

# Peng Gao

## List of Publications by Year in descending order

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65  
papers

5,756  
citations

101384

36  
h-index

102304

66  
g-index

67  
all docs

67  
docs citations

67  
times ranked

4654  
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct conversion of CO <sub>2</sub> into liquid fuels with high selectivity over a bifunctional catalyst. Nature Chemistry, 2017, 9, 1019-1024.	6.6	757
2	A review of the catalytic hydrogenation of carbon dioxide into value-added hydrocarbons. Catalysis Science and Technology, 2017, 7, 4580-4598.	2.1	385
3	Direct Production of Lower Olefins from CO <sub>2</sub> Conversion via Bifunctional Catalysis. ACS Catalysis, 2018, 8, 571-578.	5.5	382
4	Influence of Zr on the performance of Cu/Zn/Al/Zr catalysts via hydrotalcite-like precursors for CO <sub>2</sub> hydrogenation to methanol. Journal of Catalysis, 2013, 298, 51-60.	3.1	322
5	A review of research progress on heterogeneous catalysts for methanol synthesis from carbon dioxide hydrogenation. Catalysis Today, 2019, 330, 61-75.	2.2	214
6	Rationally designed indium oxide catalysts for CO <sub>2</sub> hydrogenation to methanol with high activity and selectivity. Science Advances, 2020, 6, eaaz2060.	4.7	211
7	Influence of modifier (Mn, La, Ce, Zr and Y) on the performance of Cu/Zn/Al catalysts via hydrotalcite-like precursors for CO <sub>2</sub> hydrogenation to methanol. Applied Catalysis A: General, 2013, 468, 442-452.	2.2	209
8	Novel Heterogeneous Catalysts for CO <sub>2</sub> Hydrogenation to Liquid Fuels. ACS Central Science, 2020, 6, 1657-1670.	5.3	182
9	Selective Production of Aromatics Directly from Carbon Dioxide Hydrogenation. ACS Catalysis, 2019, 9, 3866-3876.	5.5	177
10	Role of zirconium in direct CO <sub>2</sub> hydrogenation to lower olefins on oxide/zeolite bifunctional catalysts. Journal of Catalysis, 2018, 364, 382-393.	3.1	174
11	Effects of Sodium on the Catalytic Performance of CoMn Catalysts for Fischer-Tropsch to Olefin Reactions. ACS Catalysis, 2017, 7, 3622-3631.	5.5	157
12	Methanol synthesis from CO <sub>2</sub> hydrogenation over La <sub>1-x</sub> M <sub>x</sub> Cu <sub>1-x</sub> Zn <sub>x</sub> O (M=Al, Ce, Mg, Zr) catalysts derived from perovskite-type precursors. Journal of Power Sources, 2014, 251, 113-121.	4.0	115
13	Highly efficient Cu-based catalysts via hydrotalcite-like precursors for CO <sub>2</sub> hydrogenation to methanol. Catalysis Today, 2017, 281, 327-336.	2.2	111
14	Controlled Synthesis of Double- and Multiwall Silver Nanotubes with Template Organogel from a Bolaamphiphile. Langmuir, 2006, 22, 775-779.	1.6	107
15	Selective Transformation of CO <sub>2</sub> and H <sub>2</sub> into Lower Olefins over In <sub>2</sub> O <sub>3</sub> -ZnZrO <sub>3</sub> /SAPO-34 Bifunctional Catalysts. ChemSusChem, 2019, 12, 3582-3591.	3.6	103
16	Yttrium oxide modified Cu/ZnO/Al <sub>2</sub> O <sub>3</sub> catalysts via hydrotalcite-like precursors for CO <sub>2</sub> hydrogenation to methanol. Catalysis Science and Technology, 2015, 5, 4365-4377.	2.1	99
17	Preparation and activity of Cu/Zn/Al/Zr catalysts via hydrotalcite-containing precursors for methanol synthesis from CO <sub>2</sub> hydrogenation. Catalysis Science and Technology, 2012, 2, 1447.	2.1	95
18	Catalytic performance of spray-dried Cu/ZnO/Al <sub>2</sub> O <sub>3</sub> /ZrO <sub>2</sub> catalysts for slurry methanol synthesis from CO <sub>2</sub> hydrogenation. Journal of CO <sub>2</sub> Utilization, 2016, 15, 72-82.	3.3	94

