Xiao-Jun Bao

List of Publications by Year
in descending order

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		218677	254184
65	2,066	26	43
papers	citations	h-index	g-index

65	65	65	2273
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Propane Dehydrogenation over Pt Clusters Localized at the Sn Single-Site in Zeolite Framework. ACS Catalysis, 2020, 10, 818-828.	11.2	136
2	Understanding Catalyst Surfaces during Catalysis through Near Ambient Pressure X-ray Photoelectron Spectroscopy. Chemical Reviews, 2019, 119, 6822-6905.	47.7	127
3	Synthesis, characterization, and catalytic properties of hydrothermally stable macroâ€“mesoâ€“micro-porous composite materials synthesized via in situ assembly of preformed zeolite Y nanoclusters on kaolin. Journal of Catalysis, 2007, 251, 69-79.	6.2	119
4	Impact of cationic surfactant chain length during SAPO-11 molecular sieve synthesis on structure, acidity, and n-octane isomerization to di-methyl hexanes. Journal of Catalysis, 2012, 294, 161-170.	6.2	102
5	Acidity Adjustment of HZSM-5 Zeolites by Dealumination and Realumination with Steaming and Citric Acid Treatments. Journal of Physical Chemistry B, 2006, 110, 15411-15416.	2.6	86
6	Origin of the Robust Catalytic Performance of Nanodiamondâ€“Graphene-Supported Pt Nanoparticles Used in the Propane Dehydrogenation Reaction. ACS Catalysis, 2017, 7, 3349-3355.	11.2	85
7	From natural aluminosilicate minerals to hierarchical ZSM-5 zeolites: A nanoscale depolymerizationâ€“reorganization approach. Journal of Catalysis, 2014, 319, 200-210.	6.2	81
8	Two-stage surfactant-assisted crystallization for enhancing SAPO-11 acidity to improve n-octane di-branched isomerization. Journal of Catalysis, 2013, 301, 162-173.	6.2	75
9	Synthesis of zeolite Y from natural aluminosilicate minerals for fluid catalytic cracking application. Green Chemistry, 2012, 14, 3255.	9.0	60
10	Propane dehydrogenation catalyzed by single Lewis acid site in Sn-Beta zeolite. Journal of Catalysis, 2021, 395, 155-167.	6.2	54
11	Synthesis and characterization of kaolin/NaY/MCM-41 composites. Microporous and Mesoporous Materials, 2003, 66, 117-125.	4.4	52
12	One-pot synthesis of hierarchical FeZSM-5 zeolites from natural aluminosilicates for selective catalytic reduction of NO by NH3. Scientific Reports, 2015, 5, 9270.	3.3	52
13	A novel method for enhancing on-stream stability of fluid catalytic cracking (FCC) gasoline hydro-upgrading catalyst: Post-treatment of HZSM-5 zeolite by combined steaming and citric acid leaching. Catalysis Today, 2007, 125, 185-191.	4.4	49
14	Green synthesis of zeolites from a natural aluminosilicate mineral rectorite: Effects of thermal treatment temperature. Applied Clay Science, 2014, 90, 53-60.	5.2	49
15	Unmodified bulk alumina as an efficient catalyst for propane dehydrogenation. Catalysis Science and Technology, 2020, 10, 3537-3541.	4.1	48
16	Coking and Deactivation Behavior of HZSM-5 Zeolite-Based FCC Gasoline Hydro-Upgrading Catalyst. Energy & Fuels, 2007, 21, 2517-2524.	5.1	46
17	Seed-assisted, template-free synthesis of ZSM-5 zeolite from natural aluminosilicate minerals. Applied Clay Science, 2018, 158, 177-185.	5.2	45
18	Catalytic Properties of a Hierarchical Zeolite Synthesized from a Natural Aluminosilicate Mineral without the Use of a Secondary Mesoscale Template. ChemCatChem, 2013, 5, 2258-2269.	3.7	38

