Xin Jin

List of Publications by Year
in descending order

70 papers	1,876 citations	257450 24 h-index	302126 39 g-index
72 all docs	72 docs citations	72 times ranked	1746 citing authors

#	Article	IF	Citations
1	Lattice-Matched Bimetallic CuPd-Graphene Nanocatalysts for Facile Conversion of Biomass-Derived Polyols to Chemicals. ACS Nano, 2013, 7, 1309-1316.	14.6	112
2	Catalytic Transfer Hydrogenation of Biomassâ€Derived Substrates to Valueâ€Added Chemicals on Dualâ€Function Catalysts: Opportunities and Challenges. ChemSusChem, 2019, 12, 71-92.	6.8	109
3	Exceptional performance of bimetallic Pt1Cu3/TiO2 nanocatalysts for oxidation of gluconic acid and glucose with O2 to glucaric acid. Journal of Catalysis, 2015, 330, 323-329.	6.2	88
4	Sorbitol Hydrogenolysis over Hybrid Cu/CaO-Al₂O₃ Catalysts: Tunable Activity and Selectivity with Solid Base Incorporation. ACS Catalysis, 2015, 5, 6545-6558.	11.2	76
5	Synergistic Effects of Bimetallic PtPd/TiO₂ Nanocatalysts in Oxidation of Glucose to Glucaric Acid: Structure Dependent Activity and Selectivity. Industrial & Engineering Chemistry Research, 2016, 55, 2932-2945.	3.7	73
6	Oxidation of Glycerol to Dicarboxylic Acids Using Cobalt Catalysts. ACS Catalysis, 2016, 6, 4576-4583.	11.2	68
7	Tailoring Facets of Î±-Mn₂O₃ Microcrystalline Catalysts for Enhanced Selective Oxidation of Glycerol to Glycolic Acid. ACS Catalysis, 2021, 11, 6371-6383.	11.2	64
8	Atom Economical Aqueous-Phase Conversion (APC) of Biopolyols to Lactic Acid, Glycols, and Linear Alcohols Using Supported Metal Catalysts. ACS Sustainable Chemistry and Engineering, 2013, 1, 1453-1462.	6.7	59
9	Synergistic Pt/MgO/SBA-15 nanocatalysts for glycerol oxidation in base-free medium: Catalyst design and mechanistic study. Journal of Catalysis, 2019, 370, 434-446.	6.2	56
10	Minireview on Bio-Oil Upgrading via Electrocatalytic Hydrogenation: Connecting Biofuel Production with Renewable Power. Energy & Fuels, 2020, 34, 7915-7928.	5.1	55
11	Synergistic effects of bimetallic PtRu/MCM-41 nanocatalysts for glycerol oxidation in base-free medium: Structure and electronic coupling dependent activity. Applied Catalysis B: Environmental, 2019, 259, 118070.	20.2	53
12	Niâ€“Co oxide catalysts with lattice distortions for enhanced oxidation of glycerol to glyceric acid. Journal of Catalysis, 2020, 381, 248-260.	6.2	48
13	A Review on Biomass Gasification: Effect of Main Parameters on Char Generation and Reaction. Energy & Fuels, 2020, 34, 13438-13455.	5.1	47
14	Manipulating Gold Spatial Location on Titanium Silicalite-1 To Enhance the Catalytic Performance for Direct Propene Epoxidation with H₂ and O₂. ACS Catalysis, 2018, 8, 10649-10657.	11.2	44
15	Anisotropic growth of PtFe nanoclusters induced by lattice-mismatch: Efficient catalysts for oxidation of biopolyols to carboxylic acid derivatives. Journal of Catalysis, 2016, 337, 272-283.	6.2	43
16	Engineering Pt-Mn2O3 interface to boost selective oxidation of ethylene glycol to glycolic acid. Applied Catalysis B: Environmental, 2021, 284, 119803.	20.2	40
17	Bimetallic AuPt/TiO₂Catalysts for Direct Oxidation of Glucose and Gluconic Acid to Tartaric Acid in the Presence of Molecular O₂. ACS Catalysis, 2020, 10, 10932-10945.	11.2	37
