

Modesto Orozco Lopez

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6514974/modesto-orozco-lopez-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

395
papers

23,822
citations

78
h-index

138
g-index

412
ext. papers

26,470
ext. citations

9
avg, IF

6.78
L-index

#	Paper	IF	Citations
395	Molecular basis of Arginine and Lysine DNA sequence-dependent thermo-stability modulation.. <i>PLoS Computational Biology</i> , 2022 , 18, e1009749	5	0
394	The Impact of the HydroxyMethylCytosine epigenetic signature on DNA structure and function. <i>PLoS Computational Biology</i> , 2021 , 17, e1009547	5	1
393	Sequence-dependent structural properties of B-DNA: what have we learned in 40 years?. <i>Biophysical Reviews</i> , 2021 , 13, 995-1005	3.7	1
392	Mutation in KARS: A novel mechanism for severe anaphylaxis. <i>Journal of Allergy and Clinical Immunology</i> , 2021 , 147, 1855-1864.e9	11.5	8
391	Impact of DNA methylation on 3D genome structure. <i>Nature Communications</i> , 2021 , 12, 3243	17.4	8
390	3dRS, a Web-Based Tool to Share Interactive Representations of 3D Biomolecular Structures and Molecular Dynamics Trajectories. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 726232	5.6	1
389	Probing allosteric regulations with coevolution-driven molecular simulations. <i>Science Advances</i> , 2021 , 7, eabj0786	14.3	0
388	Protein disorder-to-order transition enhances the nucleosome-binding affinity of H1. <i>Nucleic Acids Research</i> , 2020 , 48, 5318-5331	20.1	11
387	Colibactin DNA-damage signature indicates mutational impact in colorectal cancer. <i>Nature Medicine</i> , 2020 , 26, 1063-1069	50.5	76
386	Emergence of chromatin hierarchical loops from protein disorder and nucleosome asymmetry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 7216-7224	11.5	21
385	4D Genome Rewiring during Oncogene-Induced and Replicative Senescence. <i>Molecular Cell</i> , 2020 , 78, 522-538.e9	17.6	48
384	A multi-modal coarse grained model of DNA flexibility mappable to the atomistic level. <i>Nucleic Acids Research</i> , 2020 , 48, e29	20.1	10
383	Determination of a Structural Ensemble Representing the Dynamics of a G-Quadruplex DNA. <i>Biochemistry</i> , 2020 , 59, 379-388	3.2	2
382	Surviving the deluge of biosimulation data. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2020 , 10, e1449	7.9	5
381	Bioactive Conformational Ensemble Server and Database. A Public Framework to Speed Up Drug Discovery. <i>Journal of Chemical Theory and Computation</i> , 2020 , 16, 6586-6597	6.4	6
380	Exploring the Conformational Landscape of Bioactive Small Molecules. <i>Journal of Chemical Theory and Computation</i> , 2020 , 16, 6575-6585	6.4	10
379	DFFR: A New Method for High-Throughput Recalibration of Automatic Force-Fields for Drugs. <i>Journal of Chemical Theory and Computation</i> , 2020 , 16, 6598-6608	6.4	2

378	BioExcel Building Blocks, a software library for interoperable biomolecular simulation workflows. <i>Scientific Data</i> , 2019 , 6, 169	8.2	19
377	Nucleosome Dynamics: a new tool for the dynamic analysis of nucleosome positioning. <i>Nucleic Acids Research</i> , 2019 , 47, 9511-9523	20.1	3
376	Predicting the Limit of Intramolecular Hydrogen Bonding with Classical Molecular Dynamics. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 3759-3763	16.4	10
375	Predicting the Limit of Intramolecular Hydrogen Bonding with Classical Molecular Dynamics. <i>Angewandte Chemie</i> , 2019 , 131, 3799-3803	3.6	4
374	A multifunctional toolkit for target-directed cancer therapy. <i>Chemical Communications</i> , 2019 , 55, 802-805	5.8	1
373	An artificial DNAzyme RNA ligase shows a reaction mechanism resembling that of cellular polymerases. <i>Nature Catalysis</i> , 2019 , 2, 544-552	36.5	9
372	DNA specificities modulate the binding of human transcription factor A to mitochondrial DNA control region. <i>Nucleic Acids Research</i> , 2019 , 47, 6519-6537	20.1	6
371	The Origins and the Biological Consequences of the Pur/Pyr DNA/RNA Asymmetry. <i>CheM</i> , 2019 , 5, 1619-1631	16.3	6
370	Modulation of the helical properties of DNA: next-to-nearest neighbour effects and beyond. <i>Nucleic Acids Research</i> , 2019 , 47, 4418-4430	20.1	12
369	Oncogenic mutations at the EGFR ectodomain structurally converge to remove a steric hindrance on a kinase-coupled cryptic epitope. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 10009-10018	11.5	23
368	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	14.3	55
367	How B-DNA Dynamics Decipher Sequence-Selective Protein Recognition. <i>Journal of Molecular Biology</i> , 2019 , 431, 3845-3859	6.5	15
366	VeriNA3d: an R package for nucleic acids data mining. <i>Bioinformatics</i> , 2019 , 35, 5334-5336	7.2	2
365	The static and dynamic structural heterogeneities of B-DNA: extending Calladine-Dickerson rules. <i>Nucleic Acids Research</i> , 2019 , 47, 11090-11102	20.1	18
364	An In-Depth Look at DNA Crystals through the Prism of Molecular Dynamics Simulations. <i>CheM</i> , 2019 , 5, 649-663	16.2	9
363	Modeling, Simulations, and Bioinformatics at the Service of RNA Structure. <i>CheM</i> , 2019 , 5, 51-73	16.2	20
362	Inhibition of Human Enhancer of Zeste Homolog 2 with Tambjamine Analogs. <i>Journal of Chemical Information and Modeling</i> , 2018 , 57, 2089-2098	6.1	4
361	Protein Flexibility and Synergy of HMG Domains Underlie U-Turn Bending of DNA by TFAM in Solution. <i>Biophysical Journal</i> , 2018 , 114, 2386-2396	2.9	11

360	Plasticity in oligomerization, operator architecture, and DNA binding in the mode of action of a bacterial B-based photoreceptor. <i>Journal of Biological Chemistry</i> , 2018 , 293, 17888-17905	5.4	11
359	Allosterism and signal transfer in DNA. <i>Nucleic Acids Research</i> , 2018 , 46, 7554-7565	20.1	15
358	Targeting RNA structure in SMN2 reverses spinal muscular atrophy molecular phenotypes. <i>Nature Communications</i> , 2018 , 9, 2032	17.4	34
357	The Multiple Roles of Waters in Protein Solvation. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 3636-3643	3.4	13
356	How accurate are accurate force-fields for B-DNA?. <i>Nucleic Acids Research</i> , 2017 , 45, 4217-4230	20.1	79
355	Proton Dynamics in Protein Mass Spectrometry. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 1105-1112	6.4	26
354	Discrete Molecular Dynamics Approach to the Study of Disordered and Aggregating Proteins. <i>Journal of Chemical Theory and Computation</i> , 2017 , 13, 1454-1461	6.4	14
353	Efficient siRNA-peptide conjugation for specific targeted delivery into tumor cells. <i>Chemical Communications</i> , 2017 , 53, 2870-2873	5.8	15
352	Compaction of Duplex Nucleic Acids upon Native Electrospray Mass Spectrometry. <i>ACS Central Science</i> , 2017 , 3, 454-461	16.8	65
351	Mechanism of Structural Tuning of the Hepatitis C Virus Human Cellular Receptor CD81 Large Extracellular Loop. <i>Structure</i> , 2017 , 25, 53-65	5.2	13
350	PMut: a web-based tool for the annotation of pathological variants on proteins, 2017 update. <i>Nucleic Acids Research</i> , 2017 , 45, W222-W228	20.1	100
349	The Role of Unconventional Hydrogen Bonds in Determining BII Propensities in B-DNA. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 21-28	6.4	15
348	DNA structure directs positioning of the mitochondrial genome packaging protein Abf2p. <i>Nucleic Acids Research</i> , 2017 , 45, 951-967	20.1	17
347	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	16.4	40
346	Repair of UV-Induced DNA Damage Independent of Nucleotide Excision Repair Is Masked by MUTYH. <i>Molecular Cell</i> , 2017 , 68, 797-807.e7	17.6	22
345	Quantification of Pathway Cross-talk Reveals Novel Synergistic Drug Combinations for Breast Cancer. <i>Cancer Research</i> , 2017 , 77, 459-469	10.1	47
344	Changes in the free-energy landscape of p38MAP kinase through its canonical activation and binding events as studied by enhanced molecular dynamics simulations. <i>ELife</i> , 2017 , 6,	8.9	36
343	Structural basis of a histidine-DNA nicking/joining mechanism for gene transfer and promiscuous spread of antibiotic resistance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, E6526-E6535	11.5	17

