

Catalytic reduction of CO₂ by H₂ and hydrocarbons: challenges and opportunities

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Citation Report

#	ARTICLE	IF	CITATIONS
3	Controllable synthesis of MoCl_x - and Mo_2C nanowires for highly selective CO_2 reduction to CO . <i>Catalysis Communications</i> , 2016, 84, 147-150.	1.6	66
4	Life Cycle Assessment of Power-to-Gas: Syngas vs Methane. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 4156-4165.	3.2	107
5	Identification of relevant active sites and a mechanism study for reverse water gas shift reaction over Pt/CeO ₂ catalysts. <i>Journal of Energy Chemistry</i> , 2016, 25, 1051-1057.	7.1	56
6	Preparation and characterization of Co/Cu/ZrO_2 nanomaterials and their catalytic activity in CO_2 methanation. <i>Ceramics International</i> , 2016, 42, 10444-10451.	2.3	20
7	Tuning the basicity of ionic liquids for efficient synthesis of alkylidene carbonates from CO_2 at atmospheric pressure. <i>Chemical Communications</i> , 2016, 52, 7830-7833.	2.2	79
8	CO_2 conversion by reverse water gas shift catalysis: comparison of catalysts, mechanisms and their consequences for CO_2 conversion to liquid fuels. <i>RSC Advances</i> , 2016, 6, 49675-49691.	1.7	384
9	A route for direct transformation of aryl halides to benzyl alcohols via carbon dioxide fixation reaction catalyzed by a (Pd@N-GMC) palladium nanoparticle encapsulated nitrogen doped mesoporous carbon material. <i>Green Chemistry</i> , 2016, 18, 4649-4656.	4.6	29
10	Combining Electrochemical CO_2 Capture with Catalytic Dry Methane Reforming in a Single Reactor for Low-Cost Syngas Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 7056-7065.	3.2	33
11	Magnetic field-enhanced catalytic CO_2 hydrogenation and selective conversion to light hydrocarbons over Fe/MCM-41 catalysts. <i>Chemical Engineering Journal</i> , 2016, 306, 866-875.	6.6	40
12	Visible and Near-Infrared Photothermal Catalyzed Hydrogenation of Gaseous CO_2 over Nanostructured Pd@Nb ₂ O ₅ . <i>Advanced Science</i> , 2016, 3, 1600189.	5.6	133
13	Optimizing Binding Energies of Key Intermediates for CO_2 Hydrogenation to Methanol over Oxide-Supported Copper. <i>Journal of the American Chemical Society</i> , 2016, 138, 12440-12450.	6.6	565
14	Carbon Dioxide Transformation in Imidazolium Salts: Hydroaminomethylation Catalyzed by Ru-Complexes. <i>ChemSusChem</i> , 2016, 9, 2129-2134.	3.6	24
15	Continuous heterogeneous hydrogenation of CO_2 -derived dimethyl carbonate to methanol over a Cu-based catalyst. <i>RSC Advances</i> , 2016, 6, 69530-69539.	1.7	13
16	Catalytic hydrogenation of CO_2 to methanol in a Lewis pair functionalized MOF. <i>Catalysis Science and Technology</i> , 2016, 6, 8392-8405.	2.1	75
17	Sustainable iron production from mineral iron carbonate and hydrogen. <i>Green Chemistry</i> , 2016, 18, 6255-6265.	4.6	23
18	Direct synthesis of ethanol via CO_2 hydrogenation using supported gold catalysts. <i>Chemical Communications</i> , 2016, 52, 14226-14229.	2.2	73
19	The thermodynamics analysis and experimental validation for complicated systems in CO_2 hydrogenation process. <i>Journal of Energy Chemistry</i> , 2016, 25, 1027-1037.	7.1	72
20	Computer-Assisted Design of Ionic Liquids for Efficient Synthesis of 3-(2-H-Furanones): A Domino Reaction Triggered by CO_2 . <i>Journal of the American Chemical Society</i> , 2016, 138, 14198-14201.	6.6	76

