Robert Tycko

List of Publications by Year in Descending Order

161 papers	20,570 citations	67 h-index	143 g-index
169 ext. papers	22,516 ext. citations	8.3 avg, IF	7.32 L-index

#	Paper	IF	Citations
161	Time-resolved DEER EPR and solid-state NMR afford kinetic and structural elucidation of substrate binding to Ca-ligated calmodulin.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119,	11.5	2
160	Structural differences in amyloid-β fibrils from brains of nondemented elderly individuals and Alzheimer's disease patients. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
159	Automated picking of amyloid fibrils from cryo-EM images for helical reconstruction with RELION. *Journal of Structural Biology*, **2021**, 213, 107736	3.4	1
158	Transiently structured head domains control intermediate filament assembly. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	7
157	Constraints on the Structure of Fibrils Formed by a Racemic Mixture of Amyloid-β Peptides from Solid-State NMR, Electron Microscopy, and Theory. *Journal of the American Chemical Society*, **2021**, 143, 13299-13313	16.4	3
156	Molecular structure of a prevalent amyloid-β fibril polymorph from Alzheimer's disease brain tissue. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	34
155	Slice selection in low-temperature, DNP-enhanced magnetic resonance imaging by Lee-Goldburg spin-locking and phase modulation. *Journal of Magnetic Resonance*, **2020**, 313, 106715	3	2
154	Effects of an HIV-1 maturation inhibitor on the structure and dynamics of CA-SP1 junction helices in virus-like particles. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 10286-10293	11.5	10
153	Succinyl-DOTOPA: An effective triradical dopant for low-temperature dynamic nuclear polarization with high solubility in aqueous solvent mixtures at neutral pH. *Journal of Magnetic Resonance*, **2020**, 311, 106672	3	5
152	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. *Biochemistry*, **2020**, 59, 364-378	3.2	15
151	Molecular structure and interactions within amyloid-like fibrils formed by a low-complexity protein sequence from FUS. *Nature Communications*, **2020**, 11, 5735	17.4	23
150	Millisecond Time-Resolved Solid-State NMR Reveals a Two-Stage Molecular Mechanism for Formation of Complexes between Calmodulin and a Target Peptide from Myosin Light Chain Kinase. *Journal of the American Chemical Society*, **2020**, 142, 21220-21232	16.4	8
149	Optimization of band-selective homonuclear dipolar recoupling in solid-state NMR by a numerical phase search. *Journal of Chemical Physics*, **2019**, 150, 154201	3.9	7
148	Application of millisecond time-resolved solid state NMR to the kinetics and mechanism of melittin self-assembly. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 16717-16722	11.5	24
147	Segmental isotopic labeling of HIV-1 capsid protein assemblies for solid state NMR. *Journal of Biomolecular NMR*, **2018**, 70, 103-114	3	20
146	Coexisting order and disorder within a common 40-residue amyloid-β fibril structure in Alzheimer's disease brain tissue. *Chemical Communications*, **2018**, 54, 5070-5073	5.8	14
145	Depletion of amyloid-β peptides from solution by sequestration within fibril-seeded hydrogels. *Protein Science*, **2018**, 27, 1218-1230	6.3	4

144	Low-temperature magnetic resonance imaging with 2.8 Å isotropic resolution. *Journal of Magnetic Resonance*, **2018**, 287, 47-55	3	9
143	Temperature-Dependent Nuclear Spin Relaxation Due to Paramagnetic Dopants Below 30 K: Relevance to DNP-Enhanced Magnetic Resonance Imaging. *Journal of Physical Chemistry B*, **2018**, 122, 11731-11742	3.4	4
142	Structural characterization of the D290V mutation site in hnRNPA2 low-complexity-domain polymers. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E9782-E9791	11.5	32
141	Molecular, Local, and Network-Level Basis for the Enhanced Stiffness of Hydrogel Networks Formed from Coassembled Racemic Peptides: Predictions from Pauling and Corey. *ACS Central Science*, **2017**, 3, 586-597	16.8	80
