Guohui Yang

List of Publications by Year
in descending order

101 papers	4,280 citations	101543 36 h-index	123424 61 g-index
103 all docs	103 docs citations	103 times ranked	2967 citing authors

#	Article	IF	Citations
1	Integrated tuneable synthesis of liquid fuels via Fischerâ€“Tropsch technology. Nature Catalysis, 2018, 1, 787-793.	34.4	300
2	Confinement Effect and Synergistic Function of H-ZSM-5/Cu-ZnO-Al₂O₃ Capsule Catalyst for One-Step Controlled Synthesis. Journal of the American Chemical Society, 2010, 132, 8129-8136.	13.7	263
3	Significant Advances in C1 Catalysis: Highly Efficient Catalysts and Catalytic Reactions. ACS Catalysis, 2019, 9, 3026-3053.	11.2	238
4	Rationally Designing Bifunctional Catalysts as an Efficient Strategy To Boost CO₂ Hydrogenation Producing Value-Added Aromatics. ACS Catalysis, 2019, 9, 895-901.	11.2	236
5	One-pass selective conversion of syngas to <i>para</i>-xylene. Chemical Science, 2017, 8, 7941-7946.	7.4	154
6	An Introduction of CO₂ Conversion by Dry Reforming with Methane and New Route of Low-Temperature Methanol Synthesis. Accounts of Chemical Research, 2013, 46, 1838-1847.	15.6	137
7	Hydrogenation of CO₂ into aromatics over a ZnCrO_xâ€“zeolite composite catalyst. Chemical Communications, 2019, 55, 973-976.	4.1	102
8	Synthesis of isoalkanes over a core (Feâ€“Znâ€“Zr)â€“shell (zeolite) catalyst by CO₂ hydrogenation. Chemical Communications, 2016, 52, 7352-7355.	4.1	95
9	Design of a coreâ€“shell catalyst: an effective strategy for suppressing side reactions in syngas for direct selective conversion to light olefins. Chemical Science, 2020, 11, 4097-4105.	7.4	95
10	Direct and Oriented Conversion of CO₂ into Valueâ€Added Aromatics. Chemistry - A European Journal, 2019, 25, 5149-5153.	3.3	89
11	Designing core (Cu/ZnO/Al2O3)â€“shell (SAPO-11) zeolite capsule catalyst with a facile physical way for dimethyl ether direct synthesis from syngas. Chemical Engineering Journal, 2015, 270, 605-611.	12.7	88
12	Metal 3D printing technology for functional integration of catalytic system. Nature Communications, 2020, 11, 4098.	12.8	82
13	Iso-butanol direct synthesis from syngas over the alkali metals modified Cr/ZnO catalysts. Applied Catalysis A: General, 2015, 505, 141-149.	4.3	69
14	Direct CO2 hydrogenation to light olefins by suppressing CO by-product formation. Fuel Processing Technology, 2019, 196, 106174.	7.2	69
15	Direct Conversion of CO₂ to Ethanol Boosted by Intimacy-Sensitive Multifunctional Catalysts. ACS Catalysis, 2021, 11, 11742-11753.	11.2	69
16	A new method of ethanol synthesis from dimethyl ether and syngas in a sequential dual bed reactor with the modified zeolite and Cu/ZnO catalysts. Catalysis Today, 2011, 164, 425-428.	4.4	66
17	Controllable encapsulation of cobalt clusters inside carbon nanotubes as effective catalysts for Fischerâ€“Tropsch synthesis. Catalysis Today, 2013, 215, 24-28.	4.4	66
18	A new coreâ€“shell-like capsule catalyst with SAPO-46 zeolite shell encapsulated Cr/ZnO for the controlled tandem synthesis of dimethyl ether from syngas. Fuel, 2013, 111, 727-732.	6.4	59

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19	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.	10.3	59
20	Effective Suppression of CO Selectivity for CO₂ Hydrogenation to High-Quality Gasoline. ACS Catalysis, 2021, 11, 1528-1547.	11.2	54
21	A brand new zeolite catalyst for carbonylation reaction. Chemical Communications, 2019, 55, 1048-1051.	4.1	52
