

# Philippe H Hnenberger

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

124  
papers

9,411  
citations

48  
h-index

96  
g-index

128  
ext. papers

10,238  
ext. citations

4.3  
avg, IF

6.3  
L-index

#	Paper	IF	Citations
124	RestraintMaker: a graph-based approach to select distance restraints in free-energy calculations with dual topology.. <i>Journal of Computer-Aided Molecular Design</i> , <b>2022</b> , 36, 175	4.2	0
123	Evaluation of nine condensed-phase force fields of the GROMOS, CHARMM, OPLS, AMBER, and OpenFF families against experimental cross-solvation free energies. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 13055-13074	3.6	3
122	Systematic optimization of a fragment-based force field against experimental pure-liquid properties considering large compound families: application to oxygen and nitrogen compounds. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 17774-17793	3.6	1
121	Solvent-scaling as an alternative to coarse-graining in adaptive-resolution simulations: The adaptive solvent-scaling (AdSoS) scheme. <i>Journal of Chemical Physics</i> , <b>2021</b> , 155, 094107	3.9	1
120	Efficient Alchemical Intermediate States in Free Energy Calculations Using $\Xi$ Enveloping Distribution Sampling. <i>Journal of Chemical Theory and Computation</i> , <b>2021</b> , 17, 5805-5815	6.4	2
119	On the Effect of the Various Assumptions and Approximations used in Molecular Simulations on the Properties of Bio-Molecular Systems: Overview and Perspective on Issues. <i>ChemPhysChem</i> , <b>2021</b> , 22, 264-282	3.2	2
118	Evaluating Classical Force Fields against Experimental Cross-Solvation Free Energies. <i>Journal of Chemical Theory and Computation</i> , <b>2020</b> , 16, 7556-7580	6.4	13
117	The Conveyor Belt Umbrella Sampling (CBUS) Scheme: Principle and Application to the Calculation of the Absolute Binding Free Energies of Alkali Cations to Crown Ethers. <i>Journal of Chemical Theory and Computation</i> , <b>2020</b> , 16, 2474-2493	6.4	1
116	Interfacial solvation can explain attraction between like-charged objects in aqueous solution. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 104713	3.9	7
115	Overcoming Orthogonal Barriers in Alchemical Free Energy Calculations: On the Relative Merits of $\Xi$ Variations, $\Xi$ Extrapolations, and Biasing. <i>Journal of Chemical Theory and Computation</i> , <b>2020</b> , 16, 1630-1645	6.4	12
114	Reaction-field electrostatics in molecular dynamics simulations: development of a conservative scheme compatible with an atomic cutoff. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 26419-26437	3.6	8
113	Systematic Optimization of a Fragment-Based Force Field against Experimental Pure-Liquid Properties Considering Large Compound Families: Application to Saturated Haloalkanes. <i>Journal of Chemical Theory and Computation</i> , <b>2020</b> , 16, 7525-7555	6.4	9
112	An Alternative to Conventional $\Xi$ Intermediate States in Alchemical Free Energy Calculations: $\Xi$ Enveloping Distribution Sampling. <i>Journal of Chemical Information and Modeling</i> , <b>2020</b> , 60, 5407-5423	6.1	10
111	Influence of the Treatment of Nonbonded Interactions on the Thermodynamic and Transport Properties of Pure Liquids Calculated Using the 2016H66 Force Field. <i>Journal of Chemical Theory and Computation</i> , <b>2019</b> , 15, 1806-1826	6.4	17
110	Vase-Kite Equilibrium of Resorcin[4]arene Cavitands Investigated Using Molecular Dynamics Simulations with Ball-and-Stick Local Elevation Umbrella Sampling. <i>Helvetica Chimica Acta</i> , <b>2019</b> , 102, e1900060	2	3
109	Alchemical Free-Energy Calculations by Multiple-Replica $\Xi$ Dynamics: The Conveyor Belt Thermodynamic Integration Scheme. <i>Journal of Chemical Theory and Computation</i> , <b>2019</b> , 15, 2392-2419	6.4	13
108	Absolute proton hydration free energy, surface potential of water, and redox potential of the hydrogen electrode from first principles: QM/MM MD free-energy simulations of sodium and potassium hydration. <i>Journal of Chemical Physics</i> , <b>2018</b> , 148, 222814	3.9	55

