

Jian Zhi Hu

List of Publications by Year in descending order

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194
papers

11,216
citations

34016

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34900

98
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199
all docs

199
docs citations

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times ranked

12528
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Understanding the Solvation-Dependent Properties of Cyclic Ether Multivalent Electrolytes Using High-Field NMR and Quantum Chemistry. <i>Jacs Au</i> , 2022, 2, 917-932. | 3.6 | 5 |
| 2 | The superior hydrothermal stability of Pd/SSZ-39 in low temperature passive NO _x adsorption (PNA) and methane combustion. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119449. | 10.8 | 56 |
| 3 | High-Field One-Dimensional and Two-Dimensional ²⁷ Al Magic-Angle Spinning Nuclear Magnetic Resonance Study of Γ_1^- , Γ_2^- , and Γ_3^- -Al ₂ O ₃ Dominated Aluminum Oxides: Toward Understanding the Al Sites in Γ_3^- -Al ₂ O ₃ . <i>ACS Omega</i> , 2021, 6, 4090-4099. | 1.6 | 29 |
| 4 | Conversion of ethanol to 1,3-butadiene over Ag-ZrO ₂ /SiO ₂ catalysts: The role of surface interfaces. <i>Journal of Energy Chemistry</i> , 2021, 54, 7-15. | 7.1 | 21 |
| 5 | Factors Influencing Preferential Anion Interactions during Solvation of Multivalent Cations in Ethereal Solvents. <i>Journal of Physical Chemistry C</i> , 2021, 125, 6005-6012. | 1.5 | 17 |
| 6 | Low-temperature ($\sim 200^\circ\text{C}$) degradation of electronic nicotine delivery system liquids generates toxic aldehydes. <i>Scientific Reports</i> , 2021, 11, 7800. | 1.6 | 14 |
| 7 | Impact of Hydration on Supported V ₂ O ₅ /TiO ₂ Catalysts as Explored by Magnetic Resonance Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2021, 125, 16766-16775. | 1.5 | 3 |
| 8 | Activity of Cu-Al-Oxo Extra-Framework Clusters for Selective Methane Oxidation on Cu-Exchanged Zeolites. <i>Jacs Au</i> , 2021, 1, 1412-1421. | 3.6 | 21 |
| 9 | Elucidating the Cooperative Roles of Water and Lewis Acid-Base Pairs in Cascade C-C Coupling and Self-Deoxygenation Reactions. <i>Jacs Au</i> , 2021, 1, 1471-1487. | 3.6 | 5 |
| 10 | Structure-Activity Relationships of Hydrothermally Aged Titania-Supported Vanadium-Tungsten Oxide Catalysts for SCR of NO _x Emissions with NH ₃ . <i>ACS Catalysis</i> , 2021, 11, 12096-12111. | 5.5 | 20 |
| 11 | Role of a Multivalent Ion-Solvent Interaction on Restricted Mg ²⁺ Diffusion in Dimethoxyethane Electrolytes. <i>Journal of Physical Chemistry B</i> , 2021, 125, 12574-12583. | 1.2 | 7 |
| 12 | Pulsed Field Gradient Nuclear Magnetic Resonance and Diffusion Analysis in Battery Research. <i>Chemistry of Materials</i> , 2021, 33, 8562-8590. | 3.2 | 20 |
| 13 | Palladium/Zeolite Low Temperature Passive NO _x Adsorbers (PNA): Structure-Adsorption Property Relationships for Hydrothermally Aged PNA Materials. <i>Emission Control Science and Technology</i> , 2020, 6, 126-138. | 0.8 | 38 |
| 14 | Single-Step Conversion of Ethanol to <i>n</i> -Butene over Ag-ZrO ₂ /SiO ₂ Catalysts. <i>ACS Catalysis</i> , 2020, 10, 10602-10613. | 5.5 | 34 |
| 15 | Role of Solvent Rearrangement on Mg ²⁺ Solvation Structures in Dimethoxyethane Solutions using Multimodal NMR Analysis. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 6443-6449. | 2.1 | 27 |
| 16 | Origin of Unusual Acidity and Li ⁺ Diffusivity in a Series of Water-in-Salt Electrolytes. <i>Journal of Physical Chemistry B</i> , 2020, 124, 5284-5291. | 1.2 | 26 |
| 17 | Probing Conformational Evolution and Associated Dynamics of Mg(N(SO ₂ CF ₃) ₂) ₂ ·Dimethoxyethane Adduct Using Solid-State ¹⁹ F and ¹ H NMR. <i>Journal of Physical Chemistry C</i> , 2020, 124, 4999-5008. | 1.5 | 13 |
