

# Tairan Yuwen

## List of Publications by Year in descending order

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150  
papers

21,661  
citations

15504

65  
h-index

9345

143  
g-index

152  
all docs

152  
docs citations

152  
times ranked

11518  
citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular Insight into the Extracellular Chaperone Serum Albumin in Modifying the Folding Free Energy Landscape of Client Proteins. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 2711-2717.	4.6	2
2	Towards autonomous analysis of chemical exchange saturation transfer experiments using deep neural networks. <i>Journal of Biomolecular NMR</i> , 2022, 76, 75-86.	2.8	7
3	Revisiting dipolar relaxation of a homonuclear spin pair in the presence of a radio frequency field: a tutorial. <i>Journal of Magnetic Resonance Open</i> , 2022, , 100065.	1.1	0
4	NMR spectroscopy captures the essential role of dynamics in regulating biomolecular function. <i>Cell</i> , 2021, 184, 577-595.	28.9	103
5	Removal of 2H-decoupling sidebands in 13CHD2 13C-CEST profiles. <i>Journal of Biomolecular NMR</i> , 2021, 75, 133-142.	2.8	3
6	Chemical shift prediction of RNA imino groups: application toward characterizing RNA excited states. <i>Nature Communications</i> , 2021, 12, 1595.	12.8	15
7	Interaction hot spots for phase separation revealed by NMR studies of a CAPRIN1 condensed phase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	40
8	The A39G FF domain folds on a volcano-shaped free energy surface via separate pathways. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	10
9	Opening of a cryptic pocket in $\beta$ -lactamase increases penicillinase activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	17
10	Probing allosteric interactions in homo-oligomeric molecular machines using solution NMR spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	7
11	Unveiling invisible protein states with NMR spectroscopy. <i>Current Opinion in Structural Biology</i> , 2020, 60, 39-49.	5.7	73
12	NMR Experiments for Studies of Dilute and Condensed Protein Phases: Application to the Phase-Separating Protein CAPRIN1. <i>Journal of the American Chemical Society</i> , 2020, 142, 2471-2489.	13.7	49
13	A methyl-TROSY approach for NMR studies of high-molecular-weight DNA with application to the nucleosome core particle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 12836-12846.	7.1	38
14	Understanding and solving abnormal peak splitting in 3D HCCH-TOCSY and HCC(CO)NH-TOCSY. <i>Journal of Biomolecular NMR</i> , 2020, 74, 213-221.	2.8	1
15	A Methyl-TROSY-Based <sup>1</sup> H Relaxation Dispersion Experiment for Studies of Conformational Exchange in High Molecular Weight Proteins. <i>Angewandte Chemie</i> , 2019, 131, 6316-6320.	2.0	2
16	Revisiting 1HN CPMG relaxation dispersion experiments: a simple modification can eliminate large artifacts. <i>Journal of Biomolecular NMR</i> , 2019, 73, 641-650.	2.8	12
17	An NMR View of Protein Dynamics in Health and Disease. <i>Annual Review of Biophysics</i> , 2019, 48, 297-319.	10.0	113
18	A Methyl-TROSY-Based <sup>1</sup> H Relaxation Dispersion Experiment for Studies of Conformational Exchange in High Molecular Weight Proteins. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6250-6254.	13.8	31