107	Single-Ion Thermodynamics from First Principles: Calculation of the Absolute Hydration Free Energy and Single-Electrode Potential of Aqueous Li Using ab Initio Quantum Mechanical/Molecular Mechanical Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , <b>2018</b> , 14, 6443-6459	6.4	9
106	Simulating Bilayers of Nonionic Surfactants with the GROMOS-Compatible 2016H66 Force Field. <i>Langmuir</i> , <b>2017</b> , 33, 10225-10238	4	9
105	Solvent-Modulated Influence of Intramolecular Hydrogen-Bonding on the Conformational Properties of the Hydroxymethyl Group in Glucose and Galactose: A Molecular Dynamics Simulation Study. <i>Helvetica Chimica Acta</i> , <b>2017</b> , 100, e1600158	2	7
104	A GROMOS-Compatible Force Field for Small Organic Molecules in the Condensed Phase: The 2016H66 Parameter Set. <i>Journal of Chemical Theory and Computation</i> , <b>2016</b> , 12, 3825-50	6.4	75
103	Revision of the GROMOS 56A6(CARBO) force field: Improving the description of ring-conformational equilibria in hexopyranose-based carbohydrates chains. <i>Journal of Computational Chemistry</i> , <b>2016</b> , 37, 354-65	3.5	65
102	Origin of Asymmetric Solvation Effects for Ions in Water and Organic Solvents Investigated Using Molecular Dynamics Simulations: The Swain Acidity-Basicity Scale Revisited. <i>Journal of Physical Chemistry B</i> , <b>2016</b> , 120, 8485-517	3.4	31
101	Multistate Local-elevation umbrella-sampling (MS-LEUS): method and application to the complexation of cations by crown ethers. <i>Journal of Chemical Theory and Computation</i> , <b>2015</b> , 11, 2575-88	6.4	13
100	On the ambiguity of conformational states: A B&S-LEUS simulation study of the helical conformations of decaalanine in water. <i>Journal of Chemical Physics</i> , <b>2015</b> , 142, 165102	3.9	4
99	Long-timescale motions in glycerol-monopalmitate lipid bilayers investigated using molecular dynamics simulation. <i>Journal of Molecular Graphics and Modelling</i> , <b>2015</b> , 55, 48-64	2.8	6
98	Effect of methanol on the phase-transition properties of glycerol-monopalmitate lipid bilayers investigated using molecular dynamics simulations: in quest of the biphasic effect. <i>Journal of Molecular Graphics and Modelling</i> , <b>2015</b> , 55, 85-104	2.8	8
97	Orthogonal sampling in free-energy calculations of residue mutations in a tripeptide: TI versus LEUS. <i>Journal of Computational Chemistry</i> , <b>2015</b> , 36, 1686-97	3.5	10
96	Phase-transition properties of glycerol-dipalmitate lipid bilayers investigated using molecular dynamics simulation. <i>Journal of Molecular Graphics and Modelling</i> , <b>2015</b> , 59, 136-47	2.8	2
95	Flexible Boundaries for Multiresolution Solvation: An Algorithm for Spatial Multiscaling in Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , <b>2015</b> , 11, 5447-63	6.4	11
94	Local Elevation Umbrella Sampling Applied to the Calculation of Alchemical Free-Energy Changes via Dynamics: The LEUS Scheme. <i>Journal of Chemical Theory and Computation</i> , <b>2014</b> , 10, 3006-22	6.4	16
93	Communication: estimating the initial biasing potential for Local-elevation umbrella-sampling (LEUS) simulations via slow growth. <i>Journal of Chemical Physics</i> , <b>2014</b> , 141, 201101	3.9	10
92	Effect of the cosolutes trehalose and methanol on the equilibrium and phase-transition properties of glycerol-monopalmitate lipid bilayers investigated using molecular dynamics simulations. <i>European Biophysics Journal</i> , <b>2014</b> , 43, 517-44	1.9	10
91	Intramolecular hydrogen-bonding in aqueous carbohydrates as a cause or consequence of conformational preferences: a molecular dynamics study of cellobiose stereoisomers. <i>European Biophysics Journal</i> , <b>2013</b> , 42, 521-37	1.9	40
90	Calculating the binding free energies of charged species based on explicit-solvent simulations employing lattice-sum methods: an accurate correction scheme for electrostatic finite-size effects. <i>Journal of Chemical Physics</i> , <b>2013</b> , 139, 184103	3.9	143

