Recent trend in thermal catalytic low temperature CO2

Catalysis Today 368, 2-19 DOI: 10.1016/j.cattod.2020.02.017

Citation Report

#	Article	IF	CITATIONS
1	The Role of Alkali and Alkaline Earth Metals in the CO2 Methanation Reaction and the Combined Capture and Methanation of CO2. Catalysts, 2020, 10, 812.	1.6	97
2	Sustainable Carbon as Efficient Support for Metal-Based Nanocatalyst: Applications in Energy Harvesting and Storage. Molecules, 2020, 25, 3123.	1.7	10
3	Development and analysis of a polygenerational smart energy hub for sustainable communities. Energy Conversion and Management, 2020, 226, 113475.	4.4	9
4	Boosting Ni Dispersion on Zeolite-Supported Catalysts for CO ₂ Methanation: The Influence of the Impregnation Solvent. Energy & Fuels, 2020, 34, 14656-14666.	2.5	24
5	Aqueous Miscible Organic LDH Derived Ni-Based Catalysts for Efficient CO2 Methanation. Catalysts, 2020, 10, 1168.	1.6	5
6	Ni mesostructured catalysts obtained from rice husk ashes by microwave-assisted synthesis for CO2 methanation. Journal of CO2 Utilization, 2020, 42, 101328.	3.3	19
7	Ru and Ni—Privileged Metal Combination for Environmental Nanocatalysis. Catalysts, 2020, 10, 992.	1.6	10
8	Zeolite-Supported Ni Catalysts for CO2 Methanation: Effect of Zeolite Structure and Si/Al Ratio. Applied Sciences (Switzerland), 2020, 10, 5131.	1.3	17
9	Promising Catalytic Systems for CO2 Hydrogenation into CH4: A Review of Recent Studies. Processes, 2020, 8, 1646.	1.3	34
10	Three-Dimensional Mesoporous Ni-CeO2 Catalysts with Ni Embedded in the Pore Walls for CO2 Methanation. Catalysts, 2020, 10, 523.	1.6	19
11	Analysis and optimization of carbon supply chains integrated to a power to gas process in Italy. Journal of Cleaner Production, 2020, 269, 122172.	4.6	17
12	Smart recycling of carbon oxides: Current status of methanation reaction. Current Opinion in Green and Sustainable Chemistry, 2020, 26, 100376.	3.2	10
13	CO ₂ hydrogenation over heterogeneous catalysts at atmospheric pressure: from electronic properties to product selectivity. Green Chemistry, 2021, 23, 249-267.	4.6	74
14	Transformation technologies for CO2 utilisation: Current status, challenges and future prospects. Chemical Engineering Journal, 2021, 409, 128138.	6.6	207
15	Promising pathways: The geographic and energetic potential of power-to-x technologies based on regeneratively obtained hydrogen. Renewable and Sustainable Energy Reviews, 2021, 138, 110644.	8.2	48
16	Understanding the opportunities of metal–organic frameworks (MOFs) for CO ₂ capture and gas-phase CO ₂ conversion processes: a comprehensive overview. Reaction Chemistry and Engineering, 2021, 6, 787-814.	1.9	31
17	In-Situ FTIR Study of CO2 Adsorption and Methanation Mechanism Over Bimetallic Catalyst at Low Temperature. Catalysis Letters, 2021, 151, 2894-2905.	1.4	14
18	Barium promoted Ni/Sm ₂ O ₃ catalysts for enhanced CO ₂ methanation. RSC Advances, 2021, 11, 31807-31816.	1.7	6

