

Electrocatalytic and homogeneous approaches to convert fuels

Chemical Society Reviews

38, 89-99

DOI: [10.1039/b804323j](https://doi.org/10.1039/b804323j)

Citation Report

#	ARTICLE	IF	CITATIONS
3	Synthesis of α,β -Unsaturated Acids from Allenes and Carbon Dioxide. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4104-4105.	7.2	38
4	Electrocatalytic reduction of carbon dioxide by a polymeric film of rhenium tricarbonyl dipyridylamine. <i>Journal of Organometallic Chemistry</i> , 2009, 694, 2842-2845.	0.8	31
5	Opportunities and prospects in the chemical recycling of carbon dioxide to fuels. <i>Catalysis Today</i> , 2009, 148, 191-205.	2.2	1,224
6	The Temperature-Dependent Structure of Alkylamines and Their Corresponding Alkylammonium-Alkylcarbamates. <i>Journal of the American Chemical Society</i> , 2009, 131, 9107-9113.	6.6	34
7	Development of Molecular Electrocatalysts for CO ₂ Reduction and H ₂ Production/Oxidation. <i>Accounts of Chemical Research</i> , 2009, 42, 1974-1982.	7.6	765
8	Redox rich dicobalt macrocycles as templates for multi-electron transformations. <i>Chemical Communications</i> , 2009, , 6729.	2.2	50
9	Electrocatalytic Reduction of CO ₂ to Small Organic Molecule Fuels on Metal Catalysts. <i>ACS Symposium Series</i> , 2010, , 55-76.	0.5	63
10	Electrocatalytic CO ₂ Conversion to Oxalate by a Copper Complex. <i>Science</i> , 2010, 327, 313-315.	6.0	507
11	Toward Solar Fuels: Photocatalytic Conversion of Carbon Dioxide to Hydrocarbons. <i>ACS Nano</i> , 2010, 4, 1259-1278.	7.3	1,379
12	Update 1 of: Electrochemical Approach to the Mechanistic Study of Proton-Coupled Electron Transfer. <i>Chemical Reviews</i> , 2010, 110, PR1-PR40.	23.0	157
13	A Feasibility Study of the Electro-recycling of Greenhouse Gases: Design and Characterization of a (TiO ₂ /RuO ₂)/PTFE Gas Diffusion Electrode for the Electrosynthesis of Methanol from Methane. <i>Electrocatalysis</i> , 2010, 1, 224-229.	1.5	30
14	Catalytic Generation of Hydrogen from Formic acid and its Derivatives: Useful Hydrogen Storage Materials. <i>Topics in Catalysis</i> , 2010, 53, 902-914.	1.3	387
15	Effect of surface hydroxyls on selective CO ₂ hydrogenation over Ni ₄ /Al ₂ O ₃ : A density functional theory study. <i>Journal of Catalysis</i> , 2010, 272, 227-234.	3.1	159
16	Photocatalytic reduction of CO ₂ with H ₂ O on mesoporous silica supported Cu/TiO ₂ catalysts. <i>Applied Catalysis B: Environmental</i> , 2010, 100, 386-392.	10.8	446
17	Problems and perspectives in nanostructured carbon-based electrodes for clean and sustainable energy. <i>Catalysis Today</i> , 2010, 150, 151-162.	2.2	88
18	Nitrogen-rich polymers for the electrocatalytic reduction of CO ₂ . <i>Electrochemistry Communications</i> , 2010, 12, 1749-1751.	2.3	22
19	CO ₂ reduction by group 6 transition metal suboxide cluster anions. <i>Journal of Chemical Physics</i> , 2010, 133, 024305.	1.2	32
21	An overview of CO ₂ capture technologies. <i>Energy and Environmental Science</i> , 2010, 3, 1645.	15.6	1,376

#	ARTICLE	IF	CITATIONS
22	Steric Titration of Arylthiolate Coordination Modes at Pseudotetrahedral Nickel(II) Centers. <i>Inorganic Chemistry</i> , 2010, 49, 457-467.	1.9	12
23	A New Solar Carbon Capture Process: Solar Thermal Electrochemical Photo (STEP) Carbon Capture. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2363-2368.	2.1	138
24	Hydrogenation of Carbon Dioxide by Water: Alkali-Promoted Synthesis of Formate. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2130-2134.	2.1	11
25	The teraton challenge. A review of fixation and transformation of carbon dioxide. <i>Energy and Environmental Science</i> , 2010, 3, 43-81.	15.6	1,929
26	Solar Energy Supply and Storage for the Legacy and Nonlegacy Worlds. <i>Chemical Reviews</i> , 2010, 110, 6474-6502.	23.0	2,676
27	Re(bipy-tBu)(CO) ₃ Cl ⁻ improved Catalytic Activity for Reduction of Carbon Dioxide: IR-Spectroelectrochemical and Mechanistic Studies. <i>Inorganic Chemistry</i> , 2010, 49, 9283-9289.	1.9	490
28	Reactions of CO ₂ and CS ₂ with 1,2-Bis(di- <i>tert</i> -butylphosphino)ethane Complexes of Nickel(0) and Nickel(I). <i>Inorganic Chemistry</i> , 2010, 49, 10203-10207.	1.9	93
29	Photoreduction of CO ₂ on p-type Silicon Using Re(bipy-Bu ^{sup} ₂)(CO) ₃ Cl: Photovoltages Exceeding 600 mV for the Selective Reduction of CO ₂ to CO. <i>Journal of Physical Chemistry C</i> , 2010, 114, 14220-14223.	1.5	164
30	Cobalt ^{II} Porphyrin Catalyzed Electrochemical Reduction of Carbon Dioxide in Water. 2. Mechanism from First Principles. <i>Journal of Physical Chemistry A</i> , 2010, 114, 10174-10184.	1.1	130
31	Cobalt ^{II} Porphyrin Catalyzed Electrochemical Reduction of Carbon Dioxide in Water. 1. A Density Functional Study of Intermediates. <i>Journal of Physical Chemistry A</i> , 2010, 114, 10166-10173.	1.1	69
32	Iron-Catalyzed Hydrogen Production from Formic Acid. <i>Journal of the American Chemical Society</i> , 2010, 132, 8924-8934.	6.6	326
33	Hydride Ion Transfer from Ruthenium(II) Complexes in Water: Kinetics and Mechanism. <i>Inorganic Chemistry</i> , 2010, 49, 9809-9822.	1.9	48
34	Simultaneous Two-Hydrogen Transfer as a Mechanism for Efficient CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2010, 49, 8724-8728.	1.9	70
35	A tungsten-mediated closed cycle of reactivity for the reduction of CO ₂ to CO. <i>Dalton Transactions</i> , 2010, 39, 9662.	1.6	21
36	Ironing Out Hydrogen Storage. <i>Science</i> , 2011, 333, 1714-1715.	6.0	45
37	Nickel N-heterocyclic carbene ^π -pyridine complexes that exhibit selectivity for electrocatalytic reduction of carbon dioxide over water. <i>Chemical Communications</i> , 2011, 47, 6578.	2.2	120
38	Artificial photosynthesis: semiconductor photocatalytic fixation of CO ₂ to afford higher organic compounds. <i>Dalton Transactions</i> , 2011, 40, 5151.	1.6	136
39	Bimetallic aluminium(acen) complexes as catalysts for the synthesis of cyclic carbonates from carbon dioxide and epoxides. <i>Catalysis Science and Technology</i> , 2011, 1, 93.	2.1	76

#	ARTICLE	IF	CITATIONS
40	Influence of flue gas on the catalytic activity of an immobilized aluminium(salen) complex for cyclic carbonate synthesis. <i>Energy and Environmental Science</i> , 2011, 4, 4163.	15.6	104
41	Silylation of Iron-Bound Carbon Monoxide Affords a Terminal Fe Carbyne. <i>Journal of the American Chemical Society</i> , 2011, 133, 4438-4446.	6.6	76
42	Role of axially coordinated surface sites for electrochemically controlled carbon monoxide adsorption on single crystal copper electrodes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 5242.	1.3	41
43	Unraveling the Anomalous Solvatochromic Response of the Formate Ion Vibrational Spectrum: An Infrared, Ar-Tagging Study of the HCO_2^- , DCO_2^- , and $\text{HCO}_2\text{-H}_2\text{O}$ Ions. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 2437-2441.	2.1	49
44	STEP—A Solar Chemical Process to End Anthropogenic Global Warming. II: Experimental Results. <i>Journal of Physical Chemistry C</i> , 2011, 115, 11803-11821.	1.5	54
45	Reduction of Carbon Dioxide to Energy-Rich Products. <i>ACS Symposium Series</i> , 2011, , 143-174.	0.5	1
46	Electrocatalytic reduction of CO_2 to CO by polypyridyl ruthenium complexes. <i>Chemical Communications</i> , 2011, 47, 12607.	2.2	209
47	Electrochemical CO_2 sequestration in ionic liquids; a perspective. <i>Energy and Environmental Science</i> , 2011, 4, 403-408.	15.6	84
48	Nickel Hydrides Supported by a Non-Innocent Diphosphine Arene Pincer: Mechanistic Studies of Nickel-Arene H-Migration and Partial Arene Hydrogenation. <i>Journal of the American Chemical Society</i> , 2011, 133, 3828-3831.	6.6	71
49	Constructing de Novo Biosynthetic Pathways for Chemical Synthesis inside Living Cells. <i>Biochemistry</i> , 2011, 50, 5404-5418.	1.2	35
50	CO_2 photoreduction at enzyme-modified metal oxide nanoparticles. <i>Energy and Environmental Science</i> , 2011, 4, 2393.	15.6	155
51	Recent advances in catalytic hydrogenation of carbon dioxide. <i>Chemical Society Reviews</i> , 2011, 40, 3703.	18.7	2,713
52	Activation of CO_2 by a Heterobimetallic Zr/Co Complex. <i>Journal of the American Chemical Society</i> , 2011, 133, 14582-14585.	6.6	160
53	Discovery and Characterization of Heme Enzymes from Unsequenced Bacteria: Application to Microbial Lignin Degradation. <i>Journal of the American Chemical Society</i> , 2011, 133, 18006-18009.	6.6	100
54	One-component bimetallic aluminium(salen)-based catalysts for cyclic carbonate synthesis and their immobilization. <i>Dalton Transactions</i> , 2011, 40, 3885-3902.	1.6	146
55	Metal centers in the anaerobic microbial metabolism of CO and CO_2 . <i>Metallomics</i> , 2011, 3, 797.	1.0	67
56	Size-dependent photocatalytic reduction of CO_2 with PbS quantum dot sensitized TiO_2 heterostructured photocatalysts. <i>Journal of Materials Chemistry</i> , 2011, 21, 13452.	6.7	196
57	Photoreduction of Carbon Dioxide to Carbon Monoxide with Hydrogen Catalyzed by a Rhenium(I) Phenanthroline-Polyoxometalate Hybrid Complex. <i>Journal of the American Chemical Society</i> , 2011, 133, 188-190.	6.6	206

#	ARTICLE	IF	CITATIONS
58	Artificial photosynthesis for solar energy conversion. , 0, , 349-364.		1
62	Photocatalytic Reduction of CO ₂ over Cu-TiO ₂ /Molecular Sieve 5A Composite. Photochemistry and Photobiology, 2011, 87, 995-1001.	1.3	70
63	Reduction of CO ₂ on a Tricarbonyl Rhenium(I) Complex: Modeling a Catalytic Cycle. Journal of Physical Chemistry A, 2011, 115, 2877-2881.	1.1	71
64	Reversibility and efficiency in electrocatalytic energy conversion and lessons from enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14049-14054.	3.3	310
65	Photochemistry and Photophysics of a Pd(II) Metalloporphyrin: Re(I) Tricarbonyl Bipyridine Molecular Dyad and its Activity Toward the Photoreduction of CO ₂ to CO. Inorganic Chemistry, 2011, 50, 11877-11889.	1.9	91
66	Trialkylborane-Assisted CO ₂ Reduction by Late Transition Metal Hydrides. Organometallics, 2011, 30, 4308-4314.	1.1	73
67	Directing the Reactivity of [HFe ₄ N(CO) ₁₂] ⁺ toward H ⁺ or CO ₂ Reduction by Understanding the Electrocatalytic Mechanism. Journal of the American Chemical Society, 2011, 133, 18577-18579.	6.6	110
68	Covalent Attachment of a Rhenium Bipyridyl CO ₂ Reduction Catalyst to Rutile TiO ₂ . Journal of the American Chemical Society, 2011, 133, 6922-6925.	6.6	106
69	Enhanced Electrocatalytic Reduction of CO ₂ with Ternary Ni-Fe ₄ S ₄ and Co-Fe ₄ S ₄ -Based Biomimetic Chalcogels. Journal of the American Chemical Society, 2011, 133, 15854-15857.	6.6	55
70	Kinetics and Limiting Current Densities of Homogeneous and Heterogeneous Electrocatalysts. Journal of Physical Chemistry Letters, 2011, 2, 2372-2379.	2.1	38
71	Efficient Solar-Driven Synthesis, Carbon Capture, and Desalinization, STEP: Solar Thermal Electrochemical Production of Fuels, Metals, Bleach. Advanced Materials, 2011, 23, 5592-5612.	11.1	119
72	Design of a High Throughput 25-Well Parallel Electrolyzer for the Accelerated Discovery of CO ₂ Reduction Catalysts via a Combinatorial Approach. Electroanalysis, 2011, 23, 2335-2342.	1.5	17
73	Microbes as Electrochemical CO ₂ Conversion Catalysts. ChemSusChem, 2011, 4, 587-590.	3.6	50
75	[Mn(bipyridyl)(CO) ₃ Br]: An Abundant Metal Carbonyl Complex as Efficient Electrocatalyst for CO ₂ Reduction. Angewandte Chemie - International Edition, 2011, 50, 9903-9906.	7.2	498
76	Carbon dioxide reduction by early metal compounds: A propensity for oxygen atom transfer. Inorganica Chimica Acta, 2011, 369, 203-214.	1.2	24
77	Sustainable hydrocarbon fuels by recycling CO ₂ and H ₂ O with renewable or nuclear energy. Renewable and Sustainable Energy Reviews, 2011, 15, 1-23.	8.2	932
78	Thermodynamic Analysis of CO ₂ Reduction in the SnO ₂ /SnO Solar Thermochemical Cycle. , 2011, , .		0
80	Carbon dioxide reduction to methane and coupling with acetylene to form propylene catalyzed by remodeled nitrogenase. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19644-19648.	3.3	103

#	ARTICLE	IF	CITATIONS
81	Electrochemical Reduction of Carbon Dioxide Using a Copper Rubenate Metal Organic Framework. <i>ECS Electrochemistry Letters</i> , 2012, 1, H17-H19.	1.9	186
82	Nickel-Catalyzed Reductive Hydroesterification of Styrenes Using CO ₂ and MeOH. <i>Organometallics</i> , 2012, 31, 8200-8207.	1.1	33
83	Synthesis, Characterization, Electronic Structure, and Photocatalytic Behavior of CuGaO ₂ and CuGa _{1-x} Fe _x O ₂ (0 ≤ x ≤ 1). <i>J. Electrochem. Soc.</i> , 2012, 159, F1000-F1007.	1.0	10
84	Orientation of a Series of CO ₂ Reduction Catalysts on Single Crystal TiO ₂ Probed by Phase-Sensitive Vibrational Sum Frequency Generation Spectroscopy (PS-VSFG). <i>Journal of Physical Chemistry C</i> , 2012, 116, 24107-24114.	1.5	48
85	Electrocatalytic pathways towards sustainable fuel production from water and CO ₂ . <i>Coordination Chemistry Reviews</i> , 2012, 256, 2571-2600.	9.5	138
86	Well-Defined Iron Catalyst for Improved Hydrogenation of Carbon Dioxide and Bicarbonate. <i>Journal of the American Chemical Society</i> , 2012, 134, 20701-20704.	6.6	345
87	Advances in molecular photocatalytic and electrocatalytic CO ₂ reduction. <i>Coordination Chemistry Reviews</i> , 2012, 256, 2562-2570.	9.5	428
88	Thermodynamics and kinetics of CO ₂ , CO, and H ⁺ binding to the metal centre of CO ₂ reduction catalysts. <i>Chemical Society Reviews</i> , 2012, 41, 2036-2051.	18.7	632
89	Covalent attachment of a molecular CO ₂ -reduction photocatalyst to mesoporous silica. <i>Journal of Molecular Catalysis A</i> , 2012, 363-364, 208-213.	4.8	36
90	Versatile Synthesis of P ^R ₂ N ^R ₂ Ligands for Molecular Electrocatalysts with Pendant Bases in the Second Coordination Sphere. <i>Organometallics</i> , 2012, 31, 779-782.	1.1	21
91	Mild Reduction of Carbon Dioxide to Methane with Tertiary Silanes Catalyzed by Platinum and Palladium Silyl Pincer Complexes. <i>Chemistry - A European Journal</i> , 2012, 18, 15258-15262.	1.7	142
92	Electrochemical Reduction of Carbon Dioxide I. Effects of the Electrolyte on the Selectivity and Activity with Sn Electrode. <i>Journal of the Electrochemical Society</i> , 2012, 159, F353-F359.	1.3	198
93	Reaction of carbon dioxide with a palladium-alkyl complex supported by a bis-NHC framework. <i>Dalton Transactions</i> , 2012, 41, 7977.	1.6	25
94	Drastic difference in the photo-driven hydrogenation reactions of ruthenium complexes containing NAD model ligands. <i>Chemical Communications</i> , 2012, 48, 1796.	2.2	22
95	Reversible formal insertion of CO ₂ into a remote C-H bond of a ligand in a Ru(II) complex at room temperature. <i>Chemical Communications</i> , 2012, 48, 5416.	2.2	31
96	Multielectron reduction of diazoalkane and azides via reversible cyclometalation in ditantalum complexes. <i>Chemical Communications</i> , 2012, 48, 6809.	2.2	14
97	Structural investigations into the deactivation pathway of the CO ₂ reduction electrocatalyst Re(bpy)(CO) ₃ Cl. <i>Chemical Communications</i> , 2012, 48, 7374.	2.2	136
98	Tunable, light-assisted co-generation of CO and H ₂ from CO ₂ and H ₂ O by Re(bipy-tbu)(CO) ₃ Cl and p-Si in non-aqueous medium. <i>Chemical Communications</i> , 2012, 48, 272-274.	2.2	99

#	ARTICLE	IF	CITATIONS
99	Directed secondary interactions in transition metal complexes of tripodal pyrrole imine and amide ligands. Dalton Transactions, 2012, 41, 5785.	1.6	23
100	Non-innocent Dissociation of H ₂ O on GaP(110): Implications for Electrochemical Reduction of CO ₂ . Journal of the American Chemical Society, 2012, 134, 13600-13603.	6.6	48
101	Adsorption and Photochemical Properties of a Molecular CO ₂ Reduction Catalyst in Hierarchical Mesoporous ZSM-5: An In Situ FTIR Study. Journal of Physical Chemistry Letters, 2012, 3, 486-492.	2.1	30
102	Diimine Triscarbonyl Re(I) of Isomeric Pyridyl-fulvene Ligands: an Electrochemical, Spectroscopic, and Computational Investigation. Inorganic Chemistry, 2012, 51, 12738-12747.	1.9	15
103	Bridgehead Hydrogen Atoms Are Important: Unusual Electrochemistry and Proton Reduction at Iron Dimers with Ferrocenyl-Substituted Phosphido Bridges. Organometallics, 2012, 31, 3480-3491.	1.1	25
104	Mild, Reversible Reaction of Iridium(III) Amido Complexes with Carbon Dioxide. Inorganic Chemistry, 2012, 51, 9683-9693.	1.9	20
105	Formation of Phosphino-Substituted Isocyanate by Reaction of CO ₂ with Group 2 Complexes Based on the (Me ₃ Si)(iPr) ₂ P)NH Ligand. Inorganic Chemistry, 2012, 51, 1162-1169.	1.9	20
106	Nickel(ii) macrocycles: highly efficient electrocatalysts for the selective reduction of CO ₂ to CO. Energy and Environmental Science, 2012, 5, 9502.	15.6	180
107	Trivalent Uranium Complex As a Catalyst to Promote the Functionalization of Carbon Dioxide and Carbon Disulfide: A Computational Mechanistic Study. Journal of Chemical Theory and Computation, 2012, 8, 3605-3617.	2.3	15
108	Tin Oxide Dependence of the CO ₂ Reduction Efficiency on Tin Electrodes and Enhanced Activity for Tin/Tin Oxide Thin-Film Catalysts. Journal of the American Chemical Society, 2012, 134, 1986-1989.	6.6	861
109	O-Atom Exchange between H ₂ O and CO ₂ Mediated by a Bis(dithiolene)tungsten Complex. Inorganic Chemistry, 2012, 51, 7951-7953.	1.9	7
110	Evidence for the Formation of a Mo-H Intermediate in the Catalytic Cycle of Formate Dehydrogenase. Inorganic Chemistry, 2012, 51, 8331-8339.	1.9	37
111	Quantum Chemical Benchmarking, Validation, and Prediction of Acidity Constants for Substituted Pyridinium Ions and Pyridinyl Radicals. Journal of Chemical Theory and Computation, 2012, 8, 3187-3206.	2.3	81
112	Reversible hydrogen storage using CO ₂ and a proton-switchable iridium catalyst in aqueous media under mild temperatures and pressures. Nature Chemistry, 2012, 4, 383-388.	6.6	830
113	Molecular approaches to the electrochemical reduction of carbon dioxide. Chemical Communications, 2012, 48, 1392-1399.	2.2	251
114	Electrocatalytic and photocatalytic reduction of carbon dioxide to carbon monoxide using the alkynyl-substituted rhenium(I) complex (5,5'-bisphenylethynyl-2,2'-bipyridyl)Re(CO) ₃ Cl. Journal of Organometallic Chemistry, 2012, 716, 19-25.	0.8	57
115	Conversion of a substrate carbon source to formic acid for carbon dioxide emission reduction utilizing series-stacked microbial fuel cells. Journal of Power Sources, 2012, 217, 59-64.	4.0	68
116	The role of the bridging ligand in photocatalytic supramolecular assemblies for the reduction of protons and carbon dioxide. Coordination Chemistry Reviews, 2012, 256, 1682-1705.	9.5	140

#	ARTICLE	IF	CITATIONS
118	An Organic Hydride Transfer Reaction of a Ruthenium NAD Model Complex Leading to Carbon Dioxide Reduction. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9792-9795.	7.2	60
119	Multielectron \rightarrow Transfer Templates via Consecutive Two \rightarrow Electron Transformations: Iron \rightarrow Sulfur Complexes Relevant to Biological Enzymes. <i>Chemistry - A European Journal</i> , 2012, 18, 13968-13973.	1.7	31
120	Functionalization and post-functionalization: a step towards polyoxometalate-based materials. <i>Chemical Society Reviews</i> , 2012, 41, 7605.	18.7	788
121	Synthesis and structures of transition metal pacman complexes of heteroditopic Schiff-base pyrrole macrocycles. <i>Dalton Transactions</i> , 2012, 41, 13815.	1.6	14
122	Turnover Numbers, Turnover Frequencies, and Overpotential in Molecular Catalysis of Electrochemical Reactions. Cyclic Voltammetry and Preparative-Scale Electrolysis. <i>Journal of the American Chemical Society</i> , 2012, 134, 11235-11242.	6.6	647
123	Insights into the effect of surface hydroxyls on CO ₂ hydrogenation over Pd/ γ -Al ₂ O ₃ catalyst: A computational study. <i>Applied Catalysis B: Environmental</i> , 2012, 126, 108-120.	10.8	62
124	Nickel oxide functionalized silicon for efficient photo-oxidation of water. <i>Energy and Environmental Science</i> , 2012, 5, 7872.	15.6	167
125	(η^5 -Diimine)tricarbonylhalorhenium complexes: the oxidation side. <i>Dalton Transactions</i> , 2012, 41, 1013-1019.	1.6	13
126	Mechanistic Insight from Activation Parameters for the Reaction of a Ruthenium Hydride Complex with CO ₂ in Conventional Solvents and an Ionic Liquid. <i>Inorganic Chemistry</i> , 2012, 51, 7340-7345.	1.9	24
127	A Local Proton Source Enhances CO ₂ Electroreduction to CO by a Molecular Fe Catalyst. <i>Science</i> , 2012, 338, 90-94.	6.0	1,075
128	Homogeneous CO ₂ Reduction by Ni(cyclam) at a Glassy Carbon Electrode. <i>Inorganic Chemistry</i> , 2012, 51, 3932-3934.	1.9	280
130	Solar to Fuel. , 2012, , 82-89.		0
131	How well can renewable resources mimic commodity monomers and polymers?. <i>Journal of Polymer Science Part A</i> , 2012, 50, 1-15.	2.5	227
132	Alternative feedstocks: a continuing trend in the polymer industry?. <i>Polymer International</i> , 2012, 61, 6-8.	1.6	14
133	Photochemical and Photoelectrochemical Reduction of CO ₂ . <i>Annual Review of Physical Chemistry</i> , 2012, 63, 541-569.	4.8	960
134	Activity Descriptors for CO ₂ Electroreduction to Methane on Transition-Metal Catalysts. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 251-258.	2.1	1,250
135	Selective Electrocatalytic Reduction of CO ₂ to Formate by Water-Stable Iridium Dihydride Pincer Complexes. <i>Journal of the American Chemical Society</i> , 2012, 134, 5500-5503.	6.6	293
136	Formate oxidation via β -deprotonation in [Ni(PR ₂ NR ⁺) ₂ (CH ₃ CN)] ²⁺ complexes. <i>Energy and Environmental Science</i> , 2012, 5, 6480.	15.6	58

#	ARTICLE	IF	CITATIONS
137	Controlling the rate of electron transfer between a quantum dot and a tri-ruthenium molecular cluster by tuning the chemistry of the interface. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 13794.	1.3	35
139	Silicon Nanowires as Photoelectrodes for Carbon Dioxide Fixation. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6709-6712.	7.2	62
140	Towards Artificial Photosynthesis of CO ₂ Neutral Fuel: Homogenous Catalysis of CO ₂ Selective Reduction to Methanol Initiated by Visible-Light-Driven Multi-Electron Collector. <i>ChemCatChem</i> , 2012, 4, 1746-1750.	1.8	12
141	Reduction of CO ₂ to CO at Low Overpotential in Neutral Aqueous Solution by a Ni(cyclam) Complex Attached to Poly(allylamine). <i>ChemSusChem</i> , 2012, 5, 634-636.	3.6	32
142	Electroreduction of Carbon Dioxide on Copper-Based Electrodes: Activity of Copper Single Crystals and Copper-Gold Alloys. <i>Electrocatalysis</i> , 2012, 3, 139-146.	1.5	165
143	The Role of CO ₂ Reduction Catalysis in Carbon Capture. , 2012, , 245-255.		3
144	Splitting CO ₂ into CO and O ₂ by a single catalyst. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 15606-15611.	3.3	168
146	A Diagonal Approach to Chemical Recycling of Carbon Dioxide: Organocatalytic Transformation for the Reductive Functionalization of CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2012, 51, 187-190.	7.2	487
147	Selective Nitrite Reduction at Heterobimetallic CoMg Complexes. <i>Journal of the American Chemical Society</i> , 2013, 135, 12023-12031.	6.6	61
148	Photofunctional Construct That Interfaces Molecular Cobalt-Based Catalysts for H ₂ Production to a Visible-Light-Absorbing Semiconductor. <i>Journal of the American Chemical Society</i> , 2013, 135, 11861-11868.	6.6	134
149	CO ₂ reduction by Fe(i): solvent control of C=O cleavage versus C=C coupling. <i>Chemical Science</i> , 2013, 4, 4042.	3.7	65
150	A solar cell driven electrochemical process for the concurrent reduction of carbon dioxide and degradation of azo dye in dilute KHCO ₃ electrolyte. <i>Separation and Purification Technology</i> , 2013, 117, 3-11.	3.9	21
151	Mild and efficient capture and functionalisation of CO ₂ using silver(i) oxide and application to ¹³ C-labelled dialkyl carbonates. <i>RSC Advances</i> , 2013, 3, 4613.	1.7	2
152	A Cobalt-Based Catalyst for the Hydrogenation of CO ₂ under Ambient Conditions. <i>Journal of the American Chemical Society</i> , 2013, 135, 11533-11536.	6.6	343
153	Synthesis, Structural, and Electrocatalytic Reduction Studies of [Pd(P2N2) ₂] ²⁺ Complexes. <i>Organometallics</i> , 2013, 32, 4556-4563.	1.1	12
154	Hydrogen storage: beyond conventional methods. <i>Chemical Communications</i> , 2013, 49, 8735.	2.2	417
155	Innovative Photocatalysts for Solar Fuel Generation by CO ₂ Reduction. , 2013, , 219-241.		2
156	High-loaded nickel-alumina catalyst for direct CO ₂ hydrogenation into synthetic natural gas (SNG). <i>Fuel</i> , 2013, 113, 598-609.	3.4	129

#	ARTICLE	IF	CITATIONS
157	Electrodes modified with iron porphyrin and carbon nanotubes: application to CO ₂ reduction and mechanism of synergistic electrocatalysis. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 1657-1664.	1.2	45
158	From Carbon Dioxide to Valuable Products under Homogeneous Catalysis. , 2013, , 563-586.		4
159	Carbon Dioxide Capture and Activation ¹¹ This chapter was prepared using literature published before April, 2011.. , 2013, , 475-504.		1
160	Elucidation of the Selectivity of Proton-Dependent Electrocatalytic CO ₂ Reduction by <i>fac</i> -Re(bpy)(CO) ₃ Cl. <i>Journal of the American Chemical Society</i> , 2013, 135, 15823-15829.	6.6	238
161	Tuning the Reactivity of an Actor Ligand for Tandem CO ₂ and C ¹⁸ H Activations: From Spectator Metals to Metal-Free. <i>Journal of the American Chemical Society</i> , 2013, 135, 16175-16183.	6.6	30
162	Monodisperse Au Nanoparticles for Selective Electrocatalytic Reduction of CO ₂ to CO. <i>Journal of the American Chemical Society</i> , 2013, 135, 16833-16836.	6.6	1,192
163	Nickel(i)-mediated transformations of carbon dioxide in closed synthetic cycles: reductive cleavage and coupling of CO ₂ generating NiCO, NiCO ₃ and NiC ₂ O ₄ entities. <i>Chemical Communications</i> , 2013, 49, 10923.	2.2	82
164	Renewable and metal-free carbon nanofibre catalysts for carbon dioxide reduction. <i>Nature Communications</i> , 2013, 4, .	5.8	593
165	Ni ^{II} -Fe ^{II} -S Cubanes in CO ₂ Reduction Electrocatalysis: A DFT Study. <i>ACS Catalysis</i> , 2013, 3, 2640-2643.	5.5	68
166	Exciton Annihilation and Dissociation Dynamics in Group II ^{VI} Cd ₃ P ₂ Quantum Dots. <i>Journal of Physical Chemistry A</i> , 2013, 117, 6362-6372.	1.1	32
167	Catalytic CO ₂ valorization into CH ₄ on Ni-based ceria-zirconia. Reaction mechanism by operando IR spectroscopy. <i>Catalysis Today</i> , 2013, 215, 201-207.	2.2	395
168	Manganese as a Substitute for Rhenium in CO ₂ Reduction Catalysts: The Importance of Acids. <i>Inorganic Chemistry</i> , 2013, 52, 2484-2491.	1.9	359
169	Nickel-Catalyzed Hydrosilylation of CO ₂ in the Presence of Et ₃ B for the Synthesis of Formic Acid and Related Formates. <i>Organometallics</i> , 2013, 32, 7186-7194.	1.1	106
170	Synthesis and Reactivity of Nickel(II) Hydroxycarbonyl Species, NiCOOH·H ₂ O. <i>Organometallics</i> , 2013, 32, 7195-7203.	1.1	61
171	Status and perspectives of CO ₂ conversion into fuels and chemicals by catalytic, photocatalytic and electrocatalytic processes. <i>Energy and Environmental Science</i> , 2013, 6, 3112.	15.6	1,475
172	Visible-Light Photoredox Catalysis: Selective Reduction of Carbon Dioxide to Carbon Monoxide by a Nickel <i>N</i> -Heterocyclic Carbene-Isoquinoline Complex. <i>Journal of the American Chemical Society</i> , 2013, 135, 14413-14424.	6.6	317
173	How Light-Harvesting Semiconductors Can Alter the Bias of Reversible Electrocatalysts in Favor of H ₂ Production and CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2013, 135, 15026-15032.	6.6	77
175	Photocatalytic reduction of CO ₂ for fuel production: Possibilities and challenges. <i>Journal of Catalysis</i> , 2013, 308, 168-175.	3.1	286

#	ARTICLE	IF	CITATIONS
176	Direct observation of the reduction of carbon dioxide by rhenium bipyridine catalysts. <i>Energy and Environmental Science</i> , 2013, 6, 3748.	15.6	130
177	Solar Fuels: Photoelectrosynthesis of CO from CO ₂ at p-type Si using Fe Porphyrin Electrocatalysts. <i>Chemistry - A European Journal</i> , 2013, 19, 13522-13527.	1.7	41
178	Tetranuclear Iron Complexes Bearing Benzenetetra-thiolate Bridges as Four-Electron Transformation Templates and Their Electrocatalytic Properties for Proton Reduction. <i>Inorganic Chemistry</i> , 2013, 52, 1798-1806.	1.9	31
179	Synthesis, spectroscopic, electrochemical and computational studies of rhenium(i) dicarbonyl complexes based on meridionally-coordinated 2,2',6',6''-terpyridine. <i>Dalton Transactions</i> , 2013, 42, 12440.	1.6	28
180	Carbon monoxide release catalysed by electron transfer: electrochemical and spectroscopic investigations of [Re(bpy-R)(CO) ₄](OTf) complexes relevant to CO ₂ reduction. <i>Dalton Transactions</i> , 2013, 42, 8498.	1.6	63
181	CHAPTER 11. Electro- and Photocatalytic Reduction of CO ₂ : The Homogeneous and Heterogeneous Worlds Collide?. <i>RSC Energy and Environment Series</i> , 0, , 289-332.	0.2	5
183	A Highly Efficient Mononuclear Iridium Complex Photocatalyst for CO ₂ Reduction under Visible Light. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 988-992.	7.2	277
184	Understanding Trends in the Electrocatalytic Activity of Metals and Enzymes for CO ₂ Reduction to CO. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 388-392.	2.1	604
185	Catalysis of the electrochemical reduction of carbon dioxide. <i>Chemical Society Reviews</i> , 2013, 42, 2423-2436.	18.7	1,382
186	Solar fuels generation and molecular systems: is it homogeneous or heterogeneous catalysis?. <i>Chemical Society Reviews</i> , 2013, 42, 2338-2356.	18.7	437
187	New concepts and modeling strategies to design and evaluate photo-electro-catalysts based on transition metal oxides. <i>Chemical Society Reviews</i> , 2013, 42, 2401-2422.	18.7	225
188	Complete Catalytic Deoxygenation of CO ₂ into Formamidine Derivatives. <i>ChemCatChem</i> , 2013, 5, 117-120.	1.8	124
189	Vibrational relaxation dynamics of catalysts on TiO ₂ Rutile (110) single crystal surfaces and anatase nanoporous thin films. <i>Chemical Physics</i> , 2013, 422, 264-271.	0.9	24
190	From natural to artificial photosynthesis. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20120984.	1.5	293
191	Dual 1,3-dipolar cycloaddition of carbon dioxide: two C=O bonds of CO ₂ react in one reaction. <i>Chemical Communications</i> , 2013, 49, 2569.	2.2	54
192	Synthesis, Structures, and Photochemistry of Tricarbonyl Metal Polyoxoanion Complexes, [X ₂ W ₂₀ O ₇₀]{M(CO) ₃ } ₂ ¹²⁻ (X = Sb, Bi and M = Re, Mn). <i>Inorganic Chemistry</i> , 2013, 52, 671-678.	1.9	49
193	CO ₂ as a C1-building block for the catalytic methylation of amines. <i>Chemical Science</i> , 2013, 4, 2127.	3.7	310
194	Electrocatalytic Reduction of Carbon Dioxide to Carbon Monoxide by a Polymerized Film of an Alkynyl-substituted Rhenium(I) Complex. <i>ChemCatChem</i> , 2013, 5, 1790-1796.	1.8	47

#	ARTICLE	IF	CITATIONS
195	Activation of CO ₂ by tBuZnOH species: efficient routes to novel nanomaterials based on zinc carbonates. <i>Chemical Communications</i> , 2013, 49, 5271.	2.2	17
196	Silicon Nanowires Show Improved Performance as Photocathode for Catalyzed Carbon Dioxide Photofixation. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4225-4228.	7.2	43
197	Electrochemical CO ₂ and CO Reduction on Metal-Functionalized Porphyrin-like Graphene. <i>Journal of Physical Chemistry C</i> , 2013, 117, 9187-9195.	1.5	260
198	Photocatalytic Reduction of CO ₂ on TiO ₂ and Other Semiconductors. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7372-7408.	7.2	2,481
199	A dinuclear silver hydride and an umpolung reaction of CO ₂ . <i>Chemical Science</i> , 2013, 4, 3068.	3.7	60
200	Frontiers, Opportunities, and Challenges in Biochemical and Chemical Catalysis of CO ₂ Fixation. <i>Chemical Reviews</i> , 2013, 113, 6621-6658.	23.0	1,786
201	The Electronic States of Rhenium Bipyridyl Electrocatalysts for CO ₂ Reduction as Revealed by X-ray Absorption Spectroscopy and Computational Quantum Chemistry. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4841-4844.	7.2	119
202	Computational Approaches to the Chemical Conversion of Carbon Dioxide. <i>ChemSusChem</i> , 2013, 6, 944-965.	3.6	144
203	Carbon dioxide activation and dissociation on ceria (110): A density functional theory study. <i>Journal of Chemical Physics</i> , 2013, 138, 014702.	1.2	141
204	The coordination chemistry of organo-hydride donors: new prospects for efficient multi-electron reduction. <i>Chemical Society Reviews</i> , 2013, 42, 5439.	18.7	131
205	Selective electrocatalytic reduction of carbon dioxide to formate by a water-soluble iridium pincer catalyst. <i>Chemical Science</i> , 2013, 4, 3497.	3.7	142
206	Steric and Electronic Effects in the Formation and Carbon Disulfide Reactivity of Dinuclear Nickel Complexes Supported by Bis(iminopyridine) Ligands. <i>Organometallics</i> , 2013, 32, 2952-2962.	1.1	22
207	Electrochemical conversion of CO ₂ to useful chemicals: current status, remaining challenges, and future opportunities. <i>Current Opinion in Chemical Engineering</i> , 2013, 2, 191-199.	3.8	645
208	Proton-Coupled Electron Transfer Cleavage of Heavy-Atom Bonds in Electrocatalytic Processes. Cleavage of a C-O Bond in the Catalyzed Electrochemical Reduction of CO ₂ . <i>Journal of the American Chemical Society</i> , 2013, 135, 9023-9031.	6.6	209
209	Methane formation from the hydrogenation of carbon dioxide on Ni(110) surface – a density functional theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 5701.	1.3	34
210	Theoretical mechanism studies on the electrocatalytic reduction of CO ₂ to formate by water-stable iridium dihydride pincer complex. <i>Dalton Transactions</i> , 2013, 42, 5755.	1.6	37
211	Long-range metal-ligand bifunctional catalysis: cyclometallated iridium catalysts for the mild and rapid dehydrogenation of formic acid. <i>Chemical Science</i> , 2013, 4, 1234.	3.7	168
212	Photocatalytic reduction of carbon dioxide to formic acid, formaldehyde, and methanol using dye-sensitized TiO ₂ film. <i>Applied Catalysis B: Environmental</i> , 2013, 129, 599-605.	10.8	119

