

# Ray Dupree

## List of Publications by Year in descending order

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186  
papers

7,642  
citations

47006

47  
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190  
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190  
docs citations

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times ranked

4906  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Folding of xylan onto cellulose fibrils in plant cell walls revealed by solid-state NMR. <i>Nature Communications</i> , 2016, 7, 13902.  | 12.8 | 287       |
| 2  | Negative Thermal Expansion and Phase Transitions in the ZrV <sub>2</sub> -xPxO <sub>7</sub> Series. <i>Chemistry of Materials</i> , 1995, 7, 412-417.  | 6.7  | 258       |
| 3  | A multinuclear magnetic resonance study of the structure of hydrous albite glasses. <i>Geochimica Et Cosmochimica Acta</i> , 1989, 53, 2925-2935.  | 3.9  | 222       |
| 4  | An even pattern of xylan substitution is critical for interaction with cellulose in plant cell walls. <i>Nature Plants</i> , 2017, 3, 859-865.   | 9.3  | 204       |
| 5  | NMR investigation of the structure of some bioactive and related glasses. <i>Journal of Non-Crystalline Solids</i> , 1995, 188, 207-219.   | 3.1  | 194       |
| 6  | Determination of the Si-O-Si bond angle distribution in vitreous silica by magic angle spinning NMR. <i>Nature</i> , 1984, 308, 523-525.   | 27.8 | 193       |
| 7  | The structure of soda-silica glasses: A mas NMR study. <i>Journal of Non-Crystalline Solids</i> , 1984, 68, 399-410.   | 3.1  | 185       |
| 8  | Cristobalite in Volcanic Ash of the Soufriere Hills Volcano, Montserrat, British West Indies. <i>Science</i> , 1999, 283, 1142-1145.   | 12.6 | 169       |
| 9  | Combined First-Principles Computational and Experimental Multinuclear Solid-State NMR Investigation of Amino Acids. <i>Journal of Physical Chemistry A</i> , 2005, 109, 6960-6969.                                     | 2.5  | 169       |
| 10 | Molecular architecture of softwood revealed by solid-state NMR. <i>Nature Communications</i> , 2019, 10, 4978.   | 12.8 | 157       |
| 11 | Structural and electronic transformations of liquid selenium at high temperature and pressure: A Se-77 NMR study. <i>Physical Review B</i> , 1980, 22, 2257-2275.  | 3.2  | 148       |
| 12 | NMR determinations of Si O Si bond angle distributions in silica. <i>Journal of Non-Crystalline Solids</i> , 1988, 106, 408-412.   | 3.1  | 141       |
| 13 | A High-Resolution <sup>17</sup> O and <sup>29</sup> Si NMR Study of Zeolite Siliceous Ferrierite and ab Initio Calculations of NMR Parameters. <i>Journal of the American Chemical Society</i> , 2000, 122, 4948-4958. | 13.7 | 129       |
| 14 | <sup>23</sup> Na nuclear relaxation in Na <sup>+</sup> -alumina: Barrier-height distributions and the diffusion process. <i>Physical Review B</i> , 1977, 15, 3442-3454.   | 3.2  | 124       |
| 15 | A MAS-NMR investigation of lithium silicate glasses and glass ceramics. <i>Journal of Non-Crystalline Solids</i> , 1990, 116, 148-160.   | 3.1  | 118       |
| 16 | A study of the structural role of water in hydrous silica glass using cross-polarisation magic angle spinning NMR. <i>Geochimica Et Cosmochimica Acta</i> , 1987, 51, 2869-2873.                                       | 3.9  | 116       |
| 17 | Pressure-induced bond-angle variation in amorphous SiO <sub>2</sub> . <i>Physical Review B</i> , 1987, 35, 2560-2562.  | 3.2  | 116       |
| 18 | Golgi-localized STELLO proteins regulate the assembly and trafficking of cellulose synthase complexes in Arabidopsis. <i>Nature Communications</i> , 2016, 7, 11656.   | 12.8 | 110       |

