David L Bryce

List of Publications by Year
in descending order

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188	6,189	66343	106344
papers	citations	42 h-index	65 g-index

202	202	202	4879
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Definition of the chalcogen bond (IUPAC Recommendations 2019). Pure and Applied Chemistry, 2019, 91, 1889-1892.	1.9	322
2	Direct detection of CH/Ï€ interactions in proteins. Nature Chemistry, 2010, 2, 466-471.	13.6	247
3	Spinâ€“spin coupling tensors as determined by experiment and computational chemistry. Progress in Nuclear Magnetic Resonance Spectroscopy, 2002, 41, 233-304.	7.5	169
4	EFGShield â€" A program for parsing and summarizing the results of electric field gradient and nuclear magnetic shielding tensor calculations. Canadian Journal of Chemistry, 2007, 85, 496-505.	1.1	144
5	NMR crystallography: structure and properties of materials from solid-state nuclear magnetic resonance observables. IUCrJ, 2017, 4, 350-359.	2.2	115
6	A revised experimental absolute magnetic shielding scale for oxygen. Journal of Chemical Physics, 2002, 117, 10061-10066.	3.0	110
7	Potent inhibition of ice recrystallization by low molecular weight carbohydrate-based surfactants and hydrogelators. Chemical Science, 2012, 3, 1408.	7.4	102
8	Calcium-43 Chemical Shift Tensors as Probes of Calcium Binding Environments. Insight into the Structure of the Vaterite CaCO₃ Polymorph by ⁴³Ca Solid-State NMR Spectroscopy. Journal of the American Chemical Society, 2008, 130, 9282-9292.	13.7	92
9	Zero Thermal Expansion in ZrMgMo₃O₁₂: NMR Crystallography Reveals Origins of Thermoelastic Properties. Chemistry of Materials, 2015, 27, 2633-2646.	6.7	90
10	NMR Investigations of Noncovalent Carbon Tetrel Bonds. Computational Assessment and Initial Experimental Observation. Journal of Physical Chemistry A, 2015, 119, 11891-11899.	2.5	88
11	High-Field Chlorine NMR Spectroscopy of Solid Organic Hydrochloride Salts:Â A Sensitive Probe of Hydrogen Bonding Environment. Journal of Physical Chemistry A, 2001, 105, 10413-10421.	2.5	84
12	QUESTâ€"QUadrupolar Exact SofTware: A fast graphical program for the exact simulation of NMR and NQR spectra for quadrupolar nuclei. Solid State Nuclear Magnetic Resonance, 2012, 45-46, 36-44.	2.3	77
13	Capsule Formation, Carboxylate Exchange, and DFT Exploration of Cadmium Cluster Metallocavitands: Highly Dynamic Supramolecules. Journal of the American Chemical Society, 2010, 132, 3893-3908.	13.7	75
14	Solid-state NMR spectroscopy of the quadrupolar halogens: chlorine-35/37, bromine-79/81, and iodine-127. Magnetic Resonance in Chemistry, 2006, 44, 409-450.	1.9	72
15	Halogen bonding as a supramolecular dynamics catalyst. Nature Communications, 2019, 10, 916.	12.8	72
16	Relaxation-Optimized NMR Spectroscopy of Methylene Groups in Proteins and Nucleic Acids. Journal of the American Chemical Society, 2004, 126, 10560-10570.	13.7	71
17	A high-field solid-state 35/37Cl NMR and quantum chemical investigation of the chlorine quadrupolar and chemical shift tensors in amino acid hydrochlorides. Physical Chemistry Chemical Physics, 2007, 9, 6219.	2.8	71
18	A Solid-State ¹¹B NMR and Computational Study of Boron Electric Field Gradient and Chemical Shift Tensors in Boronic Acids and Boronic Esters. Journal of Physical Chemistry A, 2010, 114, 5119-5131.	2.5	70

