Edward Perez-Reyes

List of Publications by Year
in descending order

113	13,832	31902 53	22764 112
papers	citations	h-index	g-index

113	113	113	8734
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Molecular Physiology of Low-Voltage-Activated T-type Calcium Channels. Physiological Reviews, 2003, 83, 117-161.	13.1	1,481
2	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
3	Nomenclature of Voltage-Gated Calcium Channels. Neuron, 2000, 25, 533-535.	3.8	868
4	Differential Distribution of Three Members of a Gene Family Encoding Low Voltage-Activated (T-Type) Calcium Channels. Journal of Neuroscience, 1999, 19, 1895-1911.	1.7	725
5	Molecular characterization of a neuronal low-voltage-activated T-type calcium channel. Nature, 1998, 391, 896-900.	13.7	724
6	Cloning and Characterization of Î±1H From Human Heart, a Member of the T-Type Ca ²⁺ Channel Gene Family. Circulation Research, 1998, 83, 103-109.	2.0	554
7	Nickel Block of Three Cloned T-Type Calcium Channels: Low Concentrations Selectively Block Î±1H. Biophysical Journal, 1999, 77, 3034-3042.	0.2	496
8	Cloning and Expression of a Novel Member of the Low Voltage-Activated T-Type Calcium Channel Family. Journal of Neuroscience, 1999, 19, 1912-1921.	1.7	440
9	Normalization of current kinetics by interaction between the Î±1and Î² subunits of the skeletal muscle dihydropyridine-sensitive Ca2+ channel. Nature, 1991, 352, 527-530.	13.7	295
10	Ducky Mouse Phenotype of Epilepsy and Ataxia Is Associated with Mutations in theCacna2d2Gene and Decreased Calcium Channel Current in Cerebellar Purkinje Cells. Journal of Neuroscience, 2001, 21, 6095-6104.	1.7	289
11	THE CONCISE GUIDE TO PHARMACOLOGY 2019/20: Ion channels. British Journal of Pharmacology, 2019, 176, S142-S228.	2.7	242
12	Redox Modulation of T-Type Calcium Channels in Rat Peripheral Nociceptors. Neuron, 2001, 31, 75-85.	3.8	230
13	International Union of Pharmacology. XL. Compendium of Voltage-Gated Ion Channels: Calcium Channels. Pharmacological Reviews, 2003, 55, 579-581.	7.1	221
14	Specific contribution of human Tâ€type calcium channel isotypes (Î± 1G , Î± 1H and Î± 1I) to neuronal excitability. Journal of Physiology, 2002, 540, 3-14.	1.3	203
15	Regulation of breathing by CO ₂ requires the proton-activated receptor GPR4 in retrotrapezoid nucleus neurons. Science, 2015, 348, 1255-1260.	6.0	190
16	Ca channels in cardiac myocytes: structure and function in Ca influx and intracellular Ca release. Cardiovascular Research, 1999, 42, 339-360.	1.8	189
17	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: Ion channels. British Journal of Pharmacology, 2021, 178, S157-S245.	2.7	187
18	Inhibition of T-type voltage-gated calcium channels by a new scorpion toxin. Nature Neuroscience, 1998, 1, 668-674.	7.1	185

