

# Robert Tycko

## List of Publications by Citations

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143  
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169  
ext. papers

22,516  
ext. citations

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L-index

#	Paper	IF	Citations
161	A structural model for Alzheimer $\beta$ beta -amyloid fibrils based on experimental constraints from solid state NMR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 16742-7	11.5	1630
160	Self-propagating, molecular-level polymorphism in Alzheimer $\beta$ beta-amyloid fibrils. <i>Science</i> , <b>2005</b> , 307, 262-5	33.3	1438
159	Cell-free formation of RNA granules: low complexity sequence domains form dynamic fibers within hydrogels. <i>Cell</i> , <b>2012</b> , 149, 753-67	56.2	1300
158	Experimental constraints on quaternary structure in Alzheimer $\beta$ beta-amyloid fibrils. <i>Biochemistry</i> , <b>2006</b> , 45, 498-512	3.2	935
157	Molecular structural basis for polymorphism in Alzheimer $\beta$ beta-amyloid fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 18349-54	11.5	910
156	Molecular structure of $\beta$ amyloid fibrils in Alzheimer $\beta$ disease brain tissue. <i>Cell</i> , <b>2013</b> , 154, 1257-68	56.2	808
155	Amyloid fibril formation by A beta 16-22, a seven-residue fragment of the Alzheimer $\beta$ beta-amyloid peptide, and structural characterization by solid state NMR. <i>Biochemistry</i> , <b>2000</b> , 39, 13748-59	3.2	611
154	Peptide conformation and supramolecular organization in amylin fibrils: constraints from solid-state NMR. <i>Biochemistry</i> , <b>2007</b> , 46, 13505-22	3.2	487
153	Molecular structure of amyloid fibrils: insights from solid-state NMR. <i>Quarterly Reviews of Biophysics</i> , <b>2006</b> , 39, 1-55	7	454
152	Solid-state NMR studies of amyloid fibril structure. <i>Annual Review of Physical Chemistry</i> , <b>2011</b> , 62, 279-99	15.7	416
151	Structure of FUS Protein Fibrils and Its Relevance to Self-Assembly and Phase Separation of Low-Complexity Domains. <i>Cell</i> , <b>2017</b> , 171, 615-627.e16	56.2	382
150	Structural variation in amyloid- $\beta$ fibrils from Alzheimer $\beta$ disease clinical subtypes. <i>Nature</i> , <b>2017</b> , 541, 217-221	50.4	375
149	Progress towards a molecular-level structural understanding of amyloid fibrils. <i>Current Opinion in Structural Biology</i> , <b>2004</b> , 14, 96-103	8.1	348
148	Alignment of Biopolymers in Strained Gels: A New Way To Create Detectable Dipole-Dipole Couplings in High-Resolution Biomolecular NMR. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 9340-9341	16.4	322
147	Supramolecular structure in full-length Alzheimer $\beta$ beta-amyloid fibrils: evidence for a parallel beta-sheet organization from solid-state nuclear magnetic resonance. <i>Biophysical Journal</i> , <b>2002</b> , 83, 1205-16	2.9	294
146	Antiparallel $\beta$ sheet architecture in Iowa-mutant $\beta$ amyloid fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 4443-8	11.5	264
145	Measurement of nuclear magnetic dipole-dipole couplings in magic angle spinning NMR. <i>Chemical Physics Letters</i> , <b>1990</b> , 173, 461-465	2.5	264

