

Martin Zacharias

List of Publications by Year in descending order

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Version: 2024-02-01

230
papers

8,131
citations

44069

48
h-index

71685

76
g-index

247
all docs

247
docs citations

247
times ranked

8338
citing authors

#	ARTICLE	IF	CITATIONS
1	Match_Motif: A rapid computational tool to assist in protein-protein interaction design. <i>Protein Science</i> , 2022, 31, 147-157.	7.6	1
2	Altered fibrin clot structure and dysregulated fibrinolysis contribute to thrombosis risk in severe COVID-19. <i>Blood Advances</i> , 2022, 6, 1074-1087.	5.2	35
3	Molecular rationale for the impairment of the MexAB-OprM efflux pump by a single mutation in MexA. <i>Computational and Structural Biotechnology Journal</i> , 2022, 20, 252-260.	4.1	4
4	Computational Tools for Accurate Binding Free-Energy Prediction. <i>Methods in Molecular Biology</i> , 2022, 2385, 255-292.	0.9	3
5	Cryo-EM demonstrates the in vitro proliferation of an ex vivo amyloid fibril morphology by seeding. <i>Nature Communications</i> , 2022, 13, 85.	12.8	15
6	Rapid Rational Design of Cyclic Peptides Mimicking Protein-Protein Interfaces. <i>Methods in Molecular Biology</i> , 2022, 2405, 231-244.	0.9	1
7	Dissociation of β 2m from MHC class I triggers formation of noncovalent transient heavy chain dimers. <i>Journal of Cell Science</i> , 2022, 135, .	2.0	6
8	The Impact of Prolonged Inflammation on Wound Healing. <i>Biomedicines</i> , 2022, 10, 856.	3.2	33
9	Nearest-Neighbor dsDNA Stability Analysis Using Alchemical Free-Energy Simulations. <i>Journal of Physical Chemistry B</i> , 2022, , .	2.6	1
10	Active site geometry stabilization of a presenilin homolog by the lipid bilayer promotes intramembrane proteolysis. <i>ELife</i> , 2022, 11, .	6.0	3
11	An internal docking site stabilizes substrate binding to β 3-secretase: Analysis by molecular dynamics simulations. <i>Biophysical Journal</i> , 2022, 121, 2330-2344.	0.5	10
12	ADAMTS4-specific MR probe to assess aortic aneurysms in vivo using synthetic peptide libraries. <i>Nature Communications</i> , 2022, 13, .	12.8	6
13	Improving the Potential of Mean Force and Nonequilibrium Pulling Simulations by Simultaneous Alchemical Modifications. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 3873-3893.	5.3	5
14	Analysis of amyloidogenic transthyretin mutations using continuum solvent free energy calculations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2022, 90, 2080-2090.	2.6	2
15	Explicit solvent repulsive scaling replica exchange molecular dynamics (scpr-REMD) in molecular modeling of protein-glycosaminoglycan complexes. <i>Journal of Computational Chemistry</i> , 2022, 43, 1633-1640.	3.3	6
16	Targeting Telomeres: Molecular Dynamics and Free Energy Simulation of Gold-Carbene Binding to DNA. <i>Biophysical Journal</i> , 2021, 120, 101-108.	0.5	3
17	Proteolysis of Rab32 by Salmonella CtgE induces an inactive GTPase conformation. <i>IScience</i> , 2021, 24, 101940.	4.1	12
18	Evaluation of replica exchange with repulsive scaling approach for docking glycosaminoglycans. <i>Journal of Computational Chemistry</i> , 2021, 42, 1040-1053.	3.3	8

