Copper-Based Catalytic Anodes To Produce 2,5-Furandi Alternative to Terephthalic Acid

ACS Catalysis

8, 1197-1206

DOI: 10.1021/acscatal.7b03152

Citation Report

#	Article	IF	Citations
1	Electrocatalytic and photocatalytic hydrogen evolution integrated with organic oxidation. Chemical Communications, 2018, 54, 5943-5955.	4.1	142
2	Sustainable Routes for the Synthesis of Renewable Heteroatom-Containing Chemicals. ACS Sustainable Chemistry and Engineering, 2018, 6, 5694-5707.	6.7	140
3	Production of 2,5-furandicarboxylic acid (FDCA) from 5-hydroxymethylfurfural (HMF): recent progress focusing on the chemical-catalytic routes. Green Chemistry, 2018, 20, 5427-5453.	9.0	445
4	Biocatalytic Transformation of 5-Hydroxymethylfurfural into High-Value Derivatives: Recent Advances and Future Aspects. ACS Sustainable Chemistry and Engineering, 2018, 6, 15915-15935.	6.7	122
5	Electrochemical Valorization of Furfural to Maleic Acid. ACS Sustainable Chemistry and Engineering, 2018, 6, 9596-9600.	6.7	69
6	Cobaltâ€“metalloid alloys for electrochemical oxidation of 5-hydroxymethylfurfural as an alternative anode reaction in lieu of oxygen evolution during water splitting. Beilstein Journal of Organic Chemistry, 2018, 14, 1436-1445.	2.2	58
7	Electrocatalytic Oxidation of 5â€(Hydroxymethyl)furfural Using Highâ€Surfaceâ€Area Nickel Boride. Angewandte Chemie - International Edition, 2018, 57, 11460-11464.	13.8	283
8	Elektrokatalytische Oxidation von 5â€(Hydroxymethyl)furfural an Nickelborid mit groÃŸer OberflÃche. Angewandte Chemie, 2018, 130, 11631-11636.	2.0	50
9	Boosting Hydrogen Production by Anodic Oxidation of Primary Amines over a NiSe Nanorod Electrode. Angewandte Chemie, 2018, 130, 13347-13350.	2.0	69
10	Boosting Hydrogen Production by Anodic Oxidation of Primary Amines over a NiSe Nanorod Electrode. Angewandte Chemie - International Edition, 2018, 57, 13163-13166.	13.8	312
11	Chemical Transformations of Biomass-Derived C6-Furanic Platform Chemicals for Sustainable Energy Research, Materials Science, and Synthetic Building Blocks. ACS Sustainable Chemistry and Engineering, 2018, 6, 8064-8092.	6.7	232
12	Chemical-assisted hydrogen electrocatalytic evolution reaction (CAHER). Journal of Materials Chemistry A, 2018, 6, 13538-13548.	10.3	98
13	Cu Nanodendrite Foams on Integrated Band Array Electrodes for the Nonenzymatic Detection of Glucose. ACS Applied Nano Materials, 2019, 2, 5878-5889.	5.0	29
14	Photoelectrochemical cells for solar hydrogen production: Challenges and opportunities. APL Materials, 2019, 7, .	5.1	119
15	An active, selective, and stable manganese oxide-supported atomic Pd catalyst for aerobic oxidation of 5-hydroxymethylfurfural. Green Chemistry, 2019, 21, 4194-4203.	9.0	45
16	Cuâ€'Ni Bimetallic Hydroxide Catalyst for Efficient Electrochemical Conversion of 5â€Hydroxymethylfurfural to 2,5â€Furandicarboxylic Acid. ChemElectroChem, 2019, 6, 5797-5801.	3.4	45
17	Insight into the Oxidation Mechanism of Furanic Compounds on Pt(111). ACS Catalysis, 2019, 9, 11360-11370.	11.2	10
18	Electrochemical Fixation of Nitrogen and Its Coupling with Biomass Valorization with a Strongly Adsorbing and Defect Optimized Boronâ€“Carbonâ€“Nitrogen Catalyst. ACS Applied Energy Materials, 2019, 2, 8359-8365.	5.1	43

