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List of Publications by Year
in descending order

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63 papers	2,301 citations	201674 27 h-index	223800 46 g-index
65 all docs	65 docs citations	65 times ranked	2431 citing authors

#	Article	IF	Citations
1	Catalytic cracking performance of alkaline-treated zeolite Beta in the terms of acid sites properties and their accessibility. Journal of Catalysis, 2014, 312, 46-57.	6.2	157
2	Hierarchic zeolites: Zeolite ZSM-5 desilicated with NaOH and NaOH/tetrabutylamine hydroxide. Microporous and Mesoporous Materials, 2013, 167, 82-88.	4.4	134
3	2,6-Di-tert-butylpyridine Sorption Approach to Quantify the External Acidity in Hierarchical Zeolites. Journal of Physical Chemistry C, 2014, 118, 12266-12274.	3.1	134
4	Desilication of highly siliceous zeolite ZSM-5 with NaOH and NaOH/tetrabutylamine hydroxide. Microporous and Mesoporous Materials, 2013, 168, 195-205.	4.4	118
5	IR studies of Fe modified ZSM-5 zeolites of diverse mesopore topologies in the terms of their catalytic performance in NH3-SCR and NH3-SCO processes. Applied Catalysis B: Environmental, 2015, 179, 589-598.	20.2	95
6	Zeolite Y modified with palladium as effective catalyst for selective catalytic oxidation of ammonia to nitrogen. Journal of Catalysis, 2014, 316, 36-46.	6.2	94
7	Hierarchic zeolites studied by IR spectroscopy: Acid properties of zeolite ZSM-5 desilicated with NaOH and NaOH/tetrabutylamine hydroxide. Vibrational Spectroscopy, 2012, 63, 418-425.	2.2	80
8	Acidity and accessibility studies of desilicated ZSM-5 zeolites in terms of their effectiveness as catalysts in acid-catalyzed cracking processes. Catalysis Science and Technology, 2017, 7, 858-873.	4.1	78
9	Effect of zeolite topology on NH3-SCR activity and stability of Cu-exchanged zeolites. Applied Catalysis B: Environmental, 2021, 284, 119752.	20.2	77
10	Hydrothermal stability and catalytic performance of desilicated highly siliceous zeolites ZSM-5. Journal of Catalysis, 2016, 339, 256-269.	6.2	75
11	Catalytic performance of commercial Cu-ZSM-5 zeolite modified by desilication in NH 3 -SCR and NH 3 -SCO processes. Microporous and Mesoporous Materials, 2017, 246, 193-206.	4.4	69
12	Porosity and accessibility of acid sites in desilicated ZSM-5 zeolites studied using adsorption of probe molecules. Microporous and Mesoporous Materials, 2014, 183, 54-61.	4.4	68
13	Accessibility of Acid Sites in Hierarchical Zeolites: Quantitative IR Studies of Pivalonitrile Adsorption. Journal of Physical Chemistry C, 2013, 117, 9237-9244.	3.1	67
14	Hierarchical zeolites Y obtained by desilication: Porosity, acidity and catalytic properties. Microporous and Mesoporous Materials, 2018, 263, 282-288.	4.4	58
15	Zeolites Y modified with palladium as effective catalysts for low-temperature methanol incineration. Applied Catalysis B: Environmental, 2015, 166-167, 353-365.	20.2	56
16	Recovering waste plastics using shape-selective nano-scale reactors as catalysts. Nature Sustainability, 2019, 2, 39-42.	23.7	53
17	Molecular Understanding of the Catalytic Consequence of Ketene Intermediates under Confinement. Journal of the American Chemical Society, 2021, 143, 15440-15452.	13.7	45
18	Effective hierarchization of TS-1 and its catalytic performance in cyclohexene epoxidation. Microporous and Mesoporous Materials, 2016, 233, 16-25.	4.4	40

