Feng Deng

List of Publications by Year in descending order

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220 papers	10,991 citations	22099 59 h-index	40881 93 g-index
227 all docs	227 docs citations	227 times ranked	8428 citing authors

#	Article	IF	Citations
1	BrÃ¸nsted/Lewis Acid Synergy in Dealuminated HY Zeolite:â€‰ A Combined Solid-State NMR and Theoretical Calculation Study. Journal of the American Chemical Society, 2007, 129, 11161-11171.	6.6	349
2	Roles for Cyclopentenyl Cations in the Synthesis of Hydrocarbons from Methanol on Zeolite Catalyst HZSM-5. Journal of the American Chemical Society, 2000, 122, 4763-4775.	6.6	296
3	Highly Efficient Heterogeneous Hydroformylation over Rh-Metalated Porous Organic Polymers: Synergistic Effect of High Ligand Concentration and Flexible Framework. Journal of the American Chemical Society, 2015, 137, 5204-5209.	6.6	292
4	³¹P NMR Chemical Shifts of Phosphorus Probes as Reliable and Practical Acidity Scales for Solid and Liquid Catalysts. Chemical Reviews, 2017, 117, 12475-12531.	23.0	258
5	Sustainable Synthesis of Zeolites without Addition of Both Organotemplates and Solvents. Journal of the American Chemical Society, 2014, 136, 4019-4025.	6.6	233
6	Understanding the High Photocatalytic Activity of (B, Ag)-Codoped TiO₂ under Solar-Light Irradiation with XPS, Solid-State NMR, and DFT Calculations. Journal of the American Chemical Society, 2013, 135, 1607-1616.	6.6	230
7	Acid properties of solid acid catalysts characterized by solid-state 31P NMR of adsorbed phosphorous probe molecules. Physical Chemistry Chemical Physics, 2011, 13, 14889.	1.3	204
8	Direct Observation of Cyclic Carbenium Ions and Their Role in the Catalytic Cycle of the Methanolâ€toâ€Olefin Reaction over Chabazite Zeolites. Angewandte Chemie - International Edition, 2013, 52, 11564-11568.	7.2	193
9	Acidic Properties and Structureâ€“Activity Correlations of Solid Acid Catalysts Revealed by Solid-State NMR Spectroscopy. Accounts of Chemical Research, 2016, 49, 655-663.	7.6	177
10	Insights into the Dealumination of Zeoliteâ€…HY Revealed by Sensitivityâ€Enhanced ²⁷Al DQâ€MAS NMR Spectroscopy at High Field. Angewandte Chemie - International Edition, 2010, 49, 8657-8661.	7.2	173
11	Boron Environments in B-Doped and (B, N)-Codoped TiO₂ Photocatalysts: A Combined Solid-State NMR and Theoretical Calculation Study. Journal of Physical Chemistry C, 2011, 115, 2709-2719.	1.5	164
12	Room temperature activation of methane over Zn modified H-ZSM-5 zeolites: Insight from solid-state NMR and theoretical calculations. Chemical Science, 2012, 3, 2932.	3.7	157
13	BrÃ¸nsted/Lewis Acid Synergy in Hâ€“ZSM-5 and Hâ€“MOR Zeolites Studied by ¹H and ²⁷Al DQ-MAS Solid-State NMR Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 22320-22327.	1.5	147
14	Mesoporous ZSM-5 Zeolite-Supported Ru Nanoparticles as Highly Efficient Catalysts for Upgrading Phenolic Biomolecules. ACS Catalysis, 2015, 5, 2727-2734.	5.5	147
15	Theoretical Predictions of ³¹P NMR Chemical Shift Threshold of Trimethylphosphine Oxide Absorbed on Solid Acid Catalysts. Journal of Physical Chemistry B, 2008, 112, 4496-4505.	1.2	143
16	New Insight into the Hydrocarbonâ€Pool Chemistry of the Methanolâ€toâ€Olefins Conversion over Zeolite Hâ€ZSMâ€5 from GCâ€MS, Solidâ€State NMR Spectroscopy, and DFT Calculations. Chemistry - A European Journal, 2014, 20, 12432-12443.	1.7	131
17	Efficient and selective photocatalytic CH4 conversion to CH3OH with O2 by controlling overoxidation on TiO2. Nature Communications, 2021, 12, 4652.	5.8	131
18	Location, Acid Strength, and Mobility of the Acidic Protons in Keggin 12-H3PW12O40:â€‰ A Combined Solid-State NMR Spectroscopy and DFT Quantum Chemical Calculation Study. Journal of the American Chemical Society, 2005, 127, 18274-18280.	6.6	130