#	Article	IF	Citations
19	Beyond Expertâ€Level Performance Prediction for Rechargeable Batteries by Unsupervised Machine Learning. Advanced Intelligent Systems, 2019, 1, 1900102.	6.1	9
20	Electrochemical Oxidation of 5â€Hydroxymethylfurfural on Nickel Nitride/Carbon Nanosheets: Reaction Pathway Determined by In Situ Sum Frequency Generation Vibrational Spectroscopy. Angewandte Chemie, 2019, 131, 16042-16050.	2.0	100
21	Electrochemical Oxidation of 5â€Hydroxymethylfurfural on Nickel Nitride/Carbon Nanosheets: Reaction Pathway Determined by In Situ Sum Frequency Generation Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 15895-15903.	13.8	309
22	Elucidating Acidic Electro-Oxidation Pathways of Furfural on Platinum. ACS Catalysis, 2019, 9, 10305-10316.	11.2	85
23	Direct Catalytic Route to Biomass-Derived 2,5-Furandicarboxylic Acid and Its Use as Monomer in a Multicomponent Polymerization. ACS Omega, 2019, 4, 16972-16979.	3.5	24
24	Alternative Oxidation Reactions for Solar-Driven Fuel Production. ACS Catalysis, 2019, 9, 2007-2017.	11.2	115
25	Stabilities, Regeneration Pathways, and Electrocatalytic Properties of Nitroxyl Radicals for the Electrochemical Oxidation of 5-Hydroxymethylfurfural. ACS Sustainable Chemistry and Engineering, 2019, 7, 11138-11149.	6.7	57
26	Patterning Cu nanostructures tailored for CO₂ reduction to electrooxidizable fuels and oxygen reduction in alkaline media. Nanoscale Advances, 2019, 1, 2645-2653.	4.6	9
27	Ultrastable and efficient H₂ production via membrane-free hybrid water electrolysis over a bifunctional catalyst of hierarchical Moâ€“Ni alloy nanoparticles. Journal of Materials Chemistry A, 2019, 7, 16501-16507.	10.3	49
28	Ultrathin Rh nanosheets as a highly efficient bifunctional electrocatalyst for isopropanol-assisted overall water splitting. Nanoscale, 2019, 11, 9319-9326.	5.6	97
29	Highly Efficient Oxidation of 5â€Hydroxymethylfurfural to 2,5â€Furandicarboxylic Acid with Heteropoly Acids and Ionic Liquids. ChemSusChem, 2019, 12, 2715-2724.	6.8	58
30	In situ anchoring of a Co₃O₄ nanowire on nickel foam: an outstanding bifunctional catalyst for energy-saving simultaneous reactions. Green Chemistry, 2019, 21, 6699-6706.	9.0	89
31	Carbon nanofibers@NiSe core/sheath nanostructures as efficient electrocatalysts for integrating highly selective methanol conversion and less-energy intensive hydrogen production. Journal of Materials Chemistry A, 2019, 7, 25878-25886.	10.3	57
32	A Comparative Study of Nickel, Cobalt, and Iron Oxyhydroxide Anodes for the Electrochemical Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid. ACS Catalysis, 2019, 9, 660-670.	11.2	254
33	Enhanced activity for electrochemical hydrogenation and hydrogenolysis of furfural to biofuel using electrodeposited Cu catalysts. Catalysis Today, 2019, 323, 26-34.	4.4	62
34	Electrocatalysis of 5-hydroxymethylfurfural at cobalt based spinel catalysts with filamentous nanoarchitecture in alkaline media. Applied Catalysis B: Environmental, 2019, 242, 85-91.	20.2	145
35	Ni-Ni3P nanoparticles embedded into N, P-doped carbon on 3D graphene frameworks via in situ phosphatization of saccharomycetes with multifunctional electrodes for electrocatalytic hydrogen production and anodic degradation. Applied Catalysis B: Environmental, 2020, 261, 118147.	20.2	82
36	NiSe@NiOx core-shell nanowires as a non-precious electrocatalyst for upgrading 5-hydroxymethylfurfural into 2,5-furandicarboxylic acid. Applied Catalysis B: Environmental, 2020, 261, 118235.	20.2	130

#	Article	IF	Citations
37	Hierarchical three-dimensional framework interface assembled from oxygen-doped cobalt phosphide layer-shelled metal nanowires for efficient electrocatalytic water splitting. Applied Catalysis B: Environmental, 2020, 261, 118268.	20.2	87
38	Benzylamine oxidation boosted electrochemical water-splitting: Hydrogen and benzonitrile co-production at ultra-thin Ni2P nanomeshes grown on nickel foam. Applied Catalysis B: Environmental, 2020, 268, 118393.	20.2	100
39	A dual-enzyme, micro-band array biosensor based on the electrodeposition of carbon nanotubes embedded in chitosan and nanostructured Au-foams on microfabricated gold band electrodes. Analyst, The, 2020, 145, 402-414.	3.5	24
40	Porous cobalt@N-doped carbon derived from chitosan for oxidative esterification of 5-Hydroxymethylfurfural: The roles of zinc in the synthetic and catalytic process. Molecular Catalysis, 2020, 482, 110695.	2.0	21
41	Bio-based copolyesters poly(butylene 2,6-naphthalate-co-butylene furandicarboxylate) derived from 2,5-furandicarboxylic acid (FDCA): Synthesis, characterization, and properties. Polymer Testing, 2020, 91, 106771.	4.8	12
42	Ni, Co hydroxide triggers electrocatalytic production of high-purity benzoic acid over 400 mA cm^{â^'2}. Energy and Environmental Science, 2020, 13, 4990-4999.	30.8	125
43	Cu-CuOx/rGO catalyst derived from hybrid LDH/GO with enhanced C2H4 selectivity by CO2 electrochemical reduction. Journal of CO2 Utilization, 2020, 40, 101205.	6.8	16
44	Deep eutectic solvent stabilised Coâ€“P films for electrocatalytic oxidation of 5-hydroxymethylfurfural into 2,5-furandicarboxylic acid. New Journal of Chemistry, 2020, 44, 14239-14245.	2.8	28
45	Heterogeneous Catalytic Conversion of Sugars Into 2,5-Furandicarboxylic Acid. Frontiers in Chemistry, 2020, 8, 659.	3.6	40
46	Conversion of 5-hydroxymethylfurfural to chemicals: A review of catalytic routes and product applications. Fuel Processing Technology, 2020, 209, 106528.	7.2	86
47	Improved Performance of Nickel Boride by Phosphorus Doping as an Efficient Electrocatalyst for the Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid. Industrial & Engineering Chemistry Research, 2020, 59, 17348-17356.	3.7	42
48	Two-dimensional metalâ€“organic framework nanosheets for highly efficient electrocatalytic biomass 5-(hydroxymethyl)furfural (HMF) valorization. Journal of Materials Chemistry A, 2020, 8, 20386-20392.	10.3	88
49	Chemical and Enzymatic Routes for Lignocellulosic Bioproducts via Carbon Extension and Deoxygenation. ACS Sustainable Chemistry and Engineering, 2020, 8, 13555-13575.	6.7	2
50	Biomimetic oxygen activation and electron transfer for aerobic oxidative 5-hydroxymethylfurfural to 2,5-diformylfuran. Chemical Engineering Journal, 2020, 396, 125303.	12.7	30
51	Hierarchically nanostructured NiO-Co3O4 with rich interface defects for the electro-oxidation of 5-hydroxymethylfurfural. Science China Chemistry, 2020, 63, 980-986.	8.2	85
52	Tracking the formation of new brominated disinfection by-products during the seawater desalination process. Environmental Science: Water Research and Technology, 2020, 6, 2521-2541.	2.4	12
53	Rhodium phosphide ultrathin nanosheets for hydrazine oxidation boosted electrochemical water splitting. Applied Catalysis B: Environmental, 2020, 270, 118880.	20.2	151
54	Advances in the synthesis and application of 2,5-furandicarboxylic acid. , 2020, , 135-170.		7

