

# Sharon Ashbrook

## List of Publications by Year in descending order

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178  
papers

8,238  
citations

41258

49  
h-index

62479

80  
g-index

186  
all docs

186  
docs citations

186  
times ranked

7030  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | First-Principles Calculation of NMR Parameters Using the Gauge Including Projector Augmented Wave Method: A Chemist's Point of View. <i>Chemical Reviews</i> , 2012, 112, 5733-5779.  | 23.0 | 446       |
| 2  | A family of zeolites with controlled pore size prepared using a top-down method. <i>Nature Chemistry</i> , 2013, 5, 628-633.  | 6.6  | 355       |
| 3  | Solid state $^{17}\text{O}$ NMR – an introduction to the background principles and applications to inorganic materials. <i>Chemical Society Reviews</i> , 2006, 35, 718-735.  | 18.7 | 203       |
| 4  | Combining solid-state NMR spectroscopy with first-principles calculations – a guide to NMR crystallography. <i>Chemical Communications</i> , 2016, 52, 7186-7204.   | 2.2  | 202       |
| 5  | Solid-state NMR spectroscopy. <i>Nature Reviews Methods Primers</i> , 2021, 1, .  | 11.8 | 196       |
| 6  | The Polar Phase of $\text{NaNbO}_3$ : A Combined Study by Powder Diffraction, Solid-State NMR, and First-Principles Calculations. <i>Journal of the American Chemical Society</i> , 2010, 132, 8732-8746.                                     | 6.6  | 178       |
| 7  | Synthesis, characterisation and adsorption properties of microporous scandium carboxylates with rigid and flexible frameworks. <i>Microporous and Mesoporous Materials</i> , 2011, 142, 322-333.  | 2.2  | 170       |
| 8  | Protecting group and switchable pore-discriminating adsorption properties of a hydrophilic – hydrophobic metal – organic framework. <i>Nature Chemistry</i> , 2011, 3, 304-310.   | 6.6  | 141       |
| 9  | Structural information from quadrupolar nuclei in solid state NMR. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2006, 28A, 183-248.  | 0.2  | 136       |
| 10 | Hydrolytic stability in hemilabile metal – organic frameworks. <i>Nature Chemistry</i> , 2018, 10, 1096-1102.   | 6.6  | 134       |
| 11 | High-resolution NMR of quadrupolar nuclei in solids: the satellite-transition magic angle spinning (STMAS) experiment. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2004, 45, 53-108.   | 3.9  | 133       |
| 12 | Early Stage Reversed Crystal Growth of Zeolite A and Its Phase Transformation to Sodalite. <i>Journal of the American Chemical Society</i> , 2009, 131, 17986-17992.  | 6.6  | 129       |
| 13 | New Methods and Applications in Solid-State NMR Spectroscopy of Quadrupolar Nuclei. <i>Journal of the American Chemical Society</i> , 2014, 136, 15440-15456.   | 6.6  | 120       |
| 14 | Recent advances in solid-state NMR spectroscopy of quadrupolar nuclei. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 6892.   | 1.3  | 114       |
| 15 | Characterization of Structural Disorder in $\hat{^3}\text{Ga}_2\text{O}_3$ . <i>Journal of Physical Chemistry C</i> , 2014, 118, 16188-16198.   | 1.5  | 107       |
| 16 | $^{17}\text{O}$ and $^{29}\text{Si}$ NMR Parameters of $\text{MgSiO}_3$ Phases from High-Resolution Solid-State NMR Spectroscopy and First-Principles Calculations. <i>Journal of the American Chemical Society</i> , 2007, 129, 13213-13224. | 6.6  | 104       |
| 17 | Mixed – Metal MIL-100(Sc,M) (M=Al, Cr, Fe) for Lewis Acid Catalysis and Tandem $\text{C}\equiv\text{C}$ Bond Formation and Alcohol Oxidation. <i>Chemistry - A European Journal</i> , 2014, 20, 17185-17197.                                  | 1.7  | 104       |
| 18 | Zeolites with Continuously Tuneable Porosity. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 13210-13214.   | 7.2  | 104       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Synthesis and characterization of hybrid organic/inorganic nanotubes of the imogolite type and their behaviour towards methane adsorption. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 744-750.  | 1.3 | 102       |