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19	Specificity of AMPylation of the human chaperone BiP is mediated by TPR motifs of FICD. <i>Nature Communications</i> , 2021, 12, 2426.	12.8	15
20	Accurate modeling of DNA conformational flexibility by a multivariate Ising model. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	35
21	Controlling Protein Crystallization by Free Energy Guided Design of Interactions at Crystal Contacts. <i>Crystals</i> , 2021, 11, 588.	2.2	4
22	Between inflammation and thrombosis: endothelial cells in COVID-19. <i>European Respiratory Journal</i> , 2021, 58, 2100377.	6.7	86
23	Rapid Antigen Test for Postmortem Evaluation of SARS-CoV-2 Carriage. <i>Emerging Infectious Diseases</i> , 2021, 27, 1734-1737.	4.3	14
24	Influence of a Ser111â€phosphorylation on Rab1b GTPase conformational dynamics studied by advanced sampling simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2021, 89, 1324-1332.	2.6	0
25	Molecular and Spectroscopic Characterization of Green and Red Cyanine Fluorophores from the Alexa Fluor and AF Series**. <i>ChemPhysChem</i> , 2021, 22, 1566-1583.	2.1	27
26	Mechanism of collagen folding propagation studied by Molecular Dynamics simulations. <i>PLoS Computational Biology</i> , 2021, 17, e1009079.	3.2	9
27	Molecular and Spectroscopic Characterization of Green and Red Cyanine Fluorophores from the Alexa Fluor and AF Series. <i>ChemPhysChem</i> , 2021, 22, 1546-1546.	2.1	8
28	Molecular insights on CALX-CBD12 interdomain dynamics from MD simulations, RDCs, and SAXS. <i>Biophysical Journal</i> , 2021, 120, 3664-3675.	0.5	4
29	Modeling Proteinâ€Glycosaminoglycan Complexes: Does the Size Matter?. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 4475-4485.	5.4	14
30	Molecular mechanism of amyloidogenic mutations in hypervariable regions of antibody light chains. <i>Journal of Biological Chemistry</i> , 2021, 296, 100334.	3.4	22
31	Tumuc1: A New Accurate DNA Force Field Consistent with High-Level Quantum Chemistry. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7096-7105.	5.3	21
32	Structural dynamics in the evolution of a bilobed protein scaffold. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	9
33	Binding-induced functional-domain motions in the Argonaute characterized by adaptive advanced sampling. <i>PLoS Computational Biology</i> , 2021, 17, e1009625.	3.2	6
34	Reflex testing in non-small cell lung carcinoma using DNA- and RNA-based next-generation sequencingâ€a single-center experience. <i>Translational Lung Cancer Research</i> , 2021, 10, 4221-4234.	2.8	7
35	Orientation Dependence of DNA Blunt-End Stacking Studied by Free-Energy Simulations. <i>Journal of Physical Chemistry B</i> , 2021, 125, 13850-13857.	2.6	4
36	Computational prediction of proteinâ€protein binding affinities. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2020, 10, e1448.	14.6	107

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37	Molecular mechanism of Be ²⁺ -ion binding to HLA-DP2: tetrahedral coordination, conformational changes and multi-ion binding. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 799-810.	2.8	8
38	How Mutations Perturb β -Secretase Active Site Studied by Free Energy Simulations. <i>ACS Chemical Neuroscience</i> , 2020, 11, 3321-3332.	3.5	14
39	Occurrence of SARS-CoV-2 in the intraocular milieu. <i>Experimental Eye Research</i> , 2020, 201, 108273.	2.6	18
40	From monomer to fibril: A β -amyloid binding to Aducanumab antibody studied by molecular dynamics simulation. <i>Proteins: Structure, Function and Bioinformatics</i> , 2020, 88, 1592-1606.	2.6	12
41	Ligand binding and global adaptation of the GlnPQ substrate binding domain 2 revealed by molecular dynamics simulations. <i>Protein Science</i> , 2020, 29, 2482-2494.	7.6	5
42	Altered Hinge Conformations in APP Transmembrane Helix Mutants May Affect Enzyme-Substrate Interactions of β -Secretase. <i>ACS Chemical Neuroscience</i> , 2020, 11, 4426-4433.	3.5	12
43	CHARMM-GUI supports the Amber force fields. <i>Journal of Chemical Physics</i> , 2020, 153, 035103.	3.0	175
44	Efficient Refinement and Free Energy Scoring of Predicted Protein-Protein Complexes Using Replica Exchange with Repulsive Scaling. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 5552-5562.	5.4	20
45	Rapid in silico Design of Potential Cyclic Peptide Binders Targeting Protein-Protein Interfaces. <i>Frontiers in Chemistry</i> , 2020, 8, 573259.	3.6	16
46	Base-Pairing and Base-Stacking Contributions to Double-Stranded DNA Formation. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10345-10352.	2.6	20
47	Folding and Unfolding of the Short Light-Triggered β -Hairpin Peptide AzoChignolin Occurs within 100 ns. <i>Journal of Physical Chemistry B</i> , 2020, 124, 5113-5121.	2.6	3
48	NWChem: Past, present, and future. <i>Journal of Chemical Physics</i> , 2020, 152, 184102.	3.0	425
49	How global DNA unwinding causes non-uniform stress distribution and melting of DNA. <i>PLoS ONE</i> , 2020, 15, e0232976.	2.5	19
50	Prediction of protein-protein complexes using replica exchange with repulsive scaling. <i>Journal of Computational Chemistry</i> , 2020, 41, 1436-1447.	3.3	27
51	Structures of peptide-free and partially loaded MHC class I molecules reveal mechanisms of peptide selection. <i>Nature Communications</i> , 2020, 11, 1314.	12.8	40
52	Compensatory Mechanisms in Temperature Dependence of DNA Double Helical Structure: Bending and Elongation. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 2857-2863.	5.3	16
53	Coarse-grained and atomic resolution biomolecular docking with the ATTRACT approach. <i>Proteins: Structure, Function and Bioinformatics</i> , 2020, 88, 1018-1028.	2.6	12
54	The dynamics of β -secretase and its substrates. <i>Seminars in Cell and Developmental Biology</i> , 2020, 105, 86-101.	5.0	19