#	Article	IF	Citations
55	Utilization of biomass waste: Facile synthesis high nitrogen-doped porous carbon from pomelo peel and used as catalyst support for aerobic oxidation of 5-hydroxymethylfurfural. Fuel, 2020, 278, 118361.	6.4	24
56	Ag Electrodeposited on Cu Openâ€Cell Foams for the Selective Electroreduction of 5â€Hydroxymethylfurfural. ChemElectroChem, 2020, 7, 1238-1247.	3.4	23
57	Recent Developments in Metal-Based Catalysts for the Catalytic Aerobic Oxidation of 5-Hydroxymethyl-Furfural to 2,5-Furandicarboxylic Acid. Catalysts, 2020, 10, 120.	3.5	47
58	Electrochemical biomass valorization on gold-metal oxide nanoscale heterojunctions enables investigation of both catalyst and reaction dynamics with operando surface-enhanced Raman spectroscopy. Chemical Science, 2020, 11, 1798-1806.	7.4	120
59	Electrocatalytic Hydrogenation and Oxidation in Aqueous Conditions^{â€}. Chinese Journal of Chemistry, 2020, 38, 996-1004.	4.9	38
60	Cu-Pd pair facilitated simultaneous activation of ethanol and CO. Journal of Catalysis, 2020, 386, 81-93.	6.2	2
61	High efficient catalytic oxidation of 5-hydroxymethylfurfural into 2,5-furandicarboxylic acid under benign conditions with nitrogen-doped graphene encapsulated Cu nanoparticles. Journal of Energy Chemistry, 2020, 50, 96-105.	12.9	30
62	2,5-Furandicarboxylic acid production via catalytic oxidation of 5-hydroxymethylfurfural: Catalysts, processes and reaction mechanism. Journal of Energy Chemistry, 2021, 54, 528-554.	12.9	137
63	Innovative Protocols in the Catalytic Oxidation of 5â€Hydroxymethylfurfural. ChemSusChem, 2021, 14, 266-280.	6.8	62
64	Heterogeneous recyclable copper oxide supported on activated red mud as an efficient and stable catalyst for the one pot hydroxylation of benzene to phenol. Molecular Catalysis, 2021, 499, 111310.	2.0	16
65	Copperâ€nanostructureâ€modified laserâ€scribed electrodes based on graphitic carbon for electrochemical detection of dopamine and glucose. Journal of Chemical Technology and Biotechnology, 2021, 96, 1086-1095.	3.2	15
66	Sulfidation of nickel foam with enhanced electrocatalytic oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid. Dalton Transactions, 2021, 50, 10922-10927.	3.3	21
67	Preparation and characterization of a copper oxide nanoparticle-supported red-mud catalyst for liquid phase oxidation of ethyl benzene to acetophenone. New Journal of Chemistry, 2021, 45, 13070-13079.	2.8	7
68	Selective hydrodeoxygenation of 5-hydroxymethylfurfural to 2, 5-dimethylfuran over mesoporous silica supported copper catalysts. Materials Science for Energy Technologies, 2021, 4, 357-366.	1.8	2
69	Nanoengineered Electrodes for Biomass-Derived 5-Hydroxymethylfurfural Electrocatalytic Oxidation to 2,5-Furandicarboxylic Acid. ACS Sustainable Chemistry and Engineering, 2021, 9, 1970-1993.	6.7	65
70	Critical practices in conducting electrochemical conversion of 5-hydroxymethylfurfural. Catalysis Science and Technology, 2021, 11, 4882-4888.	4.1	9
71	Electrochemical oxidation of biomass derived 5-hydroxymethylfurfural (HMF): pathway, mechanism, catalysts and coupling reactions. Green Chemistry, 2021, 23, 4228-4254.	9.0	191
72	Electrochemical biomass upgrading on CoOOH nanosheets in a hybrid water electrolyzer. Green Chemistry, 2021, 23, 2525-2530.	9.0	31

