Yingxu Wei

List of Publications by Year
in descending order

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80
papers

4,689
citations

136740
32
h-index

98622
67
g-index

84
all docs

84
docs citations

84
times ranked

3227
citing authors

#	ARTICLE	IF	CITATIONS
1	Methanol to Olefins (MTO): From Fundamentals to Commercialization. ACS Catalysis, 2015, 5, 1922-1938.	5.5	1,268
2	Nanosize-Enhanced Lifetime of SAPO-34 Catalysts in Methanol-to-Olefin Reactions. Journal of Physical Chemistry C, 2013, 117, 8214-8222.	1.5	224
3	Recent Progress in Methanolâ€toâ€Olefins (MTO) Catalysts. Advanced Materials, 2019, 31, e1902181.	11.1	217
4	Facile synthesis of morphology and size-controlled zirconium metalâ€“organic framework UiO-66: the role of hydrofluoric acid in crystallization. CrystEngComm, 2015, 17, 6434-6440.	1.3	200
5	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.	6.6	173
6	Cavity Controls the Selectivity: Insights of Confinement Effects on MTO Reaction. ACS Catalysis, 2015, 5, 661-665.	5.5	131
7	Direct Mechanism of the First Carbonâ€“Carbon Bond Formation in the Methanolâ€toâ€Hydrocarbons Process. Angewandte Chemie - International Edition, 2017, 56, 9039-9043.	7.2	128
8	Spatial confinement effects of cage-type SAPO molecular sieves on product distribution and coke formation in methanol-to-olefin reaction. Catalysis Communications, 2014, 46, 36-40.	1.6	116
9	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.	2.1	115
10	Polystyrene sulphonic acid resins with enhanced acid strength via macromolecular self-assembly within confined nanospace. Nature Communications, 2014, 5, 3170.	5.8	114
11	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.	2.1	89
12	Coupling of Methanol and Carbon Monoxide over Hâ€ZSMâ€5 to Form Aromatics. Angewandte Chemie - International Edition, 2018, 57, 12549-12553.	7.2	85
13	Interconnected Hierarchical ZSM-5 with Tunable Acidity Prepared by a Dealuminationâ€“Realumination Process: A Superior MTP Catalyst. ACS Applied Materials & Interfaces, 2017, 9, 26096-26106.	4.0	84
14	Synthesis of mesoporous ZSM-5 catalysts using different mesogenous templates and their application in methanol conversion for enhanced catalyst lifespan. RSC Advances, 2014, 4, 21479-21491.	1.7	81
15	Elucidating the olefin formation mechanism in the methanol to olefin reaction over AlPO-18 and SAPO-18. Catalysis Science and Technology, 2014, 4, 3268.	2.1	71
16	Molecular elucidating of an unusual growth mechanism for polycyclic aromatic hydrocarbons in confined space. Nature Communications, 2020, 11, 1079.	5.8	70
17	Reaction Behaviors and Kinetics during Induction Period of Methanol Conversion on HZSM-5 Zeolite. ACS Catalysis, 2015, 5, 3973-3982.	5.5	65
18	Generation of diamondoid hydrocarbons as confined compounds in SAPO-34 catalyst in the conversion of methanol. Chemical Communications, 2012, 48, 3082.	2.2	62

