Jian Sun

List of Publications by Year
in descending order

65 papers	3,406 citations	185998 28 h-index	143772 57 g-index
66 all docs	66 docs citations	66 times ranked	2971 citing authors

#	ARTICLE	IF	CITATIONS
1	Directly converting CO2 into a gasoline fuel. Nature Communications, 2017, 8, 15174.	5.8	652
2	Catalysis Chemistry of Dimethyl Ether Synthesis. ACS Catalysis, 2014, 4, 3346-3356.	5.5	232
3	New insights into the effect of sodium on Fe₃O₄- based nanocatalysts for CO₂ hydrogenation to light olefins. Catalysis Science and Technology, 2016, 6, 4786-4793.	2.1	198
4	Towards the development of the emerging process of CO₂heterogenous hydrogenation into high-value unsaturated heavy hydrocarbons. Chemical Society Reviews, 2021, 50, 10764-10805.	18.7	161
5	Recent advances in direct catalytic hydrogenation of carbon dioxide to valuable C₂₊ hydrocarbons. Journal of Materials Chemistry A, 2018, 6, 23244-23262.	5.2	144
6	Catalytic Hydrogenation of CO₂ to Isoparaffins over Fe-Based Multifunctional Catalysts. ACS Catalysis, 2018, 8, 9958-9967.	5.5	141
7	Stabilizing Cu⁺ in Cu/SiO₂ Catalysts with a Shattuckite-Like Structure Boosts CO₂ Hydrogenation into Methanol. ACS Catalysis, 2020, 10, 14694-14706.	5.5	129
8	Directly converting carbon dioxide to linear Î±-olefins on bio-promoted catalysts. Communications Chemistry, 2018, 1, .	2.0	123
9	Interfacing with Carbonaceous Potassium Promoters Boosts Catalytic CO₂ Hydrogenation of Iron. ACS Catalysis, 2020, 10, 12098-12108.	5.5	101
10	Highly-Dispersed Metallic Ru Nanoparticles Sputtered on H-Beta Zeolite for Directly Converting Syngas to Middle Isoparaffins. ACS Catalysis, 2014, 4, 1-8.	5.5	98
11	Precisely regulating BrÃ¸nsted acid sites to promote the synthesis of light aromatics via CO2 hydrogenation. Applied Catalysis B: Environmental, 2021, 283, 119648.	10.8	79
12	Ordered mesoporous alumina-supported bimetallic Pdâ€“Ni catalysts for methane dry reforming reaction. Catalysis Science and Technology, 2016, 6, 6542-6550.	2.1	73
13	Freezing copper as a noble metalâ€“like catalyst for preliminary hydrogenation. Science Advances, 2018, 4, eaau3275.	4.7	64
14	Highly Ordered Mesoporous Fe₂O₃â€“ZrO₂ Bimetal Oxides for an Enhanced CO Hydrogenation Activity to Hydrocarbons with Their Structural Stability. ACS Catalysis, 2017, 7, 5955-5964.	5.5	63
15	A hollow Mo/HZSM-5 zeolite capsule catalyst: preparation and enhanced catalytic properties in methane dehydroaromatization. Journal of Materials Chemistry A, 2017, 5, 8599-8607.	5.2	59
16	Monometallic iron catalysts with synergistic Na and S for higher alcohols synthesis via CO2 hydrogenation. Applied Catalysis B: Environmental, 2021, 298, 120556.	10.8	55
17	One-Pass Hydrogenation of CO₂ to Multibranched Isoparaffins over Bifunctional Zeolite-Based Catalysts. ACS Catalysis, 2020, 10, 14186-14194.	5.5	54
18	Fabrication of active Cuâ€“Zn nanoalloys on H-ZSM5 zeolite for enhanced dimethyl ether synthesis via syngas. Journal of Materials Chemistry A, 2014, 2, 8637.	5.2	43

