

Michael Nilges

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220
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L-index

#	Paper	IF	Citations
220	Crystallography & NMR system: A new software suite for macromolecular structure determination. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1998 , 54, 905-21		14106
219	Determination of three-dimensional structures of proteins from interproton distance data by hybrid distance geometry-dynamical simulated annealing calculations. <i>FEBS Letters</i> , 1988 , 229, 317-24	3.8	665
218	Refinement of protein structures in explicit solvent. <i>Proteins: Structure, Function and Bioinformatics</i> , 2003 , 50, 496-506	4.2	521
217	Determination of the three-dimensional solution structure of the C-terminal domain of cellobiohydrolase I from <i>Trichoderma reesei</i> . A study using nuclear magnetic resonance and hybrid distance geometry-dynamical simulated annealing. <i>Biochemistry</i> , 1989 , 28, 7241-57	3.2	496
216	Determination of three-dimensional structures of proteins by simulated annealing with interproton distance restraints. Application to crambin, potato carboxypeptidase inhibitor and barley serine proteinase inhibitor 2. <i>Protein Engineering, Design and Selection</i> , 1988 , 2, 27-38	1.9	467
215	Determination of three-dimensional structures of proteins from interproton distance data by dynamical simulated annealing from a random array of atoms. Circumventing problems associated with folding. <i>FEBS Letters</i> , 1988 , 239, 129-36	3.8	466
214	ARIA2: automated NOE assignment and data integration in NMR structure calculation. <i>Bioinformatics</i> , 2007 , 23, 381-2	7.2	404
213	ARIA: automated NOE assignment and NMR structure calculation. <i>Bioinformatics</i> , 2003 , 19, 315-6	7.2	397
212	Automated NOESY interpretation with ambiguous distance restraints: the refined NMR solution structure of the pleckstrin homology domain from beta-spectrin. <i>Journal of Molecular Biology</i> , 1997 , 269, 408-22	6.5	395
211	Calculation of protein structures with ambiguous distance restraints. Automated assignment of ambiguous NOE crosspeaks and disulphide connectivities. <i>Journal of Molecular Biology</i> , 1995 , 245, 645-60	6.5	324
210	Architecture of the RNA polymerase II-TFIIF complex revealed by cross-linking and mass spectrometry. <i>EMBO Journal</i> , 2010 , 29, 717-26	13	322
209	A calculation strategy for the structure determination of symmetric dimers by 1H NMR. <i>Proteins: Structure, Function and Bioinformatics</i> , 1993 , 17, 297-309	4.2	301
208	Automated assignment of ambiguous nuclear overhauser effects with ARIA. <i>Methods in Enzymology</i> , 2001 , 339, 71-90	1.7	300
207	RECOORD: a recalculated coordinate database of 500+ proteins from the PDB using restraints from the BioMagResBank. <i>Proteins: Structure, Function and Bioinformatics</i> , 2005 , 59, 662-72	4.2	285
206	Three-dimensional structure of potato carboxypeptidase inhibitor in solution. A study using nuclear magnetic resonance, distance geometry, and restrained molecular dynamics. <i>Biochemistry</i> , 1987 , 26, 8012-23	3.2	270
205	Inferential structure determination. <i>Science</i> , 2005 , 309, 303-6	33.3	268
204	Three-dimensional structure and stability of the KH domain: molecular insights into the fragile X syndrome. <i>Cell</i> , 1996 , 85, 237-45	56.2	258

