JÃ©rÃ´me J Lacroix

List of Publications by Year
in descending order

52	1,265	361296	526166
papers	citations	20 h-index	27 g-index

62	62	62	1453
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Focused ultrasound excites cortical neurons via mechanosensitive calcium accumulation and ion channel amplification. Nature Communications, 2022, 13, 493.	5.8	152
2	Yoda1â€™s energetic footprint on Piezo1 channels and its modulation by voltage and temperature. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	19
3	Dichotomy between heterotypic and homotypic interactions by a common chemical law. Physical Chemistry Chemical Physics, 2021, 23, 17761-17765.	1.3	0
4	Intermolecular Cooperative Gating in Piezo1 Channels. Biophysical Journal, 2021, 120, 157a-158a.	0.2	0
5	iGlow: Real-Time Fluorescence Reporting, Intra-Vesicular Activity, and Helix-8 Independence in a CPGFP-Tagged Mechanosensitive GPCR. Biophysical Journal, 2021, 120, 363a.	0.2	0
6	An Open State Was Induced by Mimicking Mechanosensitive Piezo1 Channel Clusters in Molecular Dynamic Simulations. Biophysical Journal, 2021, 120, 228a.	0.2	0
7	Mechanical and chemical activation of GPR68 probed with a genetically encoded fluorescent reporter. Journal of Cell Science, 2021, 134, .	1.2	17
8	Crowding-induced opening of the mechanosensitive Piezo1 channel in silico. Communications Biology, 2021, 4, 84.	2.0	35
9	Ion Channels in Biophysics and Physiology: Methods & Challenges to Study Mechanosensitive Ion Channels. Advances in Experimental Medicine and Biology, 2021, 1349, 33-49.	0.8	0
10	Insight into Molecular Mechanism for Activin A-Induced Bone Morphogenetic Protein Signaling. International Journal of Molecular Sciences, 2020, 21, 6498.	1.8	6
11	Domain-Dependent Force Selectivity in the Mechanosensitive Ion Channel Piezo1. Biophysical Journal, 2020, 118, 396a-397a.	0.2	0
12	A mechanism for the activation of the mechanosensitive Piezo1 channel by the small molecule Yoda1. Nature Communications, 2019, 10, 4503.	5.8	136
13	Multiplexing Focused Ultrasound Stimulation with Fluorescence Microscopy. Journal of Visualized Experiments, 2019, , .	0.2	3
14	Force-Dependent Conformational Changes in the Mechanosensitive Piezo1 Channel. Biophysical Journal, 2019, 116, 377a.	0.2	0
15	Structural Bases for Chemical and Mechanical Gating in the Piezo1 Channel. Biophysical Journal, 2019, 116, 478a-479a.	0.2	0
16	Development of a PET radioligand for potassium channels to image CNS demyelination. Scientific Reports, 2018, 8, 607.	1.6	36
17	Probing the gating mechanism of the mechanosensitive channel Piezo1 with the small molecule Yoda1. Nature Communications, 2018, 9, 2029.	5.8	104
18	A Minimal Protein Region Required for the Chemical Activation of the Mechanosensitive Channel Piezo1. Biophysical Journal, 2018, 114, 203a.	0.2	0