#	Article	IF	Citations
73	Boosting HMF oxidation performance via decorating ultrathin nickel hydroxide nanosheets with amorphous copper hydroxide islands. Journal of Materials Chemistry A, 2021, 9, 9685-9691.	10.3	45
74	Hydrogen and Potassium Acetate Co-Production from Electrochemical Reforming of Ethanol at Ultrathin Cobalt Sulfide Nanosheets on Nickel Foam. ACS Applied Materials & Interfaces, 2021, 13, 4026-4033.	8.0	33
75	Rational incorporation of defects within metalâ€“organic frameworks generates highly active electrocatalytic sites. Chemical Science, 2021, 12, 7324-7333.	7.4	50
76	Highly Ordered Mesoporous Co₃O₄ Electrocatalyst for Efficient, Selective, and Stable Oxidation of 5â€Hydroxymethylfurfural to 2,5â€Furandicarboxylic Acid. ChemSusChem, 2021, 14, 5199-5206.	6.8	38
77	Recent Progress in 5-Hydroxymethylfurfural Catalytic Oxidation to 2,5-Furandicarboxylic Acid. Current Organic Chemistry, 2021, 25, 404-416.	1.6	8
78	Efficient electrochemical oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid using the facilely synthesized 3D porous WO3/Ni electrode. Molecular Catalysis, 2021, 504, 111459.	2.0	13
79	Base-free atmospheric O2-mediated oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic acid triggered by Mg-bearing MTW zeolite supported Au nanoparticles. Applied Catalysis A: General, 2021, 616, 118106.	4.3	16
80	Highly Efficient Electroâ€reforming of 5â€Hydroxymethylfurfural on Vertically Oriented Nickel Nanosheet/Carbon Hybrid Catalysts: Structureâ€“Function Relationships. Angewandte Chemie - International Edition, 2021, 60, 14528-14535.	13.8	98
82	Avoiding Pitfalls in Comparison of Activity and Selectivity of Solid Catalysts for Electrochemical HMF Oxidation. ChemistryOpen, 2021, 10, 600-606.	1.9	6
83	Nitrogen-doped Co3O4 nanowires enable high-efficiency electrochemical oxidation of 5-hydroxymethylfurfural. Chinese Chemical Letters, 2022, 33, 385-389.	9.0	32
84	Highly Efficient Electroâ€reforming of 5â€Hydroxymethylfurfural on Vertically Oriented Nickel Nanosheet/Carbon Hybrid Catalysts: Structureâ€“Function Relationships. Angewandte Chemie, 2021, 133, 14649-14656.	2.0	18
85	Progress and Perspectives in Photoâ€•and Electrochemicalâ€Oxidation of Biomass for Sustainable Chemicals and Hydrogen Production. Advanced Energy Materials, 2021, 11, 2101180.	19.5	200
86	Paired and Tandem Electrochemical Conversion of 5â€(Hydroxymethyl)furfural Using Membraneâ€Electrode Assemblyâ€Based Electrolytic Systems. ChemElectroChem, 2021, 8, 2817-2824.	3.4	24
87	In Situ Growth of Ultrathin Ni(OH)₂ Nanosheets as Catalyst for Electrocatalytic Oxidation Reactions. ChemSusChem, 2021, 14, 2935-2942.	6.8	35
88	Understanding the Roles of Electrogenerated Co³⁺ and Co⁴⁺ in Selectivityâ€Tuned 5â€Hydroxymethylfurfural Oxidation. Angewandte Chemie, 2021, 133, 20698-20705.	2.0	25
89	Selective Electro-oxidation of Alcohols to the Corresponding Aldehydes in Aqueous Solution via Cu(III) Intermediates from CuO Nanorods. ACS Sustainable Chemistry and Engineering, 2021, 9, 11855-11861.	6.7	19
90	Understanding the Roles of Electrogenerated Co³⁺ and Co⁴⁺ in Selectivityâ€Tuned 5â€Hydroxymethylfurfural Oxidation. Angewandte Chemie - International Edition, 2021, 60, 20535-20542.	13.8	121
91	Accelerating Hydrogen Evolution by Anodic Electrosynthesis of Valueâ€Added Chemicals in Water over Nonâ€Precious Metal Electrocatalysts. ChemPlusChem, 2021, 86, 1307-1315.	2.8	15

#	Article	IF	Citations
92	Electroreductive 5â€Hydroxymethylfurfural Dimerization on Carbon Electrodes. ChemSusChem, 2021, 14, 5245-5253.	6.8	20
93	Electronic Structure Modulation of Nonâ€Nobleâ€Metalâ€Based Catalysts for Biomass Electrooxidation Reactions. Small Structures, 2021, 2, 2100095.	12.0	28
94	Conductive Metalâ€Organic Frameworks Bearing Mâ^'O₄ Active Sites as Highly Active Biomass Valorization Electrocatalysts. ChemSusChem, 2022, 15, .	6.8	4
95	A Perspective on Heterogeneous Catalysts for the Selective Oxidation of Alcohols. Chemistry - A European Journal, 2021, 27, 16809-16833.	3.3	45
96	Preparation of Sulfur-Modulated Nickel/Carbon Composites from Lignosulfonate for the Electrocatalytic Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid. ACS Applied Energy Materials, 2021, 4, 1182-1188.	5.1	37
97	Recent advances in the electrocatalytic synthesis of 2,5-furandicarboxylic acid from 5-(hydroxymethyl)furfural. Journal of Materials Chemistry A, 2021, 9, 20164-20183.	10.3	62
98	Nitrogen modulated NiMoO₄ with enhanced activity for the electrochemical oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid. Catalysis Science and Technology, 2021, 11, 7326-7330.	4.1	14
99	Earth-abundant 3d-transition-metal catalysts for lignocellulosic biomass conversion. Chemical Society Reviews, 2021, 50, 6042-6093.	38.1	104
100	Electrocatalytic Oxidation of Glycerol to Formic Acid by CuCo₂O₄ Spinel Oxide Nanostructure Catalysts. ACS Catalysis, 2020, 10, 6741-6752.	11.2	221
101	Effect of Coordination Environment Surrounding a Single Pt Site on the Liquid-Phase Aerobic Oxidation of 5-Hydroxymethylfurfural. ACS Applied Materials & Interfaces, 2021, 13, 48582-48594.	8.0	12
102	Recent Progress on Electrocatalytic Valorization of Biomassâ€Derived Organics. Energy and Environmental Materials, 2022, 5, 1117-1138.	12.8	38
103	Killing Two Birds with One Stone: Selective Oxidation of Small Organic Molecule as Anodic Reaction to Boost CO₂ Electrolysis. Small Structures, 2022, 3, 2100134.	12.0	25
104	Electrochemical Production of 2,5-Furandicarboxylic from 5-Hydroxymethylfurfural Using Ultrathin Co(OH)₂ on ZIF-67. ACS Applied Energy Materials, 2021, 4, 12909-12916.	5.1	9
105	Hydrothermal carbonization and liquefaction for sustainable production of hydrochar and aromatics. Renewable and Sustainable Energy Reviews, 2021, 152, 111722.	16.4	86
107	5-Hydroxymethylfurfural as a chemical platform for a lignocellulosic biomass biorefinery. , 2022, , 269-315.		0
108	Heterogeneous Catalysis in Hydroxymethylfurfural Conversion to Fuels and Chemicals. , 2020, , 355-370.		0
109	Electroreforming of Biomass for Value-Added Products. Micromachines, 2021, 12, 1405.	2.9	7
110	Efficient electrolysis of 5-hydroxymethylfurfural to the biopolymer-precursor furandicarboxylic acid in a zero-gap MEA-type electrolyzer. Cell Reports Physical Science, 2021, 2, 100650.	5.6	11