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21	Reductive Calcination of Mineral Magnesite: Hydrogenation of Carbon Dioxide without Catalysts. <i>Chemical Engineering and Technology</i> , 2016, 39, 2035-2041.	0.9	30
22	CO ₂ Activation on Ni ³⁺ Al ₂ O ₃ Catalysts by First-Principles Calculations: From Ideal Surfaces to Supported Nanoparticles. <i>ACS Catalysis</i> , 2016, 6, 4501-4505.	5.5	92
23	CO ₂ utilization with a novel dual function material (DFM) for capture and catalytic conversion to synthetic natural gas: An update. <i>Journal of CO₂ Utilization</i> , 2016, 15, 65-71.	3.3	159
24	Highly Active Au ¹⁺ -MoC and Cu ¹⁺ -MoC Catalysts for the Conversion of CO ₂ : The Metal/C Ratio as a Key Factor Defining Activity, Selectivity, and Stability. <i>Journal of the American Chemical Society</i> , 2016, 138, 8269-8278.	6.6	140
25	Toward highly efficient in situ dry reforming of H ₂ S contaminated methane in solid oxide fuel cells via incorporating a coke/sulfur resistant bimetallic catalyst layer. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9080-9087.	5.2	26
26	Hydrogen-treated mesoporous WO ₃ as a reducing agent of CO ₂ to fuels (CH ₄ and CH ₃ OH) with enhanced photothermal catalytic performance. <i>Journal of Materials Chemistry A</i> , 2016, 4, 5314-5322.	5.2	156
27	Promoting role of potassium in the reverse water gas shift reaction on Pt/mullite catalyst. <i>Catalysis Today</i> , 2017, 281, 319-326.	2.2	98
28	Hydrogenation of CO ₂ to methanol over CuCeTiO catalysts. <i>Applied Catalysis B: Environmental</i> , 2017, 206, 704-711.	10.8	109
29	Photoelectrochemical Reduction of Carbon Dioxide to Methanol through a Highly Efficient Enzyme Cascade. <i>Angewandte Chemie</i> , 2017, 129, 3885-3890.	1.6	44
30	Photoelectrochemical Reduction of Carbon Dioxide to Methanol through a Highly Efficient Enzyme Cascade. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3827-3832.	7.2	231
31	Carbon Capture and Utilization Update. <i>Energy Technology</i> , 2017, 5, 834-849.	1.8	424
32	Confinement of Ultrasmall Cu/ZnO Nanoparticles in Metal-Organic Frameworks for Selective Methanol Synthesis from Catalytic Hydrogenation of CO ₂ . <i>Journal of the American Chemical Society</i> , 2017, 139, 3834-3840.	6.6	463
33	Hydrogenation of CO ₂ to Methanol at Atmospheric Pressure over Cu/ZnO Catalysts: Influence of the Calcination, Reduction, and Metal Loading. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 1979-1987.	1.8	57
34	CO ₂ Catalysis. <i>ChemSusChem</i> , 2017, 10, 1036-1038.	3.6	193
35	Morphology effect of nanostructure ceria on the Cu/CeO ₂ catalysts for synthesis of methanol from CO ₂ hydrogenation. <i>Catalysis Communications</i> , 2017, 95, 36-39.	1.6	98
36	Homogeneous Reduction of Carbon Dioxide with Hydrogen. <i>Topics in Current Chemistry</i> , 2017, 375, 23.	3.0	55
37	Potassium-Promoted Molybdenum Carbide as a Highly Active and Selective Catalyst for CO ₂ Conversion to CO. <i>ChemSusChem</i> , 2017, 10, 2408-2415.	3.6	65
38	Interfaces in heterogeneous catalytic reactions: Ambient pressure XPS as a tool to unravel surface chemistry. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2017, 221, 28-43.	0.8	41

