Eric Jakobsson

List of Publications by Year
in descending order

67 papers	3,866 citations	172457 29 h-index	123424 61 g-index
71 all docs	71 docs citations	71 times ranked	4029 citing authors

#	Article	IF	Citations
1	Entropic boundary conditions towards safe artificial superintelligence. Journal of Experimental and Theoretical Artificial Intelligence, 2023, 35, 1-33.	2.8	0
2	High-Dimensional Parameter Search Method to Determine Force Field Mixing Terms in Molecular Simulations. Langmuir, 2022, 38, 2840-2851.	3.5	5
3	ResidueFinder: extracting individual residue mentions from protein literature. Journal of Biomedical Semantics, 2021, 12, 14.	1.6	0
4	Transferable interactions of Li+ and Mg2+ ions in polarizable models. Journal of Chemical Physics, 2020, 153, 104113.	3.0	11
5	Interactions of Monovalent and Divalent Cations at Palmitoyl-Oleoyl-Phosphatidylcholine Interface. Langmuir, 2019, 35, 10522-10532.	3.5	10
6	Rationally designing antisense therapy to keep up with evolving bacterial resistance. PLoS ONE, 2019, 14, e0209894.	2.5	8
7	Systems Biology Understanding of the Effects of Lithium on Cancer. Frontiers in Oncology, 2019, 9, 296.	2.8	16
8	Using Optimal F-Measure and Random Resampling in Gene Ontology Enrichment Calculations. Frontiers in Applied Mathematics and Statistics, 2019, 5, .	1.3	3
9	An assessment of true and false positive detection rates of stepwise epistatic model selection as a function of sample size and number of markers. Heredity, 2019, 122, 660-671.	2.6	18
10	Systems Biology Understanding of the Effects of Lithium on Affective and Neurodegenerative Disorders. Frontiers in Neuroscience, 2018, 12, 933.	2.8	11
11	Effects of Lithium and Other Monovalent Ions on Palmitoyl Oleoyl Phosphatidylcholine Bilayer. Langmuir, 2017, 33, 1105-1115.	3.5	14
12	Three-Dimensional Encapsulation of Saccharomyces cerevisiae in Silicate Matrices Creates Distinct Metabolic States as Revealed by Gene Chip Analysis. ACS Nano, 2017, 11, 3560-3575.	14.6	17
13	Towards a Unified Understanding of Lithium Action in Basic Biology and its Significance for Applied Biology. Journal of Membrane Biology, 2017, 250, 587-604.	2.1	103
14	Conservation in Mammals of Genes Associated with Aggression-Related Behavioral Phenotypes in Honey Bees. PLoS Computational Biology, 2016, 12, e1004921.	3.2	14
15	Nanoporous Silica-Based Protocells at Multiple Scales for Designs of Life and Nanomedicine. Life, 2015, 5, 214-229.	2.4	16
16	Distinct mechanisms regulating mechanical force-induced Ca2+ signals at the plasma membrane and the ER in human MSCs. ELife, 2015, 4, e04876.	6.0	90
17	Automated Optimization of Waterâ€"Water Interaction Parameters for a Coarse-Grained Model. Journal of Physical Chemistry B, 2014, 118, 1603-1611.	2.6	17
18	Building a Knowledge-Based Statistical Potential by Capturing High-Order Inter-residue Interactions and its Applications in Protein Secondary Structure Assessment. Journal of Chemical Information and Modeling, 2013, 53, 500-508.	5.4	11