144	Amyloid polymorphism: structural basis and neurobiological relevance. <i>Neuron</i> , <b>2015</b> , 86, 632-45	13.9	257
143	Amyloid of the prion domain of Sup35p has an in-register parallel beta-sheet structure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 19754-9	11.5	257
142	Seeded growth of beta-amyloid fibrils from Alzheimer's brain-derived fibrils produces a distinct fibril structure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 7443-8	11.5	256
141	Supramolecular structural constraints on Alzheimer's beta-amyloid fibrils from electron microscopy and solid-state nuclear magnetic resonance. <i>Biochemistry</i> , <b>2002</b> , 41, 15436-50	3.2	249
140	Molecular structures of amyloid and prion fibrils: consensus versus controversy. <i>Accounts of Chemical Research</i> , <b>2013</b> , 46, 1487-96	24.3	232
139	Molecular dynamics simulations of Alzheimer's beta-amyloid protofilaments. <i>Journal of Molecular Biology</i> , <b>2005</b> , 353, 804-21	6.5	229
138	Abeta40-Lactam(D23/K28) models a conformation highly favorable for nucleation of amyloid. <i>Biochemistry</i> , <b>2005</b> , 44, 6003-14	3.2	223
137	Sensitivity enhancement in solid state (15)N NMR by indirect detection with high-speed magic angle spinning. <i>Journal of Magnetic Resonance</i> , <b>2000</b> , 142, 199-204	3	217
136	Adiabatic rotational splittings and Berry's phase in nuclear quadrupole resonance. <i>Physical Review Letters</i> , <b>1987</b> , 58, 2281-2284	7.4	215
135	Insights into the amyloid folding problem from solid-state NMR. <i>Biochemistry</i> , <b>2003</b> , 42, 3151-9	3.2	191
134	Measurement of sample temperatures under magic-angle spinning from the chemical shift and spin-lattice relaxation rate of 79Br in KBr powder. <i>Journal of Magnetic Resonance</i> , <b>2009</b> , 196, 84-7	3	184
133	Polymorphic fibril formation by residues 10-40 of the Alzheimer's beta-amyloid peptide. <i>Biophysical Journal</i> , <b>2006</b> , 90, 4618-29	2.9	182
132	Symmetry principles in the design of pulse sequences for structural measurements in magic angle spinning nuclear magnetic resonance. <i>Journal of Chemical Physics</i> , <b>1993</b> , 98, 932-943	3.9	180
131	Theory for cross effect dynamic nuclear polarization under magic-angle spinning in solid state nuclear magnetic resonance: the importance of level crossings. <i>Journal of Chemical Physics</i> , <b>2012</b> , 137, 084508	3.9	171
130	Physical and structural basis for polymorphism in amyloid fibrils. <i>Protein Science</i> , <b>2014</b> , 23, 1528-39	6.3	164
129	Sensitivity enhancement in solid-state (13)C NMR of synthetic polymers and biopolymers by (1)H NMR detection with high-speed magic angle spinning. <i>Journal of the American Chemical Society</i> , <b>2001</b> , 123, 2921-2	16.4	143
128	Low-temperature dynamic nuclear polarization at 9.4 T with a 30 mW microwave source. <i>Journal of Magnetic Resonance</i> , <b>2010</b> , 204, 303-13	3	136
127	Characterization of beta-sheet structure in Ure2p1-89 yeast prion fibrils by solid-state nuclear magnetic resonance. <i>Biochemistry</i> , <b>2007</b> , 46, 13149-62	3.2	134

126	Parallel beta-sheets and polar zippers in amyloid fibrils formed by residues 10-39 of the yeast prion protein Ure2p. <i>Biochemistry</i> , <b>2005</b> , 44, 10669-80	3.2	129
125	Amyloid of Rnq1p, the basis of the [PIN+] prion, has a parallel in-register beta-sheet structure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2008</b> , 105, 2403-8	11.5	128
124	Polymorph-specific kinetics and thermodynamics of amyloid fibril growth. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 6860-71	16.4	123
123	Recoupling of chemical shift anisotropies in solid-state NMR under high-speed magic-angle spinning and in uniformly <sup>13</sup> C-labeled systems. <i>Journal of Chemical Physics</i> , <b>2003</b> , 118, 8378-8389	3.9	118
122	The helical C-terminal domain of full-length recombinant PrP converts to an in-register parallel beta-sheet structure in PrP fibrils: evidence from solid state nuclear magnetic resonance. <i>Biochemistry</i> , <b>2010</b> , 49, 9488-97	3.2	117
121	Evidence for novel beta-sheet structures in Iowa mutant beta-amyloid fibrils. <i>Biochemistry</i> , <b>2009</b> , 48, 6072-84	3.2	117
120	Double-quantum filtering in magic-angle-spinning NMR spectroscopy: an approach to spectral simplification and molecular structure determination. <i>Journal of the American Chemical Society</i> , <b>1991</b> , 113, 9444-9448	16.4	115
119	Perturbation of nuclear spin polarizations in solid state NMR of nitroxide-doped samples by magic-angle spinning without microwaves. <i>Journal of Chemical Physics</i> , <b>2014</b> , 140, 184201	3.9	114
118	Determination of Peptide Conformations by Two-Dimensional Magic Angle Spinning NMR Exchange Spectroscopy with Rotor Synchronization. <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 8487-8488	16.4	113
117	Increasing the amphiphilicity of an amyloidogenic peptide changes the beta-sheet structure in the fibrils from antiparallel to parallel. <i>Biophysical Journal</i> , <b>2004</b> , 86, 428-34	2.9	112
116	The functional curli amyloid is not based on in-register parallel beta-sheet structure. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 25065-76	5.4	107
115	Measurement of amyloid fibril mass-per-length by tilted-beam transmission electron microscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 14339-44	11.5	106
114	Symmetry-based constant-time homonuclear dipolar recoupling in solid state NMR. <i>Journal of Chemical Physics</i> , <b>2007</b> , 126, 064506	3.9	104
113	Biomolecular solid state NMR: advances in structural methodology and applications to peptide and protein fibrils. <i>Annual Review of Physical Chemistry</i> , <b>2001</b> , 52, 575-606	15.7	103
112	Constraints on supramolecular structure in amyloid fibrils from two-dimensional solid-state NMR spectroscopy with uniform isotopic labeling. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 6606-7	16.4	102
111	Molecular structure of monomorphic peptide fibrils within a kinetically trapped hydrogel network. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 9816-21	11.5	93
110	Investigation of molecular structure in solids by two-dimensional NMR exchange spectroscopy with magic angle spinning. <i>Journal of Chemical Physics</i> , <b>1996</b> , 105, 7915-7930	3.9	93
109	Biopolymer Conformational Distributions from Solid-State NMR: Helix and 310-Helix Contents of a Helical Peptide. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 7039-7048	16.4	89

