Minghua Qiao

List of Publications by Year
in descending order

75 papers	3,831 citations	109321 35 h-index	123424 61 g-index
81 all docs	81 docs citations	81 times ranked	4080 citing authors

#	ARTICLE	IF	CITATIONS
1	Fe_{<i>x</i>}O_{<i>y</i>}@C Spheres as an Excellent Catalyst for Fischerâˆ'Tropsch Synthesis. Journal of the American Chemical Society, 2010, 132, 935-937.	13.7	263
2	Îµ-Iron carbide as a low-temperature Fischerâ€"Tropsch synthesis catalyst. Nature Communications, 2014, 5, 5783.	12.8	214
3	Fischerâ€"Tropsch Synthesis to Lower Olefins over Potassium-Promoted Reduced Graphene Oxide Supported Iron Catalysts. ACS Catalysis, 2016, 6, 389-399.	11.2	195
4	Synthesis and catalysis of chemically reduced metalâ€"metalloid amorphous alloys. Chemical Society Reviews, 2012, 41, 8140.	38.1	190
5	Graphene-supported metal/metal oxide nanohybrids: synthesis and applications in heterogeneous catalysis. Catalysis Science and Technology, 2015, 5, 3903-3916.	4.1	125
6	MOFs Conferred with Transient Metal Centers for Enhanced Photocatalytic Activity. Angewandte Chemie - International Edition, 2020, 59, 17182-17186.	13.8	121
7	Mg and K dual-decorated Fe-on-reduced graphene oxide for selective catalyzing CO hydrogenation to light olefins with mitigated CO2 emission and enhanced activity. Applied Catalysis B: Environmental, 2017, 204, 475-485.	20.2	104
8	Ptâ€"WO on monoclinic or tetrahedral ZrO2: Crystal phase effect of zirconia on glycerol hydrogenolysis to 1,3-propanediol. Applied Catalysis B: Environmental, 2017, 217, 331-341.	20.2	101
9	Preparation and Catalysis of Carbonâ€Supported Iron Catalysts for Fischerâ€"Tropsch Synthesis. ChemCatChem, 2012, 4, 1498-1511.	3.7	100
10	Porous Graphene-Confined Feâ€"K as Highly Efficient Catalyst for CO₂ Direct Hydrogenation to Light Olefins. ACS Applied Materials & Interfaces, 2018, 10, 23439-23443.	8.0	100
11	Aqueous-phase reforming of ethylene glycol to hydrogen on Pd/Fe3O4 catalyst prepared by co-precipitation: Metalâ€"support interaction and excellent intrinsic activity. Journal of Catalysis, 2010, 274, 287-295.	6.2	95
12	Partial hydrogenation of benzene to cyclohexene on a Ruâ€"Zn/m-ZrO2 nanocomposite catalyst. Applied Catalysis A: General, 2004, 272, 29-36.	4.3	92
13	Ironâ€"Potassium on Single-Walled Carbon Nanotubes as Efficient Catalyst for CO₂ Hydrogenation to Heavy Olefins. ACS Catalysis, 2020, 10, 6389-6401.	11.2	90
14	Liquid-phase chemoselective hydrogenation of 2-ethylanthraquinone over chromium-modified nanosized amorphous Niâ€"B catalysts. Journal of Catalysis, 2005, 229, 97-104.	6.2	80
15	Nanoparticulate Pt on mesoporous SBA-15 doped with extremely low amount of W as a highly selective catalyst for glycerol hydrogenolysis to 1,3-propanediol. Green Chemistry, 2017, 19, 2174-2183.	9.0	80
16	A novel Ruâ€"B/SiO2 amorphous catalyst used in benzene-selective hydrogenation. Applied Catalysis A: General, 1999, 176, 129-134.	4.3	76
17	A highly selective Raney Fe@HZSM-5 Fischerâ€"Tropsch synthesis catalyst for gasoline production: one-pot synthesis and unexpected effect of zeolites. Catalysis Science and Technology, 2012, 2, 1625.	4.1	76
18	Fischerâ€"Tropsch Synthesis over Molecular Sieve Supported Catalysts. ChemCatChem, 2011, 3, 542-550.	3.7	75

