Joerg Striessnig

List of Publications by Citations

180 papers	15,946 citations	68 h-index	123 g-index
203 ext. papers	17,623 ext. citations	6.6 avg, IF	6.39 L-index

#	Paper	IF	Citations
180	International Union of Pharmacology. XLVIII. Nomenclature and structure-function relationships of voltage-gated calcium channels. *Pharmacological Reviews*, **2005**, 57, 411-25	22.5	970
179	Purification, molecular cloning, and expression of the mammalian sigma1-binding site. *Proceedings of the National Academy of Sciences of the United States of America*, **1996**, 93, 8072-7	11.5	762
178	Congenital deafness and sinoatrial node dysfunction in mice lacking class D L-type Ca2+ channels. *Cell*, **2000**, 102, 89-97	56.2	703
177	The Physiology, Pathology, and Pharmacology of Voltage-Gated Calcium Channels and Their Future Therapeutic Potential. *Pharmacological Reviews*, **2015**, 67, 821-70	22.5	562
176	Neurobiology of migraine. *Nature Reviews Neuroscience*, **2003**, 4, 386-98	13.5	433
175	Functional role of L-type Cav1.3 Ca2+ channels in cardiac pacemaker activity. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 5543-8	11.5	362
174	alpha 1D (Cav1.3) subunits can form l-type Ca2+ channels activating at negative voltages. *Journal of Biological Chemistry*, **2001**, 276, 22100-6	5.4	356
173	Somatic mutations in ATP1A1 and CACNA1D underlie a common subtype of adrenal hypertension. *Nature Genetics*, **2013**, 45, 1055-60	36.3	353
172	Receptor sites for Ca2+ channel antagonists. *Trends in Pharmacological Sciences*, **1992**, 13, 256-62	13.2	342
171	Pharmacological disruption of calcium channel trafficking by the alpha2delta ligand gabapentin. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 3628-33	11.5	304
170	CaV1.3 channels are essential for development and presynaptic activity of cochlear inner hair cells. *Journal of Neuroscience*, **2003**, 23, 10832-40	6.6	304
169	THE CONCISE GUIDE TO PHARMACOLOGY 2017/18: Overview. *British Journal of Pharmacology*, **2017**, 174 Suppl 1, S1-S16	8.6	231
168	Structural basis of drug binding to L Ca2+ channels. *Trends in Pharmacological Sciences*, **1998**, 19, 108-15	13.2	231
167	Quantitative proteomics of the Cav2 channel nano-environments in the mammalian brain. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 14950-7	11.5	219
166	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Introduction and Other Protein Targets. *British Journal of Pharmacology*, **2019**, 176 Suppl 1, S1-S20	8.6	218
165	Familial hemiplegic migraine mutations increase Ca(2+) influx through single human CaV2.1 channels and decrease maximal CaV2.1 current density in neurons. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 13284-9	11.5	209
164	Loss of Ca(v)1.3 (CACNA1D) function in a human channelopathy with bradycardia and congenital deafness. *Nature Neuroscience*, **2011**, 14, 77-84	25.5	208

163	The Concise Guide to PHARMACOLOGY 2015/16: Overview. *British Journal of Pharmacology*, **2015**, 172, 5729-43	8.6	207
162	Functional embryonic cardiomyocytes after disruption of the L-type alpha1C (Cav1.2) calcium channel gene in the mouse. *Journal of Biological Chemistry*, **2000**, 275, 39193-9	5.4	207
161	Fast exocytosis with few Ca(2+) channels in insulin-secreting mouse pancreatic B cells. *Biophysical Journal*, **2001**, 81, 3308-23	2.9	207
160	International Union of Pharmacology. XL. Compendium of voltage-gated ion channels: calcium channels. *Pharmacological Reviews*, **2003**, 55, 579-81	22.5	201
159	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Ion channels. *British Journal of Pharmacology*, **2019**, 176 Suppl 1, S142-S228	8.6	200
158	Pharmacology, structure and function of cardiac L-type Ca(2+) channels. *Cellular Physiology and Biochemistry*, **1999**, 9, 242-69	3.9	167