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19	Measurement of hetero-nuclear distances using a symmetry-based pulse sequence in solid-state NMR. Physical Chemistry Chemical Physics, 2010, 12, 9395.	1.3	120
20	A defect-based strategy for the preparation of mesoporous zeolite Y for high-performance catalytic cracking. Journal of Catalysis, 2013, 298, 102-111.	3.1	120
21	Hydrothermal treatment on ZSM-5 extrudates catalyst for methanol to propylene reaction: Finely tuning the acidic property. Fuel Processing Technology, 2015, 129, 130-138.	3.7	112
22	Acid sites in mesoporous Al-SBA-15 material as revealed by solid-state NMR spectroscopy. Microporous and Mesoporous Materials, 2006, 92, 22-30.	2.2	110
23	BrÃ¸nsted/Lewis Acid Synergy in Methanol-to-Aromatics Conversion on Ga-Modified ZSM-5 Zeolites, As Studied by Solid-State NMR Spectroscopy. ACS Catalysis, 2018, 8, 69-74.	5.5	107
24	Metal Active Sites and Their Catalytic Functions in Zeolites: Insights from Solid-State NMR Spectroscopy. Accounts of Chemical Research, 2019, 52, 2179-2189.	7.6	106
25	Probing the Spatial Proximities among Acid Sites in Dealuminated H-Y Zeolite by Solid-State NMR Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 14486-14494.	1.5	105
26	Acidic Strengths of BrÃ¸nsted and Lewis Acid Sites in Solid Acids Scaled by ³¹P NMR Chemical Shifts of Adsorbed Trimethylphosphine. Journal of Physical Chemistry C, 2011, 115, 7660-7667.	1.5	104
27	In situ growth-etching approach to the preparation of hierarchically macroporous zeolites with high MTO catalytic activity and selectivity. Journal of Materials Chemistry A, 2014, 2, 17994-18004.	5.2	102
28	Conformation of Surfactant Molecules in the Interlayer of Montmorillonite Studied by ¹³C MAS NMR. Clays and Clay Minerals, 2004, 52, 350-356.	0.6	100
29	A Mechanistic Study of Methanol-to-Aromatics Reaction over Ga-Modified ZSM-5 Zeolites: Understanding the Dehydrogenation Process. ACS Catalysis, 2018, 8, 9809-9820.	5.5	100
30	Insight into Dimethyl Ether Carbonylation Reaction over Mordenite Zeolite from in-Situ Solid-State NMR Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 5840-5847.	1.5	98
31	High performance nanosheet-like silicoaluminophosphate molecular sieves: synthesis, 3D EDT structural analysis and MTO catalytic studies. Journal of Materials Chemistry A, 2014, 2, 17828-17839.	5.2	96
32	Transfer Channel of Photoinduced Holes on a TiO₂ Surface As Revealed by Solid-State Nuclear Magnetic Resonance and Electron Spin Resonance Spectroscopy. Journal of the American Chemical Society, 2017, 139, 10020-10028.	6.6	96
33	Au-ZSM-5 catalyses the selective oxidation of CH4 to CH3OH and CH3COOH using O2. Nature Catalysis, 2022, 5, 45-54.	16.1	95
34	A Hierarchical Bipyridineâ€Constructed Framework for Highly Efficient Carbon Dioxide Capture and Catalytic Conversion. ChemSusChem, 2017, 10, 1186-1192.	3.6	94
35	MAS NMR Studies on the Dealumination of Zeolite MCM-22. Journal of Physical Chemistry B, 2001, 105, 1770-1779.	1.2	92
36	³¹P Chemical Shift of Adsorbed Trialkylphosphine Oxides for Acidity Characterization of Solid Acids Catalysts. Journal of Physical Chemistry A, 2008, 112, 7349-7356.	1.1	92

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37	Inorganic molecular imprinted titanium dioxide photocatalyst: synthesis, characterization and its application for efficient and selective degradation of phthalate esters. Journal of Materials Chemistry, 2009, 19, 4843.	6.7	92
38	Understanding Surface and Interfacial Chemistry in Functional Nanomaterials via Solidâ€State NMR. Advanced Materials, 2017, 29, 1605895.	11.1	91
39	Beyond the Thermal Equilibrium Limit of Ammonia Synthesis with Dual Temperature Zone Catalyst Powered by Solar Light. CheM, 2019, 5, 2702-2717.	5.8	91
40	Hydrogen Spillover to Oxygen Vacancy of TiO_{2â€“x}H_y/Fe: Breaking the Scaling Relationship of Ammonia Synthesis. Journal of the American Chemical Society, 2020, 142, 17403-17412.	6.6	91
41	Methylbenzene hydrocarbon pool in methanol-to-olefins conversion over zeolite H-ZSM-5. Journal of Catalysis, 2015, 332, 127-137.	3.1	88
42	Self-Assembly of Cetyltrimethylammonium Bromide and Lamellar Zeolite Precursor for the Preparation of Hierarchical MWW Zeolite. Chemistry of Materials, 2016, 28, 4512-4521.	3.2	88
43	Extraâ€Framework Aluminumâ€Assisted Initial Câ€"C Bond Formation in Methanolâ€toâ€Olefins Conversion on Zeolite Hâ€ZSMâ€5. Angewandte Chemie - International Edition, 2018, 57, 10197-10201.	7.2	86
44	NMRâ€Spectroscopic Evidence of Intermediateâ€Dependent Pathways for Acetic Acid Formation from Methane and Carbon Monoxide over a ZnZSMâ€5 Zeolite Catalyst. Angewandte Chemie - International Edition, 2012, 51, 3850-3853.	7.2	84
45	Theoretical Investigation of the Effects of the Zeolite Framework on the Stability of Carbenium Ions. Journal of Physical Chemistry C, 2011, 115, 7429-7439.	1.5	83
46	Relationship Between 1H Chemical Shifts of Deuterated Pyridinium Ions and BrÃ¸nsted Acid Strength of Solid Acids. Journal of Physical Chemistry B, 2007, 111, 3085-3089.	1.2	82
47	Indirect Detection via Spin-1/2 Nuclei in Solid State NMR Spectroscopy: Application to the Observation of Proximities between Protons and Quadrupolar Nuclei. Journal of Physical Chemistry A, 2009, 113, 12864-12878.	1.1	81
48	Combined DFT Theoretical Calculation and Solid-State NMR Studies of Al Substitution and Acid Sites in Zeolite MCM-22. Journal of Physical Chemistry B, 2005, 109, 24273-24279.	1.2	80
49	Low-Temperature Reactivity of Zn⁺ Ions Confined in ZSM-5 Zeolite toward Carbon Monoxide Oxidation: Insight from in Situ DRIFT and ESR Spectroscopy. Journal of the American Chemical Society, 2013, 135, 6762-6765.	6.6	80
50	The acidic nature of â€œNMR-invisibleâ€•tri-coordinated framework aluminum species in zeolites. Chemical Science, 2019, 10, 10159-10169.	3.7	78
51	Insights of the Crystallization Process of Molecular Sieve AlPO₄-5 Prepared by Solvent-Free Synthesis. Journal of the American Chemical Society, 2016, 138, 6171-6176.	6.6	77
52	Using Trimethylphosphine as a Probe Molecule to Study the Acid Sites in Alâ€"MCM-41 Materials by Solid-State NMR Spectroscopy. Journal of Physical Chemistry B, 2003, 107, 2435-2442.	1.2	72
53	Acidity of Mesoporous MoOx/ZrO2and WOx/ZrO2Materials:Â A Combined Solid-State NMR and Theoretical Calculation Study. Journal of Physical Chemistry B, 2006, 110, 10662-10671.	1.2	70
54	Reactivity of C₁ Surface Species Formed in Methane Activation on Znâ€Modified Hâ€ZSMâ€5 Zeolite. Chemistry - A European Journal, 2010, 16, 14016-14025.	1.7	68