#	ARTICLE	IF	CITATIONS
213	Solar-driven photoelectrochemical reduction of carbon dioxide to methanol at CuInS ₂ thin film photocathode. <i>Solar Energy Materials and Solar Cells</i> , 2013, 108, 170-174.	3.0	89
214	Mechanism of Homogeneous Reduction of CO ₂ by Pyridine: Proton Relay in Aqueous Solvent and Aromatic Stabilization. <i>Journal of the American Chemical Society</i> , 2013, 135, 142-154.	6.6	151
215	CHAPTER 12. Key Intermediates in the Hydrogenation and Electrochemical Reduction of CO ₂ . <i>RSC Energy and Environment Series</i> , 0, , 333-358.	0.2	2
216	Ready Hydrothermal Reactions from Carbon Dioxide to Methane. <i>ACS Sustainable Chemistry and Engineering</i> , 2013, 1, 313-315.	3.2	18
217	The use of solar energy can enhance the conversion of carbon dioxide into energy-rich products: stepping towards artificial photosynthesis. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2013, 371, 20120111.	1.6	41
218	Investigation of Monomeric versus Dimeric <i>fac</i> -Rhenium(I) Tricarbonyl Systems Containing the Noninnocent 8-Oxyquinolate Ligand. <i>Organometallics</i> , 2013, 32, 1832-1841.	1.1	24
219	Synthesis and Crystal Structure of [Cp ₃ Zr ₃ ($\frac{1}{2}$ -O ₂ CH) ₃ ($\frac{1}{2}$ -OH) ₃ ($\frac{1}{3}$ -O)] ₂ [CpZr(O ₂ CH) ₅] and [Cp ₃ Zr ₃ ($\frac{1}{2}$ -O ₂ CH) ₃ ($\frac{1}{2}$ -OH) ₃ ($\frac{1}{3}$ -O)] [B(C ₆ F ₅) ₄]. <i>Inorganica Chimica Acta</i> , 2013, 404, 192-196.	1.2	4
220	IR Spectroscopy of Gas Phase V(CO ₂) _n Clusters: Solvation-Induced Electron Transfer and Activation of CO ₂ . <i>Journal of Physical Chemistry A</i> , 2013, 117, 11490-11498.	1.1	62
221	Theoretical Insights into Electrochemical CO ₂ Reduction Mechanisms Catalyzed by Surface-Bound Nitrogen Heterocycles. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 4058-4063.	2.1	57
222	Long-lived charge separated states in nanostructured semiconductor photoelectrodes for the production of solar fuels. <i>Chemical Society Reviews</i> , 2013, 42, 2281-2293.	18.7	310
223	Organic molecules as mediators and catalysts for photocatalytic and electrocatalytic CO ₂ reduction. <i>Chemical Society Reviews</i> , 2013, 42, 2253-2261.	18.7	231
224	Electrochemical Reduction of Carbon Dioxide on Stainless Steel Electrode in Acetonitrile. <i>Advanced Materials Research</i> , 0, 807-809, 1322-1325.	0.3	7
225	Combined Catalysis and Optical Screening for High Throughput Discovery of Solar Fuels Catalysts. <i>Journal of the Electrochemical Society</i> , 2013, 160, F337-F342.	1.3	50
226	Electrocatalytic Oxidation of Formate with Nickel Diphosphine Dipeptide Complexes: Effect of Ligands Modified with Amino Acids. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 5366-5371.	1.0	16
227	Photoinduced Charge Separation in Zinc-“Porphyrin/Tungsten”-Alkylidyne Dyads: Generation of Reactive Porphyrin and Metallo Radical States. <i>Chemistry - A European Journal</i> , 2013, 19, 17082-17091.	1.7	12
228	Electrocatalytic Activation of Aromatic Carbon-Bromine Bonds toward Carboxylation at Silver and Copper Cathodes. <i>Journal of the Electrochemical Society</i> , 2013, 160, G3073-G3079.	1.3	26
229	Catalytic Disproportionation of Formic Acid to Generate Methanol. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 3981-3984.	7.2	95
231	Electro- and photo-chemistry of rhenium and rhodium complexes for carbon dioxide and proton reduction: a mini review. <i>Nanomaterials and Energy</i> , 2013, 2, 134-147.	0.1	18

#	ARTICLE	IF	CITATIONS
232	Thermal modelling of parabolic trough collectors. , 2013, , 189-212.		1
235	Selective electro-reduction of CO ₂ to formate on nanostructured Bi from reduction of BiOCl nanosheets. <i>Electrochemistry Communications</i> , 2014, 46, 63-66.	2.3	133
239	Design and fabrication of semiconductor photocatalyst for photocatalytic reduction of CO ₂ to solar fuel. <i>Science China Materials</i> , 2014, 57, 70-100.	3.5	446
241	Reactivity of a Series of Isostructural Cobalt Pincer Complexes with CO ₂ , CO, and H ₂ . <i>Inorganic Chemistry</i> , 2014, 53, 13031-13041.	1.9	41
242	Structures and CO ₂ Reactivity of Zinc Complexes of Bis(diisopropyl-) and Bis(diphenylphosphino)amines. <i>Organometallics</i> , 2014, 33, 6511-6518.	1.1	14
247	Ni complexes of redox-active pincers with pendant H-bonding sites as precursors for hydrogen production electrocatalysis. <i>Polyhedron</i> , 2014, 82, 2-6.	1.0	16
248	Electroreduction of carbon monoxide to liquid fuel on oxide-derived nanocrystalline copper. <i>Nature</i> , 2014, 508, 504-507.	13.7	1,360
249	Hydrogenation of CO ₂ to value-added products—A review and potential future developments. <i>Journal of CO₂ Utilization</i> , 2014, 5, 66-81.	3.3	676
250	Monolithic cells for solar fuels. <i>Chemical Society Reviews</i> , 2014, 43, 7963-7981.	18.7	181
251	Discovery of a Ni-Ga catalyst for carbon dioxide reduction to methanol. <i>Nature Chemistry</i> , 2014, 6, 320-324.	6.6	865
252	Electrochemical reduction of CO ₂ in organic solvents catalyzed by MoO ₂ . <i>Chemical Communications</i> , 2014, 50, 3878.	2.2	75
253	Electrocatalytic CO ₂ reduction by M(bpy-R)(CO) ₄ (M = Mo, W; R = H, tBu) complexes. Electrochemical, spectroscopic, and computational studies and comparison with group 7 catalysts. <i>Chemical Science</i> , 2014, 5, 1894-1900.	3.7	100
254	Wedge N-doped CuO with more negative conductive band and lower overpotential for high efficiency photoelectric converting CO ₂ to methanol. <i>Applied Catalysis B: Environmental</i> , 2014, 156-157, 134-140.	10.8	60
255	Spectroelectrochemical study of complexes [Mo(CO) ₂ (η -3-allyl)(η -diimine)(NCS)] (η -diimine = Bis(2,6-dimethylphenyl)-acenaphthenequinonediimine and 2,2'-bipyridine) exhibiting different molecular structure and redox reactivity. <i>Journal of Organometallic Chemistry</i> , 2014, 760, 30-41.	0.8	28
256	Aqueous Solution Route to Zinc Telluride Films for Application to CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5852-5857.	7.2	91
257	Highly active Ni-promoted mesostructured silica nanoparticles for CO ₂ methanation. <i>Applied Catalysis B: Environmental</i> , 2014, 147, 359-368.	10.8	404
258	Multifunctional, Defect-Engineered Metal-Organic Frameworks with Ruthenium Centers: Sorption and Catalytic Properties. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7058-7062.	7.2	237
259	Development of Molecular Electrocatalysts for Energy Storage. <i>Inorganic Chemistry</i> , 2014, 53, 3935-3960.	1.9	371

#	ARTICLE	IF	CITATIONS
260	Reaction of Dinuclear Rhodium 4,5-Diazafluorenyl-9-Carboxylate Complexes with H ₂ and CO ₂ . <i>Organometallics</i> , 2014, 33, 2776-2783.	1.1	12
261	Efficient Fluoride-Catalyzed Conversion of CO ₂ to CO at Room Temperature. <i>Journal of the American Chemical Society</i> , 2014, 136, 6142-6147.	6.6	130
262	Diazine bridged dinuclear rhenium complex: New molecular material for the CO ₂ conversion. <i>Inorganica Chimica Acta</i> , 2014, 417, 270-273.	1.2	7
263	Electrochemical reduction of carbon dioxide at low overpotential on a polyaniline/Cu ₂ O nanocomposite based electrode. <i>Applied Energy</i> , 2014, 120, 85-94.	5.1	106
264	Efficient Reduction of CO ₂ to CO with High Current Density Using in Situ or ex Situ Prepared Bi-Based Materials. <i>Journal of the American Chemical Society</i> , 2014, 136, 8361-8367.	6.6	259
265	A review of catalysts for the electroreduction of carbon dioxide to produce low-carbon fuels. <i>Chemical Society Reviews</i> , 2014, 43, 631-675.	18.7	2,360
266	A review on the electrochemical reduction of CO ₂ in fuel cells, metal electrodes and molecular catalysts. <i>Catalysis Today</i> , 2014, 233, 169-180.	2.2	392
267	Determining the Overpotential for a Molecular Electrocatalyst. <i>ACS Catalysis</i> , 2014, 4, 630-633.	5.5	285
268	Photoreduction of CO ₂ to methanol with hexanuclear molybdenum [Mo ₆ Br ₁₄] ²⁺ cluster units under visible light irradiation. <i>RSC Advances</i> , 2014, 4, 10420.	1.7	50
269	Recent Studies of Rhenium and Manganese Bipyridine Carbonyl Catalysts for the Electrochemical Reduction of CO ₂ . <i>Advances in Inorganic Chemistry</i> , 2014, 66, 163-188.	0.4	72
270	Catalytic Hydrogenation of Carbon Dioxide to Formic Acid. <i>Advances in Inorganic Chemistry</i> , 2014, , 223-258.	0.4	39
271	Molecular artificial photosynthesis. <i>Chemical Society Reviews</i> , 2014, 43, 7501-7519.	18.7	769
272	Conversion of carbon dioxide into methanol – a potential liquid fuel: Fundamental challenges and opportunities (a review). <i>Renewable and Sustainable Energy Reviews</i> , 2014, 31, 221-257.	8.2	449
273	Methylation of amines, nitrobenzenes and aromatic nitriles with carbon dioxide and molecular hydrogen. <i>Chemical Science</i> , 2014, 5, 649-655.	3.7	169
274	Reduction of CO ₂ to Methanol Catalyzed by a Biomimetic Organo-Hydride Produced from Pyridine. <i>Journal of the American Chemical Society</i> , 2014, 136, 16081-16095.	6.6	131
275	Electrocatalytic Reduction of CO ₂ with Palladium Bis-N-heterocyclic Carbene Pincer Complexes. <i>Inorganic Chemistry</i> , 2014, 53, 12962-12972.	1.9	57
276	Selective and Efficient Photocatalytic CO ₂ Reduction to CO Using Visible Light and an Iron-Based Homogeneous Catalyst. <i>Journal of the American Chemical Society</i> , 2014, 136, 16768-16771.	6.6	275
277	Highly Selective Solar-Driven Methanol from CO ₂ by a Photocatalyst/Biocatalyst Integrated System. <i>Journal of the American Chemical Society</i> , 2014, 136, 16728-16731.	6.6	194

#	ARTICLE	IF	CITATIONS
278	Computational studies of electrochemical CO ₂ reduction on subnanometer transition metal clusters. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 26584-26599.	1.3	62
279	Making C-C Bonds from Carbon Dioxide via Transition-Metal Catalysis. <i>Topics in Catalysis</i> , 2014, 57, 1342-1350.	1.3	71
280	Towards the elucidation of the high oxygen electroreduction activity of Pt _x Y: surface science and electrochemical studies of Y/Pt(111). <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 13718-13725.	1.3	27
281	A computational study of the mechanism of the [(salen)Cr + DMAP]-catalyzed formation of cyclic carbonates from CO ₂ and epoxide. <i>Chemical Communications</i> , 2014, 50, 2676-2678.	2.2	59
282	Mechanistic Contrasts between Manganese and Rhenium Bipyridine Electrocatalysts for the Reduction of Carbon Dioxide. <i>Journal of the American Chemical Society</i> , 2014, 136, 16285-16298.	6.6	269
283	The Influence of the Second and Outer Coordination Spheres on Rh(diphosphine) ₂ CO ₂ Hydrogenation Catalysts. <i>ACS Catalysis</i> , 2014, 4, 3663-3670.	5.5	37
284	Selective reduction of CO ₂ to formate through bicarbonate reduction on metal electrodes: new insights gained from SG/TC mode of SECM. <i>Chemical Communications</i> , 2014, 50, 11143-11146.	2.2	100
285	Electrocatalytic CO ₂ reduction with a membrane supported manganese catalyst in aqueous solution. <i>Chemical Communications</i> , 2014, 50, 12698-12701.	2.2	81
286	Theoretical treatment of one electron redox transformation of a small molecule using f-element complexes. <i>Dalton Transactions</i> , 2014, 43, 12124-12134.	1.6	19
287	Facile Insertion of Carbon Dioxide into Cu ₂ (μ ₄ -H) Dinuclear Units Supported by Tetrakisphosphine Ligands. <i>Chemistry - an Asian Journal</i> , 2014, 9, 3106-3110.	1.7	55
288	Making syngas electrocatalytically using a polypyridyl ruthenium catalyst. <i>Chemical Communications</i> , 2014, 50, 335-337.	2.2	61
289	Mechanistic insights into electrocatalytic CO ₂ reduction within [Ru ^{II} (tpy)(NN)X] ⁿ⁺ architectures. <i>Dalton Transactions</i> , 2014, 43, 15028-15037.	1.6	57
290	High-turnover visible-light photoreduction of CO ₂ by a Re(ⁱ) complex stabilized on dye-sensitized TiO ₂ . <i>Chemical Communications</i> , 2014, 50, 4462-4464.	2.2	62
291	Photocatalysts of 3D Ordered Macroporous TiO ₂ -Supported CeO ₂ Nanolayers: Design, Preparation, and Their Catalytic Performances for the Reduction of CO ₂ with H ₂ O under Simulated Solar Irradiation. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 17345-17354.	1.8	92
292	Reactivity of a fac-ReCl(μ ₂ -diimine)(CO) ₃ complex with an NAD ⁺ model ligand toward CO ₂ reduction. <i>Chemical Communications</i> , 2014, 50, 728-730.	2.2	22
293	Trends in electrochemical CO ₂ reduction activity for open and close-packed metal surfaces. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4720.	1.3	375
294	CO ₂ activation and carbonate intermediates: an operando AP-XPS study of CO ₂ electrolysis reactions on solid oxide electrochemical cells. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 11633-11639.	1.3	82
295	C ₆₀ fullerene as an active and stable catalyst for the synthesis of cyclic carbonates from CO ₂ and epoxides. <i>Chemical Communications</i> , 2014, 50, 10307-10310.	2.2	57

#	ARTICLE	IF	CITATIONS
296	Directional charge transfer and highly reducing and oxidizing excited states of new dirhodium(d^8 , d^8) complexes: potential applications in solar energy conversion. <i>Chemical Science</i> , 2014, 5, 727-737.	3.7	31
297	$\text{Au}_{137}(\text{SR})_{56}$ nanomolecules: composition, optical spectroscopy, electrochemistry and electrocatalytic reduction of CO_2 . <i>Chemical Communications</i> , 2014, 50, 9895.	2.2	55
298	8.04 Reduction of CO to CHO _H by Metal-Catalyzed Hydrogenation and Transfer Hydrogenation. , 2014, , 198-273.		7
299	9.14 Preparative Electrochemistry for Organic Synthesis. , 2014, , 351-389.		3
300	Photocatalytic reduction of CO ₂ into hydrocarbon solar fuels over g-C ₃ N ₄ @Pt nanocomposite photocatalysts. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 11492.	1.3	465
301	Highly selective electrocatalytic reduction of carbon dioxide to carbon monoxide on silver electrode with aqueous ionic liquids. <i>Electrochemistry Communications</i> , 2014, 46, 103-106.	2.3	50
302	Terpyridine complexes of first row transition metals and electrochemical reduction of CO ₂ to CO. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 13635-13644.	1.3	154
303	Isolation of Iron(II) Aqua and Hydroxyl Complexes Featuring a Tripodal H-bond Donor and Acceptor Ligand. <i>Inorganic Chemistry</i> , 2014, 53, 4450-4458.	1.9	55
304	In Situ Surface-Enhanced Raman Spectroscopy of the Electrochemical Reduction of Carbon Dioxide on Silver with 3,5-Diamino-1,2,4-Triazole. <i>Journal of Physical Chemistry C</i> , 2014, 118, 17567-17576.	1.5	97
305	CO ₂ Reduction to Methanol on TiO ₂ -Passivated GaP Photocatalysts. <i>ACS Catalysis</i> , 2014, 4, 3512-3516.	5.5	130
306	A Cobalt Hydride Catalyst for the Hydrogenation of CO ₂ : Pathways for Catalysis and Deactivation. <i>ACS Catalysis</i> , 2014, 4, 3755-3762.	5.5	102
307	Embedding Covalency into Metal Catalysts for Efficient Electrochemical Conversion of CO ₂ . <i>Journal of the American Chemical Society</i> , 2014, 136, 11355-11361.	6.6	192
308	Supramolecular Assembly Promotes the Electrocatalytic Reduction of Carbon Dioxide by Re(I) Bipyridine Catalysts at a Lower Overpotential. <i>Journal of the American Chemical Society</i> , 2014, 136, 14598-14607.	6.6	128
309	Hybrid catalysts for photoelectrochemical reduction of carbon dioxide: a prospective review on semiconductor/metal complex co-catalyst systems. <i>Journal of Materials Chemistry A</i> , 2014, 2, 15228.	5.2	108
310	Thermochemical Insight into the Reduction of CO to CH ₃ OH with [Re(CO)] ⁺ and [Mn(CO)] ⁺ Complexes. <i>Journal of the American Chemical Society</i> , 2014, 136, 8661-8668.	6.6	13
311	CO ₂ Reduction Catalyzed by Mercaptopteridine on Glassy Carbon. <i>Journal of the American Chemical Society</i> , 2014, 136, 14007-14010.	6.6	70
312	Kinetic Aspects for the Reduction of CO ₂ and CS ₂ with Mixed-Ligand Ruthenium(II) Hydride Complexes Containing Phosphine and Bipyridine. <i>Inorganic Chemistry</i> , 2014, 53, 9570-9580.	1.9	36
313	Manganese Catalysts with Bulky Bipyridine Ligands for the Electrocatalytic Reduction of Carbon Dioxide: Eliminating Dimerization and Altering Catalysis. <i>Journal of the American Chemical Society</i> , 2014, 136, 5460-5471.	6.6	394

#	ARTICLE	IF	CITATIONS
314	Catalytic CO ₂ conversion to organic carbonates with alcohols in combination with dehydration system. <i>Catalysis Science and Technology</i> , 2014, 4, 2830-2845.	2.1	136
315	Pendant Acid-Base Groups in Molecular Catalysts: H-Bond Promoters or Proton Relays? Mechanisms of the Conversion of CO ₂ to CO by Electrogenenerated Iron(0)Porphyrins Bearing Prepositioned Phenol Functionalities. <i>Journal of the American Chemical Society</i> , 2014, 136, 11821-11829.	6.6	209
316	Enabling Silicon for Solar-Fuel Production. <i>Chemical Reviews</i> , 2014, 114, 8662-8719.	23.0	329
318	Earth-abundant inorganic electrocatalysts and their nanostructures for energy conversion applications. <i>Energy and Environmental Science</i> , 2014, 7, 3519-3542.	15.6	1,151
319	Single catalyst electrocatalytic reduction of CO ₂ in water to H ₂ +CO syngas mixtures with water oxidation to O ₂ . <i>Energy and Environmental Science</i> , 2014, 7, 4007-4012.	15.6	120
320	Elucidation of inorganic reaction mechanisms in ionic liquids: the important role of solvent donor and acceptor properties. <i>Dalton Transactions</i> , 2014, 43, 15675-15692.	1.6	23
321	Selective Visible-Light-Driven CO ₂ Reduction on a p-Type Dye-Sensitized NiO Photocathode. <i>Journal of the American Chemical Society</i> , 2014, 136, 13518-13521.	6.6	97
322	Photons to formate: Efficient electrochemical solar energy conversion via reduction of carbon dioxide. <i>Journal of CO₂ Utilization</i> , 2014, 7, 1-5.	3.3	79
323	Electrochemistry of nickel(II) and copper(II) N,N'-ethylenebis(acetylacetoniminato) complexes and their electrocatalytic activity for reduction of carbon dioxide and carboxylic acid protons. <i>Transition Metal Chemistry</i> , 2014, 39, 819-830.	0.7	19
324	Evaluation of Homogeneous Electrocatalysts by Cyclic Voltammetry. <i>Inorganic Chemistry</i> , 2014, 53, 9983-10002.	1.9	403
325	Retarding of electrochemical oxidation of formate on the platinum anode by a coat of Nafion membrane. <i>Journal of Power Sources</i> , 2014, 272, 303-310.	4.0	21
326	Ultraefficient homogeneous catalyst for the CO ₂ -to-CO electrochemical conversion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 14990-14994.	3.3	236
327	Elucidation of Aqueous Solvent-Mediated Hydrogen-Transfer Reactions by ab Initio Molecular Dynamics and Nudged Elastic-Band Studies of NaBH ₄ Hydrolysis. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21385-21399.	1.5	37
328	Electrocatalytic CO ₂ Reduction with a Homogeneous Catalyst in Ionic Liquid: High Catalytic Activity at Low Overpotential. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2033-2038.	2.1	108
329	Developing a Mechanistic Understanding of Molecular Electrocatalysts for CO ₂ Reduction using Infrared Spectroelectrochemistry. <i>Organometallics</i> , 2014, 33, 4550-4559.	1.1	186
330	Rapid Selective Electrocatalytic Reduction of Carbon Dioxide to Formate by an Iridium Pincer Catalyst Immobilized on Carbon Nanotube Electrodes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8709-8713.	7.2	221
331	Effective visible-light driven CO ₂ photoreduction via a promising bifunctional iridium coordination polymer. <i>Chemical Science</i> , 2014, 5, 3808.	3.7	131
332	Multimetallic Cooperativity in Uranium-Mediated CO ₂ Activation. <i>Journal of the American Chemical Society</i> , 2014, 136, 6716-6723.	6.6	113

#	ARTICLE	IF	CITATIONS
333	Nanostructured Tin Catalysts for Selective Electrochemical Reduction of Carbon Dioxide to Formate. <i>Journal of the American Chemical Society</i> , 2014, 136, 1734-1737.	6.6	1,001
334	The Mechanism of Homogeneous CO ₂ Reduction by Ni(cyclam): Product Selectivity, Concerted Proton–Electron Transfer and C–O Bond Cleavage. <i>Inorganic Chemistry</i> , 2014, 53, 7500-7507.	1.9	145
335	Formation of a nickel carbon dioxide adduct and its transformation mediated by a Lewis acid. <i>Chemical Communications</i> , 2014, 50, 11458-11461.	2.2	74
336	Mechanism of N ₂ Reduction to NH ₃ by Aqueous Solvated Electrons. <i>Journal of Physical Chemistry B</i> , 2014, 118, 195-203.	1.2	49
337	Combined steric and electronic effects of positional substitution on dimethyl-bipyridine rhenium(I)tricarbonyl electrocatalysts for the reduction of CO ₂ . <i>Inorganica Chimica Acta</i> , 2014, 422, 109-113.	1.2	30
338	Templated assembly of photoswitches significantly increases the energy-storage capacity of solar thermal fuels. <i>Nature Chemistry</i> , 2014, 6, 441-447.	6.6	261
339	Carbon dioxide reduction via light activation of a ruthenium–Ni(cyclam) complex. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 12067.	1.3	45
340	Ruthenium-Catalyzed Reduction of Carbon Dioxide to Formaldehyde. <i>Journal of the American Chemical Society</i> , 2014, 136, 4419-4425.	6.6	194
341	A novel electrolysis cell for CO ₂ reduction to CO in ionic liquid/organic solvent electrolyte. <i>Journal of Power Sources</i> , 2014, 259, 50-53.	4.0	56
342	Reduction of CO ₂ using a rhenium bipyridine complex containing ancillary BODIPY moieties. <i>Catalysis Today</i> , 2014, 225, 149-157.	2.2	36
343	New insight into photoelectric converting CO ₂ to CH ₃ OH on the one-dimensional ribbon CoPc enhanced Fe ₂ O ₃ NTs. <i>Applied Catalysis B: Environmental</i> , 2014, 156-157, 249-256.	10.8	36
344	Electrocatalytic and Photocatalytic Conversion of CO ₂ to Methanol using Ruthenium Complexes with Internal Pyridyl Cocatalysts. <i>Inorganic Chemistry</i> , 2014, 53, 6544-6553.	1.9	47
345	Multielectron, Multistep Molecular Catalysis of Electrochemical Reactions: Benchmarking of Homogeneous Catalysts. <i>ChemElectroChem</i> , 2014, 1, 1226-1236.	1.7	345
346	Studies of Cobalt-Mediated Electrocatalytic CO ₂ Reduction Using a Redox-Active Ligand. <i>Inorganic Chemistry</i> , 2014, 53, 4980-4988.	1.9	139
347	Distinguishing Homogeneous from Heterogeneous Water Oxidation Catalysis when Beginning with Polyoxometalates. <i>ACS Catalysis</i> , 2014, 4, 909-933.	5.5	195
348	A Hydrogen-Evolving Ni(P ₂ N ₂) ₂ Electrocatalyst Covalently Attached to a Glassy Carbon Electrode: Preparation, Characterization, and Catalysis. Comparisons with the Homogeneous Analogue. <i>Inorganic Chemistry</i> , 2014, 53, 6875-6885.	1.9	49
349	Use of carbon dioxide as feedstock for chemicals and fuels: homogeneous and heterogeneous catalysis. <i>Journal of Chemical Technology and Biotechnology</i> , 2014, 89, 334-353.	1.6	181
350	Electrochemical conversion of CO ₂ to fuels: tuning of the reaction zone using suitable functional groups in a solid polymer electrolyte. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 17588-17594.	1.3	69

#	ARTICLE	IF	CITATIONS
351	Formate production through carbon dioxide hydrogenation with recombinant whole cell biocatalysts. <i>Bioresource Technology</i> , 2014, 164, 7-11.	4.8	52
352	Electrochemical Carbon Dioxide Reduction Catalyzed by a Dinuclear Ruthenium Complex with a Flexible Bridging Ligand. <i>Chemistry Letters</i> , 2014, 43, 1222-1223.	0.7	3
353	Electrochemical Conversion of Bicarbonate to Formate Mediated by the Complex Ru ^{III} (edta) (edta ⁴⁻ = ethylenediaminetetraacetate). <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 5856-5859.	1.0	11
354	C-O Bond Activation by a Tantalum-Bonded Pincer Ligand - Ligand Modification Effects on the Selectivity of C-H Bond Cleavage Processes. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 6196-6204.	1.0	3
355	Analysis of Catalytic Gas Products Using Electron Energy-Loss Spectroscopy and Residual Gas Analysis for <i>Operando</i> Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2014, 20, 815-824.	0.2	45
356	Non-photochemical synthesis of Re(diimine)(CO) ₂ (L)Cl (L = phosphine or phosphite) compounds. <i>Inorganic Chemistry Communication</i> , 2015, 59, 80-83.	1.8	10
357	Dissociative Electron Transfers. , 2015, , 531-550.		0
358	Orbital-Resolved Imaging of the Adsorbed State of Pyridine on GaP(110) Identifies Sites Susceptible to Nucleophilic Attack. <i>Journal of Physical Chemistry C</i> , 2015, 119, 28917-28924.	1.5	8
359	Synthesis and Characterization of Chloro- and Alkyliron Complexes with N-Donor Ligands and Their Reactivity towards CO ₂ . <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 5066-5073.	1.0	4
361	An Air- and Water-Tolerant Zinc Hydride Cluster That Reacts Selectively With CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7047-7050.	7.2	38
362	Electrochemical Reduction of CO ₂ by M(CO) ₄ (diimine) Complexes (M=Mo, W): Catalytic Activity Improved by 2,2'-Dipyridylamine. <i>ChemElectroChem</i> , 2015, 2, 1372-1379.	1.7	46
363	Reduction of CO ₂ by Pyridine Monoimine Molybdenum Carbonyl Complexes: Cooperative Metal-Ligand Binding of CO ₂ . <i>Chemistry - A European Journal</i> , 2015, 21, 8497-8503.	1.7	63
364	Site Isolation Leads to Stable Photocatalytic Reduction of CO ₂ over a Rhenium-Based Catalyst. <i>Chemistry - A European Journal</i> , 2015, 21, 18576-18579.	1.7	30
366	Enhanced Photocatalytic Reduction of CO ₂ to CO through TiO ₂ Passivation of InP in Ionic Liquids. <i>Chemistry - A European Journal</i> , 2015, 21, 13502-13507.	1.7	52
367	Molecular Catalyst Immobilized Photocathodes for Water/Proton and Carbon Dioxide Reduction. <i>ChemSusChem</i> , 2015, 8, 3746-3759.	3.6	72
368	Ni-Ag ₂ O ₃ /Ni foam catalyst with enhanced heat transfer for hydrogenation of CO ₂ to methane. <i>AIChE Journal</i> , 2015, 61, 4323-4331.	1.8	83
369	Cyclic Voltammetry of Electrocatalytic Films: Fast Catalysis Regimes. <i>ChemElectroChem</i> , 2015, 2, 1774-1784.	1.7	25
370	Electrocatalytic Transformation of Carbon Dioxide into Low Carbon Compounds on Conducting Polymers Derived from Multimetallic Porphyrins. <i>ChemSusChem</i> , 2015, 8, 3897-3904.	3.6	14

#	ARTICLE	IF	CITATIONS
371	Amines as Reaction Environment Regulator for CO ₂ Electrochemical Reduction to CH ₄ . Macromolecular Symposia, 2015, 357, 79-85.	0.4	13
372	Synthetic Model of the Oxygen-Evolving Center: Photosystem-II under the Spotlight. ChemBioChem, 2015, 16, 1981-1983.	1.3	3
373	Electro-Assisted Reduction of CO ₂ to CO and Formaldehyde by (TOA) ₆ [SiW ₁₁ O ₃₉ Co()] Polyoxometalate. European Journal of Inorganic Chemistry, 2015, 2015, 3642-3648.	1.0	45
374	Aktivierung und Elektronentransfer-induzierte Reaktion von Kohlendioxid an einer Oxid-Metall-Grenzfläche. Angewandte Chemie, 2015, 127, 12661-12665.	1.6	12
375	How the [NiFe ₄ S ₄] Cluster of CO Dehydrogenase Activates CO ₂ and NCO ⁺ . Angewandte Chemie - International Edition, 2015, 54, 8560-8564.	7.2	118
376	Metal-Doped Nitrogenated Carbon as an Efficient Catalyst for Direct CO ₂ Electroreduction to CO and Hydrocarbons. Angewandte Chemie - International Edition, 2015, 54, 10758-10762.	7.2	504
377	Electrocatalytic Carbon Dioxide Reduction by Using Cationic Pentamethylcyclopentadienyl-Iridium Complexes with Unsymmetrically Substituted Bipyridine Ligands. Chemistry - A European Journal, 2015, 21, 6564-6571.	1.7	28
378	<i>trans</i> -(Cl) ₂ [Ru(5,5'-diamide-2,2'-bipyridine)(CO) ₂ Cl ₂]: Synthesis, Structure, and Photocatalytic CO ₂ Reduction Activity. Chemistry - A European Journal, 2015, 21, 10049-10060.	1.7	46
379	Mechanistic Study of a Photocatalyzed C-S Bond Formation Involving Alkyl/Aryl Thiosulfate. Chemistry - A European Journal, 2015, 21, 16059-16065.	1.7	69
380	An Air- and Water-Tolerant Zinc Hydride Cluster That Reacts Selectively With CO ₂ . Angewandte Chemie, 2015, 127, 7153-7156.	1.6	33
381	Carbon Dioxide Activation and Reaction Induced by Electron Transfer at an Oxide-Metal Interface. Angewandte Chemie - International Edition, 2015, 54, 12484-12487.	7.2	80
382	Organocatalysts with carbon-centered activity for CO ₂ reduction with boranes. Chemical Communications, 2015, 51, 11293-11296.	2.2	52
383	Mechanistic Insights into the Electrochemical Reduction of CO ₂ to CO on Nanostructured Ag Surfaces. ACS Catalysis, 2015, 5, 4293-4299.	5.5	476
384	Photo- and Electro-Catalysis. , 2015, , 233-268.		7
385	Quantum Dots for Visible-Light Photocatalytic CO ₂ Reduction. , 2015, , 269-295.		1
387	Organometallics and Related Molecules for Energy Conversion. Green Chemistry and Sustainable Technology, 2015, , .	0.4	4
389	Electrocatalytic Reduction of Carbon Dioxide using Sol-gel Processed Copper Indium Sulfide (CIS) Immobilized on ITO-Coated Glass Electrode. Electrocatalysis, 2015, 6, 405-413.	1.5	14
390	Solar Electrical Energy Storage. , 2015, , 7-25.		6

#	ARTICLE	IF	CITATIONS
391	Efficient and selective molecular catalyst for the CO ₂ -to-CO electrochemical conversion in water. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6882-6886.	3.3	278
392	Fabrication of inverse opal TiO ₂ -supported Au@CdS core-shell nanoparticles for efficient photocatalytic CO ₂ conversion. Applied Catalysis B: Environmental, 2015, 179, 422-432.	10.8	121
393	Kinetics and Mechanisms of Reduction of Protons and Carbon Dioxide Catalyzed by Metal Complexes and Nanoparticles. Green Chemistry and Sustainable Technology, 2015, , 313-345.	0.4	0
394	Pyridine and Pyridinium Electrochemistry on Polycrystalline Gold Electrodes and Implications for CO ₂ Reduction. Journal of Physical Chemistry C, 2015, 119, 12523-12530.	1.5	65
395	Proton-Coupled Electron Transfer Reactions Catalysed by π -Metal Complexes. Chemistry - A European Journal, 2015, 21, 15078-15091.	1.7	51
396	Standard Reduction Potentials for Oxygen and Carbon Dioxide Couples in Acetonitrile and <i>N,N</i> -Dimethylformamide. Inorganic Chemistry, 2015, 54, 11883-11888.	1.9	189
397	Isotopic Probe Illuminates the Role of the Electrode Surface in Proton Coupled Hydride Transfer Electrochemical Reduction of Pyridinium on Pt(111). Journal of the Electrochemical Society, 2015, 162, H938-H944.	1.3	14
398	CS ₂ activation at uranium(III) siloxide ate complexes: the effect of a Lewis acidic site. Dalton Transactions, 2015, 44, 2650-2656.	1.6	26
399	Photoinduced charge accumulation by metal ion-coupled electron transfer. Physical Chemistry Chemical Physics, 2015, 17, 24001-24010.	1.3	20
400	Electrocatalytic Reduction of Nitrogen and Carbon Dioxide to Chemical Fuels: Challenges and Opportunities for a Solar Fuel Device. Journal of Photochemistry and Photobiology B: Biology, 2015, 152, 47-57.	1.7	37
401	Electrochemical reduction of CO ₂ in an aqueous electrolyte employing an iridium/ruthenium-oxide electrode. Canadian Journal of Chemical Engineering, 2015, 93, 55-62.	0.9	23
402	Hydricity of an Fe-H Species and Catalytic CO ₂ Hydrogenation. Inorganic Chemistry, 2015, 54, 5124-5135.	1.9	105
403	CO ₂ utilization: an enabling element to move to a resource- and energy-efficient chemical and fuel production. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140177.	1.6	145
404	Design of electrocatalysts for oxygen- and hydrogen-involving energy conversion reactions. Chemical Society Reviews, 2015, 44, 2060-2086.	18.7	4,323
405	Electrochemical Conversion of CO ₂ into Negative Electrode Materials for Li-Ion Batteries. ChemElectroChem, 2015, 2, 224-230.	1.7	43
406	A Mn Bipyrimidine Catalyst Predicted To Reduce CO ₂ at Lower Overpotential. ACS Catalysis, 2015, 5, 2521-2528.	5.5	67
407	Oxygen-induced changes to selectivity-determining steps in electrocatalytic CO ₂ reduction. Physical Chemistry Chemical Physics, 2015, 17, 4505-4515.	1.3	43
408	Modeling of catalytically active metal complex species and intermediates in reactions of organic halides electroreduction. Physical Chemistry Chemical Physics, 2015, 17, 5594-5605.	1.3	2

