

Ad Bax

List of Publications by Year in descending order

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190
papers

49,745
citations

7672

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189
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212
all docs

212
docs citations

212
times ranked

30810
citing authors

#	ARTICLE	IF	CITATIONS
1	NMRPipe: A multidimensional spectral processing system based on UNIX pipes. <i>Journal of Biomolecular NMR</i> , 1995, 6, 277-93.	1.6	14,090
2	Protein backbone angle restraints from searching a database for chemical shift and sequence homology. <i>Journal of Biomolecular NMR</i> , 1999, 13, 289-302.	1.6	2,825
3	Backbone dynamics of proteins as studied by nitrogen-15 inverse detected heteronuclear NMR spectroscopy: application to staphylococcal nuclease. <i>Biochemistry</i> , 1989, 28, 8972-8979.	1.2	1,856
4	Direct Measurement of Distances and Angles in Biomolecules by NMR in a Dilute Liquid Crystalline Medium. <i>Science</i> , 1997, 278, 1111-1114.	6.0	1,705
5	Quantitative J correlation: a new approach for measuring homonuclear three-bond J(HNH.alpha.) coupling constants in 15N-enriched proteins. <i>Journal of the American Chemical Society</i> , 1993, 115, 7772-7777.	6.6	1,074
6	Deviations from the simple two-parameter model-free approach to the interpretation of nitrogen-15 nuclear magnetic relaxation of proteins. <i>Journal of the American Chemical Society</i> , 1990, 112, 4989-4991.	6.6	1,021
7	Backbone dynamics of calmodulin studied by nitrogen-15 relaxation using inverse detected two-dimensional NMR spectroscopy: the central helix is flexible. <i>Biochemistry</i> , 1992, 31, 5269-5278.	1.2	969
8	Correlating backbone amide and side chain resonances in larger proteins by multiple relayed triple resonance NMR. <i>Journal of the American Chemical Society</i> , 1992, 114, 6291-6293.	6.6	963
9	Protein backbone and sidechain torsion angles predicted from NMR chemical shifts using artificial neural networks. <i>Journal of Biomolecular NMR</i> , 2013, 56, 227-241.	1.6	939
10	Measurement of J and Dipolar Couplings from Simplified Two-Dimensional NMR Spectra. <i>Journal of Magnetic Resonance</i> , 1998, 131, 373-378.	1.2	931
11	Assignment of complex proton NMR spectra via two-dimensional homonuclear Hartmann-Hahn spectroscopy. <i>Journal of the American Chemical Society</i> , 1985, 107, 2820-2821.	6.6	926
12	A novel approach for sequential assignment of proton, carbon-13, and nitrogen-15 spectra of larger proteins: heteronuclear triple-resonance three-dimensional NMR spectroscopy. Application to calmodulin. <i>Biochemistry</i> , 1990, 29, 4659-4667.	1.2	926
13	Validation of Protein Structure from Anisotropic Carbonyl Chemical Shifts in a Dilute Liquid Crystalline Phase. <i>Journal of the American Chemical Society</i> , 1998, 120, 6836-6837.	6.6	880
14	The airborne lifetime of small speech droplets and their potential importance in SARS-CoV-2 transmission. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11875-11877.	3.3	852
15	Methodological advances in protein NMR. <i>Accounts of Chemical Research</i> , 1993, 26, 131-138.	7.6	838
16	Prediction of Sterically Induced Alignment in a Dilute Liquid Crystalline Phase: A Aid to Protein Structure Determination by NMR. <i>Journal of the American Chemical Society</i> , 2000, 122, 3791-3792.	6.6	680
17	Rotational diffusion anisotropy of human ubiquitin from 15N NMR relaxation. <i>Journal of the American Chemical Society</i> , 1995, 117, 12562-12566.	6.6	678
18	Solution structure of calcium-free calmodulin. <i>Nature Structural and Molecular Biology</i> , 1995, 2, 768-776.	3.6	677