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55	¹³C Chemical Shift of Adsorbed Acetone for Measuring the Acid Strength of Solid Acids: A Theoretical Calculation Study. Journal of Physical Chemistry C, 2010, 114, 12711-12718.	1.5	67
56	Direct Detection of Supramolecular Reaction Centers in the Methanolâ€toâ€Olefins Conversion over Zeolite Hâ€ZSMâ€5 by ¹³Câ€“²⁷Al Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 2507-2511.	7.2	67
57	Construction of Porous Aromatic Frameworks with Exceptional Porosity via Building Unit Engineering. Advanced Materials, 2018, 30, e1804169.	11.1	66
58	A Hydrothermally Stable Irreducible Oxideâ€Modified Pd/MgAl₂O₄ Catalyst for Methane Combustion. Angewandte Chemie - International Edition, 2020, 59, 18522-18526.	7.2	64
59	Acid Sites and Hydration Behavior of Dealuminated Zeolite HZSM-5: A High-Resolution Solid State NMR Study. The Journal of Physical Chemistry, 1995, 99, 15208-15214.	2.9	62
60	Acidity characterization of heterogeneous catalysts by solid-state NMR spectroscopy using probe molecules. Solid State Nuclear Magnetic Resonance, 2013, 55-56, 12-27.	1.5	62
61	Experimental Evidence on the Formation of Ethene through Carbocations in Methanol Conversion over Hâ€ZSMâ€5 Zeolite. Chemistry - A European Journal, 2015, 21, 12061-12068.	1.7	62
62	¹⁹F Chemical Shift of Crystalline Metal Fluorides: Theoretical Predictions Based on Periodic Structure Models. Journal of Physical Chemistry C, 2009, 113, 15018-15023.	1.5	61
63	Distance measurement between a spin-1/2 and a half-integer quadrupolar nuclei by solid-state NMR using exact analytical expressions. Journal of Magnetic Resonance, 2010, 206, 269-273.	1.2	61
64	Measurement of Aluminumâ€“Carbon Distances Using Sâ€RESPDOR NMR Experiments. ChemPhysChem, 2012, 13, 3605-3615.	1.0	59
65	Synergic Effect of Active Sites in Zincâ€Modified ZSMâ€5 Zeolites as Revealed by Highâ€Field Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2016, 55, 15826-15830.	7.2	59
66	Methanol to Olefins Reaction over Cavity-type Zeolite: Cavity Controls the Critical Intermediates and Product Selectivity. ACS Catalysis, 2018, 8, 10950-10963.	5.5	59
67	Combined Solid-State NMR and Theoretical Calculation Studies of BrÃ¸nsted Acid Properties in Anhydrous 12-Molybdophosphoric Acid. Journal of Physical Chemistry C, 2010, 114, 15464-15472.	1.5	57
68	Methanol to hydrocarbons reaction over HÎ² zeolites studied by high resolution solid-state NMR spectroscopy: Carbenium ions formation and reaction mechanism. Journal of Catalysis, 2016, 335, 47-57.	3.1	57
69	Secondâ€Order Nonlinear Optical Switch of a New Hydrogenâ€Bonded Supramolecular Crystal with a High Laserâ€Induced Damage Threshold. Advanced Optical Materials, 2014, 2, 1199-1205.	3.6	55
70	Crystallization of AlPO4-5 Aluminophosphate Molecular Sieve Prepared in Fluoride Medium:Â A Multinuclear Solid-State NMR Study. Journal of Physical Chemistry B, 2007, 111, 7105-7113.	1.2	54
71	Direct observation of tin sites and their reversible interconversion in zeolites by solid-state NMR spectroscopy. Communications Chemistry, 2018, 1, .	2.0	54
72	Solid-state 31P NMR mapping of active centers and relevant spatial correlations in solid acid catalysts. Nature Protocols, 2020, 15, 3527-3555.	5.5	54

