How Catalysts and Experimental Conditions Determine Furfural and 5-Hydroxymethylfurfural

Chemical Reviews

118, 11023-11117

DOI: 10.1021/acs.chemrev.8b00134

Citation Report

#	Article	IF	Citations
1	Photoactive ZnO Materials for Solar Light-Induced CuxO-ZnO Catalyst Preparation. Materials, 2018, 11, 2260.	1.3	15
2	Catalytic Approaches to Monomers for Polymers Based on Renewables. ACS Catalysis, 2019, 9, 8012-8067.	5.5	146
3	High yield one-pot synthesis of high density and low freezing point jet-fuel-ranged blending from bio-derived phenol and cyclopentanol. Chemical Engineering Science, 2019, 207, 441-447.	1.9	32
4	Mechanistic Insights into the BrÃ¸nsted Acid-Catalyzed Dehydration of Î²-<scp>d</scp>-Glucose to 5-Hydroxymethylfurfural under Ambient and Subcritical Conditions. ACS Catalysis, 2019, 9, 7250-7263.	5.5	32
5	Catalytic Production of Value-Added Chemicals and Liquid Fuels from Lignocellulosic Biomass. CheM, 2019, 5, 2520-2546.	5.8	337
6	Effect of the conditions for the aqueous-phase hydrogenation of furfural over Pd/C catalysts on the reaction routes. , 2019, , .		7
7	Twoâ€Step Preparation of Diverse 3â€Amidofurans from Chitin. ChemistrySelect, 2019, 4, 10097-10099.	0.7	25
8	Hydrothermal synthesis of Î³-MnOOH nanowires using sapless leaves as the reductant: an effective catalyst for the regio-specific epoxidation of Î²-ionone. Sustainable Energy and Fuels, 2019, 3, 2572-2576.	2.5	7
9	Achmatowicz rearrangement enables hydrogenolysis-free gas-phase synthesis of pentane-1,2,5-triol from furfuryl alcohol. Green Chemistry, 2019, 21, 5657-5664.	4.6	8
10	Selective Arene Hydrogenation for Direct Access to Saturated Carboâ€•and Heterocycles. Angewandte Chemie - International Edition, 2019, 58, 10460-10476.	7.2	199
11	Multiple activations of CH bonds in arenes and heteroarenes. Dalton Transactions, 2019, 48, 8530-8540.	1.6	2
12	Selective conversion of 5-hydroxymethylfurfural to diketone derivatives over Beta zeolite-supported Pd catalysts in water. Journal of Catalysis, 2019, 375, 224-233.	3.1	31
13	Synergistic bimetallic RuMo catalysts for selective rearrangement of furfural to cyclopentanol in aqueous phase. Catalysis Communications, 2019, 129, 105745.	1.6	19
14	Recent development of production technology of diesel- and jet-fuel-range hydrocarbons from inedible biomass. Fuel Processing Technology, 2019, 193, 404-422.	3.7	83
15	Catalytic furfural hydrogenation to furfuryl alcohol over Cu/SiO2 catalysts: A comparative study of the preparation methods. Fuel Processing Technology, 2019, 193, 221-231.	3.7	80
16	Cu/Cu₂O-MC (MC = Mesoporous Carbon) for Highly Efficient Hydrogenation of Furfural to Furfuryl Alcohol under Visible Light. ACS Sustainable Chemistry and Engineering, 2019, 7, 11485-11492.	3.2	35
17	Kinetics of Furfural Hydrogenation over Bimetallic Overlayer Catalysts and the Effect of Oxygen Vacancy Concentration on Product Selectivity. ChemCatChem, 2019, 11, 3296-3306.	1.8	20
18	Complete Aqueous Hydrogenation of 5-Hydroxymethylfurfural at Room Temperature over Bimetallic RuPd/Graphene Catalyst. ACS Sustainable Chemistry and Engineering, 2019, 7, 10670-10678.	3.2	57

#	Article	IF	Citations
19	Catalytic production of renewable lubricant base oils from bio-based 2-alkylfurans and enals. Green Chemistry, 2019, 21, 3606-3614.	4.6	27
20	In situ cryocrystallization and solid-state structures of furfural and some derivatives. CrystEngComm, 2019, 21, 3295-3303.	1.3	8
21	Ni Promotion by Fe: What Benefits for Catalytic Hydrogenation?. Catalysts, 2019, 9, 451.	1.6	46
22	Structureâ€Reactivity Relations in Ruthenium Catalysed Furfural Hydrogenation. ChemCatChem, 2019, 11, 3927-3932.	1.8	49
23	Alternative Recovery and Valorization of Metals from Exhausted Catalytic Converters in a New Smart Polymetallic Catalyst. ChemistrySelect, 2019, 4, 4624-4632.	0.7	0
24	Catalytic conversion of herbal residue carbohydrates to furanic derivatives in a deep eutectic solvent accompanied by dissolution and recrystallisation of choline chloride. Cellulose, 2019, 26, 8263-8277.	2.4	35
25	Structure and Mechanism of Titania-Supported Platinumâ€“Molybdenum Catalyst for Hydrodeoxygenation of 2-Furancarboxylic Acid to Valeric Acid. ACS Sustainable Chemistry and Engineering, 2019, 7, 9601-9612.	3.2	20
26	Biorefinery via Achmatowicz Rearrangement: Synthesis of Pentaneâ€1,2,5â€triol from Furfuryl Alcohol. ChemSusChem, 2019, 12, 2748-2754.	3.6	16
27	Synthesis of functionalized tetrahydrofuran derivatives from 2,5-dimethylfuran through cascade reactions. Green Chemistry, 2019, 21, 2601-2609.	4.6	4
28	Selective Production of Furan from Gas-Phase Furfural Decarbonylation on Ni-MgO Catalysts. ACS Sustainable Chemistry and Engineering, 2019, 7, 7676-7685.	3.2	42
29	Cobalt Nickel Nitrogen Array as a Easily Eecoverable, Effective Catalyst for Liquidâ€Phase Catalytic Reaction with Remarkable Recycled Stability. ChemistrySelect, 2019, 4, 3515-3523.	0.7	3
30	An electrocatalytic route for transformation of biomass-derived furfural into 5-hydroxy-2(5H)-furanone. Chemical Science, 2019, 10, 4692-4698.	3.7	36
31	Activation of Heteroaromatic Câ€“H Bonds in Furan and 2,5-Dimethylfuran. Inorganic Chemistry, 2019, 58, 6008-6015.	1.9	7
32	Insight into the hydrogenation of pure and crude HMF to furan diols using Ru/C as catalyst. Applied Catalysis A: General, 2019, 578, 122-133.	2.2	61
33	Die selektive Arenhydrierung bietet einen direkten Zugang zu gesÄttigten Carboâ€•und Heterocyclen. Angewandte Chemie, 2019, 131, 10570-10586.	1.6	49
34	Exploiting the Synergetic Behavior of PtPd Bimetallic Catalysts in the Selective Hydrogenation of Glucose and Furfural. Catalysts, 2019, 9, 132.	1.6	17
35	Some insight on the structure/activity relationship of metal nanoparticles in Cu/SiO2 catalysts. Chinese Journal of Catalysis, 2019, 40, 1788-1794.	6.9	8
36	Heterogeneous Nickel Catalysts Derived from 2D Metalâ€“Organic Frameworks for Regulating the Selectivity of Furfural Hydrogenation. ACS Omega, 2019, 4, 21724-21731.	1.6	18

#	Article	IF	Citations
37	A theoretical insight into furfural conversion catalyzed on the Ni(111) surface. Physical Chemistry Chemical Physics, 2019, 21, 23685-23696.	1.3	25
38	Boosting the utilization efficiency of glucose via a favored Câ€“C coupling reaction. Green Chemistry, 2019, 21, 6236-6240.	4.6	7
39	Selective hydrogenation via cascade catalysis on amorphous TiO₂. Green Chemistry, 2019, 21, 6585-6589.	4.6	26
40	Selective hydrogenolysis of 2-furancarboxylic acid to 5-hydroxyvaleric acid derivatives over supported platinum catalysts. Green Chemistry, 2019, 21, 6133-6145.	4.6	26
41	Compositionâ€“Reactivity Correlations in Platinumâ€“Cobalt Nanoporous Network as Catalyst for Hydrodeoxygenation of 5-Hydroxymethylfurfural. Journal of Physical Chemistry C, 2019, 123, 30274-30282.	1.5	9
42	Glucose to 5-Hydroxymethylfurfural: Origin of Site-Selectivity Resolved by Machine Learning Based Reaction Sampling. Journal of the American Chemical Society, 2019, 141, 20525-20536.	6.6	59
43	Facile Preparation of Pd/UiO-66-v for the Conversion of Furfuryl Alcohol to Tetrahydrofurfuryl Alcohol under Mild Conditions in Water. Nanomaterials, 2019, 9, 1698.	1.9	14
44	Tailor-made biofuel 2-butyltetrahydrofuran from the continuous flow hydrogenation and deoxygenation of furfuralacetone. Green Chemistry, 2019, 21, 6299-6306.	4.6	15
45	Approaches to the synthesis of Pd/C catalysts with controllable activity and selectivity in hydrogenation reactions. Catalysis Today, 2020, 357, 152-165.	2.2	30
46	Co3O4 NPs decorated Mn-Co-O solid solution as highly selective catalyst for aerobic base-free oxidation of 5-HMF to 2,5-FDCA in water. Catalysis Today, 2020, 355, 252-262.	2.2	71
47	Taking advantage of sulfur impurities present in commercial carbon nanofibers to generate selective palladium catalysts. Carbon, 2020, 157, 120-129.	5.4	5
48	Enhancing the electrocatalytic activity of CoO for the oxidation of 5-hydroxymethylfurfural by introducing oxygen vacancies. Green Chemistry, 2020, 22, 843-849.	4.6	126
49	Efficient Hydrogenation of Xylose and Hemicellulosic Hydrolysate to Xylitol over Ni-Re Bimetallic Nanoparticle Catalyst. Nanomaterials, 2020, 10, 73.	1.9	24
50	Self-tuned properties of CuZnO catalysts for hydroxymethylfurfural hydrodeoxygenation towards dimethylfuran production. Catalysis Science and Technology, 2020, 10, 658-670.	2.1	25
51	CNN pincer ruthenium complexes for efficient transfer hydrogenation of biomass-derived carbonyl compounds. Dalton Transactions, 2020, 49, 453-465.	1.6	14
52	Total hydrogenation of bio-derived furans over supported Ru subnanoclusters preparedviaamino acid-assisted deposition. Green Chemistry, 2020, 22, 850-859.	4.6	15
53	One-pot cascade conversion of xylose to furfuryl alcohol over a bifunctional Cu/SBA-15-SO3H catalyst. Chinese Journal of Catalysis, 2020, 41, 404-414.	6.9	33
54	Palladium-Catalyzed Cascade Reactions of 2-(Cyanomethoxy)chalcones with Arylboronic Acids: Selective Synthesis of Emissive Benzofuro[2,3-c]pyridines. Organic Letters, 2020, 22, 1239-1243.	2.4	29

