Hans Wolfgang Spiess

List of Publications by Year
in descending order

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445 papers	27,025 citations	6486 82 h-index	11608 140 g-index
449 all docs	449 docs citations	449 times ranked	19554 citing authors

#	Article	IF	Citations
1	Dead-Time Free Measurement of Dipoleâ€“Dipole Interactions between Electron Spins. Journal of Magnetic Resonance, 2000, 142, 331-340.	1.2	949
2	Self-organization of supramolecular helical dendrimers into complex electronic materials. Nature, 2002, 419, 384-387.	13.7	938
3	Ultrahigh Mobility in Polymer Field-Effect Transistors by Design. Journal of the American Chemical Society, 2011, 133, 2605-2612.	6.6	671
4	Nature of nonexponential loss of correlation above the glass transition investigated by multidimensional NMR. Physical Review Letters, 1991, 66, 3020-3023.	2.9	601
5	Catalyst-free Preparation of Melamine-Based Microporous Polymer Networks through Schiff Base Chemistry. Journal of the American Chemical Society, 2009, 131, 7216-7217.	6.6	579
6	Advanced Solid-State NMR Methods for the Elucidation of Structure and Dynamics of Molecular, Macromolecular, and Supramolecular Systems. Chemical Reviews, 2001, 101, 4125-4156.	23.0	482
7	Correlation of structure, mobility, and morphological information in heterogeneous polymer materials by two-dimensional wideline-separation NMR spectroscopy. Macromolecules, 1992, 25, 3273-3277.	2.2	478
8	Molecular dynamics of solid polymers as revealed by deuteron NMR. Colloid and Polymer Science, 1983, 261, 193-209.	1.0	434
9	Determination of domain sizes in heterogeneous polymers by solid-state NMR. Acta Polymerica, 1993, 44, 1-17.	1.4	411
10	Heterogeneity in polymer melts from melting of polymer crystals. Nature Materials, 2005, 4, 635-641.	13.3	321
11	High-Resolution 1H NMR Spectroscopy in the Solid State: Very Fast Sample Rotation and Multiple-Quantum Coherences. Journal of Magnetic Resonance, 2001, 151, 153-227.	1.2	320
12	Tunable and Switchable Dielectric Constant in an Amphidynamic Crystal. Journal of the American Chemical Society, 2013, 135, 5230-5233.	6.6	307
13	Intermediate temperature proton conductors for PEM fuel cells based on phosphonic acid as protogenic group: A progress report. Physical Chemistry Chemical Physics, 2007, 9, 1764-1773.	1.3	303
14	Deuteron spin alignment: A probe for studying ultraslow motions in solids and solid polymers. Journal of Chemical Physics, 1980, 72, 6755-6762.	1.2	290
15	Molecular Nature of the .beta. Relaxation in Poly(methyl methacrylate) Investigated by Multidimensional NMR. Macromolecules, 1994, 27, 4733-4745.	2.2	271
16	Chain diffusion between crystalline and amorphous regions in polyethylene detected by 2D exchange carbon-13 NMR. Macromolecules, 1991, 24, 5288-5293.	2.2	260
17	Block Copolymerâ^'Ceramic Hybrid Materials from Organically Modified Ceramic Precursors. Chemistry of Materials, 2001, 13, 3464-3486.	3.2	257
18	Photocatalytic hydrogen evolution through fully conjugated poly(azomethine) networks. Chemical Communications, 2010, 46, 8932.	2.2	235

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19	Rate Memory of Structural Relaxation in Glasses and Its Detection by Multidimensional NMR. Physical Review Letters, 1995, 75, 2851-2854.	2.9	234
20	Dipolar spectroscopy and spin alignment in electron paramagnetic resonance. Chemical Physics Letters, 2000, 331, 243-252.	1.2	173
21	Length scale of dynamic heterogeneity in supercooled glycerol near Tg. Journal of Chemical Physics, 2001, 114, 7299-7302.	1.2	173
22	The NMR-WEBLAB: An internet approach to NMR lineshape analysis. Applied Magnetic Resonance, 2001, 20, 405-432.	0.6	171
23	Self-Assembly of Dendronized Triphenylenes into Helical Pyramidal Columns and Chiral Spheres. Journal of the American Chemical Society, 2009, 131, 7662-7677.	6.6	169
24	Dynamics of molecular reorientations: direct determination of rotational angles from two-dimensional NMR of powders. Chemical Physics Letters, 1986, 130, 84-90.	1.2	165
25	High-Resolution Solid-State NMR Studies of Imidazole-Based Proton Conductors:â€‰ Structure Motifs and Chemical Exchange from 1H NMR. Journal of Physical Chemistry B, 2002, 106, 9322-9334.	1.2	164
26	Structure and Dynamics in Columnar Discotic Materials:â€‰ A Combined X-ray and Solid-State NMR Study of Hexabenzocoronene Derivatives. Journal of Physical Chemistry B, 2002, 106, 6408-6418.	1.2	163
27	Stiff macromolecules with aliphatic side chains: side-chain mobility, conformation, and organization from 2D solid-state NMR spectroscopy. Macromolecules, 1992, 25, 5208-5214.	2.2	160
28	A Strategy for Revealing the Packing in Semicrystalline Ï€â€Conjugated Polymers: Crystal Structure of Bulk Polyâ€3â€hexylâ€thiophene (P3HT). Angewandte Chemie - International Edition, 2012, 51, 11068-11072.	7.2	160
29	Nuclear Magnetic Resonance in I_Bâ€“IIIâ€“VI₂ Semiconductors. Physica Status Solidi (B): Basic Research, 1974, 62, 183-192.	0.7	159
30	Two-dimensional solid-state NMR studies of ultraslow chain motion: glass transition in atactic poly(propylene) versus helical jumps in isotactic poly(propylene). Macromolecules, 1990, 23, 3431-3439.	2.2	152
31	Dipolar Heteronuclear Multiple-Quantum NMR Spectroscopy in Rotating Solids. Journal of Magnetic Resonance Series A, 1995, 113, 131-134.	1.6	150
32	A supramolecular helix that disregards chirality. Nature Chemistry, 2016, 8, 80-89.	6.6	147
33	Structure Assignment in the Solid State by the Coupling of Quantum Chemical Calculations with NMR Experiments:Â A Columnar Hexabenzocoronene Derivative. Journal of the American Chemical Society, 2001, 123, 2597-2606.	6.6	145
34	Parameters Influencing the Templated Growth of Colloidal Crystals on Chemically Patterned Surfaces. Langmuir, 2004, 20, 9114-9123.	1.6	142
35	Homochiral Columns Constructed by Chiral Self-Sorting During Supramolecular Helical Organization of Hat-Shaped Molecules. Journal of the American Chemical Society, 2014, 136, 7169-7185.	6.6	141
36	High-resolution double-quantum NMR spectroscopy of homonuclear spin pairs and proton connectivities in solids. Chemical Physics Letters, 1995, 243, 314-323.	1.2	139

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37	High-Resolution Solid-State NMR Studies of Poly(vinyl phosphonic acid) Proton-Conducting Polymer:â€‰Molecular Structure and Proton Dynamics. Journal of Physical Chemistry B, 2007, 111, 9711-9721.	1.2	138
38	Separation of the Nonlinear Oscillatory Response into a Superposition of Linear, Strain Hardening, Strain Softening, and Wall Slip Response. Macromolecules, 2007, 40, 4250-4259.	2.2	136
39	Twoâ€dimensional exchange NMR of powder samples. II. The dynamic evolution of twoâ€time distribution functions. Journal of Chemical Physics, 1988, 89, 1234-1244.	1.2	134
40	Twoâ€dimensional exchange nuclear magnetic resonance of powder samples. III. Transition to motional averaging and application to the glass transition. Journal of Chemical Physics, 1990, 93, 197-214.	1.2	131
41	Solid-state proton multiple-quantum NMR spectroscopy with fast magic angle spinning. Chemical Physics Letters, 1994, 227, 79-86.	1.2	131
42	Structure and order in partially oriented solids: Characterization by 2Dâ€magicâ€angleâ€spinning NMR. Journal of Chemical Physics, 1987, 86, 1206-1218.	1.2	130
43	Local and cooperative motions at the glass transition of polystyrene: information from one- and two-dimensional NMR as compared with other techniques. Macromolecules, 1991, 24, 398-402.	2.2	129
44	Packing Interactions in Hydrated and Anhydrous Forms of the Antibiotic Ciprofloxacin: a Solid-State NMR, X-ray Diffraction, and Computer Simulation Study. Journal of the American Chemical Society, 2012, 134, 71-74.	6.6	128
45	Solid echoes in the slow-motion region. Journal of Magnetic Resonance, 1981, 42, 381-389.	0.5	127
46	1H Fast MAS NMR Studies of Hydrogen-Bonding Interactions in Self-Assembled Monolayers. Journal of the American Chemical Society, 2003, 125, 4174-4184.	6.6	127
47	Dynamics of molecular reorientations: Analogies between quasielastic neutron scattering and deuteron NMR spin alignment. Journal of Chemical Physics, 1986, 84, 4579-4584.	1.2	126
48	Twoâ€dimensional exchange NMR of powder samples. I. Twoâ€time distribution functions. Journal of Chemical Physics, 1988, 89, 1219-1233.	1.2	125
49	Poly(p-phenylenevinylene) by chemical vapor deposition: synthesis, structural evaluation, glass transition, electroluminescence, and photoluminescence. Synthetic Metals, 1996, 82, 1-9.	2.1	124
50	Self-Assembly of Dendronized Perylene Bisimides into Complex Helical Columns. Journal of the American Chemical Society, 2011, 133, 12197-12219.	6.6	120
51	Molecular motion studied by NMR powder spectra. II. Experimental results for solid P4 and solid Fe(CO)5. Chemical Physics, 1974, 6, 226-234.	0.9	119
52	Structure and dynamics of solid polymers from 2D- and 3D-NMR. Chemical Reviews, 1991, 91, 1321-1338.	23.0	119
53	Benzoxazole Resin: A Novel Class of Thermoset Polymer via Smart Benzoxazine Resin. Macromolecules, 2012, 45, 8991-8997.	2.2	118
54	Phenylene motion in polycarbonate and polycarbonate/additive mixtures. Colloid and Polymer Science, 1987, 265, 815-822.	1.0	117