18	Liquid-Phase Epoxidation of Light Olefins over W and Nb Nanocatalysts. ACS Sustainable Chemistry and Engineering, 2018, 6, 4423-4452.	6.7	36

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19	Multiphase Catalytic Hydrogenolysis/Hydrodeoxygenation Processes for Chemicals from Renewable Feedstocks: Kinetics, Mechanism, and Reaction Engineering. Industrial & Engineering Chemistry Research, 2013, 52, 15226-15243.	3.7	35
20	Intriguing Catalyst (CaO) Pretreatment Effects and Mechanistic Insights during Propylene Carbonate Transesterification with Methanol. ACS Sustainable Chemistry and Engineering, 2017, 5, 4718-4729.	6.7	31
21	Selective oxidation of glycerol to carboxylic acids on Pt(111) in base-free medium: A periodic density functional theory investigation. Applied Surface Science, 2019, 497, 143661.	6.1	31
22	Engineering three-layer coreâ€“shell S-1/TS-1@dendritic-SiO2 supported Au catalysts towards improved performance for propene epoxidation with H2 and O2. Green Energy and Environment, 2020, 5, 473-483.	8.7	30
23	Synthesis of PtCuâ€“based nanocatalysts: Fundamentals and emerging challenges in energy conversion. Journal of Energy Chemistry, 2022, 64, 583-606.	12.9	29
24	Graphene oxide stabilized Cu2O for shape selective nanocatalysis. Journal of Materials Chemistry A, 2014, 2, 7147.	10.3	28
25	Enhanced performance of bimetallic PtCo/MCM-41 catalysts for glycerol oxidation in base-free medium. Catalysis Science and Technology, 2019, 9, 4909-4919.	4.1	27
26	Structural sensitivity of heterogeneous catalysts for sustainable chemical synthesis of gluconic acid from glucose. Chinese Journal of Catalysis, 2020, 41, 1320-1336.	14.0	26
27	Toward Selective Dehydrogenation of Glycerol to Lactic Acid over Bimetallic Ptâ€“Co/CeO_{<i>x</i>} Catalysts. Industrial & Engineering Chemistry Research, 2019, 58, 14548-14558.	3.7	25
28	Kinetic Modeling of Sorbitol Hydrogenolysis over Bimetallic RuRe/C Catalyst. ACS Sustainable Chemistry and Engineering, 2016, 4, 6037-6047.	6.7	24
29	Lattice distortion induced electronic coupling results in exceptional enhancement in the activity of bimetallic PtMn nanocatalysts. Applied Catalysis A: General, 2017, 534, 46-57.	4.3	24
30	Phase Transformed PtFe Nanocomposites Show Enhanced Catalytic Performances in Oxidation of Glycerol to Tartronic Acid. Industrial & Engineering Chemistry Research, 2017, 56, 13157-13164.	3.7	24
31	Kinetic modeling of Pt/C catalyzed aqueous phase glycerol conversion with <i>in situ</i> formed hydrogen. AIChE Journal, 2016, 62, 1162-1173.	3.6	23
32	Mesoporogen-Free Strategy to Construct Hierarchical TS-1 in a Highly Concentrated System for Gas-Phase Propene Epoxidation with H₂ and O₂. ACS Applied Materials & Interfaces, 2021, 13, 26134-26142.	8.0	22
33	Synergistic Strain Engineering Effect of Hybrid Plasmonic, Catalytic, and Magnetic Coreâ€“Shell Nanocrystals. Nano Letters, 2015, 15, 8347-8353.	9.1	21
34	Recent Progress in Adipic Acid Synthesis Over Heterogeneous Catalysts. Frontiers in Chemistry, 2020, 8, 185.	3.6	20
35	Catalytic Transfer Hydrogenolysis of Glycerol over Heterogeneous Catalysts: A Short Review on Mechanistic Studies. Chemical Record, 2021, 21, 1792-1810.	5.8	20
