Jian Zhi Hu

List of Publications by Year
in descending order

194 papers	11,216 citations	34016 52 h-index	34900 98 g-index
199 all docs	199 docs citations	199 times ranked	12528 citing authors

#	Article	IF	Citations
1	Coordinatively Unsaturated Al ³⁺ Centers as Binding Sites for Active Catalyst Phases of Platinum on Î³-Al ₂ O ₃. Science, 2009, 325, 1670-1673.	6.0	790
2	A Stable Vanadium Redoxâ€Flow Battery with High Energy Density for Largeâ€Scale Energy Storage. Advanced Energy Materials, 2011, 1, 394-400.	10.2	688
3	Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. Advanced Functional Materials, 2013, 23, 929-946.	7.8	590
4	Anodeâ€Free Rechargeable Lithium Metal Batteries. Advanced Functional Materials, 2016, 26, 7094-7102.	7.8	495
5	Lactic Acid Is Elevated in Idiopathic Pulmonary Fibrosis and Induces Myofibroblast Differentiation via pH-Dependent Activation of Transforming Growth Factor-Î². American Journal of Respiratory and Critical Care Medicine, 2012, 186, 740-751.	2.5	265
6	Quantitatively Probing the Al Distribution in Zeolites. Journal of the American Chemical Society, 2014, 136, 8296-8306.	6.6	199
7	Investigation of the rechargeability of Liâ€“O2 batteries in non-aqueous electrolyte. Journal of Power Sources, 2011, 196, 5674-5678.	4.0	197
8	The stability of organic solvents and carbon electrode in nonaqueous Li-O2 batteries. Journal of Power Sources, 2012, 215, 240-247.	4.0	197
9	A facile approach using MgCl2 to formulate high performance Mg2+ electrolytes for rechargeable Mg batteries. Journal of Materials Chemistry A, 2014, 2, 3430.	5.2	197
10	Towards understanding the poor thermal stability of V5+ electrolyte solution in Vanadium Redox Flow Batteries. Journal of Power Sources, 2011, 196, 3669-3672.	4.0	194
11	Towards Highâ€Performance Nonaqueous Redox Flow Electrolyte Via Ionic Modification of Active Species. Advanced Energy Materials, 2015, 5, 1400678.	10.2	181
12	Penta-coordinated Al3+ ions as preferential nucleation sites for BaO on Î³-Al2O3: An ultra-high-magnetic field 27Al MAS NMR study. Journal of Catalysis, 2007, 251, 189-194.	3.1	173
13	Carbon-13 chemical shift anisotropies of solid amino acids. Magnetic Resonance in Chemistry, 1993, 31, 699-704.	1.1	146
14	A sensitive, high resolution magic angle turning experiment for measuring chemical shift tensor principal values. Molecular Physics, 1998, 95, 1113-1126.	0.8	138
15	Direct Observation of the Active Center for Methane Dehydroaromatization Using an Ultrahigh Field ⁹⁵Mo NMR Spectroscopy. Journal of the American Chemical Society, 2008, 130, 3722-3723.	6.6	134
16	Magic-Angle-Turning Experiments for Measuring Chemical-Shift-Tensor Principal Values in Powdered Solids. Journal of Magnetic Resonance Series A, 1995, 113, 210-222.	1.6	133
17	Synthesis, characterization, and catalytic function of novel highly dispersed tungsten oxide catalysts on mesoporous silica. Journal of Catalysis, 2006, 239, 200-211.	3.1	130
18	Chloride supporting electrolytes for all-vanadium redox flow batteries. Physical Chemistry Chemical Physics, 2011, 13, 18186.	1.3	126

#	ARTICLE	IF	CITATIONS
19	Reduction Mechanism of Fluoroethylene Carbonate for Stable Solidâ€“Electrolyte Interphase Film on Silicon Anode. ChemSusChem, 2014, 7, 549-554.	3.6	126