| 18 | Variable Temperature and Pressure Operando MAS NMR for Catalysis Science and Related Materials. <i>Accounts of Chemical Research</i> , 2020, 53, 611-619. | 7.6 | 48 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Thermal perturbation of NMR properties in small polar and non-polar molecules. <i>Scientific Reports</i> , 2020, 10, 6097. | 1.6 | 9 |
| 20 | Intermediate Species in the Crystallization of Sodium Aluminate Hydroxy Hydrates. <i>Journal of Physical Chemistry C</i> , 2020, 124, 12337-12345. | 1.5 | 10 |
| 21 | High-Temperature and High-Pressure In situ Magic Angle Spinning Nuclear Magnetic Resonance Spectroscopy. <i>Journal of Visualized Experiments</i> , 2020, , . | 0.2 | 5 |
| 22 | Mechanism by which Tungsten Oxide Promotes the Activity of Supported V_{2O_5}/TiO_2 Catalysts for NO_x Abatement: Structural Effects Revealed by ^{51}V MAS NMR Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12609-12616. | 7.2 | 96 |
| 23 | Mechanism by which Tungsten Oxide Promotes the Activity of Supported V_{2O_5}/TiO_2 Catalysts for NO_x Abatement: Structural Effects Revealed by ^{51}V MAS NMR Spectroscopy. <i>Angewandte Chemie</i> , 2019, 131, 12739-12746. | 1.6 | 45 |
| 24 | Innen-Äcktitelbild: Mechanism by which Tungsten Oxide Promotes the Activity of Supported V_{2O_5}/TiO_2 Catalysts for NO_x Abatement: Structural Effects Revealed by ^{51}V MAS NMR Spectroscopy (<i>Angew. Chem.</i> 36/2019). <i>Angewandte Chemie</i> , 2019, 131, 12847-12847. | 1.6 | 1 |
| 25 | Transformation of Gibbsite to Boehmite in Caustic Aqueous Solution at Hydrothermal Conditions. <i>Crystal Growth and Design</i> , 2019, 19, 5557-5567. | 1.4 | 19 |
| 26 | Unraveling Gibbsite Transformation Pathways into LiAl-LDH in Concentrated Lithium Hydroxide. <i>Inorganic Chemistry</i> , 2019, 58, 12385-12394. | 1.9 | 29 |
| 27 | Adsorption and Thermal Decomposition of Electrolytes on Nanometer Magnesium Oxide: An in Situ ^{13}C MAS NMR Study. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 38689-38696. | 4.0 | 19 |
| 28 | Genesis and Stability of Hydronium Ions in Zeolite Channels. <i>Journal of the American Chemical Society</i> , 2019, 141, 3444-3455. | 6.6 | 119 |
| 29 | Promotion of protolytic pentane conversion on H-MFI zeolite by proximity of extra-framework aluminum oxide and Brønsted acid sites. <i>Journal of Catalysis</i> , 2019, 370, 424-433. | 3.1 | 40 |
| 30 | Catalytic activation of ethylene C-H bonds on uniform $d_{80} Ir(i)$ and $Ni(ii)$ cations in zeolites: toward molecular level understanding of ethylene polymerization on heterogeneous catalysts. <i>Catalysis Science and Technology</i> , 2019, 9, 6570-6576. | 2.1 | 20 |
| 31 | WO supported on γ - Al_2O_3 with different morphologies as model catalysts for alkanol dehydration. <i>Journal of Catalysis</i> , 2018, 363, 1-8. | 3.1 | 20 |
| 32 | ^{25}Mg NMR and computational modeling studies of the solvation structures and molecular dynamics in magnesium based liquid electrolytes. <i>Nano Energy</i> , 2018, 46, 436-446. | 8.2 | 37 |
| 33 | Solvent-determined mechanistic pathways in zeolite-H-BEA-catalysed phenol alkylation. <i>Nature Catalysis</i> , 2018, 1, 141-147. | 16.1 | 85 |
| 34 | Elementary Steps of Faujasite Formation Followed by in Situ Spectroscopy. <i>Chemistry of Materials</i> , 2018, 30, 888-897. | 3.2 | 29 |
| 35 | ^{27}Al Pulsed Field Gradient, Diffusion- ^{27}Al NMR Spectroscopy of Solvation Dynamics and Ion Pairing in Alkaline Aluminate Solutions. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10907-10912. | 1.2 | 15 |
| 36 | Boehmite and Gibbsite Nanoplates for the Synthesis of Advanced Alumina Products. <i>ACS Applied Nano Materials</i> , 2018, 1, 7115-7128. | 2.4 | 79 |

