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New insights into the electrochemical reduction of carbon dioxide on metallic copper surfaces

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2111	The Electrified Plasma/Liquid Interface as a Platform for Highly Efficient CO <sub>2</sub> Electroreduction to Oxalate.		
2110	Optimizing CC Coupling on Oxide-Derived Copper Catalysts for Electrochemical CO <sub>2</sub> Reduction.		
2109	Copper Electrode Fabricated via Pulse Electrodeposition: Toward High Methane Selectivity and Activity for CO <sub>2</sub> Electroreduction.		
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2105	HostGuest Chemistry Meets Electrocatalysis: Cucurbit[6]uril on a Au Surface as a Hybrid System in CO <sub>2</sub> Reduction.		
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2098	The Tunable and Highly Selective Reduction Products on Ag@Cu Bimetallic Catalysts Toward CO <sub>2</sub> Electrochemical Reduction Reaction.		
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2091	Composition-Dependent Electrocatalytic Behavior of AuSn Bimetallic Nanoparticles in Carbon Dioxide Reduction.	
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2084	Theoretical Considerations on the Electroreduction of CO to C <sub>2</sub> Species on Cu(100) Electrodes. <b>2013</b> , 125, 7423-7426	146
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1767	Syngas production by electrochemical CO <sub>2</sub> reduction in an ionic liquid based-electrolyte. <b>2017</b> , 18, 62-72	41
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1762	Current Status and Bioinspired Perspective of Electrochemical Conversion of CO to a Long-Chain Hydrocarbon. <b>2017</b> , 8, 538-545	83
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1760	Electrochemical Reduction of Carbon Dioxide on Zinc-Modified Copper Electrodes. <b>2017</b> , 164, H164-H169	32
1759	Carbon Dioxide Electroreduction using a SilverZinc Alloy. <b>2017</b> , 5, 955-961	34
1758	Spectroscopic Observation of a Hydrogenated CO Dimer Intermediate During CO Reduction on Cu(100) Electrodes. <b>2017</b> , 56, 3621-3624	201
1757	MetalOrganic frameworks with Lewis acidity: synthesis, characterization, and catalytic applications. <b>2017</b> , 19, 4066-4081	154
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1755	Sn nanoparticles on gas diffusion electrodes: Synthesis, characterization and use for continuous CO <sub>2</sub> electroreduction to formate. <b>2017</b> , 18, 222-228	106
1754	Highly Efficient and Exceptionally Durable CO Photoreduction to Methanol over Freestanding Defective Single-Unit-Cell Bismuth Vanadate Layers. <b>2017</b> , 139, 3438-3445	374
1753	The Central Role of Bicarbonate in the Electrochemical Reduction of Carbon Dioxide on Gold. <b>2017</b> , 139, 3774-3783	324

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1751	Isolation of Cu Atoms in Pd Lattice: Forming Highly Selective Sites for Photocatalytic Conversion of CO to CH <sub>4</sub> . <b>2017</b> , 139, 4486-4492		317
1750	CO <sub>2</sub> Electroreduction on Au/TiC: Enhanced Activity Due to Metal-Support Interaction. <b>2017</b> , 7, 2101-2106		52
1749	Nanostructured Materials for Heterogeneous Electrocatalytic CO Reduction and their Related Reaction Mechanisms. <b>2017</b> , 56, 11326-11353		588
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1747	Nanostrukturierte Materialien für die elektrokatalytische CO <sub>2</sub> -Reduktion und ihre Reaktionsmechanismen. <b>2017</b> , 129, 11482-11511		86
1746	Synthesis and characterization of supported Sn/Al <sub>2</sub> O <sub>3</sub> and Sn/ZSM5 catalysts for CO <sub>2</sub> reduction in electrochemical cell. <b>2017</b> , 18, 80-88		12
1745	Full atomistic reaction mechanism with kinetics for CO reduction on Cu(100) from ab initio molecular dynamics free-energy calculations at 298 K. <b>2017</b> , 114, 1795-1800		263
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1742	Theoretical insight into effect of doping of transition metal M (M = Ni, Pd and Pt) on CO <sub>2</sub> reduction pathways on Cu(111) and understanding of origin of electrocatalytic activity. <b>2017</b> , 7, 11938-11950		15
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1732	Progress in inorganic cathode catalysts for electrochemical conversion of carbon dioxide into formate or formic acid. <b>2017</b> , 47, 661-678	51
1731	CO <sub>2</sub> reduction to alcohols in a polymer electrolyte membrane co-electrolysis cell operating at low potentials. <b>2017</b> , 241, 28-40	38
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1727	Cu metal embedded in oxidized matrix catalyst to promote CO activation and CO dimerization for electrochemical reduction of CO. <b>2017</b> , 114, 6685-6688	146
1726	Continuous-flow electroreduction of carbon dioxide. <b>2017</b> , 62, 133-154	194
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1706	TiC- and TiN-Supported Single-Atom Catalysts for Dramatic Improvements in CO <sub>2</sub> Electrochemical Reduction to CH <sub>4</sub> . <b>2017</b> , 2, 969-975	134
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1679	Crystalline Copper(II) Phthalocyanine Catalysts for Electrochemical Reduction of Carbon Dioxide in Aqueous Media. <b>2017</b> , 7, 8382-8385	63
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1657	Electrochemical Reduction of $\text{CO}_2$ in Proton Exchange Membrane Reactor: The Function of Buffer Layer. <b>2017</b> , 56, 10242-10250	19
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1655	Copper Nanoparticles Installed in Metal-Organic Framework Thin Films are Electrocatalytically Competent for $\text{CO}_2$ Reduction. <b>2017</b> , 2, 2394-2401	112
1654	Softoxometalate $[\{\text{KCu}(\text{OH})(\text{HO})\}_n\{\text{KPWO}\}]$ ( $n = 1348-2024$ ) as an Efficient Inorganic Material for CO Reduction with Concomitant Water Oxidation. <b>2017</b> , 9, 35086-35094	19
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1627	Brass and Bronze as Effective CO <sub>2</sub> Reduction Electrocatalysts. <b>2017</b> , 129, 16806-16809	7