20	Improving Lithiumâ€“Sulfur Battery Performance under Lean Electrolyte through Nanoscale Confinement in Soft Swellable Gels. Nano Letters, 2017, 17, 3061-3067.	4.5	122
21	Nanocomposite polymer electrolyte for rechargeable magnesium batteries. Nano Energy, 2015, 12, 750-759.	8.2	121
22	Genesis and Stability of Hydronium Ions in Zeolite Channels. Journal of the American Chemical Society, 2019, 141, 3444-3455.	6.6	119
23	<i>In Situ</i> Molecular Spectroscopic Evidence for CO₂ Intercalation into Montmorillonite in Supercritical Carbon Dioxide. Langmuir, 2012, 28, 7125-7128.	1.6	117
24	Combined ^{6,7}Li NMR and Molecular Dynamics Study of Li Diffusion in Li₂TiO₃. Journal of Physical Chemistry C, 2009, 113, 20108-20116.	1.5	107
25	Spectroscopic investigations of the fouling process on Nafion membranes in vanadium redox flow batteries. Journal of Membrane Science, 2011, 366, 325-334.	4.1	107
26	Following the Transient Reactions in Lithiumâ€“Sulfur Batteries Using an In Situ Nuclear Magnetic Resonance Technique. Nano Letters, 2015, 15, 3309-3316.	4.5	107
27	Role of Pentacoordinated Al³⁺ Ions in the High Temperature Phase Transformation of Î³-Al₂O₃. Journal of Physical Chemistry C, 2008, 112, 9486-9492.	1.5	106
28	Production of Diethyl Carbonate from Ethanol and Carbon Monoxide over a Heterogeneous Catalyst. Energy & Fuels, 2002, 16, 177-181.	2.5	104
29	The role of H2O in the carbonation of forsterite in supercritical CO2. International Journal of Greenhouse Gas Control, 2011, 5, 1081-1092.	2.3	103
30	Unique Role of Anchoring Penta-Coordinated Al³⁺ Sites in the Sintering of Î³-Al₂O₃-Supported Pt Catalysts. Journal of Physical Chemistry Letters, 2010, 1, 2688-2691.	2.1	101
31	Reaction of water-saturated supercritical CO2 with forsterite: Evidence for magnesite formation at low temperatures. Geochimica Et Cosmochimica Acta, 2012, 91, 271-282.	1.6	97
32	Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_{<i>X</i>} Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 12609-12616.	7.2	96
33	An Isotropic Chemical Shift-Chemical Shift Anisotropy Magic-Angle Slow-Spinning 2D NMR Experiment. Journal of Magnetic Resonance Series A, 1993, 105, 82-87.	1.6	94
34	Metal Carbonation of Forsterite in Supercritical CO₂ and H₂O Using Solid State ²⁹Si, ¹³C NMR Spectroscopy. Journal of Physical Chemistry C, 2010, 114, 4126-4134.	1.5	89
35	Elucidating the higher stability of vanadium(V) cations in mixed acid based redox flow battery electrolytes. Journal of Power Sources, 2013, 241, 173-177.	4.0	85
36	Solvent-determined mechanistic pathways in zeolite-H-BEA-catalysed phenol alkylation. Nature Catalysis, 2018, 1, 141-147.	16.1	85

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37	Nuclear magnetic resonance studies on vanadium(IV) electrolyte solutions for vanadium redox flow battery. Journal of Power Sources, 2010, 195, 7709-7717.	4.0	84
38	15N Chemical Shift Tensors in Nucleic Acid Bases. Journal of the American Chemical Society, 1998, 120, 9863-9869.	6.6	80
39	Insights into silicate carbonation processes in water-bearing supercritical CO2 fluids. International Journal of Greenhouse Gas Control, 2013, 15, 104-118.	2.3	80
40	Boehmite and Gibbsite Nanoplates for the Synthesis of Advanced Alumina Products. ACS Applied Nano Materials, 2018, 1, 7115-7128.	2.4	79