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19	Tailored metastable Ceâ€“Zr oxides with highly distorted lattice oxygen for accelerating redox cycles. Chemical Science, 2018, 9, 3386-3394.	3.7	40
20	Completed encapsulation of cobalt particles in mesoporous H-ZSM-5 zeolite catalyst for direct synthesis of middle isoparaffin from syngas. Catalysis Communications, 2014, 55, 53-56.	1.6	38
21	Beyond Cars: Fischerâ€Tropsch Synthesis for Nonâ€Automotive Applications. ChemCatChem, 2019, 11, 1412-1424.	1.8	38
22	Ultra-high thermal stability of sputtering reconstructed Cu-based catalysts. Nature Communications, 2021, 12, 7209.	5.8	36
23	Direct syngas conversion to liquefied petroleum gas: Importance of a multifunctional metal-zeolite interface. Applied Energy, 2018, 209, 1-7.	5.1	35
24	Preparation and performance of Co based capsule catalyst with the zeolite shell sputtered by Pd for direct isoparaffin synthesis from syngas. Applied Catalysis A: General, 2013, 456, 75-81.	2.2	34
25	Successive reduction-oxidation activity of FeOx/TiO2 for dehydrogenation of ethane and subsequent CO2 activation. Applied Catalysis B: Environmental, 2020, 270, 118887.	10.8	34
26	Filter and buffer-pot confinement effect of hollow sphere catalyst for promoted activity and enhanced selectivity. Journal of Materials Chemistry A, 2013, 1, 5670.	5.2	33
27	Combining wet impregnation and dry sputtering to prepare highly-active CoPd/H-ZSM5 ternary catalysts applied for tandem catalytic synthesis of isoparaffins. Catalysis Science and Technology, 2014, 4, 1260.	2.1	32
28	Tunable isoparaffin and olefin yields in Fischerâ€“Tropsch synthesis achieved by a novel iron-based micro-capsule catalyst. Catalysis Today, 2015, 251, 41-46.	2.2	29
29	SiC foam monolith catalyst for pressurized adiabatic methane reforming. Applied Energy, 2013, 107, 297-303.	5.1	27
30	Tandem catalytic synthesis of benzene from CO₂and H₂. Catalysis Science and Technology, 2017, 7, 2695-2699.	2.1	27
31	Tuning interactions between zeolite and supported metal by physical-sputtering to achieve higher catalytic performances. Scientific Reports, 2013, 3, 2813.	1.6	25
32	Highly selective and multifunctional Cu/ZnO/Zeolite catalyst for one-step dimethyl ether synthesis: Preparing catalyst by bimetallic physical sputtering. Fuel, 2013, 112, 140-144.	3.4	25
33	Ruthenium promoted cobalt catalysts prepared by an autocombustion method directly used for Fischerâ€“Tropsch synthesis without further reduction. Catalysis Science and Technology, 2014, 4, 3099.	2.1	25
34	Flame-made Cu/ZrO₂ catalysts with metastable phase and strengthened interactions for CO₂ hydrogenation to methanol. Chemical Communications, 2021, 57, 7509-7512.	2.2	25
35	Tunable isoparaffin and olefin synthesis in Fischerâ€“Tropsch synthesis achieved by composite catalyst. Fuel Processing Technology, 2015, 136, 68-72.	3.7	24
36	Highly stable Sr and Na co-decorated Fe catalyst for high-valued olefin synthesis from CO2 hydrogenation. Applied Catalysis B: Environmental, 2022, 316, 121640.	10.8	24

