

Zhangfeng Qin

List of Publications by Year in descending order

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105
papers

4,452
citations

109137

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118652

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all docs

106
docs citations

106
times ranked

4510
citing authors

#	ARTICLE	IF	CITATIONS
1	Improvement of the catalytic performance of ITQ-13 zeolite in methanol to olefins via Ce modification. <i>Catalysis Today</i> , 2023, 410, 184-192.	2.2	3
2	Highly effective conversion of CO ₂ into light olefins abundant in ethene. <i>CheM</i> , 2022, 8, 1376-1394.	5.8	31
3	Influence of the ZSM-5 Support Acidity on the Catalytic Performance of Pd/ZSM-5 in Lean Methane Oxidation. <i>Chemical Research in Chinese Universities</i> , 2022, 38, 229-236.	1.3	7
4	Trimethyloxonium ion “ a zeolite confined mobile and efficient methyl carrier at low temperatures: a DFT study coupled with microkinetic analysis. <i>Catalysis Science and Technology</i> , 2022, 12, 3328-3342.	2.1	2
5	Effective conversion of CO ₂ into light olefins over a bifunctional catalyst consisting of La-modified ZnZrO ₂ oxide and acidic zeolite. <i>Catalysis Science and Technology</i> , 2022, 12, 2566-2577.	2.1	15
6	Catalytic Performance of Various Zinc-Based Binary Metal Oxides/H-RUB-13 for Hydrogenation of CO ₂ . <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 10409-10418.	1.8	6
7	Enhancing the catalytic performance of H-ITQ-13 zeolite in the conversion of methanol to olefins through regulating the aluminum distribution in its framework. <i>Applied Catalysis A: General</i> , 2022, 637, 118604.	2.2	6
8	The migration of Zn species on Zn/ZSM-5 catalyst during the process of ethylene aromatization. <i>Catalysis Science and Technology</i> , 2022, 12, 4201-4210.	2.1	13
9	Structure and performance of supported iridium catalyst for the lean methane oxidation at low temperature. <i>Applied Catalysis A: General</i> , 2022, 641, 118699.	2.2	5
10	Regulating the distribution of acid sites in ZSM-11 zeolite with different halogen anions to enhance its catalytic performance in the conversion of methanol to olefins. <i>Microporous and Mesoporous Materials</i> , 2022, 341, 112051.	2.2	7
11	Catalytic Performance and Mechanistic Insights into the Synthesis of Polyoxymethylene Dimethyl Ethers from Dimethoxymethane and Trioxymethylene over ZSM-5 Zeolite. <i>Catalysis Letters</i> , 2021, 151, 670-684.	1.4	4
12	Regulating Al distribution of ZSM-5 by Sn incorporation for improving catalytic properties in methanol to olefins. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119391.	10.8	61
13	Conversion of syngas into light olefins over bifunctional ZnCeZrO/SAPO-34 catalysts: regulation of the surface oxygen vacancy concentration and its relation to the catalytic performance. <i>Catalysis Science and Technology</i> , 2021, 11, 338-348.	2.1	25
14	A comparison of Al-rich Cu-SSZ-13 zeolites synthesized by different methods in their Al distribution, hydrothermal stability and catalytic performance in the selective catalytic reduction of NO _x with NH ₃ . <i>Microporous and Mesoporous Materials</i> , 2021, 313, 110851.	2.2	13
15	Preparation of Pd/SiO ₂ Catalysts by a Simple Dry Ball-Milling Method for Lean Methane Oxidation and Probe of the State of Active Pd Species. <i>Catalysts</i> , 2021, 11, 725.	1.6	7
16	Catalytic roles of the acid sites in different pore channels of H-ZSM-5 zeolite for methanol-to-olefins conversion. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1126-1136.	6.9	23
17	Hierarchically structured Pt/K-Beta zeolites for the catalytic conversion of n-heptane to aromatics. <i>Microporous and Mesoporous Materials</i> , 2021, 324, 111308.	2.2	16
18	Probing into the building and evolution of primary hydrocarbon pool species in the process of methanol to olefins over H-ZSM-5 zeolite. <i>Molecular Catalysis</i> , 2021, 516, 111968.	1.0	3

