MarÃ-a Queralt-MartÃ-n

List of Publications by Year
in descending order

54 papers	789 citations	516710 16 h-index	526287 27 g-index
57 all docs	57 docs citations	57 times ranked	1154 citing authors

#	Article	IF	Citations
1	Dynorphin A induces membrane permeabilization by formation of proteolipidic pores. Insights from electrophysiology and computational simulations. Computational and Structural Biotechnology Journal, 2022, 20, 230-240.	4.1	4
2	Restricting Î±-synuclein transport into mitochondria by inhibition of Î±-synucleinâ€“VDAC complexation as a potential therapeutic target for Parkinsonâ€™s disease treatment. Cellular and Molecular Life Sciences, 2022, 79, .	5.4	4
3	Single-molecule conformational dynamics of viroporin ion channels regulated by lipid-protein interactions. Bioelectrochemistry, 2021, 137, 107641.	4.6	9
4	Specific adsorption of trivalent cations in biological nanopores determines conductance dynamics and reverses ionic selectivity. Physical Chemistry Chemical Physics, 2021, 23, 1352-1362.	2.8	4
5	Assessing the Role of Electrostatic Interactions in the Mechanism of Beta-Barrel Channel Gating. Biophysical Journal, 2021, 120, 156a.	0.5	0
6	Dynorphin a Induces Membrane Permeabilization by Formation of Proteolipidic Pores. Biophysical Journal, 2021, 120, 142a.	0.5	0
7	Transport mechanisms of SARS-CoV-E viroporin in calcium solutions: Lipid-dependent Anomalous Mole Fraction Effect and regulation of pore conductance. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183590.	2.6	13
8	THE USE OF CHECKLISTS IN LABORATORY CLASS OF PHYSICS. , 2021, , .		0
9	Molecular mechanism of olesoxime-mediated neuroprotection through targeting Î±-synuclein interaction with mitochondrial VDAC. Cellular and Molecular Life Sciences, 2020, 77, 3611-3626.	5.4	39
10	Gating of Bacterial Beta-Barrel Channels is Regulated by Salt Concentration and Lipid Composition. Biophysical Journal, 2020, 118, 416a.	0.5	0
11	Reduced Affinity of Mitochondrial VDAC3 for Cytosolic Proteins Reveals a Mechanism for VDAC Isoform-Specific Physiology. Biophysical Journal, 2020, 118, 448a.	0.5	0
12	VDAC Gating Thermodynamics, but Not Gating Kinetics, Are Virtually Temperature Independent. Biophysical Journal, 2020, 119, 2584-2592.	0.5	10
13	Targeting the Multiple Physiologic Roles of VDAC With Steroids and Hydrophobic Drugs. Frontiers in Physiology, 2020, 11, 446.	2.8	24
14	Mechanism of Alpha-Synuclein Translocation into Mitochondria. Biophysical Journal, 2020, 118, 444a-445a.	0.5	0
15	Dynamic Plasticity of Mitochondrial VDAC2 Revealed by Single-Molecule Electrophysiology. Biophysical Journal, 2020, 118, 273a.	0.5	0
16	A lower affinity to cytosolic proteins reveals VDAC3 isoform-specific role in mitochondrial biology. Journal of General Physiology, 2020, 152, .	1.9	36
17	Multiple neurosteroid and cholesterol binding sites in voltage-dependent anion channel-1 determined by photo-affinity labeling. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2019, 1864, 1269-1279.	2.4	26
18	Mechanistic Insights into Voltage-Induced Closure of Bacterial Beta-Barrel Channels. Biophysical Journal, 2019, 116, 401a.	0.5	1