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19	Stabilization of amyloidogenic immunoglobulin light chains by small molecules. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8360-8369.	7.1	52
20	Artifacts can emerge in spectra recorded with even the simplest of pulse schemes: an HMQC case study. Journal of Biomolecular NMR, 2019, 73, 423-427.	2.8	6
21	Effects of maturation on the conformational free-energy landscape of SOD1. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2546-E2555.	7.1	48
22	Dramatic Decrease in CEST Measurement Times Using Multi-Site Excitation. ChemPhysChem, 2018, 19, 1707-1710.	2.1	35
23	A new class of CEST experiment based on selecting different magnetization components at the start and end of the CEST relaxation element: an application to <sup>1</sup> H CEST. Journal of Biomolecular NMR, 2018, 70, 93-102.	2.8	10
24	Probing Conformational Exchange in Weakly Interacting, Slowly Exchanging Protein Systems via Off-Resonance <sup>1</sup> H Experiments: Application to Studies of Protein Phase Separation. Journal of the American Chemical Society, 2018, 140, 2115-2126.	13.7	32
25	Exploring methods to expedite the recording of CEST datasets using selective pulse excitation. Journal of Magnetic Resonance, 2018, 292, 1-7.	2.1	16
26	Investigating the Dynamics of Destabilized Nucleosomes Using Methyl-TROSY NMR. Journal of the American Chemical Society, 2018, 140, 4774-4777.	13.7	42
27	A methyl <sup>1</sup> H double quantum CPMG experiment to study protein conformational exchange. Journal of Biomolecular NMR, 2018, 72, 79-91.	2.8	16
28	Measuring Diffusion Constants of Invisible Protein Conformers by Triple-Quantum <sup>1</sup> H CPMG Relaxation Dispersion. Angewandte Chemie - International Edition, 2018, 57, 16777-16780.	13.8	17
29	Measuring Diffusion Constants of Invisible Protein Conformers by Triple-Quantum <sup>1</sup> H CPMG Relaxation Dispersion. Angewandte Chemie, 2018, 130, 17019-17022.	2.0	5
30	Measuring Solvent Hydrogen Exchange Rates by Multifrequency Excitation <sup>15</sup> N CEST: Application to Protein Phase Separation. Journal of Physical Chemistry B, 2018, 122, 11206-11217.	2.6	19
31	Reversible inhibition of the ClpP protease via an N-terminal conformational switch. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E6447-E6456.	7.1	56
32	Conserved conformational selection mechanism of Hsp70 chaperone-substrate interactions. ELife, 2018, 7, .	6.0	71
33	Longitudinal relaxation optimized amide <sup>1</sup> H-CEST experiments for studying slow chemical exchange processes in fully protonated proteins. Journal of Biomolecular NMR, 2017, 67, 295-307.	2.8	16
34	Probing conformational dynamics in biomolecules via chemical exchange saturation transfer: a primer. Journal of Biomolecular NMR, 2017, 67, 243-271.	2.8	123
35	Separating Dipolar and Chemical Exchange Magnetization Transfer Processes in <sup>1</sup> H-CEST. Angewandte Chemie - International Edition, 2017, 56, 6122-6125.	13.8	35
36	Probing the cooperativity of Thermoplasma acidophilum proteasome core particle gating by NMR spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9846-E9854.	7.1	22