#	ARTICLE	IF	CITATIONS
409	Roles of ion pairing on electroreduction of carbon dioxide based on imidazolium-based salts. <i>Electrochimica Acta</i> , 2015, 158, 138-142.	2.6	25
410	The effect of the alkyl chain length of the tetraalkylammonium cation on CO ₂ electroreduction in an aprotic medium. <i>Electrochemistry Communications</i> , 2015, 52, 58-62.	2.3	7
411	Photocatalytic Carbon Dioxide Reduction with Rhodium-based Catalysts in Solution and Heterogenized within Metal-Organic Frameworks. <i>ChemSusChem</i> , 2015, 8, 603-608.	3.6	177
412	Using sustainable metals to carry out "green" transformations: Fe- and Cu-catalyzed CO ₂ monetization. <i>Coordination Chemistry Reviews</i> , 2015, 288, 69-97.	9.5	70
413	Electrochemical Reduction of Aqueous Imidazolium on Pt(111) by Proton Coupled Electron Transfer. <i>Topics in Catalysis</i> , 2015, 58, 23-29.	1.3	14
414	Electrocatalytic Reduction of Carbon Dioxide: Let the Molecules Do the Work. <i>Topics in Catalysis</i> , 2015, 58, 30-45.	1.3	85
415	Bio-inspired mechanistic insights into CO ₂ reduction. <i>Current Opinion in Chemical Biology</i> , 2015, 25, 103-109.	2.8	88
416	Cluster Models for Studying CO ₂ Reduction on Semiconductor Photoelectrodes. <i>Topics in Catalysis</i> , 2015, 58, 46-56.	1.3	30
417	Towards the electrochemical conversion of carbon dioxide into methanol. <i>Green Chemistry</i> , 2015, 17, 2304-2324.	4.6	441
418	Topological Effects on Globular Protein-ELP Fusion Block Copolymer Self-Assembly. <i>Advanced Functional Materials</i> , 2015, 25, 729-738.	7.8	40
419	Versatile functionalization of carbon electrodes with a polypyridine ligand: metallation and electrocatalytic H ⁺ and CO ₂ reduction. <i>Chemical Communications</i> , 2015, 51, 2995-2998.	2.2	70
420	The Homogeneous Reduction of CO ₂ by [Ni(cyclam)] ⁺ : Increased Catalytic Rates with the Addition of a CO Scavenger. <i>Journal of the American Chemical Society</i> , 2015, 137, 3565-3573.	6.6	200
421	Combinatorial Synthesis of Gold-Based Thin Films for Improved Electrocatalytic Conversion of CO ₂ to CO. <i>Electrocatalysis</i> , 2015, 6, 308-314.	1.5	8
422	Efficient Conversion of CO ₂ to CO Using Tin and Other Inexpensive and Easily Prepared Post-Transition Metal Catalysts. <i>Journal of the American Chemical Society</i> , 2015, 137, 5021-5027.	6.6	221
423	Benchmarking of Homogeneous Electrocatalysts: Overpotential, Turnover Frequency, Limiting Turnover Number. <i>Journal of the American Chemical Society</i> , 2015, 137, 5461-5467.	6.6	141
424	A Molecular Ruthenium Electrocatalyst for the Reduction of Carbon Dioxide to CO and Formate. <i>Journal of the American Chemical Society</i> , 2015, 137, 8564-8571.	6.6	129
425	Crucial role of sustainable liquid junction potential for solar-to-carbon monoxide conversion by a photovoltaic photoelectrochemical system. <i>RSC Advances</i> , 2015, 5, 54246-54252.	1.7	28
426	Observation of Surface-Bound Negatively Charged Hydride and Hydroxide on GaP(110) in H ₂ O Environments. <i>Journal of Physical Chemistry C</i> , 2015, 119, 17762-17772.	1.5	39

#	ARTICLE	IF	CITATIONS
427	Investigations by Protein Film Electrochemistry of Alternative Reactions of Nickel-Containing Carbon Monoxide Dehydrogenase. <i>Journal of Physical Chemistry B</i> , 2015, 119, 13690-13697.	1.2	30
428	Computational screening for effective Ge _{1-x} Si _x nanowire photocatalyst. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 20391-20397.	1.3	14
429	Ionic liquids enhance the electrochemical CO ₂ reduction catalyzed by MoO ₂ . <i>Chemical Communications</i> , 2015, 51, 13698-13701.	2.2	71
430	Unexpected effect of catalyst concentration on photochemical CO ₂ reduction by trans(Cl)Ru(bpy)(CO) ₂ Cl ₂ : new mechanistic insight into the CO/HCOO ⁻ selectivity. <i>Chemical Science</i> , 2015, 6, 3063-3074.	3.7	103
431	Remarkable accelerating and decelerating effects of the bases on CO ₂ reduction using a ruthenium NADH model complex. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015, 313, 163-167.	2.0	15
432	Reductive Disproportionation of Carbon Dioxide by an Alkyl-Functionalized Pyridine Monoimine Re(I) <i>fac</i> -Tricarbonyl Electrocatalyst. <i>Organometallics</i> , 2015, 34, 4678-4683.	1.1	37
433	CO ₂ photoreduction with water: Catalyst and process investigation. <i>Journal of CO₂ Utilization</i> , 2015, 12, 86-94.	3.3	37
434	Tuning redox potentials of CO ₂ reduction catalysts for carbon photofixation by Si nanowires. <i>Science China Materials</i> , 2015, 58, 515-520.	3.5	7
435	Iron-Catalyzed Reduction of CO ₂ into Methylene: Formation of C=N, C=O, and C=C Bonds. <i>Journal of the American Chemical Society</i> , 2015, 137, 9563-9566.	6.6	139
436	Photocatalytic CO ₂ Reduction to Formate Using a Mn(I) Molecular Catalyst in a Robust Metal-Organic Framework. <i>Inorganic Chemistry</i> , 2015, 54, 6821-6828.	1.9	293
437	Impurity Ion Complexation Enhances Carbon Dioxide Reduction Catalysis. <i>ACS Catalysis</i> , 2015, 5, 4479-4484.	5.5	219
438	Cyclic voltammetry of fast conducting electrocatalytic films. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19350-19359.	1.3	16
439	Carbon Dioxide Promoted H ⁺ Reduction Using a Bis(imino)pyridine Manganese Electrocatalyst. <i>Inorganic Chemistry</i> , 2015, 54, 4475-4482.	1.9	45
440	Octahedral rhenium K ₄ [Re ₆ S ₈ (CN) ₆] and Cu(OH) ₂ cluster modified TiO ₂ for the photoreduction of CO ₂ under visible light irradiation. <i>Applied Catalysis A: General</i> , 2015, 499, 32-38.	2.2	21
441	Cyclic Voltammetry Analysis of Electrocatalytic Films. <i>Journal of Physical Chemistry C</i> , 2015, 119, 12174-12182.	1.5	41
442	Enhanced CO ₂ electroreduction efficiency through secondary coordination effects on a pincer iridium catalyst. <i>Chemical Communications</i> , 2015, 51, 5947-5950.	2.2	57
443	Turning it off! Disfavouring hydrogen evolution to enhance selectivity for CO production during homogeneous CO ₂ reduction by cobalt-terpyridine complexes. <i>Chemical Science</i> , 2015, 6, 2522-2531.	3.7	152
444	Recent Technological Progress in CO ₂ Electroreduction to Fuels and Energy Carriers in Aqueous Environments. <i>Energy Technology</i> , 2015, 3, 197-210.	1.8	98

#	ARTICLE	IF	CITATIONS
445	The Formation of CO by Thermal Decomposition of Formic Acid under Electrochemical Conditions of CO ₂ Reduction. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2015, 152, 43-46.	1.7	8
446	Examining the selectivity of borohydride for carbon dioxide and bicarbonate reduction in protic conditions. <i>Fuel</i> , 2015, 150, 139-145.	3.4	34
447	Heterostructured nanocomposite tin phthalocyanine@mesoporous ceria (SnPc@CeO ₂) for photoreduction of CO ₂ in visible light. <i>RSC Advances</i> , 2015, 5, 42414-42421.	1.7	33
448	Design of a Catalytic Active Site for Electrochemical CO ₂ Reduction with Mn(I)-Tricarbonyl Species. <i>Inorganic Chemistry</i> , 2015, 54, 5285-5294.	1.9	163
449	EPR spin trapping evidence of radical intermediates in the photo-reduction of bicarbonate/CO ₂ in TiO ₂ aqueous suspensions. <i>Photochemical and Photobiological Sciences</i> , 2015, 14, 1039-1046.	1.6	25
450	A review of iron and cobalt porphyrins, phthalocyanines and related complexes for electrochemical and photochemical reduction of carbon dioxide. <i>Journal of Porphyrins and Phthalocyanines</i> , 2015, 19, 45-64.	0.4	190
451	Organic reactions for the electrochemical and photochemical production of chemical fuels from CO ₂ – The reduction chemistry of carboxylic acids and derivatives as bent CO ₂ surrogates. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2015, 152, 26-42.	1.7	26
452	Layer-controllable WS ₂ -reduced graphene oxide hybrid nanosheets with high electrocatalytic activity for hydrogen evolution. <i>Nanoscale</i> , 2015, 7, 10391-10397.	2.8	140
453	Surface Segregation in Bimetallic Nanoparticles: A Critical Issue in Electrocatalyst Engineering. <i>Small</i> , 2015, 11, 3221-3246.	5.2	208
454	Recent Advances in Electrocatalytic Reduction of Carbon Dioxide Using Metal-Free Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 4033-4042.	1.8	88
455	Structural and electronic characterization of multi-electron reduced naphthalene (BIAN) cobaloximes. <i>Dalton Transactions</i> , 2015, 44, 13017-13029.	1.6	16
456	3D ordered macroporous TiO ₂ -supported Pt@CdS core-shell nanoparticles: design, synthesis and efficient photocatalytic conversion of CO ₂ with water to methane. <i>Journal of Materials Chemistry A</i> , 2015, 3, 11074-11085.	5.2	138
457	Electrochemical Studies for CO ₂ Reduction Using Synthesized Co ₃ O ₄ (Anode) and Cu ₂ O (Cathode) as Electrocatalysts. <i>Energy & Fuels</i> , 2015, 29, 6670-6677.	2.5	37
458	Thermodynamic Aspects of Electrocatalytic CO ₂ Reduction in Acetonitrile and with an Ionic Liquid as Solvent or Electrolyte. <i>ACS Catalysis</i> , 2015, 5, 6440-6452.	5.5	162
459	Photocatalytic reduction of CO ₂ using metal complexes. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2015, 25, 106-137.	5.6	440
460	Direct Hydrogenation of Carbon Dioxide by an Artificial Reductase Obtained by Substituting Rhodium for Zinc in the Carbonic Anhydrase Catalytic Center. A Mechanistic Study. <i>ACS Catalysis</i> , 2015, 5, 5397-5409.	5.5	22
461	Reactivity of Hydride Bridges in High-Spin [3M ^{III} (μ_3 -H)] Clusters (M = Fe, Co). <i>Journal of the American Chemical Society</i> , 2015, 137, 10610-10617.	6.6	45
462	Conversion of Carbon Dioxide to Methanol Using a ¹ H Activated Bis(imino)pyridine Molybdenum Hydroboration Catalyst. <i>Inorganic Chemistry</i> , 2015, 54, 7506-7515.	1.9	37

#	ARTICLE	IF	CITATIONS
463	Molecular Catalysis of the Electrochemical and Photochemical Reduction of CO ₂ with Earth-Abundant Metal Complexes. Selective Production of CO vs HCOOH by Switching of the Metal Center. <i>Journal of the American Chemical Society</i> , 2015, 137, 10918-10921.	6.6	294
464	Photochemical Reduction of CO ₂ Using 1,3-Dimethylimidazolylidene. <i>Organic Letters</i> , 2015, 17, 4152-4155.	2.4	26
465	Short-Range Catalystâ€‘Surface Interactions Revealed by Heterodyne Two-Dimensional Sum Frequency Generation Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4204-4209.	2.1	42
466	Theoretical Investigation of a Parallel Catalytic Cycle in CO ₂ Hydrogenation by (PNP)IrH ₃ . <i>Organometallics</i> , 2015, 34, 4932-4940.	1.1	38
467	Anion-Receptor Mediated Oxidation of Carbon Monoxide to Carbonate by Peroxide Dianion. <i>Journal of the American Chemical Society</i> , 2015, 137, 14562-14565.	6.6	26
468	Highly Robust Hybrid Photocatalyst for Carbon Dioxide Reduction: Tuning and Optimization of Catalytic Activities of Dye/TiO ₂ /Re(I) Organicâ€‘Inorganic Ternary Systems. <i>Journal of the American Chemical Society</i> , 2015, 137, 13679-13690.	6.6	139
469	Preparation, characterization and photocatalytic performance of TiO ₂ prepared by using pressurized fluids in CO ₂ reduction and N ₂ O decomposition. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 76, 621-629.	1.1	13
470	Hybrid bioinorganic approach to solar-to-chemical conversion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 11461-11466.	3.3	234
471	Remarkable reactivity of a rhodium(III) boryl complex towards CO ₂ and CS ₂ : isolation of a carbido complex. <i>Chemical Communications</i> , 2015, 51, 14613-14616.	2.2	50
472	Graphite-Conjugated Pyrazines as Molecularly Tunable Heterogeneous Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2015, 137, 10926-10929.	6.6	95
473	Activation of CO ₂ by ionic liquid EMIMâ€‘BF ₄ in the electrochemical system: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 23521-23531.	1.3	101
474	A novel Ru/TiO ₂ hybrid nanocomposite catalyzed photoreduction of CO ₂ to methanol under visible light. <i>Nanoscale</i> , 2015, 7, 15258-15267.	2.8	55
475	Metal-free boron-doped graphene for selective electroreduction of carbon dioxide to formic acid/formate. <i>Chemical Communications</i> , 2015, 51, 16061-16064.	2.2	239
476	Synthesis of thin film AuPd alloys and their investigation for electrocatalytic CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20185-20194.	5.2	116
477	The Selective Electrochemical Conversion of Preactivated CO ₂ to Methane. <i>Journal of the Electrochemical Society</i> , 2015, 162, H473-H476.	1.3	18
478	CO ₂ Hydrogenation to Formate and Methanol as an Alternative to Photo- and Electrochemical CO ₂ Reduction. <i>Chemical Reviews</i> , 2015, 115, 12936-12973.	23.0	1,244
479	Fe-Porphyrin-Based Metalâ€‘Organic Framework Films as High-Surface Concentration, Heterogeneous Catalysts for Electrochemical Reduction of CO ₂ . <i>ACS Catalysis</i> , 2015, 5, 6302-6309.	5.5	639
480	Selective CO production by Au coupled ZnTe/ZnO in the photoelectrochemical CO ₂ reduction system. <i>Energy and Environmental Science</i> , 2015, 8, 3597-3604.	15.6	152

#	ARTICLE	IF	CITATIONS
481	Powered by porphyrin packing. <i>Nature Materials</i> , 2015, 14, 1192-1193.	13.3	16
482	Correcting errors in self-assembly. <i>Nature Materials</i> , 2015, 14, 1193-1193.	13.3	0
483	Temperature-Dependent Chemoselective Hydrosilylation of Carbon Dioxide to Formaldehyde or Methanol Oxidation State. <i>Organometallics</i> , 2015, 34, 543-546.	1.1	111
484	Selective, high efficiency reduction of CO ₂ in a non-diaphragm-based electrochemical system at low applied voltage. <i>RSC Advances</i> , 2015, 5, 9278-9282.	1.7	9
485	Influence of Weak Brønsted Acids on Electrocatalytic CO ₂ Reduction by Manganese and Rhenium Bipyridine Catalysts. <i>ACS Catalysis</i> , 2015, 5, 900-908.	5.5	120
486	Photo- and Electrocatalytic Reduction of CO ₂ by [Re(CO) ₃ {(1,1'-diimine)(4-piperidinyl-1,8-naphthalimide)}Cl] Complexes. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 296-304.		45
487	Ga doped RGO-TiO ₂ composite on an ITO surface electrode for investigation of photoelectrocatalytic activity under visible light irradiation. <i>New Journal of Chemistry</i> , 2015, 39, 369-376.	1.4	36
488	[M(CO) ₄ (2,2'-bipyridine)] (M=Cr, Mo, W) Complexes as Efficient Catalysts for Electrochemical Reduction of CO ₂ at a Gold Electrode. <i>ChemElectroChem</i> , 2015, 2, 213-217.	1.7	61
489	Salen ligand complexes as electrocatalysts for direct electrochemical reduction of gaseous carbon dioxide to value added products. <i>RSC Advances</i> , 2015, 5, 3581-3589.	1.7	30
490	Visible light assisted photocatalytic reduction of CO ₂ using a graphene oxide supported heteroleptic ruthenium complex. <i>Green Chemistry</i> , 2015, 17, 1605-1609.	4.6	74
491	Reductive functionalization of CO ₂ with amines: an entry to formamide, formamidine and methylamine derivatives. <i>Green Chemistry</i> , 2015, 17, 157-168.	4.6	339
492	Nickel complexes of a binucleating ligand derived from an SCS pincer. <i>Dalton Transactions</i> , 2015, 44, 747-752.	1.6	16
493	Nanostructured Metallic Electrocatalysts for Carbon Dioxide Reduction. <i>ChemCatChem</i> , 2015, 7, 38-47.	1.8	233
494	Rigid and microporous polymers for gas separation membranes. <i>Progress in Polymer Science</i> , 2015, 43, 1-32.	11.8	377
495	Semiconductor-based photocatalysts and photoelectrochemical cells for solar fuel generation: a review. <i>Catalysis Science and Technology</i> , 2015, 5, 1360-1384.	2.1	824
496	A general framework for the assessment of solar fuel technologies. <i>Energy and Environmental Science</i> , 2015, 8, 126-157.	15.6	293
497	Electrocatalytic Study of Carbon Dioxide Reduction By Co(TPP)Cl Complex. <i>Journal of Chemistry</i> , 2016, 2016, 1-7.	0.9	8
498	Pricing of Renewable Gasoline and Its Impact on Greenhouse Gas Emission Reduction Planning for Automakers and Electricity Generators. , 0, , .		1

#	ARTICLE	IF	CITATIONS
499	Nanostructured p-Type Semiconductor Electrodes and Photoelectrochemistry of Their Reduction Processes. <i>Energies</i> , 2016, 9, 373.	1.6	46
501	Anion-Selective Redox Electrodes: Electrochemically Mediated Separation with Heterogeneous Organometallic Interfaces. <i>Advanced Functional Materials</i> , 2016, 26, 3394-3404.	7.8	106
502	Electrocatalytic Reduction of Carbon Dioxide with a Well-Defined PN^3Ru Pincer Complex. <i>ChemPlusChem</i> , 2016, 81, 166-171.	1.3	21
503	Electrochemical Reduction of Carbon Dioxide to Methanol by Direct Injection of Electrons into Immobilized Enzymes on a Modified Electrode. <i>ChemSusChem</i> , 2016, 9, 631-635.	3.6	79
504	Capture of CO_2 by a Cationic Nickel(I) Complex in the Gas Phase and Characterization of the Bound, Activated CO_2 Molecule by Cryogenic Ion Vibrational Predissociation Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1282-1285.	7.2	68
505	Unbiased Sunlight-Driven Artificial Photosynthesis of Carbon Monoxide from CO_2 Using a ZnTe-Based Photocathode and a Perovskite Solar Cell in Tandem. <i>ACS Nano</i> , 2016, 10, 6980-6987.	7.3	128
506	Carbon Monoxide: A Mild and Efficient Reducing Agent towards Atomically Precise Gold Nanoclusters. <i>Chemical Record</i> , 2016, 16, 1761-1771.	2.9	23
507	Interrogating heterobimetallic co-catalytic responses for the electrocatalytic reduction of CO_2 using supramolecular assembly. <i>Dalton Transactions</i> , 2016, 45, 15942-15950.	1.6	18
508	Activating a Low Overpotential CO_2 Reduction Mechanism by a Strategic Ligand Modification on a Ruthenium Polypyridyl Catalyst. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1825-1829.	7.2	78
509	CO_2 as a C1 Source: $\text{B}(\text{C}_6\text{F}_5)_3$ -Catalyzed Cyclization of <i>o</i> -Phenylene-diamines To Construct Benzimidazoles in the Presence of Hydrosilane. <i>Organic Letters</i> , 2016, 18, 6316-6319.	2.4	67
510	Heterogene molekulare Systeme für eine photokatalytische CO_2 -Reduktion mit Wasseroxidation. <i>Angewandte Chemie</i> , 2016, 128, 15146-15174.	1.6	46
511	Nanoporous copper: fabrication techniques and advanced electrochemical applications. <i>Corrosion Reviews</i> , 2016, 34, 249-276.	1.0	3
512	Iodide-Photocatalyzed Reduction of Carbon Dioxide to Formic Acid with Thiols and Hydrogen Sulfide. <i>ChemSusChem</i> , 2016, 9, 3397-3400.	3.6	7
513	Comparison of heterogenized molecular and heterogeneous oxide catalysts for photoelectrochemical water oxidation. <i>Energy and Environmental Science</i> , 2016, 9, 1794-1802.	15.6	136
514	Selective Reduction of CO_2 to CH_4 by Tandem Hydrosilylation with Mixed Al/B Catalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 5321-5333.	6.6	140
515	Controlled electropolymerisation of a carbazole-functionalised iron porphyrin electrocatalyst for CO_2 reduction. <i>Chemical Communications</i> , 2016, 52, 5864-5867.	2.2	48
516	Toward Co -metalloMOFzymes: Metal-Organic Frameworks with Single-Site Metal Catalysts for Small-Molecule Transformations. <i>Inorganic Chemistry</i> , 2016, 55, 7281-7290.	1.9	96
517	Electrocatalytic Reduction of CO_2 by Group 6 $\text{M}(\text{CO})_6$ Species without Co -Non-Innocent Ligands. <i>Inorganic Chemistry</i> , 2016, 55, 6240-6246.	1.9	37

#	ARTICLE	IF	CITATIONS
518	Synthesis and Low Temperature Spectroscopic Observation of 1,3,5-Trioxane-2,4,6-Trione: The Cyclic Trimer of Carbon Dioxide. <i>Journal of Organic Chemistry</i> , 2016, 81, 5354-5361.	1.7	5
519	Synthesis of oxocarbon-encapsulated gold nanoparticles with blue-shifted localized surface plasmon resonance by pulsed laser ablation in water with CO ₂ absorbers. <i>Nanotechnology</i> , 2016, 27, 255602.	1.3	16
520	Iridium(III) 1-Phenylisoquinoline Complexes as a Photosensitizer for Photocatalytic CO ₂ Reduction: A Mixed System with a Re(I) Catalyst and a Supramolecular Photocatalyst. <i>Inorganic Chemistry</i> , 2016, 55, 5702-5709.	1.9	103
521	Polyaniline-Supported Bacterial Biofilms as Active Matrices for Platinum Nanoparticles: Enhancement of Electroreduction of Carbon Dioxide. <i>Australian Journal of Chemistry</i> , 2016, 69, 411.	0.5	6
522	Photocatalytic Reduction of Carbon Dioxide to CO and HCO ₂ H Using <i>fac</i> -Mn(CN)(bpy)(CO) ₃ . <i>Inorganic Chemistry</i> , 2016, 55, 3192-3198.	1.9	100
523	Solvent influence on the thermodynamics for hydride transfer from bis(diphosphine) complexes of nickel. <i>Dalton Transactions</i> , 2016, 45, 10017-10023.	1.6	24
524	Simultaneous Reduction of CO ₂ and Splitting of H ₂ O by a Single Immobilized Cobalt Phthalocyanine Electrocatalyst. <i>ACS Catalysis</i> , 2016, 6, 3092-3095.	5.5	237
525	N-Heterocyclic Carbene-Based Mn Electrocatalyst for Two-Electron CO ₂ Reduction over Proton Reduction. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8821-8831.	1.5	37
526	Noninnocent Proton-Responsive Ligand Facilitates Reductive Deprotonation and Hinders CO ₂ Reduction Catalysis in [Ru(tpy)(6DHBP)(NCCH ₃) ₂] ²⁺ (6DHBP = Tj ETQp 0 0 rg 87 /Overlo	0.0	0
527	Preparation of a silver electrode with a three-dimensional surface and its performance in the electrochemical reduction of carbon dioxide. <i>Electrochimica Acta</i> , 2016, 203, 99-108.	2.6	33
528	Electrochemical CO ₂ reduction to CO on dendritic Ag@Cu electrocatalysts prepared by electrodeposition. <i>Chemical Engineering Journal</i> , 2016, 299, 37-44.	6.6	140
529	Proton-Assisted Reduction of CO ₂ by Cobalt Aminopyridine Macrocycles. <i>Journal of the American Chemical Society</i> , 2016, 138, 5765-5768.	6.6	186
530	Can photosynthesis enable a global transition from fossil fuels to solar fuels, to mitigate climate change and fuel-supply limitations?. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 62, 134-163.	8.2	74
531	Morphology Matters: Tuning the Product Distribution of CO ₂ Electroreduction on Oxide-Derived Cu Foam Catalysts. <i>ACS Catalysis</i> , 2016, 6, 3804-3814.	5.5	366
532	Electrocatalytic reduction of CO ₂ to CO by a mononuclear ruthenium(<i>scpi</i>) complex. <i>New Journal of Chemistry</i> , 2016, 40, 6347-6357.	1.4	17
533	A review of harvesting clean fuels from enzymatic CO ₂ reduction. <i>RSC Advances</i> , 2016, 6, 44170-44194.	1.7	87
534	Single Atom (Pd/Pt) Supported on Graphitic Carbon Nitride as an Efficient Photocatalyst for Visible-Light Reduction of Carbon Dioxide. <i>Journal of the American Chemical Society</i> , 2016, 138, 6292-6297.	6.6	985
535	Toward Rational Design of 3d Transition Metal Catalysts for CO ₂ Hydrogenation Based on Insights into Hydricity-Controlled Rate-Determining Steps. <i>Inorganic Chemistry</i> , 2016, 55, 5438-5444.	1.9	71

#	ARTICLE	IF	CITATIONS
536	Electrochemical Cycling Induced Surface Segregation of AuPt Nanoparticles in HClO ₄ and H ₂ SO ₄ . Journal of the Electrochemical Society, 2016, 163, F752-F760.	1.3	5
537	Design of a Two-Compartment Electrolysis Cell for the Reduction of CO ₂ to CO in Tetrabutylammonium Perchlorate/Propylene Carbonate for Renewable Electrical Energy Storage. Journal of the Electrochemical Society, 2016, 163, G82-G87.	1.3	23
538	Photoelectrochemical study of p-GaP(100) ZnO AuNP devices: strategies for enhanced electron transfer and aqueous catalysis. Chemical Communications, 2016, 52, 9145-9148.	2.2	5
539	Reduced State of Iridium PCP Pincer Complexes in Electrochemical CO ₂ Hydrogenation. ACS Catalysis, 2016, 6, 3834-3839.	5.5	23
541	Heterogeneous Molecular Systems for Photocatalytic CO ₂ Reduction with Water Oxidation. Angewandte Chemie - International Edition, 2016, 55, 14924-14950.	7.2	360
542	The Electrochemical Behavior of Early Metal Metallocene Cp ₂ MCl ₂ Complexes under CO ₂ . Electrochimica Acta, 2016, 218, 110-118.	2.6	7
543	Metal-organic redox vehicles to encapsulate organic dyes for photocatalytic protons and carbon dioxide reduction. Inorganic Chemistry Frontiers, 2016, 3, 1256-1263.	3.0	9
544	[ReCl(CO) ₃ (phen-dione)] as a homogeneous and heterogeneous electrocatalyst for the reduction of carbon dioxide. Journal of CO ₂ Utilization, 2016, 16, 354-360.	3.3	14
545	Zn electrode with a layer of nanoparticles for selective electroreduction of CO ₂ to formate in aqueous solutions. Journal of Materials Chemistry A, 2016, 4, 16670-16676.	5.2	81
546	Electrocatalytic reduction of carbon dioxide with Mn(terpyridine) carbonyl complexes. Dalton Transactions, 2016, 45, 17179-17186.	1.6	40
547	Evaluating the Thermodynamics of Electrocatalytic N ₂ Reduction in Acetonitrile. ACS Energy Letters, 2016, 1, 698-704.	8.8	115
548	Enzymatic photosynthesis of formate from carbon dioxide coupled with highly efficient photoelectrochemical regeneration of nicotinamide cofactors. Green Chemistry, 2016, 18, 5989-5993.	4.6	69
549	Differences between carbon suboxide and its heavier congeners as ligands in transition metal complexes: a theoretical study. New Journal of Chemistry, 2016, 40, 9486-9493.	1.4	5
550	Cationic dirhodium(II) complexes for the electrocatalytic reduction of CO ₂ to HCOOH. Chemical Communications, 2016, 52, 12175-12178.	2.2	27
551	Is the Imidazolium Cation a Unique Promoter for Electrocatalytic Reduction of Carbon Dioxide?. Journal of Physical Chemistry C, 2016, 120, 23989-24001.	1.5	100
552	Thermodynamic Hydricity of Transition Metal Hydrides. Chemical Reviews, 2016, 116, 8655-8692.	23.0	365
553	Inhibited proton transfer enhances Au-catalyzed CO ₂ -to-fuels selectivity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4585-93.	3.3	310
554	Nanowire Array Structures for Photocatalytic Energy Conversion and Utilization: A Review of Design Concepts, Assembly and Integration, and Function Enabling. Advanced Energy Materials, 2016, 6, 1600683.	10.2	89

#	ARTICLE	IF	CITATIONS
555	Molecular deposition of a macrocyclic cobalt catalyst on TiO ₂ nanoparticles. <i>Journal of Molecular Catalysis A</i> , 2016, 423, 293-299.	4.8	10
556	Photoelectrochemical Reduction of CO ₂ Using Third-Generation Conjugated Polymers. <i>ChemistrySelect</i> , 2016, 1, 1156-1162.	0.7	18
557	High Performance Fe Porphyrin/Ionic Liquid Co-catalyst for Electrochemical CO ₂ Reduction. <i>Chemistry - A European Journal</i> , 2016, 22, 14158-14161.	1.7	55
558	Efficient Photoelectrochemical Reduction of CO ₂ on Pyridyl Covalent Bonded Ruthenium(II) Based-Photosensitizer. <i>Electrochimica Acta</i> , 2016, 216, 228-238.	2.6	11
560	Selectivity for HCO ₂ ⁻ over H ₂ in the Electrochemical Catalytic Reduction of CO ₂ by (POCOP)IrH ₂ . <i>ACS Catalysis</i> , 2016, 6, 6362-6371.	5.5	33
561	Photocatalytic CO ₂ reduction by highly dispersed Cu sites on TiO ₂ . <i>Journal of Photonics for Energy</i> , 2016, 7, 012004.	0.8	15
562	Nucleophilic Aromatic Substitution on Pentafluorophenyl-Substituted Dipyrranes and Tetrapyrroles as a Route to Multifunctionalized Chromophores for Potential Application in Photodynamic Therapy. <i>Chemistry - A European Journal</i> , 2016, 22, 13953-13964.	1.7	23
563	Electrocatalysis of CO ₂ Reduction in Brush Polymer Ion Gels. <i>Journal of the American Chemical Society</i> , 2016, 138, 11160-11163.	6.6	27
564	Photoreduction Mechanism of CO ₂ to CO Catalyzed by a Rhenium(I)-Polyoxometalate Hybrid Compound. <i>ACS Catalysis</i> , 2016, 6, 6422-6428.	5.5	58
565	Curvature-Dependent Selectivity of CO ₂ Electrocatalytic Reduction on Cobalt Porphyrin Nanotubes. <i>ACS Catalysis</i> , 2016, 6, 6294-6301.	5.5	113
566	The effects of chelating N ₄ ligand coordination on Co(II)-catalysed photochemical conversion of CO ₂ to CO: reaction mechanism and DFT calculations. <i>Catalysis Science and Technology</i> , 2016, 6, 7408-7420.	2.1	59
567	Bismuth nanodendrites as a high performance electrocatalyst for selective conversion of CO ₂ to formate. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13746-13753.	5.2	160
568	Material science lesson from the biological photosystem. <i>Nano Convergence</i> , 2016, 3, 19.	6.3	18
569	CO ₂ reduction with Re(I)-NHC compounds: driving selective catalysis with a silicon nanowire photoelectrode. <i>Chemical Communications</i> , 2016, 52, 14258-14261.	2.2	32
570	Molecular engineering for efficient and selective iron porphyrin catalysts for electrochemical reduction of CO ₂ to CO. <i>Chemical Communications</i> , 2016, 52, 14478-14481.	2.2	55
571	Ni-based bimetallic heterogeneous catalysts for energy and environmental applications. <i>Energy and Environmental Science</i> , 2016, 9, 3314-3347.	15.6	556
572	Achieving Both High Selectivity and Current Density for CO ₂ Reduction to Formate on Nanoporous Tin Foam Electrocatalysts. <i>ChemistrySelect</i> , 2016, 1, 1711-1715.	0.7	38
573	Catalytic CO ₂ -to-CO conversion in water by covalently functionalized carbon nanotubes with a molecular iron catalyst. <i>Chemical Communications</i> , 2016, 52, 12084-12087.	2.2	104

#	ARTICLE	IF	CITATIONS
574	Synthesis, characterization, and electrocatalytic properties of a custom-designed conjugated polymer with pyridine side chain. <i>Electrochimica Acta</i> , 2016, 217, 92-99.	2.6	6
575	Reactivity of CS ₂ – Syntheses and Structures of Transition-Metal Species with Dithioformate and Methanedithiolate Ligands. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 4913-4920.	1.0	18
576	Mechanistic exploration and controlled synthesis of precise thiolate-gold nanoclusters. <i>Coordination Chemistry Reviews</i> , 2016, 329, 1-15.	9.5	161
577	Judicious Ligand Design in Ruthenium Polypyridyl CO ₂ Reduction Catalysts to Enhance Reactivity by Steric and Electronic Effects. <i>Chemistry - A European Journal</i> , 2016, 22, 14870-14880.	1.7	35
578	Barriers of Electrochemical CO ₂ Reduction on Transition Metals. <i>Organic Process Research and Development</i> , 2016, 20, 1424-1430.	1.3	135
579	Complexes of the tripodal phosphine ligands PhSi(XPPH) ₃ (X =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 CO ₂ . <i>Dalton Transactions</i> , 2016, 45, 14774-14788.	1.6	40
580	Introduction to CO ₂ Electroreduction. <i>Electrochemical Energy Storage and Conversion</i> , 2016, , 1-46.	0.0	1
581	Electrode Kinetics of CO ₂ Electroreduction. <i>Electrochemical Energy Storage and Conversion</i> , 2016, , 103-154.	0.0	4
582	Catalysis of CO ₂ Electroreduction. <i>Electrochemical Energy Storage and Conversion</i> , 2016, , 155-228.	0.0	1
583	Product Analysis for CO ₂ Electroreduction. <i>Electrochemical Energy Storage and Conversion</i> , 2016, , 293-310.	0.0	0
584	Highly Efficient and Selective Photocatalytic CO ₂ Reduction by Iron and Cobalt Quaterpyridine Complexes. <i>Journal of the American Chemical Society</i> , 2016, 138, 9413-9416.	6.6	276
585	Efficient Electrochemical Production of Syngas from CO ₂ and H ₂ O by using a Nanostructured Ag/g-C ₃ N ₄ Catalyst. <i>ChemElectroChem</i> , 2016, 3, 1497-1502.	1.7	46
586	Enhanced electrochemical reduction of CO ₂ to CO on Ag electrocatalysts with increased unoccupied density of states. <i>Journal of Materials Chemistry A</i> , 2016, 4, 12616-12623.	5.2	74
587	Photoelectrochemical CO ₂ Reduction by a Molecular Cobalt(II) Catalyst on Planar and Nanostructured Si Surfaces. <i>Chemistry - A European Journal</i> , 2016, 22, 13064-13067.	1.7	27
588	Catalytic Hydrogenation of CO ₂ by Manganese Complexes: Role of π -Acceptor Ligands. <i>Journal of Physical Chemistry C</i> , 2016, 120, 16478-16488.	1.5	43
589	Catalytic Hydrogenation of CO ₂ by Fe Complexes Containing Pendant Amines: Role of Water and Base. <i>Journal of Physical Chemistry C</i> , 2016, 120, 26652-26662.	1.5	16
590	Dissection of Electronic Substituent Effects in Multielectron – Multistep Molecular Catalysis. Electrochemical CO ₂ -to-CO Conversion Catalyzed by Iron Porphyrins. <i>Journal of Physical Chemistry C</i> , 2016, 120, 28951-28960.	1.5	139
591	Electrochemical Properties and CO ₂ -Reduction Ability of <i>m</i> -Terphenyl Isocyanide Supported Manganese Tricarbonyl Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 12400-12408.	1.9	32

#	ARTICLE	IF	CITATIONS
592	Descriptors and Thermodynamic Limitations of Electrocatalytic Carbon Dioxide Reduction on Rutile Oxide Surfaces. <i>ChemSusChem</i> , 2016, 9, 3230-3243.	3.6	34
593	Electrochemical Reduction of CO ₂ to CO by a Co ^{II} Electrocatalyst and PEM Reactor at Ambient Conditions. <i>ChemistrySelect</i> , 2016, 1, 5533-5537.	0.7	14
594	A tunable metal ^{II} -polyaniline interface for efficient carbon dioxide electro-reduction to formic acid and methanol in aqueous solution. <i>Chemical Communications</i> , 2016, 52, 13901-13904.	2.2	36
595	Graphene Quantum Sheet Catalyzed Silicon Photocathode for Selective CO ₂ Conversion to CO. <i>Advanced Functional Materials</i> , 2016, 26, 233-242.	7.8	77
596	Capture of CO ₂ by a Cationic Nickel(I) Complex in the Gas Phase and Characterization of the Bound, Activated CO ₂ Molecule by Cryogenic Ion Vibrational Predissociation Spectroscopy. <i>Angewandte Chemie</i> , 2016, 128, 1304-1307.	1.6	17
597	Process integration of dimethyl carbonate and ethylene glycol production from biomass and heat exchanger network design. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016, 107, 80-93.	1.8	9
598	Nanostructured nonprecious metal catalysts for electrochemical reduction of carbon dioxide. <i>Nano Today</i> , 2016, 11, 373-391.	6.2	200
599	Highly selective palladium-copper bimetallic electrocatalysts for the electrochemical reduction of CO ₂ to CO. <i>Nano Energy</i> , 2016, 27, 35-43.	8.2	211
600	Efficient fixation and conversion of CO ₂ into dimethyl carbonate catalyzed by an imidazolium containing tri-cationic ionic liquid/super base system. <i>RSC Advances</i> , 2016, 6, 42279-42287.	1.7	17
601	Activation of heteroallenes by coordinatively unsaturated nickel(II) alkyl complexes supported by the hydrotris(3-phenyl-5-methyl)pyrazolyl borate (TpPh,Me) ligand. <i>Dalton Transactions</i> , 2016, 45, 14581-14590.	1.6	3
602	Improving the Efficiency and Activity of Electrocatalysts for the Reduction of CO ₂ through Supramolecular Assembly with Amino Acid-Modified Ligands. <i>Journal of the American Chemical Society</i> , 2016, 138, 8184-8193.	6.6	59
603	Electrocatalytic reduction of CO ₂ using Mn complexes with unconventional coordination environments. <i>Chemical Communications</i> , 2016, 52, 8010-8013.	2.2	50
604	Heterogenization of a macrocyclic cobalt complex for photocatalytic CO ₂ reduction. <i>Journal of Coordination Chemistry</i> , 2016, 69, 1748-1758.	0.8	16
605	Photochemical and electrochemical catalytic reduction of CO ₂ with NHC-containing dicarbonyl rhenium(^{III}) bipyridine complexes. <i>Dalton Transactions</i> , 2016, 45, 14524-14529.	1.6	50
606	Tuned Chemical Bonding Ability of Au at Grain Boundaries for Enhanced Electrochemical CO ₂ Reduction. <i>ACS Catalysis</i> , 2016, 6, 4443-4448.	5.5	103
607	How Doped MoS ₂ Breaks Transition-Metal Scaling Relations for CO ₂ Electrochemical Reduction. <i>ACS Catalysis</i> , 2016, 6, 4428-4437.	5.5	254
608	A pH-differential dual-electrolyte microfluidic electrochemical cells for CO ₂ utilization. <i>Renewable Energy</i> , 2016, 95, 277-285.	4.3	49
609	Surface-Induced Anisotropic Binding of a Rhenium CO ₂ -Reduction Catalyst on Rutile TiO ₂ (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2016, 120, 20970-20977.	1.5	44