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|----|---|------|-----------|
| 19 | Magic angle spinning NMR of alkali phospho-alumino-silicate glasses. <i>Journal of Non-Crystalline Solids</i> , 1989, 112, 111-119.   | 3.1  | 107       |
| 20 | Yttrium-89 magic angle spinning NMR study of rare-earth pyrochlores: paramagnetic shifts in the solid state. <i>Journal of the American Chemical Society</i> , 1990, 112, 4670-4675.  | 13.7 | 107       |
| 21 | The structure of binary alkali silicate glasses. <i>Journal of Non-Crystalline Solids</i> , 1986, 81, 185-200.  | 3.1  | 106       |
| 22 | The interaction between water and aluminosilicate magmas. <i>Chemical Geology</i> , 1992, 96, 399-409.  | 3.3  | 100       |
| 23 | Absence of magnetic pair breaking in Zn-doped YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> . <i>Physical Review B</i> , 1993, 48, 10646-10649.   | 3.2  | 88        |
| 24 | An MAS NMR study of network - cation coordination in phosphosilicate glasses. <i>Journal of Non-Crystalline Solids</i> , 1988, 106, 403-407.  | 3.1  | 86        |
| 25 | Different water solubility mechanisms in hydrous glasses along the Qz-Ab join. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 513-526.  | 3.9  | 83        |
| 26 | Theoretical Investigation of Oxygen-17 NMR Shielding and Electric Field Gradients in Glutamic Acid Polymorphs. <i>Journal of Physical Chemistry A</i> , 2004, 108, 6032-6037.   | 2.5  | 83        |
| 27 | New perspectives on calcium environments in inorganic materials containing calcium—oxygen bonds: A combined computational—experimental <sup>43</sup> Ca NMR approach. <i>Chemical Physics Letters</i> , 2008, 464, 42-48.               | 2.6  | 83        |
| 28 | Experimental and Theoretical <sup>17</sup> O NMR Study of the Influence of Hydrogen-Bonding on CO and O—H Oxygens in Carboxylic Solids. <i>Journal of Physical Chemistry A</i> , 2006, 110, 1824-1835.                                  | 2.5  | 82        |
| 29 | Solid-State <sup>17</sup> O NMR of Amino Acids. <i>Journal of Physical Chemistry B</i> , 2004, 108, 9256-9263.  | 2.6  | 81        |
| 30 | <sup>13</sup> C MAS NMR: A method for studying CO <sub>2</sub> speciation in glasses. <i>Geochimica Et Cosmochimica Acta</i> , 1991, 55, 3879-3884.   | 3.9  | 78        |
| 31 | Probing Heteronuclear <sup>15</sup> N— <sup>17</sup> O and <sup>13</sup> C— <sup>17</sup> O Connectivities and Proximities by Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2009, 131, 1820-1834.     | 13.7 | 76        |
| 32 | A high-resolution NMR study of the lanthanum-silicon-aluminum-oxygen-nitrogen system. <i>Journal of the American Chemical Society</i> , 1989, 111, 5125-5132.   | 13.7 | 75        |
| 33 | Probing the Molecular Architecture of <i>Arabidopsis thaliana</i> Secondary Cell Walls Using Two- and Three-Dimensional <sup>13</sup> C Solid State Nuclear Magnetic Resonance Spectroscopy. <i>Biochemistry</i> , 2015, 54, 2335-2345. | 2.5  | 69        |
| 34 | High-resolution silicon-29 nuclear magnetic resonance in the Y-Si-O-N system. <i>Journal of the American Chemical Society</i> , 1988, 110, 1083-1087.   | 13.7 | 67        |
| 35 | Quantitative determination of water speciation in aluminosilicate glasses: a comparative NMR and IR spectroscopic study. <i>Chemical Geology</i> , 2001, 174, 195-208.  | 3.3  | 67        |
| 36 | Variations of Titanium Interactions in Solid State NMR Correlations to Local Structure. <i>Journal of Physical Chemistry B</i> , 2002, 106, 13176-13185.  | 2.6  | 67        |