		CITATION REPORT		
#	Article		IF	CITATIONS
19	Reduction of Non-CO2 Greenhouse Gas Emissions by Catalytic Processes. , 2021, , 1-4	4.		0
20	<i>In situ</i> synthesis of methane using Ag–GDC composite electrodes in a tubula electrolytic cell: new insight into the role of oxide ion removal. Sustainable Energy and 2055-2064.	r solid oxide Fuels, 2021, 5,	2.5	7
21	Ru–CeO ₂ and Ni–CeO ₂ Coated on Open-Cell Metallic F Electrodeposition for the CO ₂ Methanation. Industrial & Engineering Research, 2021, 60, 6730-6741.		1.8	10
22	Non-thermal plasma catalysis for CO ₂ conversion and catalyst design for Journal Physics D: Applied Physics, 2021, 54, 233001.	the process.	1.3	52
23	Porous Biochars Derived from Microalgae Pyrolysis for CO ₂ Adsorption. E Fuels, 2021, 35, 7646-7656.	inergy &	2.5	22
24	Capture and Reuse of Carbon Dioxide (CO2) for a Plastics Circular Economy: A Review 9, 759.	. Processes, 2021,	1.3	41
25	Abiotic Transformation of H ₂ and CO ₂ into Methane on a N Rock. ACS Earth and Space Chemistry, 2021, 5, 1695-1708.	atural Chromitite	1.2	3
26	Electroreduction of Carbon Dioxide into Formate: A Comprehensive Review. ChemElec 8, 3207-3220.	troChem, 2021,	1.7	65
27	Enhancing CO2 Conversion to CO over Plasma-Deposited Composites Based on Mixec Catalysts, 2021, 11, 883.	l Co and Fe Oxides.	1.6	4
28	Recent trends in developments of active metals and heterogenous materials for cataly hydrogenation to renewable methane: A review. Journal of Environmental Chemical En 9, 105460.		3.3	102
29	A First-Principles Study of the Mechanism and Site Requirements for CO ₂ over CeO ₂ -Supported Ru Catalyst. Journal of Physical Chemistry C, 2021,	Methanation 125, 18161-18169.	1.5	10
30	Direct Conversion of Syngas Produced from Steam Reforming of Toluene into Methan Ni/Biochar Catalyst. ACS Sustainable Chemistry and Engineering, 2021, 9, 11212-1122	e over a 22.	3.2	12
31	Highly Active Ce- and Mg-Promoted Ni Catalysts Supported on Cellulose-Derived Carbo Low-Temperature CO ₂ Methanation. Energy & Fuels, 2021, 35, 1723		2.5	17
32	Sol-gel synthesis and application of NiO, NiTiO3 and Ni5TiO4(BO3)2 on open-cell TiO2 methanation. Chemical Engineering Science, 2022, 248, 117151.	foams for CO2	1.9	4
33	Incorporating plasmonic Au-nanoparticles into three-dimensionally ordered macroporc frameworks for efficient photocatalytic CO2 reduction. Chemical Engineering Journal, 132137.		6.6	40
34	Low temperature methanation of CO ₂ over an amorphous cobalt-based of Science, 2021, 12, 3937-3943.	catalyst. Chemical	3.7	30
35	Bimetallic Ni-Based Catalysts for CO2 Methanation: A Review. Nanomaterials, 2021, 1	1, 28.	1.9	95
36	Power to Methane technologies through renewable H ₂ and CO ₂ The case of Sardinia. E3S Web of Conferences, 2021, 312, 08015.	sub> from biogas:	0.2	2

#	Article	IF	CITATIONS
37	One catalyst for two uses: TiOx–C acts as either a photocatalyst or thermocatalyst to promote reductive amination. Reaction Chemistry and Engineering, 0, , .	1.9	0
38	One-Pot Synthesis of Ni0.05Ce0.95O2â^'δ Catalysts with Nanocubes and Nanorods Morphology for CO2 Methanation Reaction and in Operando DRIFT Analysis of Intermediate Species. Processes, 2021, 9, 1899.	1.3	5
39	Alkali and Alkali-Earth Metals Incorporation to Ni/USY Catalysts for CO2 Methanation: The Effect of the Metal Nature. Processes, 2021, 9, 1846.	1.3	2
40	Spectroscopic evidence of surface species during CO2 methanation catalyzed by supported metals: A review. Catalysis Today, 2022, 394-396, 2-12.	2.2	7
41	Highly stable and selective CoxNiyTiO3 for CO2 methanation: Electron transfer and interface interaction. Journal of CO2 Utilization, 2021, 53, 101743.	3.3	12
42	Electrochemistry and energy conversion features of protonic ceramic cells with mixed ionic-electronic electrolytes. Energy and Environmental Science, 2022, 15, 439-465.	15.6	108
43	K-Promoted Ni-Based Catalysts for Gas-Phase CO2 Conversion: Catalysts Design and Process Modelling Validation. Frontiers in Chemistry, 2021, 9, 785571.	1.8	10
44	Elucidating the Role of the Metal Catalyst and Oxide Support in the Ru/CeO ₂ -Catalyzed CO ₂ Methanation Mechanism. Journal of Physical Chemistry C, 2021, 125, 25533-25544.	1.5	17
45	Contemporary thrust and emerging prospects of catalytic systems for substitute natural gas production by CO methanation. Fuel, 2022, 311, 122604.	3.4	11
46	Elucidation of the Roles of Ionic Liquid in CO2 Electrochemical Reduction to Value-Added Chemicals and Fuels. Molecules, 2021, 26, 6962.	1.7	11
47	CO2 Methanation: Nickel–Alumina Catalyst Prepared by Solid-State Combustion. Materials, 2021, 14, 6789.	1.3	8
48	Methanation of CO2 Using MIL-53-Based Catalysts: Ni/MIL-53–Al2O3 versus Ni/MIL-53. Catalysts, 2021, 11, 1412.	1.6	5
49	Technological advances in the transformative utilization of CO2 to value-added products. Journal of Environmental Chemical Engineering, 2022, 10, 106922.	3.3	24
50	A fundamental study of CO2 capture and CH4 production in a rapid cyclic system using nickel-lithium-silicate as a catal-sorbent. Fuel, 2022, 311, 122602.	3.4	15
51	Carbon Dioxide Emissions, Capture, Storage and Utilization: Review of Materials, Processes and Technologies. Progress in Energy and Combustion Science, 2022, 89, 100965.	15.8	200
53	Effect of gas flow rate and discharge volume on CO ₂ methanation with plasma catalysis. Japanese Journal of Applied Physics, 2022, 61, SI1002.	0.8	7
54	Catalytic Production of Renewable Hydrogen for Use in Fuel Cells: A Review Study. Topics in Catalysis, 0, , 1.	1.3	6
55	Mechanochemical Synthesis of Ni–Y/CeO ₂ Catalyst for Nonthermal Plasma Catalytic CO ₂ Methanation. Industrial & Engineering Chemistry Research, 2022, 61, 1666-1674.	1.8	12