1626	Monolithic Nanoporous In-Sn Alloy for Electrochemical Reduction of Carbon Dioxide. <b>2017</b> , 9, 43575-43582	44
1625	Electrochemical CO Reduction over Compressively Strained CuAg Surface Alloys with Enhanced Multi-Carbon Oxygenate Selectivity. <b>2017</b> , 139, 15848-15857	331
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1613	Electrochemical Reduction of Carbon Dioxide to Syngas and Formate at Dendritic Copper/Indium Electrocatalysts. <b>2017</b> , 7, 5381-5390	110
1612	Sustainable Capture and Conversion of Carbon Dioxide into Valuable Multiwalled Carbon Nanotubes Using Metal Scrap Materials. <b>2017</b> , 5, 7104-7110	19
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1605	Copper-Based Metal-Organic Porous Materials for CO Electrochemical Reduction to Alcohols. <b>2017</b> , 10, 1100-1109	208
1604	Size-dependent reactivity of gold-copper bimetallic nanoparticles during CO <sub>2</sub> electroreduction. <b>2017</b> , 288, 30-36	56
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1602	Porous dendritic copper: an electrocatalyst for highly selective CO reduction to formate in water/ionic liquid electrolyte. <b>2017</b> , 8, 742-747	109
1601	(Keynote) Experimental Considerations for Electrocatalytic CO <sub>2</sub> Reduction. <b>2017</b> , 80, 1191-1201	
1600	Theoretical Investigations of the Electrochemical Reduction of CO on Single Metal Atoms Embedded in Graphene. <b>2017</b> , 3, 1286-1293	41
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1598	Electroreduction of CO <sub>2</sub> into Ethanol over an Active Catalyst: Copper Supported on Titania. <b>2017</b> , 7, 220	22
1597	Reactivity of Copper Electrodes towards Functional Groups and Small Molecules in the Context of CO <sub>2</sub> Electro-Reductions. <b>2017</b> , 7, 161	22
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1595	Reduction of carbon dioxide at copper(I) oxide photocathode activated and stabilized by over-coating with oligoaniline. <b>2018</b> , 265, 400-410	17
1594	Design of Electrocatalysts and Electrochemical Cells for Carbon Dioxide Reduction Reactions. <b>2018</b> , 3, 1700377	34
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1591	Two novel Pb(II) coordination polymers (CPs) based on 4-(4-oxopyridin-1(4H)-yl) and 3-(4-oxopyridin-1(4H)-yl) phthalic acid: Band gaps, structures, and their photoelectrocatalytic properties in CO <sub>2</sub> -saturated system. <b>2018</b> , 261, 43-52	4

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1589	Trends in the Catalytic Activity of Hydrogen Evolution during CO <sub>2</sub> Electroreduction on Transition Metals. <b>2018</b> , 8, 3035-3040	67
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1587	Bipolar Membranes Inhibit Product Crossover in CO <sub>2</sub> Electrolysis Cells. <b>2018</b> , 2, 1700187	73
1586	The effects of currents and potentials on the selectivities of copper toward carbon dioxide electroreduction. <b>2018</b> , 9, 925	145
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1582	Chemically heterogeneous nitrogen sites of various reactivity in porous carbons provide high stability of CO <sub>2</sub> electroreduction catalysts. <b>2018</b> , 234, 1-9	27
1581	Calculations of Product Selectivity in Electrochemical CO <sub>2</sub> Reduction. <b>2018</b> , 8, 5240-5249	135
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1578	Poly-Amide Modified Copper Foam Electrodes for Enhanced Electrochemical Reduction of Carbon Dioxide. <b>2018</b> , 8, 4132-4142	85
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1574	A reassembled nanoporous gold leaf electrocatalyst for efficient CO <sub>2</sub> reduction towards CO. <b>2018</b> , 5, 1207-1212	7
1573	Steric Hindrance in Sulfur Vacancy of Monolayer MoS Boosts Electrochemical Reduction of Carbon Monoxide to Methane. <b>2018</b> , 11, 1455-1459	21