#	Article	IF	Citations
55	Fuels and fuel additives from furfural derivatives via etherification and formation of methylfurans. Fuel Processing Technology, 2020, 200, 106308.	3.7	50
56	Hydrodeoxygenation of m-Cresol Over Pt-WOx/C Using H2 Generated In Situ by n-Hexane Dehydrogenation. Catalysis Letters, 2020, 150, 913-921.	1.4	16
57	Highly Efficient Production of DMF from Biomass-Derived HMF on Recyclable Ni-Fe/TiO2 Catalysts. Energies, 2020, 13, 4660.	1.6	15
58	Charge-separated metal-couple-site in NiZn alloy catalysts towards furfural hydrodeoxygenation reaction. Journal of Catalysis, 2020, 392, 69-79.	3.1	59
59	Layered double hydroxide derived NiAl-oxide hollow nanospheres for selective transfer hydrogenation with improved stability. Journal of Materials Chemistry A, 2020, 8, 23376-23384.	5.2	9
60	Chitosan as a sustainable precursor for nitrogen-containing carbon nanomaterials: synthesis and uses. Materials Today Sustainability, 2020, 10, 100053.	1.9	35
61	Biocarbon Supported Nanoscale Ruthenium Oxide-Based Catalyst for Clean Hydrogenation of Arenes and Heteroarenes. ACS Sustainable Chemistry and Engineering, 2020, 8, 15740-15754.	3.2	44
62	Efficient hydrogenation of furfural to furfuryl alcohol by magnetically recoverable RuCo bimetallic catalyst. Green Energy and Environment, 2022, 7, 275-287.	4.7	21
63	Mechanistic understanding of humin formation in the conversion of glucose and fructose to 5-hydroxymethylfurfural in [BMIM]Cl ionic liquid. RSC Advances, 2020, 10, 34732-34737.	1.7	48
64	Advances in catalytic routes for the production of carboxylic acids from biomass: a step forward for sustainable polymers. Chemical Society Reviews, 2020, 49, 5704-5771.	18.7	134
65	Transformations of Biomass, Its Derivatives, and Downstream Chemicals over Ceria Catalysts. ACS Catalysis, 2020, 10, 8788-8814.	5.5	75
66	Mechanistic Insights into the Solvent-Driven Adsorptive Hydrodeoxygenation of Biomass Derived Levulinate Acid/Ester to 2-Methyltetrahydrofuran over Bimetallic Cuâ€“Ni Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 11477-11490.	3.2	33
67	Electronic Properties and Reactivity of Furfural on a Model Pt(111) Catalytic Surface. Journal of Physical Chemistry C, 2020, 124, 26268-26278.	1.5	12
68	Polyphenylene as an Active Support for Ru-Catalyzed Hydrogenolysis of 5-Hydroxymethylfurfural. ACS Applied Materials & Interfaces, 2020, 12, 53712-53718.	4.0	5
69	Vapor-Phase Furfural Decarbonylation over a High-Performance Catalyst of 1%Pt/SBA-15. Catalysts, 2020, 10, 1304.	1.6	6
70	State-of-the-art advances and perspectives in the separation of biomass-derived 5-hydroxymethylfurfural. Journal of Cleaner Production, 2020, 276, 124219.	4.6	34
71	Mechanism of Pd/C-catalyzed hydrogenation of furfural under hydrothermal conditions. Journal of Catalysis, 2020, 389, 721-734.	3.1	49
72	Recent Advances in Carboxylation of Furoic Acid into 2,5â€Furandicarboxylic Acid: Pathways towards Bioâ€Based Polymers. ChemSusChem, 2020, 13, 5164-5172.	3.6	28

#	Article	IF	Citations
73	Metalâ€Catalyzed Hydrogenation of Biomassâ€Derived Furfural: Particle Size Effects and Regulation Strategies. ChemSusChem, 2020, 13, 5185-5198.	3.6	50
74	Bimetallic PtFe-Catalyzed Selective Hydrogenation of Furfural to Furfuryl Alcohol: Solvent Effect of Isopropanol and Hydrogen Activation. ACS Sustainable Chemistry and Engineering, 2020, 8, 12722-12730.	3.2	61
75	Biomass-derived chemical substitutes for bisphenol A: recent advancements in catalytic synthesis. Chemical Society Reviews, 2020, 49, 6329-6363.	18.7	87
76	Catalytic Activity of Tiâ€based MXenes for the Hydrogenation of Furfural. ChemCatChem, 2020, 12, 5733-5742.	1.8	20
77	Theoretical investigation of decarbonylation mechanism of furfural on Pd(111) and M/Pd(111)(Mâ€¯=â€¯Ru, Ni,) Tj ETQq0 0 0 rgBT /Ove	1.0	6
78	Recent advances and mechanistic insights on the production of biomass-derived 2,5-bis(alkoxymethyl)furans. Biomass Conversion and Biorefinery, 2023, 13, 1343-1358.	2.9	14
79	Unlocking the Potential of Photocatalysts in Biomass Refinery. CheM, 2020, 6, 2871-2873.	5.8	9
80	Selectivity Control in Photocatalytic Valorization of Biomass-Derived Platform Compounds by Surface Engineering of Titanium Oxide. CheM, 2020, 6, 3038-3053.	5.8	112
81	Catalytic Hydrodeoxygenation of Lignin-Derived Feedstock Into Arenes and Phenolics. Frontiers in Chemical Engineering, 2020, 2, .	1.3	7
82	5-Hydroxymethylfurfural Hydrodeoxygenation to 2,5-Dimethylfuran in Continuous-Flow System over Ni on Nitrogen-Doped Carbon. Sustainable Chemistry, 2020, 1, 106-115.	2.2	16
83	Sustainable access to renewable N-containing chemicals from reductive amination of biomass-derived platform compounds. Green Chemistry, 2020, 22, 6714-6747.	4.6	100
84	Ni-Pd/Î³-Al2O3 Catalysts in the Hydrogenation of Levulinic Acid and Hydroxymethylfurfural towards Value Added Chemicals. Catalysts, 2020, 10, 1026.	1.6	14
85	One-pot construction of carbohydrate scaffolds mediated by metal catalysts. RSC Advances, 2020, 10, 32450-32475.	1.7	6
86	CO₂ Hydrogenation to Methanol and Methane over Carbon-Supported Catalysts. Industrial & Engineering Chemistry Research, 2020, 59, 15393-15423.	1.8	22
87	Renewable Cyclopentanol From Catalytic Hydrogenation-Rearrangement of Biomass Furfural Over Ruthenium-Molybdenum Bimetallic Catalysts. Frontiers in Bioengineering and Biotechnology, 2020, 8, 615235.	2.0	7
88	Arundo donax Refining to Second Generation Bioethanol and Furfural. Processes, 2020, 8, 1591.	1.3	13
89	Enhanced Catalytic Transfer Hydrogenation of Biomass-Based Furfural into 2-Methylfuran over Multifunctional Cuâ€“Re Bimetallic Catalysts. ACS Sustainable Chemistry and Engineering, 2020, 8, 16624-16636.	3.2	47
90	Catalytic Conversion of Lignocellulosic Biomass:Application of Heterogeneous and Homogeneous Catalysts to Process Biomass into Value-Added Compounds. ACS Symposium Series, 2020, , 151-182.	0.5	2

#	Article	IF	Citations
91	Supported Metal Nanoparticles as Heterogeneous Catalysts for Transformation of Biomass-Derived Platform Chemicals. ACS Symposium Series, 2020, , 183-211.	0.5	1
92	The effect of Pd(II) chloride complexes anchoring on the formation and properties of Pd/MgAlOx catalysts. Journal of Catalysis, 2020, 392, 108-118.	3.1	7
93	Highly efficient Cu/SiO2 catalyst derived from ethanolamine modification for furfural hydrogenation. Applied Catalysis A: General, 2020, 598, 117598.	2.2	26
94	High-Efficiency Synthesis of 5-Hydroxymethylfurfural from Fructose over Highly Sulfonated Organocatalyst. Industrial & Engineering Chemistry Research, 2020, 59, 17218-17227.	1.8	21
95	Metal organic frameworks for biomass conversion. Chemical Society Reviews, 2020, 49, 3638-3687.	18.7	176
96	Base-Free Aerobic Oxidation of 5-Hydroxymethylfurfural on a Ru(0) Center in Cooperation with a Co(II)/Co(III) Redox Pair over the One-Pot Synthesized Ruâ€“Co Composites. Industrial & Engineering Chemistry Research, 2020, 59, 17200-17209.	1.8	31
97	gem â€Diolâ€Type Intermediate in the Activation of a Ketone on Snâ€Î² Zeolite as Studied by Solidâ€State NMR Spectroscopy. Angewandte Chemie, 2020, 132, 19700-19706.	1.6	2
98	gem â€Diolâ€Type Intermediate in the Activation of a Ketone on Snâ€Î² Zeolite as Studied by Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 19532-19538.	7.2	13
99	Biomass valorisation over metal-based solid catalysts from nanoparticles to single atoms. Chemical Society Reviews, 2020, 49, 3764-3782.	18.7	163
100	A gradient reduction strategy to produce defects-rich nano-twin Cu particles for targeting activation of carbon-carbon or carbon-oxygen in furfural conversion. Journal of Catalysis, 2020, 389, 78-86.	3.1	12
101	Effective Control of Particle Size and Electron Density of Pd/C and Sn-Pd/C Nanocatalysts for Vanillin Production via Base-Free Oxidation. ACS Catalysis, 2020, 10, 7699-7709.	5.5	52
102	Recent advances in photoelectrochemical cells (PECs) for organic synthesis. Organic Chemistry Frontiers, 2020, 7, 1895-1902.	2.3	67
103	Catalytic pyrolysis of cellulose over solid acidic catalysts: an environment-friendly method for furan production. Biomass Conversion and Biorefinery, 2021, 11, 2695-2702.	2.9	7
104	Efficient and selective catalytic hydrogenation of furanic aldehydes using well defined Ru and Ir pincer complexes. Green Chemistry, 2020, 22, 6767-6772.	4.6	24
105	Effect of support on selective 5-hydroxymethylfurfural hydrogenation towards 2,5-dimethylfuran over copper catalysts. Fuel, 2020, 270, 117524.	3.4	61
106	A robust strategy of homogeneously hybridizing silica and Cu3(BTC)2 to in situ synthesize highly dispersed copper catalyst for furfural hydrogenation. Applied Catalysis A: General, 2020, 596, 117518.	2.2	20
107	Influence of modification of supported palladium systems by polymers: PVP, AMPS and AcrAMPS on their catalytic properties in the reaction of transformation of biomass into fuel bio-components. Fuel, 2020, 271, 117584.	3.4	5
108	Access to N-unprotected 2-amide-substituted indoles from Ugi adducts via palladium-catalyzed intramolecular cyclization of o-iodoanilines bearing furan rings. RSC Advances, 2020, 10, 11750-11754.	1.7	5

#	Article	IF	Citations
109	ZrOCl₂ as a bifunctional and in situ precursor material for catalytic hydrogen transfer of bio-based carboxides. Sustainable Energy and Fuels, 2020, 4, 3102-3114.	2.5	19
110	Selective Hydrogenation of Biomassâ€Derived Furfural: Enhanced Catalytic Performance of Pdâ^'Cu Alloy Nanoparticles in Porous Polymer. ChemPlusChem, 2020, 85, 1697-1703.	1.3	13
111	Selective Activation of Câ€“OH, Câ€“Oâ€“C, or Câ•C in Furfuryl Alcohol by Engineered Pt Sites Supported on Layered Double Oxides. ACS Catalysis, 2020, 10, 8032-8041.	5.5	73
112	Levoglucosan: a promising platform molecule?. Green Chemistry, 2020, 22, 5859-5880.	4.6	109
113	Selective Hydrogenation of 5-Hydroxymethylfurfural via Zeolite Encapsulation to Avoid Further Hydrodehydroxylation. Industrial & Engineering Chemistry Research, 2020, 59, 12004-12012.	1.8	26
114	Hydrogenation of levulinic acid to Î³-valerolactone over bifunctional Ru/(AlO)(ZrO) catalyst: Effective control of Lewis acidity and surface synergy. Molecular Catalysis, 2020, 493, 111097.	1.0	24
115	Effect of the type of siliceous template and carbon precursor on physicochemical and catalytic properties of mesoporous nanostructured carbon-palladium systems. Journal of Porous Materials, 2020, 27, 1287-1308.	1.3	5
116	Minireview on Bio-Oil Upgrading via Electrocatalytic Hydrogenation: Connecting Biofuel Production with Renewable Power. Energy & Fuels, 2020, 34, 7915-7928.	2.5	55
117	Hydrogenolysis of tetrahydrofuran-2-carboxylic acid over tungsten-modified rhodium catalyst. Applied Catalysis A: General, 2020, 602, 117723.	2.2	9
118	Pd/Lewis Acid Synergy in Macroporous Pd@Naâ€ZSMâ€5â€‰for Enhancing Selective Conversion of Biomass. ChemCatChem, 2020, 12, 5364-5368.	1.8	9
119	An alloy chemistry strategy to tailoring the d-band center of Ni by Cu for efficient and selective catalytic hydrogenation of furfural. Journal of Catalysis, 2020, 383, 172-180.	3.1	119
120	Influence of Support Properties and Particle Size on the Goldâ€Catalyzed Baseâ€Free Aerobic Oxidation of 5â€Hydroxymethylfurfural. ChemistrySelect, 2020, 5, 1416-1423.	0.7	20
121	Controllable chemoselective hydrogenation of furfural by PdAg/C bimetallic catalysts under ambient operating conditions: an interesting Ag switch. Green Chemistry, 2020, 22, 1432-1442.	4.6	38
122	A magnetic CoRuâ€“CoO_X nanocomposite efficiently hydrogenates furfural to furfuryl alcohol at ambient H₂ pressure in water. Chemical Communications, 2020, 56, 3765-3768.	2.2	35
123	Ag Electrodeposited on Cu Openâ€Cell Foams for the Selective Electroreduction of 5â€Hydroxymethylfurfural. ChemElectroChem, 2020, 7, 1238-1247.	1.7	23
124	Selective hydrogenolysis of 5-hydroxymethylfurfural to 2,5-dimethylfuran catalyzed by ordered mesoporous alumina supported nickel-molybdenum sulfide catalysts. Applied Catalysis B: Environmental, 2020, 268, 118748.	10.8	58
125	Strategies to Control Electrochemical Hydrogenation and Hydrogenolysis of Furfural and Minimize Undesired Side Reactions. ACS Catalysis, 2020, 10, 3212-3221.	5.5	101
126	Continuous Saturated Steam Assisted Lowâ€temperature Pyrolysis of Corncobs and Selective Production of Furfural. ChemistrySelect, 2020, 5, 931-936.	0.7	5

