Xiongfu Zhang

List of Publications by Year
in descending order

90 papers	3,781 citations	109137 35 h-index	133063 59 g-index
90 all docs	90 docs citations	90 times ranked	3898 citing authors

#	Article	IF	Citations
1	Synthesis of Fe3O4@ZIF-8 magnetic coreâ€“shell microspheres and their potential application in a capillary microreactor. Chemical Engineering Journal, 2013, 228, 398-404.	6.6	301
2	New Membrane Architecture with High Performance: ZIF-8 Membrane Supported on Vertically Aligned ZnO Nanorods for Gas Permeation and Separation. Chemistry of Materials, 2014, 26, 1975-1981.	3.2	199
3	An investigation of Knoevenagel condensation reaction in microreactors using a new zeolite catalyst. Applied Catalysis A: General, 2004, 261, 109-118.	2.2	196
4	Preparation and application of zeolite/ceramic microfiltration membranes for treatment of oil contaminated water. Journal of Membrane Science, 2008, 325, 420-426.	4.1	187
5	A simple and scalable method for preparing low-defect ZIF-8 tubular membranes. Journal of Materials Chemistry A, 2013, 1, 10635.	5.2	139
6	In situ fabrication of a perfect Pd/ZnO@ZIF-8 coreâ€“shell microsphere as an efficient catalyst by a ZnO support-induced ZIF-8 growth strategy. Nanoscale, 2015, 7, 7615-7623.	2.8	118
7	GO-guided direct growth of highly oriented metalâ€“organic framework nanosheet membranes for H₂/CO₂ separation. Chemical Science, 2018, 9, 4132-4141.	3.7	116
8	A rapid synthesis route for Sn-Beta zeolites by steam-assisted conversion and their catalytic performance in Baeyerâ€“Villiger oxidation. Chemical Engineering Journal, 2013, 218, 425-432.	6.6	107
9	Experiments and modeling of membrane microreactors. Catalysis Today, 2005, 110, 26-37.	2.2	84
10	Influence of seed size on the formation and microstructure of zeolite silicalite-1 membranes by seeded growth. Materials Chemistry and Physics, 2006, 96, 42-50.	2.0	82
11	Preparation of titanium silicalite-1 catalytic films and application as catalytic membrane reactors. Chemical Engineering Journal, 2010, 156, 562-570.	6.6	77
12	Catalytic dehydration of lactic acid to acrylic acid over modified ZSM-5 catalysts. Chemical Engineering Journal, 2016, 284, 934-941.	6.6	75
13	Synthesis of stable UiO-66 membranes for pervaporation separation of methanol/methyl tert-butyl ether mixtures by secondary growth. Journal of Membrane Science, 2017, 544, 342-350.	4.1	73
14	Growth of ZnO self-converted 2D nanosheet zeolitic imidazolate framework membranes by an ammonia-assisted strategy. Nano Research, 2018, 11, 1850-1860.	5.8	72
15	Preparation and properties of TS-1 zeolite and film using Sil-1 nanoparticles as seeds. Chemical Engineering Journal, 2009, 147, 316-322.	6.6	68
16	A novel method for the assembly of nano-zeolite crystals on porous stainless steel microchannel and then zeolite film growth. Journal of Physics and Chemistry of Solids, 2007, 68, 26-31.	1.9	66
17	Investigating the Role of Zeolite Nanocrystal Seeds in the Synthesis of Mesoporous Catalysts with Zeolite Wall Structure. Chemistry of Materials, 2011, 23, 4469-4479.	3.2	66
18	Carbon Nanotubes Supported Mono- and Bimetallic Pt and Ru Catalysts for Selective Hydrogenation of Phenylacetylene. Industrial & Engineering Chemistry Research, 2012, 51, 4934-4941.	1.8	60