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19	Predicting Protein-Protein Interaction by the Mirrortree Method: Possibilities and Limitations. PLoS ONE, 2013, 8, e81100.	2.5	8
20	Sampling Multiple Scoring Functions Can Improve Protein Loop Structure Prediction Accuracy. Journal of Chemical Information and Modeling, 2011, 51, 1656-1666.	5.4	17
21	Molecular dynamic simulation study of cholesterol and conjugated double bonds in lipid bilayers. Chemistry and Physics of Lipids, 2011, 164, 811-818.	3.2	8
22	Conjugated double bonds in lipid bilayers: A molecular dynamics simulation study. Chemistry and Physics of Lipids, 2011, 164, 251-257.	3.2	10
23	Identifying bacterial and archaeal homologs of pentameric ligand-gated ion channel (pLGIC) family using domain-based and alignment-based approaches. Channels, 2011, 5, 325-344.	2.8	7
24	Evolutionary coupling in the KV1.2-β2complex. Channels, 2010, 4, 355-374.	2.8	1
25	A Coarse-Grained Model Based on Morse Potential for Water and n-Alkanes. Journal of Chemical Theory and Computation, 2010, 6, 851-863.	5.3	75
26	A Biophysical Model for Integration of Electrical, Osmotic, and pH Regulation in the Human Bronchial Epithelium. Biophysical Journal, 2010, 98, 1476-1485.	0.5	17
27	Backbone Statistical Potential from Local Sequence-Structure Interactions in Protein Loops. Journal of Physical Chemistry B, 2010, 114, 1859-1869.	2.6	33
28	Integrating multiple scoring functions to improve protein loop structure conformation space sampling. , 2010, , .		5
29	Domain-Based Identification and Analysis of Glutamate Receptor Ion Channels and Their Relatives in Prokaryotes. PLoS ONE, 2010, 5, e12827.	2.5	20
30	Simulation of charge transport in ion channels andÂnanopores withÂanisotropicÂpermittivity. Journal of Computational Electronics, 2009, 8, 98-109.	2.5	6
31	An Improved United Atom Force Field for Simulation of Mixed Lipid Bilayers. Journal of Physical Chemistry B, 2009, 113, 2748-2763.	2.6	267
32	Transforming Chemistry Education through Computational Science. Computing in Science and Engineering, 2008, 10, 34-39.	1.2	10
33	Cholesterol Packing around Lipids with Saturated and Unsaturated Chains: A Simulation Study. Langmuir, 2008, 24, 6858-6865.	3.5	97
34	MotifNetwork: A Grid-enabled Workflow for High-throughput Domain Analysis of Biological Sequences: Implications for annotation and study of phylogeny, protein interactions, and intraspecies variation. , 2007, , .		4
35	MotifNetwork: Genome-Wide Domain Analysis using Grid-enabled Workflows. , 2007, , .		4
36	The cPLA2 C2Î± Domain in Solution: Structure and Dynamics of Its Ca2+-activated and Cation-Free States. Biophysical Journal, 2007, 92, 966-976.	0.5	7