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39	Surface chemistry of methanol on different ZnO surfaces studied by vibrational spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 12992-13001.	1.3	26
40	Microwave-Assisted Hydrothermal Synthesis of CuO-ZnO-ZrO ₂ as Catalyst for Direct Synthesis of Methanol by Carbon Dioxide Hydrogenation. <i>Energy Technology</i> , 2017, 5, 2100-2107.	1.8	26
41	Directly converting CO ₂ into a gasoline fuel. <i>Nature Communications</i> , 2017, 8, 15174.	5.8	652
42	Hydrogenation of CO ₂ to methanol over Pd-Cu/CeO ₂ catalysts. <i>Molecular Catalysis</i> , 2017, 434, 146-153.	1.0	92
43	Highly active and stable TiO ₂ -supported Au nanoparticles for CO ₂ reduction. <i>Catalysis Communications</i> , 2017, 98, 52-56.	1.6	29
44	CO ₂ reduction over Cu-ZnGaMO (M = Al, Zr) catalysts prepared by a sol-gel method: Unique performance for the RWGS reaction. <i>Catalysis Today</i> , 2017, 296, 181-186.	2.2	20
45	A Titanium Dioxide Supported Gold Nanoparticle Catalyst for the Selective N-Formylation of Functionalized Amines with Carbon Dioxide and Hydrogen. <i>ChemCatChem</i> , 2017, 9, 3632-3636.	1.8	53
46	Highly active Au ¹⁺ -MoC and Au ¹⁺ -Mo ₂ C catalysts for the low-temperature water gas shift reaction: effects of the carbide metal/carbon ratio on the catalyst performance. <i>Catalysis Science and Technology</i> , 2017, 7, 5332-5342.	2.1	39
47	Effect of O ₂ , CO ₂ and N ₂ O on Ni ²⁺ -Mo/Al ₂ O ₃ catalyst oxygen mobility in <i>n</i> -butane activation and conversion to 1,3-butadiene. <i>Catalysis Science and Technology</i> , 2017, 7, 3291-3302.	2.1	24
48	Theoretical Insights and the Corresponding Construction of Supported Metal Catalysts for Highly Selective CO ₂ to CO Conversion. <i>ACS Catalysis</i> , 2017, 7, 4613-4620.	5.5	104
49	Hydrogen Storage Technologies for Future Energy Systems. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2017, 8, 445-471.	3.3	246
50	Carbon Dioxide Hydrogenation over a Metal-Free Carbon-Based Catalyst. <i>ACS Catalysis</i> , 2017, 7, 4497-4503.	5.5	71
51	A review on photo-thermal catalytic conversion of carbon dioxide. <i>Green Energy and Environment</i> , 2017, 2, 204-217.	4.7	153
52	Mechanisms and kinetics of CO ₂ hydrogenation to value-added products: A detailed review on current status and future trends. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 80, 1292-1311.	8.2	175
53	Life cycle assessment of CO ₂ -based C1-chemicals. <i>Green Chemistry</i> , 2017, 19, 2244-2259.	4.6	147
54	Active sites for CO ₂ hydrogenation to methanol on Cu/ZnO catalysts. <i>Science</i> , 2017, 355, 1296-1299.	6.0	1,180
55	Graphene-Based Nanomaterials for Catalysis. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 3477-3502.	1.8	234
56	Highly Dispersed Copper over ¹ -Mo ₂ C as an Efficient and Stable Catalyst for the Reverse Water Gas Shift (RWGS) Reaction. <i>ACS Catalysis</i> , 2017, 7, 912-918.	5.5	263

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57	Sodium-Containing Spinel Zinc Ferrite as a Catalyst Precursor for the Selective Synthesis of Liquid Hydrocarbon Fuels. <i>ChemSusChem</i> , 2017, 10, 4764-4770.	3.6	89
58	Pyrolysis of metal-organic frameworks to hierarchical porous Cu/Zn-nanoparticle@carbon materials for efficient CO ₂ hydrogenation. <i>Materials Chemistry Frontiers</i> , 2017, 1, 2405-2409.	3.2	54
