

Homogeneously Catalyzed Electroreduction of Carbon and Catalysts

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Citation Report

#	ARTICLE	IF	CITATIONS
1	A Highly Active Nâ€Heterocyclic Carbene Manganese(I) Complex for Selective Electrocatalytic CO ₂ Reduction to CO. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4603-4606.	7.2	109
2	A Hybrid Co Quaterpyridine Complex/Carbon Nanotube Catalytic Material for CO ₂ Reduction in Water. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7769-7773.	7.2	101
3	Chemically and electrochemically catalysed conversion of CO ₂ to CO with follow-up utilization to value-added chemicals. <i>Nature Catalysis</i> , 2018, 1, 244-254.	16.1	373
4	Fe-Mediated Nitrogen Fixation with a Metallocene Mediator: Exploring p <i>K_a</i> Effects and Demonstrating Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2018, 140, 6122-6129.	6.6	132
5	A Highly Active Nâ€Heterocyclic Carbene Manganese(I) Complex for Selective Electrocatalytic CO ₂ Reduction to CO. <i>Angewandte Chemie</i> , 2018, 130, 4693-4696.	1.6	23
6	Highly Selective Molecular Catalysts for the CO ₂ -to-CO Electrochemical Conversion at Very Low Overpotential. Contrasting Fe vs Co Quaterpyridine Complexes upon Mechanistic Studies. <i>ACS Catalysis</i> , 2018, 8, 3411-3417.	5.5	141
7	Near-surface microrheology reveals dynamics and viscoelasticity of soft matter. <i>Soft Matter</i> , 2018, 14, 9764-9776.	1.2	10
8	Assessing the Performance of Cobalt Phthalocyanine Nanoflakes as Molecular Catalysts for Li-Promoted Oxalate Formation in Liâ€CO ₂ â€Oxalate Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 25776-25784.	1.5	22
9	Electrocatalytic CO ₂ Reduction: From Homogeneous Catalysts to Heterogeneous-Based Reticular Chemistry. <i>Molecules</i> , 2018, 23, 2835.	1.7	28
10	Visible-Light-Driven Conversion of CO ₂ to CH ₄ with an Organic Sensitizer and an Iron Porphyrin Catalyst. <i>Journal of the American Chemical Society</i> , 2018, 140, 17830-17834.	6.6	150
11	Composition Tailoring via N and S Coâ€doping and Structure Tuning by Constructing Hierarchical Pores: Metalâ€Free Catalysts for Highâ€Performance Electrochemical Reduction of CO ₂ . <i>Angewandte Chemie</i> , 2018, 130, 15702-15706.	1.6	63
12	Composition Tailoring via N and S Coâ€doping and Structure Tuning by Constructing Hierarchical Pores: Metalâ€Free Catalysts for Highâ€Performance Electrochemical Reduction of CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2018, 57, 15476-15480.	7.2	162
13	Photoiodocarboxylation of Activated Câ€C Double Bonds with CO ₂ and Lithium Iodide. <i>Journal of Organic Chemistry</i> , 2018, 83, 13381-13394.	1.7	12
14	Reaction Mechanisms of Wellâ€Defined Metalâ€N ₄ Sites in Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie</i> , 2018, 130, 16577-16580.	1.6	44
15	Reaction Mechanisms of Wellâ€Defined Metalâ€N ₄ Sites in Electrocatalytic CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16339-16342.	7.2	328
16	A Review on Recent Advances for Electrochemical Reduction of Carbon Dioxide to Methanol Using Metalâ€Organic Framework (MOF) and Non-MOF Catalysts: Challenges and Future Prospects. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 15895-15914.	3.2	188
17	Electroreduction of Carbon Dioxide to Formate by Homogeneous Ir Catalysts in Water. <i>ACS Catalysis</i> , 2018, 8, 11296-11301.	5.5	37
18	Covalent-Organic Frameworks Composed of Rhenium Bipyridine and Metal Porphyrins: Designing Heterobimetallic Frameworks with Two Distinct Metal Sites. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 37919-37927.	4.0	112

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19	Direct chemical synthesis of ultrathin holey iron doped cobalt oxide nanosheets on nickel foam for oxygen evolution reaction. <i>Nano Energy</i> , 2018, 54, 238-250.	8.2	114
20	Pyrazolium Ionic Liquid Co-catalysts for the Electroreduction of CO ₂ . <i>ACS Applied Energy Materials</i> , 2018, , .	2.5	7
21	A Thiourea Tether in the Second Coordination Sphere as a Binding Site for CO ₂ and a Proton Donor Promotes the Electrochemical Reduction of CO ₂ to CO Catalyzed by a Rhenium Bipyridine-Type Complex. <i>Journal of the American Chemical Society</i> , 2018, 140, 12451-12456.	6.6	111
22	Carbon Dioxide Electroreduction Catalyzed by Organometallic Complexes. <i>Advances in Organometallic Chemistry</i> , 2018, 70, 1-69.	0.5	5
23	An electron-reservoir Re(I) complex for enhanced efficiency for reduction of CO ₂ to CO. <i>Journal of Catalysis</i> , 2018, 363, 191-196.	3.1	22
24	A Hybrid Co Quaterpyridine Complex/Carbon Nanotube Catalytic Material for CO ₂ Reduction in Water. <i>Angewandte Chemie</i> , 2018, 130, 7895-7899.	1.6	24
25	Mechanisms of catalytic reduction of CO ₂ with heme and nonheme metal complexes. <i>Chemical Science</i> , 2018, 9, 6017-6034.	3.7	105
26	Solvent and Ligand Substitution Effects on the Electrocatalytic Reduction of CO ₂ with [Mo(CO) ₄ (<i>x</i> , <i>x</i>)- <i>dimethyl</i> -2,2'-bipyridine)] (<i>x</i> =4-6) Enhanced at a Gold Cathodic Surface. <i>ChemElectroChem</i> , 2018, 5, 3155-3161.		17
27	Electrocatalytic CO ₂ Reduction with Cis and Trans Conformers of a Rigid Dinuclear Rhenium Complex: Comparing the Monometallic and Cooperative Bimetallic Pathways. <i>Inorganic Chemistry</i> , 2018, 57, 9564-9575.	1.9	40
28	How to teach an old dog new (electrochemical) tricks: aziridine-functionalized CNTs as efficient electrocatalysts for the selective CO ₂ reduction to CO. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16382-16389.	5.2	31
29	Mechanistic aspects of CO ₂ reduction catalysis with manganese-based molecular catalysts. <i>Coordination Chemistry Reviews</i> , 2018, 374, 173-217.	9.5	131
30	Exploring the scope of capacitance-assisted electrochemical carbon dioxide capture. <i>Dalton Transactions</i> , 2018, 47, 10447-10452.	1.6	2
31	Magnesium-regulated oxygen vacancies of nickel layered double hydroxides for electrocatalytic water oxidation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18378-18383.	5.2	29
32	Redox "Innocence" of Re(I) in Electrochemical CO ₂ Reduction Catalyzed by Nanographene-Re Complexes. <i>Inorganic Chemistry</i> , 2018, 57, 10548-10556.	1.9	11
33	A Carbon Nitride/Fe Quaterpyridine Catalytic System for Photostimulated CO ₂ -to-CO Conversion with Visible Light. <i>Journal of the American Chemical Society</i> , 2018, 140, 7437-7440.	6.6	160
34	Fe ₄ S ₄ clusters as small molecule catalysts. <i>Nature Catalysis</i> , 2018, 1, 383-384.	16.1	1
35	[OSSO]-Type Iron(III) Complexes for the Low-Pressure Reaction of Carbon Dioxide with Epoxides: Catalytic Activity, Reaction Kinetics, and Computational Study. <i>ACS Catalysis</i> , 2018, 8, 6882-6893.	5.5	103
36	Recent Approaches to Design Electrocatalysts Based on Metal-Organic Frameworks and Their Derivatives. <i>Chemistry - an Asian Journal</i> , 2019, 14, 3474-3501.	1.7	34

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37	Thermodynamic Analysis of Metal–Ligand Cooperativity of PNP Ru Complexes: Implications for CO ₂ Hydrogenation to Methanol and Catalyst Inhibition. <i>Journal of the American Chemical Society</i> , 2019, 141, 14317-14328.	6.6	58
38	CO ₂ electrochemical catalytic reduction with a highly active cobalt phthalocyanine. <i>Nature Communications</i> , 2019, 10, 3602.	5.8	307
39	Underevaluated Solvent Effects in Electrocatalytic CO ₂ Reduction by Fe III Chloride Tetrakis(pentafluorophenyl)porphyrin. <i>Chemistry - A European Journal</i> , 2019, 26, 4007.	1.7	28
40	Rational Design of Novel Catalysts with Atomic Layer Deposition for the Reduction of Carbon Dioxide. <i>Advanced Energy Materials</i> , 2019, 9, 1900889.	10.2	53
41	Carbonaceous materials for efficient electrocatalysis. , 2019, , 375-394.		2
42	Controlling the nucleophilic properties of cobalt salen complexes for carbon dioxide capture. <i>RSC Advances</i> , 2019, 9, 23254-23260.	1.7	8
43	An Iron Quaterpyridine Complex as Precursor for the Electrocatalytic Reduction of CO ₂ to Methane. <i>ChemSusChem</i> , 2019, 12, 4500-4505.	3.6	23
44	Rhenium bipyridine catalysts with hydrogen bonding pendant amines for CO ₂ reduction. <i>Dalton Transactions</i> , 2019, 48, 14251-14255.	1.6	34
45	Bipyridine-Assisted Assembly of Au Nanoparticles on Cu Nanowires To Enhance the Electrochemical Reduction of CO ₂ . <i>Angewandte Chemie</i> , 2019, 131, 14238-14241.	1.6	20
46	Opportunities and Challenges for Catalysis in Carbon Dioxide Utilization. <i>ACS Catalysis</i> , 2019, 9, 7937-7956.	5.5	271
47	CO ₂ fixation and transformation on a thiolate-bridged dicobalt scaffold under oxidising conditions. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2185-2193.	3.0	8
48	Synergistic catalysis between atomically dispersed Fe and a pyrrolic-N-C framework for CO ₂ electroreduction. <i>Nanoscale Horizons</i> , 2019, 4, 1411-1415.	4.1	21
49	Bipyridine-Assisted Assembly of Au Nanoparticles on Cu Nanowires To Enhance the Electrochemical Reduction of CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14100-14103.	7.2	85
50	Bifunctional wood for electrocatalytic CO ₂ reduction to formate and electroanalytical detection of myricetin and cadmium (II). <i>Electrochimica Acta</i> , 2019, 319, 569-576.	2.6	10
51	Unified Benchmarking of Electrocatalysts in Noninnocent Second Coordination Spheres for CO ₂ Reduction. <i>ACS Energy Letters</i> , 2019, 4, 1999-2004.	8.8	29
52	Scalable Production of Efficient Single-Atom Copper Decorated Carbon Membranes for CO ₂ Electroreduction to Methanol. <i>Journal of the American Chemical Society</i> , 2019, 141, 12717-12723.	6.6	545
53	Molecular electrocatalysts can mediate fast, selective CO ₂ reduction in a flow cell. <i>Science</i> , 2019, 365, 367-369.	6.0	601
54	Graphite Conjugation Eliminates Redox Intermediates in Molecular Electrocatalysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 14160-14167.	6.6	42

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55	Semiconductor Quantum Dots: An Emerging Candidate for CO ₂ Photoreduction. <i>Advanced Materials</i> , 2019, 31, e1900709.	11.1	316
56	Efficient Electrocatalytic CO ₂ Reduction Driven by Ionic Liquid Buffer-Like Solutions. <i>ChemSusChem</i> , 2019, 12, 4170-4175.	3.6	19
57	The Impact of a Proton Relay in Binuclear μ -Diimine-Mn(CO) ₃ Complexes on the CO ₂ Reduction Catalysis. <i>Inorganic Chemistry</i> , 2019, 58, 10444-10453.	1.9	25
58	Thermodynamic Cycles Relevant to Hydrogenation of CO ₂ to Formic Acid in Water and Acetonitrile. <i>Chemistry Letters</i> , 2019, 48, 627-629.	0.7	9
59	Use of CO ₂ as Source of Carbon for Energy-Rich C _n Products. , 2019, , 211-238.		1
60	Electrochemical and Photoelectrochemical Transformations of Aqueous CO ₂ . , 2019, , 239-286.		0
61	Electrode Materials Engineering in Electrocatalytic CO ₂ Reduction: Energy Input and Conversion Efficiency. <i>Advanced Materials</i> , 2020, 32, e1903796.	11.1	87
62	Bio-proton coupled semiconductor/metal-complex hybrid photoelectrocatalytic interface for efficient CO ₂ reduction. <i>Green Chemistry</i> , 2019, 21, 339-348.	4.6	27
63	Photon-Induced, Timescale, and Electrode Effects Critical for the in Situ X-ray Spectroscopic Analysis of Electrocatalysts: The Water Oxidation Case. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28533-28549.	1.5	24
64	Molecular Control of Heterogeneous Electrocatalysis through Graphite Conjugation. <i>Accounts of Chemical Research</i> , 2019, 52, 3432-3441.	7.6	81
65	DFT studies on the structure and stability of tetraaza macrocyclic nickel(II) complexes containing dicarbinolamine ligand moiety. <i>Journal of Chemical Sciences</i> , 2019, 131, 1.	0.7	3
66	Decoration of copper foam with Ni nanorods and copper oxide nanosheets to produce a high-stability electrocatalyst for the reduction of CO ₂ : Characterization of the electrosynthesis of isonicotinic acid. <i>Comptes Rendus Chimie</i> , 2019, 22, 678-685.	0.2	0
67	Quantum Interference and Substantial Property Tuning in Conjugated <i>ortho</i> -Regio-Resistive Organic (ZORRO) Junctions. <i>Nano Letters</i> , 2019, 19, 8956-8963.	4.5	10
68	Ten years of carbon-based metal-free electrocatalysts. , 2019, 1, 19-31.		114
69	Capacity Allocation and Compensation in a Dual-Channel Supply Chain under Uncertain Environment. <i>Mathematical Problems in Engineering</i> , 2019, 2019, 1-12.	0.6	1
70	Biosynthesized silver nanorings as a highly efficient and selective electrocatalysts for CO ₂ reduction. <i>Nanoscale</i> , 2019, 11, 18595-18603.	2.8	12
71	Immobilized Molecular Wires on Carbon-Cloth Electrodes Facilitate CO ₂ Electrolysis. <i>ACS Catalysis</i> , 2019, 9, 9393-9397.	5.5	18
72	An Investigation of Electrocatalytic CO ₂ Reduction Using a Manganese Tricarbonyl Biquinoline Complex. <i>Frontiers in Chemistry</i> , 2019, 7, 628.	1.8	26

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73	Re(tBu-bpy)(CO) ₃ Cl Supported on Multi-Walled Carbon Nanotubes Selectively Reduces CO ₂ in Water. <i>Journal of the American Chemical Society</i> , 2019, 141, 17270-17277.	6.6	64
74	Single Mn atom as a promising electrocatalyst for CO reduction to C ₂ H ₅ OH and C ₃ H ₆ : A computational study. <i>Applied Surface Science</i> , 2019, 498, 143868.	3.1	15
75	SnSe ₂ Nanorods on Carbon Cloth as a Highly Selective, Active, and Flexible Electrocatalyst for Electrochemical Reduction of CO ₂ into Formate. <i>ACS Applied Energy Materials</i> , 2019, 2, 7655-7662.	2.5	39
76	A cyanide-bridged di-manganese carbonyl complex that photochemically reduces CO ₂ to CO. <i>Dalton Transactions</i> , 2019, 48, 1226-1236.	1.6	28
77	Reduction of CO ₂ by a masked two-coordinate cobalt(<i>scpi</i>) complex and characterization of a proposed oxodicobalt(<i>scpii</i>) intermediate. <i>Chemical Science</i> , 2019, 10, 918-929.	3.7	44
78	Bio-inspired design: bulk iron-nickel sulfide allows for efficient solvent-dependent CO ₂ reduction. <i>Chemical Science</i> , 2019, 10, 1075-1081.	3.7	64
79	Electrochemical CO ₂ reduction by a cobalt bipyridine complex: decrease of an overpotential value derived from monoanionic ligand character of the porphyrinoid species. <i>Chemical Communications</i> , 2019, 55, 493-496.	2.2	17
80	A new tri-nuclear Cu-carbonate cluster utilizing CO ₂ as a C1-building block – reactive intermediates, a probable mechanism, and EPR and magnetic studies. <i>Dalton Transactions</i> , 2019, 48, 3576-3582.	1.6	6
81	Electrochemical CO ₂ reduction in water at carbon cloth electrodes functionalized with a <i>fac</i> -Mn(apbpy)(CO) ₃ Br complex. <i>Chemical Communications</i> , 2019, 55, 775-777.	2.2	38
82	Insights into the Photoassisted Electrocatalytic Reduction of CO ₂ over a Two-dimensional MoS ₂ Nanostructure Loaded on SnO ₂ Nanoparticles. <i>ChemElectroChem</i> , 2019, 6, 3077-3084.	1.7	9
83	Bifunctional electrocatalysis for CO ₂ reduction <i>via</i> surface capping-dependent metal-oxide interactions. <i>Chemical Communications</i> , 2019, 55, 8864-8867.	2.2	17
84	Structural features of molecular electrocatalysts in multi-electron redox processes for renewable energy – recent advances. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2159-2175.	2.5	31
85	g-C ₃ N ₄ foam/Cu ₂ O QDs with excellent CO ₂ adsorption and synergistic catalytic effect for photocatalytic CO ₂ reduction. <i>Environment International</i> , 2019, 130, 104898.	4.8	86
86	Carbonylation of C ^N Bonds in Tertiary Amines Catalyzed by Low-Valent Iron Catalysts. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10884-10887.	7.2	27
87	Carbonylation of C ^N Bonds in Tertiary Amines Catalyzed by Low-Valent Iron Catalysts. <i>Angewandte Chemie</i> , 2019, 131, 11000-11003.	1.6	10
88	Synthesis of a Redox-Active NNP-Type Pincer Ligand and Its Application to Electrocatalytic CO ₂ Reduction With First-Row Transition Metal Complexes. <i>Frontiers in Chemistry</i> , 2019, 7, 330.	1.8	23
89	Electronic Effects of Substituents on <i>fac</i> -M(bpy-R)(CO) ₃ (M = Mn, Re) Complexes for Homogeneous CO ₂ Electroreduction. <i>Frontiers in Chemistry</i> , 2019, 7, 417.	1.8	28
90	Recent Advances in the Chemical Fixation of Carbon Dioxide: A Green Route to Carbonylated Heterocycle Synthesis. <i>Catalysts</i> , 2019, 9, 511.	1.6	54

