

Michael K Gilson

List of Publications by Year in descending order

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152
papers

19,950
citations

15880

67
h-index

12638

137
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161
all docs

161
docs citations

161
times ranked

15867
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancing water sampling of buried binding sites using nonequilibrium candidate Monte Carlo. <i>Journal of Computer-Aided Molecular Design</i> , 2021, 35, 167-177.	1.3	22
2	Automation of absolute protein-ligand binding free energy calculations for docking refinement and compound evaluation. <i>Scientific Reports</i> , 2021, 11, 1116.	1.6	49
3	Development and Benchmarking of Open Force Field v1.0.0—the Parsley Small-Molecule Force Field. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 6262-6280.	2.3	80
4	Fast Equilibration of Water between Buried Sites and the Bulk by Molecular Dynamics with Parallel Monte Carlo Water Moves on Graphical Processing Units. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7366-7372.	2.3	16
5	Data-Driven Mapping of Gas-Phase Quantum Calculations to General Force Field Lennard-Jones Parameters. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 1115-1127.	2.3	15
6	Accounting for the Central Role of Interfacial Water in Protein–Ligand Binding Free Energy Calculations. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 7883-7894.	2.3	24
7	Data-driven analysis of the number of Lennard–Jones types needed in a force field. <i>Communications Chemistry</i> , 2020, 3, .	2.0	6
8	D3R grand challenge 4: blind prediction of protein–ligand poses, affinity rankings, and relative binding free energies. <i>Journal of Computer-Aided Molecular Design</i> , 2020, 34, 99-119.	1.3	81
9	The SAMPL6 SAMPLing challenge: assessing the reliability and efficiency of binding free energy calculations. <i>Journal of Computer-Aided Molecular Design</i> , 2020, 34, 601-633.	1.3	86
10	Non-bonded force field model with advanced restrained electrostatic potential charges (RESP2). <i>Communications Chemistry</i> , 2020, 3, .	2.0	98
11	A molecular reconstruction approach to site-based 3D-RISM and comparison to GIST hydration thermodynamic maps in an enzyme active site. <i>PLoS ONE</i> , 2019, 14, e0219473.	1.1	22
12	Binding Thermodynamics of Host–Guest Systems with SMIRNOFF99Frosst 1.0.5 from the Open Force Field Initiative. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 6225-6242.	2.3	21
13	A Thermodynamic Limit on the Role of Self-Propulsion in Enhanced Enzyme Diffusion. <i>Biophysical Journal</i> , 2019, 116, 1898-1906.	0.2	17
14	Simulating Water Exchange to Buried Binding Sites. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 2684-2691.	2.3	33
15	Toward Learned Chemical Perception of Force Field Typing Rules. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 402-423.	2.3	30
16	Accounting for apparent deviations between calorimetric and van't Hoff enthalpies. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2018, 1862, 692-704.	1.1	22
17	Substrate-driven chemotactic assembly in an enzyme cascade. <i>Nature Chemistry</i> , 2018, 10, 311-317.	6.6	121
18	Solvation Structure and Thermodynamic Mapping (SSTMap): An Open-Source, Flexible Package for the Analysis of Water in Molecular Dynamics Trajectories. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 418-425.	2.3	40