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19	Unraveling the Relationship between Zeolite Structure and MTO Product Distribution by Theoretical Study of the Reaction Mechanism. <i>Journal of Physical Chemistry C</i> , 2021, 125, 26472-26483.	1.5	9
20	Selective oxidative esterification of alcohols over Au-Pd/graphene. <i>Molecular Catalysis</i> , 2020, 484, 110687.	1.0	10
21	Direct Conversion of Syngas into Light Olefins with Low CO ₂ Emission. <i>ACS Catalysis</i> , 2020, 10, 2046-2059.	5.5	77
22	Plasmon-enhanced furfural hydrogenation catalyzed by stable carbon-coated copper nanoparticles driven from metal-organic frameworks. <i>Catalysis Science and Technology</i> , 2020, 10, 6483-6494.	2.1	23
23	Selective Conversion of CO ₂ into Propene and Butene. <i>CheM</i> , 2020, 6, 3344-3363.	5.8	58
24	Enhancement of light olefin production in CO ₂ hydrogenation over In ₂ O ₃ -based oxide and SAPO-34 composite. <i>Journal of Catalysis</i> , 2020, 391, 459-470.	3.1	44
25	Promoting effect of alkali metal cations on the catalytic performance of Pd/H-ZSM-5 in the combustion of lean methane. <i>Applied Catalysis A: General</i> , 2020, 602, 117678.	2.2	24
26	Insight into the Methylation of Alkenes and Aromatics with Methanol over Zeolite Catalysts by Linear Scaling Relations. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13789-13798.	1.5	11
27	Synthesis of HZSM-5 Rich in Paired Al and Its Catalytic Performance for Propane Aromatization. <i>Catalysts</i> , 2020, 10, 622.	1.6	3
28	Methanol to olefins over H-RUB-13 zeolite: regulation of framework aluminum siting and acid density and their relationship to the catalytic performance. <i>Catalysis Science and Technology</i> , 2020, 10, 1835-1847.	2.1	24
29	A highly active Pd/H-ZSM-5 catalyst in lean methane combustion prepared via a sol-gel method and treated by reduction-oxidation. <i>New Journal of Chemistry</i> , 2020, 44, 3940-3949.	1.4	20
30	Structural and electronic feature evolution of Au-Pd bimetallic catalysts supported on graphene and SiO ₂ in H ₂ and O ₂ . <i>Journal of Catalysis</i> , 2019, 376, 44-56.	3.1	6
31	Aerobic Oxidation of Alcohols over Isolated Single Au Atoms Supported on CeO ₂ Nanorods: Catalysis of Interfacial [Ov-Ce-Ou] Sites. <i>ACS Applied Nano Materials</i> , 2019, 2, 5214-5223.	2.4	36
32	Tuning the siting of aluminum in ZSM-11 zeolite and regulating its catalytic performance in the conversion of methanol to olefins. <i>Journal of Catalysis</i> , 2019, 377, 81-97.	3.1	50
33	Evolution of Zn Species on Zn/HZSM-5 Catalyst under H ₂ Pretreated and its Effect on Ethylene Aromatization. <i>ChemCatChem</i> , 2019, 11, 3892-3902.	1.8	34
34	One-step fabrication of Ni-embedded hierarchically-porous carbon microspheres for levulinic acid hydrogenation. <i>Chemical Engineering Journal</i> , 2019, 369, 386-393.	6.6	53
35	Reactive adsorption desulfurization of thiophene over NiMo/ZnO, a new adsorbent with high desulfurization performance and sulfur capacity at moderate temperature. <i>Catalysis Science and Technology</i> , 2019, 9, 6318-6326.	2.1	19
36	Direct synthesis of acetic acid from carbon dioxide and methane over Cu-modulated BEA, MFI, MOR and TON zeolites: a density functional theory study. <i>Catalysis Science and Technology</i> , 2019, 9, 6613-6626.	2.1	26

