

How Catalysts and Experimental Conditions Determine Furfural and 5-Hydroxymethylfurfural

Chemical Reviews

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Photoactive ZnO Materials for Solar Light-Induced Cu ₂ O-ZnO Catalyst Preparation. <i>Materials</i> , 2018, 11, 2260.	2.9	15
2	Catalytic Approaches to Monomers for Polymers Based on Renewables. <i>ACS Catalysis</i> , 2019, 9, 8012-8067.	11.2	146
3	High yield one-pot synthesis of high density and low freezing point jet-fuel-ranged blending from bio-derived phenol and cyclopentanol. <i>Chemical Engineering Science</i> , 2019, 207, 441-447.	3.8	32
4	Mechanistic Insights into the Brønsted Acid-Catalyzed Dehydration of D-Glucose to 5-Hydroxymethylfurfural under Ambient and Subcritical Conditions. <i>ACS Catalysis</i> , 2019, 9, 7250-7263.	11.2	32
5	Catalytic Production of Value-Added Chemicals and Liquid Fuels from Lignocellulosic Biomass. <i>ChemSusChem</i> , 2019, 5, 2520-2546.	11.7	337
6	Effect of the conditions for the aqueous-phase hydrogenation of furfural over Pd/C catalysts on the reaction routes. , 2019, , .		7
7	Two-Step Preparation of Diverse 3-Amidofurans from Chitin. <i>ChemistrySelect</i> , 2019, 4, 10097-10099.	1.5	25
8	Hydrothermal synthesis of MnOOH nanowires using sapless leaves as the reductant: an effective catalyst for the regio-specific epoxidation of 2-ionone. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2572-2576.	4.9	7
9	Achmatowicz rearrangement enables hydrogenolysis-free gas-phase synthesis of pentane-1,2,5-triol from furfuryl alcohol. <i>Green Chemistry</i> , 2019, 21, 5657-5664.	9.0	8
10	Selective Arene Hydrogenation for Direct Access to Saturated Carbo- and Heterocycles. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10460-10476.	13.8	199
11	Multiple activations of CH bonds in arenes and heteroarenes. <i>Dalton Transactions</i> , 2019, 48, 8530-8540.	3.3	2
12	Selective conversion of 5-hydroxymethylfurfural to diketone derivatives over Beta zeolite-supported Pd catalysts in water. <i>Journal of Catalysis</i> , 2019, 375, 224-233.	6.2	31
13	Synergistic bimetallic RuMo catalysts for selective rearrangement of furfural to cyclopentanol in aqueous phase. <i>Catalysis Communications</i> , 2019, 129, 105745.	3.3	19
14	Recent development of production technology of diesel- and jet-fuel-range hydrocarbons from inedible biomass. <i>Fuel Processing Technology</i> , 2019, 193, 404-422.	7.2	83
15	Catalytic furfural hydrogenation to furfuryl alcohol over Cu/SiO ₂ catalysts: A comparative study of the preparation methods. <i>Fuel Processing Technology</i> , 2019, 193, 221-231.	7.2	80
16	Cu/Cu ₂ O-MC (MC = Mesoporous Carbon) for Highly Efficient Hydrogenation of Furfural to Furfuryl Alcohol under Visible Light. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 11485-11492.	6.7	35
17	Kinetics of Furfural Hydrogenation over Bimetallic Overlayer Catalysts and the Effect of Oxygen Vacancy Concentration on Product Selectivity. <i>ChemCatChem</i> , 2019, 11, 3296-3306.	3.7	20
18	Complete Aqueous Hydrogenation of 5-Hydroxymethylfurfural at Room Temperature over Bimetallic RuPd/Graphene Catalyst. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10670-10678.	6.7	57