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55	Benzoxazine Oligomers:Â Evidence for a Helical Structure from Solid-State NMR Spectroscopy and DFT-Based Dynamics and Chemical Shift Calculations. Journal of the American Chemical Society, 2003, 125, 5792-5800.	6.6	116
56	Self-Assembly of Semifluorinated Dendrons Attached to Electron-Donor Groups Mediates Their Ï€-Stacking via a Helical Pyramidal Column. Chemistry - A European Journal, 2006, 12, 6298-6314.	1.7	116
57	Coupling of .alpha. and .beta. Processes in Poly(ethyl methacrylate) Investigated by Multidimensional NMR. Macromolecules, 1994, 27, 4746-4754.	2.2	114
58	Structure of Crystalline Phosphates from31P Double-Quantum NMR Spectroscopy. Journal of the American Chemical Society, 1996, 118, 9631-9634.	6.6	114
59	An infrared spectroscopic study of photo-induced reorientation in dye containing liquid-crystalline polymers. Liquid Crystals, 1992, 11, 251-267.	0.9	111
60	Solid-State NMR in Macromolecular Systems: Insights on How Molecular Entities Move. Accounts of Chemical Research, 2013, 46, 1996-2007.	7.6	110
61	Ring-Expansion Metathesis Polymerization: Catalyst-Dependent Polymerization Profiles. Journal of the American Chemical Society, 2009, 131, 2670-2677.	6.6	109
62	Site-Selective Growth of Colloidal Crystals with Photonic Properties on Chemically Patterned Surfaces. Advanced Materials, 2003, 15, 1025-1028.	11.1	107
63	Supramolecular Assembly of Dendritic Polymers Elucidated by1H and13C Solid-State MAS NMR Spectroscopy. Journal of the American Chemical Society, 2003, 125, 13284-13297.	6.6	106
64	Surface Modification with Orthogonal Photosensitive Silanes for Sequential Chemical Lithography and Site-Selective Particle Deposition. Angewandte Chemie - International Edition, 2005, 44, 4707-4712.	7.2	106
65	EPR Spectroscopic Characterization of Local Nanoscopic Heterogeneities during the Thermal Collapse of Thermoresponsive Dendronized Polymers. Angewandte Chemie - International Edition, 2010, 49, 5683-5687.	7.2	105
66	Twoâ€dimensional exchange nuclear magnetic resonance of powder samples. IV. Distribution of correlation times and line shapes in the intermediate dynamic range. Journal of Chemical Physics, 1992, 97, 7944-7954.	1.2	103
67	Deuteron n.m.r. study of chain motion in solid polyethylene. Polymer, 1984, 25, 1078-1086.	1.8	102
68	Miscibility of polymer blends investigated by1H spin diffusion and13C NMR detection. Magnetic Resonance in Chemistry, 1990, 28, S3-S9.	1.1	100
69	Oxygenâ€17 Quadrupole Coupling Parameters for Water in Its Various Phases. Journal of Chemical Physics, 1969, 51, 1201-1205.	1.2	99
70	Interplay of Structure and Dynamics in Functional Macromolecular and Supramolecular Systems As Revealed by Magnetic Resonance Spectroscopy. Chemical Reviews, 2016, 116, 1272-1308.	23.0	99
71	Transformation from Kinetically into Thermodynamically Controlled Self-Organization of Complex Helical Columns with 3D Periodicity Assembled from Dendronized Perylene Bisimides. Journal of the American Chemical Society, 2013, 135, 4129-4148.	6.6	98
72	Design and synthesis of a two compartment micellar system based on the self-association behavior of poly(N-acylethyleneimine) end-capped with a fluorocarbon and a hydrocarbon chain. Macromolecular Chemistry and Physics, 2000, 201, 995-1007.	1.1	97

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73	Crystallization of PDMS: The effect of physical and chemical crosslinks. Europhysics Letters, 2002, 60, 390-396.	0.7	96
74	Structural properties of amorphous hydrogenated carbon. III. NMR investigations. Physical Review B, 1994, 50, 846-852.	1.1	95
75	Structural Studies of Nanophase-Separated Poly(2-hydroxyethyl methacrylate)-l-polyisobutylene Amphiphilic Conetworks by Solid-State NMR and Small-Angle X-ray Scattering. Macromolecules, 2003, 36, 9107-9114.	2.2	95
76	Frequency Dependence of Orientation in Dynamically Sheared Diblock Copolymers. Macromolecules, 1995, 28, 778-781.	2.2	94
77	Bulk Chemical Shifts in Hydrogen-Bonded Systems from First-Principles Calculations and Solid-State-NMR. Journal of Physical Chemistry B, 2006, 110, 23204-23210.	1.2	94
78	Long-Lived ¹H Singlet Spin States Originating from Para-Hydrogen in Cs-Symmetric Molecules Stored for Minutes in High Magnetic Fields. Journal of the American Chemical Society, 2012, 134, 10393-10396.	6.6	94
79	A solid-state n.m.r. study of microphase structure and segmental dynamics of poly(styrene-b-methylphenylsiloxane) diblock copolymers. Polymer, 1993, 34, 267-276.	1.8	92
80	Water sorption of poly(vinylphosphonic acid) and its influence on proton conductivity. Solid State Ionics, 2007, 178, 469-474.	1.3	88
81	Orientational distributions in partially ordered solids as determined from NMR and ESR line shapes. Journal of Chemical Physics, 1978, 68, 56.	1.2	87
82	Experimental Aspects of Multidimensional Exchange Solid-State NMR. Journal of Magnetic Resonance Series A, 1995, 115, 60-79.	1.6	86
83	Optimisation and Application of Polyolefin Branch Quantification by Melt-State13C NMR Spectroscopy. Macromolecular Chemistry and Physics, 2006, 207, 382-395.	1.1	84
84	1H spin diffusion coefficients of highly mobile polymers. Polymer, 1993, 34, 4566-4569.	1.8	83
85	Self-Repairing Complex Helical Columns Generated via Kinetically Controlled Self-Assembly of Dendronized Perylene Bisimides. Journal of the American Chemical Society, 2011, 133, 18479-18494.	6.6	82
86	NMR Studies of the Effect of Adsorbed Water on Polyelectrolyte Multilayer Films in the Solid State. Macromolecules, 2003, 36, 3616-3625.	2.2	81
87	Anhydrous proton-conducting properties of triazoleâ€“phosphonic acid copolymers: a combined study with MAS NMR. Physical Chemistry Chemical Physics, 2008, 10, 6058.	1.3	81
88	Self-Assembly, Molecular Dynamics, and Kinetics of Structure Formation in Dipole-Functionalized Discotic Liquid Crystals. Journal of the American Chemical Society, 2008, 130, 5311-5319.	6.6	80
89	Cooperative Molecular Motion within a Selfâ€Assembled Liquidâ€Crystalline Molecular Wire: The Case of a TEGâ€Substituted Perylenediimide Disc. Angewandte Chemie - International Edition, 2009, 48, 4621-4624.	7.2	79
90	Empty Helical Nanochannels with Adjustable Order from Lowâ€Symmetry Macrocycles. Angewandte Chemie - International Edition, 2011, 50, 3030-3033.	7.2	79

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91	An Investigation of the Hydrogen-Bonding Structure in Bilirubin by 1H Double-Quantum Magic-Angle Spinning Solid-State NMR Spectroscopy. Journal of the American Chemical Society, 2001, 123, 4275-4285.	6.6	78
92	Local Order and Chain Dynamics in Molten Polymer Blocks Revealed by Proton Double-Quantum NMR. Macromolecules, 2001, 34, 298-309.	2.2	78
93	Transient States in [2 + 2] Photodimerization of Cinnamic Acid:â€‰ Correlation of Solid-State NMR and X-ray Analysis. Journal of the American Chemical Society, 2008, 130, 1741-1748.	6.6	77
94	Anisotropic Chemical Shifts in Cobalt (III) Complexes. Journal of Chemical Physics, 1969, 50, 3057-3064.	1.2	76
95	Recoupled Polarization-Transfer Methods for Solid-State 1Hâ€“13C Heteronuclear Correlation in the Limit of Fast MAS. Journal of Magnetic Resonance, 2001, 148, 398-418.	1.2	76
96	Formation of a Mesoscopic Skin Barrier in Mesoglobules of Thermoresponsive Polymers. Journal of the American Chemical Society, 2011, 133, 10832-10838.	6.6	76
97	Comparative study of the NMR length scale of dynamic heterogeneities of three different glass formers. Journal of Non-Crystalline Solids, 2002, 307-310, 208-214.	1.5	75
98	Two-Dimensional Solid-State NMR Spectroscopy: New Possibilities for the Investigation of the Structure and Dynamics of Solid Polymers [New Analytical Methods (38)]. Angewandte Chemie International Edition in English, 1988, 27, 1655-1672.	4.4	73
99	Deuteron two-dimensional exchange NMR in solids. Journal of Magnetic Resonance, 1988, 79, 269-290.	0.5	73
100	Restricted Segmental Mobility Can Facilitate Medium-Range Chain Diffusion: A NMR Study of Morphological Influence on Chain Dynamics of Polyethylene. Macromolecules, 2008, 41, 2514-2519.	2.2	73
101	Molecular motion studied by NMR powder spectra. I. Lineshape calculation for axially symmetric sheilding tensors. Chemical Physics, 1974, 6, 217-225.	0.9	72
102	Interplay of Structure and Dynamics in Macromolecular and Supramolecular Systems. Macromolecules, 2010, 43, 5479-5491.	2.2	72
103	NMR Studies of PAH/PSS Polyelectrolyte Multilayers Adsorbed onto Silica. Macromolecules, 2004, 37, 4830-4838.	2.2	71
104	Pseudo-solid echoes of proton and deuteron NMR in polyethvlene melts. Colloid and Polymer Science, 1981, 259, 220-226.	1.0	69
105	Orientational distribution of polymer chains studied by 2H n.m.r. line shapes. Polymer, 1981, 22, 1516-1521.	1.8	69
106	Molecular dynamics at the glass transition: One dimensional and two dimensional nuclear magnetic resonance studies of a glassâ€forming discotic liquid crystal. Journal of Chemical Physics, 1992, 97, 3749-3759.	1.2	69
107	Molecular orientation distributions in poly(ethylene terephthalate) thin films and fibers from multidimensional DECODER NMR spectroscopy. Macromolecules, 1993, 26, 2282-2296.	2.2	69
108	Characterization of polymer dispersions by Fourier transform rheology. Rheologica Acta, 2001, 40, 552-559.	1.1	69

