Peng Tian

List of Publications by Year
in descending order

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105 papers	4,993 citations	136950 32 h-index	95266 68 g-index
105 all docs	105 docs citations	105 times ranked	3111 citing authors

#	Article	IF	Citations
1	A dual-bed catalyst for producing ethylene and propylene from syngas. Journal of Energy Chemistry, 2022, 66, 190-194.	12.9	13
2	Hydrothermal synthesis of Siliceous Beta Zeolite by an inorganic cation-driven strategy and its crystallization mechanism. Microporous and Mesoporous Materials, 2022, 329, 111557.	4.4	7
3	Progress in Seed-assisted Synthesis of (Silico)Aluminophosphate Molecular Sieves. Chemical Research in Chinese Universities, 2022, 38, 1-8.	2.6	8
4	SAPO-34 crystals with nanosheet morphology synthesized by pyrophosphoric acid as new phosphorus source. Microporous and Mesoporous Materials, 2022, 333, 111753.	4.4	7
5	High-silica zeolite Y: seed-assisted synthesis, characterization and catalytic properties. Inorganic Chemistry Frontiers, 2022, 9, 2213-2220.	6.0	6
6	Designed synthesis of MOR zeolites using gemini-type bis(methylpyrrolidinium) dications as structure directing agents and their DME carbonylation performance. Journal of Materials Chemistry A, 2022, 10, 8334-8343.	10.3	6
7	Simultaneously Achieving High Conversion and Selectivity in Syngas-to-Propane Reaction via a Dual-Bed Catalyst System. ACS Catalysis, 2022, 12, 3985-3994.	11.2	8
8	Realizing Fast Synthesis of Highâ€Silica Zeolite Y with Remarkable Catalytic Performance. Angewandte Chemie - International Edition, 2022, 61, .	13.8	10
9	Recognizing the Important Role of Surface Barriers in MOR Zeolite Catalyzed DME Carbonylation Reaction. ACS Catalysis, 2022, 12, 1-7.	11.2	21
10	Synthesis of mesoporous high-silica zeolite Y and their catalytic cracking performance. Chinese Journal of Catalysis, 2022, 43, 1945-1954.	14.0	18
11	Conversion of methanol to propylene over SAPO-14: Reaction mechanism and deactivation. Chinese Journal of Catalysis, 2022, 43, 2259-2269.	14.0	8
12	One-pot synthesis of Na+-free Cu-SSZ-13 and its application in the NH3â€“SCR reaction. Chemical Communications, 2021, 57, 4898-4901.	4.1	3
13	Embryonic zeolite-assisted synthesis of SSZ-13 with superior efficiency and their excellent catalytic performance. Journal of Materials Chemistry A, 2021, 9, 15238-15245.	10.3	17
14	Dual-template directed aminothermal syntheses and characterization of silicoaluminophosphates SAPO-CLO and ECR-40. Microporous and Mesoporous Materials, 2021, 315, 110915.	4.4	8
15	Exploring boron distributions in MFI-type borosilicates. Inorganic Chemistry Communication, 2021, 126, 108467.	3.9	1
16	The Complex Crystal Structure and Abundant Local Defects of Zeolite EMMâ€17 Unraveled by Combined Electron Crystallography and Microscopy. Angewandte Chemie, 2021, 133, 24429.	2.0	0
17	The Complex Crystal Structure and Abundant Local Defects of Zeolite EMMâ€17 Unraveled by Combined Electron Crystallography and Microscopy. Angewandte Chemie - International Edition, 2021, 60, 24227-24233.	13.8	9
18	Organic-free synthesis of MOR nanoassemblies with excellent DME carbonylation performance. Chinese Journal of Catalysis, 2021, 42, 1468-1477.	14.0	19

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19	DMTO: A Sustainable Methanol-to-Olefins Technology. Engineering, 2021, 7, 17-21.	6.7	30
20	The effect of Si environments on NH3 selective catalytic reduction performance and moisture stability of Cu-SAPO-34 catalysts. Journal of Catalysis, 2020, 391, 404-413.	6.2	30