#	Article	IF	Citations
111	Self-supported 2D Fe-doped Ni-MOF nanosheets as highly efficient and stable electrocatalysts for benzylamine oxidation. Applied Surface Science, 2022, 578, 152065.	6.1	15
112	Efficient Electrocatalytic Oxidation of 5-Hydroxymethylfurfural Coupled with 4-Nitrophenol Hydrogenation in a Water System. ACS Catalysis, 2022, 12, 1545-1557.	11.2	113
113	Alcohols electrooxidation coupled with H2 production at high current densities promoted by a cooperative catalyst. Nature Communications, 2022, 13, 147.	12.8	133
114	Transforming Electrocatalytic Biomass Upgrading and Hydrogen Production from Electricity Input to Electricity Output. Angewandte Chemie, 2022, 134, .	2.0	17
115	Transforming Electrocatalytic Biomass Upgrading and Hydrogen Production from Electricity Input to Electricity Output. Angewandte Chemie - International Edition, 2022, 61, e202115636.	13.8	50
116	Electroâ€and Photocatalytic Oxidative Upgrading of Bioâ€based 5â€Hydroxymethylfurfural. ChemSusChem, 2022, 15, .	6.8	67
117	Pickering High Internal Phase Emulsions Templated CoOxâ^'HPC Loading Bimetallic AuPd Nanoparticles for Catalytic Oxidation of 5â€Hydroxymethylfurfural to 2, 5â€Furan Dicarboxylic. ChemistrySelect, 2022, 7, .	1.5	2
118	Strain-induced in situ formation of NiOOH species on Co Co bond for selective electrooxidation of 5-hydroxymethylfurfural and efficient hydrogen production. Applied Catalysis B: Environmental, 2022, 305, 121072.	20.2	53
119	Combined anodic and cathodic hydrogen production from aldehyde oxidation and hydrogen evolution reaction. Nature Catalysis, 2022, 5, 66-73.	34.4	276
120	Boosting the electro-oxidation of 5-hydroxymethyl-furfural on a Coâ€“CoS_x heterojunction by intensified spin polarization. Chemical Science, 2022, 13, 4647-4653.	7.4	21
121	Integrated Catalytic Sites for Highly Efficient Electrochemical Oxidation of the Aldehyde and Hydroxyl Groups in 5-Hydroxymethylfurfural. ACS Catalysis, 2022, 12, 4242-4251.	11.2	74
122	Collaborative Electrochemical Oxidation of the Alcohol and Aldehyde Groups of 5-Hydroxymethylfurfural by NiOOH and Cu(OH)₂ for Superior 2,5-Furandicarboxylic Acid Production. ACS Catalysis, 2022, 12, 4078-4091.	11.2	45
123	Design and Application of a High-Surface-Area Mesoporous Î´-MnO₂ Electrocatalyst for Biomass Oxidative Valorization. Chemistry of Materials, 2022, 34, 3123-3132.	6.7	19
124	Electrochemically Derived Crystalline CuO from Covellite CuS Nanoplates: A Multifunctional Anode Material. Inorganic Chemistry, 2022, 61, 4995-5009.	4.0	22
125	Boosting the valorization of biomass and green electrons to chemical building blocks: A study on the kinetics and mass transfer during the electrochemical conversion of HMF to FDCA in a microreactor. Chemical Engineering Journal, 2022, 438, 135393.	12.7	15
126	Effects of Metallic Impurities in Alkaline Electrolytes on Electro-Oxidation of Water and Alcohol Molecules. Journal of the Electrochemical Society, 2021, 168, 124516.	2.9	4
127	Electrochemical Hydrogen Generation by Oxygen Evolution Reactionâ€Alternative Anodic Oxidation Reactions. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	34
128	W exsolution promotes the in situ reconstruction of a NiW electrode with rich active sites for the electrocatalytic oxidation of 5-hydroxymethylfurfural (HMF). Catalysis Science and Technology, 2022, 12, 3363-3371.	4.1	8