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109	Effect of functionalization on glass formation by columnar mesophases of substituted triphenylene mesogens. Liquid Crystals, 1991, 10, 759-770.	0.9	67
110	Level anti-crossings in ParaHydrogen Induced Polarization experiments with Cs-symmetric molecules. Journal of Magnetic Resonance, 2012, 219, 33-40.	1.2	67
111	Chain dynamics in the crystalline Î±-phase of poly(vinylidene fluoride) by two-dimensional exchange deuteron NMR. Macromolecules, 1991, 24, 2428-2433.	2.2	66
112	NMR Studies of the Structure and Dynamics of Polymer Gels Based onN-Isopropylacrylamide (NiPAAm) and Methacrylic Acid (MAA). Macromolecular Chemistry and Physics, 2002, 203, 491-502.	1.1	66
113	Influence of Hydrogen Bonds on the Supramolecular Order of Hexa-peri-hexabenzocoronenes. Advanced Functional Materials, 2005, 15, 1585-1594.	7.8	66
114	Continuous ¹H and ¹³C Signal Enhancement in NMR Spectroscopy and MRI Using Parahydrogen and Hollowâ€Fiber Membranes. Angewandte Chemie - International Edition, 2010, 49, 8358-8362.	7.2	66
115	Photochemistry and Mobility of Stilbenoid Dendrimers in Their Neat Phases. Journal of the American Chemical Society, 2004, 126, 772-784.	6.6	65
116	Heteronuclear 1Hâ€“13C multiple-spin correlation in solid-state nuclear magnetic resonance: Combining rotational-echo double-resonance recoupling and multiple-quantum spectroscopy. Journal of Chemical Physics, 2001, 114, 5707-5728.	1.2	64
117	The Distribution of Fatty Acids Reveals the Functional Structure of Human Serum Albumin. Angewandte Chemie - International Edition, 2010, 49, 8755-8759.	7.2	64
118	Solid-State 13C-NMR Investigation of the Disorder in Crystalline Syndiotactic Polypropylene. Macromolecules, 1995, 28, 6902-6910.	2.2	63
119	Inverse Detection and Heteronuclear Editing in 1Hâ€“15N Correlation and 1Hâ€“1H Double-Quantum NMR Spectroscopy in the Solid State under Fast MAS. Journal of Magnetic Resonance, 2001, 150, 57-70.	1.2	63
120	Spinning Sidebands in the Fast-MAS Multiple-Quantum Spectra of Protons in Solids. Journal of Magnetic Resonance Series A, 1995, 114, 264-267.	1.6	62
121	Solid-State NMR Investigations of Molecular Dynamics in Polyphenylene Dendrimers:Â Evidence of Dense-Shell Packing. Macromolecules, 2002, 35, 10071-10086.	2.2	62
122	Observation of Chain Branching in Polyethylene in the Solid State and Melt via13C NMR Spectroscopy and Melt NMR Relaxation Time Measurements. Macromolecules, 2004, 37, 813-825.	2.2	62
123	2H Solid-State NMR of Mobile Protons:Â It Is Not Always the Simple Way. Journal of the American Chemical Society, 2007, 129, 12406-12407.	6.6	62
124	Dynamic magic-angle spinning nmr spectroscopy: exchange-induced sidebands. Chemical Physics Letters, 1987, 139, 239-243.	1.2	61
125	Dead-time free measurement of dipoleâ€“dipole interactions between electron spins. Journal of Magnetic Resonance, 2011, 213, 316-325.	1.2	61
126	Title is missing!. Acta Polymerica, 1994, 45, 148-159.	1.4	59

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127	Quadruple hydrogen bonds of ureido-pyrimidinone moieties investigated in the solid state by 1H double-quantum MAS NMR spectroscopyPresented as part of a plenary lecture by H. W. Spiess at the annual meeting of the Deutsche Bunsen-Gesellschaft fÃ¼r Physikalische Chemie, Potsdam, May 9â€“11, 2002.. Physical Chemistry Chemical Physics, 2002, 4, 3750-3758.	1.3	59
128	50th Anniversary Perspective: The Importance of NMR Spectroscopy to Macromolecular Science. Macromolecules, 2017, 50, 1761-1777.	2.2	59
129	Twoâ€dimensional nuclear magnetic resonance with sample flip for characterizing orientation distributions, and its analogy to xâ€ray scattering. Journal of Chemical Physics, 1992, 97, 2247-2262.	1.2	58
130	Multiple-Pulse Line Narrowing under Fast Magic-Angle Spinning. Journal of Magnetic Resonance Series A, 1996, 121, 160-166.	1.6	58
131	Polyethylene Functionalized with Precisely Spaced Phosphonic Acid Groups. Macromolecules, 2009, 42, 4407-4409.	2.2	57
132	Determination of Ion Cluster Sizes and Cluster-to-Cluster Distances in Ionomers by Four-Pulse Double Electron Electron Resonance Spectroscopy. Macromolecules, 2000, 33, 7812-7818.	2.2	56
133	Dynamics, Site Binding, and Distribution of Counterions in Polyelectrolyte Solutions Studied by Electron Paramagnetic Resonance Spectroscopyâ€. Journal of Physical Chemistry B, 2004, 108, 3698-3704.	1.2	56
134	Morphological differences in semicrystalline polymers: Implications for local dynamics and chain diffusion. Physical Review E, 2007, 76, 060801.	0.8	56
135	Hierarchical Self-Organization of Perylene Bisimides into Supramolecular Spheres and Periodic Arrays Thereof. Journal of the American Chemical Society, 2016, 138, 14798-14807.	6.6	56
136	Fast Magic-Angle Spinning and Double-Quantum1H Solid-State NMR Spectroscopy of Polyelectrolyte Multilayers. Advanced Materials, 2000, 12, 1934-1938.	11.1	55
137	Self-Assembly, Dynamics, and Phase Transformation Kinetics of Donorâ^'Acceptor Substituted Perylene Derivatives. Journal of the American Chemical Society, 2010, 132, 7478-7487.	6.6	54
138	Deuteron n.m.r. in relation to the glass transition in polymers. Polymer, 1985, 26, 203-207.	1.8	53
139	Molecular dynamics and the glass transition in a columnar liquid crystal formed by a chiral discotic mesogen. Liquid Crystals, 1990, 8, 889-893.	0.9	53
140	Structural Relaxation of Polymers at the Glass Transition: Conformational Memory in Poly(n-alkylmethacrylates). Physical Review Letters, 2003, 91, 155702.	2.9	53
141	Structure of Molecular Tweezer Complexes in the Solid State:Â NMR Experiments, X-ray Investigations, and Quantum Chemical Calculations. Journal of the American Chemical Society, 2007, 129, 1293-1303.	6.6	53
142	Origin of the Complex Molecular Dynamics in Functionalized Discotic Liquid Crystals. Physical Review Letters, 2008, 100, 107801.	2.9	53
143	Conformational exchange near the glass transition: two-dimensional carbon-13 NMR study of atactic polypropylene. Macromolecules, 1991, 24, 6874-6876.	2.2	52
144	Phenylene motion in polycarbonate: Influence of tensile stress and chemical modification. Colloid and Polymer Science, 1993, 271, 446-453.	1.0	52

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145	Effect of Interfaces on the Crystallization Behavior of PDMS. Journal of Materials Science, 2003, 11, 199-209.	1.2	52
146	Unravelling the fine structure of stacked bipyridine diamine-derived C3-discotics as determined by X-ray diffraction, quantum-chemical calculations, Fast-MAS NMR and CD spectroscopy. Chemical Science, 2011, 2, 69-76.	3.7	52
147	Chain motion in the amorphous regions of polyethylene as revealed by Deutron magnetic resonance. Macromolecules, 1981, 14, 1605-1607.	2.2	51
148	Investigation of an Nï¿½ï¿½H hydrogen bond in a solid benzoxazine dimer by1H-15N NMR correlation techniques under fast magic-angle spinning. Magnetic Resonance in Chemistry, 2001, 39, S5-S17.	1.1	51
149	Direct detection of connectivities in glasses by 2D NMR. Journal of Non-Crystalline Solids, 1994, 180, 91-95.	1.5	50
150	Phase transition from a C-centered to a B-centered orthorhombic crystalline form of syndiotactic poly(propylene). Macromolecular Chemistry and Physics, 1995, 196, 4011-4024.	1.1	50
151	13C Anisotropic chemical shift in a single crystal of benzophenone. Chemical Physics Letters, 1972, 17, 39-42.	1.2	49
152	13C anisotropic chemical shift in organic solids: Benzoic acid and derivatives, benzophenone, and thiobenzophenone. Chemical Physics, 1974, 4, 269-276.	0.9	49
153	Deuteron NMR measurements of order and mobility in the hard segments of a model polyurethane. Macromolecules, 1991, 24, 4787-4795.	2.2	49
154	Solid-state reactions studied by carbon-13 rotor synchronized magic angle spinning two-dimensional exchange NMR. 1. Self-diffusion and the tautomeric hydrogen shift in tropolone. Journal of the American Chemical Society, 1992, 114, 3756-3765.	6.6	49
155	A 1H double-quantum magic-angle spinning solid-state NMR investigation of packing and dynamics in triphenylene and hexabenzocoronene derivatives. Journal of Molecular Structure, 2000, 521, 179-195.	1.8	49
156	Heterogeneity of the Surfactant Layer in Organically Modified Silicates and Polymer/Layered Silicate Composites. Macromolecules, 2006, 39, 2191-2200.	2.2	49
157	DEER in biological multispin-systems: A case study on the fatty acid binding to human serum albumin. Journal of Magnetic Resonance, 2011, 210, 210-217.	1.2	49
158	Twoâ€dimensional proton magnetizationâ€exchange NMR spectroscopy in crossâ€linked elastomers. Journal of Chemical Physics, 1996, 105, 11285-11296.	1.2	48
159	Selfâ€Assembly and Dynamics of Polypeptides. Macromolecular Rapid Communications, 2009, 30, 278-298.	2.0	48
160	Spin-rotation interaction and anisotropic chemical shift in 13CS2. Journal of Magnetic Resonance, 1971, 5, 101-108.	0.5	47
161	Shape-Persistent Polyphenylene Dendrimersâ€”Restricted Molecular Dynamics from Advanced Solid-State Nuclear Magnetic Resonance Techniques. Advanced Materials, 2001, 13, 752-756.	11.1	47
162	Rotation-Synchronized Homonuclear Dipolar Decoupling. Journal of Magnetic Resonance Series A, 1995, 116, 36-45.	1.6	46