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37	Synthesis of polyoxymethylene dimethyl ethers from dimethoxymethane and trioxymethylene over graphene oxide: Probing the active species and relating the catalyst structure to performance. <i>Applied Catalysis A: General</i> , 2019, 570, 15-22.	2.2	14
38	Origin and evolution of the initial hydrocarbon pool intermediates in the transition period for the conversion of methanol to olefins over H-ZSM-5 zeolite. <i>Journal of Catalysis</i> , 2019, 369, 382-395.	3.1	72
39	A facile method for the synthesis of graphene-like 2D metal oxides and their excellent catalytic application in the hydrogenation of nitroarenes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9948-9961.	5.2	33
40	Reaction Mechanism for Direct Cyclization of Linear C ₅ , C ₆ , and C ₇ Alkenes over H-ITQ-13 Zeolite Investigated Using Density Functional Theory. <i>ChemPhysChem</i> , 2018, 19, 496-503.	1.0	18
41	Relation of Catalytic Performance to the Aluminum Siting of Acidic Zeolites in the Conversion of Methanol to Olefins, Viewed via a Comparison between ZSM-5 and ZSM-11. <i>ACS Catalysis</i> , 2018, 8, 5485-5505.	5.5	148
42	Reaction mechanism for the conversion of methanol to olefins over H-ITQ-13 zeolite: a density functional theory study. <i>Catalysis Science and Technology</i> , 2018, 8, 521-533.	2.1	18
43	Competitive reactive adsorption desulphurization of dibenzothiophene and hydrogenation of naphthalene over Ni/ZnO. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 865-872.	0.9	7
44	Area-Controllable Synthesis of (001), (101), and (011) Planes in ZSM-5 Zeolites. <i>Crystal Growth and Design</i> , 2018, 18, 7548-7561.	1.4	6
45	Effect of Pretreatment on the Adsorption Performance of Ni/ZnO Adsorbent for Dibenzothiophene Desulfurization. <i>ACS Omega</i> , 2018, 3, 18967-18975.	1.6	20
46	Highly active and stable Zn/ZSM-5 zeolite catalyst for the conversion of methanol to aromatics: effect of support morphology. <i>Catalysis Science and Technology</i> , 2018, 8, 5646-5656.	2.1	52
47	Catalytic Performance of Gold Supported on Mn, Fe and Ni Doped Ceria in the Preferential Oxidation of CO in H ₂ -Rich Stream. <i>Catalysts</i> , 2018, 8, 469.	1.6	10
48	Co-reaction of methanol with butene over a high-silica H-ZSM-5 catalyst. <i>Journal of Catalysis</i> , 2018, 367, 315-325.	3.1	16
49	Mechanistic insights into the catalytic role of various acid sites on ZSM-5 zeolite in the carbonylation of methanol and dimethyl ether. <i>Catalysis Science and Technology</i> , 2018, 8, 3193-3204.	2.1	29
50	Surfactant Assembly within Pickering Emulsion Droplets for Fabrication of Interior-Structured Mesoporous Carbon Microspheres. <i>Angewandte Chemie</i> , 2018, 130, 11065-11070.	1.6	22
51	Surfactant Assembly within Pickering Emulsion Droplets for Fabrication of Interior-Structured Mesoporous Carbon Microspheres. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10899-10904.	7.2	65
52	Comparative Study of Methanol to Olefins Over ZSM-5, ZSM-11, ZSM-22 and EU-1: Dependence of Catalytic Performance on the Zeolite Framework Structure. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 3680-3688.	0.9	11
53	Demonstration of mitigation and utilization of ventilation air methane in a pilot scale catalytic reverse flow reactor. <i>Fuel Processing Technology</i> , 2017, 160, 102-108.	3.7	20
54	Mechanistic Insights into Ethylene Transformations on Ir(111) by Density Functional Calculations and Microkinetic Modeling. <i>ChemPhysChem</i> , 2017, 18, 906-916.	1.0	10