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91	A mechanistic study of B ₃₆ -supported atomic Au promoted CO ₂ electroreduction to formic acid. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13935-13940.	5.2	25
92	Design and Optimization of Catalysts Based on Mechanistic Insights Derived from Quantum Chemical Reaction Modeling. <i>Chemical Reviews</i> , 2019, 119, 6509-6560.	23.0	130
93	Recent Trends, Benchmarking, and Challenges of Electrochemical Reduction of CO ₂ by Molecular Catalysts. <i>Advanced Energy Materials</i> , 2019, 9, 1900090.	10.2	144
94	Elektrochemischer Durchlaufgenerator für hypervalente Iodreagenzien: Synthetische Anwendungen. <i>Angewandte Chemie</i> , 2019, 131, 9916-9920.	1.6	22
95	On decomposition, degradation, and voltammetric deviation: the electrochemist's field guide to identifying precatalyst transformation. <i>Chemical Society Reviews</i> , 2019, 48, 2927-2945.	18.7	92
96	Electrocatalytic CO ₂ Reduction at Lower Overpotentials Using Iron(III) Tetra(<i>meso</i> -thienyl)porphyrins. <i>ACS Applied Energy Materials</i> , 2019, 2, 4022-4026.	2.5	28
97	Family-dependent magnetism in atomic boron adsorbed armchair graphene nanoribbons. <i>Journal of Materials Chemistry C</i> , 2019, 7, 6241-6245.	2.7	16
98	Continuous-Flow Electrochemical Generator of Hypervalent Iodine Reagents: Synthetic Applications. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 9811-9815.	7.2	106
99	Electrocatalytic Reduction of CO ₂ to Methanol by Iron Tetradentate Phosphine Complex Through Amidation Strategy. <i>ChemSusChem</i> , 2019, 12, 2195-2201.	3.6	27
100	Controlling Hydrogen Evolution during Photoreduction of CO ₂ to Formic Acid Using [Rh(R-bpy)(Cp*)Cl] ⁺ Catalysts: A Structure-Activity Study. <i>Inorganic Chemistry</i> , 2019, 58, 6893-6903.	1.9	31
101	Zinc: A promising material for electrocatalyst-assisted microbial electrosynthesis of carboxylic acids from carbon dioxide. <i>Water Research</i> , 2019, 159, 87-94.	5.3	43
102	5 Ultramicropore-rich renewable porous carbon from biomass tar with excellent adsorption capacity and selectivity for CO ₂ capture. <i>Chemical Engineering Journal</i> , 2019, 373, 171-178.	6.6	68
103	Computational prediction of pentadentate iron and cobalt complexes as a mimic of mono-iron hydrogenase for the hydrogenation of carbon dioxide to methanol. <i>Dalton Transactions</i> , 2019, 48, 8034-8038.	1.6	4
104	From molecular metal complex to metal-organic framework: The CO ₂ reduction photocatalysts with clear and tunable structure. <i>Coordination Chemistry Reviews</i> , 2019, 390, 86-126.	9.5	196
105	Advances in the electrochemical catalytic reduction of CO ₂ with metal complexes. <i>Current Opinion in Electrochemistry</i> , 2019, 15, 109-117.	2.5	48
106	Hydrogenation of CO ₂ to Methanol Catalyzed by Cp*Co Complexes: Mechanistic Insights and Ligand Design. <i>Inorganic Chemistry</i> , 2019, 58, 5494-5502.	1.9	16
107	Plausible roles of carbonate in catalytic water oxidation. <i>Advances in Inorganic Chemistry</i> , 2019, 74, 343-360.	0.4	14
108	Rhenium(I) Phosphazane Complexes for Electrocatalytic CO ₂ Reduction. <i>Organometallics</i> , 2019, 38, 1664-1676.	1.1	16

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109	Recent advances in electrochemical reduction of CO ₂ . Current Opinion in Green and Sustainable Chemistry, 2019, 16, 77-84.	3.2	17
110	CO ₂ Electroreduction in Ionic Liquids. Frontiers in Chemistry, 2019, 7, 102.	1.8	59
111	Electrochemical CO ₂ Reduction Using Electrons Generated from Photoelectrocatalytic Phenol Oxidation. Advanced Energy Materials, 2019, 9, 1900364.	10.2	31
112	Intrinsic Carbon-Defect-Driven Electrocatalytic Reduction of Carbon Dioxide. Advanced Materials, 2019, 31, e1808276.	11.1	263
113	Ligand-centered electrochemical processes enable CO ₂ reduction with a nickel bis(triazapentadienyl) complex. Sustainable Energy and Fuels, 2019, 3, 1172-1181.	2.5	7
114	Thermodynamic Considerations for Optimizing Selective CO ₂ Reduction by Molecular Catalysts. ACS Central Science, 2019, 5, 580-588.	5.3	86
115	A donor-chromophore-catalyst assembly for solar CO ₂ reduction. Chemical Science, 2019, 10, 4436-4444.	3.7	23
116	General Review on the Components and Parameters of Photoelectrochemical System for CO ₂ Reduction with in Situ Analysis. ACS Sustainable Chemistry and Engineering, 2019, 7, 7431-7455.	3.2	87
117	A look at periodic trends in d-block molecular electrocatalysts for CO ₂ reduction. Dalton Transactions, 2019, 48, 9454-9468.	1.6	58
118	Electrochemical Reduction of CO ₂ by a Gas-Diffusion Electrode Composed of fac-Re(diimine)(CO) ₃ Cl and Carbon Nanotubes. Journal of Physical Chemistry C, 2019, 123, 12073-12080.	1.5	8
119	The <i>Trans</i> Effect in Electrocatalytic CO ₂ Reduction: Mechanistic Studies of Asymmetric Ruthenium Pyridyl-Carbene Catalysts. Journal of the American Chemical Society, 2019, 141, 6658-6671.	6.6	51
120	Synergistic Effects of Imidazolium-Functionalization on <i>fac</i> -Mn(CO) ₃ Bipyridine Catalyst Platforms for Electrocatalytic Carbon Dioxide Reduction. Journal of the American Chemical Society, 2019, 141, 6569-6582.	6.6	104
121	A rational design of manganese electrocatalysts for Lewis acid-assisted carbon dioxide reduction. Physical Chemistry Chemical Physics, 2019, 21, 8849-8855.	1.3	12
122	Electrocatalysis at Organic-Metal Interfaces: Identification of Structure-Reactivity Relationships for CO ₂ Reduction at Modified Cu Surfaces. Journal of the American Chemical Society, 2019, 141, 7355-7364.	6.6	133
123	Electro-catalytic and photo-catalytic reformation of CO ₂ reactions and efficiencies processes (Review). IOP Conference Series: Materials Science and Engineering, 0, 503, 012009.	0.3	2
124	Molecular approach to catalysis of electrochemical reaction in porous films. Current Opinion in Electrochemistry, 2019, 15, 58-65.	2.5	33
125	Electronic Structure Engineering of 2D Carbon Nanosheets by Evolutionary Nitrogen Modulation for Synergizing CO ₂ Electroreduction. ACS Applied Energy Materials, 2019, 2, 3151-3159.	2.5	7
126	Small-molecule activation with iron porphyrins using electrons, photons and protons: some recent advances and future strategies. Dalton Transactions, 2019, 48, 5869-5878.	1.6	15

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127	Recent Advances in Carbon-Based Metal-Free Electrocatalysts. <i>Advanced Materials</i> , 2019, 31, e1806403.	11.1	222
128	A molecular noble metal-free system for efficient visible light-driven reduction of CO ₂ to CO. <i>Dalton Transactions</i> , 2019, 48, 9596-9602.	1.6	37
129	Graphene-based materials for electrochemical CO ₂ reduction. <i>Journal of CO₂ Utilization</i> , 2019, 30, 168-182.	3.3	87
130	Cobalt Complex of a Tetraamido Macrocyclic Ligand as a Precursor for Electrocatalytic Hydrogen Evolution. <i>Organometallics</i> , 2019, 38, 1397-1406.	1.1	11
131	Room temperature CO ₂ reduction to solid carbon species on liquid metals featuring atomically thin ceria interfaces. <i>Nature Communications</i> , 2019, 10, 865.	5.8	179
132	A General and Facile Approach for the Electrochemical Reduction of Carbon Dioxide Inspired by Deep Eutectic Solvents. <i>ChemSusChem</i> , 2019, 12, 1635-1639.	3.6	36
133	Transformation of CO ₂ into \pm -Alkylidene Cyclic Carbonates at Room Temperature Cocatalyzed by CuI and Ionic Liquid with Biomass-Derived Levulinate Anion. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 5614-5619.	3.2	43
134	Cocatalysts for Selective Photoreduction of CO ₂ into Solar Fuels. <i>Chemical Reviews</i> , 2019, 119, 3962-4179.	23.0	1,591
135	Electro- and Solar-Driven Fuel Synthesis with First Row Transition Metal Complexes. <i>Chemical Reviews</i> , 2019, 119, 2752-2875.	23.0	615
136	Metal-bipyridine complexes as electrocatalysts for the reduction of CO ₂ : a density functional theory study. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 23742-23748.	1.3	9
137	A long-life Li-CO ₂ battery employing a cathode catalyst of cobalt-embedded nitrogen-doped carbon nanotubes derived from a Prussian blue analogue. <i>Chemical Communications</i> , 2019, 55, 12781-12784.	2.2	21
138	Domino electroreduction of CO ₂ to methanol on a molecular catalyst. <i>Nature</i> , 2019, 575, 639-642.	13.7	658
139	The good, the neutral, and the positive: buffer identity impacts CO ₂ reduction activity by nickel(<i>scp</i>) cyclam. <i>Dalton Transactions</i> , 2019, 48, 15810-15821.	1.6	26
140	Revealing Ni-based layered double hydroxides as high-efficiency electrocatalysts for the oxygen evolution reaction: a DFT study. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23091-23097.	5.2	75
141	Molecular Electrochemical Catalysis of the CO ₂ -to-CO Conversion with a Co Complex: A Cyclic Voltammetry Mechanistic Investigation. <i>Organometallics</i> , 2019, 38, 1280-1285.	1.1	24
142	Mechanistic Insights into the Electrochemical Reduction of CO ₂ Catalyzed by Iron Cyclopentadienone Complexes. <i>Organometallics</i> , 2019, 38, 1236-1247.	1.1	23
143	In Situ Electrochemical Conversion of an Ultrathin Tannin Nickel Iron Complex Film as an Efficient Oxygen Evolution Reaction Electrocatalyst. <i>Angewandte Chemie</i> , 2019, 131, 3809-3813.	1.6	22
144	Mechanistic Insights into Light-Activated Catalysis for Water Oxidation. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 2027-2039.	1.0	20

#	ARTICLE	IF	CITATIONS
145	Solvent-Controlled CO ₂ Reduction by a Triphos [−] Iron Hydride Complex. <i>Organometallics</i> , 2019, 38, 289-299.	1.1	17
146	Chemical Versatility of [FeFe]-Hydrogenase Models: Distinctive Activity of [1/4-C ₆ H ₄ -1,2-([−] S) ₂][Fe ₂ (CO) ₆] for Electrocatalytic CO ₂ Reduction. <i>ACS Catalysis</i> , 2019, 9, 768-774.	5.5	21
147	Manganese N-Heterocyclic Carbene Pincers for the Electrocatalytic Reduction of Carbon Dioxide. <i>Organometallics</i> , 2019, 38, 1248-1253.	1.1	46
148	Improved Electrocatalytic CO ₂ Reduction with Palladium bis(NHC) Pincer Complexes Bearing Cationic Side Chains. <i>Organometallics</i> , 2019, 38, 1330-1343.	1.1	16
149	Photocatalytic Reduction of CO ₂ to CO and Formate: Do Reaction Conditions or Ruthenium Catalysts Control Product Selectivity?. <i>ACS Applied Energy Materials</i> , 2019, 2, 37-46.	2.5	42
150	Benzimidazoles as Metal-Free and Recyclable Hydrides for CO ₂ Reduction to Formate. <i>Journal of the American Chemical Society</i> , 2019, 141, 272-280.	6.6	67
151	Zn [−] Cu Alloy Nanofoams as Efficient Catalysts for the Reduction of CO ₂ to Syngas Mixtures with a Potential [−] Independent H ₂ /CO Ratio. <i>ChemSusChem</i> , 2019, 12, 511-517.	3.6	49
152	Selective Earth-Abundant System for CO ₂ Reduction: Comparing Photo- and Electrocatalytic Processes. <i>ACS Catalysis</i> , 2019, 9, 2091-2100.	5.5	80
153	Computational Approach to Molecular Catalysis by 3d Transition Metals: Challenges and Opportunities. <i>Chemical Reviews</i> , 2019, 119, 2453-2523.	23.0	260
154	Group 6 Metal Complexes as Electrocatalysts of CO ₂ Reduction: Strong Substituent Control of the Reduction Path of [Mo([−] -allyl)(CO) ₂]([−] -dimethyl-2,2 [−] -bipyridine)(NCS)] ([−] = [−] ETQq1 1 [−] 0.784314	1.1	14
155	In Situ Electrochemical Conversion of an Ultrathin Tannin Nickel Iron Complex Film as an Efficient Oxygen Evolution Reaction Electrocatalyst. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3769-3773.	7.2	188
156	Manganese-Based Catalysts with Varying Ligand Substituents for the Electrochemical Reduction of CO ₂ to CO. <i>Organometallics</i> , 2019, 38, 1292-1299.	1.1	44
157	Synergistic Metal [−] Ligand Redox Cooperativity for Electrocatalytic CO ₂ Reduction Promoted by a Ligand-Based Redox Couple in Mn and Re Tricarbonyl Complexes. <i>Organometallics</i> , 2019, 38, 1317-1329.	1.1	37
158	Atomically Precise Noble Metal Nanoclusters as Efficient Catalysts: A Bridge between Structure and Properties. <i>Chemical Reviews</i> , 2020, 120, 526-622.	23.0	849
159	Surface and Interface Control in Nanoparticle Catalysis. <i>Chemical Reviews</i> , 2020, 120, 1184-1249.	23.0	492
160	Wavy SnO ₂ catalyzed simultaneous reinforcement of carbon dioxide adsorption and activation towards electrochemical conversion of CO ₂ to HCOOH. <i>Applied Catalysis B: Environmental</i> , 2020, 261, 118243.	10.8	97
161	First-row transition metal polypyridine complexes that catalyze proton to hydrogen reduction. <i>Coordination Chemistry Reviews</i> , 2020, 402, 213079.	9.5	66
162	Identification of dual-active sites in cobalt phthalocyanine for electrochemical carbon dioxide reduction. <i>Nano Energy</i> , 2020, 67, 104163.	8.2	48

#	ARTICLE	IF	CITATIONS
163	Two-dimensional Electrocatalysts for Efficient Reduction of Carbon Dioxide. <i>ChemSusChem</i> , 2020, 13, 59-77.	3.6	31
164	Current achievements and the future direction of electrochemical CO ₂ reduction: A short review. <i>Critical Reviews in Environmental Science and Technology</i> , 2020, 50, 769-815.	6.6	106
165	Carbon nitride embedded with transition metals for selective electrocatalytic CO ₂ reduction. <i>Applied Catalysis B: Environmental</i> , 2020, 268, 118391.	10.8	64
166	Construction of secondary coordination sphere boosts electrochemical CO ₂ reduction of iron porphyrins. <i>Journal of Porphyrins and Phthalocyanines</i> , 2020, 24, 465-472.	0.4	8
167	Cobalt-Group 13 Complexes Catalyze CO ₂ Hydrogenation via a Co(III)/Co(I) Redox Cycle. <i>ACS Catalysis</i> , 2020, 10, 2459-2470.	5.5	55
168	Nickel-nitrogen-modified porous carbon/carbon nanotube hybrid with necklace-like geometry: An efficient and durable electrocatalyst for selective reduction of CO ₂ to CO in a wide negative potential region. <i>Electrochimica Acta</i> , 2020, 334, 135583.	2.6	21
169	Unusual Reactivity of a Thiazole-Based Mn Tricarbonyl Complex for CO ₂ Activation. <i>Organometallics</i> , 2020, 39, 988-994.	1.1	6
170	CO ₂ Reduction: From Homogeneous to Heterogeneous Electrocatalysis. <i>Accounts of Chemical Research</i> , 2020, 53, 255-264.	7.6	391
171	Highly efficient utilization of single atoms via constructing 3D and free-standing electrodes for CO ₂ reduction with ultrahigh current density. <i>Nano Energy</i> , 2020, 70, 104454.	8.2	106
172	Reduction-induced CO dissociation by a [Mn(bpy)(CO) ₄][SbF ₆] complex and its relevance in electrocatalytic CO ₂ reduction. <i>Dalton Transactions</i> , 2020, 49, 891-900.	1.6	14
173	Electrocatalytic reduction of carbon dioxide: opportunities with heterogeneous molecular catalysts. <i>Energy and Environmental Science</i> , 2020, 13, 374-403.	15.6	303
174	Isolating substituent effects in Re(I)-phenanthroline electrocatalysts for CO ₂ reduction. <i>Inorganica Chimica Acta</i> , 2020, 503, 119397.	1.2	11
176	NO and NO ₂ as non-innocent ligands: A comparison. <i>Coordination Chemistry Reviews</i> , 2020, 404, 213114.	9.5	23
177	Pd-catalyzed Reductive Cyclization of Nitroarenes with CO ₂ as the CO Source. <i>European Journal of Organic Chemistry</i> , 2020, 2020, 57-60.	1.2	13
178	Pore size effect of graphyne supports on CO ₂ electrocatalytic activity of Cu single atoms. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 1181-1186.	1.3	37
179	Advances and challenges in electrochemical CO ₂ reduction processes: an engineering and design perspective looking beyond new catalyst materials. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1511-1544.	5.2	305
180	A new polypyridyl-based Ru(II) complex as a highly efficient electrocatalyst for CO ₂ reduction. <i>Applied Organometallic Chemistry</i> , 2020, 34, e5389.	1.7	2
181	High efficiency and selectivity from synergy: Bi nanoparticles embedded in nitrogen doped porous carbon for electrochemical reduction of CO ₂ to formate. <i>Electrochimica Acta</i> , 2020, 334, 135563.	2.6	37