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19	SPARTA+: a modest improvement in empirical NMR chemical shift prediction by means of an artificial neural network. <i>Journal of Biomolecular NMR</i> , 2010, 48, 13-22.	1.6	468
20	Use of dipolar ^1H - ^{15}N and ^1H - ^{13}C couplings in the structure determination of magnetically oriented macromolecules in solution. <i>Nature Structural Biology</i> , 1997, 4, 732-738.	9.7	456
21	Rapid recording of 2D NMR spectra without phase cycling. Application to the study of hydrogen exchange in proteins. <i>Journal of Magnetic Resonance</i> , 1989, 85, 393-399.	0.5	450
22	Weak alignment offers new NMR opportunities to study protein structure and dynamics. <i>Protein Science</i> , 2003, 12, 1-16.	3.1	396
23	Dipolar Couplings in Macromolecular Structure Determination. <i>Methods in Enzymology</i> , 2001, 339, 127-174.	0.4	388
24	[2] Measurement of homo- and heteronuclear J couplings from quantitative J correlation. <i>Methods in Enzymology</i> , 1994, 239, 79-105.	0.4	373
25	A Robust Method for Determining the Magnitude of the Fully Asymmetric Alignment Tensor of Oriented Macromolecules in the Absence of Structural Information. <i>Journal of Magnetic Resonance</i> , 1998, 133, 216-221.	1.2	368
26	Visualizing Speech-Generated Oral Fluid Droplets with Laser Light Scattering. <i>New England Journal of Medicine</i> , 2020, 382, 2061-2063.	13.9	355
27	Measurement of HN-H γ J couplings in calcium-free calmodulin using new 2D and 3D water-flip-back methods. <i>Journal of Biomolecular NMR</i> , 1994, 4, 871-878.	1.6	349
28	Recommendations for the presentation of NMR structures of proteins and nucleic acids. IUPAC-IUBMB-IUPAB Inter-Union Task Group on the Standardization of Data Bases of Protein and Nucleic Acid Structures Determined by NMR Spectroscopy. <i>Journal of Biomolecular NMR</i> , 1998, 12, 1-23.	1.6	347
29	The solution structure of HIV-1 Nef reveals an unexpected fold and permits delineation of the binding surface for the SH3 domain of Hck tyrosine protein kinase. <i>Nature Structural and Molecular Biology</i> , 1996, 3, 340-345.	3.6	337
30	Four-dimensional heteronuclear triple-resonance NMR spectroscopy of interleukin-1 beta in solution. <i>Science</i> , 1990, 249, 411-414.	6.0	322
31	Magnetic Field Dependence of Nitrogen- α -Proton J Splittings in ^{15}N -Enriched Human Ubiquitin Resulting from Relaxation Interference and Residual Dipolar Coupling. <i>Journal of the American Chemical Society</i> , 1996, 118, 6264-6272.	6.6	318
32	Solution structure of Ca(2+)-calmodulin reveals flexible hand-like properties of its domains. <i>Nature Structural Biology</i> , 2001, 8, 990-997.	9.7	305
33	Evaluation of Backbone Proton Positions and Dynamics in a Small Protein by Liquid Crystal NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2003, 125, 9179-9191.	6.6	278
34	Characterization of magnetically oriented phospholipid micelles for measurement of dipolar couplings in macromolecules. , 1998, 12, 361-372.		254
35	Protein Structure Determination Using Molecular Fragment Replacement and NMR Dipolar Couplings. <i>Journal of the American Chemical Society</i> , 2000, 122, 2142-2143.	6.6	250
36	Solution structure of cyanovirin-N, a potent HIV-inactivating protein. <i>Nature Structural Biology</i> , 1998, 5, 571-578.	9.7	249

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37	Weak alignment NMR: a hawk-eyed view of biomolecular structure. <i>Current Opinion in Structural Biology</i> , 2005, 15, 563-570.	2.6	246
38	Determination of Relative $N\alpha^1HN$, $N\alpha^1C\alpha^2$, $C\alpha^1\alpha^2C\alpha^3$, and $C\alpha^1\alpha^2H\alpha^3$ Effective Bond Lengths in a Protein by NMR in a Dilute Liquid Crystalline Phase. <i>Journal of the American Chemical Society</i> , 1998, 120, 12334-12341.	6.6	244
39	Sparse multidimensional iterative lineshape-enhanced (SMILE) reconstruction of both non-uniformly sampled and conventional NMR data. <i>Journal of Biomolecular NMR</i> , 2017, 68, 101-118.	1.6	238
40	Anisotropic rotational diffusion of perdeuterated HIV protease from ^{15}N NMR relaxation measurements at two magnetic fields. <i>Journal of Biomolecular NMR</i> , 1996, 8, 273-284.	1.6	236
41	Flexibility and function in HIV-1 protease. <i>Nature Structural and Molecular Biology</i> , 1995, 2, 274-280.	3.6	231
42	Determination of the Backbone Dihedral Angles ϕ in Human Ubiquitin from Reparametrized Empirical Karplus Equations. <i>Journal of the American Chemical Society</i> , 1996, 118, 2483-2494.	6.6	231
43	A natural product inhibits the initiation of β -synuclein aggregation and suppresses its toxicity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E1009-E1017.	3.3	231
44	A simple apparatus for generating stretched polyacrylamide gels, yielding uniform alignment of proteins and detergent micelles. <i>Journal of Biomolecular NMR</i> , 2001, 21, 377-382.	1.6	223
45	A two-dimensional NMR study of the antimicrobial peptide magainin 2. <i>FEBS Letters</i> , 1988, 227, 21-26.	1.3	203
46	Two-Dimensional NMR and Protein Structure. <i>Annual Review of Biochemistry</i> , 1989, 58, 223-256.	5.0	194
47	Comparison of different modes of two-dimensional reverse-correlation NMR for the study of proteins. <i>Journal of Magnetic Resonance</i> , 1990, 86, 304-318.	0.5	191
48	Impact of N-Terminal Acetylation of β -Synuclein on Its Random Coil and Lipid Binding Properties. <i>Biochemistry</i> , 2012, 51, 5004-5013.	1.2	186
49	Four-dimensional carbon-13/carbon-13-edited nuclear Overhauser enhancement spectroscopy of a protein in solution: application to interleukin 1. <i>Biochemistry</i> , 1991, 30, 12-18.	1.2	182
50	High-resolution heteronuclear NMR of human ubiquitin in an aqueous liquid crystalline medium. <i>Journal of Biomolecular NMR</i> , 1997, 10, 289-292.	1.6	176
51	Defining long range order in NMR structure determination from the dependence of heteronuclear relaxation times on rotational diffusion anisotropy. <i>Nature Structural Biology</i> , 1997, 4, 443-449.	9.7	174
52	A powerful method of sequential proton resonance assignment in proteins using relayed ^{15}N - 1H multiple quantum coherence spectroscopy. <i>FEBS Letters</i> , 1989, 243, 93-98.	1.3	173
53	Measurement of ^{15}N relaxation rates in perdeuterated proteins by TROSY-based methods. <i>Journal of Biomolecular NMR</i> , 2012, 53, 209-221.	1.6	172
54	Monomeric β -40 and β -42 Peptides in Solution Adopt Very Similar Ramachandran Map Distributions That Closely Resemble Random Coil. <i>Biochemistry</i> , 2016, 55, 762-775.	1.2	168