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55	Systematic study of the crystallization process of CrAPO-5 using in situ high resolution X-ray diffraction. <i>RSC Advances</i> , 2017, 7, 22964-22973.	1.7	6
56	Synthesis of Chainlike ZSM-5 Zeolites: Determination of Synthesis Parameters, Mechanism of Chainlike Morphology Formation, and Their Performance in Selective Adsorption of Xylene Isomers. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 14899-14910.	4.0	39
57	Influence of crystal size on the catalytic performance of H-ZSM-5 and Zn/H-ZSM-5 in the conversion of methanol to aromatics. <i>Fuel Processing Technology</i> , 2017, 157, 99-107.	3.7	138
58	Controllable decoration of palladium sub-nanoclusters on reduced graphene oxide with superior catalytic performance in selective oxidation of alcohols. <i>Catalysis Science and Technology</i> , 2017, 7, 5650-5661.	2.1	15
59	Insight into the effect of incorporation of boron into ZSM-11 on its catalytic performance for conversion of methanol to olefins. <i>Catalysis Science and Technology</i> , 2017, 7, 4766-4779.	2.1	23
60	Polyurethane Foam-Based Ultramicroporous Carbons for CO ₂ Capture. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 18849-18859.	4.0	68
61	Methane formation mechanism in the initial methanol-to-olefins process catalyzed by SAPO-34. <i>Catalysis Science and Technology</i> , 2016, 6, 5526-5533.	2.1	43
62	Kinetics and thermodynamics of polymethylbenzene formation over zeolites with different pore sizes for understanding the mechanisms of methanol to olefin conversion – a computational study. <i>Catalysis Science and Technology</i> , 2016, 6, 5326-5335.	2.1	21
63	Kinetic study of vapor-phase Beckmann rearrangement of cyclohexanone oxime over silicalite-1. <i>Chemical Engineering Science</i> , 2016, 153, 246-254.	1.9	18
64	Conversion of Methanol to Olefins over H-ZSM-5 Zeolite: Reaction Pathway Is Related to the Framework Aluminum Siting. <i>ACS Catalysis</i> , 2016, 6, 7311-7325.	5.5	285
65	Evolution of Aromatic Species in Supercages and Its Effect on the Conversion of Methanol to Olefins over H-MCM-22 Zeolite: A Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27964-27979.	1.5	24
66	Graphene oxide: an effective acid catalyst for the synthesis of polyoxymethylene dimethyl ethers from methanol and trioxymethylene. <i>Catalysis Science and Technology</i> , 2016, 6, 993-997.	2.1	53
67	Stability and Reactivity of Intermediates of Methanol Related Reactions and C–C Bond Formation over H-ZSM-5 Acidic Catalyst: A Computational Analysis. <i>Journal of Physical Chemistry C</i> , 2016, 120, 6075-6087.	1.5	50
68	Self-metathesis of 1-butene to propene over SBA-15-supported WO ₃ . <i>Catalysis Science and Technology</i> , 2016, 6, 5515-5525.	2.1	24
69	Regulation of Framework Aluminum Siting and Acid Distribution in H-MCM-22 by Boron Incorporation and Its Effect on the Catalytic Performance in Methanol to Hydrocarbons. <i>ACS Catalysis</i> , 2016, 6, 2299-2313.	5.5	113
70	Polymethylbenzene or Alkene Cycle? Theoretical Study on Their Contribution to the Process of Methanol to Olefins over H-ZSM-5 Zeolite. <i>Journal of Physical Chemistry C</i> , 2015, 119, 28482-28498.	1.5	105
71	Methanol to Olefins over H-MCM-22 Zeolite: Theoretical Study on the Catalytic Roles of Various Pores. <i>ACS Catalysis</i> , 2015, 5, 1131-1144.	5.5	72
72	High Si/Al ratio HZSM-5 zeolite: an efficient catalyst for the synthesis of polyoxymethylene dimethyl ethers from dimethoxymethane and trioxymethylene. <i>Green Chemistry</i> , 2015, 17, 2353-2357.	4.6	100

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73	Chemical recycling of unsaturated polyester resin and its composites via selective cleavage of the ester bond. <i>Green Chemistry</i> , 2015, 17, 4527-4532.	4.6	76
74	Effect of zeolite pore structure on the diffusion and catalytic behaviors in the transalkylation of toluene with 1,2,4-trimethylbenzene. <i>RSC Advances</i> , 2015, 5, 66301-66310.	1.7	25
75	A New Molybdenum Nitride Catalyst with Rhombohedral MoS ₂ Structure for Hydrogenation Applications. <i>Journal of the American Chemical Society</i> , 2015, 137, 4815-4822.	6.6	195
76	Highly active Au-Pd nanoparticles supported on three-dimensional graphene-carbon nanotube hybrid for selective oxidation of methanol to methyl formate. <i>RSC Advances</i> , 2015, 5, 44835-44839.	1.7	19
77	Synthesis of two-dimensional mesoporous carbon nitride under different carbonization temperatures and investigation of its catalytic properties in Knoevenagel condensations. <i>RSC Advances</i> , 2015, 5, 22838-22846.	1.7	32
78	Chemical Recycling of Carbon Fiber Reinforced Epoxy Resin Composites via Selective Cleavage of the Carbon-Nitrogen Bond. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 3332-3337.	3.2	141
79	Theoretical Insights into the Mechanism of Olefin Elimination in the Methanol-to-Olefin Process over HZSM-5, HMOR, HBEA, and HMCM-22 Zeolites. <i>Journal of Physical Chemistry A</i> , 2014, 118, 8901-8910.	1.1	33
80	Morphologic effects of nano CeO ₂ -TiO ₂ on the performance of Au/CeO ₂ -TiO ₂ catalysts in low-temperature CO oxidation. <i>Applied Catalysis B: Environmental</i> , 2014, 144, 498-506.	10.8	96
81	Influence of preparation method on the performance of Zn-containing HZSM-5 catalysts in methanol-to-aromatics. <i>Microporous and Mesoporous Materials</i> , 2014, 197, 252-261.	2.2	338
82	A route to form initial hydrocarbon pool species in methanol conversion to olefins over zeolites. <i>Journal of Catalysis</i> , 2014, 317, 277-283.	3.1	151
83	Catalytic Combustion of Lean Methane at Low Temperature Over Palladium on a CoO x SiO ₂ Composite Support. <i>Catalysis Letters</i> , 2013, 143, 411-417.	1.4	18
84	Graphene-supported Au-Pd bimetallic nanoparticles with excellent catalytic performance in selective oxidation of methanol to methyl formate. <i>Chemical Communications</i> , 2013, 49, 8250.	2.2	120
85	Promoting effect of carbon dioxide on the dehydrogenation of ethylbenzene over silica-supported vanadium catalysts. <i>Fuel</i> , 2013, 109, 43-48.	3.4	30
86	A logic-based controller for the mitigation of ventilation air methane in a catalytic flow reversal reactor. <i>Frontiers of Chemical Science and Engineering</i> , 2013, 7, 347-356.	2.3	5
87	A control strategy of flow reversal with hot gas withdrawal for heat recovery and its application in mitigation and utilization of ventilation air methane in a reverse flow reactor. <i>Chemical Engineering Journal</i> , 2013, 228, 243-255.	6.6	20
88	Catalytic performance of MnOx-NiO composite oxide in lean methane combustion at low temperature. <i>Applied Catalysis B: Environmental</i> , 2013, 129, 172-181.	10.8	178
89	Rapid tuning of ZSM-5 crystal size by using polyethylene glycol or colloidal silicalite-1 seed. <i>Microporous and Mesoporous Materials</i> , 2012, 163, 192-200.	2.2	41
90	Degradable polymers from ring-opening polymerization of β -angelica lactone, a five-membered unsaturated lactone. <i>Polymer Chemistry</i> , 2011, 2, 1190-1194.	1.9	51