#	ARTICLE	IF	CITATIONS
182	Highly Efficient Electrocatalytic Reduction of CO ₂ to CO by a Molecular Chromium Complex. ACS Catalysis, 2020, 10, 1146-1151.	5.5	48
183	A Unified Electro- and Photocatalytic CO ₂ to CO Reduction Mechanism with Aminopyridine Cobalt Complexes. Journal of the American Chemical Society, 2020, 142, 120-133.	6.6	75
184	Bias-free solar syngas production by integrating a molecular cobalt catalyst with perovskite BiVO ₄ tandems. Nature Materials, 2020, 19, 189-194.	13.3	175
185	Selective conversion of CO into ethanol on Cu(511) surface reconstructed from Cu(pc): Operando studies by electrochemical scanning tunneling microscopy, mass spectrometry, quartz crystal nanobalance, and infrared spectroscopy. Journal of Electroanalytical Chemistry, 2020, 857, 113704.	1.9	9
186	Ruthenium Complexes in Homogeneous and Heterogeneous Catalysis for Electroreduction of CO ₂ . ChemCatChem, 2020, 12, 1292-1296.	1.8	9
187	Tertiary Amine-Assisted Electroreduction of Carbon Dioxide to Formate Catalyzed by Iron Tetraphenylporphyrin. ACS Energy Letters, 2020, 5, 72-78.	8.8	48
188	Photo-Assisted Electrocatalytic Reduction of CO ₂ : A New Strategy for Reducing Catalytic Overpotentials. ChemCatChem, 2020, 12, 386-393.	1.8	14
189	Basic Strategies and Types of Applications in Organic Electrochemistry. ChemElectroChem, 2020, 7, 395-405.	1.7	133
190	Unexpected Effect of Intramolecular Phenolic Group on Electrocatalytic CO ₂ Reduction. ChemCatChem, 2020, 12, 1591-1595.	1.8	23
191	Atropisomeric Hydrogen Bonding Control for CO ₂ Binding and Enhancement of Electrocatalytic Reduction at Iron Porphyrins. Angewandte Chemie, 2020, 132, 22637-22641.	1.6	20
192	Noble-Metal-Free Doped Carbon Nanomaterial Electrocatalysts. Chemistry - A European Journal, 2020, 26, 15397-15415.	1.7	28
193	Manganese and Rhenium Tricarbonyl Complexes Equipped with Proton Relays in the Electrochemical CO ₂ Reduction Reaction. European Journal of Inorganic Chemistry, 2020, 2020, 4319-4333.	1.0	33
194	Hierarchical NiCo ₂ O ₄ -MnO ₂ -NF monolithic catalyst synthesized by in-situ alternating anode and cathode electro-deposition strategy: Strong interfacial anchoring force promote catalytic performance. Applied Surface Science, 2020, 532, 147485.	3.1	6
195	Homogeneous and heterogeneous molecular catalysts for electrochemical reduction of carbon dioxide. RSC Advances, 2020, 10, 38013-38023.	1.7	24
196	Immobilization of a Molecular Re Complex on MOF-derived Hierarchical Porous Carbon for CO ₂ Electroreduction in Water/Ionic Liquid Electrolyte. ChemSusChem, 2020, 13, 6418-6425.	3.6	9
197	Three-Dimensional Cathodes for Electrochemical Reduction of CO ₂ : From Macro- to Nano-Engineering. Nanomaterials, 2020, 10, 1884.	1.9	23
198	Functionalization of Carbon Nanotubes with Nickel Cyclam for the Electrochemical Reduction of CO ₂ . ChemSusChem, 2020, 13, 6449-6456.	3.6	27
199	CO ₂ to CO: Photo- and Electrocatalytic Conversion Based on Re(I) Bis-Arene Frameworks: Synergisms Between Catalytic Subunits. Helvetica Chimica Acta, 2020, 103, e2000147.	1.0	2

#	ARTICLE	IF	CITATIONS
201	Iron-Mediated C–C Bond Formation via Reductive Coupling with Carbon Dioxide. <i>Organometallics</i> , 2020, 39, 3562-3571.	1.1	13
202	Molecular catalysis of CO ₂ reduction: recent advances and perspectives in electrochemical and light-driven processes with selected Fe, Ni and Co aza macrocyclic and polypyridine complexes. <i>Chemical Society Reviews</i> , 2020, 49, 5772-5809.	18.7	233
203	Ligand-Controlled Product Selectivity in Electrochemical Carbon Dioxide Reduction Using Manganese Bipyridine Catalysts. <i>Journal of the American Chemical Society</i> , 2020, 142, 4265-4275.	6.6	114
204	Electroreduction of CO ₂ to Formate with Low Overpotential using Cobalt Pyridine Thiolate Complexes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15726-15733.	7.2	38
205	Emergence of CO ₂ electrolyzers including supported molecular catalysts. <i>Current Opinion in Electrochemistry</i> , 2020, 24, 49-55.	2.5	15
206	Efficient Conversion of CO ₂ to Formate Using Inexpensive and Easily Prepared Post-Transition Metal Alloy Catalysts. <i>Energy & Fuels</i> , 2020, 34, 3467-3476.	2.5	23
207	Aromatic Ester-Functionalized Ionic Liquid for Highly Efficient CO ₂ Electrochemical Reduction to Oxalic Acid. <i>ChemSusChem</i> , 2020, 13, 4900-4905.	3.6	33
208	Heterogeneous Nature of Electrocatalytic CO/CO ₂ Reduction by Cobalt Phthalocyanines. <i>ChemSusChem</i> , 2020, 13, 6296-6299.	3.6	37
209	Co/FeC core–nitrogen doped hollow carbon shell structure with tunable shell-thickness for oxygen evolution reaction. <i>Journal of Colloid and Interface Science</i> , 2020, 580, 794-802.	5.0	15
210	From CO ₂ to Bioplastic – Coupling the Electrochemical CO ₂ Reduction with a Microbial Product Generation by Drop-in Electrolysis. <i>ChemSusChem</i> , 2020, 13, 4086-4093.	3.6	45
211	Electroreduction of CO ₂ to Formate with Low Overpotential using Cobalt Pyridine Thiolate Complexes. <i>Angewandte Chemie</i> , 2020, 132, 15856-15863.	1.6	13
213	Electrochemical CO ₂ and Proton Reduction by a Co(dithiacyclam) Complex. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2020, 646, 746-753.	0.6	9
214	Mn(III) Catalyzed Electrochemical Reduction of CO ₂ on Carbon Electrodes. <i>Croatica Chemica Acta</i> , 2020, 93, 41-47.	0.1	1
215	Metal–Ligand Cooperativity via Exchange Coupling Promotes Iron-Catalyzed Electrochemical CO ₂ Reduction at Low Overpotentials. <i>Journal of the American Chemical Society</i> , 2020, 142, 20489-20501.	6.6	77
216	Temperature Effects on CO ₂ Electroreduction Pathways in an Imidazolium-Based Ionic Liquid on Pt Electrode. <i>Journal of Physical Chemistry C</i> , 2020, 124, 26094-26105.	1.5	15
217	Ink-Assisted Synthetic Strategy for Stable and Advanced Composite Electrocatalysts with Single Fe Sites. <i>Small</i> , 2020, 16, e2006113.	5.2	4
218	Understanding the Efficiency and Selectivity of Two-Electron Production of Metalloporphyrin-Embedded Zirconium–Pyrogallol Scaffolds in Electrochemical CO ₂ Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 52588-52594.	4.0	3
219	Repurposing a Bio-Inspired NiFe Hydrogenase Model for CO ₂ Reduction with Selective Production of Methane as the Unique C-Based Product. <i>ACS Energy Letters</i> , 2020, 5, 3837-3842.	8.8	41

#	ARTICLE	IF	CITATIONS
220	Selective electrocatalytic reduction of carbon dioxide to formate by a trimetallic Sn-Co/Cu foam electrode. <i>Journal of Electroanalytical Chemistry</i> , 2020, 877, 114623.	1.9	7
221	Enhanced Electrocatalytic Activity of a Zinc Porphyrin for CO ₂ Reduction: Cooperative Effects of Triazole Units in the Second Coordination Sphere. <i>Chemistry - A European Journal</i> , 2020, 26, 16774-16781.	1.7	16
222	Design strategies and mechanism studies of CO ₂ electroreduction catalysts based on coordination chemistry. <i>Coordination Chemistry Reviews</i> , 2020, 422, 213436.	9.5	49
223	Luminescent Rhenium(I)tricarbonyl Complexes Containing Different Pyrazoles and Their Successive Deprotonation Products: CO ₂ Reduction Electrocatalysts. <i>Inorganic Chemistry</i> , 2020, 59, 11152-11165.	1.9	17
224	Grand Challenges for Catalytic Remediation in Environmental and Energy Applications Toward a Cleaner and Sustainable Future. <i>Frontiers in Environmental Chemistry</i> , 2020, 1, .	0.7	34
225	Efficient Carbon Dioxide Electroreduction over Ultrathin Covalent Organic Framework Nanolayers with Isolated Cobalt Porphyrin Units. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 37986-37992.	4.0	72
226	An <i>ab initio</i> multireference study of reductive eliminations from organoferrates(ⁱⁱⁱ) in the gas-phase: it is all about the spin state. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 17677-17686.	1.3	2
227	Transfer hydrogenation of carbon dioxide via bicarbonate promoted by bifunctional C ⁺ N chelating Cp*Ir complexes. <i>Chemical Communications</i> , 2020, 56, 10762-10765.	2.2	5
228	Beyond CO ₂ Reduction: Vistas on Electrochemical Reduction of Heavy Non-metal Oxides with Very Strong E ⁺ O Bonds (E = Si, P, S). <i>Journal of the American Chemical Society</i> , 2020, 142, 14772-14788.	6.6	22
229	Transition metal macrocycles for heterogeneous electrochemical CO ₂ reduction. <i>Coordination Chemistry Reviews</i> , 2020, 422, 213435.	9.5	88
230	Towards highly efficient electrochemical CO ₂ reduction: Cell designs, membranes and electrocatalysts. <i>Applied Energy</i> , 2020, 277, 115557.	5.1	104
231	Understanding the Improved Activity of Dendritic Sn ₁ Pb ₃ Alloy for the CO ₂ Electrochemical Reduction: A Computational ⁺ Experimental Investigation. <i>ACS Catalysis</i> , 2020, 10, 10726-10734.	5.5	11
232	Graphene-encapsulated nickel ⁺ copper bimetallic nanoparticle catalysts for electrochemical reduction of CO ₂ to CO. <i>Chemical Communications</i> , 2020, 56, 11275-11278.	2.2	23
233	Advanced Electrocatalysts with Single-Metal-Atom Active Sites. <i>Chemical Reviews</i> , 2020, 120, 12217-12314.	23.0	563
234	Imidazolium- and Pyrrolidinium-Based Ionic Liquids as Cocatalysts for CO ₂ Electroreduction in Model Molecular Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23764-23772.	1.5	12
235	Electrocatalyst design for aprotic Li ⁺ CO ₂ batteries. <i>Energy and Environmental Science</i> , 2020, 13, 4717-4737.	15.6	65
236	Computational mechanistic insights into non-noble-metal-catalysed CO ₂ conversion. <i>Dalton Transactions</i> , 2020, 49, 16608-16616.	1.6	4
237	Molecular quaterpyridine-based metal complexes for small molecule activation: water splitting and CO ₂ reduction. <i>Chemical Society Reviews</i> , 2020, 49, 7271-7283.	18.7	57

#	ARTICLE	IF	CITATIONS
238	Construction of Thiazolo[5,4- <i>d</i>]thiazole-based Two-Dimensional Network for Efficient Photocatalytic CO ₂ Reduction. ACS Applied Materials & Interfaces, 2020, 12, 46483-46489.	4.0	43
239	Systematic Trends in the Electrochemical Properties of Transition Metal Hydride Complexes Discovered by Using the Ligand Acidity Constant Equation. Journal of the American Chemical Society, 2020, 142, 17607-17629.	6.6	10
240	Recent advances in the use of catalysts based on natural products for the conversion of CO ₂ into cyclic carbonates. Green Chemistry, 2020, 22, 7665-7706.	4.6	110
241	Hydrogenation and electrocatalytic reduction of carbon dioxide to formate with a single Co catalyst. Chemical Communications, 2020, 56, 12142-12145.	2.2	5
242	Molecularly engineered photocatalyst sheet for scalable solar formate production from carbon dioxide and water. Nature Energy, 2020, 5, 703-710.	19.8	156
243	Transition metal-based catalysts for the electrochemical CO ₂ reduction: from atoms and molecules to nanostructured materials. Chemical Society Reviews, 2020, 49, 6884-6946.	18.7	305
244	Novel homogeneous selective electrocatalysts for CO ₂ reduction: an electrochemical and computational study of cyclopentadienyl-phenylendiamino-cobalt complexes. Sustainable Energy and Fuels, 2020, 4, 5609-5617.	2.5	5
245	Materializing efficient methanol oxidation via electron delocalization in nickel hydroxide nanoribbon. Nature Communications, 2020, 11, 4647.	5.8	117
246	Atropisomeric Hydrogen Bonding Control for CO ₂ Binding and Enhancement of Electrocatalytic Reduction at Iron Porphyrins. Angewandte Chemie - International Edition, 2020, 59, 22451-22455.	7.2	55
247	Electroreduction of Carbon Dioxide by Homogeneous Iridium Catalysts. Topics in Organometallic Chemistry, 2020, , 325-339.	0.7	0
248	Vitamin B ₁₂ on Graphene for Highly Efficient CO ₂ Electroreduction. ACS Applied Materials & Interfaces, 2020, 12, 41288-41293.	4.0	22
249	<i>Operando</i> characterization techniques for electrocatalysis. Energy and Environmental Science, 2020, 13, 3748-3779.	15.6	159
250	Carbon Dioxide Reduction Mediated by Iron Catalysts: Mechanism and Intermediates That Guide Selectivity. ACS Omega, 2020, 5, 21309-21319.	1.6	25
251	Anion exchange-induced single-molecule dispersion of cobalt porphyrins in a cationic porous organic polymer for enhanced electrochemical CO ₂ reduction <i>via</i> secondary-coordination sphere interactions. Journal of Materials Chemistry A, 2020, 8, 18677-18686.	5.2	20
252	Reprint of "Selective conversion of CO into ethanol on Cu(511) surface reconstructed from Cu(pc): Operando studies by electrochemical scanning tunneling microscopy, mass spectrometry, quartz crystal nanobalance, and infrared spectroscopy". Journal of Electroanalytical Chemistry, 2020, 875, 114757.	1.9	0
253	Hierarchical Tuning of the Performance of Electrochemical Carbon Dioxide Reduction Using Conductive Two-Dimensional Metallophthalocyanine Based Metal-Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 21656-21669.	6.6	129
254	Advances in Metal Phthalocyanine based Carbon Composites for Electrocatalytic CO ₂ Reduction. ChemCatChem, 2020, 12, 6103-6130.	1.8	38
255	A bioinspired molybdenum-copper molecular catalyst for CO ₂ electroreduction. Chemical Science, 2020, 11, 5503-5510.	3.7	40

#	ARTICLE	IF	CITATIONS
256	Electrocatalytic Reduction of CO ₂ to CH ₄ and CO in Aqueous Solution Using Pyridine-Porphyrins Immobilized onto Carbon Nanotubes. ACS Sustainable Chemistry and Engineering, 2020, 8, 9549-9557.	3.2	39
257	Electro-organic synthesis – a 21 st century technique. Chemical Science, 2020, 11, 12386-12400.	3.7	379
258	Harnessing Noninnocent Porphyrin Ligand to Circumvent Fe-Hydride Formation in the Selective Fe-Catalyzed CO ₂ Reduction in Aqueous Solution. ACS Catalysis, 2020, 10, 6332-6345.	5.5	37
259	Enhanced Molecular CO ₂ Electroreduction Enabled by a Flexible Hydrophilic Channel for Relay Proton Shuttling. ChemSusChem, 2020, 13, 3412-3417.	3.6	18
261	Core-shell structured catalysts for thermocatalytic, photocatalytic, and electrocatalytic conversion of CO ₂ . Chemical Society Reviews, 2020, 49, 2937-3004.	18.7	479
262	Photocatalytic CO ₂ Reduction Using a Robust Multifunctional Iridium Complex toward the Selective Formation of Formic Acid. Journal of the American Chemical Society, 2020, 142, 10261-10266.	6.6	90
263	Tuning nanocavities of Au@Cu ₂ O yolk-shell nanoparticles for highly selective electroreduction of CO ₂ to ethanol at low potential. RSC Advances, 2020, 10, 19192-19198.	1.7	33
264	Electrocatalytic Reduction of CO ₂ to Ethylene by Molecular Cu Complex Immobilized on Graphitized Mesoporous Carbon. Small, 2020, 16, e2000955.	5.2	48
265	Electrocatalytic reduction of CO ₂ to CO over iron phthalocyanine-modified graphene nanocomposites. Carbon, 2020, 167, 658-667.	5.4	58
266	Direct oxidative carboxylation of olefins into cyclic carbonates at ambient pressure. Journal of CO ₂ Utilization, 2020, 40, 101204.	3.3	15
267	Metal-free sites with multidimensional structure modifications for selective electrochemical CO ₂ reduction. Nano Today, 2020, 33, 100891.	6.2	23
268	Atropisomeric Effects of Second Coordination Spheres on Electrocatalytic CO ₂ Reduction. ChemCatChem, 2020, 12, 4886-4892.	1.8	10
269	Revealing active sites in N-doped carbon for CO ₂ electroreduction by well-defined molecular model catalysts. Science Bulletin, 2020, 65, 781-782.	4.3	4
270	Mechanically Interlocked Carbon Nanotubes as a Stable Electrocatalytic Platform for Oxygen Reduction. ACS Applied Materials & Interfaces, 2020, 12, 32615-32621.	4.0	25
271	In-situ Scanning Tunneling Microscopy of Cobalt-Phthalocyanine-Catalyzed CO ₂ Reduction Reaction. Angewandte Chemie, 2020, 132, 16232-16237.	1.6	6
272	In-situ Scanning Tunneling Microscopy of Cobalt-Phthalocyanine-Catalyzed CO ₂ Reduction Reaction. Angewandte Chemie - International Edition, 2020, 59, 16098-16103.	7.2	56
273	Cu nanowire bridged Bi nanosheet arrays for efficient electrochemical CO ₂ reduction toward formate. Journal of Alloys and Compounds, 2020, 841, 155789.	2.8	41
274	An NADH-Inspired Redox Mediator Strategy to Promote Second-Sphere Electron and Proton Transfer for Cooperative Electrochemical CO ₂ Reduction Catalyzed by Iron Porphyrin. Inorganic Chemistry, 2020, 59, 9270-9278.	1.9	30