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55	Bicelle-based liquid crystals for NMR-measurement of dipolar couplings at acidic and basic pH values. , 1999, 13, 187-191.		167
56	Modulation of the Alignment Tensor of Macromolecules Dissolved in a Dilute Liquid Crystalline Medium. Journal of the American Chemical Society, 1998, 120, 9106-9107.	6.6	151
57	Refined solution structure and backbone dynamics of HIV-1 Nef. Protein Science, 1997, 6, 1248-1263.	3.1	146
58	Measurement of Dipolar Contributions to ^1H Splittings from Magnetic-Field Dependence of Modulation in Two-Dimensional NMR Spectra. Journal of Magnetic Resonance, 1997, 124, 512-515.	1.2	143
59	Evaluation of Cross-Correlation Effects and Measurement of One-Bond Couplings in Proteins with Short Transverse Relaxation Times. Journal of Magnetic Resonance, 2000, 143, 184-196.	1.2	142
60	The complete influenza hemagglutinin fusion domain adopts a tight helical hairpin arrangement at the lipid:water interface. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11341-11346.	3.3	142
61	Measurement of amide proton exchange rates and NOEs with water in $^{13}\text{C}/^{15}\text{N}$ -enriched calcineurin B. Journal of Biomolecular NMR, 1993, 3, 627-38.	1.6	140
62	Morphology of Three Lyotropic Liquid Crystalline Biological NMR Media Studied by Translational Diffusion Anisotropy. Journal of the American Chemical Society, 2001, 123, 12343-12352.	6.6	139
63	Recommendations for the presentation of NMR structures of proteins and nucleic acids. IUPAC-IUBMB-IUPAB inter-union task group on the standardization of data bases of protein and nucleic acid structures determined by NMR spectroscopy. FEBS Journal, 1998, 256, 1-15.	0.2	137
64	Evaluation of uncertainty in alignment tensors obtained from dipolar couplings. Journal of Biomolecular NMR, 2002, 23, 127-137.	1.6	128
65	Characterization of Phospholipid Mixed Micelles by Translational Diffusion. Journal of Biomolecular NMR, 2004, 29, 299-308.	1.6	127
66	Limits on Variations in Protein Backbone Dynamics from Precise Measurements of Scalar Couplings. Journal of the American Chemical Society, 2007, 129, 9377-9385.	6.6	127
67	NMR Measurement of Dipolar Couplings in Proteins Aligned by Transient Binding to Purple Membrane Fragments. Journal of the American Chemical Society, 1999, 121, 1385-1386.	6.6	121
68	Measurement of long-range ^{13}C - ^{13}C J couplings in a 20-kDa protein-peptide complex. Journal of the American Chemical Society, 1992, 114, 6923-6925.	6.6	117
69	Solution structure of the DNA-binding domain of Drosophila heat shock transcription factor. Nature Structural and Molecular Biology, 1994, 1, 605-614.	3.6	115
70	An Empirical Backbone-Backbone Hydrogen-Bonding Potential in Proteins and Its Applications to NMR Structure Refinement and Validation. Journal of the American Chemical Society, 2004, 126, 7281-7292.	6.6	115
71	Prediction of Charge-Induced Molecular Alignment of Biomolecules Dissolved in Dilute Liquid-Crystalline Phases. Biophysical Journal, 2004, 86, 3444-3460.	0.2	111
72	Characterization of molecular alignment in aqueous suspensions of Pf1 bacteriophage. , 2001, 20, 365-377.		109