#	Article	IF	Citations
129	Bimetallic sites and coordination effects: electronic structure engineering of NiCo-based sulfide for 5-hydroxymethylfurfural electrooxidation. Catalysis Science and Technology, 2022, 12, 3817-3825.	4.1	15
130	Electrochemical Oxidation of HMF via Hydrogen Atom Transfer and Hydride Transfer on NiOOH and the Impact of NiOOH Composition. ChemSusChem, 2022, 15, .	6.8	24
131	Electrochemically Assisted Cycloaddition of Carbon Dioxide to Styrene Oxide on Copper/carbon Hybrid Electrodes: Active Species and Reaction Mechanism. Chemistry - A European Journal, 2022, , .	3.3	2
132	CoP nanorods anchored on Ni₂P-NiCoP nanosheets with abundant heterogeneous interfaces boosting the electrocatalytic oxidation of 5-hydroxymethyl-furfural. Catalysis Science and Technology, 2022, 12, 4288-4297.	4.1	11
133	Earthâ€Abundant Metalâ€Based Electrocatalysts Promoted Anodic Reaction in Hybrid Water Electrolysis for Efficient Hydrogen Production: Recent Progress and Perspectives. Advanced Energy Materials, 2022, 12, .	19.5	87
134	éžè´µé‡'å±žåŸºå,¬åŒ–å‰,ç"¨äºŽç"Ÿç‰©è´¨ç"µæ°§åŒ–é«˜â€¼åŒ–å^©ç"¨çš„ ç"©¶è¿›å±•. Science China Materials, 2022, 65, 327	6.8	26
135	In Situ Electrochemical Reconstitution of CFâ€"CuO/CeO₂ for Efficient Active Species Generation. Inorganic Chemistry, 2022, 61, 8940-8954.	4.0	21
136	Mechanistic Differences between Electrochemical Hydrogenation and Hydrogenolysis of 5â€Hydroxymethylfurfural and Their pH Dependence. ChemSusChem, 2022, 15, .	6.8	18
137	Preparation of NiO-N/C composites for electrochemical oxidation of 5-hydroxymethylfurfural to 2,5-furandicarboxylic acid. Biomass Conversion and Biorefinery, 2023, 13, 17247-17254.	4.6	3
138	Electroreductive C O coupling of benzaldehyde over SACs Auâ€"NiMn2O4 spinel synergetic composites. Journal of Colloid and Interface Science, 2022, 625, 305-316.	9.4	6
139	Highly Efficient Electrocatalytic Upgrade of nâ€Valeraldehyde to Octane over Au SACsâ€"NiMn₂O₄ Spinel Synergetic Composites. Small, 2022, 18, .	10.0	8
140	Alloyâ€Driven Efficient Electrocatalytic Oxidation of Biomassâ€Derived 5â€Hydroxymethylfurfural towards 2,5â€Furandicarboxylic Acid: A Review. ChemSusChem, 2022, 15, .	6.8	14
141	High oxidation state enabled by plated Ni-P achieves superior electrocatalytic performance for 5-hydroxymethylfurfural oxidation reaction. IScience, 2022, 25, 104744.	4.1	9
142	Upgrading Organic Compounds through the Coupling of Electrooxidation with Hydrogen Evolution. Angewandte Chemie - International Edition, 2022, 61, .	13.8	46
143	Aufwertung organischer Verbindungen durch Kopplung von Elektrooxidation und Wasserstoffentwicklung. Angewandte Chemie, 2022, 134, .	2.0	6
144	High-Dispersed V2O5-CuOX Nanoparticles on h-BN in NH3-SCR and NH3-SCO Performance. Nanomaterials, 2022, 12, 2329.	4.1	12
145	Mechanistic study on electro-oxidation of 5-hydroxymethylfurfural and water molecules via operando surface-enhanced Raman spectroscopy coupled with an Fe3+ probe. Applied Catalysis B: Environmental, 2022, 317, 121776.	20.2	11
146	Inâ€Liquid Plasma Modified Nickel Foam: NiOOH/NiFeOOH Active Site Multiplication for Electrocatalytic Alcohol, Aldehyde, and Water Oxidation. Advanced Energy Materials, 2022, 12, .	19.5	23

#	Article	IF	Citations
147	Insight toward the role of Fe in layered Ni(OH)2 for electrochemical oxidations of water and 5-hydroxymethylfurfural. Catalysis Communications, 2022, 170, 106501.	3.3	6
148	The highly efficient electrocatalytic oxidation of 5-hydroxymethylfurfural on copper nanocrystalline/carbon hybrid catalysts: structureâ€"function relations. Catalysis Science and Technology, 2022, 12, 6437-6443.	4.1	4
149	Recent developments in electrode materials for the selective upgrade of biomass-derived platform molecules into high-value-added chemicals and fuels. Green Chemistry, 2022, 24, 7818-7868.	9.0	29
150	Nickel-vanadium-cobalt ternary layered double hydroxide for efficient electrocatalytic upgrading of 5-hydroxymethylfurfural to 2,5-furancarboxylic acid at low potential. Journal of Materials Chemistry A, 2022, 10, 21135-21141.	10.3	9
151	Ultra-low voltage bipolar hydrogen production from biomass-derived aldehydes and water in membrane-less electrolyzers. Energy and Environmental Science, 2022, 15, 4175-4189.	30.8	28
152	Heterogeneousâ€Interfaceâ€Enhanced Adsorption of Organic and Hydroxyl for Biomass Electrooxidation. Advanced Materials, 2022, 34, .	21.0	85
153	Electrochemical Hydrogenation, Hydrogenolysis, and Dehydrogenation for Reductive and Oxidative Biomass Upgrading Using 5-Hydroxymethylfurfural as a Model System. ACS Catalysis, 2022, 12, 12349-12368.	11.2	26
154	Inâ€situ Electrochemical Transformed Cu Oxide from Cu Sulfide for Efficient Upgrading of Biomass Derived 5â€Hydroxymethylfurfural in Anion Exchange Membrane Electrolyzer. ChemSusChem, 2022, 15, .	6.8	8
155	Paired electrocatalysis in 5-hydroxymethylfurfural valorization. Frontiers in Chemistry, 0, 10, .	3.6	8
156	Membrane-free pure H2 production over single dispersed Ru-anchored Pt3Ni alloys via coupling ethanol selective electrooxidation. Applied Catalysis B: Environmental, 2023, 321, 122065.	20.2	15
157	Highly efficient electrocatalytic biomass valorization over a perovskite-derived nickel phosphide catalyst. Nanoscale Horizons, 2022, 8, 69-74.	8.0	2
158	Electroâ€Synthesis of Organic Compounds with Heterogeneous Catalysis. Advanced Science, 2023, 10, .	11.2	25
159	Mechanistic insights for dual-species evolution toward 5-hydroxymethylfurfural oxidation. Journal of Catalysis, 2023, 417, 22-34.	6.2	26
160	Unravelling rate-determining step and consequence of O2- or H2O-assisted, wet CO transformation on catalytic CuO-CeO2 domains via interfacial engineering. Applied Surface Science, 2023, 614, 156099.	6.1	3
161	A versatile single-copper-atom electrocatalyst for biomass valorization. Applied Catalysis B: Environmental, 2023, 324, 122218.	20.2	11
162	Electrochemical conversion of biomass-derived aldehydes into fine chemicals and hydrogen: A review. Environmental Chemistry Letters, 2023, 21, 1555-1583.	16.2	15
163	A Liquidâ€Liquidâ€Solid System to Manipulate the Cascade Reaction for Highly Selective Electrosynthesis of Aldehyde. Angewandte Chemie - International Edition, 2023, 62, .	13.8	4
164	A Liquidâ€Liquidâ€Solid System to Manipulate the Cascade Reaction for Highly Selective Electrosynthesis of Aldehyde. Angewandte Chemie, 2023, 135, .	2.0	2