21	Rational Design of a Novel Catalyst Cuâ€SAPOâ€42 for NH₃â€SCR Reaction. Small, 2020, 16, e2000902.	10.0	9
22	Fabrication of Cu-CHA composites with enhanced NH3-SCR catalytic performances and hydrothermal stabilities. Microporous and Mesoporous Materials, 2020, 309, 110585.	4.4	20
23	A reconstruction strategy for the synthesis of Cu-SAPO-34 with excellent NH3-SCR catalytic performance and hydrothermal stability. Chinese Journal of Catalysis, 2020, 41, 1410-1420.	14.0	16
24	A Bottomâ€Up Strategy for the Synthesis of Highly Siliceous Faujasiteâ€Type Zeolite. Advanced Materials, 2020, 32, e2000272.	21.0	45
25	Preparation of hierarchical SAPO-18 via alkaline/acid etching. Microporous and Mesoporous Materials, 2020, 300, 110156.	4.4	11
26	High Propylene Selectivity in Methanol Conversion over a Small-Pore SAPO Molecular Sieve with Ultra-Small Cage. ACS Catalysis, 2020, 10, 3741-3749.	11.2	32
27	Insights into the Pyridine-Modified MOR Zeolite Catalysts for DME Carbonylation. ACS Catalysis, 2020, 10, 3372-3380.	11.2	68
28	Cu-SAPO-17: A novel catalyst for selective catalytic reduction of NO. Chinese Journal of Catalysis, 2020, 41, 1715-1722.	14.0	6
29	A modeling study on reaction and diffusion in MTO process over SAPO-34 zeolites. Chemical Engineering Journal, 2019, 377, 119668.	12.7	50
30	Highly selective adsorption of CO over N2 on CuCl-loaded SAPO-34 adsorbent. Journal of Energy Chemistry, 2019, 36, 122-128.	12.9	18
31	Recent Progress in Methanolâ€toâ€Olefins (MTO) Catalysts. Advanced Materials, 2019, 31, e1902181.	21.0	217
32	Landscape of AlPO-based structures and compositions in the database of zeolite structures. Microporous and Mesoporous Materials, 2019, 280, 105-115.	4.4	17
33	The self-protection effect of reactant gas on the moisture stability of CuSAPO-34 catalyst for NH3-SCR. Chemical Engineering Journal, 2019, 374, 832-839.	12.7	21
34	Direct quantification of surface barriers for mass transfer in nanoporous crystalline materials. Communications Chemistry, 2019, 2, .	4.5	58
35	Achieving a Superlong Lifetime in the Zeolite-Catalyzed MTO Reaction under High Pressure: Synergistic Effect of Hydrogen and Water. ACS Catalysis, 2019, 9, 3017-3025.	11.2	91
36	Probing locations of organic structure-directing agents (OSDAs) and host-guest interactions in CHA -type SAPO-34/44. Microporous and Mesoporous Materials, 2018, 264, 55-59.	4.4	15

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37	Exploring BrÃ¸nsted acids confined in the 10-ring channels of the zeolite ferrierite. CrystEngComm, 2018, 20, 699-702.	2.6	10
38	Improving the low-temperature hydrothermal stability of Cu-SAPO-34 by the addition of Ag for ammonia selective catalytic reduction of NO x. Applied Catalysis A: General, 2018, 551, 79-87.	4.3	25
39	A novel approach for facilitating the targeted synthesis of silicoaluminophosphates. Journal of Materials Chemistry A, 2018, 6, 24186-24193.	10.3	13
40	Unraveling the Twin and Tunability of the Crystal Domain Sizes in the Mediumâ€Pore Zeolite ZSMâ€57 by Electron Crystallography. Chemistry - A European Journal, 2018, 25, 1029-1036.	3.3	3
41	Synthesis of nanosized SAPO-34 with the assistance of bifunctional amine and seeds. Chemical Communications, 2018, 54, 11160-11163.	4.1	29
42	Preparation of Spherical Mordenite Zeolite Assemblies with Excellent Catalytic Performance for Dimethyl Ether Carbonylation. ACS Applied Materials & Interfaces, 2018, 10, 32239-32246.	8.0	39
43	The influence of low-temperature hydration methods on the stability of Cu-SAPO-34 SCR catalyst. Chemical Engineering Journal, 2018, 354, 85-92.	12.7	43
