

# Modesto Orozco LÃ³pez

## List of Publications by Year in descending order

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392  
papers

28,596  
citations

5558

82  
h-index

8138

148  
g-index

412  
all docs

412  
docs citations

412  
times ranked

28681  
citing authors

#	ARTICLE	IF	CITATIONS
1	Refinement of the AMBER Force Field for Nucleic Acids: Improving the Description of $\hat{\nu}/\hat{\nu}^3$ Conformers. <i>Biophysical Journal</i> , 2007, 92, 3817-3829.	0.2	2,036
2	Whole-genome sequencing identifies recurrent mutations in chronic lymphocytic leukaemia. <i>Nature</i> , 2011, 475, 101-105.	13.7	1,364
3	Exome sequencing identifies recurrent mutations of the splicing factor SF3B1 gene in chronic lymphocytic leukemia. <i>Nature Genetics</i> , 2012, 44, 47-52.	9.4	893
4	Parmbsc1: a refined force field for DNA simulations. <i>Nature Methods</i> , 2016, 13, 55-58.	9.0	790
5	Non-coding recurrent mutations in chronic lymphocytic leukaemia. <i>Nature</i> , 2015, 526, 519-524.	13.7	749
6	Perspective on "Electrostatic interactions of a solute with a continuum. A direct utilization of ab initio molecular potentials for the prevision of solvent effects". <i>Theoretical Chemistry Accounts</i> , 2000, 103, 343-345.	0.5	712
7	Theoretical Methods for the Description of the Solvent Effect in Biomolecular Systems. <i>Chemical Reviews</i> , 2000, 100, 4187-4226.	23.0	571
8	Epigenomic analysis detects widespread gene-body DNA hypomethylation in chronic lymphocytic leukemia. <i>Nature Genetics</i> , 2012, 44, 1236-1242.	9.4	525
9	PMUT: a web-based tool for the annotation of pathological mutations on proteins. <i>Bioinformatics</i> , 2005, 21, 3176-3178.	1.8	441
10	Molecular dynamics simulations: advances and applications. <i>Advances and Applications in Bioinformatics and Chemistry</i> , 2015, 8, 37.	1.6	409
11	A systematic molecular dynamics study of nearest-neighbor effects on base pair and base pair step conformations and fluctuations in B-DNA. <i>Nucleic Acids Research</i> , 2010, 38, 299-313.	6.5	349
12	Performance of Molecular Mechanics Force Fields for RNA Simulations: Stability of UUCG and GNRA Hairpins. <i>Journal of Chemical Theory and Computation</i> , 2010, 6, 3836-3849.	2.3	339
13	Tautomerism and Protonation of Guanine and Cytosine. Implications in the Formation of Hydrogen-Bonded Complexes. <i>Journal of the American Chemical Society</i> , 1996, 118, 6811-6821.	6.6	318
14	Target Flexibility: An Emerging Consideration in Drug Discovery and Design. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 6237-6255.	2.9	280
15	PupasView: a visual tool for selecting suitable SNPs, with putative pathological effect in genes, for genotyping purposes. <i>Nucleic Acids Research</i> , 2005, 33, W501-W505.	6.5	253
16	Dynamics of B-DNA on the Microsecond Time Scale. <i>Journal of the American Chemical Society</i> , 2007, 129, 14739-14745.	6.6	250
17	A consensus view of protein dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 796-801.	3.3	223
18	Nature of Base Stacking: Reference Quantum-Chemical Stacking Energies in Ten Unique B-DNA Base-Pair Steps. <i>Chemistry - A European Journal</i> , 2006, 12, 2854-2865.	1.7	211