108	Controlling residual dipolar couplings in high-resolution NMR of proteins by strain induced alignment in a gel. <i>Journal of Biomolecular NMR</i> , <b>2001</b> , 21, 141-51	3	85
107	Two prion variants of Sup35p have in-register parallel beta-sheet structures, independent of hydration. <i>Biochemistry</i> , <b>2009</b> , 48, 5074-82	3.2	84
106	Probing site-specific conformational distributions in protein folding with solid-state NMR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 3284-9	11.5	84
105	Biomolecular solid state NMR with magic-angle spinning at 25K. <i>Journal of Magnetic Resonance</i> , <b>2008</b> , 195, 179-86	3	82
104	Molecular, Local, and Network-Level Basis for the Enhanced Stiffness of Hydrogel Networks Formed from Coassembled Racemic Peptides: Predictions from Pauling and Corey. <i>ACS Central Science</i> , <b>2017</b> , 3, 586-597	16.8	80
103	Successive Stages of Amyloid- $\beta$ Self-Assembly Characterized by Solid-State Nuclear Magnetic Resonance with Dynamic Nuclear Polarization. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 8294-307	16.4	80
102	The Japanese mutant A $\beta$ (E22-A $\beta$ (1-39)) forms fibrils instantaneously, with low-thioflavin T fluorescence: seeding of wild-type A $\beta$ (1-40) into atypical fibrils by E22-A $\beta$ (1-39). <i>Biochemistry</i> , <b>2011</b> , 50, 2026-39	3.2	80
101	Structural evolution of Iowa mutant $\beta$ amyloid fibrils from polymorphic to homogeneous states under repeated seeded growth. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 4018-29	16.4	77
100	Solid-state NMR evidence for an antibody-dependent conformation of the V3 loop of HIV-1 gp120. <i>Nature Structural Biology</i> , <b>1999</b> , 6, 141-5		75
99	Site-specific identification of non-beta-strand conformations in Alzheimer's beta-amyloid fibrils by solid-state NMR. <i>Biophysical Journal</i> , <b>2003</b> , 84, 3326-35	2.9	72
98	Quantitative Conformational Measurements in Solid State NMR by Constant-Time Homonuclear Dipolar Recoupling. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 4897-4898	16.4	70
97	Optical Pumping in Solid State Nuclear Magnetic Resonance. <i>The Journal of Physical Chemistry</i> , <b>1996</b> , 100, 13240-13250		70
96	Detection of a transient intermediate in a rapid protein folding process by solid-state nuclear magnetic resonance. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 24-5	16.4	69
95	NMR Studies of Chloroquine $\beta$ riprotoporphyrin IX Complex. <i>Journal of Physical Chemistry A</i> , <b>2003</b> , 107, 5821-5825	2.8	67
94	Measurement of dipole-coupled lineshapes in a many-spin system by constant-time two-dimensional solid state NMR with high-speed magic-angle spinning. <i>Chemical Physics</i> , <b>2001</b> , 266, 231-236	2.3	65
93	Optical pumping in indium phosphide: $^{31}\text{P}$ NMR measurements and potential for signal enhancement in biological solid state NMR. <i>Solid State Nuclear Magnetic Resonance</i> , <b>1998</b> , 11, 1-9	3.1	63
92	High-order multiple quantum excitation in $^{13}\text{C}$ nuclear magnetic resonance spectroscopy of organic solids. <i>Journal of Chemical Physics</i> , <b>1999</b> , 110, 2749-2752	3.9	62
91	Structure and dynamics of the HIV-1 Vpu transmembrane domain revealed by solid-state NMR with magic-angle spinning. <i>Biochemistry</i> , <b>2006</b> , 45, 918-33	3.2	61