#	Article	IF	Citations
163	Solid State NMR Spectroscopic Investigations of Model Compounds for Imidazole-Based Proton Conductors. Journal of Physical Chemistry B, 2004, 108, 18500-18508.	1.2	46
164	Structural Reasons for Restricted Backbone Motion in Poly(n-alkyl methacrylates): Degree of Polymerization, Tacticity and Side-Chain Length. Macromolecular Chemistry and Physics, 2005, 206, 142-156.	1.1	46
165	Protonâ€Conducting Properties of Acidâ€Doped Poly(glycidyl methacrylate)â€1,2,4â€Triazole Systems. Macromolecular Chemistry and Physics, 2008, 209, 593-603.	1.1	46
166	Local and Collective Motions in Precise Polyolefins with Alkyl Branches: A Combination of ²H and ¹³C Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2009, 48, 4617-4620.	7.2	46
167	¹H Solid-State NMR Investigation of Structure and Dynamics of Anhydrous Proton Conducting Triazole-Functionalized Siloxane Polymers. Journal of Physical Chemistry B, 2009, 113, 9151-9160.	1.2	46
168	Liquid-Crystalline Perylene Derivatives asâ€œDiscotic Pigmentsâ€. Angewandte Chemie International Edition in English, 1993, 32, 1660-1662.	4.4	45
169	Deuteron NMR study of molecular order and motion in a liquid crystalline polymer. Journal of the American Chemical Society, 1982, 104, 917-919.	6.6	44
170	²H NMR studies of phase behaviour and molecular motions of doped discotic liquid-crystalline systems. Liquid Crystals, 1990, 8, 375-388.	0.9	44
171	Structure and order in partially oriented solids by threeâ€dimensional magic angle spinning nuclear magnetic resonance spectroscopy. Journal of Chemical Physics, 1993, 98, 3816-3826.	1.2	44
172	Solid Hybrid Polymer Electrolyte Networks: Nano-Structurable Materials for Lithium Batteries. Advanced Materials, 2002, 14, 1134.	11.1	44
173	No influence of magnetic fields on cell cycle progression using conditions relevant for patients during MRI. Bioelectromagnetics, 2003, 24, 241-250.	0.9	44
174	Deuterium nuclear magnetic resonance studies of molecular motions and alignment processes of discotic liquid-crystalline compounds based on substituted triphenylenes. Macromolecules, 1990, 23, 4061-4067.	2.2	43
175	Advanced solid-state nuclear magnetic resonance for polymer science. Journal of Polymer Science Part A, 2004, 42, 5031-5044.	2.5	42
176	Proton Mobilities in Phosphonic Acid-Based Proton Exchange Membranes Probed by 1H and 2H Solid-State NMR Spectroscopy. Journal of Physical Chemistry B, 2009, 113, 6674-6681.	1.2	42
177	Hierarchical Self-Assembly and Dynamics of a Miktoarm StarchimeraComposed of Poly(Î³-benzyl-<scp>l</scp>-glutamate), Polystyrene, and Polyisoprene. Macromolecules, 2010, 43, 1874-1881.	2.2	42
178	Proton magnetic resonance imaging with para-hydrogen induced polarization. Physical Chemistry Chemical Physics, 2012, 14, 2346.	1.3	42
179	Extraordinary Acceleration of Cogwheel Helical Self-Organization of Dendronized Perylene Bisimides by the Dendron Sequence Encoding Their Tertiary Structure. Journal of the American Chemical Society, 2020, 142, 9525-9536.	6.6	42
180	Influence of tensile stress on the phenylene flips in polycarbonate studied by two-dimensional solid-state NMR. Macromolecules, 1992, 25, 5542-5544.	2.2	41

#	Article	IF	Citations
181	Microphase Reorientation in Block Copolymer Melts As Detected via FT Rheology and 2D SAXS. Macromolecules, 2002, 35, 3198-3204.	2.2	41
182	Microheterogeneities of core-shell latexes probed by 1H spin diffusion and transmission electron microscopy. Macromolecular Chemistry and Physics, 1995, 196, 985-993.	1.1	40
183	Structure and dynamics of polyelectrolyte-surfactant complexes as revealed by solid state NMR. Macromolecular Chemistry and Physics, 1996, 197, 2713-2727.	1.1	40
184	Solid state NMR and LVSEM studies on the hardening of latex modified tile mortar systems. Cement and Concrete Research, 2005, 35, 2233-2243.	4.6	40
185	NMR Spectroscopy of Laser-Polarized129Xe Under Continuous Flow: A Method To Study Aqueous Solutions of Biomolecules. Angewandte Chemie - International Edition, 2006, 45, 7282-7284.	7.2	40
186	Chain Dynamics in Poly(n-alkyl acrylates) by Solid-State NMR, Dielectric, and Mechanical Spectroscopies. Macromolecules, 2007, 40, 6249-6256.	2.2	40
187	13C hyperpolarization of a barbituric acid derivative via parahydrogen induced polarization. Journal of Magnetic Resonance, 2010, 204, 50-55.	1.2	40
188	Hyperpolarized 1H long lived states originating from parahydrogen accessed by rf irradiation. Physical Chemistry Chemical Physics, 2013, 15, 17233.	1.3	40
189	Increasing 3D Supramolecular Order by Decreasing Molecular Order. A Comparative Study of Helical Assemblies of Dendronized Nonchlorinated and Tetrachlorinated Perylene Bisimides. Journal of the American Chemical Society, 2015, 137, 5210-5224.	6.6	40
190	Anisotropic Chemical Shifts in Trigonal Cobalt Carbonyls Containing Metalâ€“Metal Bonds. Journal of Chemical Physics, 1970, 53, 3036-3041.	1.2	39
191	Nonexponential relaxation functions above Tg analysed by multidimensional NMR and novel spin-echo decay techniques. Physica A: Statistical Mechanics and Its Applications, 1993, 201, 79-87.	1.2	39
192	Determining the Geometry of Hydrogen Bonds in Solids with Picometer Accuracy by Quantum-Chemical Calculations and NMR Spectroscopy. ChemPhysChem, 2005, 6, 315-327.	1.0	39
193	Structure of amorphous poly-(ethylmethacrylate): A wide-angle x-ray scattering study. Journal of Chemical Physics, 2005, 122, 014906.	1.2	39
194	Control of Peptide Secondary Structure and Dynamics in Poly(Î³-benzyl-l-glutamate)-b-polyalanine Peptides. Macromolecules, 2008, 41, 8072-8080.	2.2	39
195	The impact of the amide connectivity on the assembly and dynamics of benzene-1,3,5-tricarboxamides in the solid state. Chemical Science, 2011, 2, 2040.	3.7	39
196	Counterion Condensation and Conformational Transitions of Polyelectrolytes Characterized by EPR Spectroscopy. Macromolecules, 2002, 35, 9698-9706.	2.2	38
197	Thermal, morphological and rheological characterization of poly(acrylic acid-g-styrene) amphiphilic graft copolymers. Polymer, 2005, 46, 4544-4553.	1.8	38
198	Molecularly Tethered Amphiphiles as 3-D Supramolecular Assembly Platforms: Unlocking a Trapped Conformation. Journal of the American Chemical Society, 2009, 131, 8537-8547.	6.6	38

#	Article	IF	Citations
199	Morphological Anisotropy and Proton Conduction in Multiblock Copolyimide Electrolyte Membranes. Macromolecules, 2014, 47, 2645-2658.	2.2	38
200	Reconstruction of angular distributions from two-dimensional NMR spectra of powder samples. Chemical Physics Letters, 1990, 167, 583-587.	1.2	37
201	Determination of chemical-shift tensor orientations in methylene groups by separated-local-field NMR. Magnetic Resonance in Chemistry, 1993, 31, 352-356.	1.1	37
202	Reorientation phenomena in imidazolium methyl sulfonate as probed by advanced solid-state NMR. Solid State Nuclear Magnetic Resonance, 2003, 24, 150-162.	1.5	37
203	Electron spin relaxation due to small-angle motion: Theory for the canonical orientations and application to hierarchic cage dynamics in ionomers. Journal of Chemical Physics, 2003, 119, 11829-11846.	1.2	37
204	Diffusion and Conformation of Peptide-Functionalized Polyphenylene Dendrimers Studied by Fluorescence Correlation and13C NMR Spectroscopy. Biomacromolecules, 2007, 8, 1745-1750.	2.6	37
205	Solidâ€State NMR investigations of anhydrous protonâ€conducting acidâ€“base poly(acrylic acid)â€“poly(4â€vinyl pyridine) polymer blend system: A study of hydrogen bonding and proton conduction. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 138-155.	2.4	37
206	Miscibility between Differently Shaped Mesogens: Structural and Morphological Study of a Phthalocyanine-Perylene Binary System. Journal of Physical Chemistry B, 2009, 113, 5448-5457.	1.2	37
207	Quadrupole Coupling and Anisotropic Chemical Shifts in Some Manganese Carbonyls. Journal of Chemical Physics, 1971, 54, 1099-1103.	1.2	36
208	19F and 1H shielding tensors and crystal structure of 4,4â€²-difluorobiphenyl. Molecular Physics, 1976, 31, 1569-1583.	0.8	36
209	Conformational Effects and Configurational Splitting in 13C NMR Spectra of Synthetic Polymers As Investigated by ab Initio Individual Gauges for Localized Molecular Orbitals (IGLO) Calculations. Macromolecules, 1995, 28, 7785-7795.	2.2	36
210	Deuterium fourier transform NMR in solids and solid polymers. Journal of Magnetic Resonance, 1979, 35, 157-162.	0.5	35
211	Deuteron double-quantum NMR imaging of molecular order and mobility in solid polymers. Molecular Physics, 1990, 71, 477-489.	0.8	35
212	Universality of the glass transition temperature. Journal of Non-Crystalline Solids, 1994, 176, 294-298.	1.5	35
213	Thermoresponsive, spin-labeled hydrogels as separable DNP polarizing agents. Physical Chemistry Chemical Physics, 2010, 12, 5879.	1.3	35
214	Fast and Slow Dynamics in a Discotic Liquid Crystal with Regions of Columnar Order and Disorder. Physical Review Letters, 2011, 107, 257801.	2.9	35
215	Chain motion in amorphous regions of polyethylene: interpretation of deuteron n.m.r. line shapes. Polymer, 1980, 21, 757-763.	1.8	34
216	Solid state NMR investigations on the role of organic admixtures on the hydration of cement pastes. Cement and Concrete Composites, 2006, 28, 417-426.	4.6	34