| 20 | Multiple-quantum MAS NMR of quadrupolar nuclei. Do five-, seven- and nine-quantum experiments yield higher resolution than the three-quantum experiment?. <i>Solid State Nuclear Magnetic Resonance</i> , 2000, 16, 203-215.  | 1.5 | 100       |
| 21 | Structure and NMR assignment in calcined and as-synthesized forms of AlPO-14: a combined study by first-principles calculations and high-resolution $^{27}\text{Al}$ - $^{31}\text{P}$ MAS NMR correlation. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 5754.  | 1.3 | 95        |
| 22 | A novel structural form of MIL-53 observed for the scandium analogue and its response to temperature variation and $\text{CO}_2$ adsorption. <i>Dalton Transactions</i> , 2012, 41, 3937-3941.  | 1.6 | 95        |
| 23 | $^{23}\text{Na}$ multiple-quantum MAS NMR of the perovskites $\text{NaNbO}_3$ and $\text{NaTaO}_3$ . <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 3423-3431.   | 1.3 | 86        |
| 24 | High-Resolution $^{19}\text{F}$ MAS NMR Spectroscopy: Structural Disorder and Unusual $^{19}\text{F}$ Couplings in a Fluorinated Hydroxy-Silicate. <i>Journal of the American Chemical Society</i> , 2010, 132, 15651-15660.  | 6.6 | 83        |
| 25 | Task specific ionic liquids for the ionothermal synthesis of siliceous zeolites. <i>Chemical Science</i> , 2010, 1, 483.  | 3.7 | 81        |
| 26 | Applications of NMR Crystallography to Problems in Biomineralization: Refinement of the Crystal Structure and $^{31}\text{P}$ Solid-State NMR Spectral Assignment of Octacalcium Phosphate. <i>Journal of the American Chemical Society</i> , 2012, 134, 12508-12515.   | 6.6 | 80        |
| 27 | New Twists on the Perovskite Theme: Crystal Structures of the Elusive Phases R and S of $\text{NaNbO}_3$ . <i>Inorganic Chemistry</i> , 2012, 51, 6876-6889.  | 1.9 | 78        |
| 28 | Color and Brightness Tuning in Heteronuclear Lanthanide Terephthalate Coordination Polymers. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 3464-3476.  | 1.0 | 76        |
| 29 | Structural Chemistry, Monoclinic-to-Orthorhombic Phase Transition, and $\text{CO}_2$ Adsorption Behavior of the Small Pore Scandium Terephthalate, $\text{Sc}_2(\text{O}_2\text{CC}_6\text{H}_4\text{CO}_2)_3$ , and Its Nitro- And Amino-Functionalized Derivatives. <i>Inorganic Chemistry</i> , 2011, 50, 10844-10858. | 1.9 | 75        |
| 30 | Fast room temperature lability of aluminosilicate zeolites. <i>Nature Communications</i> , 2019, 10, 4690.  | 5.8 | 75        |
| 31 | Dynamics on the Microsecond Timescale in Microporous Aluminophosphate AlPO-14 as Evidenced by $^{27}\text{Al}$ MQMAS and STMAS NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2006, 128, 8054-8062.  | 6.6 | 72        |
| 32 | Satellite-Transition MAS NMR of Spin $I=3/2, 5/2, 7/2,$ and $9/2$ Nuclei: Sensitivity, Resolution, and Practical Implementation. <i>Journal of Magnetic Resonance</i> , 2002, 156, 269-281.   | 1.2 | 71        |
| 33 | Recent developments in solid-state NMR spectroscopy of crystalline microporous materials. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 8223-8242.   | 1.3 | 69        |
| 34 | Motional broadening: an important distinction between multiple-quantum and satellite-transition MAS NMR of quadrupolar nuclei. <i>Chemical Physics Letters</i> , 2002, 364, 634-642.  | 1.2 | 67        |
| 35 | First-principles calculations of solid-state $^{17}\text{O}$ and $^{29}\text{Si}$ NMR spectra of $\text{Mg}_2\text{SiO}_4$ polymorphs. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 1587-1598.   | 1.3 | 65        |
| 36 | Control of polymorphism in $\text{NaNbO}_3$ by hydrothermal synthesis. <i>Chemical Communications</i> , 2009, , 68-70.  | 2.2 | 65        |