140	Structural variation in amyloid-β fibrils from Alzheimer's disease clinical subtypes. *Nature*, **2017**, 541, 217-221	50.4	375
139	Structure of FUS Protein Fibrils and Its Relevance to Self-Assembly and Phase Separation of Low-Complexity Domains. *Cell*, **2017**, 171, 615-627.e16	56.2	382
138	Molecular Structure of Aggregated Amyloid-β: Insights from Solid-State Nuclear Magnetic Resonance. *Cold Spring Harbor Perspectives in Medicine*, **2016**, 6,	5.4	53
137	Alzheimer's disease: Structure of aggregates revealed. *Nature*, **2016**, 537, 492-493	50.4	33
136	Structure of the Dimerization Interface in the Mature HIV-1 Capsid Protein Lattice from Solid State NMR of Tubular Assemblies. *Journal of the American Chemical Society*, **2016**, 138, 8538-46	16.4	18
135	Low-temperature dynamic nuclear polarization with helium-cooled samples and nitrogen-driven magic-angle spinning. *Journal of Magnetic Resonance*, **2016**, 264, 99-106	3	46
134	Preparation of Amyloid Fibrils Seeded from Brain and Meninges. *Methods in Molecular Biology*, **2016**, 1345, 299-312	1.4	10
133	Major Variations in HIV-1 Capsid Assembly Morphologies Involve Minor Variations in Molecular Structures of Structurally Ordered Protein Segments. *Journal of Biological Chemistry*, **2016**, 291, 13098-112	5.4	12
132	Helical Conformation in the CA-SP1 Junction of the Immature HIV-1 Lattice Determined from Solid-State NMR of Virus-like Particles. *Journal of the American Chemical Society*, **2016**, 138, 12029-32	16.4	25
131	Molecular structure of monomorphic peptide fibrils within a kinetically trapped hydrogel network. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 9816-21	11.5	93
130	On the problem of resonance assignments in solid state NMR of uniformly ^{15}N,^{13}C-labeled proteins. *Journal of Magnetic Resonance*, **2015**, 253, 166-72	3	6
129	Successive Stages of Amyloid-β Self-Assembly Characterized by Solid-State Nuclear Magnetic Resonance with Dynamic Nuclear Polarization. *Journal of the American Chemical Society*, **2015**, 137, 8294-307	16.4	80
128	Amyloid polymorphism: structural basis and neurobiological relevance. *Neuron*, **2015**, 86, 632-45	13.9	257
127	Micron-scale magnetic resonance imaging of both liquids and solids. *Journal of Magnetic Resonance*, **2015**, 260, 1-9	3	15

126	Remote sensing of sample temperatures in nuclear magnetic resonance using photoluminescence of semiconductor quantum dots. *Journal of Magnetic Resonance*, **2014**, 244, 64-7	3	6
125	Physical and structural basis for polymorphism in amyloid fibrils. *Protein Science*, **2014**, 23, 1528-39	6.3	164
124	Locating folds of the in-register parallel β-sheet of the Sup35p prion domain infectious amyloid. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E4615-22	11.5	55
123	Site-specific structural variations accompanying tubular assembly of the HIV-1 capsid protein. *Journal of Molecular Biology*, **2014**, 426, 1109-27	6.5	41
122	Synthesis and evaluation of nitroxide-based oligoradicals for low-temperature dynamic nuclear polarization in solid state NMR. *Journal of Magnetic Resonance*, **2014**, 244, 98-106	3	28
121	Perturbation of nuclear spin polarizations in solid state NMR of nitroxide-doped samples by magic-angle spinning without microwaves. *Journal of Chemical Physics*, **2014**, 140, 184201	3.9	114
120	On Mechanisms of Dynamic Nuclear Polarization in Solids. *Israel Journal of Chemistry*, **2014**, 54, 39-46	3.4	27
119	Molecular structure of β-amyloid fibrils in Alzheimer's disease brain tissue. *Cell*, **2013**, 154, 1257-68	56.2	808
118	Molecular structures of amyloid and prion fibrils: consensus versus controversy. *Accounts of Chemical Research*, **2013**, 46, 1487-96	24.3	232
117	Dynamic nuclear polarization-enhanced 13C NMR spectroscopy of static biological solids. *Journal of Magnetic Resonance*, **2013**, 231, 5-14	3	23
