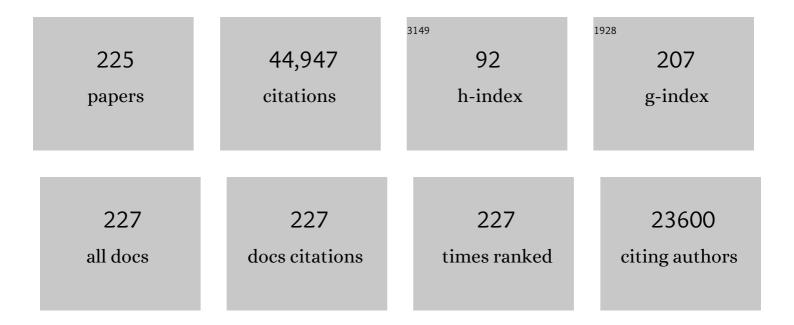
## Zhang Tao

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2141183/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Single-atom catalysis of CO oxidation using Pt1/FeOx. Nature Chemistry, 2011, 3, 634-641.	6.6	5,149
2	Single-Atom Catalysts: A New Frontier in Heterogeneous Catalysis. Accounts of Chemical Research, 2013, 46, 1740-1748.	7.6	3,405
3	Heterogeneous single-atom catalysis. Nature Reviews Chemistry, 2018, 2, 65-81.	13.8	2,728
4	Catalytic Transformation of Lignin for the Production of Chemicals and Fuels. Chemical Reviews, 2015, 115, 11559-11624.	23.0	2,200
5	Atomically dispersed Ni(i) as the active site for electrochemical CO2 reduction. Nature Energy, 2018, 3, 140-147.	19.8	1,594
6	Single Cobalt Atoms Anchored on Porous N-Doped Graphene with Dual Reaction Sites for Efficient Fenton-like Catalysis. Journal of the American Chemical Society, 2018, 140, 12469-12475.	6.6	1,044
7	FeOx-supported platinum single-atom and pseudo-single-atom catalysts for chemoselective hydrogenation of functionalized nitroarenes. Nature Communications, 2014, 5, 5634.	5.8	890
8	Selective Hydrogenation over Supported Metal Catalysts: From Nanoparticles to Single Atoms. Chemical Reviews, 2020, 120, 683-733.	23.0	871
9	Remarkable Performance of Ir <sub>1</sub> /FeO <sub><i>x</i></sub> Single-Atom Catalyst in Water Gas Shift Reaction. Journal of the American Chemical Society, 2013, 135, 15314-15317.	6.6	811
10	Discriminating Catalytically Active FeN <sub><i>x</i></sub> Species of Atomically Dispersed Fe–N–C Catalyst for Selective Oxidation of the C–H Bond. Journal of the American Chemical Society, 2017, 139, 10790-10798.	6.6	738
11	Direct Catalytic Conversion of Cellulose into Ethylene Glycol Using Nickelâ€Promoted Tungsten Carbide Catalysts. Angewandte Chemie - International Edition, 2008, 47, 8510-8513.	7.2	671
12	State of the art and perspectives in heterogeneous catalysis of CO <sub>2</sub> hydrogenation to methanol. Chemical Society Reviews, 2020, 49, 1385-1413.	18.7	605
13	Single-atom dispersed Co–N–C catalyst: structure identification and performance for hydrogenative coupling of nitroarenes. Chemical Science, 2016, 7, 5758-5764.	3.7	571
14	Ag Alloyed Pd Single-Atom Catalysts for Efficient Selective Hydrogenation of Acetylene to Ethylene in Excess Ethylene. ACS Catalysis, 2015, 5, 3717-3725.	5.5	545
15	Thermally stable single atom Pt/m-Al2O3 for selective hydrogenation and CO oxidation. Nature Communications, 2017, 8, 16100.	5.8	545
16	Powering the Future with Liquid Sunshine. Joule, 2018, 2, 1925-1949.	11.7	499
17	Single-Atom Catalysts Based on the Metal–Oxide Interaction. Chemical Reviews, 2020, 120, 11986-12043.	23.0	486
18	Non defect-stabilized thermally stable single-atom catalyst. Nature Communications, 2019, 10, 234.	5.8	452

#	Article	IF	CITATIONS
19	Ultrastable single-atom gold catalysts with strong covalent metal-support interaction (CMSI). Nano Research, 2015, 8, 2913-2924.	5.8	422
20	One-Pot Conversion of Cellulose to Ethylene Glycol with Multifunctional Tungsten-Based Catalysts. Accounts of Chemical Research, 2013, 46, 1377-1386.	7.6	420
21	Atomically dispersed nickel as coke-resistant active sites for methane dry reforming. Nature Communications, 2019, 10, 5181.	5.8	398
22	Highly Efficient Catalysis of Preferential Oxidation of CO in H <sub>2</sub> -Rich Stream by Gold Single-Atom Catalysts. ACS Catalysis, 2015, 5, 6249-6254.	5.5	380
23	Recent Advances in Preferential Oxidation of CO Reaction over Platinum Group Metal Catalysts. ACS Catalysis, 2012, 2, 1165-1178.	5.5	378
24	Hydroformylation of Olefins by a Rhodium Singleâ€Atom Catalyst with Activity Comparable to RhCl(PPh <sub>3</sub> ) <sub>3</sub> . Angewandte Chemie - International Edition, 2016, 55, 16054-16058.	7.2	376
25	Performance of Cu-Alloyed Pd Single-Atom Catalyst for Semihydrogenation of Acetylene under Simulated Front-End Conditions. ACS Catalysis, 2017, 7, 1491-1500.	5.5	374
26	Classical strong metal–support interactions between gold nanoparticles and titanium dioxide. Science Advances, 2017, 3, e1700231.	4.7	361
27	One-pot catalytic hydrocracking of raw woody biomass into chemicals over supported carbide catalysts: simultaneous conversion of cellulose, hemicellulose and lignin. Energy and Environmental Science, 2012, 5, 6383-6390.	15.6	358
28	Strong Metal–Support Interactions between Gold Nanoparticles and Nonoxides. Journal of the American Chemical Society, 2016, 138, 56-59.	6.6	357