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37	Structural and hydrodynamic properties of an intrinsically disordered region of a germ cell-specific protein on phase separation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8194-E8203.	7.1	381
38	An enhanced sensitivity methyl <sup>1</sup> H triple-quantum pulse scheme for measuring diffusion constants of macromolecules. Journal of Biomolecular NMR, 2017, 68, 249-255.	2.8	9
39	Slow conformational exchange and overall rocking motion in ubiquitin protein crystals. Nature Communications, 2017, 8, 145.	12.8	78
40	Exploiting conformational plasticity in the AAA+ protein VCP/p97 to modify function. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6822-E6829.	7.1	33
41	Separating Dipolar and Chemical Exchange Magnetization Transfer Processes in <sup>1</sup> H CEST. Angewandte Chemie, 2017, 129, 6218-6221.	2.0	2
42	Probing slow timescale dynamics in proteins using methyl <sup>1</sup> H CEST. Journal of Biomolecular NMR, 2017, 68, 215-224.	2.8	22
43	The RNF168 paralog RNF169 defines a new class of ubiquitylated histone reader involved in the response to DNA damage. ELife, 2017, 6, .	6.0	44
44	Promiscuous binding by Hsp70 results in conformational heterogeneity and fuzzy chaperone-substrate ensembles. ELife, 2017, 6, .	6.0	72
45	Enhancing the Sensitivity of CPMG Relaxation Dispersion to Conformational Exchange Processes by Multiple-Quantum Spectroscopy. Angewandte Chemie, 2016, 128, 11662-11666.	2.0	7
46	Hsp70 biases the folding pathways of client proteins. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2794-801.	7.1	84
47	Evaluating the influence of initial magnetization conditions on extracted exchange parameters in NMR relaxation experiments: applications to CPMG and CEST. Journal of Biomolecular NMR, 2016, 65, 143-156.	2.8	6
48	Enhancing the Sensitivity of CPMG Relaxation Dispersion to Conformational Exchange Processes by Multiple-Quantum Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 11490-11494.	13.8	40
49	Unfolding the mechanism of the AAA+ unfoldase VAT by a combined cryo-EM, solution NMR study. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4190-9.	7.1	55
50	Probing the free energy landscapes of ALS disease mutants of SOD1 by NMR spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6939-E6945.	7.1	47
51	A magnet moment silenced: A tribute to my friend and mentor Alex D. Bain. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2016, 45A, e21420.	0.5	0
52	Atomistic picture of conformational exchange in a T4 lysozyme cavity mutant: an experiment-guided molecular dynamics study. Chemical Science, 2016, 7, 3602-3613.	7.4	34
53	Role of Electrostatic Interactions in Binding of Peptides and Intrinsically Disordered Proteins to Their Folded Targets: 2. The Model of Encounter Complex Involving the Double Mutant of the c-Crk N-SH3 Domain and Peptide Sos. Biochemistry, 2016, 55, 1784-1800.	2.5	16
54	A Dynamic molecular basis for malfunction in disease mutants of p97/VCP. ELife, 2016, 5, .	6.0	74

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55	Probing Invisible, Excited Protein States by Non-Uniformly Sampled Pseudo-4D CEST Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 10507-10511.	13.8	25
56	<sup>13</sup> CHD <sup>2</sup> -CEST NMR spectroscopy provides an avenue for studies of conformational exchange in high molecular weight proteins. <i>Journal of Biomolecular NMR</i> , 2015, 63, 187-199.	2.8	30
57	Mapping the conformation of a client protein through the Hsp70 functional cycle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 10395-10400.	7.1	85
58	Observing the overall rocking motion of a protein in a crystal. <i>Nature Communications</i> , 2015, 6, 8361.	12.8	67
59	Folding of an intrinsically disordered protein by phosphorylation as a regulatory switch. <i>Nature</i> , 2015, 519, 106-109.	27.8	471
60	Thermal fluctuations of immature SOD1 lead to separate folding and misfolding pathways. <i>ELife</i> , 2015, 4, e07296.	6.0	91
61	Triple resonance-based <sup>13</sup> C <sup>±</sup> and <sup>13</sup> C <sup>2</sup> CEST experiments for studies of ms timescale dynamics in proteins. <i>Journal of Biomolecular NMR</i> , 2014, 60, 203-208.	2.8	28
62	Measuring hydrogen exchange rates in invisible protein excited states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 8820-8825.	7.1	41
63	Role of Electrostatic Interactions in Binding of Peptides and Intrinsically Disordered Proteins to Their Folded Targets. 1. NMR and MD Characterization of the Complex between the c-Crk N-SH3 Domain and the Peptide Sos. <i>Biochemistry</i> , 2014, 53, 6473-6495.	2.5	46
64	CP-HISQC: a better version of HSQC experiment for intrinsically disordered proteins under physiological conditions. <i>Journal of Biomolecular NMR</i> , 2014, 58, 175-192.	2.8	34
65	Visualizing Side Chains of Invisible Protein Conformers by Solution NMR. <i>Journal of Molecular Biology</i> , 2014, 426, 763-774.	4.2	59
66	Bringing Dynamic Molecular Machines into Focus by Methyl-TROSY NMR. <i>Annual Review of Biochemistry</i> , 2014, 83, 291-315.	11.1	200
67	Measurement of histidine pK <sub>a</sub> values and tautomer populations in invisible protein states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E1705-12.	7.1	111
68	Proton-decoupled CPMG: A better experiment for measuring <sup>15</sup> N R <sub>2</sub> relaxation in disordered proteins. <i>Journal of Magnetic Resonance</i> , 2014, 241, 155-169.	2.1	21
69	Probing slowly exchanging protein systems via <sup>13</sup> C <sup>±</sup> -CEST: monitoring folding of the Im7 protein. <i>Journal of Biomolecular NMR</i> , 2013, 55, 279-289.	2.8	24
70	An R <sub>1ρ</sub> -expression for a spin in chemical exchange between two sites with unequal transverse relaxation rates. <i>Journal of Biomolecular NMR</i> , 2013, 55, 211-218.	2.8	32
71	A Computational Study of the Effects of <sup>13</sup> C- <sup>13</sup> C Scalar Couplings on <sup>13</sup> C CEST NMR Spectra: Towards Studies on a Uniformly <sup>13</sup> C-Labeled Protein. <i>ChemBioChem</i> , 2013, 14, 1709-1713.	2.6	19
72	NMR paves the way for atomic level descriptions of sparsely populated, transiently formed biomolecular conformers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12867-12874.	7.1	230