116	Polymorph-specific kinetics and thermodynamics of β-amyloid fibril growth. *Journal of the American Chemical Society*, **2013**, 135, 6860-71	16.4	123
115	β-Amyloid Fibril Structures, In Vitro and In Vivo. *Research and Perspectives in Alzheimer's Disease*, **2013**, 19-31		1
114	NMR at low and ultralow temperatures. *Accounts of Chemical Research*, **2013**, 46, 1923-32	24.3	54
113	Solid state nuclear magnetic resonance with magic-angle spinning and dynamic nuclear polarization below 25 K. *Journal of Magnetic Resonance*, **2013**, 226, 100-6	3	58
112	Restraints on backbone conformations in solid state NMR studies of uniformly labeled proteins from quantitative amide 15N-15N and carbonyl 13C-13C dipolar recoupling data. *Journal of Magnetic Resonance*, **2012**, 218, 115-27	3	22
111	Dynamic nuclear polarization-enhanced ¹H-¹³C double resonance NMR in static samples below 20 K. *Journal of Magnetic Resonance*, **2012**, 221, 32-40	3	29
110	Cell-free formation of RNA granules: low complexity sequence domains form dynamic fibers within hydrogels. *Cell*, **2012**, 149, 753-67	56.2	1300
109	Fiber diffraction data indicate a hollow core for the Alzheimer's aβ-fold symmetric fibril. *Journal of Molecular Biology*, **2012**, 423, 454-61	6.5	31

108	Antiparallel β-sheet architecture in Iowa-mutant β-amyloid fibrils. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 4443-8	11.5	264
107	Theory for cross effect dynamic nuclear polarization under magic-angle spinning in solid state nuclear magnetic resonance: the importance of level crossings. *Journal of Chemical Physics*, **2012**, 137, 084508	3.9	171
106	Zero-quantum stochastic dipolar recoupling in solid state nuclear magnetic resonance. *Journal of Chemical Physics*, **2012**, 137, 104201	3.9	7
105	Evidence from solid-state NMR for nonhelical conformations in the transmembrane domain of the amyloid precursor protein. *Biophysical Journal*, **2011**, 100, 711-719	2.9	34
104	Simulated self-assembly of the HIV-1 capsid: protein shape and native contacts are sufficient for two-dimensional lattice formation. *Biophysical Journal*, **2011**, 100, 3035-44	2.9	41
103	Segmental polymorphism in a functional amyloid. *Biophysical Journal*, **2011**, 101, 2242-50	2.9	54
102	Experimentally derived structural constraints for amyloid fibrils of wild-type transthyretin. *Biophysical Journal*, **2011**, 101, 2485-92	2.9	29
101	The core of Ure2p prion fibrils is formed by the N-terminal segment in a parallel cross-β structure: evidence from solid-state NMR. *Journal of Molecular Biology*, **2011**, 409, 263-77	6.5	52
100	Solid-state NMR studies of amyloid fibril structure. *Annual Review of Physical Chemistry*, **2011**, 62, 279-99	15.7	416
99	Structural evolution of Iowa mutant β-amyloid fibrils from polymorphic to homogeneous states under repeated seeded growth. *Journal of the American Chemical Society*, **2011**, 133, 4018-29	16.4	77
98	A general Monte Carlo/simulated annealing algorithm for resonance assignment in NMR of uniformly labeled biopolymers. *Journal of Biomolecular NMR*, **2011**, 50, 267-76	3	35
97	The Japanese mutant Aβ(E22-Aβ(1-39)) forms fibrils instantaneously, with low-thioflavin T fluorescence: seeding of wild-type Aβ(1-40) into atypical fibrils by E22-Aβ(1-39). *Biochemistry*, **2011**, 50, 2026-39	3.2	80
96	Repeat domains of melanosome matrix protein Pmel17 orthologs form amyloid fibrils at the acidic melanosomal pH. *Journal of Biological Chemistry*, **2011**, 286, 8385-8393	5.4	39
95	Detection of a transient intermediate in a rapid protein folding process by solid-state nuclear magnetic resonance. *Journal of the American Chemical Society*, **2010**, 132, 24-5	16.4	69
94	The α-helical C-terminal domain of full-length recombinant PrP converts to an in-register parallel β-sheet structure in PrP fibrils: evidence from solid state nuclear magnetic resonance. *Biochemistry*, **2010**, 49, 9488-97	3.2	117