29	Single-Atom Catalysis toward Efficient CO <sub>2</sub> Conversion to CO and Formate Products. Accounts of Chemical Research, 2019, 52, 656-664.	7.6	348
30	PdZn Intermetallic Nanostructure with Pd–Zn–Pd Ensembles for Highly Active and Chemoselective Semi-Hydrogenation of Acetylene. ACS Catalysis, 2016, 6, 1054-1061.	5.5	334
31	Hydrolysis of cellulose into glucose over carbons sulfonated at elevated temperatures. Chemical Communications, 2010, 46, 6935.	2.2	313
32	Strong Metal–Support Interactions between Pt Single Atoms and TiO <sub>2</sub> . Angewandte Chemie - International Edition, 2020, 59, 11824-11829.	7.2	309
33	Transition Metal–Tungsten Bimetallic Catalysts for the Conversion of Cellulose into Ethylene Glycol. ChemSusChem, 2010, 3, 63-66.	3.6	296
34	Unraveling the coordination structure-performance relationship in Pt1/Fe2O3 single-atom catalyst. Nature Communications, 2019, 10, 4500.	5.8	279
35	Synthesis of Thermally Stable and Highly Active Bimetallic Auâ^'Ag Nanoparticles on Inert Supports. Chemistry of Materials, 2009, 21, 410-418.	3.2	262
36	Structural changes of Au–Cu bimetallic catalysts in CO oxidation: In situ XRD, EPR, XANES, and FT-IR characterizations. Journal of Catalysis, 2011, 278, 288-296.	3.1	260

#	Article	IF	CITATIONS
37	Co–N–C Catalyst for C–C Coupling Reactions: On the Catalytic Performance and Active Sites. ACS Catalysis, 2015, 5, 6563-6572.	5.5	260
38	Single-atom catalyst: a rising star for green synthesis of fine chemicals. National Science Review, 2018, 5, 653-672.	4.6	258
39	Synthesis of ethylene glycol and terephthalic acid from biomass for producing PET. Green Chemistry, 2016, 18, 342-359.	4.6	254
40	A new 3D mesoporous carbon replicated from commercial silica as a catalyst support for direct conversion of cellulose into ethylene glycol. Chemical Communications, 2010, 46, 862-864.	2.2	249
41	Production of Primary Amines by Reductive Amination of Biomassâ€Derived Aldehydes/Ketones. Angewandte Chemie - International Edition, 2017, 56, 3050-3054.	7.2	243
42	A Durable Nickel Singleâ€Atom Catalyst for Hydrogenation Reactions and Cellulose Valorization under Harsh Conditions. Angewandte Chemie - International Edition, 2018, 57, 7071-7075.	7.2	243
43	Identification of the Electronic and Structural Dynamics of Catalytic Centers in Single-Fe-Atom Material. CheM, 2020, 6, 3440-3454.	5.8	231
44	Efficient and Durable Au Alloyed Pd Single-Atom Catalyst for the Ullmann Reaction of Aryl Chlorides in Water. ACS Catalysis, 2014, 4, 1546-1553.	5.5	221
45	Dynamic Behavior of Single-Atom Catalysts in Electrocatalysis: Identification of Cu-N <sub>3</sub> as an Active Site for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2021, 143, 14530-14539.	6.6	218
46	Catalysis by gold: New insights into the support effect. Nano Today, 2013, 8, 403-416.	6.2	211
47	Supported Nobleâ€Metal Single Atoms for Heterogeneous Catalysis. Advanced Materials, 2019, 31, e1902031.	11.1	207
48	Supported Single Pt <sub>1</sub> /Au <sub>1</sub> Atoms for Methanol Steam Reforming. ACS Catalysis, 2014, 4, 3886-3890.	5.5	204
49	Zeolite-supported metal catalysts for selective hydrodeoxygenation of biomass-derived platform molecules. Green Chemistry, 2019, 21, 3744-3768.	4.6	200
50	Strong metal-support interaction promoted scalable production of thermally stable single-atom catalysts. Nature Communications, 2020, 11, 1263.	5.8	198
51	Ultrastable Hydroxyapatite/Titaniumâ€Đioxideâ€5upported Gold Nanocatalyst with Strong Metal–Support Interaction for Carbon Monoxide Oxidation. Angewandte Chemie - International Edition, 2016, 55, 10606-10611.	7.2	192
52	Potential-Driven Restructuring of Cu Single Atoms to Nanoparticles for Boosting the Electrochemical Reduction of Nitrate to Ammonia. Journal of the American Chemical Society, 2022, 144, 12062-12071.	6.6	192
53	Improving PMS oxidation of organic pollutants by single cobalt atom catalyst through hybrid radical and non-radical pathways. Applied Catalysis B: Environmental, 2020, 263, 118350.	10.8	191
54	Nonradical Oxidation of Pollutants with Single-Atom-Fe(III)-Activated Persulfate: Fe(V) Being the Possible Intermediate Oxidant. Environmental Science & Technology, 2020, 54, 14057-14065.	4.6	190

#	Article	IF	CITATIONS
55	Design of a Highly Active Ir/Fe(OH) <sub><i>x</i></sub> Catalyst: Versatile Application of Ptâ€Group Metals for the Preferential Oxidation of Carbon Monoxide. Angewandte Chemie - International Edition, 2012, 51, 2920-2924.	7.2	183
56	lridium Single-Atom Catalyst Performing a Quasi-homogeneous Hydrogenation Transformation of CO2 to Formate. CheM, 2019, 5, 693-705.	5.8	181
