

Sergey Dvinskikh

List of Publications by Year in descending order

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102
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times ranked

2180
citing authors

#	ARTICLE	IF	CITATIONS
1	Towards tailored hierarchical structures in cellulose nanocomposite biofoams prepared by freezing/freeze-drying. <i>Journal of Materials Chemistry</i> , 2010, 20, 6646.	6.7	97
2	Anisotropic self-diffusion in thermotropic liquid crystals studied by ^1H and ^2H pulse-field-gradient spin-echo NMR. <i>Physical Review E</i> , 2002, 65, 061701.	2.1	84
3	Measurements of motionally averaged heteronuclear dipolar couplings in MAS NMR using R-type recoupling. <i>Journal of Magnetic Resonance</i> , 2004, 168, 194-201.	2.1	77
4	Heteronuclear dipolar recoupling in liquid crystals and solids by PISEMA-type pulse sequences. <i>Journal of Magnetic Resonance</i> , 2003, 164, 165-170.	2.1	73
5	Heating caused by radiofrequency irradiation and sample rotation in ^{13}C magic angle spinning NMR studies of lipid membranes. <i>Magnetic Resonance in Chemistry</i> , 2004, 42, 875-881.	1.9	73
6	Molecular Motion in the Two Amorphous Phases of Triphenyl Phosphite. <i>Journal of Physical Chemistry B</i> , 1999, 103, 1727-1737.	2.6	71
7	NMR methods applied to anisotropic diffusion. <i>Magnetic Resonance in Chemistry</i> , 2002, 40, S3-S14.	1.9	71
8	High-Resolution 2D NMR Spectroscopy of Bicelles To Measure the Membrane Interaction of Ligands. <i>Journal of the American Chemical Society</i> , 2007, 129, 794-802.	13.7	62
9	Heteronuclear isotropic mixing separated local field NMR spectroscopy. <i>Journal of Chemical Physics</i> , 2006, 125, 034507.	3.0	61
10	A High-Resolution Solid-State NMR Approach for the Structural Studies of Bicelles. <i>Journal of the American Chemical Society</i> , 2006, 128, 6326-6327.	13.7	60
11	Anisotropic self-diffusion in the nematic phase of a thermotropic liquid crystal by ^1H -spin-echo nuclear magnetic resonance. <i>Journal of Chemical Physics</i> , 2001, 115, 1946-1950.	3.0	58
12	Magnet Design with High B_0 Homogeneity for Fast-Field-Cycling NMR Applications. <i>Journal of Magnetic Resonance</i> , 2001, 149, 22-28.	2.1	58
13	Efficient solid-state NMR methods for measuring heteronuclear dipolar couplings in unoriented lipid membrane systems. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 607-613.	2.8	58
14	Heteronuclear dipolar recoupling in solid-state nuclear magnetic resonance by amplitude-, phase-, and frequency-modulated Lee-Goldburg cross-polarization. <i>Journal of Chemical Physics</i> , 2005, 122, 044512.	3.0	52
15	Ion conductive behaviour in a confined nanostructure: NMR observation of self-diffusion in a liquid-crystalline bicontinuous cubic phase. <i>Chemical Communications</i> , 2010, 46, 728-730.	4.1	52
16	A multinuclear magnetic resonance imaging (MRI) study of wood with adsorbed water: Estimating bound water concentration and local wood density. <i>Holzforschung</i> , 2011, 65, 103-107.	1.9	52
17	Polymer mobilization and drug release during tablet swelling. A ^1H NMR and NMR microimaging study. <i>Journal of Controlled Release</i> , 2007, 122, 199-205.	9.9	50
18	Frequency offset refocused PISEMA-type sequences. <i>Journal of Magnetic Resonance</i> , 2005, 175, 163-169.	2.1	48