1572	Colloidal AuCu alloy nanoparticles: synthesis, optical properties and applications. <b>2018</b> , 2, 1074-1089	35
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1569	Electrochemical Reduction of CO <sub>2</sub> in Water-Based Electrolytes KHCO <sub>3</sub> and K <sub>2</sub> SO <sub>4</sub> Using Boron Doped Diamond Electrodes. <b>2018</b> , 3, 3591-3595	7
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1567	Technoeconomics of Commodity Chemical Production Using Sunlight. <b>2018</b> , 6, 7003-7009	14
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1565	Upscaling and continuous operation of electrochemical CO <sub>2</sub> to CO conversion in aqueous solutions on silver gas diffusion electrodes. <b>2018</b> , 24, 454-462	104
1564	Mechanistic Understanding of CO <sub>2</sub> Electroreduction on Cu <sub>2</sub> O. <b>2018</b> , 122, 5472-5480	17
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1561	Elastic Ag-anchored N-doped graphene/carbon foam for the selective electrochemical reduction of carbon dioxide to ethanol. <b>2018</b> , 6, 5025-5031	78
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1559	Investigating the Role of Copper Oxide in Electrochemical CO Reduction in Real Time. <b>2018</b> , 10, 8574-8584	132
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1557	CO <sub>2</sub> abatement using two-dimensional MXene carbides. <b>2018</b> , 6, 3381-3385	93
1556	Effects of Anion Identity and Concentration on Electrochemical Reduction of CO <sub>2</sub> . <b>2018</b> , 5, 1064-1072	102
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1553	Is Subsurface Oxygen Necessary for the Electrochemical Reduction of CO on Copper?. <b>2018</b> , 9, 601-606	93
1552	Boosting Formate Production in Electrocatalytic CO Reduction over Wide Potential Window on Pd Surfaces. <b>2018</b> , 140, 2880-2889	210
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1550	General Techno-Economic Analysis of CO <sub>2</sub> Electrolysis Systems. <b>2018</b> , 57, 2165-2177	534
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1548	CO reduction to acetate in mixtures of ultrasmall (Cu) ,(Ag) bimetallic nanoparticles. <b>2018</b> , 115, 278-283	69
1547	Morphological and Compositional Design of Pd-Cu Bimetallic Nanocatalysts with Controllable Product Selectivity toward CO Electroreduction. <b>2018</b> , 14, 1703314	65
1546	Reticular Electronic Tuning of Porphyrin Active Sites in Covalent Organic Frameworks for Electrocatalytic Carbon Dioxide Reduction. <b>2018</b> , 140, 1116-1122	300
1545	Artificial Photosynthesis for Formaldehyde Production with 85% of Faradaic Efficiency by Tuning the Reduction Potential. <b>2018</b> , 8, 968-974	24
1544	Selective Electrochemical Production of Formate from Carbon Dioxide with Bismuth-Based Catalysts in an Aqueous Electrolyte. <b>2018</b> , 8, 931-937	132
1543	Extended Investigation of Electrochemical CO <sub>2</sub> Reduction in Ethanolamine Solutions by SECM. <b>2018</b> , 30, 690-697	5
1542	Preferentially Oriented Ag Nanocrystals with Extremely High Activity and Faradaic Efficiency for CO Electrochemical Reduction to CO. <b>2018</b> , 10, 1734-1742	75
1541	Mechanism of CO <sub>2</sub> Reduction at Copper Surfaces: Pathways to C <sub>2</sub> Products. <b>2018</b> , 8, 1490-1499	377
1540	Metal ion cycling of Cu foil for selective C <sub>1</sub> coupling in electrochemical CO <sub>2</sub> reduction. <b>2018</b> , 1, 111-119	383
1539	Catalyst electro-redeposition controls morphology and oxidation state for selective carbon dioxide reduction. <b>2018</b> , 1, 103-110	479
1538	Low-dimensional catalysts for hydrogen evolution and CO <sub>2</sub> reduction. <b>2018</b> , 2,	441
1537	The importance of grand-canonical quantum mechanical methods to describe the effect of electrode potential on the stability of intermediates involved in both electrochemical CO reduction and hydrogen evolution. <b>2018</b> , 20, 2549-2557	37

