New trends in tailoring active sites in zeolite-based cata

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Citation Report

#	Article	IF	CITATIONS
1	Highly Efficient Alkylation Using Hydrophobic Sulfonic Acid-Functionalized Biochar as a Catalyst for Synthesis of High-Density Biofuels. ACS Sustainable Chemistry and Engineering, 2019, 7, 14973-14981.	3.2	43
2	Atom Probe Tomography for Catalysis Applications: A Review. Applied Sciences (Switzerland), 2019, 9, 2721.	1.3	15
3	Cationic surfactant-directed synthesis of hollow Beta zeolite with hierarchical structure. Inorganic Chemistry Communication, 2019, 107, 107468.	1.8	22
4	Synthesis of ZSM-5 via organotemplate-free and dry gel conversion method: Investigating the effects of experimental parameters. Journal of Solid State Chemistry, 2019, 279, 120969.	1.4	16
5	Rational design of syngas to isoparaffins reaction route over additive dehydrogenation catalyst in a triple-bed system. Catalysis Communications, 2019, 131, 105799.	1.6	12
6	Design of Hybrid Phase Sliding Mode Control Scheme for Lower Extremity Exoskeleton. Applied Sciences (Switzerland), 2019, 9, 3754.	1.3	3
7	Vapour-phase-transport rearrangement technique for the synthesis of new zeolites. Nature Communications, 2019, 10, 5129.	5.8	29
8	Transformation of Extra-Large Pore Germanosilicate CIT-13 Molecular Sieve into Extra-Large Pore CIT-5 Molecular Sieve. Chemistry of Materials, 2019, 31, 9777-9787.	3.2	17
9	Water Molecules Facilitate Hydrogen Release in Anaerobic Oxidation of Methane to Methanol over Cu/Mordenite. ACS Catalysis, 2019, 9, 10365-10374.	5.5	34
10	Ethene Dimerization on Zeolite-Hosted Ni Ions: Reversible Mobilization of the Active Site. ACS Catalysis, 2019, 9, 5645-5650.	5.5	54
11	Bifunctional catalysts for the hydroisomerization of <i>n</i> -alkanes: the effects of metal–acid balance and textural structure. Catalysis Science and Technology, 2019, 9, 4162-4187.	2.1	103
12	Composition and kinetic study on template- and solvent-free synthesis of ZSM-5 using leached illite clay. Microporous and Mesoporous Materials, 2019, 285, 170-177.	2.2	15
13	Organic Mesopore Generating Agents (OMeGAs) for Hierarchical Zeolites: Combining Functions on Multiple Scales. ChemNanoMat, 2019, 5, 869-877.	1.5	8
14	Systematic Study of Tiâ€Distribution in Titanosilicate *BEA Zeolites via Symmetryâ€Adapted Enumeration. Chinese Journal of Chemistry, 2019, 37, 593-596.	2.6	0
15	Mesoporogen-free synthesis of nanosized hierarchical ITQ-21 zeolites. Inorganic Chemistry Frontiers, 2019, 6, 1184-1188.	3.0	5
16	Sn–Al-USY for the valorization of glucose to methyl lactate: switching from hydrolytic to retro-aldol activity by alkaline ion exchange. Green Chemistry, 2019, 21, 5876-5885.	4.6	24
17	Surfactant-templated zeolites for the production of active pharmaceutical intermediates. Chemical Communications, 2019, 55, 12869-12872.	2.2	14
18	A succinct strategy for construction of nanoporous ionic organic networks from a pyrylium intermediate. Chemical Communications, 2019, 55, 13450-13453.	2.2	9

#	Article	IF	CITATIONS
19	Insight into the active site nature of zeolite H-BEA for liquid phase etherification of isobutylene with ethanol. RSC Advances, 2019, 9, 35957-35968.	1.7	15
20	Insights on Ga-zeolite catalysts: X-ray powder diffraction and absorption spectroscopy characterization at ambient conditions. Catalysis Today, 2020, 345, 147-156.	2.2	2
21	High activity of Ga-containing nanosponge MTW zeolites in acylation of p-xylene. Catalysis Today, 2020, 345, 110-115.	2.2	4
22	Zeolites in Pechmann condensation: Impact of the framework topology and type of acid sites. Catalysis Today, 2020, 345, 97-109.	2.2	3
23	Advances and challenges in zeolite synthesis and catalysis. Catalysis Today, 2020, 345, 2-13.	2.2	40
24	La-doped Zr-Beta zeolite as efficient catalyst for reduction of cyclohexanone to cyclohexanol via the MPV process. Catalysis Communications, 2020, 133, 105845.	1.6	15
25	Synthesis of aggregation-resistant MFI nanoparticles. Catalysis Today, 2020, 354, 151-157.	2.2	2
26	Hierarchical Beta zeolites obtained in concentrated reaction mixtures as catalysts in tetrahydropyranylation of alcohols. Applied Catalysis A: General, 2020, 594, 117380.	2.2	12
27	Synthesis of loosely aggregating polycrystalline ZSM-5 with luxuriant mesopore structure and its hierarchically cracking for bulky reactants. Materials Chemistry and Physics, 2020, 243, 122610.	2.0	11
28	Synthesis and Catalytic Properties of Porous Metal Silica Materials Templated and Functionalized by Extended Coordination Cages. Inorganic Chemistry, 2020, 59, 767-776.	1.9	16
29	Characterization of Metalâ€zeolite Composite Catalysts: Determining the Environment of the Active Phase. ChemCatChem, 2020, 12, 1826-1852.	1.8	29
30	CrO supported on high-silica HZSM-5 for propane dehydrogenation. Journal of Energy Chemistry, 2020, 47, 225-233.	7.1	51
31	Coâ€hydrolysis and Seedâ€Induced Synthesis of Basic Mesoporous ZSMâ€5 Zeolites with Enhanced Catalytic Performance. Chemistry - A European Journal, 2020, 26, 6147-6157.	1.7	4
32	Crystal engineering of hierarchical zeolite in dynamically maintained Pickering emulsion. Chemical Engineering Research and Design, 2020, 153, 49-62.	2.7	8
33	Seed-induced synthesis of functional MFI zeolite materials: Method development, crystallization mechanisms, and catalytic properties. Frontiers of Chemical Science and Engineering, 2020, 14, 143-158.	2.3	12
34	New gold standard: weakly capped infant Au nanoclusters with record high catalytic activity for 4-nitrophenol reduction and hydrogen generation from an ammonia borane–sodium borohydride mixture. Nanoscale Advances, 2020, 2, 5384-5395.	2.2	3
35	Cascade reaction engineering on zirconia-supported mesoporous MFI zeolites with tunable Lewis–BrĂุnsted acid sites: a case of the one-pot conversion of furfural to γ-valerolactone. RSC Advances, 2020, 10, 35318-35328.	1.7	21
36	A dramatic conformational effect of multifunctional zwitterions on zeolite crystallization. Chemical Communications, 2020, 56, 14693-14696.	2.2	1