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19	Design, Synthesis, and Biological Evaluation of Dual Binding Site Acetylcholinesterase Inhibitors: New Disease-Modifying Agents for Alzheimer's Disease. <i>Journal of Medicinal Chemistry</i> , 2005, 48, 7223-7233.	2.9	203
20	Characterization of disease-associated single amino acid polymorphisms in terms of sequence and structure properties 1 Edited by J. Thornton. <i>Journal of Molecular Biology</i> , 2002, 315, 771-786.	2.0	194
21	Frontiers in Molecular Dynamics Simulations of DNA. <i>Accounts of Chemical Research</i> , 2012, 45, 196-205.	7.6	194
22	Correlated ab initio study of nucleic acid bases and their tautomers in the gas phase, in a microhydrated environment and in aqueous solution : Part 1. Cytosine. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 4192-4203.	1.3	187
23	1/4ABC: a systematic microsecond molecular dynamics study of tetranucleotide sequence effects in B-DNA. <i>Nucleic Acids Research</i> , 2014, 42, 12272-12283.	6.5	186
24	New Tacrine~Huperzine A Hybrids (Huprines): Highly Potent Tight-Binding Acetylcholinesterase Inhibitors of Interest for the Treatment of Alzheimer's Disease. <i>Journal of Medicinal Chemistry</i> , 2000, 43, 4657-4666.	2.9	185
25	Epigenomic analysis detects aberrant super-enhancer DNA methylation in human cancer. <i>Genome Biology</i> , 2016, 17, 11.	3.8	184
26	PMut: a web-based tool for the annotation of pathological variants on proteins, 2017 update. <i>Nucleic Acids Research</i> , 2017, 45, W222-W228.	6.5	184
27	Molecular Dynamics Simulations of the Unfolding of Barnase in Water and 8 M Aqueous Urea. <i>Biochemistry</i> , 1997, 36, 7313-7329.	1.2	173
28	On the Performance of Continuum Solvation Methods. A Comment on Universal Approaches to Solvation Modeling. <i>Accounts of Chemical Research</i> , 2009, 42, 489-492.	7.6	171
29	Molecular Dynamics Simulations of the d(TAA-T) Triple Helix. <i>Journal of the American Chemical Society</i> , 1997, 119, 7463-7469.	6.6	160
30	Direct measurement of the dielectric polarization properties of DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3624-30.	3.3	160
31	Accuracy of free energies of hydration for organic molecules from 6-31g*-derived partial charges. <i>Journal of Computational Chemistry</i> , 1993, 14, 1240-1249.	1.5	154
32	MDWeb and MDMoby: an integrated web-based platform for molecular dynamics simulations. <i>Bioinformatics</i> , 2012, 28, 1278-1279.	1.8	153
33	Cooperativity in Drug~DNA Recognition: A Molecular Dynamics Study. <i>Journal of the American Chemical Society</i> , 2001, 123, 12658-12663.	6.6	150
34	Theoretical methods for the simulation of nucleic acids. <i>Chemical Society Reviews</i> , 2003, 32, 350-364.	18.7	150
35	Triplex-forming oligonucleotide target sequences in the human genome. <i>Nucleic Acids Research</i> , 2004, 32, 354-360.	6.5	149
36	Colibactin DNA-damage signature indicates mutational impact in colorectal cancer. <i>Nature Medicine</i> , 2020, 26, 1063-1069.	15.2	149