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91	Coupling dehydrogenation of isobutane to produce isobutene in carbon dioxide over NiO/ γ -Al ₂ O ₃ catalyst. Reaction Kinetics, Mechanisms and Catalysis, 2010, 101, 173-181.	0.8	11
92	A sulfur K-edge XANES study on the transfer of sulfur species in the reactive adsorption desulfurization of diesel oil over Ni/ZnO. Catalysis Communications, 2010, 11, 592-596.	1.6	58
93	Molecular dynamics simulations on single-file diffusions: Effects of channel potential periods and particle-particle interactions. Journal of Applied Physics, 2009, 106, 084905.	1.1	4
94	Zinc Carboxylate Functionalized Mesoporous SBA-15 Catalyst for Selective Synthesis of Methyl-4,4'-di(phenylcarbamate). Catalysis Letters, 2009, 128, 405-412.	1.4	21
95	Effects of carbon on the sulfidation and hydrodesulfurization of CoMo hydrating catalysts. Korean Journal of Chemical Engineering, 2009, 26, 576-581.	1.2	10
96	Positive Effect of Water Vapor on CO Oxidation at Low Temperature over Pd/CeO ₂ -TiO ₂ Catalyst. Catalysis Letters, 2008, 126, 353-360.	1.4	22
97	Friedel-Crafts acylation of anisole and toluene with acetic anhydride over nano-sized Beta zeolites. Catalysis Letters, 2007, 117, 171-176.	1.4	24
98	Lewis acid-catalyzed transesterification and esterification of high free fatty acid oil in subcritical methanol. Korean Journal of Chemical Engineering, 2007, 24, 311-313.	1.2	50
99	Preparation of mesoporous activated carbon fiber by steam activation in the presence of cerium oxide and its adsorption of Congo red and Vitamin B12 from solution. Journal of Materials Science, 2004, 39, 4693-4696.	1.7	15
100	Title is missing!. Journal of Materials Science Letters, 2003, 22, 635-637.	0.5	2
101	Reaction Coupling in the New Processes for Producing Styrene from Ethylbenzene. Industrial & Engineering Chemistry Research, 2003, 42, 1329-1333.	1.8	38
102	Liquid-Liquid Equilibria for Methanol + Water + Hexane Ternary Mixtures. Journal of Chemical & Engineering Data, 2002, 47, 1243-1245.	1.0	26
103	Reaction Coupling of Ethylbenzene Dehydrogenation with Nitrobenzene Hydrogenation. Catalysis Letters, 2002, 79, 33-37.	1.4	21
104	Alkylation of Benzene with Propene on Beta Zeolites Under Supercritical Conditions. Catalysis Letters, 2002, 83, 265-269.	1.4	13
105	Methanol Synthesis under Supercritical Conditions: Calculations of Equilibrium Conversions by Using the Soave-Redlich-Kwong Equation of State. Industrial & Engineering Chemistry Research, 2001, 40, 3801-3805.	1.8	23