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19	Ru nanoparticles on rutile/anatase junction of P25 TiO 2 : Controlled deposition and synergy in partial hydrogenation of benzene to cyclohexene. Journal of Catalysis, 2015, 332, 119-126.	6.2	68
20	Ceriaâ€Zirconia/Zeolite Bifunctional Catalyst for Highly Selective Conversion of Syngas into Aromatics. ChemCatChem, 2018, 10, 4519-4524.	3.7	68
21	Advances in the slurry reactor technology of the anthraquinone process for H2O2 production. Frontiers of Chemical Science and Engineering, 2018, 12, 124-131.	4.4	67
22	Structural and catalytic properties of skeletal Ni catalyst prepared from the rapidly quenched Ni50Al50 alloy. Journal of Catalysis, 2004, 221, 612-618.	6.2	65
23	Shape Effect of ZnO Crystals as Cocatalyst in Combined Reformingâ€"Hydrogenolysis of Glycerol. ACS Catalysis, 2013, 3, 2280-2287.	11.2	65
24	Mesoporous silica-supported NiB amorphous alloy catalysts for selective hydrogenation of 2-ethylanthraquinone. Journal of Catalysis, 2004, 227, 419-427.	6.2	63
25	Characterization and catalytic properties of Sn-modified rapidly quenched skeletal Ni catalysts in aqueous-phase reforming of ethylene glycol. Journal of Catalysis, 2006, 241, 211-220.	6.2	62
26	Heteroepitaxial growth of gold on flowerlike magnetite: An efficacious and magnetically recyclable catalyst for chemoselective hydrogenation of crotonaldehyde to crotyl alcohol. Journal of Catalysis, 2011, 281, 106-118.	6.2	62
27	Doping effects of B in ZrO2 on structural and catalytic properties of Ru/B-ZrO2 catalysts for benzene partial hydrogenation. Journal of Catalysis, 2014, 311, 393-403.	6.2	62
28	KOH-Assisted Band Engineering of Polymeric Carbon Nitride for Visible Light Photocatalytic Oxygen Reduction to Hydrogen Peroxide. ACS Sustainable Chemistry and Engineering, 2020, 8, 594-603.	6.7	57
29	FeK on 3D Grapheneâ€"Zeolite Tandem Catalyst with High Efficiency and Versatility in Direct CO₂ Conversion to Aromatics. ACS Sustainable Chemistry and Engineering, 2019, 7, 17825-17833.	6.7	53
30	One-pot synthesis of potassium and phosphorus-doped carbon nitride catalyst derived from urea for highly efficient visible light-driven hydrogen peroxide production. Catalysis Today, 2019, 330, 171-178.	4.4	42
31	Colloidal RuB/Al2O3Â·xH2O catalyst for liquid phase hydrogenation of benzene to cyclohexene. Journal of Molecular Catalysis A, 2004, 222, 229-234.	4.8	40
32	Aqueous-phase reforming of ethylene glycol on Co/ZnO catalysts prepared by the coprecipitation method. Journal of Molecular Catalysis A, 2011, 335, 129-135.	4.8	40
33	Cu/ZnO/Al2O3 waterâ€"gas shift catalysts for practical fuel cell applications: the performance in shut-down/start-up operation. International Journal of Hydrogen Energy, 2009, 34, 2361-2368.	7.1	37
34	Physically mixed ZnO and skeletal NiMo for one-pot reforming-hydrogenolysis of glycerol to 1,2-propanediol. Chinese Journal of Catalysis, 2013, 34, 1020-1026.	14.0	37
35	Skeletal Ni catalysts prepared from Niâ€"Al alloys rapidly quenched at different rates: Texture, structure and catalytic performance in chemoselective hydrogenation of 2-ethylanthraquinone. Journal of Catalysis, 2006, 237, 143-151.	6.2	36
36	Reforming and Hydrogenolysis of Glycerol over Ni/ZnO Catalysts Prepared by Different Methods. Chinese Journal of Catalysis, 2012, 33, 1266-1275.	14.0	36