#	Article	IF	CITATIONS
56	Interface-dependent activity and selectivity for CO2 hydrogenation on Ni/CeO2 and Ni/CeO.9Sn0.1Ox. Fuel, 2022, 316, 123191.	3.4	12
57	Effect of pore structure on Ni/Al2O3 microsphere catalysts for enhanced CO2 methanation. Fuel, 2022, 315, 123262.	3.4	19
58	Methane synthesis from CO ₂ and H ₂ O using a phosphate-based electrochemical cell at 210–270 °C with oxide-supported Ru catalysts. Sustainable Energy and Fuels, 2022, 6, 1362-1372.	2.5	4
59	Oxygen vacancies in Ru/TiO2 - drivers of low-temperature CO2 methanation assessed by multimodal operando spectroscopy. IScience, 2022, 25, 103886.	1.9	10
60	Integrating oxy-fuel combustion and power-to-gas in the cement industry: A process modeling and simulation study. International Journal of Greenhouse Gas Control, 2022, 114, 103602.	2.3	10
61	One-Pot Synthesis of Hexagonal Mesoporous Silica Confined Ni Based Catalysts with Advanced Co2 Methanation Performance. SSRN Electronic Journal, 0, , .	0.4	0
62	One-Pot Synthesis of Hexagonal Mesoporous Silica Confined Ni Based Catalysts with Advanced Co2 Methanation Performance. SSRN Electronic Journal, 0, , .	0.4	0
63	Ni Promoted Fe-Cao Dual Functional Materials for Calcium Chemical Dual Looping. SSRN Electronic Journal, 0, , .	0.4	0
64	Potential Application of Alkaline Metal Nitrate-Promoted Magnesium-Based Materials in the Integrated CO ₂ Capture and Methanation Process. Industrial & Engineering Chemistry Research, 2022, 61, 2882-2893.	1.8	15
65	Research Progress and Reaction Mechanism of CO2 Methanation over Ni-Based Catalysts at Low Temperature: A Review. Catalysts, 2022, 12, 244.	1.6	31
66	Recent Advances in Catalysis for Methanation of CO2 from Biogas. Catalysts, 2022, 12, 374.	1.6	11
67	The Route from Green H2 Production through Bioethanol Reforming to CO2 Catalytic Conversion: A Review. Energies, 2022, 15, 2383.	1.6	16
68	State-of-art modifications of heterogeneous catalysts for CO2 methanation – Active sites, surface basicity and oxygen defects. Catalysis Today, 2022, 402, 88-103.	2.2	32
70	Highly stable and selective layered Co-Al-O catalysts for low-temperature CO2 methanation. Applied Catalysis B: Environmental, 2022, 310, 121303.	10.8	43
71	Ni promoted Fe-CaO dual functional materials for calcium chemical dual looping. Chemical Engineering Journal, 2022, 441, 135752.	6.6	30
72	Submillisecond Laser Annealing Induced Surface and Subsurface Restructuring of Cu–Ni–Pd Trimetallic Nanocatalyst Promotes Thermal CO ₂ Reduction. ACS Applied Energy Materials, 2021, 4, 14043-14058.	2.5	19
73	Optimizing the oxide support composition in Pr-doped CeO2 towards highly active and selective Ni-based CO2 methanation catalysts. Journal of Energy Chemistry, 2022, 71, 547-561.	7.1	36
74	Recent advances in thermal catalytic CO2 methanation on hydrotalcite-derived catalysts. Fuel, 2022, 321, 124115.	3.4	29