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73	Unravelling the Efficient Photocatalytic Activity of Boron-induced Ti3+ Species in the Surface Layer of TiO2. Scientific Reports, 2016, 6, 34765.	1.6	53
74	F-assisted synthesis of a hierarchical ZSM-5 zeolite for methanol to propylene reaction: a b-oriented thinner dimensional morphology. RSC Advances, 2015, 5, 61354-61363.	1.7	52
75	Slight channel difference influences the reaction pathway of methanol-to-olefins conversion over acidic H-ZSM-22 and H-ZSM-12 zeolites. Catalysis Science and Technology, 2015, 5, 3507-3517.	2.1	51
76	Fluorine-planted titanosilicate with enhanced catalytic activity in alkene epoxidation with hydrogen peroxide. Catalysis Science and Technology, 2012, 2, 2433.	2.1	50
77	Recent Advances of Solidâ€State NMR Spectroscopy for Microporous Materials. Advanced Materials, 2020, 32, e2002879.	11.1	50
78	Reactivity Enhancement of 2-Propanol Photocatalysis on SO₄^{2â˜}/TiO₂: Insights from Solid-State NMR Spectroscopy. Environmental Science & Technology, 2008, 42, 5316-5321.	4.6	49
79	Sustainable Synthesis of Pure Silica Zeolites from a Combined Strategy of Zeolite Seeding and Alcohol Filling. Angewandte Chemie - International Edition, 2019, 58, 12138-12142.	7.2	47
80	Evolution of D6R units in the interzeolite transformation from FAU, MFI or *BEA into AEI: transfer or reassembly?. Inorganic Chemistry Frontiers, 2020, 7, 2204-2211.	3.0	47
81	Acidity of sulfated tin oxide and sulfated zirconia: A view from solid-state NMR spectroscopy. Catalysis Communications, 2009, 10, 920-924.	1.6	45
82	Alkylation of Benzene with Methane over ZnZSM-5 Zeolites Studied with Solid-State NMR Spectroscopy. Journal of Physical Chemistry C, 2013, 117, 4018-4023.	1.5	45
83	Pore Selectivity for Olefin Protonation Reactions Confined inside Mordenite Zeolite: A Theoretical Calculation Study. Journal of Physical Chemistry C, 2013, 117, 2194-2202.	1.5	43
84	Synthesis of chiral polymorph A-enriched zeolite Beta with an extremely concentrated fluoride route. Scientific Reports, 2015, 5, 11521.	1.6	43
85	Super Hydrophobic Mesoporous Silica with Anchored Methyl Groups on the Surface by a One-Step Synthesis without Surfactant Template. Journal of Physical Chemistry C, 2007, 111, 999-1004.	1.5	42
86	New Insights into Keggināâ€Type 12â€Tungstophosphoric Acid from ³¹P MAS NMR Analysis of Absorbed Trimethylphosphine Oxide and DFT Calculations. Chemistry - an Asian Journal, 2011, 6, 137-148.	1.7	42
87	Mapping the oxygen structure of Î³-Al2O3 by high-field solid-state NMR spectroscopy. Nature Communications, 2020, 11, 3620.	5.8	42
88	New Insights into the Effects of Acid Strength on the Solid Acid-Catalyzed Reaction: Theoretical Calculation Study of Olefinic Hydrocarbon Protonation Reaction. Journal of Physical Chemistry C, 2010, 114, 10254-10264.	1.5	41
89	Amine Surface Modifications and Fluorescent Labeling of Thermally Stabilized Mesoporous Silicon Nanoparticles. Journal of Physical Chemistry C, 2012, 116, 22307-22314.	1.5	41
90	Observation of an oxonium ion intermediate in ethanol dehydration to ethene on zeolite. Nature Communications, 2019, 10, 1961.	5.8	40

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91	Solid-state MAS NMR detection of the oxidation center in TS-1 zeolite by in situ probe reaction. Journal of Catalysis, 2004, 221, 670-673.	3.1	39
92	Influence of acid strength on the reactivity of alkane activation on solid acid catalysts: A theoretical calculation study. Microporous and Mesoporous Materials, 2012, 151, 241-249.	2.2	39
93	Dual Active Sites on Molybdenum/ZSMâ€5 Catalyst for Methane Dehydroaromatization: Insights from Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 10709-10715.	7.2	39
94	Synthesis of high-silica EU-1 zeolite in the presence of hexamethonium ions: A seeded approach for inhibiting ZSM-48. Journal of Colloid and Interface Science, 2011, 358, 252-260.	5.0	38
95	Highly nitrogen-doped mesoscopic carbons as efficient metal-free electrocatalysts for oxygen reduction reactions. Journal of Materials Chemistry A, 2014, 2, 20030-20037.	5.2	37
96	Solid-state NMR studies of internuclear correlations for characterizing catalytic materials. Chemical Society Reviews, 2021, 50, 8382-8399.	18.7	37
97	Enhancement of BrÃ¸nsted acidity in zeolitic catalysts due to an intermolecular solvent effect in confined micropores. Chemical Communications, 2012, 48, 6936.	2.2	35
98	Ï€â€Interactions between Cyclic Carbocations and Aromatics Cause Zeolite Deactivation in Methanolâ€toâ€Hydrocarbon Conversion. Angewandte Chemie - International Edition, 2020, 59, 7198-7202.	7.2	35
99	Hydroiodic Acid Additive Enhanced the Performance and Stability of PbS-QDs Solar Cells via Suppressing Hydroxyl Ligand. Nano-Micro Letters, 2020, 12, 37.	14.4	35
100	Solid-state NMR studies of methanol-to-aromatics reaction over silver exchanged HZSM-5 zeolite. Microporous and Mesoporous Materials, 2007, 98, 214-219.	2.2	34
101	Signal enhancement of J-HMQC experiments in solid-state NMR involving half-integer quadrupolar nuclei. Chemical Communications, 2013, 49, 6653.	2.2	34
102	Recent Advances of Solid-State NMR Studies on Zeolites. Annual Reports on NMR Spectroscopy, 2013, 78, 1-54.	0.7	34
103	Progress in development and application of solid-state NMR for solid acid catalysis. Chinese Journal of Catalysis, 2013, 34, 436-491.	6.9	33
104	Boosting the turnover number of coreâ€“shell Al-ZSM-5@B-ZSM-5 zeolite for methanol to propylene reaction by modulating its gradient acid site distribution and low consumption diffusion. Catalysis Science and Technology, 2019, 9, 659-671.	2.1	33
105	Mechanism of Methanolâ€toâ€Hydrocarbon Reaction over Zeolites: A solidâ€state NMR Perspective. ChemCatChem, 2020, 12, 965-980.	1.8	33
106	Solid state NMR study of acid sites formed by adsorption of SO3 onto Î³-Al2O3. Chemical Communications, 2003, , 884-885.	2.2	32
107	Strong or weak acid, which is more efficient for Beckmann rearrangement reaction over solid acid catalysts?. Catalysis Science and Technology, 2015, 5, 3675-3681.	2.1	32
108	Stabilizing the framework of SAPO-34 zeolite toward long-term methanol-to-olefins conversion. Nature Communications, 2021, 12, 4661.	5.8	32