#	Article	IF	Citations
19	Direct Investigation of Covalently Bound Chlorine in Organic Compounds by Solidâ€State ³⁵Clâ€...NMR Spectroscopy and Exact Spectral Lineâ€Shape Simulations. Angewandte Chemie - International Edition, 2012, 51, 4227-4230.	13.8	69
20	Microwave Spectroscopy and Nuclear Magnetic Resonance SpectroscopyWhat Is the Connection?. Accounts of Chemical Research, 2003, 36, 327-334.	15.6	67
21	Solid-state NMR of quadrupolar halogen nuclei. Progress in Nuclear Magnetic Resonance Spectroscopy, 2009, 55, 215-237.	7.5	67
22	Solid-State35/37Cl NMR Spectroscopy of Hydrochloride Salts of Amino Acids Implicated in Chloride Ion Transport Channel Selectivity:Â Opportunities at 900 MHz. Journal of the American Chemical Society, 2006, 128, 2121-2134.	13.7	64
23	Direct Investigation of Halogen Bonds by Solid-State Multinuclear Magnetic Resonance Spectroscopy and Molecular Orbital Analysis. Journal of the American Chemical Society, 2014, 136, 6929-6942.	13.7	64
24	Solid-State ¹²⁷I NMR and GIPAW DFT Study of Metal Iodides and Their Hydrates: Structure, Symmetry, and Higher-Order Quadrupole-Induced Effects. Journal of Physical Chemistry A, 2010, 114, 10810-10823.	2.5	63
25	Correlation between 13C chemical shifts and the halogen bonding environment in a series of solid para-diiodotetrafluorobenzene complexes. CrystEngComm, 2013, 15, 3168.	2.6	63
26	Double Chalcogen Bonds: Crystal Engineering Stratagems via Diffraction and Multinuclear Solidâ€State Magnetic Resonance Spectroscopy. Chemistry - A European Journal, 2020, 26, 3275-3286.	3.3	61
27	Indirect Nuclear Spinâ^'Spin Coupling Tensors in Diatomic Molecules:Â A Comparison of Results Obtained by Experiment and First Principles Calculations. Journal of the American Chemical Society, 2000, 122, 3197-3205.	13.7	60
28	Crystallographic structure refinement with quadrupolar nuclei: a combined solid-state NMR and GIPAW DFT example using MgBr2. Physical Chemistry Chemical Physics, 2009, 11, 7120.	2.8	60
29	Alkaline Earth Chloride Hydrates: Chlorine Quadrupolar and Chemical Shift Tensors by Solid-State NMR Spectroscopy and Plane Wave Pseudopotential Calculations. Chemistry - A European Journal, 2007, 13, 4786-4796.	3.3	59
30	Signal enhancement in solid-state NMR of quadrupolar nuclei. Solid State Nuclear Magnetic Resonance, 2013, 51-52, 1-15.	2.3	58
31	Substituted 4,4â€²-Stilbenoid NCN-Pincer Platinum(II) Complexes. Luminescence and Tuning of the Electronic and NLO Properties and the Application in an OLED. Organometallics, 2008, 27, 1690-1701.	2.3	56
32	Calcium binding environments probed by 43Ca NMR spectroscopy. Dalton Transactions, 2010, 39, 8593.	3.3	56
33	Periodic Trends in Indirect Nuclear Spinâ^'Spin Coupling Tensors:â€‰ Relativistic Density Functional Calculations for Interhalogen Diatomics. Journal of the American Chemical Society, 2002, 124, 4894-4900.	13.7	54
34	Multinuclear Magnetic Resonance Crystallographic Structure Refinement and Cross-Validation Using Experimental and Computed Electric Field Gradients: Application to Na₂Al₂B₂O₇. Journal of Physical Chemistry C, 2012, 116, 19472-19482.	3.1	52
35	Chlorine-35/37 NMR Spectroscopy of Solid Amino Acid Hydrochlorides:Â Refinement of Hydrogen-Bonded Proton Positions Using Experiment and Theory. Journal of Physical Chemistry B, 2006, 110, 26461-26470.	2.6	47