203	Structure of the pleckstrin homology domain from beta-spectrin. <i>Nature</i> , 1994 , 369, 675-7	50.4	239
202	Influence of non-bonded parameters on the quality of NMR structures: a new force field for NMR structure calculation. <i>Journal of Biomolecular NMR</i> , 1999 , 13, 51-9	3	231
201	The three-dimensional structure of β -purothionin in solution: combined use of nuclear magnetic resonance, distance geometry and restrained molecular dynamics. <i>EMBO Journal</i> , 1986 , 5, 2729-2735	13	208
200	ModBase, a database of annotated comparative protein structure models and associated resources. <i>Nucleic Acids Research</i> , 2014 , 42, D336-46	20.1	207
199	Sampling and efficiency of metric matrix distance geometry: a novel partial metrization algorithm. <i>Journal of Biomolecular NMR</i> , 1992 , 2, 33-56	3	192
198	The folding catalyst protein disulfide isomerase is constructed of active and inactive thioredoxin modules. <i>Current Biology</i> , 1997 , 7, 239-45	6.3	185
197	Ambiguous NOEs and automated NOE assignment. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 1998 , 32, 107-139	10.4	185
196	Internal repeats in the BRCA2 protein sequence. <i>Nature Genetics</i> , 1996 , 13, 22-3	36.3	173
195	Structure determination of the N-terminal thioredoxin-like domain of protein disulfide isomerase using multidimensional heteronuclear $^{13}\text{C}/^{15}\text{N}$ NMR spectroscopy. <i>Biochemistry</i> , 1996 , 35, 7684-91	3.2	172
194	Normal mode analysis suggests a quaternary twist model for the nicotinic receptor gating mechanism. <i>Biophysical Journal</i> , 2005 , 88, 3954-65	2.9	165
193	Complementarity of structure ensembles in protein-protein binding. <i>Structure</i> , 2004 , 12, 2125-36	5.2	160
192	The PH superfold: a structural scaffold for multiple functions. <i>Trends in Biochemical Sciences</i> , 1999 , 24, 441-5	10.3	159
191	Posttranslational modification of pili upon cell contact triggers N. meningitidis dissemination. <i>Science</i> , 2011 , 331, 778-82	33.3	149
190	The structure of a novel insecticidal neurotoxin, omega-atracotoxin-HV1, from the venom of an Australian funnel web spider. <i>Nature Structural Biology</i> , 1997 , 4, 559-66		149
189	Relaxation matrix refinement of the solution structure of squash trypsin inhibitor. <i>Journal of Molecular Biology</i> , 1991 , 219, 499-510	6.5	148
188	Assessing the quality of solution nuclear magnetic resonance structures by complete cross-validation. <i>Science</i> , 1993 , 261, 328-31	33.3	146
187	Computational challenges for macromolecular structure determination by X-ray crystallography and solution NMR-spectroscopy. <i>Quarterly Reviews of Biophysics</i> , 1993 , 26, 49-125	7	143
186	Solution structure of the spectrin repeat: a left-handed antiparallel triple-helical coiled-coil. <i>Journal of Molecular Biology</i> , 1997 , 273, 740-51	6.5	135

185	Outcome of the First wwPDB Hybrid/Integrative Methods Task Force Workshop. <i>Structure</i> , 2015 , 23, 1156-67	5.2	131
184	3D structure determination of the Crh protein from highly ambiguous solid-state NMR restraints. <i>Journal of the American Chemical Society</i> , 2008 , 130, 3579-89	16.4	128
183	SNARE protein mimicry by an intracellular bacterium. <i>PLoS Pathogens</i> , 2008 , 4, e1000022	7.6	124
182	Recommendations of the wwPDB NMR Validation Task Force. <i>Structure</i> , 2013 , 21, 1563-70	5.2	117
181	Functional analysis of early secreted antigenic target-6, the dominant T-cell antigen of Mycobacterium tuberculosis, reveals key residues involved in secretion, complex formation, virulence, and immunogenicity. <i>Journal of Biological Chemistry</i> , 2005 , 280, 33953-9	5.4	117
180	Flexibility and conformational entropy in protein-protein binding. <i>Structure</i> , 2006 , 14, 683-93	5.2	113
179	The three-dimensional structure of the HRDC domain and implications for the Werner and Bloom syndrome proteins. <i>Structure</i> , 1999 , 7, 1557-66	5.2	110
178	Nicotine reverses hypofrontality in animal models of addiction and schizophrenia. <i>Nature Medicine</i> , 2017 , 23, 347-354	50.5	107
177	Visualization of macromolecular structures. <i>Nature Methods</i> , 2010 , 7, S42-55	21.6	107
176	Solution structure of the DNA-binding domain and model for the complex of multifunctional hexameric arginine repressor with DNA. <i>Nature Structural Biology</i> , 1997 , 4, 819-26		104
175	Floating stereospecific assignment revisited: application to an 18 kDa protein and comparison with J-coupling data. <i>Journal of Biomolecular NMR</i> , 1997 , 9, 245-58	3	100
174	Toward a unified representation of protein structural dynamics in solution. <i>Journal of the American Chemical Society</i> , 2009 , 131, 16968-75	16.4	98
173	¹ H-NMR stereospecific assignments by conformational data-base searches. <i>Biopolymers</i> , 1990 , 29, 813-22.2		97
172	Structural biology by NMR: structure, dynamics, and interactions. <i>PLoS Computational Biology</i> , 2008 , 4, e1000168	5	94
171	An efficient protocol for NMR-spectroscopy-based structure determination of protein complexes in solution. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 1967-70	16.4	88
170	High resolution NMR solution structure of the leucine zipper domain of the c-Jun homodimer. <i>Journal of Biological Chemistry</i> , 1996 , 271, 13663-7	5.4	85
169	Automated modeling of coiled coils: application to the GCN4 dimerization region. <i>Protein Engineering, Design and Selection</i> , 1991 , 4, 649-59	1.9	85
168	A new approach for applying residual dipolar couplings as restraints in structure elucidation. <i>Journal of Biomolecular NMR</i> , 2000 , 16, 245-52	3	83