#	ARTICLE	IF	CITATIONS
275	Effects of Tuning Intramolecular Proton Acidity on CO ₂ Reduction by Mn Bipyridyl Species. <i>Organometallics</i> , 2020, 39, 2425-2437.	1.1	12
276	Organic-Inorganic Hybrid Nanomaterials for Electrocatalytic CO ₂ Reduction. <i>Small</i> , 2020, 16, e2001847.	5.2	79
277	Single-Atom Catalysts for Electrocatalytic Applications. <i>Advanced Functional Materials</i> , 2020, 30, 2000768.	7.8	390
278	Tuning adsorption strength of CO ₂ and its intermediates on tin oxide-based electrocatalyst for efficient CO ₂ reduction towards carbonaceous products. <i>Applied Catalysis B: Environmental</i> , 2020, 277, 119252.	10.8	50
279	Electrochemical Reduction of Carbamates and Carbamic Acids: Implications for Combined Carbon Capture and Electrochemical CO ₂ Recycling. <i>Journal of the Electrochemical Society</i> , 2020, 167, 086507.	1.3	13
280	Acridine Variations for Coordination Chemistry. <i>Israel Journal of Chemistry</i> , 2020, 60, 433-436.	1.0	0
281	Evaluation of the Electrocatalytic Reduction of Carbon Dioxide using Rhenium and Ruthenium Bipyridine Catalysts Bearing Pendant Amines in the Secondary Coordination Sphere. <i>Organometallics</i> , 2020, 39, 1480-1490.	1.1	30
282	Exploiting Metal-Ligand Cooperativity to Sequester, Activate, and Reduce Atmospheric Carbon Dioxide with a Neutral Zinc Complex. <i>Inorganic Chemistry</i> , 2020, 59, 4835-4841.	1.9	19
283	Nanoconfined Tin Oxide within N-Doped Nanocarbon Supported on Electrochemically Exfoliated Graphene for Efficient Electroreduction of CO ₂ to Formate and C1 Products. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 16178-16185.	4.0	41
284	Ligand-Assisted Electrochemical CO ₂ Reduction by Ru-Polypyridyl Complexes. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 1814-1818.	1.0	12
285	Computational Insights on the Electrocatalytic Behavior of [Cp*Rh] Molecular Catalysts Immobilized on Graphene for Heterogeneous Hydrogen Evolution Reaction. <i>Scientific Reports</i> , 2020, 10, 5777.	1.6	4
286	Recent Advances in Atomic-Level Engineering of Nanostructured Catalysts for Electrochemical CO ₂ Reduction. <i>Advanced Functional Materials</i> , 2020, 30, 1910534.	7.8	100
287	Iridium Nanotubes as Bifunctional Electrocatalysts for Oxygen Evolution and Nitrate Reduction Reactions. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 14064-14070.	4.0	91
288	Carbon Capture and Conversion. <i>Journal of the American Chemical Society</i> , 2020, 142, 4955-4957.	6.6	85
289	Surprisingly big linker-dependence of activity and selectivity in CO ₂ reduction by an iridium(κ^2) pincer complex. <i>Chemical Communications</i> , 2020, 56, 9126-9129.	2.2	10
290	Plasmonic Heterostructure Functionalized with a Carbene-Linked Molecular Catalyst for Sustainable and Selective Carbon Dioxide Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 33817-33826.	4.0	13
291	Highly Active Manganese-Based CO ₂ Reduction Catalysts with Bulky NHC Ligands: A Mechanistic Study. <i>Inorganic Chemistry</i> , 2020, 59, 10234-10242.	1.9	21
292	CO ₂ Electrochemical Reduction by Exohedral N-Pyridine Decorated Metal-Free Carbon Nanotubes. <i>Energies</i> , 2020, 13, 2703.	1.6	9

#	ARTICLE	IF	CITATIONS
293	Electrochemical Conversion of CO ₂ to CO by a Competent Fe ^I Intermediate Bearing a Schiff Base Ligand. <i>ChemSusChem</i> , 2020, 13, 4111-4120.	3.6	11
294	Highly active coral-like porous silver for electrochemical reduction of CO ₂ to CO. <i>Journal of CO₂ Utilization</i> , 2020, 41, 101242.	3.3	16
295	Synthesis and characterization of pH-sensitive block polymer poly (propylene carbonate)-b-poly (acrylic acid) for sustained chlorpyrifos release. <i>Materials Today Communications</i> , 2020, 24, 100974.	0.9	3
296	Electrocatalytic CO ₂ Reduction with a Half-Sandwich Cobalt Catalyst: Selectivity towards CO. <i>Chemistry - an Asian Journal</i> , 2020, 15, 904-909.	1.7	5
297	Molecular enhancement of heterogeneous CO ₂ reduction. <i>Nature Materials</i> , 2020, 19, 266-276.	13.3	416
298	Sterically hindered Re- and Mn-CO ₂ reduction catalysts for solar energy conversion. <i>Dalton Transactions</i> , 2020, 49, 4230-4243.	1.6	9
299	Recent Progress in Self-Supported Catalysts for CO ₂ Electrochemical Reduction. <i>Small Methods</i> , 2020, 4, 1900826.	4.6	48
300	Single-atom Ni integrated gas diffusion electrode for high performance carbon dioxide electroreduction. <i>Science Bulletin</i> , 2020, 65, 696-697.	4.3	2
301	Stable, yet "naked" azo radical anion ArNNAr ^{•-} and dianion ArNNAr ²⁻ (Ar = Tj ETQqO O O rgBT /Overlo activation. <i>Chemical Communications</i> , 2020, 56, 3285-3288.	2.2	6
302	Recent Advances in Carbon Dioxide Hydrogenation to Methanol via Heterogeneous Catalysis. <i>Chemical Reviews</i> , 2020, 120, 7984-8034.	23.0	825
303	A Ru(II)-Mn(I) Supramolecular Photocatalyst for CO ₂ Reduction. <i>Organometallics</i> , 2020, 39, 1511-1518.	1.1	24
304	Iron Porphyrin Allows Fast and Selective Electrocatalytic Conversion of CO ₂ to CO in a Flow Cell. <i>Chemistry - A European Journal</i> , 2020, 26, 3034-3038.	1.7	52
305	Understanding the Enhanced Catalytic CO ₂ Reduction upon Adhering Cobalt Porphyrin to Carbon Nanotubes and the Inverse Loading Effect. <i>Organometallics</i> , 2020, 39, 1634-1641.	1.1	28
306	Current progress in electrocatalytic carbon dioxide reduction to fuels on heterogeneous catalysts. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3541-3562.	5.2	204
307	Mn-Based Molecular Catalysts for the Electrocatalytic Disproportionation of CO ₂ into CO and CO ₃ ²⁻ . <i>ACS Catalysis</i> , 2020, 10, 1961-1968.	5.5	25
308	Cu ^I SNS triazole and imidazole pincers as electrocatalyst precursors for the production of solar fuels. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 1012-1015.	3.0	7
309	Catalyst-free selective <i>N</i> -formylation and <i>N</i> -methylation of amines using CO ₂ as a sustainable C1 source. <i>Green Chemistry</i> , 2020, 22, 1134-1138.	4.6	51
310	Boosting Photocatalytic CO ₂ Reduction on CsPbBr ₃ Perovskite Nanocrystals by Immobilizing Metal Complexes. <i>Chemistry of Materials</i> , 2020, 32, 1517-1525.	3.2	197

#	ARTICLE	IF	CITATIONS
311	Electrochemical CO ₂ Reduction in a Continuous Non-Aqueous Flow Cell with [Ni(cyclam)] ²⁺ . <i>Inorganic Chemistry</i> , 2020, 59, 1883-1892.	1.9	26
312	Recent advances in metalloporphyrin-based catalyst design towards carbon dioxide reduction: from bio-inspired second coordination sphere modifications to hierarchical architectures. <i>Dalton Transactions</i> , 2020, 49, 2381-2396.	1.6	103
313	Catalytic N ₂ -to-NH ₃ (or -N ₂ H ₄) Conversion by Well-Defined Molecular Coordination Complexes. <i>Chemical Reviews</i> , 2020, 120, 5582-5636.	23.0	234
314	2-Aminobenzenethiol-Functionalized Silver-Decorated Nanoporous Silicon Photoelectrodes for Selective CO ₂ Reduction. <i>Angewandte Chemie</i> , 2020, 132, 11559-11566.	1.6	6
315	2-Aminobenzenethiol-Functionalized Silver-Decorated Nanoporous Silicon Photoelectrodes for Selective CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11462-11469.	7.2	24
316	Strong Impact of Intramolecular Hydrogen Bonding on the Cathodic Path of [Re(3,3'-dihydroxy-2,2'-bipyridine)(CO) ₃ Cl] and Catalytic Reduction of Carbon Dioxide. <i>Inorganic Chemistry</i> , 2020, 59, 5564-5578.	1.9	22
317	Homogeneous Electrochemical Reduction of CO ₂ to CO by a Cobalt Pyridine Thiolate Complex. <i>Inorganic Chemistry</i> , 2020, 59, 5292-5302.	1.9	30
318	The critical role of hydride (H ⁻) ligands in electrocatalytic CO ₂ reduction to HCOOH by [Cu ₂₅ H ₂₂ (PH ₃) ₁₂]Cl nanocluster. <i>Journal of Catalysis</i> , 2020, 387, 95-101.	3.1	20
319	Atomically Dispersed Nickel(I) on an Alloy-Encapsulated Nitrogen-Doped Carbon Nanotube Array for High-Performance Electrochemical CO ₂ Reduction Reaction. <i>Angewandte Chemie</i> , 2020, 132, 12153-12159.	1.6	27
320	Atomically Dispersed Nickel(I) on an Alloy-Encapsulated Nitrogen-Doped Carbon Nanotube Array for High-Performance Electrochemical CO ₂ Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12055-12061.	7.2	117
321	Toward Excellence of Transition Metal-Based Catalysts for CO ₂ Electrochemical Reduction: An Overview of Strategies and Rationales. <i>Small Methods</i> , 2020, 4, 2000033.	4.6	60
322	Enhanced Electrochemical CO ₂ Reduction by a Series of Molecular Rhenium Catalysts Decorated with Second-Sphere Hydrogen-Bond Donors. <i>Inorganic Chemistry</i> , 2020, 59, 6087-6099.	1.9	46
323	Electrocatalytic CO ₂ Reduction to Formate with Molecular Fe(III) Complexes Containing Pendant Proton Relays. <i>Inorganic Chemistry</i> , 2020, 59, 5854-5864.	1.9	37
324	Descriptor-Based Design Principle for Two-Dimensional Single-Atom Catalysts: Carbon Dioxide Electroreduction. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3481-3487.	2.1	65
325	Kinetics of the <i>trans</i> Effect in Ruthenium Complexes Provide Insight into the Factors That Control Activity and Stability in CO ₂ Electroreduction. <i>Journal of the American Chemical Society</i> , 2020, 142, 8980-8999.	6.6	40
326	Construction of cobalt-copper bimetallic oxide heterogeneous nanotubes for high-efficient and low-overpotential electrochemical CO ₂ reduction. <i>Journal of Energy Chemistry</i> , 2021, 54, 1-6.	7.1	26
327	Direct growth of holey Fe ₃ O ₄ -coupled Ni(OH) ₂ sheets on nickel foam for the oxygen evolution reaction. <i>Chinese Journal of Catalysis</i> , 2021, 42, 271-278.	6.9	21
328	Cobalt porphyrin immobilized on the TiO ₂ nanotube electrode for CO ₂ electroreduction in aqueous solution. <i>Journal of Energy Chemistry</i> , 2021, 55, 219-227.	7.1	23

#	ARTICLE	IF	CITATIONS
329	Design, Identification, and Evolution of a Surface Ruthenium(II/III) Single Site for CO Activation. <i>Angewandte Chemie</i> , 2021, 133, 1232-1239.	1.6	0
330	Recent Advances in Electrochemical CO ₂ Reduction on Indium-Based Catalysts. <i>ChemCatChem</i> , 2021, 13, 514-531.	1.8	50
331	Design, Identification, and Evolution of a Surface Ruthenium(II/III) Single Site for CO Activation. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1212-1219.	7.2	8
332	On the molecular properties of graphene-pyrazines conjugated Ru and Fe complexes: Computational insights. <i>Materials Today Communications</i> , 2021, 26, 101694.	0.9	0
333	First principles studies of mononuclear and dinuclear Pacman complexes for electrocatalytic reduction of CO ₂ . <i>Catalysis Science and Technology</i> , 2021, 11, 637-645.	2.1	3
334	Consistent inclusion of continuum solvation in energy decomposition analysis: theory and application to molecular CO ₂ reduction catalysts. <i>Chemical Science</i> , 2021, 12, 1398-1414.	3.7	41
335	Recent Advances in Strategies for Improving the Performance of CO ₂ Reduction Reaction on Single Atom Catalysts. <i>Small Science</i> , 2021, 1, 2000028.	5.8	57
336	Phosphine Carboxylate-Probing the Edge of Stability of a Carbon Dioxide Adduct with Dihydrogenphosphide. <i>Angewandte Chemie</i> , 2021, 133, 3803-3811.	1.6	2
337	Boosting CO ₂ -to-CO conversion on a robust single-atom copper decorated carbon catalyst by enhancing intermediate binding strength. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1705-1712.	5.2	49
338	Electro- and Photochemical Reduction of CO ₂ by Molecular Manganese Catalysts: Exploring the Positional Effect of Second-Sphere Hydrogen-Bond Donors. <i>ChemSusChem</i> , 2021, 14, 662-670.	3.6	26
339	Recent Progress of Sn-Based Derivative Catalysts for Electrochemical Reduction of CO ₂ . <i>Energy Technology</i> , 2021, 9, .	1.8	42
340	Phosphine Carboxylate-Probing the Edge of Stability of a Carbon Dioxide Adduct with Dihydrogenphosphide. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3759-3767.	7.2	8
341	Morphology and composition-controllable synthesis of copper sulfide nanocrystals for electrochemical reduction of CO ₂ to HCOOH. <i>Materials Letters</i> , 2021, 284, 128919.	1.3	11
342	Biochemical and artificial pathways for the reduction of carbon dioxide, nitrite and the competing proton reduction: effect of 2 nd -sphere interactions in catalysis. <i>Chemical Society Reviews</i> , 2021, 50, 3755-3823.	18.7	77
343	Electrocatalysis for CO ₂ conversion: from fundamentals to value-added products. <i>Chemical Society Reviews</i> , 2021, 50, 4993-5061.	18.7	559
344	An iron-nitrogen doped carbon and CdS hybrid catalytic system for efficient CO ₂ photochemical reduction. <i>Chemical Communications</i> , 2021, 57, 2033-2036.	2.2	16
345	A proton-responsive ligand becomes a dimetal linker for multisubstrate assembly <i>via</i> nitrate deoxygenation. <i>Chemical Communications</i> , 2021, 57, 2780-2783.	2.2	10
346	Enhance the activity of multi-carbon products for Cu via P doping towards CO ₂ reduction. <i>Science China Chemistry</i> , 2021, 64, 1096-1102.	4.2	22

#	ARTICLE	IF	CITATIONS
347	Spectroelectrochemistry: Tools for Electrochemical Mechanisms and Electro catalysis. , 2021, , 1101-1124.		1
348	Electrocatalytic reduction of CO ₂ to CO and HCO ⁺ with Zn(<i>scpi</i>) complexes displaying cooperative ligand reduction. Chemical Communications, 2021, 57, 9292-9295.	2.2	4
349	The Role of Organic Promoters in the Electroreduction of Carbon Dioxide. ACS Catalysis, 2021, 11, 1392-1405.	5.5	41
350	Mechanistic Insights into Co and Fe Quaterpyridine-Based CO ₂ Reduction Catalysts: Metal-Ligand Orbital Interaction as the Key Driving Force for Distinct Pathways. Journal of the American Chemical Society, 2021, 143, 744-763.	6.6	52
351	An amide-based second coordination sphere promotes the dimer pathway of Mn-catalyzed CO ₂ -to-CO reduction at low overpotential. Chemical Science, 2021, 12, 4779-4788.	3.7	19
352	Aqueous CO ₂ fixation: construction of pyridine skeletons in cooperation with ammonium cations. Green Chemistry, 2021, 23, 7950-7955.	4.6	8
353	Tunable metal-organic framework nanoarrays on carbon cloth constructed by a rational self-sacrificing template for efficient and robust oxygen evolution reactions. CrystEngComm, 2021, 23, 7090-7096.	1.3	6
354	Gas diffusion electrodes (GDEs) for electrochemical reduction of carbon dioxide, carbon monoxide, and dinitrogen to value-added products: a review. Energy and Environmental Science, 2021, 14, 1959-2008.	15.6	243
355	Introduction to the Organometallic Chemistry of Carbon Dioxide. , 2021, , .		0
356	A relativistic DFT probe for small-molecule activation mediated by low-valent uranium metallocenes. New Journal of Chemistry, 2021, 45, 4270-4279.	1.4	0
357	MOF-based electrocatalysts for high-efficiency CO ₂ conversion: structure, performance, and perspectives. Journal of Materials Chemistry A, 2021, 9, 22710-22728.	5.2	20
358	Structure Sensitivity in Single-Atom Catalysis toward CO ₂ Electroreduction. ACS Energy Letters, 2021, 6, 713-727.	8.8	149
359	Stand-Alone Photoelectrochemical Energy Conversions. Solar Rrl, 2021, 5, 2000517.	3.1	1
360	Selective electroreduction of CO ₂ to carbon-rich products with a simple binary copper selenide electrocatalyst. Journal of Materials Chemistry A, 2021, 9, 7150-7161.	5.2	32
361	Understanding active sites in molecular (photo)electrocatalysis through complementary vibrational spectroelectrochemistry. Chemical Communications, 2021, 57, 2328-2342.	2.2	17
362	Electrocatalytic syngas generation with a redox non-innocent cobalt 2-phosphinobenzenethiolate complex. Dalton Transactions, 2021, 50, 10779-10788.	1.6	4
363	<i>C</i> -Methylation of anilines and indoles with CO ₂ and hydrosilane using a pentanuclear zinc complex catalyst. Chemical Communications, 2021, 57, 8083-8086.	2.2	17
364	Porphyin-based frameworks for oxygen electrocatalysis and catalytic reduction of carbon dioxide. Chemical Society Reviews, 2021, 50, 2540-2581.	18.7	249

