Huizhen Liu

List of Publications by Year
in descending order

111 papers	6,008 citations	66234 42 h-index	79541 73 g-index
113 all docs	113 docs citations	113 times ranked	6450 citing authors

#	Article	IF	Citations
1	Selective Phenol Hydrogenation to Cyclohexanone Over a Dual Supported Pdâ€“Lewis Acid Catalyst. Science, 2009, 326, 1250-1252.	6.0	566
2	Highly efficient synthesis of cyclic carbonates from CO₂and epoxides over cellulose/KI. Chemical Communications, 2011, 47, 2131-2133.	2.2	264
3	Selective electroreduction of carbon dioxide to methanol on copper selenide nanocatalysts. Nature Communications, 2019, 10, 677.	5.8	258
4	Molybdenumâ€“Bismuth Bimetallic Chalcogenide Nanosheets for Highly Efficient Electrocatalytic Reduction of Carbon Dioxide to Methanol. Angewandte Chemie - International Edition, 2016, 55, 6771-6775.	7.2	225
5	Efficient Reduction of CO₂ into Formic Acid on a Lead or Tin Electrode using an Ionic Liquid Catholyte Mixture. Angewandte Chemie - International Edition, 2016, 55, 9012-9016.	7.2	202
6	Cycloaddition of CO2 to epoxides catalyzed by imidazolium-based polymeric ionic liquids. Green Chemistry, 2013, 15, 1584.	4.6	169
7	Highly Efficient Electroreduction of CO₂ to C2+ Alcohols on Heterogeneous Dual Active Sites. Angewandte Chemie - International Edition, 2020, 59, 16459-16464.	7.2	148
8	Synthesis of liquid fuel via direct hydrogenation of CO ₂. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12654-12659.	3.3	138
9	Boosting CO₂ Electroreduction on N,Pâ€Coâ€doped Carbon Aerogels. Angewandte Chemie - International Edition, 2020, 59, 11123-11129.	7.2	138
10	Dual-ionic liquid system: an efficient catalyst for chemical fixation of CO₂ to cyclic carbonates under mild conditions. Green Chemistry, 2018, 20, 2990-2994.	4.6	120
11	Hydrogenolysis of glycerol catalyzed by Ru-Cu bimetallic catalysts supported on clay with the aid of ionic liquids. Green Chemistry, 2009, 11, 1000.	4.6	115
12	Synthesis of ketones from biomass-derived feedstock. Nature Communications, 2017, 8, 14190.	5.8	115
13	Ambient Reductive Amination of Levulinic Acid to Pyrrolidones over Pt Nanocatalysts on Porous TiO₂ Nanosheets. Journal of the American Chemical Society, 2019, 141, 4002-4009.	6.6	106
14	Biomass-derived Î³-valerolactone as an efficient solvent and catalyst for the transformation of CO₂ to formamides. Green Chemistry, 2016, 18, 3956-3961.	4.6	105
15	Sustainable production of benzene from lignin. Nature Communications, 2021, 12, 4534.	5.8	100
16	One-pot conversion of CO2 and glycerol to value-added products using propylene oxide as the coupling agent. Green Chemistry, 2012, 14, 1743.	4.6	98
17	Highly effective photoreduction of CO₂ to CO promoted by integration of CdS with molecular redox catalysts through metalâ€“organic frameworks. Chemical Science, 2018, 9, 8890-8894.	3.7	95
18	Efficient hydrogenolysis of 5-hydroxymethylfurfural to 2,5-dimethylfuran over a cobalt and copper bimetallic catalyst on N-graphene-modified Al₂O₃. Green Chemistry, 2016, 18, 6222-6228.	4.6	92