59	Heterogeneous electrochemical CO ₂ reduction using nonmetallic carbon-based catalysts: current status and future challenges. <i>Nanotechnology</i> , 2017, 28, 472001.	1.3	87
60	A highly selective and stable ZnO-ZrO ₂ solid solution catalyst for CO ₂ hydrogenation to methanol. <i>Science Advances</i> , 2017, 3, e1701290.	4.7	683
61	Direct and selective hydrogenation of CO ₂ to ethylene and propene by bifunctional catalysts. <i>Catalysis Science and Technology</i> , 2017, 7, 5602-5607.	2.1	118
62	Chemical reduction of CO ₂ facilitated by C-nucleophiles. <i>Chemical Communications</i> , 2017, 53, 11390-11398.	2.2	38
63	A New Energy-Saving Catalytic System: Carbon Dioxide Activation by a Metal/Carbon Catalyst. <i>ChemSusChem</i> , 2017, 10, 3671-3678.	3.6	8
64	Electrochemical Reduction of CO ₂ in Proton Exchange Membrane Reactor: The Function of Buffer Layer. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 10242-10250.	1.8	29
65	ZIF-67-Derived Nanoreactors for Controlling Product Selectivity in CO ₂ Hydrogenation. <i>ACS Catalysis</i> , 2017, 7, 7509-7519.	5.5	124
66	Rhodium-Palladium Nanocatalysts for Selective Methanation of Carbon Dioxide. <i>ChemNanoMat</i> , 2017, 3, 639-645.	1.5	12
67	Prominent Electron Penetration through Ultrathin Graphene Layer from FeNi Alloy for Efficient Reduction of CO ₂ to CO. <i>ChemSusChem</i> , 2017, 10, 3044-3048.	3.6	21
68	N,P,S-codoped C@nano-Mo ₂ C as an efficient catalyst for high selective synthesis of methanol from CO ₂ hydrogenation. <i>Journal of CO₂ Utilization</i> , 2017, 21, 64-71.	3.3	23
69	Designing of highly selective and high-temperature durable RWGS heterogeneous catalysts: recent advances and the future directions. <i>Journal of Energy Chemistry</i> , 2017, 26, 854-867.	7.1	186
70	Real-Time Elucidation of Catalytic Pathways in CO Hydrogenation on Ru. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 3820-3825.	2.1	9
71	Synthesis of Carbon Monoxide from Hydrogen and Magnesite/Dolomite. <i>Chemie-Ingenieur-Technik</i> , 2017, 89, 172-179.	0.4	13
72	Colloidal Cu/ZnO catalysts for the hydrogenation of carbon dioxide to methanol: investigating catalyst preparation and ligand effects. <i>Catalysis Science and Technology</i> , 2017, 7, 3842-3850.	2.1	22
73	Photothermal Catalyst Engineering: Hydrogenation of Gaseous CO ₂ with High Activity and Tailored Selectivity. <i>Advanced Science</i> , 2017, 4, 1700252.	5.6	97
74	Reactivity of methanol over copper supported on well-shaped CeO ₂ : a TPD-DRIFTS study. <i>Catalysis Science and Technology</i> , 2017, 7, 5224-5235.	2.1	41

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75	Highly Selective Conversion of Carbon Dioxide to Lower Olefins. <i>ACS Catalysis</i> , 2017, 7, 8544-8548.	5.5	387
76	Direct catalytic hydrogenation of CO ₂ to formate over a Schiff-base-mediated gold nanocatalyst. <i>Nature Communications</i> , 2017, 8, 1407.	5.8	177
77	Oxygen vacancies induced exciton dissociation of flexible BiOCl nanosheets for effective photocatalytic CO ₂ conversion. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24995-25004.	5.2	215
79	The study of morphology effect of Pt/Co ₃ O ₄ catalysts for higher alcohol synthesis from CO ₂ hydrogenation. <i>Applied Catalysis A: General</i> , 2017, 543, 189-195.	2.2	75