89	Efficient Combination of Environment Change and Alchemical Perturbation within the Enveloping Distribution Sampling (EDS) Scheme: Twin-System EDS and Application to the Determination of Octanol-Water Partition Coefficients. <i>Journal of Chemical Theory and Computation</i> , <b>2013</b> , 9, 1334-46	6.4	14
88	Phase-transition properties of glycerol-monopalmitate lipid bilayers investigated by molecular dynamics simulation: influence of the system size and force-field parameters. <i>Molecular Simulation</i> , <b>2013</b> , 39, 563-583	2	10
87	New functionalities in the GROMOS biomolecular simulation software. <i>Journal of Computational Chemistry</i> , <b>2012</b> , 33, 340-53	3.5	91
86	New Interaction Parameters for Charged Amino Acid Side Chains in the GROMOS Force Field. <i>Journal of Chemical Theory and Computation</i> , <b>2012</b> , 8, 3705-23	6.4	154
85	Calculation of Derivative Thermodynamic Hydration and Aqueous Partial Molar Properties of Ions Based on Atomistic Simulations. <i>Journal of Chemical Theory and Computation</i> , <b>2012</b> , 8, 3542-64	6.4	11
84	A GROMOS Parameter Set for Vicinal Diether Functions: Properties of Polyethyleneoxide and Polyethyleneglycol. <i>Journal of Chemical Theory and Computation</i> , <b>2012</b> , 8, 3943-63	6.4	56
83	Wilfred van Gunsteren: 35 Years of Biomolecular Simulation. <i>Journal of Chemical Theory and Computation</i> , <b>2012</b> , 8, 3425-9	6.4	0
82	Reoptimized interaction parameters for the peptide-backbone model compound N-methylacetamide in the GROMOS force field: influence on the folding properties of two beta-peptides in methanol. <i>Journal of Computational Chemistry</i> , <b>2012</b> , 33, 1907-17	3.5	12
81	Temperature dependence of the dielectric permittivity of acetic acid, propionic acid and their methyl esters: a molecular dynamics simulation study. <i>ChemPhysChem</i> , <b>2012</b> , 13, 1182-90	3.2	17
80	Calculation of relative free energies for ligand-protein binding, solvation, and conformational transitions using the GROMOS software. <i>Journal of Physical Chemistry B</i> , <b>2011</b> , 115, 13570-7	3.4	66
79	Computation of methodology-independent single-ion solvation properties from molecular simulations. III. Correction terms for the solvation free energies, enthalpies, entropies, heat capacities, volumes, compressibilities, and expansivities of solvated ions. <i>Journal of Chemical Physics</i> , <b>2011</b> , 134, 144103	3.9	60
78	New Interaction Parameters for Oxygen Compounds in the GROMOS Force Field: Improved Pure-Liquid and Solvation Properties for Alcohols, Ethers, Aldehydes, Ketones, Carboxylic Acids, and Esters. <i>Journal of Chemical Theory and Computation</i> , <b>2011</b> , 7, 1016-31	6.4	93
77	Preferential affinity of the components of liquid mixtures at a rigid non-polar surface: enthalpic and entropic driving forces. <i>ChemPhysChem</i> , <b>2011</b> , 12, 3214-23	3.2	3
76	A reoptimized GROMOS force field for hexopyranose-based carbohydrates accounting for the relative free energies of ring conformers, anomers, epimers, hydroxymethyl rotamers, and glycosidic linkage conformers. <i>Journal of Computational Chemistry</i> , <b>2011</b> , 32, 998-1032	3.5	128
75	Enantiomeric segregation in the gel phase of lipid bilayers. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 8464-6	16.4	11
74	Computation of methodology-independent single-ion solvation properties from molecular simulations. IV. Optimized Lennard-Jones interaction parameter sets for the alkali and halide ions in water. <i>Journal of Chemical Physics</i> , <b>2011</b> , 134, 144104	3.9	117
73	Interaction of alginate single-chain polyguluronate segments with mono- and divalent metal cations: a comparative molecular dynamics study. <i>Molecular Simulation</i> , <b>2010</b> , 36, 778-795	2	24
72	Enhanced Conformational Sampling in Molecular Dynamics Simulations of Solvated Peptides: Fragment-Based Local Elevation Umbrella Sampling. <i>Journal of Chemical Theory and Computation</i> , <b>2010</b> , 6, 2598-621	6.4	24