93	Prospects for sub-micron solid state nuclear magnetic resonance imaging with low-temperature dynamic nuclear polarization. *Physical Chemistry Chemical Physics*, **2010**, 12, 5779-85	3.6	20
92	An Achilles' heel in an amyloidogenic protein and its repair: insulin fibrillation and therapeutic design. *Journal of Biological Chemistry*, **2010**, 285, 10806-21	5.4	41
91	Low-temperature dynamic nuclear polarization at 9.4 T with a 30 mW microwave source. *Journal of Magnetic Resonance*, **2010**, 204, 303-13	3	136

90	A Monte Carlo/simulated annealing algorithm for sequential resonance assignment in solid state NMR of uniformly labeled proteins with magic-angle spinning. *Journal of Magnetic Resonance*, **2010**, 205, 304-14	3	38
89	What can solid state NMR contribute to our understanding of protein folding?. *Biophysical Chemistry*, **2010**, 151, 10-21	3.5	20
88	Structural and dynamical characterization of tubular HIV-1 capsid protein assemblies by solid state nuclear magnetic resonance and electron microscopy. *Protein Science*, **2010**, 19, 716-30	6.3	46
87	Oligomerization state and supramolecular structure of the HIV-1 Vpu protein transmembrane segment in phospholipid bilayers. *Protein Science*, **2010**, 19, 1877-96	6.3	50
86	The functional curli amyloid is not based on in-register parallel beta-sheet structure. *Journal of Biological Chemistry*, **2009**, 284, 25065-76	5.4	107
85	Zero-quantum frequency-selective recoupling of homonuclear dipole-dipole interactions in solid state nuclear magnetic resonance. *Journal of Chemical Physics*, **2009**, 131, 045101	3.9	24
84	Measurement of amyloid fibril mass-per-length by tilted-beam transmission electron microscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 14339-44	11.5	106
83	Measurement of sample temperatures under magic-angle spinning from the chemical shift and spin-lattice relaxation rate of 79Br in KBr powder. *Journal of Magnetic Resonance*, **2009**, 196, 84-7	3	184
82	Two prion variants of Sup35p have in-register parallel beta-sheet structures, independent of hydration. *Biochemistry*, **2009**, 48, 5074-82	3.2	84
81	Evidence for novel beta-sheet structures in Iowa mutant beta-amyloid fibrils. *Biochemistry*, **2009**, 48, 6072-84	3.2	117
80	Quantitative determination of site-specific conformational distributions in an unfolded protein by solid-state nuclear magnetic resonance. *Journal of Molecular Biology*, **2009**, 392, 1055-73	6.5	36
79	Dipolar Recoupling: Homonuclear Experiments **2009**,		1
78	Seeded growth of beta-amyloid fibrils from Alzheimer's brain-derived fibrils produces a distinct fibril structure. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 7443-8	11.5	256
77	Solid-state NMR in biological and materials physics. *Physics Today*, **2009**, 62, 44-49	0.9	56
76	Molecular structure of amyloid and prion fibrils. *FASEB Journal*, **2009**, 23, 423.3	0.9	
75	Introduction to special topic: new developments in magnetic resonance. *Journal of Chemical Physics* , **2008**, 128, 052101	3.9	11
74	Theory of stochastic dipolar recoupling in solid-state nuclear magnetic resonance. *Journal of Physical Chemistry B*, **2008**, 112, 6114-21	3.4	19
73	Amyloids of shuffled prion domains that form prions have a parallel in-register beta-sheet structure. *Biochemistry*, **2008**, 47, 4000-7	3.2	60

72	Molecular structural basis for polymorphism in Alzheimer's beta-amyloid fibrils. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 18349-54	11.5	910
71	Amyloid of Rnq1p, the basis of the [PIN+] prion, has a parallel in-register beta-sheet structure. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 2403-8	11.5	128
70	Biomolecular solid state NMR with magic-angle spinning at 25K. *Journal of Magnetic Resonance*, **2008**, 195, 179-86	3	82