22	Facile synthesis of H-type zeolite shell on a silica substrate for tandem catalysis. Chemical Communications, 2012, 48, 1263-1265.	4.1	51
23	Synergetic catalysis of bimetallic copperâ€“cobalt nanosheets for direct synthesis of ethanol and higher alcohols from syngas. Catalysis Science and Technology, 2018, 8, 3936-3947.	4.1	49
24	Synergistic Effect of a Boronâ€Doped Carbonâ€Nanotubeâ€Supported Cu Catalyst for Selective Hydrogenation of Dimethyl Oxalate to Ethanol. Chemistry - A European Journal, 2017, 23, 8252-8261.	3.3	47
25	Active and regioselective rhodium catalyst supported on reduced graphene oxide for 1-hexene hydroformylation. Catalysis Science and Technology, 2016, 6, 1162-1172.	4.1	45
26	Preparation and application of Cu/ZnO catalyst by urea hydrolysis method for low-temperature methanol synthesis from syngas. Fuel Processing Technology, 2017, 167, 69-77.	7.2	44
27	Induced high selectivity methanol formation during CO2 hydrogenation over a CuBr2-modified CuZnZr catalyst. Journal of Catalysis, 2020, 389, 47-59.	6.2	44
28	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.	10.3	43
29	Ethanol direct synthesis from dimethyl ether and syngas on the combination of noble metal impregnated zeolite with Cu/ZnO catalyst. Catalysis Today, 2014, 232, 22-26.	4.4	42
30	Mechanistic insight to acidity effects of Ga/HZSM-5 on its activity for propane aromatization. RSC Advances, 2015, 5, 92222-92233.	3.6	42
31	Capsule-like zeolite catalyst fabricated by solvent-free strategy for para-Xylene formation from CO2 hydrogenation. Applied Catalysis B: Environmental, 2022, 303, 120906.	20.2	42
32	Formic acid directly assisted solid-state synthesis of metallic catalysts without further reduction: As-prepared Cu/ZnO catalysts for low-temperature methanol synthesis. Journal of Catalysis, 2013, 302, 83-90.	6.2	40
33	One-Pot Hydrothermal Synthesis of Nitrogen Functionalized Carbonaceous Material Catalysts with Embedded Iron Nanoparticles for CO₂ Hydrogenation. ACS Sustainable Chemistry and Engineering, 2019, 7, 8331-8339.	6.7	40
34	FeMn@HZSM-5 capsule catalyst for light olefins direct synthesis via Fischer-Tropsch synthesis: Studies on depressing the CO2 formation. Applied Catalysis B: Environmental, 2022, 300, 120713.	20.2	40
35	Recent advances in the routes and catalysts for ethanol synthesis from syngas. Chemical Society Reviews, 2022, 51, 5606-5659.	38.1	40
36	Beyond Cars: Fischerâ€Tropsch Synthesis for Nonâ€Automotive Applications. ChemCatChem, 2019, 11, 1412-1424.	3.7	38

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37	Vapor-phase low-temperature methanol synthesis from CO2-containing syngas via self-catalysis of methanol and Cu/ZnO catalysts prepared by solid-state method. Applied Catalysis B: Environmental, 2020, 279, 119382.	20.2	38
38	The role of potassium promoter in isobutanol synthesis over Znâ€“Cr based catalysts. Catalysis Science and Technology, 2016, 6, 4105-4115.	4.1	37
39	Space-Confined Self-Regulation Mechanism from a Capsule Catalyst to Realize an Ethanol Direct Synthesis Strategy. ACS Catalysis, 2020, 10, 1366-1374.	11.2	37
40	Probing the promotional roles of cerium in the structure and performance of Cu/SiO₂ catalysts for ethanol production. Catalysis Science and Technology, 2018, 8, 6441-6451.	4.1	36
41	Probing Hydrophobization of a Cu/ZnO Catalyst for Suppression of Waterâ€“Gas Shift Reaction in Syngas Conversion. ACS Catalysis, 2021, 11, 4633-4643.	11.2	34