#	Article	IF	Citations
217	Sequence-Defined Dendrons Dictate Supramolecular Cogwheel Assembly of Dendronized Perylene Bisimides. Journal of the American Chemical Society, 2019, 141, 15761-15766.	6.6	34
218	Deuteron NMR methods for studying molecular order and motion in solid polymers and liquid crystalline polymers. Pure and Applied Chemistry, 1985, 57, 1617-1626.	0.9	33
219	Structure and deformation behaviour of model poly(ether-urethane) elastomers, 1. Infrared studies. Macromolecular Chemistry and Physics, 1994, 195, 2855-2873.	1.1	33
220	Conformational Order in Molten Amorphous Poly(ethyl methacrylate). Macromolecules, 1994, 27, 3111-3113.	2.2	33
221	Influence of Tensile Stress on the Molecular Mobility in Polycarbonate Visualized by Localized 1H NMR Spectroscopy. Macromolecules, 1995, 28, 6361-6364.	2.2	33
222	Effect of Polymer Composition and Water Content on Proton Conductivity in Vinyl Benzyl Phosphonic Acidâ€"4â€Vinyl Pyridine Copolymers. Macromolecular Chemistry and Physics, 2008, 209, 2494-2503.	1.1	33
223	NMR Spectroscopy: Pushing the Limits of Sensitivity. Angewandte Chemie - International Edition, 2008, 47, 639-642.	7.2	33
224	Ultraslow tetrahedral jumps in solid hexamethylenetetramine studied by deuteron spin alignment. Chemical Physics Letters, 1980, 71, 182-186.	1.2	32
225	Quasiâ€Oneâ€Dimensional Behaviour of Hydrogen in H_{0.35}MoO₃ and H_{0.33}WO₃ as Revealed by Proton NMR. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1982, 86, 1101-1106.	0.9	32
226	2D-ELDOR detection of magnetization transfer of nitroxides in disordered solid polymers. Chemical Physics Letters, 1992, 193, 134-140.	1.2	32
227	Solvent molecules trapped in supramolecular organic nanotubes: a combined solid-state NMR and DFT study. Chemical Physics Letters, 2004, 388, 164-169.	1.2	32
228	Self-Assembly and Molecular Dynamics of Peptide-Functionalized Polyphenylene Dendrimers. Macromolecules, 2006, 39, 9605-9613.	2.2	32
229	Relaxation-based distance measurements between a nitroxide and a lanthanide spin label. Journal of Magnetic Resonance, 2008, 194, 254-263.	1.2	32
230	EPR Spectroscopy Provides a Molecular View on Thermoresponsive Dendronized Polymers Below the Critical Temperature. Macromolecular Chemistry and Physics, 2011, 212, 1229-1235.	1.1	32
231	Solid-state reactions studied by carbon-13 rotor-synchronized magic angle spinning two-dimensional exchange NMR. 2. The Cope rearrangement and molecular reorientation in bullvalene. Journal of the American Chemical Society, 1992, 114, 3765-3771.	6.6	31
232	Multidimensional 2H NMR studies of the non-exponential chain relaxation of polystyrene above the glass transition. Journal of Non-Crystalline Solids, 1994, 172-174, 737-750.	1.5	31
233	Double-Quantum Double-Quantum MAS Exchange NMR Spectroscopy: Dipolar-Coupled Spin Pairs as Probes for Slow Molecular Dynamics. Journal of Magnetic Resonance, 2001, 149, 90-102.	1.2	31
234	Water Induced Dewetting of Ultrathin Polystyrene Films on Hydrophilic Surfaces. Langmuir, 2002, 18, 8056-8061.	1.6	31

#	Article	IF	Citations
235	Diffusion in binary gas mixtures studied by NMR of hyperpolarized gases and molecular dynamics simulations. Physical Chemistry Chemical Physics, 2006, 8, 4182-4188.	1.3	31
236	Kinetics of Shear Microphase Orientation and Reorientation in Lamellar Diblock and Triblock Copolymer Melts as Detected via FTâ€Rheology and 2Dâ€SAXS. Macromolecular Chemistry and Physics, 2007, 208, 1719-1729.	1.1	31
237	Geometry of Complex Molecular Motions of Guest Molecules in Polymers from Solid State 2H NMR. Macromolecules, 2009, 42, 4929-4931.	2.2	31
238	Hydrogen-Bonded Aggregates of Oligoaramideâ^'Poly(ethylene glycol) Block Copolymers. Macromolecules, 2010, 43, 4978-4985.	2.2	31
239	Complex Columnar Hexagonal Polymorphism in Supramolecular Assemblies of a Semifluorinated Electron-Accepting Naphthalene Bisimide. Journal of the American Chemical Society, 2015, 137, 807-819.	6.6	31
240	Nitrogen-15 NMR of pyridine in high magnetic: Fields. Journal of Magnetic Resonance, 1974, 15, 529-539.	0.5	30
241	Quasiâ€twoâ€dimensional motion and proton exchange in electrolyte layers of hydrated chalcogenides. Journal of Chemical Physics, 1982, 77, 4627-4631.	1.2	30
242	Characterization of Ionic Clusters in Different Ionically Functionalized Diblock Copolymers by CW EPR and Four-Pulse Double Electronâ^'Electron Resonance. Macromolecules, 2001, 34, 5555-5560.	2.2	30
243	Effect of Chain Topology on the Self-Organization and Dynamics of Block Copolypeptides: From Diblock Copolymers to Stars. Biomacromolecules, 2008, 9, 1959-1966.	2.6	30
244	A comparative study of 1H and 19F Overhauser DNP in fluorinated benzenes. Physical Chemistry Chemical Physics, 2013, 15, 20717.	1.3	30
245	Analysis of the13C chemical shift tensor in CO, Ni(CO)4, and Fe(CO)5and its relationship to ï€â€back bonding. Journal of Chemical Physics, 1974, 61, 55-60.	1.2	29
246	Advanced 1 H Solid-State NMR Spectroscopy on Hydrogels, 1. Macromolecular Chemistry and Physics, 2004, 205, 430-437.	1.1	29
247	Effect of large amplitude oscillatory shear (LAOS) on the dielectric response of 1,4-cis-polyisoprene. Polymer, 2006, 47, 7282-7288.	1.8	29
248	Multiple pulse study of the proton shielding in single crystals of maleic acid. Chemical Physics, 1974, 5, 119-128.	0.9	28
249	Deuteron NMR Study of Molecular Mobility in a Polymer Model Membrane. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1985, 89, 1208-1214.	0.9	28
250	Quaternions as a practical tool for the evaluation of composite rotations. Journal of Magnetic Resonance, 1985, 61, 356-362.	0.5	28
251	Highly ordered main chain in a liquid crystalline side-group polymer. Macromolecules, 1988, 21, 1626-1629.	2.2	28
252	Lack of mutagenic and co-mutagenic effects of magnetic fields during magnetic resonance imaging. Journal of Magnetic Resonance Imaging, 2001, 14, 779-788.	1.9	28

#	Article	IF	Citations
253	Constrained dynamics in supramolecular structures of poly(p-phenylenes) with ethylene oxide side chains: A combined dielectric and nuclear magnetic resonance investigation. Journal of Chemical Physics, 2002, 117, 6289-6299.	1.2	28
254	NMR chemical shifts in proton conducting crystals from first principles. Computational and Theoretical Chemistry, 2003, 625, 283-288.	1.5	28
255	Selectivity of guestâ€“host interactions in self-assembled hydrogen-bonded nanostructures observed by NMR. Physical Chemistry Chemical Physics, 2007, 9, 4545.	1.3	28
256	A Mobile DNP Polarizer for Clinical Applications. Applied Magnetic Resonance, 2008, 34, 321-330.	0.6	28
257	Beyond Isotropic Tumbling Models: Nuclear Spin Relaxation in Liquids from First Principles. ChemPhysChem, 2008, 9, 2313-2316.	1.0	28
258	The nature of the glass transition in a columnar hexagonal ordered phase. Journal of Non-Crystalline Solids, 1994, 170, 295-299.	1.5	27
259	Two-Dimensional Field-Step ELDOR. A Method for Characterizing the Motion of Spin Probes and Spin Labels in Glassy Solids. Journal of Magnetic Resonance Series A, 1995, 117, 193-208.	1.6	27
260	Nanostructure and Shape Control in Polymer-Ceramic Hybrids from Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td (oxide)- Chemistry and Physics, 2004, 205, 1021-1030.	1.1	27
261	2H NMR Study of Aromatic Guest Dynamics in Clathrate Phases of Syndiotactic Polystyrene. Macromolecular Chemistry and Physics, 2005, 206, 715-724.	1.1	27
262	Probing How Counterion Structure and Dynamics Determine Polyelectrolyte Solutions Using EPR Spectroscopy. Applied Magnetic Resonance, 2010, 37, 657-683.	0.6	27
263	High-temperature in situ crystallographic observation of reversible gas sorption in impermeable organic cages. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14156-14161.	3.3	27
264	Molecular structure and local dynamic in impact polypropylene copolymers studied by preparative TREF, solid state NMR spectroscopy, and SFM microscopy. Polymer, 2015, 61, 87-98.	1.8	27
265	Pulsed deuteron NMR investigations of structure and dynamics of solid polymers. Journal of Molecular Structure, 1983, 111, 119-133.	1.8	26
266	Broadband dielectric spectroscopy on a discotic liquid crystalline polymer. Colloid and Polymer Science, 1989, 267, 583-586.	1.0	26
267	Application of nuclear magnetic resonance magic sandwich echo imaging to solid polymers. Solid State Nuclear Magnetic Resonance, 1994, 3, 59-66.	1.5	26
268	Spatially Resolved NMR Spin Diffusion in Solid Polymers. Journal of Magnetic Resonance Series A, 1996, 120, 190-200.	1.6	26
269	Investigations on the Film-Formation Process of Latex Dispersions by Solid-State NMR Spectroscopy. Macromolecular Chemistry and Physics, 2003, 204, 787-802.	1.1	26
270	Rotor Modulations and Recoupling Strategies in13C Solid-State Magic-Angle-Spinning NMR Spectroscopy: Probing Molecular Orientation and Dynamics. ChemPhysChem, 2004, 5, 895-908.	1.0	26

