Chao-he Yang

List of Publications by Year
in descending order

113	2,562	201674	289244
papers	citations	27 h-index	40 g-index

114	114	114	1925
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Insights into the confinement effect on isobutane alkylation with C4 olefin catalyzed by zeolite catalyst: A combined theoretical and experimental study. Chinese Journal of Chemical Engineering, 2022, 47, 174-184.	3.5	7
2	Crude oil hierarchical catalytic cracking for maximizing chemicals production: Pilot-scale test, process optimization strategy, techno-economic-society-environment assessment. Energy Conversion and Management, 2022, 253, 115149.	9.2	19
3	Promoting catalytic transfer hydrodecarbonylation of methyl stearate over bimetallic CoNi/HAP catalysts with strong electronic coupling effect. Applied Catalysis B: Environmental, 2022, 306, 121138.	20.2	20
4	Understanding the Diffusion Properties of Sulfur-Containing Compounds in Mesoporous Alumina: A Molecular Dynamics Study. Industrial & Engineering Chemistry Research, 2022, 61, 3023-3030.	3.7	4
5	PO₄^{3â^'} Coordinated Robust Singleâ€Atom Platinum Catalyst for Selective Polyol Oxidation**. Angewandte Chemie, 2022, 134, .	2.0	21
6	PO₄^{3â^'} Coordinated Robust Singleâ€Atom Platinum Catalyst for Selective Polyol Oxidation**. Angewandte Chemie - International Edition, 2022, 61, .	13.8	51
7	Theoretical and experimental investigations into light alkane dehydrogenation over chromium-containing catalyst. Fuel, 2022, 320, 123893.	6.4	5
8	One-step leap in achieving oil-to-chemicals by using a two-stage riser reactor: Molecular-level process model and multi-objective optimization strategy. Chemical Engineering Journal, 2022, 444, 136684.	12.7	23
9	Recent Advances on Synthesis of CoCO₃ with Controlled Morphologies. Chemical Record, 2022, 22, e202200021.	5.8	2
10	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
11	Insight into the selective oxidation mechanism of glycerol to 1,<scp>3â€dihydroxyacetone</scp>over<scp>AuCuâ€“ZnO</scp>interface. AICHE Journal, 2022, 68, .	3.6	5
12	Effective Regulation of the Au Spatial Position in a Hierarchically Structured Au/HTS-1 Catalyst: To Boost the Catalytic Performance of Propene Epoxidation with H₂ and O₂. ACS Sustainable Chemistry and Engineering, 2022, 10, 9515-9524.	6.7	9
13	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
14	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
15	Engineering Pt-Mn2O3 interface to boost selective oxidation of ethylene glycol to glycolic acid. Applied Catalysis B: Environmental, 2021, 284, 119803.	20.2	40
16	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
17	Reversing Titanium Oligomer Formation towards Highâ€Efficiency and Green Synthesis of Titaniumâ€Containing Molecular Sieves. Angewandte Chemie, 2021, 133, 3485-3490.	2.0	2
18	Reversing Titanium Oligomer Formation towards Highâ€Efficiency and Green Synthesis of Titaniumâ€Containing Molecular Sieves. Angewandte Chemie - International Edition, 2021, 60, 3443-3448.	13.8	58