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37	Synergy of macro-meso bimodal pore and Ni-Co alloy for enhanced stability in dry reforming of methane. Fuel, 2022, 310, 122375.	3.4	22
38	A facile solvent-free synthesis strategy for Co-imbedded zeolite-based Fischer-Tropsch catalysts for direct gasoline production. Chinese Journal of Catalysis, 2020, 41, 604-612.	6.9	21
39	Fischerâ€"Tropsch synthesis on impregnated cobalt-based catalysts: New insights into the effect of impregnation solutions and pH value. Journal of Energy Chemistry, 2016, 25, 994-1000.	7.1	20
40	From hydrophilic to hydrophobic: A promising approach to tackle high CO2 selectivity of Fe-based Fischer-Tropsch microcapsule catalysts. Catalysis Today, 2019, 330, 39-45.	2.2	20
41	Robust nickel cluster@Mes-HZSM-5 composite nanostructure with enhanced catalytic activity in the DTG reaction. Journal of Catalysis, 2018, 363, 26-33.	3.1	19
42	Tandem Reactions over Zeolite-Based Catalysts in Syngas Conversion. ACS Central Science, 2022, 8, 1047-1062.	5.3	18
43	Green Synthesis of Rice Bran Microsphere Catalysts Containing Natural Biopromoters. ChemCatChem, 2015, 7, 1642-1645.	1.8	17
44	Sputtered nano-cobalt on H-USY zeolite for selectively converting syngas to gasoline. Journal of Energy Chemistry, 2015, 24, 637-641.	7.1	17
45	Effects of metal-organic framework-derived iron carbide phases for CO hydrogenation activity to hydrocarbons. Fuel, 2020, 281, 118779.	3.4	17
46	Quick microwave assembling nitrogen-regulated graphene supported iron nanoparticles for Fischer-Tropsch synthesis. Chemical Engineering Journal, 2022, 429, 132063.	6.6	17
47	Isoparaffin-rich gasoline synthesis from DME over Ni-modified HZSM-5. Catalysis Science and Technology, 2016, 6, 8089-8097.	2.1	15
48	Importance of the Initial Oxidation State of Copper for the Catalytic Hydrogenation of Dimethyl Oxalate to Ethylene Glycol. ChemistryOpen, 2018, 7, 969-976.	0.9	15
49	Tunable Synthesis of Ethanol or Methyl Acetate via Dimethyl Oxalate Hydrogenation on Confined Iron Catalysts. ACS Catalysis, 2021, 11, 4908-4919.	5.5	15
50	Controlling phase transfer of molybdenum carbides by various metals for highly efficient hydrogen production. Journal of Energy Chemistry, 2021, 62, 191-197.	7.1	14
51	Structure sensitivity of iron oxide catalyst for CO2 hydrogenation. Catalysis Today, 2021, 371, 134-141.	2.2	13
52	Selectively Converting Biomass to Jet Fuel in Largeâ€scale Apparatus. ChemCatChem, 2017, 9, 2668-2674.	1.8	12
53	Manganese cluster induce the control synthesis of RHO- and CHA-type silicoaluminaphosphates for dimethylether to light olefin conversion. Fuel, 2019, 244, 104-109.	3.4	12
54	Oxidative dehydrogenation of ethane and subsequent CO2 activation on Ce-incorporated FeTiOx metal oxides. Chemical Engineering Journal, 2022, 433, 134621.	6.6	12

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55	EDTA chemical directly orient CO2 hydrogenation towards olefins. Chemical Engineering Journal, 2022, 438, 135597.	6.6	12
56	Fischerâ€“Tropsch synthesis over iron catalysts with corncob-derived promoters. Journal of Energy Chemistry, 2017, 26, 632-638.	7.1	11
57	Dendritic Neuron Model Trained by Biogeography-Based Optimization for Crude Oil Price Forecasting. , 2018, , .		11
58	Hydrogen bond promoted thermal stability enhancement of acetate based ionic liquid. Chinese Journal of Chemical Engineering, 2020, 28, 1293-1301.	1.7	11
59	Highly selective production of long-chain aldehydes, ketones or alcohols via syngas at a mild condition. Applied Catalysis B: Environmental, 2022, 307, 121155.	10.8	11
60	Fabrication of Ni-Based Bimodal Porous Catalyst for Dry Reforming of Methane. Catalysts, 2020, 10, 1220.	1.6	8
61	Sputtering FeCu nanoalloys as active sites for alkane formation in CO2 hydrogenation. Journal of Energy Chemistry, 2022, 70, 162-173.	7.1	8
62	Functionalized Natural Carbonâ€Supported Nanoparticles as Excellent Catalysts for Hydrocarbon Production. Chemistry - an Asian Journal, 2017, 12, 366-371.	1.7	7
63	Fe Doped Bimodal Macro/Mesoporous Nickel-Based Catalysts for CO₂â€“CH₄ Reforming. Industrial & Engineering Chemistry Research, 2022, 61, 10347-10356.	1.8	6
64	Fabrication of Stable Cu-Ce Catalyst with Active Interfacial Sites for NOx Elimination by Flame Spray Pyrolysis. Catalysts, 2022, 12, 432.	1.6	3
65	Expanding Small Pore Size of the Bimodal Catalyst with Surfactant and Its Application in Slurry-phase Fischer-Tropsch Synthesis. ChemistrySelect, 2016, 1, 778-783.	0.7	2