80	Conversion of CO ₂ , CO, and H ₂ in CO ₂ Hydrogenation to Fungible Liquid Fuels on Fe-Based Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 13334-13355.	1.8	66
81	Tuning Selectivity of CO ₂ Hydrogenation Reactions at the Metal/Oxide Interface. <i>Journal of the American Chemical Society</i> , 2017, 139, 9739-9754.	6.6	823
82	The influence of different promoter oxides on the functionality of hybrid CuZn-ferrierite systems for the production of DME from CO ₂ -H ₂ mixtures. <i>Applied Catalysis A: General</i> , 2017, 544, 21-29.	2.2	39
83	Mesoporous oxidic holey nanosheets from Zn-Cr LDH synthesized by soft chemical etching of Cr ³⁺ and its application as CO ₂ hydrogenation catalyst. <i>Journal of CO₂ Utilization</i> , 2017, 21, 40-51.	3.3	15
84	Surface-Atom Dependence of ZnO-Supported Ag@Pd Core@Shell Nanocatalysts in CO ₂ Hydrogenation to CH ₃ OH. <i>ChemCatChem</i> , 2017, 9, 924-928.	1.8	30
85	Unexpectedly efficient CO ₂ hydrogenation to higher hydrocarbons over non-doped Fe ₂ O ₃ . <i>Applied Catalysis B: Environmental</i> , 2017, 204, 119-126.	10.8	137
86	Adsorption and dissociation of molecular hydrogen on orthorhombic $\sqrt{2}$ -Mo ₂ C and cubic $\sqrt{3}$ -MoC (001) surfaces. <i>Surface Science</i> , 2017, 656, 24-32.	0.8	50
87	The role of catalyst environment on CO ₂ hydrogenation in a fixed-bed reactor. <i>Journal of CO₂ Utilization</i> , 2017, 17, 1-9.	3.3	16
88	Adsorbate-mediated strong metal-support interactions in oxide-supported Rh catalysts. <i>Nature Chemistry</i> , 2017, 9, 120-127.	6.6	609
89	Synthesis of hydrocarbons by CO ₂ fluid conversion with hydrogen: Experimental modeling at 7.8 GPa and 1350°C. <i>Doklady Earth Sciences</i> , 2017, 477, 1483-1487.	0.2	9
90	The Effect of Copper Addition on the Activity and Stability of Iron-Based CO ₂ Hydrogenation Catalysts. <i>Molecules</i> , 2017, 22, 1579.	1.7	26
91	Methanation of Carbon Dioxide over Ni-Ce-Zr Oxides Prepared by One-Pot Hydrolysis of Metal Nitrates with Ammonium Carbonate. <i>Catalysts</i> , 2017, 7, 104.	1.6	17
92	Ab initio study of CO ₂ hydrogenation mechanisms on inverse ZnO/Cu catalysts. <i>Journal of Catalysis</i> , 2018, 360, 168-174.	3.1	58
93	A short review of recent advances in CO ₂ hydrogenation to hydrocarbons over heterogeneous catalysts. <i>RSC Advances</i> , 2018, 8, 7651-7669.	1.7	499

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94	Oxidative dehydrogenation and dry reforming of n-butane with CO ₂ over NiFe bimetallic catalysts. <i>Applied Catalysis B: Environmental</i> , 2018, 231, 213-223.	10.8	33
95	Multicomponent Catalysts: Limitations and Prospects. <i>ACS Catalysis</i> , 2018, 8, 3202-3208.	5.5	64
96	Insight into catalytic reduction of CO ₂ to methane with silanes using Brookhart's cationic Ir(η^5 -Cp*) pincer complex. <i>RSC Advances</i> , 2018, 8, 9232-9242.	1.7	11
97	CO ₂ Conversion Enhancement in a Periodically Operated Sabatier Reactor: Nonlinear Frequency Response Analysis and Simulation-based Study. <i>Israel Journal of Chemistry</i> , 2018, 58, 762-775.	1.0	16
98	Dehydrogenation reactions of mechanically activated alkali metal hydrides with CO ₂ at room temperature. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 5068-5076.	3.8	9
99	Photocatalytic Hydrogenation of Carbon Dioxide with High Selectivity to Methanol at Atmospheric Pressure. <i>Joule</i> , 2018, 2, 1369-1381.	11.7	148