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109	Formation, Location, and Photocatalytic Reactivity of Methoxy Species on Keggin 12-H₃PW₁₂O₄₀: A Joint Solid-State NMR Spectroscopy and DFT Calculation Study. Journal of Physical Chemistry C, 2008, 112, 15765-15770.	1.5	31
110	Hostâ€“Guest Interactions in Dealuminated HY Zeolite Probed by ¹³Câ€“²⁷Al Solid-State NMR Spectroscopy. Journal of Physical Chemistry Letters, 2014, 5, 3068-3072.	2.1	31
111	Highly efficient visible light induced photocatalytic activity of a novel in situ synthesized conjugated microporous poly(benzothiadiazole)â€“C₃N₄ composite. Catalysis Science and Technology, 2017, 7, 418-426.	2.1	30
112	BrÃ¶nsted and Lewis Acidity of the BF3/Î³-Al2O3Alkylation Catalyst as Revealed by Solid-State NMR Spectroscopy and DFT Quantum Chemical Calculations. Journal of Physical Chemistry B, 2005, 109, 13124-13131.	1.2	29
113	Population transfer HMQC for half-integer quadrupolar nuclei. Journal of Chemical Physics, 2015, 142, 094201.	1.2	29
114	Probing the surface of Î³-Al₂O₃ by oxygen-17 dynamic nuclear polarization enhanced solid-state NMR spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 17218-17225.	1.3	29
115	Molecular Vises for Precisely Positioning Ligands near Catalytic Metal Centers in Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 16182-16187.	6.6	29
116	Establishing a Link Between the Dual Cycles in Methanol-to-Olefins Conversion on H-ZSM-5: Aromatization of Cycloalkenes. ACS Catalysis, 2020, 10, 4299-4305.	5.5	29
117	Direct observation of methylcyclopentenyl cations (MCP⁺) and olefin generation in methanol conversion over TON zeolite. Catalysis Science and Technology, 2016, 6, 89-97.	2.1	28
118	Origin of High Selectivity of Dimethyl Ether Carbonylation in the 8-Membered Ring Channel of Mordenite Zeolite. Journal of Physical Chemistry C, 2019, 123, 15503-15512.	1.5	28
119	An NMR Scale for Measuring the Base Strength of Solid Catalysts with Pyrrole Probe: A Combined Solid-State NMR Experiment and Theoretical Calculation Study. Journal of Physical Chemistry C, 2017, 121, 3887-3895.	1.5	27
120	Mesoporous MSU materials functionalized with sulfonic group: A multinuclear NMR and theoretical calculation study. Microporous and Mesoporous Materials, 2006, 89, 219-226.	2.2	26
121	Molecular engineering of microporous crystals: (IV) Crystallization process of microporous aluminophosphate AlPO4-11. Microporous and Mesoporous Materials, 2012, 152, 190-207.	2.2	26
122	Methanol carbonylation over copper-modified mordenite zeolite: A solid-state NMR study. Solid State Nuclear Magnetic Resonance, 2016, 80, 1-6.	1.5	26
123	External or internal surface of H-ZSM-5 zeolite, which is more effective for the Beckmann rearrangement reaction?. Catalysis Science and Technology, 2017, 7, 2512-2523.	2.1	26
124	Solid-state NMR Studies of Hostâ€“Guest Interaction between UiO-67 and Light Alkane at Room Temperature. Journal of Physical Chemistry C, 2017, 121, 14261-14268.	1.5	25
125	Isolated Ï€-Interaction Sites in Mesoporous MOF Backbone for Repetitive and Reversible Dynamics in Water. ACS Applied Materials & Interfaces, 2019, 11, 973-981.	4.0	25
126	Ammonia Catalyzed Hydrolysis-Condensation Kinetics of Tetraethoxysilane/Dimethyldiethoxysilane Mixtures Studied by 29 Si NMR and SAXS. Journal of Solution Chemistry, 2007, 36, 327-344.	0.6	24

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127	Hostâ€“Guest Interactions and Their Catalytic Consequences in Methanol to Olefins Conversion on Zeolites Studied by ¹³Câ€“²⁷Al Double-Resonance Solid-State NMR Spectroscopy. ACS Catalysis, 2017, 7, 6094-6103.	5.5	24
128	Preferential Occupation of Xenon in Zeolite MCM-22 As Revealed by129Xe NMR Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 9426-9432.	1.2	23
129	Stability of the Reaction Intermediates of Ethylbenzene Disproportionation over Medium-Pore Zeolites with Different Framework Topologies: A Theoretical Investigation. Journal of Physical Chemistry C, 2013, 117, 23626-23637.	1.5	23
130	Extraâ€Framework Aluminumâ€Assisted Initial Câ''C Bond Formation in Methanolâ€toâ€Olefins Conversion on Zeolite Hâ€ZSMâ€5. Angewandte Chemie, 2018, 130, 10354-10358.	1.6	23
131	Efficient synthesis of aluminosilicate RTH zeolite with good catalytic performances in NH₃-SCR and MTO reactions. Journal of Materials Chemistry A, 2018, 6, 8705-8711.	5.2	22
132	Enhanced Photocatalytic Performance of Carbon-Coated TiO_{2â€“x} with Surface-Active Carbon Species. Journal of Physical Chemistry C, 2018, 122, 10948-10955.	1.5	21
133	Breaking the T1 Constraint for Quantitative Measurement in Magic Angle Spinning Solid-State NMR Spectroscopy. Journal of the American Chemical Society, 2010, 132, 5538-5539.	6.6	20
134	Acidity Characterization of Solid Acid Catalysts by Solid-State 31P NMR of Adsorbed Phosphorus-Containing Probe Molecules. Annual Reports on NMR Spectroscopy, 2014, 81, 47-108.	0.7	20
135	Bistable Nâ€“Hâ‹¯N hydrogen bonds for reversibly modulating the dynamic motion in an organic co-crystal. Physical Chemistry Chemical Physics, 2016, 18, 10868-10872.	1.3	20
136	Carbonylation of ethane with carbon monoxide over Zn-modified ZSM-5 zeolites studied by in situ solid-state NMR spectroscopy. Journal of Catalysis, 2017, 345, 228-235.	3.1	20
137	1H MAS and 1H[23Na] double resonance NMR studies on the modification of surface hydroxyl groups of Î³-alumina by sodium. Solid State Nuclear Magnetic Resonance, 1997, 7, 281-290.	1.5	19
138	Hydrogenated mesoporous TiO2â€“SiO2 with increased moderate strong BrÃ¶nsted acidic sites for Friedelâ€“Crafts alkylation reaction. Catalysis Science and Technology, 2012, 2, 719.	2.1	19
139	An elaborate structure investigation of the chiral polymorph A-enriched zeolite beta. CrystEngComm, 2016, 18, 1782-1789.	1.3	19
140	Molecular engineering of microporous crystals: (VII) The molar ratio dependence of the structure-directing ability of piperazine in the crystallization of four aluminophosphates with open-frameworks. Microporous and Mesoporous Materials, 2013, 176, 112-122.	2.2	18
141	Mechanism of alkane H/D exchange over zeolite H-ZSM-5 at low temperature: a combined computational and experimental study. Catalysis Science and Technology, 2016, 6, 5350-5363.	2.1	18
142	Solid-state NMR for metal-containing zeolites: From active sites to reaction mechanism. Frontiers of Chemical Science and Engineering, 2020, 14, 159-187.	2.3	18
143	Solid-State NMR in Zeolite Catalysis. Lecture Notes in Quantum Chemistry II, 2019, , .	0.3	17
144	Surface Water Loading on Titanium Dioxide Modulates Photocatalytic Water Splitting. Cell Reports Physical Science, 2020, 1, 100013.	2.8	17