#	Article	IF	Citations
165	Advances in Selective Electrochemical Oxidation of 5â€Hydroxymethylfurfural to Produce Highâ€Value Chemicals. Advanced Science, 2023, 10, .	11.2	26
166	Electrochemical Oxidation of Primary Alcohols Using a Co₂NiO₄ Catalyst: Effects of Alcohol Identity and Electrochemical Bias on Product Distribution. ACS Catalysis, 2023, 13, 515-529.	11.2	9
167	A bismuth silver pnictohalide alternative to perovskite in fully-printable triple-mesoscopic solar cells. Sustainable Energy and Fuels, 2023, 7, 1067-1076.	4.9	2
168	Stabilization of alkaline 5-HMF electrolytes via Cannizzaro reaction for the electrochemical oxidation to FDCA. Green Chemistry, 2023, 25, 1797-1802.	9.0	15
169	Microfabrication of a multiplexed device for controlled deposition of miniaturised copper-structures for glucose electro-oxidation in biological and chemical matrices. Biosensors and Bioelectronics: X, 2023, 13, 100315.	1.7	1
170	An efficient electrocatalytic system composed of nickel oxide and nitroxyl radical for the oxidation of bio-platform molecules to dicarboxylic acids. Journal of Energy Chemistry, 2023, 80, 58-67.	12.9	8
171	Doped Mn Enhanced NiS Electrooxidation Performance of HMF into FDCA at Industrialâ€Level Current Density. Advanced Functional Materials, 2023, 33, .	14.9	23
172	Defectâ€Rich PdIr Bimetallene Nanoribbons with Interatomic Charge Localization for Isopropanolâ€Assisted Seawater Splitting. Small, 2023, 19, .	10.0	7
173	Mechanical and Gas Barrier Properties of Poly(Lactic Acid) Modified by Blending with Poly(Butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	4.5	1
174	Recent progress of Cu-based electrocatalysts for upgrading biomass-derived furanic compounds. Catalysis Science and Technology, 2023, 13, 2899-2921.	4.1	4
175	An acid-alkaline furfural hybrid battery for furoate and bipolar hydrogen production. Chemical Communications, 2023, 59, 6837-6840.	4.1	1
176	Controllable surface reconstruction of copper foam for electrooxidation of benzyl alcohol integrated with pure hydrogen production. SmartMat, 2024, 5, .	10.7	3
177	A Facile Molecular Approach to Amorphous Nickel Pnictides and Their Reconstruction to Crystalline Potassiumâ€Intercalated Î³â€NiOOH_x Enabling Highâ€Performance Electrocatalytic Water Oxidation and Selective Oxidation of 5â€Hydroxymethylfurfural. Small, 2023, 19, .	10.0	7
178	Cu₂P₇â€CoP Heterostructure Nanosheets Enable Highâ€Performance of 5â€Hydroxymethylfurfural Electrooxidation. Chemistry - A European Journal, 2023, 29, .	3.3	4
179	A Survey of Various 2,5-Furandicarboxylic Acid-Based Renewable Polyesters. Energy, Environment, and Sustainability, 2023, , 347-362.	1.0	0
180	A mini review of electrocatalytic upgrading of carbohydrate biomassâ€"System, path, and optimization. Energy Science and Engineering, 2023, 11, 2944-2965.	4.0	1
181	Liquid flow fuel cell with an electrodeposition-modified nickel foam anode for efficient oxidation of 5-hydroxymethylfurfural to produce 2, 5-furandicarboxylic acid with co-generation of electricity. Chemical Engineering Journal, 2023, 469, 143832.	12.7	5
182	Highly Efficiency Coupled Electrocatalytic CO2 Reduction to C2H4 with 5â€'Hydroxymethylfurfural Oxidation over Cu-based Nanoflower electrocatalyst. Green Chemistry, 0, , .	9.0	2