342	Mutations in JMJD1C are involved in Rett syndrome and intellectual disability. <i>Genetics in Medicine</i> , 2016 , 18, 378-85	8.1	28
341	Small Details Matter: The 2'-Hydroxyl as a Conformational Switch in RNA. <i>Journal of the American Chemical Society</i> , 2016 , 138, 16355-16363	16.4	16
340	Prediction and validation of protein intermediate states from structurally rich ensembles and coarse-grained simulations. <i>Nature Communications</i> , 2016 , 7, 12575	17.4	38
339	pyPcazip: A PCA-based toolkit for compression and analysis of molecular simulation data. <i>SoftwareX</i> , 2016 , 5, 44-50	2.7	23
338	Parmsbc1: a refined force field for DNA simulations. <i>Nature Methods</i> , 2016 , 13, 55-8	21.6	483
337	Multiscale simulation of DNA. <i>Current Opinion in Structural Biology</i> , 2016 , 37, 29-45	8.1	85
336	Residues Coevolution Guides the Systematic Identification of Alternative Functional Conformations in Proteins. <i>Structure</i> , 2016 , 24, 116-126	5.2	40
335	Exploring the complete mutational space of the LDL receptor LA5 domain using molecular dynamics: linking SNPs with disease phenotypes in familial hypercholesterolemia. <i>Human Molecular Genetics</i> , 2016 , 25, 1233-46	5.6	7
334	Rational design of novel N-alkyl-N capped biostable RNA nanostructures for efficient long-term inhibition of gene expression. <i>Nucleic Acids Research</i> , 2016 , 44, 4354-67	20.1	6
333	BIGNASim: a NoSQL database structure and analysis portal for nucleic acids simulation data. <i>Nucleic Acids Research</i> , 2016 , 44, D272-8	20.1	35
332	Epigenomic analysis detects aberrant super-enhancer DNA methylation in human cancer. <i>Genome Biology</i> , 2016 , 17, 11	18.3	141
331	The Differential Response of Proteins to Macromolecular Crowding. <i>PLoS Computational Biology</i> , 2016 , 12, e1005040	5	35
330	Nucleosome architecture throughout the cell cycle. <i>Scientific Reports</i> , 2016 , 6, 19729	4.9	23
329	Conformational plasticity of RepB, the replication initiator protein of promiscuous streptococcal plasmid pMV158. <i>Scientific Reports</i> , 2016 , 6, 20915	4.9	9
328	Saturation of recognition elements blocks evolution of new tRNA identities. <i>Science Advances</i> , 2016 , 2, e1501860	14.3	34
327	Computational Prediction of HIV-1 Resistance to Protease Inhibitors. <i>Journal of Chemical Information and Modeling</i> , 2016 , 56, 915-23	6.1	15
326	Long-timescale dynamics of the Drew-Dickerson dodecamer. <i>Nucleic Acids Research</i> , 2016 , 44, 4052-66	20.1	68
325	Challenges of docking in large, flexible and promiscuous binding sites. <i>Bioorganic and Medicinal Chemistry</i> , 2016 , 24, 4961-4969	3.4	15

324	Structure and Dynamics of Oligonucleotides in the Gas Phase. <i>Angewandte Chemie</i> , 2015 , 127, 477-481	3.6	6
323	Synthesis and properties of 2'-deoxy-2',4'-difluoroarabinose-modified nucleic acids. <i>Journal of Organic Chemistry</i> , 2015 , 80, 3083-91	4.2	25
322	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, 10205-15	16.4	96
321	Non-coding recurrent mutations in chronic lymphocytic leukaemia. <i>Nature</i> , 2015 , 526, 519-24	50.4	565
320	The structural impact of DNA mismatches. <i>Nucleic Acids Research</i> , 2015 , 43, 4309-21	20.1	80
319	SEABED: Small molecule activity scanner web service based. <i>Bioinformatics</i> , 2015 , 31, 773-5	7.2	7
318	Seven-Membered Ring Nucleoside Analogues: Stereoselective Synthesis and Studies on Their Conformational Properties. <i>Organic Letters</i> , 2015 , 17, 5416-9	6.2	9
317	Inntags: small self-structured epitopes for innocuous protein tagging. <i>Nature Methods</i> , 2015 , 12, 955-8	21.6	18
316	Visualizing phosphodiester-bond hydrolysis by an endonuclease. <i>Nature Structural and Molecular Biology</i> , 2015 , 22, 65-72	17.6	26
315	SDS-PAGE analysis of Aβ oligomers is disserving research into Alzheimer's disease: appealing for ESI-IM-MS. <i>Scientific Reports</i> , 2015 , 5, 14809	4.9	70
314	Can A Denaturant Stabilize DNA? Pyridine Reverses DNA Denaturation in Acidic pH. <i>Angewandte Chemie</i> , 2015 , 127, 10634-10637	3.6	
313	Can A Denaturant Stabilize DNA? Pyridine Reverses DNA Denaturation in Acidic pH. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 10488-91	16.4	6
312	Molecular dynamics simulations: advances and applications. <i>Advances and Applications in Bioinformatics and Chemistry</i> , 2015 , 8, 37-47	1.5	229
311	PACSAB: Coarse-Grained Force Field for the Study of Protein-Protein Interactions and Conformational Sampling in Multiprotein Systems. <i>Journal of Chemical Theory and Computation</i> , 2015 , 11, 5929-38	6.4	10
310	Assessing the suitability of the multilevel strategy for the conformational analysis of small ligands. <i>Journal of Physical Chemistry B</i> , 2015 , 119, 1164-72	3.4	16
309	Structure and dynamics of oligonucleotides in the gas phase. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 467-71	16.4	18
308	Molecular dynamics study of naturally existing cavity couplings in proteins. <i>PLoS ONE</i> , 2015 , 10, e0119978	3.7	7
307	Specific loop modifications of the thrombin-binding aptamer trigger the formation of parallel structures. <i>FEBS Journal</i> , 2014 , 281, 1085-99	5.7	21

