

# Weili Dai

## List of Publications by Year in descending order

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87  
papers

5,200  
citations

94381

37  
h-index

88593

70  
g-index

91  
all docs

91  
docs citations

91  
times ranked

4839  
citing authors

#	ARTICLE	IF	CITATIONS
1	Zeolite-encaged palladium catalysts for heterogeneous Suzuki-Miyaura cross-coupling reactions. <i>Catalysis Today</i> , 2023, 410, 237-246.	2.2	16
2	Improvement on the Catalytic Performance of MoO <sub>3</sub> Nanobelts for NH <sub>3</sub> -SCR Reaction by SnO <sub>2</sub> -Modification: Enhancement of Acidity and Redox Property. <i>Catalysis Letters</i> , 2022, 152, 480-488.	1.4	4
3	Catalytic Hydration of Aromatic Alkynes to Ketones over H-MFI Zeolites. <i>Chemical Research in Chinese Universities</i> , 2022, 38, 173-180.	1.3	4
4	Progressive steps and catalytic cycles in methanol-to-hydrocarbons reaction over acidic zeolites. <i>Fundamental Research</i> , 2022, 2, 184-192.	1.6	28
5	Application of ammonia probe-assisted solid-state NMR technique in zeolites and catalysis. <i>Magnetic Resonance Letters</i> , 2022, 2, 28-37.	0.7	8
6	Design of plate-like H[Ga]MFI zeolite catalysts for high-performance methanol-to-propylene reaction. <i>Microporous and Mesoporous Materials</i> , 2022, 333, 111767.	2.2	14
7	Optimizing zeolite stabilized Pt-Zn catalysts for propane dehydrogenation. <i>Journal of Energy Chemistry</i> , 2021, 57, 92-98.	7.1	54
8	Integration of multifunctionalities on ionic liquid-anchored MIL-101(Cr): A robust and efficient heterogeneous catalyst for conversion of CO <sub>2</sub> into cyclic carbonates. <i>Microporous and Mesoporous Materials</i> , 2021, 312, 110750.	2.2	26
9	Self-aldol condensation of aldehydes over Lewis acidic rare-earth cations stabilized by zeolites. <i>Chinese Journal of Catalysis</i> , 2021, 42, 595-605.	6.9	24
10	Titelbild: Experimental and Theoretical Evidence for the Promotional Effect of Acid Sites on the Diffusion of Alkenes through Small-Pore Zeolites ( <i>Angew. Chem.</i> 18/2021). <i>Angewandte Chemie</i> , 2021, 133, 9813-9813.	1.6	1
11	Experimental and Theoretical Evidence for the Promotional Effect of Acid Sites on the Diffusion of Alkenes through Small-Pore Zeolites. <i>Angewandte Chemie</i> , 2021, 133, 10104-10110.	1.6	10
12	Experimental and Theoretical Evidence for the Promotional Effect of Acid Sites on the Diffusion of Alkenes through Small-Pore Zeolites. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10016-10022.	7.2	39
13	Chemical conversion of CO <sub>2</sub> into cyclic carbonates using a versatile and efficient all-in-one catalyst integrated with DABCO ionic liquid and MIL-101(Cr). <i>Microporous and Mesoporous Materials</i> , 2021, 318, 111027.	2.2	35
14	Facile Preparation of Poly(ionic liquid)-zinc Halide Composite Toward Highly Efficient Conversion of CO <sub>2</sub> into Cyclic Carbonates. <i>Polish Journal of Environmental Studies</i> , 2021, 30, 2597-2608.	0.6	3
15	Synthesis of NU-87 Zeolite via Aging and Dual-Templating Methods. <i>ChemistrySelect</i> , 2021, 6, 3952-3957.	0.7	1
16	Confinement in a Zeolite and Zeolite Catalysis. <i>Accounts of Chemical Research</i> , 2021, 54, 2894-2904.	7.6	159
17	Tandem Lewis acid catalysis for the conversion of alkenes to 1,2-diols in the confined space of bifunctional TiSn-Beta zeolite. <i>Chinese Journal of Catalysis</i> , 2021, 42, 1176-1184.	6.9	12
18	Stabilizing the framework of SAPO-34 zeolite toward long-term methanol-to-olefins conversion. <i>Nature Communications</i> , 2021, 12, 4661.	5.8	32