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19	Overview of the SAMPL6 host-guest binding affinity prediction challenge. <i>Journal of Computer-Aided Molecular Design</i> , 2018, 32, 937-963.	1.3	106
20	Escaping Atom Types in Force Fields Using Direct Chemical Perception. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 6076-6092.	2.3	110
21	Protein-ligand binding enthalpies from near-millisecond simulations: Analysis of a preorganization paradox. <i>Journal of Chemical Physics</i> , 2018, 149, 072311.	1.2	17
22	Motor-like Properties of Nonmotor Enzymes. <i>Biophysical Journal</i> , 2018, 114, 2174-2179.	0.2	13
23	Bind3P: Optimization of a Water Model Based on Host-Guest Binding Data. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 3621-3632.	2.3	23
24	Predicting Binding Free Energies: Frontiers and Benchmarks. <i>Annual Review of Biophysics</i> , 2017, 46, 531-558.	4.5	265
25	Attractive Interactions between Heteroallenes and the Cucurbituril Portal. <i>Journal of the American Chemical Society</i> , 2017, 139, 8138-8145.	6.6	22
26	Testing inhomogeneous solvation theory in structure-based ligand discovery. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E6839-E6846.	3.3	65
27	HYDROPHOBE Challenge: A Joint Experimental and Computational Study on the Host-Guest Binding of Hydrocarbons to Cucurbiturils, Allowing Explicit Evaluation of Guest Hydration Free-Energy Contributions. <i>Journal of Physical Chemistry B</i> , 2017, 121, 11144-11162.	1.2	62
28	Evaluating Force Field Performance in Thermodynamic Calculations of Cyclodextrin Host-Guest Binding: Water Models, Partial Charges, and Host Force Field Parameters. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 4253-4269.	2.3	51
29	Overview of the SAMPL5 host-guest challenge: Are we doing better?. <i>Journal of Computer-Aided Molecular Design</i> , 2017, 31, 1-19.	1.3	140
30	Evaluation and Minimization of Uncertainty in ITC Binding Measurements: Heat Error, Concentration Error, Saturation, and Stoichiometry. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2017, 1861, 485-498.	1.1	45
31	Lessons learned from comparing molecular dynamics engines on the SAMPL5 dataset. <i>Journal of Computer-Aided Molecular Design</i> , 2017, 31, 147-161.	1.3	187
32	Probing the orientation of inhibitor and epoxy-eicosatrienoic acid binding in the active site of soluble epoxide hydrolase. <i>Archives of Biochemistry and Biophysics</i> , 2017, 613, 1-11.	1.4	9
33	The SAMPL5 host-guest challenge: computing binding free energies and enthalpies from explicit solvent simulations by the attach-pull-release (APR) method. <i>Journal of Computer-Aided Molecular Design</i> , 2017, 31, 133-145.	1.3	33
34	Attach-Pull-Release Calculations of Ligand Binding and Conformational Changes on the First BRD4 Bromodomain. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 3260-3275.	2.3	49
35	Solvation thermodynamic mapping of molecular surfaces in AmberTools: GIST. <i>Journal of Computational Chemistry</i> , 2016, 37, 2029-2037.	1.5	95
36	Enthalpic Breakdown of Water Structure on Protein Active-Site Surfaces. <i>Journal of Physical Chemistry B</i> , 2016, 120, 8743-8756.	1.2	33