157	THE CONCISE GUIDE TO PHARMACOLOGY 2017/18: Voltage-gated ion channels. *British Journal of Pharmacology*, **2017**, 174 Suppl 1, S160-S194	8.6	166
156	Molecular properties of calcium channels. *Reviews of Physiology, Biochemistry and Pharmacology*, **1990**, 114, 1-105	2.9	160
155	Expression and 1,4-dihydropyridine-binding properties of brain L-type calcium channel isoforms. *Molecular Pharmacology*, **2009**, 75, 407-14	4.3	158
154	Familial hemiplegic migraine mutations change alpha1A Ca2+ channel kinetics. *Journal of Biological Chemistry*, **1998**, 273, 5586-90	5.4	157
153	Identification of a phenylalkylamine binding region within the alpha 1 subunit of skeletal muscle Ca2+ channels. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 9108-12	11.5	153
152	Isoform-specific regulation of mood behavior and pancreatic beta cell and cardiovascular function by L-type Ca 2+ channels. *Journal of Clinical Investigation*, **2004**, 113, 1430-9	15.9	144
151	Role of voltage-gated L-type Ca2+ channel isoforms for brain function. *Biochemical Society Transactions*, **2006**, 34, 903-9	5.1	142
150	Transfer of 1,4-dihydropyridine sensitivity from L-type to class A (BI) calcium channels. *Neuron*, **1996**, 16, 207-18	13.9	137
149	Dihydropyridine receptor of L-type Ca2+ channels: identification of binding domains for [3H](+)-PN200-110 and [3H]azidopine within the alpha 1 subunit. *Proceedings of the National Academy of Sciences of the United States of America*, **1991**, 88, 10769-73	11.5	137
148	Identification of 1,4-dihydropyridine binding regions within the alpha 1 subunit of skeletal muscle Ca2+ channels by photoaffinity labeling with diazipine. *Proceedings of the National Academy of Sciences of the United States of America*, **1991**, 88, 9203-7	11.5	135
147	L-type Ca channels in heart and brain. *Environmental Sciences Europe*, **2014**, 3, 15-38	5	132
146	Loss of Cav1.3 channels reveals the critical role of L-type and BK channel coupling in pacemaking mouse adrenal chromaffin cells. *Journal of Neuroscience*, **2010**, 30, 491-504	6.6	129

145	A CACNA1F mutation identified in an X-linked retinal disorder shifts the voltage dependence of Cav1.4 channel activation. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 7553-8	11.5	120
144	C-terminal modulator controls Ca2+-dependent gating of Ca(v)1.4 L-type Ca2+ channels. *Nature Neuroscience*, **2006**, 9, 1108-16	25.5	118
143	Cav1.4alpha1 subunits can form slowly inactivating dihydropyridine-sensitive L-type Ca2+ channels lacking Ca2+-dependent inactivation. *Journal of Neuroscience*, **2003**, 23, 6041-9	6.6	113
142	Three new familial hemiplegic migraine mutants affect P/Q-type Ca(2+) channel kinetics. *Journal of Biological Chemistry*, **2000**, 275, 9239-43	5.4	109
141	Modulation of voltage- and Ca2+-dependent gating of CaV1.3 L-type calcium channels by alternative splicing of a C-terminal regulatory domain. *Journal of Biological Chemistry*, **2008**, 283, 20733-44	5.4	105
140	Photoaffinity labelling of the phenylalkylamine receptor of the skeletal muscle transverse-tubule calcium channel. *FEBS Letters*, **1987**, 212, 247-53	3.8	105
139	CACNA1D de novo mutations in autism spectrum disorders activate Cav1.3 L-type calcium channels. *Biological Psychiatry*, **2015**, 77, 816-22	7.9	104
138	Cav1.3 (alpha1D) Ca2+ currents in neonatal outer hair cells of mice. *Journal of Physiology*, **2003**, 553, 747-58	3.9	103
137	Down-regulation of L-type calcium channels in inflamed circular smooth muscle cells of the canine colon. *Gastroenterology*, **2001**, 120, 480-9	13.3	102
136	Channelopathies in Cav1.1, Cav1.3, and Cav1.4 voltage-gated L-type Ca2+ channels. *Pflugers Archiv European Journal of Physiology*, **2010**, 460, 361-74	4.6	98
135	Purified skeletal muscle 1,4-dihydropyridine receptor forms phosphorylation-dependent oligomeric calcium channels in planar bilayers. *Proceedings of the National Academy of Sciences of the United States of America*, **1988**, 85, 4290-4	11.5	98