69	Peptide conformation and supramolecular organization in amylin fibrils: constraints from solid-state NMR. *Biochemistry*, **2007**, 46, 13505-22	3.2	487
68	Characterization of beta-sheet structure in Ure2p1-89 yeast prion fibrils by solid-state nuclear magnetic resonance. *Biochemistry*, **2007**, 46, 13149-62	3.2	134
67	Molecular alignment within beta-sheets in Abeta(14-23) fibrils: solid-state NMR experiments and theoretical predictions. *Biophysical Journal*, **2007**, 92, 594-602	2.9	45
66	Conformational constraints in solid-state NMR of uniformly labeled polypeptides from double single-quantum-filtered rotational echo double resonance. *Magnetic Resonance in Chemistry*, **2007**, 45 Suppl 1, S101-6	2.1	4
65	Symmetry-based constant-time homonuclear dipolar recoupling in solid state NMR. *Journal of Chemical Physics*, **2007**, 126, 064506	3.9	104
64	Stochastic dipolar recoupling in nuclear magnetic resonance of solids. *Physical Review Letters*, **2007**, 99, 187601	7.4	28
63	Characterization of amyloid structures at the molecular level by solid state nuclear magnetic resonance spectroscopy. *Methods in Enzymology*, **2006**, 413, 103-22	1.7	38
62	Solid-state NMR as a probe of amyloid structure. *Protein and Peptide Letters*, **2006**, 13, 229-34	1.9	33
61	Frequency-selective homonuclear dipolar recoupling in solid state NMR. *Journal of Chemical Physics* , **2006**, 124, 194303	3.9	53
60	Amyloid of the prion domain of Sup35p has an in-register parallel beta-sheet structure. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 19754-9	11.5	257
59	Experimental constraints on quaternary structure in Alzheimer's beta-amyloid fibrils. *Biochemistry*, **2006**, 45, 498-512	3.2	935
58	Polymorphic fibril formation by residues 10-40 of the Alzheimer's beta-amyloid peptide. *Biophysical Journal*, **2006**, 90, 4618-29	2.9	182
57	Structure and dynamics of the HIV-1 Vpu transmembrane domain revealed by solid-state NMR with magic-angle spinning. *Biochemistry*, **2006**, 45, 918-33	3.2	61
56	Molecular structure of amyloid fibrils: insights from solid-state NMR. *Quarterly Reviews of Biophysics*, **2006**, 39, 1-55	7	454
55	Self-propagating, molecular-level polymorphism in Alzheimer's beta-amyloid fibrils. *Science*, **2005**, 307, 262-5	33.3	1438

54	Parallel beta-sheets and polar zippers in amyloid fibrils formed by residues 10-39 of the yeast prion protein Ure2p. *Biochemistry*, **2005**, 44, 10669-80	3.2	129
53	Abeta40-Lactam(D23/K28) models a conformation highly favorable for nucleation of amyloid. *Biochemistry*, **2005**, 44, 6003-14	3.2	223
52	Molecular dynamics simulations of Alzheimer's beta-amyloid protofilaments. *Journal of Molecular Biology*, **2005**, 353, 804-21	6.5	229
51	Expression and purification of a recombinant peptide from the Alzheimer's beta-amyloid protein for solid-state NMR. *Protein Expression and Purification*, **2005**, 42, 200-10	2	43
50	Probing site-specific conformational distributions in protein folding with solid-state NMR. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 3284-9	11.5	84
49	Progress towards a molecular-level structural understanding of amyloid fibrils. *Current Opinion in Structural Biology*, **2004**, 14, 96-103	8.1	348
48	Sensitivity enhancement in two-dimensional solid-state NMR spectroscopy by transverse mixing. *ChemPhysChem*, **2004**, 5, 863-8	3.2	16
47	Rotational resonance in uniformly 13C-labeled solids: effects on high-resolution magic-angle spinning NMR spectra and applications in structural studies of biomolecular systems. *Journal of Magnetic Resonance*, **2004**, 168, 137-46	3	17
46	Broadband rotational resonance in solid state NMR spectroscopy. *Journal of Chemical Physics*, **2004**, 120, 8349-52	3.9	16
45	Solid-state NMR yields structural constraints on the V3 loop from HIV-1 Gp120 bound to the 447-52D antibody Fv fragment. *Journal of the American Chemical Society*, **2004**, 126, 4979-90	16.4	46