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37	D3R grand challenge 2015: Evaluation of protein–ligand pose and affinity predictions. <i>Journal of Computer-Aided Molecular Design</i> , 2016, 30, 651-668.	1.3	178
38	Blind prediction of cyclohexane–water distribution coefficients from the SAMPL5 challenge. <i>Journal of Computer-Aided Molecular Design</i> , 2016, 30, 927-944.	1.3	99
39	Parameterization of an effective potential for protein–ligand binding from host–guest affinity data. <i>Journal of Molecular Recognition</i> , 2016, 29, 10-21.	1.1	27
40	Improving the Efficiency and Activity of Electrocatalysts for the Reduction of CO ₂ through Supramolecular Assembly with Amino Acid-Modified Ligands. <i>Journal of the American Chemical Society</i> , 2016, 138, 8184-8193.	6.6	59
41	Evaluation of Representations and Response Models for Polarizable Force Fields. <i>Journal of Physical Chemistry B</i> , 2016, 120, 8668-8684.	1.2	6
42	Spatial Decomposition of Translational Water–Water Correlation Entropy in Binding Pockets. <i>Journal of Chemical Theory and Computation</i> , 2016, 12, 414-429.	2.3	34
43	BindingDB in 2015: A public database for medicinal chemistry, computational chemistry and systems pharmacology. <i>Nucleic Acids Research</i> , 2016, 44, D1045-D1053.	6.5	1,002
44	Connecting proteins with drug-like compounds: Open source drug discovery workflows with BindingDB and KNIME. <i>Database: the Journal of Biological Databases and Curation</i> , 2015, 2015, bav087.	1.4	15
45	Binding Enthalpy Calculations for a Neutral Host–Guest Pair Yield Widely Divergent Salt Effects across Water Models. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 4555-4564.	2.3	36
46	Toward Improved Force-Field Accuracy through Sensitivity Analysis of Host-Guest Binding Thermodynamics. <i>Journal of Physical Chemistry B</i> , 2015, 119, 10145-10155.	1.2	30
47	Computational Calorimetry: High-Precision Calculation of Host–Guest Binding Thermodynamics. <i>Journal of Chemical Theory and Computation</i> , 2015, 11, 4377-4394.	2.3	96
48	Blind prediction of SAMPL4 cucurbit[7]uril binding affinities with the mining minima method. <i>Journal of Computer-Aided Molecular Design</i> , 2014, 28, 463-474.	1.3	18
49	The SAMPL4 hydration challenge: evaluation of partial charge sets with explicit-water molecular dynamics simulations. <i>Journal of Computer-Aided Molecular Design</i> , 2014, 28, 277-287.	1.3	31
50	Dynamic architecture of a protein kinase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E4623-31.	3.3	205
51	Supramolecular Assembly Promotes the Electrocatalytic Reduction of Carbon Dioxide by Re(I) Bipyridine Catalysts at a Lower Overpotential. <i>Journal of the American Chemical Society</i> , 2014, 136, 14598-14607.	6.6	128
52	Bridging Calorimetry and Simulation through Precise Calculations of Cucurbituril–Guest Binding Enthalpies. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 4069-4078.	2.3	83
53	The SAMPL4 host–guest blind prediction challenge: an overview. <i>Journal of Computer-Aided Molecular Design</i> , 2014, 28, 305-317.	1.3	162
54	Thermodynamics of Water in an Enzyme Active Site: Grid-Based Hydration Analysis of Coagulation Factor Xa. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 2769-2780.	2.3	117

