Chen Zhao

List of Publications by Year
in descending order

67 papers	5,214 citations	101543 36 h-index	85541 71 g-index
78 all docs	78 docs citations	78 times ranked	3668 citing authors

#	Article	IF	Citations
1	Highly Selective Catalytic Conversion of Phenolic Bioâ€Oil to Alkanes. Angewandte Chemie - International Edition, 2009, 48, 3987-3990.	13.8	590
2	Towards Quantitative Conversion of Microalgae Oil to Dieselâ€Range Alkanes with Bifunctional Catalysts. Angewandte Chemie - International Edition, 2012, 51, 2072-2075.	13.8	297
3	Catalytic deoxygenation of microalgae oil to green hydrocarbons. Green Chemistry, 2013, 15, 1720.	9.0	285
4	Selective Hydrodeoxygenation of Ligninâ€Derived Phenolic Monomers and Dimers to Cycloalkanes on Pd/C and HZSMâ€5 Catalysts. ChemCatChem, 2012, 4, 64-68.	3.7	284
5	Upgrading Pyrolysis Oil over Ni/HZSMâ€5 by Cascade Reactions. Angewandte Chemie - International Edition, 2012, 51, 5935-5940.	13.8	281
6	Hydrodeoxygenation of bio-derived phenols to hydrocarbons using RANEYÂ® Ni and Nafion/SiO₂catalysts. Chemical Communications, 2010, 46, 412-414.	4.1	250
7	Synergistic effects of Ni and acid sites for hydrogenation and Câ€"O bond cleavage of substituted phenols. Green Chemistry, 2015, 17, 1204-1218.	9.0	241
8	Selective catalytic hydroalkylation and deoxygenation of substituted phenols to bicycloalkanes. Journal of Catalysis, 2012, 288, 92-103.	6.2	213
9	Comparison of kinetics, activity and stability of Ni/HZSM-5 and Ni/Al2O3-HZSM-5 for phenol hydrodeoxygenation. Journal of Catalysis, 2012, 296, 12-23.	6.2	207
10	Amino Acid-Assisted Construction of Single-Crystalline Hierarchical Nanozeolites via Oriented-Aggregation and Intraparticle Ripening. Journal of the American Chemical Society, 2019, 141, 3772-3776.	13.7	131
11	Importance of Size and Distribution of Ni Nanoparticles for the Hydrodeoxygenation of Microalgae Oil. Chemistry - A European Journal, 2013, 19, 9833-9842.	3.3	130
12	Bimetallic Ruâ€"Ni Catalyzed Aqueous-Phase Guaiacol Hydrogenolysis at Low H₂ Pressures. ACS Catalysis, 2017, 7, 8304-8313.	11.2	130
13	Hydrothermally stable Ru/HZSM-5-catalyzed selective hydrogenolysis of lignin-derived substituted phenols to bio-arenes in water. Green Chemistry, 2016, 18, 5845-5858.	9.0	128
14	Precise oxygen scission of lignin derived aryl ethers to quantitatively produce aromatic hydrocarbons in water. Green Chemistry, 2016, 18, 433-441.	9.0	111
15	Reductive deconstruction of organosolv lignin catalyzed by zeolite supported nickel nanoparticles. Green Chemistry, 2015, 17, 5079-5090.	9.0	98
16	High-grade diesel production by hydrodeoxygenation of palm oil over a hierarchically structured Ni/HBEA catalyst. Green Chemistry, 2015, 17, 1692-1701.	9.0	98
17	Development of a Bimetallic Pd-Ni/HZSM-5 Catalyst for the Tandem Limonene Dehydrogenation and Fatty Acid Deoxygenation to Alkanes and Arenes for Use as Biojet Fuel. ACS Catalysis, 2016, 6, 4512-4525.	11.2	91
18	Direct production of naphthenes and paraffins from lignin. Chemical Communications, 2015, 51, 17580-17583.	4.1	78