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19	Producing glyceric acid from glycerol via integrating vacuum dividing wall columns: conceptual process design and techno-economic-environmental analysis. Green Chemistry, 2021, 23, 3664-3676.	9.0	24
20	<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
21	Enhancing light olefins and aromatics production from naphthenic-based vacuum gas oil: Process integration, techno-economic analysis and life cycle environmental assessment. Computers and Chemical Engineering, 2021, 146, 107207.	3.8	11
22	Regulating catalyst morphology to boost the stability of Niâ€“Mo/Al2O3 catalyst for ebullated-bed residue hydrotreating. Green Energy and Environment, 2021, 6, 283-290.	8.7	20
23	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
24	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
25	Catalytic Transfer Hydrogenolysis of Glycerol over Heterogeneous Catalysts: A Short Review on Mechanistic Studies. Chemical Record, 2021, 21, 1792-1810.	5.8	20
26	Regulating light olefins or aromatics production in ex-situ catalytic pyrolysis of biomass by engineering the structure of tin modified ZSM-5 catalyst. Bioresource Technology, 2021, 330, 124975.	9.6	25
27	Octadecanol Production from Methyl Stearate by Catalytic Transfer Hydrogenation over Synergistic Co/HAP Catalysts. Energy & Fuels, 2021, 35, 9970-9982.	5.1	17
28	Glycolic Acid Production from Ethylene Glycol via Sustainable Biomass Energy: Integrated Conceptual Process Design and Comparative Techno-economicâ€“Societyâ€“Environment Analysis. ACS Sustainable Chemistry and Engineering, 2021, 9, 10948-10962.	6.7	25
29	Produce petrochemicals directly from crude oil catalytic cracking, a techno-economic analysis and life cycle society-environment assessment. Journal of Cleaner Production, 2021, 308, 127283.	9.3	33
30	Computation-guided descriptor for efficient zeolite catalysts screening in C4 alkylation process. Chemical Engineering Science, 2021, 241, 116726.	3.8	5
31	Rationally constructed Ti sites of TS-1 for epoxidation reactions. Science Bulletin, 2021, 66, 1945-1949.	9.0	19
32	Opportunities for utilizing waste cooking oil in crude to petrochemical process: Novel process design, optimal strategy, techno-economic analysis and life cycle society-environment assessment. Energy, 2021, 237, 121530.	8.8	12
33	Hydrogenolysis of Glycerol to Propylene Glycol: Energy, Tech-Economic, and Environmental Studies. Frontiers in Chemistry, 2021, 9, 778579.	3.6	14
34	Effect of acid strength on the formation mechanism of tertiary butyl carbocation in initial C4 alkylation reaction over H-BEA zeolite: A density functional theory study. Catalysis Today, 2020, 355, 171-179.	4.4	13
35	Propene epoxidation with H2 and O2 on Au/TS-1 catalyst: Cost-effective synthesis of small-sized mesoporous TS-1 and its unique performance. Catalysis Today, 2020, 347, 102-109.	4.4	29
36	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

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37	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
38	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
39	Enhancing the dynamic electron transfer of Au species on wormhole-like TS-1 for boosting propene epoxidation performance with H2 and O2. Green Energy and Environment, 2020, 5, 433-443.	8.7	28
40	Recent Advances on Purification of Lactic Acid. Chemical Record, 2020, 20, 1236-1256.	5.8	18
41	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
42	Effect of Phosphorus Modification on the Acidity, Nanostructure of the Active Phase, and Catalytic Performance of Residue Hydrodenitrogenation Catalysts. ACS Omega, 2020, 5, 19111-19119.	3.5	3
43	Synergistic Bimetallic Pdâ€“Pt/TiO₂ Catalysts for Hydrogenolysis of Xylitol with In Situ-Formed H₂. Industrial & Engineering Chemistry Research, 2020, 59, 13879-13891.	3.7	9
44	Enhancing the Conversion of Polycyclic Aromatic Hydrocarbons from Naphthenic Heavy Oil: Novel Process Design, Comparative Techno-Economic Analysis, and Life Cycle Assessment. Industrial & Engineering Chemistry Research, 2020, 59, 20086-20101.	3.7	12
45	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
46	Numerical Investigations of the Oxidative Dehydrogenation of Propane in a Spouted Bed Reactor. Energy & Fuels, 2020, 34, 10858-10871.	5.1	5
47	Revealing the Effect of Nickel Particle Size on Carbon Formation Type in the Methane Decomposition Reaction. Catalysts, 2020, 10, 890.	3.5	23
48	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
49	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
50	A DFT Study for Catalytic Deoxygenation of Methyl Butyrate on a Lewis Acid Site of ZSM-5 Zeolite. Catalysts, 2020, 10, 1233.	3.5	2
51	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
52	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
53	NiMgAlMo catalyst derived from a guest-host MoO42- mediated layered double hydroxide: High performance for the methane decomposition reaction. Applied Catalysis A: General, 2020, 597, 117551.	4.3	21
54	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

