Weiping Deng

List of Publications by Year
in descending order

61 papers	7,721 citations	50273 46 h-index	106340 65 g-index
70 all docs	70 docs citations	70 times ranked	8084 citing authors

#	Article	IF	Citations
1	Recent advances in heterogeneous selective oxidation catalysis for sustainable chemistry. Chemical Society Reviews, 2014, 43, 3480.	38.1	653
2	MgO- and Pt-Promoted TiO₂ as an Efficient Photocatalyst for the Preferential Reduction of Carbon Dioxide in the Presence of Water. ACS Catalysis, 2014, 4, 3644-3653.	11.2	380
3	Photocatalytic Conversion of Carbon Dioxide with Water into Methane: Platinum and Copper(I) Oxide Coâ€catalysts with a Coreâ€“Shell Structure. Angewandte Chemie - International Edition, 2013, 52, 5776-5779.	13.8	358
4	Base-Free Aerobic Oxidation of 5-Hydroxymethyl-furfural to 2,5-Furandicarboxylic Acid in Water Catalyzed by Functionalized Carbon Nanotube-Supported Auâ€“Pd Alloy Nanoparticles. ACS Catalysis, 2014, 4, 2175-2185.	11.2	353
5	Chemical synthesis of lactic acid from cellulose catalysed by lead(II) ions in water. Nature Communications, 2013, 4, 2141.	12.8	327
6	Conversion of Cellulose into Sorbitol over Carbon Nanotube-Supported Ruthenium Catalyst. Catalysis Letters, 2009, 133, 167-174.	2.6	290
7	Selective transformation of carbon dioxide into lower olefins with a bifunctional catalyst composed of ZnGa₂O₄ and SAPO-34. Chemical Communications, 2018, 54, 140-143.	4.1	265
8	CdSâ€“graphene and CdSâ€“CNT nanocomposites as visible-light photocatalysts for hydrogen evolution and organic dye degradation. Catalysis Science and Technology, 2012, 2, 969.	4.1	261
9	Hydrotalciteâ€Supported Gold Catalyst for the Oxidantâ€Free Dehydrogenation of Benzyl Alcohol: Studies on Support and Gold Size Effects. Chemistry - A European Journal, 2011, 17, 1247-1256.	3.3	235
10	Photocatalytic reduction of CO2 with H2O: significant enhancement of the activity of Ptâ€“TiO2 in CH4 formation by addition of MgO. Chemical Communications, 2013, 49, 2451.	4.1	220
11	Oxidative conversion of lignin and lignin model compounds catalyzed by CeO₂-supported Pd nanoparticles. Green Chemistry, 2015, 17, 5009-5018.	9.0	210
12	Carbon nanotube-supported gold nanoparticles as efficient catalysts for selective oxidation of cellobiose into gluconic acid in aqueous medium. Chemical Communications, 2009, , 7179.	4.1	178
13	Synthesis of lower olefins by hydrogenation of carbon dioxide over supported iron catalysts. Catalysis Today, 2013, 215, 186-193.	4.4	175
14	Catalytic amino acid production from biomass-derived intermediates. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5093-5098.	7.1	168
15	Fischerâ€“Tropsch Catalysts for the Production of Hydrocarbon Fuels with High Selectivity. ChemSusChem, 2014, 7, 1251-1264.	6.8	164
16	Polyoxometalates as efficient catalysts for transformations of cellulose into platform chemicals. Dalton Transactions, 2012, 41, 9817.	3.3	153
17	Mesoporous Beta Zeolite-Supported Ruthenium Nanoparticles for Selective Conversion of Synthesis Gas to C₅â€“C₁₁ Isoparaffins. ACS Catalysis, 2012, 2, 441-449.	11.2	149
18	Transformation of Cellulose and its Derived Carbohydrates into Formic and Lactic Acids Catalyzed by Vanadyl Cations. ChemSusChem, 2014, 7, 1557-1567.	6.8	148

