

Wonpil Im

List of Publications by Year in descending order

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206
papers

25,721
citations

22153

59
h-index

8396

147
g-index

226
all docs

226
docs citations

226
times ranked

19029
citing authors

#	ARTICLE	IF	CITATIONS
1	CHARMM-GUI: A web-based graphical user interface for CHARMM. <i>Journal of Computational Chemistry</i> , 2008, 29, 1859-1865.	3.3	5,402
2	CHARMM-GUI Input Generator for NAMD, GROMACS, AMBER, OpenMM, and CHARMM/OpenMM Simulations Using the CHARMM36 Additive Force Field. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 405-413.	5.3	2,567
3	CHARMM-GUI Membrane Builder toward realistic biological membrane simulations. <i>Journal of Computational Chemistry</i> , 2014, 35, 1997-2004.	3.3	1,802
4	CHARMM-GUI Membrane Builder for Mixed Bilayers and Its Application to Yeast Membranes. <i>Biophysical Journal</i> , 2009, 97, 50-58.	0.5	1,346
5	Automated Builder and Database of Protein/Membrane Complexes for Molecular Dynamics Simulations. <i>PLoS ONE</i> , 2007, 2, e880.	2.5	930
6	Generalized born model with a simple smoothing function. <i>Journal of Computational Chemistry</i> , 2003, 24, 1691-1702.	3.3	642
7	Performance comparison of generalized born and Poisson methods in the calculation of electrostatic solvation energies for protein structures. <i>Journal of Computational Chemistry</i> , 2004, 25, 265-284.	3.3	523
8	Continuum solvation model: Computation of electrostatic forces from numerical solutions to the Poisson-Boltzmann equation. <i>Computer Physics Communications</i> , 1998, 111, 59-75.	7.5	500
9	CHARMM-GUI Membrane Builder for Complex Biological Membrane Simulations with Glycolipids and Lipoglycans. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 775-786.	5.3	388
10	An Implicit Membrane Generalized Born Theory for the Study of Structure, Stability, and Interactions of Membrane Proteins. <i>Biophysical Journal</i> , 2003, 85, 2900-2918.	0.5	384
11	Theoretical and computational models of biological ion channels. <i>Quarterly Reviews of Biophysics</i> , 2004, 37, 15-103.	5.7	362
12	Ion Permeation and Selectivity of OmpF Porin: A Theoretical Study Based on Molecular Dynamics, Brownian Dynamics, and Continuum Electrodiffusion Theory. <i>Journal of Molecular Biology</i> , 2002, 322, 851-869.	4.2	353
13	CHARMM-GUI Martini Maker for Coarse-Grained Simulations with the Martini Force Field. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 4486-4494.	5.3	340
14	Balancing Solvation and Intramolecular Interactions: Toward a Consistent Generalized Born Force Field. <i>Journal of the American Chemical Society</i> , 2006, 128, 3728-3736.	13.7	327
15	CHARMM-GUI ligand reader and modeler for CHARMM force field generation of small molecules. <i>Journal of Computational Chemistry</i> , 2017, 38, 1879-1886.	3.3	311
16	Ions and Counterions in a Biological Channel: A Molecular Dynamics Simulation of OmpF Porin from <i>Escherichia coli</i> in an Explicit Membrane with 1M KCl Aqueous Salt Solution. <i>Journal of Molecular Biology</i> , 2002, 319, 1177-1197.	4.2	252
17	Developing a Fully Glycosylated Full-Length SARS-CoV-2 Spike Protein Model in a Viral Membrane. <i>Journal of Physical Chemistry B</i> , 2020, 124, 7128-7137.	2.6	240
18	A Grand Canonical Monte Carlo-Brownian Dynamics Algorithm for Simulating Ion Channels. <i>Biophysical Journal</i> , 2000, 79, 788-801.	0.5	226