57	Understanding the synergistic effects of gold bimetallic catalysts. Journal of Catalysis, 2013, 308, 258-271.	3.1	178
58	Direct catalytic hydrogenation of CO2 to formate over a Schiff-base-mediated gold nanocatalyst. Nature Communications, 2017, 8, 1407.	5.8	177
59	Selectivity Control for Cellulose to Diols: Dancing on Eggs. ACS Catalysis, 2017, 7, 1939-1954.	5.5	162
60	Catalytic conversion of cellulose into ethylene glycol over supported carbide catalysts. Catalysis Today, 2009, 147, 77-85.	2.2	157
61	Acid-Promoter-Free Ethylene Methoxycarbonylation over Ru-Clusters/Ceria: The Catalysis of Interfacial Lewis Acid–Base Pair. Journal of the American Chemical Society, 2018, 140, 4172-4181.	6.6	157
62	Influence of pretreatment temperature on catalytic performance of rutile TiO2-supported ruthenium catalyst in CO2 methanation. Journal of Catalysis, 2016, 333, 227-237.	3.1	154
63	Temperature-controlled phase-transfer catalysis for ethylene glycol production from cellulose. Chemical Communications, 2012, 48, 7052.	2.2	152
64	Highly selective and robust single-atom catalyst Ru1/NC for reductive amination of aldehydes/ketones. Nature Communications, 2021, 12, 3295.	5.8	152
65	Heterogeneous catalysts for CO <sub>2</sub> hydrogenation to formic acid/formate: from nanoscale to single atom. Energy and Environmental Science, 2021, 14, 1247-1285.	15.6	152
66	Catalytic conversion of cellulose to hexitols with mesoporous carbon supported Ni-based bimetallic catalysts. Green Chemistry, 2012, 14, 614.	4.6	151
67	Promotional effect of Pd single atoms on Au nanoparticles supported on silica for the selective hydrogenation of acetylene in excess ethylene. New Journal of Chemistry, 2014, 38, 2043.	1.4	151
68	Maximizing the Number of Interfacial Sites in Singleâ€Atom Catalysts for the Highly Selective, Solventâ€Free Oxidation of Primary Alcohols. Angewandte Chemie - International Edition, 2018, 57, 7795-7799.	7.2	151
69	Transition metal carbide catalysts for biomass conversion: A review. Applied Catalysis B: Environmental, 2019, 254, 510-522.	10.8	149
70	Synthesis of renewable high-density fuels using cyclopentanone derived from lignocellulose. Chemical Communications, 2014, 50, 2572.	2.2	143
71	Valorization of Lignin to Simple Phenolic Compounds over Tungsten Carbide: Impact of Lignin Structure. ChemSusChem, 2017, 10, 523-532.	3.6	141
72	Hydrogenolysis of Glycerol to 1,3â€propanediol under Low Hydrogen Pressure over WO <sub><i>x</i></sub> â€Supported Single/Pseudoâ€Single Atom Pt Catalyst. ChemSusChem, 2016, 9, 784-790.	3.6	140

#	Article	IF	CITATIONS
73	Catalytic Conversion of Cellulose to Ethylene Glycol over a Lowâ€Cost Binary Catalyst of Raney Ni and Tungstic Acid. ChemSusChem, 2013, 6, 652-658.	3.6	132
74	Electrostatic Stabilization of Single-Atom Catalysts by Ionic Liquids. CheM, 2019, 5, 3207-3219.	5.8	131
75	Catalytically Active Rh Subâ€Nanoclusters on TiO <sub>2</sub> for CO Oxidation at Cryogenic Temperatures. Angewandte Chemie - International Edition, 2016, 55, 2820-2824.	7.2	127
76	ZnAlâ€Hydrotalcite‣upported Au <sub>25</sub> Nanoclusters as Precatalysts for Chemoselective Hydrogenation of 3â€Nitrostyrene. Angewandte Chemie - International Edition, 2017, 56, 2709-2713.	7.2	127
77	Singleâ€Atom Catalysis in Mesoporous Photovoltaics: The Principle of Utility Maximization. Advanced Materials, 2014, 26, 8147-8153.	11.1	122
78	Promotion effects of potassium on the activity and selectivity of Pt/zeolite catalysts for reverse water gas shift reaction. Applied Catalysis B: Environmental, 2017, 216, 95-105.	10.8	122
79	Catalytic Hydrogenation of Corn Stalk to Ethylene Glycol and 1,2-Propylene Glycol. Industrial & Engineering Chemistry Research, 2011, 50, 6601-6608.	1.8	119
80	Effect of Na Promoter on Fe-Based Catalyst for CO <sub>2</sub> Hydrogenation to Alkenes. ACS Sustainable Chemistry and Engineering, 2019, 7, 925-932.	3.2	117
81	Controlling CO <sub>2</sub> Hydrogenation Selectivity by Metalâ€Supported Electron Transfer. Angewandte Chemie - International Edition, 2020, 59, 19983-19989.	7.2	114
82	Tuning reactivity of Fischer–Tropsch synthesis by regulating TiOx overlayer over Ru/TiO2 nanocatalysts. Nature Communications, 2020, 11, 3185.	5.8	114
83	Integrated Conversion of Cellulose to High-Density Aviation Fuel. Joule, 2019, 3, 1028-1036.	11.7	113
84	Little do more: a highly effective Pt <sub>1</sub> /FeO <sub>x</sub> single-atom catalyst for the reduction of NO by H <sub>2</sub> . Chemical Communications, 2015, 51, 7911-7914.	2.2	107