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37	Towards a molecular dynamics consensus view of B-DNA flexibility. <i>Nucleic Acids Research</i> , 2008, 36, 2379-2394.	6.5	147
38	Thorough Validation of Protein Normal Mode Analysis: A Comparative Study with Essential Dynamics. <i>Structure</i> , 2007, 15, 565-575.	1.6	144
39	Molecular basis of substrate-induced permeation by an amino acid antiporter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 3935-3940.	3.3	139
40	Optimization of solute cavities and van der Waals parameters in ab initio MST-SCRF calculations of neutral molecules. <i>Journal of Computational Chemistry</i> , 1994, 15, 446-454.	1.5	135
41	Synthesis of Enantiopure trans-3,4-Disubstituted Piperidines. An Enantiodivergent Synthesis of (+)- and (âˆ’)-Paroxetine. <i>Journal of Organic Chemistry</i> , 2000, 65, 3074-3084.	1.7	135
42	Chromatin Unfolding by Epigenetic Modifications Explained by Dramatic Impairment of Internucleosome Interactions: A Multiscale Computational Study. <i>Journal of the American Chemical Society</i> , 2015, 137, 10205-10215.	6.6	135
43	Functional and structural conservation of CBS domains from CLC chloride channels. <i>Journal of Physiology</i> , 2004, 557, 363-378.	1.3	131
44	Glutaryl-CoA Dehydrogenase Deficiency in Spain: Evidence of Two Groups of Patients, Genetically, and Biochemically Distinct. <i>Pediatric Research</i> , 2000, 48, 315-322.	1.1	127
45	CÃ¡~HÃ¡~Ã¡~O Contacts in the Adenine~Ã¡~Uracil Watson~Crick and Uracil~Ã¡~Uracil Nucleic Acid Base Pairs: a Nonempirical ab Initio Study with Inclusion of Electron Correlation Effects. <i>Journal of Physical Chemistry B</i> , 2000, 104, 6286-6292.	1.2	125
46	Multiscale simulation of DNA. <i>Current Opinion in Structural Biology</i> , 2016, 37, 29-45.	2.6	124
47	MoDEL (Molecular Dynamics Extended Library): A Database of Atomistic Molecular Dynamics Trajectories. <i>Structure</i> , 2010, 18, 1399-1409.	1.6	123
48	The Structure and Dynamics of DNA in the Gas Phase. <i>Journal of the American Chemical Society</i> , 2003, 125, 8007-8014.	6.6	121
49	Determining promoter location based on DNA structure first-principles calculations. <i>Genome Biology</i> , 2007, 8, R263.	13.9	121
50	X-Pol Potential: An Electronic Structure-Based Force Field for Molecular Dynamics Simulation of a Solvated Protein in Water. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 459-467.	2.3	121
51	Single Stranded Loops of Quadruplex DNA As Key Benchmark for Testing Nucleic Acids Force Fields. <i>Journal of Chemical Theory and Computation</i> , 2009, 5, 2514-2530.	2.3	121
52	Solvation in octanol: parametrization of the continuum MST model. <i>Journal of Computational Chemistry</i> , 2001, 22, 1180-1193.	1.5	120
53	Theoretical Study of Alkyl- and Aryl- Interactions. Reconciling Theory and Experiment. <i>Journal of Organic Chemistry</i> , 2002, 67, 7057-7065.	1.7	119
54	The relative flexibility of B-DNA and A-RNA duplexes: database analysis. <i>Nucleic Acids Research</i> , 2004, 32, 6144-6151.	6.5	119

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55	Induced dipole moment and atomic charges based on average electrostatic potentials in aqueous solution. <i>Journal of Chemical Physics</i> , 1993, 98, 2975-2982.	1.2	118
56	Impact of Methylation on the Physical Properties of DNA. <i>Biophysical Journal</i> , 2012, 102, 2140-2148.	0.2	118
57	Recent advances in the study of nucleic acid flexibility by molecular dynamics. <i>Current Opinion in Structural Biology</i> , 2008, 18, 185-193.	2.6	113
58	The structural impact of DNA mismatches. <i>Nucleic Acids Research</i> , 2015, 43, 4309-4321.	6.5	113
59	Extension of MST/SCRF method to organic solvents: Ab initio and semiempirical parametrization for neutral solutes in CCl <sub>4</sub> . <i>Journal of Computational Chemistry</i> , 1996, 17, 806-820.	1.5	111
60	Theoretical Study of the Truncated Hemoglobin HbN: Exploring the Molecular Basis of the NO Detoxification Mechanism. <i>Journal of the American Chemical Society</i> , 2005, 127, 4433-4444.	6.6	111
61	A theoretical view of protein dynamics. <i>Chemical Society Reviews</i> , 2014, 43, 5051-5066.	18.7	111
62	On the potential role of the amino nitrogen atom as a hydrogen bond acceptor in macromolecules. <i>Journal of Molecular Biology</i> , 1998, 279, 1123-1136.	2.0	110
63	How accurate are accurate force-fields for B-DNA?. <i>Nucleic Acids Research</i> , 2017, 45, gkw1355.	6.5	107
64	4D Genome Rewiring during Oncogene-Induced and Replicative Senescence. <i>Molecular Cell</i> , 2020, 78, 522-538.e9.	4.5	107
65	Epigenetic loss of RNA-methyltransferase NSUN5 in glioma targets ribosomes to drive a stress adaptive translational program. <i>Acta Neuropathologica</i> , 2019, 138, 1053-1074.	3.9	106
66	Synthesis, in Vitro Pharmacology, and Molecular Modeling of Very Potent Tacrine-Huperzine A Hybrids as Acetylcholinesterase Inhibitors of Potential Interest for the Treatment of Alzheimer's Disease. <i>Journal of Medicinal Chemistry</i> , 1999, 42, 3227-3242.	2.9	101
67	Molecular Dynamics Studies of DNA A-Tract Structure and Flexibility. <i>Journal of the American Chemical Society</i> , 1999, 121, 5981-5991.	6.6	101
68	The Structure of Human 4F2hc Ectodomain Provides a Model for Homodimerization and Electrostatic Interaction with Plasma Membrane. <i>Journal of Biological Chemistry</i> , 2007, 282, 31444-31452.	1.6	101
69	Molecular Dynamics Simulation of a PNA-DNA-PNA Triple Helix in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 1998, 120, 5895-5904.	6.6	99
70	Essential Dynamics: A Tool for Efficient Trajectory Compression and Management. <i>Journal of Chemical Theory and Computation</i> , 2006, 2, 251-258.	2.3	98
71	Exploring the Counterion Atmosphere around DNA: What Can Be Learned from Molecular Dynamics Simulations?. <i>Biophysical Journal</i> , 2004, 87, 800-811.	0.2	96
72	Interactions of Hydrated Mg <sup>2+</sup> Cation with Bases, Base Pairs, and Nucleotides. Electron Topology, Natural Bond Orbital, Electrostatic, and Vibrational Study. <i>Journal of Physical Chemistry B</i> , 2001, 105, 6051-6060.	1.2	95