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55	Fatal amyloid formation in a patient's antibody light chain is caused by a single point mutation. <i>ELife</i> , 2020, 9, .	6.0	33
56	Prediction of protein-protein complex structures by docking. , 2020, , 59-85.		0
57	How global DNA unwinding causes non-uniform stress distribution and melting of DNA. , 2020, 15, e0232976.		0
58	How global DNA unwinding causes non-uniform stress distribution and melting of DNA. , 2020, 15, e0232976.		0
59	How global DNA unwinding causes non-uniform stress distribution and melting of DNA. , 2020, 15, e0232976.		0
60	How global DNA unwinding causes non-uniform stress distribution and melting of DNA. , 2020, 15, e0232976.		0
61	Phosphorylation of Ser111 in Rab8a Modulates Rabin8-Dependent Activation by Perturbation of Side Chain Interaction Networks. <i>Biochemistry</i> , 2019, 58, 3546-3554.	2.5	8
62	Empty peptide-receptive MHC class I molecules for efficient detection of antigen-specific T cells. <i>Science Immunology</i> , 2019, 4, .	11.9	64
63	Cryo-EM structure of a transthyretin-derived amyloid fibril from a patient with hereditary ATTR amyloidosis. <i>Nature Communications</i> , 2019, 10, 5008.	12.8	127
64	The Architecture of Talin1 Reveals an Autoinhibition Mechanism. <i>Cell</i> , 2019, 179, 120-131.e13.	28.9	93
65	Evaluation of Predicted Protein-Protein Complexes by Binding Free Energy Simulations. <i>Journal of Chemical Theory and Computation</i> , 2019, 15, 2071-2086.	5.3	46
66	Prognostic value of cyclin A2 and B1 expression in lung carcinoids. <i>Pathology</i> , 2019, 51, 481-486.	0.6	20
67	Uncovering the Binding Mode of β -Secretase Inhibitors. <i>ACS Chemical Neuroscience</i> , 2019, 10, 3398-3403.	3.5	21
68	Extracellular interface between APP and Nicastrin regulates A β length and response to β -secretase modulators. <i>EMBO Journal</i> , 2019, 38, .	7.8	45
69	An Interspecies Analysis Reveals Molecular Construction Principles of Interleukin 27. <i>Journal of Molecular Biology</i> , 2019, 431, 2383-2393.	4.2	10
70	Dynamics of the full-length yeast Hsp90 dimer. <i>European Physical Journal: Special Topics</i> , 2019, 227, 1693-1704.	2.6	1
71	Free energy calculations elucidate substrate binding, gating mechanism, and tolerance-promoting mutations in herbicide target 4-hydroxyphenylpyruvate dioxygenase. <i>Protein Science</i> , 2019, 28, 1048-1058.	7.6	9
72	How methyl-sugar interactions determine DNA structure and flexibility. <i>Nucleic Acids Research</i> , 2019, 47, 1132-1140.	14.5	21

