# Xiaohao Liu

## List of Publications by Citations



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|---|---|---|---|
| 64 papers | 1,934 citations | 27 h-index | 42 g-index |
| 71 ext. papers | 2,627 ext. citations | 7.2 avg, IF | 5.38 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 64 | Turning Au Nanoclusters Catalytically Active for Visible-Light-Driven CO Reduction through Bridging Ligands. *Journal of the American Chemical Society*, **2018**, 140, 16514-16520 | 16.4 | 134 |
| 63 | Oxygen Vacancy-Rich In-Doped CoO/CoP Heterostructure as an Effective Air Cathode for Rechargeable Zn-Air Batteries. *Small*, **2019**, 15, e1904210 | 11 | 102 |
| 62 | Insights into the Influence of CeO2 Crystal Facet on CO2 Hydrogenation to Methanol over Pd/CeO2 Catalysts. *ACS Catalysis*, **2020**, 10, 11493-11509 | 13.1 | 87 |
| 61 | Insights into the influence of support and potassium or sulfur promoter on iron-based Fischer□Tropsch synthesis: understanding the control of catalytic activity, selectivity to lower olefins, and catalyst deactivation. *Catalysis Science and Technology*, **2017**, 7, 1245-1265 | 5.5 | 72 |
| 60 | Interfacial Effects of CeO2-Supported Pd Nanorod in Catalytic CO Oxidation: A Theoretical Study. *Journal of Physical Chemistry C*, **2015**, 119, 12923-12934 | 3.8 | 71 |
| 59 | Hydrogenation of CO2 into hydrocarbons: enhanced catalytic activity over Fe-based Fischer□Tropsch catalysts. *Catalysis Science and Technology*, **2018**, 8, 4097-4107 | 5.5 | 70 |
| 58 | Synthesis of {111} Facet-Exposed MgO with Surface Oxygen Vacancies for Reactive Oxygen Species Generation in the Dark. *ACS Applied Materials & Interfaces*, **2017**, 9, 12687-12693 | 9.5 | 69 |
| 57 | Selective production of aromatics from CO2. *Catalysis Science and Technology*, **2019**, 9, 593-610 | 5.5 | 69 |
| 56 | Unravelling the New Roles of Na and Mn Promoter in CO2 Hydrogenation over Fe3O4-Based Catalysts for Enhanced Selectivity to Light □Olefins. *ChemCatChem*, **2018**, 10, 4718-4732 | 5.2 | 65 |
| 55 | Mechanistic Study of Selective Catalytic Reduction of NO with NH3 on W-Doped CeO2 Catalysts: Unraveling the Catalytic Cycle and the Role of Oxygen Vacancy. *Journal of Physical Chemistry C*, **2016**, 120, 2271-2283 | 3.8 | 63 |
| 54 | Synthesis of higher alcohols by Fischer□Tropsch synthesis over alkali metal-modified cobalt catalysts. *Applied Catalysis A: General*, **2013**, 458, 145-154 | 5.1 | 63 |
| 53 | Iron-Based Fischer□Tropsch Synthesis for the Efficient Conversion of Carbon Dioxide into Isoparaffins. *ChemCatChem*, **2016**, 8, 1303-1307 | 5.2 | 58 |
| 52 | Conversion of syngas toward aromatics over hybrid Fe-based Fischer-Tropsch catalysts and HZSM-5 zeolites. *Applied Catalysis A: General*, **2018**, 552, 168-183 | 5.1 | 56 |
| 51 | Particle size effects in the selective hydrogenation of cinnamaldehyde over supported palladium catalysts. *RSC Advances*, **2016**, 6, 75541-75551 | 3.7 | 50 |
| 50 | Hydroformylation of olefins by Au/Co3O4 catalysts. *Applied Catalysis B: Environmental*, **2009**, 92, 411-421 | 11.8 | 49 |
| 49 | Two-dimensional graphene-directed formation of cylindrical iron carbide nanocapsules for Fischer□Tropsch synthesis. *Catalysis Science and Technology*, **2017**, 7, 4609-4621 | 5.5 | 47 |
| 48 | Investigation of the highly tunable selectivity to linear □olefins in Fischer□Tropsch synthesis over silica-supported Co and CoMn catalysts by carburization□□eduction pretreatment. *Catalysis Science and Technology*, **2017**, 7, 4736-4755 | 5.5 | 41 |