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19	Bottom-up fabrication of two-dimensional Co-based zeolitic imidazolate framework tubular membranes consisting of nanosheets by vapor phase transformation of Co-based gel for H2/CO2 separation. Journal of Membrane Science, 2019, 573, 200-209.	4.1	58
20	Pdâ€“silicalite-1 composite membrane for direct hydroxylation of benzene. Chemical Communications, 2009, , 5898.	2.2	56
21	Flow fabrication of a highly efficient Pd/UiO-66-NH2 film capillary microreactor for 4-nitrophenol reduction. Chemical Engineering Journal, 2018, 333, 146-152.	6.6	56
22	Performance of TS-1-Coated Structured Packing Materials for Styrene Oxidation Reaction. ACS Catalysis, 2011, 1, 437-445.	5.5	55
23	New Pd/SiO‹sub›2‹/sub›@ZIF-8 Coreâ€“Shell Catalyst with Selective, Antipoisoning, and Antileaching Properties for the Hydrogenation of Alkenes. Industrial & Engineering Chemistry Research, 2014, 53, 10906-10913.	1.8	55
24	Synthesis of a highly stable ZIF-8 membrane on a macroporous ceramic tube by manual-rubbing ZnO deposition as a multifunctional layer. Journal of Membrane Science, 2015, 490, 354-363.	4.1	54
25	Fabrication of oriented metal-organic framework nanosheet membrane coated stainless steel meshes for highly efficient oil/water separation. Separation and Purification Technology, 2019, 229, 115835.	3.9	54
26	ZnO Nanorod-Induced Heteroepitaxial Growth of SOD Type Co-Based Zeolitic Imidazolate Framework Membranes for H‹sub›2‹/sub› Separation. ACS Applied Materials & Interfaces, 2018, 10, 4151-4160.	4.0	52
27	Catalytic properties of benzene hydroxylation by TS-1 film reactor and Pdâ€“TS-1 composite membrane reactor. Catalysis Today, 2010, 156, 288-294.	2.2	51
28	High-performance UiO-66-NH2 tubular membranes by zirconia-induced synthesis for desulfurization of model gasoline via pervaporation. Journal of Membrane Science, 2018, 556, 54-65.	4.1	50
29	Coreâ€“shell Pd/ZSM-5@ZIF-8 membrane micro-reactors with size selectivity properties for alkene hydrogenation. Catalysis Today, 2014, 236, 41-48.	2.2	47
30	Preparation and performance of TS-1/SiO2 egg-shell catalysts. Chemical Engineering Journal, 2011, 175, 408-416.	6.6	45
31	Green synthesis of ZIF-8 tubular membranes from a recyclable 2-methylimidazole water-solvent solution by ZnO nanorods self-converted strategy for gas separation. Journal of Membrane Science, 2019, 581, 344-354.	4.1	43
32	Transformation of SiO2 in Titanium Silicalite-1/SiO2 extrudates during tetrapropylammonium hydroxide treatment and improvement of catalytic properties for propylene epoxidation. Chemical Engineering Journal, 2014, 253, 464-471.	6.6	40
33	Preparation of core (Ni base)â€“shell (Silicalite-1) catalysts and their application for alkali resistance in direct internal reforming molten carbonate fuel cell. Journal of Power Sources, 2012, 198, 14-22.	4.0	38
34	Factors affecting the formation of Sn-Beta zeolites by steam-assisted conversion method. Materials Chemistry and Physics, 2013, 141, 519-529.	2.0	37
35	Pd nanoparticles immobilized in a microporous/mesoporous composite ZIF-8/MSS: A multifunctional catalyst for the hydrogenation of alkenes. Microporous and Mesoporous Materials, 2014, 197, 324-330.	2.2	36
36	A novel approach for the preparation of highly stable Pd membrane on macroporous Î±-Al2O3 tube. Journal of Membrane Science, 2010, 362, 241-248.	4.1	35