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19	Catalytic production of renewable lubricant base oils from bio-based 2-alkylfurans and enals. <i>Green Chemistry</i> , 2019, 21, 3606-3614.	9.0	27
20	In situ cryocrystallization and solid-state structures of furfural and some derivatives. <i>CrystEngComm</i> , 2019, 21, 3295-3303.	2.6	8
21	Ni Promotion by Fe: What Benefits for Catalytic Hydrogenation?. <i>Catalysts</i> , 2019, 9, 451.	3.5	46
22	Structure–Reactivity Relations in Ruthenium Catalysed Furfural Hydrogenation. <i>ChemCatChem</i> , 2019, 11, 3927-3932.	3.7	49
23	Alternative Recovery and Valorization of Metals from Exhausted Catalytic Converters in a New Smart Polymetallic Catalyst. <i>ChemistrySelect</i> , 2019, 4, 4624-4632.	1.5	0
24	Catalytic conversion of herbal residue carbohydrates to furanic derivatives in a deep eutectic solvent accompanied by dissolution and recrystallisation of choline chloride. <i>Cellulose</i> , 2019, 26, 8263-8277.	4.9	35
25	Structure and Mechanism of Titania-Supported Platinum–Molybdenum Catalyst for Hydrodeoxygenation of 2-Furancarboxylic Acid to Valeric Acid. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9601-9612.	6.7	20
26	Biorefinery via Achmatowicz Rearrangement: Synthesis of Pentane-1,2,5-triol from Furfuryl Alcohol. <i>ChemSusChem</i> , 2019, 12, 2748-2754.	6.8	16
27	Synthesis of functionalized tetrahydrofuran derivatives from 2,5-dimethylfuran through cascade reactions. <i>Green Chemistry</i> , 2019, 21, 2601-2609.	9.0	4
28	Selective Production of Furan from Gas-Phase Furfural Decarbonylation on Ni-MgO Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 7676-7685.	6.7	42
29	Cobalt Nickel Nitrogen Array as a Easily Ecoverable, Effective Catalyst for Liquid–Phase Catalytic Reaction with Remarkable Recycled Stability. <i>ChemistrySelect</i> , 2019, 4, 3515-3523.	1.5	3
30	An electrocatalytic route for transformation of biomass-derived furfural into 5-hydroxy-2(5 <i>H</i>)-furanone. <i>Chemical Science</i> , 2019, 10, 4692-4698.	7.4	36
31	Activation of Heteroaromatic C–H Bonds in Furan and 2,5-Dimethylfuran. <i>Inorganic Chemistry</i> , 2019, 58, 6008-6015.	4.0	7
32	Insight into the hydrogenation of pure and crude HMF to furan diols using Ru/C as catalyst. <i>Applied Catalysis A: General</i> , 2019, 578, 122-133.	4.3	61
33	Die selektive Arenhydrierung bietet einen direkten Zugang zu gesättigten Carbo- und Heterocyclen. <i>Angewandte Chemie</i> , 2019, 131, 10570-10586.	2.0	49
34	Exploiting the Synergetic Behavior of PtPd Bimetallic Catalysts in the Selective Hydrogenation of Glucose and Furfural. <i>Catalysts</i> , 2019, 9, 132.	3.5	17
35	Some insight on the structure/activity relationship of metal nanoparticles in Cu/SiO ₂ catalysts. <i>Chinese Journal of Catalysis</i> , 2019, 40, 1788-1794.	14.0	8
36	Heterogeneous Nickel Catalysts Derived from 2D Metal–Organic Frameworks for Regulating the Selectivity of Furfural Hydrogenation. <i>ACS Omega</i> , 2019, 4, 21724-21731.	3.5	18