306	The DNA-forming properties of 6-selenoguanine. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 1101-10	3.6	9
305	Comprehensive characterization of complex structural variations in cancer by directly comparing genome sequence reads. <i>Nature Biotechnology</i> , 2014 , 32, 1106-12	44.5	62
304	Structure and properties of DNA in apolar solvents. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 8540-8	3.4	14
303	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	11.5	119
302	MD and NMR analyses of choline and TMA binding to duplex DNA: on the origins of aberrant sequence-dependent stability by alkyl cations in aqueous and water-free solvents. <i>Journal of the American Chemical Society</i> , 2014 , 136, 3075-86	16.4	39
301	A theoretical view of protein dynamics. <i>Chemical Society Reviews</i> , 2014 , 43, 5051-66	58.5	83
300	Correlated motions are a fundamental property of β sheets. <i>Nature Communications</i> , 2014 , 5, 4070	17.4	52
299	μ ABC: a systematic microsecond molecular dynamics study of tetranucleotide sequence effects in B-DNA. <i>Nucleic Acids Research</i> , 2014 , 42, 12272-83	20.1	138
298	A comprehensive DNA methylation profile of epithelial-to-mesenchymal transition. <i>Cancer Research</i> , 2014 , 74, 5608-19	10.1	54
297	Unraveling the sequence-dependent polymorphic behavior of d(CpG) steps in B-DNA. <i>Nucleic Acids Research</i> , 2014 , 42, 11304-20	20.1	63
296	Fuzziness and noise in nucleosomal architecture. <i>Nucleic Acids Research</i> , 2014 , 42, 4934-46	20.1	19
295	Structure of Nucleic Acids in the Gas Phase. <i>Physical Chemistry in Action</i> , 2014 , 55-75		3
294	On the nature of DNA hyperchromic effect. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 8697-704	3.4	31
293	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, 119-25	6.4	63
292	The conformational landscape of an intrinsically disordered DNA-binding domain of a transcription regulator. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 13842-50	3.4	19
291	BioSuper: a web tool for the superimposition of biomolecules and assemblies with rotational symmetry. <i>BMC Structural Biology</i> , 2013 , 13, 32	2.7	5
290	Backbone FC-H \cdots O hydrogen bonds in 2'-F-substituted nucleic acids. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 12065-8	16.4	41
289	Backbone FC-H \cdots O Hydrogen Bonds in 2'-F-Substituted Nucleic Acids. <i>Angewandte Chemie</i> , 2013 , 125, 12287-12290	3.6	6

288	Efficient Relaxation of Protein-Protein Interfaces by Discrete Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , 2013 , 9, 1222-9	6.4	10
287	The dynamic view of proteins: comment on "Comparing proteins to their internal dynamics: exploring structure-function relationships beyond static structural alignments". <i>Physics of Life Reviews</i> , 2013 , 10, 29-30; discussion 39-40	2.1	2
286	The catalytic site structural gate of adenosine deaminase allosterically modulates ligand binding to adenosine receptors. <i>FASEB Journal</i> , 2013 , 27, 1048-61	0.9	30
285	Functionalization of the 3'-ends of DNA and RNA strands with N-ethyl-N-coupled nucleosides: a promising approach to avoid 3'-exonuclease-catalyzed hydrolysis of therapeutic oligonucleotides. <i>ChemBioChem</i> , 2013 , 14, 510-20	3.8	9
284	Structure, Stiffness and Substates of the Dickerson-Drew Dodecamer. <i>Journal of Chemical Theory and Computation</i> , 2013 , 9, 707-721	6.4	72
283	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, 5344-7	16.4	55
282	Proteins in the gas phase. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2013 , 3, 408-425	4.9	40
281	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, 5933-8	11.5	42
280	Understanding the connection between epigenetic DNA methylation and nucleosome positioning from computer simulations. <i>PLoS Computational Biology</i> , 2013 , 9, e1003354	5	40
279	Exploring early stages of the chemical unfolding of proteins at the proteome scale. <i>PLoS Computational Biology</i> , 2013 , 9, e1003393	5	11
278	NAFlex: a web server for the study of nucleic acid flexibility. <i>Nucleic Acids Research</i> , 2013 , 41, W47-55	20.1	30
277	Unravelling the hidden DNA structural/physical code provides novel insights on promoter location. <i>Nucleic Acids Research</i> , 2013 , 41, 7220-30	20.1	11
276	Improved nucleic acid descriptors for siRNA efficacy prediction. <i>Nucleic Acids Research</i> , 2013 , 41, 1383-94	20.1	15
275	Exploration of conformational transition pathways from coarse-grained simulations. <i>Bioinformatics</i> , 2013 , 29, 1980-6	7.2	21
274	Light on the structural communication in Ras GTPases. <i>Journal of Biomolecular Structure and Dynamics</i> , 2013 , 31, 142-57	3.6	17
273	Conformational dynamics of the human propeller telomeric DNA quadruplex on a microsecond time scale. <i>Nucleic Acids Research</i> , 2013 , 41, 2723-35	20.1	60
272	Geometry, Dynamics, and Electronic Structure of DNA/Carbon Nanotube Hybrids. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 11278-11282	3.8	4
271	Hog1 bypasses stress-mediated down-regulation of transcription by RNA polymerase II redistribution and chromatin remodeling. <i>Genome Biology</i> , 2012 , 13, R106	18.3	43

270	Structure of triplex DNA in the gas phase. <i>Journal of the American Chemical Society</i> , 2012 , 134, 6596-60616.4	49
269	Finding Conformational Transition Pathways from Discrete Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , 2012 , 8, 4707-18	6.4 25
268	Frontiers in molecular dynamics simulations of DNA. <i>Accounts of Chemical Research</i> , 2012 , 45, 196-205	24.3 171
267	Fast Atomistic Molecular Dynamics Simulations from Essential Dynamics Samplings. <i>Journal of Chemical Theory and Computation</i> , 2012 , 8, 792-9	6.4 9
266	Exploring polymorphisms in B-DNA helical conformations. <i>Nucleic Acids Research</i> , 2012 , 40, 10668-78	20.1 68
265	Epigenomic analysis detects widespread gene-body DNA hypomethylation in chronic lymphocytic leukemia. <i>Nature Genetics</i> , 2012 , 44, 1236-42	36.3 422
264	Application of Drug-Perturbed Essential Dynamics/Molecular Dynamics (ED/MD) to Virtual Screening and Rational Drug Design. <i>Journal of Chemical Theory and Computation</i> , 2012 , 8, 2204-14	6.4 10
263	Impact of methylation on the physical properties of DNA. <i>Biophysical Journal</i> , 2012 , 102, 2140-8	2.9 89
262	A Multilevel Strategy for the Exploration of the Conformational Flexibility of Small Molecules. <i>Journal of Chemical Theory and Computation</i> , 2012 , 8, 1808-19	6.4 32
261	Defining the nature of thermal intermediate in 3 state folding proteins: apoflavodoxin, a study case. <i>PLoS Computational Biology</i> , 2012 , 8, e1002647	5 9
260	Evidence for transcript networks composed of chimeric RNAs in human cells. <i>PLoS ONE</i> , 2012 , 7, e282133.7	51
259	Characterization of the impact of alternative splicing on protein dynamics: the cases of glutathione S-transferase and ectodysplasin-A isoforms. <i>Proteins: Structure, Function and Bioinformatics</i> , 2012 , 80, 2235-49	4.2 4
258	MDWeb and MDMoby: an integrated web-based platform for molecular dynamics simulations. <i>Bioinformatics</i> , 2012 , 28, 1278-9	7.2 120
257	Small Molecule Docking from Theoretical Structural Models 2012 , 75-95	1
256	Exome sequencing identifies recurrent mutations of the splicing factor SF3B1 gene in chronic lymphocytic leukemia. <i>Nature Genetics</i> , 2011 , 44, 47-52	36.3 752
255	Structural, dynamical, and electronic transport properties of modified DNA duplexes containing size-expanded nucleobases. <i>Journal of Physical Chemistry A</i> , 2011 , 115, 11344-54	2.8 15
254	Coarse-grained representation of protein flexibility. Foundations, successes, and shortcomings. <i>Advances in Protein Chemistry and Structural Biology</i> , 2011 , 85, 183-215	5.3 27
253	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, 12154-61	16.4 48