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19	One-pot synthesis of FeCu-SSZ-13 zeolite with superior performance in selective catalytic reduction of NO by NH3 from natural aluminosilicates. Chemical Engineering Journal, 2020, 398, 125515.	12.7	37
20	From natural aluminosilicate minerals to zeolites: synthesis of ZSM-5 from rectorites activated via different methods. Applied Clay Science, 2015, 115, 201-211.	5.2	36
21	Carboxylic acids to butyl esters over dealuminatedâ€“realuminated beta zeolites for removing organic acids from bio-oils. RSC Advances, 2017, 7, 33714-33725.	3.6	35
22	Bimetallic Pt-Sn nanocluster from the hydrogenolysis of a well-defined surface compound consisting of [(AlO)Pt(COD)Me] and [(AlO)SnPh3] fragments for propane dehydrogenation. Journal of Catalysis, 2019, 374, 391-400.	6.2	34
23	Effect of pore diameter and structure of mesoporous sieve supported catalysts on hydrodesulfurization performance. Chemical Engineering Science, 2014, 111, 381-389.	3.8	31
24	Pure-phase zeolite beta synthesized from natural aluminosilicate minerals and its catalytic application for esterification. Applied Clay Science, 2016, 126, 1-6.	5.2	31
25	Selective adsorption of Co(II)/Mn(II) by zeolites from purified terephthalic acid wastewater containing dissolved aromatic organic compounds and metal ions. Science of the Total Environment, 2020, 698, 134287.	8.0	30
26	Synthesis, Modification, and Application of Hollow Mesoporous Carbon Submicrospheres for Adsorptive Desulfurization. Industrial & Engineering Chemistry Research, 2018, 57, 15020-15030.	3.7	28
27	Template-Free Synthesis and Catalytic Applications of Microporous and Hierarchical ZSM-5 Zeolites from Natural Aluminosilicate Minerals. Industrial & Engineering Chemistry Research, 2017, 56, 10069-10077.	3.7	26
28	Alkane isomerization over sulfated zirconia solid acid system. International Journal of Energy Research, 2020, 44, 3270-3294.	4.5	26
29	Realumination of dealuminated HZSM-5 zeolite by citric acid treatment and its application in preparing FCC gasoline hydro-upgrading catalyst. Microporous and Mesoporous Materials, 2007, 98, 174-181.	4.4	25
30	A Quasi-Solid-Phase Approach to Activate Natural Minerals for Zeolite Synthesis. ACS Sustainable Chemistry and Engineering, 2017, 5, 3233-3242.	6.7	25
31	A process for producing ultraclean gasoline by coupling efficient hydrodesulfurization and directional olefin conversion. AICHE Journal, 2013, 59, 571-581.	3.6	24
32	New understanding and controllable synthesis of silica hollow microspheres with size-tunable penetrating macroporous shells as a superior support for polystyrene hydrogenation catalysts. Journal of Materials Chemistry A, 2013, 1, 9597.	10.3	22
33	Natural rectorite mineral: A promising substitute of kaolin for inâ€situ synthesis of fluid catalytic cracking catalysts. AICHE Journal, 2010, 56, 2913-2922.	3.6	21
34	Direct Synthesis of Hierarchical FeCuâ€ZSMâ€5 Zeolite with Wide Temperature Window in Selective Catalytic Reduction of NO by NH₃. ChemCatChem, 2019, 11, 4744-4754.	3.7	21
35	Insights into the reaction pathway of n-butane conversion over HZSM-5 zeolite at low temperature. Applied Catalysis A: General, 2019, 584, 117135.	4.3	21
36	Synthesis of Pd/SiO₂ Catalysts in Various HCl Concentrations for Selective NBR Hydrogenation: Effects of H⁺ and Cl^{â€“} Concentrations and Electrostatic Interactions. ACS Omega, 2018, 3, 6651-6659.	3.5	20