	CITATION	Report	
#	Article	IF	CITATIONS
37	Solvent-free ketalization of polyols over germanosilicate zeolites: the role of the nature and strength of acid sites. Catalysis Science and Technology, 2020, 10, 8254-8264.	2.1	17
38	Emphasis on the Properties of Metal ontaining Zeolites Operating Outside the Comfort Zone of Current Heterogeneous Catalytic Reactions. Angewandte Chemie - International Edition, 2020, 59, 19414-19432.	7.2	21
39	Opportunities in Catalysis over Metal-Zeotypes Enabled by Descriptions of Active Centers Beyond Their Binding Site. ACS Catalysis, 2020, 10, 9476-9495.	5.5	34
40	Magnetically recoverable Ir/IrO2@Fe3O4 core/ SiO2 shell catalyst for the reduction of organic pollutants in water. Chemical Physics Letters, 2020, 742, 137147.	1.2	11
41	Improved CO ₂ Hydrogenation on Ni–ZnO/MCM-41 Catalysts with Cooperative Ni and ZnO Sites. Energy & Fuels, 2020, 34, 16320-16329.	2.5	20
42	One-Pass Hydrogenation of CO ₂ to Multibranched Isoparaffins over Bifunctional Zeolite-Based Catalysts. ACS Catalysis, 2020, 10, 14186-14194.	5.5	54
43	Light Paraffinic Naphtha to BTX Aromatics over Metalâ€Modified Pt/ZSMâ€5. ChemistrySelect, 2020, 5, 13807-13813.	0.7	12
44	Nanoporous catalysts for biomass conversion. , 2020, , 387-440.		2
45	Effective removal of particulate matter from air by using zeolite-coated filters. Journal of Materials Chemistry A, 2020, 8, 17960-17968.	5.2	10
46	Transition metal atoms encapsulated within microporous Silicalite-1 zeolite: A systematic computational study. Microporous and Mesoporous Materials, 2020, 308, 110462.	2.2	7
47	Ultrafast Encapsulation of Metal Nanoclusters into MFI Zeolite in the Course of Its Crystallization: Catalytic Application for Propane Dehydrogenation. Angewandte Chemie, 2020, 132, 19837-19842.	1.6	3
48	Porous Materials Applied in Nonaqueous Li–O ₂ Batteries: Status and Perspectives. Advanced Materials, 2020, 32, e2002559.	11.1	115
49	Emphasis on the Properties of Metalâ€Containing Zeolites Operating Outside the Comfort Zone of Current Heterogeneous Catalytic Reactions. Angewandte Chemie, 2020, 132, 19582-19600.	1.6	13
50	Shape Selectivity in Hydroisomerization of n-Hexadecane over Pd Supported on Zeolites: ZSM-22, ZSM-12 and Beta. Russian Journal of Applied Chemistry, 2020, 93, 1427-1437.	0.1	3
51	Preparation of Fe3O4–HNTs Hybrid Material and Its Effect on Epoxy Coating Properties. Russian Journal of Applied Chemistry, 2020, 93, 1399-1411.	0.1	0
52	Revival of Zeoliteâ€Templated Nanocarbon Materials: Recent Advances in Energy Storage and Conversion. Advanced Science, 2020, 7, 2001335.	5.6	42
53	Effects of Framework Disruption of Ga and Ba Containing Zeolitic Materials by Thermal Treatment. Catalysts, 2020, 10, 975.	1.6	2
54	Biomass Catalytic Pyrolysis over Zeolite Catalysts with an Emphasis on Porosity and Acidity: A State-of-the-Art Review. Energy & Fuels, 2020, 34, 11771-11790.	2.5	61

