Carlos A Villalba-Galea

List of Publications by Year
in descending order

46 papers	1,129 citations	430874 18 h-index	580821 25 g-index
49 all docs	49 docs citations	49 times ranked	1087 citing authors

#	Article	IF	Citations
1	Structural mechanism of voltage-dependent gating in an isolated voltage-sensing domain. Nature Structural and Molecular Biology, 2014, 21, 244-252.	8.2	228
2	S4-based voltage sensors have three major conformations. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17600-17607.	7.1	202
3	Coupling between the voltage-sensing and phosphatase domains of Ci-VSP. Journal of General Physiology, 2009, 134, 5-14.	1.9	63
4	Charge Movement of a Voltage-Sensitive Fluorescent Protein. Biophysical Journal, 2009, 96, L19-L21.	0.5	59
5	I _{Ks} channels open slowly because KCNE1 accessory subunits slow the movement of S4 voltage sensors in KCNQ1 pore-forming subunits. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E559-66.	7.1	54
6	Ryanodine Receptor Adaptation. Journal of General Physiology, 2000, 116, 873-882.	1.9	51
7	Sensing charges of the Ciona intestinalis voltage-sensing phosphatase. Journal of General Physiology, 2013, 142, 543-555.	1.9	40
8	Hv1 Proton Channel Opening Is Preceded by a Voltage-independent Transition. Biophysical Journal, 2014, 107, 1564-1572.	0.5	40
9	Molecular mechanism for depolarization-induced modulation of Kv channel closure. Journal of General Physiology, 2012, 140, 481-493.	1.9	39
10	The gating charge should not be estimated by fitting a two-state model to a Q-V curve. Journal of General Physiology, 2013, 142, 575-578.	1.9	39
11	Controlling the Activity of a Phosphatase and Tensin Homolog (PTEN) by Membrane Potential. Journal of Biological Chemistry, 2011, 286, 17945-17953.	3.4	38
12	Clathrin and synaptic vesicle endocytosis: studies at the squid giant synapse. Biochemical Society Transactions, 2006, 34, 68-72.	3.4	36
13	Hysteresis in voltage-gated channels. Channels, 2017, 11, 140-155.	2.8	36
14	S3-S4 Linker Length Modulates the Relaxed State of a Voltage-Gated Potassium Channel. Biophysical Journal, 2013, 105, 2312-2322.	0.5	30
15	Pulsed local-field fluorescence microscopy: a new approach for measuring cellular signals in the beating heart. Pflugers Archiv European Journal of Physiology, 2003, 445, 747-758.	2.8	29
16	Hysteretic Behavior in Voltage-Gated Channels. Frontiers in Pharmacology, 2020, 11, 579596.	3.5	25
17	Retigabine holds KV7 channels open and stabilizes the resting potential. Journal of General Physiology, 2016, 147, 229-241.	1.9	23
18	A human phospholipid phosphatase activated by a transmembrane control module. Journal of Lipid Research, 2012, 53, 2266-2274.	4.2	22

#	Article	IF	Citations
19	Voltage-Controlled Enzymes: The New JanusBifrons. Frontiers in Pharmacology, 2012, 3, 161.	3.5	20
20	Regulation of Kv2.1 channel inactivation by phosphatidylinositol 4,5-bisphosphate. Scientific Reports, 2018, 8, 1769.	3.3	18
21	New insights in the activity of voltage sensitive phosphatases. Cellular Signalling, 2012, 24, 1541-1547.	3.6	15
22	A Xenopus oocyte model system to study action potentials. Journal of General Physiology, 2018, 150, 1583-1593.	1.9	12
23	Optical control of muscular nicotinic channels with azocuroniums, photoswitchable azobenzenes bearing two N-methyl-N-carbocyclic quaternary ammonium groups. European Journal of Medicinal Chemistry, 2020, 200, 112403.	5.5	6
24	Modulation of KV7 Channel Deactivation by PI(4,5)P2. Frontiers in Pharmacology, 2020, 11, 895.	3.5	2
25	Uncoupling Of The Phosphatase Produces A Deeper Relaxation Of Ci-VSP. Biophysical Journal, 2009, 96, 370a.	0.5	0
26	Sensing Charges of Ci-VSP. Biophysical Journal, 2010, 98, 313a.	0.5	0
27	Stabilization of the Relaxed State of the Voltage Sensing Domain of Shaker. Biophysical Journal, 2010, 98, 521a.	0.5	0
28	Structural Model of the Voltage Sensing Domain in Ci-VSP. Biophysical Journal, 2010, 98, 645a.	0.5	0
29	Modular Nature of the Main Domains in Voltage Sensitive Phosphatases. Biophysical Journal, 2010, 98, 313a.	0.5	0
30	Dynamic Modulation of Voltage-Dependent Kv7.2-7.3 Channel Opening by Voltage-Sensor Relaxation. Biophysical Journal, 2011, 100, 428a.	0.5	0
31	Gate Closure Strictly Follows Voltage-Sensor Movements in KV Channels. Biophysical Journal, 2011, 100, 580a-581a.	0.5	0
32	Structural Dynamics in the Resting and Activated States of the Voltage Sensor of Ci-VSP from Dipolar Distance Measurements. Biophysical Journal, 2012, 102, 685a.	0.5	0
33	Reducing S3-S4 Linker Length in Shaker K+ Channels Stabilizes the Relaxed State. Biophysical Journal, 2012, 102, 530a.	0.5	0
34	The Resting and Activated Conformations of the Voltage Sensor of Ci-VSP from Functional and Solvent Accessibility Determinations. Biophysical Journal, 2012, 102, 36a.	0.5	0
35	Control of Hv1 Voltage-Gated Proton Channel Opening by Changes in the Transmembrane Voltage and pH Gradients. Biophysical Journal, 2012, 102, 36a.	0.5	0
36	S3-S4 Loop Modulates Voltage Sensing Domain Relaxation. Biophysical Journal, 2013, 104, 466a-467a.	0.5	0

#	Article	IF	Citations
37	Voltage Sensing in Hv1 Proton Channels. Biophysical Journal, 2013, 104, 207a.	0.5	0
38	Voltage Sensor Trapping in the Relaxed State. Biophysical Journal, 2013, 104, 196a.	0.5	0
39	Ph Sensitivity of Voltage Sensing Domain Relaxation. Biophysical Journal, 2014, 106, 745a-746a.	0.5	0
40	Development of a Model for Excitability Studies using Xenopus Oocytes. Biophysical Journal, 2015, 108, 281a.	0.5	0
41	Editorial: Phosphoinositides and their phosphatases: Linking electrical and chemical signals in biological processes. Frontiers in Pharmacology, 2015, 6, 142.	3.5	0
42	Pi(4,5)P 2 Modulates Hysteresis and Pharmacology of K V 7 Channels. Biophysical Journal, 2017, 112, 110a.	0.5	0
43	Modulation of KV7.1 by NaVÎ²1 Subunit. Biophysical Journal, 2018, 114, 122a.	0.5	0
44	Functional Characterization of Novel Photo-Switchable Neuromuscular Blockers. Biophysical Journal, 2018, 114, 297a.	0.5	0
45	C-Type Inactivation in KV2.1 Channels. Biophysical Journal, 2019, 116, 15a.	0.5	0
46	Structure-Activity Relationship of Potent Photo-Switchable Neuromuscular Inhibitors. Biophysical Journal, 2019, 116, 395a.	0.5	0