44	External surface modification of as-made ZSM-5 and their catalytic performance in the methanol to propylene reaction. Chinese Journal of Catalysis, 2018, 39, 1418-1426.	14.0	17
45	Synthesis of high-Si hierarchical beta zeolites without mesoporogen and their catalytic application in the methanol to propene reaction. Catalysis Science and Technology, 2018, 8, 2966-2974.	4.1	25
46	Silicoaluminophosphate molecular sieve DNL-6: Synthesis with a novel template, N,N â€²-dimethylethylenediamine, and its catalytic application. Chinese Journal of Catalysis, 2018, 39, 1511-1519.	14.0	14
47	Synthesis of SAPO-34 nanoaggregates with the assistance of an inexpensive three-in-one non-surfactant organosilane. Chemical Communications, 2017, 53, 4985-4988.	4.1	45
48	Insights into the aminothermal crystallization process of SAPO-34 and its comparison with hydrothermal system. Microporous and Mesoporous Materials, 2017, 248, 204-213.	4.4	13
49	Investigation of low-temperature hydrothermal stability of Cu-SAPO-34 for selective catalytic reduction of NO x with NH 3. Chinese Journal of Catalysis, 2017, 38, 918-927.	14.0	33
50	SAPO-34 synthesized with n -butylamine as a template and its catalytic application in the methanol amination reaction. Chinese Journal of Catalysis, 2017, 38, 574-582.	14.0	9
51	Recent advances of the nano-hierarchical SAPO-34 in the methanol-to-olefin (MTO) reaction and other applications. Catalysis Science and Technology, 2017, 7, 4905-4923.	4.1	115
52	Investigation of methanol conversion over high-Si beta zeolites and the reaction mechanism of their high propene selectivity. Catalysis Science and Technology, 2017, 7, 5882-5892.	4.1	33
53	Organophosphorous surfactant-assistant synthesis of SAPO-34 molecular sieve with special morphology and improved MTO performance. RSC Advances, 2016, 6, 47864-47872.	3.6	28
54	A reconstruction strategy to synthesize mesoporous SAPO molecular sieve single crystals with high MTO catalytic activity. Chemical Communications, 2016, 52, 6463-6466.	4.1	30

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55	A low-temperature approach to synthesize low-silica SAPO-34 nanocrystals and their application in the methanol-to-olefins (MTO) reaction. Catalysis Science and Technology, 2016, 6, 7569-7578.	4.1	89
56	Microporous Aluminophosphate ULM-6: Synthesis, NMR Assignment, and Its Transformation to AlPO4-14 Molecular Sieve. Journal of Physical Chemistry C, 2016, 120, 11854-11863.	3.1	7
57	Direct Cu²⁺ ion-exchanged into as-synthesized SAPO-34 and its catalytic application in the selective catalytic reduction of NO with NH₃. RSC Advances, 2016, 6, 12544-12552.	3.6	32
58	SAPO-34 templated by dipropylamine and diisopropylamine: synthesis and catalytic performance in the methanol to olefin (MTO) reaction. New Journal of Chemistry, 2016, 40, 4236-4244.	2.8	29
59	Creation of hollow SAPO-34 single crystals via alkaline or acid etching. Chemical Communications, 2016, 52, 5718-5721.	4.1	58
60	Hollow nanocrystals of silicoaluminophosphate molecular sieves synthesized by an aminothermal co-templating strategy. CrystEngComm, 2016, 18, 1000-1008.	2.6	20
61	Facile preparation of nanocrystal-assembled hierarchical mordenite zeolites with remarkable catalytic performance. Chinese Journal of Catalysis, 2015, 36, 1910-1919.	14.0	55
62	Dual template-directed synthesis of SAPO-34 nanosheet assemblies with improved stability in the methanol to olefins reaction. Journal of Materials Chemistry A, 2015, 3, 5608-5616.	10.3	160