85	Catalytic performance of the Pt/TiO2 catalysts in reverse water gas shift reaction: Controlled product selectivity and a mechanism study. Catalysis Today, 2017, 281, 312-318.	2.2	106
86	Theoretical Insights and the Corresponding Construction of Supported Metal Catalysts for Highly Selective CO <sub>2</sub> to CO Conversion. ACS Catalysis, 2017, 7, 4613-4620.	5.5	104
87	Catalytic Conversion of Concentrated Glucose to Ethylene Glycol with Semicontinuous Reaction System. Industrial & amp; Engineering Chemistry Research, 2013, 52, 9566-9572.	1.8	103
88	Highâ€Density and Thermally Stable Palladium Singleâ€Atom Catalysts for Chemoselective Hydrogenations. Angewandte Chemie - International Edition, 2020, 59, 21613-21619.	7.2	103
89	Dual Metal Active Sites in an Ir <sub>1</sub> /FeO <sub><i>x</i></sub> Singleâ€Atom Catalyst: A Redox Mechanism for the Waterâ€Gas Shift Reaction. Angewandte Chemie - International Edition, 2020, 59, 12868-12875.	7.2	102
90	Promoting role of potassium in the reverse water gas shift reaction on Pt/mullite catalyst. Catalysis Today, 2017, 281, 319-326.	2.2	98

#	Article	IF	CITATIONS
91	Synthesis of diesel and jet fuel range alkanes with furfural and ketones from lignocellulose under solvent free conditions. Green Chemistry, 2014, 16, 4879-4884.	4.6	97
92	Recent progress in CO oxidation over Pt-group-metal catalysts at low temperatures. Chinese Journal of Catalysis, 2016, 37, 1805-1813.	6.9	97
93	Nickelâ€Promoted Tungsten Carbide Catalysts for Cellulose Conversion: Effect of Preparation Methods. ChemSusChem, 2012, 5, 939-944.	3.6	96
94	Ferric Oxide-Supported Pt Subnano Clusters for Preferential Oxidation of CO in H <sub>2</sub> -Rich Gas at Room Temperature. ACS Catalysis, 2014, 4, 2113-2117.	5.5	96
95	Remarkable active-site dependent H2O promoting effect in CO oxidation. Nature Communications, 2019, 10, 3824.	5.8	96
96	Mn decorated Na/Fe catalysts for CO <sub>2</sub> hydrogenation to light olefins. Catalysis Science and Technology, 2019, 9, 456-464.	2.1	96
97	Highly active Au1/Co3O4 single-atom catalyst for CO oxidation at room temperature. Chinese Journal of Catalysis, 2015, 36, 1505-1511.	6.9	93
98	Versatile Nickel–Lanthanum(III) Catalyst for Direct Conversion of Cellulose to Glycols. ACS Catalysis, 2015, 5, 874-883.	5.5	92
99	Hydrodeoxygenation of furans over Pd-FeOx/SiO2 catalyst under atmospheric pressure. Applied Catalysis B: Environmental, 2017, 201, 266-277.	10.8	91
100	Remarkable effect of alkalis on the chemoselective hydrogenation of functionalized nitroarenes over high-loading Pt/FeO <sub>x</sub> catalysts. Chemical Science, 2017, 8, 5126-5131.	3.7	90
101	Selective Hydrogenolysis of Glycerol to 1,3â€Propanediol: Manipulating the Frustrated Lewis Pairs by Introducing Gold to Pt/WO <sub><i>x</i></sub> . ChemSusChem, 2017, 10, 819-824.	3.6	89
102	Single atom gold catalysts for low-temperature CO oxidation. Chinese Journal of Catalysis, 2016, 37, 1580-1586.	6.9	85
103	Synthesis of Diesel and Jet Fuel Range Alkanes with Furfural and Angelica Lactone. ACS Catalysis, 2017, 7, 5880-5886.	5.5	85
104	Selectivity-Switchable Conversion of Cellulose to Glycols over Ni–Sn Catalysts. ACS Catalysis, 2016, 6, 191-201.	5.5	83
105	Unique role of Mössbauer spectroscopy in assessing structural features of heterogeneous catalysts. Applied Catalysis B: Environmental, 2018, 224, 518-532.	10.8	83
106	Ru/TiO <sub>2</sub> Catalysts with Size-Dependent Metal/Support Interaction for Tunable Reactivity in Fischer–Tropsch Synthesis. ACS Catalysis, 2020, 10, 12967-12975.	5.5	83
107	Bioinspired copper singleâ€atom nanozyme as a superoxide dismutaseâ€like antioxidant for sepsis treatment. Exploration, 2022, 2, .	5.4	81
108	Theoretical investigations of non-noble metal single-atom catalysis: Ni <sub>1</sub> /FeO <sub>x</sub> for CO oxidation. Catalysis Science and Technology, 2016, 6, 6886-6892.	2.1	79

#	Article	IF	CITATIONS
109	Making JPâ€10 Superfuel Affordable with a Lignocellulosic Platform Compound. Angewandte Chemie - International Edition, 2019, 58, 12154-12158.	7.2	78
110	Crystal phase effects on the structure and performance of ruthenium nanoparticles for CO <sub>2</sub> hydrogenation. Catalysis Science and Technology, 2014, 4, 2058-2063.	2.1	77
111	Hydrogenolysis of methyl glycolate to ethanol over a Pt–Cu/SiO <sub>2</sub> single-atom alloy catalyst: a further step from cellulose to ethanol. Green Chemistry, 2018, 20, 2142-2150.	4.6	77
112	Selective aldol condensation of biomass-derived levulinic acid and furfural in aqueous-phase over MgO and ZnO. Green Chemistry, 2016, 18, 3430-3438.	4.6	76