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37	Lateral Organization in Lipid-Cholesterol Mixed Bilayers. Biophysical Journal, 2007, 92, 440-447.	0.5	49
38	Cholesterol Surrogates: A Comparison of Cholesterol and 16:0 Ceramide in POPC Bilayers. Biophysical Journal, 2007, 92, 920-927.	0.5	71
39	The Influence of Amino Acid Protonation States on Molecular Dynamics Simulations of the Bacterial Porin OmpF. Biophysical Journal, 2006, 90, 112-123.	0.5	67
40	Digital biology: an emerging and promising discipline. Trends in Biotechnology, 2005, 23, 113-117.	9.3	9
41	Sphingomyelin-Cholesterol Domains in Phospholipid Membranes: Atomistic Simulation. Biophysical Journal, 2004, 87, 1092-1100.	0.5	161
42	Simulation of the Early Stages of Nano-Domain Formation in Mixed Bilayers of Sphingomyelin, Cholesterol, and Dioleylphosphatidylcholine. Biophysical Journal, 2004, 87, 3312-3322.	0.5	164
43	Identification of the prokaryotic ligand-gated ion channels and their implications for the mechanisms and origins of animal Cys-loop ion channels. Genome Biology, 2004, 6, R4.	9.6	218
44	Ionization States of Residues in OmpF and Mutants: Effects of Dielectric Constant and Interactions between Residues. Biophysical Journal, 2004, 86, 690-704.	0.5	47
45	Electrolytic Transport in Modified Carbon Nanotubes. Nano Letters, 2003, 3, 1399-1403.	9.1	188
46	Anomalously Immobilized Water:â€‰ A New Water Phase Induced by Confinement in Nanotubes. Nano Letters, 2003, 3, 589-592.	9.1	411
47	Sequence-Function Analysis of the K+-Selective Family of Ion Channels Using a Comprehensive Alignment and the KcsA Channel Structure. Biophysical Journal, 2003, 84, 2929-2942.	0.5	112
48	Structure of Sphingomyelin Bilayers: A Simulation Study. Biophysical Journal, 2003, 85, 3624-3635.	0.5	134
49	Cholesterol-Induced Modifications in Lipid Bilayers: A Simulation Study. Biophysical Journal, 2002, 83, 1842-1853.	0.5	225
50	Hierarchical Approach to Predicting Permeation in Ion Channels. Biophysical Journal, 2001, 81, 2473-2483.	0.5	79
51	Molecular Simulation of Dioleoylphosphatidylcholine Lipid Bilayers at Differing Levels of Hydration. Biophysical Journal, 2001, 81, 3005-3015.	0.5	128
52	Combined Monte Carlo and Molecular Dynamics Simulation of Hydrated Lipid-Cholesterol Lipid Bilayers at Low Cholesterol Concentration. Biophysical Journal, 2001, 80, 1104-1114.	0.5	70
53	Motion and meaning. Nature, 2001, 414, 394-394.	27.8	0
54	The biology student workbench project. Biochemistry and Molecular Biology Education, 2001, 29, 165-166.	1.2	2

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55	The biology student workbench project. Biochemistry and Molecular Biology Education, 2001, 29, 165-166.	1.2	1
56	Combined Monte Carlo and molecular dynamics simulation of hydrated dipalmitoylâ€"phosphatidylcholineâ€"cholesterol lipid bilayers. Journal of Chemical Physics, 2001, 114, 5435-5443.	3.0	55
57	Collective motion artifacts arising in long-duration molecular dynamics simulations. Journal of Computational Chemistry, 2000, 21, 121-131.	3.3	59
58	Application of combined Monte Carlo and molecular dynamics method to simulation of dipalmitoyl phosphatidylcholine lipid bilayer. Journal of Computational Chemistry, 1999, 20, 1153-1164.	3.3	47
59	Combined Monte Carlo and Molecular Dynamics Simulation of Fully Hydrated Dioleyl and Palmitoyl-oleyl Phosphatidylcholine Lipid Bilayers. Biophysical Journal, 1999, 77, 2462-2469.	0.5	126
60	Simulation Study of a Gramicidin/Lipid Bilayer System in Excess Water and Lipid. I. Structure of the Molecular Complex. Biophysical Journal, 1999, 76, 1929-1938.	0.5	108
61	Simulation Study of a Gramicidin/Lipid Bilayer System in Excess Water and Lipid. II. Rates and Mechanisms of Water Transport. Biophysical Journal, 1999, 76, 1939-1950.	0.5	71
62	Optimization of Hydrocarbon Chain Interaction Parameters:â€‰ Application to the Simulation of Fluid Phase Lipid Bilayers. Journal of Physical Chemistry B, 1999, 103, 6323-6327.	2.6	59
63	Simulations of lipid membranes with atomic resolution. Computers in Physics, 1998, 12, 328.	0.5	13
64	Functional significance of the A-current. Biological Cybernetics, 1993, 70, 109-114.	1.3	13
65	The theory of ion transport through membrane channels. Progress in Biophysics and Molecular Biology, 1985, 46, 51-96.	2.9	171
66	A fully coupled transient excited state model for the sodium channel. Journal of Mathematical Biology, 1978, 5, 121-142.	1.9	13
67	The Physical Interpretation of Mathematical Models for Sodium Permeability Changes in Excitable Membranes. Biophysical Journal, 1973, 13, 1200-1211.	0.5	15