100	Mechanistic Understanding of Alloy Effect and Water Promotion for Pd-Cu Bimetallic Catalysts in CO ₂ Hydrogenation to Methanol. <i>ACS Catalysis</i> , 2018, 8, 4873-4892.	5.5	171
101	An Environmentally Friendly Strategy for One-Step Turning Cr(VI) Contaminant into a Cr-Loaded Catalyst for CO ₂ Utilization. <i>Advanced Sustainable Systems</i> , 2018, 2, 1700165.	2.7	10
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103	Monodisperse Metal-Organic Framework Nanospheres with Encapsulated Core-Shell Nanoparticles Pt/Au@Pd@Co ₂ (oba) ₄ (3-bpdh) ₂ ·4H ₂ O for the Highly Selective Conversion of CO ₂ to CO. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15096-15103.	4.0	42
104	Recent Progress in Photoelectrochemical Water Splitting Activity of WO ₃ Photoanodes. <i>Topics in Catalysis</i> , 2018, 61, 1043-1076.	1.3	78
105	Synthesis and Characterization of Catalysts Cu-ZnO Supported on Mesoporous Carbon FDU-15. <i>Journal of the Chinese Chemical Society</i> , 2018, 65, 793-800.	0.8	1
106	Entropy generation minimization for CO ₂ hydrogenation to light olefins. <i>Energy</i> , 2018, 147, 187-196.	4.5	58
107	Carbon Dioxide Promotes Dehydrogenation in the Equimolar C ₂ H ₂ + CO ₂ Reaction to Synthesize Carbon Nanotubes. <i>Small</i> , 2018, 14, 1703482.	5.2	8
108	DFT comparison of the performance of bare Cu and Cu-alloyed Co single-atom catalyst for CO ₂ synthesizing of methanol. <i>Theoretical Chemistry Accounts</i> , 2018, 137, 1.	0.5	8
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110	Carbon dioxide hydrogenation to methanol over multi-functional catalyst: Effects of reactants adsorption and metal-oxide(s) interfacial area. <i>Journal of Industrial and Engineering Chemistry</i> , 2018, 62, 156-165.	2.9	47
111	LaFe _{0.9} Ni _{0.1} O ₃ perovskite catalyst with enhanced activity and coke-resistance for dry reforming of ethane. <i>Journal of Catalysis</i> , 2018, 358, 168-178.	3.1	67

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114	Sunlight-assisted hydrogenation of CO ₂ into ethanol and C ₂₊ hydrocarbons by sodium-promoted Co@C nanocomposites. Applied Catalysis B: Environmental, 2018, 235, 186-196.	10.8	101
115	CO ₂ reforming with methane over small-sized Ni@SiO ₂ catalysts with unique features of sintering-free and low carbon. Applied Catalysis B: Environmental, 2018, 235, 26-35.	10.8	148
116	Carbonate-Promoted Hydrogenation of Carbon Dioxide to Multicarbon Carboxylates. ACS Central Science, 2018, 4, 606-613.	5.3	30
117	Enhancing catalytic selectivity and stability for CO ₂ hydrogenation to methanol using a solid-solution catalyst. National Science Review, 2018, 5, 607-608.	4.6	3
118	A catalyst based on copper-cadmium bimetal for electrochemical reduction of CO ₂ to CO with high faradaic efficiency. Electrochimica Acta, 2018, 271, 544-550.	2.6	49
119	Directly converting carbon dioxide to linear α -olefins on bio-promoted catalysts. Communications Chemistry, 2018, 1, .	2.0	123
120	Theoretical Investigation of CO ₂ Adsorption and Dissociation on Low Index Surfaces of Transition Metals. Journal of Physical Chemistry C, 2018, 122, 8306-8314.	1.5	104
121	Surface Immobilization of Transition Metal Ions on Nitrogen-Doped Graphene Realizing High Efficient and Selective CO ₂ Reduction. Advanced Materials, 2018, 30, e1706617.	11.1	276