167	Structural and functional studies of titinB fn3 modules reveal conserved surface patterns and binding to myosin S1--a possible role in the Frank-Starling mechanism of the heart. <i>Journal of Molecular Biology</i> , 2001 , 313, 431-47	6.5	82
166	Three-dimensional structure of acyl carrier protein in solution determined by nuclear magnetic resonance and the combined use of dynamical simulated annealing and distance geometry. <i>FEBS Journal</i> , 1988 , 175, 9-15		77
165	Classification of protein sequences by homology modeling and quantitative analysis of electrostatic similarity. <i>Proteins: Structure, Function and Bioinformatics</i> , 1999 , 37, 379-87	4.2	76
164	Three-dimensional structure of phoratoxin in solution: combined use of nuclear magnetic resonance, distance geometry, and restrained molecular dynamics. <i>Biochemistry</i> , 1987 , 26, 1732-1745	3.2	76
163	The conformations of hirudin in solution: a study using nuclear magnetic resonance, distance geometry and restrained molecular dynamics. <i>EMBO Journal</i> , 1987 , 6, 529-537	13	76
162	Conservation of the biochemical properties of IncA from <i>Chlamydia trachomatis</i> and <i>Chlamydia caviae</i> : oligomerization of IncA mediates interaction between facing membranes. <i>Journal of Biological Chemistry</i> , 2004 , 279, 46896-906	5.4	73
161	The solution structure of the first KH domain of FMR1, the protein responsible for the fragile X syndrome. <i>Nature Structural Biology</i> , 1997 , 4, 712-6		71
160	Pathways and intermediates in forced unfolding of spectrin repeats. <i>Structure</i> , 2002 , 10, 1085-96	5.2	71
159	Refinement of the solution structure of the DNA hexamer 5R(GCATGC)2: combined use of nuclear magnetic resonance and restrained molecular dynamics. <i>Biochemistry</i> , 1987 , 26, 3718-33	3.2	71
158	Weighting of experimental evidence in macromolecular structure determination. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 1756-61	11.5	66
157	Successful prediction of the coiled coil geometry of the GCN4 leucine zipper domain by simulated annealing: comparison to the X-ray structure. <i>Proteins: Structure, Function and Bioinformatics</i> , 1993 , 15, 133-46	4.2	66
156	Blind testing of routine, fully automated determination of protein structures from NMR data. <i>Structure</i> , 2012 , 20, 227-36	5.2	64
155	Refinement of the solution structure of the DNA decamer 5R(CTGGATCCAG)2: combined use of nuclear magnetic resonance and restrained molecular dynamics. <i>Biochemistry</i> , 1987 , 26, 3734-44	3.2	61
154	Improved large-scale prediction of growth inhibition patterns using the NCI60 cancer cell line panel. <i>Bioinformatics</i> , 2016 , 32, 85-95	7.2	60
153	The structure in solution of the b domain of protein disulfide isomerase. <i>Journal of Biomolecular NMR</i> , 1999 , 13, 357-68	3	60
152	The solution structure of the Tyr41-->His mutant of the single-stranded DNA binding protein encoded by gene V of the filamentous bacteriophage M13. <i>Journal of Molecular Biology</i> , 1994 , 236, 229-46	6.5	60
151	Essential spaces defined by NMR structure ensembles and molecular dynamics simulation show significant overlap. <i>Proteins: Structure, Function and Bioinformatics</i> , 1998 , 31, 370-382	4.2	58
150	Replica-exchange Monte Carlo scheme for bayesian data analysis. <i>Physical Review Letters</i> , 2005 , 94, 018105	10.5	56

149	Detailed structural and assembly model of the type II secretion pilus from sparse data. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 13081-6	11.5	54
148	A structure refinement protocol combining NMR residual dipolar couplings and small angle scattering restraints. <i>Journal of Biomolecular NMR</i> , 2008 , 41, 199-208	3	52
147	CASD-NMR: critical assessment of automated structure determination by NMR. <i>Nature Methods</i> , 2009 , 6, 625-6	21.6	51
146	Biskit--a software platform for structural bioinformatics. <i>Bioinformatics</i> , 2007 , 23, 769-70	7.2	51
145	Correction of spin diffusion during iterative automated NOE assignment. <i>Journal of Magnetic Resonance</i> , 2004 , 167, 334-42	3	51
144	NOE assignment with ARIA 2.0: the nuts and bolts. <i>Methods in Molecular Biology</i> , 2004 , 278, 379-402	1.4	50
143	Ambiguous distance data in the calculation of NMR structures. <i>Folding & Design</i> , 1997 , 2, S53-7		49
142	Improved strategies for the determination of protein structures from NMR data: the solution structure of acyl carrier protein. <i>FEBS Letters</i> , 1989 , 242, 218-24	3.8	49
141	Comparative evaluation of 3D virtual ligand screening methods: impact of the molecular alignment on enrichment. <i>Journal of Chemical Information and Modeling</i> , 2010 , 50, 992-1004	6.1	47
140	Comparative analysis of structural and dynamic properties of the loaded and unloaded hemophore HasA: functional implications. <i>Journal of Molecular Biology</i> , 2008 , 376, 517-25	6.5	47
139	Structure of Complement C3(H2O) Revealed By Quantitative Cross-Linking/Mass Spectrometry And Modeling. <i>Molecular and Cellular Proteomics</i> , 2016 , 15, 2730-43	7.6	46
138	A model of the complex between single-stranded DNA and the single-stranded DNA binding protein encoded by gene V of filamentous bacteriophage M13. <i>Journal of Molecular Biology</i> , 1994 , 240, 341-57	6.5	46
137	Are there non-trivial dynamic cross-correlations in proteins?. <i>Journal of Molecular Biology</i> , 1998 , 279, 911-20	6.5	45
136	Automated structure modeling of large protein assemblies using crosslinks as distance restraints. <i>Nature Methods</i> , 2016 , 13, 515-20	21.6	44
135	Structural insights into serine-rich fimbriae from Gram-positive bacteria. <i>Journal of Biological Chemistry</i> , 2010 , 285, 32446-57	5.4	43
134	Accurate NMR structures through minimization of an extended hybrid energy. <i>Structure</i> , 2008 , 16, 1305-12	3.2	43
133	Neisseria meningitidis Type IV Pili Composed of Sequence Invariable Pilins Are Masked by Multisite Glycosylation. <i>PLoS Pathogens</i> , 2015 , 11, e1005162	7.6	42
132	Structure calculation from NMR data. <i>Current Opinion in Structural Biology</i> , 1996 , 6, 617-23	8.1	41