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|----|--|-----|-----------|
| 37 | <i>In situ</i> and <i>ex situ</i> NMR for battery research. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 463001. | 0.7 | 35 |
| 38 | In Situ ²⁷ Al NMR Spectroscopy of Aluminate in Sodium Hydroxide Solutions above and below Saturation with Respect to Gibbsite. <i>Inorganic Chemistry</i> , 2018, 57, 11864-11873. | 1.9 | 33 |
| 39 | Hydrolysis of zeolite framework aluminum and its impact on acid catalyzed alkane reactions. <i>Journal of Catalysis</i> , 2018, 365, 359-366. | 3.1 | 47 |
| 40 | Development and Application of In Situ High-Temperature, High-Pressure Magic Angle Spinning NMR. , 2018, , 1073-1091. | | 1 |
| 41 | Investigation of Silica-Supported Vanadium Oxide Catalysts by High-Field ⁵¹ V Magic-Angle Spinning NMR. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6246-6254. | 1.5 | 39 |
| 42 | NMR-based Metabolomics Analysis of Liver from C57BL/6 Mouse Exposed to Ionizing Radiation. <i>Radiation Research</i> , 2017, 188, 44. | 0.7 | 17 |
| 43 | Improving Lithium-Sulfur Battery Performance under Lean Electrolyte through Nanoscale Confinement in Soft Swellable Gels. <i>Nano Letters</i> , 2017, 17, 3061-3067. | 4.5 | 122 |
| 44 | Mechanism of Phenol Alkylation in Zeolite H-BEA Using In Situ Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2017, 139, 9178-9185. | 6.6 | 56 |
| 45 | ²⁷ Al MAS NMR Studies of HBEA Zeolite at Low to High Magnetic Fields. <i>Journal of Physical Chemistry C</i> , 2017, 121, 12849-12854. | 1.5 | 37 |
| 46 | Multinuclear NMR Study of the Solid Electrolyte Interface Formed in Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 14741-14748. | 4.0 | 47 |
| 47 | Stability of Zeolites in Aqueous Phase Reactions. <i>Chemistry of Materials</i> , 2017, 29, 7255-7262. | 3.2 | 55 |
| 48 | Transitions in Al Coordination during Gibbsite Crystallization Using High-Field ²⁷ Al and ²³ Na MAS NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017, 121, 27555-27562. | 1.5 | 41 |
| 49 | Development and Application of In Situ High-Temperature, High-Pressure Magic Angle Spinning NMR. , 2017, , 1-19. | | 5 |
| 50 | Magic Angle Spinning NMR Metabolomics. <i>Metabolomics: Open Access</i> , 2016, 6, . | 0.1 | 3 |
| 51 | Investigating the Surface Structure of $\hat{\Gamma}^3\text{-Al}_2\text{O}_3$ Supported WO_x Catalysts by High Field ²⁷ Al MAS NMR and Electronic Structure Calculations. <i>Journal of Physical Chemistry C</i> , 2016, 120, 23093-23103. | 1.5 | 26 |
| 52 | Anode-Free Rechargeable Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2016, 26, 7094-7102. | 7.8 | 495 |
| 53 | Preferential Solvation of an Asymmetric Redox Molecule. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27834-27839. | 1.5 | 18 |
| 54 | In Situ Natural Abundance ¹⁷ O and ²⁵ Mg NMR Investigation of Aqueous $\text{Mg}(\text{OH})_2$ Dissolution in the Presence of Supercritical CO_2 . <i>Environmental Science & Technology</i> , 2016, 50, 12373-12384. | 4.6 | 7 |