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19	Probing segmental order in lipid bilayers at variable hydration levels by amplitude- and phase-modulated cross-polarization NMR. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 3255.	2.8	48
20	Sensitivity and resolution enhancement in solid-state NMR spectroscopy of bicelles. <i>Journal of Magnetic Resonance</i> , 2007, 184, 228-235.	2.1	45
21	A multi-scale approach for simulation of transient moisture transport processes in wood below the fiber saturation point. <i>Composites Science and Technology</i> , 2011, 71, 1727-1738.	7.8	45
22	Separated local field spectroscopy of columnar and nematic liquid crystals. <i>Journal of Magnetic Resonance</i> , 2003, 163, 46-55.	2.1	44
23	Cross-Relaxation Effects in Stimulated-Echo-Type PGSE NMR Experiments by Bipolar and Monopolar Gradient Pulses. <i>Journal of Magnetic Resonance</i> , 2000, 146, 283-289.	2.1	43
24	Electrokinetic transport of water and methanol in Nafion membranes as observed by NMR spectroscopy. <i>Electrochimica Acta</i> , 2010, 55, 3542-3549.	5.2	39
25	Experimental Detection of Trinitramide, N(NO ₂) ₃ . <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1145-1148.	13.8	38
26	Ex Situ Catalytic Pyrolysis of a Mixture of Polyvinyl Chloride and Cellulose Using Calcium Oxide for HCl Adsorption and Catalytic Reforming of the Pyrolysis Products. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 13960-13970.	3.7	38
27	¹³ C PGSE NMR Experiment with Heteronuclear Dipolar Decoupling to Measure Diffusion in Liquid Crystals and Solids. <i>Journal of Magnetic Resonance</i> , 2000, 142, 102-110.	2.1	33
28	Carbon-13 NMR spectroscopy applied to columnar liquid crystals. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2006, 48, 85-107.	7.5	33
29	NMR imaging study and multi-Fickian numerical simulation of moisture transfer in Norway spruce samples. <i>Engineering Structures</i> , 2011, 33, 3079-3086.	5.3	31
30	Measurement of heteronuclear dipolar couplings using a rotating frame solid-state NMR experiment. <i>Chemical Physics Letters</i> , 2006, 419, 533-536.	2.6	30
31	NMR investigations of interactions between anesthetics and lipid bilayers. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 2604-2611.	2.6	30
32	MRI profiles over very wide concentration ranges: Application to swelling of a bentonite clay. <i>Journal of Magnetic Resonance</i> , 2009, 198, 146-150.	2.1	30
33	Polymer Swelling, Drug Mobilization and Drug Recrystallization in Hydrating Solid Dispersion Tablets Studied by Multinuclear NMR Microimaging and Spectroscopy. <i>Molecular Pharmaceutics</i> , 2011, 8, 1247-1256.	4.6	30
34	Molecular Characterization of Hexaoctyloxy-Rufigallol in the Solid and Columnar Phases: A Local Field NMR Study. <i>Journal of Physical Chemistry B</i> , 2003, 107, 1969-1976.	2.6	28
35	Nuclear magnetic resonance studies of translational diffusion in thermotropic liquid crystals. <i>Russian Chemical Reviews</i> , 2006, 75, 497-506.	6.5	27
36	NMR studies of membranes composed of glycolipids and phospholipids. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 2432-2437.	2.6	27

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37	Coil Design for Large-Volume High-B1 Homogeneity for Solid-State NMR Applications. Journal of Magnetic Resonance Series A, 1996, 123, 157-160.	1.6	26
38	Molecular self-diffusion in a columnar liquid crystalline phase determined by deuterium NMR. Physical Review E, 2002, 65, 050702.	2.1	26
39	Deuterium Stimulated-Echo-Type PGSE NMR Experiments for Measuring Diffusion: Application to a Liquid Crystal. Journal of Magnetic Resonance, 2001, 153, 83-91.	2.1	25
40	A ¹³ C solid-state NMR study of cryptophane-E:chloromethane inclusion complexes. Chemical Physics Letters, 2004, 388, 208-211.	2.6	22
41	Combining PGSE NMR with Homonuclear Dipolar Decoupling. Journal of Magnetic Resonance, 2000, 144, 142-149.	2.1	21
42	Order Parameter Profile of Perfluorinated Chains in a Lamellar Phase. Langmuir, 2000, 16, 2962-2967.	3.5	20
43	Moisture content profiles and uptake kinetics in wood cladding materials evaluated by a portable nuclear magnetic resonance spectrometer. Wood Material Science and Engineering, 2011, 6, 119-127.	2.3	20
44	Profiling of thermally aged EPDM seals using portable NMR, indenter measurements and IR spectroscopy facilitating separation of different deterioration mechanisms. Polymer Testing, 2016, 53, 77-84.	4.8	20
45	Spin and Molecular Dynamics of Biradicals as Studied by Low Field Nuclear Polarization at Variable Temperature. Journal of Physical Chemistry A, 1999, 103, 980-988.	2.5	19
46	Separated local field NMR spectroscopy by windowless isotropic mixing. Chemical Physics Letters, 2006, 419, 168-173.	2.6	19
47	High-Resolution Characterization of Liquid-Crystalline [60]Fullerenes Using Solid-State Nuclear Magnetic Resonance Spectroscopy. Journal of Physical Chemistry B, 2008, 112, 12347-12353.	2.6	19
48	Phase Transitions and Chain Dynamics of Surfactants Intercalated into the Galleries of Naturally Occurring Clay Mineral Magadiite. Langmuir, 2014, 30, 7859-7866.	3.5	19
49	Microscopic structure of the glassy ionic conductor $x\hat{\text{A}}\cdot\text{LiF}+(1\hat{\text{A}}\sim x)\hat{\text{A}}\cdot\text{LiPO}_3$ from NMR data. Journal of Non-Crystalline Solids, 1998, 240, 79-90.	3.1	18
50	Assessment of moisture protective properties of wood coatings by a portable NMR sensor. Journal of Coatings Technology Research, 2011, 8, 649-654.	2.5	18
51	A Time-Resolved Stimulated Nuclear Polarization Study of Biradicals in Low Magnetic Field. The Journal of Physical Chemistry, 1996, 100, 8125-8130.	2.9	16
52	Measurement of the Principal Values of the Anisotropic Diffusion Tensor in an Unoriented Sample by Exploiting the Chemical Shift Anisotropy: ¹⁹ F PGSE NMR with Homonuclear Decoupling. Journal of Magnetic Resonance, 2001, 148, 73-77.	2.1	15
53	Translational self-diffusion in the synclitic to anticlincic phases of a ferroelectric liquid crystal. Soft Matter, 2010, 6, 5999.	2.7	14
54	NMR longitudinal relaxation enhancement in metal halides by heteronuclear polarization exchange during magic-angle spinning. Journal of Chemical Physics, 2016, 144, 224201.	3.0	14

