

Andrew Pohorille

List of Publications by Year in descending order

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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	Calculating free energies using average force. <i>Journal of Chemical Physics</i> , 2001, 115, 9169-9183.	3.0	940
2	Adaptive biasing force method for scalar and vector free energy calculations. <i>Journal of Chemical Physics</i> , 2008, 128, 144120.	3.0	683
3	Hydrophobic Effects and Modeling of Biophysical Aqueous Solution Interfaces. <i>Chemical Reviews</i> , 2002, 102, 2671-2692.	47.7	359
4	The NASA Astrobiology Roadmap. <i>Astrobiology</i> , 2008, 8, 715-730.	3.0	278
5	Artificial cells: prospects for biotechnology. <i>Trends in Biotechnology</i> , 2002, 20, 123-128.	9.3	267
6	Mechanism of Unassisted Ion Transport across Membrane Bilayers. <i>Journal of the American Chemical Society</i> , 1996, 118, 6580-6587.	13.7	157
7	Interaction of monovalent ions with the water liquid-vapor interface: A molecular dynamics study. <i>Journal of Chemical Physics</i> , 1991, 95, 6005-6013.	3.0	124
8	Molecular dynamics of phenol at the liquid-vapor interface of water. <i>Journal of Chemical Physics</i> , 1991, 94, 5599-5605.	3.0	88
9	Self-assembly and function of primitive cell membranes. <i>Research in Microbiology</i> , 2009, 160, 449-456.	2.1	85
10	Proton pumps: mechanism of action and applications. <i>Trends in Biotechnology</i> , 2001, 19, 140-144.	9.3	67
11	Toward biotechnology in space: High-throughput instruments for in situ biological research beyond Earth. <i>Biotechnology Advances</i> , 2017, 35, 905-932.	11.7	48
12	The Origin and Early Evolution of Membrane Channels. <i>Astrobiology</i> , 2005, 5, 1-17.	3.0	47
13	Conformational Equilibria of Terminally Blocked Single Amino Acids at the Water-Hexane Interface. A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 1998, 102, 281-290.	2.6	44
14	Molecular dynamics studies of simple membrane-water interfaces: Structure and functions in the beginnings of cellular life. <i>Origins of Life and Evolution of Biospheres</i> , 1995, 25, 21-46.	1.9	41
15	Permeation of Membranes by Ribose and Its Diastereomers. <i>Journal of the American Chemical Society</i> , 2009, 131, 10237-10245.	13.7	40
16	Activation and Proton Transport Mechanism in Influenza A M2 Channel. <i>Biophysical Journal</i> , 2013, 105, 2036-2045.	0.5	40
17	Molecular Dynamics Simulation of the Antiamoebin Ion Channel: Linking Structure and Conductance. <i>Biophysical Journal</i> , 2011, 100, 2394-2402.	0.5	39
18	Flip-Flop of Oleic Acid in a Phospholipid Membrane: Rate and Mechanism. <i>Journal of Physical Chemistry B</i> , 2014, 118, 12919-12926.	2.6	34

#	ARTICLE	IF	CITATIONS
19	Solution Influence on Biomolecular Equilibria: Nucleic Acid Base Associations. <i>Journal of Biomolecular Structure and Dynamics</i> , 1984, 1, 1257-1280.	3.5	33
20	Permeation of Nucleosides through Lipid Bilayers. <i>Journal of Physical Chemistry B</i> , 2011, 115, 3681-3688.	2.6	30
21	Early events in the folding of an amphipathic peptide: A multianosecond molecular dynamics study. <i>Proteins: Structure, Function and Bioinformatics</i> , 1999, 36, 383-399.	2.6	24
22	Combining molecular dynamics and an electrodiffusion model to calculate ion channel conductance. <i>Journal of Chemical Physics</i> , 2014, 141, 22D519.	3.0	20
23	Flexible Proteins at the Origin of Life. <i>Life</i> , 2017, 7, 23.	2.4	16
24	Towards Co-Evolution of Membrane Proteins and Metabolism. <i>Origins of Life and Evolution of Biospheres</i> , 2014, 44, 357-361.	1.9	14
25	Permeation of Aldopentoses and Nucleosides Through Fatty Acid and Phospholipid Membranes: Implications to the Origins of Life. <i>Astrobiology</i> , 2013, 13, 177-188.	3.0	13
26	Validity of the Electrodiffusion Model for Calculating Conductance of Simple Ion Channels. <i>Journal of Physical Chemistry B</i> , 2017, 121, 3607-3619.	2.6	11
27	Sequence-Dependent Interfacial Adsorption and Permeation of Dipeptides across Phospholipid Membranes. <i>Journal of Physical Chemistry B</i> , 2017, 121, 9859-9867.	2.6	8
28	Gene Expression Measurement Module (GEMM) for space application: Design and validation. <i>Life Sciences in Space Research</i> , 2019, 22, 55-67.	2.3	6
29	M2 Proton Channel: Toward a Model of a Primitive Proton Pump. <i>Origins of Life and Evolution of Biospheres</i> , 2015, 45, 241-248.	1.9	5
30	Computational Electrophysiology from a Single Molecular Dynamics Simulation and the Electrodiffusion Model. <i>Journal of Physical Chemistry B</i> , 2021, 125, 3132-3144.	2.6	5
31	Electrophysiological Properties from Computations at a Single Voltage: Testing Theory with Stochastic Simulations. <i>Entropy</i> , 2021, 23, 571.	2.2	4
32	Fast bilayer-micelle fusion mediated by hydrophobic dipeptides. <i>Biophysical Journal</i> , 2021, 120, 2330-2342.	0.5	4
33	Early Ancestors of Existing Cells. , 2008, , 563-581.		2
34	Processes that Drove the Transition from Chemistry to Biology: Concepts and Evidence. <i>Origins of Life and Evolution of Biospheres</i> , 2012, 42, 429-432.	1.9	1
35	Chapter 3. Free Energy Calculations for Understanding Membrane Receptors. <i>RSC Theoretical and Computational Chemistry Series</i> , 2016, , 59-106.	0.7	1