41	Polymer-Ceramic Conversion of Liquid Polyaluminasilazanes for SiAlCN Ceramics. Journal of the American Ceramic Society, 2005, 88, 2415-2419.	1.9	69
42	Solvent Evaporation Assisted Preparation of Oriented Nanocrystalline Mesoporous MFI Zeolites. ACS Catalysis, 2011, 1, 682-690.	5.5	67
43	Lithium diffusion in Li4Ti5O12 at high temperatures. Journal of Power Sources, 2011, 196, 2211-2220.	4.0	65
44	Structural Determination in Carbonaceous Solids Using Advanced Solid State NMR Techniques. Energy & Fuels, 2001, 15, 14-22.	2.5	64
45	Investigation of Aluminum Site Changes of Dehydrated Zeolite H-Beta during a Rehydration Process by High-Field Solid-State NMR. Journal of Physical Chemistry C, 2015, 119, 1410-1417.	1.5	63
46	High-resolution1H NMR spectroscopy in organs and tissues using slow magic angle spinning. Magnetic Resonance in Medicine, 2001, 46, 213-218.	1.9	61
47	Investigation of local environments in Nafionâ€“SiO2 composite membranes used in vanadium redox flow batteries. Solid State Nuclear Magnetic Resonance, 2012, 42, 71-80.	1.5	61
48	Effect of Chemical Lithium Insertion into Rutile TiO₂ Nanorods. Journal of Physical Chemistry C, 2009, 113, 14567-14574.	1.5	59
49	Natural abundance 17O, 6Li NMR and molecular modeling studies of the solvation structures of lithium bis(fluorosulfonyl)imide/1,2-dimethoxyethane liquid electrolytes. Journal of Power Sources, 2016, 307, 231-243.	4.0	58
50	Metabolomics in Lung Inflammation:A High-Resolution¹H NMR Study of Mice Exposedto Silica Dust. Toxicology Mechanisms and Methods, 2008, 18, 385-398.	1.3	57
51	Following Solidâ€Acidâ€Catalyzed Reactions by MAS NMR Spectroscopy in Liquid Phaseâ€"Zeoliteâ€Catalyzed Conversion of Cyclohexanol in Water. Angewandte Chemie - International Edition, 2014, 53, 479-482.	7.2	57
52	Probing Lithium Germanide Phase Evolution and Structural Change in a Germanium-in-Carbon Nanotube Energy Storage System. Journal of the American Chemical Society, 2015, 137, 2600-2607.	6.6	57
53	Mechanism of Phenol Alkylation in Zeolite H-BEA Using In Situ Solid-State NMR Spectroscopy. Journal of the American Chemical Society, 2017, 139, 9178-9185.	6.6	56
54	The superior hydrothermal stability of Pd/SSZ-39 in low temperature passive NOx adsorption (PNA) and methane combustion. Applied Catalysis B: Environmental, 2021, 280, 119449.	10.8	56

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55	Structure and stability of hexa-aqua V(iii) cations in vanadium redox flow battery electrolytes. Physical Chemistry Chemical Physics, 2012, 14, 10233.	1.3	55
56	Stability of Zeolites in Aqueous Phase Reactions. Chemistry of Materials, 2017, 29, 7255-7262.	3.2	55
57	A fundamental study on the [(Î¼-Cl)₃Mg₂(THF)₆]⁺ dimer electrolytes for rechargeable Mg batteries. Chemical Communications, 2015, 51, 2312-2315.	2.2	53
58	<i>In Situ</i> Raman and Nuclear Magnetic Resonance Study of Trapped Lithium in the Solid Electrolyte Interface of Reduced Graphene Oxide. Journal of Physical Chemistry C, 2016, 120, 2600-2608.	1.5	53
59	Investigation of the Structure and Active Sites of TiO₂ Nanorod Supported VO_{<i>x</i>} Catalysts by High-Field and Fast-Spinning ⁵¹V MAS NMR. ACS Catalysis, 2015, 5, 3945-3952.	5.5	51
60	Unraveling the Origin of Structural Disorder in High Temperature Transition Al₂O₃: Structure of Î¸-Al₂O₃. Chemistry of Materials, 2015, 27, 7042-7049.	3.2	51