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19	The synthesis of glycerol carbonate from glycerol and CO <sub>2</sub> over La <sub>2</sub> O <sub>3</sub> /ZnO catalysts. <i>Catalysis Science and Technology</i> , 2013, 3, 2801.	2.1	92
20	Enhanced Electrocatalysis via 3D Graphene Aerogel Engineered with a Silver Nanowire Network for Ultrahigh-Rate Zinc-Air Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1700041.	7.8	85
21	Cu/Zn/Al/Zr catalysts via phase-pure hydrotalcite-like compounds for methanol synthesis from carbon dioxide. <i>Journal of CO<sub>2</sub> Utilization</i> , 2015, 11, 41-48.	3.3	84
22	Single atomic Ag enhances the bifunctional activity and cycling stability of MnO <sub>2</sub> . <i>Chemical Engineering Journal</i> , 2019, 366, 631-638.	6.6	83
23	Effect of hydrotalcite-containing precursors on the performance of Cu/Zn/Al/Zr catalysts for CO <sub>2</sub> hydrogenation: Introduction of Cu <sup>2+</sup> at different formation stages of precursors. <i>Catalysis Today</i> , 2012, 194, 9-15.	2.2	80
24	Core-shell structured Cu@m-SiO <sub>2</sub> and Cu/ZnO@m-SiO <sub>2</sub> catalysts for methanol synthesis from CO <sub>2</sub> hydrogenation. <i>Catalysis Communications</i> , 2016, 84, 56-60.	1.6	79
25	Mechanism of the Mn Promoter via CoMn Spinel for Morphology Control: Formation of Co <sub>2</sub> C Nanoprisms for Fischer-Tropsch to Olefins Reaction. <i>ACS Catalysis</i> , 2017, 7, 8023-8032.	5.5	79
26	Fluorine-modified Cu/Zn/Al/Zr catalysts via hydrotalcite-like precursors for CO <sub>2</sub> hydrogenation to methanol. <i>Catalysis Communications</i> , 2014, 50, 78-82.	1.6	75
27	ZnZrO <sub>x</sub> integrated with chain-like nanocrystal HZSM-5 as efficient catalysts for aromatics synthesis from CO <sub>2</sub> hydrogenation. <i>Applied Catalysis B: Environmental</i> , 2021, 286, 119929.	10.8	73
28	Palladium single atoms supported by interwoven carbon nanotube and manganese oxide nanowire networks for enhanced electrocatalysis. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23366-23377.	5.2	68
29	Direct conversion of CO <sub>2</sub> to long-chain hydrocarbon fuels over K-promoted CoCu/TiO <sub>2</sub> catalysts. <i>Catalysis Today</i> , 2018, 311, 65-73.	2.2	67
30	Fluorinated Cu/Zn/Al/Zr hydrotalcites derived nanocatalysts for CO <sub>2</sub> hydrogenation to methanol. <i>Journal of CO<sub>2</sub> Utilization</i> , 2016, 16, 32-41.	3.3	66
31	Effect of alkali metals on the performance of CoCu/TiO <sub>2</sub> catalysts for CO <sub>2</sub> hydrogenation to long-chain hydrocarbons. <i>Chinese Journal of Catalysis</i> , 2018, 39, 1294-1302.	6.9	63
32	Influence of fluorine on the performance of fluorine-modified Cu/Zn/Al catalysts for CO <sub>2</sub> hydrogenation to methanol. <i>Journal of CO<sub>2</sub> Utilization</i> , 2013, 2, 16-23.	3.3	54
33	Slurry methanol synthesis from CO <sub>2</sub> hydrogenation over micro-spherical SiO <sub>2</sub> support Cu/ZnO catalysts. <i>Journal of CO<sub>2</sub> Utilization</i> , 2018, 26, 642-651.	3.3	54
34	Inter- and intra-molecular H-bonds induced different nanostructures from a multi-H-bonding (MHB) amphiphile: nanofibers and nanodisks Electronic supplementary information (ESI) available: experimental data, AFM, SEM images, XRD, FT-IR and CD spectra of gels I and II, and molecular models. See <a href="http://www.rsc.org/suppdata/cc/b4/b402956a/">http://www.rsc.org/suppdata/cc/b4/b402956a/</a> . <i>Chemical Communications</i> , 2004, , 1174.	2.2	51
35	Facile one-pot synthesis of mesoporous carbon and N-doped carbon for CO <sub>2</sub> capture by a novel melting-assisted solvent-free method. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23990-23999.	5.2	46
36	Preparation and CO <sub>2</sub> hydrogenation catalytic properties of alumina microsphere supported Cu-based catalyst by deposition-precipitation method. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 17, 263-272.	3.3	44