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73	Probing Slow Chemical Exchange at Carbonyl Sites in Proteins by Chemical Exchange Saturation Transfer NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4156-4159.	13.8	45
74	A 2D <sup>13</sup> C-CEST experiment for studying slowly exchanging protein systems using methyl probes: an application to protein folding. <i>Journal of Biomolecular NMR</i> , 2012, 53, 303-310.	2.8	76
75	Measurement of Proton Chemical Shifts in Invisible States of Slowly Exchanging Protein Systems by Chemical Exchange Saturation Transfer. <i>Journal of Physical Chemistry B</i> , 2012, 116, 14311-14317.	2.6	64
76	Quantifying Millisecond Exchange Dynamics in Proteins by CPMG Relaxation Dispersion NMR Using Side-Chain <sup>1</sup> H Probes. <i>Journal of the American Chemical Society</i> , 2012, 134, 3178-3189.	13.7	55
77	Microsecond Time-Scale Conformational Exchange in Proteins: Using Long Molecular Dynamics Trajectory To Simulate NMR Relaxation Dispersion Data. <i>Journal of the American Chemical Society</i> , 2012, 134, 2555-2562.	13.7	64
78	Structure of an Intermediate State in Protein Folding and Aggregation. <i>Science</i> , 2012, 336, 362-366.	12.6	339
79	Studying "Invisible" Excited Protein States in Slow Exchange with a Major State Conformation. <i>Journal of the American Chemical Society</i> , 2012, 134, 8148-8161.	13.7	430
80	Nonnative Interactions in the FF Domain Folding Pathway from an Atomic Resolution Structure of a Sparsely Populated Intermediate: An NMR Relaxation Dispersion Study. <i>Journal of the American Chemical Society</i> , 2011, 133, 10974-10982.	13.7	37
81	An Optimized Relaxation-Based Coherence Transfer NMR Experiment for the Measurement of Side-Chain Order in Methyl-Protonated, Highly Deuterated Proteins. <i>Journal of Physical Chemistry B</i> , 2011, 115, 14878-14884.	2.6	85
82	Solution structure of a minor and transiently formed state of a T4 lysozyme mutant. <i>Nature</i> , 2011, 477, 111-114.	27.8	265
83	Increasing the Exchange Time-Scale That Can Be Probed by CPMG Relaxation Dispersion NMR. <i>Journal of Physical Chemistry B</i> , 2011, 115, 14891-14900.	2.6	51
84	Domain cooperativity in multidomain proteins: what can we learn from molecular alignment in anisotropic media?. <i>Journal of Biomolecular NMR</i> , 2011, 51, 131-150.	2.8	19
85	Architecture of the high mobility group nucleosomal protein 2-nucleosome complex as revealed by methyl-based NMR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 12283-12288.	7.1	155
86	Optimal methyl labeling for studies of supra-molecular systems. <i>Journal of Biomolecular NMR</i> , 2010, 47, 163-169.	2.8	39
87	Dynamic Regulation of Archaeal Proteasome Gate Opening As Studied by TROSY NMR. <i>Science</i> , 2010, 328, 98-102.	12.6	221
88	A Transient and Low-Populated Protein-Folding Intermediate at Atomic Resolution. <i>Science</i> , 2010, 329, 1312-1316.	12.6	282
89	<sup>13</sup> C <sub>2</sub> Methyl Group Probes of Millisecond Time Scale Exchange in Proteins by <sup>1</sup> H Relaxation Dispersion: An Application to Proteasome Gating Residue Dynamics. <i>Journal of the American Chemical Society</i> , 2010, 132, 10992-10995.	13.7	60
90	Observing biological dynamics at atomic resolution using NMR. <i>Trends in Biochemical Sciences</i> , 2009, 34, 601-611.	7.5	295