#	ARTICLE	IF	CITATIONS
19	Molecular Routes of Dynamic Autocatalysis for Methanol-to-Hydrocarbons Reaction. Journal of the American Chemical Society, 2021, 143, 12038-12052.	6.6	60
20	Atomic Insight into the Local Structure and Microenvironment of Isolated Co-Motifs in MFI Zeolite Frameworks for Propane Dehydrogenation. Journal of the American Chemical Society, 2022, 144, 12127-12137.	6.6	60
21	Methanol to Olefins Reaction over Cavity-type Zeolite: Cavity Controls the Critical Intermediates and Product Selectivity. ACS Catalysis, 2018, 8, 10950-10963.	5.5	59
22	Methanol to Olefins Reaction Route Based on Methylcyclopentadienes as Critical Intermediates. ACS Catalysis, 2019, 9, 7373-7379.	5.5	58
23	Catalysts and shape selective catalysis in the methanol-to-olefin (MTO) reaction. Journal of Catalysis, 2021, 396, 23-31.	3.1	55
24	Coke Formation and Carbon Atom Economy of Methanolâ€toâ€Olefins Reaction. ChemSusChem, 2012, 5, 906-912.	3.6	54
25	Evolution of Câ€“C Bond Formation in the Methanol-to-Olefins Process: From Direct Coupling to Autocatalysis. ACS Catalysis, 2018, 8, 7356-7361.	5.5	54
26	Catalytic performance of chloromethane transformation for light olefins production over SAPO-34 with different Si content. Catalysis Letters, 2007, 114, 30-35.	1.4	52
27	Increasing the selectivity to ethylene in the MTO reaction by enhancing diffusion limitation in the shell layer of SAPO-34 catalyst. Chemical Communications, 2018, 54, 3146-3149.	2.2	49
28	Ultra-short contact time conversion of chloromethane to olefins over pre-coked SAPO-34: direct insight into the primary conversion with coke deposition. Chemical Communications, 2009, , 5999.	2.2	42
29	A ZSM-5-based Catalyst for Efficient Production of Light Olefins and Aromatics from Fluidized-bed Naphtha Catalytic Cracking. Catalysis Letters, 2008, 124, 150-156.	1.4	40
30	Advances in Catalysis for Methanol-to-Olefins Conversion. Advances in Catalysis, 2017, , 37-122.	0.1	39
31	Dynamic Evolution of Zeolite Framework and Metal-Zeolite Interface. ACS Catalysis, 2022, 12, 5060-5076.	5.5	36
32	Research on the Acidity of the Double-function Catalyst for DME Synthesis from Syngas. Catalysis Letters, 2006, 106, 61-66.	1.4	35
33	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.	2.1	33
34	Simultaneous Evaluation of Reaction and Diffusion over Molecular Sieves for Shape-Selective Catalysis. ACS Catalysis, 2020, 10, 8727-8735.	5.5	32
35	High Propylene Selectivity in Methanol Conversion over a Small-Pore SAPO Molecular Sieve with Ultra-Small Cage. ACS Catalysis, 2020, 10, 3741-3749.	5.5	32
36	Chloromethane Conversion to Higher Hydrocarbons over Zeolites and SAPOs. Catalysis Letters, 2006, 109, 97-101.	1.4	31