131	Distinct docking and stabilization steps of the Pseudopilus conformational transition path suggest rotational assembly of type IV pilus-like fibers. <i>Structure</i> , 2014 , 22, 685-96	5.2	40
130	Shelling the Voronoi interface of protein-protein complexes reveals patterns of residue conservation, dynamics, and composition. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009 , 76, 677-92	4.2	39
129	The three-dimensional structure of a type I module from titin: a prototype of intracellular fibronectin type III domains. <i>Structure</i> , 1998 , 6, 1291-302	5.2	39
128	Structure of the calcium-dependent type 2 secretion pseudopilus. <i>Nature Microbiology</i> , 2017 , 2, 1686-1695	5.6	38
127	A comparison of the restrained molecular dynamics and distance geometry methods for determining three-dimensional structures of proteins on the basis of interproton distances. <i>FEBS Letters</i> , 1987 , 213, 269-77	3.8	38
126	ARIA for solution and solid-state NMR. <i>Methods in Molecular Biology</i> , 2012 , 831, 453-83	1.4	38
125	A role for specific collagen motifs during wound healing and inflammatory response of fibroblasts in the teleost fish gilthead seabream. <i>Molecular Immunology</i> , 2011 , 48, 826-34	4.3	36
124	Inferential Structure Determination of Chromosomes from Single-Cell Hi-C Data. <i>PLoS Computational Biology</i> , 2016 , 12, e1005292	5	36
123	Bat coronaviruses related to SARS-CoV-2 and infectious for human cells.. <i>Nature</i> , 2022 ,	50.4	36
122	The impact of protein flexibility on protein-protein docking. <i>Proteins: Structure, Function and Bioinformatics</i> , 2005 , 58, 126-33	4.2	35
121	Modeling pilus structures from sparse data. <i>Journal of Structural Biology</i> , 2011 , 173, 436-44	3.4	34
120	Modeling errors in NOE data with a log-normal distribution improves the quality of NMR structures. <i>Journal of the American Chemical Society</i> , 2005 , 127, 16026-7	16.4	34
119	Structure of the histone mRNA hairpin required for cell cycle regulation of histone gene expression. <i>Rna</i> , 2002 , 8, 29-46	5.8	34
118	Calculation of symmetric multimer structures from NMR data using a priori knowledge of the monomer structure, co-monomer restraints, and interface mapping: The case of leucine zippers. <i>Journal of Biomolecular NMR</i> , 1996 , 8, 193-206	3	34
117	Heteronuclear relaxation study of the PH domain of beta-spectrin: restriction of loop motions upon binding inositol trisphosphate. <i>Journal of Molecular Biology</i> , 1998 , 280, 879-96	6.5	33
116	Influence of internal dynamics on accuracy of protein NMR structures: derivation of realistic model distance data from a long molecular dynamics trajectory. <i>Journal of Molecular Biology</i> , 1999 , 285, 727-40	6.5	33
115	Determination of the backbone conformation of secretin by restrained molecular dynamics on the basis of interproton distance data. <i>FEBS Journal</i> , 1988 , 171, 479-84		33
114	An algorithm to enumerate all possible protein conformations verifying a set of distance constraints. <i>BMC Bioinformatics</i> , 2015 , 16, 23	3.6	32