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55	A field-cycling NMR study of nematic 4-pentyl-4'-cyanobiphenyl confined in porous glasses. Applied Magnetic Resonance, 1998, 15, 363-381.	1.2	13
56	Domain Structure in an Unoriented Lamellar Lyotropic Liquid Crystal Phase Studied by ² H NMR. Langmuir, 2001, 17, 6455-6460.	3.5	13
57	Molecular structure and order of hexaoxyloxy-rufigallol in the solid and columnar phases: Analysis of ² H- ¹³ C dipolar and ¹³ C chemical-shift interactions. Journal of Chemical Physics, 2003, 119, 413-422.	3.0	13
58	Cross-polarization with radio-frequency field phase and amplitude modulation under magic-angle spinning conditions. Journal of Experimental and Theoretical Physics, 2006, 102, 91-101.	0.9	13
59	Mesomorphism in columnar phases studied by solid-state nuclear magnetic resonance. Physical Review E, 2006, 74, 021703.	2.1	13
60	Comparative study of local structure of two cyanobiphenyl liquid crystals by molecular dynamics method. Journal of Chemical Physics, 2014, 141, 074503.	3.0	13
61	Study of Translational Diffusion Anisotropy of Ionic Smectogens by NMR Diffusometry. Molecular Crystals and Liquid Crystals, 2015, 614, 30-38.	0.9	13
62	Molecular and Segmental Orientational Order in a Smectic Mesophase of a Thermotropic Ionic Liquid Crystal. Crystals, 2019, 9, 18.	2.2	13
63	Molecular Mechanism of Lateral Diffusion of Fluorosurfactants. A ¹⁹ F NMR Study. Langmuir, 2002, 18, 5015-5018.	3.5	12
64	Ion Channels and Anisotropic Ion Mobility in a Liquid-Crystalline Columnar Phase As Observed by Multinuclear NMR Diffusometry. Journal of Physical Chemistry B, 2010, 114, 15477-15482.	2.6	12
65	Anisotropic self-diffusion in nematic, smectic- A , and reentrant nematic phases. Physical Review E, 2012, 86, 031704.	2.1	12
66	Low rf power high resolution ¹ H- ¹³ C- ¹⁴ N separated local field spectroscopy in lyotropic mesophases. Journal of Magnetic Resonance, 2012, 223, 73-79.	2.1	12
67	Conformational Dynamics of Surfactant in a Mesolamellar Composite Studied by Local Field NMR Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 24511-24517.	3.1	12
68	Understanding ionic mesophase stabilization by hydration: a solid-state NMR study. Physical Chemistry Chemical Physics, 2020, 22, 13408-13417.	2.8	12
69	NMR-measurements for determination of local moisture content of coated wood. Journal of Coatings Technology Research, 2013, 10, 601-607.	2.5	11
70	Translational self-diffusion in the smectic phases of ferroelectric liquid crystals: an overview. Phase Transitions, 2012, 85, 861-871.	1.3	10
71	Suppressing magnetization exchange effects in stimulated-echo diffusion experiments. Journal of Magnetic Resonance, 2013, 234, 35-43.	2.1	10
72	Constant-time chemical-shift selective imaging. Journal of Magnetic Resonance, 2013, 226, 19-21.	2.1	10