36	Recent Advances on Purification of Lactic Acid. Chemical Record, 2020, 20, 1236-1256.	5.8	18

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37	Insight into the basic strength-dependent catalytic performance in aqueous phase oxidation of glycerol to glyceric acid. Chemical Engineering Science, 2021, 230, 116191.	3.8	18
38	Interfacial catalysts for sustainable chemistry: advances on atom and energy efficient glycerol conversion to acrylic acid. Green Chemistry, 2021, 23, 51-76.	9.0	17
39	Lattice distorted MnCo oxide materials as efficient catalysts for transfer hydrogenation of levulinic acid using formic acid as H-donor. Chemical Engineering Science, 2020, 222, 115721.	3.8	16
40	Hydrogenolysis of Glycerol to 1,3â€Propanediol: Are Spatial and Electronic Configuration of â€œMetalâ€Solid Acidâ€•Interface Key for Active and Durable Catalysts?. ChemCatChem, 2022, 14, .	3.7	15
41	Hydrogenolysis of Glycerol to Propylene Glycol: Energy, Tech-Economic, and Environmental Studies. Frontiers in Chemistry, 2021, 9, 778579.	3.6	14
42	Catalytic epoxidation of olefins in liquid phase over manganese based magnetic nanoparticles. Dalton Transactions, 2019, 48, 16827-16843.	3.3	13
43	Non-noble metal catalysts for transfer hydrogenation of levulinic acid: The role of surface morphology and acid-base pairs. Materials Today Energy, 2020, 18, 100501.	4.7	13
44	Catalytic Transfer Hydrogenolysis of Bio-Polyols to Renewable Chemicals over Bimetallic PtPd/C Catalysts: Size-Dependent Activity and Selectivity. ACS Sustainable Chemistry and Engineering, 2020, 8, 5305-5316.	6.7	13
45	Catalytic Deoxygenation of Xylitol to Renewable Chemicals: Advances on Catalyst Design and Mechanistic Studies. Chemical Record, 2021, 21, 133-148.	5.8	12
46	Insight into the Effect of Lewis Acid of W/Al-MCM-41 Catalyst on Metathesis of 1-Butene and Ethylene. Applied Catalysis A: General, 2020, 604, 117772.	4.3	11
47	Selective Oxidation of 1,2-Propanediol to Lactic Acid Over Synergistic AuCu/TiO2 Catalysts. Catalysis Letters, 2019, 149, 1037-1045.	2.6	10
48	Nanostructured Metal Catalysts for Selective Hydrogenation and Oxidation of Cellulosic Biomass to Chemicals. Chemical Record, 2019, 19, 1952-1994.	5.8	10
49	Opportunities and Emerging Challenges of the Heterogeneous Metal-Based Catalysts for Vegetable Oil Epoxidation. ACS Sustainable Chemistry and Engineering, 2022, 10, 7426-7446.	6.7	10
50	Structurally Strained Bimetallic PtFe Nanocatalysts Show Tunable Catalytic Selectivity in Aqueous Oxidation of Bio-Polyols to Dicarboxylic Acids. Industrial & Engineering Chemistry Research, 2018, 57, 12078-12086.	3.7	9
51	Influence of Lewis Acid on the Activity and Selectivity of Pt/MCM-41 (Al) Catalysts for Oxidation of C₃ Polyols in Base-Free Medium. Industrial & Engineering Chemistry Research, 2019, 58, 20259-20269.	3.7	9
52	Fe³⁺-Mediated Pt/Y Zeolite Catalysts Display Enhanced Metalâ€“Bronsted Acid Interaction and Synergistic Cascade Hydrogenolysis Reactions. Industrial & Engineering Chemistry Research, 2020, 59, 17387-17398.	3.7	9
53	Synergistic Bimetallic Pdâ€“Pt/TiO₂ Catalysts for Hydrogenolysis of Xylitol with <i>In Situ</i>-Formed H₂. Industrial & Engineering Chemistry Research, 2020, 59, 13879-13891.	3.7	9