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38	Boosting the utilization efficiency of glucose <i>via</i> a favored C=C coupling reaction. Green Chemistry, 2019, 21, 6236-6240.	9.0	7
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41	Composition-Reactivity Correlations in Platinum-Cobalt Nanoporous Network as Catalyst for Hydrodeoxygenation of 5-Hydroxymethylfurfural. Journal of Physical Chemistry C, 2019, 123, 30274-30282.	3.1	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.	13.7	59
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44	Tailor-made biofuel 2-butyltetrahydrofuran from the continuous flow hydrogenation and deoxygenation of furfuralacetone. Green Chemistry, 2019, 21, 6299-6306.	9.0	15
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46	Co ₃ O ₄ 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.	4.4	71
47	Taking advantage of sulfur impurities present in commercial carbon nanofibers to generate selective palladium catalysts. Carbon, 2020, 157, 120-129.	10.3	5
48	Enhancing the electrocatalytic activity of CoO for the oxidation of 5-hydroxymethylfurfural by introducing oxygen vacancies. Green Chemistry, 2020, 22, 843-849.	9.0	126
49	Efficient Hydrogenation of Xylose and Hemicellulosic Hydrolysate to Xylitol over Ni-Re Bimetallic Nanoparticle Catalyst. Nanomaterials, 2020, 10, 73.	4.1	24
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56	Hydrodeoxygenation of m-Cresol Over Pt-WO _x /C Using H ₂ Generated In Situ by n-Hexane Dehydrogenation. Catalysis Letters, 2020, 150, 913-921.	2.6	16
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71	Mechanism of Pd/C-catalyzed hydrogenation of furfural under hydrothermal conditions. Journal of Catalysis, 2020, 389, 721-734.	6.2	49
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75	Biomass-derived chemical substitutes for bisphenol A: recent advancements in catalytic synthesis. <i>Chemical Society Reviews</i> , 2020, 49, 6329-6363.	38.1	87
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77	Theoretical investigation of decarbonylation mechanism of furfural on Pd(111) and M/Pd(111) (M = Ru, Ni). <i>Theoretical Chemistry Accounts</i> , 2020, 119, 1-10.	2.0	6
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79	Unlocking the Potential of Photocatalysts in Biomass Refinery. <i>Chem</i> , 2020, 6, 2871-2873.	11.7	9
80	Selectivity Control in Photocatalytic Valorization of Biomass-Derived Platform Compounds by Surface Engineering of Titanium Oxide. <i>Chem</i> , 2020, 6, 3038-3053.	11.7	112
81	Catalytic Hydrodeoxygenation of Lignin-Derived Feedstock Into Arenes and Phenolics. <i>Frontiers in Chemical Engineering</i> , 2020, 2, .	2.7	7
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99	Biomass valorisation over metal-based solid catalysts from nanoparticles to single atoms. Chemical Society Reviews, 2020, 49, 3764-3782.	38.1	163
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110	Selective Hydrogenation of Biomass-Derived Furfural: Enhanced Catalytic Performance of Pd-Cu Alloy Nanoparticles in Porous Polymer. ChemPlusChem, 2020, 85, 1697-1703.	2.8	13
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129	Selective Hydrogenation of Xylose to Xylitol over Co/SiO ₂ Catalysts. <i>ChemCatChem</i> , 2020, 12, 1973-1978.	3.7	23
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576	Construction of Pt ₃ Sn Alloy Catalyst with High Activity for Selective Hydrogenation of 5-Hydroxymethylfurfural. <i>Industrial & Engineering Chemistry Research</i> , 2024, 63, 3880-3890.	3.7	0
577	Promoted catalytic performance from furfural to isopropyl levulinate by Zr loaded on defective nanosponge zeolites. <i>Microporous and Mesoporous Materials</i> , 2024, 370, 113061.	4.4	0
578	Strategies to improve hydrogen activation on gold catalysts. <i>Nature Reviews Chemistry</i> , 2024, 8, 195-210.	30.2	0
579	Combining Isothermal and Adiabatic Mode Experiments for Kinetic Constant Estimation: Application to the Hydrogenation of 5-(Hydroxymethyl)furfural (5-HMF). <i>Industrial & Engineering Chemistry Research</i> , 2024, 63, 4362-4379.	3.7	0
580	Catalytic production of 5-hydroxymethylfurfural from lignocellulosic biomass: Recent advances, challenges and opportunities. <i>Renewable and Sustainable Energy Reviews</i> , 2024, 196, 114332.	16.4	0
581	Tailoring Cu immobilized MCM-41-based mesostructured catalysts for selective hydrogenolysis of biomass-derived furfural. <i>Catalysis Communications</i> , 2024, 187, 106898.	3.3	0
582	Hydrogenation of olefinic bonds in nitrile butadiene rubber on single-atom Pd ₁ /CeO _{2-x} catalysts with ultrahigh mass activity and stability. <i>Chemical Engineering Journal</i> , 2024, 487, 150427.	12.7	0
585	Poly(divinylbenzene-maleic acid) Hollow Nanospheres Coordinated with Zirconium: An Effective Catalyst for the Catalytic Transfer Hydrogenation of Furfural to Furfuryl Alcohol. <i>Industrial & Engineering Chemistry Research</i> , 2024, 63, 5113-5124.	3.7	0