113	Selective Production of 1,2â€Propylene Glycol from Jerusalem Artichoke Tuber using Ni–W <sub>2</sub> C/AC Catalysts. ChemSusChem, 2012, 5, 932-938.	3.6	74
114	Kinetic study of retroâ€aldol condensation of glucose to glycolaldehyde with ammonium metatungstate as the catalyst. AICHE Journal, 2014, 60, 3804-3813.	1.8	74
115	Enhanced performance of Rh <sub>1</sub> /TiO <sub>2</sub> catalyst without methanation in waterâ€gas shift reaction. AICHE Journal, 2017, 63, 2081-2088.	1.8	74
116	Mild Redox-Neutral Depolymerization of Lignin with a Binuclear Rh Complex in Water. ACS Catalysis, 2019, 9, 4441-4447.	5.5	74
117	Styrene Hydroformylation with In Situ Hydrogen: Regioselectivity Control by Coupling with the Lowâ€Temperature Water–Gas Shift Reaction. Angewandte Chemie - International Edition, 2020, 59, 7430-7434.	7.2	74
118	One-Pot Production of Cellulosic Ethanol via Tandem Catalysis over a Multifunctional Mo/Pt/WOx Catalyst. Joule, 2019, 3, 1937-1948.	11.7	73
119	One-pot catalytic conversion of cellulose to ethylene glycol and other chemicals: From fundamental discovery to potential commercialization. Chinese Journal of Catalysis, 2014, 35, 602-613.	6.9	72
120	Catalytic cascade conversion of furfural to 1,4-pentanediol in a single reactor. Green Chemistry, 2018, 20, 1770-1776.	4.6	71
121	FeO <sub>x</sub> supported singleâ€atom Pd bifunctional catalyst for water gas shift reaction. AICHE Journal, 2017, 63, 4022-4031.	1.8	70
122	Catalytic Conversion of Cellulose to Ethylene Glycol over Tungsten Phosphide Catalysts. Chinese Journal of Catalysis, 2010, 31, 928-932.	6.9	69
123	Single-atom Pt promoted Mo2C for electrochemical hydrogen evolution reaction. Journal of Energy Chemistry, 2021, 57, 371-377.	7.1	69
124	Zeolite-Encapsulated Cu Nanoparticles for the Selective Hydrogenation of Furfural to Furfuryl Alcohol. ACS Catalysis, 2021, 11, 10246-10256.	5.5	69
125	Effective Hydrogenolysis of Glycerol to 1,3â€Propanediol over Metalâ€Acid Concerted Pt/WO <sub>x</sub> /Al <sub>2</sub> O <sub>3</sub> Catalysts. ChemCatChem, 2019, 11, 3903-3912.	1.8	66
126	Sustainable Production of Benzylamines from Lignin. Angewandte Chemie - International Edition, 2021, 60, 20666-20671.	7.2	66

#	Article	IF	CITATIONS
127	High-Efficiency Water Gas Shift Reaction Catalysis on α-MoC Promoted by Single-Atom Ir Species. ACS Catalysis, 2021, 11, 5942-5950.	5.5	65
128	A Durable Nickel Singleâ€Atom Catalyst for Hydrogenation Reactions and Cellulose Valorization under Harsh Conditions. Angewandte Chemie, 2018, 130, 7189-7193.	1.6	64
129	Unravelling the enigma of lignin <sup>OX</sup> : can the oxidation of lignin be controlled?. Chemical Science, 2018, 9, 702-711.	3.7	64
130	A Hydrothermally Stable Irreducible Oxideâ€Modified Pd/MgAl <sub>2</sub> O <sub>4</sub> Catalyst for Methane Combustion. Angewandte Chemie - International Edition, 2020, 59, 18522-18526.	7.2	64
131	Hierarchical Echinus-like Cu-MFI Catalysts for Ethanol Dehydrogenation. ACS Catalysis, 2020, 10, 13624-13629.	5.5	63
132	Effect of group IB metals on the dehydrogenation of propane to propylene over anti-sintering Pt/MgAl2O4. Journal of Catalysis, 2018, 366, 115-126.	3.1	62
133	Unlock the Compact Structure of Lignocellulosic Biomass by Mild Ball Milling for Ethylene Glycol Production. ACS Sustainable Chemistry and Engineering, 2019, 7, 679-687.	3.2	62
134	A highly active Rh <sub>1</sub> /CeO <sub>2</sub> single-atom catalyst for low-temperature CO oxidation. Chemical Communications, 2020, 56, 4870-4873.	2.2	62
135	Synthesis of gasoline and jet fuel range cycloalkanes and aromatics from poly(ethylene terephthalate) waste. Green Chemistry, 2019, 21, 2709-2719.	4.6	61
136	Photo-thermo semi-hydrogenation of acetylene on Pd1/TiO2 single-atom catalyst. Nature Communications, 2022, 13, 2648.	5.8	61
137	Synthesis of Renewable High-Density Fuel with Cyclopentanone Derived from Hemicellulose. ACS Sustainable Chemistry and Engineering, 2017, 5, 1812-1817.	3.2	60
138	Mesoporous WO3 Supported Pt Catalyst for Hydrogenolysis of Glycerol to 1,3-Propanediol. Chinese Journal of Catalysis, 2012, 33, 1257-1261.	6.9	58
139	Direct Catalytic Hydrogenolysis of Kraft Lignin to Phenols in Choline-Derived Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2016, 4, 3850-3856.	3.2	54
140	Identification of Active Sites on High-Performance Pt/Al <sub>2</sub> O <sub>3</sub> Catalyst for Cryogenic CO Oxidation. ACS Catalysis, 2020, 10, 8815-8824.	5.5	54