	CITATION	Report	
#	Article	IF	CITATIONS
55	A new microporous 12-ring zincosilicate THK-2 with many terminal silanols characterized by automated electron diffraction tomography. Dalton Transactions, 2020, 49, 12960-12969.	1.6	3
56	Hierarchical Beta zeolites as catalysts in a one-pot three-component cascade Prins–Friedel–Crafts reaction. Green Chemistry, 2020, 22, 6992-7002.	4.6	14
57	Facile and selective synthesis of zeolites L and W from a single-source heptanuclear aluminosilicate precursor. CrystEngComm, 2020, 22, 5862-5870.	1.3	2
58	lsomorphous Substitution Synthesis and Photoelectric Properties of Spinel AgInSnS ₄ Nanosheets. Chemistry of Materials, 2020, 32, 9713-9720.	3.2	12
59	Recent developments in the control of selectivity in hydrogenation reactions by confined metal functionalities. Catalysis Science and Technology, 2020, 10, 8140-8172.	2.1	28
60	Selective Recovery and Recycling of Germanium for the Design of Sustainable Zeolite Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 8235-8246.	3.2	23
61	Fine-tuning hierarchical ZSM-5 zeolite by controlled aggregation of protozeolitic units functionalized with tertiary amine-containing organosilane. Microporous and Mesoporous Materials, 2020, 303, 110189.	2.2	13
63	Exploring the multifunctionality and accessibility of vanadosilicates to produce acrylic acid in one-pot glycerol oxydehydration. Applied Catalysis A: General, 2020, 602, 117687.	2.2	9
64	Synthesis and Postâ€6ynthesis Transformation of Germanosilicate Zeolites. Angewandte Chemie, 2020, 132, 19548-19557.	1.6	4
65	Conversion of rice husks cellulose to levulinic acid on hierarchical Mn3O4/ZSM-5 catalyst from natural aluminosilicate. AIP Conference Proceedings, 2020, , .	0.3	2
66	Synthesis and Postâ€Synthesis Transformation of Germanosilicate Zeolites. Angewandte Chemie - International Edition, 2020, 59, 19380-19389.	7.2	48
67	One step synthesis of Fe-SSZ-13 zeolite by hydrothermal method. Journal of Solid State Chemistry, 2020, 287, 121330.	1.4	21
68	Recent progress in the development of advanced biofuel 5-ethoxymethylfurfural. BMC Energy, 2020, 2, .	6.3	25
69	A Singleâ€Crystalline Hierarchical Zeolite via an Oriented Coâ€Growth of Nanocrystals Based on Synergy of Polyelectrolytes and Heteroâ€Atoms. ChemCatChem, 2020, 12, 2702-2707.	1.8	7
70	Oxidation of a lignin-derived-model compound: Iso-eugenol to vanillin over cerium containing MCM-22. Catalysis Communications, 2020, 145, 106099.	1.6	16
71	Ultrafast Encapsulation of Metal Nanoclusters into MFI Zeolite in the Course of Its Crystallization: Catalytic Application for Propane Dehydrogenation. Angewandte Chemie - International Edition, 2020, 59, 19669-19674.	7.2	63
72	Generalized Methodology for Inserting Metal Heteroatoms into the Layered Zeolite Precursor RUB-36 by Interlayer Expansion. Crystals, 2020, 10, 530.	1.0	6
73	Effect of mother liquor addition on (P)MCM-22 synthesis. Microporous and Mesoporous Materials, 2020, 306, 110370.	2.2	5

#	Article	IF	CITATIONS
74	Calcium zeolites as intelligent carriers in controlled release of bisphosphonates. International Journal of Pharmaceutics, 2020, 578, 119117.	2.6	24
75	Room-Temperature Activation of Methane and Direct Formations of Acetic Acid and Methanol on Zn-ZSM-5 Zeolite: A Mechanistic DFT Study. Bulletin of the Chemical Society of Japan, 2020, 93, 345-354.	2.0	21
76	Zeolite-Enhanced Sustainable Pd-Catalyzed C–C Cross-Coupling Reaction: Controlled Release and Capture of Palladium. ACS Applied Materials & Interfaces, 2020, 12, 11419-11427.	4.0	23
77	Selective Hydrogenation of Aromatic Ketone over Pt@Y Zeolite through Restricted Adsorption Conformation of Reactants by Zeolitic Micropores. ChemCatChem, 2020, 12, 1948-1952.	1.8	15
78	Bâ€MWW Zeolite: The Case Against Singleâ€ S ite Catalysis. Angewandte Chemie, 2020, 132, 6608-6612.	1.6	12
79	Bâ€MWW Zeolite: The Case Against Single‣ite Catalysis. Angewandte Chemie - International Edition, 2020, 59, 6546-6550.	7.2	54
80	Fundamentals and recent progress relating to the fabrication, functionalization and characterization of mesostructured materials using diverse synthetic methodologies. RSC Advances, 2020, 10, 16431-16456.	1.7	21
81	Recent Advances in Nonâ€Noble Bifunctional Oxygen Electrocatalysts toward Large cale Production. Advanced Functional Materials, 2020, 30, 2000503.	7.8	226
82	Functionalized Biochar with Superacidity and Hydrophobicity as a Highly Efficient Catalyst in the Synthesis of Renewable High-Density Fuels. ACS Sustainable Chemistry and Engineering, 2020, 8, 7785-7794.	3.2	24
83	Optimized preparation and regeneration of MFI type base catalysts for <scp>d</scp> -glucose isomerization in water. Catalysis Science and Technology, 2020, 10, 3232-3246.	2.1	12
84	The effect of hierarchical single-crystal ZSM-5 zeolites with different Si/Al ratios on its pore structure and catalytic performance. Frontiers of Chemical Science and Engineering, 2021, 15, 269-278.	2.3	9
85	Three-dimensional metal-halide open frameworks. Coordination Chemistry Reviews, 2021, 430, 213663.	9.5	31
86	Incorporation of Active Metal Species in Crystalline Porous Materials for Highly Efficient Synergetic Catalysis. Small, 2021, 17, e2003971.	5.2	31
87	Ultrasonic-assisted production of zero-valent iron-decorated graphene oxide/activated carbon nanocomposites: Chemical transformation and structural evolution. Materials Science and Engineering C, 2021, 118, 111362.	3.8	19
88	Development Trends on Nickelâ€Based Electrocatalysts for Direct Hydrazine Fuel Cells. ChemCatChem, 2021, 13, 81-110.	1.8	38
89	Topotactic conversion of Ge-rich IWW zeolite into IPC-18 under mild condition. Microporous and Mesoporous Materials, 2021, 310, 110617.	2.2	13
90	Biorefinery roadmap based on catalytic production and upgrading 5-hydroxymethylfurfural. Green Chemistry, 2021, 23, 119-231.	4.6	223
91	Single-crystalline hierarchically-porous TS-1 zeolite catalysts via a solid-phase transformation mechanism. Microporous and Mesoporous Materials, 2021, 313, 110828.	2.2	15