1536	Monitoring multicomponent transport using in situ ATR FTIR spectroscopy. <b>2018</b> , 550, 348-356	30
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1534	Accelerating the discovery of materials for clean energy in the era of smart automation. <b>2018</b> , 3, 5-20	308
1533	Nanocomposites of transition-metal carbides on reduced graphite oxide as catalysts for the hydrogen evolution reaction. <b>2018</b> , 235, 36-44	65
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1531	Cuprous ions embedded in ceria lattice for selective and stable electrochemical reduction of carbon dioxide to ethylene. <b>2018</b> , 6, 9373-9377	28
1530	What Should We Make with CO <sub>2</sub> and How Can We Make It?. <b>2018</b> , 2, 825-832	546
1529	Size-dependent activity and selectivity of carbon dioxide photocatalytic reduction over platinum nanoparticles. <b>2018</b> , 9, 1252	271
1528	Stannate derived bimetallic nanoparticles for electrocatalytic CO <sub>2</sub> reduction. <b>2018</b> , 6, 7851-7858	46
1527	High Selectivity Toward CH <sub>4</sub> Production over Cu Particles Supported by Butterfly-Wing-Derived Carbon Frameworks. <b>2018</b> , 10, 12618-12625	47
1526	Computational Screening of Near-Surface Alloys for CO <sub>2</sub> Electroreduction. <b>2018</b> , 8, 3885-3894	51
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1524	A brief review of the computational modeling of CO <sub>2</sub> electroreduction on Cu electrodes. <b>2018</b> , 9, 158-165	42
1523	Solar carbon fuel via photoelectrochemistry. <b>2018</b> , 317, 56-75	58
1522	Controlling the Specific CO <sub>2</sub> Adsorption on Electrochemically Formed Metallic Copper Surfaces. <b>2018</b> , 165, H163-H169	1
1521	High-Rate Electrochemical Reduction of Carbon Monoxide to Ethylene Using Cu-Nanoparticle-Based Gas Diffusion Electrodes. <b>2018</b> , 3, 855-860	50
1520	Selected fundamentals of catalysis and electrocatalysis in energy conversion reactions: A tutorial. <b>2018</b> , 309, 263-268	10
1519	Ethylene Selectivity in CO Electroreduction when using Cu Oxides: An In Situ ATR-SEIRAS Study. <b>2018</b> , 5, 558-564	17

1518	Covalent Organic Framework Electrocatalysts for Clean Energy Conversion. <b>2018</b> , 30, 1703646	200
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1516	Prism-Shaped Cu Nanocatalysts for Electrochemical CO <sub>2</sub> Reduction to Ethylene. <b>2018</b> , 8, 531-535	125
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1513	ELECTROCATALYTIC PROCESSES IN ENERGY TECHNOLOGIES. <b>2018</b> , 291-341	
1512	Ultra-small Cu nanoparticles embedded in N-doped carbon arrays for electrocatalytic CO <sub>2</sub> reduction reaction in dimethylformamide. <b>2018</b> , 11, 3678-3690	10
1511	Electrocatalytic Alloys for CO Reduction. <b>2018</b> , 11, 48-57	178
1510	Stability of Residual Oxides in Oxide-Derived Copper Catalysts for Electrochemical CO Reduction Investigated with O Labeling. <b>2018</b> , 57, 551-554	212
1509	Initial Application of Selected-Ion Flow-Tube Mass Spectrometry to Real-Time Product Detection in Electrochemical CO <sub>2</sub> Reduction. <b>2018</b> , 6, 110-121	9
1508	Optimum Cu nanoparticle catalysts for CO <sub>2</sub> hydrogenation towards methanol. <b>2018</b> , 43, 200-209	91
1507	Highly Selective Electrochemical Conversion of CO <sub>2</sub> to HCOOH on Dendritic Indium Foams. <b>2018</b> , 5, 253-259	57
1506	Stability of Residual Oxides in Oxide-Derived Copper Catalysts for Electrochemical CO <sub>2</sub> Reduction Investigated with <sup>18</sup> O Labeling. <b>2018</b> , 130, 560-563	34
1505	Tailoring gas-phase CO electroreduction selectivity to hydrocarbons at Cu nanoparticles. <b>2018</b> , 29, 014001	60
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1500	Ag-Cu nanoparticles supported on N-doped TiO <sub>2</sub> nanowire arrays for efficient photocatalytic CO <sub>2</sub> reduction. <b>2018</b> , 31, 695-700	2
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1497	Stabilizing Copper for CO Reduction in Low-Grade Electrolyte. <b>2018</b> , 57, 14624-14631	16
1496	Phase and structure engineering of copper tin heterostructures for efficient electrochemical carbon dioxide reduction. <b>2018</b> , 9, 4933	90
1495	Guiding Electrochemical Carbon Dioxide Reduction toward Carbonyls Using Copper Silver Thin Films with Interphase Miscibility. <b>2018</b> , 3, 2947-2955	47
1494	A Molecular CO Reduction Catalyst Based on Giant Polyoxometalate {Mo}. <b>2018</b> , 6, 514	15
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1492	Reactor design and integration with product detection to accelerate screening of electrocatalysts for carbon dioxide reduction. <b>2018</b> , 89, 124102	6
1491	Reduction of CO <sub>2</sub> to Ethanol on Cu-In/CuInS <sub>2</sub> Composite Thin Film Photocathode. <b>2018</b> , 165, H1066-H1071	6
1490	Electrochemical Reduction of CO <sub>2</sub> over Heterogeneous Catalysts in Aqueous Solution: Recent Progress and Perspectives. <b>2018</b> , 3, 1800369	74
1489	Oxygen Vacancy Tuning toward Efficient Electrocatalytic CO <sub>2</sub> Reduction to C <sub>2</sub> H <sub>4</sub> . <b>2018</b> , 3, 1800449	51
1488	Understanding heterogeneous electrocatalytic carbon dioxide reduction through operando techniques. <b>2018</b> , 1, 922-934	318
1487	Origin of the Selective Electroreduction of Carbon Dioxide to Formate by Chalcogen Modified Copper. <b>2018</b> , 9, 7153-7159	41
1486	Electrochemical Surface Science of CO <sub>2</sub> Reduction at Well-Defined Cu Electrodes: Surface Characterization by Emersion, Ex Situ, In Situ, and Operando Methods. <b>2018</b> , 562-576	2
1485	Decision tree analysis for efficient CO <sub>2</sub> utilization in electrochemical systems. <b>2018</b> , 28, 83-95	13
1484	Orbital Interactions in Bi-Sn Bimetallic Electrocatalysts for Highly Selective Electrochemical CO <sub>2</sub> Reduction toward Formate Production. <b>2018</b> , 8, 1802427	167
1483	Polydopamine Functionalized Cu Nanowires for Enhanced CO <sub>2</sub> Electroreduction Towards Methane. <b>2018</b> , 5, 3991-3999	28