42	Enhanced Liquid Fuel Production from CO₂ Hydrogenation: Catalytic Performance of Bimetallic Catalysts over a Twoâ€Stage Reactor System. ChemistrySelect, 2018, 3, 13705-13711.	1.5	33
43	Selective Conversion of CO₂ into <i>para</i>â€Xylene over a ZnCr₂O₄â€ZSMâ€5 Catalyst. ChemSusChem, 2020, 13, 6541-6545.	6.8	33
44	Pt Nanoparticles Loaded on Reduced Graphene Oxide as an Effective Catalyst for the Direct Oxidation of 5-Hydroxymethylfurfural (HMF) to Produce 2,5-Furandicarboxylic Acid (FDCA) under Mild Conditions. Bulletin of the Chemical Society of Japan, 2014, 87, 1124-1129.	3.2	32
45	Facile solid-state synthesis of Cuâ€“Znâ€“O catalysts for novel ethanol synthesis from dimethyl ether (DME) and syngas (CO+H2). Fuel, 2013, 109, 54-60.	6.4	31
46	Structureâ€“Performance Correlations over Cu/ZnO Interface for Low-Temperature Methanol Synthesis from Syngas Containing CO₂. ACS Applied Materials & Interfaces, 2021, 13, 8191-8205.	8.0	31
47	A Catalyst for Oneâ€step Isoparaffin Production via Fischerâ€“Tropsch Synthesis: Growth of a Hâ€Mordenite Shell Encapsulating a Fused Iron Core. ChemCatChem, 2013, 5, 3101-3106.	3.7	30
48	Development of dual-membrane coated Fe/SiO2 catalyst for efficient synthesis of isoparaffins directly from syngas. Journal of Membrane Science, 2015, 475, 22-29.	8.2	30
49	Macroscopic assembly style of catalysts significantly determining their efficiency for converting CO₂ to gasoline. Catalysis Science and Technology, 2019, 9, 5401-5412.	4.1	30
50	Tunable isoparaffin and olefin yields in Fischerâ€“Tropsch synthesis achieved by a novel iron-based micro-capsule catalyst. Catalysis Today, 2015, 251, 41-46.	4.4	29
51	Ethanol and Higher Alcohols Synthesis from Syngas over CuCoM (M=Fe, Cr, Ga and Al) Nanoplates Derived From Hydrotalciteâ€Like Precursors. ChemCatChem, 2019, 11, 2695-2706.	3.7	29
52	Design of an Autoreduced Copper in Carbon Nanotube Catalyst to Realize the Precisely Selective Hydrogenation of Dimethyl Oxalate. ChemCatChem, 2017, 9, 1067-1075.	3.7	28
53	Designing a novel dual bed reactor to realize efficient ethanol synthesis from dimethyl ether and syngas. Catalysis Science and Technology, 2018, 8, 2087-2097.	4.1	28
54	The real active sites over Znâ€“Cr catalysts for direct synthesis of isobutanol from syngas: structure-activity relationship. RSC Advances, 2015, 5, 89273-89281.	3.6	27

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55	Tandem catalytic synthesis of benzene from CO₂and H₂. Catalysis Science and Technology, 2017, 7, 2695-2699.	4.1	27
56	Urea-derived Cu/ZnO catalyst being dried by supercritical CO2 for low-temperature methanol synthesis. Fuel, 2020, 268, 117213.	6.4	27
57	Heteroatom doped iron-based catalysts prepared by urea self-combustion method for efficient CO2 hydrogenation. Fuel, 2020, 276, 118102.	6.4	27
58	Highly-dispersed Ru nanoparticles sputtered on graphene for hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 7320-7325.	7.1	26
59	Boosting liquid hydrocarbons selectivity from CO2 hydrogenation by facilely tailoring surface acid properties of zeolite via a modified Fischer-Tropsch synthesis. Fuel, 2021, 306, 121684.	6.4	26
60	Oriented synthesis of target products in liquid-phase tandem reaction over a tripartite zeolite capsule catalyst. Chemical Science, 2013, 4, 3958.	7.4	25
61	Insight into the Nanoparticle Growth in Supported Ni Catalysts during the Early Stage of CO Hydrogenation Reaction: The Important Role of Adsorbed CO Molecules. ACS Catalysis, 2018, 8, 6367-6374.	11.2	25