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73	Atomic Resolution Insight into Sac7d Protein Binding to DNA and Associated Global Changes by Molecular Dynamics Simulations. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5967-5972.	13.8	8
74	Modeling large protein-glycosaminoglycan complexes using a fragment-based approach. <i>Journal of Computational Chemistry</i> , 2019, 40, 1429-1439.	3.3	15
75	Atomic Resolution Insight into Sac7d Protein Binding to DNA and Associated Global Changes by Molecular Dynamics Simulations. <i>Angewandte Chemie</i> , 2019, 131, 6028-6033.	2.0	1
76	Global Dynamics of Yeast Hsp90 Middle and C-Terminal Dimer Studied by Advanced Sampling Simulations. <i>Frontiers in Molecular Biosciences</i> , 2019, 6, 93.	3.5	4
77	The structure and oxidation of the eye lens chaperone α -crystallin. <i>Nature Structural and Molecular Biology</i> , 2019, 26, 1141-1150.	8.2	42
78	A folding switch regulates interleukin 27 biogenesis and secretion of its β -subunit as a cytokine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 1585-1590.	7.1	32
79	Structural Modeling of β -Secretase $\text{A}\beta$ Complex Formation and Substrate Processing. <i>ACS Chemical Neuroscience</i> , 2019, 10, 1826-1840.	3.5	25
80	The N-Terminal Segment of the Voltage-Dependent Anion Channel: A Possible Membrane-Bound Intermediate in Pore Unbinding. <i>Journal of Molecular Biology</i> , 2019, 431, 223-243.	4.2	10
81	Structural Architecture of the Nucleosome Remodeler ISWI Determined from Cross-Linking, Mass Spectrometry, SAXS, and Modeling. <i>Structure</i> , 2018, 26, 282-294.e6.	3.3	11
82	A single residue switch reveals principles of antibody domain integrity. <i>Journal of Biological Chemistry</i> , 2018, 293, 17107-17118.	3.4	8
83	Bulk tumour cell migration in lung carcinomas might be more common than epithelial-mesenchymal transition and be differently regulated. <i>BMC Cancer</i> , 2018, 18, 717.	2.6	33
84	Tethered multifluorophore motion reveals equilibrium transition kinetics of single DNA double helices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E7512-E7521.	7.1	33
85	The temperature dependence of the helical twist of DNA. <i>Nucleic Acids Research</i> , 2018, 46, 7998-8009.	14.5	55
86	β -Secretase Studied by Atomistic Molecular Dynamics Simulations: Global Dynamics, Enzyme Activation, Water Distribution and Lipid Binding. <i>Frontiers in Chemistry</i> , 2018, 6, 640.	3.6	29
87	Both DNA global deformation and repair enzyme contacts mediate flipping of thymine dimer damage. <i>Scientific Reports</i> , 2017, 7, 41324.	3.3	13
88	Predicting Allosteric Changes from Conformational Ensembles. <i>Structure</i> , 2017, 25, 393-394.	3.3	3
89	Monte Carlo replica-exchange based ensemble docking of protein conformations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2017, 85, 924-937.	2.6	15
90	Optical control of a receptor-linked guanylyl cyclase using a photoswitchable peptidic hormone. <i>Chemical Science</i> , 2017, 8, 4644-4653.	7.4	23