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19	Catalytic transformations of cellulose and cellulose-derived carbohydrates into organic acids. Catalysis Today, 2014, 234, 31-41.	4.4	147
20	Gold nanoparticles on hydrotalcites as efficient catalysts for oxidant-free dehydrogenation of alcohols. Chemical Communications, 2010, 46, 1547.	4.1	133
21	Selective Conversion of Cellobiose and Cellulose into Gluconic Acid in Water in the Presence of Oxygen, Catalyzed by Polyoxometalateâ€Supported Gold Nanoparticles. Chemistry - A European Journal, 2012, 18, 2938-2947.	3.3	132
22	Conversion of cellobiose into sorbitol in neutral water medium over carbon nanotube-supported ruthenium catalysts. Journal of Catalysis, 2010, 271, 22-32.	6.2	131
23	Recent advances in understanding the key catalyst factors for Fischer-Tropsch synthesis. Journal of Energy Chemistry, 2013, 22, 27-38.	12.9	130
24	Acid-catalysed direct transformation of cellulose into methyl glucosides in methanol at moderate temperatures. Chemical Communications, 2010, 46, 2668.	4.1	126
25	Polyoxometalate-supported ruthenium nanoparticles as bifunctional heterogeneous catalysts for the conversions of cellobiose and cellulose into sorbitol under mild conditions. Chemical Communications, 2011, 47, 9717.	4.1	118
26	Functionalized Carbon Nanotubes for Biomass Conversion: The Baseâ€Free Aerobic Oxidation of 5â€Hydroxymethylfurfural to 2,5â€Furandicarboxylic Acid over Platinum Supported on a Carbon Nanotube Catalyst. ChemCatChem, 2015, 7, 2853-2863.	3.7	113
27	Transformation of Methane to Propylene: A Twoâ€Step Reaction Route Catalyzed by Modified CeO₂ Nanocrystals and Zeolites. Angewandte Chemie - International Edition, 2012, 51, 2438-2442.	13.8	110
28	Transformation of cellulose and related carbohydrates into lactic acid with bifunctional Al(<scp>iii</scp>)â€“Sn(<scp>ii</scp>) catalysts. Green Chemistry, 2018, 20, 735-744.	9.0	109
29	Effect of size of catalytically active phases in the dehydrogenation of alcohols and the challenging selective oxidation of hydrocarbons. Chemical Communications, 2011, 47, 9275.	4.1	96
30	Osmium-Catalyzed Selective Oxidations of Methane and Ethane with Hydrogen Peroxide in Aqueous Medium. Advanced Synthesis and Catalysis, 2007, 349, 1199-1209.	4.3	94
31	Visibleâ€Lightâ€Driven Cleavage of Câ”O Linkage for Lignin Valorization to Functionalized Aromatics. ChemSusChem, 2019, 12, 5023-5031.	6.8	86
32	Active site and reaction mechanism for the epoxidation of propylene by oxygen over CuOx/SiO2 catalysts with and without Cs+ modification. Journal of Catalysis, 2013, 299, 53-66.	6.2	81
33	Direct transformation of cellulose into methyl and ethyl glucosides in methanol and ethanol media catalyzed by heteropolyacids. Catalysis Today, 2011, 164, 461-466.	4.4	76
34	Catalytic transformations of cellulose and its derived carbohydrates into 5-hydroxymethylfurfural, levulinic acid, and lactic acid. Science China Chemistry, 2015, 58, 29-46.	8.2	76
35	Catalytic conversion of cellulose-based biomass and glycerol to lactic acid. Journal of Energy Chemistry, 2019, 32, 138-151.	12.9	74
36	Hydrogenation of carbon dioxide to light olefins over non-supported iron catalyst. Chinese Journal of Catalysis, 2013, 34, 956-963.	14.0	71