252	Structural analysis of an equilibrium folding intermediate in the apoflavodoxin native ensemble by small-angle X-ray scattering. <i>Journal of Molecular Biology</i> , 2011 , 406, 604-19	6.5	23
251	A systematic study of the energetics involved in structural changes upon association and connectivity in protein interaction networks. <i>Structure</i> , 2011 , 19, 881-9	5.2	38
250	Polarization effects in molecular interactions. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2011 , 1, 844-854	7.9	26
249	Physical properties of naked DNA influence nucleosome positioning and correlate with transcription start and termination sites in yeast. <i>BMC Genomics</i> , 2011 , 12, 489	4.5	25
248	Effects of local electric fields on the redox free energy of single stranded DNA. <i>Chemical Communications</i> , 2011 , 47, 2646-8	5.8	6
247	The protein folding transition-state ensemble from a G β -like model. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 15166-74	3.6	12
246	Whole-genome sequencing identifies recurrent mutations in chronic lymphocytic leukaemia. <i>Nature</i> , 2011 , 475, 101-5	50.4	1206
245	nucleR: a package for non-parametric nucleosome positioning. <i>Bioinformatics</i> , 2011 , 27, 2149-50	7.2	54
244	Scoring by intermolecular pairwise propensities of exposed residues (SIPPER): a new efficient potential for protein-protein docking. <i>Journal of Chemical Information and Modeling</i> , 2011 , 51, 370-7	6.1	51
243	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, 3935-40	11.5	111
242	Nucleotide binding switches the information flow in ras GTPases. <i>PLoS Computational Biology</i> , 2011 , 7, e1001098	5	27
241	Structural properties of g,t-parallel duplexes. <i>Journal of Nucleic Acids</i> , 2010 , 2010,	2.3	3
240	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, 2498-511	20.1	58
239	Toward a consensus view of duplex RNA flexibility. <i>Biophysical Journal</i> , 2010 , 99, 1876-85	2.9	46
238	Approaching Elastic Network Models to Molecular Dynamics Flexibility. <i>Journal of Chemical Theory and Computation</i> , 2010 , 6, 2910-23	6.4	52
237	Ensemble Docking from Homology Models. <i>Journal of Chemical Theory and Computation</i> , 2010 , 6, 2547-56	5.4	55
236	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	20.1	299
235	Structural characterization of protein-protein complexes by integrating computational docking with small-angle scattering data. <i>Journal of Molecular Biology</i> , 2010 , 403, 217-30	6.5	59

234	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	6.4	261
233	Performance of the IEF-MST solvation continuum model in the SAMPL2 blind test prediction of hydration and tautomerization free energies. <i>Journal of Computer-Aided Molecular Design</i> , 2010 , 24, 281-291	4.7	22
232	Deciphering the deformation modes associated with function retention and specialization in members of the Ras superfamily. <i>Structure</i> , 2010 , 18, 402-14	5.2	40
231	MoDEL (Molecular Dynamics Extended Library): a database of atomistic molecular dynamics trajectories. <i>Structure</i> , 2010 , 18, 1399-409	5.2	100
230	A genomics method to identify pathogenicity-related proteins. Application to aminoacyl-tRNA synthetase-like proteins. <i>FEBS Letters</i> , 2010 , 584, 460-6	3.8	5
229	Real-Time Atomistic Description of DNA Unfolding. <i>Angewandte Chemie</i> , 2010 , 122, 4915-4918	3.6	2
228	Multiple Routes to Characterize the Folding of a Small DNA Hairpin. <i>Angewandte Chemie</i> , 2010 , 122, 7839-7842	3.6	4
227	Real-time atomistic description of DNA unfolding. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 4805-8	16.4	26
226	Multiple routes to characterize the folding of a small DNA hairpin. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 7673-6	16.4	40
225	Protein flexibility from discrete molecular dynamics simulations using quasi-physical potentials. <i>Proteins: Structure, Function and Bioinformatics</i> , 2010 , 78, 83-94	4.2	20
224	Conformationally rigid nucleoside probes help understand the role of sugar pucker and nucleobase orientation in the thrombin-binding aptamer. <i>Nucleic Acids Research</i> , 2009 , 37, 5589-601	20.1	33
223	Alternative splicing of transcription factors' genes: beyond the increase of proteome diversity. <i>Comparative and Functional Genomics</i> , 2009 , 905894		13
222	FlexServ: an integrated tool for the analysis of protein flexibility. <i>Bioinformatics</i> , 2009 , 25, 1709-10	7.2	67
221	An atomistic view to the gas phase proteome. <i>Structure</i> , 2009 , 17, 88-95	5.2	37
220	Solvation enthalpies of neutral solutes in water and octanol. <i>Theoretical Chemistry Accounts</i> , 2009 , 123, 11-20	1.9	7
219	COCO: a simple tool to enrich the representation of conformational variability in NMR structures. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009 , 75, 206-16	4.2	17
218	Comparison of molecular dynamics and superfamily spaces of protein domain deformation. <i>BMC Structural Biology</i> , 2009 , 9, 6	2.7	29
217	On the performance of continuum solvation methods. A comment on "Universal approaches to solvation modeling". <i>Accounts of Chemical Research</i> , 2009 , 42, 489-92; discussion 493-7	24.3	152

216	Theoretical characterization of the dynamical behavior and transport properties of alpha,gamma-peptide nanotubes in solution. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15678-86	16.4	40
215	Performance of the IEF-MST solvation continuum model in a blind test prediction of hydration free energies. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 9330-4	3.4	17
214	Ab initio study of the structural, tautomeric, pairing, and electronic properties of seleno-derivatives of thymine. <i>Journal of Physical Chemistry B</i> , 2009 , 113, 14465-72	3.4	14
213	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	6.4	114
212	On the Use of low-resolution Data to Improve Structure Prediction of Proteins and Protein Complexes. <i>Journal of Chemical Theory and Computation</i> , 2009 , 5, 3129-37	6.4	7
211	Unique tautomeric and recognition properties of thioketothymines?. <i>Journal of the American Chemical Society</i> , 2009 , 131, 12845-53	16.4	4
210	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, 2514-30	6.4	112
209	The impact of monovalent ion force field model in nucleic acids simulations. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 10596-607	3.6	59
208	Recent advances in the study of nucleic acid flexibility by molecular dynamics. <i>Current Opinion in Structural Biology</i> , 2008 , 18, 185-93	8.1	105
207	Ab initio study of naphtho-homologated DNA bases. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 2179-86	3.4	23
206	Exploring the suitability of coarse-grained techniques for the representation of protein dynamics. <i>Biophysical Journal</i> , 2008 , 95, 2127-38	2.9	39
205	Geometrical and electronic structure variability of the sugar-phosphate backbone in nucleic acids. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 8188-97	3.4	50
204	Target flexibility: an emerging consideration in drug discovery and design. <i>Journal of Medicinal Chemistry</i> , 2008 , 51, 6237-55	8.3	244
203	Induction effects in metal cation-benzene complexes. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 2616-24	3.4	73
202	8-Amino guanine accelerates tetramolecular G-quadruplex formation. <i>Chemical Communications</i> , 2008 , 2926-8	5.8	30
201	Structure-directed reversion in the pi-facial stereoselective alkylation of chiral bicyclic lactams. <i>Journal of Organic Chemistry</i> , 2008 , 73, 7756-63	4.2	12
200	United-Atom Discrete Molecular Dynamics of Proteins Using Physics-Based Potentials. <i>Journal of Chemical Theory and Computation</i> , 2008 , 4, 2001-10	6.4	16
199	Theoretical analysis of antisense duplexes: determinants of the RNase H susceptibility. <i>Journal of the American Chemical Society</i> , 2008 , 130, 3486-96	16.4	27