#	Article	IF	Citations
127	Selective hydrogenation of 5-hydroxymethylfurfural and its acetal with 1,3-propanediol to 2,5-bis(hydroxymethyl)furan using supported rhenium-promoted nickel catalysts in water. Green Chemistry, 2020, 22, 1229-1238.	4.6	50
128	Capping Agent Effect on Pd-Supported Nanoparticles in the Hydrogenation of Furfural. Catalysts, 2020, 10, 11.	1.6	23
129	Selective Hydrogenation of Xylose to Xylitol over Co/SiO₂ Catalysts. ChemCatChem, 2020, 12, 1973-1978.	1.8	23
130	Hydroconversion of 5â€Hydroxymethylfurfural to 2,5â€Dimethylfuran and 2,5â€Dimethyltetrahydrofuran over Nonâ€promoted Ni/SBAâ€15. ChemCatChem, 2020, 12, 2050-2059.	1.8	41
131	Chemoenzymatic Synthesis of 5â€Hydroxymethylfurfural (HMF)â€Derived Plasticizers by Coupling HMF Reduction with Enzymatic Esterification. ChemSusChem, 2020, 13, 1864-1875.	3.6	32
132	The role of nitride species in the gas-phase furfural hydrogenation activity of supported nickel catalysts. Molecular Catalysis, 2020, 487, 110889.	1.0	9
133	Solvothermal hydrodeoxygenation of hydroxymethylfurfural derived from biomass towards added value chemicals on Ni/TiO2 catalysts. Journal of Supercritical Fluids, 2020, 163, 104827.	1.6	15
134	Ruthenium on phosphorous-modified alumina as an effective and stable catalyst for catalytic transfer hydrogenation of furfural. RSC Advances, 2020, 10, 11507-11516.	1.7	15
135	Heterogeneous iron-containing nanocatalysts â€“ promising systems for selective hydrogenation and hydrogenolysis. Catalysis Science and Technology, 2020, 10, 3160-3174.	2.1	23
136	Golden seaweed tides from beach inundations as a valuable sustainable fuel resource: Fast pyrolysis characteristics, product distribution and pathway study on Sargassum horneri based on model compounds. Algal Research, 2020, 48, 101888.	2.4	15
137	A comparative study of thermal- and electrocatalytic conversion of furfural: methylfuran as a primary and major product. Journal of Applied Electrochemistry, 2021, 51, 19-26.	1.5	14
138	Performant Au hydrogenation catalyst cooperated with Cu-doped Al2O3 for selective conversion of furfural to furfuryl alcohol at ambient pressure. Green Energy and Environment, 2021, 6, 546-556.	4.7	38
139	Effect of Ni Metal Content on Emulsifying Properties of Ni/CNTox Catalysts for Catalytic Conversion of Furfural in Pickering Emulsions. ChemCatChem, 2021, 13, 682-694.	1.8	11
140	Study of the oxidative esterification of furfural catalyzed by Au25(glutathione)18 nanocluster deposited on zirconia. Molecular Catalysis, 2021, 499, 111265.	1.0	5
141	Biomass, biorefinery, and biofuels. , 2021, , 51-87.		6
142	Nitrogen-doped carbon nanotubes-supported PdNiCo nanoparticles as a highly efficient catalyst for selective hydrogenation of furfural. Fuel, 2021, 284, 119015.	3.4	27
143	An Account of the Catalytic Transfer Hydrogenation and Hydrogenolysis of Carbohydrateâ€Derived Renewable Platform Chemicals over Nonâ€Precious Heterogeneous Metal Catalysts. ChemCatChem, 2021, 13, 59-80.	1.8	36
144	Atomically-ordered active sites in NiMo intermetallic compound toward low-pressure hydrodeoxygenation of furfural. Applied Catalysis B: Environmental, 2021, 282, 119569.	10.8	92

#	Article	IF	Citations
145	Synthesis of [2,2â€™]Bifuranylâ€5,5â€™â€dicarboxylic Acid Esters via Reductive Homocoupling of <scp>5â€Bromofuran</scp>â€2â€carboxylates Using Alcohols as Reductants^{â€}. Chinese Journal of Chemistry, 2021, 39, 62-68.	2.6	5
146	Biorefinery roadmap based on catalytic production and upgrading 5-hydroxymethylfurfural. Green Chemistry, 2021, 23, 119-231.	4.6	223
147	Atom efficient PtCu bimetallic catalysts and ultra dilute alloys for the selective hydrogenation of furfural. Applied Catalysis B: Environmental, 2021, 284, 119737.	10.8	49
148	Formic Acidâ€Assisted Selective Hydrogenolysis of 5â€Hydroxymethylfurfural to 2,5â€Dimethylfuran over Bifunctional Pd Nanoparticles Supported on Nâ€Doped Mesoporous Carbon. Angewandte Chemie - International Edition, 2021, 60, 6807-6815.	7.2	65
149	Production of biomass-derived monomers through catalytic conversion of furfural and hydroxymethylfurfural. Green Chemical Engineering, 2021, 2, 158-173.	3.3	14
150	Rapid conversion of glucose to 5-hydroxymethylfurfural using a MoCl3 catalyst in an ionic liquid with microwave irradiation. Industrial Crops and Products, 2021, 160, 113091.	2.5	28
151	Conversion of furfural to 2-methylfuran over CuNi catalysts supported on biobased carbon foams. Catalysis Today, 2021, 367, 16-27.	2.2	12
152	Zirconium and hafnium polyhedral oligosilsesquioxane complexes â€“ green homogeneous catalysts in the formation of bio-derived ethers via a MPV/etherification reaction cascade. Catalysis Science and Technology, 2021, 11, 211-218.	2.1	16
153	A Divergent Paired Electrochemical Process for the Conversion of Furfural Using a Dividedâ€Cell Flow Microreactor. ChemSusChem, 2021, 14, 590-594.	3.6	24
154	High-performance and stable Ru-Pd nanosphere catalyst supported on two-dimensional boron nitride nanosheets for the hydrogenation of furfural via water-mediated protonation. Fuel, 2021, 290, 119826.	3.4	31
155	Aqueous phase catalytic hydrogenation of furfural to furfuryl alcohol over in-situ synthesized Cuâ€“Zn/SiO2 catalysts. Materials Chemistry and Physics, 2021, 260, 124152.	2.0	23
156	Synergistic catalytic hydrogenation of furfural to 1,2-pentanediol and 1,5-pentanediol with LDO derived from CuMgAl hydrotalcite. Molecular Catalysis, 2021, 499, 111298.	1.0	22
157	Dual Metalâ€“Acid Pd-Br Catalyst for Selective Hydrodeoxygenation of 5-Hydroxymethylfurfural (HMF) to 2,5-Dimethylfuran at Ambient Temperature. ACS Catalysis, 2021, 11, 19-30.	5.5	65
158	One-Pot Cascade Conversion of Renewable Furfural to Levulinic Acid over a Bifunctional H₃PW₁₂O₄₀/SiO₂ Catalyst in the Absence of External H₂. Energy & Fuels, 2021, 35, 539-545.	2.5	18
159	Upgrading of Bioâ€Oil Model Compounds and Bioâ€Crude into Biofuel by Electrocatalysis: A Review. ChemSusChem, 2021, 14, 1037-1052.	3.6	20
160	Efficient single-atom Ni for catalytic transfer hydrogenation of furfural to furfuryl alcohol. Journal of Materials Chemistry A, 2021, 9, 1110-1118.	5.2	102
161	AmeisensÃureâ€unterstÃ¼tzte selektive Hydrogenolyse von 5â€Hydroxymethylfurfural zu 2,5â€Dimethylfuran Ã¼ber bifunktionale Pdâ€Nanopartikel auf Nâ€dotiertem mesoporÃ¶sem Kohlenstoff als TrÃ¤ger. Angewandte Chemie, 2021, 133, 6882-6891.	1.6	13
162	Recent advances in heterogeneous catalytic transfer hydrogenation/hydrogenolysis for valorization of biomass-derived furanic compounds. Green Chemistry, 2021, 23, 670-688.	4.6	106

#	Article	IF	Citations
163	Fe 3 O 4 @Lâ€lysineâ€Pd(0) organicâ€“inorganic hybrid: As a novel heterogeneous magnetic nanocatalyst for chemo and homoselective [2 + 3] cycloaddition synthesis of 5â€substituted 1Hâ€tetrazoles. Applied Organometallic Chemistry, 2021, 35, e6133.	1.7	9
164	Hybrid Conversion of 5â€Hydroxymethylfurfural to 5â€Aminomethylâ€2â€furancarboxylic acid: Toward New Bioâ€sourced Polymers. ChemCatChem, 2021, 13, 247-259.	1.8	16
165	Electrocatalytic reduction of furfural with high selectivity to furfuryl alcohol using AgPd alloy nanoparticles. Nanoscale, 2021, 13, 2312-2316.	2.8	17
166	Zinc-electrocatalyzed hydrogenation of furfural in near-neutral electrolytes. Sustainable Energy and Fuels, 2021, 5, 2972-2984.	2.5	14
167	Recent advances in decarbonylative annulation reactions. Organic and Biomolecular Chemistry, 2021, 19, 8853-8873.	1.5	5
168	The Piancatelli rearrangement of non-symmetrical furan-2,5-dicarbinols for the synthesis of highly functionalized cyclopentenones. Organic Chemistry Frontiers, 2021, 8, 2449-2455.	2.3	9
169	Selective electrochemical hydrogenation of furfural to 2-methylfuran over a single atom Cu catalyst under mild pH conditions. Green Chemistry, 2021, 23, 3028-3038.	4.6	43
170	Lignin amination valorization: heterogeneous catalytic synthesis of aniline and benzylamine from lignin-derived chemicals. Green Chemistry, 2021, 23, 6761-6788.	4.6	40
171	Multicatalysis from renewable resources: a direct route to furan-based polyesters. Green Chemistry, 2021, 23, 6931-6935.	4.6	17
172	Recent advances in the conversion of furfural into bio-chemicals through chemo- and bio-catalysis. RSC Advances, 2021, 11, 27042-27058.	1.7	44
173	Air-Stable and Reusable Cobalt Phosphide Nanoalloy Catalyst for Selective Hydrogenation of Furfural Derivatives. ACS Catalysis, 2021, 11, 750-757.	5.5	60
174	One-step hydrogenolysis of 5-hydroxymethylfurfural to 1,2,6-hexanetriol using a Pt@MIL-53-derived Pt@Al₂O₃ catalyst and NaBH₄ in aqueous media. Sustainable Energy and Fuels, 2021, 5, 4087-4094.	2.5	5
175	Emerging heterogeneous catalysts for biomass conversion: studies of the reaction mechanism. Chemical Society Reviews, 2021, 50, 11270-11292.	18.7	102
176	Electrochemical oxidation of biomass derived 5-hydroxymethylfurfural (HMF): pathway, mechanism, catalysts and coupling reactions. Green Chemistry, 2021, 23, 4228-4254.	4.6	191
177	Conjugated microporous polymers as a visible light driven platform for photo-redox conversion of biomass derived chemicals. Green Chemistry, 2021, 23, 3607-3611.	4.6	27
178	Bimetallic RuNi nanoparticles as catalysts for upgrading biomass: metal dilution and solvent effects on selectivity shifts. Green Chemistry, 2021, 23, 8480-8500.	4.6	9
179	Hydrodeoxygenation and hydrogenolysis of biomass-based materials using FeNi catalysts and magnetic induction. Green Chemistry, 2021, 23, 2025-2036.	4.6	38
180	Converting Co2+-impregnated g-C3N4 into N-doped CNTs-confined Co nanoparticles for efficient hydrogenation rearrangement reactions of furanic aldehydes. Nano Research, 2021, 14, 2846-2852.	5.8	18

