

Zhong-Wen Liu

List of Publications by Year in descending order

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88
papers

1,911
citations

218677
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345221
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88
all docs

88
docs citations

88
times ranked

2048
citing authors

#	ARTICLE	IF	CITATIONS
1	Removal of cobalt(II) ion from aqueous solution by chitosan@montmorillonite. Journal of Environmental Sciences, 2014, 26, 1879-1884.	6.1	81
2	Cobalt nanoparticles confined in carbon matrix for probing the size dependence in Fischer-Tropsch synthesis. Journal of Catalysis, 2019, 369, 143-156.	6.2	72
3	Magnesia modified H-ZSM-5 as an efficient acidic catalyst for steam reforming of dimethyl ether. Applied Catalysis B: Environmental, 2013, 134-135, 381-388.	20.2	52
4	Insights into CeO ₂ -modified Ni-Mg-Al oxides for pressurized carbon dioxide reforming of methane. Chemical Engineering Journal, 2015, 259, 581-593.	12.7	50
5	Photoresponsive Shape Memory Hydrogels for Complex Deformation and Solvent-Driven Actuation. ACS Applied Materials & Interfaces, 2020, 12, 6407-6418.	8.0	46
6	Gallium nitride catalyzed the direct hydrogenation of carbon dioxide to dimethyl ether as primary product. Nature Communications, 2021, 12, 2305.	12.8	45
7	Iso-paraffins synthesis from modified Fischer-Tropsch reaction: Insights into Pd/beta and Pt/beta catalysts. Catalysis Today, 2005, 104, 41-47.	4.4	44
8	Copper-Catalyzed Coupling of Indoles with Dimethylformamide as a Methylenating Reagent. Advanced Synthesis and Catalysis, 2016, 358, 539-542.	4.3	44
9	Ultraclean Fuels Production and Utilization for the Twenty-First Century: Advances toward Sustainable Transportation Fuels. Energy & Fuels, 2013, 27, 6335-6338.	5.1	43
10	Smart Bilayer Polyacrylamide/DNA Hybrid Hydrogel Film Actuators Exhibiting Programmable Responsive and Reversible Macroscopic Shape Deformations. Small, 2020, 16, e1906998.	10.0	43
11	Active and selective nature of supported CrO _x for the oxidative dehydrogenation of propane with carbon dioxide. Applied Catalysis B: Environmental, 2021, 297, 120400.	20.2	43
12	DMC Formation over Ce _{0.5} Zr _{0.5} O ₂ Prepared by Complex-decomposition Method. Catalysis Letters, 2009, 129, 428-436.	2.6	40
13	V ₂ O ₅ /Ce _{0.6} Zr _{0.4} O ₂ @Al ₂ O ₃ as an Efficient Catalyst for the Oxidative Dehydrogenation of Ethylbenzene with Carbon Dioxide. ChemSusChem, 2011, 4, 341-345.	6.8	38
14	Porous Montmorillonite Heterostructures Directed by a Single Alkyl Ammonium Template for Controlling the Product Distribution of Fischer-Tropsch Synthesis over Cobalt. Chemistry of Materials, 2012, 24, 972-974.	6.7	38
15	Carboxyl-Directed Conjugate Addition of C-H Bonds to α,β -Unsaturated Ketones in Air and Water. Advanced Synthesis and Catalysis, 2018, 360, 1358-1363.	4.3	38
16	Synthesis of mesoporous MCM-48 using fumed silica and mixed surfactants. Microporous and Mesoporous Materials, 2010, 131, 224-229.	4.4	37
17	Acid-resistant ROS-responsive hyperbranched polythioether micelles for ulcerative colitis therapy. Chinese Chemical Letters, 2020, 31, 3102-3106.	9.0	34
18	Hydrogen production for fuel cells via steam reforming of dimethyl ether over commercial Cu/ZnO/Al ₂ O ₃ and zeolite. Chemical Engineering Journal, 2012, 187, 299-305.	12.7	33