134	Functional properties of a newly identified C-terminal splice variant of Cav1.3 L-type Ca2+ channels. *Journal of Biological Chemistry*, **2011**, 286, 42736-42748	5.4	97
133	Beta subunit heterogeneity in neuronal L-type Ca2+ channels. *Journal of Biological Chemistry*, **1997**, 272, 13877-82	5.4	96
132	Visualization of the domain structure of an L-type Ca2+ channel using electron cryo-microscopy. *Journal of Molecular Biology*, **2003**, 332, 171-82	6.5	93
131	Cav1.3 channels control D2-autoreceptor responses via NCS-1 in substantia nigra dopamine neurons. *Brain*, **2014**, 137, 2287-302	11.2	87
130	Identification of PK-A phosphorylation sites in the carboxyl terminus of L-type calcium channel alpha 1 subunits. *Biochemistry*, **1996**, 35, 9400-6	3.2	84
129	Voltage-dependent calcium channels and cardiac pacemaker activity: from ionic currents to genes. *Progress in Biophysics and Molecular Biology*, **2006**, 90, 38-63	4.7	83
128	Calcium channels. *Vitamins and Hormones*, **1988**, 44, 155-328	2.5	83

127	The mysteries of sigma receptors: new family members reveal a role in cholesterol synthesis. *Trends in Pharmacological Sciences*, **1997**, 18, 67-70	13.2	82
126	Functional consequences of P/Q-type Ca2+ channel Cav2.1 missense mutations associated with episodic ataxia type 2 and progressive ataxia. *Journal of Biological Chemistry*, **2002**, 277, 6960-6	5.4	82
125	Stereoselective photoaffinity labelling of the purified 1,4-dihydropyridine receptor of the voltage-dependent calcium channel. *FEBS Journal*, **1986**, 161, 603-9		82
124	CaV1.3 L-type Ca2+ channels modulate depression-like behaviour in mice independent of deaf phenotype. *International Journal of Neuropsychopharmacology*, **2010**, 13, 499-513	5.8	80
123	Current modulation and membrane targeting of the calcium channel alpha1C subunit are independent functions of the beta subunit. *Journal of Physiology*, **1999**, 517 (Pt 2), 353-68	3.9	79
122	Pharmacology of L-type Calcium Channels: Novel Drugs for Old Targets?. *Current Molecular Pharmacology*, **2015**, 8, 110-22	3.7	78
121	Structural determinants of CaV1.3 L-type calcium channel gating. *BMC Pharmacology*, **2011**, 11, A11		78
120	Stimulation of 5-HT(2) receptors in prefrontal pyramidal neurons inhibits Ca(v)1.2 L type Ca(2+) currents via a PLCbeta/IP3/calcineurin signaling cascade. *Journal of Neurophysiology*, **2002**, 87, 2490-504	3.2	78
119	Exploring the function and pharmacotherapeutic potential of voltage-gated Ca2+ channels with gene knockout models. *Channels*, **2008**, 2, 233-51	3	76
118	Congenital stationary night blindness type 2 mutations S229P, G369D, L1068P, and W1440X alter channel gating or functional expression of Ca(v)1.4 L-type Ca2+ channels. *Journal of Neuroscience*, **2005**, 25, 252-9	6.6	73
117	Molecular mechanism of use-dependent calcium channel block by phenylalkylamines: role of inactivation. *Proceedings of the National Academy of Sciences of the United States of America*, **1997**, 94, 13323-8	11.5	72
116	Cav1.3 calcium channels are required for normal development of the auditory brainstem. *Journal of Neuroscience*, **2011**, 31, 8280-94	6.6	70
115	Functional roles of Ca(v)1.3, Ca(v)3.1 and HCN channels in automaticity of mouse atrioventricular cells: insights into the atrioventricular pacemaker mechanism. *Channels*, **2011**, 5, 251-61	3	70
114	Cav1.2 L-type Ca□+ channels mediate cocaine-induced GluA1 trafficking in the nucleus accumbens, a long-term adaptation dependent on ventral tegmental area Ca(v)1.3 channels. *Journal of Neuroscience*, **2011**, 31, 13562-75	6.6	69
113	Transfer of high sensitivity for benzothiazepines from L-type to class A (BI) calcium channels. *Journal of Biological Chemistry*, **1996**, 271, 24471-5	5.4	68