#	Article	IF	Citations
181	Selective Hydrogenation of Furfural over the Co-Based Catalyst: A Subtle Synergy with Ni and Zn Dopants. ACS Applied Materials & Interfaces, 2021, 13, 8507-8517.	4.0	49
182	Toward Value-Added Dicarboxylic Acids from Biomass Derivatives via Thermocatalytic Conversion. ACS Catalysis, 2021, 11, 2524-2560.	5.5	75
183	Electrolysis Can Be Used to Resolve Hydrogenation Pathways at Palladium Surfaces in a Membrane Reactor. Jacs Au, 2021, 1, 336-343.	3.6	11
184	One-step complexed preparation of nitrogen and Cu co-doped oxidative active carbon catalysts Cu-N/OAC for furfural selective hydrogenation with high yield. Catalysis Communications, 2021, 151, 106266.	1.6	10
185	Pd catalysts supported on different hydrophilic or hydrophobic carbonaceous substrate for furfural and 5-(hydroxymethyl)-furfural hydrogenation in water. Molecular Catalysis, 2021, 504, 111496.	1.0	15
186	Electrochemical Routes for the Valorization of Biomass-Derived Feedstocks: From Chemistry to Application. ACS Energy Letters, 0, , 1205-1270.	8.8	130
187	Furfural hydrogenation, hydrodeoxygenation and etherification over MoO2 and MoO3: A combined experimental and theoretical study. Applied Surface Science, 2021, 543, 148836.	3.1	17
188	Seagrass-based platform strategies for sustainable hydroxymethylfurfural (HMF) production: toward bio-based chemical products. Critical Reviews in Biotechnology, 2021, 41, 902-917.	5.1	13
189	A green and highly efficient synthesis of 5-hydroxymethylfurfural from monosaccharides using a novel binary ionic liquid mixture. Molecular Catalysis, 2021, 503, 111428.	1.0	14
190	Reductive Conversion of Biomass-Derived Furancarboxylic Acids with Retention of Carboxylic Acid Moiety. Transactions of Tianjin University, 2021, 27, 165-179.	3.3	21
191	Tuning the Reaction Selectivity over MgAl Spinel-Supported Pt Catalyst in Furfuryl Alcohol Conversion to Pentanediols. Catalysts, 2021, 11, 415.	1.6	2
192	Titanium silicalite-1 supported bimetallic catalysts for selective hydrogenolysis of 5-hydroxymethylfurfural to biofuel 2, 5-dimethylfuran. Chemical Engineering Journal Advances, 2021, 5, 100081.	2.4	11
193	Tailoring the Reactive Oxygen Species in Mesoporous NiO for Selectivity-Controlled Aerobic Oxidation of 5-Hydroxymethylfurfural on a Loaded Pt Catalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 6056-6067.	3.2	43
194	In situ encapsulated ultrafine Pd nanoparticles in nitrogen-doped porous carbon derived from hyper-crosslinked polymers effectively catalyse hydrogenation. Journal of Catalysis, 2021, 396, 342-350.	3.1	29
195	Highly selective ring rearrangement of 5-hydroxymethylfurfural to 3-hydroxymethylcyclopentanon catalyzed by non-noble Ni-Fe/Al2O3. Molecular Catalysis, 2021, 505, 111505.	1.0	13
196	On the Role of Protonic Acid Sites in Cu Loaded FAU31 Zeolite as a Catalyst for the Catalytic Transformation of Furfural to Furan. Molecules, 2021, 26, 2015.	1.7	2
197	Selectively Producing Acetic Acid via Boric Acid-Catalyzed Fast Pyrolysis of Woody Biomass. Catalysts, 2021, 11, 494.	1.6	5
198	Reducing Challenges in Organic Synthesis with Stereoselective Hydrogenation and Tandem Catalysis. Journal of the American Chemical Society, 2021, 143, 6724-6745.	6.6	33

#	Article	IF	Citations
199	Catalytic Conversion of Xylose to Furfural by p-Toluenesulfonic Acid (pTSA) and Chlorides: Process Optimization and Kinetic Modeling. Molecules, 2021, 26, 2208.	1.7	24
200	Catalytic Transformation of Biomass-Derived 5-Hydroxymethylfurfural over Supported Bimetallic Iridium-Based Catalysts. Journal of Physical Chemistry C, 2021, 125, 9657-9678.	1.5	10
201	Efficient Transfer Hydrogenolysis of 5-Hydromethylfurfural to 2,5-Dimethylfuran over CoFe Bimetallic Catalysts Using Formic Acid as a Sustainable Hydrogen Donor. Industrial & Engineering Chemistry Research, 2021, 60, 5826-5837.	1.8	16
202	The Promotion Effect of Cu on the Pd/C Catalyst in the Chemoselective Hydrogenation of Unsaturated Carbonyl Compounds. Bulletin of Chemical Reaction Engineering and Catalysis, 2021, 16, 267-279.	0.5	1
203	Perspectives on Multifunctional Catalysts Derived from Layered Double Hydroxides toward Upgrading Reactions of Biomass Resources. ACS Catalysis, 2021, 11, 6440-6454.	5.5	46
204	Efficient production of aromatics by catalytic pyrolysis of fruit waste over zeolites with 3D pore topologies. Energy, 2021, 223, 120046.	4.5	14
205	Adsorption Configuration-Determined Selective Hydrogenative Ring Opening and Ring Rearrangement of Furfural over Metal Phosphate. ACS Catalysis, 2021, 11, 6406-6415.	5.5	52
206	Selective aqueousâ€phase hydrogenation of furfural to cyclopentanol over Niâ€based catalyst under mild conditions. Journal of the Chinese Chemical Society, 2021, 68, 1177-1180.	0.8	11
207	Insights into the Role of Dual-Interfacial Sites in Cu/ZrO₂ Catalysts in 5-HMF Hydrogenolysis with Isopropanol. ACS Applied Materials & Interfaces, 2021, 13, 22292-22303.	4.0	20
208	Density Functional Theory Investigation of the Conversion of 5-(Hydroxymethyl)furfural into 2,5-Dimethylfuran over the Pd(111), Cu(111), and Cu₃Pd(111) Surfaces. Journal of Physical Chemistry C, 2021, 125, 10295-10317.	1.5	18
209	Conversion of Xylose to Furfural Catalyzed by Carbon-Based Solid Acid Prepared from Pectin. Energy & Fuels, 2021, 35, 9961-9969.	2.5	23
210	Hydrogenolysis of Furfuryl Alcohol to 1,2â€Pentanediol Over Supported Ruthenium Catalysts. ChemistryOpen, 2021, 10, 731-736.	0.9	6
211	Selective catalytic hydrogenation of biomass derived furans to secondary alcohols using <scp>Pt</scp>/polyoxometalate catalysts under mild reaction conditions. Biofuels, Bioproducts and Biorefining, 2021, 15, 1431-1446.	1.9	4
212	Adsorption of 5-Hydroxymethylfurfural, Levulinic Acid, Formic Acid, and Glucose Using Polymeric Resins Modified with Different Functional Groups. ACS Omega, 2021, 6, 16955-16968.	1.6	14
213	Pd₃Pb Nanosponges for Selective Conversion of Furfural to Furfuryl Alcohol under Mild Condition. Small Methods, 2021, 5, e2100400.	4.6	8
214	Metal Sulfide Photocatalysts for Lignocellulose Valorization. Advanced Materials, 2021, 33, e2007129.	11.1	106
215	Palladium confined in pure-silica TON zeolite for furfuryl alcohol hydrogenation into tetrahydrofurfuryl alcohol. Microporous and Mesoporous Materials, 2021, 322, 111161.	2.2	14
216	From Waste to Valueâ€"Direct Utilization of Î±-Angelica Lactone as a Nonconventional Irreversible Acylating Agent in a Chromatography-Free Lipase-Catalyzed KR Approach toward sec-Alcohols. ACS Sustainable Chemistry and Engineering, 2021, 9, 10276-10290.	3.2	4

#	Article	IF	Citations
217	Hydrogenâ€Bindingâ€Initiated Activation of Oâ^'H Bonds on a Nitrogenâ€Doped Surface for the Catalytic Oxidation of Biomass Hydroxyl Compounds. Angewandte Chemie, 2021, 133, 18251-18258.	1.6	3
218	Hydrogenâ€Bindingâ€Initiated Activation of Oâ^'H Bonds on a Nitrogenâ€Doped Surface for the Catalytic Oxidation of Biomass Hydroxyl Compounds. Angewandte Chemie - International Edition, 2021, 60, 18103-18110.	7.2	25
219	Discovering the role of substrate in aldehyde hydrogenation. Journal of Catalysis, 2021, 399, 162-169.	3.1	9
220	Selective hydroconversion of 2-methylfuran to pentanols on MWNT-supported Pt catalyst at ambient temperature. Rare Metals, 2022, 41, 889-900.	3.6	8
222	Boosted activity of Cu/SiO2 catalyst for furfural hydrogenation by freeze drying. Chinese Chemical Letters, 2022, 33, 912-915.	4.8	10
223	MoO_x-Decorated Co-Based Catalysts toward the Hydrodeoxygenation Reaction of Biomass-Derived Platform Molecules. ACS Applied Materials & Interfaces, 2021, 13, 31799-31807.	4.0	26
224	Zeolite-Encapsulated Cu Nanoparticles for the Selective Hydrogenation of Furfural to Furfuryl Alcohol. ACS Catalysis, 2021, 11, 10246-10256.	5.5	69
225	Highly Dispersed CoNi Alloy Embedded in Nâ€doped Graphitic Carbon for Catalytic Transfer Hydrogenation of Biomassâ€derived Furfural. Chemistry - an Asian Journal, 2021, 16, 3194-3201.	1.7	21
226	Tunable selectivity of Ni catalysts in the hydrogenation reaction of 5-hydroxymethylfurfural in aqueous media: Role of the carbon supports. Carbon, 2021, 182, 265-275.	5.4	28
227	Microporous and mesoporous structure catalysts for the production of 5â€hydroxymethylfurfural (5â€HMF). International Journal of Energy Research, 2022, 46, 577-633.	2.2	10
228	Diversified upgrading of HMF via acetylation, aldol condensation, carboxymethylation, vinylation and reductive amination reactions. Molecular Catalysis, 2021, 514, 111838.	1.0	9
229	2-Methylfuran (MF) as a potential biofuel: A thorough review on the production pathway from biomass, combustion progress, and application in engines. Renewable and Sustainable Energy Reviews, 2021, 148, 111265.	8.2	96
230	One-pot domino conversion of biomass-derived furfural to Î³-valerolactone with an in-situ formed bifunctional catalyst. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-17.	1.2	1
231	Energy Densification of Biomass-Derived Furfurals to Furanic Biofuels by Catalytic Hydrogenation and Hydrodeoxygenation Reactions. Sustainable Chemistry, 2021, 2, 521-549.	2.2	6
232	Effect of carboxylate stabilizers on the performance of Pt/C catalysts for furfural hydrogenation. Journal of Environmental Chemical Engineering, 2021, 9, 106293.	3.3	9
233	Biomass-formic acid-hydrogen conversion process with improved sustainability and formic acid yield: Combination of citric acid and mechanocatalytic depolymerization. Chemical Engineering Journal, 2021, 421, 127827.	6.6	9
234	Selective aqueous-phase hydrogenation of furfural to cyclopentanol over Ni-based catalysts prepared from Ni-MOF composite. Inorganic Chemistry Communication, 2021, 133, 108894.	1.8	10
235	Highly efficient g-C3N4 supported ruthenium catalysts for the catalytic transfer hydrogenation of levulinic acid to liquid fuel Î³-valerolactone. Renewable Energy, 2021, 177, 652-662.	4.3	30