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91	Thermodynamics and Kinetics of Nucleobase Stacking Oligomerization Revealed by Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 3005-3011.	5.3	4
92	Fast and accurate grid representations for atom-based docking with partner flexibility. <i>Journal of Computational Chemistry</i> , 2017, 38, 1538-1546.	3.3	1
93	Multidomain structure and correlated dynamics determined by self-consistent FRET networks. <i>Nature Methods</i> , 2017, 14, 174-180.	19.0	110
94	The pepATTRACT web server for blind, large-scale peptide-protein docking. <i>Nucleic Acids Research</i> , 2017, 45, W361-W364.	14.5	84
95	Origin of Ion Specificity of Telomeric DNA G-Quadruplexes Investigated by Free-Energy Simulations. <i>Biophysical Journal</i> , 2017, 112, 2280-2290.	0.5	18
96	From β Filament to Fibril: Molecular Mechanism of Surface-Activated Secondary Nucleation from All-Atom MD Simulations. <i>Journal of Physical Chemistry B</i> , 2017, 121, 671-682.	2.6	34
97	Determinants of the assembly and function of antibody variable domains. <i>Scientific Reports</i> , 2017, 7, 12276.	3.3	20
98	Comparative Molecular Dynamics Analysis of RNase-S Complex Formation. <i>Biophysical Journal</i> , 2017, 113, 1466-1474.	0.5	8
99	Multiscale Simulation of Receptor-Drug Association Kinetics: Application to Neuraminidase Inhibitors. <i>Journal of Chemical Theory and Computation</i> , 2017, 13, 5097-5105.	5.3	24
100	Unwinding Induced Melting of Double-Stranded DNA Studied by Free Energy Simulations. <i>Journal of Physical Chemistry B</i> , 2017, 121, 11019-11030.	2.6	27
101	Protein-protein and peptide-protein docking and refinement using ATTRACT in CAPRI. <i>Proteins: Structure, Function and Bioinformatics</i> , 2017, 85, 391-398.	2.6	18
102	Update of the ATTRACT force field for the prediction of protein-protein binding affinity. <i>Journal of Computational Chemistry</i> , 2017, 38, 1887-1890.	3.3	9
103	Rapid Design of Knowledge-Based Scoring Potentials for Enrichment of Near-Native Geometries in Protein-Protein Docking. <i>PLoS ONE</i> , 2017, 12, e0170625.	2.5	7
104	Accelerated flexible protein-ligand docking using Hamiltonian replica exchange with a repulsive biasing potential. <i>PLoS ONE</i> , 2017, 12, e0172072.	2.5	14
105	Transient helicity in intrinsically disordered Axin-1 studied by NMR spectroscopy and molecular dynamics simulations. <i>PLoS ONE</i> , 2017, 12, e0174337.	2.5	7
106	Covalent dye attachment influences the dynamics and conformational properties of flexible peptides. <i>PLoS ONE</i> , 2017, 12, e0177139.	2.5	18
107	Concerted regulation of ISWI by an autoinhibitory domain and the H4 N-terminal tail. <i>ELife</i> , 2017, 6, .	6.0	28
108	Application of the ATTRACT Coarse-Grained Docking and Atomistic Refinement for Predicting Peptide-Protein Interactions. <i>Methods in Molecular Biology</i> , 2017, 1561, 49-68.	0.9	0