112	Neurotoxic aminoglycoside antibiotics are potent inhibitors of [125I]-Omega-Conotoxin GVIA binding to guinea-pig cerebral cortex membranes. *Naunyn-Schmiedebergls Archives of Pharmacology* , **1987**, 336, 583-6	3.4	67
111	Nine L-type amino acid residues confer full 1,4-dihydropyridine sensitivity to the neuronal calcium channel alpha1A subunit. Role of L-type Met1188. *Journal of Biological Chemistry*, **1997**, 272, 27686-93	5.4	65
110	A destructive interaction mechanism accounts for dominant-negative effects of misfolded mutants of voltage-gated calcium channels. *Journal of Neuroscience*, **2008**, 28, 4501-11	6.6	65

109	Neurological phenotype and synaptic function in mice lacking the CaV1.3 alpha subunit of neuronal L-type voltage-dependent Ca2+ channels. *Neuroscience*, **2003**, 120, 435-42	3.9	65
108	Phenylalkylamine Ca2+ antagonist binding protein. Molecular cloning, tissue distribution, and heterologous expression. *Journal of Biological Chemistry*, **1995**, 270, 7551-7	5.4	65
107	Human red-blood-cell Ca2+-antagonist binding sites. Evidence for an unusual receptor coupled to the nucleoside transporter. *FEBS Journal*, **1985**, 150, 67-77		64
106	Calcium channels from Cyprinus carpio skeletal muscle. *Proceedings of the National Academy of Sciences of the United States of America*, **1991**, 88, 727-31	11.5	63
105	Purified calcium channels have three allosterically coupled drug receptors. *FEBS Letters*, **1986**, 197, 204-10	3.8	63
104	Conserved Ca2+-antagonist-binding properties and putative folding structure of a recombinant high-affinity dihydropyridine-binding domain. *Biochemical Journal*, **2000**, 347, 829-836	3.8	60
103	New gain-of-function mutation shows CACNA1D as recurrently mutated gene in autism spectrum disorders and epilepsy. *Human Molecular Genetics*, **2017**, 26, 2923-2932	5.6	58
102	Familial hemiplegic migraine type 1 mutations K1336E, W1684R, and V1696I alter Cav2.1 Ca2+ channel gating: evidence for beta-subunit isoform-specific effects. *Journal of Biological Chemistry*, **2004**, 279, 51844-50	5.4	57
101	Resolving the structure of the Ca2+ channel by photoaffinity labelling. *Trends in Pharmacological Sciences*, **1987**, 8, 95-100	13.2	57
100	L-type calcium channels as drug targets in CNS disorders. *Channels*, **2016**, 10, 7-13	3	54
99	L-type Cav1.3 channels regulate ryanodine receptor-dependent Ca2+ release during sino-atrial node pacemaker activity. *Cardiovascular Research*, **2016**, 109, 451-61	9.9	53
98	Voltage-dependent calcium channel CaV1.3 subunits regulate the light peak of the electroretinogram. *Journal of Neurophysiology*, **2007**, 97, 3731-5	3.2	53
97	The role of physiological afferent nerve activity during in vivo maturation of the calyx of Held synapse. *Journal of Neuroscience*, **2007**, 27, 1725-37	6.6	53
96	Calcium channels: the beta-subunit increases the affinity of dihydropyridine and Ca2+ binding sites of the alpha 1-subunit. *FEBS Letters*, **1994**, 352, 141-5	3.8	52
95	Role of Cav1.2 L-type Ca2+ channels in vascular tone: effects of nifedipine and Mg2+. *American Journal of Physiology - Heart and Circulatory Physiology*, **2007**, 292, H415-25	5.2	52
94	High affinity interaction of mibefradil with voltage-gated calcium and sodium channels. *British Journal of Pharmacology*, **2000**, 130, 669-77	8.6	50
93	Cav1.2 and Cav1.3 L-type calcium channels regulate dopaminergic firing activity in the mouse ventral tegmental area. *Journal of Neurophysiology*, **2014**, 112, 1119-30	3.2	49
92	Brain activation pattern induced by stimulation of L-type Ca2+-channels: contribution of Ca(V)1.3 and Ca(V)1.2 isoforms. *Neuroscience*, **2006**, 139, 1005-15	3.9	49

91	Block of P/Q-type calcium channels by therapeutic concentrations of aminoglycoside antibiotics. *Biochemistry*, **1996**, 35, 14659-64	3.2	49
