

Liangshu Zhong

List of Publications by Year in descending order

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papers

5,673
citations

117625

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89
docs citations

89
times ranked

3914
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced Carrier Spatial Separation and Interfacial Transfer for Photocatalytic Cyanation of Olefins. ACS Sustainable Chemistry and Engineering, 2022, 10, 831-837.	6.7	5
2	Direct synthesis of higher alcohols from syngas over modified Mo ₂ C catalysts under mild reaction conditions. Catalysis Science and Technology, 2022, 12, 1697-1708.	4.1	9
3	Effects of alkaline-earth metals on CoMn-based catalysts for the Fischer-Tropsch synthesis to olefins. Catalysis Science and Technology, 2022, 12, 2677-2687.	4.1	6
4	Bifunctional catalysts with versatile zeolites enable unprecedented para-xylene productivity for syngas conversion under mild conditions. Chem Catalysis, 2022, 2, 779-796.	6.1	16
5	Effects of Noble Metals on a Co ₂ C-Based Supported Catalyst for Fischer-Tropsch to Olefins. Industrial & Engineering Chemistry Research, 2022, 61, 4824-4831.	3.7	3
6	Fe binuclear sites convert methane to acetic acid with ultrahigh selectivity. Chem, 2022, 8, 1658-1672.	11.7	40
7	Tandem Catalysis for Selective Oxidation of Methane to Oxygenates Using Oxygen over PdCu/Zeolite. Angewandte Chemie - International Edition, 2022, 61, .	13.8	27
8	Rh single atoms embedded in CeO ₂ nanostructure boost CO ₂ hydrogenation to HCOOH. Chinese Journal of Chemical Engineering, 2022, 43, 62-69.	3.5	13
9	Gold nanoparticles selectively convert CH ₄ to oxygenates by using O ₂ . Chem Catalysis, 2022, 2, 436-438.	6.1	1
10	Tandem Catalysis for Selective Oxidation of Methane to Oxygenates Using Oxygen over PdCu/Zeolite. Angewandte Chemie, 2022, 134, .	2.0	2
11	Highly Selective Photocatalytic Aerobic Oxidation of Methane to Oxygenates with Water over W-doped TiO ₂ . ChemSusChem, 2022, 15, .	6.8	18
12	Carbon-encapsulated metallic Co nanoparticles for Fischer-Tropsch to olefins with low CO ₂ selectivity. Applied Catalysis B: Environmental, 2022, 316, 121700.	20.2	8
13	Chemo- and regioselective hydroformylation of alkenes with CO ₂ /H ₂ over a bifunctional catalyst. Green Chemistry, 2021, 23, 8040-8046.	9.0	13
14	One-pot Synthesis of Acetals by Tandem Hydroformylation-acetalization of Olefins Using Heterogeneous Supported Catalysts. Catalysis Letters, 2021, 151, 2638-2646.	2.6	9
15	Catalytic cycle of the partial oxidation of methane to methanol over Cu-ZSM-5 revealed using DFT calculations. Physical Chemistry Chemical Physics, 2021, 23, 4963-4974.	2.8	16
16	Ru single atoms for efficient chemoselective hydrogenation of nitrobenzene to azoxybenzene. Green Chemistry, 2021, 23, 4753-4761.	9.0	35
17	IrFe/ZSM-5 Synergistic Catalyst for Selective Oxidation of Methane to Formic Acid. Energy & Fuels, 2021, 35, 4418-4427.	5.1	19
18	Cobalt Carbide Nanocatalysts for Efficient Syngas Conversion to Value-Added Chemicals with High Selectivity. Accounts of Chemical Research, 2021, 54, 1961-1971.	15.6	54