141	Catalytic conversion of concentrated miscanthus in water for ethylene glycol production. AICHE Journal, 2014, 60, 2254-2262.	1.8	53
142	Oxygen surface groups of activated carbon steer the chemoselective hydrogenation of substituted nitroarenes over nickel nanoparticles. Chemical Communications, 2017, 53, 1969-1972.	2.2	53
143	Taking on all of the biomass for conversion. Science, 2020, 367, 1305-1306.	6.0	53
144	Tungstenâ€Based Bimetallic Catalysts for Selective Cleavage of Lignin Câ^'O Bonds. ChemCatChem, 2018, 10, 415-421.	1.8	52

#	Article	IF	CITATIONS
145	Transition-metal-free synthesis of pyrimidines from lignin β-O-4 segments via a one-pot multi-component reaction. Nature Communications, 2022, 13, .	5.8	52
146	Rhodium-terpyridine catalyzed redox-neutral depolymerization of lignin in water. Green Chemistry, 2020, 22, 33-38.	4.6	51
147	Unveiling the In Situ Generation of a Monovalent Fe(I) Site in the Single-Fe-Atom Catalyst for Electrochemical CO <sub>2</sub> Reduction. ACS Catalysis, 2021, 11, 7292-7301.	5.5	51
148	On the mechanism of H2 activation over single-atom catalyst: An understanding of Pt1/WO in the hydrogenolysis reaction. Chinese Journal of Catalysis, 2020, 41, 524-532.	6.9	50
149	Kinetic study of the competitive hydrogenation of glycolaldehyde and glucose on Ru/C with or without AMT. AICHE Journal, 2015, 61, 224-238.	1.8	49
150	Selective conversion of concentrated glucose to 1,2-propylene glycol and ethylene glycol by using RuSn/AC catalysts. Applied Catalysis B: Environmental, 2018, 239, 300-308.	10.8	49
151	Strong Metal–Support Interaction of Ru on TiO <sub>2</sub> Derived from the Co-Reduction Mechanism of Ru <sub><i>x</i></sub> Ti <sub>1–<i>x</i></sub> O <sub>2</sub> Interphase. ACS Catalysis, 2022, 12, 1697-1705.	5.5	49
152	Catalytic conversion of cellulosic biomass to ethylene glycol: Effects of inorganic impurities in biomass. Bioresource Technology, 2015, 175, 424-429.	4.8	48
153	ReO <sub><i>x</i></sub> /AC-Catalyzed Cleavage of C–O Bonds in Lignin Model Compounds and Alkaline Lignins. ACS Sustainable Chemistry and Engineering, 2019, 7, 208-215.	3.2	47
154	Pd/ZnO catalysts with different origins for high chemoselectivity in acetylene semi-hydrogenation. Chinese Journal of Catalysis, 2016, 37, 692-699.	6.9	46
155	Chemoselective hydrogenation of 3-nitrostyrene over a Pt/FeO <sub>x</sub> pseudo-single-atom-catalyst in CO <sub>2</sub> -expanded liquids. Green Chemistry, 2016, 18, 1332-1338.	4.6	46
156	Strong Metal–Support Interactions between Pt Single Atoms and TiO <sub>2</sub> . Angewandte Chemie, 2020, 132, 11922-11927.	1.6	46
157	Selective hydrogenation of acetylene in an ethylene-rich stream over silica supported Ag-Ni bimetallic catalysts. Applied Catalysis A: General, 2017, 545, 90-96.	2.2	45
158	Isolation of Pd atoms by Cu for semi-hydrogenation of acetylene: Effects of Cu loading. Chinese Journal of Catalysis, 2017, 38, 1540-1548.	6.9	44
159	Synthesis and Characterization of Poly(ethylene terephthalate) from Biomass-Based Ethylene Glycol: Effects of Miscellaneous Diols. Industrial & Engineering Chemistry Research, 2015, 54, 5862-5869.	1.8	42
160	SiO 2 -supported Au-Ni bimetallic catalyst for the selective hydrogenation of acetylene. Chinese Journal of Catalysis, 2017, 38, 1338-1346.	6.9	42
161	Tuning selectivity of CO <sub>2</sub> hydrogenation by modulating the strong metal–support interaction over lr/TiO <sub>2</sub> catalysts. Green Chemistry, 2020, 22, 6855-6861.	4.6	42
162	Combined Experimental and Theoretical Investigation on the Selectivities of Ag, Au, and Pt Catalysts for Hydrogenation of Crotonaldehyde. Journal of Physical Chemistry C, 2009, 113, 20918-20926.	1.5	41

#	Article	IF	CITATIONS
163	Local structure of Pt species dictates remarkable performance on Pt/Al2O3 for preferential oxidation of CO in H2. Applied Catalysis B: Environmental, 2021, 282, 119588.	10.8	41
164	Advances in catalytic dehydrogenation of ethanol to acetaldehyde. Green Chemistry, 2021, 23, 7902-7916.	4.6	41
165	Power-to-X: Lighting the Path to a Net-Zero-Emission Future. ACS Sustainable Chemistry and Engineering, 2021, 9, 7179-7181.	3.2	39
166	Microwave-assisted fast conversion of lignin model compounds and organosolv lignin over methyltrioxorhenium in ionic liquids. RSC Advances, 2015, 5, 84967-84973.	1.7	38
167	Ethylene glycol production from glucose over Wâ€Ru catalysts: Maximizing yield by kinetic modeling and simulation. AICHE Journal, 2017, 63, 2072-2080.	1.8	38
168	Supported Au-Ni nano-alloy catalysts for the chemoselective hydrogenation of nitroarenes. Chinese Journal of Catalysis, 2015, 36, 160-167.	6.9	37