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19	Effect of Steroids on Mitochondrial Metabolite Channel Function and Lipid Membrane Properties. Biophysical Journal, 2019, 116, 269a.	0.5	0
20	Interfacial Effects of Ion Channels in Lipid Membranes: Mean-Field Computation from 3D Atomic Structures Versus Analytical Estimates. Biophysical Journal, 2019, 116, 219a.	0.5	0
21	Human VDAC3 Forms VDAC1-Type Anionic Channels that are High-Conducting, Permeable to Metabolites, and Regulated by Cytosolic Proteins. Biophysical Journal, 2019, 116, 155a.	0.5	1
22	Lipid Headgroup Charge and Acyl Chain Composition Modulate Closure of Bacterial Î²-Barrel Channels. International Journal of Molecular Sciences, 2019, 20, 674.	4.1	11
23	Assessing the role of residue E73 and lipid headgroup charge in VDAC1 voltage gating. Biochimica Et Biophysica Acta - Bioenergetics, 2019, 1860, 22-29.	1.0	27
24	Interfacial Effects Dominate Ion Permeation through Membrane Channels in Low Ionic Strength Solutions. Biophysical Journal, 2018, 114, 260a.	0.5	0
25	Assessing the Role of Residue E73 in VDAC1 Voltage Gating. Biophysical Journal, 2018, 114, 660a.	0.5	0
26	Scaling Behavior of Ionic Transport in Membrane Nanochannels. Nano Letters, 2018, 18, 6604-6610.	9.1	20
27	Role of Severe Acute Respiratory Syndrome Coronavirus Viroporins E, 3a, and 8a in Replication and Pathogenesis. MBio, 2018, 9, .	4.1	248
28	Scaling Laws for Ionic Transport in Nanochannels: Bulk, Surface and Interfacial Effects. Biophysical Journal, 2018, 114, 609a.	0.5	0
29	Fluctuation-Driven Transport in Bacterial Channels under Acidic Stress. Biophysical Journal, 2017, 112, 545a.	0.5	0
30	Channel-Inactivating Mutations and Their Revertant Mutants in the Envelope Protein of Infectious Bronchitis Virus. Journal of Virology, 2017, 91, .	3.4	27
31	Ion Transport in Confined Geometries below the Nanoscale: Access Resistance Dominates Protein Channel Conductance in Diluted Solutions. ACS Nano, 2017, 11, 10392-10400.	14.6	30
32	Fluctuation-Driven Transport in Biological Nanopores. A 3D Poissonâ€“Nernstâ€“Planck Study. Entropy, 2017, 19, 116.	2.2	7
33	Buried Charges and their Effect on Ion Channel Selectivity. Analytical Solutions, Numerical Calculations and MD Simulations. Biophysical Journal, 2016, 110, 245a.	0.5	0
34	On the different sources of cooperativity in pH titrating sites of a membrane protein channel. European Physical Journal E, 2016, 39, 29.	1.6	2
35	Effects of extreme pH on ionic transport through protein nanopores: the role of ion diffusion and charge exclusion. Physical Chemistry Chemical Physics, 2016, 18, 21668-21675.	2.8	10
36	Stochastic pumping of ions based on colored noise in bacterial channels under acidic stress. Nanoscale, 2016, 8, 13422-13428.	5.6	12

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37	Excess white noise to probe transport mechanisms in a membrane channel. Physical Review E, 2015, 91, 062704.	2.1	4
38	Current Fluctuation Analysis in a Protein Nanopore. Biophysical Journal, 2015, 108, 634a.	0.5	0
39	Bacterial Porins. Springer Series in Biophysics, 2015, , 101-121.	0.4	0
40	Entropyâ€"enthalpy compensation at the single protein level: pH sensing in the bacterial channel OmpF. Nanoscale, 2014, 6, 15210-15215.	5.6	7
41	Experimental demonstration of charge inversion in a protein channel in the presence of monovalent cations. Electrochemistry Communications, 2014, 48, 32-34.	4.7	8
42	Experimental Observation of Surface Charge Inversion in a Biological Nanopore in Presence of Monovalent and Multivalent Cations. Biophysical Journal, 2014, 106, 210a.	0.5	0
43	Electrical Pumping of Potassium Ions Against an External Concentration Gradient in a Biological Ion Channel. Biophysical Journal, 2014, 106, 416a.	0.5	0
44	Electrical pumping of potassium ions against an external concentration gradient in a biological ion channel. Applied Physics Letters, 2013, 103, .	3.3	36
45	Electrostatic Interactions Drive the Nonsteric Directional Block of OmpF Channel by La³⁺. Langmuir, 2013, 29, 15320-15327.	3.5	10
46	La3+-Induced Asymmetric Current Inhibition in OmpF Channel. Biophysical Journal, 2013, 104, 630a.	0.5	0
47	Protein Ion Channels as Molecular Ratchets. Switchable Current Modulation in Outer Membrane Protein F Porin Induced by Millimolar La³⁺ Ions. Journal of Physical Chemistry C, 2012, 116, 6537-6542.	3.1	28
48	Increased salt concentration promotes competitive block of OmpF channel by protons. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 2777-2782.	2.6	16
49	Probing Tubulin-Blocked State of VDAC by Varying Membrane Surface Charge. Biophysical Journal, 2012, 102, 2070-2076.	0.5	20
50	Entropic Modulation of Ion Transport through OmpF Channel. Molecular Basis of pH Sensing Derived from Cooperative Interactions. Biophysical Journal, 2012, 102, 269a-270a.	0.5	1
51	Divalent cations reduce the pH sensitivity of OmpF channel inducing the pK_ashift of key acidic residues. Physical Chemistry Chemical Physics, 2011, 13, 563-569.	2.8	18
52	Insights on the permeability of wide protein channels: measurement and interpretation of ion selectivity. Integrative Biology (United Kingdom), 2011, 3, 159-172.	1.3	49
53	Pinning and Avalanches in Hydrophobic Microchannels. Physical Review Letters, 2011, 106, 194501.	7.8	27
54	Divalent Cations Reduce the pH Sensitivity of OmpF Channel Inducing the PKA Shift of Key Acidic Residues. Biophysical Journal, 2011, 100, 331a.	0.5	0