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19	Direct Conversion of Syngas to Higher Alcohols over Multifunctional Catalyst: The Role of Copper-Based Component and Catalytic Mechanism. <i>Journal of Physical Chemistry C</i> , 2021, 125, 6137-6146.	3.1	20
20	Theoretical Insights into Morphologies of Alkali-Promoted Cobalt Carbide Catalysts for Fischer-Tropsch Synthesis. <i>Journal of Physical Chemistry C</i> , 2021, 125, 6061-6072.	3.1	12
21	Tuning chemical environment and synergistic relay reaction to promote higher alcohols synthesis via syngas conversion. <i>Applied Catalysis B: Environmental</i> , 2021, 285, 119840.	20.2	41
22	Atomically dispersed Rh on hydroxyapatite as an effective catalyst for tandem hydroaminomethylation of olefins. <i>Molecular Catalysis</i> , 2021, 509, 111671.	2.0	3
23	Fischer-Tropsch to olefins over Co ₂ C-based catalysts: Effect of thermal pretreatment of SiO ₂ support. <i>Applied Catalysis A: General</i> , 2021, 623, 118283.	4.3	9
24	Tuning the interaction between Na and Co ₂ C to promote selective CO ₂ hydrogenation to ethanol. <i>Applied Catalysis B: Environmental</i> , 2021, 293, 120207.	20.2	57
25	Effect of In ₂ O ₃ particle size on CO ₂ hydrogenation to lower olefins over bifunctional catalysts. <i>Chinese Journal of Catalysis</i> , 2021, 42, 2038-2048.	14.0	39
26	Designing silica-coated CoMn-based catalyst for Fischer-Tropsch synthesis to olefins with low CO ₂ emission. <i>Applied Catalysis B: Environmental</i> , 2021, 299, 120683.	20.2	27
27	Single-atom Ru catalyst for selective synthesis of 3-pentanone <i>via</i> ethylene hydroformylation. <i>Green Chemistry</i> , 2021, 23, 9038-9047.	9.0	14
28	Fischer-Tropsch to olefins over CoMn-based catalysts: Effect of preparation methods. <i>Applied Catalysis A: General</i> , 2020, 592, 117414.	4.3	22
29	Enhancing CO ₂ methanation over a metal foam structured catalyst by electric internal heating. <i>Chemical Communications</i> , 2020, 56, 205-208.	4.1	42
30	Tuning the Facet Proportion of Co ₂ C Nanoprisms for Fischer-Tropsch Synthesis to Olefins. <i>ChemCatChem</i> , 2020, 12, 1630-1638.	3.7	23
31	Cu single-atoms embedded in porous carbon nitride for selective oxidation of methane to oxygenates. <i>Chemical Communications</i> , 2020, 56, 14677-14680.	4.1	37
32	Tuning of active sites in M/TiO ₂ for photocatalytic cyanation of olefins with high regioselectivity. <i>Applied Catalysis A: General</i> , 2020, 604, 117787.	4.3	3
33	Control of Co ₀ /Co ₂ C dual active sites for higher alcohols synthesis from syngas. <i>Applied Catalysis A: General</i> , 2020, 602, 117704.	4.3	29
34	Gamma-Ray Irradiation to Accelerate Crystallization of Mesoporous Zeolites. <i>Angewandte Chemie</i> , 2020, 132, 11421-11425.	2.0	11
35	Gamma-Ray Irradiation to Accelerate Crystallization of Mesoporous Zeolites. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11325-11329.	13.8	30
36	Effects of alkali metal promoters on the structure-performance relationship of CoMn catalysts for Fischer-Tropsch synthesis. <i>Catalysis Science and Technology</i> , 2020, 10, 1816-1826.	4.1	20