113	Unraveling the symmetry ambiguity in a hexamer: calculation of the R6 human insulin structure. <i>Journal of Biomolecular NMR</i> , 2000 , 16, 93-108	3	32
112	Sequential resonance assignment and secondary structure determination of the <i>Ascaris</i> trypsin inhibitor, a member of a novel class of proteinase inhibitors. <i>Biochemistry</i> , 1990 , 29, 183-9	3.2	31
111	Functional diversity of PH domains: an exhaustive modelling study. <i>Folding & Design</i> , 1997 , 2, 343-55		30
110	Quantitative study of the effects of chemical shift tolerances and rates of SA cooling on structure calculation from automatically assigned NOE data. <i>Journal of Magnetic Resonance</i> , 2005 , 175, 92-102	3	30
109	Principal Component Analysis reveals correlation of cavities evolution and functional motions in proteins. <i>Journal of Molecular Graphics and Modelling</i> , 2015 , 55, 13-24	2.8	29
108	Influence of different assignment conditions on the determination of symmetric homodimeric structures with ARIA. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009 , 75, 569-85	4.2	29
107	Efficient sampling in collective coordinate space. <i>Proteins: Structure, Function and Bioinformatics</i> , 2000 , 39, 82-8	4.2	29
106	ISD: a software package for Bayesian NMR structure calculation. <i>Bioinformatics</i> , 2008 , 24, 1104-5	7.2	28
105	A simple method for delineating well-defined and variable regions in protein structures determined from interproton distance data. <i>FEBS Letters</i> , 1987 , 219, 11-16	3.8	28
104	SOLARIA: a protocol for automated cross-peak assignment and structure calculation for solid-state magic-angle spinning NMR spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 6151-4	16.4	27
103	Bayesian inference applied to macromolecular structure determination. <i>Physical Review E</i> , 2005 , 72, 031912	11.2	27
102	Refinement of the solution structure of the ribonucleotide 5P(GCAUGC)2: combined use of nuclear magnetic resonance and restrained molecular dynamics. <i>Biochemistry</i> , 1988 , 27, 1735-43	3.2	27
101	NMR Exchange Format: a unified and open standard for representation of NMR restraint data. <i>Nature Structural and Molecular Biology</i> , 2015 , 22, 433-4	17.6	26
100	Computational reverse-engineering of a spider-venom derived peptide active against <i>Plasmodium falciparum</i> SUB1. <i>PLoS ONE</i> , 2011 , 6, e21812	3.7	26
99	Refined structure, DNA binding studies, and dynamics of the bacteriophage Pf3 encoded single-stranded DNA binding protein. <i>Biochemistry</i> , 1997 , 36, 9120-35	3.2	25
98	Structure of a PH domain from the <i>C. elegans</i> muscle protein UNC-89 suggests a novel function. <i>Structure</i> , 2000 , 8, 1079-87	5.2	25
97	Refinement of the protein backbone angle psi in NMR structure calculations. <i>Journal of Biomolecular NMR</i> , 2000 , 16, 47-58	3	25
96	Continuum solvent molecular dynamics study of flexibility in interleukin-8. <i>Journal of Molecular Graphics and Modelling</i> , 2001 , 19, 136-45	2.8	24

95	Bayesian Weighing of Electron Cryo-Microscopy Data for Integrative Structural Modeling. <i>Structure</i> , 2019 , 27, 175-188.e6	5.2	24
94	Sampling Properties of Simulated Annealing and Distance Geometry 1991 , 451-455		24
93	Solution structure of the 30 kDa polysulfide-sulfur transferase homodimer from <i>Wolinella succinogenes</i> . <i>Biochemistry</i> , 2004 , 43, 1418-24	3.2	23
92	Re-face stereospecificity of methylenetetrahydromethanopterin and methylenetetrahydrofolate dehydrogenases is predetermined by intrinsic properties of the substrate. <i>ChemBioChem</i> , 2001 , 2, 530-41	3.8	22
91	Bayesian estimation of Karplus parameters and torsion angles from three-bond scalar couplings constants. <i>Journal of Magnetic Resonance</i> , 2005 , 177, 160-5	3	21
90	Coronaviruses with a SARS-CoV-2-like receptor-binding domain allowing ACE2-mediated entry into human cells isolated from bats of Indochinese peninsula		21
89	Bayesian estimation of NMR restraint potential and weight: a validation on a representative set of protein structures. <i>Proteins: Structure, Function and Bioinformatics</i> , 2011 , 79, 1525-37	4.2	20
88	Molecular dynamics and accuracy of NMR structures: Effects of error bounds and data removal. <i>Proteins: Structure, Function and Bioinformatics</i> , 1999 , 34, 453-463	4.2	20
87	Structure and function of minor pilins of type IV pili. <i>Medical Microbiology and Immunology</i> , 2020 , 209, 301-308	4	20
86	An automatic tool to analyze and cluster macromolecular conformations based on self-organizing maps. <i>Bioinformatics</i> , 2015 , 31, 1490-2	7.2	19
85	Minimal NMR distance information for rigidity of protein graphs. <i>Discrete Applied Mathematics</i> , 2019 , 256, 91-104	1	19
84	Improved reliability, accuracy and quality in automated NMR structure calculation with ARIA. <i>Journal of Biomolecular NMR</i> , 2015 , 62, 425-38	3	18
83	Three dimensional structure and implications for the catalytic mechanism of 6-phosphogluconolactonase from <i>Trypanosoma brucei</i> . <i>Journal of Molecular Biology</i> , 2007 , 366, 868-81	6.5	18
82	Clinical and mutational investigations of tyrosinemia type II in Northern Tunisia: identification and structural characterization of two novel TAT mutations. <i>Molecular Genetics and Metabolism</i> , 2006 , 88, 184-91	3.7	18
81	Functionally important correlated motions in the single-stranded DNA-binding protein encoded by filamentous phage Pf3. <i>Journal of Molecular Biology</i> , 1999 , 287, 569-77	6.5	18
80	Tertiary structure prediction using mean-force potentials and internal energy functions: successful prediction for coiled-coil geometries. <i>Folding & Design</i> , 1997 , 2, S47-52		17
79	Structural Characterization of Whirlin Reveals an Unexpected and Dynamic Supramodule Conformation of Its PDZ Tandem. <i>Structure</i> , 2017 , 25, 1645-1656.e5	5.2	16
78	A convective replica-exchange method for sampling new energy basins. <i>Journal of Computational Chemistry</i> , 2013 , 34, 132-40	3.5	16