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19	Selective hydrogenation of 5-(hydroxymethyl)furfural to 5-methylfurfural over single atomic metals anchored on Nb2O5. Nature Communications, 2021, 12, 584.	5.8	92
20	Design of a Cu(<scp>i</scp>)/C-doped boron nitride electrocatalyst for efficient conversion of CO₂into acetic acid. Green Chemistry, 2017, 19, 2086-2091.	4.6	91
21	Selectively transform lignin into value-added chemicals. Chinese Chemical Letters, 2019, 30, 15-24.	4.8	90
22	Hollow Metalâ€“Organicâ€Frameworkâ€Mediated Inâ€…Situ Architecture of Copper Dendrites for Enhanced CO₂ Electroreduction. Angewandte Chemie - International Edition, 2020, 59, 8896-8901.	7.2	85
23	Ruâ€“Zn supported on hydroxyapatite as an effective catalyst for partial hydrogenation of benzene. Green Chemistry, 2013, 15, 152-159.	4.6	84
24	The highly selective aerobic oxidation of cyclohexane to cyclohexanone and cyclohexanol over V₂O₅@TiO₂ under simulated solar light irradiation. Green Chemistry, 2017, 19, 311-318.	4.6	78
25	Copper-catalyzed <i>N</i>-formylation of amines with CO₂ under ambient conditions. RSC Advances, 2016, 6, 32370-32373.	1.7	75
26	Synthesis of formamides containing unsaturated groups by N-formylation of amines using CO₂ with H₂. Green Chemistry, 2017, 19, 196-201.	4.6	75
27	Selective Utilization of the Methoxy Group in Lignin to Produce Acetic Acid. Angewandte Chemie - International Edition, 2017, 56, 14868-14872.	7.2	72
28	Synthesis of Supported Ultrafine Nonâ€noble Subnanometerâ€Scale Metal Particles Derived from Metalâ€“Organic Frameworks as Highly Efficient Heterogeneous Catalysts. Angewandte Chemie - International Edition, 2016, 55, 1080-1084.	7.2	69
29	Selective catalytic transformation of lignin with guaiacol as the only liquid product. Chemical Science, 2020, 11, 1347-1352.	3.7	68
30	Highly efficient hydrogenation of levulinic acid into 2-methyltetrahydrofuran over Niâ€“Cu/Al₂O₃â€“ZrO₂bifunctional catalysts. Green Chemistry, 2019, 21, 606-613.	4.6	66
31	Productâ€oriented Direct Cleavage of Chemical Linkages in Lignin. ChemSusChem, 2020, 13, 4367-4381.	3.6	66
32	Transformation of alcohols to esters promoted by hydrogen bonds using oxygen as the oxidant under metal-free conditions. Science Advances, 2018, 4, eaas9319.	4.7	63
33	Selective valorization of lignin to phenol by direct transformation of C _{sp2} â€“C _{sp3} and Câ€“O bonds. Science Advances, 2020, 6, .	4.7	62
34	Halogen-free fixation of carbon dioxide into cyclic carbonates <i>via</i> bifunctional organocatalysts. Green Chemistry, 2021, 23, 1147-1153.	4.6	58
35	Nitrogen Dioxide Catalyzed Aerobic Oxidative Cleavage of C(OH)â€“C Bonds of Secondary Alcohols to Produce Acids. Angewandte Chemie - International Edition, 2019, 58, 17393-17398.	7.2	57
36	Efficient Reduction of CO₂ into Formic Acid on a Lead or Tin Electrode using an Ionic Liquid Catholyte Mixture. Angewandte Chemie, 2016, 128, 9158-9162.	1.6	56