61	Measurement of 13C chemical shift tensor principal values with a magic-angle turning experiment. Solid State Nuclear Magnetic Resonance, 1994, 3, 181-197.	1.5	50
62	Stereochemical Analysis by Solid-State NMR:Â Structural Predictions in Ambuic Acid. Journal of Organic Chemistry, 2003, 68, 4609-4614.	1.7	50
63	Impact of Aqueous Medium on Zeolite Framework Integrity. Chemistry of Materials, 2015, 27, 3533-3545.	3.2	50
64	Technique for Importing Greater Evolution Resolution in Multidimensional NMR Spectrum. Journal of Magnetic Resonance, 1997, 129, 134-144.	1.2	48
65	High-resolution1H NMR spectroscopy in rat liver using magic angle turning at a 1 Hz spinning rate. Magnetic Resonance in Medicine, 2002, 47, 829-836.	1.9	48
66	Variable Temperature and Pressure Operando MAS NMR for Catalysis Science and Related Materials. Accounts of Chemical Research, 2020, 53, 611-619.	7.6	48
67	High field 27Al MAS NMR and TPD studies of active sites in ethanol dehydration using thermally treated transitional aluminas as catalysts. Journal of Catalysis, 2016, 336, 85-93.	3.1	47
68	Multinuclear NMR Study of the Solid Electrolyte Interface Formed in Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 14741-14748.	4.0	47
69	Hydrolysis of zeolite framework aluminum and its impact on acid catalyzed alkane reactions. Journal of Catalysis, 2018, 365, 359-366.	3.1	47
70	In vivo and ex vivo high-resolution 1H NMR in biological systems using low-speed magic angle spinning. Progress in Nuclear Magnetic Resonance Spectroscopy, 2006, 49, 207-259.	3.9	46
71	Sealed rotors for in situ high temperature high pressure MAS NMR. Chemical Communications, 2015, 51, 13458-13461.	2.2	46
72	Mechanism by which Tungsten Oxide Promotes the Activity of Supported V₂O₅/TiO₂ Catalysts for NO_{<i>X</i>} Abatement: Structural Effects Revealed by ⁵¹V MAS NMR Spectroscopy. Angewandte Chemie, 2019, 131, 12739-12746.	1.6	45

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73	Synthesis of nanodispersed oxides of vanadium, titanium, molybdenum, and tungsten on mesoporous silica using atomic layer deposition. Topics in Catalysis, 2006, 39, 245-255.	1.3	43
74	Solid-State Hydriding Mechanism in the LiBH₄ + MgH₂ System. Journal of Physical Chemistry C, 2010, 114, 8089-8098.	1.5	43
75	Characterization of Dispersed Heteropoly Acid on Mesoporous Zeolite Using Solid-State ³¹P NMR Spinâˆ'Lattice Relaxation. Journal of the American Chemical Society, 2009, 131, 9715-9721.	6.6	42
76	High-pressure magic angle spinning nuclear magnetic resonance. Journal of Magnetic Resonance, 2011, 212, 378-385.	1.2	42
77	Elucidating grapheneâ€"ionic liquid interfacial region: A combined experimental and computational study. Nano Energy, 2014, 3, 152-158.	8.2	42
78	High-resolution1H NMR spectroscopy in a live mouse subjected to 1.5 Hz magic angle spinning. Magnetic Resonance in Medicine, 2003, 50, 1113-1119.	1.9	41
79	A new class of highly dispersed VOx catalysts on mesoporous silica: Synthesis, characterization, and catalytic activity in the partial oxidation of ethanol. Applied Catalysis A: General, 2006, 300, 109-119.	2.2	41
80	Transitions in Al Coordination during Gibbsite Crystallization Using High-Field ²⁷Al and ²³Na MAS NMR Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 27555-27562.	1.5	41