#	ARTICLE	IF	CITATIONS
610	In-situ FTIR spectroscopic studies of electrocatalytic reactions and processes. <i>Nano Energy</i> , 2016, 29, 414-427.	8.2	108
611	Electrocatalytic Reduction of CO ₂ to CO With Re-Pyridyl-NHCs: Proton Source Influence on Rates and Product Selectivities. <i>Inorganic Chemistry</i> , 2016, 55, 6085-6094.	1.9	60
612	Interface effects for the hydrogenation of CO ₂ on Pt ₄ /Al ₂ O ₃ . <i>Applied Surface Science</i> , 2016, 386, 196-201.	3.1	20
613	Reduction of Carbon Dioxide by a Molybdenum-Containing Formate Dehydrogenase: A Kinetic and Mechanistic Study. <i>Journal of the American Chemical Society</i> , 2016, 138, 8834-8846.	6.6	112
614	Recent Advances in Inorganic Heterogeneous Electrocatalysts for Reduction of Carbon Dioxide. <i>Advanced Materials</i> , 2016, 28, 3423-3452.	11.1	1,256
615	Activating a Low Overpotential CO ₂ Reduction Mechanism by a Strategic Ligand Modification on a Ruthenium Polypyridyl Catalyst. <i>Angewandte Chemie</i> , 2016, 128, 1857-1861.	1.6	22
616	Surface structure and composition effects on electrochemical reduction of carbon dioxide. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 861-873.	1.2	34
617	Research opportunities to advance solar energy utilization. <i>Science</i> , 2016, 351, aad1920.	6.0	1,480
618	Electrocatalytic reduction of CO ₂ by thiophene-substituted rhenium(ⁱ) complexes and by their polymerized films. <i>Dalton Transactions</i> , 2016, 45, 14678-14688.	1.6	43
619	Highly effective sites and selectivity of nitrogen-doped graphene/CNT catalysts for CO ₂ electrochemical reduction. <i>Chemical Science</i> , 2016, 7, 1268-1275.	3.7	199
620	Electrochemical Impedance Studies of CO ₂ Reduction in Ionic Liquid/Organic Solvent Electrolyte on Au Electrode. <i>Electrochimica Acta</i> , 2016, 189, 32-37.	2.6	62
621	Making C-H bonds with CO ₂ : production of formate by molecular electrocatalysts. <i>Chemical Communications</i> , 2016, 52, 1768-1777.	2.2	92
622	CO ₂ conversion in a dielectric barrier discharge plasma: N ₂ in the mix as a helping hand or problematic impurity?. <i>Energy and Environmental Science</i> , 2016, 9, 999-1011.	15.6	154
623	Excess-electron-induced C-C bond formation in transformation of carbon dioxide. <i>RSC Advances</i> , 2016, 6, 851-858.	1.7	2
624	Facilitated carbon dioxide reduction using a Zn(ⁱⁱ) complex. <i>Chemical Communications</i> , 2016, 52, 1685-1688.	2.2	32
625	Technological advances in CO ₂ conversion electro-biorefinery: A step toward commercialization. <i>Bioresource Technology</i> , 2016, 215, 357-370.	4.8	165
626	CO ₂ photo-reduction: insights into CO ₂ activation and reaction on surfaces of photocatalysts. <i>Energy and Environmental Science</i> , 2016, 9, 2177-2196.	15.6	1,488
627	Single-nanowire photoelectrochemistry. <i>Nature Nanotechnology</i> , 2016, 11, 609-612.	15.6	111

#	ARTICLE	IF	CITATIONS
628	Polymer coordination promotes selective CO ₂ reduction by cobalt phthalocyanine. <i>Chemical Science</i> , 2016, 7, 2506-2515.	3.7	216
629	Noncovalent Immobilization of a Molecular Iron-Based Electrocatalyst on Carbon Electrodes for Selective, Efficient CO ₂ -to-CO Conversion in Water. <i>Journal of the American Chemical Society</i> , 2016, 138, 2492-2495.	6.6	250
630	Insertion of CO ₂ into the carbon–boron bond of a boronic ester ligand. <i>Chemical Communications</i> , 2016, 52, 4148-4151.	2.2	27
631	New trends in the development of heterogeneous catalysts for electrochemical CO ₂ reduction. <i>Catalysis Today</i> , 2016, 270, 19-30.	2.2	259
632	Electronic effects on the catalytic disproportionation of formic acid to methanol by [Cp*Ir ^{III} (R-bpy)Cl]Cl complexes. <i>Dalton Transactions</i> , 2016, 45, 2436-2439.	1.6	23
633	Mechanism for Forming B,C,N,O Rings from NH ₃ and BH ₃ and CO ₂ via Reaction Discovery Computations. <i>Journal of Physical Chemistry A</i> , 2016, 120, 1135-1144.	1.1	15
634	A pendant proton shuttle on [Fe ₄ N(CO) ₁₂] ⁺ alters product selectivity in formate vs. H ₂ production via the hydride [H ⁺ Fe ₄ N(CO) ₁₂] ⁺ . <i>Chemical Science</i> , 2016, 7, 2728-2735.	3.7	61
635	Minuscule weight percent of graphene oxide and reduced graphene oxide modified Ag ₃ PO ₄ : new insight into improved photocatalytic activity. <i>New Journal of Chemistry</i> , 2016, 40, 3370-3384.	1.4	21
636	Pyrrolic-nitrogen doped graphene: a metal-free electrocatalyst with high efficiency and selectivity for the reduction of carbon dioxide to formic acid: a computational study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 5491-5498.	1.3	114
637	Experimental and Theoretical Study of CO ₂ Insertion into Ruthenium Hydride Complexes. <i>Inorganic Chemistry</i> , 2016, 55, 1623-1632.	1.9	42
638	Recent advances in catalytic CO ₂ reduction by organometal complexes anchored on modified electrodes. <i>New Journal of Chemistry</i> , 2016, 40, 5656-5661.	1.4	54
639	Re(I) NHC Complexes for Electrocatalytic Conversion of CO ₂ . <i>Inorganic Chemistry</i> , 2016, 55, 3136-3144.	1.9	77
640	Transition Metal-Based Photofunctional Materials: Recent Advances and Potential Applications. <i>Structure and Bonding</i> , 2016, , 201-289.	1.0	1
641	Manganese Electrocatalysts with Bulky Bipyridine Ligands: Utilizing Lewis Acids To Promote Carbon Dioxide Reduction at Low Overpotentials. <i>Journal of the American Chemical Society</i> , 2016, 138, 1386-1393.	6.6	247
642	Ligand steals spotlight from metal to orchestrate hydrogen production. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 478-479.	3.3	7
643	Photocatalytic Reduction of CO ₂ with Re-Pyridyl-NHCs. <i>Inorganic Chemistry</i> , 2016, 55, 682-690.	1.9	88
644	Tailoring Electrocatalysts for Selective CO ₂ or H ₂ Reduction: Iron Carbonyl Clusters as a Case Study. <i>Inorganic Chemistry</i> , 2016, 55, 378-385.	1.9	81
645	Electrochemistry of Carbon Dioxide on Carbon Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 28357-28371.	4.0	128

#	ARTICLE	IF	CITATIONS
646	Kinetic Analysis of Competitive Electrocatalytic Pathways: New Insights into Hydrogen Production with Nickel Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 604-616.	6.6	51
647	Orientation of Cyano-Substituted Bipyridine Re(I) π -Tricarbonyl Electrocatalysts Bound to Conducting Au Surfaces. <i>Journal of Physical Chemistry C</i> , 2016, 120, 1657-1665.	1.5	46
648	Reaction Mechanisms in Carbon Dioxide Conversion. , 2016, , .		70
649	One- and Multi-electron Pathways for the Reduction of CO ₂ into C ₁ and C ₁ + Energy-Richer Molecules: Some Thermodynamic and Kinetic Facts. , 2016, , 311-345.		4
650	Gold catalyst reactivity for CO ₂ electro-reduction: From nano particle to layer. <i>Catalysis Today</i> , 2016, 260, 107-111.	2.2	67
651	Synthesis and Photophysical Study of a [NiFe] Hydrogenase Biomimetic Compound Covalently Linked to a Re-diimine Photosensitizer. <i>Inorganic Chemistry</i> , 2016, 55, 527-536.	1.9	20
652	Solar CO ₂ Reduction Using Surface-Immobilized Molecular Catalysts. <i>Comments on Inorganic Chemistry</i> , 2016, 36, 38-60.	3.0	23
653	Direct propanol synthesis from CO ₂ , C ₂ H ₄ , and H ₂ over Cs ⁺ Au/TiO ₂ rutile: effect of promoter loading, temperature and feed composition. <i>Catalysis Science and Technology</i> , 2016, 6, 2171-2180.	2.1	14
654	Alkali metals incorporated ordered mesoporous tantalum oxide with enhanced photocatalytic activity for water splitting. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3007-3017.	5.2	33
655	Structural and photophysical characterization of a tin(IV) porphyrin π -rhenium(I)(diimine) conjugate. <i>Inorganica Chimica Acta</i> , 2016, 439, 61-68.	1.2	10
656	Hydrogen energy future with formic acid: a renewable chemical hydrogen storage system. <i>Catalysis Science and Technology</i> , 2016, 6, 12-40.	2.1	433
657	Carbon dioxide reduction with homogenous early transition metal complexes: Opportunities and challenges for developing CO ₂ catalysis. <i>Coordination Chemistry Reviews</i> , 2017, 336, 78-95.	9.5	172
658	Electrochemical reduction of CO_2 for synthesis of green fuel. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2017, 6, e244.	1.9	59
659	CO ₂ Electroreduction at Low Overpotential on Oxide-Derived Cu/Carbons Fabricated from Metal Organic Framework. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 5302-5311.	4.0	239
660	Turning on the Protonation-First Pathway for Electrocatalytic CO ₂ Reduction by Manganese Bipyridyl Tricarbonyl Complexes. <i>Journal of the American Chemical Society</i> , 2017, 139, 2604-2618.	6.6	210
661	Efficient and practical organocatalytic system for the synthesis of cyclic carbonates from carbon dioxide and epoxides: 3-hydroxypyridine/tetra-n-butylammonium iodide. <i>Tetrahedron</i> , 2017, 73, 1190-1195.	1.0	21
662	The Influence of <i>para</i> Substituents in Bis(N-Heterocyclic Carbene) Palladium Pincer Complexes for Electrocatalytic CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2017, 56, 1161-1172.	1.9	39
663	Terminal Uranium(V/VI) Nitride Activation of Carbon Dioxide and Carbon Disulfide: Factors Governing Diverse and Well-Defined Cleavage and Redox Reactions. <i>Chemistry - A European Journal</i> , 2017, 23, 2950-2959.	1.7	38

#	ARTICLE	IF	CITATIONS
664	Temperature dependent CO ₂ behavior in microporous 1-D channels of a metal-organic framework with multiple interaction sites. <i>Scientific Reports</i> , 2017, 7, 41447.	1.6	11
665	Electrochemical CO ₂ Reduction to Fuels Using Pt/CNT Catalysts Synthesized in Supercritical Medium. <i>Energy & Fuels</i> , 2017, 31, 3038-3046.	2.5	47
666	An Isolable Silicon Dicarboxylate Complex from Carbon Dioxide Activation with a Silylone. <i>Angewandte Chemie</i> , 2017, 129, 1920-1923.	1.6	20
667	An Isolable Silicon Dicarboxylate Complex from Carbon Dioxide Activation with a Silylone. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 1894-1897.	7.2	44
668	Trapping of excess energy in a nano-layered microenvironment to promote chemical reactions. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 4734-4740.	1.3	4
669	Electrocatalysis for the oxygen evolution reaction: recent development and future perspectives. <i>Chemical Society Reviews</i> , 2017, 46, 337-365.	18.7	4,505
670	Electrochemical Reduction of CO ₂ Catalyzed by Fe-N-C Materials: A Structure-Selectivity Study. <i>ACS Catalysis</i> , 2017, 7, 1520-1525.	5.5	363
671	Electrochemical and Photoelectrochemical Properties of Screen-Printed Nickel Oxide Thin Films Obtained from Precursor Pastes with Different Compositions. <i>Journal of the Electrochemical Society</i> , 2017, 164, H137-H147.	1.3	45
672	Rhenium Complexes Based on 2-Pyridyl-1,2,3-triazole Ligands: A New Class of CO ₂ Reduction Catalysts. <i>Inorganic Chemistry</i> , 2017, 56, 2966-2976.	1.9	48
673	Zwitterionic indenylammonium with carbon-centred reactivity towards reversible CO ₂ binding and catalytic reduction. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 2240-2245.	1.5	15
674	Well-Defined Nanographene-Rhenium Complex as an Efficient Electrocatalyst and Photocatalyst for Selective CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2017, 139, 3934-3937.	6.6	95
675	Water effect on band alignment of GaP: A theoretical insight into pyridinium catalyzed CO ₂ reduction. <i>Journal of Energy Chemistry</i> , 2017, 26, 724-729.	7.1	8
676	Stoichiometric Reactivity and Catalytic Applications of Heavier Tetraylene Derivatives. <i>Springer Theses</i> , 2017, , 147-203.	0.0	0
677	Base assisted C-C coupling between carbonyl and polypyridyl ligands in a Ru-NADH-type carbonyl complex. <i>Dalton Transactions</i> , 2017, 46, 4373-4381.	1.6	10
678	AuPd/3DOM-TiO ₂ catalysts for photocatalytic reduction of CO ₂ : High efficient separation of photogenerated charge carriers. <i>Applied Catalysis B: Environmental</i> , 2017, 209, 228-239.	10.8	142
679	Efficient Reduction of Carbon Dioxide to Methanol Equivalents Catalyzed by Two-Coordinate Amido-Germanium(II) and Tin(II) Hydride Complexes. <i>ACS Catalysis</i> , 2017, 7, 1853-1859.	5.5	86
680	Current progress on zeolite membrane reactor for CO ₂ hydrogenation. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	17
681	Unique Zinc Germanium Oxynitride Hyperbranched Nanostructures with Enhanced Visible-Light Photocatalytic Activity for CO ₂ Reduction. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 2195-2200.	1.0	21

#	ARTICLE	IF	CITATIONS
682	CO ₂ reduction: the quest for electrocatalytic materials. <i>Journal of Materials Chemistry A</i> , 2017, 5, 8230-8246.	5.2	214
683	Asymmetric Faradaic systems for selective electrochemical separations. <i>Energy and Environmental Science</i> , 2017, 10, 1272-1283.	15.6	143
684	Mn-carbonyl molecular catalysts containing a redox-active phenanthroline-5,6-dione for selective electro- and photoreduction of CO ₂ to CO or HCOOH. <i>Electrochimica Acta</i> , 2017, 240, 288-299.	2.6	31
685	Enhanced Catalytic Activity of Cobalt Porphyrin in CO ₂ Electroreduction upon Immobilization on Carbon Materials. <i>Angewandte Chemie</i> , 2017, 129, 6568-6572.	1.6	62
686	Gliding Arc Plasmatron: Providing an Alternative Method for Carbon Dioxide Conversion. <i>ChemSusChem</i> , 2017, 10, 2642-2652.	3.6	114
687	Selective and Direct Hydrogenation of CO ₂ for the Synthesis of Formic Acid over a Rhodium Hydrotalcite (Rh α HT) Catalyst. <i>ChemistrySelect</i> , 2017, 2, 3823-3830.	0.7	17
688	Electrochemical and spectroscopic methods for evaluating molecular electrocatalysts. <i>Nature Reviews Chemistry</i> , 2017, 1, .	13.8	178
689	Enhanced Catalytic Activity of Cobalt Porphyrin in CO ₂ Electroreduction upon Immobilization on Carbon Materials. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 6468-6472.	7.2	305
690	Photocatalytic CO ₂ Reduction by Periodic Mesoporous Organosilica (PMO) Containing Two Different Ruthenium Complexes as Photosensitizing and Catalytic Sites. <i>Chemistry - A European Journal</i> , 2017, 23, 10301-10309.	1.7	38
691	Charged Macromolecular Rhenium Bipyridine Catalysts with Tunable CO ₂ Reduction Potentials. <i>Chemistry - A European Journal</i> , 2017, 23, 8619-8622.	1.7	30
692	CO ₂ reduction to alcohols in a polymer electrolyte membrane co-electrolysis cell operating at low potentials. <i>Electrochimica Acta</i> , 2017, 241, 28-40.	2.6	46
693	Potassium phosphate-catalyzed one-pot synthesis of 3-aryl-2-oxazolidinones from epoxides, amines, and atmospheric carbon dioxide. <i>Green Chemistry</i> , 2017, 19, 803-808.	4.6	50
694	The Importance of Temperature Control for the Synthesis of Fluorinated Phenanthroline-Extended Porphyrins and the Evaluation of Their Photocatalytic CO ₂ Reduction Ability. <i>ChemistrySelect</i> , 2017, 2, 4767-4773.	0.7	2
696	Initiation of the Electrochemical Reduction of CO ₂ by a Singly Reduced Ruthenium(II) Bipyridine Complex. <i>Inorganic Chemistry</i> , 2017, 56, 8326-8333.	1.9	17
697	Lattice-Hydride Mechanism in Electrocatalytic CO ₂ Reduction by Structurally Precise Copper-Hydride Nanoclusters. <i>Journal of the American Chemical Society</i> , 2017, 139, 9728-9736.	6.6	261
698	Phosphate tuned copper electrodeposition and promoted formic acid selectivity for carbon dioxide reduction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11905-11916.	5.2	46
699	Cu ₂ O/TiO ₂ heterostructures for CO ₂ reduction through a direct Z-scheme: Protecting Cu ₂ O from photocorrosion. <i>Applied Catalysis B: Environmental</i> , 2017, 217, 485-493.	10.8	442
700	Direct conversion of CO ₂ into liquid fuels with high selectivity over a bifunctional catalyst. <i>Nature Chemistry</i> , 2017, 9, 1019-1024.	6.6	757

#	ARTICLE	IF	CITATIONS
701	Photochemical Hydrogenation of CO ₂ to CH ₃ OH and Pyridine to 1,2-Dihydropyridine Using Plasmon-Facilitated Chemisorbed Hydrogen on Au Surface: Theoretical Perspective. <i>Journal of Physical Chemistry C</i> , 2017, 121, 15326-15332.	1.5	10
702	A Highly Selective and Robust Co(II)-Based Homogeneous Catalyst for Reduction of CO ₂ to CO in CH ₃ CN/H ₂ O Solution Driven by Visible Light. <i>Inorganic Chemistry</i> , 2017, 56, 7307-7311.	1.9	49
703	Ligand and Metal Based Multielectron Redox Chemistry of Cobalt Supported by Tetradentate Schiff Bases. <i>Journal of the American Chemical Society</i> , 2017, 139, 8628-8638.	6.6	38
704	Efficiently photoelectrocatalyze CO ₂ to methanol using Ru(II)-pyridyl complex covalently bonded on TiO ₂ nanotube arrays. <i>Applied Catalysis B: Environmental</i> , 2017, 210, 368-378.	10.8	27
705	Bio-inspired CO ₂ reduction by a rhenium tricarbonyl bipyridine-based catalyst appended to amino acids and peptidic platforms: incorporating proton relays and hydrogen-bonding functional groups. <i>Faraday Discussions</i> , 2017, 198, 279-300.	1.6	42
706	Organic, Organometallic and Bioorganic Catalysts for Electrochemical Reduction of CO ₂ . <i>ChemPhysChem</i> , 2017, 18, 3094-3116.	1.0	29
707	3D interconnected hierarchically porous N-doped carbon with NH ₃ activation for efficient oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2017, 210, 57-66.	10.8	131
708	Perspectives on metal-organic frameworks with intrinsic electrocatalytic activity. <i>CrystEngComm</i> , 2017, 19, 4049-4065.	1.3	72
709	Thermochemical CO ₂ splitting using double perovskite-type Ba _{0.66} Ca _{0.66} Nb _{1.34} Fe _x O ₆ . <i>Journal of Materials Chemistry A</i> , 2017, 5, 6874-6883.	5.2	23
710	Electronic Structure of a Formal Iron(0) Porphyrin Complex Relevant to CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2017, 56, 4745-4750.	1.9	85
711	Influence of the metal center of metalloprotoporphyrins on the electrocatalytic CO ₂ reduction to formic acid. <i>Catalysis Today</i> , 2017, 288, 37-47.	2.2	65
712	Selective CO ₂ electroreduction to C ₂ H ₄ on porous Cu films synthesized by sacrificial support method. <i>Journal of CO₂ Utilization</i> , 2017, 19, 137-145.	3.3	29
713	Hydrogenation of CO ₂ in Water Using a Bis(diphosphine) Ni-H Complex. <i>ACS Catalysis</i> , 2017, 7, 3089-3096.	5.5	66
714	Temperature dependence of photocatalytic CO ₂ reduction by trans(Cl)-Ru(bpy)(CO) ₂ Cl: activation energy difference between CO and formate production. <i>Faraday Discussions</i> , 2017, 198, 263-277.	1.6	12
715	Comparisons of Mn ₂ S ₂ vs. bipyridine as redox-active ligands to manganese and rhenium in (L)M ² (CO) ₃ Cl complexes. <i>Dalton Transactions</i> , 2017, 46, 5175-5182.	1.6	11
716	Two-dimensional nanosheets for electrocatalysis in energy generation and conversion. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7257-7284.	5.2	220
717	Semiconductor, molecular and hybrid systems for photoelectrochemical solar fuel production. <i>Journal of Energy Chemistry</i> , 2017, 26, 219-240.	7.1	48
718	The Holy Grail: Chemistry Enabling an Economically Viable CO ₂ Capture, Utilization, and Storage Strategy. <i>Accounts of Chemical Research</i> , 2017, 50, 472-475.	7.6	153

#	ARTICLE	IF	CITATIONS
719	Electrocatalytic reduction of CO ₂ to CO in the presence of a mononuclear polypyridyl ruthenium(II) complex. <i>Journal of CO₂ Utilization</i> , 2017, 17, 80-89.	3.3	16
720	Platinum-Cobalt Bimetallic Nanoparticles with Pt Skin for Electro-Oxidation of Ethanol. <i>ACS Catalysis</i> , 2017, 7, 892-895.	5.5	89
721	Effect of surface structure of platinum single crystal electrodes on the electrochemical reduction of CO ₂ in methanol-water mixtures. <i>Journal of Electroanalytical Chemistry</i> , 2017, 793, 157-163.	1.9	7
722	Cyclopentadienone iron complexes as efficient and selective catalysts for the electroreduction of CO ₂ to CO. <i>Catalysis Science and Technology</i> , 2017, 7, 459-465.	2.1	41
723	CO ₂ conversion in a gliding arc plasma: Performance improvement based on chemical reaction modeling. <i>Journal of CO₂ Utilization</i> , 2017, 17, 220-234.	3.3	106
724	Selective Visible-Light-Driven CO ₂ Reduction on a p-Type Dye-Sensitised NiO Photocathode. <i>Springer Theses</i> , 2017, , 179-191.	0.0	1
725	Electrocatalytic Alcohol Oxidation with Ruthenium Transfer Hydrogenation Catalysts. <i>Journal of the American Chemical Society</i> , 2017, 139, 738-748.	6.6	48
726	Carbon dioxide conversion to synthetic fuels using biocatalytic electrodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2429-2443.	5.2	44
727	Thousandfold Enhancement of Photoreduction Lifetime in Re(bpy)(CO) ₃ via Spin-Dependent Electron Transfer from a Peryleneimide Radical Anion Donor. <i>Journal of the American Chemical Society</i> , 2017, 139, 16466-16469.	6.6	20
728	Production of Liquid Solar Fuels and Their Use in Fuel Cells. <i>Joule</i> , 2017, 1, 689-738.	11.7	149
729	Preparation of Labile Ni ⁺ (cyclam) Cations in the Gas Phase Using Electron-Transfer Reduction through Ion-Ion Recombination in an Ion Trap and Structural Characterization with Vibrational Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5047-5052.	2.1	17
730	Electrocatalytic Metal-Organic Frameworks for Energy Applications. <i>ChemSusChem</i> , 2017, 10, 4374-4392.	3.6	182
731	Bicarbonate Is Not a General Acid in Au-Catalyzed CO ₂ Electroreduction. <i>Journal of the American Chemical Society</i> , 2017, 139, 17109-17113.	6.6	196
732	Selective electrochemical CO ₂ reduction to CO using in situ reduced In ₂ O ₃ nanocatalysts. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22743-22749.	5.2	46
733	Activation of CO ₂ by supported Cu clusters. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 28788-28807.	1.3	55
734	First-Row Transition Metal Based Catalysts for the Oxygen Evolution Reaction under Alkaline Conditions: Basic Principles and Recent Advances. <i>Small</i> , 2017, 13, 1701931.	5.2	352
735	Ruthenium(II) complexes of pyridinol and N-heterocyclic carbene derived pincers as robust catalysts for selective carbon dioxide reduction. <i>Chemical Communications</i> , 2017, 53, 11217-11220.	2.2	40
736	Electrochemical Reduction of CO ₂ into Multicarbon Alcohols on Activated Cu Mesh Catalysts: An Identical Location (IL) Study. <i>ACS Catalysis</i> , 2017, 7, 7946-7956.	5.5	148

#	ARTICLE	IF	CITATIONS
737	Sulfur-Modulated Tin Sites Enable Highly Selective Electrochemical Reduction of CO ₂ to Formate. <i>Joule</i> , 2017, 1, 794-805.	11.7	390
738	Supported Cobalt Polyphthalocyanine for High-Performance Electrocatalytic CO ₂ Reduction. <i>Chem</i> , 2017, 3, 652-664.	5.8	406
739	Artificial Photosynthetic Systems for CO ₂ Reduction: Progress on Higher Efficiency with Cobalt Complexes as Catalysts. <i>ChemSusChem</i> , 2017, 10, 4393-4402.	3.6	70
740	Photocatalytic Conversion of CO ₂ to CO by a Copper(II) Quaterpyridine Complex. <i>ChemSusChem</i> , 2017, 10, 4009-4013.	3.6	74
741	Electrocatalytic Conversion of Carbon Dioxide and Nitrate Ions to Urea by a Titania/Nafion Composite Electrode. <i>ChemSusChem</i> , 2017, 10, 3999-4003.	3.6	87
742	Renewable Formate from C-H Bond Formation with CO ₂ : Using Iron Carbonyl Clusters as Electrocatalysts. <i>Accounts of Chemical Research</i> , 2017, 50, 2362-2370.	7.6	78
743	Design and Synthesis of Tunable Ligands with 4,4'-Bipyridyl as an Electron-Accepting Unit and Their Rhenium Complexes. <i>Organometallics</i> , 2017, 36, 3429-3434.	1.1	12
744	Chelated [Zn(cyclam)] ²⁺ Lewis acid improves the reactivity of the electrochemical reduction of CO ₂ by Mn catalysts with bulky bipyridine ligands. <i>Dalton Transactions</i> , 2017, 46, 12413-12416.	1.6	24
745	Catalytic Hydride Transfer to CO ₂ Using Ru-NAD-Type Complexes under Electrochemical Conditions. <i>Inorganic Chemistry</i> , 2017, 56, 11066-11073.	1.9	22
746	Visible-Light Homogeneous Photocatalytic Conversion of CO ₂ into CO in Aqueous Solutions with an Iron Catalyst. <i>ChemSusChem</i> , 2017, 10, 4447-4450.	3.6	83
747	Copper Nanoparticles Installed in Metal-Organic Framework Thin Films are Electrocatalytically Competent for CO ₂ Reduction. <i>ACS Energy Letters</i> , 2017, 2, 2394-2401.	8.8	157
748	Electrocatalytic CO ₂ Reduction by Imidazolium-Functionalized Molecular Catalysts. <i>Journal of the American Chemical Society</i> , 2017, 139, 13993-13996.	6.6	149
749	Tuning Product Selectivity for Aqueous CO ₂ Reduction with a Mn(bipyridine)-pyrene Catalyst Immobilized on a Carbon Nanotube Electrode. <i>Journal of the American Chemical Society</i> , 2017, 139, 14425-14435.	6.6	185
750	Scalable carbon dioxide electroreduction coupled to carbonylation chemistry. <i>Nature Communications</i> , 2017, 8, 489.	5.8	54
751	Urea-glass preparation of titanium niobium nitrides and subsequent oxidation to photoactive titanium niobium oxynitrides. <i>Dalton Transactions</i> , 2017, 46, 12081-12087.	1.6	7
752	Metal-Free Carbon Materials for CO ₂ Electrochemical Reduction. <i>Advanced Materials</i> , 2017, 29, 1701784.	11.1	558
753	Nitrogen doped tin oxide nanostructured catalysts for selective electrochemical reduction of carbon dioxide to formate. <i>Journal of Energy Chemistry</i> , 2017, 26, 825-829.	7.1	41
755	CO ₂ Reduction: From the Electrochemical to Photochemical Approach. <i>Advanced Science</i> , 2017, 4, 1700194.	5.6	651

#	ARTICLE	IF	CITATIONS
756	Progress in catalyst exploration for heterogeneous CO ₂ reduction and utilization: a critical review. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21625-21649.	5.2	305
757	A review of the catalytic hydrogenation of carbon dioxide into value-added hydrocarbons. <i>Catalysis Science and Technology</i> , 2017, 7, 4580-4598.	2.1	385
758	Electroreduction of CO ₂ to formic acid on Cu: Role of water bilayer in modeling electrochemical interface. <i>Applied Catalysis A: General</i> , 2017, 547, 214-218.	2.2	9
759	Terminal Iron Carbene Complexes Derived from Arrested CO ₂ Reductive Disproportionation. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10894-10899.	7.2	30
760	AgIn dendrite catalysts for electrochemical reduction of CO ₂ to CO. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 123-131.	10.8	64
761	CO ₂ Reduction Selective for C ₂ Products on Polycrystalline Copper with N-Substituted Pyridinium Additives. <i>ACS Central Science</i> , 2017, 3, 853-859.	5.3	226
762	Perspective: Photocatalytic reduction of CO ₂ to solar fuels over semiconductors. <i>Journal of Chemical Physics</i> , 2017, 147, 030901.	1.2	76
763	Photocatalytic reduction of CO ₂ to CO by diamond nanoparticles. <i>Diamond and Related Materials</i> , 2017, 78, 24-30.	1.8	38
764	Enhanced carbon dioxide conversion to formate on a multi-functional synergistic photoelectrocatalytic interface. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 45-52.	10.8	39
765	Room Temperature Conversion of Carbon Dioxide into Fuel Gases by Mechanochemically Reacting with Metal Hydrides. <i>ChemistrySelect</i> , 2017, 2, 5244-5247.	0.7	12
766	Nickel Complexes of C-Substituted Cyclams and Their Activity for CO ₂ and H ₂ Reduction. <i>ACS Omega</i> , 2017, 2, 3966-3976.	1.6	20
767	Photoelectrocatalytic Reduction of CO ₂ into C ₁ Products by Using Modified Semiconductor-Based Catalyst Systems. <i>Asian Journal of Organic Chemistry</i> , 2017, 6, 1519-1530.	1.3	12
768	Renewable Synthetic Fuels and Chemicals from Carbon Dioxide. <i>SpringerBriefs in Energy</i> , 2017, , .	0.2	29
769	Building Blocks for High Performance in Electrocatalytic CO ₂ Reduction: Materials, Optimization Strategies, and Device Engineering. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3933-3944.	2.1	147
770	Electrocatalytic Reduction of CO ₂ . <i>SpringerBriefs in Energy</i> , 2017, , 27-42.	0.2	1
771	Quantum Chemical Analyses of BH ₄ ⁻ and BH ₃ OH ⁻ Hydride Transfers to CO ₂ in Aqueous Solution with Potentials of Mean Force. <i>ChemPhysChem</i> , 2017, 18, 3148-3152.	1.0	7
772	Terminal Iron Carbene Complexes Derived from Arrested CO ₂ Reductive Disproportionation. <i>Angewandte Chemie</i> , 2017, 129, 11034-11039.	1.6	3
773	Electrocatalytic reduction of CO ₂ with CCC-NHC pincer nickel complexes. <i>Chemical Communications</i> , 2017, 53, 9442-9445.	2.2	53

#	ARTICLE	IF	CITATIONS
774	Electrocatalytic reduction of CO ₂ using rhenium complexes with dipyrido[3,2-a:2'â€²,3'â€²-c]phenazine ligands. <i>Inorganic Chemistry Communication</i> , 2017, 84, 113-117.	1.8	12
775	Assessment of trends in the electrochemical CO ₂ reduction and H ₂ evolution reactions on metal nanoparticles. <i>MRS Communications</i> , 2017, 7, 601-606.	0.8	2
776	Enhanced selectivity of methane production for photocatalytic reduction by the piezoelectric effect. <i>Chemical Communications</i> , 2017, 53, 9765-9768.	2.2	32
777	Room-Temperature Activation of CO ₂ by Dual Defect-Stabilized Nanoscale Hematite (Fe ₂ O ₃): Concurrent Role of Fe and O Vacancies. <i>ACS Omega</i> , 2017, 2, 8407-8413.	1.6	8
778	Twisting and Tilting 1,1'-Bis(dialkylphosphino)ferrocene Bound to Low Valent Tricarbonylmanganese(I) to Tj ETQq0,0 0 rgBT /Overlock	1.9	13
779	A versatile route to homo- and hetero-bimetallic 5f ⁴ and 3d ⁴ complexes supported by a redox active ligand framework. <i>Dalton Transactions</i> , 2017, 46, 11145-11148.	1.6	21
780	Selective cobalt nanoparticles for catalytic transfer hydrogenation of N-heteroarenes. <i>Chemical Science</i> , 2017, 8, 6239-6246.	3.7	83
781	Insight on the mechanism of molecular catalysis of CO ₂ reduction with Fe(II)-polypyridine complexes. <i>Electrochimica Acta</i> , 2017, 247, 241-251.	2.6	21
782	Electrochemical preparation of Ag/Cu and Au/Cu foams for electrochemical conversion of CO ₂ to CO. <i>Journal of Industrial and Engineering Chemistry</i> , 2017, 54, 218-225.	2.9	33
783	Electrode-Ligand Interactions Dramatically Enhance CO ₂ Conversion to CO by the [Ni(cyclam)](PF ₆) ₂ Catalyst. <i>ACS Catalysis</i> , 2017, 7, 5282-5288.	5.5	43
784	Electrophilic activation of CO ₂ in cycloaddition reactions towards a nucleophilic carbenoid intermediate: new defying insights from the Molecular Electron Density Theory. <i>Theoretical Chemistry Accounts</i> , 2017, 136, 1.	0.5	11
785	Tuning Iridium Photocatalysts and Light Irradiation for Enhanced CO ₂ Reduction. <i>ACS Catalysis</i> , 2017, 7, 154-160.	5.5	73
786	Heteroleptic Copper Photosensitizers: Why an Extended π -System Does Not Automatically Lead to Enhanced Hydrogen Production. <i>Chemistry - A European Journal</i> , 2017, 23, 312-319.	1.7	91
787	Photocatalytic Water Splitting and Carbon Dioxide Reduction. , 2017, , 2709-2756.		9
788	Electrons, Photons, Protons and Earth-Abundant Metal Complexes for Molecular Catalysis of CO ₂ Reduction. <i>ACS Catalysis</i> , 2017, 7, 70-88.	5.5	558
789	Molybdenum and tungsten-containing formate dehydrogenases: Aiming to inspire a catalyst for carbon dioxide utilization. <i>Inorganica Chimica Acta</i> , 2017, 455, 350-363.	1.2	96
790	Carbon dioxide binding at a Ni/Fe center: synthesis and characterization of Ni(I)-CO ₂ and Ni(I)-CO ₂ - ¹³ C and Ni(I)-CO ₂ - ¹³ C ¹⁸ O ₂ -Fe. <i>Chemical Science</i> , 2017, 8, 600-605.		44
791	In situ spectroscopic monitoring of CO ₂ reduction at copper oxide electrode. <i>Faraday Discussions</i> , 2017, 197, 517-532.	1.6	37

#	ARTICLE	IF	CITATIONS
792	50 Years of Structure and Bonding – The Anniversary Volume. Structure and Bonding, 2017, , .	1.0	2
793	Synthesis and characterization of a four-coordinate nickel carbamate species (MeSiP i Pr 2) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5 Chimica Acta, 2017, 460, 55-62.	1.2	11
794	The Quest for Value-Added Products from Carbon Dioxide and Water in a Dielectric Barrier Discharge: A Chemical Kinetics Study. ChemSusChem, 2017, 10, 409-424.	3.6	72
795	Redox-electrodes for selective electrochemical separations. Advances in Colloid and Interface Science, 2017, 244, 6-20.	7.0	132
796	Electrocatalytic CO ₂ reduction using rhenium(I) complexes with modified 2-(2-pyridyl)imidazole ligands. Inorganica Chimica Acta, 2017, 460, 63-68.	1.2	35
797	Molecular catalysis of the electrochemical and photochemical reduction of CO ₂ with Fe and Co metal based complexes. Recent advances. Coordination Chemistry Reviews, 2017, 334, 184-198.	9.5	195
798	Photoelectrochemical Reduction of Carbon Dioxide to Methanol at CuS/CuO/CuInS ₂ Thin Film Photocathodes. Journal of the Electrochemical Society, 2017, 164, E475-E479.	1.3	15
799	Well-Defined Metal Nanoparticles for Electrocatalysis. Studies in Surface Science and Catalysis, 2017, , 123-148.	1.5	4
800	Reactor Design for CO ₂ Photo-Hydrogenation toward Solar Fuels under Ambient Temperature and Pressure. Catalysts, 2017, 7, 63.	1.6	19
801	Recent Advances in Transition-Metal-Mediated Electrocatalytic CO ₂ Reduction: From Homogeneous to Heterogeneous Systems. Catalysts, 2017, 7, 373.	1.6	48
802	Spectroscopic and Structural Characterization of Carbon Dioxide Transition Metal Complexes. Advances in Organometallic Chemistry, 2017, 68, 1-91.	0.5	7
803	Nanostructured Semiconductor Materials for Dye-Sensitized Solar Cells. Journal of Nanomaterials, 2017, 2017, 1-31.	1.5	93
804	Algae-Based Polyolefins. , 2017, , 499-529.		0
805	Recent advances in the nanoengineering of electrocatalysts for CO ₂ reduction. Nanoscale, 2018, 10, 6235-6260.	2.8	139
806	Positional effects of second-sphere amide pendants on electrochemical CO ₂ reduction catalyzed by iron porphyrins. Chemical Science, 2018, 9, 2952-2960.	3.7	199
807	Pendant Hydrogen-Bond Donors in Cobalt Catalysts Independently Enhance CO ₂ Reduction. ACS Central Science, 2018, 4, 397-404.	5.3	163
808	Two novel Pb(II) coordination polymers (CPs) based on 4-(4-oxopyridin-1(4H)-yl) and 3-(4-oxopyridin-1(4H)-yl) phthalic acid: Band gaps, structures, and their photoelectrocatalytic properties in CO ₂ -saturated system. Journal of Solid State Chemistry, 2018, 261, 43-52.	1.4	8
809	Iron catalyzed hydrogenation and electrochemical reduction of CO ₂ : The role of functional ligands. Journal of Organometallic Chemistry, 2018, 861, 159-173.	0.8	22