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145	Alkylation of benzene with carbon monoxide over Zn/H-ZSM-5 zeolite studied using in situ solid-state NMR spectroscopy. Chemical Communications, 2014, 50, 11382-11384.	2.2	16
146	Facet dependent pairwise addition of hydrogen over Pd nanocrystal catalysts revealed via NMR using para-hydrogen-induced polarization. Physical Chemistry Chemical Physics, 2017, 19, 9349-9353.	1.3	16
147	Solventâ€Free Synthesis of <scp>ITQ</scp>â€12, <scp>ITQ</scp>â€13, and <scp>ITQ</scp>â€17 Zeolites. Chinese Journal of Chemistry, 2017, 35, 572-576.	2.6	15
148	Influence of Trimethylphosphine Oxide Loading on the Measurement of Zeolite Acidity by Solid-State NMR Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 9497-9506.	1.5	15
149	Unraveling Hydrocarbon Pool Boosted Propane Aromatization on Gallium/ZSMâ€5 Zeolite by Solidâ€State Nuclear Magnetic Resonance Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 23630-23634.	7.2	15
150	Synthesis of Î±-layered sodium disilicate and its tribological properties in liquid paraffin. Journal of Materials Chemistry, 2009, 19, 6896.	6.7	14
151	Investigation of the Strong BrÃ¸nsted Acidity in a Novel SAPO-type Molecular Sieve, DNL-6. Journal of Physical Chemistry C, 2015, 119, 2589-2596.	1.5	14
152	Direct Detection of Supramolecular Reaction Centers in the Methanolâ€toâ€Olefins Conversion over Zeolite Hâ€ZSMâ€5 by ¹³Câ€“²⁷Al Solidâ€State NMR Spectroscopy. Angewandte Chemie, 2016, 128, 2553-2557.	1.6	14
153	Polarization Switching Induced by Slowing the Dynamic Swinglike Motion in a Flexible Organic Dielectric. Journal of Physical Chemistry C, 2016, 120, 27571-27576.	1.5	14
154	A Hydrothermally Stable Irreducible Oxideâ€Modified Pd/MgAl₂O₄ Catalyst for Methane Combustion. Angewandte Chemie, 2020, 132, 18680-18684.	1.6	14
155	Application of solid-state NMR techniques for structural characterization of metal-organic frameworks. Solid State Nuclear Magnetic Resonance, 2022, 117, 101772.	1.5	14
156	Capturing the Local Adsorption Structures of Carbon Dioxide in Polyamine-Impregnated Mesoporous Silica Adsorbents. Journal of Physical Chemistry Letters, 2014, 5, 3183-3187.	2.1	13
157	Identification of double four-ring units in germanosilicate ITQ-13 zeolite by solid-state NMR spectroscopy. Solid State Nuclear Magnetic Resonance, 2017, 87, 1-9.	1.5	13
158	Synthesis of EUâ€1/ZSMâ€48 Coâ€Crystalline Zeolites from Highâ€Silica EUâ€1 Seeds: Tailoring Phase Proportions and Promoting Long Crystallineâ€Phase Stability. Chemistry - A European Journal, 2018, 24, 6595-6605.	1.7	13
159	Tuning Pdâ€“Au Bimetallic Catalysts for Heterogeneous Parahydrogen-Induced Polarization. Journal of Physical Chemistry C, 2018, 122, 1248-1257.	1.5	13
160	Host-guest interaction of styrene and ethylbenzene in MIL-53 studied by solid-state NMR. Solid State Nuclear Magnetic Resonance, 2018, 90, 1-6.	1.5	13
161	gem â€Diolâ€Type Intermediate in the Activation of a Ketone on Snâ€Î² Zeolite as Studied by Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 19532-19538.	7.2	13
162	Dynamic Self-Dispersion of Aggregated Boron Clusters into Stable Oligomeric Boron Species on MFI Zeolite Nanosheets under Oxidative Dehydrogenation of Propane. ACS Catalysis, 2022, 12, 7368-7376.	5.5	13