169	Exploring the Reaction Paths in the Consecutive Fe-Based FT Catalyst–Zeolite Process for Syngas Conversion. ACS Catalysis, 2020, 10, 3797-3806.	5.5	37
170	Pt/Nb-WO x for the chemoselective hydrogenolysis of glycerol to 1,3-propanediol: Nb dopant pacifying the over-reduction of WO x supports. Chinese Journal of Catalysis, 2018, 39, 1027-1037.	6.9	36
171	Effects of divalent metal ions of hydrotalcites on catalytic behavior of supported gold nanocatalysts for chemoselective hydrogenation of 3-nitrostyrene. Journal of Catalysis, 2018, 364, 174-182.	3.1	35
172	Single-Atom Catalysis: Far beyond the Matter of Metal Dispersion. Nano Letters, 2021, 21, 9835-9837.	4.5	35
173	Production of C <sub>5</sub> /C <sub>6</sub> Sugar Alcohols by Hydrolytic Hydrogenation of Raw Lignocellulosic Biomass over Zr Based Solid Acids Combined with Ru/C. ACS Sustainable Chemistry and Engineering, 2017, 5, 5940-5950.	3.2	34
174	Modulating <i>trans</i> -imination and hydrogenation towards the highly selective production of primary diamines from dialdehydes. Green Chemistry, 2020, 22, 6897-6901.	4.6	32
175	Understanding the deactivation behavior of Pt/WO3/Al2O3 catalyst in the glycerol hydrogenolysis reaction. Chinese Journal of Catalysis, 2020, 41, 1261-1267.	6.9	30
176	Synthesis of high-density aviation fuels with methyl benzaldehyde and cyclohexanone. Green Chemistry, 2018, 20, 3753-3760.	4.6	29
177	Mechanistic understanding and design of non-noble metal-based single-atom catalysts supported on two-dimensional materials for CO <sub>2</sub> electroreduction. Journal of Materials Chemistry A, 2022, 10, 5813-5834.	5.2	28
178	Selective removal of 1,2â€propanediol and 1,2â€butanediol from bioâ€ethylene glycol by catalytic reaction. AICHE Journal, 2017, 63, 4032-4042.	1.8	27
179	Synthesis of bio-based methylcyclopentadiene via direct hydrodeoxygenation of 3-methylcyclopent-2-enone derived from cellulose. Nature Communications, 2021, 12, 46.	5.8	27
180	Synthesis of 1,4 yclohexanedimethanol, 1,4 yclohexanedicarboxylic Acid and 1,2 yclohexanedicarboxylates from Formaldehyde, Crotonaldehyde and Acrylate/Fumarate. Angewandte Chemie - International Edition, 2018, 57, 6901-6905.	7.2	26

#	Article	IF	CITATIONS
181	Promoting the Effect of Au on the Selective Hydrogenolysis of Glycerol to 1,3-Propanediol over the Pt/WO <sub><i>x</i></sub> /Al <sub>2</sub> O <sub>3</sub> Catalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 5705-5715.	3.2	26
182	Comparison of cellobiose and glucose transformation to ethylene glycol. Chinese Journal of Catalysis, 2014, 35, 1811-1817.	6.9	25
183	Experimental investigation and theoretical exploration of single-atom electrocatalysis in hybrid photovoltaics: The powerful role of Pt atoms in triiodide reduction. Nano Energy, 2017, 39, 1-8.	8.2	25
184	<i>In situ</i> synthesis of metal clusters encapsulated within small-pore zeolites <i>via</i> a dry gel conversion method. Nanoscale, 2018, 10, 11320-11327.	2.8	25
185	The influence of intimacy on the â€~iterative reactions' during OX-ZEO process for aromatic production. Journal of Energy Chemistry, 2019, 35, 60-65.	7.1	25
186	Pd1/CeO2 single-atom catalyst for alkoxycarbonylation of aryl iodides. Science China Materials, 2020, 63, 959-964.	3.5	24
187	Complete conversion of lignocellulosic biomass to mixed organic acids and ethylene glycol <i>via</i> cascade steps. Green Chemistry, 2021, 23, 2427-2436.	4.6	23
188	Introducing Co–O Moiety to Co–N–C Single-Atom Catalyst for Ethylbenzene Dehydrogenation. ACS Catalysis, 2022, 12, 7760-7772.	5.5	23
189	Sustainable production of pyromellitic acid with pinacol and diethyl maleate. Green Chemistry, 2017, 19, 1663-1667.	4.6	21
190	The influence of alkali-treated zeolite on the oxide–zeolite syngas conversion process. Catalysis Science and Technology, 2018, 8, 4338-4348.	2.1	21
191	Synthesis of Decaline-Type Thermal-Stable Jet Fuel Additives with Cycloketones. ACS Sustainable Chemistry and Engineering, 2019, 7, 17354-17361.	3.2	21
192	Remarkable effect of extremely dilute H2SO4 on the cellulose conversion to ethylene glycol. Applied Catalysis A: General, 2015, 502, 65-70.	2.2	20
193	Catalytic upgrading of ethanol to butanol over a binary catalytic system of FeNiO and LiOH. Chinese Journal of Catalysis, 2020, 41, 672-678.	6.9	20
194	Exceptional Antisintering Gold Nanocatalyst for Diesel Exhaust Oxidation. Nano Letters, 2018, 18, 6489-6493.	4.5	19