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37	Selective hydrogenation of unsaturated aldehydes over Pt nanoparticles promoted by the cooperation of steric and electronic effects. Chemical Communications, 2018, 54, 908-911.	2.2	55
38	Conversion of levulinic acid to Î³-valerolactone over ultra-thin TiO₂ nanosheets decorated with ultrasmall Ru nanoparticle catalysts under mild conditions. Green Chemistry, 2019, 21, 770-774.	4.6	55
39	CO₂ Hydrogenation to Formate Catalyzed by Ru Coordinated with a N,P-Containing Polymer. ACS Catalysis, 2020, 10, 8557-8566.	5.5	52
40	Aerobic Oxidative Cleavage and Esterification of C(OH)â€“C Bonds. CheM, 2020, 6, 3288-3296.	5.8	51
41	Insights into Carbon Dioxide Electroreduction in Ionic Liquids: Carbon Dioxide Activation and Selectivity Tailored by Ionic Microhabitat. ChemSusChem, 2018, 11, 3191-3197.	3.6	50
42	Highly selective benzene hydrogenation to cyclohexene over supported Ru catalyst without additives. Green Chemistry, 2011, 13, 1106.	4.6	43
43	The <i>in situ</i> study of surface species and structures of oxide-derived copper catalysts for electrochemical CO₂ reduction. Chemical Science, 2021, 12, 5938-5943.	3.7	40
44	Self-supported hydrogenolysis of aromatic ethers to arenes. Science Advances, 2019, 5, eaax6839.	4.7	39
45	Electrochemical Strategy for the Simultaneous Production of Cyclohexanone and Benzoquinone by the Reaction of Phenol and Water. Journal of the American Chemical Society, 2022, 144, 1556-1571.	6.6	39
46	Naturally occurring gallic acid derived multifunctional porous polymers for highly efficient CO₂ conversion and I₂ capture. Green Chemistry, 2018, 20, 4655-4661.	4.6	37
47	A fully heterogeneous catalyst Br-LDH for the cycloaddition reactions of CO₂ with epoxides. Chemical Communications, 2019, 55, 6942-6945.	2.2	37
48	Selective electrochemical reduction of carbon dioxide to ethanol <i>via</i> a relay catalytic platform. Chemical Science, 2020, 11, 5098-5104.	3.7	37
49	An electrocatalytic route for transformation of biomass-derived furfural into 5-hydroxy-2(5<i>H</i>)-furanone. Chemical Science, 2019, 10, 4692-4698.	3.7	36
50	Synthesis of higher carboxylic acids from ethers, CO2 and H2. Nature Communications, 2019, 10, 5395.	5.8	36
51	Catalysis of photooxidation reactions through transformation between Cu²⁺ and Cu⁺ in TiO₂â€“Cuâ€“MOF composites. Chemical Communications, 2018, 54, 5984-5987.	2.2	34
52	Selective hydrogenation of aromatic furfurals into aliphatic tetrahydrofurfural derivatives. Green Chemistry, 2020, 22, 4937-4942.	4.6	34
53	Selective utilization of methoxy groups in lignin for <i>N</i>-methylation reaction of anilines. Chemical Science, 2019, 10, 1082-1088.	3.7	33
54	Hydrogenolysis of 5-Hydroxymethylfurfural to 2,5-Dimethylfuran under Mild Conditions without Any Additive. ACS Sustainable Chemistry and Engineering, 2019, 7, 5711-5716.	3.2	33

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55	Hydrogenolysis of Glycerol to 1,2â€Propanediol over Ruâ€“Cu Bimetals Supported on Different Supports. Clean - Soil, Air, Water, 2012, 40, 318-324.	0.7	32
56	Simultaneous and selective transformation of glucose to arabinose and nitrosobenzene to azoxybenzene driven by visible-light. Green Chemistry, 2016, 18, 3852-3857.	4.6	32
57	Solid surface frustrated Lewis pair constructed on layered AlOOH for hydrogenation reaction. Nature Communications, 2022, 13, 2320.	5.8	32
58	Acceleration of Suzuki coupling reactions by abundant and non-toxic salt particles. Green Chemistry, 2014, 16, 1198-1201.	4.6	31
59	Basic ionic liquids promoted chemical transformation of CO2 to organic carbonates. Science China Chemistry, 2018, 61, 1486-1493.	4.2	31
60	Highly Efficient Oxidative Cyanation of Aldehydes to Nitriles over Se,S,Nâ€<i>tri</i>â€Doped Hierarchically Porous Carbon Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 21479-21485.	7.2	29
61	Cooperative catalysis of Pt/C and acid resin for the production of 2,5-dimethyltetrahydrofuran from biomass derived 2,5-hexanedione under mild conditions. Green Chemistry, 2016, 18, 220-225.	4.6	26
62	The tetramethylguanidine-based ionic liquid-catalyzed synthesis of propylene glycol methyl ether. New Journal of Chemistry, 2010, 34, 2534.	1.4	24
63	Methanol Promoted Palladiumâ€Catalyzed Amine Formylation with CO₂ and H₂ by the Formation of HCOOCH₃. ChemCatChem, 2018, 10, 5124-5127.	1.8	24
64	The Hydrogenation of Aromatic Compounds under Mild Conditions by Using a Solid Lewis Acid and Supported Palladium Catalyst. ChemCatChem, 2014, 6, 3323-3327.	1.8	23
65	Synthesis of hierarchical mesoporous Prussian blue analogues in ionic liquid/water/MgCl₂ and application in electrochemical reduction of CO₂. Green Chemistry, 2016, 18, 1869-1873.	4.6	22
66	Stepwise degradation of hydroxyl compounds to aldehydes <i>via</i> successive Câ€“C bond cleavage. Chemical Communications, 2019, 55, 925-928.	2.2	22
67	Aerobic selective oxidation of methylaromatics to benzoic acids over Co@N/Co-CNTs with high loading CoN₄species. Journal of Materials Chemistry A, 2019, 7, 27212-27216.	5.2	22
68	Target-Binding Accelerated Response for Sensitive Detection of Basal H₂O₂ in Tumor Cells and Tissues via a Dual-Functional Fluorescence Probe. Analytical Chemistry, 2022, 94, 5962-5969.	3.2	22
69	N-methylation of quinolines with CO2 and H2 catalyzed by Ru-triphos complexes. Science China Chemistry, 2017, 60, 927-933.	4.2	21
70	Nitrogen Dioxide Catalyzed Aerobic Oxidative Cleavage of C(OH)â€“C Bonds of Secondary Alcohols to Produce Acids. Angewandte Chemie, 2019, 131, 17554-17559.	1.6	21
71	Lowâ€Temperature Reverse Waterâ€“Gas Shift Process and Transformation of Renewable Carbon Resources to Valueâ€Added Chemicals. ChemSusChem, 2019, 12, 5149-5156.	3.6	21
72	Ruâ€“Cd/Bentonite for the Partial Hydrogenation of Benzene: A Catalyst without Additives. ChemCatChem, 2012, 4, 1836-1843.	1.8	20