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73	Ligand-induced dynamical regulation of NO conversion in Mycobacterium tuberculosis truncated hemoglobin-N. <i>Proteins: Structure, Function and Bioinformatics</i> , 2006, 64, 457-464.	1.5	95
74	Development of optimized MST/SCRF methods for semiempirical calculations: The MNDO and PM3 Hamiltonians. <i>Journal of Computational Chemistry</i> , 1995, 16, 563-575.	1.5	94
75	Relative Flexibility of DNA and RNA: a Molecular Dynamics Study. <i>Journal of Molecular Biology</i> , 2004, 343, 627-638.	2.0	94
76	Interoperability with Moby 1.0--It's better than sharing your toothbrush!. <i>Briefings in Bioinformatics</i> , 2008, 9, 220-231.	3.2	91
77	Continuum solvation models: Dissecting the free energy of solvation. <i>Physical Chemistry Chemical Physics</i> , 2003, 5, 3827-3836.	1.3	89
78	Exploring polymorphisms in B-DNA helical conformations. <i>Nucleic Acids Research</i> , 2012, 40, 10668-10678.	6.5	89
79	An AM1-SCRF approach to the study of changes in molecular properties induced by solvent. <i>The Journal of Physical Chemistry</i> , 1993, 97, 4386-4391.	2.9	88
80	SDS-PAGE analysis of A $\beta$ oligomers is disserving research into Alzheimer's disease: appealing for ESI-IM-MS. <i>Scientific Reports</i> , 2015, 5, 14809.	1.6	88
81	Classical molecular interaction potentials: Improved setup procedure in molecular dynamics simulations of proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2001, 45, 428-437.	1.5	87
82	Electrostatic component of solvation: Comparison of SCRF continuum models. <i>Journal of Computational Chemistry</i> , 2003, 24, 284-297.	1.5	86
83	Long-timescale dynamics of the Drew's Dickerson dodecamer. <i>Nucleic Acids Research</i> , 2016, 44, 4052-4066.	6.5	86
84	G-Quadruplexes Can Maintain Their Structure in the Gas Phase. <i>Journal of the American Chemical Society</i> , 2006, 128, 3608-3619.	6.6	85
85	Consistent View of Protein Fluctuations from All-Atom Molecular Dynamics and Coarse-Grained Dynamics with Knowledge-Based Force-Field. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 119-125.	2.3	85
86	Polarization effects in generalized molecular interaction potential: New Hamiltonian for reactivity studies and mixed QM/MM calculations. <i>Journal of Computational Chemistry</i> , 1998, 19, 866-881.	1.5	83
87	Ab Initio Study of Stacking Interactions in A- and B-DNA. <i>Journal of Physical Chemistry B</i> , 1997, 101, 3846-3853.	1.2	82
88	Correlated motions are a fundamental property of $\beta$ -sheets. <i>Nature Communications</i> , 2014, 5, 4070.	5.8	82
89	nucleR: a package for non-parametric nucleosome positioning. <i>Bioinformatics</i> , 2011, 27, 2149-2150.	1.8	81
90	Unraveling the sequence-dependent polymorphic behavior of d(CpG) steps in B-DNA. <i>Nucleic Acids Research</i> , 2014, 42, 11304-11320.	6.5	81