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|----|--|------|-----------|
| 37 | Exchange enhancement of the spin susceptibility of metals. <i>Solid State Communications</i> , 1971, 9, 145-149.   | 1.9  | 64        |
| 38 | Co-ordination of Si atoms in silicon-oxynitrides determined by magic-angle-spinning NMR. <i>Journal of Materials Science Letters</i> , 1985, 4, 393-395.   | 0.5  | 62        |
| 39 | Structural influences on high-resolution yttrium-89 NMR spectra of solids. <i>Chemical Physics Letters</i> , 1988, 148, 41-44.   | 2.6  | 62        |
| 40 | Natural abundance $^{43}\text{Ca}$ solid-state NMR characterisation of hydroxyapatite: identification of the two calcium sites. <i>Magnetic Resonance in Chemistry</i> , 2008, 46, 347-350.                          | 1.9  | 60        |
| 41 | Solid-State $^{17}\text{O}$ NMR as a Probe for Structural Studies of Proteins in Biomembranes. <i>Journal of the American Chemical Society</i> , 2004, 126, 15320-15321.   | 13.7 | 58        |
| 42 | Solid-state magnesium-25 n.m.r. spectroscopy. <i>Journal of the Chemical Society Chemical Communications</i> , 1988, , 1483.   | 2.0  | 55        |
| 43 | Structural implications of water dissolution in haplogranitic glasses from NMR spectroscopy: influence of total water content and mixed alkali effect. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 2949-2964. | 3.9  | 54        |
| 44 | A High-Resolution $^{43}\text{Ca}$ Solid-State NMR Study of the Calcium Sites of Hydroxyapatite. <i>Journal of the American Chemical Society</i> , 2008, 130, 2412-2413.   | 13.7 | 54        |
| 45 | Natural abundance $^{43}\text{Ca}$ NMR study of calcium-containing organic solids: A model study for Ca-binding biomaterials. <i>Chemical Physics Letters</i> , 2006, 427, 201-205.                                  | 2.6  | 53        |
| 46 | An upper bound for the density of states at the yttrium site in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ . <i>Journal of Physics C: Solid State Physics</i> , 1988, 21, L847-L852.                                    | 1.5  | 51        |
| 47 | Symmetry-based recoupling of $^{17}\text{O}$ $^1\text{H}$ spin pairs in magic-angle spinning NMR. <i>Journal of Magnetic Resonance</i> , 2006, 179, 38-48.   | 2.1  | 49        |
| 48 | A $^{89}\text{Y}$ NMR study of substitution for copper in $\text{YBa}_2(\text{Cu}_{1-x}\text{M}_x)\text{O}_7$ . <i>Physica C: Superconductivity and Its Applications</i> , 1992, 193, 81-89.                         | 1.2  | 48        |
| 49 | Observation of NMR of the Formation of Localized Electronic States in an Ionic Liquid Alloy. <i>Physical Review Letters</i> , 1980, 45, 130-133.   | 7.8  | 46        |
| 50 | Determination of titanium NMR parameters of $\text{ATiO}_3$ compounds: correlations with structural distortion. <i>Solid State Nuclear Magnetic Resonance</i> , 2000, 15, 231-236.                                   | 2.3  | 46        |
| 51 | $\text{H}_2\text{O}$ speciation in float glass and soda lime silica glass. <i>Chemical Geology</i> , 2006, 229, 64-77.   | 3.3  | 45        |
| 52 | The effect of d electrons on crystal field potentials in rare earth metals and dilute alloys. <i>Journal of Physics F: Metal Physics</i> , 1973, 3, 118-124.   | 1.6  | 44        |
| 53 | A spectrometer designed for 6.7 and 14.1T DNP-enhanced solid-state MAS NMR using quasi-optical microwave transmission. <i>Journal of Magnetic Resonance</i> , 2012, 215, 1-9.  | 2.1  | 44        |
| 54 | Structural information about amorphous anodic alumina from $^{27}\text{Al}$ MAS NMR. <i>Philosophical Magazine Letters</i> , 1989, 59, 189-195.  | 1.2  | 43        |