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| 55 | Nuclear magnetic resonance studies of the solvation structures of a high-performance nonaqueous redox flow electrolyte. <i>Journal of Power Sources</i> , 2016, 308, 172-179. | 4.0 | 15 |
| 56 | <i>In Situ</i> Raman and Nuclear Magnetic Resonance Study of Trapped Lithium in the Solid Electrolyte Interface of Reduced Graphene Oxide. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2600-2608. | 1.5 | 53 |
| 57 | High field ²⁷ Al MAS NMR and TPD studies of active sites in ethanol dehydration using thermally treated transitional aluminas as catalysts. <i>Journal of Catalysis</i> , 2016, 336, 85-93. | 3.1 | 47 |
| 58 | Natural abundance ¹⁷ O, ⁶ Li NMR and molecular modeling studies of the solvation structures of lithium bis(fluorosulfonyl)imide/1,2-dimethoxyethane liquid electrolytes. <i>Journal of Power Sources</i> , 2016, 307, 231-243. | 4.0 | 58 |
| 59 | <i>In Situ</i> High Temperature High Pressure MAS NMR Study on the Crystallization of AlPO ₄ -5. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1701-1708. | 1.5 | 23 |
| 60 | In situ ⁷ Li and ¹³ Cs nuclear magnetic resonance investigations on the role of Cs ⁺ additive in lithium-metal deposition process. <i>Journal of Power Sources</i> , 2016, 304, 51-59. | 4.0 | 20 |
| 61 | Investigation of water assisted phase transformation process from AlPO ₄ -5 to AlPO ₄ -tridymite. <i>Microporous and Mesoporous Materials</i> , 2016, 223, 241-246. | 2.2 | 13 |
| 62 | Activity of titania and zeolite samples dosed with triethylamine. <i>Microporous and Mesoporous Materials</i> , 2016, 220, 44-57. | 2.2 | 4 |
| 63 | NMR Metabolomics in Ionizing Radiation. <i>Clinics in Oncology</i> , 2016, 1, . | 0.0 | 0 |
| 64 | A fundamental study on the [(1/4-Cl) ₃ Mg ₂ (THF) ₆] ⁺ dimer electrolytes for rechargeable Mg batteries. <i>Chemical Communications</i> , 2015, 51, 2312-2315. | 2.2 | 53 |
| 65 | Probing Lithium Germanide Phase Evolution and Structural Change in a Germanium-in-Carbon Nanotube Energy Storage System. <i>Journal of the American Chemical Society</i> , 2015, 137, 2600-2607. | 6.6 | 57 |
| 66 | Nanocomposite polymer electrolyte for rechargeable magnesium batteries. <i>Nano Energy</i> , 2015, 12, 750-759. | 8.2 | 121 |
| 67 | Investigation of the Structure and Active Sites of TiO ₂ Nanorod Supported VO _x Catalysts by High-Field and Fast-Spinning ⁵¹ V MAS NMR. <i>ACS Catalysis</i> , 2015, 5, 3945-3952. | 5.5 | 51 |
| 68 | Impact of Aqueous Medium on Zeolite Framework Integrity. <i>Chemistry of Materials</i> , 2015, 27, 3533-3545. | 3.2 | 50 |
| 69 | Natural abundance ¹⁷ O nuclear magnetic resonance and computational modeling studies of lithium based liquid electrolytes. <i>Journal of Power Sources</i> , 2015, 285, 146-155. | 4.0 | 29 |
| 70 | Following the Transient Reactions in Lithium-Sulfur Batteries Using an In Situ Nuclear Magnetic Resonance Technique. <i>Nano Letters</i> , 2015, 15, 3309-3316. | 4.5 | 107 |
| 71 | Unraveling the Origin of Structural Disorder in High Temperature Transition Al ₂ O ₃ : Structure of γ -Al ₂ O ₃ . <i>Chemistry of Materials</i> , 2015, 27, 7042-7049. | 3.2 | 51 |
| 72 | Sealed rotors for in situ high temperature high pressure MAS NMR. <i>Chemical Communications</i> , 2015, 51, 13458-13461. | 2.2 | 46 |