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| 47 | Exploring pretreatment effects in Co/SiO 2 Fischer-Tropsch catalysts: Different oxidizing gases applied to oxidation-reduction process. *Applied Catalysis B: Environmental*, **2017**, 210, 1-13 | 21.8 | 39 |
| 46 | Effects of solvent on Fischer‐Tropsch synthesis. *Applied Catalysis A: General*, **2006**, 303, 251-257 | 5.1 | 36 |
| 45 | Computational Design of a CeO2-Supported Pd-Based Bimetallic Nanorod for CO Oxidation. *Journal of Physical Chemistry C*, **2016**, 120, 5557-5564 | 3.8 | 35 |
| 44 | Insight into the Intrinsic Active Site for Selective Production of Light Olefins in Cobalt-Catalyzed Fischer‐Tropsch Synthesis. *ACS Catalysis*, **2019**, 9, 7073-7089 | 13.1 | 34 |
| 43 | Carbonate-mediated Mars-van Krevelen mechanism for CO oxidation on cobalt-doped ceria catalysts: facet-dependence and coordination-dependence. *Physical Chemistry Chemical Physics*, **2018**, 20, 16045-16059 | 3.6 | 33 |
| 42 | Supported Fe/MnOx catalyst with Ag doping for remarkably enhanced catalytic activity in Fischer‐Tropsch synthesis. *Catalysis Science and Technology*, **2018**, 8, 1953-1970 | 5.5 | 31 |
| 41 | CO2 formation mechanism in Fischer‐Tropsch synthesis over iron-based catalysts: a combined experimental and theoretical study. *Catalysis Science and Technology*, **2018**, 8, 5288-5301 | 5.5 | 31 |
| 40 | Supercritical phase process for direct synthesis of middle iso-paraffins from modified Fischer‐Tropsch reaction. *Catalysis Today*, **2005**, 106, 154-160 | 5.3 | 30 |
| 39 | Highly active Co/SiC catalysts with controllable dispersion and reducibility for Fischer‐Tropsch synthesis. *Fuel*, **2013**, 112, 483-488 | 7.1 | 28 |
| 38 | Solvent-free rapid synthesis of porous CeWOx by a mechanochemical self-assembly strategy for the abatement of NOx. *Journal of Materials Chemistry A*, **2020**, 8, 6717-6731 | 13 | 27 |
| 37 | Particle-Size-Dependent Methane Selectivity Evolution in Cobalt-Based Fischer‐Tropsch Synthesis. *ACS Catalysis*, **2020**, 10, 2799-2816 | 13.1 | 27 |
| 36 | Direct production of aromatics from syngas over a hybrid FeMn Fischer‐Tropsch catalyst and HZSM-5 zeolite: local environment effect and mechanism-directed tuning of the aromatic selectivity. *Catalysis Science and Technology*, **2019**, 9, 3933-3946 | 5.5 | 25 |
| 35 | Probing cobalt localization on HZSM-5 for efficient methane dehydroaromatization catalysts. *Journal of Catalysis*, **2020**, 387, 102-118 | 7.3 | 25 |
| 34 | Anti-ASF distribution in Fischer-Tropsch synthesis over unsupported cobalt catalysts in a batch slurry phase reactor. *Catalysis Today*, **2011**, 175, 494-503 | 5.3 | 25 |
| 33 | Assessing the formation of cobalt carbide and its catalytic performance under realistic reaction conditions and tuning product selectivity in a cobalt-based FTS reaction. *Catalysis Science and Technology*, **2019**, 9, 3238-3258 | 5.5 | 24 |
| 32 | CeO2 supported Pd dimers boosting CO2 hydrogenation to ethanol. *Applied Catalysis B: Environmental*, **2021**, 291, 120122 | 21.8 | 21 |
| 31 | CH conversion over Ni/HZSM-5 catalyst in the absence of oxygen: decomposition or dehydroaromatization?. *Chemical Communications*, **2020**, 56, 4396-4399 | 5.8 | 20 |
| 30 | Controllable Fischer‐Tropsch Synthesis by In Situ-Produced 1-Olefins. *ChemCatChem*, **2010**, 2, 1569-1572 | 5.2 | 19 |