#	Article	IF	CITATIONS
92	SnO2/CeO2 nanoparticle-decorated mesoporous ZSM-5 as bifunctional electrocatalyst for HOR and ORR. Chemical Engineering Journal, 2021, 417, 127913.	6.6	21
93	Tutorial: structural characterization of isolated metal atoms and subnanometric metal clusters in zeolites. Nature Protocols, 2021, 16, 1871-1906.	5.5	30
94	Oxidative dehydrogenation of n-octane using Ba and Ga-modified faujasite type catalysts prepared by different methods. Journal of Porous Materials, 2021, 28, 593-603.	1.3	2
95	Long afterglow MOFs: a frontier study on synthesis and applications. Materials Chemistry Frontiers, 2021, 5, 6824-6849.	3.2	26
96	Nuclear spin relaxation as a probe of zeolite acidity: a combined NMR and TPD investigation of pyridine in HZSM-5. Physical Chemistry Chemical Physics, 2021, 23, 17752-17760.	1.3	19
97	New avenues for mechanochemistry in zeolite science. Dalton Transactions, 2021, 50, 8995-9009.	1.6	36
98	Mechanochemical Approach to Preparation of MFI Zeolites Substituted Isomorphously by Both Al and Fe as Durable Catalysts for the Dimethyl Ether to Olefin Reaction. Industrial & Engineering Chemistry Research, 2021, 60, 2079-2088.	1.8	17
99	General Remarks of Soft-Matter Nanotubes. Nanostructure Science and Technology, 2021, , 1-58.	0.1	1
100	MWW and MFI Frameworks as Model Layered Zeolites: Structures, Transformations, Properties, and Activity. ACS Catalysis, 2021, 11, 2366-2396.	5.5	63
101	Toward Controlling Disassembly Step within the ADOR Process for the Synthesis of Zeolites. Chemistry of Materials, 2021, 33, 1228-1237.	3.2	11
102	Leveraging Exchange Kinetics for the Synthesis of Atomically Precise Porous Catalysts. ChemCatChem, 2021, 13, 2117-2131.	1.8	6
103	Ex situ nucleation and growth study of the pure silica HPM-1 zeolite. Microporous and Mesoporous Materials, 2021, 315, 110893.	2.2	3
104	Faujasite silicalites for oxidative dehydrogenation of n-octane: Influence of alkali metals, gallium, and boron on catalyst activity. Molecular Catalysis, 2021, 502, 111393.	1.0	0
105	Modification of the Physicochemical Properties of High-Crystallinity Granular Y Zeolite by Steam Heating and Acid Treatment. Petroleum Chemistry, 2021, 61, 284-291.	0.4	2
106	Extra-Large Pore Titanosilicate Synthesized via Reversible 3D–2D–3D Structural Transformation as Highly Active Catalyst for Cycloalkene Epoxidation. ACS Catalysis, 2021, 11, 2650-2662.	5.5	17
107	Binding Site Effect in Metalâ€Organic Frameworks for Property Regulation of Metal Nanoparticles. Small Structures, 2021, 2, 2000119.	6.9	12
108	Rational Construction of Light-Driven Catalysts for CO ₂ Reduction. Energy & Fuels, 2021, 35, 5696-5715.	2.5	18
109	Designing Sequence-Defined Peptoids for Biomimetic Control over Inorganic Crystallization. Chemistry of Materials, 2021, 33, 3047-3065.	3.2	11

#	Article	IF	CITATIONS
110	Design and application of photocatalysts using porous materials. Catalysis Reviews - Science and Engineering, 2021, 63, 165-233.	5.7	21
111	Synthesis of Micro/Mesoporous Zeolite ZSM-5 Using a Natural Aluminosilicate. Catalysis in Industry, 2021, 13, 99-104.	0.3	0
112	Zeolite-Encapsulated Ultrasmall Cu/ZnO <i>_x</i> Nanoparticles for the Hydrogenation of CO ₂ to Methanol. ACS Applied Materials & Interfaces, 2021, 13, 18693-18703.	4.0	46
113	Gas-phase etherification of cyclopentanol with methanol to cyclopentyl methyl ether catalyzed by zeolites. Applied Catalysis A: General, 2021, 618, 118122.	2.2	4
114	Postsynthesis of Delaminated MWW-Type Stannosilicate as a Robust Catalyst for Sugar Conversion to Methyl Lactate. Industrial & Engineering Chemistry Research, 2021, 60, 8027-8034.	1.8	7
115	Atomicâ€6cale Designing of Zeolite Based Catalysts by Atomic Layer Deposition. ChemPhysChem, 2021, 22, 1287-1301.	1.0	6
116	Hydrothermally stable ITH-type zeolite directed by a simple nonquaternary ammonium pyrrolidine derivative: Synthesis, characterization and catalytic performance. Microporous and Mesoporous Materials, 2021, 319, 111058.	2.2	3
117	Imidazolium-type ionic liquid-assisted formation of the MFI zeolite loaded with metal nanoparticles for hydrogenation reactions. Chemical Engineering Journal, 2021, 412, 128599.	6.6	11
118	Cu-Based Nanocatalysts for CO ₂ Hydrogenation to Methanol. Energy & Fuels, 2021, 35, 8558-8584.	2.5	74
119	Visualizing Element Migration over Bifunctional Metalâ€Zeolite Catalysts and its Impact on Catalysis. Angewandte Chemie, 2021, 133, 17876-17884.	1.6	53
120	Dynamic Interconversion of Metal Active Site Ensembles in Zeolite Catalysis. Annual Review of Chemical and Biomolecular Engineering, 2021, 12, 115-136.	3.3	12
121	Gripper-like Silicon Species for Efficient Synthesis of Crystalline Metallosilicates with Spatially Homogeneous Heteroatoms in the Framework. Chemistry of Materials, 2021, 33, 4988-5001.	3.2	22
122	Physical characteristics and utilization of ZSM-5 prepared from rice husk silica and aluminum hydroxide as catalyst for transesterification of Ricinus communis oil. Materials Research Express, 2021, 8, 065506.	0.8	6
123	A Noble and Economical Method for the Synthesis of Low Cost Zeolites From Coal Fly Ash Waste. Advances in Materials and Processing Technologies, 2022, 8, 301-319.	0.8	11
124	Stable Palladium Oxide Clusters Encapsulated in Silicalite-1 for Complete Methane Oxidation. ACS Catalysis, 2021, 11, 7371-7382.	5.5	34
125	Aromatics Production via Methanol-Mediated Transformation Routes. ACS Catalysis, 2021, 11, 7780-7819.	5.5	92
126	Review and prospects of microporous zeolite catalysts for CO2 photoreduction. Applied Materials Today, 2021, 23, 101042.	2.3	17
127	Visualizing Element Migration over Bifunctional Metalâ€Zeolite Catalysts and its Impact on Catalysis. Angewandte Chemie - International Edition, 2021, 60, 17735-17743.	7.2	99

