

John Griffin

List of Publications by Year in descending order

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66
papers

4,394
citations

147566

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106150

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69
all docs

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docs citations

69
times ranked

5283
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | New Perspectives on the Charging Mechanisms of Supercapacitors. Journal of the American Chemical Society, 2016, 138, 5731-5744. | 6.6 | 529 |
| 2 | First-Principles Calculation of NMR Parameters Using the Gauge Including Projector Augmented Wave Method: A Chemist's Point of View. Chemical Reviews, 2012, 112, 5733-5779. | 23.0 | 446 |
| 3 | In situ NMR and electrochemical quartz crystal microbalance techniques reveal the structure of the electrical double layer in supercapacitors. Nature Materials, 2015, 14, 812-819. | 13.3 | 296 |
| 4 | Direct observation of ion dynamics in supercapacitor electrodes using in situ diffusion NMR spectroscopy. Nature Energy, 2017, 2, . | 19.8 | 285 |
| 5 | High-Rate Intercalation without Nanostructuring in Metastable Nb ₂ O ₅ Bronze Phases. Journal of the American Chemical Society, 2016, 138, 8888-8899. | 6.6 | 247 |
| 6 | Low cost and renewable sulfur-polymers by inverse vulcanisation, and their potential for mercury capture. Journal of Materials Chemistry A, 2017, 5, 11682-11692. | 5.2 | 187 |
| 7 | NMR Study of Ion Dynamics and Charge Storage in Ionic Liquid Supercapacitors. Journal of the American Chemical Society, 2015, 137, 7231-7242. | 6.6 | 182 |
| 8 | In Situ NMR Spectroscopy of Supercapacitors: Insight into the Charge Storage Mechanism. Journal of the American Chemical Society, 2013, 135, 18968-18980. | 6.6 | 152 |
| 9 | Catalytic inverse vulcanization. Nature Communications, 2019, 10, 647. | 5.8 | 143 |
| 10 | 2021 roadmap for sodium-ion batteries. JPhys Energy, 2021, 3, 031503. | 2.3 | 125 |
| 11 | Quantifying Weak Hydrogen Bonding in Uracil and 4-Cyano-4-ethynylbiphenyl: A Combined Computational and Experimental Investigation of NMR Chemical Shifts in the Solid State. Journal of the American Chemical Society, 2008, 130, 945-954. | 6.6 | 112 |
| 12 | Ring Current Effects: Factors Affecting the NMR Chemical Shift of Molecules Adsorbed on Porous Carbons. Journal of Physical Chemistry C, 2014, 118, 7508-7514. | 1.5 | 110 |
| 13 | Expanding the chemistry of borates with functional [BO ₂] ⁻ anions. Nature Communications, 2021, 12, 2597. | 5.8 | 99 |
| 14 | Ion counting in supercapacitor electrodes using NMR spectroscopy. Faraday Discussions, 2014, 176, 49-68. | 1.6 | 95 |
| 15 | New Insights into the Structure of Nanoporous Carbons from NMR, Raman, and Pair Distribution Function Analysis. Chemistry of Materials, 2015, 27, 6848-6857. | 3.2 | 88 |
| 16 | High-Resolution ¹⁹ F MAS NMR Spectroscopy: Structural Disorder and Unusual ¹⁹ F/ ¹⁹ F Couplings in a Fluorinated Hydroxy-Silicate. Journal of the American Chemical Society, 2010, 132, 15651-15660. | 6.6 | 83 |
| 17 | Complete ¹ H resonance assignment of ¹² C-maltose from ¹ H- ¹ H DQ-SQ CRAMPS and ¹ H (DQ-DUMBO)- ¹³ C SQ refocused INEPT 2D solid-state NMR spectra and first principles GIPAW calculations. Physical Chemistry Chemical Physics, 2010, 12, 6970. | 1.3 | 83 |
| 18 | Nuclear magnetic resonance study of ion adsorption on microporous carbide-derived carbon. Physical Chemistry Chemical Physics, 2013, 15, 7722. | 1.3 | 77 |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Structural Chemistry, Monoclinic-to-Orthorhombic Phase Transition, and CO ₂ Adsorption Behavior of the Small Pore Scandium Terephthalate, Sc ₂ (O ₂ CC ₆ H ₄ CO ₂) ₃ , and Its Nitro- And Amino-Functionalized Derivatives. <i>Inorganic Chemistry</i> , 2011, 50, 10844-10858. | 1.9 | 75 |
| 20 | Donor-acceptor stacking arrangements in bulk and thin-film high-mobility conjugated polymers characterized using molecular modelling and MAS and surface-enhanced solid-state NMR spectroscopy. <i>Chemical Science</i> , 2017, 8, 3126-3136. | 3.7 | 64 |
| 21 | Ionothermal ¹⁷ O enrichment of oxides using microlitre quantities of labelled water. <i>Chemical Science</i> , 2012, 3, 2293. | 3.7 | 57 |
| 22 | Characterization of the Dynamics in the Protonic Conductor CsH ₂ PO ₄ by ¹⁷ O Solid-State NMR Spectroscopy and First-Principles Calculations: Correlating Phosphate and Protonic Motion. <i>Journal of the American Chemical Society</i> , 2015, 137, 3867-3876. | 6.6 | 53 |
| 23 | Lithium Conductivity and Ions Dynamics in LiBH ₄ /SiO ₂ Solid Electrolytes Studied by Solid-State NMR and Quasi-Elastic Neutron Scattering and Applied in Lithium-Sulfur Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15264-15275. | 1.5 | 51 |
| 24 | Solid-state NMR studies of supercapacitors. <i>Solid State Nuclear Magnetic Resonance</i> , 2016, 74-75, 16-35. | 1.5 | 49 |
| 25 | Recent Advances in Solid-State Nuclear Magnetic Resonance Spectroscopy. <i>Annual Review of Analytical Chemistry</i> , 2018, 11, 485-508. | 2.8 | 45 |
| 26 | 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 |
| 27 | Perspectives for next generation lithium-ion battery cathode materials. <i>APL Materials</i> , 2021, 9, . | 2.2 | 44 |
| 28 | Water in the Earth's mantle: a solid-state NMR study of hydrous wadsleyite. <i>Chemical Science</i> , 2013, 4, 1523. | 3.7 | 41 |
| 29 | 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 |
| 30 | Permselective ion electrosorption of subnanometer pores at high molar strength enables capacitive deionization of saline water. <i>Sustainable Energy and Fuels</i> , 2020, 4, 1285-1295. | 2.5 | 34 |
| 31 | Long-Term Solar Energy Storage under Ambient Conditions in a MOF-Based Solid-Solid Phase-Change Material. <i>Chemistry of Materials</i> , 2020, 32, 9925-9936. | 3.2 | 33 |
| 32 | Continuous silicon oxycarbide fiber mats with tin nanoparticles as a high capacity anode for lithium-ion batteries. <i>Sustainable Energy and Fuels</i> , 2018, 2, 215-228. | 2.5 | 32 |
| 33 | Ion Dynamics in Li ₂ CO ₃ Studied by Solid-State NMR and First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2015, 119, 24255-24264. | 1.5 | 31 |
| 34 | Dynamics on the microsecond timescale in hydrous silicates studied by solid-state ² H NMR spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 2989. | 1.3 | 30 |
| 35 | Lattice simulation method to model diffusion and NMR spectra in porous materials. <i>Journal of Chemical Physics</i> , 2015, 142, 094701. | 1.2 | 28 |
| 36 | ⁷⁷ 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 |