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19	Gradient Hydrogen Migration Modulated with Self-Adapting S Vacancy in Copper-Doped ZnIn <sub>2</sub> S <sub>4</sub> Nanosheet for Photocatalytic Hydrogen Evolution. ACS Nano, 2021, 15, 15238-15248.	7.3	173
20	Methane combustion over palladium catalyst within the confined space of MFI zeolite. Chinese Journal of Catalysis, 2021, 42, 1689-1699.	6.9	36
21	Multifunctional heteroatom zeolites: construction and applications. Frontiers of Chemical Science and Engineering, 2021, 15, 1462-1486.	2.3	9
22	Zeolite-Encaged Isolated Platinum Ions Enable Heterolytic Dihydrogen Activation and Selective Hydrogenations. Journal of the American Chemical Society, 2021, 143, 20898-20906.	6.6	66
23	Efficient Capture of Volatile Iodine by Thiophene-Containing Porous Organic Polymers. ACS Applied Polymer Materials, 2020, 2, 5121-5128.	2.0	36
24	Reaction kinetics and mechanism of CH <sub>4</sub> -SCR on Ru <sup>+</sup> /H-SSZ-13. Catalysis Science and Technology, 2020, 10, 6025-6034.	2.1	8
25	Spectroscopic Signature of Lewis Acidic Framework and Extraframework Sn Sites in Beta Zeolites. ACS Catalysis, 2020, 10, 14135-14146.	5.5	67
26	Entrapped NbOx clusters in MFI zeolite for sustainable acid catalysis. Microporous and Mesoporous Materials, 2020, 305, 110361.	2.2	9
27	Zeolite Stabilized Isolated Molybdenum Species for Catalytic Oxidative Desulfurization. Acta Chimica Sinica, 2020, 78, 1404.	0.5	8
28	Noble Metal Particles Confined in Zeolites: Synthesis, Characterization, and Applications. Advanced Science, 2019, 6, 1900299.	5.6	127
29	Stabilizing copper species using zeolite for ethanol catalytic dehydrogenation to acetaldehyde. Chinese Journal of Catalysis, 2019, 40, 1375-1384.	6.9	50
30	Cascade Conversion of Acetic Acid to Isobutene over Yttrium-Modified Siliceous Beta Zeolites. ACS Catalysis, 2019, 9, 9726-9738.	5.5	36
31	Role of Acetaldehyde in the Roadmap from Initial Carbon <sup>+</sup> Carbon Bonds to Hydrocarbons during Methanol Conversion. ACS Catalysis, 2019, 9, 6491-6501.	5.5	60
32	Acetylene-Selective Hydrogenation Catalyzed by Cationic Nickel Confined in Zeolite. Journal of the American Chemical Society, 2019, 141, 9920-9927.	6.6	112
33	Mechanistic Insights into One-Step Catalytic Conversion of Ethanol to Butadiene over Bifunctional Zn <sup>+</sup> /Beta Zeolite. ACS Catalysis, 2018, 8, 2760-2773.	5.5	109
34	Bimetallic Cr-In/H-SSZ-13 for selective catalytic reduction of nitric oxide by methane. Chinese Journal of Catalysis, 2018, 39, 1004-1011.	6.9	8
35	Robust cobalt oxide catalysts for controllable hydrogenation of carboxylic acids to alcohols. Chinese Journal of Catalysis, 2018, 39, 250-257.	6.9	30
36	Lead-containing Beta zeolites as versatile Lewis acid catalysts for the aminolysis of epoxides. Microporous and Mesoporous Materials, 2018, 264, 230-239.	2.2	22