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19	Block of Cloned Human T-Type Calcium Channels by Succinimide Antiepileptic Drugs. Molecular Pharmacology, 2001, 60, 1121-1132.	1.0	183
20	Functional Characterization and Neuronal Modeling of the Effects of Childhood Absence Epilepsy Variants of CACNA1H, a T-Type Calcium Channel. Journal of Neuroscience, 2005, 25, 4844-4855.	1.7	169
21	Functional Properties of a New Voltage-dependent Calcium Channel Î±2Î´ Auxiliary Subunit Gene (CACNA2D2). Journal of Biological Chemistry, 2000, 275, 12237-12242.	1.6	165
22	Molecular biology of calcium channels. Kidney International, 1995, 48, 1111-1124.	2.6	152
23	Comparison of the Ca2â€Š+â€Š currents induced by expression of three cloned Î±1 subunits, Î±1G, Î±1H and Î±1I, of low-voltage-activated T-type Ca2â€Š+â€Š channels. European Journal of Neuroscience, 1999, 11, 4171-4178.	1.2	152
24	Role of voltage-gated calcium channels in epilepsy. Pflugers Archiv European Journal of Physiology, 2010, 460, 395-403.	1.3	149
25	The Endogenous Redox Agent L-Cysteine Induces T-Type Ca2+ Channel-Dependent Sensitization of a Novel Subpopulation of Rat Peripheral Nociceptors. Journal of Neuroscience, 2005, 25, 8766-8775.	1.7	148
26	Reducing Agents Sensitize C-Type Nociceptors by Relieving High-Affinity Zinc Inhibition of T-Type Calcium Channels. Journal of Neuroscience, 2007, 27, 8250-8260.	1.7	147
27	Low-voltage-activated calcium channel subunit expression in a genetic model of absence epilepsy in the rat. Molecular Brain Research, 2000, 75, 159-165.	2.5	130
28	Molecular Mechanisms of Subtype-Specific Inhibition of Neuronal T-Type Calcium Channels by Ascorbate. Journal of Neuroscience, 2007, 27, 12577-12583.	1.7	121
29	Calcium channels: Structure, function, and classification. Drug Development Research, 1994, 33, 295-318.	1.4	119
30	The I-II Loop Controls Plasma Membrane Expression and Gating of Cav3.2 T-Type Ca2+ Channels: A Paradigm for Childhood Absence Epilepsy Mutations. Journal of Neuroscience, 2007, 27, 322-330.	1.7	107
31	Membrane Targeting of L-type Calcium Channels. Journal of Biological Chemistry, 1998, 273, 23590-23597.	1.6	106
32	A Molecular Determinant of Nickel Inhibition in Cav3.2 T-type Calcium Channels. Journal of Biological Chemistry, 2006, 281, 4823-4830.	1.6	101
33	Anticonvulsants But Not General Anesthetics Have Differential Blocking Effects on Different T-Type Current Variants. Molecular Pharmacology, 2000, 58, 98-108.	1.0	96
34	Molecular characterization of T-type calcium channels. Cell Calcium, 2006, 40, 89-96.	1.1	95
35	State-Dependent Inactivation of the Î±1g T-Type Calcium Channel. Journal of General Physiology, 1999, 114, 185-202.	0.9	94
36	Overexpression of T-type calcium channels in HEK-293 cells increases intracellular calcium without affecting cellular proliferation. FEBS Letters, 2000, 478, 166-172.	1.3	94