63	N-methyldiethanolamine: A multifunctional structure-directing agent for the synthesis of SAPO and AlPO molecular sieves. Journal of Colloid and Interface Science, 2015, 445, 119-126.	9.4	16
64	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.	3.1	14
65	Methanol to Olefins (MTO): From Fundamentals to Commercialization. ACS Catalysis, 2015, 5, 1922-1938.	11.2	1,268
66	Synthesis of hierarchical beta zeolite by using a bifunctional cationic polymer and the improved catalytic performance. RSC Advances, 2015, 5, 9852-9860.	3.6	27
67	In situ growth and assembly of microporous aluminophosphate nanosheets into ordered architectures at low temperature and their enhanced catalytic performance. Journal of Materials Chemistry A, 2015, 3, 7741-7749.	10.3	33
68	Cationic surfactant-assisted hydrothermal synthesis: an effective way to tune the crystalline phase and morphology of SAPO molecular sieves. CrystEngComm, 2015, 17, 8555-8561.	2.6	11
69	Cavity Controls the Selectivity: Insights of Confinement Effects on MTO Reaction. ACS Catalysis, 2015, 5, 661-665.	11.2	131
70	A top-down approach to prepare silicoaluminophosphate molecular sieve nanocrystals with improved catalytic activity. Chemical Communications, 2014, 50, 1845.	4.1	101
71	Heptamethylbenzenium cation formation and the correlated reaction pathway during methanol-to-olefins conversion over DNL-6. Catalysis Today, 2014, 226, 47-51.	4.4	16
72	Synthesis of SAPO-34 with alkanolamines as novel templates and their application for CO2 separation. Microporous and Mesoporous Materials, 2014, 194, 8-14.	4.4	33

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73	Seed-assisted synthesis of high silica ZSM-35 through interface-induced growth over MCM-49 seeds. Microporous and Mesoporous Materials, 2014, 196, 89-96.	4.4	27
74	Synthesis of SAPO-35 molecular sieve and its catalytic properties in the methanol-to-olefins reaction. Chinese Journal of Catalysis, 2013, 34, 798-807.	14.0	14
75	Aminothermal synthesis of CHA-type SAPO molecular sieves and their catalytic performance in methanol to olefins (MTO) reaction. Journal of Materials Chemistry A, 2013, 1, 14206.	10.3	49
76	Synthesis of DNLâ€6 with a High Concentration of Siâ€‰(4â€‰Al) Environments and its Application in CO₂ Separation. ChemSusChem, 2013, 6, 911-918.	6.8	36
77	Study of crystallization process of SAPO-11 molecular sieve. Chinese Journal of Catalysis, 2013, 34, 593-603.	14.0	25
78	Investigation of the Crystallization Process of SAPO-35 and Si Distribution in the Crystals. Journal of Physical Chemistry C, 2013, 117, 4048-4056.	3.1	31
79	Synthesis and Growth Mechanism of the Core-Shell SAPO-34/AlPO-18 Molecular Sieves. Chinese Journal of Catalysis, 2013, 33, 1724-1729.	14.0	2
80	A novel solvothermal approach to synthesize SAPO molecular sieves using organic amines as the solvent and template. Journal of Materials Chemistry, 2012, 22, 6568.	6.7	72
81	Observation of Heptamethylbenzenium Cation over SAPO-Type Molecular Sieve DNL-6 under Real MTO Conversion Conditions. Journal of the American Chemical Society, 2012, 134, 836-839.	13.7	173
82	An effective route to improve the catalytic performance of SAPO-34 in the methanol-to-olefin reaction. Journal of Natural Gas Chemistry, 2012, 21, 431-434.	1.8	24
83	Synthesis of SAPO-34 Molecular Sieves Templated with Diethylamine and Their Properties Compared with Other Templates. Chinese Journal of Catalysis, 2012, 33, 174-182.	14.0	56
84	A study of the acidity of SAPO-34 by solid-state NMR spectroscopy. Microporous and Mesoporous Materials, 2012, 158, 19-25.	4.4	87