122	Tuning Ni-catalyzed CO ₂ hydrogenation selectivity via Ni-ceria support interactions and Ni-Fe bimetallic formation. Applied Catalysis B: Environmental, 2018, 224, 442-450.	10.8	133
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124	Enhanced activity, selectivity and stability of a CuO-ZnO-ZrO ₂ catalyst by adding graphene oxide for CO ₂ hydrogenation to methanol. Chemical Engineering Journal, 2018, 334, 1781-1791.	6.6	129
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126	Characterization of supported Cu-Zn/graphene aerogel catalyst for direct CO ₂ hydrogenation to methanol: Effect of hydrothermal temperature on graphene aerogel synthesis. Catalysis Today, 2018, 314, 154-163.	2.2	27
127	Alumina-Supported CoFe Alloy Catalysts Derived from Layered Double Hydroxide Nanosheets for Efficient Photothermal CO ₂ Hydrogenation to Hydrocarbons. Advanced Materials, 2018, 30, 1704663.	11.1	309
128	Direct Production of Lower Olefins from CO ₂ Conversion via Bifunctional Catalysis. ACS Catalysis, 2018, 8, 571-578.	5.5	382
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131	Atmospheric Pressure and Room Temperature Synthesis of Methanol through Plasma-Catalytic Hydrogenation of CO ₂ . ACS Catalysis, 2018, 8, 90-100.	5.5	206
132	Efficient light-driven CO ₂ hydrogenation on Ru/CeO ₂ catalysts. Catalysis Science and Technology, 2018, 8, 6503-6510.	2.1	18
133	Recent advances in direct catalytic hydrogenation of carbon dioxide to valuable C ₂₊ hydrocarbons. Journal of Materials Chemistry A, 2018, 6, 23244-23262.	5.2	144
134	Synergy between Ceria Oxygen Vacancies and Cu Nanoparticles Facilitates the Catalytic Conversion of CO ₂ to CO under Mild Conditions. ACS Catalysis, 2018, 8, 12056-12066.	5.5	137
135	Enhanced Liquid Fuel Production from CO ₂ Hydrogenation: Catalytic Performance of Bimetallic Catalysts over a Two-Stage Reactor System. ChemistrySelect, 2018, 3, 13705-13711.	0.7	33
136	Catalytic Processes Combining CO ₂ and Alkenes into Value-Added Chemicals. Topics in Organometallic Chemistry, 2018, , 17-38.	0.7	3
137	Fast real time and quantitative gas analysis method for the investigation of the CO ₂ reduction reaction mechanism. Review of Scientific Instruments, 2018, 89, 114102.	0.6	8
138	Low-Temperature Restructuring of CeO ₂ -Supported Ru Nanoparticles Determines Selectivity in CO ₂ Catalytic Reduction. Journal of the American Chemical Society, 2018, 140, 13736-13745.	6.6	210
139	Low-carbon roadmap of chemical production: A case study of ethylene in China. Renewable and Sustainable Energy Reviews, 2018, 97, 580-591.	8.2	60
140	A Highly Porous Copper Electrocatalyst for Carbon Dioxide Reduction. Advanced Materials, 2018, 30, e1803111.	11.1	356
141	Enhanced lattice oxygen reactivity over Fe ₂ O ₃ /Al ₂ O ₃ redox catalyst for chemical-looping dry (CO ₂) reforming of CH ₄ : Synergistic La-Ce effect. Journal of Catalysis, 2018, 368, 38-52.	3.1	65
142	Catalytic Hydrogenation of CO ₂ to Isoparaffins over Fe-Based Multifunctional Catalysts. ACS Catalysis, 2018, 8, 9958-9967.	5.5	141
143	Homogeneously Catalyzed Synthesis of (Higher) Alcohols (C ₁ -C ₄) from the Combination of CO ₂ /CO/H ₂ . Chemie-Ingenieur-Technik, 2018, 90, 1476-1488.	0.4	10
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