#	ARTICLE	IF	CITATIONS
810	Insight into catalytic reduction of CO ₂ to methane with silanes using Brookhart's cationic Ir(η^5 -Cp*) pincer complex. RSC Advances, 2018, 8, 9232-9242.	1.7	11
811	Reduced graphene oxide supported gold nanoparticles for electrocatalytic reduction of carbon dioxide. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	26
812	Rethinking Co(CO) ₃ \cdot 0.5(OH) \cdot 0.11H ₂ O: a new property for highly selective electrochemical reduction of carbon dioxide to methanol in aqueous solution. Green Chemistry, 2018, 20, 2967-2972.	4.6	55
813	Long-lived charge separation in dye-semiconductor assemblies: a pathway to multi-electron transfer reactions. Chemical Communications, 2018, 54, 5289-5298.	2.2	24
814	A computational exploration of CO ₂ reduction <i>via</i> CO dimerization on mixed-valence copper oxide surface. Physical Chemistry Chemical Physics, 2018, 20, 16906-16909.	1.3	23
815	Creating a Low-Potential Redox Polymer for Efficient Electroenzymatic CO ₂ Reduction. Angewandte Chemie, 2018, 130, 6692-6696.	1.6	32
816	Creating a Low-Potential Redox Polymer for Efficient Electroenzymatic CO ₂ Reduction. Angewandte Chemie - International Edition, 2018, 57, 6582-6586.	7.2	79
817	Chemically and electrochemically catalysed conversion of CO ₂ to CO with follow-up utilization to value-added chemicals. Nature Catalysis, 2018, 1, 244-254.	16.1	373
818	Fe-Mediated Nitrogen Fixation with a Metallocene Mediator: Exploring <i>pKa</i> Effects and Demonstrating Electrocatalysis. Journal of the American Chemical Society, 2018, 140, 6122-6129.	6.6	132
819	Flexible proton-responsive ligand-based Mn(η^5 -Cp*) complexes for CO ₂ hydrogenation: a DFT study. Physical Chemistry Chemical Physics, 2018, 20, 12535-12542.	1.3	11
820	Electrochemical reduction of carbon dioxide with a molecular polypyridyl nickel complex. Sustainable Energy and Fuels, 2018, 2, 1269-1277.	2.5	19
821	In Situ/Operando Characterization Techniques to Probe the Electrochemical Reactions for Energy Conversion. Small Methods, 2018, 2, 1700395.	4.6	131
822	Effects of Substrate and Polymer Encapsulation on CO ₂ Electroreduction by Immobilized Indium(III) Porphyrin. ACS Catalysis, 2018, 8, 4420-4428.	5.5	52
823	Selective Transformation of CO ₂ to CO at a Single Nickel Center. Accounts of Chemical Research, 2018, 51, 1144-1152.	7.6	43
824	Ni(I)-Hydride Catalyst for Hydrosilylation of Carbon Dioxide and Dihydrogen Generation: Theoretical Prediction and Exploration of Full Catalytic Cycle. Organometallics, 2018, 37, 1258-1270.	1.1	21
825	Oxygen Vacancies in ZnO Nanosheets Enhance CO ₂ Electrochemical Reduction to CO. Angewandte Chemie, 2018, 130, 6162-6167.	1.6	122
826	Oxygen Vacancies in ZnO Nanosheets Enhance CO ₂ Electrochemical Reduction to CO. Angewandte Chemie - International Edition, 2018, 57, 6054-6059.	7.2	564
827	Technoeconomics of Commodity Chemical Production Using Sunlight. ACS Sustainable Chemistry and Engineering, 2018, 6, 7003-7009.	3.2	19

#	ARTICLE	IF	CITATIONS
828	Mechanistic insights into catalytic CO ₂ hydrogenation using Mn(<i>scp</i>)-complexes with pendant oxygen ligands. <i>Catalysis Science and Technology</i> , 2018, 8, 3034-3043.	2.1	13
829	Modifying the steric and electronic character within Re(I)-phenanthroline complexes for electrocatalytic CO ₂ reduction. <i>Inorganica Chimica Acta</i> , 2018, 479, 49-57.	1.2	14
830	Rationalizing the Reactivity of Bimetallic Molecular Catalysts for CO ₂ Hydrogenation. <i>ACS Catalysis</i> , 2018, 8, 4955-4968.	5.5	39
831	Technologies and infrastructures underpinning future CO ₂ value chains: A comprehensive review and comparative analysis. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 85, 46-68.	8.2	171
832	Carbon Dioxide Methanation over Nickel-Based Catalysts Supported on Various Mesoporous Material. <i>Energy & Fuels</i> , 2018, 32, 3681-3689.	2.5	131
833	C-C Bond Formation of Mg- and Zn-Activated Carbon Dioxide. <i>Chemistry - A European Journal</i> , 2018, 24, 4710-4717.	1.7	11
834	Quantum chemical studies of redox properties and conformational changes of a four-center iron CO ₂ reduction electrocatalyst. <i>Chemical Science</i> , 2018, 9, 2645-2654.	3.7	6
835	Electrocatalytic Reduction of CO ₂ to Formate by an Iron Schiff Base Complex. <i>Inorganic Chemistry</i> , 2018, 57, 2111-2121.	1.9	97
836	Electronic Structure and Spin Multiplicity of Iron Tetraphenylporphyrins in Their Reduced States as Determined by a Combination of Resonance Raman Spectroscopy and Quantum Chemistry. <i>Inorganic Chemistry</i> , 2018, 57, 2141-2148.	1.9	48
837	Direct CO ₂ Addition to a Ni(0)-CO Species Allows the Selective Generation of a Nickel(II) Carboxylate with Expulsion of CO. <i>Journal of the American Chemical Society</i> , 2018, 140, 2179-2185.	6.6	52
838	Electrocatalytic CO ₂ reduction by a cobalt bis(pyridylmonoimine) complex: effect of acid concentration on catalyst activity and stability. <i>Chemical Communications</i> , 2018, 54, 1579-1582.	2.2	30
839	The adsorption of Ru (n ⁻ =1 ⁻) on γ -Al ₂ O ₃ Surface: A DFT study. <i>Applied Surface Science</i> , 2018, 440, 586-594.	3.1	7
840	Design and synthesis of porous polymeric materials and their applications in gas capture and storage: a review. <i>Journal of Polymer Research</i> , 2018, 25, 1.	1.2	84
841	High-efficiency photocatalytic CO ₂ reduction in organic-aqueous system: a new insight into the role of water. <i>RSC Advances</i> , 2018, 8, 3798-3802.	1.7	15
842	Considering a Possible Role for [H-Fe ₄ N(CO) ₁₂] ²⁺ in Selective Electrocatalytic CO ₂ Reduction to Formate by [Fe ₄ N(CO) ₁₂] ⁺ . <i>Organometallics</i> , 2018, 37, 1087-1091.	1.1	15
843	Reaction mechanisms of catalytic photochemical CO ₂ reduction using Re(I) and Ru(II) complexes. <i>Coordination Chemistry Reviews</i> , 2018, 373, 333-356.	9.5	212
844	Hydricity of Transition-Metal Hydrides: Thermodynamic Considerations for CO ₂ Reduction. <i>ACS Catalysis</i> , 2018, 8, 1313-1324.	5.5	171
845	Extended Investigation of Electrochemical CO ₂ Reduction in Ethanolamine Solutions by SECM. <i>Electroanalysis</i> , 2018, 30, 690-697.	1.5	9

#	ARTICLE	IF	CITATIONS
846	Unprecedented Reaction Mode of Phosphorus in Phosphinidene Rare-Earth Complexes: A Joint Experimental–Theoretical Study. <i>Journal of the American Chemical Society</i> , 2018, 140, 102-105.	6.6	16
847	Synthesis and characterization of Zn ₂ GeO ₄ /Mg-MOF-74 composites with enhanced photocatalytic activity for CO ₂ reduction. <i>Catalysis Science and Technology</i> , 2018, 8, 1288-1295.	2.1	86
848	Homogeneously Catalyzed Electroreduction of Carbon Dioxide—Methods, Mechanisms, and Catalysts. <i>Chemical Reviews</i> , 2018, 118, 4631-4701.	23.0	858
849	Synthesis and comparison of nickel, palladium, and platinum bis(N-heterocyclic carbene) pincer complexes for electrocatalytic CO ₂ reduction. <i>Dalton Transactions</i> , 2018, 47, 1827-1840.	1.6	30
850	Tunable and Efficient Tin Modified Nitrogen-Doped Carbon Nanofibers for Electrochemical Reduction of Aqueous Carbon Dioxide. <i>Advanced Energy Materials</i> , 2018, 8, 1702524.	10.2	232
851	Highly selective and efficient reduction of CO ₂ to CO on cadmium electrodes derived from cadmium hydroxide. <i>Chemical Communications</i> , 2018, 54, 5450-5453.	2.2	18
852	Photochemical CO ₂ Reduction Catalyzed by <i>trans</i> -(Cl) ₂ [Ru(2,2'-bipyridine)(CO) ₂ Cl ₂] Bearing Two Methyl Groups at 4,4', 5,5'- or 6,6'-Positions in the Ligand. <i>ChemPhotoChem</i> , 2018, 2, 314-322.	4.4	18
853	Photocatalytic CO ₂ Reduction by Trigonal-Bipyramidal Cobalt(II) Polypyridyl Complexes: The Nature of Cobalt(I) and Cobalt(0) Complexes upon Their Reactions with CO ₂ , CO, or Proton. <i>Inorganic Chemistry</i> , 2018, 57, 5486-5498.	1.9	53
854	Activation of Co(I) State in a Cobalt-Dithiolato Catalyst for Selective and Efficient CO ₂ Reduction to CO. <i>Inorganic Chemistry</i> , 2018, 57, 5939-5947.	1.9	55
855	Vibrational Characterization of Radical Ion Adducts between Imidazole and CO ₂ . <i>Journal of Physical Chemistry A</i> , 2018, 122, 3805-3810.	1.1	4
856	Impact of the Type of Reactor and the Catalytic Conditions on the Photocatalytic Production of Hydrogen Using a Fully Noble-Metal-Free System. <i>ChemistrySelect</i> , 2018, 3, 2905-2911.	0.7	10
857	Electrochemical CO ₂ Reduction with Atomic Iron-Dispersed on Nitrogen-Doped Graphene. <i>Advanced Energy Materials</i> , 2018, 8, 1703487.	10.2	369
858	Microwave-assisted synthesis of graphene-like cobalt sulfide freestanding sheets as an efficient bifunctional electrocatalyst for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7592-7607.	5.2	108
859	Insights into Elevated-Temperature Photocatalytic Reduction of CO ₂ by H ₂ O. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8045-8057.	1.5	33
860	Dopant-Dependent SFG Response of Rhenium CO ₂ Reduction Catalysts Chemisorbed on SrTiO ₃ (100) Single Crystals. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13944-13952.	1.5	10
861	Determinant Role of Electrogenerated Reactive Nucleophilic Species on Selectivity during Reduction of CO ₂ Catalyzed by Metalloporphyrins. <i>Journal of the American Chemical Society</i> , 2018, 140, 4826-4834.	6.6	75
862	Emerging Two-Dimensional Nanomaterials for Electrocatalysis. <i>Chemical Reviews</i> , 2018, 118, 6337-6408.	23.0	1,552
863	Nickel(<i>ii</i>) pincer complexes demonstrate that the remote substituent controls catalytic carbon dioxide reduction. <i>Chemical Communications</i> , 2018, 54, 3819-3822.	2.2	39

#	ARTICLE	IF	CITATIONS
864	Cis-[Coll(MPCA)X ₂] (X = Cl or Br) complexes as catalyst exhibiting different activity for visible light induced photocatalytic CO ₂ -to-CO conversion. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 355, 175-179.	2.0	11
865	Electrochemical Behavior of Pyridinium and N-Methyl Pyridinium Cations in Aqueous Electrolytes for CO ₂ Reduction. ChemSusChem, 2018, 11, 219-228.	3.6	17
866	Progress and Perspective of Electrocatalytic CO ₂ Reduction for Renewable Carbonaceous Fuels and Chemicals. Advanced Science, 2018, 5, 1700275.	5.6	638
867	Metal-organic frameworks for solar energy conversion by photoredox catalysis. Coordination Chemistry Reviews, 2018, 373, 83-115.	9.5	146
868	Rational Design of Sulfur-Doped Copper Catalysts for the Selective Electroreduction of Carbon Dioxide to Formate. ChemSusChem, 2018, 11, 320-326.	3.6	102
869	Electrocatalytic Activity of Co-4,4'-dimethyl-2,2'-bipyridine Supported on Ketjenblack for Reduction of CO ₂ to CO Using PEM Reactor. Electrocatalysis, 2018, 9, 220-225.	1.5	9
870	Selectivity of photoelectrochemical CO ₂ reduction modulated with electron transfer from size-tunable quantized energy states of CdSe nanocrystals. Applied Surface Science, 2018, 429, 2-8.	3.1	20
871	CO ₂ reduction in wet ionic liquid solution in microscale-based electrochemical reactor. Chemical Engineering Journal, 2018, 333, 300-309.	6.6	16
872	Synthesis of Sn catalysts by solar electro-deposition method for electrochemical CO ₂ reduction reaction to HCOOH. Catalysis Today, 2018, 303, 276-281.	2.2	28
873	Applications of Phosphorene and Black Phosphorus in Energy Conversion and Storage Devices. Advanced Energy Materials, 2018, 8, 1702093.	10.2	385
874	ELECTROCATALYTIC PROCESSES IN ENERGY TECHNOLOGIES. , 2018, , 291-341.		0
875	Photo- and Electrochemical Valorization of Carbon Dioxide Using Earth-Abundant Molecular Catalysts. Topics in Current Chemistry, 2018, 376, 1.	3.0	137
876	Optimum Cu nanoparticle catalysts for CO ₂ hydrogenation towards methanol. Nano Energy, 2018, 43, 200-209.	8.2	133
877	Recent developments in the design of photoreactors for solar energy conversion from water splitting and CO ₂ reduction. Applied Catalysis A: General, 2018, 550, 122-141.	2.2	89
878	Facile and Cost Effective Synthesis of Oxide-Derived Silver Catalyst Electrodes via Chemical Solution Deposition for CO ₂ Electro-Reduction. Topics in Catalysis, 2018, 61, 389-396.	1.3	7
879	From Enzymes to Functional Materials Towards Activation of Small Molecules. Chemistry - A European Journal, 2018, 24, 1471-1493.	1.7	55
880	Influence of Reaction Reaction Medium on Photocatalytic CO ₂ Reduction. IOP Conference Series: Earth and Environmental Science, 2018, 186, 012001.	0.2	1
881	TiO ₂ -based heterojunction photocatalysts for photocatalytic reduction of CO ₂ into solar fuels. Journal of Materials Chemistry A, 2018, 6, 22411-22436.	5.2	195

#	ARTICLE	IF	CITATIONS
882	A 2,2'-bipyridine-containing covalent organic framework bearing rhenium(<i>triple bond</i>) tricarbonyl moieties for CO ₂ reduction. Dalton Transactions, 2018, 47, 17450-17460.	1.6	80
883	Ultrasmall C-TiO ₂ nanoparticle/g-C ₃ N ₄ composite for CO ₂ photoreduction with high efficiency and selectivity. Journal of Materials Chemistry A, 2018, 6, 21596-21604.	5.2	48
884	Attachment of Re(bpy)(CO) ₃ Cl on to TiO ₂ Nanoparticles for Enhanced Stability and Manipulation of Photo-catalytic Efficiency. Energy Procedia, 2018, 151, 120-128.	1.8	2
885	Carbon Dioxide Electrochemical Reduction on Tin and Copper Electrodes. , 2018, , 401-411.		1
886	In Situ FTIR Reactor for Monitoring Gas-Phase Products during a (Photo)catalytic Reaction in the Liquid Phase. Analytical Chemistry, 2018, 90, 14586-14592.	3.2	4
887	CO ₂ Reduction Catalysts on Gold Electrode Surfaces Influenced by Large Electric Fields. Journal of the American Chemical Society, 2018, 140, 17643-17655.	6.6	103
888	TiO ₂ -Au-Cu ₂ O Photocathodes: Au-Mediated Z-Scheme Charge Transfer for Efficient Solar-Driven Photoelectrochemical Reduction. ACS Applied Nano Materials, 2018, 1, 6843-6853.	2.4	94
889	Electrocatalytic CO ₂ Reduction: From Homogeneous Catalysts to Heterogeneous-Based Reticular Chemistry. Molecules, 2018, 23, 2835.	1.7	28
891	Application of POCOP Pincer Nickel Complexes to the Catalytic Hydroboration of Carbon Dioxide. Catalysts, 2018, 8, 508.	1.6	22
892	Electrochemical Reduction of CO ₂ over Heterogeneous Catalysts in Aqueous Solution: Recent Progress and Perspectives. Small Methods, 2019, 3, 1800369.	4.6	168
893	Oxygen Vacancy Tuning toward Efficient Electrocatalytic CO ₂ Reduction to C ₂ H ₄ . Small Methods, 2019, 3, 1800449.	4.6	146
894	Visible-Light-Driven Conversion of CO ₂ to CH ₄ with an Organic Sensitizer and an Iron Porphyrin Catalyst. Journal of the American Chemical Society, 2018, 140, 17830-17834.	6.6	150
895	Boosting CH ₃ OH Production in Electrocatalytic CO ₂ Reduction over Partially Oxidized 5 nm Cobalt Nanoparticles Dispersed on Single-Layer Nitrogen-Doped Graphene. ACS Applied Materials & Interfaces, 2018, 10, 44403-44414.	4.0	56
896	A Robust Pyridyl-NHC-Ligated Rhenium Photocatalyst for CO ₂ Reduction in the Presence of Water and Oxygen. Inorganics, 2018, 6, 22.	1.2	18
897	Electrochemical Surface Science of CO ₂ Reduction at Well-Defined Cu Electrodes: Surface Characterization by Emersion, Ex Situ, In Situ, and Operando Methods. , 2018, , 562-576.		4
898	Tailoring the Discharge Reaction in Li-CO ₂ Batteries through Incorporation of CO ₂ Capture Chemistry. Joule, 2018, 2, 2649-2666.	11.7	98
899	Recent advances in the functional applications of conducting metallopolymers. Coordination Chemistry Reviews, 2018, 377, 237-258.	9.5	26
900	Artificial photosynthesis: Catalytic water oxidation and CO ₂ reduction by dinuclear non-noble-metal molecular catalysts. Coordination Chemistry Reviews, 2018, 377, 225-236.	9.5	85

#	ARTICLE	IF	CITATIONS
901	Defect and Interface Engineering for Aqueous Electrocatalytic CO ₂ Reduction. <i>Joule</i> , 2018, 2, 2551-2582.	11.7	459
902	Dinuclear Metal Synergistic Catalysis Boosts Photochemical CO ₂ to CO Conversion. <i>Angewandte Chemie</i> , 2018, 130, 16718-16723.	1.6	27
903	A Review on Recent Advances for Electrochemical Reduction of Carbon Dioxide to Methanol Using Metal-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
904	Dinuclear Metal Synergistic Catalysis Boosts Photochemical CO ₂ to CO Conversion. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16480-16485.	7.2	165
905	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
906	Evaluation of Organic Hydride Donors as Reagents for the Reduction of Carbon Dioxide and Metal-Bound Formates. <i>Organometallics</i> , 2018, 37, 3972-3982.	1.1	4
908	Multielectron Redox Chemistry of Transition Metal Complexes Supported by a Non-Innocent N ₃ P ₂ Ligand: Synthesis, Characterization, and Catalytic Properties. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 4133-4141.	1.0	1
909	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
910	Oxygen atom exchange in rhenium bipyridine and phenanthroline tetracarbonyl cations with H ₂ O. <i>Polyhedron</i> , 2018, 156, 58-63.	1.0	0
911	Carbon Dioxide Electroreduction Catalyzed by Organometallic Complexes. <i>Advances in Organometallic Chemistry</i> , 2018, 70, 1-69.	0.5	5
912	Photoelectrochemical reduction of carbon dioxide to methanol on p-type CuFe ₂ O ₄ under visible light irradiation. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 18185-18193.	3.8	55
913	Phosphorus-doped onion-like carbon for CO ₂ electrochemical reduction: the decisive role of the bonding configuration of phosphorus. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19998-20004.	5.2	51
914	Surface Plasmon-Assisted Photoelectrochemical Reduction of CO ₂ and NO ₃ ⁻ on Nanostructured Silver Electrodes. <i>Advanced Energy Materials</i> , 2018, 8, 1800363.	10.2	50
915	Mechanistic Insights into the Ni-Catalyzed Reductive Carboxylation of C=O Bonds in Aromatic Esters with CO ₂ : Understanding Remarkable Ligand and Traceless Directing Group Effects. <i>Chemistry - an Asian Journal</i> , 2018, 13, 1570-1581.	1.7	5
916	Elucidating the Reactivity and Mechanism of CO ₂ Electroreduction at Highly Dispersed Cobalt Phthalocyanine. <i>ACS Energy Letters</i> , 2018, 3, 1381-1386.	8.8	175
917	Metallic nanocatalysts for electrochemical CO ₂ reduction in aqueous solutions. <i>Journal of Colloid and Interface Science</i> , 2018, 527, 95-106.	5.0	32
918	Surface Ligand Promotion of Carbon Dioxide Reduction through Stabilizing Chemisorbed Reactive Intermediates. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3057-3061.	2.1	61
919	Low-overpotential CO ₂ reduction by a phosphine-substituted Ru(<i>scpd</i>) ₂ polypyridyl complex. <i>Chemical Communications</i> , 2018, 54, 6915-6918.	2.2	30

#	ARTICLE	IF	CITATIONS
920	Oxygenates from the Electrochemical Reduction of Carbon Dioxide. Chemistry - an Asian Journal, 2018, 13, 1992-2008.	1.7	11
921	An overall water-splitting polyoxometalate catalyst for the electromicrobial conversion of CO ₂ in neutral water. Journal of Materials Chemistry A, 2018, 6, 9915-9921.	5.2	27
922	An electron-reservoir Re(I) complex for enhanced efficiency for reduction of CO ₂ to CO. Journal of Catalysis, 2018, 363, 191-196.	3.1	22
923	Engineering Surface Amine Modifiers of Ultrasmall Gold Nanoparticles Supported on Reduced Graphene Oxide for Improved Electrochemical CO ₂ Reduction. Advanced Energy Materials, 2018, 8, 1801400.	10.2	100
924	Formate dehydrogenase for CO ₂ utilization and its application. Journal of CO ₂ Utilization, 2018, 26, 623-641.	3.3	78
925	Reduction of CO ₂ Mediated or Catalyzed by Pincer Complexes. , 2018, , 67-99.		2
926	Theoretical study of CO ₂ hydrogenation into formic acid on Lewis acid zeolites. Physical Chemistry Chemical Physics, 2018, 20, 25179-25185.	1.3	16
927	Zinc-Coordinated Nitrogen-Codoped Graphene as an Efficient Catalyst for Selective Electrochemical Reduction of CO ₂ to CO. ChemSusChem, 2018, 11, 2944-2952.	3.6	107
928	Electroactive Co(salen) metal complexes and the electrophoretic deposition of their porous organic polymers onto glassy carbon. RSC Advances, 2018, 8, 24128-24142.	1.7	18
929	Highly Efficient and Selective Visible-Light Driven CO ₂ to CO Conversion by a Co(II) Homogeneous Catalyst in H ₂ O/CH ₃ CN Solution. ChemCatChem, 2018, 10, 3435-3440.	1.8	26
930	Principles of Electrocatalysis. , 2018, , 695-727.		4
931	Synthetic Mechanism Discovery of Monophase Cuprous Oxide for Record High Photoelectrochemical Conversion of CO ₂ to Methanol in Water. ACS Nano, 2018, 12, 8187-8196.	7.3	44
932	Computational studies on the hydride transfer barrier for the catalytic hydrogenation of CO ₂ by different Ni(II) complexes. Journal of Molecular Modeling, 2018, 24, 224.	0.8	10
933	Highly Efficient CO ₂ Electroreduction on ZnN ₄ -based Single-Atom Catalyst. Angewandte Chemie, 2018, 130, 12483-12487.	1.6	83
934	CO ₂ Electroreduction in Ionic Liquids: A Review. Chinese Journal of Chemistry, 2018, 36, 961-970.	2.6	77
935	Lewis Acid Enhancement of Proton Induced CO ₂ Cleavage: Bond Weakening and Ligand Residence Time Effects. Journal of the American Chemical Society, 2018, 140, 10121-10125.	6.6	56
936	Surface Engineering of Nanostructured Energy Materials. Advanced Materials, 2018, 30, e1802091.	11.1	54
937	Beyond Copper in CO ₂ Electrolysis: Effective Hydrocarbon Production on Silver-Nanofoam Catalysts. ACS Catalysis, 2018, 8, 8357-8368.	5.5	119

#	ARTICLE	IF	CITATIONS
938	Nanostructured Copper-Based Electrocatalysts for CO ₂ Reduction. <i>Small Methods</i> , 2018, 2, 1800121.	4.6	139
939	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
940	One step synthesis of Fe ₄ .4Ni17.6Se16 coupled NiSe foam as self-supported, highly efficient and durable oxygen evolution electrode. <i>Materials Today Chemistry</i> , 2018, 9, 133-139.	1.7	10
941	Efficient and Stable NiCo ₂ O ₄ /VN Nanoparticle Catalyst for Electrochemical Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11473-11479.	3.2	41
942	Bismuth Nano-Flowers as a Highly Selective Catalyst for Electrochemical Reduction of CO ₂ to Formate. <i>Journal of the Electrochemical Society</i> , 2018, 165, H594-H600.	1.3	33
943	Electrochemical impedance spectroscopy as a tool to investigate the electroreduction of carbon dioxide: A short review. <i>Journal of CO₂ Utilization</i> , 2018, 27, 22-31.	3.3	49
944	Insights into Carbon Dioxide Electroreduction in Ionic Liquids: Carbon Dioxide Activation and Selectivity Tailored by Ionic Microhabitat. <i>ChemSusChem</i> , 2018, 11, 3191-3197.	3.6	50
945	Mechanistic aspects of CO ₂ reduction catalysis with manganese-based molecular catalysts. <i>Coordination Chemistry Reviews</i> , 2018, 374, 173-217.	9.5	131
946	Highly Efficient CO ₂ Electroreduction on ZnN ₄ -Based Single-Atom Catalyst. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12303-12307.	7.2	356
947	Isolation of Mn(II) Compounds Featuring a Reduced Bis(imino)pyridine Chelate and Their Relevance to Electrocatalytic Hydrogen Production. <i>Inorganic Chemistry</i> , 2018, 57, 6065-6075.	1.9	14
948	Computational Design of Quaterpyridine-Based Fe/Mn-Complexes for the Direct Hydrogenation of CO ₂ to HCOOH: A Direction for Atom-Economic Approach. <i>ChemistrySelect</i> , 2018, 3, 5185-5193.	0.7	6
949	Surface, Bulk, and Interface: Rational Design of Hematite Architecture toward Efficient Photo-Electrochemical Water Splitting. <i>Advanced Materials</i> , 2018, 30, e1707502.	11.1	248
950	A Review of Metal- and Metal-Oxide-Based Heterogeneous Catalysts for Electroreduction of Carbon Dioxide. <i>Advanced Sustainable Systems</i> , 2018, 2, 1800028.	2.7	44
951	First-Principles Insight into Electrocatalytic Reduction of CO ₂ to CH ₄ on a Copper Nanoparticle. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11392-11398.	1.5	56
952	Characterizing Electrocatalysts with Scanning Electrochemical Microscopy. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 7431-7440.	1.8	21
953	Localized photodeposition of catalysts using nanophotonic resonances in silicon photocathodes. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 2097-2105.	1.5	2
954	Selective conversion of CO ₂ and H ₂ into aromatics. <i>Nature Communications</i> , 2018, 9, 3457.	5.8	301
955	Electrocatalytic Properties of Binuclear Cu(II) Fused Porphyrins for Hydrogen Evolution. <i>ACS Catalysis</i> , 2018, 8, 9888-9898.	5.5	71

#	ARTICLE	IF	CITATIONS
956	Copper Dimer Supported on a C ₂ N Layer as an Efficient Electrocatalyst for CO ₂ Reduction Reaction: A Computational Study. <i>Journal of Physical Chemistry C</i> , 2018, 122, 19712-19721.	1.5	167
957	Biomimetic Approach to CO ₂ Reduction. <i>Bioinorganic Chemistry and Applications</i> , 2018, 2018, 1-14.	1.8	40
958	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
959	Chromium Complexes with Oxido and Corrolato Ligands: Metal-Based Redox Processes versus Ligand Non-Innocence. <i>Chemistry - A European Journal</i> , 2018, 24, 12613-12622.	1.7	17
960	Electrochemical CO ₂ reduction to formate on Tin cathode: Influence of anode materials. <i>Journal of CO₂ Utilization</i> , 2018, 26, 408-414.	3.3	21
961	Iron Porphyrins Embedded into a Supramolecular Porous Organic Cage for Electrochemical CO ₂ Reduction in Water. <i>Angewandte Chemie</i> , 2018, 130, 9832-9836.	1.6	42
962	Iron Porphyrins Embedded into a Supramolecular Porous Organic Cage for Electrochemical CO ₂ Reduction in Water. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9684-9688.	7.2	149
963	Carbon Dioxide Reduction by Iron Hangman Porphyrins. <i>Organometallics</i> , 2019, 38, 1219-1223.	1.1	108
964	Urea-Based Multipoint Hydrogen-Bond Donor Additive Promotes Electrochemical CO ₂ Reduction Catalyzed by Nickel Cyclam. <i>Organometallics</i> , 2019, 38, 1213-1218.	1.1	44
965	Gas-phase electrocatalytic conversion of CO ₂ to chemicals on sputtered Cu and Cu-C catalysts electrodes. <i>Journal of Energy Chemistry</i> , 2019, 31, 46-53.	7.1	16
966	CO ₂ reduction with protons and electrons at a boron-based reaction center. <i>Chemical Science</i> , 2019, 10, 9084-9090.	3.7	9
967	Carbon-based catalysts for electrochemical CO ₂ reduction. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2890-2906.	2.5	67
968	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
969	Electrocatalytic Reduction of CO ₂ to CO and CH ₄ by Co-N-C Catalyst and Ni co-catalyst with PEM Reactor. <i>ISIJ International</i> , 2019, 59, 623-627.	0.6	10
970	Strategies for Bioelectrochemical CO ₂ Reduction. <i>Chemistry - A European Journal</i> , 2019, 25, 14258-14266.	1.7	45
971	Diverse Catalytic Systems and Mechanistic Pathways for Hydrosilylative Reduction of CO ₂ . <i>ChemSusChem</i> , 2019, 12, 4543-4569.	3.6	55
972	Rhenium bipyridine catalysts with hydrogen bonding pendant amines for CO ₂ reduction. <i>Dalton Transactions</i> , 2019, 48, 14251-14255.	1.6	34
973	Promoting Amine-Activated Electrochemical CO ₂ Conversion with Alkali Salts. <i>Journal of Physical Chemistry C</i> , 2019, 123, 18222-18231.	1.5	30

#	ARTICLE	IF	CITATIONS
974	Role of H ₂ O in CO ₂ Electrochemical Reduction As Studied in a Water-in-Salt System. ACS Central Science, 2019, 5, 1461-1467.	5.3	46
975	Rational design of carbon-based metal-free catalysts for electrochemical carbon dioxide reduction: A review. Journal of Energy Chemistry, 2019, 36, 95-105.	7.1	91
976	Bifunctional wood for electrocatalytic CO ₂ reduction to formate and electroanalytical detection of myricetin and cadmium (II). Electrochimica Acta, 2019, 319, 569-576.	2.6	10
977	Current progress of metallic and carbon-based nanostructure catalysts towards the electrochemical reduction of CO ₂ . Inorganic Chemistry Frontiers, 2019, 6, 3363-3380.	3.0	29
978	Infrared studies of surface carbonate binding to diimine-tricarbonyl Re(I) and Mn(I) complexes in mesoporous silica. Journal of Coordination Chemistry, 2019, 72, 1336-1345.	0.8	2
979	Heterogeneous Aqueous CO ₂ Reduction Using a Pyrene-Modified Rhenium(I) Diimine Complex. Inorganic Chemistry, 2019, 58, 10454-10461.	1.9	22
980	Molecular electrocatalysts can mediate fast, selective CO ₂ reduction in a flow cell. Science, 2019, 365, 367-369.	6.0	601
981	Advances in Sn-Based Catalysts for Electrochemical CO ₂ Reduction. Nano-Micro Letters, 2019, 11, 62.	14.4	176
982	Evaluation of the effect of the dicationic ionic liquid structure on the cycloaddition of CO ₂ to epoxides. Journal of CO ₂ Utilization, 2019, 34, 437-445.	3.3	45
983	Recent Advances in Power-to-X Technology for the Production of Fuels and Chemicals. Frontiers in Chemistry, 2019, 7, 392.	1.8	112
984	Controlled Substrate Transport to Electrocatalyst Active Sites for Enhanced Selectivity in the Carbon Dioxide Reduction Reaction. Comments on Inorganic Chemistry, 2019, 39, 242-269.	3.0	14
985	Hydrogen activation by isomeric aromatic phosphabenzene: A theoretical study. Polyhedron, 2019, 170, 690-694.	1.0	1
986	Semiconductor Quantum Dots: An Emerging Candidate for CO ₂ Photoreduction. Advanced Materials, 2019, 31, e1900709.	11.1	316
987	In Situ Transmission Electron Microscopy Study of Nanocrystal Formation for Electrocatalysis. ChemNanoMat, 2019, 5, 1439-1455.	1.5	14
988	Communicationâ€”Lithium-Doped CuFeO ₂ Thin Film Electrodes for Photoelectrochemical Reduction of Carbon Dioxide to Methanol. Journal of the Electrochemical Society, 2019, 166, H718-H720.	1.3	15
989	Critical operating conditions for enhanced energy-efficient molten salt CO ₂ capture and electrolytic utilization as durable looping applications. Applied Energy, 2019, 255, 113862.	5.1	25
990	Twoâ€”Dimensional Organometallic TM ₃ â€”C ₁₂ S ₁₂ Monolayers for Electrocatalytic Reduction of CO ₂ . Energy and Environmental Materials, 2019, 2, 193-200.	7.3	34
991	Polyoxometalate-based materials for sustainable and clean energy conversion and storage. EnergyChem, 2019, 1, 100021.	10.1	183

#	ARTICLE	IF	CITATIONS
992	Redox-Active Guanidines in Proton-Coupled Electron-Transfer Reactions: Real Alternatives to Benzoquinones?. <i>Chemistry - A European Journal</i> , 2019, 25, 15988-15992.	1.7	12
993	Improved ability of artificial photosynthesis by using InGaN/AlGaIn/GaN electrode. <i>Applied Physics Express</i> , 2019, 12, 111003.	1.1	3
994	Electrolyte Effects on the Electrochemical Reduction of CO ₂ . <i>ChemPhysChem</i> , 2019, 20, 2926-2935.	1.0	151
995	Recent progress in two-dimensional nanomaterials: Synthesis, engineering, and applications. <i>FlatChem</i> , 2019, 18, 100133.	2.8	52
996	Synthesis of a photo-responsive single-walled nanoscroll and its photo-reactivity in a nano-layered microenvironment. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 21738-21745.	1.3	4
997	Conversion of carbon dioxide into storable solar fuels using solar energy. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 291, 012038.	0.2	0
998	Heterogeneous molecular rhenium catalyst for CO ₂ photoreduction with high activity and tailored selectivity in an aqueous solution. <i>Applied Catalysis B: Environmental</i> , 2019, 259, 118113.	10.8	14
999	Three-dimensional carbon felt host for stable sodium metal anode. <i>Carbon</i> , 2019, 155, 50-55.	5.4	25
1000	A Perovskite Electronic Structure Descriptor for Electrochemical CO ₂ Reduction and the Competing H ₂ Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24469-24476.	1.5	26
1001	Bio-mimetic self-assembled computationally designed catalysts of Mo and W for hydrogenation of CO ₂ /dehydrogenation of HCOOH inspired by the active site of formate dehydrogenase. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 21370-21380.	1.3	7
1002	Different Pathways for CO ₂ Electrocatalytic Reduction by Confined CoTMPyP in Electrodeposited Reduced Graphene Oxide. <i>ACS Applied Energy Materials</i> , 2019, 2, 8434-8440.	2.5	16
1003	Introduction of Mn(III) to regulate the electronic structure of fluorine-doped nickel hydroxide for efficient water oxidation. <i>Nanoscale Advances</i> , 2019, 1, 4099-4108.	2.2	22
1004	Molecular Catalysis for Utilizing CO ₂ in Fuel Electro-Generation and in Chemical Feedstock. <i>Catalysts</i> , 2019, 9, 760.	1.6	14
1005	Disclosing CO ₂ Activation Mechanism by Hydroxyl-Induced Crystalline Structure Transformation in Electrocatalytic Process. <i>Matter</i> , 2019, 1, 1656-1668.	5.0	60
1006	Selective Electrocatalytic Conversion of CO ₂ to HCOOH by a Cationic Rh ₂ (II,II) Complex. <i>ACS Applied Energy Materials</i> , 2019, 2, 7306-7314.	2.5	9
1007	Nickel(II) Cyclen Complexes Bearing Ancillary Amide Appendages for the Electrocatalytic Reduction of CO ₂ . <i>ACS Applied Energy Materials</i> , 2019, 2, 8560-8569.	2.5	8
1008	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
1009	Power to methanol technologies via CO ₂ recovery: CO ₂ hydrogenation and electrocatalytic routes. <i>Reviews in Chemical Engineering</i> , 2019, .	2.3	12