#	Article	IF	Citations
183	Critical Role of Interface Design in Acceleration of Overall Water Splitting and Hybrid Electrolysis Process: State of the Art and Perspectives. Energy & Fuels, 2023, 37, 7603-7633.	5.1	5
184	Regulating the Electronic Structure of Ni Sites in Ni(OH)₂ by Ce Doping and Cu(OH)₂ Coupling to Boost 5-Hydroxymethylfurfural Oxidation Performance. Inorganic Chemistry, 2023, 62, 12534-12547.	4.0	3
185	Cu-Based Bimetallic Catalysts for Electrocatalytic Oxidative Dehydrogenation of Furfural with Practical Rates. ACS Applied Materials & Interfaces, 2023, 15, 37477-37485.	8.0	3
186	H2O2-assisted fabricate nickel cobalt sulfide as the efficient catalyst for the novel strategy of 5-hydroxymethylfurfural stepwise electrolysis. Applied Surface Science, 2023, 639, 158198.	6.1	1
187	Factors affecting selective electrochemical glycerol oxidation to three-carbon products over cuprous oxide microcubes. Journal of the Taiwan Institute of Chemical Engineers, 2024, 158, 105087.	5.3	0
188	Electroreforming injects a new life into solid waste. , 2023, 1, 892-920.		7
189	Scalable electrosynthesis of commodity chemicals from biomass by suppressing non-Faradaic transformations. Nature Communications, 2023, 14, .	12.8	8
190	Electrocatalytic Refinery of Biomass-Based 5-Hydroxymethylfurfural to Fine Chemicals. ACS Catalysis, 2023, 13, 11204-11231.	11.2	11
191	Construction of hierarchical NiCu-based bimetallic electrocatalysts for promoting the electrooxidation of biomass derivatives. Sustainable Energy and Fuels, 2023, 7, 4505-4513.	4.9	2
192	Core-skin Co@NiCo-LDH as an efficient Mott-Schottky electrocatalyst for biomass upgrading coupled with hydrogen evolution. Chemical Engineering Journal, 2023, 474, 145905.	12.7	2
193	Halide Adsorption Enhances Electrochemical Hydrogenolysis of 5-Hydroxymethylfurfural by Suppressing Hydrogenation. Journal of the American Chemical Society, 2023, 145, 20473-20484.	13.7	0
194	Bionic Mineralization toward Scalable MOF Films for Ampere-Level Biomass Upgrading. Journal of the American Chemical Society, 2023, 145, 20624-20633.	13.7	1
195	Kilogram-scale production of high purity 2,5-furandicarboxylic acid via sustainable leap in continuous electrochemical oxidation of 5-hydroxymethylfurfural. Chemical Engineering Journal, 2023, 476, 146478.	12.7	2
196	In-situ synthesis of copper phytate-hierarchically porous MOF-199 hybrid in wood towards multifunctional flame-retardant wood composite. Industrial Crops and Products, 2023, 204, 117233.	5.2	2
197	MOF Material-Derived Bimetallic Sulfide CoxNiyS for Electrocatalytic Oxidation of 5-Hydroxymethylfurfural. Nanomaterials, 2023, 13, 2318.	4.1	4
198	Construction of isolated Coâ€“N_x and dual Co_nâ€“CoN_x sites for the regulation of hydrogenation and hydrodeoxygenation selectivity of biomass-derived chemicals. Green Chemistry, 0, , .	9.0	1
199	Interfacial coupling effect promotes selective electrocatalytic oxidation of 5-hydroxymethylfurfural into the value-added products under neutral conditions. Journal of Colloid and Interface Science, 2024, 654, 731-739.	9.4	0
200	Additive manufacturing technologies applied to the electrochemical valorization of biomass. Current Research in Green and Sustainable Chemistry, 2023, 7, 100386.	5.6	0

#	Article	IF	Citations
201	Water electrolysis for hydrogen production: from hybrid systems to self-powered/catalyzed devices. Energy and Environmental Science, 2024, 17, 49-113.	30.8	10
202	Paired electrosynthesis strategy for enhancing 2, 5-Furardicarboxylic acid formation rate. Applied Surface Science, 2024, 648, 158833.	6.1	0
203	Transforming liquid flow fuel cells to controllable reactors for highly-efficient oxidation of 5-hydroxymethylfurfural to 2, 5-furandicarboxylic acid at low temperature. Journal of Energy Chemistry, 2024, 90, 621-631.	12.9	0
204	Self-Reconstruction of Sulfate-Terminated Copper Oxide Nanorods for Efficient and Stable 5-Hydroxymethylfurfural Electrooxidation. Nano Letters, 2023, 23, 11314-11322.	9.1	2
205	Unraveling the Electrooxidation Mechanism of 5-(Hydroxymethyl)furfural at a Molecular Level via Nickel-Based Two-Dimensional Metalâ€“Organic Frameworks Catalysts. ACS Catalysis, 0, , 449-462.	11.2	0
206	Ionic liquid dopant induced 3D hierarchical CuO nanostructures with doped heteroatoms and highly dispersed Ag for electrochemical upgrading of 5-hydroxymethylfurfural. Chemical Engineering Journal, 2024, 481, 148580.	12.7	0
207	Co-catalytic metalâ€“support interactions in single-atom electrocatalysts. Nature Reviews Materials, 2024, 9, 173-189.	48.7	1
208	Electro-oxidation of 5-hydroxymethylfurfural by a catalyst containing copper nanoparticles and single copper atoms. , 2024, 4, 100041.		0
209	Controllable dual Cuâ€“Cu2O sites derived from CuxAl-LDH for CO2 electroreduction to hydrocarbons. Vacuum, 2024, 222, 112974.	3.5	0
210	Uncovering the electrooxidation behavior of 5-hydroxymethylfurfural on Ni/Co electrodes. Journal of Energy Chemistry, 2024, 92, 1-7.	12.9	0
211	S, P modified CoFe-LDH derived CoFeS and CoFeP-400 catalysts efficiently catalyze the oxidation of HMF to FDCA. Catalysis Science and Technology, 2024, 14, 1191-1200.	4.1	0
212	Novel Ag₃PO₄-ZnO@GOTernary composite, synthesis, characterisation and photodegradation of Rhodamine B. Materials Science and Technology, 0, , .	1.6	0
213	Electrocatalytic Epoxidation of Cyclooctene on Surface Modified Ni Foam Using Water as Oxygen Source. Chemistry - A European Journal, 2024, 30, .	3.3	0
214	Electrochemical reduction of carbon dioxide to produce formic acid coupled with oxidative conversion of biomass. Journal of Energy Chemistry, 2024, 92, 705-729.	12.9	0
215	Enhancing Low-Potential Electrosynthesis of 2,5-Furandicarboxylic Acid on Monolithic CuO by Constructing Oxygen Vacancies. ACS Applied Materials & Interfaces, 2024, 16, 8697-8706.	8.0	0
216	Critical Practices in Improving the Electrochemical Oxidation of 5-Hydroxymethylfurfural to 2,5-Furandicarboxylic Acid in 0.1 M KOH. ACS Sustainable Chemistry and Engineering, 2024, 12, 3256-3264.	6.7	0
217	Electronic modification of Ni active sites by W for selective benzylamine oxidation and concurrent hydrogen production. Chinese Journal of Catalysis, 2024, 58, 146-156.	14.0	0
218	Bifunctional Electrocatalysts for Overall and Hybrid Water Splitting. Chemical Reviews, 2024, 124, 3694-3812.	47.7	0