Robert I Cukier

List of Publications by Year
in descending order

38 papers	1,459 citations	623734 14 h-index	345221 36 g-index
38 all docs	38 docs citations	38 times ranked	1713 citing authors

#	Article	IF	Citations
1	A maximum entropy principle approach to a joint probability model for sequences with known neighbor and next neighbor pair probabilities. Chemical Physics, 2020, 538, 110872.	1.9	1
2	Machine learning can be used to distinguish protein families and generate new proteins belonging to those families. Journal of Chemical Physics, 2019, 151, 175102.	3.0	2
3	Generating intrinsically disordered protein conformational ensembles from a Markov chain. Journal of Chemical Physics, 2018, 148, 105102.	3.0	3
4	Hinge action versus grip in translocation by RNA polymerase. Transcription, 2018, 9, 1-16.	3.1	10
5	Reweighting ensemble probabilities with experimental histogram data constraints using a maximum entropy principle. Journal of Chemical Physics, 2018, 149, 234106.	3.0	7
6	Generating Intrinsically Disordered Protein Conformational Ensembles from a Database of Ramachandran Space Pair Residue Probabilities Using a Markov Chain. Journal of Physical Chemistry B, 2018, 122, 9087-9101.	2.6	14
7	Conformational Ensembles Exhibit Extensive Molecular Recognition Features. ACS Omega, 2018, 3, 9907-9920.	3.5	3
8	Molecular Dynamics of Oxazole Yellow Dye in its Ground and First Excited Electronic States in Solution and when Intercalated in dsDNA. Journal of Physical Chemistry B, 2017, 121, 10242-10248.	2.6	0
9	Dihedral Angle Entropy Measures for Intrinsically Disordered Proteins. Journal of Physical Chemistry B, 2015, 119, 3621-3634.	2.6	18
10	Five checkpoints maintaining the fidelity of transcription by RNA polymerases in structural and energetic details. Nucleic Acids Research, 2015, 43, 1133-1146.	14.5	24
11	Simulations of Potentials of Mean Force for Separating a Leucine Zipper Dimer and the Basic Region of a Basic Region Leucine Zipper Dimer. Journal of Physical Chemistry B, 2014, 118, 10341-10354.	2.6	2
12	Glucose-Promoted Localization Dynamics of Excess Electrons in Aqueous Glucose Solution Revealed by Ab Initio Molecular Dynamics Simulation. Journal of Chemical Theory and Computation, 2014, 10, 4189-4197.	5.3	9
13	Transition Paths of Met-Enkephalin from Markov State Modeling of a Molecular Dynamics Trajectory. Journal of Physical Chemistry B, 2014, 118, 2883-2895.	2.6	5
14	Bending Vibration-Governed Solvation Dynamics of an Excess Electron in Liquid Acetonitrile Revealed by Ab Initio Molecular Dynamics Simulation. Journal of Chemical Theory and Computation, 2013, 9, 4727-4734.	5.3	11
15	Variance of a Potential of Mean Force Obtained Using the Weighted Histogram Analysis Method. Journal of Physical Chemistry B, 2013, 117, 14785-14796.	2.6	5
16	Simulations of Temperature and Salt Concentration Effects on bZIP, a Basic Region Leucine Zipper. Journal of Physical Chemistry B, 2012, 116, 6071-6086.	2.6	6
17	Ferreting out correlations from trajectory data. Journal of Chemical Physics, 2011, 135, 225103.	3.0	5
18	A Hamiltonian replica exchange method for building proteinâ€“protein interfaces applied to a leucine zipper. Journal of Chemical Physics, 2011, 134, 045104.	3.0	6

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19	How many atoms are required to characterize accurately trajectory fluctuations of a protein?. Journal of Chemical Physics, 2010, 132, 245101.	3.0	1
20	Î±-Helix C-Terminus Acting as a Relay to Mediate Long-Range Hole Migration in Proteins. Journal of Physical Chemistry Letters, 2010, 1, 1637-1641.	4.6	33
21	Theoretical prediction of sizeâ€expansion effect on the C8â€site activity in the modified guanineâ€cytosine analogs. Journal of Physical Organic Chemistry, 2009, 22, 1114-1119.	1.9	6
22	Hamiltonian Replica Exchange Method Studies of a Leucine Zipper Dimer. Journal of Physical Chemistry B, 2009, 113, 9595-9605.	2.6	12
23	Apo Adenylate Kinase Encodes Its Holo Form: A Principal Component and Varimax Analysis. Journal of Physical Chemistry B, 2009, 113, 1662-1672.	2.6	24
24	Prostaglandin Endoperoxide H Synthases. Journal of Biological Chemistry, 2007, 282, 18233-18244.	3.4	37
25	Hamiltonian and Distance Replica Exchange Method Studies of Met-Enkephalin. Journal of Physical Chemistry B, 2007, 111, 12310-12321.	2.6	19
26	Hydration effect on interaction mode between glutamic acid and Ca2+ and its biochemical implication: a theoretical exploration. New Journal of Chemistry, 2006, 30, 890.	2.8	2
27	Molecular Dynamics of Apo-Adenylate Kinase:Â A Principal Component Analysis. Journal of Physical Chemistry B, 2006, 110, 12796-12808.	2.6	81
28	Molecular Dynamics of Apo-Adenylate Kinase:Â A Distance Replica Exchange Method for the Free Energy of Conformational Fluctuations. Journal of Physical Chemistry B, 2006, 110, 24121-24137.	2.6	84
29	Effects of Donors and Acceptors on the Energetics and Mechanism of Proton, Hydrogen, and Hydride Release from Imidazole. Journal of Physical Chemistry B, 2004, 108, 10089-10100.	2.6	11
30	Proton-Coupled Electron Transfer Reactions: A Theoretical Approach. ACS Symposium Series, 2004, , 145-158.	0.5	6
31	Effects of Sr2+-Substitution on the Reduction Rates of Yzâ€¢in PSII MembranesEvidence for Concerted Hydrogen-Atom Transfer in Oxygen Evolutionâ€. Biochemistry, 2000, 39, 16220-16229.	2.5	52
32	PROTON-COUPLED ELECTRON TRANSFER. Annual Review of Physical Chemistry, 1998, 49, 337-369.	10.8	797
33	Diffusion-controlled reactions among stationary sinks. Journal of Statistical Physics, 1983, 30, 383-389.	1.2	4
34	Dynamics of diffusionâ€controlled reactions among stationary sinks: Scaling expansion approach. Journal of Chemical Physics, 1982, 76, 6202-6214.	3.0	60
35	Recombination kinetics: Langevin dynamics with a space dependent friction coefficient. Journal of Chemical Physics, 1981, 75, 5879-5882.	3.0	24
36	A stochastic theory of translational correlation functions in gases and liquids. Journal of Chemical Physics, 1977, 67, 568-578.	3.0	9

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37	Generalized stochastic model for molecular rotational motion in dense media. Journal of Chemical Physics, 1975, 62, 3271-3280.	3.0	40
38	Rotational relaxation of molecules in isotropic and anisotropic fluids. Journal of Chemical Physics, 1974, 60, 734-743.	3.0	26