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|----|---|-----|-----------|
| 37 | Exploiting NMR spectroscopy for the study of disorder in solids. <i>International Reviews in Physical Chemistry</i> , 2017, 36, 39-115.   | 0.9 | 65        |
| 38 | High-resolution solid-state <sup>13</sup> C NMR spectroscopy of the paramagnetic metal-organic frameworks, STAM-1 and HKUST-1. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 919-929.                                    | 1.3 | 64        |
| 39 | In situ solid-state NMR and XRD studies of the ADOR process and the unusual structure of zeolite IPC-6. <i>Nature Chemistry</i> , 2017, 9, 1012-1018.   | 6.6 | 63        |
| 40 | Cation Disorder in Pyrochlore Ceramics: <sup>89</sup> Y MAS NMR and First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2009, 113, 18874-18883.   | 1.5 | 62        |
| 41 | Solid-State <sup>17</sup> O NMR Spectroscopy of Hydrous Magnesium Silicates: Evidence for Proton Dynamics. <i>Journal of Physical Chemistry C</i> , 2009, 113, 465-471.   | 1.5 | 61        |
| 42 | <sup>2</sup> H double-quantum MAS NMR spectroscopy as a probe of dynamics on the microsecond timescale in solids. <i>Chemical Physics Letters</i> , 2006, 423, 276-281.   | 1.2 | 58        |
| 43 | Multirate delivery of multiple therapeutic agents from metal-organic frameworks. <i>APL Materials</i> , 2014, 2, .  | 2.2 | 58        |
| 44 | Isothermal <sup>17</sup> O enrichment of oxides using microlitre quantities of labelled water. <i>Chemical Science</i> , 2012, 3, 2293.   | 3.7 | 57        |
| 45 | The pyrochlore to defect fluorite phase transition in Y <sub>2</sub> Sn <sub>2</sub> xZrxO <sub>7</sub> . <i>RSC Advances</i> , 2013, 3, 5090.  | 1.7 | 55        |
| 46 | Exploiting Periodic First-Principles Calculations in NMR Spectroscopy of Disordered Solids. <i>Accounts of Chemical Research</i> , 2013, 46, 1964-1974.   | 7.6 | 53        |
| 47 | Multiple-quantum cross-polarization in MAS NMR of quadrupolar nuclei. <i>Chemical Physics Letters</i> , 1998, 288, 509-517.   | 1.2 | 52        |
| 48 | Multiple-Quantum Cross-Polarization and Two-Dimensional MQMAS NMR of Quadrupolar Nuclei. <i>Journal of Magnetic Resonance</i> , 2000, 147, 238-249.   | 1.2 | 52        |
| 49 | DFT calculations of quadrupolar solid-state NMR properties: Some examples in solid-state inorganic chemistry. <i>Journal of Computational Chemistry</i> , 2008, 29, 2279-2287.  | 1.5 | 52        |
| 50 | <sup>93</sup> Nb NMR and DFT investigation of the polymorphs of NaNbO <sub>3</sub> . <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 7565.   | 1.3 | 50        |
| 51 | <sup>119</sup> Sn MAS NMR and first-principles calculations for the investigation of disorder in stannate pyrochlores. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 488-497.  | 1.3 | 49        |
| 52 | Synthesis and crystal chemistry of the STA-12 family of metal N,N'-piperazinebis(methylenephosphonate)s and applications of STA-12(Ni) in the separation of gases. <i>Microporous and Mesoporous Materials</i> , 2012, 157, 3-17. | 2.2 | 49        |
| 53 | Cost-effective <sup>17</sup> O enrichment and NMR spectroscopy of mixed-metal terephthalate metal-organic frameworks. <i>Chemical Science</i> , 2018, 9, 850-859.   | 3.7 | 49        |
| 54 | Spin-locking of half-integer quadrupolar nuclei in nuclear magnetic resonance of solids: Second-order quadrupolar and resonance offset effects. <i>Journal of Chemical Physics</i> , 2009, 131, 194509.                           | 1.2 | 48        |