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19	CHARMM-GUI 10 years for biomolecular modeling and simulation. <i>Journal of Computational Chemistry</i> , 2017, 38, 1114-1124.	3.3	224
20	Generalized solvent boundary potential for computer simulations. <i>Journal of Chemical Physics</i> , 2001, 114, 2924-2937.	3.0	223
21	CHARMM-GUI Glycan Modeler for modeling and simulation of carbohydrates and glycoconjugates. <i>Glycobiology</i> , 2019, 29, 320-331.	2.5	222
22	CHARMM-GUI PDB Manipulator for Advanced Modeling and Simulations of Proteins Containing Nonstandard Residues. <i>Advances in Protein Chemistry and Structural Biology</i> , 2014, 96, 235-265.	2.3	214
23	PBEQ-Solver for online visualization of electrostatic potential of biomolecules. <i>Nucleic Acids Research</i> , 2008, 36, W270-W275.	14.5	194
24	Effects of N-glycosylation on protein conformation and dynamics: Protein Data Bank analysis and molecular dynamics simulation study. <i>Scientific Reports</i> , 2015, 5, 8926.	3.3	187
25	Ion Permeation through the β -Hemolysin Channel: Theoretical Studies Based on Brownian Dynamics and Poisson-Nernst-Planck Electrodiffusion Theory. <i>Biophysical Journal</i> , 2004, 87, 2299-2309.	0.5	179
26	CHARMM-GUI supports the Amber force fields. <i>Journal of Chemical Physics</i> , 2020, 153, 035103.	3.0	175
27	Glycan reader: Automated sugar identification and simulation preparation for carbohydrates and glycoproteins. <i>Journal of Computational Chemistry</i> , 2011, 32, 3135-3141.	3.3	172
28	Ion Channels, Permeation, and Electrostatics: Insight into the Function of KcsA. <i>Biochemistry</i> , 2000, 39, 13295-13306.	2.5	167
29	Interfacial folding and membrane insertion of designed peptides studied by molecular dynamics simulations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 6771-6776.	7.1	167
30	Molecular Dynamics and NMR Spectroscopy Studies of E. coli Lipopolysaccharide Structure and Dynamics. <i>Biophysical Journal</i> , 2013, 105, 1444-1455.	0.5	153
31	Improving Protein-Ligand Docking Results with High-Throughput Molecular Dynamics Simulations. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 2189-2198.	5.4	152
32	CHARMM-GUI Martini Maker for modeling and simulation of complex bacterial membranes with lipopolysaccharides. <i>Journal of Computational Chemistry</i> , 2017, 38, 2354-2363.	3.3	150
33	Improving the CHARMM Force Field for Polyunsaturated Fatty Acid Chains. <i>Journal of Physical Chemistry B</i> , 2012, 116, 9424-9431.	2.6	140
34	Implicit solvation based on generalized Born theory in different dielectric environments. <i>Journal of Chemical Physics</i> , 2004, 120, 903-911.	3.0	136
35	E. coli Outer Membrane and Interactions with OmpLA. <i>Biophysical Journal</i> , 2014, 106, 2493-2502.	0.5	128
36	Novel Pyrrolopyrimidine-Based β -Helix Mimetics: Cell-Permeable Inhibitors of Protein-Protein Interactions. <i>Journal of the American Chemical Society</i> , 2011, 133, 676-679.	13.7	121