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19	Understanding the impact of aluminum oxide binder on Ni/HZSM-5 for phenol hydrodeoxygenation. Applied Catalysis B: Environmental, 2013, 132-133, 282-292.	20.2	76
20	Converting waste PET plastics into automobile fuels and antifreeze components. Nature Communications, 2022, 13, .	12.8	58
21	Direct liquefaction techniques on lignite coal: A review. Chinese Journal of Catalysis, 2020, 41, 375-389.	14.0	54
22	Controlling Hydrodeoxygenation of Stearic Acid to <i>n</i>â€Heptadecane and <i>n</i>â€Octadecane by Adjusting the Chemical Properties of Ni/SiO₂â€"ZrO₂ Catalyst. ChemCatChem, 2017, 9, 195-203.	3.7	53
23	Interconnected hierarchical HUSY zeolite-loaded Ni nano-particles probed for hydrodeoxygenation of fatty acids, fatty esters, and palm oil. Journal of Materials Chemistry A, 2016, 4, 11330-11341.	10.3	51
24	A new approach for bio-jet fuel generation from palm oil and limonene in the absence of hydrogen. Chemical Communications, 2015, 51, 17249-17252.	4.1	49
25	Mechanism of supported Ru₃Sn₇ nanocluster-catalyzed selective hydrogenation of coconut oil to fatty alcohols. Catalysis Science and Technology, 2018, 8, 1322-1332.	4.1	49
26	Selective Deoxygenation of Aqueous Furfural to 2-Methylfuran over Cu⁰/Cu₂OÂ·SiO₂ Sites via a Copper Phyllosilicate Precursor without Extraneous Gas. ACS Sustainable Chemistry and Engineering, 2018, 6, 12096-12103.	6.7	49
27	Selective conversion of lignin to ethylbenzene. Green Chemistry, 2020, 22, 1842-1850.	9.0	48
28	Ni nanoparticles encapsulated into mesoporous single-crystalline HBEA: application for drainage oil hydrodeoxygenation to diesel. Green Chemistry, 2015, 17, 4610-4617.	9.0	46
29	Mechanistic insights into selective hydrodeoxygenation of lignin-derived Î²-O-4 linkage to aromatic hydrocarbons in water. Catalysis Science and Technology, 2016, 6, 3476-3484.	4.1	44
30	Selective conversion of coconut oil to fatty alcohols in methanol over a hydrothermally prepared Cu/SiO₂ catalyst without extraneous hydrogen. Chemical Communications, 2017, 53, 6152-6155.	4.1	44
31	One-pot synthesized hierarchical zeolite supported metal nanoparticles for highly efficient biomass conversion. Chemical Communications, 2015, 51, 15102-15105.	4.1	41
32	One-pot synthesis of highly sintering- and coking-resistant Ni nanoparticles encapsulated in dendritic mesoporous SiO₂ for methane dry reforming. Chemical Communications, 2018, 54, 13993-13996.	4.1	41
33	Ru nanoparticles supported on hydrophilic mesoporous carbon catalyzed low-temperature hydrodeoxygenation of microalgae oil to alkanes at aqueous-phase. Chinese Journal of Catalysis, 2020, 41, 1174-1185.	14.0	41
34	Facile immobilization of Ni nanoparticles into mesoporous MCM-41 channels for efficient methane dry reforming. Chinese Journal of Catalysis, 2019, 40, 1395-1404.	14.0	40
35	Tuning Ni nanoparticles and the acid sites of silica-alumina for liquefaction and hydrodeoxygenation of lignin to cyclic alkanes. RSC Advances, 2016, 6, 71940-71951.	3.6	36
36	A highly stable Ru/LaCO₃OH catalyst consisting of support-coated Ru nanoparticles in aqueous-phase hydrogenolysis reactions. Green Chemistry, 2017, 19, 5412-5421.	9.0	36