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|----|--|------|-----------|
| 55 | Structural chemistry of anodic alumina. <i>Thin Solid Films</i> , 1989, 173, 209-215.  | 1.8  | 41        |
| 56 | New insights into the bonding arrangements of l- and d-glutamates from solid state $^{17}\text{O}$ NMR. <i>Chemical Physics Letters</i> , 2003, 371, 91-97.  | 2.6  | 41        |
| 57 | Determination of the bond-angle distribution in vitreous $\text{B}_2\text{O}_3$ by $^{11}\text{B}$ double rotation (DOR) NMR spectroscopy. <i>Journal of Solid State Chemistry</i> , 2009, 182, 2402-2408.   | 2.9  | 41        |
| 58 | Hydrogen Bonding in Alzheimer's Amyloid $\beta$ Fibrils Probed by $^{15}\text{N}$ $^{17}\text{O}$ REAPDOR Solid State NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10289-10292.  | 13.8 | 41        |
| 59 | The electronic properties of small metal particles: the electric polarizability. <i>Journal of Physics C: Solid State Physics</i> , 1972, 5, 408-414.  | 1.5  | 40        |
| 60 | Modulation-aided signal enhancement in the magic angle spinning NMR of spin-5/2 nuclei. <i>Chemical Physics Letters</i> , 2003, 367, 150-156.  | 2.6  | 40        |
| 61 | Water speciation in sodium silicate glasses based on NIR and NMR spectroscopy. <i>Chemical Geology</i> , 2008, 256, 231-241.   | 3.3  | 36        |
| 62 | Two-dimensional $^{43}\text{Ca}$ $^1\text{H}$ correlation solid-state NMR spectroscopy. <i>Solid State Nuclear Magnetic Resonance</i> , 2009, 35, 32-36.   | 2.3  | 34        |
| 63 | An assessment of the structural models for amorphous $\text{SiO}_2$ using MAS NMR. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1984, 50, L13-L18.                         | 0.6  | 33        |
| 64 | Structural Studies of $\text{ZrV}_2\text{-xPxO}_7$ Solid Solutions Using $^{31}\text{P}$ and $^{51}\text{V}$ Rotational Echo Double Resonance NMR. <i>The Journal of Physical Chemistry</i> , 1996, 100, 15986-15991.  | 2.9  | 33        |
| 65 | New Limits for Solid-State $^{17}\text{O}$ NMR Spectroscopy: A Complete Resolution of Multiple Oxygen Sites in a Simple Biomolecule. <i>Journal of the American Chemical Society</i> , 2006, 128, 7744-7745.   | 13.7 | 31        |
| 66 | Determination of NMR interaction parameters from double rotation NMR. <i>Journal of Magnetic Resonance</i> , 2007, 188, 246-259.   | 2.1  | 31        |
| 67 | The preparation and optical properties of small silver particles in glass. <i>Physica Status Solidi A</i> , 1972, 11, 695-703.   | 1.7  | 30        |
| 68 | Evidence for Crystalline Electric Field and Spin-Orbit Splittings for Co Impurities in Au. <i>Physical Review Letters</i> , 1977, 38, 612-615.   | 7.8  | 30        |
| 69 | A $^{89}\text{Y}$ NMR study of Pr- and Nd-doped $\text{YBa}_2\text{Cu}_3\text{O}_7$ . <i>Physica C: Superconductivity and Its Applications</i> , 1991, 181, 355-362.   | 1.2  | 30        |
| 70 | DNP enhanced NMR using a high-power 94 GHz microwave source: a study of the TEMPOL radical in toluene. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 5757.  | 2.8  | 30        |
| 71 | Ultra-high resolution $^{17}\text{O}$ solid-state NMR spectroscopy of biomolecules: A comprehensive spectral analysis of monosodium L-glutamate monohydrate. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 12213.   | 2.8  | 30        |
| 72 | $^{17}\text{O}$ NMR characterisation of the oxygen sites in the $\text{Bi}_2\text{Sr}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_{4+2n}$ ( $n = 1, 2, 3$ ) high temperature superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1991, 175, 269-278. | 1.2  | 29        |