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37	ZnO-template synthesis of rattle-type catalysts with supported Pd nanoparticles encapsulated in hollow ZIF-8 for liquid hydrogenation. Chemical Engineering Journal, 2017, 328, 124-132.	6.6	34
38	Preparation of palladium membrane on Pd/silicalite-1 zeolite particles modified macroporous alumina substrate for hydrogen separation. International Journal of Hydrogen Energy, 2014, 39, 21044-21052.	3.8	32
39	In situ fabrication of high-permeance ZIF-8 tubular membranes in a continuous flow system. Materials Chemistry and Physics, 2014, 148, 10-16.	2.0	32
40	Direct Hydroxylation of Benzene to Phenol Using Palladiumâ€“Titanium Silicalite Zeolite Bifunctional Membrane Reactors. Industrial & Engineering Chemistry Research, 2014, 53, 5636-5645.	1.8	31
41	Bottom-up synthesis of 2D Co-based metalâ€“organic framework nanosheets by an ammonia-assisted strategy for tuning the crystal morphology. CrystEngComm, 2019, 21, 3199-3208.	1.3	30
42	TS-1 zeolite as an effective diffusion barrier for highly stable Pd membrane supported on macroporous Î±-Al2O3 tube. RSC Advances, 2013, 3, 4821.	1.7	28
43	Preparation of alkali-resistant, Sil-1 encapsulated nickel catalysts for direct internal reforming-molten carbonate fuel cell. Catalysis Communications, 2009, 10, 1804-1807.	1.6	27
44	A new alkali-resistant Ni/Al2O3-MSU-1 coreâ€“shell catalyst for methane steam reforming in a direct internal reforming molten carbonate fuel cell. Journal of Power Sources, 2014, 246, 74-83.	4.0	26
45	Preparation of a pure ZIF-67 membrane by self-conversion of cobalt carbonate hydroxide nanowires for H₂ separation. CrystEngComm, 2018, 20, 2440-2448.	1.3	26
46	High-Performance Co-Based ZIF-67 Tubular Membrane Achieved by ZnO-Induced Synthesis for Highly Efficient Pervaporation Separation of Methanol/Methyl tert-Butyl Ether Mixture. Industrial & Engineering Chemistry Research, 2019, 58, 15297-15306.	1.8	26
47	Investigation of Pd membrane reactors for one-step hydroxylation of benzene to phenol. Catalysis Today, 2012, 193, 151-157.	2.2	24
48	Synthesis and characterization of ZIF-8@SiO2@Fe3O4 core@double-shell microspheres with noble metal nanoparticles sandwiched between two shell layers. Materials Letters, 2015, 148, 17-21.	1.3	24
49	Facile preparation of ZIF-8@Pd-CSS sandwich-type microspheres via in situ growth of ZIF-8 shells over Pd-loaded colloidal carbon spheres with aggregation-resistant and leach-proof properties for the Pd nanoparticles. Applied Surface Science, 2015, 351, 1184-1190.	3.1	24
50	Heterogeneous Ligand-Free Rhodium Oxide Catalyst Embedded within Zeolitic Microchannel to Enhance Regioselectivity in Hydroformylation. Industrial & Engineering Chemistry Research, 2019, 58, 21285-21295.	1.8	23
51	Bimetallic Zn/Co-ZIF tubular membrane for highly efficient pervaporation separation of Methanol/MTBE mixture. Journal of Membrane Science, 2021, 638, 119676.	4.1	23
52	Zeolite capillary microreactor by flow synthesis method. Catalysis Today, 2012, 193, 221-225.	2.2	22
53	New synthesis strategies for Ni/Al2O3-Sil-1 coreâ€“shell catalysts for steam reforming of methane. Catalysis Today, 2014, 236, 34-40.	2.2	21
54	Flower-Like ZnO-Assisted One-Pot Encapsulation of Noble Metal Nanoparticles Supported Catalysts with ZIFs. Applied Surface Science, 2018, 433, 602-609.	3.1	21

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55	Novel two-layered zeolite NaA-silicalite-1 membranes. Journal of Physics and Chemistry of Solids, 2005, 66, 1034-1038.	1.9	20
56	Preparation of palladium membrane byÂbio-membrane assisted electroless plating forÂhydrogen separation. International Journal of Hydrogen Energy, 2014, 39, 7069-7076.	3.8	20
57	New membrane architecture: ZnO@ZIF-8 mixed matrix membrane exhibiting superb H 2 permselectivity and excellent stability. Inorganic Chemistry Communication, 2014, 48, 77-80.	1.8	20
58	One-step hydroxylation of benzene to phenol via a Pd capillary membrane microreactor. Catalysis Science and Technology, 2013, 3, 2380.	2.1	18
59	Novel tubular composite carbon-zeolite membranes. Materials Letters, 2004, 58, 2223-2226.	1.3	17
60	APTES-assisted synthesis of ZIF-8 films on the inner surface of capillary quartz tubes via flow system. Materials Letters, 2015, 141, 344-346.	1.3	16
61	One-Step Encapsulation of Bimetallic Pdâ€“Co Nanoparticles Within UiO-66 for Selective Conversion of Furfural to Cyclopentanone. Catalysis Letters, 2020, 150, 2158-2166.	1.4	16
62	Zinc(II)porphyrin-Based Porous Ionic Polymers (PIPs) as Multifunctional Heterogeneous Catalysts for the Conversion of CO₂ to Cyclic Carbonates. Industrial & Engineering Chemistry Research, 2022, 61, 5093-5102.	1.8	16
63	Modification of carbon membranes and preparation of carbonâ€“zeolite composite membranes with zeolite growth. Carbon, 2006, 44, 501-507.	5.4	15
64	Amino-functionalized seeds-induced synthesis of encapsulated Pd@Silicalite-1 core-shell catalysts for size-selective hydrogenation. Catalysis Communications, 2018, 109, 16-19.	1.6	15
65	Pdâ€“silicalite-1 composite membrane reactor for direct hydroxylation of benzene to phenol. Catalysis Today, 2010, 156, 282-287.	2.2	14
66	Fabrication of 2D bimetallic metal-organic framework ultrathin membranes by vapor phase transformation of hydroxy double salts. Journal of Membrane Science, 2022, 644, 120167.	4.1	14
67	Factors affecting the synthesis of hetero-atom zeolite Fe-ZSM-5 membrane. Separation and Purification Technology, 2003, 32, 151-158.	3.9	13
68	Preparation of ZIF-8 membranes supported on macroporous carbon tubes via a dipcoatingâ€“rubbing method. Journal of Physics and Chemistry of Solids, 2015, 77, 23-29.	1.9	13
69	Facile synthesis of bimetallic MOF crystals with controllable morphology and topology by the self-converted strategy of hydroxy double salts (HDSs). Microporous and Mesoporous Materials, 2021, 322, 111153.	2.2	11
70	Fabrication of MIL-96 nanosheets and relevant c-oriented ultrathin membrane through solvent optimization. Journal of Membrane Science, 2022, 643, 120064.	4.1	11
71	One-pot synthesis of cup-like ZSM-5 zeolite and its excellent oxidative desulfurization performance. RSC Advances, 2018, 8, 31979-31983.	1.7	10
72	Synthesis of titanium silicalite-I from TPABr system. Studies in Surface Science and Catalysis, 1997, 112, 499-508.	1.5	9