90	Amyloids of shuffled prion domains that form prions have a parallel in-register beta-sheet structure. <i>Biochemistry</i> , <b>2008</b> , 47, 4000-7	3.2	60
89	Determination of Polypeptide Backbone Dihedral Angles in Solid State NMR by Double Quantum <sup>13</sup> C Chemical Shift Anisotropy Measurements. <i>Journal of Magnetic Resonance</i> , <b>2001</b> , 149, 131-138	3	60
88	Solid state nuclear magnetic resonance with magic-angle spinning and dynamic nuclear polarization below 25 K. <i>Journal of Magnetic Resonance</i> , <b>2013</b> , 226, 100-6	3	58
87	Solid-state NMR in biological and materials physics. <i>Physics Today</i> , <b>2009</b> , 62, 44-49	0.9	56
86	Locating folds of the in-register parallel $\beta$ -sheet of the Sup35p prion domain infectious amyloid. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, E4615-22	11.5	55
85	NMR at low and ultralow temperatures. <i>Accounts of Chemical Research</i> , <b>2013</b> , 46, 1923-32	24.3	54
84	Segmental polymorphism in a functional amyloid. <i>Biophysical Journal</i> , <b>2011</b> , 101, 2242-50	2.9	54
83	Molecular Structure of Aggregated Amyloid—Insights from Solid-State Nuclear Magnetic Resonance. <i>Cold Spring Harbor Perspectives in Medicine</i> , <b>2016</b> , 6,	5.4	53
82	Frequency-selective homonuclear dipolar recoupling in solid state NMR. <i>Journal of Chemical Physics</i> , <b>2006</b> , 124, 194303	3.9	53
81	The core of Ure2p prion fibrils is formed by the N-terminal segment in a parallel cross- $\beta$ structure: evidence from solid-state NMR. <i>Journal of Molecular Biology</i> , <b>2011</b> , 409, 263-77	6.5	52
80	Oligomerization state and supramolecular structure of the HIV-1 Vpu protein transmembrane segment in phospholipid bilayers. <i>Protein Science</i> , <b>2010</b> , 19, 1877-96	6.3	50
79	Sensitivity enhancement in structural measurements by solid state NMR through pulsed spin locking. <i>Journal of Magnetic Resonance</i> , <b>2002</b> , 155, 293-9	3	49
78	Prospects for resonance assignments in multidimensional solid-state NMR spectra of uniformly labeled proteins. <i>Journal of Biomolecular NMR</i> , <b>1996</b> , 8, 239-51	3	48
77	Zero field nuclear magnetic resonance in high field. <i>Journal of Chemical Physics</i> , <b>1990</b> , 92, 5776-5793	3.9	47
76	Low-temperature dynamic nuclear polarization with helium-cooled samples and nitrogen-driven magic-angle spinning. <i>Journal of Magnetic Resonance</i> , <b>2016</b> , 264, 99-106	3	46
75	Structural and dynamical characterization of tubular HIV-1 capsid protein assemblies by solid state nuclear magnetic resonance and electron microscopy. <i>Protein Science</i> , <b>2010</b> , 19, 716-30	6.3	46
74	Solid-state NMR yields structural constraints on the V3 loop from HIV-1 Gp120 bound to the 447-52D antibody Fv fragment. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 4979-90	16.4	46
73	Stray-field NMR imaging and wavelength dependence of optically pumped nuclear spin polarization in InP. <i>Physical Review B</i> , <b>1999</b> , 60, 8672-8679	3.3	46