54	Electronically Coupled PtCo/MgAl Hydrotalcite Catalysts Display Tunable Selectivity Toward Glyceric Acid and Lactic Acid for Glycerol Conversion. Catalysis Letters, 2020, 150, 2590-2598.	2.6	9

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55	<scp>Auâ€Promoted</scp> Pt nanoparticles supported on <scp>MgO</scp>/<scp>SBA</scp>â€15 as an efficient catalyst for selective oxidation of glycerol. AIChE Journal, 2021, 67, e17196.	3.6	9
56	Catalytic H2 auto transfer amination of polyols to alkyl amines in one pot using supported Ru catalysts. Catalysis Today, 2018, 302, 227-232.	4.4	8
57	Chemical Synthesis of Adipic Acid from Glucose and Derivatives: Challenges for Nanocatalyst Design. ACS Sustainable Chemistry and Engineering, 2020, 8, 18732-18754.	6.7	8
58	Electronic coupling enhanced PtCo/CeO2 hybrids as highly active catalysts for the key dehydrogenation step in conversion of bio-derived polyols. Chemical Engineering Science, 2021, 229, 116060.	3.8	8
59	Selective propylene epoxidation in liquid phase using highly dispersed Nb catalysts incorporated in mesoporous silicates. Chinese Journal of Chemical Engineering, 2018, 26, 1278-1284.	3.5	7
60	PtRu/Zn₃Ce₁O_x catalysts with Lewis acidâ€“base pairs show synergistic performances for the conversion of glycerol in the absence of externally added H₂. Catalysis Science and Technology, 2020, 10, 4386-4395.	4.1	7
61	Activity and Selectivity of Base Promoted Mono and Bimetallic Catalysts for Hydrogenolysis of Xylitol and Sorbitol. ACS Symposium Series, 2013, , 273-285.	0.5	6
62	Strain engineered gas-consumption electroreduction reactions: Fundamentals and perspectives. Coordination Chemistry Reviews, 2021, 429, 213649.	18.8	6
63	Synergistic advanced oxidation process for enhanced degradation of organic pollutants in spent sulfuric acid over recoverable apricot shell-derived biochar catalyst. RSC Advances, 2022, 12, 1904-1913.	3.6	6
64	Strong metal-support interaction of palladium carbide in PtPd/C catalysts for enhanced catalytic transfer hydrogenolysis of glycerol. Biomass and Bioenergy, 2022, 163, 106507.	5.7	6
65	Recent Advances in Facile Liquid Phase Epoxidation of Light Olefins over Heterogeneous Molybdenum Catalysts. Chemical Record, 2020, 20, 230-251.	5.8	5
66	Dealuminization for a Modified (Siâ€“OH)<i>_n</i>â€“Pt Interface: Self-Activation of Pt/NaY Catalysts for Oxidation of Ethylene Glycol in a Base-Free Medium. ACS Sustainable Chemistry and Engineering, 2021, 9, 14416-14429.	6.7	5
67	Hydrothermal conversion of fructose to lactic acid and derivatives: Synergies of metal and acid/base catalysts. Chinese Journal of Chemical Engineering, 2023, 53, 381-401.	3.5	4
68	Recent Advances in Catalyst Development for Transesterification of Dialkyl Carbonates with Phenol. Industrial & Engineering Chemistry Research, 2020, 59, 20630-20645.	3.7	3
69	Different Agglomeration Processes Induced by the Varied Interaction of Feâ€“Fe Analogues with Differently Charged Surfactants. Langmuir, 2022, 38, 8469-8476.	3.5	3
70	Recent Advances on Synthesis of CoCO₃ with Controlled Morphologies. Chemical Record, 2022, 22, e202200021.	5.8	2