1482	Tailoring the Discharge Reaction in Li-CO <sub>2</sub> Batteries through Incorporation of CO <sub>2</sub> Capture Chemistry. <b>2018</b> , 2, 2649-2666	56
1481	Mechanistic Insight into Formate Production via CO <sub>2</sub> Reduction in Cu Coupled Carbon Nanotube Molecular Junctions. <b>2018</b> , 122, 23385-23392	5
1480	Optimized Ag Nanovoid Structures for Probing Electrocatalytic Carbon Dioxide Reduction Using Operando Surface-Enhanced Raman Spectroscopy. <b>2018</b> , 34, 12293-12301	12
1479	Hierarchically Ordered Nanochannel Array Membrane Reactor with Three-Dimensional Electrocatalytic Interfaces for Electrohydrogenation of CO <sub>2</sub> to Alcohol. <b>2018</b> , 3, 2649-2655	10
1478	Sub-5 nm SnO <sub>2</sub> chemically coupled hollow carbon spheres for efficient electrocatalytic CO <sub>2</sub> reduction. <b>2018</b> , 6, 20121-20127	48
1477	A Surface Reconstruction Route to High Productivity and Selectivity in CO Electroreduction toward C Hydrocarbons. <b>2018</b> , 30, e1804867	131
1476	Copper and Copper-Based Bimetallic Catalysts for Carbon Dioxide Electroreduction. <b>2018</b> , 5, 1800919	36
1475	Boosting Tunable Syngas Formation via Electrochemical CO Reduction on Cu/InO Core/Shell Nanoparticles. <b>2018</b> , 10, 36996-37004	67
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1473	Improved CO <sub>2</sub> reduction activity towards C <sub>2</sub> + alcohols on a tandem gold on copper electrocatalyst. <b>2018</b> , 1, 764-771	291
1472	Introductory Perspectives. <b>2018</b> , 1-6	
1471	Bimetallic Electrocatalysts for CO Reduction. <b>2018</b> , 376, 41	33
1470	Electrochemical CO <sub>2</sub> reduction to C <sub>2</sub> + species: Heterogeneous electrocatalysts, reaction pathways, and optimization strategies. <b>2018</b> , 10, 280-301	107
1469	Best Practices for Reporting Electrocatalytic Performance of Nanomaterials. <b>2018</b> , 12, 9635-9638	310
1468	Multivariate calibration method for mass spectrometry of interfering gases such as mixtures of CO, N <sub>2</sub> , and CO. <b>2018</b> , 53, 1214-1221	5
1467	Highly Efficient Electroreduction of CO <sub>2</sub> to Methanol on Palladium-Copper Bimetallic Aerogels. <b>2018</b> , 130, 14345-14349	29
1466	Copper nanocavities confine intermediates for efficient electrosynthesis of C <sub>3</sub> alcohol fuels from carbon monoxide. <b>2018</b> , 1, 946-951	205
1465	Selective Electrocatalytic Mechanism of CO <sub>2</sub> Reduction Reaction to CO on Silver Electrodes: A Unique Reaction Intermediate. <b>2018</b> , 122, 25447-25455	20