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37	Morphologically Crossâ€Shaped Ru/HZSMâ€5 Catalyzes Tandem Hydrogenolysis of Guaiacol to Benzene in Water. ChemCatChem, 2018, 10, 1376-1384.	3.7	33
38	Controllable hydrothermal synthesis of Ni/H-BEA with a hierarchical coreâ€“shell structure and highly enhanced biomass hydrodeoxygenation performance. Nanoscale, 2017, 9, 5986-5995.	5.6	32
39	Mini-Review on the Synthesis of Lignin-Based Phenolic Resin. Energy & Fuels, 2021, 35, 18385-18395.	5.1	31
40	Highly selective and low-temperature hydrothermal conversion of natural oils to fatty alcohols. Green Chemistry, 2019, 21, 3059-3064.	9.0	30
41	Reduced oxygen-deficient CuWO4 with Ni catalyzed selective hydrogenolysis of cellulose to ethylene glycol. Catalysis Today, 2020, 351, 125-132.	4.4	29
42	Liquefaction and Hydrodeoxygenation of Polymeric Lignin Using a Hierarchical Ni Microreactor Catalyst. ACS Sustainable Chemistry and Engineering, 2020, 8, 2158-2166.	6.7	23
43	Conversion of lipid into high-viscosity branched bio-lubricant base oil. Green Chemistry, 2020, 22, 7348-7354.	9.0	23
44	Direct Synthesis of Hydrogen and Dimethoxylmethane from Methanol on Copper/Silica Catalysts with Optimal Cu⁺/Cu⁰ Sites. ChemCatChem, 2018, 10, 1140-1147.	3.7	23
45	Mechanisms into dehydroaromatization of bio-derived limonene to p-cymene over Pd/HZSM-5 in the presence and absence of H₂. RSC Advances, 2016, 6, 66695-66704.	3.6	22
46	The conversion of a high concentration of lignin to cyclic alkanes by introducing Pt/HAP into a Ni/ASA catalyst. Green Chemistry, 2020, 22, 2901-2908.	9.0	22
47	Cu nanoparticles supported on coreâ€“shell MgO-La2O3 catalyzed hydrogenolysis of furfuryl alcohol to pentanediol. Journal of Catalysis, 2022, 410, 42-53.	6.2	22
48	One-pot hydrogenolysis of cellulose to bioethanol over Pd-Cu-WOx/SiO2 catalysts. Fuel, 2021, 292, 120311.	6.4	20
49	Ultra-durable Ni-Ir/MgAl2O4 catalysts for dry reforming of methane enabled by dynamic balance between carbon deposition and elimination. Chem Catalysis, 2022, 2, 1748-1763.	6.1	20
50	Production of bio-ethanol by consecutive hydrogenolysis of corn-stalk cellulose. Chinese Journal of Catalysis, 2021, 42, 844-854.	14.0	19
51	Dehydration of 1-Octadecanol over H-BEA: A Combined Experimental and Computational Study. ACS Catalysis, 2016, 6, 878-889.	11.2	16
52	Selective Decarbonylation of Fatty Acids to Long-Chain Alkenes via PtSn/SnO<i>_x</i>-Induced Câ€“O Activation. ACS Sustainable Chemistry and Engineering, 2021, 9, 12970-12977.	6.7	16
53	Integrated production of bio-jet fuel containing lignin-derived arenes <i>via</i> lipid deoxygenation. Chemical Communications, 2018, 54, 9829-9832.	4.1	12
54	Production of Highly Symmetrical and Branched Biolubricants from Lignocellulose-Derived Furan Compounds. ACS Sustainable Chemistry and Engineering, 2021, 9, 10818-10826.	6.7	12

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55	Multispectroscopic Analysis in the Synthesis of Lignin-Based Biophenolic Resins. ACS Sustainable Chemistry and Engineering, 2021, 9, 15653-15660.	6.7	12
56	Synthesis of Branched Biolubricant Base Oil from Oleic Acid. ChemSusChem, 2020, 13, 5516-5522.	6.8	11
57	Pt/HAP catalyzed direct decarboxylation of lipid to alkanes via stabilization and synergism effect. Journal of Catalysis, 2021, 400, 244-254.	6.2	11
58	Effect of Surface [Cu₄O] Moieties on the Activity of Cu-Based Catalysts. ACS Catalysis, 2022, 12, 5162-5173.	11.2	10
59	Selective production of acetol or methyl lactate from cellulose over RuSn catalysts. Journal of Energy Chemistry, 2022, 73, 607-614.	12.9	10
60	A nickel-phyllosilicate coreâ€"echinus catalyst via a green and base additive free hydrothermal approach for hydrogenation reactions. Chemical Communications, 2017, 53, 10358-10361.	4.1	8
61	K+-induced formation of granular and dense copper phyllosilicate precursor converts dimethyl oxalate to ethylene glycol in absence of H2. Journal of Catalysis, 2022, 407, 44-53.	6.2	8
62	One-pot conversion of dimethyl terephthalate to 1,4-cyclohexanedimethanol. Applied Catalysis A: General, 2022, 632, 118510.	4.3	7
63	Selective synthesis of Î±-olefins by dehydration of fatty alcohols over aluminaâ€"thoria mixed catalysts. Catalysis Science and Technology, 2020, 10, 3701-3708.	4.1	6
64	Synthesis of T-Type low-viscosity hydrocarbon bio-lubricant from fatty acid methyl esters and coconut oil. Renewable Energy, 2022, 186, 280-287.	8.9	5
65	MemSC: A Scan-Resistant and Compact Cache Replacement Framework for Memory-Based Key-Value Cache Systems. Journal of Computer Science and Technology, 2017, 32, 55-67.	1.5	3
66	Inside Back Cover: Towards Quantitative Conversion of Microalgae Oil to Dieselâ€Range Alkanes with Bifunctional Catalysts (Angew. Chem. Int. Ed. 9/2012). Angewandte Chemie - International Edition, 2012, 51, 2253-2253.	13.8	2
67	FY17-PDH-EVTest04 GodInput Impact of the Oxygen Defects1 FY17-PDH-EVTest04 Reduction Rates of Stearic AcidFY17-PDH-T04. Chemistry - A European Journal, 2015, , 2436-2434.	3.3	0