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19	Size-Controlled Synthesis of Pd Nanocatalysts on Defect-Engineered CeO ₂ for CO ₂ Hydrogenation. ACS Applied Materials & Interfaces, 2021, 13, 24957-24965.	8.0	33
20	A facile sol-gel synthesis of highly active nano γ -aluminum fluoride catalyst for dehydrofluorination of hydrofluorocarbons. Applied Catalysis B: Environmental, 2017, 206, 65-73.	20.2	31
21	2D-to-3D Shape Transformation of Room-Temperature-Programmable Shape-Memory Polymers through Selective Suppression of Strain Relaxation. ACS Applied Materials & Interfaces, 2018, 10, 40189-40197.	8.0	30
22	Hydrogen production via partial oxidation and reforming of dimethyl ether. Catalysis Today, 2009, 146, 50-56.	4.4	29
23	High-performance Ni γ -SiO ₂ for pressurized carbon dioxide reforming of methane. International Journal of Hydrogen Energy, 2014, 39, 11592-11605.	7.1	29
24	Defect-rich Ce _{1-x} Zr _x O ₂ solid solutions for oxidative dehydrogenation of ethylbenzene with CO ₂ . Catalysis Today, 2019, 324, 39-48.	4.4	29
25	Controllable and scalable synthesis of hollow-structured porous aromatic polymer for selective adsorption and separation of HMF from reaction mixture of fructose dehydration. Chemical Engineering Journal, 2019, 358, 467-479.	12.7	29
26	Photoprogrammable Moisture-Responsive Actuation of a Shape Memory Polymer Film. ACS Applied Materials & Interfaces, 2022, 14, 10836-10843.	8.0	29
27	Facile synthesis of SiO ₂ supported GaN as an active catalyst for CO ₂ enhanced dehydrogenation of propane. Journal of CO ₂ Utilization, 2020, 38, 306-313.	6.8	28
28	Selective production of iso-paraffins from syngas over Co/SiO ₂ and Pd/beta hybrid catalysts. Catalysis Communications, 2005, 6, 503-506.	3.3	27
29	Metal-support interactions regulated via carbon coating γ - A case study of Co/SiO ₂ for Fischer-Tropsch synthesis. Fuel, 2018, 226, 213-220.	6.4	27
30	Effective activation of montmorillonite and its application for Fischer-Tropsch synthesis over ruthenium promoted cobalt. Fuel Processing Technology, 2015, 136, 87-95.	7.2	26
31	Highly Active and Stable Ni γ -SiO ₂ Prepared by a Complex-Decomposition Method for Pressurized Carbon Dioxide Reforming of Methane. Industrial & Engineering Chemistry Research, 2014, 53, 19077-19086.	3.7	25
32	Programmable Humidity-Responsive Actuation of Polymer Films Enabled by Combining Shape Memory Property and Surface-Tunable Hygroscopicity. ACS Applied Materials & Interfaces, 2021, 13, 38773-38782.	8.0	25
33	Alumina Grafted to SBA-15 in Supercritical CO ₂ as a Support of Cobalt for Fischer-Tropsch Synthesis. Energy & Fuels, 2012, 26, 6567-6575.	5.1	23
34	Light Olefin Synthesis from Syngas over Sulfide γ -Zeolite Composite Catalyst. Industrial & Engineering Chemistry Research, 2018, 57, 6815-6820.	3.7	23
35	Understanding the active-site nature of vanadia-based catalysts for oxidative dehydrogenation of ethylbenzene with CO ₂ via atomic layer deposited VO _x on γ -Al ₂ O ₃ . Journal of Catalysis, 2019, 380, 195-203.	6.2	23
36	Cobalt Supported on Alkaline-Activated Montmorillonite as an Efficient Catalyst for Fischer-Tropsch Synthesis. Energy & Fuels, 2013, 27, 6362-6371.	5.1	22