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55	Effect of Aluminum Addition and Surface Moisture Content on the Catalytic Activity of Sulfated Zirconia in n-Butane Isomerization. Industrial & Engineering Chemistry Research, 2019, 58, 14638-14645.	3.7	12
56	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
57	Toward Selective Dehydrogenation of Glycerol to Lactic Acid over Bimetallic Ptâ€“Co/CeO_x Catalysts. Industrial & Engineering Chemistry Research, 2019, 58, 14548-14558.	3.7	25
58	Deoxygenation mechanism of methyl butyrate on HZSM-5: A density functional theory study. Molecular Catalysis, 2019, 479, 110588.	2.0	10
59	Technoeconomic Analysis and Life Cycle Assessment of Five VGO Processing Pathways in China. Energy & Fuels, 2019, 33, 12106-12120.	5.1	11
60	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
61	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
62	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
63	Catalytic conversion of CO2 and shale gas-derived substrates into saturated carbonates and derivatives: Catalyst design, performances and reaction mechanism. Journal of CO2 Utilization, 2019, 34, 115-148.	6.8	32
64	Effect of dispersion on the adsorption of polycyclic aromatic hydrocarbons over the Î³-Al2O3 (110) surface. Applied Surface Science, 2019, 486, 137-143.	6.1	14
65	Understanding the Effect of Acid Strength on the Alkane-Alkoxide Hydride Transfer Reaction over Solid Acid Catalysts: Insights from Density Functional Theory. Industrial & Engineering Chemistry Research, 2019, 58, 9314-9321.	3.7	10
66	Hydrogenation and TMP Coupling Process: Novel Process Design, Techno-Economic Analysis, Environmental Assessment and Thermo-Economic Optimization. Industrial & Engineering Chemistry Research, 2019, 58, 10482-10494.	3.7	20
67	Diffusion properties of aromatic hydrocarbons in mesoporous alumina: A molecular dynamics study. Chemical Engineering Science, 2019, 204, 110-117.	3.8	12
68	Conceptual Coupled Process for Catalytic Cracking of High-Acid Crude Oil. Industrial & Engineering Chemistry Research, 2019, 58, 4794-4801.	3.7	11
69	Morphological insights into the catalytic aquathermolysis of crude oil with an easily prepared high-efficiency Fe3O4-containing catalyst. Fuel, 2019, 245, 420-428.	6.4	37
70	Nanostructured Metal Catalysts for Selective Hydrogenation and Oxidation of Cellulosic Biomass to Chemicals. Chemical Record, 2019, 19, 1952-1994.	5.8	10
71	Cost-efficient core-shell TS-1/silicalite-1 supported Au catalysts: Towards enhanced stability for propene epoxidation with H2 and O2. Chemical Engineering Journal, 2019, 377, 119927.	12.7	35
72	Promoting effect of Ni on the structure and electronic properties of NixMo(1â^'x)S2 catalyst and benzene adsorption: A periodic DFT study. Applied Surface Science, 2019, 471, 607-614.	6.1	5

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73	Enhanced stability for propene epoxidation with H2 and O2 over wormhole-like hierarchical TS-1 supported Au nanocatalyst. Chemical Engineering Journal, 2019, 377, 119954.	12.7	46
74	Insights into the reaction pathway of thiophene hydrodesulfurization over corner site of MoS2 catalyst: A density functional theory study. Molecular Catalysis, 2019, 463, 45-53.	2.0	23
75	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
76	Investigation on Adsorption and Separation Behavior of Propane/Propene Mixtures in Zeolites. Journal of Nanoscience and Nanotechnology, 2019, 19, 7679-7688.	0.9	3
77	Liquid-Phase Epoxidation of Light Olefins over W and Nb Nanocatalysts. ACS Sustainable Chemistry and Engineering, 2018, 6, 4423-4452.	6.7	36
78	Adsorption and separation of n/iso-pentane on zeolites: A GCMC study. Journal of Molecular Graphics and Modelling, 2018, 80, 59-66.	2.4	14
79	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
80	Comparative study of n-butane isomerization over SO42â˜'/Al2O3-ZrO2 and HZSM-5 zeolites at low reaction temperatures. Applied Catalysis A: General, 2018, 550, 98-104.	4.3	23
81	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
82	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
83	Mechanistic Insights into the Pore Confinement Effect on Bimolecular and Monomolecular Cracking Mechanisms of N-Octane over HY and HZSM-5 Zeolites: A DFT Study. Journal of Physical Chemistry C, 2018, 122, 12222-12230.	3.1	24
84	Insights into the synergy between recyclable magnetic Fe3O4 and zeolite for catalytic aquathermolysis of heavy crude oil. Applied Surface Science, 2018, 456, 140-146.	6.1	36
85	Towards high activity of hydrogen production from ammonia borane over efficient non-noble Ni5P4 catalyst. International Journal of Hydrogen Energy, 2018, 43, 17112-17120.	7.1	22
86	Enhanced Catalytic Performance for Propene Epoxidation with H₂ and O₂ over Bimetallic Auâ€"Ag/Uncalcined Titanium Silicate-1 Catalysts. ACS Catalysis, 2018, 8, 7799-7808.	11.2	94
87	Simultaneously Enhanced Stability and Selectivity for Propene Epoxidation with H₂ and O₂ on Au Catalysts Supported on Nano-Crystalline Mesoporous TS-1. ACS Catalysis, 2017, 7, 2668-2675.	11.2	120
88	Effect of Si/Al ratio on tetralin adsorption on Y zeolite: a DFT study. Molecular Simulation, 2017, 43, 945-952.	2.0	5
89	Efficient Conversion of Light Cycle Oil into High-Octane-Number Gasoline and Light Olefins over a Mesoporous ZSM-5 Catalyst. Energy & Fuels, 2017, 31, 6968-6976.	5.1	23
90	Consequence of heterogeneity of active sites for reactivity mechanism of n -butane isomerization over SO 4 2â˜' /ZrO 2 -Al 2 O 3 catalyst. Applied Catalysis A: General, 2017, 542, 311-316.	4.3	19