36	Spying on the boronâ€“boron triple bond using spinâ€“spin coupling measured from ¹¹B solid-state NMR spectroscopy. Chemical Science, 2015, 6, 3378-3382.	7.4	47

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37	An 17O NMR and Quantum Chemical Study of Monoclinic and Orthorhombic Polymorphs of Triphenylphosphine Oxide. Inorganic Chemistry, 2003, 42, 5085-5096.	4.0	46
38	A 95Mo and 13C solid-state NMR and relativistic DFT investigation of mesitylenetricarbonylmolybdenum(0)Ââ€“ a typical transition metal piano-stool complex. Physical Chemistry Chemical Physics, 2002, 4, 3591-3600.	2.8	45
39	Multinuclear Solid-State Magnetic Resonance and X-ray Diffraction Study of Some Thiocyanate and Selenocyanate Complexes Exhibiting Halogen Bonding. Crystal Growth and Design, 2011, 11, 4984-4995.	3.0	45
40	Weak Halogen Bonding in Solid Haloanilinium Halides Probed Directly via Chlorine-35, Bromine-81, and Iodine-127 NMR Spectroscopy. Crystal Growth and Design, 2012, 12, 1641-1653.	3.0	45
41	Mechanochemical Production of Halogen-Bonded Solids Featuring Pâ•OÂ·Â·Â·Iâ€“C Motifs and Characterization via X-ray Diffraction, Solid-State Multinuclear Magnetic Resonance, and Density Functional Theory. Journal of Physical Chemistry C, 2015, 119, 27104-27117.	3.1	45
42	Liquid-crystal NMR structure of HIV TAR RNA bound to its SELEX RNA aptamer reveals the origins of the high stability of the complex. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9210-9215.	7.1	44
43	Application of multinuclear magnetic resonance and gauge-including projector-augmented-wave calculations to the study of solid group 13 chlorides. Physical Chemistry Chemical Physics, 2009, 11, 6987.	2.8	44
44	³⁵Cl Solid-State NMR and Computational Study of Chlorine Halogen Bond Donors in Single-Component Crystalline Chloronitriles. Journal of Physical Chemistry C, 2016, 120, 11121-11130.	3.1	44
45	Chapter 5 Chlorine, Bromine, and Iodine Solid-State NMR Spectroscopy. Annual Reports on NMR Spectroscopy, 2009, 66, 195-326.	1.5	43
46	Solid-State ^{79/81}Br NMR and Gauge-Including Projector-Augmented Wave Study of Structure, Symmetry, and Hydration State in Alkaline Earth Metal Bromides. Journal of Physical Chemistry A, 2010, 114, 2102-2116.	2.5	43
47	Probing halogen bonds with solid-state NMR spectroscopy: observation and interpretation of J(⁷⁷Se,³¹P) coupling in halogen-bonded Pî€Seâ¯I motifs. CrystEngComm, 2014, 16, 7285-7297.	2.6	43
48	Insight into the Structure of Silver Cyanide from 13C and 15N Solid-State NMR Spectroscopy. Inorganic Chemistry, 2002, 41, 4131-4138.	4.0	42
49	Chemical Shift Tensors of Protonated Base Carbons in Helical RNA and DNA from NMR Relaxation and Liquid Crystal Measurements. Journal of the American Chemical Society, 2006, 128, 11443-11454.	13.7	42
50	Cosublimation: A Rapid Route Toward Otherwise Inaccessible Halogen-Bonded Architectures. Crystal Growth and Design, 2018, 18, 6227-6238.	3.0	42
51	Multinuclear Solidâ€State Magnetic Resonance as a Sensitive Probe of Structural Changes upon the Occurrence of Halogen Bonding in Coâ€crystals. Chemistry - A European Journal, 2013, 19, 11949-11962.	3.3	41
52	Boronâ€“boronJcoupling constants are unique probes of electronic structure: a solid-state NMR and molecular orbital study. Chemical Science, 2014, 5, 2428-2437.	7.4	40