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37	Effect of <i>n</i> -Butanol Cofeeding on the Methanol to Aromatics Conversion over Ga-Modified Nano H-ZSM-5 and Its Mechanistic Interpretation. <i>ACS Catalysis</i> , 2018, 8, 1352-1362.	5.5	88
38	Construction of Bifunctional Co/H-ZSM-5 Catalysts for the Hydrodeoxygenation of Stearic Acid to Diesel-Range Alkanes. <i>ChemSusChem</i> , 2018, 11, 2179-2188.	3.6	34
39	On the deactivation mechanism of zeolite catalyst in ethanol to butadiene conversion. <i>Journal of Catalysis</i> , 2018, 367, 7-15.	3.1	66
40	Facile synthesis of Sn-containing MFI zeolites as versatile solid acid catalysts. <i>Microporous and Mesoporous Materials</i> , 2018, 270, 265-273.	2.2	35
41	Ru-In/H-SSZ-13 for the selective reduction of nitric oxide by methane: Insights from temperature-programmed desorption studies. <i>Applied Catalysis B: Environmental</i> , 2018, 236, 404-412.	10.8	21
42	Oxidative dehydrogenation of propane over Pt-Sn/Si-beta catalysts: key role of Pt-Sn interaction. <i>Catalysis Science and Technology</i> , 2018, 8, 3044-3051.	2.1	28
43	Selectivity Modulation of Encapsulated Palladium Nanoparticles by Zeolite Microenvironment for Biomass Catalytic Upgrading. <i>ACS Catalysis</i> , 2018, 8, 8578-8589.	5.5	114
44	Alkali metal ion exchanged ZSM-5 catalysts: on acidity and methanol-to-olefin performance. <i>Catalysis Science and Technology</i> , 2018, 8, 4440-4449.	2.1	31
45	Insights into the catalytic cycle and activity of methanol-to-olefin conversion over low-silica AlPO-34 zeolites with controllable Brønsted acid density. <i>Catalysis Science and Technology</i> , 2017, 7, 607-618.	2.1	58
46	Fabrication of WO <sub>2.72</sub> /RGO nano-composites for enhanced photocatalysis. <i>RSC Advances</i> , 2017, 7, 2606-2614.	1.7	30
47	Zeolite Structural Confinement Effects Enhance One-Pot Catalytic Conversion of Ethanol to Butadiene. <i>ACS Catalysis</i> , 2017, 7, 3703-3706.	5.5	87
48	One-pot construction of Fe/ZSM-5 zeolites for the selective catalytic reduction of nitrogen oxides by ammonia. <i>Catalysis Science and Technology</i> , 2017, 7, 3036-3044.	2.1	76
49	Meso-Zr-Al-beta zeolite as a robust catalyst for cascade reactions in biomass valorization. <i>Applied Catalysis B: Environmental</i> , 2017, 205, 393-403.	10.8	152
50	A simple synthesis of Ga <sub>2</sub> O <sub>3</sub> and GaN nanocrystals. <i>RSC Advances</i> , 2017, 7, 47898-47903.	1.7	14
51	Robust ruthenium catalysts for the selective conversion of stearic acid to diesel-range alkanes. <i>Applied Catalysis B: Environmental</i> , 2017, 201, 137-149.	10.8	60
52	Insight into the formation of the tert-butyl cation confined inside H-ZSM-5 zeolite from NMR spectroscopy and DFT calculations. <i>Chemical Communications</i> , 2016, 52, 10606-10608.	2.2	29
53	Lewis Acid Catalysis Confined in Zeolite Cages as a Strategy for Sustainable Heterogeneous Hydration of Epoxides. <i>ACS Catalysis</i> , 2016, 6, 2955-2964.	5.5	86
54	Diels-Alder and dehydration reactions of furan derivatives with ethylene catalyzed by liquid Brønsted acids and Lewis acids. <i>Journal of Molecular Catalysis A</i> , 2016, 420, 134-141.	4.8	43

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55	Al-free Fe-beta as a robust catalyst for selective reduction of nitric oxide by ammonia. <i>Catalysis Science and Technology</i> , 2016, 6, 8325-8335.	2.1	36
56	Identification of <i>tert</i> -Butyl Cations in Zeolite H-ZSM-5: Evidence from NMR Spectroscopy and DFT Calculations. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8783-8786.	7.2	63
57	Nanosheets: Tungsten Oxide Single Crystal Nanosheets for Enhanced Multichannel Solar Light Harvesting ( <i>Adv. Mater.</i> 9/2015). <i>Advanced Materials</i> , 2015, 27, 1579-1579.	11.1	8
58	Hydrodeoxygenation of lignin-derived phenolic compounds over bi-functional Ru/H-Beta under mild conditions. <i>Fuel</i> , 2015, 150, 175-183.	3.4	179
59	Hydrothermal synthesis and photocatalytic properties of tantalum pentoxide nanorods. <i>Chinese Journal of Catalysis</i> , 2015, 36, 432-438.	6.9	18
60	Mesoporous Zr-Beta zeolites prepared by a post-synthetic strategy as a robust Lewis acid catalyst for the ring-opening aminolysis of epoxides. <i>Green Chemistry</i> , 2015, 17, 1744-1755.	4.6	169
61	Intermediates and Dominating Reaction Mechanism During the Early Period of the Methanol-to-Olefin Conversion on SAPO-41. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2637-2645.	1.5	31
62	Tungsten Oxide Single Crystal Nanosheets for Enhanced Multichannel Solar Light Harvesting. <i>Advanced Materials</i> , 2015, 27, 1580-1586.	11.1	436
63	Fabrication of Ta <sub>2</sub> O <sub>5</sub> films on tantalum substrate for efficient photocatalysis. <i>Catalysis Communications</i> , 2015, 65, 24-29.	1.6	35
64	Evidence of rutile-to-anatase photo-induced electron transfer in mixed-phase TiO <sub>2</sub> by solid-state NMR spectroscopy. <i>Chemical Communications</i> , 2015, 51, 13779-13782.	2.2	32
65	Incorporation of cerium atoms into Al-free Beta zeolite framework for catalytic application. <i>Chinese Journal of Catalysis</i> , 2015, 36, 801-805.	6.9	25
66	Selective Catalytic Hydrogenolysis of Carbon-Carbon Bonds in Primary Aliphatic Alcohols over Supported Metals. <i>ACS Catalysis</i> , 2015, 5, 7199-7207.	5.5	19
67	Ru/TiO <sub>2</sub> for the preferential oxidation of CO in H <sub>2</sub> -rich stream: Effects of catalyst pre-treatments and reconstruction of Ru sites. <i>Fuel</i> , 2015, 143, 318-326.	3.4	27
68	Understanding the Early Stages of the Methanol-to-Olefin Conversion on H-SAPO-34. <i>ACS Catalysis</i> , 2015, 5, 317-326.	5.5	193
69	Cyclohexane oxidation: Small organic molecules as catalysts. <i>Chinese Journal of Catalysis</i> , 2014, 35, 279-285.	6.9	11
70	Long-term self-assembly of inorganic layered materials influenced by the local states of the interlayer cations. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10959-10964.	1.3	20
71	Verifying the dominant catalytic cycle of the methanol-to-hydrocarbon conversion over SAPO-41. <i>Catalysis Science and Technology</i> , 2014, 4, 688-696.	2.1	22
72	A procedure for the preparation of Ti-Beta zeolites for catalytic epoxidation with hydrogen peroxide. <i>Green Chemistry</i> , 2014, 16, 2281-2291.	4.6	136