71	Theoretical Investigation of Solvent Effects on Glycosylation Reactions: Stereoselectivity Controlled by Preferential Conformations of the Intermediate Oxacarbenium-Counterion Complex. <i>Journal of Chemical Theory and Computation</i> , <b>2010</b> , 6, 1783-97	6.4	114
70	Molecular dynamics simulations of the interaction between polyhydroxylated compounds and Lennard-Jones walls: preferential affinity/exclusion effects and their relevance for bioprotection. <i>Molecular Simulation</i> , <b>2010</b> , 36, 708-728	2	6
69	Ball-and-Stick Local Elevation Umbrella Sampling: Molecular Simulations Involving Enhanced Sampling within Conformational or Alchemical Subspaces of Low Internal Dimensionalities, Minimal Irrelevant Volumes, and Problem-Adapted Geometries. <i>Journal of Chemical Theory and Computation</i> , <b>2010</b> , 6, 2622-46	6.4	28
68	Simulating the Transition between Gel and Liquid-Crystal Phases of Lipid Bilayers: Dependence of the Transition Temperature on the Hydration Level. <i>Journal of Chemical Theory and Computation</i> , <b>2010</b> , 6, 2488-500	6.4	25
67	Residual structure in a peptide fragment of the outer membrane protein X under denaturing conditions: a molecular dynamics study. <i>European Biophysics Journal</i> , <b>2010</b> , 39, 1421-32	1.9	6
66	Conformational properties of glucose-based disaccharides investigated using molecular dynamics simulations with local elevation umbrella sampling. <i>Carbohydrate Research</i> , <b>2010</b> , 345, 1781-801	2.9	111
65	Interaction of the disaccharides trehalose and gentiobiose with lipid bilayers: a comparative molecular dynamics study. <i>Journal of Molecular Graphics and Modelling</i> , <b>2010</b> , 29, 331-46	2.8	30
64	Using the local elevation method to construct optimized umbrella sampling potentials: calculation of the relative free energies and interconversion barriers of glucopyranose ring conformers in water. <i>Journal of Computational Chemistry</i> , <b>2010</b> , 31, 1-23	3.5	90
63	In the eye of the beholder: Inhomogeneous distribution of high-resolution shapes within the random-walk ensemble. <i>Journal of Chemical Physics</i> , <b>2009</b> , 130, 214904	3.9	2
62	Absolute Single-Molecule Entropies from Quasi-Harmonic Analysis of Microsecond Molecular Dynamics: Correction Terms and Convergence Properties. <i>Journal of Chemical Theory and Computation</i> , <b>2009</b> , 5, 3150-3160	6.4	68
61	Molecular dynamics simulations of a reversibly folding beta-heptapeptide in methanol: influence of the treatment of long-range electrostatic interactions. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 3112-28	3.4	65
60	Martini Coarse-Grained Force Field: Extension to Carbohydrates. <i>Journal of Chemical Theory and Computation</i> , <b>2009</b> , 5, 3195-210	6.4	302
59	Effect of trehalose on a phospholipid membrane under mechanical stress. <i>Biophysical Journal</i> , <b>2008</b> , 95, 3525-34	2.9	40
58	Car-Parrinello Molecular Dynamics Simulations of CaCl <sub>2</sub> Aqueous Solutions. <i>Journal of Chemical Theory and Computation</i> , <b>2008</b> , 4, 779-89	6.4	63
57	The influence of polyhydroxylated compounds on a hydrated phospholipid bilayer: a molecular dynamics study. <i>Molecular Simulation</i> , <b>2008</b> , 34, 403-420	2	31
56	Conformation, dynamics and ion-binding properties of single-chain polyuronates: a molecular dynamics study. <i>Molecular Simulation</i> , <b>2008</b> , 34, 421-446	2	29
55	Explicit-solvent molecular dynamics simulations of a DNA tetradecanucleotide duplex: lattice-sum versus reaction-field electrostatics. <i>Molecular Simulation</i> , <b>2008</b> , 34, 491-499	2	13
54	Explicit-solvent molecular dynamics simulations of the polysaccharide schizophyllan in water. <i>Biophysical Journal</i> , <b>2007</b> , 93, 442-55	2.9	50