#	ARTICLE	IF	CITATIONS
365	Recent advances in pincer nickel catalyzed reactions. Dalton Transactions, 2021, 50, 3394-3428.	1.6	32
366	Effects of Appended Poly(ethylene glycol) on Electrochemical CO ₂ Reduction by an Iron Porphyrin Complex. Inorganic Chemistry, 2021, 60, 3843-3850.	1.9	13
367	Mechanism-of-Action Elucidation of Reversible Li ⁺ CO ₂ Batteries Using the Water-in-Salt Electrolyte. ACS Applied Materials & Interfaces, 2021, 13, 7396-7404.	4.0	30
368	Ionic liquid-based electrolytes for CO ₂ electroreduction and CO ₂ electroorganic transformation. National Science Review, 2022, 9, nwab022.	4.6	58
369	Selective Electrocatalytic CO ₂ Reduction to CO by an NHC-Based Organometallic Heme Analogue. ACS Catalysis, 2021, 11, 3257-3267.	5.5	12
370	Environmental Applications of Nanotechnology: Nano-enabled Remediation Processes in Water, Soil and Air Treatment. Water, Air, and Soil Pollution, 2021, 232, 1.	1.1	14
371	Selective CO ₂ Electrochemical Reduction Enabled by a Tricomponent Copolymer Modifier on a Copper Surface. Journal of the American Chemical Society, 2021, 143, 2857-2865.	6.6	104
372	Effects of van der Waals interactions on the structure and stability of Cu ₈ -xPdx (x = 0, 4, 8) cluster isomers. Materials Today Communications, 2021, 26, 102024.	0.9	9
373	Organic Electrochemistry: Molecular Syntheses with Potential. ACS Central Science, 2021, 7, 415-431.	5.3	335
374	Are Amines the Holy Grail for Facilitating CO ₂ Reduction?. Angewandte Chemie, 2021, 133, 9258-9263.	1.6	3
375	Electrocatalytic Refinery for Sustainable Production of Fuels and Chemicals. Angewandte Chemie, 2021, 133, 19724-19742.	1.6	30
376	Electrocatalytic Refinery for Sustainable Production of Fuels and Chemicals. Angewandte Chemie - International Edition, 2021, 60, 19572-19590.	7.2	341
377	Homogeneous Electrocatalytic CO ₂ Reduction Using a Porphyrin Complex with Flexible Triazole Units in the Second Coordination Sphere. ACS Applied Energy Materials, 2021, 4, 3604-3611.	2.5	14
378	Oxalate production via oxidation of ascorbate rather than reduction of carbon dioxide. Nature Communications, 2021, 12, 1997.	5.8	9
379	Resolving Deactivation Pathways of Co Porphyrin-Based Electrocatalysts for CO ₂ Reduction in Aqueous Medium. ACS Catalysis, 2021, 11, 3715-3729.	5.5	39
380	Hybrid Photocathodes for Carbon Dioxide Reduction: Interfaces for Charge Separation and Selective Catalysis. ChemPhotoChem, 2021, 5, 595-610.	1.5	6
381	Are Amines the Holy Grail for Facilitating CO ₂ Reduction?. Angewandte Chemie - International Edition, 2021, 60, 9174-9179.	7.2	48
382	2021 Roadmap: electrocatalysts for green catalytic processes. JPhys Materials, 2021, 4, 022004.	1.8	57

#	ARTICLE	IF	CITATIONS
383	Electrocatalytic CO_2 Reduction with Re -Based Spiro Bipyridine Complexes: Effects of the Local Proton in the Second Coordination Sphere. Chinese Journal of Chemistry, 2021, 39, 1281-1287.	2.6	6
384	How increasing proton and electron conduction benefits electrocatalytic CO_2 reduction. Matter, 2021, 4, 1555-1577.	5.0	22
385	Electrochemical reduction of CO_2 in ionic liquid: Mechanistic study of Li^+ - CO_2 batteries via in situ ambient pressure X-ray photoelectron spectroscopy. Nano Energy, 2021, 83, 105830.	8.2	27
386	Electrochemically Driven Reduction of Carbon Dioxide Mediated by Mono-Reduced Mo -Diimine Tetracarbonyl Complexes: Electrochemical, Spectroelectrochemical and Theoretical Studies. ChemElectroChem, 2021, 8, 1899-1910.	1.7	2
387	Two-Dimensional Covalent Organic Frameworks with Cobalt(II)-Phthalocyanine Sites for Efficient Electrocatalytic Carbon Dioxide Reduction. Journal of the American Chemical Society, 2021, 143, 7104-7113.	6.6	198
388	Reaction of a Molybdenum Bis(dinitrogen) Complex with Carbon Dioxide: A Combined Experimental and Computational Investigation. Inorganic Chemistry, 2021, 60, 7708-7718.	1.9	2
389	Influence of Intermolecular Hydrogen Bonding Interactions on the Electrocatalytic Reduction of CO_2 to CO by 6,6'-Amine Substituted Rhenium Bipyridine Complexes. ChemElectroChem, 2021, 17, 1864-1872.	1.7	8
390	Two Co(II) -Based MOFs Constructed from Resorcin[4]Arene Ligand: Syntheses, Structures, and Heterogeneous Catalyst for Conversion of CO_2 . Crystals, 2021, 11, 574.	1.0	2
391	Porous Bilayer Electrode-Guided Gas Diffusion for Enhanced CO_2 Electrochemical Reduction. Advanced Energy and Sustainability Research, 2021, 2, 2100083.	2.8	10
392	Organic Electrosynthesis Towards Sustainability: Fundamentals and Greener Methodologies. Chemical Record, 2021, 21, 2453-2471.	2.9	52
393	A redox cascade of NO_x^- complexes: Structures and nitrogen deoxygenation thermodynamics. Polyhedron, 2021, 200, 115119.	1.0	2
394	Thermodynamic Trends for Reduction of CO by Molecular Complexes. Organometallics, 2021, 40, 2039-2050.	1.1	5
395	Translating Tactics from Direct CO_2 Electroreduction to Electroorganic Coupling Reactions with CO_2 . Advanced Energy and Sustainability Research, 2021, 2, 2100001.	2.8	13
396	Highly Scalable Conversion of Blood Protoporphyrin to Efficient Electrocatalyst for CO_2 Conversion. Advanced Materials Interfaces, 2021, 8, 2100067.	1.9	4
397	Effective Homogeneous Catalysis of Electrochemical Reduction of Nitrous Oxide to Dinitrogen at Rhenium Carbonyl Catalysts. ACS Catalysis, 2021, 11, 6099-6103.	5.5	12
398	Metal-Organic Frameworks for Photo/Electrocatalysis. Advanced Energy and Sustainability Research, 2021, 2, 2100033.	2.8	123
399	Heterogeneous carbon dioxide reduction reaction by cobalt complexes of 4,4'-disubstituted derivatives of quinquopyridine immobilized on carbon black. Electrochimica Acta, 2021, 380, 138224.	2.6	1
400	Polymer Chromophore-Catalyst Assembly for Photocatalytic CO_2 Reduction. ACS Applied Energy Materials, 2021, 4, 7030-7039.	2.5	6

#	ARTICLE	IF	CITATIONS
401	Competition between Reversible Capture of CO ₂ and Release of CO ₂ Using Electrochemically Reduced Quinones in Acetonitrile Solutions. Journal of Physical Chemistry C, 2021, 125, 11916-11927.	1.5	11
402	Commercial Kevlar derived activated carbons for CO ₂ and C ₂ H ₄ sorption. Polish Journal of Chemical Technology, 2021, 23, 81-87.	0.3	4
403	Elucidating influence of the existence formation of anchored cobalt phthalocyanine on electrocatalytic CO ₂ -to-CO conversion. Nano Energy, 2021, 84, 105904.	8.2	40
404	Mechanistic Elucidation of Dimer Formation and Strategies for Its Suppression in Electrochemical Reduction of fac-Mn(bpy)(CO) ₃ Br. ChemElectroChem, 2021, 8, 2108-2114.	1.7	17
405	Polymer-metal complexes as emerging catalysts for electrochemical reduction of carbon dioxide. Journal of Applied Electrochemistry, 2021, 51, 1301-1311.	1.5	12
406	The Synthesis of Hexaazatrinaphthylene-Based 2D Conjugated Copper Metal-Organic Framework for Highly Selective and Stable Electroreduction of CO ₂ to Methane. Angewandte Chemie, 2021, 133, 16545-16551.	1.6	13
407	Recent Development of Electrocatalytic CO ₂ Reduction Application to Energy Conversion. Small, 2021, 17, e2100323.	5.2	53
408	The Synthesis of Hexaazatrinaphthylene-Based 2D Conjugated Copper Metal-Organic Framework for Highly Selective and Stable Electroreduction of CO ₂ to Methane. Angewandte Chemie - International Edition, 2021, 60, 16409-16415.	7.2	87
409	Highly active electrocatalytic CO ₂ reduction with manganese N-heterocyclic carbene pincer by para electronic tuning. Chinese Chemical Letters, 2022, 33, 262-265.	4.8	15
410	A Porous Copper-Organic Framework Assembled by [Cu ₁₂] Nanocages: Highly Efficient CO ₂ Capture and Chemical Fixation and Theoretical DFT Calculations. Inorganic Chemistry, 2021, 60, 9122-9131.	1.9	35
411	A brief review of electrocatalytic reduction of CO ₂ Materials, reaction conditions, and devices. Energy Science and Engineering, 2021, 9, 1012-1032.	1.9	60
412	Recent Advances in Carbon Dioxide Conversion: A Circular Bioeconomy Perspective. Sustainability, 2021, 13, 6962.	1.6	2
413	Effect of the 2-R-Allyl and Chloride Ligands on the Cathodic Paths of [Mo(Î-3-2-R-allyl)(Î±-diimine)(CO) ₂ Cl] (R = H, CH ₃ ; Î±-diimine = 6,6'-Dimethyl-2,2'-bipyridine, Bis(p-tolylimino)acenaphthene). Organometallics, 2021, 40, 1598-1613.	1.1	2
414	Electrocatalytic and Photocatalytic Reduction of Carbon Dioxide by Earth-Abundant Bimetallic Molecular Catalysts. ChemPhysChem, 2021, 22, 1835-1843.	1.0	21
415	Shaping the Electrocatalytic Performance of Metal Complexes for CO ₂ Reduction. ChemElectroChem, 2021, 8, 3472-3481.	1.7	4
416	Self-Supporting Electrodes for Gas-Involved Key Energy Reactions. Advanced Functional Materials, 2021, 31, 2104620.	7.8	39
417	Recent progress in electro- and photo-catalytic CO ₂ reduction using N-heterocyclic carbene transition metal complexes. Polyhedron, 2021, 203, 115147.	1.0	6
418	Turning manganese into gold: Efficient electrochemical CO ₂ reduction by a fac-Mn(apbpy)(CO) ₃ Br complex in a gas-liquid interface flow cell. Chemical Engineering Journal, 2021, 416, 129050.	6.6	14

#	ARTICLE	IF	CITATIONS
419	Enhanced CO ₂ Reduction Performance of BiCuSeO ₄ -Based Hybrid Catalysts by Synergetic Photo-Thermoelectric Effect. <i>Advanced Functional Materials</i> , 2021, 31, 2105001.	7.8	16
420	Cooperative Catalysis of Ru(III)-Porphyrin in CO ₂ -Involved Synthesis of Oxazolidinones. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2504-2510.	1.7	7
422	Photochemical CO ₂ -to-Formate/CO Conversion Catalyzed by Half-Metallocene Ir(III) Catalyst and Its Mechanistic Investigation. <i>Organometallics</i> , 2021, 40, 2430-2442.	1.1	4
423	2D Heterostructure of Amorphous CoFeB Coating Black Phosphorus Nanosheets with Optimal Oxygen Intermediate Absorption for Improved Electrocatalytic Water Oxidation. <i>ACS Nano</i> , 2021, 15, 12418-12428.	7.3	67
424	Single-Atom Electrocatalysts for Multi-Electron Reduction of CO ₂ . <i>Small</i> , 2021, 17, e2101443.	5.2	44
425	Graphite-supported single copper catalyst for electrochemical CO ₂ reduction: A first-principles approach. <i>Computational and Theoretical Chemistry</i> , 2021, 1201, 113277.	1.1	5
426	Chemical Reduction of NiII Cyclam and Characterization of Isolated NiII Cyclam with Cryogenic Vibrational Spectroscopy and Inert-Gas-Mediated High-Resolution Mass Spectrometry. <i>Journal of Physical Chemistry A</i> , 2021, 125, 6715-6721.	1.1	0
427	Recent Progress in (Photo)-Electrochemical Conversion of CO ₂ With Metal Porphyrinoid-Systems. <i>Frontiers in Chemistry</i> , 2021, 9, 685619.	1.8	12
428	Polyoxometalate Interlayered Zinc-Metallophthalocyanine Molecular Layer Sandwich as Photocoupled Electrocatalytic CO ₂ Reduction Catalyst. <i>Journal of the American Chemical Society</i> , 2021, 143, 13721-13730.	6.6	49
429	Quick and Easy Method to Dramatically Improve the Electrochemical CO ₂ Reduction Activity of an Iron Porphyrin Complex. <i>Angewandte Chemie</i> , 2021, 133, 22241-22245.	1.6	10
430	Tetrameric and Polymeric Zn(II) Coordination Complexes of 4-Diallylaminobenzoic Acid and Their Applications in the Electroreduction of CO ₂ and Schottky Diode Behavior. <i>Crystal Growth and Design</i> , 2021, 21, 5240-5250.	1.4	6
431	Electrocatalytic CO ₂ reduction on nanostructured metal-based materials: Challenges and constraints for a sustainable pathway to decarbonization. <i>Journal of CO₂ Utilization</i> , 2021, 50, 101579.	3.3	29
432	A DFT study on the selectivity of CO ₂ reduction electrocatalyzed by heterofluorene bis-NHC Ni pincer complexes: Interplay of media and structure factor. <i>Inorganic Chemistry Communication</i> , 2021, 130, 108690.	1.8	3
433	Activating the Fe(I) State of Iron Porphyrinoid with Second-Sphere Proton Transfer Residues for Selective Reduction of CO ₂ to HCOOH via Fe(III/II)-COOH Intermediate(s). <i>Journal of the American Chemical Society</i> , 2021, 143, 13579-13592.	6.6	59
434	Revisiting photo and electro-catalytic modalities for sustainable conversion of CO ₂ . <i>Applied Catalysis A: General</i> , 2021, 623, 118248.	2.2	13
435	Heterogeneous Molecular Catalysts of Metal Phthalocyanines for Electrochemical CO ₂ Reduction Reactions. <i>Accounts of Chemical Research</i> , 2021, 54, 3149-3159.	7.6	102
436	Intrinsic Descriptors for Coordination Environment and Synergistic Effects of Metal and Environment in Single-Atom-Catalyzed Carbon Dioxide Electroreduction. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18180-18186.	1.5	6
437	A DFT study on carbon dioxide reduction of low-valent diuranium complex supported by a polypyrrolic macrocycle. <i>Chemical Physics Letters</i> , 2021, 776, 138652.	1.2	3

#	ARTICLE	IF	CITATIONS
438	Earth-Abundant Photocatalytic CO ₂ Reduction by Multielectron Chargeable Cobalt Porphyrin Catalysts: High CO/H ₂ Selectivity in Water Based on Phase Mismatch in Frontier MO Association. ACS Catalysis, 2021, 11, 10436-10449.	5.5	56
439	Determining the Overpotential of Electrochemical Fuel Synthesis Mediated by Molecular Catalysts: Recommended Practices, Standard Reduction Potentials, and Challenges. ChemElectroChem, 2021, 8, 4161-4180.	1.7	31
440	Quick and Easy Method to Dramatically Improve the Electrochemical CO ₂ Reduction Activity of an Iron Porphyrin Complex. Angewandte Chemie - International Edition, 2021, 60, 22070-22074.	7.2	29
441	A Semiartificial Photoelectrochemical Tandem Leaf with a CO ₂ to Formate Efficiency Approaching 1%. Angewandte Chemie - International Edition, 2021, 60, 26303-26307.	7.2	34
442	Alkali metal cation effects on electrocatalytic CO ₂ reduction with iron porphyrins. Chinese Journal of Catalysis, 2021, 42, 1439-1444.	6.9	30
443	Prolonging the Triplet State Lifetimes of Rhenium Complexes with Imidazole-Pyridine Framework for Efficient CO ₂ Photoreduction. Chemistry - A European Journal, 2021, 27, 15536-15544.	1.7	9
444	Constructing Catalytic Crown Ether-Based Covalent Organic Frameworks for Electroreduction of CO ₂ . ACS Energy Letters, 2021, 6, 3496-3502.	8.8	53
445	A Semiartificial Photoelectrochemical Tandem Leaf with a CO ₂ to Formate Efficiency Approaching 1%. Angewandte Chemie, 2021, 133, 26507-26511.	1.6	4
446	Molecular Catalysis of Electrochemical Reactions: Competition between Reduction of the Substrate and Deactivation of the Catalyst by a Cosubstrate Application to N ₂ O Reduction. ChemElectroChem, 2021, 8, 3740-3744.	1.7	1
447	Single-Atom Catalysts Enabled Reductive Upgrading of CO ₂ . ChemCatChem, 2021, 13, 4859-4877.	1.8	10
448	A Water-Soluble Sodium Pectate Complex with Copper as an Electrochemical Catalyst for Carbon Dioxide Reduction. Molecules, 2021, 26, 5524.	1.7	1
449	Molecular Dynamics and Machine Learning in Catalysts. Catalysts, 2021, 11, 1129.	1.6	15
450	Sensitized Photocatalytic CO ₂ Reduction With Earth Abundant 3d Metal Complexes Possessing Dipicolyl-Triazacyclononane Derivatives. Frontiers in Chemistry, 2021, 9, 751716.	1.8	6
451	A TiO ₂ -Co(terpyridine) ₂ Photocatalyst for the Selective Oxidation of Cellulose to Formate Coupled to the Reduction of CO ₂ to Syngas. Angewandte Chemie - International Edition, 2021, 60, 23306-23312.	7.2	45
452	A TiO ₂ -Co(terpyridine) ₂ Photocatalyst for the Selective Oxidation of Cellulose to Formate Coupled to the Reduction of CO ₂ to Syngas. Angewandte Chemie, 2021, 133, 23494-23500.	1.6	11
453	Mechanistic insight into electrocatalytic CO ₂ reduction using Lewis acid-base pairs. Inorganica Chimica Acta, 2021, 526, 120528.	1.2	2
454	Boosting the faradaic efficiency for carbon dioxide to monoxide on a phthalocyanine cobalt based gas diffusion electrode to higher than 99% via microstructure regulation of catalyst layer. Electrochimica Acta, 2021, 392, 139023.	2.6	17
455	Advances in structural modification of perovskite semiconductors for visible light assisted photocatalytic CO ₂ reduction to renewable solar fuels: A review. Journal of Environmental Chemical Engineering, 2021, 9, 106264.	3.3	56