#	Article	IF	Citations
236	Selective tandem hydrogenation and rearrangement of furfural to cyclopentanone over CuNi bimetallic catalyst in water. Chinese Journal of Catalysis, 2021, 42, 2216-2224.	6.9	27
237	Hydrothermal pretreatment of lignocellulosic biomass for hemicellulose recovery. Bioresource Technology, 2021, 342, 126033.	4.8	76
238	Upgrading of biomass-derived furanic compounds into high-quality fuels involving aldol condensation strategy. Fuel, 2021, 306, 121765.	3.4	36
239	Surface functionalized Pt/SnNb2O6 nanosheets for visible-light-driven the precise hydrogenation of furfural to furfuryl alcohol. Journal of Energy Chemistry, 2022, 66, 566-575.	7.1	16
240	Pyrolysis kinetics and product distribution of Î±-cellulose: Effect of potassium and calcium impregnation. Renewable Energy, 2022, 181, 329-340.	4.3	11
241	2-MeTHF. , 2021, , 75-98.		2
242	Kinetics of furfural electrochemical hydrogenation and hydrogenolysis in acidic media on copper. Reaction Chemistry and Engineering, 2021, 6, 2075-2086.	1.9	19
243	LiCl-promoted-dehydration of fructose-based carbohydrates into 5-hydroxymethylfurfural in isopropanol. RSC Advances, 2021, 11, 1404-1410.	1.7	9
244	Oxygen binding energy of doped metal: a shortcut to efficient Ni-based bimetallic catalysts for the hydrodeoxygenation reaction. Catalysis Science and Technology, 2021, 11, 4376-4386.	2.1	10
245	Selective hydrogenolysis of 5-hydroxymethylfurfural to 2,5-dimethylfuran with ethanol as a hydrogen donor over Î²-Mo₂C embedded in carbon microspheres. Sustainable Energy and Fuels, 2021, 5, 4749-4757.	2.5	12
246	Furan platform chemicals beyond fuels and plastics. Green Chemistry, 2021, 23, 7458-7487.	4.6	43
247	Niâ€“Al/CoOx-catalyzed hydrodeoxygenation of 5-hydroxymethylfurfural into 2,5-dimethylfuran at low temperatures without external hydrogen. Green Chemistry, 2021, 23, 7763-7772.	4.6	25
248	Efficient hydrogenation of 5-hydroxymethylfurfural using a synergistically bimetallic Ruâ€“Ir/C catalyst. Chemical Communications, 2021, 57, 1742-1745.	2.2	31
249	Promotion effects of PrPO₄ for the hydrogenation transformation of biomass-derived compounds over Prâ€“Niâ€“P composites. Materials Advances, 2021, 2, 3927-3939.	2.6	7
250	Sources of variation in bourbon whiskey barrels: a review. Journal of the Institute of Brewing, 2021, 127, 210-223.	0.8	11
251	The thousand faces of Cu-doped porous mixed oxides (Cu-PMO) in the conversion of renewable resources and beyond. Advances in Inorganic Chemistry, 2021, , 59-98.	0.4	4
252	Tandem catalyzing the hydrodeoxygenation of 5-hydroxymethylfurfural over a Ni₃Fe intermetallic supported Pt single-atom site catalyst. Chemical Science, 2021, 12, 4139-4146.	3.7	33
253	Selective hydrogenolysis of 5-hydroxymethylfurfural to produce biofuel 2, 5-dimethylfuran over Ni/ZSM-5 catalysts. Fuel, 2020, 274, 117853.	3.4	67

#	Article	IF	Citations
254	Recent catalytic routes for the preparation and the upgrading of biomass derived furfural and 5-hydroxymethylfurfural. Chemical Society Reviews, 2020, 49, 4273-4306.	18.7	559
255	Mechanistic understanding of the catalytic hydrogenation of bio-derived aromatics. Green Chemistry, 2021, 23, 9239-9253.	4.6	7
256	In situ growth of MOFs on Ni(OH)₂ for efficient electrocatalytic oxidation of 5-hydroxymethylfurfural. Chemical Communications, 2021, 57, 11358-11361.	2.2	6
257	Enhancing the activity of gold supported catalysts by oxide coating: towards efficient oxidations. Green Chemistry, 2021, 23, 8453-8457.	4.6	19
258	Catalytic hydrogenation of furfural to furfuryl alcohol on hydrotalcite-derived CuxNi3â˜'xAlOy mixed-metal oxides. Journal of Catalysis, 2021, 404, 420-429.	3.1	19
259	Recent Progress on Electrocatalytic Valorization of Biomassâ€Derived Organics. Energy and Environmental Materials, 2022, 5, 1117-1138.	7.3	38
260	Efficient activation of H2 on copper species immobilized by MCM-41 for selective hydrogenation of furfural at ambient pressure. Molecular Catalysis, 2021, 515, 111921.	1.0	5
261	Controlling the Production of Acid Catalyzed Products of Furfural Hydrogenation by Pd/TiO₂. ChemCatChem, 2021, 13, 5121-5133.	1.8	11
262	Photocatalytic H₂ Evolution Coupled with Furfuralcohol Oxidation over Ptâ€Modified ZnCdS Solid Solution. Small Methods, 2021, 5, e2100979.	4.6	79
263	The Use of CO2 in the Production of Bioplastics for an Even Greener Chemistry. Sustainability, 2021, 13, 11278.	1.6	3
264	Immobilized highly dispersed Ni nanoparticles over porous carbon as an efficient catalyst for selective hydrogenation of furfural and levulinic acid. Journal of Environmental Chemical Engineering, 2021, 9, 106530.	3.3	14
265	Xylose Utilization for Polyhydroxyalkanoate Biosynthesis. ACS Symposium Series, 2020, , 125-143.	0.5	1
266	Intermolecular Diels-Alder Cycloadditions of Furfural-Based Chemicals from Renewable Resources: A Focus on the Regio- and Diastereoselectivity in the Reaction with Alkenes. International Journal of Molecular Sciences, 2021, 22, 11856.	1.8	18
267	Grass-like Ni_xSe_y nanowire arrays shelled with NiFe LDH nanosheets as a 3D hierarchical coreâ€“shell electrocatalyst for efficient upgrading of biomass-derived 5-hydroxymethylfurfural and furfural. Catalysis Science and Technology, 2022, 12, 201-211.	2.1	24
268	Separation procedures in the identification of the hydrogenation products of biomass-derived hydroxymethylfurfural. Reviews in Analytical Chemistry, 2020, 39, 88-105.	1.5	4
269	The Sizeâ€Dependent Catalytic Performances of Supported Metal Nanoparticles and Single Atoms for the Upgrading of Biomassâ€Derived 5â€Hydroxymethylfurfural, Furfural, and Levulinic acid. ChemCatChem, 2022, 14, .	1.8	3
270	Furfural and 5-(hydroxymethyl)furfural valorization using homogeneous Ni(0) and Ni(II) catalysts by transfer hydrogenation. Journal of Organometallic Chemistry, 2022, 957, 122162.	0.8	5
271	Reflection absorption infrared spectroscopy of the surface chemistry of furfural on Pd(111). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	0.9	3

#	Article	IF	Citations
272	Highly efficient syntheses of 2,5-bis(hydroxymethyl)furan and 2,5-dimethylfuran via the hydrogenation of biomass-derived 5-hydroxymethylfurfural over a nickelâ€“cobalt bimetallic catalyst. Applied Surface Science, 2022, 577, 151869.	3.1	36
273	Catalytic Transfer Hydrogenation and Acid Reactions of Furfural and 5-(Hydroxymethyl)furfural over Hf-TUD-1 Type Catalysts. Molecules, 2021, 26, 7203.	1.7	7
274	The role of hydrogen bronzes in the hydrogenation of polyfunctional reagents: cinnamaldehyde, furfural and 5-hydroxymethylfurfural over Pd/HxWO3 and Pd/HxMoO3 catalysts. International Journal of Hydrogen Energy, 2022, 47, 2347-2365.	3.8	6
275	Crystal-phase engineering of PdCu nanoalloys facilitates selective hydrodeoxygenation at room temperature. Innovation(China), 2022, 3, 100189.	5.2	5
276	Homogeneous Catalyzed Valorization of Furanics: A Sustainable Bridge to Fuels and Chemicals. Catalysts, 2021, 11, 1371.	1.6	12
277	Nature of polymeric condensates during furfural rearrangement to cyclopentanone and cyclopentanol over Cu-based catalysts. New Journal of Chemistry, 2021, 45, 22767-22777.	1.4	6
278	Selective and stable upgrading of biomass-derived furans into plastic monomers by coupling homogeneous and heterogeneous catalysis. CheM, 2022, 8, 1034-1049.	5.8	24
279	On the effect of zeolite acid property and reaction pathway in Pdâ€“catalyzed hydrogenation of furfural to cyclopentanone. Fuel, 2022, 314, 123074.	3.4	23
280	Hydrogenation of furfural to furfuryl alcohol over MOF-derived Fe/Cu@C and Fe₃O₄/Cu@C catalysts. Reaction Chemistry and Engineering, 2022, 7, 994-1004.	1.9	2
281	Pathway to fully-renewable biobased polyesters derived from HMF and phenols. Polymer Chemistry, 2022, 13, 1215-1227.	1.9	1
282	In Situ Ruthenium Catalyst Modification for the Conversion of Furfural to 1,2-Pentanediol. Nanomaterials, 2022, 12, 328.	1.9	6
284	Operando generated copperâ€based catalyst enabling efficient electrosynthesis of 2,5â€bis(hydroxymethyl)furan. Fundamental Research, 2023, 3, 763-769.	1.6	7
285	Advances in Upgrading Biomass to Biofuels and Oxygenated Fuel Additives Using Metal Oxide Catalysts. Energy & Fuels, 2022, 36, 1189-1204.	2.5	21
286	Single-step synthesis of 2-pentanone from furfural over Cuâ€“Ni @SBA-15. Biomass and Bioenergy, 2022, 156, 106321.	2.9	9
287	Recent advances in the catalytic transfer hydrogenation of furfural to furfuryl alcohol over heterogeneous catalysts. Green Chemistry, 2022, 24, 1780-1808.	4.6	94
288	Electrochemical Hydrogenation of Furfural in Aqueous Acetic Acid Media with Enhanced 2â€Methylfuran Selectivity Using CuPd Bimetallic Catalysts. Angewandte Chemie, 2022, 134, .	1.6	9
289	Selective catalysis for the reductive amination of furfural toward furfurylamine by graphene-co-shelled cobalt nanoparticles. Green Chemistry, 2022, 24, 271-284.	4.6	36
290	Electrochemical Hydrogenation of Furfural in Aqueous Acetic Acid Media with Enhanced 2â€Methylfuran Selectivity Using CuPd Bimetallic Catalysts. Angewandte Chemie - International Edition, 2022, 61, .	7.2	33