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|----|---|------|-----------|
| 73 | Boron environments in Pyrex® glass—a high resolution, Double-Rotation NMR and thermodynamic modelling study. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 11919.  | 2.8  | 29        |
| 74 | Hemocyanin facilitates lignocellulose digestion by wood-boring marine crustaceans. <i>Nature Communications</i> , 2018, 9, 5125.  | 12.8 | 29        |
| 75 | Importance of Water in Maintaining Softwood Secondary Cell Wall Nanostructure. <i>Biomacromolecules</i> , 2021, 22, 4669-4680.  | 5.4  | 29        |
| 76 | The use of magic-angle-spinning NMR in structural studies of Si-Al-O-N phases. <i>Journal of Materials Science Letters</i> , 1984, 3, 469-470.  | 0.5  | 28        |
| 77 | Comment on “A model for H <sub>2</sub> O solubility mechanisms in albite melts from infrared spectroscopy and molecular orbital calculations” by D. Sykes and J. D. Kubicki. <i>Geochimica Et Cosmochimica Acta</i> , 1994, 58, 1377-1380.              | 3.9  | 28        |
| 78 | Structural implications of water and boron dissolution in albite glass. <i>Journal of Non-Crystalline Solids</i> , 2004, 337, 207-219.  | 3.1  | 28        |
| 79 | Gyrotron FU CW VII for 300 MHz and 600 MHz DNP-NMR Spectroscopy. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2010, 31, 763-774.   | 2.2  | 28        |
| 80 | Cation substitution in <sup>125</sup> I-tricalcium phosphate investigated using multi-nuclear, solid-state NMR. <i>Journal of Solid State Chemistry</i> , 2014, 212, 227-236.   | 2.9  | 28        |
| 81 | Enhancing resolution and sensitivity of <sup>17</sup> O solid-state NMR through combining double rotation, <sup>1</sup> H decoupling and satellite modulation for biomolecular applications. <i>Chemical Physics Letters</i> , 2006, 421, 42-46.        | 2.6  | 27        |
| 82 | Determination of the temperature dependence of the dynamic nuclear polarisation enhancement of water protons at 3.4 Tesla. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4372.   | 2.8  | 27        |
| 83 | Fluorine speciation as a function of composition in peralkaline and peraluminous Na <sub>2</sub> O–CaO–Al <sub>2</sub> O <sub>3</sub> –SiO <sub>2</sub> glasses: A multinuclear NMR study. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 132, 151-169. | 3.9  | 27        |
| 84 | NMR evidence for fluctuating, localised magnetic fields in zinc-doped YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> . <i>Physica C: Superconductivity and Its Applications</i> , 1989, 161, 9-12.                                 | 1.2  | 26        |
| 85 | Structural properties of multi-component silicon oxycarbide glasses derived from metal alkoxide precursors. <i>Journal of Non-Crystalline Solids</i> , 1996, 204, 217-227.  | 3.1  | 26        |
| 86 | Gap anisotropy, spin fluctuations, and normal-state properties of the electron-doped superconductor Sr <sub>0.9</sub> La <sub>0.1</sub> CuO <sub>2</sub> . <i>Physical Review B</i> , 2002, 65, .   | 3.2  | 26        |
| 87 | A MAS NMR structural study of cadmium phosphate glasses. <i>Journal of Non-Crystalline Solids</i> , 2002, 298, 32-42.   | 3.1  | 26        |
| 88 | <sup>27</sup> Al double rotation two-dimensional spin diffusion NMR: Complete unambiguous assignment of aluminium sites in 9Al <sub>2</sub> O <sub>3</sub> ·2B <sub>2</sub> O <sub>3</sub> . <i>Chemical Physics Letters</i> , 2006, 432, 152-156.      | 2.6  | 26        |
| 89 | <sup>77</sup> Se NMR study of the electronic instability in TiSe <sub>2</sub> . <i>Physical Review B</i> , 1977, 16, 1001-1007.   | 3.2  | 25        |
| 90 | Dynamic Nuclear Polarization enhanced NMR at 187 GHz/284 MHz using an Extended Interaction Klystron amplifier. <i>Journal of Magnetic Resonance</i> , 2016, 265, 77-82.   | 2.1  | 25        |