#	Article	IF	CITATIONS
128	Review on heterogeneous catalysts for the synthesis of perfumery chemicals via isomerization, acetalization and hydrogenation. Flavour and Fragrance Journal, 2021, 36, 509-525.	1.2	9
129	Porous Materials Confining Single Atoms for Catalysis. Frontiers in Chemistry, 2021, 9, 717201.	1.8	9
130	Possible Misidentification of Heteroatom Species in Scanning Transmission Electron Microscopy Imaging of Zeolites. Journal of Physical Chemistry C, 2021, 125, 18952-18960.	1.5	8
131	Synthesis of novel aluminoborosilicate isomorphous to zeolite TUN and its acidic and catalytic properties. Microporous and Mesoporous Materials, 2021, 323, 111237.	2.2	8
132	Metal Catalysis with Knitting Aryl Polymers: Design, Catalytic Applications, and Future Trends. Chemistry of Materials, 2021, 33, 6616-6639.	3.2	25
133	One-step Synthesis of Nanoporous Titanosiloxane-based Materials with Isolated Ti Sites Using Cage Siloxane as a Building Block. Chemistry Letters, 2021, 50, 1643-1647.	0.7	3
134	A reliable protocol for fast and facile constructing multi-hollow silicalite-1 and encapsulating metal nanoparticles within the hierarchical zeolite. Chemical Engineering Journal, 2021, 419, 129641.	6.6	15
135	Platinum nanoparticles supported on zeolite MWW nanosheets prepared via homogeneous solution route. Catalysis Today, 2022, 390-391, 335-342.	2.2	1
136	Catalytic improvement of biomass conversion: Effect of adding mesoporosity on MOR zeolite for esterification with oleic acid. Renewable Energy, 2021, 178, 1-12.	4.3	13
137	Expanded titanosilicate MWW-related materials synthesized from a boron-containing precursor as an efficient catalyst for cyclohexene oxidation. Microporous and Mesoporous Materials, 2021, 327, 111437.	2.2	3
138	Recent advances in catalytic systems for CO2 conversion to substitute natural gas (SNG): Perspective and challenges. Journal of Energy Chemistry, 2021, 62, 377-407.	7.1	91
139	Anomalous diffusion in zeolites. Chemical Engineering Science, 2021, 246, 116995.	1.9	5
140	Modifying the hydrophobic nature of MAF-6. Separation and Purification Technology, 2021, 277, 119422.	3.9	3
141	Tuning the CHA framework composition by isomorphous substitution for CO2/CH4 separation. Chemical Engineering Journal, 2022, 429, 131277.	6.6	12
142	Synthesis of Phosphorus-Modified AFX Zeolite by the Hydrothermal Conversion of Tetraalkylphosphonium Hydroxide-Impregnated FAU Zeolite. Bulletin of the Chemical Society of Japan, 2021, 94, 1-7.	2.0	6
143	Metal Containing Nanoclusters in Zeolites. , 2021, , .		1
144	Dynamic evolution of catalytic active sites within zeolite catalysis. , 2021, , .		0
145	Facile synthesis of a sintering-resistant zeolite confined Ni catalyst for efficient CO _x -free hydrogen generation from ammonia decomposition. Sustainable Energy and Fuels, 2021, 5, 3182-3190.	2.5	7

#	Article	IF	CITATIONS
146	Reverse ADOR: reconstruction of UTL zeolite from layered IPC-1P. Materials Advances, 2021, 2, 3862-3870.	2.6	4
147	Recent advances in catalytic silylation of hydroxylâ€bearing compounds: A green technique for protection of alcohols using Si–O bond formations. Applied Organometallic Chemistry, 2021, 35, e6131.	1.7	7
148	Soft-Matter Nanotubes: A Platform for Diverse Functions and Applications. Chemical Reviews, 2020, 120, 2347-2407.	23.0	147
149	Preparation of Hydrophobic Acidic Metal–Organic Frameworks and Their Application for 5-Hydroxymethylfurfural Synthesis. Industrial & Engineering Chemistry Research, 2020, 59, 22068-22078.	1.8	7
150	Greener synthesis of 1,2,3-triazoles using a copper(<scp>i</scp>)-exchanged magnetically recoverable β-zeolite as catalyst. New Journal of Chemistry, 2020, 44, 15046-15053.	1.4	6
151	Ordered mesoporous photocatalysts for CO ₂ photoreduction. Journal of Materials Chemistry A, 2021, 9, 26430-26453.	5.2	27
152	Porous materials confining noble metals for the catalytic reduction of nitroaromatics: controllable synthesis and enhanced mechanism. Environmental Science: Nano, 2021, 8, 3067-3097.	2.2	22
153	Suppressing C–C Bond Dissociation for Efficient Ethane Dehydrogenation over the Isolated Co(II) Sites in SAPO-34. ACS Catalysis, 2021, 11, 13001-13019.	5.5	29
154	Mesocrystal morphology regulation by "alkali metals ion switch― Re-examining zeolite nonclassical crystallization in seed-induced process. Journal of Colloid and Interface Science, 2022, 608, 1366-1376.	5.0	9
155	Advances in Catalytic Applications of Zeoliteâ€6upported Metal Catalysts. Advanced Materials, 2021, 33, e2104442.	11.1	113
156	Prospects of refinery switching from conventional to integrated: An opportunity for sustainable investment in the petrochemical industry. Fuel, 2022, 310, 122161.	3.4	29
157	Mesopore creation in zeolite ZSM-5: Influence of NaOH concentration, temperature and treatment duration. Tehnika, 2020, 75, 9-14.	0.0	0
158	Characterization and catalytic activity of Ni/mesoporous aluminosilicate HMS and Mo/mesoporous aluminosilicate HMS in the conversion of n-hexadecane. Materials Today: Proceedings, 2020, 31, 580-583.	0.9	2
159	Construction of Inverse Metal–Zeolite Interfaces via Area-Selective Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2021, 13, 51759-51766.	4.0	0
160	Effects of zeolite molecular sieve on the hydrocarbon adsorbent and diffusion performance of gasoline engine during cold start. Fuel, 2022, 310, 122427.	3.4	46
161	Synthesis of Micro/Mesoporous ZSM-5 Zeolite Using Natural Aluminosilicate. Kataliz V Promyshlennosti, 2020, 20, 328-334.	0.2	2
162	Ionic liquid-templated synthesis of 10-MR zeolites and its origin disclosure. Microporous and Mesoporous Materials, 2020, 305, 110346.	2.2	10
163	Acidic property of YNU-5 zeolite influenced by its unique micropore system. Microporous and Mesoporous Materials, 2022, 330, 111592.	2.2	3