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55	Quantum Mechanical Calculation of Noncovalent Interactions: A Large-Scale Evaluation of PMx, DFT, and SAPT Approaches. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 1563-1575.	2.3	107
56	Correlation as a Determinant of Configurational Entropy in Supramolecular and Protein Systems. <i>Journal of Physical Chemistry B</i> , 2014, 118, 6447-6455.	1.2	36
57	Calculation and Visualization of Atomistic Mechanical Stresses in Nanomaterials and Biomolecules. <i>PLoS ONE</i> , 2014, 9, e113119.	1.1	13
58	Overcoming dissipation in the calculation of standard binding free energies by ligand extraction. <i>Journal of Computational Chemistry</i> , 2013, 34, 2360-2371.	1.5	57
59	The electrostatic response of water to neutral polar solutes: Implications for continuum solvent modeling. <i>Journal of Chemical Physics</i> , 2013, 138, 224504.	1.2	19
60	SuperTarget goes quantitative: update on drug-target interactions. <i>Nucleic Acids Research</i> , 2012, 40, D1113-D1117.	6.5	174
61	Grid inhomogeneous solvation theory: Hydration structure and thermodynamics of the miniature receptor cucurbit[7]uril. <i>Journal of Chemical Physics</i> , 2012, 137, 044101.	1.2	258
62	Entropy-enthalpy transduction caused by conformational shifts can obscure the forces driving protein-ligand binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20006-20011.	3.3	109
63	Charge Optimization Theory for Induced-Fit Ligands. <i>Journal of Chemical Theory and Computation</i> , 2012, 8, 4580-4592.	2.3	8
64	Force and Stress along Simulated Dissociation Pathways of Cucurbituril-Guest Systems. <i>Journal of Chemical Theory and Computation</i> , 2012, 8, 966-976.	2.3	14
65	Calculation of Host-Guest Binding Affinities Using a Quantum-Mechanical Energy Model. <i>Journal of Chemical Theory and Computation</i> , 2012, 8, 2023-2033.	2.3	60
66	The fundamental role of flexibility on the strength of molecular binding. <i>Soft Matter</i> , 2012, 8, 6385.	1.2	56
67	Public Domain Databases for Medicinal Chemistry. <i>Journal of Medicinal Chemistry</i> , 2012, 55, 6987-7002.	2.9	81
68	Prediction of SAMPL3 host-guest binding affinities: evaluating the accuracy of generalized force-fields. <i>Journal of Computer-Aided Molecular Design</i> , 2012, 26, 517-525.	1.3	29
69	Blind prediction of host-guest binding affinities: a new SAMPL3 challenge. <i>Journal of Computer-Aided Molecular Design</i> , 2012, 26, 475-487.	1.3	117
70	Accelerated convergence of molecular free energy via superposition approximation-based reference states. <i>Journal of Chemical Physics</i> , 2011, 134, 134107.	1.2	4
71	New Ultrahigh Affinity Host-Guest Complexes of Cucurbit[7]uril with Bicyclo[2.2.2]octane and Adamantane Guests: Thermodynamic Analysis and Evaluation of M2 Affinity Calculations. <i>Journal of the American Chemical Society</i> , 2011, 133, 3570-3581.	6.6	306
72	Thermodynamic and Differential Entropy under a Change of Variables. <i>Entropy</i> , 2010, 12, 578-590.	1.1	37

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73	Symmetry Numbers for Rigid, Flexible, and Fluxional Molecules: Theory and Applications. <i>Journal of Physical Chemistry B</i> , 2010, 114, 16304-16317.	1.2	65
74	Stress Analysis at the Molecular Level: A Forced Cucurbituril-Guest Dissociation Pathway. <i>Journal of Chemical Theory and Computation</i> , 2010, 6, 637-646.	2.3	12
75	Modeling Protein-Ligand Binding by Mining Minima. <i>Journal of Chemical Theory and Computation</i> , 2010, 6, 3540-3557.	2.3	60
76	Evaluating the Substrate-Envelope Hypothesis: Structural Analysis of Novel HIV-1 Protease Inhibitors Designed To Be Robust against Drug Resistance. <i>Journal of Virology</i> , 2010, 84, 5368-5378.	1.5	104
77	Sampling conformations in high dimensions using low-dimensional distribution functions. <i>Journal of Chemical Physics</i> , 2009, 130, 134102.	1.2	15
78	Toward the Design of Mutation-Resistant Enzyme Inhibitors: Further Evaluation of the Substrate Envelope Hypothesis. <i>Chemical Biology and Drug Design</i> , 2009, 74, 234-245.	1.5	20
79	Additivity in the Analysis and Design of HIV Protease Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2009, 52, 737-754.	2.9	23
80	Configurational Entropy in Protein-Peptide Binding. <i>Journal of Molecular Biology</i> , 2009, 389, 315-335.	2.0	79
81	Ions and Inhibitors in the Binding Site of HIV Protease: Comparison of Monte Carlo Simulations and the Linearized Poisson-Boltzmann Theory. <i>Biophysical Journal</i> , 2009, 96, 1293-1306.	0.2	15
82	Theory of Free Energy and Entropy in Noncovalent Binding. <i>Chemical Reviews</i> , 2009, 109, 4092-4107.	23.0	334
83	Host-Guest Complexes with Protein-Ligand-like Affinities: Computational Analysis and Design. <i>Journal of the American Chemical Society</i> , 2009, 131, 4012-4021.	6.6	108
84	Efficient calculation of configurational entropy from molecular simulations by combining the mutual information expansion and nearest-neighbor methods. <i>Journal of Computational Chemistry</i> , 2008, 29, 1605-1614.	1.5	97
85	HIV-1 Protease Inhibitors from Inverse Design in the Substrate Envelope Exhibit Subnanomolar Binding to Drug-Resistant Variants. <i>Journal of the American Chemical Society</i> , 2008, 130, 6099-6113.	6.6	105
86	A synthetic host-guest system achieves avidin-biotin affinity by overcoming enthalpy-entropy compensation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 20737-20742.	3.3	534
87	Ligand configurational entropy and protein binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 1534-1539.	3.3	350
88	Biological Applications of Electrostatic Calculations and Brownian Dynamics Simulations. <i>Reviews in Computational Chemistry</i> , 2007, , 229-267.	1.5	70
89	ConCEPT: de Novo Design of Synthetic Receptors for Targeted Ligands. <i>Journal of Chemical Information and Modeling</i> , 2007, 47, 425-434.	2.5	17
90	Extraction of configurational entropy from molecular simulations via an expansion approximation. <i>Journal of Chemical Physics</i> , 2007, 127, 024107.	1.2	161