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37	Regulation of the cloned L-type cardiac calcium channel by cyclic-AMP-dependent protein kinase. FEBS Letters, 1994, 342, 119-123.	1.3	91
38	Cloning of a novel four repeat protein related to voltage-gated sodium and calcium channels. FEBS Letters, 1999, 445, 231-236.	1.3	90
39	CaV3.2 is the major molecular substrate for redox regulation of T-type Ca2+channels in the rat and mouse thalamus. Journal of Physiology, 2006, 574, 415-430.	1.3	81
40	Cloning and Expression of the Human T-Type Channel Cav3.3: Insights into Prepulse Facilitation. Biophysical Journal, 2002, 83, 229-241.	0.2	79
41	Molecular characterization of a novel family of low voltage-activated, T-type, calcium channels. Journal of Bioenergetics and Biomembranes, 1998, 30, 313-318.	1.0	78
42	Molecular Pharmacology of T-type Ca2+ Channels. The Japanese Journal of Pharmacology, 2001, 85, 339-350.	1.2	77
43	Stimulation of recombinant Cav3.2, Tâ€type, Ca2+channel currents by CaMKIIÎ³C. Journal of Physiology, 2002, 538, 343-355.	1.3	75
44	Distinct kinetics of cloned T-type Ca2â€Š+â€Š channels lead to differential Ca2â€Š+â€Š entry and frequency-dependence during mock action potentials. European Journal of Neuroscience, 1999, 11, 4149-4158.	1.2	74
45	Molecular Pharmacology of Human Ca_v3.2 T-Type Ca²⁺ Channels: Block by Antihypertensives, Antiarrhythmics, and Their Analogs. Journal of Pharmacology and Experimental Therapeutics, 2009, 328, 621-627.	1.3	74
46	Mechanisms by which a CACNA1H mutation in epilepsy patients increases seizure susceptibility. Journal of Physiology, 2014, 592, 795-809.	1.3	72
47	Î±_{1H}T-type Ca²⁺channel is the predominant subtype expressed in bovine and rat zona glomerulosa. American Journal of Physiology - Cell Physiology, 2001, 280, C265-C272.	2.1	66
48	Nalcn Is a "Leak" Sodium Channel That Regulates Excitability of Brainstem Chemosensory Neurons and Breathing. Journal of Neuroscience, 2016, 36, 8174-8187.	1.7	66
49	Low-Voltage-Activated Ca2+Currents Are Generated by Members of the CavT Subunit Family (Î±1G/H) in Rat Primary Sensory Neurons. Journal of Neuroscience, 1998, 18, 8605-8613.	1.7	63
50	Functional coupling between â€˜R-typeâ€™ Ca2+channels and insulin secretion in the insulinoma cell line INS-1. FEBS Journal, 2001, 268, 1066-1075.	0.2	63
51	New isoform of the neuronal Ca2+ channel alpha1E subunit in islets of Langerhans and kidney . Distribution of voltage-gated Ca2+ channel alpha1 subunits in cell lines and tissues. FEBS Journal, 1998, 257, 274-285.	0.2	59
52	Molecular diversity of Ca2+ channel Î² subunits. Biochemical Society Transactions, 1994, 22, 483-488.	1.6	57
53	Molecular Mechanisms of Lipoic Acid Modulation of T-Type Calcium Channels in Pain Pathway. Journal of Neuroscience, 2009, 29, 9500-9509.	1.7	57
54	Contrasting anesthetic sensitivities of T-type Ca2+ channels of reticular thalamic neurons and recombinant Cav 3.3 channels. British Journal of Pharmacology, 2005, 144, 59-70.	2.7	56

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55	Molecular Determinants of Cardiac Ca2+ Channel Pharmacology. Journal of Biological Chemistry, 1995, 270, 27106-27111.	1.6	55
56	The role of voltage gated T-type Ca2+ channel isoforms in mediating â€œcapacitativeâ€•Ca2+ entry in cancer cells. Cell Calcium, 2004, 36, 489-497.	1.1	54
57	Molecular cloning and functional expression of Cav 3.1c, a T-type calcium channel from human brain. FEBS Letters, 2000, 466, 54-58.	1.3	52
58	Transfer of Î² subunit regulation from high to low voltage-gated Ca2+ channels. FEBS Letters, 2005, 579, 3907-3912.	1.3	52
59	Functional Impact of Alternative Splicing of Human T-Type Cav3.3 Calcium Channels. Journal of Neurophysiology, 2004, 92, 3399-3407.	0.9	50
60	Differential Regulation of Skeletal Muscle L-Type Ca2+ Current and Excitation-Contraction Coupling by the Dihydropyridine Receptor Î² Subunit. Biophysical Journal, 1999, 76, 1744-1756.	0.2	49
61	Ca_V3.2 calcium channels control NMDA receptor-mediated transmission: a new mechanism for absence epilepsy. Genes and Development, 2015, 29, 1535-1551.	2.7	48
62	Alternative splicing of the rat Cav 3.3 T-type calcium channel gene produces variants with distinct functional properties1. FEBS Letters, 2002, 528, 272-278.	1.3	47
63	Calmodulin plays a dominant role in determining neurotransmitter regulation of neuronal adenylate cyclase. Journal of Cellular Biochemistry, 1988, 36, 417-427.	1.2	46
64	Validation of High Throughput Screening Assays Against Three Subtypes of Cav3 T-Type Channels Using Molecular and Pharmacologic Approaches. Assay and Drug Development Technologies, 2007, 5, 191-204.	0.6	46
65	Central Mechanisms Mediating Thrombospondin-4-induced Pain States. Journal of Biological Chemistry, 2016, 291, 13335-13348.	1.6	46
66	The reduction of nitroso-spin traps in chemical and biological sysetms. A cautionary note. Tetrahedron Letters, 1979, 20, 4809-4812.	0.7	45
67	Mg2+ Block Unmasks Ca2+/Ba2+ Selectivity of Î±1G T-Type Calcium Channels. Biophysical Journal, 2000, 79, 3052-3062.	0.2	45
68	Gating Kinetics of the Î±1i T-Type Calcium Channel. Journal of General Physiology, 2001, 118, 457-470.	0.9	44
69	Iâ€“II Loop Structural Determinants in the Gating and Surface Expression of Low Voltage-Activated Calcium Channels. PLoS ONE, 2008, 3, e2976.	1.1	43
70	Differences in Apparent Pore Sizes of Low and High Voltage-activated Ca2+ Channels. Journal of Biological Chemistry, 2002, 277, 45969-45976.	1.6	41
71	Actions of Mibefradil, Efonidipine and Nifedipine Block of Recombinant T- and L-Type Ca²⁺ Channels with Distinct Inhibitory Mechanisms. Pharmacology, 2006, 78, 11-20.	0.9	41
72	Characterization of the Gating Brake in the I-II Loop of Cav3.2 T-type Ca2+ Channels. Journal of Biological Chemistry, 2008, 283, 8136-8144.	1.6	41