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| 37 | Observation of ^{25}Mg hidden magnesium: First-principles calculations and ^{25}Mg solid-state NMR of enstatite. <i>Solid State Nuclear Magnetic Resonance</i> , 2011, 40, 91-99. | 1.5 | 25 |
| 38 | A Multinuclear NMR Study of Six Forms of AlPO-34: Structure and Motional Broadening. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1781-1793. | 1.5 | 25 |
| 39 | A Multinuclear Solid-State NMR Study of Templated and Calcined Chabazite-Type GaPO-34. <i>Journal of Physical Chemistry C</i> , 2012, 116, 15048-15057. | 1.5 | 24 |
| 40 | NMR studies of adsorption and diffusion in porous carbonaceous materials. <i>Progress in Nuclear Magnetic Resonance Spectroscopy</i> , 2021, 124-125, 57-84. | 3.9 | 19 |
| 41 | Factors affecting the nucleus-independent chemical shift in NMR studies of microporous carbon electrode materials. <i>Energy Storage Materials</i> , 2019, 21, 335-346. | 9.5 | 18 |
| 42 | Ion Dynamics and CO_2 Absorption Properties of Nb-, Ta-, and Y-Doped Li_2ZrO_3 Studied by Solid-State NMR, Thermogravimetry, and First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2017, 121, 21877-21886. | 1.5 | 17 |
| 43 | Metal organic frameworks for hydrogen purification. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 23380-23405. | 3.8 | 17 |
| 44 | Surface Engineering Strategy Using Urea To Improve the Rate Performance of $\text{Na}_2\text{Ti}_3\text{O}_7$ in Na-Ion Batteries. <i>Chemistry - A European Journal</i> , 2021, 27, 3875-3886. | 1.7 | 14 |
| 45 | A Picture of Disorder in Hydrated Wadsleyite Under the Combined Microscope of Solid-State NMR Spectroscopy and Ab Initio Random Structure Searching. <i>Journal of the American Chemical Society</i> , 2019, 141, 3024-3036. | 6.6 | 13 |
| 46 | Efficient solid-state photoswitching of methoxyazobenzene in a metal-organic framework for thermal energy storage. <i>Chemical Science</i> , 2022, 13, 3014-3019. | 3.7 | 11 |
| 47 | Selective observation of charge storing ions in supercapacitor electrode materials. <i>Solid State Nuclear Magnetic Resonance</i> , 2018, 89, 45-49. | 1.5 | 10 |
| 48 | Crystalline azobenzene composites as photochemical phase-change materials. <i>New Journal of Chemistry</i> , 2022, 46, 4057-4061. | 1.4 | 9 |
| 49 | Effect of Transition Metal Substitution on the Flexibility and Thermal Properties of MOF-Based Solid Phase Change Materials. <i>Inorganic Chemistry</i> , 2021, 60, 12950-12960. | 1.9 | 8 |
| 50 | Observing Solvent Dynamics in Porous Carbons by Nuclear Magnetic Resonance. <i>Johnson Matthey Technology Review</i> , 2020, 64, 152-164. | 0.5 | 7 |
| 51 | Revealing Local Dynamics of the Protonic Conductor $\text{CsH}(\text{PO}_3\text{H})$ by Solid-State NMR Spectroscopy and First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27830-27838. | 1.5 | 6 |
| 52 | Drug orientations within statin-loaded lipoprotein nanoparticles by ^{19}F solid-state NMR. <i>Chemical Communications</i> , 2019, 55, 13287-13290. | 2.2 | 6 |
| 53 | A Combined ^{25}Mg Solid-State NMR and Ab Initio DFT Approach to Probe the Local Structural Differences in Magnesium Acetate Phases $\text{Mg}(\text{CH}_3\text{COO})_2 \cdot n\text{H}_2\text{O}$ ($n=0, 1, 4$). <i>ChemPhysChem</i> , 2018, 19, 1722-1732. | | |
| 54 | Mesoscopic simulations of the in situ NMR spectra of porous carbon based supercapacitors: electronic structure and adsorbent reorganisation effects. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 15925-15934. | 1.3 | 4 |