53	Molecular dynamics simulations of the native and partially folded states of ubiquitin: influence of methanol cosolvent, pH, and temperature on the protein structure and dynamics. <i>Protein Science</i> , <b>2007</b> , 16, 1101-18	6.3	43
52	On the relative stabilities of the alkali cations 222 cryptates in the gas phase and in water-methanol solution. <i>Journal of Molecular Modeling</i> , <b>2007</b> , 13, 1017-25	2	7
51	Conformation, dynamics, solvation and relative stabilities of selected beta-hexopyranoses in water: a molecular dynamics study with the GROMOS 45A4 force field. <i>Carbohydrate Research</i> , <b>2007</b> , 342, 2097-2124	7.1	71
50	Biomolecular modeling: Goals, problems, perspectives. <i>Angewandte Chemie - International Edition</i> , <b>2006</b> , 45, 4064-92	16.4	441
49	A multiple time step algorithm compatible with a large number of distance classes and an arbitrary distance dependence of the time step size for the fast evaluation of nonbonded interactions in molecular simulations. <i>Journal of Computational Chemistry</i> , <b>2006</b> , 27, 1163-76	3.5	5
48	Biomolekulare Modellierung: Ziele, Probleme, Perspektiven. <i>Angewandte Chemie</i> , <b>2006</b> , 118, 4168-4198	3.6	29
47	Computation of methodology-independent ionic solvation free energies from molecular simulations. I. The electrostatic potential in molecular liquids. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 124106	3.9	130
46	Computation of methodology-independent ionic solvation free energies from molecular simulations. II. The hydration free energy of the sodium cation. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 224501	3.9	163
45	Development of a lattice-sum method emulating nonperiodic boundary conditions for the treatment of electrostatic interactions in molecular simulations: a continuum-electrostatics study. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 124108	3.9	12
44	Comparison of atomic-level and coarse-grained models for liquid hydrocarbons from molecular dynamics configurational entropy estimates. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 8464-73	3.4	55
43	Conformational and dynamical properties of disaccharides in water: a molecular dynamics study. <i>Biophysical Journal</i> , <b>2006</b> , 90, 4337-44	2.9	92
42	The transition between the B and Z conformations of DNA investigated by targeted molecular dynamics simulations with explicit solvation. <i>Biophysical Journal</i> , <b>2006</b> , 91, 2976-90	2.9	38
41	Configurational entropies of lipids in pure and mixed bilayers from atomic-level and coarse-grained molecular dynamics simulations. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 15602-14	3.4	55
40	Interaction of the sugars trehalose, maltose and glucose with a phospholipid bilayer: a comparative molecular dynamics study. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 15572-81	3.4	85
39	Molecular dynamics simulations of phospholipid bilayers: Influence of artificial periodicity, system size, and simulation time. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 11643-52	3.4	65
38	Use of molecular dynamics in the design and structure determination of a photoinducible beta-hairpin. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 4935-42	16.4	29
37	Thermostat Algorithms for Molecular Dynamics Simulations. <i>Advances in Polymer Science</i> , <b>2005</b> , 105-149	1.3	321
36	Measuring 1H-1H and 1H-13C RDCs in methyl groups: example of pulse sequences with numerically optimized coherence transfer schemes. <i>Journal of Magnetic Resonance</i> , <b>2005</b> , 172, 36-47	3	3