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37	Molecular dynamics simulations of biological membranes and membrane proteins using enhanced conformational sampling algorithms. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 1635-1651.	2.6	111
38	Cholesterol Flip-Flop: Insights from Free Energy Simulation Studies. <i>Journal of Physical Chemistry B</i> , 2010, 114, 13342-13348.	2.6	109
39	Revisiting Hydrophobic Mismatch with Free Energy Simulation Studies of Transmembrane Helix Tilt and Rotation. <i>Biophysical Journal</i> , 2010, 99, 175-183.	0.5	106
40	Optimized atomic radii for protein continuum electrostatics solvation forces. <i>Biophysical Chemistry</i> , 1999, 78, 89-96.	2.8	99
41	CHARMM-GUI Micelle Builder for Pure/Mixed Micelle and Protein/Micelle Complex Systems. <i>Journal of Chemical Information and Modeling</i> , 2013, 53, 2171-2180.	5.4	99
42	Glycan Reader is improved to recognize most sugar types and chemical modifications in the Protein Data Bank. <i>Bioinformatics</i> , 2017, 33, 3051-3057.	4.1	94
43	Influence of Hydrophobic Mismatch on Structures and Dynamics of Gramicidin A and Lipid Bilayers. <i>Biophysical Journal</i> , 2012, 102, 1551-1560.	0.5	92
44	Imaging the Electrostatic Potential of Transmembrane Channels: Atomic Probe Microscopy of OmpF Porin. <i>Biophysical Journal</i> , 2002, 82, 1667-1676.	0.5	90
45	CHARMM-GUI HMMM Builder for Membrane Simulations with the Highly Mobile Membrane-Mimetic Model. <i>Biophysical Journal</i> , 2015, 109, 2012-2022.	0.5	89
46	Bilayer Properties of Lipid A from Various Gram-Negative Bacteria. <i>Biophysical Journal</i> , 2016, 111, 1750-1760.	0.5	88
47	Biomechanical characterization of SARS-CoV-2 spike RBD and human ACE2 protein-protein interaction. <i>Biophysical Journal</i> , 2021, 120, 1011-1019.	0.5	87
48	Structural, NMR Spectroscopic, and Computational Investigation of Hemin Loading in the Hemophore HasAp from <i>Pseudomonas aeruginosa</i> . <i>Journal of the American Chemical Society</i> , 2010, 132, 9857-9872.	13.7	82
49	A systematic molecular dynamics simulation study of temperature dependent bilayer structural properties. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 2520-2529.	2.6	82
50	Molecular Dynamics Studies of Ion Permeation in VDAC. <i>Biophysical Journal</i> , 2011, 100, 602-610.	0.5	78
51	Membrane Assembly of Simple Helix Homo-Oligomers Studied via Molecular Dynamics Simulations. <i>Biophysical Journal</i> , 2007, 92, 854-863.	0.5	75
52	CHARMM-GUI Ligand Binder for Absolute Binding Free Energy Calculations and Its Application. <i>Journal of Chemical Information and Modeling</i> , 2013, 53, 267-277.	5.4	71
53	L-Met Activates Arabidopsis GLR Ca ²⁺ Channels Upstream of ROS Production and Regulates Stomatal Movement. <i>Cell Reports</i> , 2016, 17, 2553-2561.	6.4	71
54	Brownian dynamics simulations of ions channels: A general treatment of electrostatic reaction fields for molecular pores of arbitrary geometry. <i>Journal of Chemical Physics</i> , 2001, 115, 4850-4861.	3.0	69

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55	Application of torsion angle molecular dynamics for efficient sampling of protein conformations. <i>Journal of Computational Chemistry</i> , 2005, 26, 1565-1578.	3.3	67
56	Differences in the Electrostatic Surfaces of the Type III Secretion Needle Proteins PrgI, BsaL, and MxiH. <i>Journal of Molecular Biology</i> , 2007, 371, 1304-1314.	4.2	66
57	BamA POTRA Domain Interacts with a Native Lipid Membrane Surface. <i>Biophysical Journal</i> , 2016, 110, 2698-2709.	0.5	65
58	De novo Folding of Membrane Proteins: An Exploration of the Structure and NMR Properties of the fd Coat Protein. <i>Journal of Molecular Biology</i> , 2004, 337, 513-519.	4.2	64
59	Generation and application of new rat monoclonal antibodies against synthetic FLAG and OLLAS tags for improved immunodetection. <i>Journal of Immunological Methods</i> , 2008, 331, 27-38.	1.4	64
60	How Tolerant are Membrane Simulations with Mismatch in Area per Lipid between Leaflets?. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 3466-3477.	5.3	64
61	Dynamics and Interactions of OmpF and LPS: Influence on Pore Accessibility and Ion Permeability. <i>Biophysical Journal</i> , 2016, 110, 930-938.	0.5	64
62	Peptide and Protein Folding and Conformational Equilibria: Theoretical Treatment of Electrostatics and Hydrogen Bonding with Implicit Solvent Models. <i>Advances in Protein Chemistry</i> , 2005, 72, 173-198.	4.4	63
63	CHARMM-GUI Input Generator for NAMD, Gromacs, Amber, Openmm, and CHARMM/OpenMM Simulations using the CHARMM36 Additive Force Field. <i>Biophysical Journal</i> , 2016, 110, 641a.	0.5	63
64	Structure, Dynamics, Receptor Binding, and Antibody Binding of the Fully Glycosylated Full-Length SARS-CoV-2 Spike Protein in a Viral Membrane. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 2479-2487.	5.3	62
65	Transmembrane Helix Assembly by Window Exchange Umbrella Sampling. <i>Physical Review Letters</i> , 2012, 108, 108102.	7.8	61
66	Refinement of NMR Structures Using Implicit Solvent and Advanced Sampling Techniques. <i>Journal of the American Chemical Society</i> , 2004, 126, 16038-16047.	13.7	60
67	Transmembrane Helix Tilting: Insights from Calculating the Potential of Mean Force. <i>Physical Review Letters</i> , 2008, 100, 018103.	7.8	60
68	CHARMM-GUI Supports Hydrogen Mass Repartitioning and Different Protonation States of Phosphates in Lipopolysaccharides. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 831-839.	5.4	59
69	CHARMM-GUI Polymer Builder for Modeling and Simulation of Synthetic Polymers. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 2431-2443.	5.3	58
70	CHARMM-GUI Free Energy Calculator for Absolute and Relative Ligand Solvation and Binding Free Energy Simulations. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 7207-7218.	5.3	57
71	Differential Interactions between Human ACE2 and Spike RBD of SARS-CoV-2 Variants of Concern. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7972-7979.	5.3	57
72	Brownian Dynamics Simulations of Ion Transport through the VDAC. <i>Biophysical Journal</i> , 2011, 100, 611-619.	0.5	56