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37	Syngas Conversion to Aromatics over the Co ₂ -C-Based Catalyst and HZSM-5 via a Tandem System. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 4419-4427.	3.7	17
38	Toward a Full One-Pass Conversion for the Fischer-Tropsch Synthesis over a Highly Selective Cobalt Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 8195-8201.	3.7	8
39	Characterization of CoMn catalyst by in situ X-ray absorption spectroscopy and wavelet analysis for Fischer-Tropsch to olefins reaction. <i>Journal of Energy Chemistry</i> , 2019, 32, 118-123.	12.9	31
40	Fischer-Tropsch Synthesis to Olefins: Catalytic Performance and Structure Evolution of Co ₂ -C-Based Catalysts under a CO ₂ Environment. <i>ACS Catalysis</i> , 2019, 9, 9554-9567.	11.2	64
41	Direct Production of Higher Oxygenates by Syngas Conversion over a Multifunctional Catalyst. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4627-4631.	13.8	92
42	Direct production of olefins <i>via</i> syngas conversion over Co ₂ -C-based catalyst in slurry bed reactor. <i>RSC Advances</i> , 2019, 9, 4131-4139.	3.6	10
43	Direct Production of Higher Oxygenates by Syngas Conversion over a Multifunctional Catalyst. <i>Angewandte Chemie</i> , 2019, 131, 4675-4679.	2.0	65
44	Selective Transformation of CO ₂ and H ₂ into Lower Olefins over In ₂ O ₃ -ZnZrO _x /SAPO-34 Bifunctional Catalysts. <i>ChemSusChem</i> , 2019, 12, 3582-3591.	6.8	103
45	<i>In situ</i> XAFS study on the formation process of cobalt carbide by Fischer-Tropsch reaction. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 10791-10797.	2.8	18
46	Hydrofunctionalization of Olefins to Higher Aliphatic Alcohols via Visible-Light Photocatalytic Coupling. <i>Catalysis Letters</i> , 2019, 149, 1651-1659.	2.6	3
47	Selective Production of Aromatics Directly from Carbon Dioxide Hydrogenation. <i>ACS Catalysis</i> , 2019, 9, 3866-3876.	11.2	177
48	Particle Size Effects of Cobalt Carbide for Fischer-Tropsch to Olefins. <i>ACS Catalysis</i> , 2019, 9, 798-809.	11.2	45
49	Fabrication of Highly Stable SiO ₂ Encapsulated Multiple CuFe Nanoparticles for Higher Alcohols Synthesis via CO Hydrogenation. <i>Catalysis Letters</i> , 2018, 148, 1080-1092.	2.6	13
50	Carbon-encapsulated highly dispersed FeMn nanoparticles for Fischer-Tropsch synthesis to light olefins. <i>New Journal of Chemistry</i> , 2018, 42, 2413-2421.	2.8	24
51	ZIF-67-derived Co ₃ O ₄ micro/nano composite structures for efficient photocatalytic degradation. <i>Materials Letters</i> , 2018, 222, 92-95.	2.6	25
52	Direct synthesis of long-chain alcohols from syngas over CoMn catalysts. <i>Applied Catalysis A: General</i> , 2018, 549, 179-187.	4.3	57
53	Recent advances in the investigation of nanoeffects of Fischer-Tropsch catalysts. <i>Catalysis Today</i> , 2018, 311, 8-22.	4.4	77
54	Direct Production of Lower Olefins from CO ₂ Conversion via Bifunctional Catalysis. <i>ACS Catalysis</i> , 2018, 8, 571-578.	11.2	382

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55	Effect of the support on cobalt carbide catalysts for sustainable production of olefins from syngas. Chinese Journal of Catalysis, 2018, 39, 1869-1880.	14.0	28
56	Effect of Reaction Pressures on Structure-Performance of Co ₂ C-Based Catalyst for Syngas Conversion. Industrial & Engineering Chemistry Research, 2018, 57, 15647-15653.	3.7	31
57	Morphology control of Co ₂ C nanostructures via the reduction process for direct production of lower olefins from syngas. Journal of Catalysis, 2018, 366, 289-299.	6.2	52
58	Highly selective production of olefins from syngas with modified ASF distribution model. Applied Catalysis A: General, 2018, 563, 146-153.	4.3	23
59	Hydrofunctionalization of olefins to value-added chemicals via photocatalytic coupling. Green Chemistry, 2018, 20, 3450-3456.	9.0	21
60	Photocatalytic Coupling of Methanol and Formaldehyde into Ethylene Glycol with High Atomic Efficiency. Catalysis Letters, 2018, 148, 2274-2282.	2.6	14
61	Role of zirconium in direct CO ₂ hydrogenation to lower olefins on oxide/zeolite bifunctional catalysts. Journal of Catalysis, 2018, 364, 382-393.	6.2	174
62	Effect of alkali metals on the performance of CoCu/TiO ₂ catalysts for CO ₂ hydrogenation to long-chain hydrocarbons. Chinese Journal of Catalysis, 2018, 39, 1294-1302.	14.0	63
63	Process intensification of honeycomb fractal micro-reactor for the direct production of lower olefins from syngas. Chemical Engineering Journal, 2018, 351, 12-21.	12.7	19
64	Highly efficient Cu-based catalysts via hydrotalcite-like precursors for CO ₂ hydrogenation to methanol. Catalysis Today, 2017, 281, 327-336.	4.4	111
65	Factors Associated with Accurate Analysis of Fischer-Tropsch Products. Catalysis Letters, 2017, 147, 704-715.	2.6	4
66	Effects of Sodium on the Catalytic Performance of CoMn Catalysts for Fischer-Tropsch to Olefin Reactions. ACS Catalysis, 2017, 7, 3622-3631.	11.2	157
67	For Better Industrial Cu/ZnO/Al ₂ O ₃ Methanol Synthesis Catalyst: A Compositional Study. Catalysis Letters, 2017, 147, 1581-1591.	2.6	16
68	Effect of Sodium on the Structure-Performance Relationship of Co ₂ SiO ₂ for Fischer-Tropsch Synthesis. Chinese Journal of Chemistry, 2017, 35, 918-926.	4.9	31
69	Direct conversion of CO ₂ into liquid fuels with high selectivity over a bifunctional catalyst. Nature Chemistry, 2017, 9, 1019-1024.	13.6	757
70	Advances in direct production of value-added chemicals via syngas conversion. Science China Chemistry, 2017, 60, 887-903.	8.2	62
71	Preparation and CO ₂ hydrogenation catalytic properties of alumina microsphere supported Cu-based catalyst by deposition-precipitation method. Journal of CO ₂ Utilization, 2017, 17, 263-272.	6.8	44
72	Mechanism of the Mn Promoter via CoMn Spinel for Morphology Control: Formation of Co ₂ C Nanoprisms for Fischer-Tropsch to Olefins Reaction. ACS Catalysis, 2017, 7, 8023-8032.	11.2	79