ARTICLE IF CITATIONS # Tailoring ZSM-5 zeolite porosity and acidity for efficient conversion of municipal solid waste to fuel. 2.2 4 164 Microporous and Mesoporous Materials, 2022, 330, 111579. 2D-to-3D zeolite transformation for the preparation of Pd@MWW catalysts with tuneable acidity. 2.2 Catalysis Today, 2022, 390-391, 109-116. "Open―Nonporous Nonasil Zeolite Structure for Selective Catalysis. Journal of the American 166 6.6 14 Chemical Society, 2021, 143, 20569-20573. Tandem Reduction–Reoxidation Augments the Catalytic Activity of Sn-Beta Zeolites by Redispersion and Respeciation of SnO₂ Clusters. Chemistry of Materials, 2021, 33, 9366-9381. Valorisation of glycerol through catalytic hydrogenolysis routes for sustainable production of value-added C₃ chemicals: current and future trends. Sustainable Energy and Fuels, 2022, 168 2.5 18 6, 596-639. Fabrication of Isomorphously Substituted Wâ€MFI Membrane with High Performance for Ethanol 1.7 Separation from Water. Chemistry - an Asian Journal, 2022, 17, e202101404. Effect of Triton X-100 additive on the synthesis of Beta zeolites and their catalytic application in 170 2.0 8 acylation of anisole with acetic anhydride. Materials Chemistry and Physics, 2022, 278, 125618. Methylene Blue Degradation Over Green Fe3O4 Nanocatalyst Fabricated Using Leaf Extract of 171 1.3 Rosmarinus officinalis. Topics in Catalysis, 0, , 1. MWW-type zeolite nanostructures for a one-pot three-component Prinsâ€"Friedelâ€"Crafts reaction. 172 3.0 7 Inorganic Chemistry Frontiers, 2022, 9, 1244-1257. Second-Sphere Lattice Effects in Copper and Iron Zeolite Catalysis. Chemical Reviews, 2022, 122, 12207-12243. Driving Forces of Cationic Dye Adsorption, Confinement, and Long-Range Correlation in Zeolitic 174 3 1.6 Materials. Langmuir, 2022, 38, 1296-1303. Zeolite-based Fenton-like catalysis for pollutant removal and reclamation from wastewater. Chinese 4.8 28 Chemical Letters, 2022, 33, 4719-4731. Preparation of graphitic carbon nitride g-C3N4-HMCM-22 composite catalysts and enhanced 176 1.0 6 para-selectivity in m-xylene isomerization. Chemical Papers, 2022, 76, 1875-1884. Tertiary amine-bisquaternary ammonium functionalized polyacrylonitrile fiber for catalytic synthesis of pyran-annulated heterocycles. Reactive and Functional Polymers, 2022, 172, 105201. Methanol diffusion in H-ZSM-5 catalysts as a function of loading and Si/Al ratio: A classical molecular 178 1.6 6 dynamics study. Catalysis Communications, 2022, 164, 106415. Synergistic Lewis acid and Pd active sites of metal–organic frameworks for highly efficient 179 carbonylation of methyl nitrite to dimethyl carbonate. Inorganic Chemistry Frontiers, 2022, 9, 2379-2388. Dissolution Behavior and Varied Mesoporosity of Zeolites by NH₄F Etching. Chemistry - A 180 1.7 9 European Journal, 2022, 28, e202104339. Direct Propylene Epoxidation with Molecular Oxygen over Cobalt-Containing Zeolites. Journal of the 6.6 American Chemical Society, 2022, 144, 4260-4268.

#	Article	IF	CITATIONS
182	Characterization and Hydroisomerization Performance of Mgâ€Promoted, Pt/ZSMâ€⊋3â€Based Catalysts. European Journal of Inorganic Chemistry, 2022, 2022, .	1.0	1
183	Hollow Zeolitesâ€Confined Isolated (ZnOH) ⁺ Enable High Selectivity and Stability for Methanol to Aromatics. ChemCatChem, 2022, 14, .	1.8	2
184	Development of Synthetic Route for Fe-substituted MWW-type Zeolites Using Mechanochemical Method. Journal of the Japan Petroleum Institute, 2022, 65, 67-77.	0.4	3
185	Hierarchical Catalysts Prepared by Interzeolite Transformation. Journal of the American Chemical Society, 2022, 144, 5163-5171.	6.6	20
186	ZSM-5@Rh amphiphilic nanoreactor: Efficient reduction of nitrobenzene under mild conditions. Inorganic Chemistry Communication, 2022, 140, 109409.	1.8	0
187	Generating TON zeolites with reduced [0 0 1] length through combined mechanochemical bead-milling and porogen-directed recrystallization with enhanced catalytic property in hydroisomerization. Chemical Engineering Journal, 2022, 440, 135874.	6.6	15
188	Quantifying Effects of Active Site Proximity on Rates of Methanol Dehydration to Dimethyl Ether over Chabazite Zeolites through Microkinetic Modeling. ACS Materials Au, 2022, 2, 163-175.	2.6	7
189	Recent Progress and Prospects in Catalytic Water Treatment. Chemical Reviews, 2022, 122, 2981-3121.	23.0	139
190	Machine learning potential era of zeolite simulation. Chemical Science, 2022, 13, 5055-5068.	3.7	15
191	Dynamic Evolution of Zeolite Framework and Metal-Zeolite Interface. ACS Catalysis, 2022, 12, 5060-5076.	5.5	36
192	Hafnium-Doped Silica Nanotubes for the Upgrading of Glycerol into Solketal: Enhanced Performances and In-Depth Structure-Activity Correlation. SSRN Electronic Journal, 0, , .	0.4	0
193	Facile Morphology and Porosity Regulation of Zeolite ZSM-5 Mesocrystals with Synergistically Enhanced Catalytic Activity and Shape Selectivity. Nanomaterials, 2022, 12, 1601.	1.9	2
194	Seed-assisted synthesis of nanosized Beta with highly accessible mesoporosity and strong Brönsted acidity by adjusting 6-MRs formation and assembly. Microporous and Mesoporous Materials, 2022, 337, 111939.	2.2	1
195	Driving the active site incorporation in zeolitic materials via the organic structureâ€directing agent through development of Hâ€bonds with hydroxyl groups. Chemistry - A European Journal, 2022, , .	1.7	3
196	Hafnium-doped silica nanotubes for the upgrading of glycerol into solketal: Enhanced performances and in-depth structure-activity correlation. Journal of Catalysis, 2022, 411, 41-53.	3.1	12
197	Rational screening of transition metal single-atom-doped ZSM-5 zeolite catalyst for naphtha cracking from microkinetic analysis. Chemical Engineering Journal, 2022, 445, 136670.	6.6	15
198	Redispersion of Pt nanoparticles encapsulated within ZSM-5 in oxygen and catalytic properties in partial oxidation of methane. Journal of Porous Materials, 0, , 1.	1.3	0
199	<i>In situ</i> synchrotron X-ray diffraction reveals the disassembly-organisation mechanism of germanosilicate zeolites in HCl vapour. Inorganic Chemistry Frontiers, 0, , .	3.0	0