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73	Homonuclear decoupling for enhancing resolution and sensitivity in NOE and RDC measurements of peptides and proteins. <i>Journal of Magnetic Resonance</i> , 2014, 241, 97-102.	1.2	105
74	Two-Dimensional NMR Methods for Determining χ_1 Angles of Aromatic Residues in Proteins from Three-Bond J_{C-C} and J_{N-C} Couplings. <i>Journal of the American Chemical Society</i> , 1997, 119, 1803-1804.	6.6	102
75	Quantitative measurement of small through-hydrogen-bond and π -through-space 1H - ^{113}Cd and 1H - ^{199}Hg J couplings in metal-substituted rubredoxin from <i>Pyrococcus furiosus</i> . <i>Journal of Biomolecular NMR</i> , 1992, 2, 527-533.	1.6	98
76	Breathing, speaking, coughing or sneezing: What drives transmission of SARS-CoV-2?. <i>Journal of Internal Medicine</i> , 2021, 290, 1010-1027.	2.7	97
77	Measurement of $^3hJ_{NC'}$ connectivities across hydrogen bonds in a 30 kDa protein. <i>Journal of Biomolecular NMR</i> , 1999, 14, 181-184.	1.6	93
78	Local unfolding of the HSP27 monomer regulates chaperone activity. <i>Nature Communications</i> , 2019, 10, 1068.	5.8	93
79	Study of conformational rearrangement and refinement of structural homology models by the use of heteronuclear dipolar couplings. <i>Journal of Biomolecular NMR</i> , 2000, 18, 217-227.	1.6	92
80	Facile measurement of 1H - ^{15}N residual dipolar couplings in larger perdeuterated proteins. <i>Journal of Biomolecular NMR</i> , 2010, 48, 65-70.	1.6	92
81	Isotope-edited multidimensional NMR of calcineurin B in the presence of the non-deuterated detergent CHAPS. <i>Journal of Biomolecular NMR</i> , 1993, 3, 121-6.	1.6	90
82	Optimized recording of heteronuclear multidimensional NMR spectra using pulsed field gradients. <i>Journal of Magnetic Resonance</i> , 1992, 99, 638-643.	0.5	88
83	Simultaneous NMR Study of Protein Structure and Dynamics Using Conservative Mutagenesis. <i>Journal of Physical Chemistry B</i> , 2008, 112, 6045-6056.	1.2	87
84	Major groove width variations in RNA structures determined by NMR and impact of ^{13}C residual chemical shift anisotropy and 1H - ^{13}C residual dipolar coupling on refinement. <i>Journal of Biomolecular NMR</i> , 2010, 47, 205-219.	1.6	77
85	Improved accuracy of ^{15}N - 1H scalar and residual dipolar couplings from gradient-enhanced IPAP-HSQC experiments on protonated proteins. <i>Journal of Biomolecular NMR</i> , 2009, 43, 161-170.	1.6	73
86	A maximum entropy approach to the study of residue-specific backbone angle distributions in τ -Synuclein, an intrinsically disordered protein. <i>Protein Science</i> , 2014, 23, 1275-1290.	3.1	73
87	Solution structure of DinI provides insight into its mode of RecA inactivation. <i>Protein Science</i> , 2000, 9, 2161-2169.	3.1	72
88	pH-triggered, activated-state conformations of the influenza hemagglutinin fusion peptide revealed by NMR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 19994-19999.	3.3	71
89	Site-Specific Interaction between τ -Synuclein and Membranes Probed by NMR-Observed Methionine Oxidation Rates. <i>Journal of the American Chemical Society</i> , 2013, 135, 2943-2946.	6.6	71
90	New NMR Techniques for Structure Determination and Resonance Assignments of Complex Carbohydrates. <i>Journal of Carbohydrate Chemistry</i> , 1984, 3, 593-611.	0.4	70