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|----|--|------|-----------|
| 73 | Dynamic Structural Changes of SiO ₂ Supported Pt–Ni Bimetallic Catalysts over Redox Treatments Revealed by NMR and EPR. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21219-21226. | 1.5 | 27 |
| 74 | Investigation of Aluminum Site Changes of Dehydrated Zeolite H-Beta during a Rehydration Process by High-Field Solid-State NMR. <i>Journal of Physical Chemistry C</i> , 2015, 119, 1410-1417. | 1.5 | 63 |
| 75 | Understanding Aqueous Electrolyte Stability through Combined Computational and Magnetic Resonance Spectroscopy: A Case Study on Vanadium Redox Flow Battery Electrolytes. <i>ChemPlusChem</i> , 2015, 80, 428-437. | 1.3 | 32 |
| 76 | Towards High-Performance Nonaqueous Redox Flow Electrolyte Via Ionic Modification of Active Species. <i>Advanced Energy Materials</i> , 2015, 5, 1400678. | 10.2 | 181 |
| 77 | Diffusional motion of redox centers in carbonate electrolytes. <i>Journal of Chemical Physics</i> , 2014, 141, 104509. | 1.2 | 24 |
| 78 | Energetics of Defects on Graphene through Fluorination. <i>ChemSusChem</i> , 2014, 7, 1295-1300. | 3.6 | 10 |
| 79 | Reduction Mechanism of Fluoroethylene Carbonate for Stable Solid-Electrolyte Interphase Film on Silicon Anode. <i>ChemSusChem</i> , 2014, 7, 549-554. | 3.6 | 126 |
| 80 | A facile approach using MgCl ₂ to formulate high performance Mg ²⁺ electrolytes for rechargeable Mg batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3430. | 5.2 | 197 |
| 81 | Following Solid-Acid-Catalyzed Reactions by MAS NMR Spectroscopy in Liquid Phase—Zeolite-Catalyzed Conversion of Cyclohexanol in Water. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 479-482. | 7.2 | 57 |
| 82 | Formation of submicron magnesite during reaction of natural forsterite in H ₂ O-saturated supercritical CO ₂ . <i>Geochimica Et Cosmochimica Acta</i> , 2014, 134, 197-209. | 1.6 | 36 |
| 83 | Structural analysis of N- and O-glycans using ZIC-HILIC/dialysis coupled to NMR detection. <i>Fungal Genetics and Biology</i> , 2014, 72, 207-215. | 0.9 | 7 |
| 84 | ¹ H NMR metabolomics study of metastatic melanoma in C57BL/6J mouse spleen. <i>Metabolomics</i> , 2014, 10, 1129-1144. | 1.4 | 18 |
| 85 | Quantitatively Probing the Al Distribution in Zeolites. <i>Journal of the American Chemical Society</i> , 2014, 136, 8296-8306. | 6.6 | 199 |
| 86 | Elucidating graphene-ionic liquid interfacial region: A combined experimental and computational study. <i>Nano Energy</i> , 2014, 3, 152-158. | 8.2 | 42 |
| 87 | Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. <i>Advanced Functional Materials</i> , 2013, 23, 929-946. | 7.8 | 590 |
| 88 | Clay Hydration/dehydration in Dry to Water-saturated Supercritical CO ₂ : Implications for Caprock Integrity. <i>Energy Procedia</i> , 2013, 37, 5443-5448. | 1.8 | 39 |
| 89 | Insights into silicate carbonation processes in water-bearing supercritical CO ₂ fluids. <i>International Journal of Greenhouse Gas Control</i> , 2013, 15, 104-118. | 2.3 | 80 |
| 90 | Elucidating the higher stability of vanadium(V) cations in mixed acid based redox flow battery electrolytes. <i>Journal of Power Sources</i> , 2013, 241, 173-177. | 4.0 | 85 |

