

The formation and degradation of active species during protonated zeotype catalysts

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Effects of Coke Deposits on the Catalytic Performance of Large Zeolite H β -ZSM β -5 Crystals during Alcohol β -to β -Hydrocarbon Reactions as Investigated by a Combination of Optical Spectroscopy and Microscopy. Chemistry - A European Journal, 2015, 21, 17324-17335.	1.7	47
2	Synchrotron Infrared Spectroscopy of Microporous Materials. Makara Journal of Science, 2016, 20, .	1.1	1
3	Methane dehydroaromatisation and methanol activation over zeolite catalysts: an overview. Applied Petrochemical Research, 2016, 6, 183-190.	1.3	0
4	Methylation of toluene with methanol over HZSM-5: A periodic density functional theory investigation. Chinese Journal of Catalysis, 2016, 37, 1882-1890.	6.9	18
5	Coke Formation in a Zeolite Crystal During the Methanol β -to β -Hydrocarbons Reaction as Studied with Atom Probe Tomography. Angewandte Chemie, 2016, 128, 11339-11343.	1.6	16
6	Radicals in carbonaceous residue deposited on mordenite from methanol. Journal of Materials Chemistry A, 2016, 4, 7036-7044.	5.2	3
7	Isoparaffin-rich gasoline synthesis from DME over Ni-modified HZSM-5. Catalysis Science and Technology, 2016, 6, 8089-8097.	2.1	15
8	Methylation of benzene with methanol over HZSM-11 and HZSM-5: A density functional theory study. Journal of Molecular Catalysis A, 2016, 424, 351-357.	4.8	30
9	Coke Formation in a Zeolite Crystal During the Methanol β -to β -Hydrocarbons Reaction as Studied with Atom Probe Tomography. Angewandte Chemie - International Edition, 2016, 55, 11173-11177.	7.2	74
10	Suppression of the Aromatic Cycle in Methanol β -to β -Olefins Reaction over ZSM β -5 by Post β -Synthetic Modification Using Calcium. ChemCatChem, 2016, 8, 3057-3063.	1.8	71
11	Synthesis of hierarchical SAPO-34 nanocrystals with improved catalytic performance for methanol to olefins. Chemical Physics Letters, 2016, 665, 59-63.	1.2	24
12	Initial Carbon β -Carbon Bond Formation during the Early Stages of the Methanol β -to β -Olefin Process Proven by Zeolite β -Trapped Acetate and Methyl Acetate. Angewandte Chemie, 2016, 128, 16072-16077.	1.6	56
13	Initial Carbon β -Carbon Bond Formation during the Early Stages of the Methanol β -to β -Olefin Process Proven by Zeolite β -Trapped Acetate and Methyl Acetate. Angewandte Chemie - International Edition, 2016, 55, 15840-15845.	7.2	170
14	Application of Inelastic Neutron Scattering to the Methanol-to-Gasoline Reaction Over a ZSM-5 Catalyst. Catalysis Letters, 2016, 146, 1242-1248.	1.4	16
15	Disruptive catalysis by zeolites. Catalysis Science and Technology, 2016, 6, 2485-2501.	2.1	68
16	Room temperature methoxylation in zeolites: insight into a key step of the methanol-to-hydrocarbons process. Chemical Communications, 2016, 52, 2897-2900.	2.2	58
17	Stability and Reactivity of Intermediates of Methanol Related Reactions and C β -C Bond Formation over H-ZSM-5 Acidic Catalyst: A Computational Analysis. Journal of Physical Chemistry C, 2016, 120, 6075-6087.	1.5	50
18	Insight into the Effect of Water on the Methanol-to-Olefins Conversion in H-SAPO-34 from Molecular Simulations and in Situ Microspectroscopy. ACS Catalysis, 2016, 6, 1991-2002.	5.5	110