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91	Compaction of Duplex Nucleic Acids upon Native Electrospray Mass Spectrometry. ACS Central Science, 2017, 3, 454-461.	5.3	81
92	Dimerization of Carboxylic Acids: Reliability of Theoretical Calculations and the Effect of Solvent. Journal of Physical Chemistry B, 1998, 102, 2269-2276.	1.2	80
93	Theoretical Evaluation of Solvent Effects on the Conformational and Tautomeric Equilibria of 2-(2-Hydroxyphenyl)benzimidazole and on Its Absorption and Fluorescence Spectra. Journal of Physical Chemistry A, 1999, 103, 4525-4532.	1.1	79
94	Extension of the MST model to the IEF formalism: HF and B3LYP parametrizations. Computational and Theoretical Chemistry, 2005, 727, 29-40.	1.5	79
95	Induction effects in metal cation-benzene complexes. Physical Chemistry Chemical Physics, 2008, 10, 2616.	1.3	78
96	Structure, Stiffness and Substates of the Dickerson-Drew Dodecamer. Journal of Chemical Theory and Computation, 2013, 9, 707-721.	2.3	78
97	Quantification of Pathway Cross-talk Reveals Novel Synergistic Drug Combinations for Breast Cancer. Cancer Research, 2017, 77, 459-469.	0.4	75
98	Comprehensive characterization of complex structural variations in cancer by directly comparing genome sequence reads. Nature Biotechnology, 2014, 32, 1106-1112.	9.4	74
99	An optimized AM1/MST method for the MST-SCRF representation of solvated systems. Journal of Computational Chemistry, 1994, 15, 847-857.	1.5	73
100	Tautomerism of 1-Methyl Derivatives of Uracil, Thymine, and 5-Bromouracil. Is Tautomerism the Basis for the Mutagenicity of 5-Bromouridine?. Journal of Physical Chemistry B, 1998, 102, 5228-5233.	1.2	73
101	Theoretical Study of Azido-Tetrazole Isomerism: Effect of Solvent and Substituents and Mechanism of Isomerization. Journal of the American Chemical Society, 1998, 120, 4723-4731.	6.6	73
102	FlexServ: an integrated tool for the analysis of protein flexibility. Bioinformatics, 2009, 25, 1709-1710.	1.8	72
103	Tautomerism of Xanthine Oxidase Substrates Hypoxanthine and Allopurinol. Journal of Organic Chemistry, 1996, 61, 5964-5971.	1.7	71
104	Theoretical Study of Anion Binding to Calix[4]pyrrole: the Effects of Solvent, Fluorine Substitution, Cosolute, and Water Traces. Journal of the American Chemical Society, 2002, 124, 12796-12805.	6.6	71
105	Theoretical study of large conformational transitions in DNA: the A conformational change in water and ethanol/water. Nucleic Acids Research, 2007, 35, 3330-3338.	6.5	71
106	Scoring by Intermolecular Pairwise Propensities of Exposed Residues (SIPPER): A New Efficient Potential for Protein-Protein Docking. Journal of Chemical Information and Modeling, 2011, 51, 370-377.	2.5	70
107	Conformational dynamics of the human propeller telomeric DNA quadruplex on a microsecond time scale. Nucleic Acids Research, 2013, 41, 2723-2735.	6.5	70
108	A Comprehensive DNA Methylation Profile of Epithelial-to-Mesenchymal Transition. Cancer Research, 2014, 74, 5608-5619.	0.4	69