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37	Catalytic Transformation of Cellulose and Its Derivatives into Functionalized Organic Acids. ChemSusChem, 2018, 11, 1995-2028.	6.8	71
38	Carbon-supported palladium catalysts for the direct synthesis of hydrogen peroxide from hydrogen and oxygen. Journal of Catalysis, 2014, 319, 15-26.	6.2	61
39	Magnesia-supported gold nanoparticles as efficient catalysts for oxidative esterification of aldehydes or alcohols with methanol to methyl esters. Catalysis Today, 2014, 233, 147-154.	4.4	57
40	Catalytic transformation of cellulose and its derived carbohydrates into chemicals involving C C bond cleavage. Journal of Energy Chemistry, 2015, 24, 595-607.	12.9	55
41	Direct conversion of cellulose into ethanol catalysed by a combination of tungstic acid and zirconia-supported Pt nanoparticles. Chemical Communications, 2019, 55, 4303-4306.	4.1	54
42	Efficient Catalysts for the Green Synthesis of Adipic Acid from Biomass. Angewandte Chemie - International Edition, 2021, 60, 4712-4719.	13.8	54
43	Niobic Acid Nanosheets Synthesized by a Simple Hydrothermal Method as Efficient BrÃ¸nsted Acid Catalysts. Chemistry of Materials, 2013, 25, 3277-3287.	6.7	50
44	Production of organic acids from biomass resources. Current Opinion in Green and Sustainable Chemistry, 2016, 2, 54-58.	5.9	49
45	Selective activation of the Câ€“O bonds in lignocellulosic biomass for the efficient production of chemicals. Chinese Journal of Catalysis, 2015, 36, 1440-1460.	14.0	47
46	SrNb₂O₆ nanoplates as efficient photocatalysts for the preferential reduction of CO₂ in the presence of H₂O. Chemical Communications, 2015, 51, 3430-3433.	4.1	44
47	A Comparative Study of Size Effects in the Auâ€Catalyzed Oxidative and Nonâ€Oxidative Dehydrogenation of Benzyl Alcohol. Chemistry - an Asian Journal, 2014, 9, 2187-2196.	3.3	41
48	Catalytic transformation of 2,5-furandicarboxylic acid to adipic acid over niobic acid-supported Pt nanoparticles. Chemical Communications, 2019, 55, 8013-8016.	4.1	41
49	Carbon nanotube-supported Auâ€“Pd alloy with cooperative effect of metal nanoparticles and organic ketone/quinone groups as a highly efficient catalyst for aerobic oxidation of amines. Chemical Communications, 2016, 52, 6805-6808.	4.1	40
50	Zirconia-supported rhenium oxide as an efficient catalyst for the synthesis of biomass-based adipic acid ester. Chemical Communications, 2019, 55, 11017-11020.	4.1	40
51	Ru particle size effect in Ru/CNT-catalyzed Fischer-Tropsch synthesis. Journal of Energy Chemistry, 2013, 22, 321-328.	12.9	39
52	Development of Bifunctional Catalysts for the Conversions of Cellulose or Cellobiose into Polyols and Organic Acids in Water. Catalysis Surveys From Asia, 2012, 16, 91-105.	2.6	36
53	Upcycling Plastic Wastes into Valueâ€Added Products by Heterogeneous Catalysis. ChemSusChem, 2022, 15, .	6.8	29
54	Significant Synergistic Effect between Supported Ruthenium and Copper Oxides for Propylene Epoxidation by Oxygen. ChemPlusChem, 2012, 77, 27-30.	2.8	23

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55	Mesoporous H-ZSM-5 as an efficient catalyst for conversions of cellulose and cellobiose into methyl glucosides in methanol. Catalysis Today, 2016, 274, 60-66.	4.4	23
56	Characterizations of Unsupported and Supported Rhodiumâ"Iron Phosphate Catalysts Effective for Oxidative Carbonylation of Methane. Journal of Physical Chemistry C, 2007, 111, 2044-2053.	3.1	16
57	Cs-substituted tungstophosphate-supported ruthenium nanoparticles as efficient and robust bifunctional catalysts for the conversion of inulin and cellulose into hexitols in water in the presence of H₂. RSC Advances, 2014, 4, 43131-43141.	3.6	12
58	Catalytic conversion of methyl chloride to lower olefins over modified H-ZSM-34. Chinese Journal of Catalysis, 2013, 34, 2047-2056.	14.0	10
59	Catalytic valorization of biomass and bioplatforms to chemicals through deoxygenation. Advances in Catalysis, 2020, , 1-108.	0.2	9
60	Efficient Catalysts for the Green Synthesis of Adipic Acid from Biomass. Angewandte Chemie, 2021, 133, 4762-4769.	2.0	7
61	Catalytic oxidation of lignin and model compounds over nano europium oxide. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 626, 126846.	4.7	5