#	Article	IF	Citations
291	Diverse Mechanistic Pathways in Single-Site Heterogeneous Catalysis: Alcohol Conversions Mediated by a High-Valent Carbon-Supported Molybdenum-Dioxo Catalyst. ACS Catalysis, 2022, 12, 1247-1257.	5.5	8
292	Creation of Highly Reducible CuO Species by High-Temperature Calcination of a Cu-Al Layered Double Hydroxide: Selective Hydrogenation of Furfural into Furfuryl Alcohol with Formic Acid. Bulletin of the Chemical Society of Japan, 2022, 95, 121-128.	2.0	9
293	Furfural Adsorption and Hydrogenation at the Oxideâ€Metal Interface: Evidence of the Support Influence on the Selectivity of Iridiumâ€Based Catalysts. ChemCatChem, 2022, 14, .	1.8	7
294	Nanoarchitectonics of phosphomolybdic acid supported on activated charcoal for selective conversion of furfuryl alcohol and levulinic acid to alkyl levulinates. Molecular Catalysis, 2022, 519, 112135.	1.0	17
295	Cu nanoparticles embedded on reticular chitosan-derived N-doped carbon: Application to the catalytic hydrogenation of alkenes, alkynes and N-heteroarenes. Molecular Catalysis, 2022, 519, 112104.	1.0	3
296	Direct conversion of fructose to levulinic acid in water medium catalyzed by a reusable perfluorosulfonic acid AquivionÂ® resin. Molecular Catalysis, 2022, 520, 112159.	1.0	4
297	Insights into the interfacial effects in Cu-Co/CeOx catalysts on hydrogenolysis of 5-hydroxymethylfurfural to biofuel 2,5-dimethylfuran. Journal of Colloid and Interface Science, 2022, 615, 19-29.	5.0	21
298	Controlled hydrogenation of a biomass-derived platform chemical formed by aldol-condensation of 5-hydroxymethyl furfural (HMF) and acetone over Ru, Pd, and Cu catalysts. Green Chemistry, 2022, 24, 2146-2159.	4.6	14
299	Chemocatalytic value addition of glucose without carbonâ€“carbon bond cleavage/formation reactions: an overview. RSC Advances, 2022, 12, 4891-4912.	1.7	9
300	Insights into the Electrochemical Reduction of 5â€Hydroxymethylfurfural at High Current Densities. ChemSusChem, 2022, 15, .	3.6	14
301	Regulating the Alkalinity of Carbon Nitride by Magnesium Doping to Boost the Selective Isomerization of Glucose to Fructose. ACS Sustainable Chemistry and Engineering, 2022, 10, 1986-1993.	3.2	16
302	Furfural hydrogenation over Cu, Ni, Pd, Pt, Re, Rh and Ru catalysts: Ab initio modelling of adsorption, desorption and reaction micro-kinetics. Chemical Engineering Journal, 2022, 436, 135070.	6.6	32
303	Micro-/mesopores confined ultrasmall Cu nanoparticles in SBA-15 as a highly efficient and robust catalyst for furfural hydrogenation to furfuryl alcohol. Applied Catalysis A: General, 2022, 633, 118527.	2.2	14
304	Efficient Conversion of Furfural to Cyclopentanol Over Lignin Activated Carbon Supported Ni-Co Catalyst. SSRN Electronic Journal, 0, , .	0.4	0
305	Solvent effect on the rate and direction of furfural transformations during hydrogenation over the Pd/C catalyst. Russian Chemical Bulletin, 2022, 71, 64-69.	0.4	1
306	Co-ligand triphenylphosphine/alkynyl-stabilized undecagold nanocluster with a capped crown structure. RSC Advances, 2022, 12, 11047-11051.	1.7	5
307	Tuning the Electron Density of Metal Nickel via Interfacial Electron Transfer in Ni/MCM-41 for Efficient and Selective Catalytic Hydrogenation of Halogenated Nitroarenes. ACS Sustainable Chemistry and Engineering, 2022, 10, 2947-2959.	3.2	26
308	Precise Control over Local Atomic Structures in Niâ€“Mo Bimetallic Alloys for the Hydrodeoxygenation Reaction: A Combination between Density Functional Theory and Microkinetic Modeling. Journal of Physical Chemistry C, 2022, 126, 4319-4328.	1.5	5

#	Article	IF	Citations
309	Tunable synthesis of furfurylamines or Î²-amino alcohols via Ru-catalyzed Nâ€“H functionalization using biomass-derived polyols. Green Synthesis and Catalysis, 2022, 3, 259-264.	3.7	7
310	A paradigm shift towards production of sustainable bioenergy and advanced products from Cannabis/hemp biomass in Canada. Biomass Conversion and Biorefinery, 2024, 14, 3161-3182.	2.9	8
311	Ni-Cu/Al2O3 from Layered Double Hydroxides Hydrogenates Furfural to Alcohols. Catalysts, 2022, 12, 390.	1.6	6
312	Sustainable Catalytic Transformation of Biomassâ€Derived 5â€Hydroxymethylfurfural to 2,5â€Bis(hydroxymethyl)tetrahydrofuran. ChemSusChem, 2022, 15, .	3.6	11
313	Identification of Crucial Intermediates in the Formation of Humins from Celluloseâ€Derived Platform Chemicals Under BrÃ¸nsted Acid Catalyzed Reaction Conditions. ChemPhysChem, 2022, 23, .	1.0	5
314	Ambientâ€Temperature Reductive Amination of 5â€Hydroxymethylfurfural Over Al₂O₃â€Supported Carbonâ€Doped Nickel Catalyst. ChemSusChem, 2022, 15, .	3.6	12
315	Effect of Rhenium on the Catalytic Activity of Activated Carbon-Supported Nickel Applied in the Hydrogenation of Furfural and Levulinic Acid. Topics in Catalysis, 0, , .	1.3	3
316	Processes for the synthesis of Î³-acetopropyl alcohol. Kataliz V Promyshlennosti, 2022, 22, 5-17.	0.2	0
317	A Review on the Critical Role of H₂ Donor in the Selective Hydrogenation of 5â€Hydroxymethylfurfural. ChemSusChem, 2022, 15, .	3.6	12
318	Selective Hydrogenation of Furfural: Pure Silica Supported Metal Catalysts. ChemistrySelect, 2022, 7, .	0.7	5
319	Highly selective hydrogenative ring-rearrangement of furfural to cyclopentanone over a bifunctional Ni3P/Î³-Al2O3 catalyst. Molecular Catalysis, 2022, 522, 112239.	1.0	5
320	Catalytic Transfer Hydrogenation of 5â€Hydroxymethylfurfural with Primary Alcohols over Skeletal CuZnAl Catalysts. ChemSusChem, 2022, 15, .	3.6	4
321	Active metal oxide-nitrogen-doped carbon hybrid catalysts towards selective catalytic transfer hydrogenation of furfural to furfuryl alcohol. Applied Catalysis A: General, 2022, 636, 118574.	2.2	3
322	Cuâ°NPs@C Nanosheets Derived from a PVPâ€assisted 2D Cuâ€MOF with Renewable Ligand for Highâ€Efficient Selective Hydrogenation of 5â€Hydroxymethylfurfural. ChemSusChem, 2022, 15, .	3.6	4
323	Design strategies and structure-performance relationships of heterogeneous catalysts for selective hydrogenation of 1,3-butadiene. Chinese Journal of Catalysis, 2022, 43, 1017-1041.	6.9	13
324	Cu-Based Nanoparticles as Catalysts for Selective Hydrogenation of Biomass-Derived 5-Hydroxymethylfurfural to 1,2-Hexanediol. ACS Applied Nano Materials, 2022, 5, 5882-5894.	2.4	9
325	Efficient Base Nickel-Catalyzed Hydrogenolysis of Furfural-Derived Tetrahydrofurfuryl Alcohol to 1,5-Pentanediol. ACS Sustainable Chemistry and Engineering, 2022, 10, 4954-4968.	3.2	14
326	Solvent-free oxidative esterification of furfural to 2-methyl furoate using novel copper-exchanged tungstophosphoric acid supported on montmorillonite K-10 catalyst. Molecular Catalysis, 2022, 524, 112256.	1.0	2