44	Absolute structural constraints on amyloid fibrils from solid-state NMR spectroscopy of partially oriented samples. *Journal of the American Chemical Society*, **2004**, 126, 4478-9	16.4	25
43	Increasing the amphiphilicity of an amyloidogenic peptide changes the beta-sheet structure in the fibrils from antiparallel to parallel. *Biophysical Journal*, **2004**, 86, 428-34	2.9	112
42	Insights into the amyloid folding problem from solid-state NMR. *Biochemistry*, **2003**, 42, 3151-9	3.2	191
41	Solid-state NMR spectroscopy method for determination of the backbone torsion angle psi in peptides with isolated uniformly labeled residues. *Journal of the American Chemical Society*, **2003**, 125, 11828-9	16.4	42
40	Constraints on supramolecular structure in amyloid fibrils from two-dimensional solid-state NMR spectroscopy with uniform isotopic labeling. *Journal of the American Chemical Society*, **2003**, 125, 6606-7	16.4	102
39	Recoupling of chemical shift anisotropies in solid-state NMR under high-speed magic-angle spinning and in uniformly 13C-labeled systems. *Journal of Chemical Physics*, **2003**, 118, 8378-8389	3.9	118
38	Site-specific identification of non-beta-strand conformations in Alzheimer's beta-amyloid fibrils by solid-state NMR. *Biophysical Journal*, **2003**, 84, 3326-35	2.9	72
37	NMR Studies of Chloroquine–Ferriprotoporphyrin IX Complex. *Journal of Physical Chemistry A*, **2003**, 107, 5821-5825	2.8	67

36	Sensitivity enhancement in structural measurements by solid state NMR through pulsed spin locking. *Journal of Magnetic Resonance*, **2002**, 155, 293-9	3	49
35	Supramolecular structural constraints on Alzheimer's beta-amyloid fibrils from electron microscopy and solid-state nuclear magnetic resonance. *Biochemistry*, **2002**, 41, 15436-50	3.2	249
34	A structural model for Alzheimer's beta -amyloid fibrils based on experimental constraints from solid state NMR. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 16742-7	11.5	1630
33	Supramolecular structure in full-length Alzheimer's beta-amyloid fibrils: evidence for a parallel beta-sheet organization from solid-state nuclear magnetic resonance. *Biophysical Journal*, **2002**, 83, 1205-16	3.9	294
32	Measurement of dipole-coupled lineshapes in a many-spin system by constant-time two-dimensional solid state NMR with high-speed magic-angle spinning. *Chemical Physics*, **2001**, 266, 231-236	2.3	65
31	Determination of Polypeptide Backbone Dihedral Angles in Solid State NMR by Double Quantum 13C Chemical Shift Anisotropy Measurements. *Journal of Magnetic Resonance*, **2001**, 149, 131-138	3	60
30	Controlling residual dipolar couplings in high-resolution NMR of proteins by strain induced alignment in a gel. *Journal of Biomolecular NMR*, **2001**, 21, 141-51	3	85
29	Biomolecular solid state NMR: advances in structural methodology and applications to peptide and protein fibrils. *Annual Review of Physical Chemistry*, **2001**, 52, 575-606	15.7	103
28	Solid-state NMR data support a helix-loop-helix structural model for the N-terminal half of HIV-1 Rev in fibrillar form. *Journal of Molecular Biology*, **2001**, 313, 845-59	6.5	44
27	Sensitivity enhancement in solid-state (13)C NMR of synthetic polymers and biopolymers by (1)H NMR detection with high-speed magic angle spinning. *Journal of the American Chemical Society*, **2001**, 123, 2921-2	16.4	143
26	Sensitivity enhancement in solid state (15)N NMR by indirect detection with high-speed magic angle spinning. *Journal of Magnetic Resonance*, **2000**, 142, 199-204	3	217
25	Probing hydrogen bonds in the antibody-bound HIV-1 gp120 V3 loop by solid state NMR REDOR measurements. *Journal of Biomolecular NMR*, **2000**, 16, 313-27	3	25
24	Amyloid fibril formation by A beta 16-22, a seven-residue fragment of the Alzheimer's beta-amyloid peptide, and structural characterization by solid state NMR. *Biochemistry*, **2000**, 39, 13748-59	3.2	611