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91	Simultaneous Measurement of ^1H - ^{15}N , ^1H - ^{13}C , and ^{15}N - ^{13}C Dipolar Couplings in a Perdeuterated 30 kDa Protein Dissolved in a Dilute Liquid Crystalline Phase. <i>Journal of the American Chemical Society</i> , 1998, 120, 7385-7386.	6.6	70
92	Improved Cross Validation of a Static Ubiquitin Structure Derived from High Precision Residual Dipolar Couplings Measured in a Drug-Based Liquid Crystalline Phase. <i>Journal of the American Chemical Society</i> , 2014, 136, 3752-3755.	6.6	69
93	Study of protein folding under native conditions by rapidly switching the hydrostatic pressure inside an NMR sample cell. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E4169-E4178.	3.3	69
94	Single-Step Determination of Protein Substructures Using Dipolar Couplings: A Aid to Structural Genomics. <i>Journal of the American Chemical Society</i> , 2001, 123, 9490-9491.	6.6	68
95	Absorption mode two-dimensional NOE spectroscopy of exchangeable protons in oligonucleotides. <i>FEBS Letters</i> , 1987, 216, 249-252.	1.3	67
96	Measurement of Three-Bond ^{13}C - ^{13}C Couplings between Carbonyl and Carbonyl/Carboxyl Carbons in Isotopically Enriched Proteins. <i>Journal of the American Chemical Society</i> , 1996, 118, 8170-8171.	6.6	66
97	The use of $^1\text{J}_{\text{C}^1\text{H}^2}$ coupling constants as a probe for protein backbone conformation. <i>Journal of Biomolecular NMR</i> , 1993, 3, 67-80.	1.6	65
98	Structural Discrimination in Small Molecules by Accurate Measurement of Long-Range Proton-Carbon NMR Residual Dipolar Couplings. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7576-7580.	7.2	65
99	An allosteric site in the T-cell receptor $\text{C}\beta^2$ domain plays a critical signalling role. <i>Nature Communications</i> , 2017, 8, 15260.	5.8	64
100	Structural Basis of hAT Transposon End Recognition by Hermes, an Octameric DNA Transposase from <i>Musca domestica</i> . <i>Cell</i> , 2014, 158, 353-367.	13.5	63
101	Chi 1 angle information from a simple two-dimensional NMR experiment that identifies trans $^3\text{J}_{\text{NC}}$ gamma couplings in isotopically enriched proteins. <i>Journal of Biomolecular NMR</i> , 1997, 9, 323-328.	1.6	60
102	How Tetrahedral Are Methyl Groups in Proteins? A Liquid Crystal NMR Study. <i>Journal of the American Chemical Society</i> , 1999, 121, 4690-4695.	6.6	60
103	Liquid Crystalline Phase of G-Tetrad DNA for NMR Study of Detergent-Solubilized Proteins. <i>Journal of the American Chemical Society</i> , 2008, 130, 7536-7537.	6.6	59
104	Global Dynamics and Exchange Kinetics of a Protein on the Surface of Nanoparticles Revealed by Relaxation-Based Solution NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2016, 138, 5789-5792.	6.6	59
105	Measurement of one-bond ^{15}N - ^{13}C dipolar couplings in medium sized proteins. <i>Journal of Biomolecular NMR</i> , 2000, 18, 101-105.	1.6	56
106	An Empirical Correlation between Amide Deuterium Isotope Effects on ^{13}C Chemical Shifts and Protein Backbone Conformation. <i>Journal of the American Chemical Society</i> , 1997, 119, 8070-8075.	6.6	54
107	Measurement of dipolar couplings in a transducin peptide fragment weakly bound to oriented photo-activated rhodopsin. <i>Journal of Biomolecular NMR</i> , 2000, 16, 121-125.	1.6	52
108	Homology modeling of larger proteins guided by chemical shifts. <i>Nature Methods</i> , 2015, 12, 747-750.	9.0	51

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109	Propensity for <i>cis</i> -Proline Formation in Unfolded Proteins. <i>ChemBioChem</i> , 2018, 19, 37-42.	1.3	51
110	The Role of Molecular Flexibility in Antigen Presentation and T Cell Receptor-Mediated Signaling. <i>Frontiers in Immunology</i> , 2018, 9, 1657.	2.2	51
111	Toxic Dopamine Metabolite DOPAL Forms an Unexpected Dicatechol Pyrrole Adduct with Lysines of α -Synuclein. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 7374-7378.	7.2	47
112	Long-range ^{15}N - ^1H correlation as an aid to sequential proton resonance assignment of proteins Application to the DNA-binding protein inner from phage Mu. <i>FEBS Letters</i> , 1988, 238, 17-21.	1.3	46
113	Hydrating the respiratory tract: An alternative explanation why masks lower severity of COVID-19. <i>Biophysical Journal</i> , 2021, 120, 994-1000.	0.2	45
114	Multiplet component separation for measurement of methyl ^{13}C - ^1H dipolar couplings in weakly aligned proteins. , 2001, 20, 77-82.		44
115	Are proteins even floppier than we thought?. <i>Nature Structural Biology</i> , 1997, 4, 254-256.	9.7	43
116	Remarkable Rigidity of the Single α -Helical Domain of Myosin-VI As Revealed by NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 9004-9017.	6.6	42
117	Protein Side-Chain Rotamers from Dipolar Couplings in a Liquid Crystalline Phase. <i>Journal of the American Chemical Society</i> , 2001, 123, 3844-3845.	6.6	41
118	Impact of Hydrostatic Pressure on an Intrinsically Disordered Protein: A High-Pressure NMR Study of α -Synuclein. <i>ChemBioChem</i> , 2013, 14, 1754-1761.	1.3	41
119	Dissociation of the trimeric gp41 ectodomain at the lipid-water interface suggests an active role in HIV-1 Env-mediated membrane fusion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3425-3430.	3.3	41
120	Conformation of double-stranded polydeoxynucleotides in solution by proton two-dimensional nuclear overhauser enhancement spectroscopy. <i>Biopolymers</i> , 1985, 24, 747-765.	1.2	40
121	MERA: a webserver for evaluating backbone torsion angle distributions in dynamic and disordered proteins from NMR data. <i>Journal of Biomolecular NMR</i> , 2015, 63, 85-95.	1.6	40
122	Concordance of X-ray and AlphaFold2 Models of SARS-CoV-2 Main Protease with Residual Dipolar Couplings Measured in Solution. <i>Journal of the American Chemical Society</i> , 2021, 143, 19306-19310.	6.6	40
123	Tilted, Uninterrupted, Monomeric HIV-1 gp41 Transmembrane Helix from Residual Dipolar Couplings. <i>Journal of the American Chemical Society</i> , 2018, 140, 34-37.	6.6	39
124	Deuterium isotope shifts for backbone ^1H , ^{15}N and ^{13}C nuclei in intrinsically disordered protein α -synuclein. <i>Journal of Biomolecular NMR</i> , 2012, 54, 181-191.	1.6	37
125	Observation of ^{12}C -Amyloid Peptide Oligomerization by Pressure-Jump NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2019, 141, 13762-13766.	6.6	36
126	Measuring rapid hydrogen exchange in the homodimeric 36 kDa HIV-1 integrase catalytic core domain. <i>Protein Science</i> , 2011, 20, 500-512.	3.1	34