62	Design of a Hierarchical Meso/Macroporous Zeoliteâ€Supported Cobalt Catalyst for the Enhanced Direct Synthesis of Isoparaffins from Syngas. ChemCatChem, 2015, 7, 682-689.	3.7	23
63	A Wellâ€Defined Coreâ€“Shellâ€Structured Capsule Catalyst for Direct Conversion of CO₂ into Liquefied Petroleum Gas. ChemSusChem, 2020, 13, 2060-2065.	6.8	23
64	Multi-Promoters Regulated Iron Catalyst with Well-Matching Reverse Water-Gas Shift and Chain Propagation for Boosting CO2 Hydrogenation. Journal of CO2 Utilization, 2021, 52, 101700.	6.8	22
65	Structural and kinetical studies on the supercritical CO2 dried Cu/ZnO catalyst for low-temperature methanol synthesis. Chemical Engineering Journal, 2016, 295, 160-166.	12.7	21
66	Hierarchical nano-sized ZnZr-Silicalite-1 multifunctional catalyst for selective conversion of ethanol to butadiene. Applied Catalysis B: Environmental, 2022, 301, 120822.	20.2	20
67	Building premium secondary reaction field with a miniaturized capsule catalyst to realize efficient synthesis of a liquid fuel directly from syngas. Catalysis Science and Technology, 2017, 7, 1996-2000.	4.1	19
68	A Carbonylation Zeolite with Specific Nanosheet Structure for Efficient Catalysis. ACS Nano, 2021, 15, 13568-13578.	14.6	18
69	Boosting the synthesis of value-added aromatics directly from syngas <i>via</i> a Cr₂O₃ and Ga doped zeolite capsule catalyst. Chemical Science, 2021, 12, 7786-7792.	7.4	18
70	Direct Conversion of CO₂ to Aromatics over Kâ€“Znâ€“Fe/ZSM-5 Catalysts via a Fischerâ€“Tropsch Synthesis Pathway. Industrial & Engineering Chemistry Research, 2022, 61, 10336-10346.	3.7	18
71	Hydroformylation of 1-Hexene on Silicalite-1 Zeolite Membrane Coated Pdâ€“Co/A.C. Catalyst. Topics in Catalysis, 2010, 53, 608-614.	2.8	17
72	Enhanced performance and stability of Cu/ZnO catalyst by introducing MgO for low-temperature methanol synthesis using methanol itself as catalytic promoter. Fuel, 2022, 315, 123272.	6.4	17

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73	Insights into the synergistic effect of active centers over ZnMg/SBA-15 catalysts in direct synthesis of butadiene from ethanol. Reaction Chemistry and Engineering, 2021, 6, 548-558.	3.7	14
74	One-Pot Hydrothermal Synthesis of Multifunctional ZnZrTUD-1 Catalysts for Highly Efficient Direct Synthesis of Butadiene from Ethanol. ACS Sustainable Chemistry and Engineering, 2021, 9, 10569-10578.	6.7	14
75	LDH-Derived (CuZn)<i>_x</i>Al<i>_y</i> Bifunctional Catalyst for Direct Synthesis of Dimethyl Ether from Syngas. Industrial & Engineering Chemistry Research, 2020, 59, 11087-11097.	3.7	13
76	Selectively Converting Biomass to Jet Fuel in Largeâ€scale Apparatus. ChemCatChem, 2017, 9, 2668-2674.	3.7	12
77	Designing ZrO2-based catalysts for the direct synthesis of isobutene from syngas: The studies on Zn promoter role. Fuel, 2019, 243, 34-40.	6.4	12
78	Ammonia pools in zeolites for direct fabrication of catalytic centers. Nature Communications, 2022, 13, 935.	12.8	12
79	Facile Preparation of Cuâ€Al Oxide Catalysts and Their Application in the Direct Synthesis of Ethanol from Syngas. ChemistrySelect, 2017, 2, 10365-10370.	1.5	11
80	Sputtered Cu-ZnO/Î³-Al₂O₃ Bifunctional Catalyst with Ultra-Low Cu Content Boosting Dimethyl Ether Steam Reforming and Inhibiting Side Reactions. Industrial & Engineering Chemistry Research, 2019, 58, 7085-7093.	3.7	11