#	Article	IF	Citations
19	Can Relative Binding Free Energy Predict Selectivity of Reversible Covalent Inhibitors?. Journal of the American Chemical Society, 2017, 139, 17945-17952.	6.6	44
20	Polymodal allosteric regulation of Type 1 Serine/Threonine Kinase Receptors via a conserved electrostatic lock. PLoS Computational Biology, 2017, 13, e1005711.	1.5	16
21	Conformational Changes during Voltage Sensing. Biophysical Journal, 2016, 110, 510a.	0.2	0
22	Kv3.1 uses a timely resurgent K+ current to secure action potential repolarization. Nature Communications, 2015, 6, 10173.	5.8	54
23	Moving gating charges through the gating pore in a Kv channel voltage sensor. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E1950-9.	3.3	69
24	Searching for the Interaction Sites of the Beta1 Subunit with the Voltage-Sensing Domains of Sodium Channels Using LRET. Biophysical Journal, 2014, 106, 133a.	0.2	0
25	Probing Î± -3 10 Transitions in a Voltage-Sensing S4 Helix. Biophysical Journal, 2014, 107, 1117-1128.	0.2	23
26	Effects of Decreased Hydrophobicity above R1 in S4-Based Voltage Sensors. Biophysical Journal, 2014, 106, 742a.	0.2	0
27	Molecular Bases for the Asynchronous Activation of Sodium and Potassium Channels Required for Nerve Impulse Generation. Neuron, 2013, 79, 651-657.	3.8	49
28	Molecular Basis for Time Dependent Modulation of Kv3.1 Channels that Assures Action Potential Repolarization. Biophysical Journal, 2013, 104, 125a.	0.2	0
29	S3-S4 Linker Length Modulates the Relaxed State of a Voltage-Gated Potassium Channel. Biophysical Journal, 2013, 105, 2312-2322.	0.2	30
30	Effects of Charged Residues Inserted above R1 in S4-Based Voltage Sensors. Biophysical Journal, 2013, 104, 197a.	0.2	0
31	Molecular Determinants for the Genesis of the Action Potential. Biophysical Journal, 2013, 104, 14a.	0.2	0
32	Probing S4 Re-Arrangement during Gating using Optical Tools. Biophysical Journal, 2013, 104, 276a.	0.2	0
33	Molecular mechanism for depolarization-induced modulation of Kv channel closure. Journal of General Physiology, 2012, 140, 481-493.	0.9	39
34	Intermediate state trapping of a voltage sensor. Journal of General Physiology, 2012, 140, 635-652.	0.9	50
35	Position of the Second Gating Charge along S4 in an Intermediate Conformation of a K+ Channel Voltage Sensor. Biophysical Journal, 2012, 102, 530a.	0.2	0
36	Probing S4 Length Changes during Gating with LRET. Biophysical Journal, 2012, 102, 265a.	0.2	0

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37	Reducing S3-S4 Linker Length in Shaker K+ Channels Stabilizes the Relaxed State. Biophysical Journal, 2012, 102, 530a.	0.2	0
38	Tuning the Voltage-Sensor Motion with a Single Residue. Biophysical Journal, 2012, 103, L23-L25.	0.2	23
39	On the Role of the Difference in Surface Tensions Involved in the Allosteric Regulation of NHE-1 Induced by Low to Mild Osmotic Pressure, Membrane Tension and Lipid Asymmetry. Cell Biochemistry and Biophysics, 2012, 63, 47-57.	0.9	9
40	Mutant SOD1 forms ion channel: Implications for ALS pathophysiology. Neurobiology of Disease, 2012, 45, 831-838.	2.1	24
41	The Nature of the Energy Barrier for the Charge Movement in Voltage-Sensors. Biophysical Journal, 2011, 100, 580a.	0.2	0
42	Gate Closure Strictly Follows Voltage-Sensor Movements in KV Channels. Biophysical Journal, 2011, 100, 580a-581a.	0.2	0
43	Properties of Deactivation Gating Currents in Shaker Channels. Biophysical Journal, 2011, 100, L28-L30.	0.2	40
44	Control of a final gating charge transition by a hydrophobic residue in the S2 segment of a K ⁺ channel voltage sensor. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6444-6449.	3.3	68
45	Controlling the Activity of a Phosphatase and Tensin Homolog (PTEN) by Membrane Potential. Journal of Biological Chemistry, 2011, 286, 17945-17953.	1.6	38
46	Two Structurally Distinct Pathways for the Voltage-Sensing S4 Helices. Biophysical Journal, 2010, 98, 313a.	0.2	0
47	Modular Nature of the Main Domains in Voltage Sensitive Phosphatases. Biophysical Journal, 2010, 98, 313a.	0.2	0
48	LRET Measurements In The Three Major Conformations Of The Shaker K Channel. Biophysical Journal, 2009, 96, 380a-381a.	0.2	0
49	Voltage-Dependent Conformational Changes of the Voltage Sensor of KVAP Measured with LRET. Biophysical Journal, 2009, 96, 484a.	0.2	0
50	Regulation of Na⁺/H⁺ exchanger 1 allosteric balance by its localization in cholesterolâ€•and caveolinâ€•rich membrane microdomains. Journal of Cellular Physiology, 2008, 216, 207-220.	2.0	35
51	Kinetic Analysis of the Regulation of the Na⁺/H⁺ Exchanger NHE-1 by Osmotic Shocks. Biochemistry, 2008, 47, 13674-13685.	1.2	27
52	A mechanism for the activation of the Na/H exchanger NHEâ€•1 by cytoplasmic acidification and mitogens. EMBO Reports, 2004, 5, 91-96.	2.0	84