#	Article	IF	CITATIONS
200	Assembly of É›â€Keggin Polyoxometalate from Molecular Crystal to Zeolitic Octahedral Metal Oxide. Chemistry - A European Journal, 2022, , .	1.7	5
201	Generation of local redox potential from confined nano-bimetals in porous metal silicate materials for high-performance catalysis. Catalysis Science and Technology, 2022, 12, 4584-4590.	2.1	4
202	Varied Morphological Study of Albite Nanomaterials at Low Temperature with Co-effect of Single Walled Nanotubes and Graphene Oxide for Kevlar Fabric Strength. , 2022, 02, 01-14.		2
203	Nanosponge hierarchical micro-mesoporous MFI zeolites as a high-performance catalyst for the hydroamination of methyl acrylate with aniline. Microporous and Mesoporous Materials, 2022, , 112087.	2.2	3
204	Connecting cation site location to alkane dehydrogenation activity in Ni/BEA catalysts. Journal of Catalysis, 2022, 413, 264-273.	3.1	3
205	Ion-Pairs in Aluminosilicate-Alkali Synthesis Liquids Determine the Aluminum Content and Topology of Crystallizing Zeolites. Chemistry of Materials, 2022, 34, 7150-7158.	3.2	13
206	Reversible ionic liquids (RevILs) for the preparation of thermally stable SBA-15 supported gold nanoparticle catalysts. Applied Catalysis A: General, 2022, 643, 118725.	2.2	1
207	Charge transformation of framework titanium (â£) into titanium (â¢) in vanadium-titanium doped MFI zeolite for enhanced alkene epoxidation. Microporous and Mesoporous Materials, 2022, 341, 112035.	2.2	3
208	Supramolecular confinement pyrolysis to carbon-supported Mo nanostructures spanning four scales for hydroquinone determination. Journal of Hazardous Materials, 2022, 437, 129327.	6.5	12
209	Atomic Insight into the Local Structure and Microenvironment of Isolated Co-Motifs in MFI Zeolite Frameworks for Propane Dehydrogenation. Journal of the American Chemical Society, 2022, 144, 12127-12137.	6.6	60
210	Synthetic strategies and performance of catalysts for pyrolytic production of alternative aviation fuels using non-edible lipids: A critical review. Applied Catalysis A: General, 2022, 643, 118769.	2.2	5
211	Highly dispersed platinum clusters anchored on hollow ZSM-5 zeolite for deep hydrogenation of polycyclic aromatic hydrocarbons. Fuel, 2022, 326, 125021.	3.4	10
212	Defect-Guided Synthesis of Hierarchical Sn-B-Beta Zeolite with Highly Exposed Sn Sites. Inorganic Chemistry, 2022, 61, 11939-11948.	1.9	2
213	Modified reverse ADOR assembles Al-rich UTL zeolite from IPC-1P layers. Inorganic Chemistry Frontiers, 2022, 9, 5444-5453.	3.0	2
214	Elucidating the Morphology Effect of Pt Nanocrystals on Pt/CNT-USY Catalysts for Selective Ring Opening of Decalin. Catalysis Letters, 0, , .	1.4	1
215	Synthesis of sulfonic SBA-15 by co-condensation and soxhlet extraction: optimization by shortening the preparation time. Journal of Porous Materials, 2023, 30, 33-42.	1.3	2
216	Effect of hydrogen reduction and palladium promotion of tungstate-modified zirconia on isomerization of heptane. Molecular Catalysis, 2022, 529, 112527.	1.0	4
217	Catalytic Conversion of CO ₂ over Atomically Precise Gold-Based Cluster Catalysts. ACS Catalysis, 2022, 12, 10638-10653.	5.5	32

		CITATION REPORT		
#	Xalidat≢on of Zn–Cu/ZSM-5 catalyst performance, at pilot scale, in the catalytic conve	ersion of butane	IF	Citations
218				