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91	BindingDB: a web-accessible database of experimentally determined protein-ligand binding affinities. <i>Nucleic Acids Research</i> , 2007, 35, D198-D201.	6.5	1,493
92	Evaluation of the substrate envelope hypothesis for inhibitors of HIV-1 protease. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007, 68, 561-567.	1.5	48
93	Design of Mutation-resistant HIV Protease Inhibitors with the Substrate Envelope Hypothesis. <i>Chemical Biology and Drug Design</i> , 2007, 69, 298-313.	1.5	51
94	Calculation of Protein-Ligand Binding Affinities. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2007, 36, 21-42.	18.3	807
95	Screening Drug-Like Compounds by Docking to Homology Models: A Systematic Study. <i>Journal of Chemical Information and Modeling</i> , 2006, 46, 365-379.	2.5	82
96	Sensitivity Analysis and Charge-Optimization for Flexible Ligands: Applicability to Lead Optimization. <i>Journal of Chemical Theory and Computation</i> , 2006, 2, 259-270.	2.3	11
97	Concepts in Receptor Optimization: Targeting the RGD Peptide. <i>Journal of the American Chemical Society</i> , 2006, 128, 4675-4684.	6.6	39
98	Virtual Screening of Molecular Databases Using a Support Vector Machine. <i>Journal of Chemical Information and Modeling</i> , 2005, 45, 549-561.	2.5	241
99	Virtual Screening of Molecular Databases Using a Support Vector Machine.. <i>ChemInform</i> , 2005, 36, no.	0.1	1
100	Evaluating the Accuracy of the Quasiharmonic Approximation. <i>Journal of Chemical Theory and Computation</i> , 2005, 1, 1017-1028.	2.3	160
101	Structural model for an AxxxG-mediated dimer of surfactant-associated protein C. <i>FEBS Journal</i> , 2004, 271, 2086-2092.	0.2	28
102	Free Energy, Entropy, and Induced Fit in Host-Guest Recognition: Calculations with the Second-Generation Mining Minima Algorithm. <i>Journal of the American Chemical Society</i> , 2004, 126, 13156-13164.	6.6	211
103	Comparing Ligand Interactions with Multiple Receptors via Serial Docking. <i>Journal of Chemical Information and Computer Sciences</i> , 2004, 44, 1961-1970.	2.8	29
104	Identification of Symmetries in Molecules and Complexes. <i>Journal of Chemical Information and Computer Sciences</i> , 2004, 44, 1301-1313.	2.8	42
105	On the Theory of Noncovalent Binding. <i>Biophysical Journal</i> , 2004, 87, 23-36.	0.2	51
106	Calculation of Cyclodextrin Binding Affinities: Energy, Entropy, and Implications for Drug Design. <i>Biophysical Journal</i> , 2004, 87, 3035-3049.	0.2	217
107	Tork: Conformational analysis method for molecules and complexes. <i>Journal of Computational Chemistry</i> , 2003, 24, 1987-1998.	1.5	102
108	Fast Assignment of Accurate Partial Atomic Charges: An Electronegativity Equalization Method that Accounts for Alternate Resonance Forms. <i>Journal of Chemical Information and Computer Sciences</i> , 2003, 43, 1982-1997.	2.8	84