53	Understanding the structural origin of crystalline phase transformations in nepheline (NaAlSiO₄)â€based glassâ€ceramics. Journal of the American Ceramic Society, 2017, 100, 2859-2878.	3.8	40
54	Sodium-23 Ssolid-Sstate Snuclear Smagnetic Sresonance of Scommercial Ssodium Snaproxen and its Ssolvates. Journal of Pharmaceutical Sciences, 2012, 101, 2930-2940.	3.3	39

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55	Ab initio characterization of through-space indirect nuclear spinâ€“spin coupling tensors for fluorine-X (X=F, C, H) spin pairs. Journal of Molecular Structure, 2002, 602-603, 463-472.	3.6	37
56	Definitive solid-state 185/187Re NMR spectral evidence for and analysis of the origin of high-order quadrupole-induced effects for I = 5/2. Physical Chemistry Chemical Physics, 2011, 13, 12413.	2.8	36
57	On the crystal structure of the vaterite polymorph of CaCO3: A calcium-43 solid-state NMR and computational assessment. Solid State Nuclear Magnetic Resonance, 2015, 65, 75-83.	2.3	36
58	A rare example of a phosphine as a halogen bond acceptor. Chemical Communications, 2018, 54, 11041-11043.	4.1	36
59	Effects of Secondary Anions on Proton Conduction in a Flexible Cationic Phosphonate Metalâ€“Organic Framework. Chemistry of Materials, 2020, 32, 679-687.	6.7	36
60	Characterization of Tricoordinate Boron Chemical Shift Tensors:Â Definitive High-Field Solid-State NMR Evidence for Anisotropic Boron Shielding. Journal of Physical Chemistry A, 2001, 105, 3633-3640.	2.5	35
61	Comparing the Halogen Bond to the Hydrogen Bond by Solidâ€State NMR Spectroscopy: Anion Coordinated Dimers from 2â€•and 3â€•Iodoethynylpyridine Salts. Chemistry - A European Journal, 2018, 24, 11364-11376.	3.3	35
62	Measuring dipolar and J coupling between quadrupolar nuclei using double-rotation NMR. Journal of Chemical Physics, 2013, 138, 174202.	3.0	34
63	¹³C and¹⁹F solid-state NMR and X-ray crystallographic study of halogen-bonded frameworks featuring nitrogen-containing heterocycles. Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 157-167.	0.5	34
64	Recent advances in solid-state nuclear magnetic resonance spectroscopy of exotic nuclei. Progress in Nuclear Magnetic Resonance Spectroscopy, 2018, 109, 160-199.	7.5	34
65	Measurement of Five Dipolar Couplings from a Single 3D NMR Multiplet Applied to the Study of RNA Dynamics. Journal of the American Chemical Society, 2004, 126, 66-67.	13.7	33
66	Alkaline-Earth Metal Carboxylates Characterized by ⁴³Ca and ⁸⁷Sr Solid-State NMR: Impact of Metal-Amine Bonding. Inorganic Chemistry, 2014, 53, 552-561.	4.0	33
67	Direct investigation of chalcogen bonds by multinuclear solid-state magnetic resonance and vibrational spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 3817-3824.	2.8	33
68	Renaissance of the coordination chemistry of 2,4,6-tris(2-pyrimidyl)-1,3,5-triazine (TPymT). Part I: First crystal structure of a TPymT complex with a d-metal cation. CrystEngComm, 2013, 15, 10419.	2.6	32
69	The role of solid-state nuclear magnetic resonance in crystal engineering. CrystEngComm, 2016, 18, 5236-5252.	2.6	32
70	Solid-state NMR spectroscopy for the analysis of element-based non-covalent interactions. Coordination Chemistry Reviews, 2020, 411, 213237.	18.8	32