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|----|--|-----|-----------|
| 55 | Facile, Room-Temperature <sup>17</sup> O Enrichment of Zeolite Frameworks Revealed by Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2020, 142, 900-906.  | 6.6 | 48        |
| 56 | 89Y Magic-Angle Spinning NMR of Y <sub>2</sub> Ti <sub>2-x</sub> Sn <sub>x</sub> O <sub>7</sub> Pyrochlores. <i>Journal of Physical Chemistry B</i> , 2006, 110, 10358-10364.  | 1.2 | 47        |
| 57 | Recent Advances in Solid-State Nuclear Magnetic Resonance Spectroscopy. <i>Annual Review of Analytical Chemistry</i> , 2018, 11, 485-508.  | 2.8 | 45        |
| 58 | Molecular Modeling, Multinuclear NMR, and Diffraction Studies in the Templated Synthesis and Characterization of the Aluminophosphate Molecular Sieve STA-2. <i>Journal of Physical Chemistry C</i> , 2010, 114, 12698-12710.        | 1.5 | 44        |
| 59 | A co-templating route to the synthesis of Cu SAPO STA-7, giving an active catalyst for the selective catalytic reduction of NO. <i>Microporous and Mesoporous Materials</i> , 2011, 146, 36-47.                                      | 2.2 | 44        |
| 60 | Single- and multiple-quantum cross-polarization in NMR of quadrupolar nuclei in static samples. <i>Molecular Physics</i> , 2000, 98, 1-26.   | 0.8 | 42        |
| 61 | Multinuclear Magnetic Resonance and DFT Studies of the Poly(chlorotrifluoroethylene- <i>i&gt;alt&lt;/i&gt;-ethyl vinyl ether) Copolymers. <i>Macromolecules</i>, 2009, 42, 5652-5659.</i>  | 2.2 | 42        |
| 62 | Synthesis, Isotopic Enrichment, and Solid-State NMR Characterization of Zeolites Derived from the Assembly, Disassembly, Organization, Reassembly Process. <i>Journal of the American Chemical Society</i> , 2017, 139, 5140-5148.   | 6.6 | 42        |
| 63 | Exploiting the Chemical Shielding Anisotropy to Probe Structure and Disorder in Ceramics: 89Y MAS NMR and First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2012, 116, 4273-4286.                              | 1.5 | 41        |
| 64 | Water in the Earth's mantle: a solid-state NMR study of hydrous wadsleyite. <i>Chemical Science</i> , 2013, 4, 1523.   | 3.7 | 41        |
| 65 | Transformation of AlPO-53 to JDF-2: Reversible Dehydration of a Templated Aluminophosphate Studied by MAS NMR and Diffraction. <i>Journal of Physical Chemistry C</i> , 2009, 113, 10780-10789.                                      | 1.5 | 40        |
| 66 | A Bifunctional MOF Catalyst Containing Metal-Phosphine and Lewis Acidic Active Sites. <i>Chemistry - A European Journal</i> , 2018, 24, 15309-15318.   | 1.7 | 40        |
| 67 | <sup>17</sup> O Multiple-Quantum MAS NMR Study of High-Pressure Hydrous Magnesium Silicates. <i>Journal of the American Chemical Society</i> , 2001, 123, 6360-6366.   | 6.6 | 39        |
| 68 | Structural Study of La <sub>2-x</sub> Y <sub>x</sub> ScO <sub>3</sub> , Combining Neutron Diffraction, Solid-State NMR, and First-Principles DFT Calculations. <i>Journal of Physical Chemistry C</i> , 2013, 117, 2252-2265.        | 1.5 | 39        |
| 69 | Structure and NMR assignment in AlPO <sub>4</sub> -15: A combined study by diffraction, MAS NMR and first-principles calculations. <i>Solid State Sciences</i> , 2009, 11, 1001-1006.  | 1.5 | 38        |
| 70 | Noncovalent Interactions in Peri-Substituted Chalconium Acenaphthene and Naphthalene Salts: A Combined Experimental, Crystallographic, Computational, and Solid-State NMR Study. <i>Inorganic Chemistry</i> , 2012, 51, 11087-11097. | 1.9 | 38        |
| 71 | Three- and five-quantum <sup>17</sup> O MAS NMR of forsterite Mg <sub>2</sub> SiO <sub>4</sub> . <i>American Mineralogist</i> , 1999, 84, 1191-1194.   | 0.9 | 37        |
| 72 | <sup>17</sup> O Multiple-Quantum MAS NMR Study of Pyroxenes. <i>Journal of Physical Chemistry B</i> , 2002, 106, 773-778.  | 1.2 | 37        |