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127	Protein NMR: Boundless opportunities. <i>Journal of Magnetic Resonance</i> , 2019, 306, 187-191.	1.2	33
128	Measurement of eight scalar and dipolar couplings for methine-methylene pairs in proteins and nucleic acids. <i>Journal of Biomolecular NMR</i> , 2005, 31, 201-216.	1.6	32
129	Discrete Fourier Transformation of NMR Signals. The Relationship between Sampling Delay Time and Spectral Baseline. <i>Journal of Magnetic Resonance Series A</i> , 1993, 105, 219-222.	1.6	30
130	A three-dimensional NMR experiment with improved sensitivity for carbonyl-carbonyl J correlation in proteins. <i>Journal of Biomolecular NMR</i> , 1997, 9, 207-211.	1.6	30
131	High Accuracy of Karplus Equations for Relating Three-Bond J Couplings to Protein Backbone Torsion Angles. <i>ChemPhysChem</i> , 2015, 16, 572-578.	1.0	30
132	An efficient NMR approach for obtaining sequence-specific resonance assignments of larger proteins based on multiple isotopic labeling. <i>FEBS Letters</i> , 1990, 266, 155-158.	1.3	29
133	Whole-Body Rocking Motion of a Fusion Peptide in Lipid Bilayers from Size-Dispersed ^{15}N NMR Relaxation. <i>Journal of the American Chemical Society</i> , 2011, 133, 14184-14187.	6.6	29
134	Monitoring Hydrogen Exchange During Protein Folding by Fast Pressure Jump NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2017, 139, 11036-11039.	6.6	29
135	Large-Scale Recombinant Production of the SARS-CoV-2 Proteome for High-Throughput and Structural Biology Applications. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 653148.	1.6	29
136	Quantitative Residue-Specific Protein Backbone Torsion Angle Dynamics from Concerted Measurement of $^3\text{J}_{\text{CH}}$ Couplings. <i>Journal of the American Chemical Society</i> , 2015, 137, 1432-1435.	6.6	28
137	Transient lipid-bound states of spike protein heptad repeats provide insights into SARS-CoV-2 membrane fusion. <i>Science Advances</i> , 2021, 7, eabk2226.	4.7	28
138	Quantitative J correlation methods for the accurate measurement of ^{13}C - ^{13}C dipolar couplings in proteins. <i>Journal of Biomolecular NMR</i> , 2004, 30, 181-194.	1.6	27
139	Protein backbone motions viewed by intraresidue and sequential ^1H - ^1H residual dipolar couplings. <i>Journal of Biomolecular NMR</i> , 2008, 41, 17-28.	1.6	27
140	Advances in NMR Spectroscopy of Weakly Aligned Biomolecular Systems. <i>Chemical Reviews</i> , 2022, 122, 9307-9330.	23.0	27
141	Quantitative detection of hydrogen peroxide in rain, air, exhaled breath, and biological fluids by NMR spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	27
142	Side Chain Conformational Distributions of a Small Protein Derived from Model-Free Analysis of a Large Set of Residual Dipolar Couplings. <i>Journal of the American Chemical Society</i> , 2015, 137, 14798-14811.	6.6	25
143	Conformation of Inhibitor-Free HIV-1 Protease Derived from NMR Spectroscopy in a Weakly Oriented Solution. <i>ChemBioChem</i> , 2015, 16, 214-218.	1.3	25
144	Observation of ^1H -Helical Hydrogen-Bond Cooperativity in an Intact Protein. <i>Journal of the American Chemical Society</i> , 2016, 138, 1824-1827.	6.6	24