71	Symmetry-Amplified J Splittings for Quadrupolar Spin Pairs: A Solid-State NMR Probe of Homoatomic Covalent Bonds. Journal of the American Chemical Society, 2013, 135, 12596-12599.	13.7	31
72	Prospects for ²⁰⁷Pb solid-state NMR studies of lead tetrel bonds. Faraday Discussions, 2017, 203, 165-186.	3.2	31

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73	Solidâ€state ¹¹B and ¹³C NMR, IR, and Xâ€ray crystallographic characterization of selected arylboronic acids and their catechol cyclic esters. Magnetic Resonance in Chemistry, 2012, 50, 388-401.	1.9	30
74	Sterically Driven Olefin Metathesis: The Impact of Alkylidene Substitution on Catalyst Activity. Organometallics, 2016, 35, 691-698.	2.3	30
75	Measurement of Ribose Carbon Chemical Shift Tensors for A-form RNA by Liquid Crystal NMR Spectroscopy. Journal of the American Chemical Society, 2005, 127, 7387-7396.	13.7	29
76	Application of Ultrahighâ€Field ⁵⁹Co Solidâ€State NMR Spectroscopy in the Investigation of the 1,2â€Polybutadiene Catalyst [Co(C₈H₁₃)(C₄H₆)]. Angewandte Chemie - International Edition, 2008, 47, 3454-3457.	13.8	29
77	Application of Correlated Residual Dipolar Couplings to the Determination of the Molecular Alignment Tensor Magnitude of Oriented Proteins and Nucleic Acids. Journal of Biomolecular NMR, 2004, 28, 273-287.	2.8	28
78	Resolution-optimized NMR measurement of 1DCH, 1DCC and 2DCH residual dipolar couplings in nucleic acid bases. Journal of Biomolecular NMR, 2004, 30, 287-301.	2.8	28
79	A solid-state ^{35/37}Cl NMR study of a chloride ion receptor and a GIPAW-DFT study of chlorine NMR interaction tensors in organic hydrochlorides. Canadian Journal of Chemistry, 2011, 89, 822-834.	1.1	28
80	Interpretation of Indirect Nuclear Spinâ^'Spin Coupling Tensors for Polyatomic Xenon Fluorides and Group 17 Fluorides:â€‰ Results from Relativistic Density-Functional Calculations. Inorganic Chemistry, 2002, 41, 3091-3101.	4.0	27
81	Solid-State 23Na NMR Study of Sodium Lariat Ether Receptors Exhibiting Cationâ^'Ï€ Interactions. Journal of Physical Chemistry A, 2006, 110, 13568-13577.	2.5	27
82	^{121/123}Sb Nuclear Quadrupole Resonance Spectroscopy: Characterization of Non-Covalent Pnictogen Bonds and NQR Crystallography. Journal of Physical Chemistry A, 2019, 123, 1030-1043.	2.5	27
83	Symmetry Properties of Indirect Nuclear Spinâ^'Spin Coupling Tensors:â€‰ First Principles Results for ClF3 and OF2. Journal of the American Chemical Society, 2000, 122, 11236-11237.	13.7	26
84	Renaissance of the coordination chemistry of 2,4,6-tris(2-pyrimidyl)-1,3,5-triazine (TPymT). Part II: new insights into the reaction of TPymT with Pb(NO₃)₂. CrystEngComm, 2014, 16, 3466-3469.	2.6	26
85	Halide ion recognition via chalcogen bonding in the solid state and in solution. Directionality and linearity. CrystEngComm, 2018, 20, 6406-6411.	2.6	26
86	Hyperfine Structure in the Rotational Spectrum of GaF: A Comparison of Experimental and Calculated Spinâ€“Rotation and Electric Field Gradient Tensors. Journal of Molecular Spectroscopy, 2000, 204, 184-194.	1.2	25
87	Experimental and Theoretical Determination of Nucleic Acid Magnetic Susceptibility:Â Importance for the Study of Dynamics by Field-Induced Residual Dipolar Couplings. Journal of the American Chemical Society, 2004, 126, 10820-10821.	13.7	25
88	Solid-State NMR Study of Halogen-Bonded Adducts. Topics in Current Chemistry, 2014, 358, 183-203.	4.0	25