#	ARTICLE	IF	CITATIONS
456	Modulating carbon growth kinetics enables electrosynthesis of graphite derived from CO ₂ via a liquid–solid process. Carbon, 2021, 184, 426-436.	5.4	17
457	Lowering Electrocatalytic CO ₂ Reduction Overpotential Using N-Annulated Perylene Diimide Rhenium Bipyridine Dyads with Variable Tether Length. Journal of the American Chemical Society, 2021, 143, 16849-16864.	6.6	15
458	Two-dimensional pyrite supported transition metal for highly-efficient electrochemical CO ₂ reduction: A theoretical screening study. Chemical Engineering Journal, 2021, 424, 130541.	6.6	31
459	High-entropy carbons: From high-entropy aromatic species to single-atom catalysts for electrocatalysis. Chemical Engineering Journal, 2021, 426, 131320.	6.6	14
460	Utilizing the charge-transfer model to design promising electrocatalysts. Current Opinion in Electrochemistry, 2021, 30, 100805.	2.5	4
461	A perspective on the electrocatalytic conversion of carbon dioxide to methanol with metallomacrocyclic catalysts. Journal of Energy Chemistry, 2022, 64, 263-275.	7.1	28
462	Directionally maximizing CO selectivity to near-unity over cupric oxide with indium species for electrochemical CO ₂ reduction. Chemical Engineering Journal, 2022, 427, 131654.	6.6	18
463	Organic terpyridine molecule as an efficient cocatalyst for metal-free CO ₂ photoreduction mediated by mesoporous graphitic carbon nitride. Chemical Engineering Journal, 2022, 429, 132348.	6.6	16
464	Single- and mixed-metal-organic framework photocatalysts for carbon dioxide reduction. Inorganic Chemistry Frontiers, 2021, 8, 3178-3204.	3.0	41
465	Carbon dioxide based methodologies for the synthesis of fine chemicals. Organic and Biomolecular Chemistry, 2021, 19, 5725-5757.	1.5	20
466	Computational study on the reactivity of imidazolium-functionalized manganese bipyridyl tricarbonyl electrocatalysts [Mn(bpyMe(Im-R))(CO) ₃ Br] ⁺ (R = Me, Me ₂) and Tj ETQq0 0 0 rgBT /Qverlock 10 Chemistry Chemical Physics, 2021, 23, 14940-14951.	1.3	6
467	Carbon-Supported Single Metal Site Catalysts for Electrochemical CO ₂ Reduction to CO and Beyond. Small, 2021, 17, e2005148.	5.2	86
468	Enabling storage and utilization of low-carbon electricity: power to formic acid. Energy and Environmental Science, 2021, 14, 1194-1246.	15.6	119
469	An industrial perspective on catalysts for low-temperature CO ₂ electrolysis. Nature Nanotechnology, 2021, 16, 118-128.	15.6	255
470	Transition Metal Complexes as Catalysts for the Electroconversion of CO ₂ : An Organometallic Perspective. Angewandte Chemie - International Edition, 2021, 60, 11628-11686.	7.2	154
472	Immobilising molecular Ru complexes on a protective ultrathin oxide layer of p-Si electrodes towards photoelectrochemical CO ₂ reduction. Dalton Transactions, 2021, 50, 10482-10492.	1.6	9
473	Electrocatalytic CO ₂ Reduction Activity Over Transition Metal Anchored on Nitrogen-Doped Carbon: A Density Functional Theory Investigation. Catalysis Letters, 2021, 151, 2547-2559.	1.4	3
474	Nickel-mediated N–N bond formation and N ₂ O liberation via nitrogen oxyanion reduction. Chemical Science, 2021, 12, 10664-10672.	3.7	8

#	ARTICLE	IF	CITATIONS
475	Hierarchical MoO ₄ ²⁻ Intercalating Γ -Co(OH) ₂ Nanosheet Assemblies: Green Synthesis and Ultrafast Reconstruction for Boosting Electrochemical Oxygen Evolution. <i>Energy & Fuels</i> , 2021, 35, 2775-2784.	2.5	13
476	Åbergangsmetallkomplexe als Katalysatoren f¼r die elektrische Umwandlung von CO ₂ â€“ eine metallorganische Perspektive. <i>Angewandte Chemie</i> , 2021, 133, 11732-11792.	1.6	24
477	Through-space Electrostatic Interactions Surpass Classical Through-bond Electronic Effects in Enhancing CO ₂ Reduction Performance of Iron Porphyrins. <i>ChemSusChem</i> , 2021, 14, 1308-1315.	3.6	20
478	Hydrogenation of CO ₂ to methanol catalyzed by a manganese pincer complex: insights into the mechanism and solvent effect. <i>Dalton Transactions</i> , 2021, 50, 7348-7355.	1.6	19
479	Recent Progress of 3d Transition Metal Single-Atom Catalysts for Electrochemical CO ₂ Reduction. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001904.	1.9	40
480	Recent advances in catalytic silylation of hydroxyl-bearing compounds: A green technique for protection of alcohols using Siâ€“O bond formations. <i>Applied Organometallic Chemistry</i> , 2021, 35, e6131.	1.7	7
481	Metalâ€“Terpyridine Complexes in Catalytic Application â€“ A Spotlight on the Last Decade. <i>ChemCatChem</i> , 2020, 12, 2890-2941.	1.8	56
482	More Than Just a Reagent: The Rise of Renewable Organohydrides for Catalytic Reduction of Carbon Dioxide. <i>ChemSusChem</i> , 2021, 14, 824-841.	3.6	13
483	Electrochemical Reduction of Carbon Dioxide to Methanol Using Metal-Organic Frameworks and Non-metal-Organic Frameworks Catalyt. <i>Environmental Chemistry for A Sustainable World</i> , 2020, , 91-131.	0.3	1
484	Non-noble metal-based molecular complexes for CO ₂ reduction: From the ligand design perspective. <i>EnergyChem</i> , 2020, 2, 100034.	10.1	76
485	(1,2-Azole)bis(bipyridyl)ruthenium(II) Complexes: Electrochemistry, Luminescent Properties, And Electro- And Photocatalysts for CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2021, 60, 692-704.	1.9	13
486	An Iron Pyridyl-Carbene Electrocatalyst for Low Overpotential CO ₂ Reduction to CO. <i>ACS Catalysis</i> , 2021, 11, 615-626.	5.5	38
487	Elucidation of Cooperativity in CO ₂ Reduction Using a Xanthene-Bridged Bimetallic Rhenium(I) Complex. <i>ACS Catalysis</i> , 2021, 11, 390-403.	5.5	18
488	Electrochemistry under Flow Conditions. <i>RSC Green Chemistry</i> , 2019, , 153-198.	0.0	4
489	A dinuclear porphyrin-macrocycle as efficient catalyst for the hydrogen evolution reaction. <i>Chemical Communications</i> , 2020, 56, 14179-14182.	2.2	18
490	Graphene-supported single-atom catalysts and applications in electrocatalysis. <i>Nanotechnology</i> , 2021, 32, 032001.	1.3	33
491	<i>fac</i> -Bromido/chlorido(0.50/0.50)[3-carbamoyl-1-(1,10-phenanthrolin-2-ylmethyl)pyridinium- Γ ²⁺ <i>N</i> , <i>N'</i> , <i>N''</i> -tricarbonylmanganese(I) 0.49-bromide 0.51-chloride methanol monosolvate. <i>IUCrData</i> , 2019, 4, .	0.1	1
492	Standard Electrode Potentials for Electrochemical Hydrogen Production, Carbon Dioxide Reduction, and Oxygen Reduction Reactions in <i>N,N</i> -Dimethylacetamide. <i>Chemistry Letters</i> , 2020, 49, 915-917.	0.7	5

#	ARTICLE	IF	CITATIONS
493	Carbonic anhydrase/formate dehydrogenase bienzymatic system for CO ₂ capture, utilization and storage. Reaction Chemistry and Engineering, 2021, 7, 181-191.	1.9	11
494	Transport in heterogeneous catalysis – Beyond reactant diffusion limitations. Journal of Catalysis, 2021, 404, 679-686.	3.1	4
495	Mediated Inner-Sphere Electron Transfer Induces Homogeneous Reduction of CO ₂ via Through-Space Electronic Conjugation**. Angewandte Chemie, 2022, 134, .	1.6	4
496	Computational Study for CO ₂ -to-CO Conversion over Proton Reduction Using [Re(bpyMe(Im-R))(CO) ₃ Cl] ⁺ (R = Me, Me ₂ , and Me ₄) Electrocatalysts and Comparison with Manganese Analogues. ACS Catalysis, 2021, 11, 12989-13000.	5.5	5
497	Mediated Inner-Sphere Electron Transfer Induces Homogeneous Reduction of CO ₂ via Through-Space Electronic Conjugation. Angewandte Chemie - International Edition, 2021, , .	7.2	16
498	Defective Bimetallic Selenides for Selective CO ₂ Electroreduction to CO. Advanced Materials, 2022, 34, e2106354.	11.1	43
499	Single Nickel Atom-Modified Phosphorene Nanosheets for Electrocatalytic CO ₂ Reduction. ACS Applied Nano Materials, 2021, 4, 11017-11030.	2.4	24
500	Boosting CO ₂ Electroreduction via Construction of a Stable ZnS/ZnO Interface. ACS Applied Materials & Interfaces, 2022, 14, 20368-20374.	4.0	18
501	Thermocatalytic Hydrogen Production Through Decomposition of Methane-A Review. Frontiers in Chemistry, 2021, 9, 736801.	1.8	20
502	A review on the state-of-the-art advances for CO ₂ electro-chemical reduction using metal complex molecular catalysts. Eclética Química, 2019, 44, 11.	0.2	6
503	Amyloid-Like Nanofibrillation of Metal-Organic Complex Arrays Ruled by Their Precisely Designed Metal Sequences. Chemistry - an Asian Journal, 2020, 15, 766-769.	1.7	2
504	Implications of Surface Strain for Enhanced Carbon Dioxide Reduction on Copper-Silver Alloys. Journal of the Electrochemical Society, 2020, 167, 126509.	1.3	3
505	Di(Thioether Sulfonate)-Substituted Quinolinodione as a Rapidly Dissoluble and Stable Electron Mediator and Its Application in Sensitive Biosensors. Advanced Healthcare Materials, 2021, , 2101819.	3.9	3
506	Covalent Organic Framework (COF)-Based Hybrids for Electrocatalysis: Recent Advances and Perspectives. Small Methods, 2021, 5, e2100945.	4.6	36
507	Maximizing Electroactive Sites in a Three-Dimensional Covalent Organic Framework for Significantly Improved Carbon Dioxide Reduction Electrocatalysis. Angewandte Chemie - International Edition, 2022, 61, .	7.2	83
508	Maximizing Electroactive Sites in a Three-Dimensional Covalent Organic Framework for Significantly Improved Carbon Dioxide Reduction Electrocatalysis. Angewandte Chemie, 0, , .	1.6	30
509	Catalysis by Oxometalates and Their Microheterogeneous Media. RSC Catalysis Series, 2020, , 165-204.	0.1	2
510	Selective Reduction of CO ₂ to a Tantalum Formate Complex and Release of Methyl Formate from the Tantalum(V) Center. Inorganic Chemistry, 2021, 60, 18291-18295.	1.9	2

#	ARTICLE	IF	CITATIONS
511	Development of Catalytic Reduction of Renewable Carbon Resources Using Well-Elaborated Organometallic Complexes with PNNP Tetradentate Ligands. <i>Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry</i> , 2020, 78, 856-866.	0.0	2
512	Iron Sulphur Cluster [Fe ₄ S ₄ (SPh) ₄] ²⁺ Catalyzed Electrochemical Reduction of CO ₂ on Carbon Electrodes in [Bu ₄ N][BF ₄]-DMF Mixture. <i>Current Analytical Chemistry</i> , 2020, 16, 854-862.	0.6	0
513	Mechanistic understanding and design of non-noble metal-based single-atom catalysts supported on two-dimensional materials for CO ₂ electroreduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5813-5834.	5.2	28
514	Cobalt-N ₄ macrocyclic complexes for heterogeneous electrocatalysis of the CO ₂ reduction reaction. <i>Chinese Journal of Catalysis</i> , 2022, 43, 104-109.	6.9	12
515	Effects of Protonation State on Electrocatalytic CO ₂ Reduction by a Cobalt Aminopyridine Macrocyclic Complex. <i>Inorganic Chemistry</i> , 2021, 60, 17517-17528.	1.9	5
516	Tetrazole-Substituted isomeric ruthenium polypyridyl complexes for low overpotential electrocatalytic CO ₂ reduction. <i>Journal of Catalysis</i> , 2022, 405, 15-23.	3.1	7
517	Promoting Selective Generation of Formic Acid from CO ₂ Using Mn(bpy)(CO) ₃ Br as Electrocatalyst and Triethylamine/Isopropanol as Additives. <i>Journal of the American Chemical Society</i> , 2021, 143, 20491-20500.	6.6	24
518	Mechanistic Study of Tungsten Bipyridyl Tetracarbonyl Electrocatalysts for CO ₂ Fixation: Exploring the Roles of Explicit Proton Sources and Substituent Effects. <i>Topics in Catalysis</i> , 2022, 65, 325-340.	1.3	4
519	Molecular Transition Metal Oxide Electrocatalysts for the Reversible Carbon Dioxide→Carbon Monoxide Transformation. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	15
520	Advances on the Merger of Electrochemistry and Transition Metal Catalysis for Organic Synthesis. <i>Chemical Reviews</i> , 2022, 122, 3180-3218.	23.0	173
521	Local Environment Determined Reactant Adsorption Configuration for Enhanced Electrocatalytic Acetone Hydrogenation to Propane. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	26
522	Basicity as a Thermodynamic Descriptor of Carbanions Reactivity with Carbon Dioxide: Application to the Carboxylation of α,β -Unsaturated Ketones. <i>Frontiers in Chemistry</i> , 2021, 9, 783993.	1.8	2
523	Molecular Transition Metal Oxide Electrocatalysts for the Reversible Carbon Dioxide→Carbon Monoxide Transformation. <i>Angewandte Chemie</i> , 0, , .	1.6	0
524	Local Environment Determined Reactant Adsorption Configuration for Enhanced Electrocatalytic Acetone Hydrogenation to Propane. <i>Angewandte Chemie</i> , 0, , .	1.6	4
525	Elucidation of the Roles of Ionic Liquid in CO ₂ Electrochemical Reduction to Value-Added Chemicals and Fuels. <i>Molecules</i> , 2021, 26, 6962.	1.7	11
526	Integrated Sn/CNT@N C hierarchical porous gas diffusion electrode by phase inversion for electrocatalytic reduction of CO ₂ . <i>Electrochimica Acta</i> , 2022, 403, 139584.	2.6	6
527	Systematic Variation of 3d Metal Centers in a Redox-Innocent Ligand Environment: Structures, Electrochemical Properties, and Carbon Dioxide Activation. <i>Inorganic Chemistry</i> , 2021, , .	1.9	5
528	Carbonyl and Isocyanide Complexes of Manganese. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
529	Copper(II) tetrakis(pentafluorophenyl)porphyrin: highly active copper-based molecular catalysts for electrochemical CO ₂ reduction. <i>Chemical Communications</i> , 2022, 58, 2975-2978.	2.2	8
530	Promoting photocatalytic CO ₂ reduction through facile electronic modification of N-annulated perylene diimide rhenium bipyridine dyads. <i>Chemical Science</i> , 2022, 13, 1049-1059.	3.7	10
531	Heterocyclic and Mesoionic Carbenes of Manganese and Rhenium in Catalysis. <i>European Journal of Inorganic Chemistry</i> , 2022, 2022, .	1.0	15
532	Revisiting the Fundamental Nature of Metal-Ligand Bonding: An Impartial and Automated Fitting Procedure for Angular Overlap Model Parameters. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	7
533	Electrocatalysis enabled transformation of earth-abundant water, nitrogen and carbon dioxide for a sustainable future. <i>Materials Advances</i> , 2022, 3, 1359-1400.	2.6	17
534	Cu ₂ O nano-flowers/graphene enabled scaffolding structure catalyst layer for enhanced CO ₂ electrochemical reduction. <i>Applied Catalysis B: Environmental</i> , 2022, 305, 121022.	10.8	29
535	Switching Catalyst Selectivity via the Introduction of a Pendant Nitrophenyl Group. <i>Inorganic Chemistry</i> , 2022, 61, 1316-1326.	1.9	5
537	Electrochemical CO ₂ Reduction Catalyzed by Binuclear LRe ₂ (CO) ₆ Cl ₂ and LMn ₂ (CO) ₆ Br ₂ Complexes with an Internal Proton Source. <i>Accounts of Chemical Research</i> , 2022, .	7.6	7
538	Dissection of Light-Induced Charge Accumulation at a Highly Active Iron Porphyrin: Insights in the Photocatalytic CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	27
539	CO ₂ Electrolysis System under Industrially Relevant Conditions. <i>Accounts of Chemical Research</i> , 2022, 55, 231-240.	7.6	45
540	Dissection of Light-Induced Charge Accumulation at a Highly Active Iron Porphyrin: Insights in the Photocatalytic CO ₂ Reduction. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	9
541	Outer-coordination sphere in multi-H ⁺ /multi-e ⁻ molecular electrocatalysis. <i>IScience</i> , 2022, 25, 103628.	1.9	8
543	Highly selective and efficient electroreduction of CO ₂ in water by quaterpyridine derivative-based molecular catalyst noncovalently tethered to carbon nanotubes. <i>SmartMat</i> , 2022, 3, 151-162.	6.4	12
544	Hydroxy-Group-Functionalized Single Crystal of Copper(II)-Porphyrin Complex for Electroreduction CO ₂ to CH ₄ . <i>ChemSusChem</i> , 2022, .	3.6	3
545	Selectivity in Electrochemical CO ₂ Reduction. <i>Accounts of Chemical Research</i> , 2022, 55, 134-144.	7.6	152
546	Heteroatom-Doped Metal-Free Carbon Nanomaterials as Potential Electrocatalysts. <i>Molecules</i> , 2022, 27, 670.	1.7	18
547	Synthesis and Electrocatalytic CO ₂ Reduction Activity of an Iron Porphyrin Complex Bearing a Hydroquinone Moiety. <i>Chemistry Letters</i> , 2022, 51, 224-226.	0.7	3
548	Group 6 transition metal-based molecular complexes for sustainable catalytic CO ₂ activation. <i>Catalysis Science and Technology</i> , 2022, 12, 390-408.	2.1	8