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91	CPMG relaxation dispersion NMR experiments measuring glycine $^1\text{H}$ and $^{13}\text{C}$ chemical shifts in the "invisible" excited states of proteins. <i>Journal of Biomolecular NMR</i> , 2009, 45, 45-55.	2.8	41
92	Measuring $^{13}\text{C}$ chemical shifts of invisible excited states in proteins by relaxation dispersion NMR spectroscopy. <i>Journal of Biomolecular NMR</i> , 2009, 44, 139-155.	2.8	40
93	NMR spectroscopy brings invisible protein states into focus. <i>Nature Chemical Biology</i> , 2009, 5, 808-814.	8.0	403
94	Isotope labeling methods for studies of excited protein states by relaxation dispersion NMR spectroscopy. <i>Nature Protocols</i> , 2009, 4, 1641-1648.	12.0	46
95	Selective Characterization of Microsecond Motions in Proteins by NMR Relaxation. <i>Journal of the American Chemical Society</i> , 2009, 131, 16257-16265.	13.7	54
96	Accurate Measurement of Alpha Proton Chemical Shifts of Excited Protein States by Relaxation Dispersion NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2009, 131, 1915-1926.	13.7	68
97	Measurement of Methyl Group Motional Parameters of Invisible, Excited Protein States by NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2009, 131, 12745-12754.	13.7	30
98	Assignment of Ile, Leu, and Val Methyl Correlations in Supra-Molecular Systems: An Application to Aspartate Transcarbamoylase. <i>Journal of the American Chemical Society</i> , 2009, 131, 16534-16543.	13.7	40
99	Alternate Binding Modes for a Ubiquitin-SH3 Domain Interaction Studied by NMR Spectroscopy. <i>Journal of Molecular Biology</i> , 2009, 386, 391-405.	4.2	36
100	Using relaxation dispersion NMR spectroscopy to determine structures of excited, invisible protein states. <i>Journal of Biomolecular NMR</i> , 2008, 41, 113-120.	2.8	112
101	Measurement of carbonyl chemical shifts of excited protein states by relaxation dispersion NMR spectroscopy: comparison between uniformly and selectively $^{13}\text{C}$ labeled samples. <i>Journal of Biomolecular NMR</i> , 2008, 42, 35-47.	2.8	65
102	An Improved $^{15}\text{N}$ Relaxation Dispersion Experiment for the Measurement of Millisecond Time-Scale Dynamics in Proteins. <i>Journal of Physical Chemistry B</i> , 2008, 112, 5898-5904.	2.6	196
103	Quantifying Two-Bond $^1\text{H}$ - $^{13}\text{C}$ and One-Bond $^1\text{H}$ - $^{13}\text{C}$ Dipolar Couplings of Invisible Protein States by Spin-State Selective Relaxation Dispersion NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2008, 130, 8397-8405.	13.7	34
104	Probing Chemical Shifts of Invisible States of Proteins with Relaxation Dispersion NMR Spectroscopy: How Well Can We Do?. <i>Journal of the American Chemical Society</i> , 2008, 130, 2667-2675.	13.7	155
105	Structures of invisible, excited protein states by relaxation dispersion NMR spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 11766-11771.	7.1	186
106	Measurement of bond vector orientations in invisible excited states of proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 18473-18477.	7.1	172
107	Separating Degenerate $^1\text{H}$ Transitions in Methyl Group Probes for Single-Quantum $^1\text{H}$ -CPMG Relaxation Dispersion NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2007, 129, 9514-9521.	13.7	32
108	Quantitative dynamics and binding studies of the 20S proteasome by NMR. <i>Nature</i> , 2007, 445, 618-622.	27.8	472