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109	Calculation of Molecular Configuration Integrals. <i>Journal of Physical Chemistry B</i> , 2003, 107, 1048-1055.	1.2	76
110	The Binding Database: data management and interface design. <i>Bioinformatics</i> , 2002, 18, 130-139.	1.8	142
111	Coordinate Systems and the Calculation of Molecular Properties. <i>Journal of Physical Chemistry A</i> , 2002, 106, 563-566.	1.1	27
112	Accelerated Poisson-Boltzmann calculations for static and dynamic systems. <i>Journal of Computational Chemistry</i> , 2002, 23, 1244-1253.	1.5	421
113	Enhanced docking with the mining minima optimizer: Acceleration and side-chain flexibility. <i>Journal of Computational Chemistry</i> , 2002, 23, 1656-1670.	1.5	51
114	Interpreting trends in the binding of cyclic ureas to HIV-1 protease. <i>Journal of Molecular Biology</i> , 2001, 309, 507-517.	2.0	39
115	The Physical Basis of Nucleic Acid Base Stacking in Water. <i>Biophysical Journal</i> , 2001, 80, 140-148.	0.2	87
116	Editorial: Molecular recognition databases. <i>Biopolymers</i> , 2001, 61, 97-98.	1.2	2
117	The binding database: Overview and user's guide. <i>Biopolymers</i> , 2001, 61, 127-141.	1.2	69
118	Ligand-receptor docking with the Mining Minima optimizer. <i>Journal of Computer-Aided Molecular Design</i> , 2001, 15, 157-171.	1.3	51
119	Comparison of generalized born and poisson models: Energetics and dynamics of HIV protease. <i>Journal of Computational Chemistry</i> , 2000, 21, 295-309.	1.5	98
120	Modeling Molecular Recognition: Theory and Application. <i>Journal of Biomolecular Structure and Dynamics</i> , 2000, 17, 89-94.	2.0	5
121	Synthetic Adenine Receptors: A Direct Calculation of Binding Affinity and Entropy. <i>Journal of the American Chemical Society</i> , 2000, 122, 2934-2937.	6.6	49
122	Competition between Intra- and Intermolecular Hydrogen Bonding: A Effect on para/ortho Adsorptive Selectivity for Substituted Phenols. <i>Industrial & Engineering Chemistry Research</i> , 2000, 39, 463-472.	1.8	34
123	Intramolecular versus Intermolecular Hydrogen Bonding in the Adsorption of Aromatic Alcohols onto an Acrylic Ester Sorbent. <i>Journal of Physical Chemistry B</i> , 2000, 104, 4735-4744.	1.2	28
124	Nucleic acid base-pairing and N-methylacetamide self-association in chloroform: affinity and conformation. <i>Biophysical Chemistry</i> , 1999, 78, 183-193.	1.5	36
125	Strength of Solvent-Exposed Salt-Bridges. <i>Journal of Physical Chemistry B</i> , 1999, 103, 727-736.	1.2	71
126	Computational Study of KNI-272, a Potent Inhibitor of HIV-1 Protease: On the Mechanism of Preorganization. <i>Journal of Physical Chemistry B</i> , 1999, 103, 1031-1044.	1.2	19