72	Molecular alignment within beta-sheets in Aβ(14-23) fibrils: solid-state NMR experiments and theoretical predictions. <i>Biophysical Journal</i> , <b>2007</b> , 92, 594-602	2.9	45
71	Solid-state NMR data support a helix-loop-helix structural model for the N-terminal half of HIV-1 Rev in fibrillar form. <i>Journal of Molecular Biology</i> , <b>2001</b> , 313, 845-59	6.5	44
70	Nuclear magnetic resonance crystallography: molecular orientational ordering in three forms of solid methanol. <i>Journal of the American Chemical Society</i> , <b>1991</b> , 113, 3592-3593	16.4	44
69	Expression and purification of a recombinant peptide from the Alzheimer's beta-amyloid protein for solid-state NMR. <i>Protein Expression and Purification</i> , <b>2005</b> , 42, 200-10	2	43
68	Solid-state NMR spectroscopy method for determination of the backbone torsion angle psi in peptides with isolated uniformly labeled residues. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 11828-9	16.4	42
67	Site-specific structural variations accompanying tubular assembly of the HIV-1 capsid protein. <i>Journal of Molecular Biology</i> , <b>2014</b> , 426, 1109-27	6.5	41
66	Simulated self-assembly of the HIV-1 capsid: protein shape and native contacts are sufficient for two-dimensional lattice formation. <i>Biophysical Journal</i> , <b>2011</b> , 100, 3035-44	2.9	41
65	An Achilles' heel in an amyloidogenic protein and its repair: insulin fibrillation and therapeutic design. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 10806-21	5.4	41
64	Repeat domains of melanosome matrix protein Pmel17 orthologs form amyloid fibrils at the acidic melanosomal pH. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 8385-8393	5.4	39
63	A Monte Carlo/simulated annealing algorithm for sequential resonance assignment in solid state NMR of uniformly labeled proteins with magic-angle spinning. <i>Journal of Magnetic Resonance</i> , <b>2010</b> , 205, 304-14	3	38
62	Characterization of amyloid structures at the molecular level by solid state nuclear magnetic resonance spectroscopy. <i>Methods in Enzymology</i> , <b>2006</b> , 413, 103-22	1.7	38
61	Quantitative determination of site-specific conformational distributions in an unfolded protein by solid-state nuclear magnetic resonance. <i>Journal of Molecular Biology</i> , <b>2009</b> , 392, 1055-73	6.5	36
60	A general Monte Carlo/simulated annealing algorithm for resonance assignment in NMR of uniformly labeled biopolymers. <i>Journal of Biomolecular NMR</i> , <b>2011</b> , 50, 267-76	3	35
59	Evidence from solid-state NMR for nonhelical conformations in the transmembrane domain of the amyloid precursor protein. <i>Biophysical Journal</i> , <b>2011</b> , 100, 711-719	2.9	34
58	Multidimensional Heteronuclear Correlation Spectroscopy of a Uniformly <sup>15</sup> N- and <sup>13</sup> C-Labeled Peptide Crystal: Toward Spectral Resolution, Assignment, and Structure Determination of Oriented Molecules in Solid-State NMR. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 1443-1455	16.4	34
57	Molecular structure of a prevalent amyloid-β fibril polymorph from Alzheimer's disease brain tissue. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	34
56	Alzheimer's disease: Structure of aggregates revealed. <i>Nature</i> , <b>2016</b> , 537, 492-493	50.4	33
55	Solid-state NMR as a probe of amyloid structure. <i>Protein and Peptide Letters</i> , <b>2006</b> , 13, 229-34	1.9	33