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|----|---|-----|-----------|
| 73 | Relative Orientation of Quadrupole Tensors from Two-Dimensional Multiple-Quantum MAS NMR. <i>Journal of the American Chemical Society</i> , 2001, 123, 8135-8136.   | 6.6 | 35        |
| 74 | Novel Large-Pore Aluminophosphate Molecular Sieve STA-15 Prepared Using the Tetrapropylammonium Cation As a Structure Directing Agent. <i>Chemistry of Materials</i> , 2010, 22, 338-346.   | 3.2 | 35        |
| 75 | Synthesis of Chiral MOF-74 Frameworks by Post-Synthetic Modification by Using an Amino Acid. <i>Chemistry - A European Journal</i> , 2020, 26, 13957-13965.   | 1.7 | 35        |
| 76 | High-Resolution $^{17}\text{O}$ NMR Spectroscopy of Wadsleyite ( $\text{Mg}_2\text{SiO}_4$ ). <i>Journal of the American Chemical Society</i> , 2003, 125, 11824-11825.   | 6.6 | 34        |
| 77 | Towards homonuclear J solid-state NMR correlation experiments for half-integer quadrupolar nuclei: experimental and simulated $^{11}\text{B}$ MAS spin-echo dephasing and calculated $2J_{\text{BB}}$ coupling constants for lithium diborate. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 5778. | 1.3 | 34        |
| 78 | Determining the Surface Structure of Silicated Alumina Catalysts via Isotopic Enrichment and Dynamic Nuclear Polarization Surface-Enhanced NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 22977-22984.   | 1.5 | 34        |
| 79 | $^{17}\text{O}$ NMR spectroscopy of crystalline microporous materials. <i>Chemical Science</i> , 2021, 12, 5016-5036.   | 3.7 | 33        |
| 80 | Relative Orientation of Quadrupole Tensors from High-Resolution NMR of Powdered Solids. <i>Journal of Physical Chemistry A</i> , 2002, 106, 9470-9478.  | 1.1 | 32        |
| 81 | Correlating fast and slow chemical shift spinning sideband patterns in solid-state NMR. <i>Journal of Magnetic Resonance</i> , 2005, 174, 301-309.  | 1.2 | 32        |
| 82 | Calculating NMR parameters in aluminophosphates: evaluation of dispersion correction schemes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 2660.  | 1.3 | 32        |
| 83 | Two-dimensional satellite-transition MAS NMR of quadrupolar nuclei: shifted echoes, high-spin nuclei and resolution. <i>Chemical Physics Letters</i> , 2001, 345, 400-408.  | 1.2 | 31        |
| 84 | Spin-locking of half-integer quadrupolar nuclei in nuclear magnetic resonance of solids: Creation and evolution of coherences. <i>Journal of Chemical Physics</i> , 2004, 120, 2719-2731.   | 1.2 | 31        |
| 85 | Unusual Phase Behavior in the Piezoelectric Perovskite System, $\text{Li}_x\text{Na}_{1-x}\text{NbO}_3$ . <i>Inorganic Chemistry</i> , 2013, 52, 8872-8880.   | 1.9 | 31        |
| 86 | Exploiting Synthetic Conditions to Promote Structural Diversity within the Scandium(III)/Pyrimidine-4,6-dicarboxylate System. <i>Crystal Growth and Design</i> , 2015, 15, 2352-2363.   | 1.4 | 31        |
| 87 | $^{27}\text{Al}$ Multiple-Quantum Magic Angle Spinning NMR Study of the Thermal Transformation between the Microporous Aluminum Methylphosphonates $\text{AlMePO-}\beta$ and $\text{AlMePO-}\gamma$ . <i>Journal of Physical Chemistry B</i> , 1999, 103, 812-817.  | 1.2 | 30        |
| 88 | Dynamics on the microsecond timescale in hydrous silicates studied by solid-state $^2\text{H}$ NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 2989.   | 1.3 | 30        |
| 89 | <i>Peri</i> -Substituted Phosphorus-Tellurium Systems: An Experimental and Theoretical Investigation of the $\text{P}\text{-}\hat{\text{A}}\text{-}\hat{\text{A}}\text{-Te}$ through-Space Interaction. <i>Inorganic Chemistry</i> , 2015, 54, 2435-2446.   | 1.9 | 30        |
| 90 | Solid-state $^{17}\text{O}$ nuclear magnetic resonance spectroscopy without isotopic enrichment: direct detection of bridging oxygen in radiation damaged zircon. <i>Solid State Nuclear Magnetic Resonance</i> , 2004, 26, 105-112.  | 1.5 | 29        |