#	ARTICLE	IF	CITATIONS
549	Electrochemical Ring-Opening Dicarboxylation of Strained Carbon–Carbon Single Bonds with CO ₂ : Facile Synthesis of Diacids and Derivatization into Polyesters. <i>Journal of the American Chemical Society</i> , 2022, 144, 2062-2068.	6.6	75
550	Recent progress in CO ₂ reduction using bimetallic electrodes containing copper. <i>Electrochemistry Communications</i> , 2022, 135, 107212.	2.3	20
551	Mo- and W-molecular catalysts for the H ₂ evolution, CO ₂ reduction and N ₂ fixation. <i>Coordination Chemistry Reviews</i> , 2022, 457, 214400.	9.5	6
552	Recent advances in electrocatalytic CO ₂ reduction with molecular complexes. <i>Advances in Inorganic Chemistry</i> , 2022, , 301-353.	0.4	2
553	Nickel-catalyzed electrochemical carboxylation of unactivated aryl and alkyl halides with CO ₂ . <i>Nature Communications</i> , 2021, 12, 7086.	5.8	71
554	Strategies for breaking molecular scaling relationships for the electrochemical CO ₂ reduction reaction. <i>Dalton Transactions</i> , 2022, 51, 6993-7010.	1.6	14
555	<i>Operando</i> monitoring of mechanisms and deactivation of molecular catalysts. <i>Green Chemistry</i> , 2022, 24, 1951-1972.	4.6	13
556	Electrochemical activation of CO ₂ by MOF-(Fe, Ni, Mn) derivatives of 5-aminoisophthalic acid and the thiazole group influence on its catalytic activity. <i>New Journal of Chemistry</i> , 2022, 46, 6060-6067.	1.4	1
557	Visible-light-driven reduction of CO ₂ to CO in fully aqueous media using a water-soluble cobalt porphyrin. <i>Sustainable Energy and Fuels</i> , 2022, 6, 2160-2164.	2.5	9
558	Electrochemistry in Organometallic Chemistry. , 2022, , .		0
559	Controllable dispersion of cobalt phthalocyanine molecules on graphene oxide for enhanced electrocatalytic reduction of CO ₂ to CO. <i>New Journal of Chemistry</i> , 2022, 46, 7153-7160.	1.4	11
560	Electrocatalytic production of formaldehyde with formaldehyde dehydrogenase using a viologen redox mediator. <i>New Journal of Chemistry</i> , 2022, 46, 10004-10011.	1.4	2
561	Multifaceted Role of the Noninnocent Mabiq Ligand in Promoting Selective Reduction of CO ₂ to CO. <i>ACS Catalysis</i> , 2022, 12, 3046-3057.	5.5	3
562	Biomimetic Metal-Free Hydride Donor Catalysts for CO ₂ Reduction. <i>Accounts of Chemical Research</i> , 2022, 55, 844-856.	7.6	13
563	Electrochemical conversion of CO ₂ in non-conventional electrolytes: Recent achievements and future challenges. <i>Electrochemical Science Advances</i> , 2023, 3, .	1.2	8
564	Revisiting Reduction of CO ₂ to Oxalate with First-Row Transition Metals: Irreproducibility, Ambiguous Analysis, and Conflicting Reactivity. <i>Jacs Au</i> , 2022, 2, 731-744.	3.6	11
565	Review of photocatalytic and photo-electrocatalytic reduction of CO ₂ on carbon supported films. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 30908-30936.	3.8	16
566	Towards single-atom photocatalysts for future carbon-neutral application. <i>SmartMat</i> , 2022, 3, 417-446.	6.4	35

#	ARTICLE	IF	CITATIONS
567	Manganese Carbonyl Complexes as Selective Electrocatalysts for CO ₂ Reduction in Water and Organic Solvents. <i>Accounts of Chemical Research</i> , 2022, 55, 955-965.	7.6	17
568	Molecular Catalysts for the Reductive Homocoupling of CO ₂ towards C ₂₊ Compounds. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	7
569	Designing Sites in Heterogeneous Catalysis: Are We Reaching Selectivities Competitive With Those of Homogeneous Catalysts?. <i>Chemical Reviews</i> , 2022, 122, 8594-8757.	23.0	118
570	Molecular Catalysts for the Reductive Homocoupling of CO ₂ towards C ₂₊ Compounds. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	38
571	An electrochromic coordination nanosheet for robust CO ₂ photoreduction via ligand-based electron transfer. <i>Nano Research</i> , 2022, 15, 5902-5911.	5.8	9
572	Unprecedented Electroreduction of CO ₂ over Metal Organic Framework-Derived Intermetallic Nano-Alloy Cu _{0.85} Ni _{0.15} /C. <i>ACS Applied Energy Materials</i> , 2022, 5, 4945-4955.	2.5	20
573	Electrocatalytic CO ₂ Reduction: from Discrete Molecular Catalysts to Their Integrated Catalytic Materials. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	25
574	Electrocatalytic CO ₂ Reduction by Molecular Ruthenium Complexes with Polypyridyl Ligands. <i>Chemistry - an Asian Journal</i> , 2022, , .	1.7	3
575	Electrochemical CO ₂ conversion to fuels on metal-free N-doped carbon-based materials: functionalities, mechanistic, and techno-economic aspects. <i>Materials Today Chemistry</i> , 2022, 24, 100838.	1.7	5
576	Toward an Understanding of the Reversible Li-CO ₂ Batteries over Metal- ^{IV} -Functionalized Graphene Electrocatalysts. <i>ACS Nano</i> , 2022, 16, 1523-1532.	7.3	52
577	Substituents and Cocatalyst Effect on the Catalytic Response and Overpotential of Re(I) Catalysts for CO ₂ Reduction. <i>ACS Applied Energy Materials</i> , 2021, 4, 13725-13734.	2.5	5
578	Stable and Exclusive Formation of CO from CO ₂ Photoreduction with H ₂ O Facilitated by Linear Fluorene and Naphthalene Diimide-Based Conjugated Polymers. <i>ACS Applied Polymer Materials</i> , 2022, 4, 521-526.	2.0	5
579	An Iron Bis(carbene) Catalyst for Low Overpotential CO ₂ Electroreduction to CO: Mechanistic Insights from Kinetic Zone Diagrams, Spectroscopy, and Theory. <i>ACS Catalysis</i> , 2021, 11, 15212-15222.	5.5	9
580	A theoretical approach for homogeneous CO ₂ reduction by Ni(cyclam): substituents with intra-molecular hydrogen transfer. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 2691-2696.	3.0	3
581	Immobilized Molecular Catalysts for CO ₂ Photoreduction. <i>Advanced Sustainable Systems</i> , 2022, 6, .	2.7	15
582	Atomic- and Molecular-Level Modulation of Dispersed Active Sites for Electrocatalytic CO ₂ Reduction. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	2
583	Electrochemical CO ₂ Reduction Catalyzed by Copper Molecular Complexes: The Influence of Ligand Structure. <i>Energy & Fuels</i> , 2022, 36, 4653-4676.	2.5	19
584	Metal Oxide Based Photoelectrodes in Photoelectrocatalysis: Advances and Challenges. <i>ChemPlusChem</i> , 2022, 87, e202200097.	1.3	11

#	ARTICLE	IF	CITATIONS
588	Deciphering Distinct Overpotential-Dependent Pathways for Electrochemical CO ₂ Reduction Catalyzed by an Iron-Terpyridine Complex. <i>Inorganic Chemistry</i> , 2022, 61, 6919-6933.	1.9	10
589	Mediated Electron Transfer in Electrosynthesis: Concepts, Applications, and Recent Influences from Photoredox Catalysis. <i>RSC Green Chemistry</i> , 2022, , 119-153.	0.0	1
590	Squalene-polyethyleneimine dynamic constitutional frameworks enhancing the enzymatic activity of carbonic anhydrase. <i>Catalysis Science and Technology</i> , 2022, 12, 3094-3101.	2.1	5
591	Recent progress of Bi-based electrocatalysts for electrocatalytic CO ₂ reduction. <i>Nanoscale</i> , 2022, 14, 7957-7973.	2.8	35
592	Recent progress in cathodic reduction-enabled organic electrosynthesis: Trends, challenges, and opportunities. <i>EScience</i> , 2022, 2, 243-277.	25.0	67
593	Water coordinated on Cu(I)-based catalysts is the oxygen source in CO ₂ reduction to CO. <i>Nature Communications</i> , 2022, 13, 2577.	5.8	5
594	Electrochemical reduction of CO ₂ at the earth-abundant transition metal-oxides/copper interfaces. <i>Catalysis Today</i> , 2023, 409, 53-62.	2.2	7
595	Spherical shell CdS@NiO Z-scheme composites for solar-driven overall water splitting and carbon dioxide reduction. <i>Materials Today Energy</i> , 2022, 27, 101044.	2.5	5
596	CO ₂ electrocatalytic reduction on Cu nanoparticles loaded on nitrogen-doped carbon. <i>Journal of Electroanalytical Chemistry</i> , 2022, 915, 116353.	1.9	4
598	Electrocatalytic reduction of CO ₂ in water by a C-functionalized Ni-cyclam complex grafted onto carbon. <i>Chemical Communications</i> , 0, , .	2.2	3
599	Covalent organic frameworks based on tetraphenyl- <i>p</i> -phenylenediamine and metalloporphyrin for electrochemical conversion of CO ₂ to CO. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3217-3223.	3.0	11
600	Development of catalysts and electrolyzers toward industrial-scale CO ₂ electroreduction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 19254-19277.	5.2	18
601	Performance Characteristics of Polymer Electrolyte Membrane CO ₂ Electrolyzer: Effect of CO ₂ Dilution, Flow Rate and Pressure. <i>Journal of the Electrochemical Society</i> , 2022, 169, 064510.	1.3	2
602	Porphyrins and phthalocyanines as biomimetic tools for photocatalytic H ₂ production and CO ₂ reduction. <i>Chemical Society Reviews</i> , 2022, 51, 6965-7045.	18.7	116
604	CO ₂ Reduction Using Molecular Photocatalysts. <i>Springer Handbooks</i> , 2022, , 1429-1452.	0.3	1
605	Layered double hydroxide (LDH) nanomaterials with engineering aspects for photocatalytic CO ₂ conversion to energy efficient fuels: Fundamentals, recent advances, and challenges. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 108151.	3.3	20
606	Electrochemical and light-driven CO ₂ reduction by amine-functionalized rhenium catalysts: A comparison between primary and tertiary amine substitutions. <i>Polyhedron</i> , 2022, 224, 115976.	1.0	2
607	Towards sustainable CO ₂ electrochemical transformation via coupling design strategy. <i>Materials Today Sustainability</i> , 2022, 19, 100179.	1.9	8

#	ARTICLE	IF	CITATIONS
608	Designing Self-Assembled Dye-Redox Shuttle Systems via Interfacial π -Stacking in Dye-Sensitized Solar Cells for Enhanced Low Light Power Conversion. <i>Energy & Fuels</i> , 0, , .	2.5	0
609	Bioinspired iron porphyrins with appended poly-pyridine/amine units for boosted electrocatalytic CO ₂ reduction reaction. <i>EScience</i> , 2022, 2, 623-631.	25.0	23
610	Templating Bicarbonate in the Second Coordination Sphere Enhances Electrochemical CO ₂ Reduction Catalyzed by Iron Porphyrins. <i>Journal of the American Chemical Society</i> , 2022, 144, 11656-11663.	6.6	45
611	Fully exposed nickel clusters with electron-rich centers for high-performance electrocatalytic CO ₂ reduction to CO. <i>Science Bulletin</i> , 2022, 67, 1477-1485.	4.3	13
612	Organic deliquescence: organic vapor-induced dissolution of molecular salts. <i>RSC Advances</i> , 2022, 12, 18307-18310.	1.7	2
613	Electronic structure analysis of electrochemical CO ₂ reduction by iron-porphyrins reveals basic requirements for design of catalysts bearing non-innocent ligands. <i>Chemical Science</i> , 2022, 13, 10029-10047.	3.7	15
614	Importance of steric bulkiness of iridium photocatalysts with PNNP tetradentate ligands for CO ₂ reduction. <i>Chemical Communications</i> , 2022, 58, 9218-9221.	2.2	7
615	Carbon dioxide electroreduction into formic acid and ethylene: a review. <i>Environmental Chemistry Letters</i> , 2022, 20, 3555-3612.	8.3	17
616	Exploring the Electrochemistry of Iron Dithiolene and Its Potential for Electrochemical Homogeneous Carbon Dioxide Reduction. <i>ChemElectroChem</i> , 2022, 9, .	1.7	1
617	Role of Specialized Division of Labor in CO ₂ Reduction with Doubly Functionalized Iron Porphyrin Atropisomers. <i>Angewandte Chemie</i> , 0, , .	1.6	1
618	Electroreduction of Carbonyl Compounds Catalyzed by a Manganese Complex. <i>ACS Catalysis</i> , 2022, 12, 8632-8640.	5.5	9
619	Role of Specialized Division of Labor in CO ₂ Reduction with Doubly Functionalized Iron Porphyrin Atropisomers. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	23
620	Introducing a Synergistic Ligand Containing an Exotic Metal in Metal-Organic Framework Nanoarrays Enabling Superior Electrocatalytic Water Oxidation Performance. <i>Inorganic Chemistry</i> , 0, , .	1.9	2
621	Synthesis, characterization, structural and photophysical properties of heteroleptic ruthenium complexes containing 2-(1H-benzo[d]imidazol-2-yl)quinoline ligand towards electrocatalytic CO ₂ reduction. <i>Journal of Chemical Sciences</i> , 2022, 134, .	0.7	0
622	Molecular Engineering of Metal Complexes for Electrocatalytic Carbon Dioxide Reduction: From Adjustment of Intrinsic Activity to Molecular Immobilization. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	26
623	Cu-Based Organic-Inorganic Composite Materials for Electrochemical CO ₂ Reduction. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	12
624	First-principles studies of monolayers MoSi ₂ N ₄ decorated with transition metal single-atom for visible light-driven high-efficient CO ₂ reduction by strain and electronic engineering. <i>Chemical Engineering Journal</i> , 2022, 450, 138198.	6.6	11
625	Multifunctional Charge and Hydrogen-Bond Effects of Second-Sphere Imidazolium Pendants Promote Capture and Electrochemical Reduction of CO ₂ in Water Catalyzed by Iron Porphyrins**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	20

#	ARTICLE	IF	CITATIONS
626	Electrocatalytic metal hydride generation using CPET mediators. <i>Nature</i> , 2022, 607, 499-506.	13.7	45
627	Extractive desulfurization of fuels using modified ionic liquids with magnetic graphene oxide from refused dry cell batteries. <i>Fuel</i> , 2022, 328, 125353.	3.4	2
628	Solar energy-driven electrolysis with molecular catalysts for the reduction of carbon dioxide coupled with the oxidation of 5-hydroxymethylfurfural. <i>Catalysis Science and Technology</i> , 2022, 12, 5495-5500.	2.1	14
629	Recent progress of electrochemical reduction of CO ₂ by single atom catalysts. <i>Materials Reports Energy</i> , 2022, 2, 100140.	1.7	2
630	Spatial Organization of Photocatalysts and Enzymes on Janus-Type DNA Nanosheets for Efficient CO ₂ Conversion. <i>ACS Catalysis</i> , 2022, 12, 9698-9705.	5.5	4
631	Molecular Engineering of Metal Complexes for Electrocatalytic Carbon Dioxide Reduction: From Adjustment of Intrinsic Activity to Molecular Immobilization. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	3
632	CO ₂ Electroreduction in Organic Aprotic Solvents: A Mini Review. <i>Journal of Chemistry</i> , 2022, 2022, 1-12.	0.9	8
633	Porously Reduced 2-Dimensional Bi ₂ O ₂ CO ₃ Petals for Strain-Mediated Electrochemical CO ₂ Reduction to HCOOH. <i>Energy and Environmental Materials</i> , 2024, 7, .	7.3	4
634	Development of electrochemical reactors for CO ₂ electroreduction – the viability of an electrochemical CO ₂ plant in Brazil. <i>Progress in Energy</i> , 0, .	4.6	0
635	Atomically Thin, Ionic-Covalent Organic Nanosheets for Stable, High-Performance Carbon Dioxide Electroreduction. <i>Advanced Materials</i> , 2022, 34, .	11.1	27
636	Insight Into Heterogeneous Electrocatalyst Design Understanding for the Reduction of Carbon Dioxide. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	24
637	Multifunctional Charge and Hydrogen-Bond Effects of Second-Sphere Imidazolium Pendants Promote Capture and Electrochemical Reduction of CO ₂ in Water Catalyzed by Iron Porphyrins**. <i>Angewandte Chemie</i> , 0, .	1.6	5
638	Temperature, pressure, and adsorption-dependent redox potentials: I. Processes of CO ₂ reduction to value-added compounds. <i>Energy Science and Engineering</i> , 2022, 10, 4520-4543.	1.9	3
639	Homogeneous catalysts for CO ₂ hydrogenation to methanol and methanol dehydrogenation to hydrogen generation. <i>Coordination Chemistry Reviews</i> , 2022, 472, 214767.	9.5	19
640	Recent Advances in Carbon Dioxide Adsorption, Activation and Hydrogenation to Methanol using Transition Metal Carbides. <i>ChemSusChem</i> , 2022, 15, .	3.6	8
641	Formate complexes of tri- and tetravalent titanium supported by a tris(phenolato)amine ligand. <i>Dalton Transactions</i> , 2022, 51, 14345-14351.	1.6	1
642	Nanomaterials and hybrid nanocomposites for CO ₂ capture and utilization: environmental and energy sustainability. <i>RSC Advances</i> , 2022, 12, 23869-23888.	1.7	90
643	Tandem electrocatalytic N ₂ fixation via proton-coupled electron transfer. <i>Nature</i> , 2022, 609, 71-76.	13.7	82