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|-----|--|------|-----------|
| 91 | Rotor design for high pressure magic angle spinning nuclear magnetic resonance. <i>Journal of Magnetic Resonance</i> , 2013, 226, 64-69. | 1.2 | 33 |
| 92 | Studies of Secondary Melanoma on C57BL/6J Mouse Liver Using ¹ H NMR Metabolomics. <i>Metabolites</i> , 2013, 3, 1011-1035. | 1.3 | 40 |
| 93 | A large sample volume magic angle spinning nuclear magnetic resonance probe for in situ investigations with constant flow of reactants. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 2137-2143. | 1.3 | 20 |
| 94 | Structure and stability of hexa-aqua V(III) cations in vanadium redox flow battery electrolytes. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10233. | 1.3 | 55 |
| 95 | <i>In Situ</i> Molecular Spectroscopic Evidence for CO ₂ Intercalation into Montmorillonite in Supercritical Carbon Dioxide. <i>Langmuir</i> , 2012, 28, 7125-7128. | 1.6 | 117 |
| 96 | Highly Dispersed and Active ReO _x on Alumina-Modified SBA-15 Silica for 2-Butanol Dehydration. <i>ACS Catalysis</i> , 2012, 2, 1020-1026. | 5.5 | 22 |
| 97 | The stability of organic solvents and carbon electrode in nonaqueous Li-O ₂ batteries. <i>Journal of Power Sources</i> , 2012, 215, 240-247. | 4.0 | 197 |
| 98 | Reaction of water-saturated supercritical CO ₂ with forsterite: Evidence for magnesite formation at low temperatures. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 91, 271-282. | 1.6 | 97 |
| 99 | Lactic Acid Is Elevated in Idiopathic Pulmonary Fibrosis and Induces Myofibroblast Differentiation via pH-Dependent Activation of Transforming Growth Factor- β 2. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2012, 186, 740-751. | 2.5 | 265 |
| 100 | Investigation of local environments in Nafion [®] /SiO ₂ composite membranes used in vanadium redox flow batteries. <i>Solid State Nuclear Magnetic Resonance</i> , 2012, 42, 71-80. | 1.5 | 61 |
| 101 | Chloride supporting electrolytes for all-vanadium redox flow batteries. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 18186. | 1.3 | 126 |
| 102 | The role of H ₂ O in the carbonation of forsterite in supercritical CO ₂ . <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 1081-1092. | 2.3 | 103 |
| 103 | Characterizing Surface Acidic Sites in Mesoporous-Silica-Supported Tungsten Oxide Catalysts Using Solid-State NMR and Quantum Chemistry Calculations. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23354-23362. | 1.5 | 11 |
| 104 | Solvent Evaporation Assisted Preparation of Oriented Nanocrystalline Mesoporous MFI Zeolites. <i>ACS Catalysis</i> , 2011, 1, 682-690. | 5.5 | 67 |
| 105 | High-pressure magic angle spinning nuclear magnetic resonance. <i>Journal of Magnetic Resonance</i> , 2011, 212, 378-385. | 1.2 | 42 |
| 106 | A Stable Vanadium Redox Flow Battery with High Energy Density for Large Scale Energy Storage. <i>Advanced Energy Materials</i> , 2011, 1, 394-400. | 10.2 | 688 |
| 107 | Multiphase sequestration geochemistry: Model for mineral carbonation. <i>Energy Procedia</i> , 2011, 4, 5009-5016. | 1.8 | 19 |
| 108 | Lithium diffusion in Li ₄ Ti ₅ O ₁₂ at high temperatures. <i>Journal of Power Sources</i> , 2011, 196, 2211-2220. | 4.0 | 65 |