89	Hybrid Material Constructed from Hg(NCS)₂ and 2,4,6â€Tris(2â€pyrimidyl)â€1,3,5â€triazine (TPymT): Coordination of TPymT in a 2,2â€²â€Bipyridineâ€Like Mode. European Journal of Inorganic Chemistry, 2015, 2015, 441-446.	2.0	25
90	4,4â€²-Dipyridyl DioxideÂ·SbF₃ Cocrystal: Pnictogen Bond Prevails over Halogen and Hydrogen Bonds in Driving Self-Assembly. Crystal Growth and Design, 2020, 20, 916-922.	3.0	25

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91	NMR crystallography of sodium diphosphates: combining dipolar, shielding, quadrupolar, diffraction, and computational information. CrystEngComm, 2013, 15, 8727.	2.6	24
92	Recent Advances in Chlorine, Bromine, and Iodine Solid-State NMR Spectroscopy. Annual Reports on NMR Spectroscopy, 2015, , 115-162.	1.5	24
93	Interaction of 2,4,6-tris(2-pyrimidyl)-1,3,5-triazine (TPymT) with CoX₂(X = Cl, Br) in water: trapping of new self-assembled waterâ€“chloride/bromide clusters in a [Co(bpca)₂]⁺host (bpca = bis(2-pyrimidylcarbonyl)amidate anion). New Journal of Chemistry, 2015, 39, 7147-7152.	2.8	23
94	Solidâ€state nuclear magnetic resonance and nuclear quadrupole resonance as complementary tools to study quadrupolar nuclei in solids. Concepts in Magnetic Resonance Part A: Bridging Education and Research, 2016, 45A, .	0.5	23
95	Chalcogen-Bonded Cocrystals of Substituted Pyridine N-Oxides and Chalcogenodiazoles: An X-ray Diffraction and Solid-State NMR Investigation. Crystal Growth and Design, 2020, 20, 7910-7920.	3.0	23
96	Ab Initio Calculations of NMR Parameters for Diatomic Molecules. An Exercise in Computational Chemistry. Journal of Chemical Education, 2001, 78, 124.	2.3	22
97	The first chromium-53 solid-state nuclear magnetic resonance spectra of diamagnetic chromium(0) and chromium(VI) compounds. Physical Chemistry Chemical Physics, 2001, 3, 5154-5157.	2.8	22
98	A Chelate-Stabilized Ruthenium(Ïƒ-pyrrolato) Complex:â€‰ Resolving Ambiguities in Nuclearity and Coordination Geometry through 1H PGSE and 31P Solid-State NMR Studies. Inorganic Chemistry, 2006, 45, 10293-10299.	4.0	22
99	Postsynthetic modification of an imine-based microporous organic network. Canadian Journal of Chemistry, 2011, 89, 577-582.	1.1	22
100	Calcium-43 chemical shift and electric field gradient tensor interplay: a sensitive probe of structure, polymorphism, and hydration. Physical Chemistry Chemical Physics, 2014, 16, 13340-13359.	2.8	22
101	Halogen-bond driven self-assembly of triangular macrocycles. New Journal of Chemistry, 2018, 42, 10467-10471.	2.8	22
102	^{79/81}Br nuclear quadrupole resonance spectroscopic characterization of halogen bonds in supramolecular assemblies. Chemical Science, 2018, 9, 4555-4561.	7.4	22
103	Mechanochemistry and cocrystallization of 3-iodoethynylbenzoic acid with nitrogen-containing heterocycles: concurrent halogen and hydrogen bonding. New Journal of Chemistry, 2018, 42, 10493-10501.	2.8	22
104	Modeling 2hJiso(N, N) in nucleic acid base pairs: ab initio characterization of the 2hJ(N, N) tensor in the methyleneimine dimer as a function of hydrogen bond geometry. , 2001, 19, 371-375.		21
105	Residual dipolar coupling between quadrupolar nuclei under magic-angle spinning and double-rotation conditions. Journal of Magnetic Resonance, 2011, 213, 82-89.	2.1	21