#	Article	IF	Citations
163	A new study on the kinetics of StÃ¶ber synthesis by in-situ liquid 29Si NMR. Journal of Sol-Gel Science and Technology, 2007, 42, 13-20.	1.1	12
164	Synergic Effect of Active Sites in Zincâ€Modified ZSMâ€5 Zeolites as Revealed by Highâ€Field Solidâ€State NMR Spectroscopy. Angewandte Chemie, 2016, 128, 16058-16062.	1.6	12
165	Origin of Zeolite Confinement Revisited by Energy Decomposition Analysis. Journal of Physical Chemistry C, 2016, 120, 27349-27363.	1.5	12
166	Hostâ€“Guest Interaction between Methanol and Metalâ€“Organic Framework Cu_{3â€“x}Zn_x(btc)₂ as Revealed by Solid-State NMR. Journal of Physical Chemistry C, 2019, 123, 24062-24070.	1.5	12
167	Quantitative Analysis of Linker Composition and Spatial Arrangement of Multivariate Metalâ€“Organic Framework UiO-66 through ¹H Fast MAS NMR. Journal of Physical Chemistry C, 2020, 124, 17640-17647.	1.5	12
168	Primary Adsorption Sites of Light Alkanes in Multivariate UiO-66 at Room Temperature as Revealed by Solid-State NMR. Journal of Physical Chemistry C, 2020, 124, 3738-3746.	1.5	12
169	Variation of sodium coordination during the hydration processes of layered sodium disilicates as studied by 23Na MQMAS and 1Hâ†”23Na CP/MAS NMR spectroscopyElectronic supplementary information (ESI) available: XRD patterns of SKS-5 and SKS-6 samples after different hydration times, and 1Hâ€“1H NOESY spectra of SKS-5 and SKS-6 hydrated for six months. See http://www.rsc.org/suppdata/jm/b2/b209578e/. Journal of Materials Chemistry, 2003, 13, 614-621.	6.7	11
170	Heteronuclear correlation experiments of 23Na-27Al in rotating solids. Solid State Nuclear Magnetic Resonance, 2017, 84, 103-110.	1.5	11
171	Porous Organic Polymers Constructed from TrÃ¶ger's Base as Efficient Carbon Dioxide Adsorbents and Heterogeneous Catalysts. ChemCatChem, 2018, 10, 1900-1904.	1.8	11
172	Uniform signal enhancement in MAS NMR of half-integer quadrupolar nuclei using quadruple-frequency sweeps. Journal of Magnetic Resonance, 2018, 293, 92-103.	1.2	11
173	Interfacial-Bonding Tiâ€“Nâ€“C Boosts Efficient Photocatalytic H₂ Evolution in Close Coupling g-C₃N₄/TiO₂. Journal of Physical Chemistry C, 2021, 125, 12012-12018.	1.5	11
174	Synthesis of phenyl-MSU-1 and bi-functionalized silica mesophases. Journal of Materials Research, 2002, 17, 431-437.	1.2	10
175	New insights into the di-n-propylamine (DPA) molecule as an organic structural directing agent (OSDA) in the crystallization of AlPO₄-11 molecular sieve. Inorganic Chemistry Frontiers, 2018, 5, 1633-1639.	3.0	10
176	Adsorption of Na+ onto Î³-alumina studied by solid-state 23Na and 27Al nuclear magnetic resonance spectroscopy. Solid State Nuclear Magnetic Resonance, 1993, 2, 317-324.	1.5	9
177	The temperature-dependence of the structure-directing effect of 2-methylpiperazine in the synthesis of open-framework aluminophosphates. RSC Advances, 2014, 4, 39011-39019.	1.7	9
178	Insights into the reaction mechanism of propene H/D exchange over acidic zeolite catalysts from theoretical calculations. Catalysis Science and Technology, 2016, 6, 6328-6338.	2.1	9
179	Breathing Effect via Solvent Inclusions on the Linker Rotational Dynamics of Functionalized MILâ€53. Chemistry - A European Journal, 2021, 27, 14711-14720.	1.7	9
180	Insight into Carbocationâ€Induced Noncovalent Interactions in the Methanolâ€toâ€Olefins Reaction over ZSMâ€5 Zeolite by Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 26847-26854.	7.2	9

#	Article	IF	Citations
181	Mixed Cationicâ€nonionic Surfactants and pH Adjustment Route to Synthesize Highâ€quality MCMâ€48. Journal of the Chinese Chemical Society, 2004, 51, 49-57.	0.8	8
182	Paramagnetic relaxation enhancement solid-state NMR studies of heterogeneous catalytic reaction over HY zeolite using natural abundance reactant. Solid State Nuclear Magnetic Resonance, 2015, 66-67, 29-32.	1.5	8
183	Observation of 1Hâ€“13C and 1Hâ€“1H proximities in a paramagnetic solid by NMR at high magnetic field under ultra-fast MAS. Journal of Magnetic Resonance, 2015, 251, 36-42.	1.2	8
184	Mechanistic Insight into Ethanol Dehydration over SAPO-34 Zeolite by Solid-state NMR Spectroscopy. Chemical Research in Chinese Universities, 2022, 38, 155-160.	1.3	8
185	â€œNMR invisibleâ€•aluminum species in dealuminated mordenite zeolite: a1H/27 Al TRAPDOR NMR study. Science in China Series B: Chemistry, 1998, 41, 149-155.	0.8	7
186	Surface modification of Î³-Al2O3 by sodium ions. Science Bulletin, 2001, 46, 188-193.	1.7	7
187	Effect of Surface Acid Properties of Modified VOx/Al2O3 Catalysts on Methanol Selective Oxidation. Catalysis Letters, 2013, 143, 624-629.	1.4	7
188	Solidâ€state NMR studies of the acidity of functionalized metalâ€“organic framework UiOâ€66 materials. Magnetic Resonance in Chemistry, 2020, 58, 1091-1098.	1.1	7
189	Ï€â€Interactions between Cyclic Carbocations and Aromatics Cause Zeolite Deactivation in Methanolâ€toâ€Hydrocarbon Conversion. Angewandte Chemie, 2020, 132, 7265-7269.	1.6	7
190	Multiple Methane Activation Pathways on Gaâ€modified ZSMâ€5 Zeolites Revealed by Solidâ€State NMR Spectroscopy. ChemCatChem, 2020, 12, 3880-3889.	1.8	7
191	Hostâ€Guest Interaction in Ethylene and Ethane Separation on Zeolitic Imidazolate Frameworks as Revealed by Solidâ€State NMR Spectroscopy. Chemistry - A European Journal, 2021, 27, 11303-11308.	1.7	7
192	Aluminum-Doped TiO₂ with Dominant {001} Facets: Microstructure and Property Evolution and Photocatalytic Activity. Journal of Physical Chemistry C, 2022, 126, 5555-5563.	1.5	7
193	Pairwise Stereoselective Hydrogenation of Propyne on Supported Pdâ€“Ag Catalysts Investigated by Parahydrogen-Induced Polarization. Journal of Physical Chemistry C, 2021, 125, 17144-17154.	1.5	6
194	Identifying Crystallographically Different Siâ˜OHâ˜Al BrÃ¸nsted Acid Sites in LTA Zeolites. Angewandte Chemie - International Edition, 2022, 61, .	7.2	6
195	Isomeric Effect on H/D Exchange of Resveratrol Studied by NMR Spectroscopy. Chinese Journal of Chemistry, 2010, 28, 2281-2286.	2.6	5
196	Room temperature stable zinc carbonyl complex formed in zeolite ZSM-5 and its hydrogenation reactivity: a solid-state NMR study. Chemical Communications, 2015, 51, 9177-9180.	2.2	5
197	Solid-State NMRÂCharacterization of Acid PropertiesÂofÂZeolites and Solid Acid Catalysts. Lecture Notes in Quantum Chemistry II, 2019, , 159-197.	0.3	5
198	Probing the active sites for methane activation on Ga/ZSM-5 zeolites with solid-state NMR spectroscopy. Chemical Communications, 2020, 56, 12029-12032.	2.2	5