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|-----|---|-----|-----------|
| 91  | Satellite-Transition MAS NMR of Low- $^{13}\text{C}$ Nuclei at Natural Abundance: $\hat{\Delta}$ Sensitivity, Practical Implementation, and Application to $^{39}\text{K}$ ( $I = 3/2$ ) and $^{25}\text{Mg}$ ( $I = 5/2$ ). <i>Journal of Physical Chemistry B</i> , 2004, 108, 13292-13299. | 1.2 | 29        |
| 92  | Ensemble-Based Modeling of the NMR Spectra of Solid Solutions: Cation Disorder in $\text{Y}_{2}(\text{Sn,Ti})_{2}\text{O}_{7}$ . <i>Journal of the American Chemical Society</i> , 2019, 141, 17838-17846.  | 6.6 | 29        |
| 93  | Second-order cross-term interactions in high-resolution MAS NMR of quadrupolar nuclei. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2009, 55, 160-181.  | 3.9 | 28        |
| 94  | Application of NMR crystallography to the determination of the mechanism of charge-balancing in organocation-templated $\text{AlPO STA-2}$ . <i>CrystEngComm</i> , 2013, 15, 8668.  | 1.3 | 28        |
| 95  | Probing interactions through space using spin-spin coupling. <i>Dalton Transactions</i> , 2014, 43, 6548-6560.  | 1.6 | 28        |
| 96  | An NMR Crystallographic Investigation of the Relationships between the Crystal Structure and $^{29}\text{Si}$ Isotropic Chemical Shift in Silica Zeolites. <i>Journal of Physical Chemistry C</i> , 2017, 121, 15198-15210.   | 1.5 | 28        |
| 97  | Perspective: Current advances in solid-state NMR spectroscopy. <i>Journal of Chemical Physics</i> , 2018, 149, 040901.  | 1.2 | 28        |
| 98  | Synthesis and Polymorphism of Mixed Aluminum-Gallium Oxides. <i>Inorganic Chemistry</i> , 2020, 59, 3805-3816.  | 1.9 | 28        |
| 99  | Synthesis of ZIF-93/11 Hybrid Nanoparticles via Post-Synthetic Modification of ZIF-93 and Their Use for $\text{H}_{2}/\text{CO}_{2}$ Separation. <i>Chemistry - A European Journal</i> , 2018, 24, 11211-11219.   | 1.7 | 27        |
| 100 | Rotor-synchronized acquisition of quadrupolar satellite-transition NMR spectra: practical aspects and double-quantum filtration. <i>Journal of Magnetic Resonance</i> , 2005, 177, 44-55.   | 1.2 | 26        |
| 101 | Characterisation of the $(\text{Y}_{1-x}\text{La}_x)_2\text{Ti}_2\text{O}_7$ system by powder diffraction and nuclear magnetic resonance methods. <i>Journal of Materials Chemistry</i> , 2006, 16, 4665-4674.  | 6.7 | 26        |
| 102 | Visualization of the effect of additives on the nanostructures of individual bio-inspired calcite crystals. <i>Chemical Science</i> , 2019, 10, 1176-1185.  | 3.7 | 26        |
| 103 | $^{77}\text{Se}$ Solid-State NMR of Inorganic and Organoselenium Systems: A Combined Experimental and Computational Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10859-10872.   | 1.5 | 25        |
| 104 | Observation of "hidden" magnesium: First-principles calculations and $^{25}\text{Mg}$ solid-state NMR of enstatite. <i>Solid State Nuclear Magnetic Resonance</i> , 2011, 40, 91-99.  | 1.5 | 25        |
| 105 | A Multinuclear NMR Study of Six Forms of $\text{AlPO-34}$ : Structure and Motional Broadening. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1781-1793.   | 1.5 | 25        |
| 106 | High-Resolution NMR Spectroscopy of Quadrupolar Nuclei in Solids: $\hat{\Delta}$ Satellite-Transition MAS with Self-Compensation for Magic-Angle Misset. <i>Journal of the American Chemical Society</i> , 2002, 124, 11602-11603.  | 6.6 | 24        |
| 107 | High-resolution $^{17}\text{O}$ MAS NMR spectroscopy of forsterite ( $\hat{\Delta}\text{-Mg}_2\text{SiO}_4$ ), wadsleyite ( $\hat{\Delta}\text{-Mg}_2\text{SiO}_4$ ), and ringwoodite ( $\hat{\Delta}\text{-Mg}_2\text{SiO}_4$ ). <i>American Mineralogist</i> , 2005, 90, 1861-1870.         | 0.9 | 24        |
| 108 | A Multinuclear Solid-State NMR Study of Templated and Calcined Chabazite-Type $\text{GaPO-34}$ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 15048-15057.   | 1.5 | 24        |