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109	Rapid approximate calculation of water binding free energies in the whole hydration domain of (bio)macromolecules. <i>Journal of Computational Chemistry</i> , 2016, 37, 1711-1724.	3.3	2
110	Adenylylation of Tyr77 stabilizes Rab1b GTPase in an active state: A molecular dynamics simulation analysis. <i>Scientific Reports</i> , 2016, 6, 19896.	3.3	13
111	Regulatory Implications of Non-Trivial Splicing: Isoform 3 of Rab1A Shows Enhanced Basal Activity and Is Not Controlled by Accessory Proteins. <i>Journal of Molecular Biology</i> , 2016, 428, 1544-1557.	4.2	5
112	Single-molecule dissection of stacking forces in DNA. <i>Science</i> , 2016, 353, .	12.6	180
113	Free energy analysis and mechanism of base pair stacking in nicked DNA. <i>Nucleic Acids Research</i> , 2016, 44, gkw607.	14.5	60
114	Global deformation facilitates flipping of damaged 8-oxo-guanine and guanine in DNA. <i>Nucleic Acids Research</i> , 2016, 44, gkw827.	14.5	12
115	Structure and target interaction of a G-quadruplex RNA-aptamer. <i>RNA Biology</i> , 2016, 13, 973-987.	3.1	20
116	SAXS Data Alone can Generate High-Quality Models of Protein-Protein Complexes. <i>Structure</i> , 2016, 24, 1387-1397.	3.3	40
117	Fragment-based modelling of single stranded RNA bound to RNA recognition motif containing proteins. <i>Nucleic Acids Research</i> , 2016, 44, 4565-4580.	14.5	20
118	Cryo-EM Data Are Superior to Contact and Interface Information in Integrative Modeling. <i>Biophysical Journal</i> , 2016, 110, 785-797.	0.5	14
119	A Stable Mutant Predisposes Antibody Domains to Amyloid Formation through Specific Non-Native Interactions. <i>Journal of Molecular Biology</i> , 2016, 428, 1315-1332.	4.2	20
120	Dynamics of Seeded α -Fibril Growth from Atomistic Molecular Dynamics Simulations: Kinetic Trapping and Reduced Water Mobility in the Locking Step. <i>Journal of the American Chemical Society</i> , 2016, 138, 527-539.	13.7	77
121	Binding Site Identification and Flexible Docking of Single Stranded RNA to Proteins Using a Fragment-Based Approach. <i>PLoS Computational Biology</i> , 2016, 12, e1004697.	3.2	19
122	Development and Application of a Fully Blind Flexible Peptide-protein Docking Protocol, pepATTRACT. <i>Bio-protocol</i> , 2016, 6, .	0.4	0
123	Free Energy Calculations of Ligand-Protein Binding. , 2015, , 313-335.		1
124	Explaining the striking difference in twist-stretch coupling between DNA and RNA: A comparative molecular dynamics analysis. <i>Nucleic Acids Research</i> , 2015, 43, gkv1028.	14.5	50
125	Application of Enhanced Sampling Monte Carlo Methods for High-Resolution Protein-Protein Docking in Rosetta. <i>PLoS ONE</i> , 2015, 10, e0125941.	2.5	24
126	A Compact Native 24-Residue Supersecondary Structure Derived from the Villin Headpiece Subdomain. <i>Biophysical Journal</i> , 2015, 108, 678-686.	0.5	7

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127	Effect of O ⁶ -guanine alkylation on DNA flexibility studied by comparative molecular dynamics simulations. <i>Biopolymers</i> , 2015, 103, 23-32.	2.4	3
128	A Web Interface for Easy Flexible Protein-Protein Docking with ATTRACT. <i>Biophysical Journal</i> , 2015, 108, 462-465.	0.5	82
129	Exploring biomolecular dynamics and interactions using advanced sampling methods. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 323101.	1.8	27
130	Fully Blind Peptide-Protein Docking with pepATTRACT. <i>Structure</i> , 2015, 23, 1507-1515.	3.3	112
131	Influence of a cis,syn-cyclobutane pyrimidine dimer damage on DNA conformation studied by molecular dynamics simulations. <i>Biopolymers</i> , 2015, 103, 215-222.	2.4	7
132	The Antibody Light-Chain Linker Is Important for Domain Stability and Amyloid Formation. <i>Journal of Molecular Biology</i> , 2015, 427, 3572-3586.	4.2	21
133	RAID3 - An interleukin-6 receptor-binding aptamer with post-selective modification-resistant affinity. <i>RNA Biology</i> , 2015, 12, 1043-1053.	3.1	23
134	Substrate Binding Specifically Modulates Domain Arrangements in Adenylate Kinase. <i>Biophysical Journal</i> , 2015, 109, 1978-1985.	0.5	17
135	iATTRACT: Simultaneous global and local interface optimization for protein-protein docking refinement. <i>Proteins: Structure, Function and Bioinformatics</i> , 2015, 83, 248-258.	2.6	57
136	Rapid Alchemical Free Energy Calculation Employing a Generalized Born Implicit Solvent Model. <i>Journal of Physical Chemistry B</i> , 2015, 119, 968-975.	2.6	7
137	Coupling between side chain interactions and binding pocket flexibility in HLA-B*44:02 molecules investigated by molecular dynamics simulations. <i>Molecular Immunology</i> , 2015, 63, 312-319.	2.2	18
138	An Integrative Approach to the Study of Filamentous Oligomeric Assemblies, with Application to RecA. <i>PLoS ONE</i> , 2015, 10, e0116414.	2.5	14
139	Computational Antigenic Epitope Prediction by Calculating Electrostatic Desolvation Penalties of Protein Surfaces. <i>Methods in Molecular Biology</i> , 2014, 1184, 365-374.	0.9	2
140	PEP-SiteFinder: a tool for the blind identification of peptide binding sites on protein surfaces. <i>Nucleic Acids Research</i> , 2014, 42, W221-W226.	14.5	79
141	A Residue-specific Shift in Stability and Amyloidogenicity of Antibody Variable Domains. <i>Journal of Biological Chemistry</i> , 2014, 289, 26829-26846.	3.4	15
142	Efficient calculation of relative binding free energies by umbrella sampling perturbation. <i>Journal of Computational Chemistry</i> , 2014, 35, 2256-2262.	3.3	18
143	Hamiltonian replica-exchange simulations with adaptive biasing of peptide backbone and side chain dihedral angles. <i>Journal of Computational Chemistry</i> , 2014, 35, 150-158.	3.3	28
144	Stabilization of duplex DNA and RNA by dangling ends studied by free energy simulations. <i>Biopolymers</i> , 2014, 101, 418-427.	2.4	13