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37	Methanol to hydrocarbons reaction over HZSM-22 and SAPO-11: Effect of catalyst acid strength on reaction and deactivation mechanism. Chinese Journal of Catalysis, 2015, 36, 1392-1402.	6.9	30
38	Methanol conversion on ZSM-22, ZSM-35 and ZSM-5 zeolites: effects of 10-membered ring zeolite structures on methylcyclopentenyl cations and dual cycle mechanism. RSC Advances, 2016, 6, 95855-95864.	1.7	30
39	Methylcyclopentenyl Cations Linking Initial Stage and Highly Efficient Stage in Methanol-to-Hydrocarbon Process. ACS Catalysis, 2020, 10, 4510-4516.	5.5	30
40	Direct Mechanism of the First Carbonâ€“Carbon Bond Formation in the Methanolâ€toâ€Hydrocarbons Process. Angewandte Chemie, 2017, 129, 9167-9171.	1.6	29
41	Direct observation of methylcyclopentenyl cations (MCP⁺) and olefin generation in methanol conversion over TON zeolite. Catalysis Science and Technology, 2016, 6, 89-97.	2.1	28
42	Waterâ€Induced Structural Dynamic Process in Molecular Sieves under Mild Hydrothermal Conditions: Shipâ€inâ€aâ€Bottle Strategy for Acidity Identification and Catalyst Modification. Angewandte Chemie - International Edition, 2020, 59, 20672-20681.	7.2	26
43	The first carbon-carbon bond formation mechanism in methanol-to-hydrocarbons process over chabazite zeolite. CheM, 2021, 7, 2415-2428.	5.8	24
44	An approach to prepare nanosized HZSM-22 with enhanced lifetime in the methanol to hydrocarbon (MTH) reaction. RSC Advances, 2015, 5, 88928-88935.	1.7	23
45	Understanding the Fundamentals of Microporosity Upgrading in Zeolites: Increasing Diffusion and Catalytic Performances. Advanced Science, 2021, 8, e2100001.	5.6	23
46	An Improved Catalytic Cracking of n-hexane via Methanol Coupling Reaction Over HZSM-5 Zeolite Catalysts. Catalysis Letters, 2006, 106, 171-176.	1.4	22
47	Enhanced Propene/Propane Separation by Directional Decoration of the 12â€Membered Rings of Mordenite with ZIF Fragments. Angewandte Chemie - International Edition, 2020, 59, 6765-6768.	7.2	19
48	In Situ Aluminum Migration into Zeolite Framework during Methanol-To-Propylene Reaction: An Innovation To Design Superior Catalysts. Industrial & Engineering Chemistry Research, 2018, 57, 8190-8199.	1.8	18
49	Heptamethylbenzenium cation formation and the correlated reaction pathway during methanol-to-olefins conversion over DNL-6. Catalysis Today, 2014, 226, 47-51.	2.2	16
50	A bioscaffolding strategy for hierarchical zeolites with a nanotube-trimodal network. Chemical Science, 2016, 7, 1582-1587.	3.7	16
51	Increasing the Number of Aluminum Atoms in T₃ Sites of a Mordenite Zeolite by Lowâ€Pressure SiCl₄ Treatment to Catalyze Dimethyl Ether Carbonylation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	16
52	Selective Removal of Acid Sites in Mordenite Zeolite by Trimethylchlorosilane Silylation to Improve Dimethyl Ether Carbonylation Stability. ACS Catalysis, 2022, 12, 4491-4500.	5.5	15
53	Synthesis of SAPO-35 molecular sieve and its catalytic properties in the methanol-to-olefins reaction. Chinese Journal of Catalysis, 2013, 34, 798-807.	6.9	14
54	Tuning the product selectivity of SAPO-18 catalysts in MTO reaction via cavity modification. Chinese Journal of Catalysis, 2019, 40, 477-485.	6.9	14