198	DNAlive: a tool for the physical analysis of DNA at the genomic scale. <i>Bioinformatics</i> , 2008 , 24, 1731-2	7.2	22
197	Interoperability with Moby 1.0--it's better than sharing your toothbrush!. <i>Briefings in Bioinformatics</i> , 2008 , 9, 220-31	13.4	73
196	GRID-MD-A tool for massive simulation of protein channels. <i>Proteins: Structure, Function and Bioinformatics</i> , 2008 , 70, 892-9	4.2	13
195	Extension of the MST continuum solvation model to the RM1 semiempirical Hamiltonian. <i>Journal of Computational Chemistry</i> , 2008 , 29, 578-87	3.5	16
194	Towards a molecular dynamics consensus view of B-DNA flexibility. <i>Nucleic Acids Research</i> , 2008 , 36, 2379-94	12.4	128
193	Thermochemical Analysis of the Hydration of Neutral Solutes. <i>Challenges and Advances in Computational Chemistry and Physics</i> , 2008 , 103-113	0.7	
192	Derivation of Distributed Models of Atomic Polarizability for Molecular Simulations. <i>Journal of Chemical Theory and Computation</i> , 2007 , 3, 1901-13	6.4	35
191	Triplex formation using oligonucleotide clamps carrying 8-aminopurines. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2007 , 26, 979-83	1.4	2
190	Dissection of the recognition properties of p38 MAP kinase. Determination of the binding mode of a new pyridinyl-heterocycle inhibitor family. <i>Journal of Medicinal Chemistry</i> , 2007 , 50, 283-93	8.3	22
189	Exploring the dynamics of calix[4]pyrrole: effect of solvent and fluorine substitution. <i>Chemistry - A European Journal</i> , 2007 , 13, 1108-16	4.8	32
188	A procedure for identifying homologous alternative splicing events. <i>BMC Bioinformatics</i> , 2007 , 8, 260	3.6	3
187	Thorough validation of protein normal mode analysis: a comparative study with essential dynamics. <i>Structure</i> , 2007 , 15, 565-75	5.2	130
186	A hydrophobic similarity analysis of solvation effects on nucleic acid bases. <i>Journal of Molecular Modeling</i> , 2007 , 13, 357-65	2	7
185	The (in)dependence of alternative splicing and gene duplication. <i>PLoS Computational Biology</i> , 2007 , 3, e33	5	57
184	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, 31444-52	5.4	81
183	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	11.5	194
182	Refinement of the AMBER force field for nucleic acids: improving the description of alpha/gamma conformers. <i>Biophysical Journal</i> , 2007 , 92, 3817-29	2.9	1705
181	Theoretical study of large conformational transitions in DNA: the BA conformational change in water and ethanol/water. <i>Nucleic Acids Research</i> , 2007 , 35, 3330-8	20.1	68

180	Dynamics of B-DNA on the microsecond time scale. <i>Journal of the American Chemical Society</i> , 2007 , 129, 14739-45	16.4	224
179	Determining promoter location based on DNA structure first-principles calculations. <i>Genome Biology</i> , 2007 , 8, R263	18.3	98
178	Characterization of compensated mutations in terms of structural and physico-chemical properties. <i>Journal of Molecular Biology</i> , 2007 , 365, 249-56	6.5	41
177	Binding affinities of oligonucleotides and PNAs containing phenoxazine and G-clamp cytosine analogues are unusually sequence-dependent. <i>Organic Letters</i> , 2007 , 9, 4503-6	6.2	39
176	Exploring the reasons for the large density of triplex-forming oligonucleotide target sequences in the human regulatory regions. <i>BMC Genomics</i> , 2006 , 7, 63	4.5	38
175	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, 2854-65	4.8	204
174	Destabilization of quadruplex DNA by 8-aminoguanine. <i>ChemBioChem</i> , 2006 , 7, 46-8	3.8	17
173	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, 1769-80	3.5	44
172	Essential Dynamics: A Tool for Efficient Trajectory Compression and Management. <i>Journal of Chemical Theory and Computation</i> , 2006 , 2, 251-8	6.4	90
171	Local aromaticity in natural nucleobases and their size-expanded benzo-fused derivatives. <i>Journal of Physical Chemistry A</i> , 2006 , 110, 12249-58	2.8	51
170	Theoretical study of the Hoogsteen-Watson-Crick junctions in DNA. <i>Biophysical Journal</i> , 2006 , 90, 1000-8	2.9	14
169	Data mining of molecular dynamics trajectories of nucleic acids. <i>Journal of Biomolecular Structure and Dynamics</i> , 2006 , 23, 447-56	3.6	12
168	G-quadruplexes can maintain their structure in the gas phase. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3608-19	16.4	82
167	Benzoderivatives of nucleic acid bases as modified DNA building blocks. <i>Journal of Physical Chemistry A</i> , 2006 , 110, 510-8	2.8	21
166	On the origin of the stereoselectivity in the alkylation of oxazolopiperidone enolates. <i>Journal of the American Chemical Society</i> , 2006 , 128, 6581-8	16.4	15
165	Aromaticity-induced changes in electronic properties of size-expanded DNA bases: Case of xC. <i>International Journal of Quantum Chemistry</i> , 2006 , 106, 2339-2346	2.1	17
164	Ligand-induced dynamical regulation of NO conversion in Mycobacterium tuberculosis truncated hemoglobin-N. <i>Proteins: Structure, Function and Bioinformatics</i> , 2006 , 64, 457-64	4.2	89
163	A fast method for the determination of fractional contributions to solvation in proteins. <i>Protein Science</i> , 2006 , 15, 2525-33	6.3	3

162	Structure, recognition properties, and flexibility of the DNA:RNA hybrid. <i>Journal of the American Chemical Society</i> , 2005 , 127, 4910-20	16.4	53
161	Nature of minor-groove binders-DNA complexes in the gas phase. <i>Journal of the American Chemical Society</i> , 2005 , 127, 11690-8	16.4	35
160	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, 4433-44	16.4	102
159	Exploring the Essential Dynamics of B-DNA. <i>Journal of Chemical Theory and Computation</i> , 2005 , 1, 790-800	4	56
158	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, 7223-33	8.3	179
157	MST continuum study of the hydration free energies of monovalent ionic species. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 3565-74	3.4	40
156	Partition of protein solvation into group contributions from molecular dynamics simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2005 , 58, 101-9	4.2	8
155	Extension of the MST model to the IEF formalism: HF and B3LYP parametrizations. <i>Computational and Theoretical Chemistry</i> , 2005 , 727, 29-40		74
154	Are the hydrogen bonds of RNA (AU) stronger than those of DNA (AT)? A quantum mechanics study. <i>Chemistry - A European Journal</i> , 2005 , 11, 5062-6	4.8	39
153	Hydrophobic molecular similarity from MST fractional contributions to the octanol/water partition coefficient. <i>Journal of Computer-Aided Molecular Design</i> , 2005 , 19, 401-19	4.2	8
152	Use of bioinformatics tools for the annotation of disease-associated mutations in animal models. <i>Proteins: Structure, Function and Bioinformatics</i> , 2005 , 61, 878-87	4.2	17
151	PMUT: a web-based tool for the annotation of pathological mutations on proteins. <i>Bioinformatics</i> , 2005 , 21, 3176-8	7.2	404
150	PupasView: a visual tool for selecting suitable SNPs, with putative pathological effect in genes, for genotyping purposes. <i>Nucleic Acids Research</i> , 2005 , 33, W501-5	20.1	192
149	Group contributions to the solvation free energy from MST continuum calculations. <i>Brazilian Journal of Physics</i> , 2004 , 34, 48-57	1.2	6
148	The relative flexibility of B-DNA and A-RNA duplexes: database analysis. <i>Nucleic Acids Research</i> , 2004 , 32, 6144-51	20.1	105
147	Triplex-forming oligonucleotide target sequences in the human genome. <i>Nucleic Acids Research</i> , 2004 , 32, 354-60	20.1	127
146	Effect of bulky lesions on DNA: solution structure of a DNA duplex containing a cholesterol adduct. <i>Journal of Biological Chemistry</i> , 2004 , 279, 24552-60	5.4	15
145	Functional and structural conservation of CBS domains from CLC chloride channels. <i>Journal of Physiology</i> , 2004 , 557, 363-78	3.9	120