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145	Theoretical studies of nucleic acids folding. <i>Wiley Interdisciplinary Reviews: Computational Molecular Science</i> , 2014, 4, 116-126.	14.6	4
146	Enhanced conformational sampling of carbohydrates by Hamiltonian replica-exchange simulation. <i>Glycobiology</i> , 2014, 24, 70-84.	2.5	24
147	Blind prediction of interfacial water positions in CAPRI. <i>Proteins: Structure, Function and Bioinformatics</i> , 2014, 82, 620-632.	2.6	50
148	Evaluation of Generalized Born Model Accuracy for Absolute Binding Free Energy Calculations. <i>Journal of Physical Chemistry B</i> , 2014, 118, 7467-7474.	2.6	18
149	Protein-Ligand Docking Using Hamiltonian Replica Exchange Simulations with Soft Core Potentials. <i>Journal of Chemical Information and Modeling</i> , 2014, 54, 1669-1675.	5.4	32
150	Adaptive Biasing Combined with Hamiltonian Replica Exchange to Improve Umbrella Sampling Free Energy Simulations. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 703-710.	5.3	23
151	Hamiltonian replica exchange combined with elastic network analysis to enhance global domain motions in atomistic molecular dynamics simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , 2014, 82, 3410-3419.	2.6	10
152	Role of Tryptophan Side Chain Dynamics on the Trp-Cage Mini-Protein Folding Studied by Molecular Dynamics Simulations. <i>PLoS ONE</i> , 2014, 9, e88383.	2.5	26
153	Flexible docking and refinement with a coarse-grained protein model using ATTRACT. <i>Proteins: Structure, Function and Bioinformatics</i> , 2013, 81, 2167-2174.	2.6	57
154	Role of tyrosine hot-spot residues at the interface of colicin E9 and immunity protein 9: A comparative free energy simulation study. <i>Proteins: Structure, Function and Bioinformatics</i> , 2013, 81, 461-468.	2.6	10
155	Redirecting catalysis from proteolysis to perhydrolysis in subtilisin Carlsberg. <i>Journal of Biotechnology</i> , 2013, 167, 279-286.	3.8	6
156	Influence of 8-Oxoguanosine on the Fine Structure of DNA Studied with Biasing-Potential Replica Exchange Simulations. <i>Biophysical Journal</i> , 2013, 104, 1089-1097.	0.5	20
157	Advanced replica-exchange sampling to study the flexibility and plasticity of peptides and proteins. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2013, 1834, 847-853.	2.3	62
158	Elastic Network Models of Nucleic Acids Flexibility. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 5460-5470.	5.3	29
159	Effect of 8-Oxoguanine on DNA Structure and Deformability. <i>Journal of Physical Chemistry B</i> , 2013, 117, 11617-11622.	2.6	17
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