81	Studies of Secondary Melanoma on C57BL/6J Mouse Liver Using 1H NMR Metabolomics. Metabolites, 2013, 3, 1011-1035.	1.3	40
82	Promotion of protolytic pentane conversion on H-MFI zeolite by proximity of extra-framework aluminum oxide and BrÃ¸nsted acid sites. Journal of Catalysis, 2019, 370, 424-433.	3.1	40
83	Clay Hydration/dehydration in Dry to Water-saturated Supercritical CO2: Implications for Caprock Integrity. Energy Procedia, 2013, 37, 5443-5448.	1.8	39
84	Investigation of Silica-Supported Vanadium Oxide Catalysts by High-Field ⁵¹V Magic-Angle Spinning NMR. Journal of Physical Chemistry C, 2017, 121, 6246-6254.	1.5	39
85	Palladium/Zeolite Low Temperature Passive NOx Adsorbers (PNA): Structure-Adsorption Property Relationships for Hydrothermally Aged PNA Materials. Emission Control Science and Technology, 2020, 6, 126-138.	0.8	38
86	²⁷Al MAS NMR Studies of HBEA Zeolite at Low to High Magnetic Fields. Journal of Physical Chemistry C, 2017, 121, 12849-12854.	1.5	37
87	25Mg NMR and computational modeling studies of the solvation structures and molecular dynamics in magnesium based liquid electrolytes. Nano Energy, 2018, 46, 436-446.	8.2	37
88	Formation of submicron magnesite during reaction of natural forsterite in H2O-saturated supercritical CO2. Geochimica Et Cosmochimica Acta, 2014, 134, 197-209.	1.6	36
89	Sensitivity-enhanced phase-corrected ultra-slow magic angle turning using multiple-echo data acquisition. Journal of Magnetic Resonance, 2003, 163, 149-162.	1.2	35
90	<i>In situ</i> and <i>ex situ</i> NMR for battery research. Journal of Physics Condensed Matter, 2018, 30, 463001.	0.7	35

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91	Single-Step Conversion of Ethanol to <i>n</i>-Butene over Ag-ZrO₂/SiO₂ Catalysts. ACS Catalysis, 2020, 10, 10602-10613.	5.5	34
92	Rotor design for high pressure magic angle spinning nuclear magnetic resonance. Journal of Magnetic Resonance, 2013, 226, 64-69.	1.2	33
93	In Situ ²⁷Al NMR Spectroscopy of Aluminate in Sodium Hydroxide Solutions above and below Saturation with Respect to Gibbsite. Inorganic Chemistry, 2018, 57, 11864-11873.	1.9	33
94	Line narrowing in 1H MAS spectrum of mesoporous silica by removing adsorbed H2O using N2. Solid State Nuclear Magnetic Resonance, 2005, 27, 200-205.	1.5	32
95	Understanding Aqueous Electrolyte Stability through Combined Computational and Magnetic Resonance Spectroscopy: A Case Study on Vanadium Redox Flow Battery Electrolytes. ChemPlusChem, 2015, 80, 428-437.	1.3	32
96	Low temperature milling of the LiNH2 + LiH hydrogen storage system. International Journal of Hydrogen Energy, 2009, 34, 4331-4339.	3.8	29
97	Studies of the Active Sites for Methane Dehydroaromatization Using Ultrahigh-Field Solid-State 95Mo NMR Spectroscopy. Journal of Physical Chemistry C, 2009, 113, 2936-2942.	1.5	29
98	Natural abundance 17O nuclear magnetic resonance and computational modeling studies of lithium based liquid electrolytes. Journal of Power Sources, 2015, 285, 146-155.	4.0	29
99	Elementary Steps of Faujasite Formation Followed by in Situ Spectroscopy. Chemistry of Materials, 2018, 30, 888-897.	3.2	29
100	Unraveling Gibbsite Transformation Pathways into LiAl-LDH in Concentrated Lithium Hydroxide. Inorganic Chemistry, 2019, 58, 12385-12394.	1.9	29