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109	Prevalent Sequences in the Human Genome Can Form Mini i-Motif Structures at Physiological pH. <i>Journal of the American Chemical Society</i> , 2017, 139, 13985-13988.	6.6	68
110	Molecular Dynamics Simulations of PNA-DNA and PNA-RNA Duplexes in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 2000, 122, 5997-6008.	6.6	67
111	The (In)dependence of Alternative Splicing and Gene Duplication. <i>PLoS Computational Biology</i> , 2007, 3, e33.	1.5	66
112	Optimization of the cavity size for ab initio MST-SCRF calculations of monovalent ions. <i>Chemical Physics</i> , 1994, 182, 237-248.	0.9	65
113	Differential stability of 2'-F-ANA-RNA and ANA-RNA hybrid duplexes: roles of structure, pseudohydrogen bonding, hydration, ion uptake and flexibility. <i>Nucleic Acids Research</i> , 2010, 38, 2498-2511.	6.5	65
114	Ensemble Docking from Homology Models. <i>Journal of Chemical Theory and Computation</i> , 2010, 6, 2547-2557.	2.3	65
115	Changes in the free-energy landscape of p38 MAP kinase through its canonical activation and binding events as studied by enhanced molecular dynamics simulations. <i>ELife</i> , 2017, 6, .	2.8	65
116	Structure, Recognition Properties, and Flexibility of the DNA-RNA Hybrid. <i>Journal of the American Chemical Society</i> , 2005, 127, 4910-4920.	6.6	64
117	Structural Characterization of Protein-Protein Complexes by Integrating Computational Docking with Small-angle Scattering Data. <i>Journal of Molecular Biology</i> , 2010, 403, 217-230.	2.0	64
118	The impact of monovalent ion force field model in nucleic acids simulations. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 10596.	1.3	62
119	Dramatic Effect of Furanose C2' Substitution on Structure and Stability: Directing the Folding of the Human Telomeric Quadruplex with a Single Fluorine Atom. <i>Journal of the American Chemical Society</i> , 2013, 135, 5344-5347.	6.6	62
120	Prediction and validation of protein intermediate states from structurally rich ensembles and coarse-grained simulations. <i>Nature Communications</i> , 2016, 7, 12575.	5.8	62
121	Comparison of 6-31G*-based MST/SCRF and FEP evaluations of the free energies of hydration for small neutral molecules. <i>Journal of Computational Chemistry</i> , 1993, 14, 1498-1503.	1.5	61
122	Theoretical Methods for the Representation of Solvent. <i>Journal of Molecular Modeling</i> , 1996, 2, 1-15.	0.8	61
123	Exploring the Essential Dynamics of B-DNA. <i>Journal of Chemical Theory and Computation</i> , 2005, 1, 790-800.	2.3	61
124	Evidence for Transcript Networks Composed of Chimeric RNAs in Human Cells. <i>PLoS ONE</i> , 2012, 7, e28213.	1.1	61
125	Impact of DNA methylation on 3D genome structure. <i>Nature Communications</i> , 2021, 12, 3243.	5.8	61
126	Approaching Elastic Network Models to Molecular Dynamics Flexibility. <i>Journal of Chemical Theory and Computation</i> , 2010, 6, 2910-2923.	2.3	60