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73	Structural Determinants of the High Affinity Extracellular Zinc Binding Site on Cav3.2 T-type Calcium Channels. Journal of Biological Chemistry, 2010, 285, 3271-3281.	1.6	40
74	Molecular Diversity and Function of G Proteins and Calcium Channels1. Biology of Reproduction, 1991, 44, 207-224.	1.2	38
75	Activation of Pyramidal Neurons in Mouse Medial Prefrontal Cortex Enhances Food-Seeking Behavior While Reducing Impulsivity in the Absence of an Effect on Food Intake. Frontiers in Behavioral Neuroscience, 2016, 10, 63.	1.0	38
76	A novel therapeutic approach for treatment of catamenial epilepsy. Neurobiology of Disease, 2018, 111, 127-137.	2.1	36
77	CACHD1 is an Î±2Î´-Like Protein That Modulates Ca_V3 Voltage-Gated Calcium Channel Activity. Journal of Neuroscience, 2018, 38, 9186-9201.	1.7	36
78	LMO7 deficiency reveals the significance of the cuticular plate for hearing function. Nature Communications, 2019, 10, 1117.	5.8	36
79	Molecular and biophysical basis of glutamate and trace metal modulation of voltage-gated Cav2.3 calcium channels. Journal of General Physiology, 2012, 139, 219-234.	0.9	32
80	Modulation of Cav 3.2 T-type Ca2+ channels by protein kinase C. FEBS Letters, 2003, 547, 37-42.	1.3	31
81	A brainstem peptide system activated at birth protects postnatal breathing. Nature, 2021, 589, 426-430.	13.7	31
82	A potassium leak channel silences hyperactive neurons and ameliorates status epilepticus. Epilepsia, 2014, 55, 203-213.	2.6	30
83	Molecular Characterization of Two Members of the T-Type Calcium Channel Family. Annals of the New York Academy of Sciences, 1999, 868, 131-143.	1.8	29
84	Calmodulin regulates Cav3 T-type channels at their gating brake. Journal of Biological Chemistry, 2017, 292, 20010-20031.	1.6	29
85	Single-Channel Pharmacology of Mibefradil in Human Native T-Type and Recombinant Cav3.2 Calcium Channels. Molecular Pharmacology, 2002, 61, 682-694.	1.0	28
86	Orientation of the Calcium Channel Î² Relative to the Î±12.2 Subunit Is Critical for Its Regulation of Channel Activity. PLoS ONE, 2008, 3, e3560.	1.1	28
87	Alternative splicing within the Iâ€“II loop controls surface expression of Tâ€type Ca_v3.1 calcium channels. FEBS Letters, 2008, 582, 3765-3770.	1.3	27
88	Characterization of the gating brake in the I-II loop of CaV3 T-type calcium channels. Channels, 2010, 4, 453-458.	1.5	26
89	Orientation of palmitoylated CaVÎ²2a relative to CaV2.2 is critical for slow pathway modulation of N-type Ca2+ current by tachykinin receptor activation. Journal of General Physiology, 2009, 134, 385-396.	0.9	24
90	Functional variants in <scp>HCN</scp>4 and <scp>CACNA</scp>1H may contribute to genetic generalized epilepsy. Epilepsia Open, 2017, 2, 334-342.	1.3	22