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73	Potential pharmacological chaperones targeting cancer-associated MCL-1 and Parkinson disease-associated α -synuclein. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11007-11012.	7.1	55
74	CHARMM-GUI Nanomaterial Modeler for Modeling and Simulation of Nanomaterial Systems. Journal of Chemical Theory and Computation, 2022, 18, 479-493.	5.3	53
75	Clustering and dynamics of crowded proteins near membranes and their influence on membrane bending. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24562-24567.	7.1	52
76	An extensive simulation study of lipid bilayer properties with different head groups, acyl chain lengths, and chain saturations. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 3093-3104.	2.6	51
77	Challenges in structural approaches to cell modeling. Journal of Molecular Biology, 2016, 428, 2943-2964.	4.2	51
78	Refinement of OprH-LPS Interactions by Molecular Simulations. Biophysical Journal, 2017, 112, 346-355.	0.5	50
79	Glycan fragment database: a database of PDB-based glycan 3D structures. Nucleic Acids Research, 2012, 41, D470-D474.	14.5	49
80	Gramicidin A Channel Formation Induces Local Lipid Redistribution I: Experiment and Simulation. Biophysical Journal, 2017, 112, 1185-1197.	0.5	48
81	CHARMM-GUI PACE CG Builder for Solution, Micelle, and Bilayer Coarse-Grained Simulations. Journal of Chemical Information and Modeling, 2014, 54, 1003-1009.	5.4	47
82	Influence of Cholesterol on Phospholipid Bilayer Structure and Dynamics. Journal of Physical Chemistry B, 2016, 120, 11761-11772.	2.6	47
83	Molecular Simulations of Gram-Negative Bacterial Membranes Come of Age. Annual Review of Physical Chemistry, 2020, 71, 171-188.	10.8	44
84	Web interface for brownian dynamics simulation of ion transport and its applications to beta-barrel pores. Journal of Computational Chemistry, 2012, 33, 331-339.	3.3	43
85	Modeling and simulation of bacterial outer membranes and interactions with membrane proteins. Current Opinion in Structural Biology, 2017, 43, 131-140.	5.7	42
86	CHARMM-GUI Nanodisc Builder for modeling and simulation of various nanodisc systems. Journal of Computational Chemistry, 2019, 40, 893-899.	3.3	42
87	Application of Binding Free Energy Calculations to Prediction of Binding Modes and Affinities of MDM2 and MDMX Inhibitors. Journal of Chemical Information and Modeling, 2012, 52, 1821-1832.	5.4	41
88	Influence of Ganglioside GM1 Concentration on Lipid Clustering and Membrane Properties and Curvature. Biophysical Journal, 2016, 111, 1987-1999.	0.5	41
89	Lipopolysaccharide Membrane Building and Simulation. Methods in Molecular Biology, 2015, 1273, 391-406.	0.9	41
90	A conserved α β transmembrane interface forms the core of a compact T-cell receptor-CD3 structure within the membrane. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6649-E6658.	7.1	40