#	Article	IF	Citations
199	Synthesis of Aluminophosphate Molecular Sieves in Alkaline Media. Chemistry - A European Journal, 2020, 26, 11408-11411.	1.7	5
200	Acidity of Solid and Liquid Acids Probed by P-31 NMR Chemical Shifts of Phosphine Oxides. Journal of Analytical Science and Technology, 2011, 2, A155-A158.	1.0	5
201	Temperature-dependence of the influence of the position-2-methyl group on the structure-directing effect of piperazine in the synthesis of open-framework aluminophosphates. Scientific Reports, 2016, 6, 22019.	1.6	4
202	Structure-directing effect on synthesis of layered aluminophosphates with same topology. Chemical Research in Chinese Universities, 2017, 33, 513-519.	1.3	4
203	Preferential adsorption sites for propane/propylene separation on ZIF-8 as revealed by solid-state NMR spectroscopy. Physical Chemistry Chemical Physics, 2022, 24, 6535-6543.	1.3	4
204	Valence state alternation of copper species doped in HY zeolite as revealed by paramagnetic relaxation enhancement NMR spectroscopy. Solid State Nuclear Magnetic Resonance, 2016, 74-75, 10-15.	1.5	3
205	Sustainable Synthesis of Pure Silica Zeolites from a Combined Strategy of Zeolite Seeding and Alcohol Filling. Angewandte Chemie, 2019, 131, 12266-12270.	1.6	3
206	Solid-State NMR Principles and Techniques. Lecture Notes in Quantum Chemistry II, 2019, , 1-55.	0.3	3
207	Throughâ€space 11 Bâ€“ 27 Al correlation: Influence of the recoupling channel. Magnetic Resonance in Chemistry, 2021, 59, 1062-1076.	1.1	3
208	Additional Incorporation of Aluminum into Al-Containing Mesostructure via Hydrothermal Treatment with NaAlO2 Solution. Journal of Porous Materials, 2005, 12, 107-112.	1.3	2
209	In Situ Solid-State NMR Investigation of Catalytic Reactions on Zeolites. Lecture Notes in Quantum Chemistry II, 2019, , 199-254.	0.3	2
210	gem â€Diolâ€Type Intermediate in the Activation of a Ketone on Snâ€Î² Zeolite as Studied by Solidâ€State NMR Spectroscopy. Angewandte Chemie, 2020, 132, 19700-19706.	1.6	2
211	Theoretical Prediction from Classical Equations and Rational Synthesis of Ultrafine LTL Zeolite Nanocrystals. Journal of Physical Chemistry C, 2020, 124, 13819-13824.	1.5	2
212	Dual Active Sites on Molybdenum/ZSMâ€5 Catalyst for Methane Dehydroaromatization: Insights from Solidâ€State NMR Spectroscopy. Angewandte Chemie, 2021, 133, 10804-10810.	1.6	2
213	Insight into Carbocation Induced Nonâ€covalent Interactions in Methanolâ€toâ€olefins Reaction over ZSMâ€5 Zeolite from Solidâ€State NMR Spectroscopy. Angewandte Chemie, 0, , .	1.6	2
214	Heterogeneous parahydrogen induced polarization on Rh-containing silicalite-1 zeolites: effect of the catalyst structure on signal enhancement. Catalysis Science and Technology, 2022, 12, 4442-4449.	2.1	2
215	Solid-State NMRÂCharacterization of Host-Guest Interactions. Lecture Notes in Quantum Chemistry II, 2019, , 133-157.	0.3	1
216	Unraveling Hydrocarbon Pool Boosted Propane Aromatization on Gallium/ZSMâ€5 Zeolite by Solidâ€State Nuclear Magnetic Resonance Spectroscopy. Angewandte Chemie, 2021, 133, 23822-23826.	1.6	1

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217	RÃ¼cktitelbild: Direct Detection of Supramolecular Reaction Centers in the Methanolâ€toâ€Olefins Conversion over Zeolite Hâ€ZSMâ€5 by ¹³Câ€“²⁷Al Solidâ€State NMR Spectroscopy (Angew. Chem. 7/2016). Angewandte Chemie, 2016, 128, 2648-2648.	1.6	0
218	Formation of aluminum diphosphonate mesostructures: The effect of aluminum source. Journal of Colloid and Interface Science, 2018, 532, 718-726.	5.0	0
219	Titelbild: Insight into Carbocationâ€Induced Noncovalent Interactions in the Methanolâ€toâ€Olefins Reaction over ZSMâ€5 Zeolite by Solidâ€State NMR Spectroscopy (Angew. Chem. 51/2021). Angewandte Chemie, 2021, 133, 26617-26617.	1.6	0
220	Identifying Crystallographically Different Siâ€OHâ€Al BrÃ¸nsted Acid Sites in LTA Zeolites. Angewandte Chemie, 0, , .	1.6	0