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37	Nanoflake-assembled Al ₂ O ₃ -supported CeO ₂ -ZrO ₂ as an efficient catalyst for oxidative dehydrogenation of ethylbenzene with CO ₂ . <i>Applied Surface Science</i> , 2017, 398, 1-8.	6.1	22
38	Divergent Syntheses of Spiroindanones and 2-Substituted 1-Indanones by Ruthenium-Catalyzed Tandem Coupling and Cyclization of Aromatic Acids with α,β -Unsaturated Ketones. <i>Journal of Organic Chemistry</i> , 2019, 84, 1348-1362.	3.2	22
39	The delaminating and pillaring of MCM-22 for Fischer-Tropsch synthesis over cobalt. <i>Catalysis Today</i> , 2016, 274, 109-115.	4.4	21
40	Encapsulation of ultra-small Cu-Fe into ZSM-5 zeolites for NH ₃ -SCR with broad reaction-temperature ranges. <i>Microporous and Mesoporous Materials</i> , 2022, 331, 111675.	4.4	21
41	Insights into a Multifunctional Hybrid Catalyst Composed of Co/SiO ₂ and Pd/Beta for Isoparaffin Production from Syngas. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 7329-7336.	3.7	20
42	Co/Pillared Clay Bifunctional Catalyst for Controlling the Product Distribution of Fischer-Tropsch Synthesis. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 9004-9011.	3.7	20
43	The dehydrogenation of ethylbenzene with CO ₂ over V ₂ O ₅ /Ce _x Zr _{1-x} O ₂ prepared with different methods. <i>Journal of Molecular Catalysis A</i> , 2010, 329, 64-70.	4.8	19
44	Fischer-Tropsch synthesis over Co/montmorillonite: Insights into the role of interlayer exchangeable cations. <i>Applied Catalysis A: General</i> , 2011, 405, 45-54.	4.3	19
45	Fischer-Tropsch synthesis over cobalt/montmorillonite promoted with different interlayer cations. <i>Fuel</i> , 2013, 109, 33-42.	6.4	19
46	Balancing free and confined metallic Ni for an active and stable catalyst: A case study of CO methanation over Ni/Ni-Al ₂ O ₃ . <i>Journal of Energy Chemistry</i> , 2020, 50, 73-84.	12.9	19
47	Formation of Isoparaffins through Pd/ β Zeolite Application in Fischer-Tropsch Synthesis. <i>Energy & Fuels</i> , 2005, 19, 1790-1794.	5.1	18
48	Cobalt-supported carbon and alumina co-pillared montmorillonite for Fischer-Tropsch synthesis. <i>Fuel Processing Technology</i> , 2015, 138, 116-124.	7.2	17
49	Hyperbranched polymer micelles with triple-stimuli backbone-breakable iminoboronate ester linkages. <i>Chinese Chemical Letters</i> , 2020, 31, 1822-1826.	9.0	17
50	Potassium promotion effects in carbon nanotube supported molybdenum sulfide catalysts for carbon monoxide hydrogenation. <i>Catalysis Today</i> , 2016, 261, 137-145.	4.4	16
51	Controllable Tandem [3+2] Cyclization of Aromatic Aldehydes with Maleimides: Rhodium(III)-Catalyzed Divergent Synthesis of Indane-Fused Pyrrolidine-2,5-dione. <i>Organic Letters</i> , 2020, 22, 8808-8813.	4.6	16
52	Aldehyde as a Traceless Directing Group for Regioselective C-H Alkylation Catalyzed by Rhodium(III) in Air. <i>Organic Letters</i> , 2020, 22, 1259-1264.	4.6	16
53	Ruthenium (II)-catalyzed synthesis of phthalides via the cascade addition and cyclization of aromatic acids with aldehydes. <i>Science China Chemistry</i> , 2018, 61, 153-158.	8.2	15
54	Tailoring the surface structures of iron oxide nanorods to support Au nanoparticles for CO oxidation. <i>Chinese Journal of Catalysis</i> , 2019, 40, 1884-1894.	14.0	15

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55	Acid activated montmorillonite for gas-phase catalytic dehydration of monoethanolamine. Applied Clay Science, 2019, 168, 116-124.	5.2	15
56	Molecular-level investigation on supported CrOx catalyst for oxidative dehydrogenation of propane with carbon dioxide. Journal of Catalysis, 2022, 409, 87-97.	6.2	15
57	Photo-Dissociable Fe ³⁺ -Carboxylate Coordination: A General Approach toward Hydrogels with Shape Programming and Active Morphing Functionalities. ACS Applied Materials & Interfaces, 2021, 13, 59310-59319.	8.0	15
58	Rubber-like composites with tunable thermal- and photo-responsive shape memory properties. Chemical Engineering Journal, 2022, 447, 137534.	12.7	14
59	Insights into the vanadia catalyzed oxidative dehydrogenation of isobutane with CO ₂ . Chinese Journal of Catalysis, 2014, 35, 1329-1336.	14.0	13
60	Catalytic behavior of manganese oxides for oxidative dehydrogenation of ethylbenzene with carbon dioxide. Journal of CO ₂ Utilization, 2017, 22, 63-70.	6.8	13