144	Linear response theory: an alternative to PB and GB methods for the analysis of molecular dynamics trajectories?. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004 , 57, 458-67	4.2	7
143	Unconventional interactions between water and heterocyclic nitrogens in protein structures. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004 , 57, 1-8	4.2	37
142	MST study of group contributions for alkane derivatives: effect of the charge normalization. <i>Chemical Physics Letters</i> , 2004 , 384, 299-305	2.5	6
141	Exploring the binding mode of semicarbazide-sensitive amine oxidase/VAP-1: identification of novel substrates with insulin-like activity. <i>Journal of Medicinal Chemistry</i> , 2004 , 47, 4865-74	8.3	27
140	Exploring the counterion atmosphere around DNA: what can be learned from molecular dynamics simulations?. <i>Biophysical Journal</i> , 2004 , 87, 800-11	2.9	86
139	Alternative splicing mechanisms for the modulation of protein function: conservation between human and other species. <i>Journal of Molecular Biology</i> , 2004 , 335, 495-502	6.5	20
138	Relative flexibility of DNA and RNA: a molecular dynamics study. <i>Journal of Molecular Biology</i> , 2004 , 343, 627-38	6.5	79
137	Theoretical study of the guanine → 6-thioguanine substitution in duplexes, triplexes, and tetraplexes. <i>Journal of the American Chemical Society</i> , 2004 , 126, 14642-50	16.4	48
136	Unique tautomeric properties of isoguanine. <i>Journal of the American Chemical Society</i> , 2004 , 126, 154-64	16.4	44
135	Molecular modelling approaches to the design of acetylcholinesterase inhibitors: new challenges for the treatment of Alzheimer's disease. <i>Current Pharmaceutical Design</i> , 2004 , 10, 3131-40	3.3	27
134	Solute-Solvent Interactions from QM SCRF Methods 2004 , 475-495		1
133	Antiparallel triple helices. Structural characteristics and stabilization by 8-amino derivatives. <i>Journal of the American Chemical Society</i> , 2003 , 125, 16127-38	16.4	34
132	Electrostatic component of solvation: comparison of SCRF continuum models. <i>Journal of Computational Chemistry</i> , 2003 , 24, 284-97	3.5	82
131	Transferability of fragmental contributions to the octanol/water partition coefficient: an NDDO-based MST study. <i>Journal of Computational Chemistry</i> , 2003 , 24, 32-45	3.5	11
130	Energy decomposition in molecular complexes: implications for the treatment of polarization in molecular simulations. <i>Journal of Computational Chemistry</i> , 2003 , 24, 1263-75	3.5	13
129	Continuum and discrete calculation of fractional contributions to solvation free energy. <i>Journal of Computational Chemistry</i> , 2003 , 24, 1610-23	3.5	8
128	Theoretical studies on the inhibition mechanism of cyclooxygenase-2. Is there a unique recognition site?. <i>Journal of Medicinal Chemistry</i> , 2003 , 46, 1372-82	8.3	45
127	Continuum solvation models: Dissecting the free energy of solvation. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 3827-3836	3.6	81

126	Perturbation Approach to Combined QM/MM Simulation of Solute/Solvent Interactions in Solution. <i>Journal of Physical Chemistry B</i> , 2003 , 107, 1664-1671	3.4	29
125	Four-stranded DNA structure stabilized by a novel G:C:A:T tetrad. <i>Journal of the American Chemical Society</i> , 2003 , 125, 5654-62	16.4	24
124	Molecular dynamics study of 2rotaxanes: influence of solvation and cation on co-conformation. <i>Journal of Organic Chemistry</i> , 2003 , 68, 4663-73	4.2	21
123	Theoretical study of a new DNA structure: the antiparallel Hoogsteen duplex. <i>Journal of the American Chemical Society</i> , 2003 , 125, 14603-12	16.4	36
122	The structure and dynamics of DNA in the gas phase. <i>Journal of the American Chemical Society</i> , 2003 , 125, 8007-14	16.4	111
121	Theoretical methods for the simulation of nucleic acids. <i>Chemical Society Reviews</i> , 2003 , 32, 350-64	58.5	141
120	Hydrophobic similarity between molecules: a MST-based hydrophobic similarity index. <i>Journal of Computational Chemistry</i> , 2002 , 23, 554-63	3.5	17
119	Fast estimation of hydrogen-bonding donor and acceptor propensities: a GMIPp study. <i>Journal of Computer-Aided Molecular Design</i> , 2002 , 16, 569-83	4.2	2
118	Properties of triple helices formed by parallel-stranded hairpins containing 8-aminopurines. <i>Nucleic Acids Research</i> , 2002 , 30, 2609-19	20.1	36
117	Can Divalent Metal Cations Stabilize the Triplex Motif? Theoretical Study of the Interaction of the Hydrated Mg ²⁺ Cation with the GTC Triplet. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 8849-8857	3.4	19
116	Rational design of reversible acetylcholinesterase inhibitors. <i>Mini-Reviews in Medicinal Chemistry</i> , 2002 , 2, 27-36	3.2	16
115	Ligand-induced changes in the binding sites of proteins. <i>Bioinformatics</i> , 2002 , 18, 939-48	7.2	45
114	Hoogsteen-based parallel-stranded duplexes of DNA. Effect of 8-amino-purine derivatives. <i>Journal of the American Chemical Society</i> , 2002 , 124, 3133-42	16.4	37
113	Characterization of disease-associated single amino acid polymorphisms in terms of sequence and structure properties. <i>Journal of Molecular Biology</i> , 2002 , 315, 771-86	6.5	171
112	Theoretical study of anion binding to calix[4]pyrrole: the effects of solvent, fluorine substitution, cosolute, and water traces. <i>Journal of the American Chemical Society</i> , 2002 , 124, 12796-805	16.4	63
111	Correlated ab initio study of nucleic acid bases and their tautomers in the gas phase, in a microhydrated environment and in aqueous solution. <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 4192-4203	3.6	175
110	Theoretical study of alkyl- π and aryl- π interactions. Reconciling theory and experiment. <i>Journal of Organic Chemistry</i> , 2002 , 67, 7057-65	4.2	101
109	Nucleic Acid Triple Helices: Stability Effects of Nucleobase Modifications. <i>Current Organic Chemistry</i> , 2002 , 6, 1333-1368	1.7	59