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91	Catalytic cracking of acetic acid and its ketene intermediate over HZSM-5 catalyst: A density functional theory study. Molecular Catalysis, 2017, 437, 11-17.	2.0	23
92	Adsorption and Separation Mechanism of Thiophene/Benzene in MFI Zeolite: A GCMC Study. Journal of Physical Chemistry C, 2017, 121, 25818-25826.	3.1	19
93	Isomerization of n-Butane over SO₄^{2â€“}/Al₂O₃â€“ZrO₂ in a Circulated Fluidized Bed Reactor: Prospects for Commercial Application. Industrial & Engineering Chemistry Research, 2017, 56, 8456-8464.	3.7	18
94	Effect of pore confinement on the adsorption of mono-branched alkanes of naphtha in ZSM-5 and Y zeolites. Applied Surface Science, 2017, 423, 131-138.	6.1	23
95	Au/TSâ€1 catalyst for propene epoxidation with H₂/O₂: A novel strategy to enhance stability by tuning charging sequence. AICHE Journal, 2016, 62, 3963-3972.	3.6	35
96	Effect of modification methods on the surface properties and n-butane isomerization performance of La/Ni-promoted SO42â˜/ZrO2-Al2O3. Applied Surface Science, 2016, 378, 489-495.	6.1	23
97	Nature of active sites and deactivation mechanism for n-butane isomerization over alumina-promoted sulfated zirconia. Journal of Catalysis, 2016, 338, 124-134.	6.2	35
98	Novel Propylene Production Route: Utilizing Hydrotreated Shale Oil as Feedstock via Two-Stage Riser Catalytic Cracking. Energy & Fuels, 2015, 29, 7190-7195.	5.1	9
99	Equivalent Reactor Network Model for the Modeling of Fluid Catalytic Cracking Riser Reactor. Industrial & Engineering Chemistry Research, 2015, 54, 8732-8742.	3.7	17
100	Study on the dipole moment of asphaltene molecules through dielectric measuring. Fuel, 2015, 140, 609-615.	6.4	10
101	Multifunctional two-stage riser fluid catalytic cracking process. Applied Petrochemical Research, 2014, 4, 395-400.	1.3	8
102	Equivalent Reactor Network Model for Simulating the Air Gasification of Polyethylene in a Conical Spouted Bed Gasifier. Energy & Fuels, 2014, 28, 6830-6840.	5.1	28
103	Numerical study of counterâ€current gasâ€“solid flow in FCC disengager and stripper. Canadian Journal of Chemical Engineering, 2014, 92, 176-188.	1.7	13
104	Study on the polarity, solubility, and stacking characteristics of asphaltenes. Fuel, 2014, 128, 366-372.	6.4	35
105	Synergistic Process for High Nitrogen Content Feedstocks Catalytic Cracking: A Case Study of Controlling the Reactions of Nitrogen Compounds in Situ. Industrial & Engineering Chemistry Research, 2014, 53, 5718-5727.	3.7	9
106	Residue Catalytic Cracking Process for Maximum Ethylene and Propylene Production. Industrial & Engineering Chemistry Research, 2013, 52, 14366-14375.	3.7	25
107	Synergistic Process for Coker Gas Oil Catalytic Cracking and Gasoline Reformation. Energy & Fuels, 2013, 27, 654-665.	5.1	22
108	In Situ Upgrading of Light Fluid Catalytic Cracking Naphtha for Minimum Loss. Industrial & Engineering Chemistry Research, 2013, 52, 6366-6376.	3.7	14

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109	Multifunctional Two-Stage Riser Catalytic Cracking of Heavy Oil. Industrial & Engineering Chemistry Research, 2013, 52, 658-668.	3.7	23
110	Dipole Moment Variation of a Petroleum Residue during Catalytic and Thermal Upgrading. Energy & Fuels, 2009, 23, 2086-2089.	5.1	10
111	Maximizing Propylene Yield by Two-Stage Riser Catalytic Cracking of Heavy Oil. Industrial & Engineering Chemistry Research, 2007, 46, 4914-4920.	3.7	77
112	Effects of Temperature and Catalyst to Oil Weight Ratio on the Catalytic Conversion of Heavy Oil to Propylene Using ZSM-5 and USY Catalysts. Journal of Natural Gas Chemistry, 2007, 16, 92-99.	1.8	31
113	Improving FCC Product Distribution with Two-Stage Riser Technology. Petroleum Science and Technology, 2006, 24, 379-387.	1.5	2