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55	Differentiating Diffusivity in Different Channels of ZSMâ€5 Zeolite by Pulsed Field Gradient (PFG) NMR. ChemCatChem, 2020, 12, 463-468.	1.8	14
56	Dynamic Activation of C1 Molecules Evoked by Zeolite Catalysis. ACS Central Science, 2021, 7, 681-687.	5.3	14
57	Sulfur-Promoted Hydrocarboxylation of Olefins on Heterogeneous Single-Rh-Site Catalysts. ACS Catalysis, 2022, 12, 4203-4215.	5.5	13
58	Influence of acid site density on the three-staged MTH induction reaction over HZSM-5 zeolite. RSC Advances, 2016, 6, 52284-52291.	1.7	12
59	Frustrated Lewis Pair in Zeolite Cages for Alkane Activations. Angewandte Chemie - International Edition, 2022, 61, e202116269.	7.2	12
60	Mechanistic Studies on the Coupled Reaction of n-Hexane and Ethanol Over HZSM-5 Zeolite Catalyst. Catalysis Letters, 2009, 127, 348-353.	1.4	11
61	Synthesis of mesoporous ZSM-5 using a new gemini surfactant as a mesoporous directing agent: A crystallization transformation process. Chinese Journal of Catalysis, 2014, 35, 1727-1739.	6.9	10
62	Investigation of Ethanol Conversion on H-ZSM-5 Zeolite by <i>in Situ</i> Solid-State NMR. Energy & Fuels, 2021, 35, 12319-12328.	2.5	10
63	Dynamic evolution of Al species in the hydrothermal dealumination process of CHA zeolites. Inorganic Chemistry Frontiers, 2022, 9, 3609-3618.	3.0	10
64	Capture and identification of coke precursors to elucidate the deactivation route of the methanol-to-olefin process over H-SAPO-34. Chemical Communications, 2020, 56, 8063-8066.	2.2	9
65	Effects of the Pore Structure and Acidâ€“Base Property of X Zeolites on Side-Chain Alkylation of Toluene with Methanol. Industrial & Engineering Chemistry Research, 2021, 60, 14381-14396.	1.8	8
66	Mn-Containing AlPO-11 and SAPO-11 Catalysts for Simultaneous Isomerization and Dehydrogenation of n-Butane. Catalysis Letters, 2003, 91, 35-40.	1.4	7
67	Increasing the Number of Aluminum Atoms in T₃ Sites of a Mordenite Zeolite by Lowâ€Pressure SiCl₄ Treatment to Catalyze Dimethyl Ether Carbonylation. Angewandte Chemie, 2022, 134, .	1.6	6
68	Quantitatively Mapping the Distribution of Intrinsic Acid Sites in Mordenite Zeolite by High-Field ²³Na Solid-State Nuclear Magnetic Resonance. Journal of Physical Chemistry Letters, 2022, 13, 5186-5194.	2.1	6
69	Direct probing of heterogeneity for adsorption and diffusion within a SAPO-34 crystal. Chemical Communications, 2019, 55, 10693-10696.	2.2	5
70	Waterâ€Induced Structural Dynamic Process in Molecular Sieves under Mild Hydrothermal Conditions: Shipâ€inâ€aâ€Bottle Strategy for Acidity Identification and Catalyst Modification. Angewandte Chemie, 2020, 132, 20853-20862.	1.6	5
71	Correlating the Adsorption Preference and Mass Transfer of Xenon in RHO-Type Molecular Sieves. Journal of Physical Chemistry C, 2021, 125, 6832-6838.	1.5	5
72	Influence of Al Coordinates on Hierarchical Structure and T Atoms Redistribution during Base Leaching of ZSM-5. Industrial & Engineering Chemistry Research, 0, , .	1.8	4

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73	Insight into the Dual Cycle Mechanism of Methanol-to-Olefins Reaction over SAPO-34 Molecular Sieve by Isotopic Tracer Studies. Chemical Research in Chinese Universities, 2020, 36, 1203-1208.	1.3	4
74	Doping Graphene into Monodispersed Fe 3 O 4 Microspheres with Droplet Microfluidics for Enhanced Electrochemical Performance in Lithiumâ€Ion Batteries. Batteries and Supercaps, 2018, 2, 49.	2.4	3
75	Revealing the Specific Spatial Confinement in 8â€membered Ring Cageâ€type Molecular Sieves via Solidâ€state NMR and Theoretical Calculations. ChemCatChem, 2021, 13, 1299-1305.	1.8	3
76	Facile precipitation microfluidic synthesis of Monodisperse and inorganic hollow microspheres for Photocatalysis. Journal of Chemical Technology and Biotechnology, 0, , .	1.6	3
77	Frustrated Lewis Pair in Zeolite Cages for Alkane Activations. Angewandte Chemie, 0, , .	1.6	2
78	Effect of acid distribution and pore structure of ZSM-5 on catalytic performance. Reaction Chemistry and Engineering, 2022, 7, 2152-2162.	1.9	2
79	InnenrÃ¼cktitelbild: Direct Mechanism of the First Carbonâ€“Carbon Bond Formation in the Methanolâ€toâ€Hydrocarbons Process (Angew. Chem. 31/2017). Angewandte Chemie, 2017, 129, 9369-9369.	1.6	0
80	Innentitelbild: Increasing the Number of Aluminum Atoms in T₃ Sites of a Mordenite Zeolite by Lowâ€Pressure SiCl₄ Treatment to Catalyze Dimethyl Ether Carbonylation (Angew. Chem. 18/2022). Angewandte Chemie, 2022, 134, .	1.6	0