#	ARTICLE	IF	CITATIONS
1010	The value of enzymes in solar fuels research – efficient electrocatalysts through evolution. <i>Chemical Society Reviews</i> , 2019, 48, 2039-2052.	18.7	62
1011	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
1012	Evaluating the impacts of amino acids in the second and outer coordination spheres of Rh-bis(diphosphine) complexes for CO ₂ hydrogenation. <i>Faraday Discussions</i> , 2019, 215, 123-140.	1.6	11
1013	Conversion of saline waste-water and gaseous carbon dioxide to (bi)carbonate salts, hydrochloric acid and desalinated water for on-site industrial utilization. <i>Reaction Chemistry and Engineering</i> , 2019, 4, 141-150.	1.9	4
1014	Reduction of CO ₂ by a masked two-coordinate cobalt(<i>i</i>) complex and characterization of a proposed oxodicobalt(<i>ii</i>) intermediate. <i>Chemical Science</i> , 2019, 10, 918-929.	3.7	44
1015	Electrocatalytic reduction of low concentration CO ₂ . <i>Chemical Science</i> , 2019, 10, 1597-1606.	3.7	62
1016	Alternative Oxidation Reactions for Solar-Driven Fuel Production. <i>ACS Catalysis</i> , 2019, 9, 2007-2017.	5.5	115
1017	From CO ₂ methanation to ambitious long-chain hydrocarbons: alternative fuels paving the path to sustainability. <i>Chemical Society Reviews</i> , 2019, 48, 205-259.	18.7	205
1018	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
1019	Inductive and electrostatic effects on cobalt porphyrins for heterogeneous electrocatalytic carbon dioxide reduction. <i>Catalysis Science and Technology</i> , 2019, 9, 974-980.	2.1	56
1020	Covalently Grafting Cobalt Porphyrin onto Carbon Nanotubes for Efficient CO ₂ Electroreduction. <i>Angewandte Chemie</i> , 2019, 131, 6667-6671.	1.6	26
1021	Covalently Grafting Cobalt Porphyrin onto Carbon Nanotubes for Efficient CO ₂ Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 6595-6599.	7.2	190
1022	Photocatalytic CO ₂ reduction by H ₂ O: insights from modeling electronically relaxed mechanisms. <i>Catalysis Science and Technology</i> , 2019, 9, 1048-1059.	2.1	24
1023	High-Efficiency Conversion of CO ₂ to Oxalate in Water Is Possible Using a Cr-Ga Oxide Electrocatalyst. <i>ACS Catalysis</i> , 2019, 9, 2324-2333.	5.5	43
1024	Highly Selective and Durable Photochemical CO ₂ Reduction by Molecular Mn(I) Catalyst Fixed on a Particular Dye-Sensitized TiO ₂ Platform. <i>ACS Catalysis</i> , 2019, 9, 2580-2593.	5.5	58
1025	Metal-free graphdiyne doped with sp ² -hybridized boron and nitrogen atoms at acetylenic sites for high-efficiency electroreduction of CO ₂ to CH ₄ and C ₂ H ₄ . <i>Journal of Materials Chemistry A</i> , 2019, 7, 4026-4035.	5.2	87
1026	Cyclophanes as Platforms for Reactive Multimetallic Complexes. <i>Accounts of Chemical Research</i> , 2019, 52, 447-455.	7.6	30
1027	Reductive Disproportionation of CO ₂ Mediated by Bimetallic Nickelate(II)/Group 13 Complexes. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 2140-2145.	1.0	20

#	ARTICLE	IF	CITATIONS
1028	Copper–Silver Bimetallic Nanowire Arrays for Electrochemical Reduction of Carbon Dioxide. <i>Nanomaterials</i> , 2019, 9, 173.	1.9	25
1029	A review on photochemical, biochemical and electrochemical transformation of CO ₂ into value-added products. <i>Journal of CO₂ Utilization</i> , 2019, 33, 131-147.	3.3	303
1030	Supported molecular catalysts for the heterogeneous CO ₂ electroreduction. <i>Current Opinion in Electrochemistry</i> , 2019, 15, 148-154.	2.5	40
1031	Carbon dioxide photo/electroreduction with cobalt. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16622-16642.	5.2	59
1032	New horizon in C1 chemistry: breaking the selectivity limitation in transformation of syngas and hydrogenation of CO ₂ into hydrocarbon chemicals and fuels. <i>Chemical Society Reviews</i> , 2019, 48, 3193-3228.	18.7	742
1033	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
1034	Metal–Organic Frameworks Toward Electrocatalytic Applications. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2427.	1.3	55
1035	Secondary-Sphere Effects in Molecular Electrocatalytic CO ₂ Reduction. <i>Frontiers in Chemistry</i> , 2019, 7, 397.	1.8	114
1036	Electrochemical Reduction of CO ₂ Catalyzed by Metal Nanocatalysts. <i>Trends in Chemistry</i> , 2019, 1, 739-750.	4.4	80
1037	Robust and Selective Cobalt Catalysts Bearing Redox-Active Bipyridyl- <i>N</i> -heterocyclic Carbene Frameworks for Electrochemical CO ₂ Reduction in Aqueous Solutions. <i>ACS Catalysis</i> , 2019, 9, 7398-7408.	5.5	52
1038	Ultrafast Dynamics of Tripyrindiones in Solution Mediated by Hydrogen-Bonding Interactions. <i>Journal of Physical Chemistry B</i> , 2019, 123, 5524-5535.	1.2	10
1039	Intensified Electrocatalytic CO ₂ Conversion in Pressure-Tunable CO ₂ -Expanded Electrolytes. <i>ChemSusChem</i> , 2019, 12, 3761-3768.	3.6	19
1040	A versatile ethanolic approach to metal aerogels (Pt, Pd, Au, Ag, Cu and Co). <i>Materials Chemistry Frontiers</i> , 2019, 3, 1586-1592.	3.2	28
1041	A ruthenium porphyrin-based porous organic polymer for the hydrosilylative reduction of CO ₂ to formate. <i>Chemical Communications</i> , 2019, 55, 7195-7198.	2.2	39
1042	Enhanced photocatalytic reduction of CO ₂ to CO over BiOBr assisted by phenolic resin-based activated carbon spheres. <i>RSC Advances</i> , 2019, 9, 14391-14399.	1.7	28
1043	Carbon nitride as a ligand: edge-site coordination of ReCl(CO) ₃ -fragments to g-C ₃ N ₄ . <i>Chemical Communications</i> , 2019, 55, 7450-7453.	2.2	10
1044	Electrodeposited mesh-type dimensionally stable anode for oxygen evolution reaction in acidic and alkaline media. <i>Chemical Engineering Science</i> , 2019, 206, 424-431.	1.9	12
1045	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

#	ARTICLE	IF	CITATIONS
1046	1D/2D nitrogen-doped carbon nanorod arrays/ultrathin carbon nanosheets: outstanding catalysts for the highly efficient electroreduction of CO ₂ to CO. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14895-14903.	5.2	46
1047	Effect of Redox Active Ligands on the Electrochemical Properties of Manganese Tricarbonyl Complexes. <i>Inorganic Chemistry</i> , 2019, 58, 7453-7465.	1.9	12
1048	Electrocatalytic CO ₂ Reduction with a Ruthenium Catalyst in Solution and on Nanocrystalline TiO ₂ . <i>ChemSusChem</i> , 2019, 12, 2402-2408.	3.6	37
1049	A Ni ^{II} complex of the tetradentate salen ligand H ₂ L ^{NH₂} comprising an anchoring -NH ₂ group: synthesis, characterization and electrocatalytic CO ₂ reduction to alcohols. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1721-1728.	3.0	18
1050	NADH-Free Electroenzymatic Reduction of CO ₂ by Conductive Hydrogel-Conjugated Formate Dehydrogenase. <i>ACS Catalysis</i> , 2019, 9, 5584-5589.	5.5	60
1051	Photoconversion of carbon dioxide into fuels using semiconductors. <i>Journal of CO₂ Utilization</i> , 2019, 33, 72-82.	3.3	28
1052	Hierarchical Nanostructured Photocatalysts for CO ₂ Photoreduction. <i>Catalysts</i> , 2019, 9, 370.	1.6	54
1053	Heterogenized Molecular Catalysts: Vibrational Sum-Frequency Spectroscopic, Electrochemical, and Theoretical Investigations. <i>Accounts of Chemical Research</i> , 2019, 52, 1289-1300.	7.6	53
1054	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
1055	CO ₂ reduction by a Mn electrocatalyst in the presence of a Lewis acid: a DFT study on the reaction mechanism. <i>Sustainable Energy and Fuels</i> , 2019, 3, 1730-1738.	2.5	11
1056	Decoding Proton-Coupled Electron Transfer with Potential-pK _a Diagrams: Applications to Catalysis. <i>Inorganic Chemistry</i> , 2019, 58, 6647-6658.	1.9	20
1057	CoxNi _{1-x} nanoalloys on N-doped carbon nanofibers: Electronic regulation toward efficient electrochemical CO ₂ reduction. <i>Journal of Catalysis</i> , 2019, 372, 277-286.	3.1	21
1058	Rhenium(I) Phosphazane Complexes for Electrocatalytic CO ₂ Reduction. <i>Organometallics</i> , 2019, 38, 1664-1676.	1.1	16
1059	Cobalt phthalocyanine coordinated to pyridine-functionalized carbon nanotubes with enhanced CO ₂ electroreduction. <i>Applied Catalysis B: Environmental</i> , 2019, 251, 112-118.	10.8	135
1060	An Application of Conducting Polymer Polypyrrole for the Design of Electrochromic pH and CO ₂ Sensors. <i>Journal of the Electrochemical Society</i> , 2019, 166, B297-B303.	1.3	30
1061	Catalysts in electro-, photo- and photoelectrocatalytic CO ₂ reduction reactions. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2019, 40, 117-149.	5.6	101
1062	CO ₂ capture and sequestration in stable Ca-oxalate, via Ca-ascorbate promoted green reaction. <i>Science of the Total Environment</i> , 2019, 666, 1232-1244.	3.9	15
1063	Single-Atom Catalysts for Photocatalytic Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6430-6443.	3.2	121

#	ARTICLE	IF	CITATIONS
1064	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
1065	Nanoelectrocatalysts for Carbon Dioxide Reduction. , 2019, , 243-272.		1
1066	Quaternäre Metall/Metalloxid-Katalysatoren als Wandkatalysatoren in Mikroreaktoren für Power-to-Gas-Anwendungen mittels kombinatorischer Hochdurchsatzmethoden. Chemie-Ingenieur-Technik, 2019, 91, 607-613.	0.4	3
1067	Unambiguous hydrogenation of CO ₂ by coinage-metal hydride anions: an intuitive idea based on <i>in silico</i> experiments. Physical Chemistry Chemical Physics, 2019, 21, 7483-7490.	1.3	13
1068	Carbon dioxide reduction by dinuclear Yb(ii) and Sm(ii) complexes supported by siloxide ligands. Dalton Transactions, 2019, 48, 6100-6110.	1.6	29
1069	Boosting electrocatalysis by heteroatom doping and oxygen vacancies in hierarchical Ni-Co based nitride phosphide hybrid. Journal of Power Sources, 2019, 422, 33-41.	4.0	39
1070	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
1071	Electronic Tuning of Cobalt Porphyrins Immobilized on Nitrogen-Doped Graphene for CO ₂ Reduction. ACS Applied Energy Materials, 2019, 2, 2435-2440.	2.5	34
1072	A look at periodic trends in d-block molecular electrocatalysts for CO ₂ reduction. Dalton Transactions, 2019, 48, 9454-9468.	1.6	58
1073	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
1074	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
1075	Modulating the mechanism of electrocatalytic CO ₂ reduction by cobalt phthalocyanine through polymer coordination and encapsulation. Nature Communications, 2019, 10, 1683.	5.8	171
1076	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
1077	Reactivity patterns for the activation of CO ₂ and CS ₂ with alumoxane and aluminum hydrides. Dalton Transactions, 2019, 48, 5595-5603.	1.6	15
1078	A molecular noble metal-free system for efficient visible light-driven reduction of CO ₂ to CO. Dalton Transactions, 2019, 48, 9596-9602.	1.6	37
1079	Recent Progress of Carbon Dioxide Conversion into Renewable Fuels and Chemicals Using Nanomaterials. Environmental Chemistry for A Sustainable World, 2019, , 271-293.	0.3	4
1080	Nanostructured Materials for Energy Related Applications. Environmental Chemistry for A Sustainable World, 2019, , .	0.3	5
1081	Nanofibrous rhodium with a new morphology for the hydrogenation of CO ₂ to formate. New Journal of Chemistry, 2019, 43, 4489-4496.	1.4	6

#	ARTICLE	IF	CITATIONS
1082	Fabrication of Superior Single-Atom Catalysts toward Diverse Electrochemical Reactions. <i>Small Methods</i> , 2019, 3, 1800497.	4.6	99
1083	Cocatalysts for Selective Photoreduction of CO ₂ into Solar Fuels. <i>Chemical Reviews</i> , 2019, 119, 3962-4179.	23.0	1,591
1084	Electro- and Solar-Driven Fuel Synthesis with First Row Transition Metal Complexes. <i>Chemical Reviews</i> , 2019, 119, 2752-2875.	23.0	615
1085	Oxygen vacancy associated single-electron transfer for photofixation of CO ₂ to long-chain chemicals. <i>Nature Communications</i> , 2019, 10, 788.	5.8	222
1086	Recent advances in low-temperature electrochemical conversion of carbon dioxide. <i>Reviews in Chemical Engineering</i> , 2021, 37, 863-884.	2.3	8
1087	30. Photochemical reduction of CO ₂ with metal-based systems. , 2019, , 657-680.		0
1088	Thermodynamic targeting of electrocatalytic CO ₂ reduction: advantages, limitations, and insights for catalyst design. <i>Dalton Transactions</i> , 2019, 48, 15841-15848.	1.6	13
1089	Small molecule activation by multimetallic uranium complexes supported by siloxide ligands. <i>Chemical Communications</i> , 2019, 55, 13031-13047.	2.2	26
1090	Reactivity of a biomimetic W(^{iv}) bis-dithiolene complex with CO ₂ leading to formate production and structural rearrangement. <i>Dalton Transactions</i> , 2019, 48, 17441-17444.	1.6	8
1091	The good, the neutral, and the positive: buffer identity impacts CO ₂ reduction activity by nickel(ⁱⁱ) cyclam. <i>Dalton Transactions</i> , 2019, 48, 15810-15821.	1.6	26
1092	CO ₂ reduction using paper-derived carbon electrodes modified with copper nanoparticles. <i>RSC Advances</i> , 2019, 9, 33657-33663.	1.7	7
1093	Mechanistic Insights into the Electrochemical Reduction of CO ₂ Catalyzed by Iron Cyclopentadienone Complexes. <i>Organometallics</i> , 2019, 38, 1236-1247.	1.1	23
1094	Surface-Immobilized Conjugated Polymers Incorporating Rhenium Bipyridine Motifs for Electrocatalytic and Photocatalytic CO ₂ Reduction. <i>ACS Applied Energy Materials</i> , 2019, 2, 110-123.	2.5	47
1095	Influence of Ni/Cu ratio in nickel copper carbonate hydroxide on the phase and electrochemical properties. <i>Journal of Alloys and Compounds</i> , 2019, 780, 147-155.	2.8	42
1096	Nickel-catalyzed carboxylation of aryl zinc reagent with CO ₂ : A theoretical and experimental study. <i>Journal of CO₂ Utilization</i> , 2019, 29, 262-270.	3.3	3
1097	CO ₂ Absorption by DBU-Based Protic Ionic Liquids: Basicity of Anion Dictates the Absorption Capacity and Mechanism. <i>Frontiers in Chemistry</i> , 2018, 6, 658.	1.8	20
1098	Chemical Versatility of [FeFe]-Hydrogenase Models: Distinctive Activity of [1/4-C ₆ H ₄ -1,2-(² -S) ₂][Fe ₂ (CO) ₆] for Electrocatalytic CO ₂ Reduction. <i>ACS Catalysis</i> , 2019, 9, 768-774.	5.5	21
1099	Covalent ligation of Co molecular catalyst to carbon cloth for efficient electroreduction of CO ₂ in water. <i>Applied Catalysis B: Environmental</i> , 2019, 244, 881-888.	10.8	74

#	ARTICLE	IF	CITATIONS
1100	Ni II Complexes of C-Substituted Cyclam as Efficient Catalysts for Reduction of CO ₂ to CO. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 2065-2070.	1.0	13
1101	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
1102	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
1103	Controlled chemical etching leads to efficient silicon-bismuth interface for photoelectrochemical CO ₂ reduction to formate. <i>Materials Today Chemistry</i> , 2019, 11, 80-85.	1.7	31
1104	Sequential Oxygen Reduction and Adsorption for Carbon Dioxide Purification for Flue Gas Applications. <i>Energy Technology</i> , 2019, 7, 1800917.	1.8	8
1105	Sustainable thermionic emission in CO ₂ , helium and argon surroundings. <i>Applied Surface Science</i> , 2019, 471, 803-812.	3.1	0
1106	Inorganic Photochemistry and Solar Energy Harvesting: Current Developments and Challenges to Solar Fuel Production. <i>International Journal of Photoenergy</i> , 2019, 2019, 1-23.	1.4	35
1107	Recent Improvements in the Production of Solar Fuels: From CO ₂ Reduction to Water Splitting and Artificial Photosynthesis. <i>Bulletin of the Chemical Society of Japan</i> , 2019, 92, 178-192.	2.0	158
1108	Selective Earth-Abundant System for CO ₂ Reduction: Comparing Photo- and Electrocatalytic Processes. <i>ACS Catalysis</i> , 2019, 9, 2091-2100.	5.5	80
1109	Nickel Bipyridine (Ni(bpy) ₃ Cl ₂) Complex Used as Molecular Catalyst for Photocatalytic CO ₂ Reduction. <i>Catalysis Letters</i> , 2019, 149, 25-33.	1.4	20
1110	A computational study of electrocatalytic CO ₂ reduction by Mn(I) complexes: Role of bipyridine substituents. <i>Electrochimica Acta</i> , 2019, 297, 606-612.	2.6	18
1111	Metal-Free Boron Nitride Nanoribbon Catalysts for Electrochemical CO ₂ Reduction: Combining High Activity and Selectivity. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 906-915.	4.0	66
1112	Effects of substrate porosity in carbon aerogel supported copper for electrocatalytic carbon dioxide reduction. <i>Electrochimica Acta</i> , 2019, 297, 545-552.	2.6	24
1113	Nickel complexes as molecular catalysts for water splitting and CO ₂ reduction. <i>Coordination Chemistry Reviews</i> , 2019, 378, 237-261.	9.5	174
1114	Ruthenium-birhodanine complex supported over fibrous phosphosilicate for photocatalytic CO ₂ reduction to formate. <i>Catalysis Today</i> , 2020, 340, 197-203.	2.2	9
1115	Multiscale design for high-performance glycolic acid electro-synthesis cell: Preparation of nanoscale-IrO ₂ -applied Ti anode and optimization of cell assembling. <i>Catalysis Today</i> , 2020, 351, 12-20.	2.2	13
1116	Identification of dual-active sites in cobalt phthalocyanine for electrochemical carbon dioxide reduction. <i>Nano Energy</i> , 2020, 67, 104163.	8.2	48
1117	Iron carbonyl compounds with aromatic dithiolate bridges as organometallic mimics of [FeFe] hydrogenases. <i>Coordination Chemistry Reviews</i> , 2020, 402, 213081.	9.5	48

#	ARTICLE	IF	CITATIONS
1118	Single-atoms supported (Fe, Co, Ni, Cu) on graphitic carbon nitride for CO ₂ adsorption and hydrogenation to formic acid: First-principles insights. <i>Applied Surface Science</i> , 2020, 499, 143928.	3.1	47
1119	Two-dimensional Electrocatalysts for Efficient Reduction of Carbon Dioxide. <i>ChemSusChem</i> , 2020, 13, 59-77.	3.6	31
1120	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
1121	Preventing the Deactivation of Gold Cathodes During Electrocatalytic CO ₂ Reduction While Avoiding Gold Dissolution. <i>Electrocatalysis</i> , 2020, 11, 25-34.	1.5	9
1122	Recent advances in the utilization of copper sulfide compounds for electrochemical CO ₂ reduction. <i>Nano Materials Science</i> , 2020, 2, 235-247.	3.9	45
1123	Carbon nitride embedded with transition metals for selective electrocatalytic CO ₂ reduction. <i>Applied Catalysis B: Environmental</i> , 2020, 268, 118391.	10.8	64
1124	Chemistry reduction of complex CO ₂ chemical kinetics: application to a gliding arc plasma. <i>Plasma Sources Science and Technology</i> , 2020, 29, 025012.	1.3	15
1125	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
1126	A redox interaction-engaged strategy for multicomponent nanomaterials. <i>Chemical Society Reviews</i> , 2020, 49, 736-764.	18.7	32
1127	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
1128	Unusual Reactivity of a Thiazole-Based Mn Tricarbonyl Complex for CO ₂ Activation. <i>Organometallics</i> , 2020, 39, 988-994.	1.1	6
1129	Selective electrochemical CO ₂ conversion to multicarbon alcohols on highly efficient N-doped porous carbon-supported Cu catalysts. <i>Green Chemistry</i> , 2020, 22, 71-84.	4.6	66
1130	CO ₂ Reduction: From Homogeneous to Heterogeneous Electrocatalysis. <i>Accounts of Chemical Research</i> , 2020, 53, 255-264.	7.6	391
1131	Two-dimensional materials and metal-organic frameworks for the CO ₂ reduction reaction. <i>Materials Today Advances</i> , 2020, 5, 100038.	2.5	48
1132	First-principles microkinetics simulations of electrochemical reduction of CO ₂ over Cu catalysts. <i>Electrochimica Acta</i> , 2020, 335, 135665.	2.6	32
1133	Tandem deoxygenative hydrosilation of carbon dioxide with a cationic scandium hydridoborate and B(C ₆ F ₅) ₃ . <i>Dalton Transactions</i> , 2020, 49, 95-101.	1.6	14
1134	Electrocatalytic reduction of carbon dioxide: opportunities with heterogeneous molecular catalysts. <i>Energy and Environmental Science</i> , 2020, 13, 374-403.	15.6	303
1135	Surface structure-dependent electrocatalytic reduction of CO ₂ to C ₁ products on SnO ₂ catalysts. <i>Sustainable Energy and Fuels</i> , 2020, 4, 600-606.	2.5	5

#	ARTICLE	IF	CITATIONS
1136	Carbonaceous materials for electrochemical CO ₂ reduction. <i>EnergyChem</i> , 2020, 2, 100024.	10.1	55
1137	Isolating substituent effects in Re(I)-phenanthroline electrocatalysts for CO ₂ reduction. <i>Inorganica Chimica Acta</i> , 2020, 503, 119397.	1.2	11
1138	Efficient electrochemical reduction of CO ₂ into formate and acetate in polyoxometalate catholyte with indium catalyst. <i>Journal of Catalysis</i> , 2020, 382, 69-76.	3.1	51
1139	Thiocyanate-Modified Silver Nanofoam for Efficient CO ₂ Reduction to CO. <i>ACS Catalysis</i> , 2020, 10, 1444-1453.	5.5	51
1141	Montmorillonite-catalyzed conversions of carbon dioxide to formic acid: Active site, competitive mechanisms, influence factors and origin of high catalytic efficiency. <i>Journal of Colloid and Interface Science</i> , 2020, 563, 8-16.	5.0	20
1142	NO and NO ₂ as non-innocent ligands: A comparison. <i>Coordination Chemistry Reviews</i> , 2020, 404, 213114.	9.5	23
1143	Two-Dimensional Metal-Organic Framework Nanosheets with Cobalt Porphyrins for High-Performance CO ₂ Electroreduction. <i>Chemistry - A European Journal</i> , 2020, 26, 1604-1611.	1.7	57
1144	Methods for Electrocatalysis. , 2020, , .		2
1145	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
1146	Placing Single-Metal Complexes into the Backbone of CO ₂ -Based Polycarbonate Chains, Construction of Nanostructures for Prospective Micellar Catalysis. <i>Organometallics</i> , 2020, 39, 1612-1618.	1.1	17
1147	<i>In situ</i> and <i>operando</i> x-ray diffraction and x-ray absorption studies of CoTiO ₂ dry methane reforming catalysts. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 044003.	1.3	5
1148	Promises of Main Group Metal-Based Nanostructured Materials for Electrochemical CO ₂ Reduction to Formate. <i>Advanced Energy Materials</i> , 2020, 10, 1902338.	10.2	384
1149	Borophene: A Metal-Free and Metallic Electrocatalyst for Efficient Converting CO ₂ into CH ₄ . <i>ChemCatChem</i> , 2020, 12, 1483-1490.	1.8	29
1150	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. <i>Journal of Electroanalytical Chemistry</i> , 2020, 857, 113704.	1.9	9
1151	Sustainable production of formic acid from biomass and carbon dioxide. <i>Molecular Catalysis</i> , 2020, 483, 110716.	1.0	62
1152	Nickel is a Different Pickle: Trends in Water Oxidation Catalysis for Molecular Nickel Complexes. <i>ChemSusChem</i> , 2020, 13, 6629-6634.	3.6	14
1153	Visible-Light Photocatalytic Conversion of Carbon Dioxide by Ni(II) Complexes with N4S2 Coordination: Highly Efficient and Selective Production of Formate. <i>Journal of the American Chemical Society</i> , 2020, 142, 19142-19149.	6.6	47
1154	Homogeneous and heterogeneous molecular catalysts for electrochemical reduction of carbon dioxide. <i>RSC Advances</i> , 2020, 10, 38013-38023.	1.7	24

#	ARTICLE	IF	CITATIONS
1155	Tuning the coordination number of Fe single atoms for the efficient reduction of CO ₂ . <i>Green Chemistry</i> , 2020, 22, 7529-7536.	4.6	49
1156	Computational Identification of a New Adsorption Site of CO ₂ on the Ag (211) Surface. <i>ChemistrySelect</i> , 2020, 5, 11503-11509.	0.7	4
1157	CuO/ZnO/C electrocatalysts for CO ₂ -to-C ₂ + products conversion with high yield: On the effect of geometric structure and composition. <i>Applied Catalysis A: General</i> , 2020, 606, 117829.	2.2	34
1159	Electrospun nitrogen-doped carbon nanofibers for electrocatalysis. <i>Sustainable Materials and Technologies</i> , 2020, 26, e00221.	1.7	11
1160	Iron-Mediated C-C Bond Formation via Reductive Coupling with Carbon Dioxide. <i>Organometallics</i> , 2020, 39, 3562-3571.	1.1	13
1161	Low Overpotential CO ₂ Activation by a Graphite-Adsorbed Cobalt Porphyrin. <i>ACS Catalysis</i> , 2020, 10, 12284-12291.	5.5	19
1162	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
1163	Recent Progress with Pincer Transition Metal Catalysts for Sustainability. <i>Catalysts</i> , 2020, 10, 773.	1.6	71
1164	Emergence of CO ₂ electrolyzers including supported molecular catalysts. <i>Current Opinion in Electrochemistry</i> , 2020, 24, 49-55.	2.5	15
1165	Cu _x W _(1-x) O ₄ Solid Solution Display Visible Light Photoreduction of CO ₂ to CH ₃ OH Coupling with Oxidation of Amine to Imine. <i>Nanomaterials</i> , 2020, 10, 1303.	1.9	7
1166	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
1167	Mn(III) Catalyzed Electrochemical Reduction of CO ₂ on Carbon Electrodes. <i>Croatica Chemica Acta</i> , 2020, 93, 41-47.	0.1	1
1168	Advances in Clean Fuel Ethanol Production from Electro-, Photo- and Photoelectro-Catalytic CO ₂ Reduction. <i>Catalysts</i> , 2020, 10, 1287.	1.6	25
1169	Nanostructured Anodic Copper Oxides as Catalysts in Electrochemical and Photoelectrochemical Reactions. <i>Catalysts</i> , 2020, 10, 1338.	1.6	25
1170	Mechanistic Insight into Hydrogen-Assisted Carbon Dioxide Reduction with Ilmenite. <i>Energy & Fuels</i> , 2020, 34, 15370-15378.	2.5	7
1171	CO ₂ Conversion on Ligand-Protected Au ₂₅ Nanoparticle: The Role of Structural Inhomogeneity in the Promotion of the Electrocatalytic Process. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 258, 2000387.	0.7	1
1172	How efficient could photocatalytic CO ₂ reduction with H ₂ O into solar fuels be?. <i>Energy Conversion and Management</i> , 2020, 222, 113236.	4.4	31
1173	Photo-electrochemical Reduction of Carbon Dioxide into Methanol at CuFeO ₂ Nanoparticle-Decorated CuInS ₂ Thin-Film Photocathodes. <i>Energy & Fuels</i> , 2020, 34, 9914-9922.	2.5	12

#	ARTICLE	IF	CITATIONS
1174	Effect of ceria promotion on the catalytic performance of Ni/SBA-16 catalysts for CO ₂ methanation. <i>Catalysis Science and Technology</i> , 2020, 10, 6330-6341.	2.1	35
1175	An artificial intelligence-aided virtual screening recipe for two-dimensional materials discovery. <i>Npj Computational Materials</i> , 2020, 6, .	3.5	39
1176	Transition metal macrocycles for heterogeneous electrochemical CO ₂ reduction. <i>Coordination Chemistry Reviews</i> , 2020, 422, 213435.	9.5	88
1177	Towards highly efficient electrochemical CO ₂ reduction: Cell designs, membranes and electrocatalysts. <i>Applied Energy</i> , 2020, 277, 115557.	5.1	104
1178	Increased CODH activity in a bioelectrochemical system improves microbial electrosynthesis with CO. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5952-5957.	2.5	8
1179	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
1180	Electrocatalytic hydrogen production and carbon dioxide conversion by earth abundant transition metal complexes of the Schiff base ligand:	1.0	6
1181	Nanostructured copper molybdates as promising bifunctional electrocatalysts for overall water splitting and CO ₂ reduction. <i>RSC Advances</i> , 2020, 10, 39037-39048.	1.7	20
1182	Electronically Modified Cobalt Aminopyridine Complexes Reveal an Orthogonal Axis for Catalytic Optimization for CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2020, 59, 13709-13718.	1.9	11
1183	The Active Center of Co ^{II} Electrocatalysts for the Selective Reduction of CO ₂ to CO Using a Nafion-H Electrolyte in the Gas Phase. <i>ACS Omega</i> , 2020, 5, 19453-19463.	1.6	11
1184	Transition metal-based catalysts for the electrochemical CO ₂ reduction: from atoms and molecules to nanostructured materials. <i>Chemical Society Reviews</i> , 2020, 49, 6884-6946.	18.7	305
1185	Investigation on Electroreduction of CO ₂ to Formic Acid Using Cu ₃ (BTC) ₂ Metal-Organic Framework (Cu-MOF) and Graphene Oxide. <i>ACS Omega</i> , 2020, 5, 23919-23930.	1.6	47
1186	Novel homogeneous selective electrocatalysts for CO ₂ reduction: an electrochemical and computational study of cyclopentadienyl-phenylendiamino-cobalt complexes. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5609-5617.	2.5	5
1187	Zero valent iron nanoparticles as sustainable nanocatalysts for reduction reactions. <i>Catalysis Reviews - Science and Engineering</i> , 2022, 64, 286-355.	5.7	20
1188	Electroreduction of Carbon Dioxide by Homogeneous Iridium Catalysts. <i>Topics in Organometallic Chemistry</i> , 2020, , 325-339.	0.7	0
1189	Defective Indium/Indium Oxide Heterostructures for Highly Selective Carbon Dioxide Electrocatalysis. <i>Inorganic Chemistry</i> , 2020, 59, 12437-12444.	1.9	40
1190	<i>Operando</i> characterization techniques for electrocatalysis. <i>Energy and Environmental Science</i> , 2020, 13, 3748-3779.	15.6	159
1191	Recent Electrochemical Applications of Metal-Organic Framework-Based Materials. <i>Crystal Growth and Design</i> , 2020, 20, 7034-7064.	1.4	112

#	ARTICLE	IF	CITATIONS
1192	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
1193	Tunable Cobalt-Polypyridyl Catalysts Supported on Metal-Organic Layers for Electrochemical CO ₂ Reduction at Low Overpotentials. Journal of the American Chemical Society, 2020, 142, 21493-21501.	6.6	61
1194	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
1195	Immobilizing cobalt phthalocyanine into a porous carbonized wood membrane as a self-supported heterogenous electrode for selective and stable CO ₂ electroreduction in water. Dalton Transactions, 2020, 49, 15607-15611.	1.6	17
1196	Ionic Liquids-Promoted Electrocatalytic Reduction of Carbon Dioxide. Industrial & Engineering Chemistry Research, 2020, 59, 20235-20252.	1.8	30
1197	DFT and Empirical Considerations on Electrocatalytic Water/Carbon Dioxide Reduction by CoTMPyP in Neutral Aqueous Solutions**. ChemPhysChem, 2020, 21, 2644-2650.	1.0	1
1198	Oxidized indium with transformable dimensions for CO ₂ electroreduction toward formate aided by oxygen vacancies. Sustainable Energy and Fuels, 2020, 4, 3726-3731.	2.5	14
1199	Highly Efficient and Selective Electrocatalytic CO ₂ -to-CO Conversion by a Non-heme Iron Complex with an In-Plane N ₄ Ligand in Heterogeneous Aqueous Media. ACS Applied Energy Materials, 2020, 3, 4114-4120.	2.5	7
1200	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
1201	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
1202	Recent Progress on Bismuth-based Nanomaterials for Electrocatalytic Carbon Dioxide Reduction. Chemical Research in Chinese Universities, 2020, 36, 410-419.	1.3	27
1203	OER Performances of Cationic Substituted (100)-Oriented IrO ₂ Thin Films: A Joint Experimental and Theoretical Study. ACS Applied Energy Materials, 2020, 3, 5229-5237.	2.5	14
1204	Carboxylation of α,β -Unsaturated Ketones by CO ₂ Fixation through Photoelectro-chemistry. ACS Applied Energy Materials, 2020, 3, 5813-5818.	2.5	21
1205	Determining the coordination environment and electronic structure of polymer-encapsulated cobalt phthalocyanine under electrocatalytic CO ₂ reduction conditions using <i>in situ</i> X-Ray absorption spectroscopy. Dalton Transactions, 2020, 49, 16329-16339.	1.6	29
1206	Heterogeneous aqueous CO ₂ reduction by rhenium(i) tricarbonyl diimine complexes with a non-chelating pendant pyridyl group. Dalton Transactions, 2020, 49, 7078-7083.	1.6	6
1207	Selective electroreduction of CO ₂ to acetone by single copper atoms anchored on N-doped porous carbon. Nature Communications, 2020, 11, 2455.	5.8	265
1208	Regulation of metal ions in smart metal-cluster nodes of metal-organic frameworks with open metal sites for improved photocatalytic CO ₂ reduction reaction. Applied Catalysis B: Environmental, 2020, 276, 119173.	10.8	138
1209	CO ₂ Capture by α -(Methylamino)pyridine Ligated Aluminum Alkyl Complexes. European Journal of Inorganic Chemistry, 2020, 2020, 2958-2967.	1.0	11

#	ARTICLE	IF	CITATIONS
1210	P-block metal-based (Sn, In, Bi, Pb) electrocatalysts for selective reduction of CO ₂ to formate. <i>APL Materials</i> , 2020, 8, .	2.2	93
1211	Impact of the Dissolved Anion on the Electrocatalytic Reduction of CO ₂ to CO with Ruthenium CNC Pincer Complexes. <i>ChemCatChem</i> , 2020, 12, 4879-4885.	1.8	7
1212	Metal-free sites with multidimensional structure modifications for selective electrochemical CO ₂ reduction. <i>Nano Today</i> , 2020, 33, 100891.	6.2	23
1213	Progress in the electrochemical reduction of CO ₂ on hierarchical dendritic metal electrodes. <i>Current Opinion in Electrochemistry</i> , 2020, 23, 145-153.	2.5	6
1214	Mechanically Interlocked Carbon Nanotubes as a Stable Electrocatalytic Platform for Oxygen Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32615-32621.	4.0	25
1215	Electrochemical CO ₂ -to-CO conversion: electrocatalysts, electrolytes, and electrolyzers. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15458-15478.	5.2	118
1216	Electroreduction of CO ₂ in Ionic Liquid-Based Electrolytes. <i>Innovation(China)</i> , 2020, 1, 100016.	5.2	70
1217	Structure Function Relationships in Ruthenium Carbon Dioxide Reduction Catalysts with CNC Pincers Containing Donor Groups. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 2709-2717.	1.0	10
1218	Electrochemical Tuning of CO ₂ Reactivity in Ionic Liquids Using Different Cathodes: From Oxalate to Carboxylation Products. <i>Journal of Carbon Research</i> , 2020, 6, 34.	1.4	8
1219	Organic-Inorganic Hybrid Nanomaterials for Electrocatalytic CO ₂ Reduction. <i>Small</i> , 2020, 16, e2001847.	5.2	79
1220	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
1221	Surface Modification for Promoting Durable, Efficient, and Selective Electrocatalysts. <i>ChemElectroChem</i> , 2020, 7, 2345-2363.	1.7	26
1222	Three-Dimensional Nitrogen-Doped Graphene Aerogel-Supported MnO Nanoparticles as Efficient Electrocatalysts for CO ₂ Reduction to CO. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 4983-4994.	3.2	32
1223	Enhancing Molecular Electrocatalysis of CO ₂ Reduction with Pressure-Tunable CO ₂ -Expanded Electrolytes. <i>ChemSusChem</i> , 2020, 13, 6338-6345.	3.6	8
1224	Synergistic Cu/CeO ₂ carbon nanofiber catalysts for efficient CO ₂ electroreduction. <i>Electrochemistry Communications</i> , 2020, 114, 106716.	2.3	34
1225	Application of two-dimensional materials for electrochemical carbon dioxide reduction. , 2020, , 289-326.		1
1226	Potential Link between Cu Surface and Selective CO ₂ Electroreduction: Perspective on Future Electrocatalyst Designs. <i>Advanced Materials</i> , 2020, 32, e1908398.	11.1	182
1227	CO ₂ thermoreduction to methanol on the MoS ₂ supported single Co atom catalyst: A DFT study. <i>Applied Surface Science</i> , 2020, 528, 147047.	3.1	46

#	ARTICLE	IF	CITATIONS
1228	Acidic Hydrogen Enhanced Photocatalytic Reduction of CO ₂ on Planetary Surfaces. ACS Earth and Space Chemistry, 2020, 4, 1001-1009.	1.2	6
1229	FeNi ₃ magnetic nanoparticles supported on ruthenium silicate-functionalized DFNS for photocatalytic CO ₂ reduction to formate. RSC Advances, 2020, 10, 20536-20542.	1.7	5
1230	Photoinduced Generation of a Durable Thermal Proton Reduction Catalyst with in Situ Conversion of Mn(bpy)(CO) ₃ Br to Mn(bpy) ₂ Br ₂ . Inorganic Chemistry, 2020, 59, 11266-11272.	1.9	3
1231	Highly Active Manganese-Based CO ₂ Reduction Catalysts with Bulky NHC Ligands: A Mechanistic Study. Inorganic Chemistry, 2020, 59, 10234-10242.	1.9	21
1232	Highly ordered mesoporous carbon/iron porphyrin nanoreactor for the electrochemical reduction of CO ₂ . Journal of Materials Chemistry A, 2020, 8, 14966-14974.	5.2	19
1233	Electrocatalytic CO ₂ Reduction with a Half-Sandwich Cobalt Catalyst: Selectivity towards CO. Chemistry - an Asian Journal, 2020, 15, 904-909.	1.7	5
1234	Hierarchically porous Cu/Zn bimetallic catalysts for highly selective CO ₂ electroreduction to liquid C ₂ products. Applied Catalysis B: Environmental, 2020, 269, 118800.	10.8	108
1235	Molecular enhancement of heterogeneous CO ₂ reduction. Nature Materials, 2020, 19, 266-276.	13.3	416
1236	Catalytic transformation of CO ₂ into C ₁ chemicals using hydrosilanes as a reducing agent. Green Chemistry, 2020, 22, 1800-1820.	4.6	111
1237	Ordered Mesoporous Carbon Embedded with Cu Nanoparticle Materials for Electrocatalytic Synthesis of Benzyl Methyl Carbonate from Benzyl Alcohol and Carbon Dioxide. ACS Omega, 2020, 5, 3498-3503.	1.6	7
1238	Power-to-Liquid catalytic CO ₂ valorization into fuels and chemicals: focus on the Fischer-Tropsch route. Journal of CO ₂ Utilization, 2020, 38, 314-347.	3.3	106
1239	Hybrid Catalysts for Artificial Photosynthesis: Merging Approaches from Molecular, Materials, and Biological Catalysis. Accounts of Chemical Research, 2020, 53, 575-587.	7.6	93
1240	Breaking Scaling Relationships in CO ₂ Electroreduction with Isolelectronic Analogs [Fe ₄ N(CO) ₁₂] ⁺ and [Fe ₃ MnO(CO) ₁₂] ⁺ . Organometallics, 2020, 39, 1658-1663.	1.1	4
1241	Dual-atom Ag ₂ /graphene catalyst for efficient electroreduction of CO ₂ to CO. Applied Catalysis B: Environmental, 2020, 268, 118747.	10.8	140
1242	Emerging covalent organic frameworks tailored materials for electrocatalysis. Nano Energy, 2020, 70, 104525.	8.2	143
1243	Efficient Methane Electrosynthesis Enabled by Tuning Local CO ₂ Availability. Journal of the American Chemical Society, 2020, 142, 3525-3531.	6.6	154
1245	Enhanced Electrocatalytic Activity of Primary Amines for CO ₂ Reduction Using Copper Electrodes in Aqueous Solution. ACS Sustainable Chemistry and Engineering, 2020, 8, 1715-1720.	3.2	48
1246	Electrochemical CO ₂ Reduction to CO Catalyzed by 2D Nanostructures. Catalysts, 2020, 10, 98.	1.6	44