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|-----|---|-----|-----------|
| 109 | Unusual Intermolecular "Through-Space" Couplings in Se Heterocycles. <i>Journal of the American Chemical Society</i> , 2015, 137, 6172-6175.  | 6.6 | 24        |
| 110 | Octaselenocyclododecane. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4123-4126.  | 7.2 | 23        |
| 111 | Investigating Relationships between the Crystal Structure and <sup>31</sup> P Isotropic Chemical Shifts in Calcined Aluminophosphates. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23285-23296.                           | 1.5 | 23        |
| 112 | Exploring the self-assembly and energy transfer of dynamic supramolecular iridium-porphyrin systems. <i>Dalton Transactions</i> , 2016, 45, 17195-17205.  | 1.6 | 23        |
| 113 | Modulator-Controlled Synthesis of Microporous STA-26, an Interpenetrated 8,3-Connected Zirconium MOF with the <i>the</i> Topology, and its Reversible Lattice Shift. <i>Chemistry - A European Journal</i> , 2018, 24, 6115-6126. | 1.7 | 23        |
| 114 | New insights into phase distribution, phase composition and disorder in Y <sub>2</sub> (Zr,Sn) <sub>2</sub> O <sub>7</sub> ceramics from NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9049-9059.      | 1.3 | 22        |
| 115 | Paramagnetic NMR of Phenolic Oxime Copper Complexes: A Joint Experimental and Density Functional Study. <i>Chemistry - A European Journal</i> , 2016, 22, 15328-15339.  | 1.7 | 22        |
| 116 | STA-27, a porous Lewis acidic scandium MOF with an unexpected topology type prepared with 2,3,5,6-tetrakis(4-carboxyphenyl)pyrazine. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5685-5701.                                | 5.2 | 22        |
| 117 | A procedure for identifying possible products in the assembly "disassembly" organization "reassembly (ADOR) synthesis of zeolites. <i>Nature Protocols</i> , 2019, 14, 781-794.   | 5.5 | 22        |
| 118 | A multiple-quantum <sup>23</sup> Na MAS NMR study of amorphous sodium gallium silicate zeolite precursors. <i>Journal of Materials Chemistry</i> , 2002, 12, 1469-1474.   | 6.7 | 21        |
| 119 | Detecting solid-state reactivity in 10-hydroxy-10,9-boroxophenanthrene using NMR spectroscopy. <i>Tetrahedron</i> , 2010, 66, 6238-6250.  | 1.0 | 21        |
| 120 | Investigation of zeolitic imidazolate frameworks using <sup>13</sup> C and <sup>15</sup> N solid-state NMR spectroscopy. <i>Solid State Nuclear Magnetic Resonance</i> , 2017, 87, 54-64.   | 1.5 | 21        |
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