35	An improved nucleic acid parameter set for the GROMOS force field. <i>Journal of Computational Chemistry</i> , <b>2005</b> , 26, 725-37	3.5	147
34	A new GROMOS force field for hexopyranose-based carbohydrates. <i>Journal of Computational Chemistry</i> , <b>2005</b> , 26, 1400-12	3.5	264
33	The GROMOS software for biomolecular simulation: GROMOS05. <i>Journal of Computational Chemistry</i> , <b>2005</b> , 26, 1719-51	3.5	514
32	Combining the lattice-sum and reaction-field approaches for evaluating long-range electrostatic interactions in molecular simulations. <i>Journal of Chemical Physics</i> , <b>2005</b> , 123, 34107	3.9	44
31	Trehalose-protein interaction in aqueous solution. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 55, 177-86	4.2	178
30	A fast pairlist-construction algorithm for molecular simulations under periodic boundary conditions. <i>Journal of Computational Chemistry</i> , <b>2004</b> , 25, 1474-86	3.5	45
29	Explicit-Solvent Molecular Dynamics Simulations of the $\alpha$ (1-3)- and $\alpha$ (1-6)-Linked Disaccharides $\beta$ -Laminaribiose and $\beta$ -Gentiobiose in Water. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 5815-5826	3.4	30
28	pH-Dependent Stability of a Decalysine $\alpha$ -Helix Studied by Explicit-Solvent Molecular Dynamics Simulations at Constant pH. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 13551-13559	3.4	49
27	Influence of Artificial Periodicity and Ionic Strength in Molecular Dynamics Simulations of Charged Biomolecules Employing Lattice-Sum Methods. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 774-788	3.4	117
26	Interaction of the disaccharide trehalose with a phospholipid bilayer: a molecular dynamics study. <i>Biophysical Journal</i> , <b>2004</b> , 86, 2273-85	2.9	139
25	Molecular dynamics simulation of highly charged proteins: comparison of the particle-particle particle-mesh and reaction field methods for the calculation of electrostatic interactions. <i>Protein Science</i> , <b>2003</b> , 12, 2161-72	6.3	37
24	Effect of mutations involving charged residues on the stability of staphylococcal nuclease: a continuum electrostatics study. <i>Protein Engineering, Design and Selection</i> , <b>2003</b> , 16, 831-40	1.9	7
23	Influence of cut-off truncation and artificial periodicity of electrostatic interactions in molecular simulations of solvated ions: A continuum electrostatics study. <i>Journal of Chemical Physics</i> , <b>2003</b> , 119, 9129-9144	3.9	60
22	A fast-Fourier transform method to solve continuum-electrostatics problems with truncated electrostatic interactions: Algorithm and application to ionic solvation and ion-ion interaction. <i>Journal of Chemical Physics</i> , <b>2003</b> , 119, 12205-12223	3.9	29
21	Molecular dynamics simulations of a double unit cell in a protein crystal: volume relaxation at constant pressure and correlation of motions between the two unit cells. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2002</b> , 48, 327-40	4.2	21
20	Calculation of the group-based pressure in molecular simulations. II. Numerical tests and application to liquid water. <i>Journal of Chemical Physics</i> , <b>2002</b> , 116, 6898-6909	3.9	10
19	Solving the Poisson equation for solute-solvent systems using fast Fourier transforms. <i>Journal of Chemical Physics</i> , <b>2002</b> , 116, 7434-7451	3.9	24
18	Calculation of the group-based pressure in molecular simulations. I. A general formulation including Ewald and particle-particle-particle-mesh electrostatics. <i>Journal of Chemical Physics</i> , <b>2002</b> , 116, 6880-6897	3.9	39