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19	Catalytic dehydration of ethanol over hierarchical ZSM-5 zeolites: studies of their acidity and porosity properties. Catalysis Science and Technology, 2016, 6, 3568-3584.	4.1	40
20	Catalytic removal of trichloroethylene from water over palladium loaded microporous and hierarchical zeolites. Applied Catalysis B: Environmental, 2016, 181, 550-560.	20.2	40
21	In situ IR spectroscopic study to reveal the impact of the synthesis conditions of zeolite Î² nanoparticles on the acidic properties of the resulting zeolite. Chemical Engineering Journal, 2014, 237, 372-379.	12.7	39
22	Pd-modified beta zeolite for modulated hydro-cracking of low-density polyethylene into a paraffinic-rich hydrocarbon fuel. Applied Catalysis B: Environmental, 2020, 277, 119070.	20.2	37
23	Mesoporous silica materials modified with alumina polycations as catalysts for the synthesis of dimethyl ether from methanol. Materials Research Bulletin, 2016, 74, 425-435.	5.2	36
24	Copper sites in zeolites - quantitative IR studies. Microporous and Mesoporous Materials, 2012, 162, 175-180.	4.4	35
25	SBA-15 loaded with iron by various methods as catalyst for DeNOx process. Materials Research Bulletin, 2016, 78, 72-82.	5.2	34
26	Ag-loaded zeolites Y and USY as catalysts for selective ammonia oxidation. Catalysis Science and Technology, 2016, 6, 1651-1660.	4.1	34
27	Hierarchical Mordenite Dedicated to the Fluid Catalytic Cracking Process: Catalytic Performance Regarding Textural and Acidic Properties. Journal of Physical Chemistry C, 2014, 118, 28043-28054.	3.1	33
28	Spectroscopic IR and NMR studies of hierarchical zeolites obtained by desilication of zeolite Y: Optimization of the desilication route. Microporous and Mesoporous Materials, 2019, 281, 134-141.	4.4	30
29	Alkaline-acid treated zeolite L as catalyst in ethanol dehydration process. Microporous and Mesoporous Materials, 2017, 241, 132-144.	4.4	26
30	Desilicated zeolite BEA for the catalytic cracking of LDPE: the interplay between acidic sites' strength and accessibility. Catalysis Science and Technology, 2019, 9, 1794-1801.	4.1	25
31	Operando Study Reveals the Superior Cracking Activity and Stability of Hierarchical ZSMâ€5 Catalyst for the Cracking of Lowâ€Ðensity Polyethylene. ChemSusChem, 2019, 12, 633-638.	6.8	23
32	The proximity of aluminium atoms influences the reaction pathway of ethanol transformation over zeolite ZSM-5. Communications Chemistry, 2020, 3, .	4.5	23
33	Standard and rapid scan infrared spectroscopic studies of o-xylene transformations in terms of pore arrangement of 10-ring zeolites â€“ 2D COS analysis. Dalton Transactions, 2017, 46, 9934-9950.	3.3	20
34	Ethylene formation by dehydration of ethanol over medium pore zeolites. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 192, 464-472.	3.9	20
35	Advanced oxidation process for coke removal: A systematic study of hydrogen peroxide and OH-derived-Fenton radicals of a fouled zeolite. Applied Catalysis A: General, 2018, 562, 215-222.	4.3	20
36	Ce-modified zeolite BEA catalysts for the trichloroethylene oxidation. The role of the different and necessary active sites. Applied Catalysis B: Environmental, 2019, 259, 118022.	20.2	20

