30	11.5	63
72	NaV1.1 channels and epilepsy. <i>Journal of Physiology</i> , 2010 , 588, 1849-59	3.9	267
71	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, 225-36	3.4	59
70	Helical motion of an S4 voltage sensor revealed by gating pore currents. <i>Channels</i> , 2010 , 4, 75-7	3	5
69	Retrospective. Edwin G. Krebs (1918-2009). <i>Science</i> , 2010 , 327, 537	33.3	1

68	Signaling complexes of voltage-gated sodium and calcium channels. <i>Neuroscience Letters</i> , 2010 , 486, 107-16	3.3	96
67	Ion channel voltage sensors: structure, function, and pathophysiology. <i>Neuron</i> , 2010 , 67, 915-28	13.9	371
66	Voltage-gated Na ⁺ channels and epilepsy. <i>Epilepsia</i> , 2010 , 51, 9-9	6.4	1
65	Na ⁺ channel mutations and epilepsy. <i>Epilepsia</i> , 2010 , 51, 59-59	6.4	3
64	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, 3994-9	11.5	159
63	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, 22498-503	11.5	117
62	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	7.5	80
61	Inherited neuronal ion channelopathies: new windows on complex neurological diseases. <i>Journal of Neuroscience</i> , 2008 , 28, 11768-77	6.6	191
60	Regulation of presynaptic Ca(V)2.1 channels by Ca ²⁺ sensor proteins mediates short-term synaptic plasticity. <i>Neuron</i> , 2008 , 57, 210-6	13.9	130
59	Calcium channel regulation and presynaptic plasticity. <i>Neuron</i> , 2008 , 59, 882-901	13.9	482
58	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, 15142-7	11.5	103
57	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, 19980-5	11.5	77
56	The voltage-gated sodium channel Scn8a is a genetic modifier of severe myoclonic epilepsy of infancy. <i>Human Molecular Genetics</i> , 2007 , 16, 2892-9	5.6	157
55	Gating pore current in an inherited ion channelopathy. <i>Nature</i> , 2007 , 446, 76-8	50.4	233
54	Reduced sodium current in Purkinje neurons from Nav1.1 mutant mice: implications for ataxia in severe myoclonic epilepsy in infancy. <i>Journal of Neuroscience</i> , 2007 , 27, 11065-74	6.6	194
53	Voltage-gated ion channels and gating modifier toxins. <i>Toxicon</i> , 2007 , 49, 124-41	2.8	489
52	Structure and function of the voltage sensor of sodium channels probed by a beta-scorpion toxin. <i>Journal of Biological Chemistry</i> , 2006 , 281, 21332-21344	5.4	115
51	Regulation of sodium and calcium channels by signaling complexes. <i>Journal of Receptor and Signal Transduction Research</i> , 2006 , 26, 577-98	2.6	29

50	Painful channels. <i>Neuron</i> , 2006 , 52, 743-4	13.9	14
49	Reduced sodium current in GABAergic interneurons in a mouse model of severe myoclonic epilepsy in infancy. <i>Nature Neuroscience</i> , 2006 , 9, 1142-9	25.5	746
48	International Union of Pharmacology. XLVII. Nomenclature and structure-function relationships of voltage-gated sodium channels. <i>Pharmacological Reviews</i> , 2005 , 57, 397-409	22.5	1031
47	International Union of Pharmacology. XLVIII. Nomenclature and structure-function relationships of voltage-gated calcium channels. <i>Pharmacological Reviews</i> , 2005 , 57, 411-25	22.5	970
46	Ion permeation through a voltage-sensitive gating pore in brain sodium channels having voltage sensor mutations. <i>Neuron</i> , 2005 , 47, 183-9	13.9	111
45	Molecular determinants for modulation of persistent sodium current by G-protein betagamma subunits. <i>Journal of Neuroscience</i> , 2005 , 25, 3341-9	6.6	73
44	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, 2813-8	11.5	65
43	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, 2819-24	11.5	103
42	International Union of Pharmacology. XXXIX. Compendium of voltage-gated ion channels: sodium channels. <i>Pharmacological Reviews</i> , 2003 , 55, 575-8	22.5	112
41	Molecular determinants of Ca ²⁺ /calmodulin-dependent regulation of Ca _v 2.1 channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 16059-64	11.5	140
40	Differential modulation of Ca _v 2.1 channels by calmodulin and Ca ²⁺ -binding protein 1. <i>Nature Neuroscience</i> , 2002 , 5, 210-7	25.5	167
39	Distribution of high-voltage-activated calcium channels in cultured GABAergic neurons from mouse cerebral cortex 2002 , 67, 48		2
38	Molecular mechanisms of gating and drug block of sodium channels. <i>Novartis Foundation Symposium</i> , 2002 , 241, 206-18; discussion 218-32		65
37	Neuromodulation of Na ⁺ channels: an unexpected form of cellular plasticity. <i>Nature Reviews Neuroscience</i> , 2001 , 2, 397-407	13.5	312
36	Sodium channel beta1 and beta3 subunits associate with neurofascin through their extracellular immunoglobulin-like domain. <i>Journal of Cell Biology</i> , 2001 , 154, 427-34	7.3	151
35	A sodium channel signaling complex: modulation by associated receptor protein tyrosine phosphatase beta. <i>Nature Neuroscience</i> , 2000 , 3, 437-44	25.5	162
34	Structure and regulation of voltage-gated Ca ²⁺ channels. <i>Annual Review of Cell and Developmental Biology</i> , 2000 , 16, 521-55	12.6	1924
33	Ca ²⁺ /calmodulin-dependent facilitation and inactivation of P/Q-type Ca ²⁺ channels. <i>Journal of Neuroscience</i> , 2000 , 20, 6830-8	6.6	177