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37	Skeletal Ni Catalyst Prepared from a Rapidly Quenched Niâ€“Al Alloy and Its High Selectivity in 2-Ethylanthraquinone Hydrogenation. Journal of Catalysis, 2001, 204, 512-515.	6.2	35
38	Undercoordinated Site-Abundant and Tensile-Strained Nickel for Low-Temperature CO_{<i>x</i>} Methanation. ACS Catalysis, 2018, 8, 1207-1211.	11.2	34
39	A comparative study of the deactivation mechanisms of the Au/CeO2 catalyst for waterâ€“gas shift under steady-state and shutdown/start-up conditions in realistic reformate. Journal of Catalysis, 2013, 300, 152-162.	6.2	32
40	Oneâ€Pot Approach to a Highly Robust Iron Oxide/Reduced Graphene Oxide Nanocatalyst for Fischerâ€“Tropsch Synthesis. ChemCatChem, 2013, 5, 714-719.	3.7	32
41	Amorphous Ni-B hollow spheres synthesized by controlled organization of Ni-B nanoparticles over PS beads via surface seeding/electroless plating. New Journal of Chemistry, 2005, 29, 266.	2.8	30
42	A novel solâ€“gel synthetic route to alumina nanofibers via aluminum nitrate and hexamethylenetetramine. Materials Letters, 2007, 61, 5074-5077.	2.6	30
43	Simultaneous Aqueousâ€Phase Reforming and KOH Carbonation to Produce CO_{<i>x</i>}â€Free Hydrogen in a Single Reactor. ChemSusChem, 2010, 3, 803-806.	6.8	30
44	Preparation of amorphous Niâ€“B alloy: the effect of feeding order, precursor salt, pH and adding rate. Materials Letters, 2002, 56, 952-957.	2.6	29
45	Selective hydrogenation of 2-ethylanthraquinone over an environmentally benign Ni_B/SBA-15 catalyst prepared by a novel reductantâ€“impregnation method. Journal of Catalysis, 2003, 220, 254-257.	6.2	29
46	Highly selective amorphous Niâ€“Crâ€“B catalyst in 2-ethylanthraquinone hydrogenation to 2-ethylanthrahydroquinone. Chemical Communications, 2002, , 1236-1237.	4.1	27
47	Structural and Catalytic Properties of Alkaline Postâ€Treated Ru/ZrO₂ Catalysts for Partial Hydrogenation of Benzene to Cyclohexene. ChemCatChem, 2013, 5, 2425-2435.	3.7	27
48	Tungsten-doped siliceous mesocellular foams-supported platinum catalyst for glycerol hydrogenolysis to 1,3-propanediol. Applied Catalysis B: Environmental, 2021, 297, 120428.	20.2	27
49	A Novel Rutheniumâ€Phosphorus Amorphous Alloy Catalyst for Maltose Hydrogenation to Maltitol. Advanced Synthesis and Catalysis, 2008, 350, 829-836.	4.3	26
50	Effect of Cu loading on Cu/ZnO waterâ€“gas shift catalysts for shut-down/start-up operation. International Journal of Hydrogen Energy, 2012, 37, 6381-6388.	7.1	25
51	Cyclohexene esterificationâ€“hydrogenation for efficient production of cyclohexanol. Green Chemistry, 2021, 23, 1185-1192.	9.0	22
52	Nanocrystalline ironâ€“boron catalysts for low-temperature CO hydrogenation: Selective liquid fuel production and structureâ€“activity correlation. Journal of Catalysis, 2016, 339, 102-110.	6.2	20
53	Ruâ€“Zn/ZrO₂ Nanocomposite Catalysts Fabricated by Galvanic Replacement for Benzene Partial Hydrogenation. ChemCatChem, 2018, 10, 1184-1191.	3.7	20
54	Potassium-promoted magnesium ferrite on 3D porous graphene as highly efficient catalyst for CO hydrogenation to lower olefins. Journal of Catalysis, 2019, 374, 24-35.	6.2	20