#	Article	IF	Citations
271	Echocardiographic Evidence for Valvular Toxicity of Benfluorex: A Double-Blind Randomised Trial in Patients with Type 2 Diabetes Mellitus. PLoS ONE, 2012, 7, e38273.	1.1	26
272	Molecular motion in liquid toluene from a study of 13C and 2D relaxation times. Journal of Magnetic Resonance, 1973, 9, 444-460.	0.5	25
273	Conformational Behavior of the Spacer in a Liquid Crystalline Main-Chain Polymer in Its Nematic and Glassy States. Macromolecules, 1995, 28, 6937-6941.	2.2	25
274	Advanced 1 H Solid-State NMR Spectroscopy on Hydrogels, 2. Macromolecular Chemistry and Physics, 2004, 205, 438-447.	1.1	25
275	Phase Transitions and Molecular Motion in Dimethylammonium Perchlorate as Revealed by DSC, Proton and Deuteron NMR. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1985, 89, 763-771.	0.9	24
276	Molecular motions in poly(diethyl siloxane) studied by solid-state29Si NMR. Colloid and Polymer Science, 1989, 267, 681-686.	1.0	24
277	Magnetic resonance imaging of dissolved hyperpolarized 129Xe using a membrane-based continuous flow system. Journal of Magnetic Resonance, 2009, 201, 93-99.	1.2	24
278	Molecular motions from twoâ€dimensional NMR of powders: Comparison of rotational jumps and diffusive reorientations. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1987, 91, 1141-1145.	0.9	23
279	Structure and Dynamics of Liquidâ€Crystalline Polymers with Different Molecular Architectures from Multidimensional NMR Plenary Lecture. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1993, 97, 1294-1305.	0.9	23
280	Molecular dynamics near the glass transition. Molecular Physics, 1993, 80, 1317-1330.	0.8	23
281	Twoâ€dimensional electron paramagnetic resonance spectroscopy of nitroxides: Elucidation of restricted molecular motions in glassy solids. Journal of Chemical Physics, 1994, 100, 2437-2448.	1.2	23
282	Solid-state n.m.r. studies of crystalline phases in gel-spun ultrahigh molecular weight polyethylene. Polymer, 1994, 35, 4728-4733.	1.8	23
283	Conformational Effects on 13C-NMR Chemical Shifts of an Amorphous Polymer: An ab Initio Study by the IGLO Method. Macromolecules, 1994, 27, 1500-1504.	2.2	23
284	Diffusion of Tracer Molecules within Symmetric Diblock Copolymers. Macromolecules, 1995, 28, 8287-8294.	2.2	23
285	Molecular order and dynamics of liquid crystals formed from hydrogen-bonded networks of 5-octadecyloxyisophthalic acid. Journal of Materials Chemistry, 1995, 5, 2265-2274.	6.7	23
286	Radial counterion distributions in polyelectrolyte solutions determined by EPR spectroscopy. Europhysics Letters, 2005, 70, 102-108.	0.7	23
287	Anhydrous Poly(2,5-benzimidazole)â€“Poly(vinylphosphonic Acid) Acidâ€“Base Polymer Blends: a Detailed Solid-State NMR Investigation. Australian Journal of Chemistry, 2009, 62, 848.	0.5	23
288	Mixture and dissolution of laser polarized noble gases: Spectroscopic and imaging applications. Progress in Nuclear Magnetic Resonance Spectroscopy, 2012, 66, 40-69.	3.9	23

#	Article	IF	Citations
289	Screening Libraries of Semifluorinated Arylene Bisimides to Discover and Predict Thermodynamically Controlled Helical Crystallization. ACS Combinatorial Science, 2016, 18, 723-739.	3.8	23
290	Two-dimensional NMR: new prospects for the elucidation of molecular dynamics in complex systems. Journal of Non-Crystalline Solids, 1991, 131-133, 766-772.	1.5	22
291	Composition and Morphology Control in Ordered Mesostructured Highâ€Temperature Ceramics from Block Copolymer Mesophases. Macromolecular Chemistry and Physics, 2007, 208, 2096-2108.	1.1	22
292	Segmental Mobility in the Nonâ€crystalline Regions of Semicrystalline Polymers and its Implications on Melting. Macromolecular Rapid Communications, 2009, 30, 826-839.	2.0	22
293	Characterization of the Solution Structure of Human Serum Albumin Loaded with a Metal Porphyrin and Fatty Acids. Biophysical Journal, 2011, 100, 2293-2301.	0.2	22
294	Online Monitoring of Styrene Polymerization in Miniemulsion by Hyperpolarized ¹²⁹Xenon NMR Spectroscopy. Macromolecules, 2012, 45, 1839-1846.	2.2	22
295	Proton magnetic shielding and susceptibility effects in single crystals of ferrocene. Chemical Physics, 1976, 12, 123-130.	0.9	21
296	Orientation of the diphenylene propane unit in stretched polycarbonate from two-dimensional magic-angle-spinning NMR. Colloid and Polymer Science, 1990, 268, 22-27.	1.0	21
297	Chain dynamics of bilayer n-decylammonium chloride studied by deuteron NMR spectroscopy. European Physical Journal B, 1991, 84, 43-49.	0.6	21
298	A deuteron NMR study of axial motion and side chain conformation in the mesophase of discotic liquid crystal main-chain polymers. Colloid and Polymer Science, 1991, 269, 993-1002.	1.0	21
299	Determining Order in Polymers via Multidimensional Slow-Magic-Angle-Spinning DECODER NMR. Journal of Magnetic Resonance Series A, 1995, 115, 26-34.	1.6	21
300	Effect of Branch Length on ¹³C NMR Relaxation Properties in Molten Poly[ethyleneâ€coâ€(Î±â€olefin)] Model Systems. Macromolecular Chemistry and Physics, 2007, 208, 2128-2133.	1.1	21
301	Conformational Transitions of Poly(<scp>l</scp>-proline) in Copolypeptides with Poly(Î³-benzyl-<scp>l</scp>-glutamate) Induced by Packing. Macromolecules, 2012, 45, 9326-9332.	2.2	21
302	Solidâ€State NMR Characterization of the Multiphase Structure of Polypropylene Inâ€reactor Alloy. Macromolecular Chemistry and Physics, 2010, 211, 1157-1166.	1.1	20
303	X-Band DNP Hyperpolarization of Viscous Liquids and Polymer Melts. Macromolecular Rapid Communications, 2015, 36, 885-889.	2.0	20
304	Deuteron spin alignment spectra of powders in presence of ultraslow motions. Journal of Magnetic Resonance, 1983, 54, 466-479.	0.5	19
305	Effect of high hydrostatic pressure on the phenylene motion in polycarbonate as revealed by 2H spin-lattice relaxation. Polymer, 1992, 33, 2231-2233.	1.8	19
306	A site-directed spin-labeling study of surfactants in polymerâ€“clay nanocomposites. Colloid and Polymer Science, 2006, 284, 1211-1219.	1.0	19

#	Article	IF	Citations
307	Probing the solvent-induced tautomerism of a redox-active ureidopyrimidinone. Chemical Communications, 2007, , 2246.	2.2	19
308	1H Multiple-pulse study of a single crystal of trans-diiodoethylene: Example of self-decoupling. Journal of Magnetic Resonance, 1977, 25, 55-66.	0.5	18
309	Static and MAS ³⁵Cl NMR and Molecular Motions of ClO Ions in the Various Phases of Multimethylammonium Perchlorates. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1986, 90, 1153-1159.	0.9	18
310	Substituted tetrabenzocyclophanes as mesogenic units of new polycondensates exhibiting columnar mesophases. Liquid Crystals, 1990, 7, 123-129.	0.9	18
311	Liquid Crystalline Perylene Derivatives: Orientation and Phase Variation of Discotic Dyes. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1993, 97, 1362-1365.	0.9	18
312	Two-dimensional Fourier transform rheology. Journal of Rheology, 2001, 45, 1319-1339.	1.3	18
313	Hierarchical self-assembly in diblock copolypeptides of poly(Î³-benzyl-l-glutamate) with poly poly(l-leucine) and poly(O-benzyl-l-tyrosine). European Polymer Journal, 2011, 47, 668-674.	2.6	18
314	High resolution para-hydrogen induced polarization in inhomogeneous magnetic fields. Journal of Magnetic Resonance, 2013, 230, 155-159.	1.2	18
315	Magnetic resonance imaging of 1H long lived states derived from parahydrogen induced polarization in a clinical system. Journal of Magnetic Resonance, 2016, 262, 68-72.	1.2	18
316	Quadrupole Coupling and Anisotropic Chemical Shift in Re2(CO)10, Mn2(CO)10, and ReMn(CO)10. Journal of Chemical Physics, 1972, 57, 813-821.	1.2	17
317	14N and 35Cl double resonance study of the low-temperature phase transition in CH3NH3ClO4. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 116, 295-298.	0.9	17
318	2D magic angle spinning NMR spectroscopy: Correlation between molecular order and dynamics. Chemical Physics Letters, 1988, 150, 1-5.	1.2	17
319	An order-exchange-correlated two-dimensional NMR study of slow molecular motion in highly oriented crystalline poly(oxymethylene). Macromolecules, 1989, 22, 1004-1006.	2.2	17
320	Ultra-slow director rotation in nematic side-group polymers detected by N.M.R.. Liquid Crystals, 1989, 4, 341-345.	0.9	17
321	Molecular dynamics of discotic charge-transfer complexes, dielectric spectroscopy and²H NMR studie. Liquid Crystals, 1994, 17, 381-395.	0.9	17
322	Spatially resolved solid-state MAS-NMR-spectroscopy. Solid State Nuclear Magnetic Resonance, 1996, 6, 375-388.	1.5	17
323	Fast-field-cycling relaxometry enhanced by Dynamic Nuclear Polarization. Microporous and Mesoporous Materials, 2015, 205, 70-74.	2.2	17
324	Anisotropic chemical shifts and spin rotation constants of 15N from liquid and solid state NMR: Nitrobenzene. Journal of Magnetic Resonance, 1974, 16, 243-251.	0.5	16