106	Direct Characterization of Metalâ€“Metal Bonds between Nuclei with Strong Quadrupolar Interactions via NMR Spectroscopy. Journal of Physical Chemistry Letters, 2014, 5, 4049-4054.	4.6	21
107	Oxygen-17 NMR spectroscopy of water molecules in solid hydrates. Canadian Journal of Chemistry, 2016, 94, 189-197.	1.1	21
108	Short and Linear Intermolecular Tetrel Bonds to Tin. Cocrystal Engineering with Triphenyltin Chloride. Crystal Growth and Design, 2020, 20, 2027-2034.	3.0	21

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109	A multinuclear solid-state magnetic resonance and GIPAW DFT study of anhydrous calcium chloride and its hydrates. Canadian Journal of Chemistry, 2011, 89, 754-763.	1.1	20
110	A Combined Solidâ€State NMR and Xâ€ray Crystallography Study of the Bromide Ion Environments in Triphenylphosphonium Bromides. Chemistry - A European Journal, 2012, 18, 5748-5758.	3.3	20
111	NMR Crystallography. Acta Crystallographica Section C, Structural Chemistry, 2017, 73, 126-127.	0.5	20
112	A kinetic study of mechanochemical halogen bond formation by in situ³¹P solid-state NMR spectroscopy. Chemical Communications, 2017, 53, 9930-9933.	4.1	20
113	New frontiers for solid-state NMR across the periodic table: a snapshot of modern techniques and instrumentation. Dalton Transactions, 2019, 48, 8014-8020.	3.3	20
114	Beryllium-9 NMR Study of Solid Bis(2,4-pentanedionato-O,Oâ€˜)beryllium and Theoretical Studies of 9Be Electric Field Gradient and Chemical Shielding Tensors. First Evidence for Anisotropic Beryllium Shielding. Journal of Physical Chemistry A, 1999, 103, 7364-7372.	2.5	19
115	A Solid-State Multinuclear Magnetic Resonance Investigation of Hexamethylborazine. Journal of Physical Chemistry A, 2003, 107, 726-735.	2.5	19
116	Theoretical study of homonuclear J coupling between quadrupolar spins: Single-crystal, DOR, and J-resolved NMR. Journal of Magnetic Resonance, 2014, 242, 23-32.	2.1	19
117	Structure and solubility behaviour of zinc containing phosphate glasses. Journal of Materials Chemistry B, 2015, 3, 8842-8855.	5.8	19
118	23Na double-rotation NMR of sodium nucleotides leads to the discovery of a new dCMP hendecahydrate. Physical Chemistry Chemical Physics, 2012, 14, 4677.	2.8	18
119	High sensitivity and resolution in ⁴³Ca solid-state NMR experiments. Canadian Journal of Chemistry, 2015, 93, 799-807.	1.1	18
120	Solid-state^{185/187}Re NMR and GIPAW DFT study of perrhenates and Re₂(CO)₁₀: chemical shift anisotropy, NMR crystallography, and a metalâ€“metal bond. Physical Chemistry Chemical Physics, 2015, 17, 10118-10134.	2.8	18
121	From discrete molecule, to polymer, to MOF: mapping the coordination chemistry of Cd^{II}using¹¹³Cd solid-state NMR. Chemical Communications, 2016, 52, 10680-10683.	4.1	18
122	Using 69/71Ga solid-state NMR and 127I NQR as probes to elucidate the composition of â€œGaIâ€• Polyhedron, 2012, 35, 96-100.	2.2	17
123	Observation of CHâ‹…â‹…â‹…Ï€ Interactions between Methyl and Carbonyl Groups in Proteins. Angewandte Chemie - International Edition, 2017, 56, 7564-7567.	13.8	17
124	1,3,5-Tri(iodoethynyl)-2,4,6-trifluorobenzene: halogen-bonded frameworks and NMR spectroscopic analysis. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2017, 73, 153-162.	1.1	17
125	Computational approaches and sigma-hole interactions: general discussion. Faraday Discussions, 2017, 203, 131-163.	3.2	17