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37	Water thermoporosimetry as a tool of characterization of the textural parameters of mesoporous materials. Journal of Thermal Analysis and Calorimetry, 2017, 127, 207-220.	3.6	19
38	Standard and Fast Selective Catalytic Reduction of NO with NH₃ on Zeolites Fe-BEA. Journal of Physical Chemistry C, 2016, 120, 16831-16842.	3.1	18
39	Nickel loaded zeolites FAU and MFI: Characterization and activity in water-phase hydrodehalogenation of TCE. Applied Catalysis A: General, 2018, 568, 64-75.	4.3	18
40	Towards a greater olefin share in polypropylene cracking â€“ Amorphous mesoporous aluminosilicate competes with zeolites. Applied Catalysis B: Environmental, 2021, 297, 120408.	20.2	16
41	Quantification of Silver Sites in Zeolites: Carbon Monoxide Sorption Monitored by IR Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 23751-23760.	3.1	15
42	Quantitative infrared spectroscopic studies and 2D COS analysis of xylenes isomerization over hierarchical zeolites. Catalysis Today, 2017, 283, 158-171.	4.4	14
43	2D COS analysis of m-xylene transformation over medium-pore zeolites. Microporous and Mesoporous Materials, 2018, 266, 90-101.	4.4	13
44	Xylenes transformation over zeolites ZSM-5 ruled by acidic properties. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 192, 361-367.	3.9	13
45	Evaluation of the Textural Parameters of Zeolite Beta in LDPE Catalytic Degradation: Thermogravimetric Analysis Coupled with FTIR Operando Studies. Molecules, 2020, 25, 926.	3.8	13
46	Tuning the properties of the cobalt-zeolite nanocomposite catalyst by potassium: Switching between dehydration and dehydrogenation of ethanol. Journal of Catalysis, 2022, 407, 364-380.	6.2	12
47	Modification of ferrierite through post-synthesis treatments. Acidic and catalytic properties. Journal of Molecular Structure, 2016, 1126, 147-153.	3.6	11
48	Zeolite-driven Ag species during redox treatments and catalytic implications for SCO of NH₃. Journal of Materials Chemistry A, 2021, 9, 27448-27458.	10.3	11
49	High-Silica Layer-like Zeolites Y from Seeding-Free Synthesis and Their Catalytic Performance in Low-Density Polyethylene Cracking. ACS Applied Materials & Interfaces, 2022, 14, 6667-6679.	8.0	11
50	Thermoporosimetry of n-alkanes for characterization of mesoporous SBA-15 silicas â€“ Towards deeper understanding the effect of the probe liquid nature. Microporous and Mesoporous Materials, 2016, 226, 25-33.	4.4	10
51	Hydroconversion of 1-methylnaphthalene over Pt/SBA-15 catalysts: Effect of SBA-15 chemical composition and method of binder incorporation. Catalysis Today, 2011, 176, 149-153.	4.4	9
52	Influence of Framework n(Si)/n(Al) Ratio on the Nature of Cu Species in Cuâ€ZSMâ€5 for NH₃â€SCRâ€DeNO_x. ChemCatChem, 2022, 14, .	3.7	9
53	Bioethanol Steam Reforming over Cobalt-Containing USY and ZSM-5 Commercial Zeolite Catalysts. Frontiers in Materials, 2020, 7, .	2.4	8
54	Improved Catalytic Technology for Waste Plastic Processing: Toward Novel Remediation and Emission Control Measures. ACS Sustainable Chemistry and Engineering, 2019, 7, 129-133.	6.7	7

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55	Increasing the catalytic performance of erionite by hierarchization. Microporous and Mesoporous Materials, 2020, 299, 110088.	4.4	7
56	Opening up ZSM-5 Hierarchical Zeoliteâ€™s Porosity through Sequential Treatments for Improved Low-Density Polyethylene Cracking. Molecules, 2020, 25, 2878.	3.8	6
57	Quantitative aspects of the identification of Fe(<scp>ii</scp>) moieties in ZSM-5 zeolites with various pore hierarchies. Dalton Transactions, 2015, 44, 8031-8040.	3.3	5
58	Process Intensification of Mesoporous Materialâ€™s Synthesis by Microwave-Assisted Surfactant Removal. ACS Sustainable Chemistry and Engineering, 2020, 8, 16814-16822.	6.7	5
59	Linking the Defective Structure of Boron-Doped Carbon Nano-Onions with Their Catalytic Properties: Experimental and Theoretical Studies. ACS Applied Materials & Interfaces, 2021, 13, 51628-51642.	8.0	5
60	Multiscale exploration of hydrocarbon adsorption and hopping through ZSM-5 channels â€“ from Monte Carlo modelling to experiment. Physical Chemistry Chemical Physics, 2021, 23, 2981-2990.	2.8	4
61	Toward the Mechanism of o-Xylene Isomerization in Selected Zeolites of Different Si/Al Ratios and Channel Sizesâ€”Experiment Corroborated by Periodic DFT + D Simulations. Journal of Physical Chemistry C, 2021, 125, 10334-10348.	3.1	4
62	Modulation of ODH Propane Selectivity by Zeolite Support Desilication: Vanadium Species Anchored to Al-Rich Shell as Crucial Active Sites. International Journal of Molecular Sciences, 2022, 23, 5584.	4.1	3
63	Ethene and ethyne molecules interacting with Cu+ sites in zeolitesâ€”Quantitative infrared spectroscopic studies. Vibrational Spectroscopy, 2015, 79, 31-35.	2.2	0