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91	Implementation and application of helix-helix distance and crossing angle restraint potentials. <i>Journal of Computational Chemistry</i> , 2007, 28, 669-680.	3.3	39
92	Unfolding of a ClC chloride transporter retains memory of its evolutionary history. <i>Nature Chemical Biology</i> , 2018, 14, 489-496.	8.0	39
93	Additive CHARMM36 Force Field for Nonstandard Amino Acids. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 3554-3570.	5.3	39
94	Role of Hydrogen Bonding and Helix-Lipid Interactions in Transmembrane Helix Association. <i>Journal of the American Chemical Society</i> , 2008, 130, 6456-6462.	13.7	38
95	Two Dimensional Window Exchange Umbrella Sampling for Transmembrane Helix Assembly. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 13-17.	5.3	38
96	Preferred Orientations of Phosphoinositides in Bilayers and Their Implications in Protein Recognition Mechanisms. <i>Journal of Physical Chemistry B</i> , 2014, 118, 4315-4325.	2.6	38
97	Electrostatic free energy calculations using the generalized solvent boundary potential method. <i>Journal of Chemical Physics</i> , 2002, 117, 7381-7388.	3.0	37
98	The Structure of a Sugar Transporter of the Glucose EIIC Superfamily Provides Insight into the Elevator Mechanism of Membrane Transport. <i>Structure</i> , 2016, 24, 956-964.	3.3	37
99	Generation of native-like protein structures from limited NMR data, modern force fields and advanced conformational sampling. <i>Journal of Biomolecular NMR</i> , 2005, 31, 59-64.	2.8	36
100	Restraint potential and free energy decomposition formalism for helical tilting. <i>Chemical Physics Letters</i> , 2007, 441, 132-135.	2.6	34
101	Preferred conformations of N-glycan core pentasaccharide in solution and in glycoproteins. <i>Glycobiology</i> , 2016, 26, cwv083.	2.5	34
102	Transmembrane Signaling of Chemotaxis Receptor Tar: Insights from Molecular Dynamics Simulation Studies. <i>Biophysical Journal</i> , 2011, 100, 2955-2963.	0.5	33
103	Probing the U-Shaped Conformation of Caveolin-1 in a Bilayer. <i>Biophysical Journal</i> , 2014, 106, 1371-1380.	0.5	33
104	GÅŁOSA: An efficient computational tool for local structure-centric biological studies and drug design. <i>Protein Science</i> , 2016, 25, 865-876.	7.6	33
105	Multidimensional umbrella sampling and replica-exchange molecular dynamics simulations for structure prediction of transmembrane helix dimers. <i>Journal of Computational Chemistry</i> , 2014, 35, 300-308.	3.3	32
106	Transmembrane features governing Fc receptor CD16A assembly with CD16A signaling adaptor molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E5645-E5654.	7.1	32
107	Comparative Molecular Dynamics Simulation Studies of Realistic Eukaryotic, Prokaryotic, and Archaeal Membranes. <i>Journal of Chemical Information and Modeling</i> , 2022, 62, 1036-1051.	5.4	32
108	Effects of N-Glycan Composition on Structure and Dynamics of IgG1 Fc and Their Implications for Antibody Engineering. <i>Scientific Reports</i> , 2017, 7, 12659.	3.3	31