81	More efficient ethanol synthesis from dimethyl ether and syngas over the combined nano-sized ZSM-35 zeolite with CuZnAl catalyst. Catalysis Today, 2021, 369, 88-94.	4.4	11
82	New Method for Ethanol Synthesis from Dimethyl Ether and Syngas <i>via</i> Two-stage Reaction. Journal of the Japan Petroleum Institute, 2009, 52, 357-358.	0.6	9
83	Effect of Preparation Method on ZrO2-Based Catalysts Performance for Isobutanol Synthesis from Syngas. Catalysts, 2019, 9, 752.	3.5	9
84	Influence of Carbon Content in Ni-Doped Mo2C Catalysts on CO Hydrogenation to Mixed Alcohol. Catalysts, 2021, 11, 230.	3.5	9
85	Tuning the Cu⁺ species of Cu-based catalysts for direct synthesis of ethanol from syngas. New Journal of Chemistry, 2021, 45, 20832-20839.	2.8	9
86	Selective direct conversion of aqueous ethanol into butadiene <i>via</i> rational design of multifunctional catalysts. Catalysis Science and Technology, 2022, 12, 2210-2222.	4.1	9
87	Design of a zeolite capsule catalyst by controlling the support size for the direct synthesis of isoparaffin. Research on Chemical Intermediates, 2008, 34, 771-779.	2.7	7
88	A Study on the Effect of pH Value of Impregnation Solution in Nickel Catalyst Preparation for Methane Dry Reforming Reaction. ChemistrySelect, 2019, 4, 8953-8959.	1.5	6
89	NaBH₄<i>Inâ€situ</i> Reduced Cobalt Catalyst Supported on Zeolite A for 1â€Hexene Hydroformylation. ChemistrySelect, 2019, 4, 10447-10451.	1.5	6
90	Catalytic Oligomerization of Isobutyl Alcohol to Hydrocarbon Liquid Fuels over Acidic Zeolite Catalysts. ChemistrySelect, 2020, 5, 528-532.	1.5	6

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91	Facile Synthesis of Protonâ€Type ZSMâ€5 by Using Quasiâ€Solidâ€Phase (QSP) Method. Chemistry - A European Journal, 2020, 26, 8532-8535.	3.3	5
92	Role of Ga³⁺ promoter in the direct synthesis of iso-butanol <i>via</i> syngas over a Kâ€“ZnO/ZnCr₂O₄ catalyst. Catalysis Science and Technology, 2021, 11, 1077-1088.	4.1	5
93	From Single Metal to Bimetallic Sites: Enhanced Higher Hydrocarbons Yield of CO₂ Hydrogenation over Bimetallic Catalysts. ChemistrySelect, 2021, 6, 5241-5247.	1.5	5
94	Novel Three-component Zeolite Capsule Catalyst for Direct Synthesis of Isoparaffin. Journal of the Japan Petroleum Institute, 2009, 52, 216-217.	0.6	4
95	Fabrication of a CuZn-based catalyst using a polyethylene glycol surfactant and supercritical drying. Catalysis Science and Technology, 2020, 10, 8410-8420.	4.1	4
96	Silicaliteâ€1 Encapsulated Fe Particles over an Inâ€situ Crystal Process for Syngas to Gasoline with Low CO₂ Selectivity. ChemistrySelect, 2018, 3, 13632-13637.	1.5	3
97	Propane Aromatization Tuned by Tailoring Cr Modified Ga/ZSMâ€5 Catalysts. ChemCatChem, 2021, 13, 3601-3610.	3.7	3
98	Resistance against Carbon Deposition via Controlling Spatial Distance of Catalytic Components in Methane Dehydroaromatization. Catalysts, 2021, 11, 148.	3.5	3
99	Silicalite-1 encapsulated rhodium nanoparticles for hydroformylation of 1-hexene. Catalysis Today, 2023, 410, 150-156.	4.4	3
100	Polyethylene Glycol Addition Effect on Preparing Cuâ€“Znâ€“O Catalysts for Low-temperature Methanol Synthesis. Journal of the Japan Petroleum Institute, 2011, 54, 344-345.	0.6	2
101	Probing the promotional roles of lanthanum in physicochemical properties and performance of ZnZr/Si-beta catalyst for direct conversion of aqueous ethanol to butadiene. Catalysis Today, 2022, , .	4.4	2