90	Modulation of Cav1.3 Ca2+ channel gating by Rab3 interacting molecule. *Molecular and Cellular Neurosciences*, **2010**, 44, 246-59	4.8	48
89	Lower Affinity of Isradipine for L-Type Ca Channels during Substantia Nigra Dopamine Neuron-Like Activity: Implications for Neuroprotection in Parkinson'S Disease. *Journal of Neuroscience*, **2017**, 37, 6761-6777	6.6	47
88	Ca(V)1.3-driven SK channel activation regulates pacemaking and spike frequency adaptation in mouse chromaffin cells. *Journal of Neuroscience*, **2012**, 32, 16345-59	6.6	46
87	Molecular basis of drug interaction with L-type Ca2+ channels. *Journal of Bioenergetics and Biomembranes*, **1998**, 30, 319-34	3.7	46
86	Coordination of Ca2+ by the pore region glutamates is essential for high-affinity dihydropyridine binding to the cardiac Ca2+ channel alpha 1 subunit. *Biochemistry*, **1995**, 34, 9350-5	3.2	46
85	Transfer of L-type calcium channel IVS6 segment increases phenylalkylamine sensitivity of alpha1A. *Journal of Biological Chemistry*, **1996**, 271, 11745-9	5.4	46
84	L-type Ca2+ channels in Ca2+ channelopathies. *Biochemical and Biophysical Research Communications*, **2004**, 322, 1341-6	3.4	45
83	Molecular switch from L-type Ca v 1.3 to Ca v 1.2 Ca2+ channel signaling underlies long-term psychostimulant-induced behavioral and molecular plasticity. *Journal of Neuroscience*, **2010**, 30, 17051-62	6.6	44
82	Iron overload decreases CaV1.3-dependent L-type Ca2+ currents leading to bradycardia, altered electrical conduction, and atrial fibrillation. *Circulation: Arrhythmia and Electrophysiology*, **2011**, 4, 733-42	6.4	44
81	Ca(v)1.3 channels produce persistent calcium sparklets, but Ca(v)1.2 channels are responsible for sparklets in mouse arterial smooth muscle. *American Journal of Physiology - Heart and Circulatory Physiology*, **2007**, 293, H1359-70	5.2	43
80	Molecular mechanism of diltiazem interaction with L-type Ca2+ channels. *Journal of Biological Chemistry*, **1998**, 273, 27205-12	5.4	42
79	Pyrimidine-2,4,6-triones are a new class of voltage-gated L-type Ca2+ channel activators. *Nature Communications*, **2014**, 5, 3897	17.4	41
78	The Potential of L-Type Calcium Channels as a Drug Target for Neuroprotective Therapy in Parkinson'S Disease. *Annual Review of Pharmacology and Toxicology*, **2019**, 59, 263-289	17.9	41
77	The L-type calcium channel Cav1.3 is required for proper hippocampal neurogenesis and cognitive functions. *Cell Calcium*, **2015**, 58, 606-16	4	40
76	Distinct localization and modulation of Cav1.2 and Cav1.3 L-type Ca2+ channels in mouse sinoatrial node. *Journal of Physiology*, **2012**, 590, 6327-42	3.9	39
75	Ca 1.3 (CACNA1D) L-type Ca channel dysfunction in CNS disorders. *Journal of Physiology*, **2016**, 594, 5839-5849	5.6	38
74	Mechanism of dihydropyridine interaction with critical binding residues of L-type Ca2+ channel alpha 1 subunits. *Journal of Biological Chemistry*, **2001**, 276, 12730-5	5.4	37

73	A rapid procedure for the purification of cardiac 1,4-dihydropyridine receptors from porcine heart. *European Journal of Pharmacology*, **1991**, 207, 51-9		37
72	Activity and calcium regulate nuclear targeting of the calcium channel beta4b subunit in nerve and muscle cells. *Channels*, **2009**, 3, 343-55	3	36
71	Complex molecular mechanism for dihydropyridine binding to L-type Ca(2+)-channels as revealed by fluorescence resonance energy transfer. *Biochemistry*, **1994**, 33, 11875-83	3.2	35
70	Subcellular localization of chromogranins, calcium channels, amine carriers, and proteins of the exocytotic machinery in bovine splenic nerve. *Journal of Neurochemistry*, **1999**, 72, 1110-6	6	34
69	Disturbed atrio-ventricular conduction and normal contractile function in isolated hearts from Cav1.3-knockout mice. *Naunyn-Schmiedebergls Archives of Pharmacology*, **2004**, 369, 554-62	3.4	34