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109	Biophysical and functional characterization of Norrin signaling through Frizzled4. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8787-8792.	7.1	30
110	Application of solid-state NMR restraint potentials in membrane protein modeling. Journal of Magnetic Resonance, 2008, 193, 68-76.	2.1	29
111	Transmembrane Helix Orientation and Dynamics: Insights from Ensemble Dynamics with Solid-State NMR Observables. Biophysical Journal, 2011, 100, 2913-2921.	0.5	29
112	Restricted N-glycan Conformational Space in the PDB and Its Implication in Glycan Structure Modeling. PLoS Computational Biology, 2013, 9, e1002946.	3.2	29
113	Synthetic Immunotherapeutics against Gram-negative Pathogens. Cell Chemical Biology, 2018, 25, 1185-1194.e5.	5.2	29
114	Protein-protein interactions in actin-myosin binding and structural effects of R405Q mutation: A molecular dynamics study. Proteins: Structure, Function and Bioinformatics, 2006, 64, 156-166.	2.6	28
115	Accurate simulation of surfaces and interfaces of ten FCC metals and steel using Lennard-Jones potentials. Npj Computational Materials, 2021, 7, .	8.7	28
116	Physical Properties of Bacterial Outer Membrane Models: Neutron Reflectometry & Molecular Simulation. Biophysical Journal, 2019, 116, 1095-1104.	0.5	27
117	Orientation of Fluorescent Lipid Analogue BODIPY-PC to Probe Lipid Membrane Properties: Insights from Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2011, 115, 6157-6165.	2.6	26
118	Modeling and Simulation of Bacterial Outer Membranes with Lipopolysaccharides and Enterobacterial Common Antigen. Journal of Physical Chemistry B, 2020, 124, 5948-5956.	2.6	26
119	Identification of Ligand Templates using Local Structure Alignment for Structure-Based Drug Design. Journal of Chemical Information and Modeling, 2012, 52, 2784-2795.	5.4	25
120	NMR Observable-Based Structure Refinement of DAP12-NKG2C Activating Immunoreceptor Complex in Explicit Membranes. Biophysical Journal, 2012, 102, L27-L29.	0.5	25
121	CHARMM-GUI Membrane Builder for Lipid Nanoparticles with Ionizable Cationic Lipids and PEGylated Lipids. Journal of Chemical Information and Modeling, 2021, 61, 5192-5202.	5.4	25
122	CHARMM-GUI MDFF/xMDFF Utilizer for Molecular Dynamics Flexible Fitting Simulations in Various Environments. Journal of Physical Chemistry B, 2017, 121, 3718-3723.	2.6	24
123	Structural Insight into Phospholipid Transport by the MlaFEBD Complex from P. aeruginosa. Journal of Molecular Biology, 2021, 433, 166986.	4.2	24
124	CHARMM-GUI Free Energy Calculator for Practical Ligand Binding Free Energy Simulations with AMBER. Journal of Chemical Information and Modeling, 2021, 61, 4145-4151.	5.4	24
125	<sc>CHARMM-GUI</sc> Drude prepper for molecular dynamics simulation using the classical Drude polarizable force field. Journal of Computational Chemistry, 2022, 43, 359-375.	3.3	24
126	Molecular dynamics studies on structure and dynamics of phospholamban monomer and pentamer in membranes. Proteins: Structure, Function and Bioinformatics, 2009, 76, 86-98.	2.6	22