32	Molecular mechanisms of neurotoxin action on voltage-gated sodium channels. <i>Biochimie</i> , 2000 , 82, 883-902	4.8	592
31	From ionic currents to molecular mechanisms: the structure and function of voltage-gated sodium channels. <i>Neuron</i> , 2000 , 26, 13-25	13.9	1680
30	Ca ²⁺ /calmodulin binds to and modulates P/Q-type calcium channels. <i>Nature</i> , 1999 , 399, 155-9	50.4	428
29	Reciprocal regulation of P/Q-type Ca ²⁺ channels by SNAP-25, syntaxin and synaptotagmin. <i>Nature Neuroscience</i> , 1999 , 2, 939-41	25.5	138
28	Interactions of presynaptic Ca ²⁺ channels and snare proteins in neurotransmitter release. <i>Annals of the New York Academy of Sciences</i> , 1999 , 868, 144-59	6.5	225
27	Solution structure of the sodium channel inactivation gate. <i>Biochemistry</i> , 1999 , 38, 855-61	3.2	116
26	Interaction of Presynaptic Calcium channels with SNARE Proteins in Neurotransmitter Release. <i>Biochemical Society Transactions</i> , 1999 , 27, A71-A71	5.1	
25	Voltage sensor-trapping: enhanced activation of sodium channels by beta-scorpion toxin bound to the S3-S4 loop in domain II. <i>Neuron</i> , 1998 , 21, 919-31	13.9	309
24	A critical role for the S4-S5 intracellular loop in domain IV of the sodium channel alpha-subunit in fast inactivation. <i>Journal of Biological Chemistry</i> , 1998 , 273, 1121-9	5.4	144
23	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	3.4	69
22	Molecular analysis of potential hinge residues in the inactivation gate of brain type IIA Na ⁺ channels. <i>Journal of General Physiology</i> , 1997 , 109, 607-17	3.4	50
21	Molecular determinants of drug binding and action on L-type calcium channels. <i>Annual Review of Pharmacology and Toxicology</i> , 1997 , 37, 361-96	17.9	314
20	Specific phosphorylation of a site in the full-length form of the alpha 1 subunit of the cardiac L-type calcium channel by adenosine 3',5'-cyclic monophosphate-dependent protein kinase. <i>Biochemistry</i> , 1996 , 35, 10392-402	3.2	251
19	Ion channels in plasma membrane signal transduction. <i>Journal of Bioenergetics and Biomembranes</i> , 1996 , 28, 217-8	3.7	6
18	Molecular properties of sodium and calcium channels. <i>Journal of Bioenergetics and Biomembranes</i> , 1996 , 28, 219-30	3.7	75
17	Calcium-dependent interaction of N-type calcium channels with the synaptic core complex. <i>Nature</i> , 1996 , 379, 451-4	50.4	323
16	Modulation of Ca ²⁺ channels by G-protein beta gamma subunits. <i>Nature</i> , 1996 , 380, 258-62	50.4	755
15	Na ⁺ channel subunits and Ig domains. <i>Nature</i> , 1996 , 383, 307-8	50.4	99

14	Molecular determinants of high affinity binding of alpha-scorpion toxin and sea anemone toxin in the S3-S4 extracellular loop in domain IV of the Na ⁺ channel alpha subunit. <i>Journal of Biological Chemistry</i> , 1996 , 271, 15950-62	5.4	349
13	Detection of Marine Toxins Using Reconstituted Sodium Channels. <i>Journal of AOAC INTERNATIONAL</i> , 1995 , 78, 570-573	1.7	14
12	A critical role for transmembrane segment IVS6 of the sodium channel alpha subunit in fast inactivation. <i>Journal of Biological Chemistry</i> , 1995 , 270, 12025-34	5.4	140
11	Differential proteolysis of the full-length form of the L-type calcium channel alpha 1 subunit by calpain. <i>Journal of Neurochemistry</i> , 1994 , 63, 1558-64	6	63
10	Identification of a syntaxin-binding site on N-type calcium channels. <i>Neuron</i> , 1994 , 13, 1303-13	13.9	391
9	Molecular properties of calcium channels in skeletal muscle and neurons. <i>Annals of the New York Academy of Sciences</i> , 1993 , 681, 342-55	6.5	27
8	Voltage-dependent potentiation of L-type Ca ²⁺ channels due to phosphorylation by cAMP-dependent protein kinase. <i>Nature</i> , 1993 , 364, 240-3	50.4	252
7	Selective dephosphorylation of the subunits of skeletal muscle calcium channels by purified phosphoprotein phosphatases. <i>Journal of Neurochemistry</i> , 1993 , 61, 1333-9	6	20
6	Structure and modulation of voltage-gated ion channels. <i>Annals of the New York Academy of Sciences</i> , 1991 , 625, 174-80	6.5	21
5	Clustering of L-type Ca ²⁺ channels at the base of major dendrites in hippocampal pyramidal neurons. <i>Nature</i> , 1990 , 347, 281-4	50.4	437
4	Differential subcellular localization of the RI and RII Na ⁺ channel subtypes in central neurons. <i>Neuron</i> , 1989 , 3, 695-704	13.9	393
3	Molecular properties of dihydropyridine-sensitive calcium channels. <i>Annals of the New York Academy of Sciences</i> , 1988 , 522, 162-75	6.5	10
2	Down regulation of sodium channels in nerve terminals of spontaneously epileptic mice. <i>Cellular and Molecular Neurobiology</i> , 1986 , 6, 213-20	4.6	19
1	Interaction of polypeptide neurotoxins with a receptor site associated with voltage-sensitive sodium channels. <i>Journal of Supramolecular Structure</i> , 1980 , 14, 295-303		15