17	Comparison of different schemes to treat long-range electrostatic interactions in molecular dynamics simulations of a protein crystal. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2001</b> , 43, 509-192	4.2	48
16	A fast SHAKE algorithm to solve distance constraint equations for small molecules in molecular dynamics simulations. <i>Journal of Computational Chemistry</i> , <b>2001</b> , 22, 501-508	3.5	647
15	Comparison of four methods to compute the dielectric permittivity of liquids from molecular dynamics simulations. <i>Journal of Chemical Physics</i> , <b>2001</b> , 115, 1125-1136	3.9	303
14	Explicit-solvent molecular dynamics simulation at constant pH: Methodology and application to small amines. <i>Journal of Chemical Physics</i> , <b>2001</b> , 114, 9706-9719	3.9	104
13	Computational analysis of PKA-balanol interactions. <i>Journal of Medicinal Chemistry</i> , <b>2001</b> , 44, 1530-9	8.3	32
12	Molecular Dynamics Simulations of a Polyalanine Octapeptide under Ewald Boundary Conditions: Influence of Artificial Periodicity on Peptide Conformation. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 3668-3675	3.4	255
11	Optimal charge-shaping functions for the particle-particle-particle-mesh (P3M) method for computing electrostatic interactions in molecular simulations. <i>Journal of Chemical Physics</i> , <b>2000</b> , 113, 10464-10476	3.9	65
10	Polarization around an ion in a dielectric continuum with truncated electrostatic interactions. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 10679-10692	3.9	31
9	Ewald artifacts in computer simulations of ionic solvation and ion-ion interaction: A continuum electrostatics study. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 1856-1872	3.9	303
8	The GROMOS Biomolecular Simulation Program Package. <i>Journal of Physical Chemistry A</i> , <b>1999</b> , 103, 3596-3607	2.8	1220
7	Determinants of ligand binding to cAMP-dependent protein kinase. <i>Biochemistry</i> , <b>1999</b> , 38, 2358-66	3.2	79
6	Molecular dynamics simulations of the hyperthermophilic protein sac7d from <i>Sulfolobus acidocaldarius</i> : contribution of salt bridges to thermostability. <i>Journal of Molecular Biology</i> , <b>1999</b> , 285, 1811-30	6.5	105
5	Lattice-sum methods for computing electrostatic interactions in molecular simulations <b>1999</b> ,		35
4	Empirical Classical Force Fields for Molecular Systems. <i>Lecture Notes in Quantum Chemistry II</i> , <b>1999</b> , 177-214	2.4	6
3	Alternative schemes for the inclusion of a reaction-field correction into molecular dynamics simulations: Influence on the simulated energetic, structural, and dielectric properties of liquid water. <i>Journal of Chemical Physics</i> , <b>1998</b> , 108, 6117-6134	3.9	105
2	Experimental and Theoretical Approach to Hydrogen-Bonded Diastereomeric Interactions in a Model Complex. <i>Journal of the American Chemical Society</i> , <b>1997</b> , 119, 7533-7544	16.4	26
1	Free Energies of Transfer of Trp Analogs from Chloroform to Water: Comparison of Theory and Experiment and the Importance of Adequate Treatment of Electrostatic and Internal Interactions. <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 6285-6294	16.4	47