101	High-Field One-Dimensional and Two-Dimensional ²⁷Al Magic-Angle Spinning Nuclear Magnetic Resonance Study of Î¸-, Î´-, and Î³-Al₂O₃ Dominated Aluminum Oxides: Toward Understanding the Al Sites in Î³-Al₂O₃. ACS Omega, 2021, 6, 4090-4099.	1.6	29
102	Modified Spectral Editing Methods for 13C CP/MAS Experiments in Solids. Journal of Magnetic Resonance, 2000, 142, 326-330.	1.2	27
103	Dynamic High-Resolution1H and31P NMR Spectroscopy and1H T2Measurements in Postmortem Rabbit Muscles Using Slow Magic Angle Spinning. Journal of Agricultural and Food Chemistry, 2004, 52, 2681-2688.	2.4	27
104	Dynamic Structural Changes of SiO₂ Supported Ptâ€"Ni Bimetallic Catalysts over Redox Treatments Revealed by NMR and EPR. Journal of Physical Chemistry C, 2015, 119, 21219-21226.	1.5	27
105	Role of Solvent Rearrangement on Mg²⁺ Solvation Structures in Dimethoxyethane Solutions using Multimodal NMR Analysis. Journal of Physical Chemistry Letters, 2020, 11, 6443-6449.	2.1	27
106	Solid State NMR and Wide Angle X-ray Diffraction Studies of Supercritical Fluid CO2-Treated Poly(ethylene terephthalate). Macromolecules, 1998, 31, 9238-9246.	2.2	26
107	Study the effects of mechanical activation on Liâ€"Nâ€"H systems with 1H and 6Li solid-state NMR. Journal of Power Sources, 2007, 170, 419-424.	4.0	26
108	Investigating the Surface Structure of Î³-Al₂O₃ Supported WO_X Catalysts by High Field ²⁷Al MAS NMR and Electronic Structure Calculations. Journal of Physical Chemistry C, 2016, 120, 23093-23103.	1.5	26

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109	Origin of Unusual Acidity and Li⁺ Diffusivity in a Series of Water-in-Salt Electrolytes. Journal of Physical Chemistry B, 2020, 124, 5284-5291.	1.2	26
110	Localized in vivo isotropic-anisotropic correlation1H NMR spectroscopy using ultraslow magic angle spinning. Magnetic Resonance in Medicine, 2006, 55, 41-49.	1.9	25
111	Probing the reaction pathway of dehydrogenation of the LiNH2+LiH mixture using in situ 1H NMR spectroscopy. Journal of Power Sources, 2008, 181, 116-119.	4.0	25
112	Hydrogen Bonding Effects on the13C NMR Chemical Shift Tensors of Some Amino Acids in the Solid State. Magnetic Resonance in Chemistry, 1997, 35, 606-608.	1.1	24
113	Effects of Novel Supports on the Physical and Catalytic Properties of Tungstophosphoric Acid for Alcohol Dehydration Reactions. Topics in Catalysis, 2008, 49, 259-267.	1.3	24
114	Diffusional motion of redox centers in carbonate electrolytes. Journal of Chemical Physics, 2014, 141, 104509.	1.2	24
115	<i>In Situ</i> High Temperature High Pressure MAS NMR Study on the Crystallization of AlPO₄-5. Journal of Physical Chemistry C, 2016, 120, 1701-1708.	1.5	23
116	Direct observation of ion exchange in mechanically activated LiH+MgB2 system using ultrahigh field nuclear magnetic resonance spectroscopy. Applied Physics Letters, 2009, 94, 141905.	1.5	22
117	Highly Dispersed and Active ReO_{<i>x</i>} on Alumina-Modified SBA-15 Silica for 2-Butanol Dehydration. ACS Catalysis, 2012, 2, 1020-1026.	5.5	22
118	The evaluation of different MAS techniques at low spinning rates in aqueous samples and in the presence of magnetic susceptibility gradients. Journal of Magnetic Resonance, 2002, 159, 92-100.	1.2	21
119	Conversion of ethanol to 1,3â€“butadiene over Agâ€“ZrO2/SiO2 catalysts: The role of surface interfaces. Journal of Energy Chemistry, 2021, 54, 7-15.	7.1	21