77	A unifying probabilistic framework for analyzing residual dipolar couplings. <i>Journal of Biomolecular NMR</i> , 2008 , 40, 135-44	3	16
76	Refined Solution Structure of the Tyr41->His Mutant of the M13 Gene V Protein. <i>FEBS Journal</i> , 1995 , 232, 506-514		16
75	In Silico screening on the three-dimensional model of the Plasmodium vivax SUB1 protease leads to the validation of a novel anti-parasite compound. <i>Journal of Biological Chemistry</i> , 2013 , 288, 18561-73	5.4	15
74	Discrimination of agonists versus antagonists of nicotinic ligands based on docking onto AChBP structures. <i>Journal of Molecular Graphics and Modelling</i> , 2011 , 30, 100-9	2.8	15
73	Sequence-specific DNA binding activity of the cross-brace zinc finger motif of the piggyBac transposase. <i>Nucleic Acids Research</i> , 2018 , 46, 2660-2677	20.1	14
72	Molecular replacement with NMR models using distance-derived pseudo B factors. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1996 , 52, 973-82		14
71	Structure and Assembly of the Enterohemorrhagic Escherichia coli Type 4 Pilus. <i>Structure</i> , 2019 , 27, 1082-1093	5.5	14
70	Identification of novel leishmanicidal molecules by virtual and biochemical screenings targeting Leishmania eukaryotic translation initiation factor 4A. <i>PLoS Neglected Tropical Diseases</i> , 2018 , 12, e0006160	4.8	13
69	Conformation of secretin in dimethyl sulfoxide solution. NMR studies and restrained molecular dynamics. <i>FEBS Journal</i> , 1989 , 186, 95-103		13
68	Tuning interval Branch-and-Prune for protein structure determination. <i>Journal of Global Optimization</i> , 2018 , 72, 109-127	1.5	12
67	In Silico prediction of the molecular basis of CLTx and AaCTx interaction with matrix metalloproteinase-2 (MMP-2) to inhibit glioma cell invasion. <i>Journal of Biomolecular Structure and Dynamics</i> , 2017 , 35, 2815-2829	3.6	12
66	Stabilization of the integrase-DNA complex by Mg ²⁺ ions and prediction of key residues for binding HIV-1 integrase inhibitors. <i>Proteins: Structure, Function and Bioinformatics</i> , 2014 , 82, 466-78	4.2	12
65	Insights into the enzymatic mechanism of 6-phosphogluconolactonase from Trypanosoma brucei using structural data and molecular dynamics simulation. <i>Journal of Molecular Biology</i> , 2009 , 388, 1009-215	6.5	12
64	Exploring protein interiors: the role of a buried histidine in the KH module fold. <i>Proteins: Structure, Function and Bioinformatics</i> , 1999 , 34, 484-96	4.2	12
63	SAXS Merge: an automated statistical method to merge SAXS profiles using Gaussian processes. <i>Journal of Synchrotron Radiation</i> , 2014 , 21, 203-8	2.4	12
62	Temperature Accelerated Molecular Dynamics with Soft-Ratcheting Criterion Oriented Enhanced Sampling by Low-Resolution Information. <i>Journal of Chemical Theory and Computation</i> , 2015 , 11, 3446-54	6.4	11
61	Identification of binding sites and favorable ligand binding moieties by virtual screening and self-organizing map analysis. <i>BMC Bioinformatics</i> , 2015 , 16, 93	3.6	11
60	Functional motions modulating VanA ligand binding unraveled by self-organizing maps. <i>Journal of Chemical Information and Modeling</i> , 2014 , 54, 289-301	6.1	11