195	Highâ€Density and Thermally Stable Palladium Singleâ€Atom Catalysts for Chemoselective Hydrogenations. Angewandte Chemie, 2020, 132, 21797-21803.	1.6	19
196	Direct Synthesis of Methylcyclopentadiene with 2,5-Hexanedione over Zinc Molybdates. ACS Catalysis, 2021, 11, 4810-4820.	5.5	19
197	Sustainable Production of <i>o</i> â€Xylene from Biomassâ€Đerived Pinacol and Acrolein. ChemSusChem, 2017, 10, 2880-2885.	3.6	18
198	Effect of IB-metal on Ni/SiO2 catalyst for selective hydrogenation of acetylene. Chinese Journal of Catalysis, 2020, 41, 1099-1108.	6.9	18

#	Article	IF	CITATIONS
199	A durable Ni/La-Y catalyst for efficient hydrogenation of Î <sup>3</sup> -valerolactone into pentanoic biofuels. Journal of Energy Chemistry, 2022, 70, 347-355.	7.1	18
200	Synergy between Ru and WO <i><sub>x</sub></i> Enables Efficient Hydrodeoxygenation of Primary Amides to Amines. ACS Catalysis, 2022, 12, 6302-6312.	5.5	18
201	One-pot synthesis of 2-hydroxymethyl-5-methylpyrazine from renewable 1,3-dihydroxyacetone. Green Chemistry, 2017, 19, 3515-3519.	4.6	17
202	Crystal Plane Effect of ZnO on the Catalytic Activity of Gold Nanoparticles for the Acetylene Hydrogenation Reaction. Journal of Physical Chemistry C, 2017, 121, 19727-19734.	1.5	17
203	Solid Acid-Catalyzed Dehydration of Pinacol Derivatives in Ionic Liquid: Simple and Efficient Access to Branched 1,3-Dienes. ACS Catalysis, 2017, 7, 2576-2582.	5.5	16
204	Kinetic study on catalytic dehydration of 1,2-propanediol and 1,2-butanediol over H-Beta for bio-ethylene glycol purification. Chemical Engineering Journal, 2018, 335, 530-538.	6.6	15
205	Hetero‣attice Intergrown and Robust MOF Membranes for Polyol Upgrading. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
206	A Hydrothermally Stable Irreducible Oxideâ€Modified Pd/MgAl <sub>2</sub> O <sub>4</sub> Catalyst for Methane Combustion. Angewandte Chemie, 2020, 132, 18680-18684.	1.6	14
207	Synthesis of ethanol and its catalytic conversion. Advances in Catalysis, 2019, 64, 89-191.	0.1	13
208	Catalytic Aerobic Oxidation of Lignocellulose-Derived Levulinic Acid in Aqueous Solution: A Novel Route to Synthesize Dicarboxylic Acids for Bio-Based Polymers. ACS Catalysis, 2021, 11, 11588-11596.	5.5	13
209	Active and stable Cu doped NiMgAlO catalysts for upgrading ethanol to n-butanol. Journal of Energy Chemistry, 2022, 72, 306-317.	7.1	12
210	Catalytic conversion of glucose to small polyols over a binary catalyst of vanadium modified beta zeolite and Ru/C. Journal of Energy Chemistry, 2019, 34, 88-95.	7.1	10
211	Production of 1,2-Cyclohexanedicarboxylates from Diacetone Alcohol and Fumarates. ACS Sustainable Chemistry and Engineering, 2019, 7, 2980-2988.	3.2	10
212	Catalytic hydrogenation of maleic anhydride to γ-butyrolactone over a high-performance hierarchical Ni-Zr-MFI catalyst. Journal of Catalysis, 2022, 410, 69-83.	3.1	9
213	Controlling CO 2 Hydrogenation Selectivity by Metal‣upported Electron Transfer. Angewandte Chemie, 2020, 132, 20158-20164.	1.6	8
214	Mössbauer spectroscopy database: past, present, future. Hyperfine Interactions, 2012, 204, 111-117.	0.2	6
215	Mechanism and Kinetic Analysis of the Hydrogenolysis of Cellulose to Polyols. Green Chemistry and Sustainable Technology, 2016, , 227-260.	0.4	5
216	Synthesis of renewable alkylated decalins with <i>p</i> -quinone and 2-methyl-2,4-pentanediol. Sustainable Energy and Fuels, 2022, 6, 834-840.	2.5	5

#	Article	IF	CITATIONS
217	Synthesis of renewable aviation fuel additives with aromatic aldehydes and methyl isobutyl ketone under solvent-free conditions. Sustainable Energy and Fuels, 2021, 5, 556-563.	2.5	4
218	Sustainable Production of Benzylamines from Lignin. Angewandte Chemie, 2021, 133, 20834-20839.	1.6	4
219	Hetero‣attice Intergrown and Robust MOF Membranes for Polyol Upgrading. Angewandte Chemie, 2022, 134, .	1.6	3
220	Explore the Unknown—The Value of Basic Research. Angewandte Chemie - International Edition, 2019, 58, 17882-17884.	7.2	2
221	Das Unbekannte erforschen – der Wert der Grundlagenforschung. Angewandte Chemie, 2019, 131, 18048-18050.	1.6	2
222	Further development of the database of the Mössbauer Effect Data Center. Hyperfine Interactions, 2020, 241, 1.	0.2	2
223	Iridium Single-Atom Catalyst Laboring a Quasi-Homogeneous Hydrogenation Transformation of CO2 to Formate. SSRN Electronic Journal, 0, , .	0.4	1
224	The new WEB-accessible online database of the Mössbauer effect data center. Hyperfine Interactions, 2021, 242, 1.	0.2	1
225	Synthesis of renewable alkylated naphthalenes with benzaldehyde and angelica lactone. Green Chemistry, 2021, 23, 5474-5480.	4.6	0