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37	Three dimensional porous Cu-Zn/Al foam monolithic catalyst for CO <sub>2</sub> hydrogenation to methanol in microreactor. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 21, 191-199.	3.3	40
38	Effect of In <sub>2</sub> O <sub>3</sub> particle size on CO <sub>2</sub> hydrogenation to lower olefins over bifunctional catalysts. <i>Chinese Journal of Catalysis</i> , 2021, 42, 2038-2048.	6.9	39
39	Direct carbon dioxide hydrogenation to produce bulk chemicals and liquid fuels via heterogeneous catalysis. <i>Chinese Journal of Catalysis</i> , 2022, 43, 2045-2056.	6.9	39
40	Expeditious Construction of (+)-Mintlactone via Intramolecular Hetero-Pauson-Khand Reaction. <i>Journal of Organic Chemistry</i> , 2009, 74, 2592-2593.	1.7	35
41	Melting-assisted solvent-free synthesis of SAPO-11 for improving the hydroisomerization performance of n-dodecane. <i>Chinese Journal of Catalysis</i> , 2020, 41, 622-630.	6.9	34
42	Enhanced Interactions between Gold and MnO <sub>2</sub> Nanowires for Water Oxidation: A Comparison of Different Chemical and Physical Preparation Methods. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2049-2057.	3.2	33
43	Compression Induced Helical Nanotubes in a Spreading Film of a Bolaamphiphile at the Air/Water Interface. <i>Langmuir</i> , 2006, 22, 6727-6729.	1.6	32
44	Standing Carbon-Supported Trace Levels of Metal Derived from Covalent Organic Framework for Electrocatalysis. <i>Small</i> , 2019, 15, e1905363.	5.2	32
45	Influence of element doping on La-Mn-Cu-O based perovskite precursors for methanol synthesis from CO <sub>2</sub> /H <sub>2</sub> . <i>RSC Advances</i> , 2014, 4, 48888-48896.	1.7	30
46	Preparation of novel bimetallic CuZn-BTC coordination polymer nanorod for methanol synthesis from CO <sub>2</sub> hydrogenation. <i>Materials Chemistry and Physics</i> , 2018, 215, 211-220.	2.0	30
47	Core@shell Co <sub>3</sub> O <sub>4</sub> @C-m-SiO <sub>2</sub> catalysts with inert C modified mesoporous channel for desired middle distillate. <i>Applied Catalysis A: General</i> , 2015, 492, 93-99.	2.2	27
48	CO <sub>2</sub> sorption in wet ordered mesoporous silica kit-6: effects of water content and mechanism on enhanced sorption capacity. <i>Adsorption</i> , 2014, 20, 883-888.	1.4	25
49	Ultra-tiny Co(OH) <sub>2</sub> particles supported on graphene oxide for highly efficient electrocatalytic water oxidation. <i>RSC Advances</i> , 2015, 5, 39075-39079.	1.7	23
50	Recent advances in the catalytic conversion of CO <sub>2</sub> to value added compounds. <i>Science China Chemistry</i> , 2015, 58, 79-92.	4.2	21
51	Hydrofunctionalization of olefins to value-added chemicals via photocatalytic coupling. <i>Green Chemistry</i> , 2018, 20, 3450-3456.	4.6	21
52	Direct conversion of CO <sub>2</sub> to a jet fuel over CoFe alloy catalysts. <i>Innovation(China)</i> , 2021, 2, 100170.	5.2	21
53	Solvent-Free Synthesis of Mg-Incorporated Nanocrystalline SAPO-34 Zeolites via Natural Clay for Chloromethane-to-Olefin Conversion. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4185-4193.	3.2	19
54	The rare earth elements modified FeK/Al <sub>2</sub> O <sub>3</sub> catalysts for direct CO <sub>2</sub> hydrogenation to liquid hydrocarbons. <i>Catalysis Today</i> , 2020, 356, 613-621.	2.2	17