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 55 | Average orientation of a fluoroaromatic molecule in lipid bilayers from DFT-informed NMR measurements of ^1H - ^{19}F dipolar couplings. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 18207-18215. | 1.3 | 3 |
| 56 | Chemically Prepared $\text{Li}_{0.6}\text{FePO}_4$ Solid Solution as a Vehicle for Studying Phase Separation Kinetics in Li-Ion Battery Materials. <i>Journal of Physical Chemistry C</i> , 2020, 124, 7608-7614. | 1.5 | 3 |
| 57 | A structural investigation of organic battery anode materials by NMR crystallography. <i>Magnetic Resonance in Chemistry</i> , 2022, 60, 489-503. | 1.1 | 3 |
| 58 | Investigation of structure and dynamics in a photochromic molecular crystal by NMR crystallography. <i>Magnetic Resonance in Chemistry</i> , 2019, 57, 230-242. | 1.1 | 2 |
| 59 | Improved Understanding of Atomic Ordering in $\text{Y}_4\text{Si}_x\text{Al}_{2-x}\text{O}_9\text{N}_x$ Materials Using a Combined Solid-State NMR and Computational Approach. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23976-23987. | 1.5 | 2 |
| 60 | Solid-state nuclear magnetic resonance study of polymorphism in tris(8-hydroxyquinolate)aluminium. <i>Magnetic Resonance in Chemistry</i> , 2021, 59, 1024-1037. | 1.1 | 2 |
| 61 | Synthesis, characterisation, and feasibility studies on the use of vanadium tellurate(V) as a cathode material for aqueous rechargeable Zn-ion batteries. <i>RSC Advances</i> , 2022, 12, 12211-12218. | 1.7 | 2 |
| 62 | A gateway to understanding confined ions. <i>Nature Nanotechnology</i> , 2020, 15, 628-629. | 15.6 | 1 |
| 63 | ^{19}F Solid-State NMR and Vibrational Raman Characterization of Corticosteroid Drug-Lipid Membrane Interactions. <i>ChemPlusChem</i> , 2021, 86, 1517-1523. | 1.3 | 1 |
| 64 | New Insight into Li^+ Dynamics in Lithium Bimetal Phosphate. <i>Journal of the Electrochemical Society</i> , 2022, 169, 010510. | 1.3 | 1 |
| 65 | Capacitive de-ionisation: An electrochemical perspective. <i>Current Opinion in Electrochemistry</i> , 2022, 35, 101084. | 2.5 | 1 |
| 66 | Orientation of a Diagnostic Ligand Bound to Macroscopically Aligned Amyloid- β Fibrils Determined by Solid-State NMR. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6611-6615. | 2.1 | 0 |