1464	Efficient electrochemical transformation of CO to C/C chemicals on benzimidazole-functionalized copper surfaces. <b>2018</b> , 54, 11324-11327	27
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1462	Stepped surface-rich copper fiber felt as an efficient electrocatalyst for the CO <sub>2</sub> RR to formate. <b>2018</b> , 6, 18960-18966	30
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1458	Electrochemical CO <sub>2</sub> Capture and Conversion. <b>2018</b> , 213-266	1
1457	On the Electrochemical CO <sub>2</sub> Reduction at Copper Sheet Electrodes with Enhanced Long-Term Stability by Pulsed Electrolysis. <b>2018</b> , 165, J3059-J3068	28
1456	Establishing new scaling relations on two-dimensional MXenes for CO <sub>2</sub> electroreduction. <b>2018</b> , 6, 21885-21890	5
1455	Reactivity Determinants in Electrodeposited Cu Foams for Electrochemical CO Reduction. <b>2018</b> , 11, 3449-3459	53
1454	Surface-Plasmon-Assisted Photoelectrochemical Reduction of CO <sub>2</sub> and NO <sub>3</sub> <sup>-</sup> on Nanostructured Silver Electrodes. <b>2018</b> , 8, 1800363	30
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1452	Elucidating the Reactivity and Mechanism of CO <sub>2</sub> Electroreduction at Highly Dispersed Cobalt Phthalocyanine. <b>2018</b> , 3, 1381-1386	112
1451	Controlled Selectivity of CO Reduction on Copper by Pulsing the Electrochemical Potential. <b>2018</b> , 11, 1781-1786	43
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1448	Advanced Cu-Sn foam for selectively converting CO <sub>2</sub> to CO in aqueous solution. <b>2018</b> , 236, 475-482	82
1447	Oxygenates from the Electrochemical Reduction of Carbon Dioxide. <b>2018</b> , 13, 1992	8

1446	A Tunable PdSn Alloy Electrocatalyst for CO <sub>2</sub> Reduction to Value Added Products from DFT Study. <b>2018</b> , 148, 2117-2126		5
1445	Electrochemical Reduction of CO into Tunable Syngas Production by Regulating the Crystal Facets of Earth-Abundant Zn Catalyst. <b>2018</b> , 10, 20530-20539		86
1444	The Predominance of Hydrogen Evolution on Transition Metal Sulfides and Phosphides under CO <sub>2</sub> Reduction Conditions: An Experimental and Theoretical Study. <b>2018</b> , 3, 1450-1457		48
1443	Standards and Protocols for Data Acquisition and Reporting for Studies of the Electrochemical Reduction of Carbon Dioxide. <b>2018</b> , 8, 6560-6570		160
1442	Recent Advances in CO <sub>2</sub> Reduction Electrocatalysis on Copper. <b>2018</b> , 3, 1545-1556		183
1441	The balance of electric field and interfacial catalysis in promoting water dissociation in bipolar membranes. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2235-2245	35.4	62
1440	Direct Observation of the Local Reaction Environment during the Electrochemical Reduction of CO. <b>2018</b> , 140, 7012-7020		114
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1438	Plasmon-Mediated Electrocatalysis for Sustainable Energy: From Electrochemical Conversion of Different Feedstocks to Fuel Cell Reactions. <b>2018</b> , 3, 1415-1433		49
1437	Surface and Interface Engineering in Copper-Based Bimetallic Materials for Selective CO <sub>2</sub> Electroreduction. <b>2018</b> , 4, 1809-1831		372
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1084	Advances and challenges in electrochemical CO <sub>2</sub> reduction processes: an engineering and design perspective looking beyond new catalyst materials. <b>2020</b> , 8, 1511-1544	141
1083	Tubular hollow fibre electrodes for CO <sub>2</sub> reduction made from copper aluminum alloy with drastically increased intrinsic porosity. <b>2020</b> , 111, 106645	7
1082	High efficiency and selectivity from synergy: Bi nanoparticles embedded in nitrogen doped porous carbon for electrochemical reduction of CO <sub>2</sub> to formate. <b>2020</b> , 334, 135563	27
1081	Electro-derived Cu-Cu <sub>2</sub> O nanocluster from LDH for stable and selective C <sub>2</sub> hydrocarbons production from CO <sub>2</sub> electrochemical reduction. <b>2020</b> , 48, 169-180	17
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1078	An efficient 3D ordered mesoporous Cu sphere array electrocatalyst for carbon dioxide electrochemical reduction. <b>2020</b> , 55, 95-106	3
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1069	Controlling Speciation during CO <sub>2</sub> Reduction on Cu-Alloy Electrodes. <b>2020</b> , 10, 672-682	58

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747	Morphology and mechanism of highly selective Cu(II) oxide nanosheet catalysts for carbon dioxide electroreduction. <b>2021</b> , 12, 794		45
746	Recent Progress on Catalyst Development for CO <sub>2</sub> Conversion into Value-Added Chemicals by Photo- and Electroreduction. <b>2021</b> , 335-360		0
745	Electrocatalytic Conversion of CO <sub>2</sub> to Syngas. <b>2021</b> , 317-334		