54	Structural characterization of the D290V mutation site in hnRNPA2 low-complexity-domain polymers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E9782-E9791	11.5	32
53	Fiber diffraction data indicate a hollow core for the Alzheimer's $\alpha\text{B}$ -fold symmetric fibril. <i>Journal of Molecular Biology</i> , <b>2012</b> , 423, 454-61	6.5	31
52	Dynamic nuclear polarization-enhanced $^1\text{H}$ - $^{13}\text{C}$ double resonance NMR in static samples below 20 K. <i>Journal of Magnetic Resonance</i> , <b>2012</b> , 221, 32-40	3	29
51	Experimentally derived structural constraints for amyloid fibrils of wild-type transthyretin. <i>Biophysical Journal</i> , <b>2011</b> , 101, 2485-92	2.9	29
50	Synthesis and evaluation of nitroxide-based oligoradicals for low-temperature dynamic nuclear polarization in solid state NMR. <i>Journal of Magnetic Resonance</i> , <b>2014</b> , 244, 98-106	3	28
49	Stochastic dipolar recoupling in nuclear magnetic resonance of solids. <i>Physical Review Letters</i> , <b>2007</b> , 99, 187601	7.4	28
48	Zero-field nuclear magnetic resonance in high field: The untruncation of dipole-dipole couplings by coherent averaging. <i>Physical Review Letters</i> , <b>1988</b> , 60, 2734-2737	7.4	28
47	On Mechanisms of Dynamic Nuclear Polarization in Solids. <i>Israel Journal of Chemistry</i> , <b>2014</b> , 54, 39-46	3.4	27
46	Absolute structural constraints on amyloid fibrils from solid-state NMR spectroscopy of partially oriented samples. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 4478-9	16.4	25
45	Probing hydrogen bonds in the antibody-bound HIV-1 gp120 V3 loop by solid state NMR REDOR measurements. <i>Journal of Biomolecular NMR</i> , <b>2000</b> , 16, 313-27	3	25
44	Helical Conformation in the CA-SP1 Junction of the Immature HIV-1 Lattice Determined from Solid-State NMR of Virus-like Particles. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 12029-32	16.4	25
43	Application of millisecond time-resolved solid state NMR to the kinetics and mechanism of melittin self-assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 16717-16722	11.5	24
42	Zero-quantum frequency-selective recoupling of homonuclear dipole-dipole interactions in solid state nuclear magnetic resonance. <i>Journal of Chemical Physics</i> , <b>2009</b> , 131, 045101	3.9	24
41	Dynamic nuclear polarization-enhanced $^{13}\text{C}$ NMR spectroscopy of static biological solids. <i>Journal of Magnetic Resonance</i> , <b>2013</b> , 231, 5-14	3	23
40	Molecular structure and interactions within amyloid-like fibrils formed by a low-complexity protein sequence from FUS. <i>Nature Communications</i> , <b>2020</b> , 11, 5735	17.4	23
39	Restraints on backbone conformations in solid state NMR studies of uniformly labeled proteins from quantitative amide $^{15}\text{N}$ - $^{15}\text{N}$ and carbonyl $^{13}\text{C}$ - $^{13}\text{C}$ dipolar recoupling data. <i>Journal of Magnetic Resonance</i> , <b>2012</b> , 218, 115-27	3	22
38	Segmental isotopic labeling of HIV-1 capsid protein assemblies for solid state NMR. <i>Journal of Biomolecular NMR</i> , <b>2018</b> , 70, 103-114	3	20
37	Prospects for sub-micron solid state nuclear magnetic resonance imaging with low-temperature dynamic nuclear polarization. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 5779-85	3.6	20



36	What can solid state NMR contribute to our understanding of protein folding?. <i>Biophysical Chemistry</i> , <b>2010</b> , 151, 10-21	3.5	20
35	Theory of stochastic dipolar recoupling in solid-state nuclear magnetic resonance. <i>Journal of Physical Chemistry B</i> , <b>2008</b> , 112, 6114-21	3.4	19
34	Dual processing of two-dimensional exchange data in magic angle spinning NMR of solids. <i>Journal of Magnetic Resonance</i> , <b>1999</b> , 141, 141-7	3	19
33	Structure of the Dimerization Interface in the Mature HIV-1 Capsid Protein Lattice from Solid State NMR of Tubular Assemblies. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 8538-46	16.4	18
32	Rotational resonance in uniformly <sup>13</sup> C-labeled solids: effects on high-resolution magic-angle spinning NMR spectra and applications in structural studies of biomolecular systems. <i>Journal of Magnetic Resonance</i> , <b>2004</b> , 168, 137-46	3	17
31	Sensitivity enhancement in two-dimensional solid-state NMR spectroscopy by transverse mixing. <i>ChemPhysChem</i> , <b>2004</b> , 5, 863-8	3.2	16
30	Broadband rotational resonance in solid state NMR spectroscopy. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 8349-52	3.9	16
29	Micron-scale magnetic resonance imaging of both liquids and solids. <i>Journal of Magnetic Resonance</i> , <b>2015</b> , 260, 1-9	3	15
28	Side Chain Hydrogen-Bonding Interactions within Amyloid-like Fibrils Formed by the Low-Complexity Domain of FUS: Evidence from Solid State Nuclear Magnetic Resonance Spectroscopy. <i>Biochemistry</i> , <b>2020</b> , 59, 364-378	3.2	15
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26	Optical pumping of dipolar order in a coupled nuclear spin system. <i>Molecular Physics</i> , <b>1998</b> , 95, 1169-1176	7	12
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