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55	Ruâ€“B nanoparticles on metalâ€“organic frameworks as excellent catalysts for hydrogenation of benzene to cyclohexane under mild reaction conditions. Green Chemistry, 2016, 18, 2216-2221.	9.0	19
56	Liquid phase hydrogenation of crotonaldehyde over Sn-promoted amorphous Coâ€“B catalysts. Journal of Molecular Catalysis A, 2004, 211, 243-249.	4.8	18
57	Integration of methanation into the hydrogenation process of benzoic acid. AIChE Journal, 2009, 55, 192-197.	3.6	18
58	Reactivation of spent Pd/AC catalyst by supercritical CO₂ fluid extraction. AIChE Journal, 2009, 55, 2382-2388.	3.6	18
59	A theoretical study on the metal cation-Ï€ complexes of Zn2+ and Cd2+ with benzene and cyclohexene. Molecular Physics, 2009, 107, 1271-1282.	1.7	18
60	Amorphous Ni-B/SiO2 catalyst prepared by microwave heating and its catalytic activityin acrylonitrile hydrogenation. Journal of Chemical Technology and Biotechnology, 2003, 78, 512-517.	3.2	12
61	A non-noble amorphous Coâ€“Feâ€“B catalyst highly selective in liquid phase hydrogenation of crotonaldehyde to crotyl alcohol. New Journal of Chemistry, 2005, 29, 992.	2.8	11
62	Fischerâ€“Tropsch Synthesis Over Skeletal Feï£¿Ce Catalysts Leached from Rapidly Quenched Ternary Feï£¿Ceï£¿Al Alloys. ChemCatChem, 2013, 5, 3857-3865.	3.7	11
63	Effect of Titania Polymorphs on the Structure and Catalytic Performance of the Ptâ€“WO_{<i>x</i>}/TiO₂ Catalyst in Glycerol Hydrogenolysis to 1,3-Propanediol. ACS Sustainable Chemistry and Engineering, 2022, 10, 9532-9545.	6.7	11
64	Preparation and characterization of the chirally modified rapidly quenched skeletal Ni catalyst for enantioselective hydrogenation of butanone to R-(âˆ’)-2-butanol. Journal of Molecular Catalysis A, 2010, 326, 113-120.	4.8	10
65	Potassium as a Versatile Promoter to Tailor the Distribution of the Olefins in CO₂ Hydrogenation over Ironâ€Based Catalyst. ChemCatChem, 2022, 14, .	3.7	10
66	Advances in methanation catalysis. Catalysis, 0, , 1-28.	1.0	9
67	Functional nanohybrids self-assembled from amphiphilic calix[6]biscrowns and noble metals. Journal of Materials Chemistry, 2009, 19, 7610.	6.7	8
68	Research, development, and application of amorphous nickel alloy catalysts prepared by melt-quenching. Chinese Journal of Catalysis, 2013, 34, 828-837.	14.0	8
69	Adsorption and Thermal Reaction of Dipropyl Sulfide on Skeletal Ni Adsorbents. Journal of Physical Chemistry C, 2007, 111, 17535-17540.	3.1	6
70	Reversible Selectivity Modulation of Gasoline and Diesel by a Facile Metalâ€Saltâ€Modified Fischerâ€“Tropsch Synthesis Strategy. ChemCatChem, 2016, 8, 3701-3705.	3.7	4
71	Effect of Support Acidity on Liquid-Phase Hydrogenation of Benzene to Cyclohexene over Ruâ€“B/ZrO2Catalysts. Industrial & Engineering Chemistry Research, 2012, , 120911135834009.	3.7	3
72	Robust Au/Ce_{0.4}Zr_{0.6}O₂ Catalyst for Dynamic Shutdown/Startup of the Waterâ€“Gas Shift Reaction in Realistic Reformate with <1â€‰% O₂. ChemCatChem, 2014, 6, 3318-3322.	3.7	3

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73	Design of Bifunctional Solid Catalysts for Conversion of Biomass-Derived Syngas into Biofuels. Biofuels and Biorefineries, 2017, , 137-158.	0.5	2
74	Selective diesel production from syngas over non-noble metal catalyst via a novel hydrogenolysis mechanism. Science China Chemistry, 2015, 58, 971-972.	8.2	0
75	Reversible Selectivity Modulation of Gasoline and Diesel by a Facile Metal-Salt-Modified Fischer-Tropsch Synthesis Strategy. ChemCatChem, 2016, 8, 3691-3691.	3.7	0