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743	Recent progress and perspective of electrochemical CO <sub>2</sub> reduction towards C <sub>2</sub> -C <sub>5</sub> products over non-precious metal heterogeneous electrocatalysts. <b>2021</b> , 14, 3188-3207	25
742	Effect of nickel on combustion synthesized copper/fumed-SiO <sub>2</sub> catalyst for selective reduction of CO <sub>2</sub> to CO.	1
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738	Selective CO Electrochemical Reduction Enabled by a Tricomponent Copolymer Modifier on a Copper Surface. <b>2021</b> , 143, 2857-2865	31
737	Emergence of Potential-Controlled Cu-Nanocuboids and Graphene-Covered Cu-Nanocuboids under CO Electroreduction. <b>2021</b> , 21, 2059-2065	21
736	High-Throughput Screening of Nitrogen-Coordinated Bimetal Catalysts for Multielectron Reduction of CO <sub>2</sub> to CH <sub>4</sub> with High Selectivity and Low Limiting Potential. <b>2021</b> , 125, 7155-7165	7
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205	Amorphization-activated Copper Indium Core-shell Nanoparticles to Achieve Stable Syngas Production from Electrochemical CO <sub>2</sub> Reduction.	0

204	Nano-Encapsulation: Overcoming Conductivity Limitations by Growing MOF Nanoparticles in Meso-Porous Carbon Enables High Electrocatalytic Performance.	0
203	Dealloying-Derived Nanoporous Bismuth for Selective CO <sub>2</sub> Electroreduction to Formate. <b>2022</b> , 13, 9058-9065	1
202	Modelling a detailed kinetic mechanism for electrocatalytic reduction of CO <sub>2</sub> . <b>2022</b> ,	0
201	Intermetallic Nanocrystals: Seed-Mediated Synthesis and Applications in Electrocatalytic Reduction Reactions.	0
200	Electrochemical CO <sub>2</sub> Reduction on Zinc and Brass with Modulated Proton Transfer Using Membrane-Modified Electrodes.	0
199	Comparative Technoeconomic Analysis of Pathways for Electrochemical Reduction of CO <sub>2</sub> with Methanol to Produce Methyl Formate. <b>2022</b> , 10, 12882-12894	3
198	Enhanced Electrochemical CO <sub>2</sub> Reduction to Formate on Poly(4-vinylpyridine)-Modified Copper and Gold Electrodes.	2
197	Electrocatalytic CO <sub>2</sub> Reduction over Atomically Precise Metal Nanoclusters Protected by Organic Ligands.	4
196	Chem-Bio interface design for rapid conversion of CO <sub>2</sub> to bioplastics in an integrated system. <b>2022</b> ,	1
195	Copper-based catalysts for electrochemical carbon monoxide reduction. <b>2022</b> , 101072	0
194	Towards understanding of CO <sub>2</sub> electroreduction to C <sub>2+</sub> products on copper-based catalysts. 20220012	1
193	Triple-Phase Interface Engineering over an In <sub>2</sub> O <sub>3</sub> Electrode to Boost Carbon Dioxide Electroreduction.	1
192	Unraveling the electrocatalytic reduction mechanism of enols on copper in aqueous media. <b>2022</b> , 13,	0
191	Engineered Charge Transfer and Reactive Site over Hierarchical Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene@In <sub>2</sub> S <sub>3</sub> -NiS toward Enhanced Photocatalytic H <sub>2</sub> Evolution.	0
190	Trends and progress in application of cobalt-based materials in catalytic, electrocatalytic, photocatalytic, and photoelectrocatalytic water splitting.	1
189	Tuning the electrocatalytic CO reduction on bilayer C <sub>3</sub> N via rotation, translation and metal intercalation. <b>2022</b> , 155204	0
188	Reduction reaction of carbon dioxide on precise number of Fe atoms anchored on two-dimensional biphenylene.	0
187	Design strategy of a Cu-based catalyst for optimizing the performance in the electrochemical CO <sub>2</sub> reduction reaction to multicarbon alcohols.	0