120	Activity of Cuâ€“Alâ€“Oxo Extra-Framework Clusters for Selective Methane Oxidation on Cu-Exchanged Zeolites. Jacs Au, 2021, 1, 1412-1421.	3.6	21
121	A large sample volume magic angle spinning nuclear magnetic resonance probe for in situ investigations with constant flow of reactants. Physical Chemistry Chemical Physics, 2012, 14, 2137-2143.	1.3	20
122	In situ 7Li and 133Cs nuclear magnetic resonance investigations on the role of Cs+ additive in lithium-metal deposition process. Journal of Power Sources, 2016, 304, 51-59.	4.0	20
123	WO supported on Î³-Al2O3 with different morphologies as model catalysts for alkanol dehydration. Journal of Catalysis, 2018, 363, 1-8.	3.1	20
124	Catalytic activation of ethylene Câ€“H bonds on uniform d⁸ Ir(<scp>i</scp>) and Ni(<scp>ii</scp>) cations in zeolites: toward molecular level understanding of ethylene polymerization on heterogeneous catalysts. Catalysis Science and Technology, 2019, 9, 6570-6576.	2.1	20
125	Structureâ€“Activity Relationships of Hydrothermally Aged Titania-Supported Vanadiumâ€“Tungsten Oxide Catalysts for SCR of NO_{<i>x</i>} Emissions with NH₃. ACS Catalysis, 2021, 11, 12096-12111.	5.5	20
126	Pulsed Field Gradient Nuclear Magnetic Resonance and Diffusion Analysis in Battery Research. Chemistry of Materials, 2021, 33, 8562-8590.	3.2	20

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127	Multiphase sequestration geochemistry: Model for mineral carbonation. Energy Procedia, 2011, 4, 5009-5016.	1.8	19
128	Transformation of Gibbsite to Boehmite in Caustic Aqueous Solution at Hydrothermal Conditions. Crystal Growth and Design, 2019, 19, 5557-5567.	1.4	19
129	Adsorption and Thermal Decomposition of Electrolytes on Nanometer Magnesium Oxide: An in Situ 13C MAS NMR Study. ACS Applied Materials & Interfaces, 2019, 11, 38689-38696.	4.0	19
130	Ab initio calculation and experimental determination of the 13C chemical shielding tensors of 4,4â€²-dimethoxybiphenyl. Computational and Theoretical Chemistry, 1998, 428, 283-286.	1.5	18
131	Investigation of mechanical activation on Liâ€“Nâ€“H systems using 6Li magic angle spinning nuclear magnetic resonance at ultra-high field. Journal of Power Sources, 2008, 182, 278-283.	4.0	18
132	1H NMR metabolomics study of metastatic melanoma in C57BL/6J mouse spleen. Metabolomics, 2014, 10, 1129-1144.	1.4	18
133	Preferential Solvation of an Asymmetric Redox Molecule. Journal of Physical Chemistry C, 2016, 120, 27834-27839.	1.5	18
134	NMR-based Metabolomics Analysis of Liver from C57BL/6 Mouse Exposed to Ionizing Radiation. Radiation Research, 2017, 188, 44.	0.7	17
135	Factors Influencing Preferential Anion Interactions during Solvation of Multivalent Cations in Ethereal Solvents. Journal of Physical Chemistry C, 2021, 125, 6005-6012.	1.5	17
136	Dynamic nuclear polarization of nitrogen-15 in benzamide. Solid State Nuclear Magnetic Resonance, 1997, 8, 129-137.	1.5	16
137	H and 15N Dynamic Nuclear Polarization Studies of Carbazole. Journal of Physical Chemistry A, 2000, 104, 4413-4420.	1.1	16
138	Ring-chain tautomerism in solid-phase erythromycin A: evidence by solid-state NMR. Solid State Nuclear Magnetic Resonance, 2003, 24, 23-38.	1.5	16
139	Detailed investigation of ion exchange in ball-milled LiH+MgB2 system using ultra-high field nuclear magnetic resonance spectroscopy. Journal of Power Sources, 2010, 195, 3645-3648.	4.0	16