#	ARTICLE	IF	CITATIONS
644	Recent progress in electrochemical reduction of carbon monoxide toward multi-carbon products. <i>Materials Today</i> , 2022, 59, 182-199.	8.3	22
645	Cobalt Phthalocyanine Cross-Linked Polypyrrole for Efficient Electroreduction of Low Concentration CO ₂ To CO. <i>ChemSusChem</i> , 2022, 15, .	3.6	8
646	Facile Deoxygenative Reduction of a Bridging Carbonato Ligand with Silyl and Boryl 4,4'-Bipyridinylidene Reagents. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2023, 649, .	0.6	0
647	Polymeric Carbon Nitride-based Single Atom Photocatalysts for CO ₂ Reduction to C1 Products. <i>Chemical Research in Chinese Universities</i> , 2022, 38, 1197-1206.	1.3	7
648	In situ/operando X-ray spectroscopy applied to electrocatalytic CO ₂ reduction: Status and perspectives. <i>Current Opinion in Colloid and Interface Science</i> , 2022, 61, 101635.	3.4	7
649	A general descriptor for guiding the electrolysis of CO ₂ in molten carbonate. <i>Green Energy and Environment</i> , 2024, 9, 748-757.	4.7	4
650	Transient Stabilization Effect of CO ₂ in the Electrochemical Hydrogenation of Azo Compounds and the Reductive Coupling of α -Ketoesters. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
651	Transient Stabilization Effect of CO ₂ in the Electrochemical Hydrogenation of Azo Compounds and the Reductive Coupling of α -Ketoesters. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	11
652	Accessing and Photo-Accelerating Low-Overpotential Pathways for CO ₂ Reduction: A Bis-Carbene Ruthenium Terpyridine Catalyst. <i>ACS Catalysis</i> , 2022, 12, 12596-12606.	5.5	3
653	Acetoacetate Production from CO ₂ and Acetone with Acetone Carboxylase from Photosynthetic Bacteria <i>Rhodobacter Capsulatus</i> . <i>Catalysis Surveys From Asia</i> , 2023, 27, 67-74.	1.0	1
654	Elucidating the mechanism of photochemical CO ₂ reduction to CO using a cyanide-bridged di-manganese complex. <i>Dalton Transactions</i> , 0, , .	1.6	3
655	A redox-active Mn(0) dicarbene metalloradical. <i>Chemical Communications</i> , 2022, 58, 12963-12966.	2.2	8
656	Host-guest tuning of the CO ₂ reduction activity of an iron porphyrin cage. <i>Natural Sciences</i> , 2023, 3, .	1.0	3
657	Homogeneous Electrocatalytic Reduction of CO ₂ by a CrN ₃ O Complex: Electronic Coupling with a Redox-Active Terpyridine Fragment Favors Selectivity for CO. <i>Inorganic Chemistry</i> , 2022, 61, 16963-16970.	1.9	5
658	Electrochemical Reduction of Carbon Dioxide: Recent Advances on Au-Based Nanocatalysts. <i>Catalysts</i> , 2022, 12, 1348.	1.6	14
659	Advanced electrochemical energy storage and conversion on graphdiyne interface. , 2022, 1, e9120036.		24
660	Metal-organic framework derived single-atom catalysts for electrochemical CO ₂ reduction. <i>RSC Advances</i> , 2022, 12, 32518-32525.	1.7	9
661	Carbon conversion: opportunities in chemical productions. , 2023, , 479-524.		0

#	ARTICLE	IF	CITATIONS
662	Bioinspired and Bioderived Aqueous Electrocatalysis. <i>Chemical Reviews</i> , 2023, 123, 2311-2348.	23.0	22
663	Advanced In Situ Characterization Techniques for Direct Observation of Gas-Involved Electrochemical Reactions. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	8
664	CO ₂ Electroreduction on Carbon-Based Electrodes Functionalized with Molecular Organometallic Complexes—A Mini Review. <i>Catalysts</i> , 2022, 12, 1448.	1.6	2
665	Potential- and Buffer-Dependent Selectivity for the Conversion of CO ₂ to CO by a Cobalt Porphyrin-Peptide Electrocatalyst in Water. <i>ACS Catalysis</i> , 2022, 12, 14689-14697.	5.5	3
666	Electrocatalytic CO ₂ reduction with a binuclear bis-terpyridine pyrazole-bridged cobalt complex. <i>Chemistry - A European Journal</i> , 0, , .	1.7	2
667	Iron porphyrin with appended guanidyl group for significantly improved electrocatalytic carbon dioxide reduction activity and selectivity in aqueous solutions. <i>Chinese Journal of Catalysis</i> , 2022, 43, 3089-3094.	6.9	5
668	Comprehensive Review for an Efficient Charge Transfer in Single Atomic Site Catalyst/Organic Polymers toward Photocatalytic CO ₂ Reduction. <i>Advanced Materials Interfaces</i> , 2023, 10, .	1.9	8
669	Translating aqueous CO ₂ hydrogenation activity to electrocatalytic reduction with a homogeneous cobalt catalyst. <i>Chemical Communications</i> , 2023, 59, 338-341.	2.2	1
670	Multiple C–C bond formation upon electrocatalytic reduction of CO ₂ by an iron-based molecular macrocycle. <i>Chemical Science</i> , 2023, 14, 550-556.	3.7	4
671	Electrocatalytic hydrogen evolution reaction by a Ni(N ₂ O ₂) complex based on 2,2'-bipyridine. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 972-978.	3.0	2
672	Molecular catalysts design: Intramolecular supporting site assisting to metal center for efficient CO ₂ photo- and electroreduction. <i>Molecular Catalysis</i> , 2023, 535, 112884.	1.0	2
673	Tunable trimetallic TM-NiFe catalysts for enhancing the products selectivity of CO ₂ electroreduction. <i>Fuel</i> , 2023, 335, 127026.	3.4	3
674	Electrochemical CO ₂ Reduction. <i>RSC Green Chemistry</i> , 2022, , 362-387.	0.0	0
675	Photocatalytic Reduction of CO ₂ to CO Using Manganese Complexes with Bipyridine Modified Electron-Donating Groups. <i>Catalysis Letters</i> , 0, , .	1.4	1
676	Synergistic Porosity and Charge Effects in a Supramolecular Porphyrin Cage Promote Efficient Photocatalytic CO ₂ Reduction**. <i>Angewandte Chemie</i> , 0, , .	1.6	0
677	Surface Immobilization of a Re(I) Tricarbonyl Phenanthroline Complex to Si(111) through Sonochemical Hydrosilylation. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 984-996.	4.0	4
678	Analyzing Structure–Activity Variations for Mn–Carbonyl Complexes in the Reduction of CO ₂ to CO. <i>Inorganic Chemistry</i> , 2023, 62, 318-335.	1.9	3
679	Time-Resolved Monitoring of Electrochemical Reactions Using In Situ Stimulated Raman Spectroscopy. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 13-17.	3.2	2

#	ARTICLE	IF	CITATIONS
680	Electric Double Layer Structure in Electrocatalytic Carbon Dioxide Reduction. <i>Advanced Energy and Sustainability Research</i> , 2023, 4, .	2.8	7
681	Synergistic Porosity and Charge Effects in a Supramolecular Porphyrin Cage Promote Efficient Photocatalytic CO ₂ Reduction*. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	15
682	Bio-Inspired Bimetallic Cooperativity Through a Hydrogen Bonding Spacer in CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	17
683	Surface ligand engineering on metal nanocatalysts for electrocatalytic CO ₂ reduction. <i>Materials Reports Energy</i> , 2023, 3, 100172.	1.7	0
684	Improved Itaconate Production with <i>Ustilago cynodontis</i> via Co-Metabolism of CO ₂ -Derived Formate. <i>Journal of Fungi</i> (Basel, Switzerland), 2022, 8, 1277.	1.5	1
685	Bio-Inspired Bimetallic Cooperativity Through a Hydrogen Bonding Spacer in CO ₂ Reduction. <i>Angewandte Chemie</i> , 0, , .	1.6	0
686	Can the CO ₂ Reduction Reaction Be Improved on Cu: Selectivity and Intrinsic Activity of Functionalized Cu Surfaces. <i>ACS Catalysis</i> , 2022, 12, 15737-15749.	5.5	17
687	Atomic design of bidirectional electrocatalysts for reversible Li-CO ₂ batteries. <i>Materials Today</i> , 2023, 63, 120-136.	8.3	9
688	Metal and metal oxide electrocatalysts for the electrochemical reduction of CO ₂ to C ₁ chemicals: are we there yet?. <i>Green Chemistry Letters and Reviews</i> , 2023, 16, .	2.1	10
689	Bimetal Cu and Fe modified g-C ₃ N ₄ sheets grown on carbon skeleton for efficient and selective photocatalytic reduction of CO ₂ to CO. <i>Journal of Environmental Chemical Engineering</i> , 2023, 11, 109319.	3.3	5
690	CO ₂ or Carbonates – What is the Active Species in Electrochemical CO ₂ Reduction over Fe-Porphyrin?. <i>ChemCatChem</i> , 2023, 15, .	1.8	4
691	One-Step Phase Separation for Core-Shell Carbon@Indium Oxide@Bismuth Microspheres with Enhanced Activity for CO ₂ Electroreduction to Formate. <i>Small</i> , 2023, 19, .	5.2	7
692	Selectivity and activity modulation of electrocatalytic carbon dioxide reduction by atomically dispersed dual iron catalysts. <i>Journal of Materials Chemistry A</i> , 2023, 11, 2377-2390.	5.2	1
693	Synthesis, characterization, structural analysis and electrocatalytic performance of zinc(II) porphyrinates. <i>Journal of Molecular Structure</i> , 2023, 1279, 134973.	1.8	0
694	Selectivity of CO ₂ , carbonic acid and bicarbonate electroreduction over Iron-porphyrin catalyst: A DFT study. <i>Electrochimica Acta</i> , 2023, 442, 141784.	2.6	3
695	Redox Mediators in Homogeneous Co-electrocatalysis. <i>Journal of the American Chemical Society</i> , 2023, 145, 2013-2027.	6.6	10
696	Emerging Ru-Co homogeneous-heterogeneous photocatalytic CO ₂ reduction systems. <i>Materials Research Bulletin</i> , 2023, 161, 112145.	2.7	4
697	Self-Supported Porous Carbon Nanofibers Decorated with Single Ni Atoms for Efficient CO ₂ Electroreduction. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 1376-1383.	4.0	11

#	ARTICLE	IF	CITATIONS
698	Highly Efficient Light-Driven CO ₂ to CO Reduction by an Appropriately Decorated Iron Porphyrin Molecular Catalyst. <i>ChemCatChem</i> , 2023, 15, .	1.8	1
699	Mechanistic Elucidations of Highly Dispersed Metalloporphyrin Metal-Organic Framework Catalysts for CO ₂ Electroreduction. <i>Angewandte Chemie</i> , 2023, 135, .	1.6	0
700	Recent advances in the rational designing of metalloporphyrinoid-based CO ₂ reduction catalysts: From molecular structural tuning to the application in catalysis. <i>Journal of Porphyrins and Phthalocyanines</i> , 2023, 27, 23-46.	0.4	4
701	Unravelling intrinsic descriptors based on a two-stage activity regulation of bimetallic 2D c-MOFs for CO ₂ RR. <i>Nanoscale</i> , 2023, 15, 4991-5000.	2.8	6
702	Two-Electron-Induced Reorganization of Cobalt Coordination and Metal-Ligand Cooperative Redox Shifting Co(I) Reactivity toward CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2023, 62, 2326-2333.	1.9	1
703	Advances and challenges of electrolyzers for large-scale CO ₂ electroreduction. <i>Materials Reports Energy</i> , 2023, 3, 100177.	1.7	7
704	Synthesis and Surface Attachment of Molecular Re(I) Complexes Supported by Functionalized Bipyridyl Ligands. <i>Inorganic Chemistry</i> , 2023, 62, 2359-2375.	1.9	7
705	Hydrosilylation and electroreduction of CO ₂ using a zirconocene hydride catalyst. <i>New Journal of Chemistry</i> , 2023, 47, 4504-4509.	1.4	1
706	Electrochemical Characterization and CO ₂ Reduction Reaction of a Family of Pyridazine-Bridged Dinuclear Mn(I) Carbonyl Complexes. <i>Molecules</i> , 2023, 28, 1138.	1.7	0
707	Synergistic Effect in a Metal-Organic Framework Boosting the Electrochemical CO ₂ Overall Splitting. <i>Journal of the American Chemical Society</i> , 2023, 145, 2439-2447.	6.6	19
708	Spin State in Homoleptic Iron(II) Terpyridine Complexes Influences Mixed Valency and Electrocatalytic CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2023, 62, 6375-6386.	1.9	4
709	Synthesis, electronic structure and interaction of rhodium(I) and iridium(I) bisimine-acenaphthalene complexes with CO ₂ . <i>Polyhedron</i> , 2023, 235, 116350.	1.0	0
710	In-situ growing nickel phthalocyanine supramolecular structure on carbon nanotubes for efficient electrochemical CO ₂ conversion. <i>Applied Catalysis B: Environmental</i> , 2023, 327, 122446.	10.8	5
711	Spectating the proton migration on catalyst with noninnocent ligand in aqueous electrochemical CO ₂ reduction. <i>Applied Catalysis B: Environmental</i> , 2023, 329, 122542.	10.8	3
712	CO ₂ adsorption mechanisms on activated nano-sized biocarbons: Investigation through in situ DRIFTS, quasi in-situ XPS and XRD. <i>Separation and Purification Technology</i> , 2023, 315, 123538.	3.9	2
713	Effect of electrochemical surface area on carbon dioxide electrolysis using anionic electrolyte membrane electrode assembly. <i>Fuel</i> , 2023, 346, 128309.	3.4	1
714	Ultrafine Cu nanoclusters confined within covalent organic frameworks for efficient electroreduction of CO ₂ to CH ₄ by synergistic strategy. <i>EScience</i> , 2023, 3, 100116.	25.0	8
715	Mechanistic Elucidations of Highly Dispersed Metalloporphyrin Metal-Organic Framework Catalysts for CO ₂ Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	11

#	ARTICLE	IF	CITATIONS
716	Deciphering the Selectivity of the Electrochemical CO ₂ Reduction to CO by a Cobalt Porphyrin Catalyst in Neutral Aqueous Solution: Insights from DFT Calculations. ChemistryOpen, 2023, 12, .	0.9	1
717	Thermally activated bipyridyl-based Mn-MOFs with Lewis acid–base bifunctional sites for highly efficient catalytic cycloaddition of CO ₂ with epoxides and Knoevenagel condensation reactions. Dalton Transactions, 2023, 52, 3671-3681.	1.6	5
718	Modulating the Catalytic Properties of Bimetallic Atomic Catalysts: Role of Dangling Bonds and Charging. ChemSusChem, 2023, 16, .	3.6	1
719	Exploring the Parameters Controlling Product Selectivity in Electrochemical CO ₂ Reduction in Competition with Hydrogen Evolution Employing Manganese Bipyridine Complexes. ACS Catalysis, 2023, 13, 3109-3119.	5.5	2
720	Alternating Metal–Ligand Coordination Improves Electrocatalytic CO ₂ Reduction by a Mononuclear Ru Catalyst**. Angewandte Chemie, 2023, 135, .	1.6	0
721	Alternating Metal–Ligand Coordination Improves Electrocatalytic CO ₂ Reduction by a Mononuclear Ru Catalyst**. Angewandte Chemie - International Edition, 2023, 62, .	7.2	4
722	Unlocking nanotubular bismuth oxyiodide toward carbon-neutral electrosynthesis. , 2023, 1, 290-300.		2
723	Durable Electrocatalytic CO ₂ Reduction Using Intermetallic Compound PdIn Nanoparticles and Their Application to a Solar Energy Harvesting System. ACS Applied Energy Materials, 2023, 6, 2793-2803.	2.5	0
724	Electrochemical C–N coupling of CO ₂ and nitrogenous small molecules for the electrosynthesis of organonitrogen compounds. Chemical Society Reviews, 2023, 52, 2193-2237.	18.7	47
725	Proton Transfer Dynamics–Mediated CO ₂ Electroreduction. ChemSusChem, 2023, 16, .	3.6	5
726	Advanced electrocatalytic technologies for conversion of carbon dioxide into methanol by electrochemical reduction: Recent progress and future perspectives. Coordination Chemistry Reviews, 2023, 482, 215081.	9.5	16
727	Sulphur vs NH Group: Effects on the CO ₂ Electroreduction Capability of Phenylenediamine-Cp Cobalt Complexes. Molecules, 2023, 28, 2364.	1.7	1
728	Revisiting Electrocatalytic CO ₂ Reduction in Nonaqueous Media: Promoting CO ₂ Recycling in Organic Molecules by Controlling H ₂ Evolution. Energy Technology, 2023, 11, .	1.8	2
729	Polyketones from Carbon Dioxide and Ethylene by Integrating Electrochemical and Organometallic Catalysis. ACS Catalysis, 2023, 13, 4053-4059.	5.5	6
730	Homogeneous Catalysis for the Conversion of CO ₂ , CO, CH ₃ OH, and CH ₄ to C ₂₊ Chemicals via C–C Bond Formation. ACS Catalysis, 2023, 13, 4231-4249.	5.5	13
731	Understanding the activity of single atom catalysts for CO ₂ reduction to C ₂ products: A high throughput computational screening. New Journal of Chemistry, 2023, 47, 7225-7231.	1.4	4
732	<i>In Situ</i> Attenuated Total Reflectance Infrared Spectroelectrochemistry (ATR-IR-SEC) for the Characterization of Molecular Redox Processes on Surface-Proximal Doped Silicon ATR Crystal Working Electrodes. Journal of Physical Chemistry C, 2023, 127, 6690-6701.	1.5	1
733	Ruthenium Complexes of Polyfluorocarbon Substituted Terpyridine and Mesoionic Carbene Ligands: An Interplay in CO ₂ Reduction. Chemistry - A European Journal, 2023, 29, .	1.7	2

#	ARTICLE	IF	CITATIONS
734	Copperâ€“Supramolecular Pair Catalyst Promoting C ₂₊ Product Formation in Electrochemical CO ₂ Reduction. ACS Catalysis, 2023, 13, 5114-5121.	5.5	8
735	Photocatalytic Reduction of Carbon Dioxide in Aqueous Suspensions of a Titania Semiconductor. High Energy Chemistry, 2023, 57, 12-17.	0.2	0
736	Light-Driven Reduction of CO ₂ to CO in Water with a Cobalt Molecular Catalyst and an Organic Sensitizer. ACS Catalysis, 2023, 13, 5979-5985.	5.5	7
767	Introducing proton/electron mediators enhances the catalytic ability of an iron porphyrin complex for photochemical CO ₂ reduction. Chemical Communications, 2023, 59, 10741-10744.	2.2	1
778	Proton transfer kinetics of transition metal hydride complexes and implications for fuel-forming reactions. Chemical Society Reviews, 2023, 52, 7137-7169.	18.7	3
782	Overview of outer-sphere electron transfer mediators for electrosynthesis. Advances in Catalysis, 2023, , 57-102.	0.1	2
794	A breath of sunshine: oxygenic photosynthesis by functional molecular architectures. Chemical Science, 0, , .	3.7	1
795	Coupling electrochemical CO ₂ reduction with value-added anodic oxidation reactions: progress and challenges. Materials Chemistry Frontiers, 0, , .	3.2	0
812	Cobalt macrocyclic complex-catalyzed selective electroreduction of CO ₂ to CO. Green Chemistry, 2023, 25, 10366-10371.	4.6	0
842	Nanomaterials in artificial photosynthesis. , 2024, , 655-683.		0