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73	Wood Microstructure Explored by Anisotropic ¹ H NMR Line Broadening: Experiments and Numerical Simulations. Journal of Physical Chemistry B, 2013, 117, 8620-8632.	2.6	10
74	Ion conformation and orientational order in a dicationic ionic liquid crystal studied by solid-state nuclear magnetic resonance spectroscopy. Scientific Reports, 2021, 11, 5985.	3.3	10
75	¹³ C-detected ¹ H- ² H separated local field NMR spectroscopy. Chemical Physics Letters, 2003, 382, 410-417.	2.6	9
76	NMR Spectroscopic Study of Orientational Order in Imidazolium-Based Ionic Liquid Crystals. Crystals, 2019, 9, 495.	2.2	9
77	Low and zero field stimulated nuclear polarization in cyclic ketones. Chemical Physics Letters, 1997, 268, 401-407.	2.6	8
78	Dynamic properties of water in silicalite-1 powder. Magnetic Resonance Imaging, 2012, 30, 1022-1031.	1.8	8
79	Chain dynamics of surfactants in mesoporous silica. Physical Chemistry Chemical Physics, 2013, 15, 18620.	2.8	8
80	Pulsed-Field-Gradient NMR Study of Anisotropic Molecular Translational Diffusion in nOCB Liquid Crystals. Applied Magnetic Resonance, 2013, 44, 169-180.	1.2	8
81	Nuclear magnetic resonance studies of translational diffusion in thermotropic ionic liquid crystals. Liquid Crystals, 2020, 47, 1975-1985.	2.2	8
82	Frequency-dependent spin-lattice relaxation study of transport processes in superionic conductors. Applied Magnetic Resonance, 1998, 15, 353-361.	1.2	7
83	Magnetic orientation of nontronite clay in aqueous dispersions and its effect on water diffusion. Journal of Colloid and Interface Science, 2015, 437, 205-210.	9.4	7
84	Broadband cross-polarization-based heteronuclear dipolar recoupling for structural and dynamic NMR studies of rigid and soft solids. Journal of Chemical Physics, 2016, 144, 034201.	3.0	7
85	¹⁵ N- ¹³ C Dipole Couplings in Smectic Mesophase of a Thermotropic Ionic Liquid. Applied Magnetic Resonance, 2018, 49, 553-562.	1.2	7
86	NMR Spectroscopic Studies of Cation Dynamics in Symmetrically-Substituted Imidazolium-Based Ionic Liquid Crystals. International Journal of Molecular Sciences, 2020, 21, 5024.	4.1	7
87	Vegetable oil reactions within wood studied by direct ¹³ C excitation with ¹ H decoupling and magic-angle sample spinning (MAS) NMR. Progress in Organic Coatings, 2012, 75, 259-263.	3.9	5
88	Study of Liquid Crystals Showing Two Isotropic Phases by ¹ H NMR Diffusometry and ¹ H NMR Relaxometry. Crystals, 2019, 9, 178.	2.2	5
89	Sign-sensitive determination of heteronuclear dipolar coupling to spin-1 by selective decoupling. Journal of Chemical Physics, 2012, 137, 234902.	3.0	4
90	Probing Molecular Mobility in Nanostructured Composites by Heteronuclear Dipolar NMR Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 28308-28313.	3.1	4

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91	Natural Abundance Nitrogen-15 NMR in Thermotropic Liquid Crystals With Cyano-Group. Zeitschrift Fur Physikalische Chemie, 2017, 231, 795-808.	2.8	4
92	Experimental strategies for ¹³ Câ€“ ¹⁵ N dipolar NMR spectroscopy in liquid crystals at the natural isotopic abundance. Physical Chemistry Chemical Physics, 2018, 20, 22187-22196.	2.8	4
93	Temperature dependence of low field CIDNP and time resolved SNP in cyclic ketones. Applied Magnetic Resonance, 1997, 12, 465-476.	1.2	3
94	¹³ C SPE MAS measurement of ligand concentration in compressible chromatographic beads. Magnetic Resonance in Chemistry, 2015, 53, 572-577.	1.9	3
95	NMR investigation of a thermotropic liquid crystal showing isotropic-isotropic'-(columnar)-cubic phase transitions. Molecular Crystals and Liquid Crystals, 2017, 649, 20-30.	0.9	1
96	Sign determination of dipolar couplings in liquid crystals by off-magic-angle sample spinning. Chemical Physics Letters, 2021, 781, 138997.	2.6	1
97	NMR Methods Applied to Anisotropic Diffusion. ChemInform, 2003, 34, no.	0.0	0
98	Separated Local Field Nmr Spectroscopy in Columnar Liquid Crystals. , 2007, , 117-140.		0