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37	Tailored Design of Differently Modified Mesoporous Materials To Deeply Understand the Adsorption Mechanism for Polycyclic Aromatic Hydrocarbons. Langmuir, 2018, 34, 15708-15718.	3.5	16
38	Acid-Modified Natural Bauxite Mineral as a Cost-Effective and High-Efficient Catalyst Support for Slurry-Phase Hydrocracking of High-Temperature Coal Tar. Energy & Fuels, 2016, 30, 9203-9209.	5.1	15
39	Design and in situ synthesis of hierarchical SAPO-34@kaolin composites as catalysts for methanol to olefins. Catalysis Science and Technology, 2019, 9, 6438-6451.	4.1	15
40	Redistributing Cu species in Cu-SSZ-13 zeolite as NH3-SCR catalyst via a simple ion-exchange. Chinese Journal of Chemical Engineering, 2022, 41, 329-341.	3.5	15
41	A Surface-Cofunctionalized Silica Supported Palladium Catalyst for Selective Hydrogenation of Nitrile Butadiene Rubber with Enhanced Catalytic Activity and Recycling Performance. Industrial & Engineering Chemistry Research, 2019, 58, 11821-11830.	3.7	14
42	Selectively catalytic hydrogenation of styrene-butadiene rubber over Pd/g-C3N4 catalyst. Applied Catalysis A: General, 2020, 589, 117312.	4.3	14
43	Stable and recyclable Pd catalyst supported on modified silica hollow microspheres with macroporous shells for enhanced catalytic hydrogenation of NBR. Journal of Materials Science, 2018, 53, 15064-15080.	3.7	13
44	From cheap natural bauxite to high-efficient slurry-phase hydrocracking catalyst for high temperature coal tar: A simple hydrothermal modification. Fuel Processing Technology, 2018, 175, 123-130.	7.2	12
45	Effect of Aluminum Addition and Surface Moisture Content on the Catalytic Activity of Sulfated Zirconia in n-Butane Isomerization. Industrial & Engineering Chemistry Research, 2019, 58, 14638-14645.	3.7	12
46	Group C + particles: Efficiency augmentation of fluidized bed reactor through nanoâ€modulation. AICHE Journal, 2020, 66, e16870.	3.6	12
47	Synthesis and catalytic application of alumina@SAPO-11 composite via the in situ assembly of silicoaluminophosphate nanoclusters at an alumina substrate. Catalysis Science and Technology, 2018, 8, 4209-4218.	4.1	11
48	Transformation and Crystallization Behaviors of Titanium Species in Synthesizing Ti-ZSM-5 Zeolites from Natural Rectorite Mineral. Industrial & Engineering Chemistry Research, 2019, 58, 11861-11870.	3.7	11
49	Solvent Effect in Heterogeneous Catalytic Selective Hydrogenation of Nitrile Butadiene Rubber: Relationship between Reaction Activity and Solvents with Density Functional Theory Analysis. ChemCatChem, 2020, 12, 663-672.	3.7	11
50	Green fabrication of hierarchical zeolites from natural minerals. National Science Review, 2020, 7, 1632-1634.	9.5	11
51	Effects of pore size, mesostructure and aluminum modification on FDU-12 supported NiMo catalysts for hydrodesulfurization. Petroleum Science, 2020, 17, 1737-1751.	4.9	11
52	Dependence of Morphology, Dispersion and Hydrodesulfurization Performance of Active Phases in NiMo/SBAâ€15 on Loading Method. ChemCatChem, 2018, 10, 3717-3725.	3.7	9
53	Synthesis, Characterization, and Catalytic Performance of Aminomethylphosphonic Molybdenum Catalysts for Slurry-Phase Hydrocracking. Industrial & Engineering Chemistry Research, 2019, 58, 2689-2696.	3.7	9
54	Effect of support morphology on the activity and reusability of Pd/SiO2 for NBR hydrogenation. Journal of Materials Science, 2020, 55, 12876-12883.	3.7	8

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55	On-stream stability enhancement of HZSM-5 based fluid catalytic cracking naphtha hydro-upgrading catalyst via magnesium modification. Catalysis Communications, 2016, 83, 31-34.	3.3	7
56	Mesoscale depolymerization of natural rectorite mineral via a quasi-solid-phase approach for zeolite synthesis. Chemical Engineering Science, 2020, 220, 115635.	3.8	7
57	Understanding the superior NH₃-SCR activity of CHA zeolite synthesized via template-free interzeolite transformation. Inorganic Chemistry Frontiers, 2022, 9, 1300-1312.	6.0	7
58	Aluminum Fluoride Modified Beta Zeolite as Highly Selective Catalyst for the Esterification of sec-Butanol with Acetic Acid. Industrial & Engineering Chemistry Research, 2018, 57, 10876-10882.	3.7	6
59	An environment-friendly and acid-degradable polymer templated synthesis of single-crystal hierarchical zeolites. Journal of Materials Chemistry A, 2022, 10, 15698-15707.	10.3	6
60	Mo supported on natural rectorite catalyst for slurry-phase hydrocracking of vacuum residue: An effect of calcination. Petroleum Science, 2021, 18, 1867-1876.	4.9	5
61	Controllable synthesis of Ir(Rh)â€“Sn/SiO2 bimetallic catalysts via surface organometallic chemistry for the production of ethanol from hydrogenolysis of ethyl acetate. Catalysis Science and Technology, 2020, 10, 1086-1095.	4.1	4
62	In Situ Diffuse Reflectance Infrared Fourier Transform Spectroscopy Investigations on the Evolution of Surface and Catalysis Properties of Alumina-Promoted Sulfated Zirconia during n-Butane Isomerization. Industrial & Engineering Chemistry Research, 2020, 59, 704-712.	3.7	3
63	Tuning of the active phase structure and hydrofining performance of alumina-supported tri-metallic WMoNi catalysts via phosphorus incorporation. Frontiers of Chemical Science and Engineering, 2018, 12, 59-69.	4.4	2
64	Two-Step Dry Gel Method Produces MgAPO-11 with Low Aspect Ratio and Improved Catalytic Performance in the Conversion of Methanol to Hydrocarbons. Catalysts, 2022, 12, 413.	3.5	2
65	Nitrogen- and Halogen-Free Multifunctional Polymer-Directed Fabrication of Aluminum-Rich Hierarchical MFI Zeolites. Nanomaterials, 2022, 12, 1633.	4.1	1