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127	Targeting RNA structure in SMN2 reverses spinal muscular atrophy molecular phenotypes. <i>Nature Communications</i> , 2018, 9, 2032.	5.8	60
128	Molecular Dynamics Simulations in Aqueous Solution of Triple Helices Containing d(GÂ·CÂ·C) Trios. <i>Journal of the American Chemical Society</i> , 1998, 120, 11226-11233.	6.6	59
129	Observation of Spontaneous Base Pair Breathing Events in the Molecular Dynamics Simulation of a Difluorotoluene-Containing DNA Oligonucleotide. <i>Journal of the American Chemical Society</i> , 1999, 121, 8653-8654.	6.6	59
130	Nucleic Acid Triple Helices: Stability Effects of Nucleobase Modifications. <i>Current Organic Chemistry</i> , 2002, 6, 1333-1368.	0.9	59
131	The Native Ensemble and Folding of a Protein Molten-Globule: Functional Consequence of Downhill Folding. <i>Journal of the American Chemical Society</i> , 2011, 133, 12154-12161.	6.6	57
132	BIGNASim: a NoSQL database structure and analysis portal for nucleic acids simulation data. <i>Nucleic Acids Research</i> , 2016, 44, D272-D278.	6.5	57
133	Theoretical study of N-methylacetamide in vacuum and aqueous solution: implications for the peptide bond isomerization. <i>Journal of Organic Chemistry</i> , 1993, 58, 6397-6405.	1.7	56
134	Structure of Triplex DNA in the Gas Phase. <i>Journal of the American Chemical Society</i> , 2012, 134, 6596-6606.	6.6	56
135	Residues Coevolution Guides the Systematic Identification of Alternative Functional Conformations in Proteins. <i>Structure</i> , 2016, 24, 116-126.	1.6	56
136	Role of Intramolecular Hydrogen Bonds in the Intermolecular Hydrogen Bonding of Carbohydrates. <i>Journal of Physical Chemistry A</i> , 1998, 102, 6690-6696.	1.1	54
137	Binding Affinities of Oligonucleotides and PNAs Containing Phenoxazine and G-Clamp Cytosine Analogues Are Unusually Sequence-Dependent. <i>Organic Letters</i> , 2007, 9, 4503-4506.	2.4	54
138	Toward a Consensus View of Duplex RNA Flexibility. <i>Biophysical Journal</i> , 2010, 99, 1876-1885.	0.2	54
139	Unique Tautomeric Properties of Isoguanine. <i>Journal of the American Chemical Society</i> , 2004, 126, 154-164.	6.6	53
140	Theoretical Study of the Guanine â†’ 6-Thioguanine Substitution in Duplexes, Triplexes, and Tetraplexes. <i>Journal of the American Chemical Society</i> , 2004, 126, 14642-14650.	6.6	52
141	Local Aromaticity in Natural Nucleobases and Their Size-Expanded Benzo-Fused Derivatives. <i>Journal of Physical Chemistry A</i> , 2006, 110, 12249-12258.	1.1	52
142	Geometrical and Electronic Structure Variability of the Sugarâˆ’phosphate Backbone in Nucleic Acids. <i>Journal of Physical Chemistry B</i> , 2008, 112, 8188-8197.	1.2	52
143	Molecular interaction potential: A new tool for the theoretical study of molecular reactivity. <i>Journal of Computational Chemistry</i> , 1993, 14, 587-602.	1.5	50
144	Theoretical Study of the Mechanisms of Substrate Recognition by Catalase. <i>Journal of the American Chemical Society</i> , 2001, 123, 9665-9672.	6.6	50

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145	Hog1 bypasses stress-mediated down-regulation of transcription by RNA polymerase II redistribution and chromatin remodeling. <i>Genome Biology</i> , 2012, 13, R106.	13.9	50
146	Toward an atomistic description of the urea-denatured state of proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 5933-5938.	3.3	50
147	Understanding the Connection between Epigenetic DNA Methylation and Nucleosome Positioning from Computer Simulations. <i>PLoS Computational Biology</i> , 2013, 9, e1003354.	1.5	50
148	New strategies to incorporate the solvent polarization in self-consistent reaction field and free-energy perturbation simulations. <i>Journal of Chemical Physics</i> , 1995, 103, 10183-10191.	1.2	49
149	Theoretical Studies on the Inhibition Mechanism of Cyclooxygenase-2. Is There a Unique Recognition Site?. <i>Journal of Medicinal Chemistry</i> , 2003, 46, 1372-1382.	2.9	49
150	Dispersion and repulsion contributions to the solvation free energy: Comparison of quantum mechanical and classical approaches in the polarizable continuum model. <i>Journal of Computational Chemistry</i> , 2006, 27, 1769-1780.	1.5	49
151	Proteins in the gas phase. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2013, 3, 408-425.	6.2	49
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