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145	Prediction of nearest neighbor effects on backbone torsion angles and NMR scalar coupling constants in disordered proteins. <i>Protein Science</i> , 2018, 27, 146-158.	3.1	24
146	The Structure of Mouse Cytomegalovirus m04 Protein Obtained from Sparse NMR Data Reveals a Conserved Fold of the m02-m06 Viral Immune Modulator Family. <i>Structure</i> , 2014, 22, 1263-1273.	1.6	23
147	Mixed-time parallel evolution in multiple quantum NMR experiments: sensitivity and resolution enhancement in heteronuclear NMR. <i>Journal of Biomolecular NMR</i> , 2007, 37, 195-204.	1.6	22
148	Measurement of ^1H - ^{15}N and ^1H - ^{13}C residual dipolar couplings in nucleic acids from TROSY intensities. <i>Journal of Biomolecular NMR</i> , 2011, 51, 89-103.	1.6	22
149	Multidimensional Triple Resonance NMR Spectroscopy of Isotopically Uniformly Enriched Proteins: A Powerful New Strategy for Structure Determination. <i>Novartis Foundation Symposium</i> , 1991, 161, 108-135.	1.2	22
150	^1H - ^1H Dipolar Couplings Provide a Unique Probe of RNA Backbone Structure. <i>Journal of the American Chemical Society</i> , 2003, 125, 15740-15741.	6.6	21
151	Pressure-induced structural transition of mature HIV-1 protease from a combined NMR/MD simulation approach. <i>Proteins: Structure, Function and Bioinformatics</i> , 2015, 83, 2117-2123.	1.5	21
152	Isoindole Linkages Provide a Pathway for DOPAL-Mediated Cross-Linking of β -Synuclein. <i>Biochemistry</i> , 2018, 57, 1462-1474.	1.2	21
153	Conditional Disorder in Small Heat-shock Proteins. <i>Journal of Molecular Biology</i> , 2020, 432, 3033-3049.	2.0	21
154	A lowly populated, transient β -sheet structure in monomeric A β 1-42 identified by multinuclear NMR of chemical denaturation. <i>Biophysical Chemistry</i> , 2021, 270, 106531.	1.5	21
155	Monitoring ^{15}N Chemical Shifts During Protein Folding by Pressure-Jump NMR. <i>Journal of the American Chemical Society</i> , 2018, 140, 8096-8099.	6.6	20
156	Superoxide is the critical driver of DOPAL autoxidation, lysyl adduct formation, and crosslinking of β -synuclein. <i>Biochemical and Biophysical Research Communications</i> , 2017, 487, 281-286.	1.0	19
157	Magnetic field induced residual dipolar couplings of imino groups in nucleic acids from measurements at a single magnetic field. <i>Journal of Biomolecular NMR</i> , 2007, 39, 91-96.	1.6	18
158	Observation and Kinetic Characterization of Transient Schiff Base Intermediates by CEST NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15309-15312.	7.2	18
159	Triple resonance three-dimensional protein NMR: Before it became a black box. <i>Journal of Magnetic Resonance</i> , 2011, 213, 442-445.	1.2	17
160	Nuclear Magnetic Resonance Observation of β -Synuclein Membrane Interaction by Monitoring the Acetylation Reactivity of Its Lysine Side Chains. <i>Biochemistry</i> , 2016, 55, 4949-4959.	1.2	17
161	Hybrid measurement of respiratory aerosol reveals a dominant coarse fraction resulting from speech that remains airborne for minutes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	17
162	Homocuclear Magnetization Transfer Experiments Using Isotropic and Nonisotropic Mixing Schemes. <i>Israel Journal of Chemistry</i> , 1988, 28, 309-317.	1.0	16