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73	A review of the catalytic hydrogenation of carbon dioxide into value-added hydrocarbons. <i>Catalysis Science and Technology</i> , 2017, 7, 4580-4598.	4.1	385
74	Cobalt carbide nanoprisms for direct production of lower olefins from syngas. <i>Nature</i> , 2016, 538, 84-87.	27.8	647
75	Catalytic performance of spray-dried Cu/ZnO/Al ₂ O ₃ /ZrO ₂ catalysts for slurry methanol synthesis from CO ₂ hydrogenation. <i>Journal of CO₂ Utilization</i> , 2016, 15, 72-82.	6.8	94
76	Deactivation study of CuCo catalyst for higher alcohol synthesis via syngas. <i>Catalysis Today</i> , 2016, 270, 101-107.	4.4	58
77	Yttrium oxide modified Cu/ZnO/Al ₂ O ₃ catalysts via hydrotalcite-like precursors for CO ₂ hydrogenation to methanol. <i>Catalysis Science and Technology</i> , 2015, 5, 4365-4377.	4.1	99
78	Elucidation of reaction network of higher alcohol synthesis over modified FT catalysts by probe molecule experiments. <i>Catalysis Science and Technology</i> , 2015, 5, 4224-4232.	4.1	23
79	A facile solvent-free route to synthesize ordered mesoporous carbons. <i>RSC Advances</i> , 2014, 4, 32113-32116.	3.6	18
80	Structural evolution of CuFe bimetallic nanoparticles for higher alcohol synthesis. <i>Journal of Molecular Catalysis A</i> , 2013, 378, 319-325.	4.8	68
81	CuFe, CuCo and CuNi nanoparticles as catalysts for higher alcohol synthesis from syngas: a comparative study. <i>Catalysis Science and Technology</i> , 2013, 3, 1591.	4.1	118
82	Advances in bifunctional catalysis for higher alcohol synthesis from syngas. <i>Chinese Journal of Catalysis</i> , 2013, 34, 116-129.	14.0	111
83	Influence of Zr on the performance of Cu/Zn/Al/Zr catalysts via hydrotalcite-like precursors for CO ₂ hydrogenation to methanol. <i>Journal of Catalysis</i> , 2013, 298, 51-60.	6.2	322
84	Preparation and activity of Cu/Zn/Al/Zr catalysts via hydrotalcite-containing precursors for methanol synthesis from CO ₂ hydrogenation. <i>Catalysis Science and Technology</i> , 2012, 2, 1447.	4.1	95
85	Size effect of Co _x Mn _{1-x} O precursor for Fischer-Tropsch to olefins over Co ₂ C-based catalysts. <i>Catalysis Science and Technology</i> , 0, , .	4.1	5
86	Structure-Performance Evolution of Cobalt-Ammonia Activated Carbon Catalyst for Ethylene Oligomerization. <i>Catalysis Letters</i> , 0, , 1.	2.6	0