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|-----|--|-----|-----------|
| 91  | Crystalline electric fields of rare-earth ions in metals I. Theory. Journal of Physics F: Metal Physics, 1971, 1, 539-548.   | 1.6 | 24        |
| 92  | N.M.R. study of changes in bonding and the metal-non-metal transition in liquid caesium-antimony alloys. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1982, 46, 595-606. | 0.6 | 24        |
| 93  | A first-principles computational $^{17}\text{O}$ NMR investigation of metal ion $\text{O}^{\ominus}$ oxygen interactions in carboxylate oxygens of alkali oxalates. Chemical Physics, 2007, 337, 144-150.  | 1.9 | 24        |
| 94  | An Ab Initio Quantum Chemical Investigation of $^{43}\text{Ca}$ NMR Interaction Parameters for the $\text{Ca}^{2+}$ Sites in Organic Complexes and in Metalloproteins. Journal of Physical Chemistry A, 2008, 112, 9807-9813.                              | 2.5 | 24        |
| 95  | Conduction electron spin resonance in liquid and solid sodium. Philosophical Magazine and Journal, 1970, 21, 787-802.  | 1.7 | 23        |
| 96  | $^{15}\text{N}$ MAS NMR in the YSiAlON system. Materials Letters, 1991, 11, 195-198.   | 2.6 | 23        |
| 97  | Application of amplitude-modulated radiofrequency fields to the magic-angle spinning NMR of spin-nuclei. Journal of Magnetic Resonance, 2003, 163, 310-317.  | 2.1 | 23        |
| 98  | Thermometers for low temperature Magic Angle Spinning NMR. Journal of Magnetic Resonance, 2010, 204, 169-172.  | 2.1 | 23        |
| 99  | Golgi-localized putative S-adenosyl methionine transporters required for plant cell wall polysaccharide methylation. Nature Plants, 2022, 8, 656-669.  | 9.3 | 23        |
| 100 | Magnetic Susceptibility of the Noble Metals around Their Melting Points. Physical Review B, 1973, 8, 1780-1782.  | 3.2 | 22        |
| 101 | NMR studies of the leucite analogues $\text{X}_2\text{YSi}_5\text{O}_{12}$ , where X= K, Rb, Cs; Y = Mg, Zn, Cd. Physics and Chemistry of Minerals, 1994, 21, 176-190.   | 0.8 | 22        |
| 102 | A $^{125}\text{Te}$ and $^{23}\text{Na}$ NMR investigation of the structure and crystallisation of sodium tellurite glasses. Solid State Nuclear Magnetic Resonance, 2005, 27, 16-27.  | 2.3 | 22        |
| 103 | Solid-state $^{17}\text{O}$ NMR spectroscopy of a phospholemman transmembrane domain protein: Implications for the limits of detecting dilute $^{17}\text{O}$ sites in biomaterials. Solid State Nuclear Magnetic Resonance, 2008, 33, 72-75.              | 2.3 | 22        |
| 104 | Effect of electron correlation on the magnetic properties of expanded liquid sodium. Journal of Physics F: Metal Physics, 1983, 13, L173-L178.   | 1.6 | 21        |
| 105 | NMR evidence for common magnetic behaviour in $\text{YBa}_2\text{Cu}_4\text{O}_8$ and $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ . Physica C: Superconductivity and Its Applications, 1991, 179, 311-316.  | 1.2 | 21        |
| 106 | An NMR study of structure and ordering in synthetic $\text{K}_2\text{MgSi}_5\text{O}_{12}$ , a leucite analogue. Physics and Chemistry of Minerals, 1991, 18, 144-152.   | 0.8 | 21        |
| 107 | Structural role of zirconium in $\text{SiO}_2\text{-ZrO}_2$ gels: evidence from $^{17}\text{O}$ NMR. Journal of Materials Chemistry, 1995, 5, 1261-1263.   | 6.7 | 21        |
| 108 | $^{29}\text{Si}$ T1 relaxation in alkali silicate glasses: a method for detecting glass-in-glass phase separation. Journal of Non-Crystalline Solids, 2001, 281, 108-116.  | 3.1 | 21        |