#	ARTICLE	IF	CITATIONS
163	Accurate Measurement of Residual Dipolar Couplings in Large RNAs by Variable Flip Angle NMR. <i>Journal of the American Chemical Society</i> , 2018, 140, 6978-6983.	6.6	16
164	Importance of time-ordered non-uniform sampling of multi-dimensional NMR spectra of A β 42 peptide under aggregating conditions. <i>Journal of Biomolecular NMR</i> , 2019, 73, 429-441.	1.6	15
165	Modulating alignment of membrane proteins in liquid-crystalline and oriented gel media by changing the size and charge of phospholipid bicelles. <i>Journal of Biomolecular NMR</i> , 2013, 55, 369-377.	1.6	13
166	SARS-CoV-2 transmission via speech-generated respiratory droplets. <i>Lancet Infectious Diseases</i> , The, 2021, 21, 318.	4.6	13
167	Insights into the Conformation of the Membrane Proximal Regions Critical to the Trimerization of the HIV-1 gp41 Ectodomain Bound to Dodecyl Phosphocholine Micelles. <i>PLoS ONE</i> , 2016, 11, e0160597.	1.1	13
168	Two-Dimensional NMR Study of Bleomycin and Its Zinc(II) Complex: Reassignment of ¹³ C Resonances. <i>Journal of Biomolecular Structure and Dynamics</i> , 1990, 8, 375-398.	2.0	12
169	NMR identification of calcineurin B residues affected by binding of a calcineurin A peptide. <i>FEBS Letters</i> , 1995, 375, 108-112.	1.3	12
170	Measurement of three-bond, ¹³ C'- ¹³ C beta J couplings in human ubiquitin by a triple resonance, E. COSY-type NMR technique. <i>Journal of Biomolecular NMR</i> , 1998, 11, 199-203.	1.6	12
171	A Novel MHC-I Surface Targeted for Binding by the MCMV m06 Immuno-evasin Revealed by Solution NMR. <i>Journal of Biological Chemistry</i> , 2015, 290, 28857-28868.	1.6	12
172	Disorder in the court. <i>Nature</i> , 2016, 530, 38-39.	13.7	12
173	Inhaled Water and Salt Suppress Respiratory Droplet Generation and COVID-19 Incidence and Death on US Coastlines. <i>Molecular Frontiers Journal</i> , 2021, 05, 17-29.	0.9	12
174	Accurate measurement of ³ J _{HNH} couplings in small or disordered proteins from WATERGATE-optimized TROSY spectra. <i>Journal of Biomolecular NMR</i> , 2016, 64, 1-7.	1.6	11
175	Interrupted Pressure-Jump NMR Experiments Reveal Resonances of On-Pathway Protein Folding Intermediate. <i>Journal of Physical Chemistry B</i> , 2018, 122, 11792-11799.	1.2	10
176	Toxic Dopamine Metabolite DOPAL Forms an Unexpected Dicatechol Pyrrole Adduct with Lysines of α -Synuclein. <i>Angewandte Chemie</i> , 2016, 128, 7500-7504.	1.6	9
177	NMR characterization of H ₂ O ₂ hydrogen exchange. <i>Journal of Magnetic Resonance</i> , 2021, 333, 107092.	1.2	9
178	Rotational Dynamics of Calcium-Free Calmodulin Studied by ¹⁵ N NMR Relaxation Measurements. <i>FEBS Journal</i> , 1995, 230, 1014-1024.	0.2	8
179	ARTSY-J: Convenient and precise measurement of ³ J _{HNH} couplings in medium-size proteins from TROSY-HSQC spectra. <i>Journal of Magnetic Resonance</i> , 2016, 268, 73-81.	1.2	8
180	Protein structural changes characterized by high-pressure, pulsed field gradient diffusion NMR spectroscopy. <i>Journal of Magnetic Resonance</i> , 2020, 312, 106701.	1.2	8

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181	NUScon: a community-driven platform for quantitative evaluation of nonuniform sampling in NMR. <i>Magnetic Resonance</i> , 2021, 2, 843-861.	0.8	7
182	Self-infection with speech aerosol may contribute to COVID-19 severity. <i>Journal of Internal Medicine</i> , 2021, 290, 1275-1277.	2.7	6
183	Simultaneous Quantification of H_2O_2 and Organic Hydroperoxides by 1H NMR Spectroscopy. <i>Analytical Chemistry</i> , 2022, 94, 5729-5733.	3.2	6
184	Concentration-Dependent Structural Transition of the HIV-1 gp41 MPER Peptide into α -Helical Trimers. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 166-170.	7.2	5
185	Quantitative evaluation of positive γ angle propensity in flexible regions of proteins from three-bond J couplings. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 5759-5770.	1.3	4
186	Four-dimensional NOE-NOE spectroscopy of SARS-CoV-2 Main Protease to facilitate resonance assignment and structural analysis. <i>Magnetic Resonance</i> , 2021, 2, 129-138.	0.8	3
187	Observation and Kinetic Characterization of Transient Schiff Base Intermediates by CEST NMR Spectroscopy. <i>Angewandte Chemie</i> , 2019, 131, 15453-15456.	1.6	2
188	Modulating the Stiffness of the Myosin VI Single α -Helical Domain. <i>Biophysical Journal</i> , 2020, 118, 1119-1128.	0.2	2
189	Real-time Exchange of the Lipid-bound Intermediate and Post-fusion States of the HIV-1 gp41 Ectodomain. <i>Journal of Molecular Biology</i> , 2022, 434, 167683.	2.0	2
190	Concentration-Dependent Structural Transition of the HIV-1 gp41 MPER Peptide into α -Helical Trimers. <i>Angewandte Chemie</i> , 2021, 133, 168-172.	1.6	0