108	Parallel-stranded hairpins containing 8-aminopurines. Novel efficient probes for triple-helix formation. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2001 , 11, 1761-3	2.9	14
107	Classical molecular interaction potentials: improved setup procedure in molecular dynamics simulations of proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , 2001 , 45, 428-37	4.2	79
106	Solvation in octanol: parametrization of the continuum MST model. <i>Journal of Computational Chemistry</i> , 2001 , 22, 1180-1193	3.5	112
105	General Access to Tacamine and Vinca-Eburna Alkaloids through Tandem Non-Biomimetic Oxidation of Dihydropyridines/Zn-Mediated Radical Addition Processes [Unexpected Facial Selectivity of Flattened Cyclohexyl-Type Radicals. <i>European Journal of Organic Chemistry</i> , 2001 , 2001, 3719	3.2	27
104	Synthesis, in vitro pharmacology, and molecular modeling of syn-huprines as acetylcholinesterase inhibitors. <i>Journal of Medicinal Chemistry</i> , 2001 , 44, 4733-6	8.3	39
103	Cooperativity in drug-DNA recognition: a molecular dynamics study. <i>Journal of the American Chemical Society</i> , 2001 , 123, 12658-63	16.4	133
102	Theoretical study of the mechanisms of substrate recognition by catalase. <i>Journal of the American Chemical Society</i> , 2001 , 123, 9665-72	16.4	41
101	Amino[mino Tautomerism in Derivatives of Cytosine: Effect on Hydrogen-Bonding and Stacking Properties. <i>Journal of Physical Chemistry A</i> , 2001 , 105, 6575-6580	2.8	32
100	Interactions of Hydrated Mg ²⁺ 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	3.4	89
99	Theoretical studies of d(A:T)-based parallel-stranded DNA duplexes. <i>Journal of the American Chemical Society</i> , 2001 , 123, 12018-25	16.4	32
98	Mixed QM/MM molecular electrostatic potentials. <i>Journal of Computer-Aided Molecular Design</i> , 2000 , 14, 329-39	4.2	9
97	Synthesis of enantiopure trans-3,4-disubstituted piperidines. An enantiodivergent synthesis of (+)- and (-)-paroxetine. <i>Journal of Organic Chemistry</i> , 2000 , 65, 3074-84	4.2	122
96	Perspective on Electrostatic interactions of a solute with a continuum. A direct utilization of ab initio molecular potentials for the prevision of solvent effects [Theoretical Chemistry Accounts, 2000 , 103, 343-345	1.9	592
95	Glutaryl-CoA dehydrogenase deficiency in Spain: evidence of two groups of patients, genetically, and biochemically distinct. <i>Pediatric Research</i> , 2000 , 48, 315-22	3.2	111
94	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, 4657-66	8.3	160
93	Theoretical Methods for the Description of the Solvent Effect in Biomolecular Systems. <i>Chemical Reviews</i> , 2000 , 100, 4187-4226	68.1	538
92	Simplified descriptions of the topological distribution of hydrophilic/hydrophobic characteristics of molecules. <i>Physical Chemistry Chemical Physics</i> , 2000 , 2, 4897-4905	3.6	13
91	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	16.4	63

90	Molecular Dynamics Study of Oligonucleotides Containing Difluorotoluene. <i>Journal of the American Chemical Society</i> , 2000 , 122, 6891-6899	16.4	29
89	CH ₂ O Contacts in the Adenine-Uracil Watson-Crick and Uracil-Uracil Nucleic Acid Base Pairs: Nonempirical ab Initio Study with Inclusion of Electron Correlation Effects. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 6286-6292	3.4	118
88	On the Use of SCRF Methods in Drug Design Studies 2000 , 129-134		1
87	Nucleic Acid Bases in Solution. <i>Theoretical and Computational Chemistry</i> , 1999 , 8, 119-166		7
86	Modified Oligonucleotides with Triple-Helix Stabilization Properties. <i>Nucleosides & Nucleotides</i> , 1999 , 18, 1619-1621		3
85	Cavitation contribution to the free energy of solvation.. <i>Chemical Physics</i> , 1999 , 240, 253-264	2.3	36
84	Fractional description of free energies of solvation. <i>Journal of Computer-Aided Molecular Design</i> , 1999 , 13, 139-52	4.2	29
83	Monte Carlo-MST: New strategy for representation of solvent configurational space in solution. <i>Journal of Computational Chemistry</i> , 1999 , 20, 665-678	3.5	15
82	Parametrization of the GMIPp for the study of stacking interactions. <i>Journal of Computational Chemistry</i> , 1999 , 20, 937-946	3.5	10
81	Role of sugar re-puckering in the transition of A and B forms of DNA in solution. A molecular dynamics study. <i>Journal of Biomolecular Structure and Dynamics</i> , 1999 , 17, 89-99	3.6	23
80	Predicting relative binding free energies of tacrine-huperzine A hybrids as inhibitors of acetylcholinesterase. <i>Journal of Medicinal Chemistry</i> , 1999 , 42, 5110-9	8.3	34
79	. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 4525-4532	2.8	74
78	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	16.4	57
77	Dimerization of Formamide in Gas Phase and Solution. An Ab Initio MCMST Study. <i>Journal of Physical Chemistry A</i> , 1999 , 103, 6200-6208	2.8	29
76	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, 3227-42	8.3	90
75	Molecular Dynamics Studies of DNA A-Tract Structure and Flexibility. <i>Journal of the American Chemical Society</i> , 1999 , 121, 5981-5991	16.4	96
74	Interactions of Nucleic Acid Bases: The Role of Solvent. <i>Computational Chemistry - Reviews of Current Trends</i> , 1999 , 191-225		2
73	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	3.5	78

72	Triple helix stabilization properties of oligonucleotides containing 8-amino-2'-deoxyguanosine. <i>Bioorganic and Medicinal Chemistry Letters</i> , 1998 , 8, 3011-6	2.9	11
71	Tautomerism of 1-Methyl Derivatives of Uracil, Thymine, and 5-Bromouracil. Is Tautomerism the Basis for the Mutagenicity of 5-Bromouridine?. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 5228-5233	3.4	71
70	Azidoazomethine \rightleftharpoons tetrazole Isomerism in Solution: A Thermochemical Study. <i>Journal of Organic Chemistry</i> , 1998 , 63, 2354-2356	4.2	23
69	Molecular Dynamics Simulations in Aqueous Solution of Triple Helices Containing d(GCC) Trios. <i>Journal of the American Chemical Society</i> , 1998 , 120, 11226-11233	16.4	57
68	A Priori Prediction of Substituent and Solvent Effects in the Basicity of Nitriles. <i>Journal of Organic Chemistry</i> , 1998 , 63, 4947-4953	4.2	23
67	Dimerization of Carboxylic Acids: Reliability of Theoretical Calculations and the Effect of Solvent. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 2269-2276	3.4	77
66	On the potential role of the amino nitrogen atom as a hydrogen bond acceptor in macromolecules. <i>Journal of Molecular Biology</i> , 1998 , 279, 1123-36	6.5	105
65	Theoretical Study of Azido \rightleftharpoons tetrazole Isomerism: Effect of Solvent and Substituents and Mechanism of Isomerization. <i>Journal of the American Chemical Society</i> , 1998 , 120, 4723-4731	16.4	65
64	Molecular Dynamics Simulation of a PNA \rightleftharpoons DNA \rightleftharpoons PNA Triple Helix in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 1998 , 120, 5895-5904	16.4	94
63	Role of Intramolecular Hydrogen Bonds in the Intermolecular Hydrogen Bonding of Carbohydrates. <i>Journal of Physical Chemistry A</i> , 1998 , 102, 6690-6696	2.8	51
62	The GAGA factor of <i>Drosophila</i> binds triple-stranded DNA. <i>Journal of Biological Chemistry</i> , 1998 , 273, 24640-8	5.4	36
61	Molecular dynamics simulations of the unfolding of barnase in water and 8 M aqueous urea. <i>Biochemistry</i> , 1997 , 36, 7313-29	3.2	162
60	Molecular Dynamics Simulations of the d(TAA) Triple Helix. <i>Journal of the American Chemical Society</i> , 1997 , 119, 7463-7469	16.4	156
59	Ab Initio Study of Stacking Interactions in A- and B-DNA. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 3846-3853	3.4	79
58	Role of tautomerism of 2-azaadenine and 2-azahypoxanthine in substrate recognition by xanthine oxidase. <i>Journal of Computer-Aided Molecular Design</i> , 1997 , 11, 153-62	4.2	41
57	Reliability of MEP and MEP-derived properties computed from DFT methods for molecules containing P, S and Cl. <i>Theoretical Chemistry Accounts</i> , 1997 , 98, 42-49	1.9	21
56	Suitability of density functional methods for calculation of electrostatic properties. <i>Journal of Computational Chemistry</i> , 1997 , 18, 980-991	3.5	34
55	Helical preferences of alanine, glycine, and aminoisobutyric homopeptides 1997 , 28, 83-93		38