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19	Towards molecular control of elementary reactions in zeolite catalysis by advanced molecular simulations mimicking operating conditions. <i>Catalysis Science and Technology</i> , 2016, 6, 2686-2705.	2.1	38
20	Confinement effects in methanol to olefins catalysed by zeolites: A computational review. <i>Frontiers of Chemical Science and Engineering</i> , 2016, 10, 76-89.	2.3	22
21	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
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24	Implications of methanol disproportionation on catalyst lifetime for methanol-to-olefins conversion by HSSZ-13. <i>Journal of Catalysis</i> , 2017, 346, 154-160.	3.1	89
25	Effect of alkene co-feed on the MTO reactions over SAPO-34. <i>Chemical Engineering Journal</i> , 2017, 316, 187-195.	6.6	19
26	An assessment of hydrocarbon species in the methanol-to-hydrocarbon reaction over a ZSM-5 catalyst. <i>Faraday Discussions</i> , 2017, 197, 447-471.	1.6	34
27	New insights into catalyst deactivation and product distribution of zeolites in the methanol-to-hydrocarbons (MTH) reaction with methanol and dimethyl ether feeds. <i>Catalysis Science and Technology</i> , 2017, 7, 2700-2716.	2.1	106
28	Comparative study of MTO kinetics over SAPO-34 catalyst in fixed and fluidized bed reactors. <i>Chemical Engineering Journal</i> , 2017, 329, 35-44.	6.6	38
29	Direct Mechanism of the First Carbon-Carbon Bond Formation in the Methanol-to-Hydrocarbons Process. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9039-9043.	7.2	128
30	Direct Mechanism of the First Carbon-Carbon Bond Formation in the Methanol-to-Hydrocarbons Process. <i>Angewandte Chemie</i> , 2017, 129, 9167-9171.	1.6	29
31	Ionothermal preparation of triclinic SAPO-34 and its catalytic performance in the MTO process. <i>Catalysis Today</i> , 2017, 296, 239-246.	2.2	18
32	Insights into the Activity and Deactivation of the Methanol-to-Olefins Process over Different Small-Pore Zeolites As Studied with Operando UV-vis Spectroscopy. <i>ACS Catalysis</i> , 2017, 7, 4033-4046.	5.5	122
33	Structure-deactivation relationships in zeolites during the methanol-to-hydrocarbons reaction: Complementary assessments of the coke content. <i>Journal of Catalysis</i> , 2017, 351, 33-48.	3.1	82
34	Effect of framework topology of SAPO catalysts on selectivity and deactivation profile in the methanol-to-olefins reaction. <i>Journal of Catalysis</i> , 2017, 352, 191-207.	3.1	72
35	Bifunctional Strategy Coupling γ -Oxopropyl-Catalyzed Alkane Decomposition with Methanol-to-Olefins Catalysis for Enhanced Lifetime. <i>ACS Catalysis</i> , 2017, 7, 4417-4422.	5.5	49
36	Flexible regulation of C ₃ = /C ₂ = ratio in methanol-to-hydrocarbons by delicate control of acidity of ZSM-5 catalyst. <i>Chinese Chemical Letters</i> , 2017, 28, 1318-1323.	4.8	15

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37	Microfibrinous-Structured SS-fiber@meso-HZSM-5 Catalyst for Methanol-to-Propylene: Steam-Assisted Crystallization Synthesis and Insight into the Stability Enhancement. ACS Sustainable Chemistry and Engineering, 2017, 5, 1840-1853.	3.2	28
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41	Conversion of Synthesis Gas to Light Olefins: Impact of Hydrogenation Activity of Methanol Synthesis Catalyst on the Hybrid Process Selectivity over Cr ²⁺ -Zn and Cu ²⁺ -Zn with SAPO-34. Industrial & Engineering Chemistry Research, 2017, 56, 13392-13401.	1.8	37
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44	Hydrogen Transfer versus Methylation: On the Genesis of Aromatics Formation in the Methanol-To-Hydrocarbons Reaction over H-ZSM-5. ACS Catalysis, 2017, 7, 5773-5780.	5.5	102
45	Bifunctional Catalysts for One-Step Conversion of Syngas into Aromatics with Excellent Selectivity and Stability. Chem, 2017, 3, 334-347.	5.8	377
46	Complex relationship between SAPO framework topology, content and distribution of Si and catalytic behaviour in the MTO reaction. Catalysis Science and Technology, 2017, 7, 3892-3901.	2.1	22
47	Influence of the Reaction Temperature on the Nature of the Active and Deactivating Species During Methanol-to-Olefins Conversion over H-SAPO-34. ACS Catalysis, 2017, 7, 5268-5281.	5.5	95
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57	Reactions of Dimethylether in Single Crystals of the Silicoaluminophosphate STA-7 Studied via Operando Synchrotron Infrared Microspectroscopy. Topics in Catalysis, 2018, 61, 199-212.	1.3	3
58	Revealing Lattice Expansion of Small-Pore Zeolite Catalysts during the Methanol-to-Olefins Process Using Combined Operando X-ray Diffraction and UV-vis Spectroscopy. ACS Catalysis, 2018, 8, 2060-2070.	5.5	62
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68	Room temperature methoxylation in zeolite H-ZSM-5: an operando DRIFTS/mass spectrometric study. Chemical Communications, 2018, 54, 12875-12878.	2.2	25
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75	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
76	Deconvoluting the Competing Effects of Zeolite Framework Topology and Diffusion Path Length on Methanol to Hydrocarbons Reaction. <i>ACS Catalysis</i> , 2018, 8, 11042-11053.	5.5	69
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78	Bridging the Gap between the Direct and Hydrocarbon Pool Mechanisms of the Methanol-to-Hydrocarbons Process. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8095-8099.	7.2	104
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85	Small-Pore Zeolites: Synthesis and Catalysis. <i>Chemical Reviews</i> , 2018, 118, 5265-5329.	23.0	534
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88	A Novel Raman Setup Based on Magnetic-Driven Rotation of Sample. <i>Topics in Catalysis</i> , 2018, 61, 1491-1498.	1.3	22
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141	Influence of Acidity on the Methanol-to-DME Reaction in Zeotypes: A First Principles-Based Microkinetic Study. <i>Journal of Physical Chemistry C</i> , 2020, 124, 14658-14663.	1.5	21
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