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73	Fabrication of Palladium Membranes Supported on a Silicaliteâ€‐1 Zeoliteâ€Modified Alumina Tube for Hydrogen Separation. Chemical Engineering and Technology, 2014, 37, 1778-1786.	0.9	9
74	Preparation of PtRu/WO3â€“C by intermittent microwave method with enhanced catalytic activity of methanol oxidation. Journal of Applied Electrochemistry, 2016, 46, 887-893.	1.5	9
75	Relating the performances of selective phenol hydrogenation with encapsulated palladium nanoparticles and surrounding distinct LTL-zeolite microenvironments. Chemical Engineering Journal, 2022, 430, 132589.	6.6	9
76	Geometrically embedding dispersive Pt nanoparticles within silicalite-1 framework for highly selective É‘, Î²-unsaturated aldehydes hydrogenation via oriented CÂ=ÂO adsorption configuration. Chemical Engineering Journal, 2022, 446, 137064.	6.6	9
77	Preparation of composite carbonâ€“zeolite membranes using a simple method. Journal of Materials Science, 2004, 39, 5603-5605.	1.7	7
78	Novel tubular composite carbon-zeolite membranes. , 2004, 58, 2223-2223.		6
79	Preparation and Catalytic Performance of Zeolite Layer in Microchannels of a Microreactor by an on-Site Flow Synthesis Method. Chinese Journal of Catalysis, 2007, 28, 758-760.	6.9	5
80	Direct synthesis of propylene oxide using hydrogen peroxide in a membrane reactor. Chemical Papers, 2017, 71, 49-57.	1.0	5
81	Synthesis of hierarchical ZSM-5 nano-aggregated microspheres for application in enhancing the stability of n-hexane aromatization. New Journal of Chemistry, 2021, 45, 18659-18668.	1.4	5
82	Synthesis of stable Ti-containing mesoporous tubular membrane using silicalite-1 nanoparticles as seeds. Chemical Engineering Journal, 2014, 255, 344-355.	6.6	4
83	Flow synthesis of a novel zirconium-based UiO-66 nanofiltration membrane and its performance in the removal of p-nitrophenol from water. Frontiers of Chemical Science and Engineering, 2020, 14, 651-660.	2.3	4
84	Localized conversion of ZnO nanorods for fabricating Metal-Organic framework MAF-5 membranes for hydrogen separation. Inorganic Chemistry Communication, 2022, 136, 109126.	1.8	4
85	Mercaptosilane-assisted synthesis of highly dispersed and stable Pt nanoparticles on HL zeolites for enhancing hydroisomerization of n-hexane. New Journal of Chemistry, 0, , .	1.4	4
86	Regulating Encapsulation of Small Pt Nanoparticles inside Silicalite-1 Zeolite with the Aid of Sodium Ions for Enhancing n-Hexane Reforming. Industrial & Engineering Chemistry Research, 0, , .	1.8	4
87	Factors affecting the formation of zeolite seed layers and the effects of seed layers on the growth of zeolite silicalite-1 membranes. Frontiers of Chemical Engineering in China, 2007, 1, 172-177.	0.6	2
88	Simple and facile one-step synthesis of bowl-like hollow ZSM-5 zeolites. CrystEngComm, 2021, 23, 6892-6898.	1.3	2
89	Tailoring Locations and Electronic States of Rh Nanoparticles in KL Zeolite by Varying the Reduction Temperature for Selective Phenol Hydrogenation. Industrial & Engineering Chemistry Research, 2021, 60, 17489-17499.	1.8	2
90	Direct Synthesis of Ultrathin Two-Dimensional Co-Based Metalâ€“Organic Framework Membranes by the Conversion of Co(OH)₂ Sheets for Gas Separation. Industrial & Engineering Chemistry Research, 2022, 61, 9847-9855.	1.8	1