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| 29 | Effective control of carbon number distribution during Fischer□ropsch synthesis over supported cobalt catalyst. *Catalysis Communications*, **2007**, 8, 1329-1335 | 3.2 | 19 |
| 28 | Elucidation of reaction network and effective control of carbon number distribution in the three phase Fischer□ropsch synthesis. *Applied Catalysis A: General*, **2007**, 333, 211-218 | 5.1 | 18 |
| 27 | Investigation of the deactivation behavior of Co catalysts in Fischer□ropsch synthesis using encapsulated Co nanoparticles with controlled SiO2 shell layer thickness. *Catalysis Science and Technology*, **2020**, 10, 1182-1192 | 5.5 | 17 |
| 26 | Hydrogenation of CO2 to methanol over Cu/ZnCr catalyst. *Fuel*, **2019**, 256, 115975 | 7.1 | 16 |
| 25 | Selective Synthesis of Higher Linear □lefins over Cobalt Fischer□ropsch Catalyst. *Catalysis Letters*, **2006**, 108, 11-13 | 2.8 | 15 |
| 24 | Unraveling Reactivity Descriptors and Structure Sensitivity in Low-Temperature NH3-SCR Reaction over CeTiOx Catalysts: A Combined Computational and Experimental Study. *ACS Catalysis*, **2021**, 11, 7613-7636 | 13.1 | 15 |
| 23 | Selective mild oxidation of methane to methanol or formic acid on Fe□MOR catalysts. *Catalysis Science and Technology*, **2019**, 9, 6946-6956 | 5.5 | 14 |
| 22 | Experimental Investigation on the Two-Sided Effect of Acidic HZSM-5 on the Catalytic Performance of Composite Fe-Based Fischer□ropsch Catalysts and HZSM-5 Zeolite in the Production of Aromatics from CO2/H2. *Industrial & Engineering Chemistry Research*, **2020**, 59, 8581-8591 | 3.9 | 13 |
| 21 | Investigation on converting 1-butene and ethylene into propene metathesis reaction over W-based catalysts.. *RSC Advances*, **2018**, 8, 8372-8384 | 3.7 | 12 |
| 20 | Sodium-Mediated Bimetallic Fe□Ni Catalyst Boosts Stable and Selective Production of Light Aromatics over HZSM-5 Zeolite. *ACS Catalysis*, **2021**, 11, 3553-3574 | 13.1 | 12 |
| 19 | Distinguishing external and internal coke depositions on micron-sized HZSM-5 via catalyst-assisted temperature-programmed oxidation. *New Journal of Chemistry*, **2019**, 43, 13938-13946 | 3.6 | 10 |
| 18 | Insight into the Potassium Poisoning Effect for Selective Catalytic Reduction of NOx with NH3 over Fe/Beta. *ACS Catalysis*,14727-14739 | 13.1 | 10 |
| 17 | Insight into the active site and reaction mechanism for selective oxidation of methane to methanol using H2O2 on a Rh1/ZrO2 catalyst. *New Journal of Chemistry*, **2020**, 44, 1632-1639 | 3.6 | 10 |
| 16 | A Facile Fabrication of Supported Ni/SiO2 Catalysts for Dry Reforming of Methane with Remarkably Enhanced Catalytic Performance. *Catalysts*, **2019**, 9, 183 | 4 | 9 |
| 15 | Effect of Bed Height on the Performance of a Fixed Mo/HZSM-5 Bed in Direct Aromatization of Methane. *Chemical Engineering and Technology*, **2016**, 39, 2059-2065 | 2 | 7 |
| 14 | Glutathione-protected gold nanocluster decorated cadmium sulfide with enhanced photostability and photocatalytic activity. *Journal of Colloid and Interface Science*, **2018**, 530, 120-126 | 9.3 | 7 |
| 13 | Gold nanoparticles assisted formation of cobalt species for intermolecular hydroaminomethylation and intramolecular cyclocarbonylation of olefins. *Catalysis Science and Technology*, **2013**, 3, 3000 | 5.5 | 7 |
| 12 | Unravelling the structure-performance relationship over iron-based Fischer-Tropsch synthesis by depositing the iron carbonyl in syngas on SiO2 in a fixed-bed reactor. *Applied Catalysis A: General*, **2019**, 572, 197-209 | 5.1 | 7 |

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| 11 | Fischer-Tropsch synthesis to lower □olefins over cobalt-based catalysts: Dependence of the promotional effect of promoter on supports. *Catalysis Today*, **2021**, 369, 158-166 | 5.3 | 6 |
| 10 | Coupling the Atomically Dispersed Fe-N3 Sites with Sub-5□nm Pd Nanocrystals Confined in N-Doped Carbon Nanobelts to Boost the Oxygen Reduction for Microbial Fuel Cells. *Advanced Functional Materials*,2107683 | 15.6 | 5 |
| 9 | Suppressing C□□ Bond Dissociation for Efficient Ethane Dehydrogenation over the Isolated Co(II) Sites in SAPO-34. *ACS Catalysis*,13001-13019 | 13.1 | 5 |
| 8 | Identifying the crucial role of water and chloride for efficient mild oxidation of methane to methanol over a [Cu2(□O)]2+-ZSM-5 catalyst. *Journal of Catalysis*, **2021**, 405, 1-1 | 7.3 | 4 |
| 7 | Dependence of copper particle size and interface on methanol and CO formation in CO2 hydrogenation over Cu@ZnO catalysts. *Catalysis Science and Technology*, **2022**, 12, 551-564 | 5.5 | 3 |
| 6 | A high growth rate process of ALD CeOx with amidinato-cerium [(N-iPr-AMD)3Ce] and O3 as precursors. *Journal of Materials Science*, **2020**, 55, 5378-5389 | 4.3 | 2 |
| 5 | Remarkably enhanced performance of the metathesis reaction of ethylene and 1-butene to propene using one-step prepared W-MCM-41 catalysts.. *RSC Advances*, **2019**, 9, 40618-40627 | 3.7 | 2 |
| 4 | Insights into Fe species structure-performance relationship for direct methane conversion toward oxygenates over Fe-MOR catalysts. *ChemCatChem*, | 5.2 | 2 |
| 3 | Structural evolution of large Fe3O4 microspheres on graphene oxide for efficient conversion of syngas into □olefins. *New Journal of Chemistry*, **2020**, 44, 4987-4991 | 3.6 | 1 |
| 2 | Effect of potassium on GO-modified large Fe3O4 microspheres for the production of □olefins. *Journal of Fuel Chemistry and Technology*, **2021**, 49, 933-944 | 1.8 | 1 |
| 1 | Tuning the Lewis acidity of ZrO2 for efficient conversion of CH4 and CO2 into acetic acid. *New Journal of Chemistry*, **2021**, 45, 8978-8985 | 3.6 | 1 |