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| 109 | Towards understanding the poor thermal stability of V ⁵⁺ electrolyte solution in Vanadium Redox Flow Batteries. <i>Journal of Power Sources</i> , 2011, 196, 3669-3672. | 4.0 | 194 |
| 110 | Investigation of the rechargeability of Li ⁺ /O ₂ batteries in non-aqueous electrolyte. <i>Journal of Power Sources</i> , 2011, 196, 5674-5678. | 4.0 | 197 |
| 111 | Spectroscopic investigations of the fouling process on Nafion membranes in vanadium redox flow batteries. <i>Journal of Membrane Science</i> , 2011, 366, 325-334. | 4.1 | 107 |
| 112 | Slow Magic Angle Sample Spinning: A Non- or Minimally Invasive Method for High-Resolution ¹ H Nuclear Magnetic Resonance (NMR) Metabolic Profiling. <i>Methods in Molecular Biology</i> , 2011, 708, 335-364. | 0.4 | 3 |
| 113 | Detailed investigation of ion exchange in ball-milled LiH+MgB ₂ system using ultra-high field nuclear magnetic resonance spectroscopy. <i>Journal of Power Sources</i> , 2010, 195, 3645-3648. | 4.0 | 16 |
| 114 | Nuclear magnetic resonance studies on vanadium(IV) electrolyte solutions for vanadium redox flow battery. <i>Journal of Power Sources</i> , 2010, 195, 7709-7717. | 4.0 | 84 |
| 115 | Solid-State Hydriding Mechanism in the LiBH ₄ + MgH ₂ System. <i>Journal of Physical Chemistry C</i> , 2010, 114, 8089-8098. | 1.5 | 43 |
| 116 | Metal Carbonation of Forsterite in Supercritical CO ₂ and H ₂ O Using Solid State ²⁹ Si, ¹³ C NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4126-4134. | 1.5 | 89 |
| 117 | Unique Role of Anchoring Penta-Coordinated Al ³⁺ Sites in the Sintering of ¹³ Al ₂ O ₃ -Supported Pt Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2688-2691. | 2.1 | 101 |
| 118 | Direct observation of ion exchange in mechanically activated LiH+MgB ₂ system using ultrahigh field nuclear magnetic resonance spectroscopy. <i>Applied Physics Letters</i> , 2009, 94, 141905. | 1.5 | 22 |
| 119 | Coordinatively Unsaturated Al ³⁺ Centers as Binding Sites for Active Catalyst Phases of Platinum on ¹³ Al ₂ O ₃ . <i>Science</i> , 2009, 325, 1670-1673. | 6.0 | 790 |
| 120 | Solid-state hydrogen storage: Storage capacity, thermodynamics, and kinetics. <i>Jom</i> , 2009, 61, 45-51. | 0.9 | 14 |
| 121 | Low temperature milling of the LiNH ₂ + LiH hydrogen storage system. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 4331-4339. | 3.8 | 29 |
| 122 | An isotropic chemical shift ¹³ C chemical shift anisotropic correlation experiment using discrete magic angle turning. <i>Journal of Magnetic Resonance</i> , 2009, 198, 105-110. | 1.2 | 2 |
| 123 | Effect of Chemical Lithium Insertion into Rutile TiO ₂ Nanorods. <i>Journal of Physical Chemistry C</i> , 2009, 113, 14567-14574. | 1.5 | 59 |
| 124 | Characterization of Dispersed Heteropoly Acid on Mesoporous Zeolite Using Solid-State ³¹ P NMR Spin ¹³ C Lattice Relaxation. <i>Journal of the American Chemical Society</i> , 2009, 131, 9715-9721. | 6.6 | 42 |
| 125 | Studies of the Active Sites for Methane Dehydroaromatization Using Ultrahigh-Field Solid-State ⁹⁵ Mo NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2936-2942. | 1.5 | 29 |
| 126 | Combined ^{6,7} Li NMR and Molecular Dynamics Study of Li Diffusion in Li ₂ TiO ₃ . <i>Journal of Physical Chemistry C</i> , 2009, 113, 20108-20116. | 1.5 | 107 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Application of High-Resolution ^1H MAS NMR Spectroscopy to the Analysis of Intact Bones from Mice Exposed to Gamma Radiation. <i>Radiation Research</i> , 2009, 172, 607-616. | 0.7 | 14 |
| 128 | Probing the reaction pathway of dehydrogenation of the LiNH_2+LiH mixture using in situ ^1H NMR spectroscopy. <i>Journal of Power Sources</i> , 2008, 181, 116-119. | 4.0 | 25 |
| 129 | Effects of Novel Supports on the Physical and Catalytic Properties of Tungstophosphoric Acid for Alcohol Dehydration Reactions. <i>Topics in Catalysis</i> , 2008, 49, 259-267. | 1.3 | 24 |
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