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73	Heterogeneous Cobaltâ€Catalyzed Direct <i>N</i>â€Formylation of Isoquinolines with CO₂ and H₂. ChemCatChem, 2017, 9, 1947-1952.	1.8	20
74	Immobilized 1,1,3,3-Tetramethylguanidine Ionic Liquids as the Catalyst for Synthesizing Propylene Glycol Methyl Ether. Catalysis Letters, 2010, 140, 49-54.	1.4	19
75	Efficient Transformation of Anisole into Methylated Phenols over Highâ€Silica HY Zeolites under Mild Conditions. ChemCatChem, 2015, 7, 2831-2835.	1.8	19
76	N,N-Dimethylation of nitrobenzenes with CO₂ and water by electrocatalysis. Chemical Science, 2017, 8, 5669-5674.	3.7	19
77	Pd nanoparticles/polyoxometalateâ€“ionic liquid composites on SiO₂ as multifunctional catalysts for efficient production of ketones from diaryl ethers. Green Chemistry, 2018, 20, 4865-4869.	4.6	19
78	A new route to synthesize aryl acetates from carbonylation of aryl methyl ethers. Science Advances, 2018, 4, eaaq0266.	4.7	19
79	Hollow Metalâ€“Organicâ€Frameworkâ€Mediated Inâ€…Situ Architecture of Copper Dendrites for Enhanced CO 2 Electroreduction. Angewandte Chemie, 2020, 132, 8981-8986.	1.6	19
80	A route to support Pt sub-nanoparticles on TiO₂ and catalytic hydrogenation of quinoline to 1,2,3,4-tetrahydroquinoline at room temperature. Catalysis Science and Technology, 2018, 8, 4314-4317.	2.1	18
81	Robust selenium-doped carbon nitride nanotubes for selective electrocatalytic oxidation of furan compounds to maleic acid. Chemical Science, 2021, 12, 6342-6349.	3.7	18
82	Copper/Carbon Heterogenous Interfaces for Enhanced Selective Electrocatalytic Reduction of CO₂ to Formate. Small, 2021, 17, e2102629.	5.2	18
83	Highly Efficient Synthesis of Amino Acids by Amination of Bioâ€Derived Hydroxy Acids with Ammonia over Ru Supported on Nâ€Doped Carbon Nanotubes. ChemSusChem, 2020, 13, 5683-5689.	3.6	17
84	Electrochemical Reduction of Carbon Dioxide to Ethanol: An Approach to Transforming Greenhouse Gas to Fuel Source. Chemistry - an Asian Journal, 2021, 16, 588-603.	1.7	17
85	Synthesis of Supported Ultrafine Nonâ€noble Subnanometerâ€Scale Metal Particles Derived from Metalâ€“Organic Frameworks as Highly Efficient Heterogeneous Catalysts. Angewandte Chemie, 2016, 128, 1092-1096.	1.6	15
86	Selective hydration of asymmetric internal aryl alkynes without directing groups to Î±-aryl ketones over Cu-based catalyst. New Journal of Chemistry, 2017, 41, 6290-6295.	1.4	15
87	Computational investigations on the phosphine-ligated CuH-catalyzed conjugate reduction of Î±-Î² unsaturated ketones: regioselectivity and stereoselectivity. RSC Advances, 2014, 4, 5726.	1.7	14
88	Selective Hydrogenolysis of Lignin Model Compounds to Aromatics over a Cobalt Nanoparticle Catalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 11862-11871.	3.2	14
89	Hydrogenation of methyl laurate to produce lauryl alcohol over Cu/ZnO/Al2O3 with methanol as the solvent and hydrogen source. Pure and Applied Chemistry, 2011, 84, 779-788.	0.9	13
90	Selective Utilization of the Methoxy Group in Lignin to Produce Acetic Acid. Angewandte Chemie, 2017, 129, 15064-15068.	1.6	13

