Andrew Pohorille

List of Publications by Year
in descending order

35 papers	3,578 citations	331670 21 h-index	395702 33 g-index
35 all docs	35 docs citations	35 times ranked	3914 citing authors

#	Article	IF	Citations
1	Computational Electrophysiology from a Single Molecular Dynamics Simulation and the Electrodiffusion Model. Journal of Physical Chemistry B, 2021, 125, 3132-3144.	2.6	5
2	Electrophysiological Properties from Computations at a Single Voltage: Testing Theory with Stochastic Simulations. Entropy, 2021, 23, 571.	2.2	4
3	Fast bilayer-micelle fusion mediated by hydrophobic dipeptides. Biophysical Journal, 2021, 120, 2330-2342.	0.5	4
4	Gene Expression Measurement Module (GEMM) for space application: Design and validation. Life Sciences in Space Research, 2019, 22, 55-67.	2.3	6
5	Toward biotechnology in space: High-throughput instruments for in situ biological research beyond Earth. Biotechnology Advances, 2017, 35, 905-932.	11.7	48
6	Validity of the Electrodiffusion Model for Calculating Conductance of Simple Ion Channels. Journal of Physical Chemistry B, 2017, 121, 3607-3619.	2.6	11
7	Sequence-Dependent Interfacial Adsorption and Permeation of Dipeptides across Phospholipid Membranes. Journal of Physical Chemistry B, 2017, 121, 9859-9867.	2.6	8
8	Flexible Proteins at the Origin of Life. Life, 2017, 7, 23.	2.4	16
9	Chapter 3. Free Energy Calculations for Understanding Membrane Receptors. RSC Theoretical and Computational Chemistry Series, 2016, , 59-106.	0.7	1
10	M2 Proton Channel: Toward a Model of a Primitive Proton Pump. Origins of Life and Evolution of Biospheres, 2015, 45, 241-248.	1.9	5
11	Combining molecular dynamics and an electrodiffusion model to calculate ion channel conductance. Journal of Chemical Physics, 2014, 141, 22D519.	3.0	20
12	Towards Co-Evolution of Membrane Proteins and Metabolism. Origins of Life and Evolution of Biospheres, 2014, 44, 357-361.	1.9	14
13	Flip-Flop of Oleic Acid in a Phospholipid Membrane: Rate and Mechanism. Journal of Physical Chemistry B, 2014, 118, 12919-12926.	2.6	34
14	Activation and Proton Transport Mechanism in Influenza A M2 Channel. Biophysical Journal, 2013, 105, 2036-2045.	0.5	40
15	Permeation of Aldopentoses and Nucleosides Through Fatty Acid and Phospholipid Membranes: Implications to the Origins of Life. Astrobiology, 2013, 13, 177-188.	3.0	13
16	Processes that Drove the Transition from Chemistry to Biology: Concepts and Evidence. Origins of Life and Evolution of Biospheres, 2012, 42, 429-432.	1.9	1
17	Molecular Dynamics Simulation of the Antiamoebin Ion Channel: Linking Structure and Conductance. Biophysical Journal, 2011, 100, 2394-2402.	0.5	39
18	Permeation of Nucleosides through Lipid Bilayers. Journal of Physical Chemistry B, 2011, 115, 3681-3688.	2.6	30

#	Article	IF	Citations
19	Self-assembly and function of primitive cell membranes. Research in Microbiology, 2009, 160, 449-456.	2.1	85
20	Permeation of Membranes by Ribose and Its Diastereomers. Journal of the American Chemical Society, 2009, 131, 10237-10245.	13.7	40
21	Adaptive biasing force method for scalar and vector free energy calculations. Journal of Chemical Physics, 2008, 128, 144120.	3.0	683
22	The NASA Astrobiology Roadmap. Astrobiology, 2008, 8, 715-730.	3.0	278
23	Early Ancestors of Existing Cells. , 2008, , 563-581.		2
24	The Origin and Early Evolution of Membrane Channels. Astrobiology, 2005, 5, 1-17.	3.0	47
25	Hydrophobic Effects and Modeling of Biophysical Aqueous Solution Interfaces. Chemical Reviews, 2002, 102, 2671-2692.	47.7	359
26	Artificial cells: prospects for biotechnology. Trends in Biotechnology, 2002, 20, 123-128.	9.3	267
27	Calculating free energies using average force. Journal of Chemical Physics, 2001, 115, 9169-9183.	3.0	940
28	Proton pumps: mechanism of action and applications. Trends in Biotechnology, 2001, 19, 140-144.	9.3	67
29	Early events in the folding of an amphipathic peptide: A multinanosecond molecular dynamics study. Proteins: Structure, Function and Bioinformatics, 1999, 36, 383-399.	2.6	24
30	Conformational Equilibria of Terminally Blocked Single Amino Acids at the Waterâ˜Hexane Interface. A Molecular Dynamics Study. Journal of Physical Chemistry B, 1998, 102, 281-290.	2.6	44
31	Mechanism of Unassisted Ion Transport across Membrane Bilayers. Journal of the American Chemical Society, 1996, 118, 6580-6587.	13.7	157
32	Molecular dynamics studies of simple membrane â€" Water interfaces: Structure and functions in the beginnings of cellular life. Origins of Life and Evolution of Biospheres, 1995, 25, 21-46.	1.9	41
33	Molecular dynamics of phenol at the liquidâ€"vapor interface of water. Journal of Chemical Physics, 1991, 94, 5599-5605.	3.0	88
34	Interaction of monovalent ions with the water liquidâ€"vapor interface: A molecular dynamics study. Journal of Chemical Physics, 1991, 95, 6005-6013.	3.0	124
35	Solution Influence on Biomolecular Equilibria: Nucleic Acid Base Associations. Journal of Biomolecular Structure and Dynamics, 1984, 1, 1257-1280.	3.5	33