68	Insect calcium channels. Molecular cloning of an alpha 1-subunit from housefly (Musca domestica) muscle. *FEBS Letters*, **1994**, 339, 189-94	3.8	34
67	Identification of benz(othi)azepine-binding regions within L-type calcium channel alpha1 subunits. *Journal of Biological Chemistry*, **1996**, 271, 20113-8	5.4	33
66	Cell-type-specific tuning of Cav1.3 Ca(2+)-channels by a C-terminal automodulatory domain. *Frontiers in Cellular Neuroscience*, **2015**, 9, 309	6.1	32
65	Cav2.3 channels contribute to dopaminergic neuron loss in a model of Parkinson's disease. *Nature Communications*, **2019**, 10, 5094	17.4	31
64	Compensatory T-type Ca2+ channel activity alters D2-autoreceptor responses of Substantia nigra dopamine neurons from Cav1.3 L-type Ca2+ channel KO mice. *Scientific Reports*, **2015**, 5, 13688	4.9	31
63	Splice variants of the Ca1.3 L-type calcium channel regulate dendritic spine morphology. *Scientific Reports*, **2016**, 6, 34528	4.9	30
62	Pacemaker activity and ionic currents in mouse atrioventricular node cells. *Channels*, **2011**, 5, 241-50	3	29
61	Role of L-type Ca2+ channel isoforms in the extinction of conditioned fear. *Learning and Memory*, **2008**, 15, 378-86	2.8	29
60	Aldosterone-Producing Adenomas: Histopathology-Genotype Correlation and Identification of a Novel Mutation. *Hypertension*, **2017**, 70, 129-136	8.5	29
59	Effects of congenital stationary night blindness type 2 mutations R508Q and L1364H on Cav1.4 L-type Ca2+ channel function and expression. *Journal of Neurochemistry*, **2006**, 96, 1648-58	6	28
58	beta subunit heterogeneity of L-type Ca(2+) channels in smooth muscle tissues. *FEBS Letters*, **2000**, 467, 65-9	3.8	28
57	G protein-gated IKACh channels as therapeutic targets for treatment of sick sinus syndrome and heart block. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E932-41	11.5	27
56	C-terminal modulatory domain controls coupling of voltage-sensing to pore opening in Cav1.3 L-type Ca(2+) channels. *Biophysical Journal*, **2014**, 106, 1467-75	2.9	27

55	Molecular nature of anomalous L-type calcium channels in mouse cerebellar granule cells. *Journal of Neuroscience*, **2007**, 27, 3855-63	6.6	27
54	Conserved Ca2+-antagonist-binding properties and putative folding structure of a recombinant high-affinity dihydropyridine-binding domain. *Biochemical Journal*, **2000**, 347, 829	3.8	27
53	Evidence for a distinct Ca2+ antagonist receptor for the novel benzothiazinone compound HOE 166. *Naunyn-Schmiedebergls Archives of Pharmacology*, **1988**, 337, 331-40	3.4	27
52	Are Ca(v)1.3 pacemaker channels in chromaffin cells? Possible bias from resting cell conditions and DHP blockers usage. *Channels*, **2011**, 5, 219-24	3	25
51	Chloride and potassium conductances of mouse pancreatic zymogen granules are inversely regulated by a approximately 80-kDa mdr1a gene product. *Journal of Biological Chemistry*, **1996**, 271, 3300-5	5.4	25
50	L-type calcium channels: binding domains for dihydropyridines and benzothiazepines are located in close proximity to each other. *Biochemistry*, **1997**, 36, 3625-31	3.2	24
49	Calcium channels in mouse hair cells: function, properties and pharmacology. *Advances in Oto-Rhino-Laryngology*, **2002**, 59, 35-41	1.7	24
48	Structural determinants of CaV1.3 L-type calcium channel gating. *Channels*, **2012**, 6, 197-205	3	23
47	Functional properties and modulation of extracellular epitope-tagged Ca(V)2.1 voltage-gated calcium channels. *Channels*, **2008**, 2, 461-73	3	22
46	Native and detergent-solubilized membrane extracts from Drosophila heads contain binding sites for phenylalkylamine calcium channel blockers. *Insect Biochemistry*, **1989**, 19, 309-322		22
45	Loss of 1 Calcium Channel Subunit Function Increases the Susceptibility for Diabetes. *Diabetes*, **2017**, 66, 897-907	0.9	21