59	Error distribution derived NOE distance restraints. <i>Proteins: Structure, Function and Bioinformatics</i> , 2006 , 64, 652-64	4.2	11
58	Target Engagement and Binding Mode of an Antituberculosis Drug to Its Bacterial Target Deciphered in Whole Living Cells by NMR. <i>Biochemistry</i> , 2019 , 58, 526-533	3.2	11
57	ATP conformations and ion binding modes in the active site of anthrax edema factor: a computational analysis. <i>Proteins: Structure, Function and Bioinformatics</i> , 2009 , 77, 971-83	4.2	10
56	NMR in the SPINE Structural Proteomics project. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2006 , 62, 1150-61		10
55	Influence of Pruning Devices on the Solution of Molecular Distance Geometry Problems. <i>Lecture Notes in Computer Science</i> , 2011 , 206-217	0.9	10
54	Distance Geometry in Structural Biology: New Perspectives 2013 , 329-350		10
53	: Consistent Identification of Plausible Binding Sites Despite the Elusive Nature of Cavities and Grooves in Protein Dynamics. <i>Journal of Chemical Information and Modeling</i> , 2019 , 59, 3506-3518	6.1	9
52	Solution structure of the coiled-coil trimerization domain from lung surfactant protein D. <i>Journal of Biomolecular NMR</i> , 2002 , 24, 89-102	3	9
51	Computational approaches to the interpretation of NMR data for studying protein dynamics. <i>Chemical Physics</i> , 2012 , 396, 124-134	2.3	8
50	¹ H and ¹⁵ N NMR resonance assignments and secondary structure of titin type I domains. <i>Journal of Biomolecular NMR</i> , 1997 , 9, 2-10	3	8
49	Influence of chemical shift tolerances on NMR structure calculations using ARIA protocols for assigning NOE data. <i>Journal of Biomolecular NMR</i> , 2005 , 31, 21-34	3	8
48	NMR studies of the sporulation protein SpoIIAA: implications for the regulation of the transcription factor sigmaF in <i>Bacillus subtilis</i> . <i>Journal of Biomolecular NMR</i> , 2001 , 19, 293-304	3	8
47	Efficient modeling of symmetric protein aggregates from NMR data. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 6916-9	16.4	7
46	Dynamics of a type 2 secretion system pseudopilus unraveled by complementary approaches. <i>Journal of Biomolecular NMR</i> , 2019 , 73, 293-303	3	6
45	Comparison of different torsion angle approaches for NMR structure determination. <i>Journal of Biomolecular NMR</i> , 2006 , 34, 153-66	3	6
44	SOLARIA: A Protocol for Automated Cross-Peak Assignment and Structure Calculation for Solid-State Magic-Angle Spinning NMR Spectroscopy. <i>Angewandte Chemie</i> , 2005 , 117, 6307-6310	3.6	6
43	¹ H, ¹⁵ N, and ¹³ C resonance assignment of the PH domain from <i>C. elegans</i> UNC-89. <i>Journal of Biomolecular NMR</i> , 1999 , 15, 269-70	3	6
42	NMR Relaxation Matrix Refinement of a DNA Octamer Solution Structure.. <i>Acta Chemica Scandinavica</i> , 1993 , 47, 43-56		6

41	Bayesian inference of chromatin structure ensembles from population-averaged contact data. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 7824-7830	11.5	5
40	An Efficient Protocol for NMR-Spectroscopy-Based Structure Determination of Protein Complexes in Solution. <i>Angewandte Chemie</i> , 2010 , 122, 2011-2014	3.6	5
39	SAS profile correlations reveal SAS hierarchical nature and information content. <i>PLoS ONE</i> , 2017 , 12, e0177309	3.7	5
38	quicksom: Self-Organizing Maps on GPUs for clustering of molecular dynamics trajectories. <i>Bioinformatics</i> , 2021 , 37, 2064-2065	7.2	4
37	Graphical analysis of NMR structural quality and interactive contact map of NOE assignments in ARIA. <i>BMC Structural Biology</i> , 2008 , 8, 30	2.7	4
36	Determination of dihedral Psi angles in large proteins by combining NH(N)/C(alpha)H(alpha) dipole/dipole cross-correlation and chemical shifts. <i>Proteins: Structure, Function and Bioinformatics</i> , 2006 , 64, 931-9	4.2	4
35	Three-dimensional structure of the single-stranded DNA-binding protein encoded by gene V of the filamentous bacteriophage M13 and a model of its complex with single-stranded DNA. <i>FEMS Microbiology Reviews</i> , 1995 , 17, 57-72	15.1	4
34	Quantitative Structural Interpretation of Protein Crosslinks. <i>Structure</i> , 2020 , 28, 75-82.e4	5.2	4
33	Building Graphs To Describe Dynamics, Kinetics, and Energetics in the d-ALa:d-Lac Ligase VanA. <i>Journal of Chemical Information and Modeling</i> , 2016 , 56, 1762-75	6.1	4
32	The iPPI-DB initiative: A Community-centered database of Protein-Protein Interaction modulators. <i>Bioinformatics</i> , 2021 ,	7.2	4
31	Convective Replica-Exchange in Ergodic Regimes. <i>Journal of Chemical Theory and Computation</i> , 2014 , 10, 953-8	6.4	3
30	Protein Structure Calculation using Ambiguous Restraints 2010 ,		3
29	Probabilistic structure calculation. <i>Comptes Rendus Chimie</i> , 2008 , 11, 356-369	2.7	3
28	Calculation of Symmetric Oligomer Structures from NMR Data 2002 , 131-161		3
27	Application of the z-COSY technique with a modified pulse sequence to measurement of coupling constants in macromolecules. <i>Journal of Magnetic Resonance</i> , 1987 , 75, 534-539		3
26	Bayesian weighing of electron cryo-microscopy data for integrative structural modeling		3
25	ARIAweb: a server for automated NMR structure calculation. <i>Nucleic Acids Research</i> , 2020 , 48, W41-W47	20.1	3
24	Host-Pathogen Adhesion as the Basis of Innovative Diagnostics for Emerging Pathogens. <i>Diagnostics</i> , 2021 , 11,	3.8	3