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127	Gramicidin A Channel Formation Induces Local Lipid Redistribution II: A 3D Continuum Elastic Model. <i>Biophysical Journal</i> , 2017, 112, 1198-1213.	0.5	22
128	Site-Specific Lipidation Enhances IFITM3 Membrane Interactions and Antiviral Activity. <i>ACS Chemical Biology</i> , 2021, 16, 844-856.	3.4	22
129	All-atom molecular dynamics simulations of Synaptotagmin-SNARE-complexin complexes bridging a vesicle and a flat lipid bilayer. <i>ELife</i> , 0, 11, .	6.0	22
130	Ligand Binding Site Detection by Local Structure Alignment and Its Performance Complementarity. <i>Journal of Chemical Information and Modeling</i> , 2013, 53, 2462-2470.	5.4	21
131	Lipid-Linked Oligosaccharides in Membranes Sample Conformations That Facilitate Binding to Oligosaccharyltransferase. <i>Biophysical Journal</i> , 2014, 107, 1885-1895.	0.5	21
132	Theory of Adaptive Optimization for Umbrella Sampling. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 2719-2728.	5.3	21
133	Novel free energy calculations to explore mechanisms and energetics of membrane protein structure and function. <i>Journal of Computational Chemistry</i> , 2009, 30, 1622-1633.	3.3	20
134	Protegrin-1 orientation and physicochemical properties in membrane bilayers studied by potential of mean force calculations. <i>Journal of Computational Chemistry</i> , 2010, 31, 2859-2867.	3.3	20
135	Assessing smectic liquid-crystal continuum models for elastic bilayer deformations. <i>Chemistry and Physics of Lipids</i> , 2013, 169, 19-26.	3.2	20
136	Transmembrane Complexes of DAP12 Crystallized in Lipid Membranes Provide Insights into Control of Oligomerization in Immunoreceptor Assembly. <i>Cell Reports</i> , 2015, 11, 1184-1192.	6.4	20
137	Structural basis of neuropeptide Y signaling through Y1 receptor. <i>Nature Communications</i> , 2022, 13, 853.	12.8	20
138	Molecular dynamics simulation strategies for protein-micelle complexes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 1566-1572.	2.6	19
139	CHARMM-GUI DEER facilitator for spin-pair distance distribution calculations and preparation of restrained-ensemble molecular dynamics simulations. <i>Journal of Computational Chemistry</i> , 2020, 41, 415-420.	3.3	19
140	Mutually constructive roles of Ail and LPS in <i>Yersinia pestis</i> serum survival. <i>Molecular Microbiology</i> , 2020, 114, 510-520.	2.5	19
141	Ligand-Binding-Site Refinement to Generate Reliable Holo Protein Structure Conformations from Apo Structures. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 535-546.	5.4	19
142	Comparative Molecular Dynamics Simulation Studies of Protegrin-1 Monomer and Dimer in Two Different Lipid Bilayers. <i>Biophysical Journal</i> , 2009, 97, 787-795.	0.5	18
143	A Repulsive Electrostatic Mechanism for Protein Export through the Type III Secretion Apparatus. <i>Biophysical Journal</i> , 2010, 98, 452-461.	0.5	18
144	NMR-Based Simulation Studies of Pf1 Coat Protein in Explicit Membranes. <i>Biophysical Journal</i> , 2013, 105, 691-698.	0.5	18

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145	Insight into Early-Stage Unfolding of GPI-Anchored Human Prion Protein. <i>Biophysical Journal</i> , 2015, 109, 2090-2100.	0.5	18
146	Structure of an EIIC sugar transporter trapped in an inward-facing conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5962-5967.	7.1	18
147	Augmenting the antinociceptive effects of nicotinic acetylcholine receptor activity through lynx1 modulation. <i>PLoS ONE</i> , 2018, 13, e0199643.	2.5	18
148	Structural basis for the association of PLEKHA7 with membrane-embedded phosphatidylinositol lipids. <i>Structure</i> , 2021, 29, 1029-1039.e3.	3.3	18
149	Solid-State NMR Ensemble Dynamics as a Mediator between Experiment and Simulation. <i>Biophysical Journal</i> , 2011, 100, 2922-2928.	0.5	17
150	Conformational Dynamics of the Lipopolysaccharide from <i>Escherichia coli</i> O91 Revealed by Nuclear Magnetic Resonance Spectroscopy and Molecular Simulations. <i>Biochemistry</i> , 2017, 56, 3826-3839.	2.5	17
151	Membrane Tension, Lipid Adaptation, Conformational Changes, and Energetics in MscL Gating. <i>Biophysical Journal</i> , 2011, 101, 671-679.	0.5	16
152	Ligand-Binding-Site Structure Refinement Using Molecular Dynamics with Restraints Derived from Predicted Binding Site Templates. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 6524-6535.	5.3	16
153	Roles of glycans in interactions between gp120 and HIV broadly neutralizing antibodies. <i>Glycobiology</i> , 2015, 26, cwv101.	2.5	15
154	Converting One-Face α -Helix Mimetics into Amphiphilic α -Helix Mimetics as Potent Inhibitors of Protein-Protein Interactions. <i>ACS Combinatorial Science</i> , 2016, 18, 36-42.	3.8	15
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