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127	Thermodynamic linkage between the binding of protons and inhibitors to HIVâ€™1 protease. Protein Science, 1999, 8, 180-195.	3.1	55
128	A hierarchical method for generating low-energy conformers of a protein-ligand complex. , 1998, 33, 475-495.		26
129	Theoretical and Experimental Analysis of Ionization Equilibria in Ovomuroid Third Domainâ€™. Biochemistry, 1998, 37, 8643-8652.	1.2	63
130	pKaShifts in Small Molecules and HIV Protease:â€™ Electrostatics and Conformation. Journal of the American Chemical Society, 1998, 120, 6138-6146.	6.6	55
131	Dielectric Screening Treatment of Electrostatic Solvation. Journal of Physical Chemistry B, 1997, 101, 11226-11236.	1.2	37
132	â€™Mining Minimaâ€™â€™ Direct Computation of Conformational Free Energy. Journal of Physical Chemistry A, 1997, 101, 1609-1618.	1.1	124
133	A new class of models for computing receptor-ligand binding affinities. Chemistry and Biology, 1997, 4, 87-92.	6.2	67
134	Modeling protonation equilibria in biomolecules. , 1997, , 199-222.		6
135	The Determinants of pKas in Proteins. Biochemistry, 1996, 35, 7819-7833.	1.2	439
136	Computing ionization states of proteins with a detailed charge model. Journal of Computational Chemistry, 1996, 17, 1633-1644.	1.5	139
137	Comparison of Continuum and Explicit Models of Solvation:â€™ Potentials of Mean Force for Alanine Dipeptide. The Journal of Physical Chemistry, 1996, 100, 1439-1441.	2.9	81
138	Electrostatics and diffusion of molecules in solution: simulations with the University of Houston Brownian Dynamics program. Computer Physics Communications, 1995, 91, 57-95.	3.0	622
139	Molecular dynamics simulation with a continuum electrostatic model of the solvent. Journal of Computational Chemistry, 1995, 16, 1081-1095.	1.5	96
140	Theory of electrostatic interactions in macromolecules. Current Opinion in Structural Biology, 1995, 5, 216-223.	2.6	203
141	Binding of Cations and Protons in the Active Site of Acetylcholinesterase. Jerusalem Symposia on Quantum Chemistry and Biochemistry, 1995, , 25-37.	0.2	5
142	Prediction of Ph-dependent Properties of Proteins. Journal of Molecular Biology, 1994, 238, 415-436.	2.0	807
143	Small Molecule pKa Prediction with Continuum Electrostatics Calculations. Journal of the American Chemical Society, 1994, 116, 10298-10299.	6.6	64
144	Acetylcholinesterase: Effects of Ionic Strength and Dimerization on the Rate Constants. Israel Journal of Chemistry, 1994, 34, 151-158.	1.0	21

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145	Multiple-site titration and molecular modeling: Two rapid methods for computing energies and forces for ionizable groups in proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 1993, 15, 266-282.	1.5	273
146	Computation of electrostatic forces on solvated molecules using the Poisson-Boltzmann equation. <i>The Journal of Physical Chemistry</i> , 1993, 97, 3591-3600.	2.9	324
147	Calculating the electrostatic potential of molecules in solution: Method and error assessment. <i>Journal of Computational Chemistry</i> , 1988, 9, 327-335.	1.5	1,017
148	Energetics of charge-charge interactions in proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 1988, 3, 32-52.	1.5	277
149	Calculation of the total electrostatic energy of a macromolecular system: Solvation energies, binding energies, and conformational analysis. <i>Proteins: Structure, Function and Bioinformatics</i> , 1988, 4, 7-18.	1.5	794
150	Calculation of electrostatic potentials in an enzyme active site. <i>Nature</i> , 1987, 330, 84-86.	13.7	458
151	The dielectric constant of a folded protein. <i>Biopolymers</i> , 1986, 25, 2097-2119.	1.2	455
152	On the calculation of electrostatic interactions in proteins. <i>Journal of Molecular Biology</i> , 1985, 184, 503-516.	2.0	315