#	Article	IF	CITATIONS
236	Microenvironment engineering of supported metal nanoparticles for chemoselective hydrogenation. Chemical Science, 2022, 13, 13291-13302.	3.7	9
237	Surface dealuminated Beta zeolites supported WO3 catalyst and its catalytic performance in tetralin hydrocracking. Petroleum Science, 2022, 19, 3116-3123.	2.4	5
238	Machine Learning in the Development of Adsorbents for Clean Energy Application and Greenhouse Gas Capture. Advanced Science, 2022, 9, .	5.6	8
239	A retrospect on recent research works in the preparation of zeolites catalyst from kaolin for biodiesel production. Biofuels, 2023, 14, 315-332.	1.4	5
240	A review of catalytic hydrogenation of carbon dioxide: From waste to hydrocarbons. Frontiers in Chemistry, 0, 10, .	1.8	9
241	Synthesis of Chainlike ZSM-5 with a Polyelectrolyte as a Second Template for Oleic Acid and Ethanol Cracking into Light Olefins. ACS Omega, 2022, 7, 40520-40531.	1.6	5
242	Recent Application of Core-Shell Nanostructured Catalysts for CO2 Thermocatalytic Conversion Processes. Nanomaterials, 2022, 12, 3877.	1.9	4
243	Mesokinetics as a Tool Bridging the Microscopic-to-Macroscopic Transition to Rationalize Catalyst Design. Accounts of Chemical Research, 2022, 55, 3230-3241.	7.6	3
244	Catalytic pyrolysis of biomass over zeolites for bio-oil and chemical production: A review on their structure, porosity and acidity co-relation. Bioresource Technology, 2022, 366, 128189.	4.8	24
245	On the nature of post synthetic isolated zirconium site development in *BEA framework for ethanol-to-butadiene conversion : A mechanism study. Microporous and Mesoporous Materials, 2022, 346, 112292.	2.2	3
246	Comparison of Dimethyl Ether Carbonylation Performance over Some Zeolites Containing 8-Member Ring Pores. Energy & Fuels, 2022, 36, 14341-14348.	2.5	2
247	Synthesis strategies to control the Al distribution in zeolites: thermodynamic and kinetic aspects. Chemical Communications, 2023, 59, 852-867.	2.2	16
248	Epitaxial growth of surface-passivated core-shell ferrierite. Journal of Crystal Growth, 2023, 603, 126992.	0.7	0
249	Rapid synthesis of hierarchical silicoaluminophosphate molecular sieves using carbon-silicon composites from rice husk ash for deoxygenation of stearic acids. Fuel, 2023, 335, 126956.	3.4	6
250	Understanding the Structure–Activity Relationships in Catalytic Conversion of Polyolefin Plastics by Zeolite-Based Catalysts: A Critical Review. ACS Catalysis, 2022, 12, 14882-14901.	5.5	39
251	Beyond traditional synthesis of zeolites: The impact of germanosilicate chemistry in the search for new materials. Microporous and Mesoporous Materials, 2023, 358, 112385.	2.2	2
252	Improving the removal of tetracycline via carbonate-mediated triplet-excited state by the Cu-containing zeolites activated percarbonate. Chemical Engineering Journal, 2023, 457, 141046.	6.6	11
253	Stable and Uniform Extraframework Cations in Faujasite Zeolites. Journal of Physical Chemistry Letters, 2022, 13, 11419-11429.	2.1	3

#	ARTICLE	IF	CITATIONS
254	A Comprehensive Review on Zeolite Chemistry for Catalytic Conversion of Biomass/Waste into Green Fuels. Molecules, 2022, 27, 8578.	1.7	7
255	Recent Advances in Tetra- (Ti, Sn, Zr, Hf) and Pentavalent (Nb, V, Ta) Metal-Substituted Molecular Sieve Catalysis. Chemical Reviews, 2023, 123, 877-917.	23.0	25
257	Lanthanide-doped aluminosilicate materials and their applications. , 2023, , 179-200.		0
258	Core-shell SAPO-34@ZSM-5 composite via in situ solid-solid transformation of pre-coating MCM-41 shell and its application in methanol-to-olefins. Microporous and Mesoporous Materials, 2023, 353, 112498.	2.2	2
259	Study on the mechanism of acid modified H-Beta zeolite acidic sites on the catalytic pyrolysis of Kraft lignin. Chemical Engineering Journal, 2023, 462, 142029.	6.6	10
260	Preparation of functionalised tetrahydropyrans catalysed by isoreticular zeolites. Microporous and Mesoporous Materials, 2023, 350, 112463.	2.2	1
261	Superior Thermostability of Poly-Silicic Acid Analogues of Zeolite Composite/Secondary Building Units: A Theoretical Investigation. Journal of Physical Chemistry C, 2023, 127, 3099-3111.	1.5	1
262	Advanced zeolite and ordered mesoporous silica-based catalysts for the conversion of CO ₂ to chemicals and fuels. Chemical Society Reviews, 2023, 52, 1773-1946.	18.7	57
263	Molecular volume-controlled shape-selective catalysis for synthesis of cinnamate over microporous zeolites. Molecular Catalysis, 2023, 540, 113042.	1.0	2
264	Dimensional Regulation of Titanosilicate by Kinetically Controlled Intergrowth Crystals. Advanced Functional Materials, 2023, 33, .	7.8	3
265	Caterpillar-shaped hierarchical ZSM-5 resulted from the self-assembly of regularly primary nano-sized zeolite crystals. Journal of Porous Materials, 2023, 30, 1543-1553.	1.3	0
266	Methane Oxidation over the Zeolites-Based Catalysts. Catalysts, 2023, 13, 604.	1.6	7
267	Metal Phosphates/Phosphonates for Fuel Cells. Engineering Materials, 2023, , 193-207.	0.3	0
268	Cu–Co Dual-Atom Catalysts Supported on Hierarchical USY Zeolites for an Efficient Cross-Dehydrogenative C(sp ²)–N Coupling Reaction. Journal of the American Chemical Society, 0, , .	6.6	1
269	Hierarchical basic zeolites allow for the solvent-free synthesis of chromene derivatives. Catalysis Today, 2023, 419, 114152.	2.2	1
278	Impact of the Crystallinity of Covalent Organic Frameworks on Photocatalytic Hydrogen Evolution. Crystal Growth and Design, 2023, 23, 4701-4719.	1.4	7
318	CO ₂ to dimethyl ether (DME): structural and functional insights of hybrid catalysts. Catalysis Science and Technology, 2024, 14, 1387-1427.	2.1	0