#	Article	IF	Citations
325	Deuterium lineshape study of tetrahedral jumps in solid hexamethylenetetramine. Journal of Magnetic Resonance, 1980, 39, 217-228.	0.5	16
326	Title is missing!. Acta Polymerica, 1993, 44, 31-38.	1.4	16
327	Anion dynamics and conductivity in glassy polyelectrolytes - a two-dimensional solid state NMR study. Solid State Ionics, 1994, 68, 151-158.	1.3	16
328	Small-angle X-ray scattering and linear melt rheologyof poly(tert-butyl acrylate-g-styrene) graft copolymers. Polymer, 2006, 47, 1487-1495.	1.8	16
329	Geometry of phenylene motion in polycarbonate from NMR spectroscopy and neutron scattering. Journal of Chemical Physics, 2007, 126, 041104.	1.2	16
330	Solid-State Organization of Semifluorinated Alkanes Probed by 19F MAS NMR Spectroscopy. Journal of Physical Chemistry B, 2009, 113, 1360-1366.	1.2	16
331	Rotor synchronized threeâ€dimensional13C magic angle spinning nuclear magnetic resonance: Correlation between molecular structure, order, and dynamics in solids. Journal of Chemical Physics, 1990, 93, 7740-7750.	1.2	15
332	Title is missing!. Acta Polymerica, 1993, 44, 279-284.	1.4	15
333	Two-dimensional NMR study of slow phenyl-flips in liquid-crystalline side group polymers. Liquid Crystals, 1993, 14, 215-226.	0.9	15
334	Probing Porous Polymer Resins by High-Field Electron Spin Resonance Spectroscopy. Macromolecules, 2002, 35, 3977-3983.	2.2	15
335	Solid-state NMR and computational studies of tetratolyl urea calix[4]arene inclusion compounds. Physical Chemistry Chemical Physics, 2009, 11, 9241.	1.3	15
336	Advanced magnetic resonance strategies for the elucidation of nanostructured soft matter. Physical Chemistry Chemical Physics, 2014, 16, 9700.	1.3	15
337	Solid-state13C-NMR on oriented films of liquid-crystalline polymers. Advanced Materials, 1990, 2, 484-487.	11.1	14
338	Phase-restricted radiation crosslinking in semicrystalline polyolefins investigated by two-dimensional solid-state nuclear magnetic resonance. Macromolecular Chemistry and Physics, 1994, 195, 1471-1482.	1.1	14
339	Dynamics and structure of a flexible columnar liquid crystal based on tetrabenzocyclododecatetraene. Liquid Crystals, 1995, 18, 309-318.	0.9	14
340	Nuclear Magnetic Resonance Spectroscopy in Macromolecular Science. Macromolecular Chemistry and Physics, 2003, 204, 340-346.	1.1	14
341	Extended mesoionic systems: synthesis and characterization of monocyclic, polycyclic and macrocyclic pyrimidinium-olate derivatives and their photochemical behavior. Tetrahedron, 2004, 60, 10011-10018.	1.0	14
342	Overhauser DNP and EPR in a Mobile Setup: Influence of Magnetic Field Inhomogeneity. Applied Magnetic Resonance, 2012, 43, 149-165.	0.6	14

#	Article	IF	Citations
343	Spectroscopic imaging of solids by deuteron magic-angle-spinning NMR. Chemical Physics Letters, 1991, 184, 251-255.	1.2	13
344	Convective director structures upon continuous rotation of nematic side group polymers. Liquid Crystals, 1992, 12, 735-750.	0.9	13
345	Molecular dynamics in glassy polyelectrolytes: a NMR study. Electrochimica Acta, 1992, 37, 1657-1661.	2.6	13
346	Orientational distribution in stretched poly(methyl methacrylate) from 13C NMR spectroscopy. Macromolecular Chemistry and Physics, 1994, 195, 1755-1762.	1.1	13
347	Spectral parameters for quantitative mobility contrast in NMR imaging of solid polymers. Solid State Nuclear Magnetic Resonance, 1996, 6, 357-365.	1.5	13
348	EPR Studies on Film Formation of Colloidal Dispersions, 1. Site Selectivity and Techniques. Macromolecular Chemistry and Physics, 2002, 203, 182-191.	1.1	13
349	Rotor-Encoded Heteronuclear MQ MAS NMR Spectroscopy of Half-Integer Quadrupolar and Spin I=1/2 Nuclei. Journal of Magnetic Resonance, 2002, 154, 101-129.	1.2	13
350	Versatility of the dipolar filter selection: From 1H nuclear spin diffusion experiment to the measurement of nuclear Overhauser effect in homopolymer melts. Solid State Nuclear Magnetic Resonance, 2005, 28, 160-172.	1.5	13
351	Self-Assembly and Molecular Dynamics of Copolymers of Î³-Methyl-l-glutamate and Stearyl-l-glutamate. Macromolecules, 2007, 40, 8311-8322.	2.2	13
352	Parahydrogen induced polarization of barbituric acid derivatives: ¹H hyperpolarization studies. Magnetic Resonance in Chemistry, 2008, 46, 713-717.	1.1	13
353	Moessbauer spectra of some linear and triangular polynuclear iron carbonyls. Inorganic Chemistry, 1970, 9, 1694-1699.	1.9	12
354	2D-solid state NMR studies of ultraslow motions: phenylflips and chain motions in the glassy state. Journal of Non-Crystalline Solids, 1991, 131-133, 777-780.	1.5	12
355	Nondestructive evaluation of polymer materials by solid state NMR imaging. Makromolekulare Chemie Macromolecular Symposia, 1991, 44, 37-45.	0.6	12
356	Motional behavior within the hard domain of segmented polyurethanes: a deuterium NMR study of a triblock model system. Macromolecules, 1992, 25, 993-995.	2.2	12
357	Heteronuclear magnetization transfer in rapidly spinning solids. Chemical Physics Letters, 1993, 213, 145-152.	1.2	12
358	Solid-state 13C NMR characterization of molecular orientation of hot drawn nylon 6. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 1521-1529.	2.4	12
359	Different types of water in the film formation process of latex dispersions as detected by solid-state nuclear magnetic resonance spectroscopy. Colloid and Polymer Science, 2000, 278, 236-244.	1.0	12
360	Confinement effects in ionomers: a high-field pulsed electron spin resonance spectroscopy study. Journal of Non-Crystalline Solids, 2002, 307-310, 510-516.	1.5	12

#	Article	IF	Citations
361	Distant Dipolar Fields in Laser-Polarized Gases on Macroscopic Scales. Physical Review Letters, 2008, 100, 213001.	2.9	12
362	Spinâ€Łabeled Heparins as Polarizing Agents for Dynamic Nuclear Polarization. ChemPhysChem, 2010, 11, 3656-3663.	1.0	12
363	Phase Behavior and Proton Conduction in Poly(vinylphosphonic acid)/Poly(ethylene oxide) Blends. Macromolecules, 2010, 43, 3876-3881.	2.2	12
364	A Mobile DNP Polarizer for Continuous Flow Applications. Applied Magnetic Resonance, 2012, 43, 195-206.	0.6	12
365	Glass transition of poly(ethylmethacrylate) admixed and bound to nanoparticles. Journal of Chemical Physics, 2013, 138, 12A503.	1.2	12
366	Quadrupole Coupling in Dicobalt Octacarbonyl. Journal of Chemical Physics, 1969, 51, 1970-1974.	1.2	11
367	Title is missing!. Acta Polymerica, 1994, 45, 204-209.	1.4	11
368	Visualization of immobilization in shear bands by NMR imaging. Advanced Materials, 1996, 8, 481-484.	11.1	11
369	Separation of polyelectrolyte chain dynamics and dynamics of counterion attachment by EPR spectroscopy. Macromolecular Symposia, 2004, 211, 71-86.	0.4	11
370	Controlling diffusion of3He by buffer gases: A structural contrast agent in lung MRI. Journal of Magnetic Resonance Imaging, 2006, 24, 1291-1297.	1.9	11
371	Spin echo experiments on 13C, 2H, 1H, and 19F in some small molecules in the liquid phase. Journal of Magnetic Resonance, 1972, 6, 39-54.	0.5	10
372	Magnetic-field-induced orientation of crystallites in powders of layered intercalation compounds detected by NMR. The Journal of Physical Chemistry, 1988, 92, 7167-7168.	2.9	10
373	Title is missing!. Acta Polymerica, 1995, 46, 291-299.	1.4	10
374	Magic-Echo Parameter Imaging of Shearbands in Solid Polymers. Journal of Magnetic Resonance Series A, 1996, 120, 201-205.	1.6	10
375	Spin Echo Formation in the Presence of Stochastic Dynamics. Physical Review Letters, 2007, 99, 263001.	2.9	10
376	Investigation of Chain Dynamics in Poly(nâ€alkyl methacrylate)s by Solidâ€State NMR: Comparison with Poly(nâ€alkyl acrylate)s. Macromolecular Chemistry and Physics, 2008, 209, 2078-2086.	1.1	10
377	NMR Study of a single crystal of KHF2. I. 1H and 19F dipolar spectra. Journal of Magnetic Resonance, 1976, 22, 93-102.	0.5	9
378	NMR study of a single crystal of KHF2. II. proton magnetic shielding tensor. Journal of Magnetic Resonance, 1976, 22, 103-116.	0.5	9