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91	Contrasting the effects of nifedipine on subtypes of endogenous and recombinant T-type Ca2+ channels. Biochemical Pharmacology, 2005, 69, 841-854.	2.0	21
92	G Protein-Mediated Inhibition of Ca_v3.2 T-Type Channels Revisited: Fig. 1.. Molecular Pharmacology, 2010, 77, 136-138.	1.0	20
93	Effects of Eugenol on T-type Ca²⁺ Channel Isoforms. Journal of Pharmacology and Experimental Therapeutics, 2013, 347, 310-317.	1.3	20
94	The voltage dependence of gating currents of the neuronal CAV3.3 channel is determined by the gating brake in the Iâ€“II loop. Pflugers Archiv European Journal of Physiology, 2011, 461, 461-468.	1.3	14
95	Paradoxical Role of T-type Calcium Channels in Coronary Smooth Muscle. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2004, 4, 16-18.	3.4	13
96	Cloning of a novel one-repeat calcium channel-like gene. Biochemical and Biophysical Research Communications, 2003, 303, 31-36.	1.0	12
97	Ca2+ Regulation of Cav3.3 T-type Ca2+ Channel Is Mediated by Calmodulin. Molecular Pharmacology, 2017, 92, 347-357.	1.0	11
98	Targeting oxidized phospholipids by AAV-based gene therapy in mice with established hepatic steatosis prevents progression to fibrosis. Science Advances, 2022, 8, .	4.7	11
99	Ins and outs of T-channel structure function. Pflugers Archiv European Journal of Physiology, 2014, 466, 627-633.	1.3	10
100	Inhibition of T-Type calcium channels in mEC layer II stellate neurons reduces neuronal hyperexcitability associated with epilepsy. Epilepsy Research, 2019, 154, 132-138.	0.8	9
101	Contrasting the roles of the I-II loop gating brake in CaV3.1 and CaV3.3 calcium channels. Pflugers Archiv European Journal of Physiology, 2015, 467, 2519-2527.	1.3	8
102	Primary aldosteronism associated with a germline variant in CACNA1H. BMJ Case Reports, 2019, 12, e229031.	0.2	8
103	Effect of photobiomodulation on mitochondrial dynamics in peripheral nervous system in streptozotocin-induced type 1 diabetes in rats. Photochemical and Photobiological Sciences, 2021, 20, 293-301.	1.6	7
104	AMPK-mediated potentiation of GABAergic signalling drives hypoglycaemia-provoked spike-wave seizures. Brain, 2022, 145, 2332-2346.	3.7	7
105	The use of PCR to Probe Calcium Channel Diversity. Journal of Receptors and Signal Transduction, 1991, 11, 553-576.	1.2	4
106	Characterization of kindled VGATâ€Cre mice as a new animal model of temporal lobe epilepsy. Epilepsia, 2020, 61, 2277-2288.	2.6	4
107	Voltage-gated calcium channels (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2019, 2019, .	0.2	4
108	Preparation and Implantation of Electrodes for Electrically Kindling VGAT-Cre Mice to Generate a Model for Temporal Lobe Epilepsy. Journal of Visualized Experiments, 2021, , .	0.2	2

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109	Voltage-gated calcium channels (Ca_V) in GtoPdb v.2021.3. IUPHAR/BPS Guide To Pharmacology CITE, 2021, 2021, .	0.2	2
110	Corrigendum to: Molecular cloning and functional expression of Cav 3.1c, a T-type calcium channel from human brain. FEBS Letters, 2000, 470, 378-378.	1.3	1
111	Voltage-gated calcium channels in GtoPdb v.2021.2. IUPHAR/BPS Guide To Pharmacology CITE, 2021, 2021, .	0.2	1
112	Voltage-gated calcium channels. , 2009, , 104-130.		1
113	Voltage-gated calcium channels (version 2020.5) in the IUPHAR/BPS Guide to Pharmacology Database. IUPHAR/BPS Guide To Pharmacology CITE, 2020, 2020, .	0.2	1