#	Article	IF	Citations
327	Integrating bio-oil and carbohydrate valorization on the fractionation of sugarcane bagasse via Organosolv process using Mo2C-based catalysts. Fuel Processing Technology, 2022, 230, 107208.	3.7	6
328	Toward efficient heterogeneous catalysts for in-situ hydrodeoxygenation of biomass. Fuel, 2022, 320, 123891.	3.4	13
329	Tuning dual active sites of Cu/CoCeOx catalysts for efficient catalytic transfer hydrogenation of 5-hydroxymethylfurfural to biofuel 2,5-dimethylfuran. Fuel, 2022, 320, 123996.	3.4	9
330	Selective hydrogenation of furfural to furfuryl alcohol in water under mild conditions over a hydrotalcite-derived Pt-based catalyst. Applied Catalysis B: Environmental, 2022, 309, 121260.	10.8	49
331	Advances on the catalytic hydrogenation of biomass-derived furfural and 5-hydroxymethylfurfural. Journal of Fuel Chemistry and Technology, 2021, 49, 1752-1766.	0.9	13
332	Catalytic Transformation of Biomass-Derived Furfurals to Cyclopentanones and Their Derivatives: A Review. ACS Omega, 2021, 6, 35145-35172.	1.6	23
333	Recent Advances in Reductive Upgrading of 5â€Hydroxymethylfurfural via Heterogeneous Thermocatalysis. ChemSusChem, 2022, 15, .	3.6	11
334	Recyclable Zr/Hf-Containing Acid-Base Bifunctional Catalysts for Hydrogen Transfer Upgrading of Biofuranics: A Review. Frontiers in Chemistry, 2021, 9, 812331.	1.8	8
335	Synergistic hydrogenolysis of biomass furfuryl alcohol over Ru/solid base catalysts in hydrothermal reaction environment. Journal of Fuel Chemistry and Technology, 2021, 49, 1867-1874.	0.9	3
336	Hierarchically Nitrogenâ€doped Porous Carbonâ€Supported Nonâ€noble Metal Nanoparticles for Promoting the Selective Hydrogenation of Furfural. ChemNanoMat, 2022, 8, .	1.5	2
337	Efficient Piancatelli rearrangement on a large scale using the Zippertex technology under subcritical water conditions. Reaction Chemistry and Engineering, 2022, 7, 1640-1649.	1.9	2
338	Efficient conversion of furfural to cyclopentanol over lignin activated carbon supported Niâ€“Co catalyst. RSC Advances, 2022, 12, 11843-11852.	1.7	3
339	Sustainable production of furan-based oxygenated fuel additives from pentose-rich biomass residues. Energy Conversion and Management: X, 2022, 14, 100222.	0.9	6
340	Defects engineering simultaneously enhances activity and recyclability of MOFs in selective hydrogenation of biomass. Nature Communications, 2022, 13, 2068.	5.8	37
341	Removal of copper ions by cellulose nanocrystal-based hydrogel and reduced adsorbents for its catalytic properties. Cellulose, 2022, 29, 4525-4537.	2.4	10
342	Cu-Co nanoparticles supported on nitrogen-doped carbon: An efficient catalyst for hydrogenation of 5-hydroxymethylfurfural into 2,5-bis(hydroxymethyl)furan. Molecular Catalysis, 2022, 524, 112304.	1.0	7
344	Oxygen-Sulfur Dual-Vacancy Engineering on La Nanosheets Synergistically Promote the Catalytic Transfer Hydrogenation of Biomass-Derived Furfural at Low Temperature. SSRN Electronic Journal, 0, , .	0.4	0
345	Efficient Cu/Feox Catalyst with Developed Structure for Catalytic Transfer Hydrogenation of Furfural. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	Citations
346	Probing the core and surface composition of nanoalloy to rationalize its selectivity: Study of Ni-Fe/SiO2 catalysts for liquid-phase hydrogenation. Chem Catalysis, 2022, 2, 1686-1708.	2.9	12
347	Effect of Co-Doping on Cu/CaO Catalysts for Selective Furfural Hydrogenation into Furfuryl Alcohol. Nanomaterials, 2022, 12, 1578.	1.9	5
348	Synergetic effect of Cu0 â˜Cu+ derived from layered double hydroxides toward catalytic transfer hydrogenation reaction. Applied Catalysis B: Environmental, 2022, 314, 121515.	10.8	51
349	Highly efficient Niâ€“NiO/carbon nanotubes catalysts for the selective transfer hydrogenation of 5-hydroxymethylfurfural to 2,5-bis(hydroxymethyl)furan. Reaction Chemistry and Engineering, 2022, 7, 1873-1878.	1.9	4
350	Ru-supported mesoporous melamine polymers as efficient catalysts for selective hydrogenation of aqueous 5-hydroxymethylfurfural to 2,5-bis-(hydroxymethyl)furan. Biomass Conversion and Biorefinery, 2024, 14, 6267-6284.	2.9	4
351	Biomass-derived 2-methyltetrahydrofuran platform: a focus on precious and non-precious metal-based catalysts for the biorefinery. Green Chemistry, 2022, 24, 4201-4236.	4.6	9
352	Alcohol-assisted hydrodeoxygenation as a sustainable and cost-effective pathway for biomass derivatives upgrading. Journal of Energy Chemistry, 2022, 73, 133-159.	7.1	28
353	Mechanochemical-Assisted Synthesis of Nitrogen-Doped Carbon Supported Cobalt Catalysts for Efficient and Selective Hydrogenation of Furfural. Catalysis Letters, 2023, 153, 956-964.	1.4	5
354	Catalysts Derived from Nickel-Containing Layered Double Hydroxides for Aqueous-Phase Furfural Hydrogenation. Catalysts, 2022, 12, 598.	1.6	5
355	Surface modification of metallic catalysts for the design of selective processes. Catalysis Reviews - Science and Engineering, 0, , 1-47.	5.7	6
356	Recent Advances in the Catalytic Hydroconversion of 5-Hydroxymethylfurfural to Valuable Diols. Frontiers in Chemistry, 2022, 10, .	1.8	4
357	Recent advances on solid acid catalyic systems for production of 5-Hydroxymethylfurfural from biomass derivatives. Fuel Processing Technology, 2022, 234, 107338.	3.7	25
358	Hydrodeoxygenation of potential platform chemicals derived from biomass to fuels and chemicals. Green Chemistry, 2022, 24, 5652-5690.	4.6	27
359	Strengthening the Connection between Science, Society and Environment to Develop Future French and European Bioeconomies: Cutting-Edge Research of VAALBIO Team at UCCS. Molecules, 2022, 27, 3889.	1.7	3
360	Methods for the Synthesis of Î³-Acetopropyl Alcohol. Catalysis in Industry, 2022, 14, 195-207.	0.3	0
361	Mechanistic Differences between Electrochemical Hydrogenation and Hydrogenolysis of 5â€Hydroxymethylfurfural and Their pH Dependence. ChemSusChem, 2022, 15, .	3.6	18
362	Mechanism of Catalytic Transfer Hydrogenation for Furfural Using Single Ni Atom Catalysts Anchored to Nitrogen-Doped Graphene Sheets. Inorganic Chemistry, 2022, 61, 9138-9146.	1.9	10
363	Selectivity Control of Furfuryl Alcohol Upgrading to 1,5-Pentanediol Over Hydrotalcite-Derived Ni-Co-Al Catalyst. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	Citations
364	Excited-state cobaloxime catalysis enabled scalable oxidant-free dehydrogenative Câ€“H phosphinoylation of undirected heterocycles. Organic Chemistry Frontiers, 2022, 9, 4379-4387.	2.3	4
365	Aqueous-phase Selective Hydrogenation of Furfural to Furfuryl Alcohol over Ordered-mesoporous Carbon Supported Pt Catalysts Prepared by One-step Modified Soft-template Self-assembly Method. Journal of Oleo Science, 2022, , .	0.6	0
366	A new reduction method based on simultaneous Ti₃AlC₂ support etching and metal deposition to prepare Pt catalysts for aqueous-phase selective hydrogenation of furfural to furfuryl alcohol. New Journal of Chemistry, 2022, 46, 14958-14966.	1.4	3
367	2,5-Dimethylfuran Production by Catalytic Hydrogenation of 5-Hydroxymethylfurfural Using Ni Supported on Al2O3-TiO2-ZrO2 Prepared by Sol-Gel Method: The Effect of Hydrogen Donors. Molecules, 2022, 27, 4187.	1.7	2
368	A unique Co@CoO catalyst for hydrogenolysis of biomass-derived 5-hydroxymethylfurfural to 2,5-dimethylfuran. Nature Communications, 2022, 13, .	5.8	66
369	Catalytic Hydrogenation of Biomassâ€Derived Furoic Acid to Tetrahydrofuroic Acid Derivatives over Pd/CoO_x Catalyst in Water. ChemCatChem, 2022, 14, .	1.8	1
370	Efficient Cu/FeOx catalyst with developed structure for catalytic transfer hydrogenation of furfural. Journal of Catalysis, 2022, 413, 575-587.	3.1	18
371	The Effect of Sibunit Carbon Surface Modification with Diazonium Tosylate Salts of Pd and Pd-Au Catalysts on Furfural Hydrogenation. Materials, 2022, 15, 4695.	1.3	5
372	Efficient Electrocatalytic Reduction of Levulinic Acid to Valeric Acid on a Nanocrystalline PbOâ€n₂O₃ Catalyst. ChemistrySelect, 2022, 7, .	0.7	2
373	Highly selective electrocatalytic hydrogenation of 5-hydroxymethylfurfural to 2,5-dihydroxymethylfuran over AgCu nanoalloys. International Journal of Hydrogen Energy, 2022, 47, 28904-28914.	3.8	11
374	In situ construction of hierarchical Ag-decorated Cu nanowire arrays as an efficient and durable electrocatalyst for hydrogenation of 5-hydroxymethylfurfural and furfural. Molecular Catalysis, 2022, 528, 112487.	1.0	8
375	Highly selective hydrogenation of 5-hydroxymethylfurfural to 2,5-bis(hydroxymethyl)furan over metal-oxide supported Pt catalysts: The role of basic sites. Applied Catalysis A: General, 2022, 643, 118762.	2.2	9
376	Co decorated low Pt loading nanoparticles over TiO2 catalyst for selective hydrogenation of furfural. Applied Catalysis A: General, 2022, 643, 118766.	2.2	6
377	Facile synthesis of Ni/Fe3O4 derived from layered double hydroxides with high performance in the selective hydrogenation of benzaldehyde and furfural. Molecular Catalysis, 2022, 528, 112505.	1.0	2
378	Highly efficient and selective conversion of guaiacol to cyclohexanol over Ni-Fe/MgAlOx: Understanding the synergistic effect between Ni-Fe alloy and basic sites. Fuel, 2022, 327, 125115.	3.4	20
379	Catalytic conversion of glucose and its biopolymers into renewable compounds by inducing Câ€“C bond scission and formation. Biomass Conversion and Biorefinery, 0, , .	2.9	2
380	One-Pot Catalysis: A Privileged Approach for Sustainable Polymers?. Accounts of Chemical Research, 2022, 55, 2168-2179.	7.6	10
381	Corn Cob as a Green Support for Laccase Immobilizationâ€”Application on Decolorization of Remazol Brilliant Blue R. International Journal of Molecular Sciences, 2022, 23, 9363.	1.8	5

#	Article	IF	Citations
382	Biomass Valorization to Chemicals over Cobalt Nanoparticles on SBA-15. Bulletin of Chemical Reaction Engineering and Catalysis, 2022, 17, 533-541.	0.5	0
383	Câ^'H Activation Based Functionalization of Furfural Derivatives. European Journal of Organic Chemistry, 2022, 2022, .	1.2	8
384	Progress in Selective Conversion of 5â€Hydroxymethylfurfural to DHMF and DMF. ChemistrySelect, 2022, 7, .	0.7	0
385	Dehydration of levoglucosan to levoglucosenone over solid acid catalysts. Tuning the product distribution by changing the acid properties of the catalysts. Molecular Catalysis, 2022, 529, 112564.	1.0	3
386	Effects of Water Addition to Isopropanol for Hydrogenation of Compounds Derived from 5-Hydroxymethyl Furfural over Pd, Ru, and Cu Catalysts. ACS Catalysis, 2022, 12, 10186-10198.	5.5	10
387	Modular synthesis of 2-furyl carbinols from 3-benzyldimethylsilylfurfural platforms relying on oxygen-assisted Câ€"Si bond functionalization. Beilstein Journal of Organic Chemistry, 0, 18, 1256-1263.	1.3	1
388	Efficient conversion of 5-hydroxymethylfurfural to 2,5-dimethylfuran by the rational design of NiZn catalysts. Molecular Catalysis, 2022, 531, 112698.	1.0	5
389	Sunlight-driven photocatalytic oxidation of 5-hydroxymethylfurfural over a cuprous oxide-anatase heterostructure in aqueous phase. Applied Catalysis B: Environmental, 2023, 320, 122006.	10.8	24
390	Trimetallic Cu-Ni-Re/HÎ² Catalyst for the Direct Conversion of Furfural to 2-Methyltetrahydrofuran. SSRN Electronic Journal, 0, , .	0.4	0
391	Ultrahigh Metal Content Carbon-Based Catalyst for Efficient Hydrogenation of Furfural: The Regulatory Effect of Glycerol. ACS Applied Materials & Interfaces, 2022, 14, 44439-44449.	4.0	8
392	Strong Oxophilicity of Zr Species in Zr⁴⁺-Exchanged Montmorillonite Boosted Meerweinâ€"Ponndorfâ€"Verley Reduction of Renewable Carbonyl Compounds. ACS Sustainable Chemistry and Engineering, 2022, 10, 12197-12206.	3.2	5
393	Electrochemical Hydrogenation, Hydrogenolysis, and Dehydrogenation for Reductive and Oxidative Biomass Upgrading Using 5-Hydroxymethylfurfural as a Model System. ACS Catalysis, 2022, 12, 12349-12368.	5.5	26
394	Ni-nanoparticles decorated CePO4 for the selective hydrogenation of furfural to tetrahydrofurfuryl alcohol. Molecular Catalysis, 2022, 531, 112712.	1.0	5
395	Continuous conversion of furfural to furfuryl alcohol by transfer hydrogenation catalyzed by copper deposited in a monolith reactor. Reaction Chemistry and Engineering, 2023, 8, 377-388.	1.9	2
396	Ruthenium nanoparticles canopied by heptagon-containing saddle-shaped nanographenes as efficient aromatic hydrogenation catalysts. Chemical Science, 2022, 13, 13046-13059.	3.7	1
397	Spillover Hydrogen on Electron-Rich Ni/m-TiO2 for Hydrogenation of Furfural to Tetrahydrofurfuryl Alcohol. Catalysts, 2022, 12, 1286.	1.6	4
398	Two-dimensional MXenes as catalytic â€œflying carpetsâ€•to transport biomass valorization towards new horizons: The case of furfural catalytic transfer hydrogenation over noble-metal free niobium-based carbides. Catalysis Today, 2023, 423, 113920.	2.2	0
399	Polymers without Petrochemicals: Sustainable Routes to Conventional Monomers. Chemical Reviews, 2023, 123, 2609-2734.	23.0	53