#	Article	IF	Citations
379	Ultraâ€slow Molecular Motion in Polymers: 1D and 2D NMR Spectroscopy. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1989, 93, 1189-1193.	0.9	9
380	Dynamics and deformation behaviour in nonâ€hydrogen bonded model urethanes under heat and stress as studied by dielectric and infrared spectroscopy. Makromolekulare Chemie Macromolecular Symposia, 1991, 50, 191-202.	0.6	9
381	Liquid-crystalline perylene oligomers: Synthesis and phase behavior. Acta Polymerica, 1994, 45, 188-195.	1.4	9
382	Dipolar Recoupling in NOESY-Type1Hî¸1H NMR Experiments under HRMAS Conditions. Organic Letters, 2002, 4, 1559-1562.	2.4	9
383	Network formation involving polyelectrolytes in solution: the role of counterions. Colloid and Polymer Science, 2004, 282, 901-909.	1.0	9
384	Imaging of a mixture of hyperpolarized 3He and 129Xe. Magnetic Resonance Imaging, 2004, 22, 1077-1083.	1.0	9
385	Effects of Comonomers on Lamellar and Noncrystalline Microstructure of Ethylene Copolymers. Macromolecular Rapid Communications, 2006, 27, 322-327.	2.0	9
386	NMR of Stiff Macromolecules with Flexible Side Chains. Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics, 1987, 153, 199-206.	0.3	8
387	Segmental Dynamics in a Glassy Polyelectrolyte: Solidâ€state ²Hâ€NMR. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1991, 95, 1071-1076.	0.9	8
388	Conditions for generating rotating gradients in MAS NMR imaging. Journal of Magnetic Resonance, 1991, 95, 437-441.	0.5	8
389	Spatially Resolved Two-Dimensional Solid-State NMR Spectroscopy. Journal of Magnetic Resonance Series A, 1994, 107, 251-254.	1.6	8
390	Synthesis and characterization of coreâ€shell latexes with microscopic and solidâ€state NMR methods. Macromolecular Symposia, 1995, 92, 109-116.	0.4	8
391	Supramolecular aspects of polymer science: a challenge for solid state NMR. Macromolecular Symposia, 2003, 201, 85-88.	0.4	8
392	13C solid state NMR investigation of structural relaxation of the polymer backbone in poly (ethylmethacrylate). Solid State Nuclear Magnetic Resonance, 2005, 27, 132-139.	1.5	8
393	Deuteron NMR investigations of structure and dynamics in solid polymers, liquid crystalline polymers and polymer model membranes. Makromolekulare Chemie Macromolecular Symposia, 1986, 4, 227-230.	0.6	7
394	Structure and molecular dynamics of highly mobile polymer membranes. Angewandte Makromolekulare Chemie, 1989, 166, 39-56.	0.3	7
395	The use of composite pulses in the TOSS experiment. Journal of Magnetic Resonance, 1991, 92, 628-630.	0.5	7
396	Application of Pulsed ENDOR to the Study of Radicals in a Liquid-Crystalline Copolyester. Journal of Magnetic Resonance Series A, 1995, 113, 177-184.	1.6	7

#	Article	IF	Citations
397	Optimum measurement temperature for elucidating incomplete phase separation in core-shell latexes by solid state NMR. Macromolecular Rapid Communications, 1996, 17, 875-883.	2.0	7
398	Orientation dynamics in isotropic phases of model oligofluorenes: Glass or liquid crystal. Journal of Chemical Physics, 2006, 124, 204910.	1.2	7
399	Slow kinetics of phase transformation in a dipole-functionalized discotic liquid crystal. Journal of Chemical Physics, 2009, 131, 114704.	1.2	7
400	Twoâ€dimensional NMR methods for studying solid polymers. Makromolekulare Chemie Macromolecular Symposia, 1989, 26, 197-207.	0.6	6
401	Spinning sidebands from chemical shift anisotropy in 13C MAS imaging. Solid State Nuclear Magnetic Resonance, 1993, 2, 105-110.	1.5	6
402	Spatially resolved NMR of rigid polymers and elastomers. Magnetic Resonance Imaging, 1994, 12, 301-304.	1.0	6
403	Nature and dynamics of radicals in polyaramide as studied by pulsed electron nuclear double resonance. Advanced Materials, 1995, 7, 747-750.	11.1	6
404	Orientation of polybutadiene chains in a thermoplastic elastomer. Colloid and Polymer Science, 1996, 274, 723-731.	1.0	6
405	Quantitative Characterisation of the Inner Structure of Core-Shell Latex Particles by1H Solid-State NMR. Macromolecular Chemistry and Physics, 2001, 202, 1262-1272.	1.1	6
406	Structure Formation in Metal Complex/Polymer Hybrid Nanomaterials Prepared by Miniemulsion. Langmuir, 2011, 27, 12859-12868.	1.6	6
407	Structure Formation of Polymeric Building Blocks: Complex Polymer Architectures. Advances in Polymer Science, 2013, , 115-210.	0.4	6
408	Magnetische Abschirmungstensoren fÃ¼r 13C und 15N in organischen FestkÃ¶rpern. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1975, 79, 1009-1013.	0.9	5
409	NMR imaging with incommensurate sampling and gradient andulation rates. Journal of Magnetic Resonance, 1986, 66, 66-73.	0.5	5
410	Photopolymerization study of photoresists by ESR spectroscopy and ESR imaging. Molecular Physics, 1991, 74, 591-598.	0.8	5
411	NMR Imaging of Objects Containing Similar Substructures. Journal of Magnetic Resonance Series A, 1993, 103, 142-150.	1.6	5
412	Molecular Dynamics in Sideâ€Group Polymers with and without Liquid Crystalline Phases from ²H NMR. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1993, 97, 1306-1311.	0.9	5
413	Detection of dynamics and phase separation in polymers using 2D ¹H NMR in solids. Magnetic Resonance in Chemistry, 1994, 32, S3.	1.1	5
414	Main Chain Order and Dynamics in a Liquid Crystalline Side-Group Polymer. Molecular Crystals and Liquid Crystals, 1995, 266, 47-58.	0.3	5

#	Article	IF	Citations
415	Title is missing!. Acta Polymerica, 1996, 47, 429-435.	1.4	5
416	Characterization of superabsorbing polymers by NMR imaging. Colloid and Polymer Science, 2000, 278, 547-552.	1.0	5
417	Film-forming colloidal dispersions studied by tracer methods. Macromolecular Symposia, 2000, 151, 451-457.	0.4	5
418	Multidimensional solid-state NMR of structure and dynamics of polymers. Macromolecular Symposia, 2001, 174, 111-120.	0.4	5
419	The influence of sodium ethene sulphonate comonomer on the film formation process of poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlo	1.0	5
420	Diffusion spin echo suppression in the presence of inhomogeneous gradients. Chemical Physics Letters, 2009, 481, 137-141.	1.2	5
421	New Phosphonate-Based Additives for Fortification in Model Epoxies. Macromolecules, 2013, 46, 2067-2077.	2.2	5
422	Orientation of the Electricâ€Fieldâ€Gradient Tensor in Crystalline Dirhenium Decacarbonyl. Journal of Chemical Physics, 1969, 51, 3932-3936.	1.2	4
423	Two-Dimensional Solid State NMR Studies of Ultraslow Molecular Reorientation in Solid Polymers. Molecular Crystals and Liquid Crystals Incorporating Nonlinear Optics, 1990, 187, 223-230.	0.3	4
424	Structure, dynamics and phase separation in liquid crystalline polymers, block copolymers and blends as revealed by solid state NMR spectroscopy. Makromolekulare Chemie Macromolecular Symposia, 1991, 50, 241-248.	0.6	4
425	Molecular motion, phase separation and internal surfaces in rubberelastic polymers. Angewandte Makromolekulare Chemie, 1992, 202, 331-342.	0.3	4
426	Structure and dynamics of liquidâ€crystalline polymers with different molecular architectures. Macromolecular Symposia, 1995, 96, 95-109.	0.4	4
427	Measurement of diffusion coefficients of additive molecules in colloidal polymer particles by electron paramagnetic resonance. Colloid and Polymer Science, 2002, 280, 569-573.	1.0	4
428	Resolution enhancement in MRI of laser polarized 3He by control of diffusion. Journal of Magnetic Resonance, 2009, 197, 56-62.	1.2	4
429	The Role of Conformations in the Interplay of Structure and Dynamics in Macromolecular and Supramolecular Systems. Macromolecular Symposia, 2010, 298, 10-16.	0.4	4
430	Multinuclear NMR Study of Structure and Mobility in Cyclic Model Lithium Conducting Systems. Applied Magnetic Resonance, 2014, 45, 1063-1073.	0.6	4
431	Magic Angle Spinning NMR of Macromolecular and Supramolecular Systems. Israel Journal of Chemistry, 2014, 54, 16-24.	1.0	4
432	Molecular dynamics in polystyrene from electron spin resonance (ESR) measurements: comparison between spinprobes and -labels attached to the chain ends. Macromolecular Chemistry and Physics, 1996, 197, 1121-1134.	1.1	3

#	Article	IF	Citations
433	Fast right-angle spinning EPR on organic radicals: Resolution enhancement and angle determination. Applied Magnetic Resonance, 2001, 20, 17-33.	0.6	3
434	¹H and ²H NMR study of chain motion at the poly(dimethylsiloxane)â€filler interface. Makromolekulare Chemie Macromolecular Symposia, 1991, 44, 33-36.	0.6	2
435	Pulsed electron nuclear double resonance study of molecular motions of radicals in a high-strength liquid-crystalline polymer. Chemical Physics Letters, 1994, 218, 81-86.	1.2	2
436	Mn(II) coordination and ionic conductivity in ionene glasses. Acta Polymerica, 1994, 45, 252-256.	1.4	2
437	Gerhard Wegner. Advanced Materials, 2000, 12, 249-250.	11.1	2
438	High-field EPR studies on polymer film formation from colloidal dispersions. Applied Magnetic Resonance, 2001, 21, 495-506.	0.6	2
439	Two-dimensional Fourier transform rheological study on thermosensitivity ofÂpoly(N,N-diethylacrylamide) in aqueous solutions. Polymer, 2012, 53, 4800-4805.	1.8	2
440	Probing Macromolecular and Supramolecular Structure, Dynamics, and Function by Magnetic Resonance. Advances in Polymer Science, 2013, , 295-320.	0.4	2
441	Dynamics in the crystalline polymorphic forms I and II and form III of isotactic poly-1-butene. , 2000, 38, 2611.		1
442	The european polymer federation. Advanced Materials, 1992, 4, 390-393.	11.1	0
443	10 years Max-Planck-institute for polymer research, Mainz. Acta Polymerica, 1994, 45, 135-136.	1.4	0
444	Dynamic mechanical and dielectric properties of ORMOCERÂ® incorporating functionalized poly(styrene) latexes. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 860-867.	2.4	0
445	On the Occasion of Gerhard Wegner's 65th Birthday. Macromolecular Chemistry and Physics, 2005, 206, 13-14.	1.1	0