126	Rapid Identification of Halogen Bonds in Coâ€Crystalline Powders via 127 I Nuclear Quadrupole Resonance Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 13479-13485.	13.8	17

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127	Single-Crystal NMR Characterization of Halogen Bonds. Journal of Physical Chemistry A, 2019, 123, 6194-6209.	2.5	17
128	Recent Advances in 11B Solid-State Nuclear Magnetic Resonance Spectroscopy of Crystalline Solids. Annual Reports on NMR Spectroscopy, 2018, , 213-279.	1.5	16
129	K-39 Quadrupolar and Chemical Shift Tensors for Organic Potassium Complexes and Diatomic Molecules. Journal of Physical Chemistry A, 2007, 111, 12859-12863.	2.5	15
130	NMR line shapes from AB spin systems in solids â€" The role of antisymmetric spinâ€"spin coupling. Canadian Journal of Chemistry, 2009, 87, 1338-1351.	1.1	15
131	First structural evidence for multiple alkali metals between sandwich decks in a metallocene. Dalton Transactions, 2012, 41, 8060.	3.3	15
132	Intercalation of Coordinatively Unsaturated Fe^{III} Ion within Interpenetrated Metalâ€"Organic Framework MOFâ€5. Chemistry - A European Journal, 2016, 22, 7711-7715.	3.3	15
133	¹¹B Solid-State NMR Interaction Tensors of Linear Two-Coordinate Boron: The Dimesitylborinium Cation. Inorganic Chemistry, 2015, 54, 11889-11896.	4.0	14
134	New Experimental Insight into the Nature of Metalâ^'Metal Bonds in Digallium Compounds: J Coupling between Quadrupolar Nuclei. Chemistry - A European Journal, 2016, 22, 9565-9573.	3.3	14
135	Dynamic Disorder and Electronic Structures of Electron-Precise Dianionic Diboranes: Insights from Solid-State Multinuclear Magnetic Resonance Spectroscopy. Journal of the American Chemical Society, 2017, 139, 8200-8211.	13.7	14
136	Enhanced spectral resolution in RNA HCP spectra for measurement of3JC2ÂPand3JC4ÂPcouplings and31P chemical shift changes upon weak alignment. Journal of Biomolecular NMR, 2004, 30, 61-70.	2.8	13
137	Measurement of Î"1J(199Hg, 31P) in [HgPCy3(OAc)2]2 and relativistic ZORA DFT investigations of mercuryâ€"phosphorus coupling tensors. Solid State Nuclear Magnetic Resonance, 2009, 36, 182-191.	2.3	13
138	²³Na magic-angle spinning and double-rotation NMR study of solid forms of sodium valproate. Canadian Journal of Chemistry, 2014, 92, 9-15.	1.1	13
139	Multinuclear Solid-State Magnetic Resonance Study of In⁺ and Ag⁺ in Neutral Weakly Coordinating Environments. Journal of Physical Chemistry Letters, 2010, 1, 3078-3084.	4.6	12
140	Insight into Magnesium Coordination Environments in Benzoate and Salicylate Complexes through 25Mg Solid-State NMR Spectroscopy. Journal of Physical Chemistry A, 2013, 117, 6561-6570.	2.5	12
141	Fieldâ€stepped ultraâ€wideline NMR at up to 36ÂT: On the inequivalence between field and frequency stepping. Magnetic Resonance in Chemistry, 2021, 59, 951-960.	1.9	12
142	Recent advances in NMR crystallography and polymorphism. Annual Reports on NMR Spectroscopy, 2021, 102, 1-80.	1.5	11
143	Experimental ¹³C and ¹H Solid-State NMR Response in Weakly Tetrel-Bonded Methyl Groups. Journal of Physical Chemistry C, 2021, 125, 2111-2123.	3.1	10
144	NMR Response of the Tetrel Bond Donor. Journal of Physical Chemistry C, 2022, 126, 851-865.	3.1	10

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