23	Structural determination of Streptococcus pyogenes M1 protein interactions with human immunoglobulin G using integrative structural biology. <i>PLoS Computational Biology</i> , 2021 , 17, e1008169 ⁵		3
22	Grid computing for improving conformational sampling in NMR structure calculation. <i>Bioinformatics</i> , 2011 , 27, 1713-4	7.2	2
21	Lobeline Docking on AChBP and Nicotinic Receptors: Discriminating Importance of the Pocket Geometry and of the Ligand Configuration. <i>Letters in Drug Design and Discovery</i> , 2012 , 9, 54-62	0.8	2
20	Protein folding in mode space: a collective coordinate approach to structure prediction. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002 , 49, 365-77	4.2	2
19	Modification in hydrophobic packing of HAMP domain induces a destabilization of the auto-phosphorylation site in the histidine kinase CpxA. <i>Biopolymers</i> , 2016 , 105, 670-82	2.2	2
18	Automatic Building of Protein Atomic Models from Cryo-EM Maps. <i>Biophysical Journal</i> , 2018 , 114, 190a-191a	1.9	2
17	InDeep: 3D fully convolutional neural networks to assist in silico drug design on protein-protein interactions.. <i>Bioinformatics</i> , 2021 ,	7.2	2
16	Computational design of protein-based inhibitors of Plasmodium vivax subtilisin-like 1 protease. <i>PLoS ONE</i> , 2014 , 9, e109269	3.7	1
15	The redundancy of NMR restraints can be used to accelerate the unfolding behavior of an SH3 domain during molecular dynamics simulations. <i>BMC Structural Biology</i> , 2011 , 11, 46	2.7	1
14	StarDOM: from STAR format to XML. <i>Journal of Biomolecular NMR</i> , 1999 , 15, 169-72	3	1
13	Structural Bioinformatics and NMR Structure Determination. <i>Nucleic Acids and Molecular Biology</i> , 2008 , 123-137		1
12	Structure of complement C3(H2O) revealed by quantitative cross-linking/mass spectrometry and modeling		1
11	Automatic Bayesian Weighting for SAXS Data. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 671011	5.6	1
10	Conformational sampling of CpxA: Connecting HAMP motions to the histidine kinase function. <i>PLoS ONE</i> , 2018 , 13, e0207899	3.7	1
9	InDeep : 3D fully convolutional neural networks to assist in silico drug design on protein-protein interactions		1
8	Computational and biochemical analysis of type IV pilus dynamics and stability. <i>Structure</i> , 2021 , 29, 1397-1409.e6	5.6	1
7	Re-Face Stereospecificity of Methylene-tetrahydromethanopterin and Methylene-tetrahydrofolate Dehydrogenases is Predetermined by Intrinsic Properties of the Substrate 2001 , 2, 530		1
6	H, N and C resonance assignments of the C-terminal domain of Pull, a component of the Klebsiella oxytoca type II secretion system. <i>Biomolecular NMR Assignments</i> , 2021 , 15, 455-459	0.7	0

- 5 Ordering Protein Contact Matrices. *Computational and Structural Biotechnology Journal*, **2018**, 16, 140-156
- 4 SAS Profile Correlations Reveal the Hierarchical Nature of SAS Data and Suggest New Scoring Strategies. *Biophysical Journal*, **2015**, 108, 45a 2.9
- 3 Efficient Modeling of Symmetric Protein Aggregates from NMR Data. *Angewandte Chemie*, **2012**, 124, 7022-7025 3.6
- 2 Simultaneous use of solution, solid-state NMR and X-ray crystallography to study the conformational landscape of the Crh protein during oligomerization and crystallization. *Advances and Applications in Bioinformatics and Chemistry*, **2010**, 3, 25-38 1.5
- 1 Contributory presentations/posters. *Journal of Biosciences*, **1999**, 24, 33-198 2.3