23	Alignment of Biopolymers in Strained Gels:A New Way To Create Detectable DipoleDipole Couplings in High-Resolution Biomolecular NMR. *Journal of the American Chemical Society*, **2000**, 122, 9340-9341	16.4	322
22	Multidimensional Heteronuclear Correlation Spectroscopy of a Uniformly15N- and13C-Labeled Peptide Crystal:Toward Spectral Resolution, Assignment, and Structure Determination of Oriented Molecules in Solid-State NMR. *Journal of the American Chemical Society*, **2000**, 122, 1443-1455	16.4	34
21	Stray-field NMR imaging and wavelength dependence of optically pumped nuclear spin polarization in InP. *Physical Review B*, **1999**, 60, 8672-8679	3.3	46
20	Solid-state NMR evidence for an antibody-dependent conformation of the V3 loop of HIV-1 gp120. *Nature Structural Biology*, **1999**, 6, 141-5		75
19	Dual processing of two-dimensional exchange data in magic angle spinning NMR of solids. *Journal of Magnetic Resonance*, **1999**, 141, 141-7	3	19

18	High-order multiple quantum excitation in 13C nuclear magnetic resonance spectroscopy of organic solids. *Journal of Chemical Physics*, **1999**, 110, 2749-2752	3.9	62
17	Optical pumping in indium phosphide: 31P NMR measurements and potential for signal enhancement in biological solid state NMR. *Solid State Nuclear Magnetic Resonance*, **1998**, 11, 1-9	3.1	63
16	Quantitative Conformational Measurements in Solid State NMR by Constant-Time Homonuclear Dipolar Recoupling. *Journal of the American Chemical Society*, **1998**, 120, 4897-4898	16.4	70
15	Biopolymer Conformational Distributions from Solid-State NMR: α-Helix and 310-Helix Contents of a Helical Peptide. *Journal of the American Chemical Society*, **1998**, 120, 7039-7048	16.4	89
14	Optical pumping of dipolar order in a coupled nuclear spin system. *Molecular Physics*, **1998**, 95, 1169-1176	1.7	12
13	Optical Pumping in Solid State Nuclear Magnetic Resonance. *The Journal of Physical Chemistry*, **1996**, 100, 13240-13250		70
12	Determination of Peptide Conformations by Two-Dimensional Magic Angle Spinning NMR Exchange Spectroscopy with Rotor Synchronization. *Journal of the American Chemical Society*, **1996**, 118, 8487-8488	16.4	113
11	Investigation of molecular structure in solids by two-dimensional NMR exchange spectroscopy with magic angle spinning. *Journal of Chemical Physics*, **1996**, 105, 7915-7930	3.9	93
10	Tycko, Robert: The Multidisciplinarity of Solid-State NMR **1996**, 1-4		
9	Prospects for resonance assignments in multidimensional solid-state NMR spectra of uniformly labeled proteins. *Journal of Biomolecular NMR*, **1996**, 8, 239-51	3	48
8	Symmetry principles in the design of pulse sequences for structural measurements in magic angle spinning nuclear magnetic resonance. *Journal of Chemical Physics*, **1993**, 98, 932-943	3.9	180
7	Nuclear magnetic resonance crystallography: molecular orientational ordering in three forms of solid methanol. *Journal of the American Chemical Society*, **1991**, 113, 3592-3593	16.4	44
6	Double-quantum filtering in magic-angle-spinning NMR spectroscopy: an approach to spectral simplification and molecular structure determination. *Journal of the American Chemical Society*, **1991**, 113, 9444-9448	16.4	115
5	Measurement of nuclear magnetic dipole-dipole couplings in magic angle spinning NMR. *Chemical Physics Letters*, **1990**, 173, 461-465	2.5	264
4	Zero field nuclear magnetic resonance in high field. *Journal of Chemical Physics*, **1990**, 92, 5776-5793	3.9	47
3	Zero-field nuclear magnetic resonance in high field: The untruncation of dipole-dipole couplings by coherent averaging. *Physical Review Letters*, **1988**, 60, 2734-2737	7.4	28
2	Adiabatic rotational splittings and Berry's phase in nuclear quadrupole resonance. *Physical Review Letters*, **1987**, 58, 2281-2284	7.4	215
1	Optical pumping of dipolar order in a coupled nuclear spin system		5