#	ARTICLE	IF	CITATIONS
1247	Electrochemical CO ₂ Reduction in a Continuous Non-Aqueous Flow Cell with [Ni(cyclam)] ²⁺ . Inorganic Chemistry, 2020, 59, 1883-1892.	1.9	26
1249	In Situ Spectroscopic Methods for Electrocatalytic CO ₂ Reduction. Catalysts, 2020, 10, 481.	1.6	35
1250	Uncovering the nature of electroactive sites in nano architected dendritic Bi for highly efficient CO ₂ electroreduction to formate. Applied Catalysis B: Environmental, 2020, 274, 119031.	10.8	46
1251	Nanostructured TiO ₂ for light-driven CO ₂ conversion into solar fuels. APL Materials, 2020, 8, .	2.2	22
1252	Synergistic tuning of oxygen vacancies and d-band centers of ultrathin cobaltous dihydroxycarbonate nanowires for enhanced electrocatalytic oxygen evolution. Nanoscale, 2020, 12, 11735-11745.	2.8	10
1253	Photocatalytic Reduction of CO ₂ to CO over 3D Bi ₂ MoO ₆ Microspheres: Simple Synthesis, High Efficiency and Selectivity, Reaction Mechanism. Catalysis Letters, 2020, 150, 2510-2516.	1.4	30
1254	Selective electrocatalytic reduction of carbon dioxide to oxalate by lead tin oxides with low overpotential. Applied Catalysis B: Environmental, 2020, 272, 118954.	10.8	36
1255	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. Inorganic Chemistry, 2020, 59, 5564-5578.	1.9	22
1256	Homogeneous Electrochemical Reduction of CO ₂ to CO by a Cobalt Pyridine Thiolate Complex. Inorganic Chemistry, 2020, 59, 5292-5302.	1.9	30
1257	Molecular Catalysts Boost the Rate of Electrolytic CO ₂ Reduction. ACS Energy Letters, 2020, 5, 1512-1518.	8.8	52
1258	The critical role of hydride (H ⁻) ligands in electrocatalytic CO ₂ reduction to HCOOH by [Cu ₂₅ H ₂₂ (PH ₃) ₁₂]Cl nanocluster. Journal of Catalysis, 2020, 387, 95-101.	3.1	20
1259	Electrochemical CO ₂ Reduction – The Effect of Chalcogenide Exchange in Ni-Isocyclam Complexes. Organometallics, 2020, 39, 1497-1510.	1.1	13
1260	A Resin-Supported Formate Catalyst for the Transformative Reduction of Carbon Dioxide with Hydrosilanes. Chemistry - A European Journal, 2020, 26, 7937-7945.	1.7	10
1261	Role of H ₂ O for CO ₂ Reduction Reactions at Platinum/Electrolyte Interfaces in Imidazolium Room-Temperature Ionic Liquids. ChemElectroChem, 2020, 7, 1765-1774.	1.7	14
1262	Nanostructures for Electrocatalytic CO ₂ Reduction. Chemistry - A European Journal, 2020, 26, 14024-14035.	1.7	26
1263	Toward Excellence of Transition Metal-Based Catalysts for CO ₂ Electrochemical Reduction: An Overview of Strategies and Rationales. Small Methods, 2020, 4, 2000033.	4.6	60
1264	Kinetics of the <i>Trans</i> Effect in Ruthenium Complexes Provide Insight into the Factors That Control Activity and Stability in CO ₂ Electroreduction. Journal of the American Chemical Society, 2020, 142, 8980-8999.	6.6	40
1265	Highly efficient and selective photocatalytic CO ₂ reduction based on water-soluble CdS QDs modified by the mixed ligands in one pot. Catalysis Science and Technology, 2020, 10, 2821-2829.	2.1	21

#	ARTICLE	IF	CITATIONS
1266	An investigation of homogeneous electrocatalytic mechanism between ferrocene derivatives and l-cysteine/N-Acetyl-l-cysteine. <i>Electrochimica Acta</i> , 2020, 346, 136126.	2.6	5
1267	Nitrogen-rich metal-organic framework mediated Cu ^{II} -N ^{II} -C composite catalysts for the electrochemical reduction of CO ₂ . <i>Journal of Energy Chemistry</i> , 2021, 54, 555-563.	7.1	36
1268	CO ₂ reduction by single copper atom supported on g-C ₃ N ₄ with asymmetrical active sites. <i>Applied Surface Science</i> , 2021, 540, 148293.	3.1	33
1269	Visible-light-driven CO ₂ reduction with g-C ₃ N ₄ -based composite: Enhancing the activity of manganese catalysts. <i>Chemical Engineering Science</i> , 2021, 229, 116042.	1.9	11
1270	Mesoporous Sn(IV) Doping DFNS Supported BaMnO ₃ Nanoparticles for Formylation of Amines Using Carbon Dioxide. <i>Catalysis Letters</i> , 2021, 151, 573-581.	1.4	4
1271	Low-Pressure CO ₂ Capture Using Ionic Liquids to Enable Mars Propellant Production. <i>Journal of Propulsion and Power</i> , 2021, 37, 100-107.	1.3	2
1272	Selective CO ₂ reduction into formate using Ln ^{III} -Ta oxynitrides combined with a binuclear Ru(II) complex under visible light. <i>Journal of Energy Chemistry</i> , 2021, 55, 176-182.	7.1	14
1273	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
1274	Microporous nickel phosphonate derived heteroatom doped nickel oxide and nickel phosphide: Efficient electrocatalysts for oxygen evolution reaction. <i>Chemical Engineering Journal</i> , 2021, 405, 126803.	6.6	112
1275	The state of the field: from inception to commercialization of metal-organic frameworks. <i>Faraday Discussions</i> , 2021, 225, 9-69.	1.6	70
1276	Charge accumulation kinetics in multi-redox molecular catalysts immobilised on TiO ₂ . <i>Chemical Science</i> , 2021, 12, 946-959.	3.7	12
1277	FPS/[Fe(Bpy) ₃] ²⁺ NPs as a nanocatalyst for production of quinoline-2-ones through the annulation of ortho-heteroaryl anilines and CO ₂ . <i>Inorganic Chemistry Communication</i> , 2021, 123, 108356.	1.8	2
1278	Heterogeneous Organocatalysts for the Reduction of Carbon Dioxide with Silanes. <i>ChemSusChem</i> , 2021, 14, 281-292.	3.6	28
1279	Selective CO ₂ reduction towards a single upgraded product: a minireview on multi-elemental copper-free electrocatalysts. <i>Catalysis Science and Technology</i> , 2021, 11, 416-424.	2.1	8
1280	Carbon-based metal-free catalysts for electrochemical CO ₂ reduction: Activity, selectivity, and stability. , 2021, 3, 24-49.		60
1281	Unraveling the catalytically preferential pathway between the direct and indirect hydrogenation of CO ₂ to CH ₃ OH using N-heterocyclic carbene-based Mn ^(I) catalysts: a theoretical approach. <i>Catalysis Science and Technology</i> , 2021, 11, 1375-1385.	2.1	13
1282	Reduction of carbon dioxide (CO ₂) using β - γ block electro-catalysts: A review. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104798.	3.3	20
1283	Substrate-Dependent Electron-Transfer Rate of Mixed-Ligand Electrolytes: Tuning Electron-Transfer Rate without Changing Driving Force. <i>Journal of the American Chemical Society</i> , 2021, 143, 488-495.	6.6	9

#	ARTICLE	IF	CITATIONS
1284	Synthesis, characterization, and electrocatalytic activity of bis(pyridylimino)isoindoline Cu(scpi) and Ni(scpi) complexes. Dalton Transactions, 2021, 50, 926-935.	1.6	12
1285	DFNS/ CD/Au as a Nanocatalyst for Interpolation of CO_2 into Aryl Alkynes Followed by SN_2 Coupling with Allylic Chlorides. Catalysis Letters, 2021, 151, 1911-1922.	1.4	7
1286	Defect Engineering on Carbon-Based Catalysts for Electrocatalytic CO_2 Reduction. Nano-Micro Letters, 2021, 13, 5.	14.4	118
1287	Recent progress in structural modulation of metal nanomaterials for electrocatalytic CO_2 reduction. Rare Metals, 2021, 40, 1412-1430.	3.6	61
1288	Sustainable conversion of carbon dioxide to formic acid with Rh-decorated phosphorous-doped fullerenes: a theoretical study. Structural Chemistry, 2021, 32, 97-106.	1.0	2
1289	Reticular materials for electrochemical reduction of CO_2 . Coordination Chemistry Reviews, 2021, 427, 213564.	9.5	29
1290	Noble-Metal Based Random Alloy and Intermetallic Nanocrystals: Syntheses and Applications. Chemical Reviews, 2021, 121, 736-795.	23.0	269
1291	Interfacial Charge Transport in 1D TiO_2 Based Photoelectrodes for Photoelectrochemical Water Splitting. Small, 2021, 17, e1903378.	5.2	102
1292	Group 7 and 8 Catalysts for Electrocatalytic CO_2 Conversion. , 2021, , 742-773.		0
1293	Photocatalytic deoxygenation of $\text{N}=\text{O}$ bonds with rhenium complexes: from the reduction of nitrous oxide to pyridine N -oxides. Chemical Science, 2021, 12, 10266-10272.	3.7	10
1294	Improving CO_2 Electroreduction Activity by Creating an Oxygen Vacancy-Rich Surface with One-Dimensional $\text{In}@\text{SnO}_2$ Hollow Nanofiber Architecture. Industrial & Engineering Chemistry Research, 2021, 60, 1164-1174.	1.8	9
1295	Perspectives and state of the art in producing solar fuels and chemicals from CO_2 . , 2021, , 181-219.		4
1296	Biochemical and artificial pathways for the reduction of carbon dioxide, nitrite and the competing proton reduction: effect of 2^{nd} sphere interactions in catalysis. Chemical Society Reviews, 2021, 50, 3755-3823.	18.7	77
1297	Electrocatalysis for CO_2 conversion: from fundamentals to value-added products. Chemical Society Reviews, 2021, 50, 4993-5061.	18.7	559
1298	The Role of Organic Promoters in the Electroreduction of Carbon Dioxide. ACS Catalysis, 2021, 11, 1392-1405.	5.5	41
1299	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
1300	Introduction to the Organometallic Chemistry of Carbon Dioxide. , 2021, , .		0
1301	A flexible cofacial Fe porphyrin dimer as an extremely efficient and selective electrocatalyst for the CO_2 to CO conversion in non-aqueous and aqueous media. Journal of Materials Chemistry A, 2021, 9, 18213-18221.	5.2	10

#	ARTICLE	IF	CITATIONS
1302	Design of robust 2,2'-bipyridine ligand linkers for the stable immobilization of molecular catalysts on silicon(111) surfaces. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 9921-9929.	1.3	6
1303	An enhanced electrochemical CO ₂ reduction reaction on the SnO _x /PdO surface of SnPd nanoparticles decorated on N-doped carbon fibers. <i>Catalysis Science and Technology</i> , 2021, 11, 143-151.	2.1	16
1304	Enhancing selectivity through decrypting the uncoordinated zirconium sites in MOF electrocatalysts. <i>Chemical Communications</i> , 2021, 57, 5191-5194.	2.2	14
1305	CdSnO ₃ /SnD NPs as a Nanocatalyst for Carbonylation of o-Phenylenediamine with CO ₂ . <i>Catalysis Letters</i> , 2021, 151, 2807-2815.	1.4	2
1306	Design, Fabrication, and Mechanism of Nitrogen-Doped Graphene-Based Photocatalyst. <i>Advanced Materials</i> , 2021, 33, e2003521.	11.1	324
1307	Understanding trends in the activity and selectivity of bi-atom catalysts for the electrochemical reduction of carbon dioxide. <i>Journal of Materials Chemistry A</i> , 2021, 9, 8761-8771.	5.2	35
1308	Turning off hydrogen evolution via an organic dye photosensitizer in aqueous acetonitrile solution during photocatalytic CO ₂ reduction to CO. <i>Molecular Catalysis</i> , 2021, 500, 111299.	1.0	10
1309	From nanoparticle to single-atom catalyst; electrocatalytic reduction of carbon dioxide. , 2021, , 111-153.		1
1310	Selective electroreduction of CO ₂ to carbon-rich products with a simple binary copper selenide electrocatalyst. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7150-7161.	5.2	32
1311	Carbon nitride derivatives as photocatalysts for the CO ₂ reduction reaction: computational study. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 3401-3406.	1.3	1
1312	Shape-selective rhodium nano-huddles on DNA for high efficiency hydrogen evolution reaction in acidic medium. <i>Journal of Materials Chemistry C</i> , 2021, 9, 1709-1720.	2.7	15
1313	Nanomaterials for photocatalytic and cold plasma-catalytic hydrogenation of CO ₂ to CO, CH ₄ , and CH ₃ OH. , 2021, , 353-373.		0
1314	Methanol synthesis from CO ₂ using Ni and Cu supported Fe catalytic system: Understanding the role of nonthermal plasma surface discharge. <i>Plasma Processes and Polymers</i> , 2021, 18, 2000104.	1.6	12
1315	Ionic liquid-based electrolytes for CO ₂ electroreduction and CO ₂ electroorganic transformation. <i>National Science Review</i> , 2022, 9, nwab022.	4.6	58
1317	Efficient palladium (II) electrocatalysts with thiophene anchored pyridinium amidates for CO ₂ reduction. <i>Journal of CO₂ Utilization</i> , 2021, 44, 101384.	3.3	2
1318	Discovering Effective Descriptors for CO ₂ Electroreduction to Predict the Catalysts with Different Selectivity. <i>Journal of Physical Chemistry C</i> , 2021, 125, 4550-4558.	1.5	2
1319	Density Functional Theory Investigation of Structure-Activity Relationship for Efficient Electrochemical CO ₂ Reduction on Defective SnSe ₂ Nanosheets. <i>ACS Applied Nano Materials</i> , 2021, 4, 2760-2767.	2.4	6
1322	Formate Dehydrogenases Reduce CO ₂ Rather than HCO ₃ ⁻ : An Electrochemical Demonstration. <i>Angewandte Chemie</i> , 2021, 133, 10052-10055.	1.6	3

#	ARTICLE	IF	CITATIONS
1323	CO supported Fe doped Ni(OH) ₂ hexagonal nanosheets for hydrogen evolution reaction in neutral electrolytes. <i>Materials Research Express</i> , 2021, 8, 035506.	0.8	2
1324	Tin Alloying Enhances Catalytic Selectivity of Copper Surface: A Mechanistic Study Based on First-Principles Calculations. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3031-3037.	2.1	4
1325	Enhancing a Molecular Electrocatalyst's Activity for CO ₂ Reduction by Simultaneously Modulating Three Substituent Effects. <i>Journal of the American Chemical Society</i> , 2021, 143, 3764-3778.	6.6	54
1326	Formate Dehydrogenases Reduce CO ₂ Rather than HCO ₃ ⁻ : An Electrochemical Demonstration. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9964-9967.	7.2	39
1327	Homogeneous Electrocatalytic CO ₂ Reduction Using a Porphyrin Complex with Flexible Triazole Units in the Second Coordination Sphere. <i>ACS Applied Energy Materials</i> , 2021, 4, 3604-3611.	2.5	14
1328	Enhancing the Electrochemical Reduction of CO ₂ by Controlling the Flow Conditions: An Intermittent Flow Reduction System with a Boron-Doped Diamond Electrode. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 5298-5303.	3.2	18
1329	DFT Study on the Electrocatalytic Reduction of CO ₂ to CO by a Molecular Chromium Complex. <i>Inorganic Chemistry</i> , 2021, 60, 3635-3650.	1.9	18
1330	Investigation of Cyclam Based Re Complexes as Potential Electrocatalysts for the CO ₂ Reduction Reaction. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2021, 647, 968-977.	0.6	6
1331	Engineering a Highly Efficient Carboligase for Synthetic One-Carbon Metabolism. <i>ACS Catalysis</i> , 2021, 11, 5396-5404.	5.5	24
1332	Cu(OH) ₂ Nanorods/Ni(OH) ₂ Nanosheets as Highly Efficient Catalyst for Hydrogen Evolution Reaction. <i>ChemistrySelect</i> , 2021, 6, 4129-4134.	0.7	3
1333	Electrocatalysts by Electrodeposition: Recent Advances, Synthesis Methods, and Applications in Energy Conversion. <i>Advanced Functional Materials</i> , 2021, 31, 2101313.	7.8	86
1334	Carbon Dioxide Hydrogenation to Formate Catalyzed by a Bench-Stable, Non-Pincer-Type Mn(I) Alkylcarbonyl Complex. <i>Organometallics</i> , 2021, 40, 1213-1220.	1.1	43
1335	Electrocatalytic CO ₂ Reduction with Re-Based Spiro Bipyridine Complexes: Effects of the Local Proton in the Second Coordination Sphere. <i>Chinese Journal of Chemistry</i> , 2021, 39, 1281-1287.	2.6	6
1336	Open Framework Material Based Thin Films: Electrochemical Catalysis and State-of-the-Art Technologies. <i>Advanced Energy Materials</i> , 2022, 12, 2003499.	10.2	25
1337	Interface engineering of earth-abundant Cu/In(OH) ₃ catalysts towards electrochemical reduction of CO ₂ favoring CO selectivity. <i>Journal of CO₂ Utilization</i> , 2021, 46, 101470.	3.3	10
1338	Electrocatalysis for the Oxygen Evolution Reaction in Acidic Media: Progress and Challenges. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 4320.	1.3	41
1339	Two-Dimensional Covalent Organic Frameworks with Cobalt(II)-Phthalocyanine Sites for Efficient Electrocatalytic Carbon Dioxide Reduction. <i>Journal of the American Chemical Society</i> , 2021, 143, 7104-7113.	6.6	198
1340	Reaction of a Molybdenum Bis(dinitrogen) Complex with Carbon Dioxide: A Combined Experimental and Computational Investigation. <i>Inorganic Chemistry</i> , 2021, 60, 7708-7718.	1.9	2

#	ARTICLE	IF	CITATIONS
1341	<i>In Situ</i> Bismuth Nanosheet Assembly for Highly Selective Electrocatalytic CO ₂ Reduction to Formate. <i>Chemistry - an Asian Journal</i> , 2021, 16, 1539-1544.	1.7	15
1342	Influence of Intermolecular Hydrogen Bonding Interactions on the Electrocatalytic Reduction of CO ₂ to CO by 6,6'-Amine Substituted Rhenium Bipyridine Complexes. <i>ChemElectroChem</i> , 2021, 17, 1864-1872.	1.7	8
1343	Copper hollow fiber electrode for efficient CO ₂ electroreduction. <i>Journal of Power Sources</i> , 2021, 495, 229814.	4.0	25
1344	The Relationships among Hydrogen Adsorption, CO Stripping, and Selectivity of CO ₂ Reduction on Pd Nanoparticles. <i>Journal of the Electrochemical Society</i> , 2021, 168, 054507.	1.3	7
1345	Highly Scalable Conversion of Blood Protoporphyrin to Efficient Electrocatalyst for CO ₂ Conversion. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100067.	1.9	4
1346	Electrochemical Catalysts for Green Hydrogen Energy. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100019.	2.8	4
1347	A review on recent developments in solar photoreactors for carbon dioxide conversion to fuels. <i>Journal of CO₂ Utilization</i> , 2021, 47, 101515.	3.3	42
1348	A review of non-noble metal-based electrocatalysts for CO ₂ electroreduction. <i>Rare Metals</i> , 2021, 40, 3019.	3.6	74
1349	Efficient Electroreduction of CO ₂ to CO on Porous ZnO Nanosheets with Hydroxyl Groups in Ionic Liquid-based Electrolytes. <i>ChemCatChem</i> , 2021, 13, 2570-2576.	1.8	15
1350	The ligand effect on the interface structures and electrocatalytic applications of atomically precise metal nanoclusters. <i>Nanotechnology</i> , 2021, 32, 352001.	1.3	10
1351	CO ₂ electrochemical reduction to methane on transition metal porphyrin nitrogen-doped carbon material M@d-NC: theoretical insight. <i>Theoretical Chemistry Accounts</i> , 2021, 140, 1.	0.5	2
1352	The modified MOF-74 with H ₂ dissociation function for CO ₂ hydrogenation: A DFT study. <i>Materials Today Communications</i> , 2021, 27, 102419.	0.9	1
1353	MOF encapsulated sub-nm Pd skin/Au nanoparticles as antenna-reactor plasmonic catalyst for light driven CO ₂ hydrogenation. <i>Nano Energy</i> , 2021, 84, 105950.	8.2	40
1354	Recent Progresses in Electrochemical Carbon Dioxide Reduction on Copper-based Catalysts toward Multicarbon Products. <i>Advanced Functional Materials</i> , 2021, 31, 2102151.	7.8	123
1355	Electroreduction of Carbon Dioxide into Formate: A Comprehensive Review. <i>ChemElectroChem</i> , 2021, 8, 3207-3220.	1.7	65
1356	Recent Development of Electrocatalytic CO ₂ Reduction Application to Energy Conversion. <i>Small</i> , 2021, 17, e2100323.	5.2	53
1357	Highly active electrocatalytic CO ₂ reduction with manganese N-heterocyclic carbene pincer by para electronic tuning. <i>Chinese Chemical Letters</i> , 2022, 33, 262-265.	4.8	15
1358	Effect of the oxidation state and morphology of SnO _x -based electrocatalysts on the CO ₂ reduction reaction. <i>Journal of Materials Research</i> , 2021, 36, 4240-4248.	1.2	5

#	ARTICLE	IF	CITATIONS
1359	(Photo)electrocatalytic Versus Heterogeneous Photocatalytic Carbon Dioxide Reduction. ChemPhotoChem, 2021, 5, 767-791.	1.5	21
1360	Recent Advances in Carbon Dioxide Conversion: A Circular Bioeconomy Perspective. Sustainability, 2021, 13, 6962.	1.6	2
1361	Aromatics Production via Methanol-Mediated Transformation Routes. ACS Catalysis, 2021, 11, 7780-7819.	5.5	92
1362	Molecular Linking Stabilizes Bi Nanoparticles for Efficient Electrochemical Carbon Dioxide Reduction. Journal of Physical Chemistry C, 2021, 125, 12699-12706.	1.5	6
1363	CO ₂ doping of organic interlayers for perovskite solar cells. Nature, 2021, 594, 51-56.	13.7	120
1364	Ni Oxidation State and Ligand Saturation Impact on the Capability of Octaazamacrocyclic Complexes to Bind and Reduce CO ₂ . Molecules, 2021, 26, 4139.	1.7	3
1365	Electrocatalytic and Photocatalytic Reduction of Carbon Dioxide by Earth-Abundant Bimetallic Molecular Catalysts. ChemPhysChem, 2021, 22, 1835-1843.	1.0	21
1366	Combining Machine Learning and Computational Chemistry for Predictive Insights Into Chemical Systems. Chemical Reviews, 2021, 121, 9816-9872.	23.0	287
1367	Catalytic Biomass Upgrading Exploiting Liquid Organic Hydrogen Carriers (LOHCs). ACS Sustainable Chemistry and Engineering, 2021, 9, 9604-9624.	3.2	19
1368	Recent progress in electro- and photo-catalytic CO ₂ reduction using N-heterocyclic carbene transition metal complexes. Polyhedron, 2021, 203, 115147.	1.0	6
1370	Effect of TiO ₂ support on immobilization of cobalt porphyrin for electrochemical CO ₂ reduction. Journal of Materials Science and Technology, 2021, 80, 20-27.	5.6	16
1371	Recent Advances in Bimetallic Cu-Based Nanocrystals for Electrocatalytic CO ₂ Conversion. Chemistry - an Asian Journal, 2021, 16, 2168-2184.	1.7	15
1372	Insights on the Catalytic Active Site for CO ₂ Reduction on Copper-based Catalyst: A DFT study. Molecular Catalysis, 2021, 511, 111725.	1.0	9
1373	Mn(III) and Fe(III) Porphyrin Complexes as Electrocatalysts for Hydrogen Evolution Reaction: A comparative study. International Journal of Electrochemical Science, 0, , ArticleID:210718.	0.5	2
1374	Recent Progress in (Photo-)Electrochemical Conversion of CO ₂ With Metal Porphyrinoid-Systems. Frontiers in Chemistry, 2021, 9, 685619.	1.8	12
1375	Quantum Mechanical Screening of 2D MBenes for the Electroreduction of CO ₂ to C ₁ Hydrocarbon Fuels. Journal of Physical Chemistry Letters, 2021, 12, 6370-6382.	2.1	23
1376	Polyoxometalate Interlayered Zinc-Metallophthalocyanine Molecular Layer Sandwich as Photocoupled Electrocatalytic CO ₂ Reduction Catalyst. Journal of the American Chemical Society, 2021, 143, 13721-13730.	6.6	49
1377	Highly selective electrocatalysis for carbon dioxide reduction to formic acid by a Co(II) complex with an equatorial N ₄ ligand. Electrochimica Acta, 2021, 387, 138545.	2.6	4

#	ARTICLE	IF	CITATIONS
1378	Investigations of the photoelectrochemical properties of different contents In of $\text{In}_x\text{Ga}_{1-x}\text{N}$ in CO_2 reduction. <i>Research on Chemical Intermediates</i> , 2021, 47, 4825-4835.	1.3	3
1379	Rhenium – A Tuneable Player in Tailored Hydrogenation Catalysis. <i>European Journal of Inorganic Chemistry</i> , 2021, 2021, 4043-4065.	1.0	24
1380	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
1381	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
1382	Tunable Selectivity for Electrochemical CO_2 Reduction by Bimetallic Cu – Sn Catalysts: Elucidating the Roles of Cu and Sn. <i>ACS Catalysis</i> , 2021, 11, 11103-11108.	5.5	82
1383	Revisiting photo and electro-catalytic modalities for sustainable conversion of CO_2 . <i>Applied Catalysis A: General</i> , 2021, 623, 118248.	2.2	13
1384	Electrochemical Reduction of CO_2 : A Review of Cobalt Based Catalysts for Carbon Dioxide Conversion to Fuels. <i>Nanomaterials</i> , 2021, 11, 2029.	1.9	60
1385	Enhanced Electrochemical Reduction of CO_2 to CO on Ag/SnO_2 by a Synergistic Effect of Morphology and Structural Defects. <i>Chemistry - an Asian Journal</i> , 2021, 16, 2694-2701.	1.7	7
1386	Towards Sustainable Oxalic Acid from CO_2 and Biomass. <i>ChemSusChem</i> , 2021, 14, 3636-3664.	3.6	58
1387	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. <i>ACS Catalysis</i> , 2021, 11, 10436-10449.	5.5	56
1388	Metal-free carbon-based nanomaterials for electrochemical nitrogen and carbon dioxide reductions. <i>Materials Research Bulletin</i> , 2021, 140, 111294.	2.7	10
1389	Determining the Overpotential of Electrochemical Fuel Synthesis Mediated by Molecular Catalysts: Recommended Practices, Standard Reduction Potentials, and Challenges. <i>ChemElectroChem</i> , 2021, 8, 4161-4180.	1.7	31
1390	Promotion of electrocatalytic CO_2 reduction on Cu_2O film by ZnO nanoparticles. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2021, 134, 243-257.	0.8	3
1391	Formic Acid Formation from the Electrochemical Reduction of Carbon Dioxide Catalyzed by a Rhodium Porphyrin in aqueous solution. <i>International Journal of Electrochemical Science</i> , 2021, 16, 210930.	0.5	0
1392	Strategy for improving the activity and selectivity of CO_2 electroreduction on flexible carbon materials for carbon neutral. <i>Applied Energy</i> , 2021, 298, 117196.	5.1	11
1393	Highly Perfluorinated Covalent Triazine Frameworks Derived from a Low-Temperature Ionothermal Approach Towards Enhanced CO_2 Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 25688-25694.	7.2	36
1394	Atomic iridium species anchored on porous carbon network support: An outstanding electrocatalyst for CO_2 conversion to CO . <i>Applied Catalysis B: Environmental</i> , 2021, 292, 120173.	10.8	20
1395	Electrochemical Studies of CO_2 – Reducing Metalloenzymes. <i>Chemistry - A European Journal</i> , 2021, 27, 17542-17553.	1.7	14

#	ARTICLE	IF	CITATIONS
1396	Highly Perfluorinated Covalent Triazine Frameworks Derived from a Low-Temperature Ionothermal Approach Towards Enhanced CO ₂ Electroreduction. <i>Angewandte Chemie</i> , 2021, 133, 25892.	1.6	2
1397	Metal-Organic Framework-Based Electrocatalysts for CO ₂ Reduction. <i>Small Structures</i> , 2022, 3, 2100090.	6.9	90
1398	Boosting Cascade Electron Transfer for Highly Efficient CO ₂ Photoreduction. <i>Solar Rrl</i> , 2021, 5, 2100558.	3.1	11
1399	Strategies for Improved Electrochemical CO ₂ Reduction to Value-Added Products by Highly Anticipated Copper-Based Nanoarchitectures. <i>Chemical Record</i> , 2022, 22, .	2.9	12
1400	A Water-Soluble Sodium Pectate Complex with Copper as an Electrochemical Catalyst for Carbon Dioxide Reduction. <i>Molecules</i> , 2021, 26, 5524.	1.7	1
1401	Effects of thicknesses and sizes of BiOX nanoplates precursors on derived Bi nanosheets for efficient CO ₂ electroreduction. <i>Journal of CO₂ Utilization</i> , 2021, 51, 101643.	3.3	12
1402	Mechanistic Insights Into Iron(II) Bis(pyridyl)amine-Bipyridine Skeleton for Selective CO ₂ Photoreduction. <i>Angewandte Chemie</i> , 0, , .	1.6	2
1403	(Photo)electrocatalytic Versus Heterogeneous Photocatalytic Carbon Dioxide Reduction. <i>ChemPhotoChem</i> , 2021, 5, 766-766.	1.5	0
1404	Dynamic Restructuring of Cu-Doped SnS ₂ Nanoflowers for Highly Selective Electrochemical CO ₂ Reduction to Formate. <i>Angewandte Chemie</i> , 2021, 133, 26437-26441.	1.6	8
1405	Sensitized Photocatalytic CO ₂ Reduction With Earth Abundant 3d Metal Complexes Possessing Dipicolyl-Triazacyclononane Derivatives. <i>Frontiers in Chemistry</i> , 2021, 9, 751716.	1.8	6
1406	Nanostructured Metal Borides for Energy-Related Electrocatalysis: Recent Progress, Challenges, and Perspectives. <i>Small Methods</i> , 2021, 5, e2100699.	4.6	47
1407	Covalent grafting of cobalt aminoporphyrin-based electrocatalyst onto carbon nanotubes for excellent activity in CO ₂ reduction. <i>Applied Catalysis B: Environmental</i> , 2022, 300, 120750.	10.8	25
1408	Mechanistic Insights Into Iron(II) Bis(pyridyl)amine-Bipyridine Skeleton for Selective CO ₂ Photoreduction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26072-26079.	7.2	25
1409	Dynamic Restructuring of Cu-Doped SnS ₂ Nanoflowers for Highly Selective Electrochemical CO ₂ Reduction to Formate. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 26233-26237.	7.2	66
1410	Noncovalent immobilization of a nickel cyclam catalyst on carbon electrodes for CO ₂ reduction using aqueous electrolyte. <i>Electrochimica Acta</i> , 2021, 392, 139015.	2.6	9
1411	Abiotic-biotic hybrid for CO ₂ biomethanation: From electrochemical to photochemical process. <i>Science of the Total Environment</i> , 2021, 791, 148288.	3.9	13
1412	Continuous electroconversion of CO ₂ into formate using 2 nm tin oxide nanoparticles. <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120447.	10.8	31
1413	Recent advances in the possible electrocatalysts for the electrochemical reduction of carbon dioxide into methanol. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161449.	2.8	17

#	ARTICLE	IF	CITATIONS
1414	A Ti-OH bond breaking route for creating oxygen vacancy in titania towards efficient CO ₂ photoreduction. <i>Chemical Engineering Journal</i> , 2021, 425, 131513.	6.6	23
1415	Carbonized wood membrane decorated with AuPd alloy nanoparticles as an efficient self-supported electrode for electrocatalytic CO ₂ reduction. <i>Journal of Colloid and Interface Science</i> , 2022, 607, 312-322.	5.0	9
1416	Zn and Na promoted Fe catalysts for sustainable production of high-valued olefins by CO ₂ hydrogenation. <i>Fuel</i> , 2022, 309, 122105.	3.4	44
1417	Single-atom catalysts for CO oxidation, CO ₂ reduction, and O ₂ electrochemistry. <i>Journal of Energy Chemistry</i> , 2022, 65, 254-279.	7.1	56
1418	Recent Progress in Electrocatalytic Methanation of CO ₂ at Ambient Conditions. <i>Advanced Functional Materials</i> , 2021, 31, 2009449.	7.8	92
1419	Computational study on the reactivity of imidazolium-functionalized manganese bipyridyl tricarbonyl electrocatalysts [Mn[bpyMe(Im-R)](CO) ₃ Br] ⁺ (R = Me, Me ₂ and) <i>Tj ETQq1 1.0.784314 rgBT /Ov Chemistry Chemical Physics</i> , 2021, 23, 14940-14951.	1.3	6
1420	Transition Metal Complexes as Catalysts for the Electroconversion of CO ₂ : An Organometallic Perspective. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 11628-11686.	7.2	154
1421	Nanomaterials for climate change and water pollution mitigation. , 2021, , 277-314.		3
1422	Immobilising molecular Ru complexes on a protective ultrathin oxide layer of p-Si electrodes towards photoelectrochemical CO ₂ reduction. <i>Dalton Transactions</i> , 2021, 50, 10482-10492.	1.6	9
1423	Äœbergangsmetallkomplexe als Katalysatoren f¼r die elektrische Umwandlung von CO ₂ â€“ eine metallorganische Perspektive. <i>Angewandte Chemie</i> , 2021, 133, 11732-11792.	1.6	24
1424	An insight into the reaction mechanism of CO ₂ photoreduction catalyzed by atomically dispersed Fe atoms supported on graphitic carbon nitride. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 4690-4699.	1.3	22
1425	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
1426	Novel Ni-Ge alloy based catalyst for converting CO ₂ to methanol. <i>Canadian Journal of Chemical Engineering</i> , 2018, 96, 832-837.	0.9	9
1427	Photocatalytic Water Splitting and Carbon Dioxide Reduction. , 2015, , 1-39.		2
1428	Molecular Complexes in Electrocatalysis for Energy Production and Storage. <i>Nanostructure Science and Technology</i> , 2013, , 273-315.	0.1	2
1429	History, Progress, and Development of Electrocatalysis. , 2020, , 401-424.		2
1430	Electrochemical Reduction of Carbon Dioxide to Methanol Using Metal-Organic Frameworks and Non-metal-Organic Frameworks Catalyst. <i>Environmental Chemistry for A Sustainable World</i> , 2020, , 91-131.	0.3	1
1431	Photocatalytic Conversion of Carbon Dioxide into Hydrocarbons. <i>Environmental Chemistry for A Sustainable World</i> , 2020, , 133-163.	0.3	5

#	ARTICLE	IF	CITATIONS
1432	MOF-based materials for photo- and electrocatalytic CO ₂ reduction. EnergyChem, 2020, 2, 100033.	10.1	177
1433	Non-noble metal-based molecular complexes for CO ₂ reduction: From the ligand design perspective. EnergyChem, 2020, 2, 100034.	10.1	76
1434	Understanding the Relationship Between Kinetics and Thermodynamics in CO ₂ Hydrogenation Catalysis. ACS Catalysis, 2017, 7, 6008-6017.	5.5	43
1435	Microwave-assisted deposition of a highly active cobalt catalyst on mesoporous silica for photochemical CO ₂ reduction. Dalton Transactions, 2017, 46, 10721-10726.	1.6	8
1436	Plasma modified BiOCl/sulfonated graphene microspheres as efficient photo-compensated electrocatalysts for the oxygen evolution reaction. Catalysis Science and Technology, 2020, 10, 4786-4793.	2.1	12
1437	Polyoxometalates as electron and proton reservoir assist electrochemical CO ₂ reduction. APL Materials, 2020, 8, .	2.2	23
1438	Atomic-scale study of nanocatalysts by aberration-corrected electron microscopy. Journal of Physics Condensed Matter, 2020, 32, 413004.	0.7	2
1439	Editors' Choice Review Creating Electrocatalytic Heterojunctions for Efficient Photoelectrochemical CO ₂ Reduction to Chemical Fuels. Journal of the Electrochemical Society, 2020, 167, 146518.	1.3	19
1441	Electrochemical Reduction of Carbon Dioxide. , 0, , .		44
1442	Electrocatalytic Hydrogen Evolution Reaction Using meso-tetrakis-(pentafluorophenyl)porphyrin iron(III) chloride. International Journal of Electrochemical Science, 2017, 12, 812-818.	0.5	15
1443	A PRELIMINARY STUDY ON ELECTROCATALYTIC CONVERSION OF CO ₂ INTO FUELS. Environmental Engineering and Management Journal, 2014, 13, 2477-2485.	0.2	7
1444	Catalytic Properties of Palladium Nanoparticles for Hydrogenation of Carbon Dioxide into Formic Acid. Nihon Enerugi Gakkaiishi/Journal of the Japan Institute of Energy, 2017, 96, 487-492.	0.2	2
1445	Second-sphere hydrogen-bonding enhances heterogeneous electrocatalytic CO ₂ to CO reduction by iron porphyrins in water. Green Chemistry, 2021, 23, 8979-8987.	4.6	12
1446	Electrocatalytic CO ₂ reduction: role of the cross-talk at nano-carbon interfaces. Energy and Environmental Science, 2021, 14, 5816-5833.	15.6	25
1447	Machine Learning in Screening High Performance Electrocatalysts for CO ₂ Reduction. Small Methods, 2021, 5, e2100987.	4.6	60
1448	Recent Advances in Interface Engineering for Electrocatalytic CO ₂ Reduction Reaction. Nano-Micro Letters, 2021, 13, 216.	14.4	58
1449	Rational confinement engineering of MOF-derived carbon-based electrocatalysts toward CO ₂ reduction and O ₂ reduction reactions. Informa Mater, 2022, 4, .	8.5	58
1450	Mediated Inner-Sphere Electron Transfer Induces Homogeneous Reduction of CO ₂ via Through-Space Electronic Conjugation**. Angewandte Chemie, 2022, 134, .	1.6	4