44	Biophysical classification of a de novo mutation as a high-risk mutation for a severe neurodevelopmental disorder. *Molecular Autism*, **2020**, 11, 4	6.5	21
43	A Polybasic Plasma Membrane Binding Motif in the I-II Linker Stabilizes Voltage-gated CaV1.2 Calcium Channel Function. *Journal of Biological Chemistry*, **2015**, 290, 21086-21100	5.4	21
42	Generation of a neuro-specific microarray reveals novel differentially expressed noncoding RNAs in mouse models for neurodegenerative diseases. *Rna*, **2014**, 20, 1929-43	5.8	21
41	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Ion channels. *British Journal of Pharmacology*, **2021**, 178 Suppl 1, S157-S245	8.6	21
40	Ca2+ antagonist receptor sites on human red blood cell membranes. *European Journal of Pharmacology*, **1985**, 108, 329-30	5.3	20
39	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Introduction and Other Protein Targets. *British Journal of Pharmacology*, **2021**, 178 Suppl 1, S1-S26	8.6	20
38	Purification and reconstitution of skeletal muscle calcium channels. *Methods in Enzymology*, **1992**, 207, 529-46	1.7	19

37	Use-dependent block of voltage-gated Cav2.1 Ca2+ channels by petasins and eudesmol isomers. *Journal of Pharmacology and Experimental Therapeutics*, **2009**, 330, 220-6	4.7	18
36	Ca1.3 L-type Ca channel contributes to the heartbeat by generating a dihydropyridine-sensitive persistent Na current. *Scientific Reports*, **2017**, 7, 7869	4.9	17
35	Repertoire of high voltage-activated Ca2+ channels in the lateral superior olive: functional analysis in wild-type, Ca(v)1.3(-/-), and Ca(v)1.2DHP(-/-) mice. *Journal of Neurophysiology*, **2012**, 108, 365-79	3.2	17
34	The monoclonal antibody mAB 1A binds to the excitation--contraction coupling domain in the II-III loop of the skeletal muscle calcium channel alpha(1S) subunit. *Archives of Biochemistry and Biophysics*, **2004**, 427, 91-100	4.1	17
33	Gating defects of disease-causing de novo mutations in Ca1.3 Ca channels. *Channels*, **2018**, 12, 388-402	3	17
32	De novo CACNA1D Ca channelopathies: clinical phenotypes and molecular mechanism. *Pflugers Archiv European Journal of Physiology*, **2020**, 472, 755-773	4.6	16
31	Voltage-Gated Ca-Channel 1-Subunit Missense Mutations: Gain or Loss of Function - Implications for Potential Therapies. *Frontiers in Synaptic Neuroscience*, **2021**, 13, 634760	3.5	16
30	Cav 1.3 L-type Ca (2+) channels mediate long-term adaptation in dopamine D2L-mediated GluA1 trafficking in the dorsal striatum following cocaine exposure. *Channels*, **2012**, 6, 11-7	3	14
29	Extra- and intracellular action of quaternary devapamil on muscle L-type Ca(2+)-channels. *British Journal of Pharmacology*, **1996**, 119, 1197-202	8.6	14
28	Mechanisms Responsible for Pore Currents in Ca Calcium Channel Voltage-Sensing Domains. *Biophysical Journal*, **2017**, 113, 1485-1495	2.9	13
27	CaV1.2 and CaV1.3 channel hyperactivation in mouse islet cells exposed to type 1 diabetic serum. *Cellular and Molecular Life Sciences*, **2015**, 72, 1197-207	10.3	13
26	C-terminal tailoring of L-type calcium channel function. *Journal of Physiology*, **2007**, 585, 643-4	3.9	13
25	Purification of L-Type Calcium Channel Drug Receptors. *Methods in Neurosciences*, **1991**, 4, 210-229		13
24	Benzothiazepine binding domain of purified L-type calcium channels: direct labeling using a novel fluorescent diltiazem analogue. *Biochemistry*, **1995**, 34, 3461-9	3.2	12
23	Anthracene based compounds as new L-type Ca2+ channel blockers: design, synthesis, and full biological profile. *Journal of Medicinal Chemistry*, **2009**, 52, 1259-62	8.3	11
22	Purification and reconstitution of calcium channel drug-receptor sites. *Annals of the New York Academy of Sciences*, **1988**, 522, 150-61	6.5	11
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