Yingxu Wei

List of Publications by Year
in descending order

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	Frustrated Lewis Pair in Zeolite Cages for Alkane Activations. Angewandte Chemie - International Edition, 2022, 61, e202116269.	7.2	12
2	Sulfur-Promoted Hydrocarboxylation of Olefins on Heterogeneous Single-Rh-Site Catalysts. ACS Catalysis, 2022, 12, 4203-4215.	5.5	13
3	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
4	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
5	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
6	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
7	Dynamic Evolution of Zeolite Framework and Metal-Zeolite Interface. ACS Catalysis, 2022, 12, 5060-5076.	5.5	36
8	Dynamic evolution of Al species in the hydrothermal dealumination process of CHA zeolites. Inorganic Chemistry Frontiers, 2022, 9, 3609-3618.	3.0	10
9	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
10	Effect of acid distribution and pore structure of ZSM-5 on catalytic performance. Reaction Chemistry and Engineering, 2022, 7, 2152-2162.	1.9	2
11	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
12	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
13	Dynamic Activation of C1 Molecules Evoked by Zeolite Catalysis. ACS Central Science, 2021, 7, 681-687.	5.3	14
14	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
15	Catalysts and shape selective catalysis in the methanol-to-olefin (MTO) reaction. Journal of Catalysis, 2021, 396, 23-31.	3.1	55
16	Molecular Routes of Dynamic Autocatalysis for Methanol-to-Hydrocarbons Reaction. Journal of the American Chemical Society, 2021, 143, 12038-12052.	6.6	60
17	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
18	Understanding the Fundamentals of Microporosity Upgrading in Zeolites: Increasing Diffusion and Catalytic Performances. Advanced Science, 2021, 8, e2100001.	5.6	23

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19	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
20	The first carbon-carbon bond formation mechanism in methanol-to-hydrocarbons process over chabazite zeolite. CheM, 2021, 7, 2415-2428.	5.8	24
21	Differentiating Diffusivity in Different Channels of ZSMâ€5 Zeolite by Pulsed Field Gradient (PFG) NMR. ChemCatChem, 2020, 12, 463-468.	1.8	14
22	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
23	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
24	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
25	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
26	Methylcyclopentenyl Cations Linking Initial Stage and Highly Efficient Stage in Methanol-to-Hydrocarbon Process. ACS Catalysis, 2020, 10, 4510-4516.	5.5	30
27	Simultaneous Evaluation of Reaction and Diffusion over Molecular Sieves for Shape-Selective Catalysis. ACS Catalysis, 2020, 10, 8727-8735.	5.5	32
28	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
29	Molecular elucidating of an unusual growth mechanism for polycyclic aromatic hydrocarbons in confined space. Nature Communications, 2020, 11, 1079.	5.8	70
30	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
31	Direct probing of heterogeneity for adsorption and diffusion within a SAPO-34 crystal. Chemical Communications, 2019, 55, 10693-10696.	2.2	5
32	Methanol to Olefins Reaction Route Based on Methylcyclopentadienes as Critical Intermediates. ACS Catalysis, 2019, 9, 7373-7379.	5.5	58
33	Recent Progress in Methanolâ€toâ€Olefins (MTO) Catalysts. Advanced Materials, 2019, 31, e1902181.	11.1	217
34	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
35	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
36	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

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37	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
38	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
39	Coupling of Methanol and Carbon Monoxide over Hâ€ZSMâ€5 to Form Aromatics. Angewandte Chemie - International Edition, 2018, 57, 12549-12553.	7.2	85
40	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
41	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
42	Direct Mechanism of the First Carbonâ€“Carbon Bond Formation in the Methanolâ€toâ€Hydrocarbons Process. Angewandte Chemie, 2017, 129, 9167-9171.	1.6	29
43	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
44	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
45	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
46	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
47	Advances in Catalysis for Methanol-to-Olefins Conversion. Advances in Catalysis, 2017, , 37-122.	0.1	39
48	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
49	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
50	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
51	A bioscaffolding strategy for hierarchical zeolites with a nanotube-trimodal network. Chemical Science, 2016, 7, 1582-1587.	3.7	16
52	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
53	Reaction Behaviors and Kinetics during Induction Period of Methanol Conversion on HZSM-5 Zeolite. ACS Catalysis, 2015, 5, 3973-3982.	5.5	65
54	Methanol to Olefins (MTO): From Fundamentals to Commercialization. ACS Catalysis, 2015, 5, 1922-1938.	5.5	1,268

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55	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
56	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
57	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
58	Cavity Controls the Selectivity: Insights of Confinement Effects on MTO Reaction. ACS Catalysis, 2015, 5, 661-665.	5.5	131
59	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
60	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
61	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
62	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
63	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
64	Polystyrene sulphonic acid resins with enhanced acid strength via macromolecular self-assembly within confined nanospace. Nature Communications, 2014, 5, 3170.	5.8	114
65	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
66	Nanosize-Enhanced Lifetime of SAPO-34 Catalysts in Methanol-to-Olefin Reactions. Journal of Physical Chemistry C, 2013, 117, 8214-8222.	1.5	224
67	Generation of diamondoid hydrocarbons as confined compounds in SAPO-34 catalyst in the conversion of methanol. Chemical Communications, 2012, 48, 3082.	2.2	62
68	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
69	Coke Formation and Carbon Atom Economy of Methanolâ€toâ€Olefins Reaction. ChemSusChem, 2012, 5, 906-912.	3.6	54
70	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
71	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
72	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

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73	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
74	Research on the Acidity of the Double-function Catalyst for DME Synthesis from Syngas. Catalysis Letters, 2006, 106, 61-66.	1.4	35
75	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
76	Chloromethane Conversion to Higher Hydrocarbons over Zeolites and SAPOs. Catalysis Letters, 2006, 109, 97-101.	1.4	31
77	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
78	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
79	Facile precipitation microfluidic synthesis of Monodisperse and inorganic hollow microspheres for Photocatalysis. Journal of Chemical Technology and Biotechnology, 0, , .	1.6	3
80	Frustrated Lewis Pair in Zeolite Cages for Alkane Activations. Angewandte Chemie, 0, , .	1.6	2