#	Article	IF	Citations
400	Promoting the electrochemical hydrogenation of furfural by synergistic Cu0â^'Cu+ active sites. Science China Chemistry, 2022, 65, 2588-2595.	4.2	18
401	Fabrication of Zirconium-Doped Activated Carbon by Chemical Activation for Catalytic Transfer Hydrogenation of 5-Hydroxymethylfurfural into 2,5-Dihydroxymethylfuran. Energy & Fuels, 2022, 36, 13796-13807.	2.5	3
402	Engineering oxygen vacancy and crystal surfaces for TiO2-based photocatalysts for enhanced photocatalytic hydrogenation of bio-based carbonyls to biofuels. Journal of Environmental Chemical Engineering, 2022, 10, 108837.	3.3	8
403	Batch and continuous-flow room temperature furfural acetalization with ethanol over aluminophosphate (APAl) catalysts for biofuels production. Fuel, 2023, 332, 126049.	3.4	3
404	Selectivity control of furfuryl alcohol upgrading to 1,5-pentanediol over hydrotalcite-derived Ni-Co-Al catalyst. Fuel, 2023, 332, 126261.	3.4	5
405	Highly selective production of the biofuel 2,5-dimethylfuran from 5-hydroxymethylfurfural over Co/Nâ€“C catalysts. Reaction Chemistry and Engineering, 2023, 8, 455-464.	1.9	9
406	Trimetallic Cu-Ni-Re/HÎ² catalyst for the direct conversion of furfural to 2-Methyltetrahydrofuran. Chemical Engineering Journal, 2023, 454, 139746.	6.6	10
407	Potassium Carbonate (K₂CO₃)-Assisted Copper-Catalyzed Liquid-Phase Hydrogenation of Furfural: Striking Promotion Synergy Enables a Superior High Furfuryl Alcohol Yield at Mild Reaction Conditions. Industrial & Engineering Chemistry Research, 2022, 61, 16643-16652.	1.8	2
408	pH-Induced selective electrocatalytic hydrogenation of furfural on Cu electrodes. Chinese Journal of Catalysis, 2022, 43, 3142-3153.	6.9	20
409	Role of lattice strain in bifunctional catalysts for tandem furfural hydrogenationâ€“esterification. Catalysis Science and Technology, 2023, 13, 774-787.	2.1	3
410	Valorization of sugarcane bagasse C5-fraction by furfural production mediated by renewable glycine-based ionic liquid. Industrial Crops and Products, 2023, 191, 115940.	2.5	2
411	Efficient acceptorless dehydrogenation of 5-Hydroxymethylfurfural (HMF) to 2,5-Diformylfuran (DFF) over Pt/CdS under visible light. Journal of Catalysis, 2023, 417, 178-184.	3.1	13
412	Green synthesis of 5-hydroxymethylfurfural from biomass-derived carbohydrates using deep eutectic solvents as environmentally benign catalyst. Environmental Technology and Innovation, 2023, 29, 102982.	3.0	6
413	Theoretical study on the hydrogenation of furfural for furfuryl alcohol production over low Ni modified Cu catalysts. Applied Surface Science, 2023, 613, 156106.	3.1	2
414	Total hydrogenation of hydroxymethylfurfural via hydrothermally stable Ni catalysts and the mechanistic study. Chemical Engineering Journal, 2023, 455, 140536.	6.6	6
415	Recent Progress of Hydrogenation and Hydrogenolysis Catalysts Derived from Layered Double Hydroxides. Catalysts, 2022, 12, 1484.	1.6	2
416	Synthesis, Photophysics and Optical Limiting Properties of Functionalized Benzofuran Derivatives. Asian Journal of Organic Chemistry, 2023, 12, .	1.3	1
417	Mechanistic exploration of furfural hydrogenation on copper surface in aqueous phase by DFT and AIMD simulations. Journal of Catalysis, 2023, 418, 1-12.	3.1	7

#	Article	IF	Citations
418	Selective Vapor-Phase Hydrogenation of Furfural to Furfuryl Alcohol over Cu/Silica Catalysts. Bulletin of the Chemical Society of Japan, 2023, 96, 8-15.	2.0	4
419	Preparation of Environmentally Friendly Glueless Boxwood Timber by Acidic Environmental Treatment and High-Temperature Pressing. Polymers, 2023, 15, 11.	2.0	2
420	Synergy in magnetic Ni Co1O oxides enables base-free selective oxidation of 5-hydroxymethylfurfural on loaded Au nanoparticles. Journal of Energy Chemistry, 2023, 78, 526-536.	7.1	16
421	Synthesis of Co-Ni Alloy Particles with the Structure of a Solid Substitution Solution by Precipitation in a Supercritical Carbon Dioxide. Nanomaterials, 2022, 12, 4366.	1.9	4
422	Recent advances in the catalytic production of bio-based diol 2,5-bis(hydroxymethyl)furan. Carbon Resources Conversion, 2023, 6, 116-131.	3.2	9
423	Boehmite-supported CuO as a catalyst for catalytic transfer hydrogenation of 5-hydroxymethylfurfural to 2,5-bis(hydroxymethyl)furan. Frontiers of Chemical Science and Engineering, 2023, 17, 415-424.	2.3	5
424	Reticular Coordination Induced Interfacial Interstitial Carbon Atoms on Ni Nanocatalysts for Highly Selective Hydrogenation of Bio-Based Furfural under Facile Conditions. Nanomaterials, 2023, 13, 285.	1.9	2
425	The Role of Copper in the Hydrogenation of Furfural and Levulinic Acid. International Journal of Molecular Sciences, 2023, 24, 2443.	1.8	2
426	Selective hydrogenation reactions of 5-hydroxymethylfurfural over Cu and Ni catalysts in water: Effect of Cu and Ni combination and the reagent purity. Catalysis Today, 2023, 423, 114021.	2.2	2
427	Promoted electrocatalytic hydrogenation of furfural in a bi-phasic system. Chemical Communications, 2023, 59, 3103-3106.	2.2	7
428	Role of reaction adsorption on the production of 5-hydroxymethylfurfural from fructose under microwave hydrothermal process. Fuel, 2023, 340, 127530.	3.4	6
429	Enantioselective transformations of 5-hydroxymethylfurfural via catalytic asymmetric 1,3-dipolar cycloaddition of azomethine ylides. Chemical Communications, 2023, 59, 4336-4339.	2.2	3
430	Electrocatalytic reduction of furfural for selective preparation of 2-methylfuran over a trace Ni assisted Cu catalyst. Catalysis Science and Technology, 2023, 13, 1846-1854.	2.1	3
431	Directed Preparation of Biomass-based Polyester Monomers by Catalytic Conversion. Acta Chimica Sinica, 2023, 81, 175.	0.5	0
432	Furfural hydrogenation into tetrahydrofurfuryl alcohol under ambient conditions: Role of Ni-supported catalysts and hydrogen source. Industrial Crops and Products, 2023, 195, 116390.	2.5	2
433	Understanding hydrogen pressure control of furfural hydrogenation selectivity on a Pd(1 1 1) model catalyst. Journal of Catalysis, 2023, 421, 55-64.	3.1	6
434	Fe-Ni bimetallic nanoparticles encapsulated into nanofibrous carbon microspheres as a catalytic nanoreactor for highly selective hydrogenation of 5-hydroxymethylfurfural to 2,5-dihydroxymethylfuran or 2,5-dihydroxymethyltetrahydrofuran. Journal of the Taiwan Institute of Chemical Engineers, 2023, 146, 104870.	2.7	2
435	Material-based generation, storage, and utilisation of hydrogen. Progress in Materials Science, 2023, 135, 101104.	16.0	31

#	Article	IF	Citations
436	Synergistic effect between Co single atoms and nanoparticles enables selective synthesis of bio-based benzimidazoles. Applied Catalysis B: Environmental, 2023, 327, 122454.	10.8	24
437	Improving furfural hydrogenation selectivity by enhanced Ni-TiO2 electronic interaction. Applied Catalysis A: General, 2023, 660, 119206.	2.2	1
438	Production of 2-methyl furan, a promising 2nd generation biofuel, by the vapor phase hydrodeoxygenation of biomass-derived furfural over TiO2 supported Cu Ni bimetallic catalysts. Fuel Processing Technology, 2023, 245, 107726.	3.7	2
439	Regulating the interfacial electronic coupling of PtNi/TiO2 via bond evolution for highly efficient hydrogenation of 5-hydroxymethylfurfural. Applied Catalysis B: Environmental, 2023, 329, 122560.	10.8	6
440	Base-free selective oxidation of 5-hydroxymethylfurfural over Pt nanoparticles on surface Nb-enriched Co-Nb oxide. Applied Catalysis B: Environmental, 2023, 330, 122670.	10.8	7
441	Recent advances in thermocatalytic hydrogenation of unsaturated organic compounds with Metal-Organic Frameworks-based materials: Construction strategies and related mechanisms. Coordination Chemistry Reviews, 2023, 487, 215159.	9.5	11
442	Photocatalytic precise hydrogenation of furfural over ultrathin Pt/NiMg-MOF-74 nanosheets: Synergistic effect of surface optimized NiII sites and Pt clusters. Applied Surface Science, 2023, 616, 156553.	3.1	7
443	High-Yield Synthesis of 1-Hydroxyhexane-2,5-dione via Hydrogenation/Hydrolysis of 5-Hydroxymethyl-furfural in Ionic Liquid-Assisted Multi-Phase Systems. ACS Sustainable Chemistry and Engineering, 2023, 11, 2520-2530.	3.2	1
445	Furfural electroreduction in choline-glycerol deep eutectic solvent. Journal of Electroanalytical Chemistry, 2023, 933, 117269.	1.9	2
446	Catalytic conversion network for lignocellulosic biomass valorization: a panoramic view. , 2023, 1, 188-206.		22
447	In situ reduction of Cu nanoparticles on Mg-Al-LDH for simultaneous efficient catalytic transfer hydrogenation of furfural to furfuryl alcohol. Chemical Communications, 2023, 59, 3301-3304.	2.2	3
448	Boosting 5-hydroxymethylfurfural electrooxidation in neutral electrolytes via TEMPO-enhanced dehydrogenation and OH adsorption. Chinese Journal of Catalysis, 2023, 46, 148-156.	6.9	3
449	Hydroxymethylfurfural oxidation over unsupported Pd-Au alloy catalysts prepared by pulsed laser ablation: Synergistic and compositional effects. Applied Catalysis A: General, 2023, 656, 119121.	2.2	8
450	Lâ€Lysine Stabilized FeNi Nanoparticles for the Catalytic Reduction of Biomassâ€derived Substrates in Water using Magnetic Induction. ChemSusChem, 0, , .	3.6	2
451	Recent Advances in the Efficient Synthesis of Useful Amines from Biomass-Based Furan Compounds and Their Derivatives over Heterogeneous Catalysts. Catalysts, 2023, 13, 528.	1.6	1
452	Screening of Catalysts for the Methyl Vinyl Ether Reaction in H₂. Industrial & Engineering Chemistry Research, 2023, 62, 4885-4895.	1.8	1
453	Bifunctional NHCâ€Catalyzed Remote Enantioselective Mannichâ€type Reaction of 5â€(Chloromethyl)furfural via Trienolate Intermediates. Angewandte Chemie - International Edition, 2023, 62, .	7.2	4
454	Bifunctional NHCâ€Catalyzed Remote Enantioselective Mannichâ€type Reaction of 5â€(Chloromethyl)furfural via Trienolate Intermediates. Angewandte Chemie, 2023, 135, .	1.6	1

#	Article	IF	Citations
455	Review on supported metal catalysts with partial/porous overlayers for stabilization. Nanoscale, 2023, 15, 8084-8109.	2.8	2
456	Synergistic Catalysis for Promoting Ring-Opening Hydrogenation of Biomass-Derived Cyclic Oxygenates. ACS Catalysis, 2023, 13, 5170-5193.	5.5	16
457	Recent progress of Cu-based electrocatalysts for upgrading biomass-derived furanic compounds. Catalysis Science and Technology, 2023, 13, 2899-2921.	2.1	4
458	Selective furanyl ring hydrogenation of 5-hydroxymethylfurfural at sub-ambient temperature via steric effect on decorated Pd surfaces. International Journal of Hydrogen Energy, 2023, , .	3.8	0
461	Biomass as a Source of Energy, Fuels and Chemicals. , 2021, , 589-741.		0
464	A perspective on catalytic production of olefinic compounds from biomass. , 2023, 1, 814-837.		5
517	Efficient electrochemical upgradation strategies for the biomass derivative furfural. Journal of Materials Chemistry A, 2023, 11, 23133-23147.	5.2	3
518	The catalysis advances on the production of furan derivatives and their conversion to biofuels. , 2024, , 85-102.		0
536	Hydrogenation of levulinic acid to Î³-valerolactone over hydrophobic Ru@HCP catalysts. Chemical Communications, 2023, 59, 14717-14720.	2.2	0