186	Two-stage electrolysis of H <sub>2</sub> O and CO <sub>2</sub> to methanol: CO <sub>2</sub> -to-methane reduction at the cathode and subsequent methane-to-methanol oxidation at the anode. <b>2022</b> , 10, 22718-22729	1
185	Electrifying the production of sustainable aviation fuel: the risks, economics, and environmental benefits of emerging pathways including CO <sub>2</sub> .	0
184	Current state of copper-based bimetallic materials for electrochemical CO <sub>2</sub> reduction: a review. <b>2022</b> , 12, 30056-30075	2
183	P-block atom modified Sn(200) surface as a promising electrocatalyst for two-electron CO <sub>2</sub> reduction: a first-principles study.	0
182	Alloying strategies for tuning product selectivity during electrochemical CO <sub>2</sub> reduction over Cu. <b>2022</b> , 14, 15560-15585	1
181	High-resolution neutron imaging of salt precipitation and water transport in zero-gap CO <sub>2</sub> electrolysis. <b>2022</b> , 13,	1
180	Synthesis of Cu@C nanocube based on Cu <sub>2</sub> O for electrocatalytic nitrogen reduction to ammonia. <b>2022</b> , 101181	0
179	Electroreduction of CO <sub>2</sub> on bismuth nanoparticles in seawater.	0
178	Spin-Control in Electrocatalysis for Clean Energy.	0
177	Electrochemical Hydrogenation of CO on Cu(100): Insights from Accurate Multiconfigurational Wavefunction Methods. 10282-10290	0
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175	Bridging knowledge gaps in liquid- and vapor-fed CO <sub>2</sub> electrolysis through active electrode area. <b>2022</b> ,	0
174	Toward Unifying the Mechanistic Concepts in Electrochemical CO <sub>2</sub> Reduction from an Integrated Material Design and Catalytic Perspective. 2209023	2
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171	Controlling Product Distribution of CO <sub>2</sub> Reduction on CuO-Based Gas Diffusion Electrodes by Manipulating Back Pressure. 2200972	0
170	Progress and Understanding of CO <sub>2</sub> /CO Electroreduction in Flow Electrolyzers. <b>2022</b> , 12, 12993-13020	1
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167	In-situ Constructed Cu/CuNC Interfaces for Low-Overpotential Reduction of CO <sub>2</sub> to Ethanol.	1
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162	Strategies for CO <sub>2</sub> electroreduction in cation exchange membrane electrode assembly. <b>2023</b> , 453, 139826	0
161	In situ surface/interface generation on Cu <sub>2</sub> O nanostructures toward enhanced electrocatalytic CO <sub>2</sub> to ethylene using operando spectroscopy.	0
160	Carbon conversion: opportunities in chemical productions. <b>2023</b> , 479-524	0
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155	Deposition of Bismuth Nanoplatelets onto Graphene Foam for Electrocatalytic CO <sub>2</sub> Reduction.	0
154	Direct conversion of carbon dioxide and steam into hydrocarbons and oxygenates using solid acid electrolysis cells. <b>2022</b> , 105381	0
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152	Surface promotion of copper nanoparticles with alumina clusters derived from layered double hydroxide accelerates CO <sub>2</sub> reduction to ethylene in membrane electrode assemblies.	1
151	Electrochemical Reduction of Carbon Dioxide at TiO <sub>2</sub> /Au Nanocomposites.	1

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145	Surface/interface reconstruction in-situ on Cu <sub>2</sub> O catalysts with high exponential facets toward enhanced electrocatalysis CO <sub>2</sub> reduction to C <sub>2</sub> + products. <b>2022</b> , 155773	0
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142	Quantification of complex electrode reactions with differential electrochemical mass spectrometry, challenges and perspectives. <b>2023</b> ,	0
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111	Metal and metal oxide electrocatalysts for the electrochemical reduction of CO <sub>2</sub> -to-C <sub>1</sub> chemicals: are we there yet?. <b>2023</b> , 16,	0
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109	Influence of Support Material on the Structural Evolution of Copper during Electrochemical CO <sub>2</sub> Reduction.	0
108	Revisiting the Electrochemical Nitrogen Reduction on Molybdenum and Iron Carbides: Promising Catalysts or False Positives?. 1649-1661	1
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- 10 Synergetic enhancement of selectivity for electroreduction of CO<sub>2</sub> to C<sub>2</sub>H<sub>4</sub> by crystal facet engineering and tandem catalysis over silver-incorporated-cuprous oxides. **2023**, 100195 ○
- 9 Benchmarking of commercial Cu catalysts in CO<sub>2</sub> electro-reduction using a gas-diffusion type microfluidic flow electrolyzer. ○
- 8 Hydrodynamics Change Tafel Slopes in Electrochemical CO<sub>2</sub> Reduction on Copper. 2185-2192 ○
- 7 Breaking BEP Relationship with Strong CO Binding and Low C<sub>2</sub> Coupling Barriers for Ethanol Synthesis on Boron-Doped Graphyne: Bond Order Conservation and Flexible Orbital Hybridization. ○

- 6 Enriching Reaction Intermediates in Multishell Structured Copper Catalysts for Boosted Propanol Electrosynthesis from Carbon Monoxide. ○
- 5 Heterogeneous Electrocatalysis of Carbon Dioxide to Methane. **2023**, 2, 148-175 ○
- 4 Selective CO<sub>2</sub>-to-formic acid electrochemical conversion by modulating electronic environment of copper phthalocyanine with defective graphene. **2023**, 100089 ○
- 3 Identification of Cu/Sc and Cu/Ti subsurface alloys for highly efficient CO electroreduction to C<sub>2</sub> products. **2023**, 157314 ○
- 2 Au Cluster-derived Electrocatalysts for CO<sub>2</sub> Reduction. ○
- 1 Biomass and CO<sub>2</sub>-Derived Fuels Through Carbon-Based Catalysis. Recent Advances and Future Challenges. **2023**, 223-264 ○