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109	A single-quantum methyl $^{13}\text{C}$ -relaxation dispersion experiment with improved sensitivity. <i>Journal of Biomolecular NMR</i> , 2007, 38, 79-88.	2.8	112
110	Fractional $^{13}\text{C}$ enrichment of isolated carbons using $[1-^{13}\text{C}]$ - or $[2-^{13}\text{C}]$ -glucose facilitates the accurate measurement of dynamics at backbone $\text{C}\alpha$ and side-chain methyl positions in proteins. <i>Journal of Biomolecular NMR</i> , 2007, 38, 199-212.	2.8	160
111	New Tools Provide New Insights in NMR Studies of Protein Dynamics. <i>Science</i> , 2006, 312, 224-228.	12.6	720
112	Relaxation Rates of Degenerate $^1\text{H}$ Transitions in Methyl Groups of Proteins as Reporters of Side-Chain Dynamics. <i>Journal of the American Chemical Society</i> , 2006, 128, 7299-7308.	13.7	57
113	Dipolar dynamic frequency shifts in multiple-quantum spectra of methyl groups in proteins: correlation with side-chain motion. <i>Magnetic Resonance in Chemistry</i> , 2006, 44, S122-S129.	1.9	5
114	Complementarity of ensemble and single-molecule measures of protein motion: A relaxation dispersion NMR study of an enzyme complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11910-11915.	7.1	35
115	Intrinsic dynamics of an enzyme underlies catalysis. <i>Nature</i> , 2005, 438, 117-121.	27.8	1,018
116	Methyl Groups as Probes of Structure and Dynamics in NMR Studies of High-Molecular-Weight Proteins. <i>ChemBioChem</i> , 2005, 6, 1567-1577.	2.6	175
117	Cross-correlated spin relaxation effects in methyl $^1\text{H}$ CPMG-based relaxation dispersion experiments: Complications and a simple solution. <i>Journal of Biomolecular NMR</i> , 2005, 31, 337-342.	2.8	15
118	Comparison of $^{13}\text{CH}_3$ , $^{13}\text{CH}_2\text{D}$ , and $^{13}\text{CHD}_2$ methyl labeling strategies in proteins. <i>Journal of Biomolecular NMR</i> , 2005, 33, 25-41.	2.8	59
119	Quantitative NMR spectroscopy of supramolecular complexes: Dynamic side pores in ClpP are important for product release. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 16678-16683.	7.1	195
120	Off-Resonance $R_1$ NMR Studies of Exchange Dynamics in Proteins with Low Spin-Lock Fields: An Application to a Fyn SH3 Domain. <i>Journal of the American Chemical Society</i> , 2005, 127, 713-721.	13.7	122
121	A New Spin Probe of Protein Dynamics: Nitrogen Relaxation in $^{15}\text{N}$ - $^2\text{H}$ Amide Groups. <i>Journal of the American Chemical Society</i> , 2005, 127, 3220-3229.	13.7	12
122	Dramatic acceleration of protein folding by stabilization of a nonnative backbone conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 7954-7959.	7.1	79
123	Low-populated folding intermediates of Fyn SH3 characterized by relaxation dispersion NMR. <i>Nature</i> , 2004, 430, 586-590.	27.8	445
124	An Isotope Labeling Strategy for Methyl TROSY Spectroscopy. <i>Journal of Biomolecular NMR</i> , 2004, 28, 165-172.	2.8	221
125	Estimates of methyl $^{13}\text{C}$ and $^1\text{H}$ CSA values (??) in proteins from cross-correlated spin relaxation. <i>Journal of Biomolecular NMR</i> , 2004, 30, 397-406.	2.8	26
126	Multiple-Quantum Relaxation Dispersion NMR Spectroscopy Probing Millisecond Time-Scale Dynamics in Proteins: Theory and Application. <i>Journal of the American Chemical Society</i> , 2004, 126, 7320-7329.	13.7	100