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73	Backbone-Based LCST-Type Hyperbranched Poly(oligo(ethylene glycol)) with CO ₂ -Reversible Iminoboronate Linkers. <i>Macromolecular Chemistry and Physics</i> , 2018, 219, 1800346.	2.2	6
74	Flame-spray-pyrolysis amorphous alumina-silica for tailoring the product distribution of Fischer-Tropsch synthesis. <i>Catalysis Today</i> , 2020, 339, 40-47.	4.4	6
75	Tailoring the surface structure of iron compounds to optimize the selectivity of 3-nitrostyrene hydrogenation reaction over Pt catalyst. <i>Chinese Chemical Letters</i> , 2021, , .	9.0	6
76	CeO ₂ -Promoted PtSn/SiO ₂ as a High-Performance Catalyst for the Oxidative Dehydrogenation of Propane with Carbon Dioxide. <i>Nanomaterials</i> , 2022, 12, 417.	4.1	6
77	Direct Asymmetric Aldol Reactions Catalyzed by L-Proline/PEG/SiO ₂ Composite Catalyst. <i>Synthetic Communications</i> , 2012, 42, 1559-1566.	2.1	5
78	Alpha-amino acid assisted synthesis of ordered mesoporous alumina with tunable structural properties. <i>Materials Letters</i> , 2018, 223, 17-20.	2.6	5
79	The Active Nature of Crystal MoS ₂ for Converting Sulfur-Containing Syngas. <i>ChemCatChem</i> , 2019, 11, 1112-1122.	3.7	5
80	Insights into the Oxidative Dehydrogenation of Ethylbenzene with CO ₂ Catalyzed by the Ordered Mesoporous V ₂ O ₅ -Ce _{0.5} Zr _{0.5} O ₂ -Al ₂ O ₃ . <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 21372-21381.	3.7	5
81	Elucidating the Support-Size Effect on the Catalytic Stability of CrO _x /Silicalite-1 for Oxidative Dehydrogenation of Propane with CO ₂ . <i>Catalysis Letters</i> , 2023, 153, 790-804.	2.6	5
82	Light-Guided Growth of Gradient Hydrogels with Programmable Geometries and Thermally Responsive Actuators. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 29188-29196.	8.0	5
83	Microfluidic-assisted assembly of fluorescent self-healing gel particles toward dual-signal sensors. <i>Journal of Materials Science</i> , 2021, 56, 14832-14843.	3.7	4
84	Ultrafast crystallization of mesoporous Sn-MFI single crystals achieved by addition of the cationic polyelectrolyte in starting gels. <i>Microporous and Mesoporous Materials</i> , 2022, 337, 111922.	4.4	3
85	Insights into the unexpected formation of hexamethylbenzene during steam reforming of dimethyl ether over zeolite-based bifunctional catalysts. <i>Catalysis Today</i> , 2013, 210, 75-80.	4.4	2
86	Backbone-Hydrolyzable Poly(oligo(ethylene glycol) bis(glycidyl ether)-alt-ε-ketoglutaric acid) with Tunable LCST Behavior. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1900004.	2.2	1
87	Sequential Cobalt/Rhodium-Catalyzed Tandem Cyclization of Aromatic Aldehydes with Acrylates for Preparing 3-Substituted Phthalides in Oxygen Atmosphere and Neat Water. <i>Asian Journal of Organic Chemistry</i> , 2022, 11, .	2.7	1
88	Kinetics behavior of Co/Ni-ordered mesoporous alumina for the CO methanation. <i>Chemical Engineering Science: X</i> , 2021, 10, 100094.	1.5	0