54	On the reaction mechanism of class Pi glutathione S-transferase 1997 , 28, 530-542		8
53	Generalization of the Molecular Electrostatic Potential for the Study of Noncovalent interactions. <i>Theoretical and Computational Chemistry</i> , 1996 , 3, 181-218		37
52	Tautomerism of Xanthine Oxidase Substrates Hypoxanthine and Allopurinol. <i>Journal of Organic Chemistry</i> , 1996 , 61, 5964-5971	4.2	64
51	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	16.4	292
50	Theoretical Methods for the Representation of Solvent. <i>Journal of Molecular Modeling</i> , 1996 , 2, 1-15	2	57
49	Extension of MST/SCRF method to organic solvents: Ab initio and semiempirical parametrization for neutral solutes in CCl ₄ . <i>Journal of Computational Chemistry</i> , 1996 , 17, 806-820	3.5	104
48	Theoretical representation of solvation in biochemical systems: From discrete solute-solvent interactions to bulk solvation. <i>International Journal of Quantum Chemistry</i> , 1996 , 60, 1179-1187	2.1	2
47	Synthesis, chemical trapping and dimerization of tricyclo[3.3.0.0 ^{3,7}]oct-1(5)-ene, the consummate member of a series of pyramidalized alkenes. <i>Tetrahedron Letters</i> , 1996 , 37, 8605-8608	2	26
46	Theoretical determination of the solvation free energy in water and chloroform of the nucleic acid bases. <i>Chemical Physics</i> , 1996 , 209, 19-29	2.3	26
45	Tautomerism of xanthine and alloxanthine: a model for substrate recognition by xanthine oxidase. <i>Journal of Computer-Aided Molecular Design</i> , 1996 , 10, 535-44	4.2	27
44	Effect of Solvation on the Charge Distribution of a Series of Anionic, Neutral, and Cationic Species. A Quantum Molecular Similarity Study. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 606-610		22
43	The polarization contribution to the free energy of hydration. <i>Journal of Chemical Physics</i> , 1995 , 102, 6145-6152	3.9	40
42	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	3.9	46
41	Molecular Solvation Potential. A New Tool for the Quantum Mechanical Description of Hydration in Organic and Bioorganic Molecules. <i>The Journal of Physical Chemistry</i> , 1995 , 99, 3084-3092		38
40	Theoretical Study of the Tautomerism and Protonation of 7-Aminopyrazolopyrimidine in the Gas Phase and in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 1995 , 117, 1378-1386	16.4	42
39	Tautomerism of Neutral and Protonated 6-Thioguanine in the Gas Phase and in Aqueous Solution. An ab Initio Study. <i>Journal of Organic Chemistry</i> , 1995 , 60, 969-976	4.2	38
38	Effect of Solvent Polarization on Bimolecular Interactions. <i>The Journal of Physical Chemistry</i> , 1995 , 99, 11344-11349		8
37	Molecular dynamics study of the binding of elsamicin A to DNA. <i>FEBS Journal</i> , 1995 , 230, 555-66		8

36	The effect of hydration on the molecular charge distribution of cations. An ab initio SCRF study. <i>Chemical Physics Letters</i> , 1995 , 232, 509-517	2.5	18
35	Development of optimized MST/SCRF methods for semiempirical calculations: The MNDO and PM3 Hamiltonians. <i>Journal of Computational Chemistry</i> , 1995 , 16, 563-575	3.5	86
34	Synthetic studies on indole alkaloids VIII. 1 Synthesis and reactivity of asymmetric 2-indolyli-4-methylenepiperidines. <i>Tetrahedron</i> , 1995 , 51, 7527-7546	2.4	4
33	Effect of solvation on the shapes, sizes, and anisotropies of polyatomic anions via molecular electrostatic potential topography: An ab initio self-consistent reaction field approach. <i>Journal of Chemical Physics</i> , 1994 , 100, 6718-6726	3.9	28
32	Comparison of NDDO and quasi-ab initio approaches to compute semiempirical molecular electrostatic potentials. <i>Journal of Computational Chemistry</i> , 1994 , 15, 12-22	3.5	39
31	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	3.5	131
30	An optimized AM1/MST method for the MST-SCRF representation of solvated systems. <i>Journal of Computational Chemistry</i> , 1994 , 15, 847-857	3.5	68
29	PAPQMD/AM1 Parametrization of the bonded term of aromatic biomolecules. <i>Biopolymers</i> , 1994 , 34, 941-955	2.2	7
28	Optimization of the cavity size for ab initio MST-SCRF calculations of monovalent ions. <i>Chemical Physics</i> , 1994 , 182, 237-248	2.3	63
27	Multicentric charges for the accurate representation of electrostatic interactions in force-field calculations for small molecules. <i>Chemical Physics</i> , 1994 , 189, 573-584	2.3	12
26	DNA sequence-specific reading by echinomycin: role of hydrogen bonding and stacking interactions. <i>Journal of Medicinal Chemistry</i> , 1994 , 37, 1602-9	8.3	32
25	Reactivity of planar and twisted amides in vacuum and aqueous environments: an ab initio MEP study. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1993 , 683		22
24	Mechanism for the rotamase activity of FK506 binding protein from molecular dynamics simulations. <i>Biochemistry</i> , 1993 , 32, 12864-74	3.2	42
23	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	4.2	53
22	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		88
21	Induced dipole moment and atomic charges based on average electrostatic potentials in aqueous solution. <i>Journal of Chemical Physics</i> , 1993 , 98, 2975-2982	3.9	113
20	Self-consistent reaction field computation of the reactive characteristics of DNA bases in water. <i>Biopolymers</i> , 1993 , 33, 1851-1869	2.2	32
19	Molecular interaction potential: A new tool for the theoretical study of molecular reactivity. <i>Journal of Computational Chemistry</i> , 1993 , 14, 587-602	3.5	45

18	Ab initio study of bond stretching: Implications in force-field parametrization for molecular mechanics and dynamics. <i>Journal of Computational Chemistry</i> , 1993 , 14, 881-894	3.5	12
17	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	3.5	142
16	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	3.5	59
15	A new scaling procedure to correct semiempirical MEP and MEP-derived properties. <i>Journal of Computer-Aided Molecular Design</i> , 1993 , 7, 721-742	4.2	25
14	Experimental and modelling studies on the DNA cleavage by elsamicin A. <i>FEBS Journal</i> , 1992 , 208, 227-33		11
13	Conformational Analysis of 2-Aryl-4-piperidones. Effect of the Indole Protective Phenylsulfonyl Group. <i>Heterocycles</i> , 1992 , 34, 449	0.8	3
12	A new strategy for the evaluation of force parameters from quantum mechanical computations. <i>Journal of Computational Chemistry</i> , 1991 , 12, 664-674	3.5	36
11	A quantum chemical study of the enzymatic deamination of benzo adenine derivatives. A theoretical model of the interactions occurring between nucleosides and the active site of adenosine deaminase. <i>FEBS Journal</i> , 1990 , 188, 155-63		17
10	Theoretical study of the hydroxyl nucleophilic attack on the 6-aminopyrimidine molecule: functional implications in the reaction mechanism of nucleoside deaminative enzymes. <i>Journal of Organic Chemistry</i> , 1990 , 55, 2630-2637	4.2	12
9	Ab initio study of the protonation and the tautomerism of the 7-aminopyrazolopyrimidine molecule. <i>Journal of Organic Chemistry</i> , 1990 , 55, 753-756	4.2	8
8	Theoretical Approximation to the Reaction Mechanism of Adenosine Deaminase. <i>QSAR and Combinatorial Science</i> , 1989 , 8, 109-114		9
7	Beyond the Continuum Approach 499-605		3
6	The structural role of SARS-CoV-2 genetic background in the emergence and success of spike mutations: the case of the spike A222V mutation		1
5	RNA-Dependent RNA Polymerase From SARS-CoV-2. Mechanism Of Reaction And Inhibition By Remdesivir		5
4	An in-depth look at DNA crystals through the prism of molecular dynamics simulations		1
3	MuGVRE. A virtual research environment for 3D/4D genomics		1
2	Colibactin DNA damage signature indicates causative role in colorectal cancer		5
1	Nucleic Acids: Molecular Dynamic Simulations		2