85	Phase-Transformation Synthesis of SAPO-34 and a Novel SAPO Molecular Sieve with RHO Framework Type from a SAPO-5 Precursor. Chemistry of Materials, 2011, 23, 1406-1413.	6.7	54
86	Conversion of methanol over H-ZSM-22: The reaction mechanism and deactivation. Catalysis Today, 2011, 164, 288-292.	4.4	54
87	Comparative study of MTO conversion over SAPO-34, H-ZSM-5 and H-ZSM-22: Correlating catalytic performance and reaction mechanism to zeolite topology. Catalysis Today, 2011, 171, 221-228.	4.4	179
88	Synthesis and characterization of DNL-6, a new silicoaluminophosphate molecular sieve with the RHO framework. Microporous and Mesoporous Materials, 2011, 144, 113-119.	4.4	29
89	Synthesis of SAPO-34 templated by diethylamine: Crystallization process and Si distribution in the crystals. Microporous and Mesoporous Materials, 2008, 114, 416-423.	4.4	122
90	Synthesis, characterization and catalytic properties of SAPO-34 synthesized using diethylamine as a template. Microporous and Mesoporous Materials, 2008, 111, 143-149.	4.4	184

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91	Inorganic phosphate crystal Na15â^'n[Al(PO4)2F2]3â^'n[Ti(PO4)2F2]n (0â‰¤n<1): A novel cation exchanger with high exchange selectivity for Li+ and Pb2+ ions. Materials Research Bulletin, 2008, 43, 3382-3388.	5.2	0
92	Structure and electrical conductivity of a novel inorganic solid electrolyte: Na14.5[Al(PO4)2F2]2.5[Ti(PO4)2F2]0.5 (NATP). Solid State Communications, 2007, 141, 407-411.	1.9	2
93	Synthesis of ZSM-34 and Its Catalytic Properties in Methanol-to-Olefins Reaction. Chinese Journal of Catalysis, 2007, 28, 817-822.	14.0	17
94	Template-assisted syntheses of porous metal methylphosphonates. Journal of Porous Materials, 2006, 13, 73-80.	2.6	5
95	Synthesis of small crystals zeolite NaY. Materials Letters, 2006, 60, 1131-1133.	2.6	70
96	Two CrIII containing metal-1-hydroxyethylidenediphosphonate compounds: Synthesis, structure, and morphology. Crystal Research and Technology, 2006, 41, 1049-1054.	1.3	4
97	Template-assisted syntheses of two novel porous zirconium methylphosphonates. Microporous and Mesoporous Materials, 2005, 81, 175-183.	4.4	11
98	Preparation of ordered carbon/silica hybrid mesoporous materials with specific pore size expansion. Microporous and Mesoporous Materials, 2005, 79, 269-273.	4.4	22
99	Syntheses and structures of sodium aluminodiphosphonates with different morphologies (diphosphonate=1-hydroxyethylidenediphosphonate). Journal of Crystal Growth, 2004, 264, 400-408.	1.5	3
100	Characterization of metal-containing molecular sieves and their catalytic properties in the selective oxidation of cyclohexane. Catalysis Today, 2004, 93-95, 735-742.	4.4	57
101	Preparation of Ru metal nanoparticles in mesoporous materials: influence of sulfur on the hydrogenating activity. Microporous and Mesoporous Materials, 2003, 60, 197-206.	4.4	31
102	Synthesis and spectroscopic study of mesoporous aluminum methylphosphonate foam templated by dibutyl methylphosphonate. Microporous and Mesoporous Materials, 2003, 62, 61-71.	4.4	5
103	Ethylenediammonium disodium (1-hydroxyethylidene)diphosphonate tetrahydrate, [NH3(CH2)2NH3]Na2(hedp)Â·4H2O. Acta Crystallographica Section E: Structure Reports Online, 2003, 59, m521-m523.	0.2	1
104	Construction of Singleâ€Crystalline Hierarchical ZSMâ€5 with Open Nanoarchitectures via Anisotropicâ€Kinetics Transformation for the Methanolâ€toâ€Hydrocarbons Reaction. Angewandte Chemie, 0, , .	2.0	0
105	Realizing Fast Synthesis of Highâ€Silica Zeolite Y with Remarkable Catalytic Performance. Angewandte Chemie, 0, , .	2.0	0