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91	The production of 4-ethyltoluene <i>via</i> directional valorization of lignin. Green Chemistry, 2020, 22, 2191-2196.	4.6	13
92	Soluble porous carbon cage-encapsulated highly active metal nanoparticle catalysts. Journal of Materials Chemistry A, 2021, 9, 13670-13677.	5.2	13
93	Highly efficient catalytic oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid using bimetallic Ptâ€“Cu alloy nanoparticles as catalysts. Chemical Communications, 2022, 58, 1183-1186.	2.2	13
94	Switching chirality in the assemblies of bio-based amphiphiles solely by varying their alkyl chain length. Chemical Communications, 2017, 53, 2162-2165.	2.2	12
95	Synthesis of Propylene Glycol Methyl Ether Catalyzed by MCM-41. Synthetic Communications, 2011, 41, 891-897.	1.1	10
96	Ethylenediamine promoted the hydrogenative coupling of nitroarenes over Ni/C catalyst. Chinese Chemical Letters, 2019, 30, 203-206.	4.8	10
97	Production of Piperidine and Î´â€Lactam Chemicals from Biomassâ€Derived Triacetic Acid Lactone. Angewandte Chemie - International Edition, 2021, 60, 14405-14409.	7.2	10
98	Synthesis of nitrogen and sulfur co-doped hierarchical porous carbons and metal-free oxidative coupling of silanes with alcohols. Chemical Communications, 2017, 53, 13019-13022.	2.2	9
99	N-vinyl pyrrolidone promoted aqueous-phase dehydrogenation of formic acid over PVP-stabilized Ru nanoclusters. Science China Chemistry, 2016, 59, 1342-1347.	4.2	7
100	Dehydroxyalkylative halogenation of C(aryl)â€“C bonds of aryl alcohols. Chemical Communications, 2020, 56, 7120-7123.	2.2	7
101	Adjacent Pt Nanoparticles and Sub-nanometer WO _x Clusters Determine Catalytic Isomerization of C ₇ H ₁₆. CCS Chemistry, 2022, 4, 2639-2650.	4.6	7
102	Synthesis of hierarchical porous Î²-FeOOH catalysts in ionic liquid/water/CH2Cl2 ionogels. Chemical Communications, 2016, 52, 4687-4690.	2.2	6
103	Selective aerobic oxidation of cyclic ethers to lactones over Au/CeO2 without any additives. Chemical Communications, 2020, 56, 2638-2641.	2.2	6
104	Organic amine mediated cleavage of C_{aromatic}â€“C_{Î±} bonds in lignin and its platform molecules. Chemical Science, 2021, 12, 15110-15115.	3.7	6
105	Salt-mediated synthesis of bimetallic networks with structural defects and their enhanced catalytic performances. Chemical Communications, 2018, 54, 12065-12068.	2.2	5
106	Crystal-phase engineering of PdCu nanoalloys facilitates selective hydrodeoxygenation at room temperature. Innovation(China), 2022, 3, 100189.	5.2	5
107	Synthesis of Bis(trimethylsilyl)acetylene (BTMSA) by Direct Reaction of CaC 2 with N â€(trimethylsilyl)imidazole. ChemistrySelect, 2020, 5, 3644-3646.	0.7	4
108	Monomeric vanadium oxide: a very efficient species for promoting aerobic oxidative dehydrogenation of N-heterocycles. New Journal of Chemistry, 2021, 45, 431-437.	1.4	1

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109	Highly Efficient Oxidative Cyanation of Aldehydes to Nitriles over Se,S,Nâ€•tri â€Doped Hierarchically Porous Carbon Nanosheets. Angewandte Chemie, 2021, 133, 21649-21655.	1.6	1
110	Titelbild: Selective Utilization of the Methoxy Group in Lignin to Produce Acetic Acid (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.6	0
111	Production of Piperidine and Îˆâ€Lactam Chemicals from Biomassâ€Derived Triacetic Acid Lactone. Angewandte Chemie, 2021, 133, 14526-14530.	1.6	0