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|-----|--|-----|-----------|
| 109 | Solid-state $^{31}\text{P}$ CP/MAS and static $^{65}\text{Cu}$ NMR characterization of polycrystalline copper(I) dialkyldithiophosphate clusters. <i>Journal of Magnetic Resonance</i> , 2006, 179, 140-145.   | 2.1 | 21        |
| 110 | Separation of isotropic chemical and second-order quadrupolar shifts by multiple-quantum double rotation NMR. <i>Journal of Magnetic Resonance</i> , 2009, 197, 229-236.   | 2.1 | 21        |
| 111 | High-resolution solid state NMR experiments for the characterization of calcium phosphate biomaterials and biominerals. <i>Journal of Materials Research</i> , 2011, 26, 2355-2368.  | 2.6 | 21        |
| 112 | Spectral assignments and NMR parameter-structure relationships in borates using high-resolution $^{11}\text{B}$ NMR and density functional theory. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 8208.  | 2.8 | 20        |
| 113 | Theory of the magnetic susceptibility of liquid metal alloys: Noble metal-tin systems. <i>Zeitschrift für Physik B Condensed Matter and Quanta</i> , 1975, 20, 275-279.  | 1.9 | 19        |
| 114 | Structure and degradation of tyranno fibres. <i>Materials Letters</i> , 1989, 8, 263-268.  | 2.6 | 19        |
| 115 | Anomalous temperature dependence of the static spin susceptibility of $\text{Tl}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ ( $T_c \approx 125$ K) in the normal state. <i>Physical Review B</i> , 1993, 47, 11529-11532.  | 3.2 | 19        |
| 116 | $^{63}\text{Cu}$ NMR shift and relaxation behavior in $\text{Tl}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ ( $T_c=125\text{K}$ ). <i>Physica C: Superconductivity and Its Applications</i> , 1994, 226, 106-112.  | 1.2 | 19        |
| 117 | The effect of Ca substitution in $\text{YBa}_2\text{Cu}_3\text{O}_7$ a $^{89}\text{Y}$ NMR study. <i>Physica C: Superconductivity and Its Applications</i> , 1995, 247, 1-6.   | 1.2 | 19        |
| 118 | $\text{H}_2\text{O}/\text{OH}$ ratio determination in hydrous aluminosilicate glasses by static proton NMR and the effect of chemical shift anisotropy. <i>Solid State Nuclear Magnetic Resonance</i> , 2000, 15, 201-207.   | 2.3 | 19        |
| 119 | $^{17}\text{O}$ satellite transition spectroscopy of amorphous $\text{SiO}_2$ . <i>Journal of Non-Crystalline Solids</i> , 1993, 155, 95-98.   | 3.1 | 17        |
| 120 | Formation of $\{\text{Cu}_6[\text{S}_2\text{P}(\text{OC}_2\text{H}_5)_2]_6\}$ on $\text{Cu}_2\text{S}$ Surfaces from Aqueous Solutions of the $\text{KS}_2\text{P}(\text{OC}_2\text{H}_5)_2$ Collector: A Scanning Electron Microscopy and Solid-State $^{31}\text{P}$ Cross-Polarization/Magic Angle Spinning and Static $^{65}\text{Cu}$ NMR Studies. <i>Langmuir</i> , 2005, 21, 4420-4424. | 3.5 | 17        |
| 121 | Spin lattice relaxation in liquid and solid potassium. <i>Philosophical Magazine and Journal</i> , 1970, 22, 657-662.  | 1.7 | 16        |
| 122 | NMR studies of lithium iodide based solid electrolytes. <i>Solid State Ionics</i> , 1983, 9-10, 131-133.   | 2.7 | 16        |
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