140	The use of differential transverse relaxation to detect mobile species in solids. Solid State Nuclear Magnetic Resonance, 1996, 6, 63-71.	1.5	15
141	Quantum chemical calculation and experimental measurement of the 13C chemical shift tensors of vanillin and 3,4-dimethoxybenzaldehyde. Chemical Physics Letters, 1997, 266, 533-536.	1.2	15
142	Nuclear magnetic resonance studies of the solvation structures of a high-performance nonaqueous redox flow electrolyte. Journal of Power Sources, 2016, 308, 172-179.	4.0	15
143	²⁷Al Pulsed Field Gradient, Diffusionâ€“NMR Spectroscopy of Solvation Dynamics and Ion Pairing in Alkaline Aluminate Solutions. Journal of Physical Chemistry B, 2018, 122, 10907-10912.	1.2	15
144	Solid-state hydrogen storage: Storage capacity, thermodynamics, and kinetics. Jom, 2009, 61, 45-51.	0.9	14

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145	Application of High-Resolution¹H MAS NMR Spectroscopy to the Analysis of Intact Bones from Mice Exposed to Gamma Radiation. Radiation Research, 2009, 172, 607-616.	0.7	14
146	Low-temperature (<â€‰200ÂÂ°C) degradation of electronic nicotine delivery system liquids generates toxic aldehydes. Scientific Reports, 2021, 11, 7800.	1.6	14
147	Solid-State 13C NMR, X-ray, and Quantum Mechanical Studies of the Carbon Chemical Shifts Tensors of p-Tolyl Ether. The Journal of Physical Chemistry, 1994, 98, 12186-12190.	2.9	13
148	High resolution 1H spectra of powdered solids observed by Hahn echo pulse sequence with magic-angle spinning. Solid State Nuclear Magnetic Resonance, 1996, 6, 85-94.	1.5	13
149	Investigation of water assisted phase transformation process from AlPO4-5 to AlPO4-tridymite. Microporous and Mesoporous Materials, 2016, 223, 241-246.	2.2	13
150	Probing Conformational Evolution and Associated Dynamics of Mg(N(SO₂CF₃)₂)₂Â·Dimethoxyethane Adduct Using Solid-State ¹⁹F and ¹H NMR. Journal of Physical Chemistry C, 2020, 124, 4999-5008.	1.5	13
151	A High-Resolution 3D Separated-Local-Field Experiment by Means of Magic-Angle Turning. Journal of Magnetic Resonance, 1997, 126, 120-126.	1.2	12
152	Slow-MAS NMR: A new technology for in vivo metabolomic studies. Drug Discovery Today: Technologies, 2005, 2, 291-294.	4.0	12
153	Spectral editing in 13C CP/MAS experiments at high magnetic field. Solid State Nuclear Magnetic Resonance, 1996, 6, 187-196.	1.5	11
154	Solid-State 13C NMR Measurements in Methoxynaphthalenes:â€‰ Determination of the Substituent Chemical Shift Effects in the Principal Values. Journal of Physical Chemistry A, 1997, 101, 9169-9175.	1.1	11
155	Measurement of spin-lattice relaxation times of 13C in organic solids. Solid State Nuclear Magnetic Resonance, 1997, 7, 291-299.	1.5	11
156	Investigation of Polyethylene by Means of Magic Angle Turning and Separated-Local-Field Experiments. Macromolecules, 2000, 33, 3359-3367.	2.2	11
157	Characterizing Surface Acidic Sites in Mesoporous-Silica-Supported Tungsten Oxide Catalysts Using Solid-State NMR and Quantum Chemistry Calculations. Journal of Physical Chemistry C, 2011, 115, 23354-23362.	1.5	11
158	Energetics of Defects on Graphene through Fluorination. ChemSusChem, 2014, 7, 1295-1300.	3.6	10
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