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55	Facile Solvent-free Synthesis of Hollow Fiber Catalyst Assembled by <i>c</i> -axis Oriented ZSM-5 Crystals. <i>ChemCatChem</i> , 2018, 10, 5619-5626.	1.8	15
56	Preparation of Cu/Zn/Al/(Zr)/(Y) Catalysts from Hydrotalcite-Like Precursors and Their Catalytic Performance for the Hydrogenation of CO <sub>2</sub> to Methanol. <i>Wuli Huaxue Xuebao/Acta Physico-Chimica Sinica</i> , 2014, 30, 1155-1162.	2.2	11
57	Understanding the structure-performance relationship of cubic In <sub>2</sub> O <sub>3</sub> catalysts for CO <sub>2</sub> hydrogenation. <i>Journal of CO<sub>2</sub> Utilization</i> , 2021, 49, 101543.	3.3	10
58	Hierarchical ZSM-5 Supported CoMn Catalyst for the Production of Middle Distillate from Syngas. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 5783-5791.	1.8	9
59	Toward a Full One-Pass Conversion for the Fischer-Tropsch Synthesis over a Highly Selective Cobalt Catalyst. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 8195-8201.	1.8	8
60	Highly selective synthesis of LPG from CO <sub>2</sub> hydrogenation over In <sub>2</sub> O <sub>3</sub> /SSZ-13 bifunctional catalyst. <i>Journal of Fuel Chemistry and Technology</i> , 2021, 49, 1132-1139.	0.9	6
61	The effect of the particle size on Fischer-Tropsch synthesis for ZSM-5 zeolite supported cobalt-based catalysts. <i>Chemical Communications</i> , 2021, 57, 13522-13525.	2.2	6
62	<sup>3</sup> D Imaging and Structural Analysis of a Mesoporous Silica-Supported Eggshell Cobalt Catalyst for Fischer-Tropsch Synthesis. <i>ChemCatChem</i> , 2016, 8, 2920-2929.	1.8	3
63	Preparation of Highly Dispersion CuO/MCM-41 Catalysts for CO <sub>2</sub> Hydrogenation. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 3218-3222.	0.9	3
64	Fluorescent Nanotubes of A Dyes Formed at the Air/Water Interface. <i>Journal of Dispersion Science and Technology</i> , 2011, 32, 265-268.	1.3	1
65	Photoelectric Response from A Dye's Langmuir-Blodgett Monolayer Film Modified Indium-Tin Oxide Electrode. <i>Journal of Dispersion Science and Technology</i> , 2010, 32, 56-59.	1.3	0