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73	Improved Postsynthesis Strategy to Sn-Beta Zeolites as Lewis Acid Catalysts for the Ring-Opening Hydration of Epoxides. <i>ACS Catalysis</i> , 2014, 4, 2801-2810.	5.5	247
74	Synthetic Design of Gold Nanoparticles on Anatase TiO <sub>2</sub> {001} for Enhanced Visible Light Harvesting. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 1940-1946.	3.2	42
75	Verifying the mechanism of the ethene-to-propene conversion on zeolite H-SSZ-13. <i>Journal of Catalysis</i> , 2014, 314, 10-20.	3.1	84
76	Mechanisms of the Deactivation of SAPO-34 Materials with Different Crystal Sizes Applied as MTO Catalysts. <i>ACS Catalysis</i> , 2013, 3, 588-596.	5.5	198
77	Effect of the Methanol-to-Olefin Conversion on the PFG NMR Self-Diffusivities of Ethane and Ethene in Large-Crystalline SAPO-34. <i>Journal of Physical Chemistry C</i> , 2012, 116, 2469-2476.	1.5	49
78	Rheological Mechanism of Long-Term Self-Assembly in Saponite Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22954-22959.	1.5	26
79	Methanol-to-Olefin Conversion Catalyzed by Low-Silica AlPO <sub>3</sub> 4 with Traces of Brønsted Acid Sites: Combined Catalytic and Spectroscopic Investigations. <i>ChemCatChem</i> , 2012, 4, 1428-1435.	1.8	53
80	Phosphorus modified HMCM-22: Characterization and catalytic application in methanol-to-hydrocarbons conversion. <i>Microporous and Mesoporous Materials</i> , 2012, 151, 99-106.	2.2	32
81	Catalytic dehydration of methanol to dimethyl ether over aluminophosphate and silico-aluminophosphate molecular sieves. <i>Catalysis Communications</i> , 2011, 12, 535-538.	1.6	57
82	Methanol-to-Olefin Conversion on Silicoaluminophosphate Catalysts: Effect of Brønsted Acid Sites and Framework Structures. <i>ACS Catalysis</i> , 2011, 1, 292-299.	5.5	140
83	Unexpected methanol-to-olefin conversion activity of low-silica aluminophosphate molecular sieves. <i>Catalysis Communications</i> , 2011, 16, 124-127.	1.6	24
84	Fate of Brønsted Acid Sites and Benzene-Based Carbenium Ions During Methanol-to-Olefin Conversion on SAPO <sub>3</sub> 4. <i>ChemCatChem</i> , 2011, 3, 1130-1133.	1.8	49
85	Solid-state nuclear magnetic resonance investigations of the nature, property, and activity of acid sites on solid catalysts. <i>Solid State Nuclear Magnetic Resonance</i> , 2011, 39, 116-141.	1.5	212
86	The Effect of Organic Impurities Originating from the Incomplete Combustion of Organic Templates on the Methanol-to-Olefins Reaction over SAPO <sub>4</sub> 6. <i>ChemCatChem</i> , 2010, 2, 1548-1551.	1.8	8
87	A one-step route to SAPO-46 using H <sub>3</sub> PO <sub>3</sub> -containing gel and its application as the catalyst for methanol dehydration. <i>Journal of Molecular Catalysis A</i> , 2009, 308, 127-133.	4.8	22