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127	Probing Slow Dynamics in High Molecular Weight Proteins by Methyl-TROSY NMR Spectroscopy: Application to a 723-Residue Enzyme. <i>Journal of the American Chemical Society</i> , 2004, 126, 3964-3973.	13.7	210
128	Double- and Zero-Quantum NMR Relaxation Dispersion Experiments Sampling Millisecond Time Scale Dynamics in Proteins. <i>Journal of the American Chemical Society</i> , 2004, 126, 1886-1891.	13.7	91
129	Nuclear Magnetic Resonance Spectroscopy of High-Molecular-Weight Proteins. <i>Annual Review of Biochemistry</i> , 2004, 73, 107-146.	11.1	247
130	Quantitative NMR Studies of High Molecular Weight Proteins: Application to Domain Orientation and Ligand Binding in the 723 Residue Enzyme Malate Synthase G. <i>Journal of Molecular Biology</i> , 2003, 327, 1121-1133.	4.2	97
131	Cross-Correlated Relaxation Enhanced $^1\text{H}$ - $^{13}\text{C}$ NMR Spectroscopy of Methyl Groups in Very High Molecular Weight Proteins and Protein Complexes. <i>Journal of the American Chemical Society</i> , 2003, 125, 10420-10428.	13.7	550
132	Slow Internal Dynamics in Proteins: Application of NMR Relaxation Dispersion Spectroscopy to Methyl Groups in a Cavity Mutant of T4 Lysozyme. <i>Journal of the American Chemical Society</i> , 2002, 124, 1443-1451.	13.7	110
133	Reconstructing NMR Spectra of "Invisible" Excited Protein States Using HSQC and HMQC Experiments. <i>Journal of the American Chemical Society</i> , 2002, 124, 12352-12360.	13.7	169
134	An NMR Experiment for the Accurate Measurement of Heteronuclear Spin-Lock Relaxation Rates. <i>Journal of the American Chemical Society</i> , 2002, 124, 10743-10753.	13.7	130
135	Distribution of molecular size within an unfolded state ensemble using small-angle X-ray scattering and pulse field gradient NMR techniques. <i>Journal of Molecular Biology</i> , 2002, 316, 101-112.	4.2	181
136	Measurement of Slow ( $\mu\text{s}$ - $\text{ms}$ ) Time Scale Dynamics in Protein Side Chains by $^{15}\text{N}$ Relaxation Dispersion NMR Spectroscopy: Application to Asn and Gln Residues in a Cavity Mutant of T4 Lysozyme. <i>Journal of the American Chemical Society</i> , 2001, 123, 967-975.	13.7	298
137	$^1\text{H}$ Torsion Angle Dynamics in Proteins from Dipolar Couplings. <i>Journal of the American Chemical Society</i> , 2001, 123, 6892-6903.	13.7	65
138	Probing Slow Time Scale Dynamics at Methyl-Containing Side Chains in Proteins by Relaxation Dispersion NMR Measurements: Application to Methionine Residues in a Cavity Mutant of T4 Lysozyme. <i>Journal of the American Chemical Society</i> , 2001, 123, 4556-4566.	13.7	170
139	Studying excited states of proteins by NMR spectroscopy. <i>Nature Structural Biology</i> , 2001, 8, 932-935.	9.7	366
140	Slow Dynamics in Folded and Unfolded States of an SH3 Domain. <i>Journal of the American Chemical Society</i> , 2001, 123, 11341-11352.	13.7	454
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