#	ARTICLE	IF	CITATIONS
1451	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
1452	Mediated Inner-Sphere Electron Transfer Induces Homogeneous Reduction of CO ₂ via Through-Space Electronic Conjugation. Angewandte Chemie - International Edition, 2021, , .	7.2	16
1453	Single Nickel Atom-Modified Phosphorene Nanosheets for Electrocatalytic CO ₂ Reduction. ACS Applied Nano Materials, 2021, 4, 11017-11030.	2.4	24
1454	Pincer-Supported Gallium Complexes for the Catalytic Hydroboration of Aldehydes, Ketones and Carbon Dioxide. Chemistry - A European Journal, 2021, 27, 17379-17385.	1.7	9
1455	Reticular-Chemistry-Inspired Supramolecule Design as a Tool to Achieve Efficient Photocatalysts for CO ₂ Reduction. ACS Omega, 2021, 6, 29291-29324.	1.6	17
1456	Emerging carbon abatement technologies to mitigate energy-carbon footprint- a review. Cleaner Materials, 2021, 2, 100020.	1.9	16
1457	Recent strategies for enhancing the catalytic activity of CO ₂ hydrogenation to formate/formic acid over Pd-based catalyst. Journal of CO ₂ Utilization, 2021, 54, 101765.	3.3	27
1458	Electrochemical Conversion of Carbon Dioxide. Journal of the Korean Electrochemical Society, 2009, 12, 131-141.	0.1	2
1459	Carbon capture and storage: The way ahead. Sustainable Technologies Systems & Policies, 2012, , 9.	0.0	1
1460	Electrocatalysts for Carbon Dioxide Reduction. , 2014, , 431-437.		0
1461	CO ₂ -Abtrennung und -Nutzung. , 2015, , 511-567.		0
1462	CHAPTER 12. Metallosupramolecular Assemblies for Application as Photocatalysts for the Production of Solar Fuels. RSC Smart Materials, 2015, , 345-396.	0.1	2
1463	Energy and the Environment. , 2015, , 73-108.		0
1465	Hydrogenation of Renewables. Catalysis By Metal Complexes, 2017, , 21-40.	0.6	0
1466	A review on the state-of-the-art advances for CO ₂ electro-chemical reduction using metal complex molecular catalyts. Eclética Química, 2019, 44, 11.	0.2	6
1467	Implications of Surface Strain for Enhanced Carbon Dioxide Reduction on Copper-Silver Alloys. Journal of the Electrochemical Society, 2020, 167, 126509.	1.3	3
1468	Enhanced CO ₂ Electrochemical Reduction Performance over Cu@AuCu Catalysts at High Noble Metal Utilization Efficiency. Nano Letters, 2021, 21, 9293-9300.	4.5	33
1469	Carbon Dioxide Utilisationâ€”The Formate Route. , 2021, , 29-81.		9

#	ARTICLE	IF	CITATIONS
1470	Catalytic properties of nanostructured nickel-containing pectin biopolymers on a glassy carbon surface. <i>Journal of Physics: Conference Series</i> , 2020, 1695, 012050.	0.3	0
1471	Reaction Analyses Based on Quaternary Metal/Metal Oxide Catalyst Testing in Micro-Structured Reactors Using Combinatorial High-Throughput Methods for Power-to-Gas Applications. <i>Catalysts</i> , 2021, 11, 6.	1.6	2
1472	Breaking down hidden barriers. <i>Nature Energy</i> , 2021, 6, 13-14.	19.8	2
1473	Oxygen promoter on copper-silver coupling for electrochemical carbon dioxide reduction catalysts. <i>Applied Surface Science</i> , 2022, 573, 151532.	3.1	1
1474	Artificial leaf for light-driven CO ₂ reduction: Basic concepts, advanced structures and selective solar-to-chemical products. <i>Chemical Engineering Journal</i> , 2022, 430, 133031.	6.6	48
1475	Mitigating mass transport limitations: hierarchical nanoporous gold flow-through electrodes for electrochemical CO ₂ reduction. <i>Materials Advances</i> , 2022, 3, 381-388.	2.6	5
1476	Water Purification Using Subnanostructured Photocatalysts. <i>ACS Symposium Series</i> , 2020, , 189-225.	0.5	0
1477	A Study on the Synthesis of CH ₄ from CO ₂ of Biogas Using 40 wt% Ni-Mg Catalyst: Characteristic Comparison of Commercial Catalyst and 40 wt% Ni Catalyt. <i>Transactions of the Korean Hydrogen and New Energy Society</i> , 2021, 32, 388-400.	0.1	1
1478	Wastewater-powered high-value chemical synthesis in a hybrid bioelectrochemical system. <i>IScience</i> , 2021, 24, 103401.	1.9	7
1479	Electrochemical Reduction of Carbon Dioxide to Ethanol: A Review. <i>ChemistrySelect</i> , 2021, 6, 11603-11629.	0.7	9
1481	Ionic Liquid-Modified Porous Organometallic Polymers as Efficient and Selective Photocatalysts for Visible-Light-Driven CO ₂ Reduction. <i>Research</i> , 2020, 2020, 9398285.	2.8	10
1482	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
1483	In situ studies of energy-related electrochemical reactions using Raman and X-ray absorption spectroscopy. <i>Chinese Journal of Catalysis</i> , 2022, 43, 33-46.	6.9	28
1484	Catalytic reduction of carbon dioxide over two-dimensional boron monolayer. <i>Journal of Materials Science and Technology</i> , 2022, 110, 96-102.	5.6	11
1485	Synthesis of Molybdenum Dihapto Carbon Dioxide Complexes via Oxidation of a Carbonyl Ligand. <i>Organometallics</i> , 0, , .	1.1	0
1486	Insights into the effects of single Mo vacancy sites on the adsorption and dissociation of CO ₂ and H ₂ O over the tertiary N-doped MoS ₂ monolayers. <i>Applied Surface Science</i> , 2022, 577, 151908.	3.1	4
1487	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
1488	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

#	ARTICLE	IF	CITATIONS
1489	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
1490	Unified mechanistic understanding of CO ₂ reduction to CO on transition metal and single atom catalysts. <i>Nature Catalysis</i> , 2021, 4, 1024-1031.	16.1	154
1491	A Highly Durable, Self-Photosensitized Mononuclear Ruthenium Catalyst for CO ₂ Reduction. <i>Synlett</i> , 2022, 33, 1137-1141.	1.0	8
1492	Impacts of the Catalyst Structures on CO ₂ Activation on Catalyst Surfaces. <i>Nanomaterials</i> , 2021, 11, 3265.	1.9	35
1493	Atomic-Scale Observations of the Manganese Porphyrin/Au Catalyst Interface Under the Electrocatalytic Process Revealed with Electrochemical Scanning Tunneling Microscopy. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100873.	1.9	6
1494	Insights into kinetics extraction of the homogeneous electrocatalytic reaction between TMPD and ascorbic acid by cyclic voltammetry. <i>Journal of Electroanalytical Chemistry</i> , 2022, 904, 115948.	1.9	0
1495	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
1496	Panoramic insights into semi-artificial photosynthesis: origin, development, and future perspective. <i>Energy and Environmental Science</i> , 2022, 15, 529-549.	15.6	30
1497	The spontaneous electrochemical reduction of gaseous CO ₂ using a sacrificial Zn anode and a high-surface-area dendritic Ag-Cu cathode. <i>Separation and Purification Technology</i> , 2022, 285, 120350.	3.9	11
1498	"Carbon Dioxide Recycling for Fuels and Chemical Products". <i>Progress in Petrochemical Science</i> , 2020, 3, .	0.0	1
1499	Influence of halide ions on the electrochemical reduction of carbon dioxide over a copper surface. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1086-1104.	5.2	31
1500	Metalized Carbon Nitrides for Efficient Catalytic Functionalization of CO ₂ . <i>ACS Catalysis</i> , 2022, 12, 1797-1808.	5.5	48
1501	Developing and Regenerating Cofactors for Sustainable Enzymatic CO ₂ Conversion. <i>Processes</i> , 2022, 10, 230.	1.3	13
1502	Selectivity in Electrochemical CO ₂ Reduction. <i>Accounts of Chemical Research</i> , 2022, 55, 134-144.	7.6	152
1503	Electrochemical study of CO ₂ reduction on Ti ₃ C ₂ T _x modified boron-doped diamond electrode. <i>Inorganic Chemistry Communication</i> , 2022, 137, 109228.	1.8	8
1504	Recent advances in electrocatalytic CO ₂ reduction with molecular complexes. <i>Advances in Inorganic Chemistry</i> , 2022, , 301-353.	0.4	2
1505	Mechanism of CO ₂ hydrogenation over a Zr ₁ –Cu single-atom catalyst. <i>New Journal of Chemistry</i> , 2022, 46, 5043-5051.	1.4	8
1506	Opportunities for Ultrathin 2D Catalysts in Promoting CO ₂ Photoreduction. <i>Inorganic Materials Series</i> , 2022, , 65-149.	0.5	1

#	ARTICLE	IF	CITATIONS
1507	Principles and strategies for green process engineering. <i>Green Chemical Engineering</i> , 2022, 3, 1-4.	3.3	10
1508	Strategies for breaking molecular scaling relationships for the electrochemical CO ₂ reduction reaction. <i>Dalton Transactions</i> , 2022, 51, 6993-7010.	1.6	14
1509	A guide to secondary coordination sphere editing. <i>Chemical Society Reviews</i> , 2022, 51, 1861-1880.	18.7	49
1510	Fabrication of p-type silicon nanowire array based photoelectrodes for the efficient photoelectrocatalytic reduction of CO ₂ to fuels and chemicals. <i>Sustainable Energy and Fuels</i> , 2022, 6, 1854-1865.	2.5	3
1511	Engineering Steam Induced Surface Oxygen Vacancy onto Ni-Fe Bimetallic Nanocomposite for CO ₂ Electroreduction. <i>Small</i> , 2022, 18, e2108034.	5.2	20
1512	Single-Atom Catalysts for the Electro-Reduction of CO ₂ to Syngas with a Tunable CO/H ₂ Ratio: A Review. <i>Catalysts</i> , 2022, 12, 275.	1.6	13
1513	Recent Progress in Two-Dimensional Materials for Electrocatalytic CO ₂ Reduction. <i>Catalysts</i> , 2022, 12, 228.	1.6	23
1514	A Hybrid Assembly with Nickel Poly-pyridine Polymer on CdS Quantum Dots for Photo-reducing CO ₂ into Syngas with Controlled H ₂ /CO Ratios. <i>ChemSusChem</i> , 2022, 15, .	3.6	10
1515	(Spectro)Electrochemistry of 3-(Pyridin-2-yl)-5-tetrazine- and 1,2-(Dihydro)pyridazine Tricarbonylrhenium(I)chloride. <i>European Journal of Inorganic Chemistry</i> , 2022, 2022, .	1.0	2
1516	Multi-field driven hybrid catalysts for CO ₂ reduction: Progress, mechanism and perspective. <i>Materials Today</i> , 2022, 54, 225-246.	8.3	14
1517	Molecular Catalysts for the Reductive Homocoupling of CO ₂ towards C ₂₊ Compounds. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	7
1518	Combining experimental and theoretical insights for reduction of CO ₂ to multi-carbon compounds. <i>Discover Chemical Engineering</i> , 2022, 2, 1.	1.1	3
1519	Rational Design of Metal-Organic Framework-Based Materials for Photocatalytic CO ₂ Reduction. <i>Advanced Energy and Sustainability Research</i> , 2022, 3, .	2.8	23
1520	Heterointerface Created on Au-Cluster-Loaded Unilamellar Hydroxide Electrocatalysts as a Highly Active Site for the Oxygen Evolution Reaction. <i>Advanced Materials</i> , 2022, 34, e2110552.	11.1	36
1521	Structural regulation of single-atomic site catalysts for enhanced electrocatalytic CO ₂ reduction. <i>Nano Research</i> , 2022, 15, 4925-4941.	5.8	20
1522	Molecular Catalysts for the Reductive Homocoupling of CO ₂ towards C ₂₊ Compounds. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	38
1523	Bifunctional CuO-Ag/KB Catalyst for the Electrochemical Reduction of CO ₂ in an Alkaline Solid-State Electrolysis Cell. <i>Catalysts</i> , 2022, 12, 293.	1.6	3
1524	Design and Preparation of Electrocatalysts by Electrodeposition for CO ₂ Reduction. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	12

#	ARTICLE	IF	CITATIONS
1525	Ultra-efficient synthesis of bamboo-shape porphyrin framework for photocatalytic CO ₂ reduction and consecutive C-S/C-N bonds formation. <i>Journal of CO₂ Utilization</i> , 2022, 59, 101968.	3.3	7
1526	Inorganometallic Photocatalyst for CO ₂ Reduction. <i>Accounts of Chemical Research</i> , 2021, 54, 4530-4544.	7.6	57
1527	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
1528	Several Key Factors for Efficient Electrocatalytic Water Splitting: Active Site Coordination Environment, Morphology Changes and Intermediates Identification. <i>Chemistry - A European Journal</i> , 2022, 28, .	1.7	5
1529	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
1530	Progress in Development of Photocatalytic Processes for Synthesis of Fuels and Organic Compounds under Outdoor Solar Light. <i>Energy & Fuels</i> , 2022, 36, 4625-4639.	2.5	18
1531	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
1532	DNA Origami-Templated Bimetallic Core-Shell Nanostructures for Enhanced Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2022, 126, 6915-6924.	1.5	9
1533	Utilization of Low-Concentration CO ₂ with Molecular Catalysts Assisted by CO ₂ -Capturing Ability of Catalysts, Additives, or Reaction Media. <i>Journal of the American Chemical Society</i> , 2022, 144, 6640-6660.	6.6	52
1536	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
1537	Silver-Carbonaceous Microsphere Precursor-Derived Nano-Coral Ag Catalyst for Electrochemical Carbon Dioxide Reduction. <i>Catalysts</i> , 2022, 12, 479.	1.6	2
1538	Bimetallic Cobalt-Copper Nanoparticle-Decorated Hollow Carbon Nanofibers for Efficient CO ₂ Electroreduction. <i>Frontiers in Chemistry</i> , 2022, 10, 904241.	1.8	3
1539	High-Performance Ligand-Protected Metal Nanocluster Catalysts for CO ₂ Conversion through the Exposure of Undercoordinated Sites. <i>Catalysts</i> , 2022, 12, 505.	1.6	5
1540	InP-Quantum Dot Surface-Modified TiO ₂ Catalysts for Sustainable Photochemical Carbon Dioxide Reduction. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 6033-6044.	3.2	10
1541	Recent advances in the rational design of single-atom catalysts for electrochemical CO ₂ reduction. <i>Nano Research</i> , 2022, 15, 9747-9763.	5.8	19
1542	Structure and Reactivity of Polynuclear Divalent Lanthanide Disiloxanediolate Complexes. <i>Inorganic Chemistry</i> , 2022, 61, 7436-7447.	1.9	3
1543	Catalyst designing strategies for electrochemical CO ₂ reduction: a perspective. <i>Progress in Energy</i> , 2022, 4, 032002.	4.6	5
1544	Mechanism-Driven Design of Heterogeneous Molecular Electrocatalysts for CO ₂ Reduction. <i>Accounts of Materials Research</i> , 2022, 3, 620-633.	5.9	12

#	ARTICLE	IF	CITATIONS
1545	Environmentally Benign Synthesis of Copper Benzenetricarboxylic Acid MOF as an Electrocatalyst for Overall Water Splitting and CO ₂ Reduction. , 2022, 1, 020501.		6
1546	Alternative Cu ₃ Zn catalysts for enhanced reduction of CO ₂ to CH ₄ : A density functional theory-based approach. Surfaces and Interfaces, 2022, 31, 102030.	1.5	2
1547	Porphyrin and phthalocyanine based covalent organic frameworks for electrocatalysis. Coordination Chemistry Reviews, 2022, 464, 214563.	9.5	72
1549	Electrocatalytic reduction of CO ₂ in water by a C-functionalized Ni-cyclam complex grafted onto carbon. Chemical Communications, 0, , .	2.2	3
1550	Atomically dispersed metal catalysts confined by covalent organic frameworks and their derivatives for electrochemical energy conversion and storage. Coordination Chemistry Reviews, 2022, 466, 214592.	9.5	16
1551	Covalent organic frameworks based on tetraphenyl- <i>p</i> -phenylenediamine and metalloporphyrin for electrochemical conversion of CO ₂ to CO. Inorganic Chemistry Frontiers, 2022, 9, 3217-3223.	3.0	11
1552	Reaction Pathways for the Highly Selective and Durable Electrochemical Co ₂ to Co Conversion on Zn Enclosed Ag Nanoparticles in KCl Electrolyte. SSRN Electronic Journal, 0, , .	0.4	0
1553	Surface-modified nanomaterial-based catalytic materials for the production of liquid fuels. , 2022, , 131-169.		0
1554	Ultra-small Size ZIF-8 Materials for Efficient and Selective Electrocatalytic Reduction of CO ₂ to CO. Electroanalysis, 2023, 35, .	1.5	4
1555	Primary- and secondary-sphere effects of amine substituent position on rhenium bipyridine electrocatalysts for CO ₂ reduction. Polyhedron, 2022, , 115933.	1.0	2
1556	Some Future Perspectives in Ambient Pressure X-ray Spectroscopies: Atmospheric Pressure, Spatially Resolved and Multi-modal Experiments. ACS Symposium Series, 0, , 333-358.	0.5	1
1557	Research advances on photo-assisted CO ₂ conversion to methanol. Applied Catalysis A: General, 2022, 643, 118738.	2.2	8
1558	Templating Bicarbonate in the Second Coordination Sphere Enhances Electrochemical CO ₂ Reduction Catalyzed by Iron Porphyrins. Journal of the American Chemical Society, 2022, 144, 11656-11663.	6.6	45
1559	First-principles calculations on CO ₂ hydrogenation to formic acid over a metal-doped boron phosphide. Molecular Catalysis, 2022, 527, 112412.	1.0	2
1560	Conversion of carbon dioxide into fuels—A review. Journal of CO ₂ Utilization, 2022, 62, 102099.	3.3	33
1561	¹² Cobalt phthalocyanine sono-immobilized on carbon cloth for efficient electrochemical reduction of CO ₂ -to-CO. Materials Letters, 2022, 324, 132614.	1.3	3
1562	Conducting polymeric nanocomposites: A review in solar fuel applications. Fuel, 2022, 325, 124899.	3.4	20
1563	Organic deliquescence: organic vapor-induced dissolution of molecular salts. RSC Advances, 2022, 12, 18307-18310.	1.7	2

#	ARTICLE	IF	CITATIONS
1564	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
1565	N-Bridged Ni and Mn Single-Atom Pair Sites: A Highly Efficient Electrocatalyst for CO ₂ Conversion to Co. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1566	Graphene oxide-based photocatalysts for CO ₂ reduction. , 2022, , 93-134.		0
1567	Recent Advances on CO ₂ Mitigation Technologies: On the Role of Hydrogenation Route via Green H ₂ . <i>Energies</i> , 2022, 15, 4790.	1.6	12
1568	Carbon dioxide electroreduction into formic acid and ethylene: a review. <i>Environmental Chemistry Letters</i> , 2022, 20, 3555-3612.	8.3	17
1569	Heterogenised Molecular Catalysts for Sustainable Electrochemical CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	54
1570	Heterogenised Molecular Catalysts for Sustainable Electrochemical CO ₂ Reduction. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	4
1571	Low-Valent Cobalt(I) CNC Pincer Complexes as Catalysts for Light-Driven Carbon Dioxide Reduction. <i>ACS Catalysis</i> , 2022, 12, 8718-8728.	5.5	8
1572	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
1573	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
1574	Hydrosilylative Reduction of CO ₂ to Formate and Methanol Using a Cobalt Porphyrin-Based Porous Organic Polymer. <i>ChemCatChem</i> , 2022, 14, .	1.8	4
1575	Selective Formate Production from the Electrochemical CO ₂ Reduction Reaction of Surface Oxide-Modified InSn ₄ Binary Catalysts. <i>ACS Applied Energy Materials</i> , 2022, 5, 9895-9901.	2.5	3
1576	Regulated CO adsorption by the electrode with OH ⁻ repulsive property for enhancing C-C coupling. <i>Green Chemical Engineering</i> , 2022, , .	3.3	0
1577	Copper-Based Catalysts for Electrochemical Carbon Dioxide Reduction to Multicarbon Products. <i>Electrochemical Energy Reviews</i> , 2022, 5, .	13.1	49
1578	Perovskite Photocatalytic CO ₂ Reduction or Photoredox Organic Transformation?. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	21
1579	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
1580	Magnetron sputtering growth of AlN film for photocatalytic CO ₂ reduction. <i>Research on Chemical Intermediates</i> , 2022, 48, 4135-4144.	1.3	2
1581	Advances of Cobalt Phthalocyanine in Electrocatalytic CO ₂ Reduction to CO: a Mini Review. <i>Electrocatalysis</i> , 2022, 13, 675-690.	1.5	19

#	ARTICLE	IF	CITATIONS
1582	Insight Into Heterogeneous Electrocatalyst Design Understanding for the Reduction of Carbon Dioxide. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	24
1583	CO ₂ reduction by electropolymerized catalyst of triphenylamine ϵ -substituted iron porphyrin. <i>Journal of the Chinese Chemical Society</i> , 0, .	0.8	0
1584	Divergent CO ₂ Activation by Tuning the Lewis Acid in Iron ϵ -Based Bimetallic Systems. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	3
1585	CoN ₄ active sites in a graphene matrix for the highly efficient electrocatalysis of CO ₂ reduction. <i>New Carbon Materials</i> , 2022, 37, 734-742.	2.9	6
1586	Six-Electron CO ₂ Reduction Involving Participation by Benzimidazole-Derived Bidentate Ligands in Ruthenium Complexes. <i>ACS Applied Energy Materials</i> , 2022, 5, 9280-9285.	2.5	0
1587	Divergent CO ₂ Activation by Tuning the Lewis Acid in Iron ϵ -Based Bimetallic Systems. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	12
1588	Multifunctional Charge and Hydrogen ϵ -Bond Effects of Second ϵ -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
1589	Perovskite Photocatalytic CO ₂ Reduction or Photoredox Organic Transformation?. <i>Angewandte Chemie</i> , 0, .	1.6	0
1590	CO ₂ Methanation of Biogas over Ni-Mg-Al: The Effects of Ni Content, Reduction Temperature, and Biogas Composition. <i>Catalysts</i> , 2022, 12, 1054.	1.6	2
1591	Advancement in electrochemical, photocatalytic, and photoelectrochemical CO ₂ reduction: Recent progress in the role of oxygen vacancies in catalyst design. <i>Journal of CO₂ Utilization</i> , 2022, 65, 102211.	3.3	14
1592	Increasing electron density by surface plasmon resonance for enhanced photocatalytic CO ₂ reduction. <i>Journal of Environmental Management</i> , 2022, 323, 116236.	3.8	10
1593	N-bridged Ni and Mn single-atom pair sites: A highly efficient electrocatalyst for CO ₂ conversion to CO. <i>Applied Catalysis B: Environmental</i> , 2023, 320, 121953.	10.8	13
1594	Hydrogenation of CO ₂ to methanol over In-doped m-ZrO ₂ : a DFT investigation into the oxygen vacancy size-dependent reaction mechanism. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 23182-23194.	1.3	4
1595	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
1596	Active and Selective Reverse Water-Gas Shift Reaction Over Pt/Na-Zeolite Catalysts. <i>SSRN Electronic Journal</i> , 0, .	0.4	0
1597	A review on recent advances in the electrochemical reduction of CO ₂ to CO with nano-electrocatalysts. <i>RSC Advances</i> , 2022, 12, 22703-22721.	1.7	13
1598	Photocatalytic Carbon Dioxide Reduction and Density Functional Theory Investigation of 2,6-(Pyridin-2-yl)-1,3,5-triazine-2,4-diamine and Its Cobalt and Nickel Complexes. <i>ACS Applied Energy Materials</i> , 2022, 5, 11077-11090.	2.5	4
1600	Reaction pathways for the highly selective and durable electrochemical CO ₂ to CO conversion on ZnO supported Ag nanoparticles in KCl electrolyte. <i>Applied Surface Science</i> , 2023, 608, 155224.	3.1	5

#	ARTICLE	IF	CITATIONS
1601	Tandem electrocatalytic CO ₂ reduction with Fe-porphyrins and Cu nanocubes enhances ethylene production. <i>Chemical Science</i> , 2022, 13, 12673-12680.	3.7	16
1602	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
1603	Fabrication of glass immobilized amorphous organotitanium polymer for enhancing catalytic turnover frequency and stabilities in photocatalytic reduction of CO ₂ . <i>Applied Catalysis A: General</i> , 2022, 647, 118910.	2.2	3
1604	Electrochemical CO ₂ Reduction in the Presence of Impurities: Influences and Mitigation Strategies. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	17
1605	Electrochemical CO ₂ Reduction in the Presence of Impurities: Influences and Mitigation Strategies. <i>Angewandte Chemie</i> , 2022, 134, .	1.6	2
1606	Oxidation State Modulation of Bimetallic Tin-Copper Oxide Nanotubes for Selective CO ₂ Electroreduction to Formate. <i>Small</i> , 2022, 18, .	5.2	17
1607	A Recent Review on Photocatalytic CO ₂ Reduction in Generating Sustainable Carbon-Based Fuels. <i>Green Energy and Technology</i> , 2023, , 205-261.	0.4	3
1608	Electrocatalytic Conversion of CO ₂ to Formate at Low Overpotential by Electrolyte Engineering in Model Molecular Catalysis. <i>ChemSusChem</i> , 2022, 15, .	3.6	6
1609	Electrocatalytic Hydrogen Production using Cu(II), Fe(III) and Co(III) complexes with Pyridoxal-thiosemicarbazone (PLTSC) derived ligand: A comparative study. <i>International Journal of Electrochemical Science</i> , 0, , ArticleID:221112.	0.5	0
1610	Active and selective reverse water-gas shift reaction over Pt/Na-Zeolite catalysts. <i>Journal of CO₂ Utilization</i> , 2022, 66, 102291.	3.3	3
1611	Recent advances on electrocatalytic CO ₂ reduction to resources: Target products, reaction pathways and typical catalysts. <i>Chemical Engineering Journal</i> , 2023, 453, 139663.	6.6	55
1613	In-Situ Constructing of Copper-Doped Bismuth Catalyst for Highly Efficient CO ₂ Electrolysis to Formate in Ampere-Level. <i>Advanced Energy Materials</i> , 2023, 13, .	10.2	30
1614	Highly Selective Electrochemical Synthesis of Urea Derivatives Initiated from Oxygen Reduction in Ionic Liquids. <i>ACS Omega</i> , 2022, 7, 42828-42834.	1.6	1
1615	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
1616	Hydrogenation of CO ₂ to Methane over a Ru/RuTiO ₂ Surface: A DFT Investigation into the Significant Role of the RuO ₂ Overlayer. <i>ACS Catalysis</i> , 2022, 12, 14654-14666.	5.5	3
1617	Nanostructure Engineering of Sn-Based Catalysts for Efficient Electrochemical CO ₂ Reduction. <i>Small</i> , 2023, 19, .	5.2	15
1618	Metal-organic framework-derived single atom catalysts for electrocatalytic reduction of carbon dioxide to C ₁ products. <i>Energy Advances</i> , 2023, 2, 252-267.	1.4	1
1619	Advanced biological and non-biological technologies for carbon sequestration, wastewater treatment, and concurrent valuable recovery: A review. <i>Journal of CO₂ Utilization</i> , 2023, 68, 102372.	3.3	7

#	ARTICLE	IF	CITATIONS
1620	Data-Driven Discovery of Robust Materials for Photocatalytic Energy Conversion. <i>Annual Review of Condensed Matter Physics</i> , 2023, 14, 237-259.	5.2	4
1621	2D Molybdenum Compounds for Electrocatalytic Energy Conversion. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	12
1622	Electrochemical Reduction of Gaseous CO ₂ at Low-Intermediate Temperatures Using a Solid Acid Membrane Cell. <i>Catalysts</i> , 2022, 12, 1504.	1.6	0
1623	Synergistic Porosity and Charge Effects in a Supramolecular Porphyrin Cage Promote Efficient Photocatalytic CO ₂ Reduction**. <i>Angewandte Chemie</i> , 0, , .	1.6	0
1624	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
1625	Arylamines as More Strongly Reducing Organic Photoredox Catalysts than <i>fac</i> -[Ir(ppy) ₃]. <i>ACS Catalysis</i> , 2022, 12, 15400-15415.	5.5	17
1626	Surface and Interface Engineering for the Catalysts of Electrocatalytic CO ₂ Reduction. <i>Chemistry - an Asian Journal</i> , 2023, 18, .	1.7	5
1627	Homoleptic Al(III) Photosensitizers for Durable CO ₂ Photoreduction. <i>Journal of the American Chemical Society</i> , 2023, 145, 676-688.	6.6	14
1628	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
1629	Bio-Inspired Bimetallic Cooperativity Through a Hydrogen Bonding Spacer in CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2023, 62, .	7.2	17
1630	URVA and Local Mode Analysis of an Iridium Pincer Complex Efficiently Catalyzing the Hydrogenation of Carbon Dioxide. <i>Inorganics</i> , 2022, 10, 234.	1.2	1
1631	Bio-Inspired Bimetallic Cooperativity Through a Hydrogen Bonding Spacer in CO ₂ Reduction. <i>Angewandte Chemie</i> , 0, , .	1.6	0
1632	Metal and metal oxide electrocatalysts for the electrochemical reduction of CO ₂ to-C1 chemicals: are we there yet?. <i>Green Chemistry Letters and Reviews</i> , 2023, 16, .	2.1	10
1633	Nanomaterials as catalysts for CO ₂ transformation into value-added products: A review. <i>Science of the Total Environment</i> , 2023, 868, 161547.	3.9	28
1634	Photoinduced Catalytic Organic-Hydride Transfer to CO ₂ Mediated with Ruthenium Complexes as NAD ⁺ /NADH Redox Couple Models**. <i>ChemSusChem</i> , 2023, 16, .	3.6	1
1635	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
1636	Solar driven CO ₂ reduction with a molecularly engineered periodic mesoporous organosilica containing cobalt phthalocyanine. <i>Nanoscale</i> , 2023, 15, 2114-2121.	2.8	3
1637	Fabrication of carbon nanotubes with rich Pyridinic nitrogen in H ₂ /Ar atmosphere for efficient electroreduction of CO ₂ to CO. <i>Diamond and Related Materials</i> , 2023, 132, 109667.	1.8	1

#	ARTICLE	IF	CITATIONS
1638	Electrochemically CO ₂ conversion using homogeneous and nanostructured heterogeneous Ru (II) electrocatalysts. <i>Fuel</i> , 2023, 335, 126712.	3.4	1
1639	Reactive Capture of CO ₂ : Opportunities and Challenges. <i>ACS Catalysis</i> , 2023, 13, 766-784.	5.5	26
1640	Amine Hole Scavengers Facilitate Both Electron and Hole Transfer in a Nanocrystal/Molecular Hybrid Photocatalyst. <i>Journal of the American Chemical Society</i> , 2023, 145, 3238-3247.	6.6	2
1641	Machine Learning Identification of Active Sites in Graphite-Conjugated Catalysts. <i>Journal of Physical Chemistry C</i> , 2023, 127, 2303-2313.	1.5	3
1642	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
1643	Carbon Capture: Materials and Process Engineering. , 2012, , 385-429.		1
1644	Electro-enzyme coupling systems for selective reduction of CO ₂ . <i>Journal of Energy Chemistry</i> , 2023, 80, 140-162.	7.1	10
1645	Electrochemical CO ₂ -to-ethylene conversion on metal-free covalent quinazoline network-derived electrodes. <i>Chem Catalysis</i> , 2023, 3, 100506.	2.9	1
1646	Binuclear Cu complex catalysis enabling Liâ€‘CO ₂ battery with a high discharge voltage above 3.0â€‘V. <i>Nature Communications</i> , 2023, 14, .	5.8	26
1647	Highâ€‘Concentration Electrosynthesis of Formic Acid/Formate from <scp>CO₂</scp>: Reactor and Electrode Design Strategies. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	11
1648	Deciphering the Selectivity of the Electrochemical CO ₂ Reduction to CO by a Cobalt Porphyrin Catalyst in Neutral Aqueous Solution: Insights from DFT Calculations. <i>ChemistryOpen</i> , 2023, 12, .	0.9	1
1649	Small, Electron-Donating Substituents Give CO₂ Activation by Permethylpentalene Zirconium Amido Complexes the Upper Hand: A DFT Study of Distortion and Interaction. <i>Inorganic Chemistry</i> , 2023, 62, 3000-3006.	1.9	0
1650	X-ray Absorption Spectroscopy Studies of a Molecular CO₂-Reduction Catalyst Deposited on Graphitic Carbon Nitride. <i>Journal of Physical Chemistry C</i> , 2023, 127, 3626-3633.	1.5	1
1651	Recent Progress in Surface-Defect Engineering Strategies for Electrocatalysts toward Electrochemical CO ₂ Reduction: A Review. <i>Catalysts</i> , 2023, 13, 393.	1.6	9
1652	Stability of Photocathodes: A Review on Principles, Design, and Strategies. <i>ChemSusChem</i> , 2023, 16, .	3.6	7
1653	Single-Atom-Anchored Two-Dimensional MoSi₂N₄ Monolayers for Efficient Electroreduction of CO₂ to Formic Acid and Methane. <i>ACS Applied Energy Materials</i> , 2023, 6, 3236-3243.	2.5	5
1655	Sulphur vs NH Group: Effects on the CO ₂ Electroreduction Capability of Phenylenediamine-Cp Cobalt Complexes. <i>Molecules</i> , 2023, 28, 2364.	1.7	1
1656	Electronic effects promoted the catalytic activities of binuclear Co(<scp>i</scp>) complexes for visible-light-driven CO₂ reduction in a water-containing system. <i>Dalton Transactions</i> , 2023, 52, 4548-4553.	1.6	6

#	ARTICLE	IF	CITATIONS
1657	Electro- and Photoinduced Interfacial Charge Transfers in Nanocrystalline Mesoporous TiO ₂ and TiO ₂ /Iron Porphyrin Sensitized Films under CO ₂ Reduction Catalysis. ACS Applied Materials & Interfaces, 0, , .	4.0	1
1658	Correlation between Key Steps and Hydricity in CO ₂ Hydrogenation Catalysed by Non-Noble Metal PNP-Pincer Complexes. Catalysts, 2023, 13, 592.	1.6	4
1659	Modulating microenvironments to enhance CO ₂ electroreduction performance. EScience, 2023, 3, 100119.	25.0	11
1660	Trends and Prospects of Bulk and Single-Atom Catalysts for the Oxygen Evolution Reaction. Advanced Energy Materials, 2023, 13, .	10.2	25
1661	Decoupling Redox Hopping and Catalysis in Metal-Organic Frameworks-based Electrocatalytic CO ₂ Reduction. Angewandte Chemie - International Edition, 2023, 62, .	7.2	2
1662	Decoupling Redox Hopping and Catalysis in Metal-Organic Frameworks-based Electrocatalytic CO ₂ Reduction. Angewandte Chemie, 0, , .	1.6	0
1663	Bimetallic Cooperativity and Hydrogen Bonding Allow Efficient Reduction of CO ₂ . Angewandte Chemie - International Edition, 2023, 62, .	7.2	3
1664	Bimetallic Cooperativity and Hydrogen Bonding Allow Efficient Reduction of CO ₂ . Angewandte Chemie, 2023, 135, .	1.6	0
1665	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
1666	Bifunctional and regenerable molecular electrode for water electrolysis at neutral pH. Journal of Materials Chemistry A, 2023, 11, 13331-13340.	5.2	4
1667	Facile Synthesis of Heterogeneous Indium Nanoparticles for Formate Production via CO ₂ Electroreduction. Nanomaterials, 2023, 13, 1304.	1.9	0
1668	Ruthenium (II) Complexes of CNC Pincers and Bipyridine in the Photocatalytic CO ₂ Reduction Reaction to CO Using Visible Light: Catalysis, Kinetics, and Computational Insights. ACS Catalysis, 2023, 13, 5986-5999.	5.5	3
1669	Unlocking the Facet-Dependent Ligand Exchange on Rutile TiO ₂ of a Rhenium Bipyridyl Catalyst for CO ₂ Reduction. Journal of Physical Chemistry C, 0, , .	1.5	0
1670	Applications of Metal-Organic Frameworks and Their Derivatives in Electrochemical CO ₂ Reduction. Nano-Micro Letters, 2023, 15, .	14.4	23
1671	Co-electrocatalytic CO ₂ reduction mediated by a dibenzophosphole oxide and a chromium complex. Chemical Communications, 2023, 59, 6359-6362.	2.2	2
1678	Copper-based metal-organic frameworks for CO ₂ reduction: selectivity trends, design paradigms, and perspectives. Catalysis Science and Technology, 2023, 13, 3740-3761.	2.1	2
1695	A review of boron nitride-based photocatalysts for carbon dioxide reduction. Journal of Materials Chemistry A, 2023, 11, 11925-11963.	5.2	10
1701	Immobilization strategies for carbon electrode materials. , 2023, , 121-151.		0

#	ARTICLE	IF	CITATIONS
1712	Selective electrochemical CO ₂ conversion with a hybrid polyoxometalate. Chemical Communications, 0, , .	2.2	0
1743	Bifunctional CoFe/HZSM-5 Catalysts Orient CO ₂ Hydrogenation to Liquid Hydrocarbons. Chemical Communications, 0, , .	2.2	0
1754	Recent advances in trifunctional electrocatalysts for Znâ€air battery and water splitting. Materials Chemistry Frontiers, 0, , .	3.2	0
1759	Using Solar Energy in Methanol Production: Efficiency, Environmental Impact and Economical Performance. , 2024, , .		0
1774	Free-Standing Single-Atom Catalyst-Based Electrodes for CO ₂ Reduction. Electrochemical Energy Reviews, 2024, 7, .	13.1	0