#	Article	IF	CITATIONS
75	Sorption enhanced catalysis for CO2 hydrogenation towards fuels and chemicals with focus on methanation. , 2022, , 95-119.		0
76	One-Pot Synthesis of Hexagonal Mesoporous Silica Confined Ni Based Catalysts with Advanced Co2 Methanation Performance. SSRN Electronic Journal, 0, , .	0.4	0
77	Bibliometric Studies and Impediments to Valorization of Dry Reforming of Methane for Hydrogen Production. SSRN Electronic Journal, 0, , .	0.4	0
78	Enhancing Zn-Co2 Battery with a Facile Pd Doped Perovskite Cathode for Efficient Co2 to Co Conversion. SSRN Electronic Journal, 0, , .	0.4	0
79	Gas-Permeable Iron-Doped Ceria Shell on Rh Nanoparticles with High Activity and Durability. Jacs Au, 2022, 2, 1115-1122.	3.6	12
80	Characteristics of Co–Ca catalyzed coal hydrogasification in a mixture of H2 and CO2 atmosphere. Fuel, 2022, 324, 124486.	3.4	7
81	A review on the valorization of CO2. Focusing on the thermodynamics and catalyst design studies of the direct synthesis of dimethyl ether. Fuel Processing Technology, 2022, 233, 107310.	3.7	36
82	Support-induced modifications on the CO2 hydrogenation performance of Ni/CeO2: The effect of ZnO doping on CeO2 nanorods. Journal of CO2 Utilization, 2022, 61, 102057.	3.3	8
83	Design of Full-Temperature-Range RWGS Catalysts: Impact of Alkali Promoters on Ni/CeO ₂ . Energy & Fuels, 2022, 36, 6362-6373.	2.5	7
84	Reduction of Non-CO2 Greenhouse Gas Emissions by Catalytic Processes. , 2022, , 1759-1802.		0
85	Carbon dioxide methanation over Ni catalysts prepared by reduction of Ni Mg3‒Al hydrotalcite-like compounds: Influence of Ni:Mg molar ratio. International Journal of Hydrogen Energy, 2022, 47, 22442-22453.	3.8	8
86	CO ₂ methanation reaction pathways over unpromoted and NaNO ₃ -promoted Ru/Al ₂ O ₃ catalysts. Catalysis Science and Technology, 2022, 12, 4637-4652.	2.1	7
87	Co2 Methanation Over the Ni-Based Catalysts Supported on Nano-Ceo2 with Varied Morphologies. SSRN Electronic Journal, 0, , .	0.4	1
88	Effect of Fe and La on the Performance of NiMgAl HT-Derived Catalysts in the Methanation of CO ₂ and Biogas. Industrial & Engineering Chemistry Research, 2022, 61, 10511-10521.	1.8	9
89	High-performance Ni/OMA catalyst achieved by solid-state grinding – A case study of CO methanation. Catalysis Today, 2022, , .	2.2	0
90	The Impact of Support Material of Cobaltâ€Based Catalysts Prepared by Double Flame Spray Pyrolysis on CO ₂ Methanation Dynamics. ChemCatChem, 2022, 14, .	1.8	11
91	Novel Adsorption–Reaction Process for Biomethane Purification/Production and Renewable Energy Storage. ACS Sustainable Chemistry and Engineering, 2022, 10, 7833-7851.	3.2	7
92	Iron promoted MOF-derived carbon encapsulated NiFe alloy nanoparticles core-shell catalyst for CO2 methanation. Journal of CO2 Utilization, 2022, 62, 102093.	3.3	17

#	Article	IF	CITATIONS
93	Recent Advances on CO2 Mitigation Technologies: On the Role of Hydrogenation Route via Green H2. Energies, 2022, 15, 4790.	1.6	12
94	Alkaline Earth Metal-Induced Hydrogenation of the CaO-Captured CO ₂ to Methane at Room Temperature. Industrial & Engineering Chemistry Research, 2022, 61, 10124-10132.	1.8	4
95	System perspective on cleaner technologies for renewable methane production and utilisation towards carbon neutrality: Principles, techno-economics, and carbon footprints. Fuel, 2022, 327, 125130.	3.4	19
96	Sponge-like CoNi Catalysts Synthesized by Combustion of Reactive Solutions: Stability and Performance for CO2 Hydrogenation. Materials, 2022, 15, 5129.	1.3	7
97	Techno-Economic Analysis for Direct Processing of Wet Solid Residues Originated from Grain and Inedible Plant Wastes. Bioenergy Research, 0, , .	2.2	0
98	CO2 hydrogenation to hydrocarbons over Fe/BZY catalysts. ChemCatChem, 0, , .	1.8	1
99	Review on the Status of the Research on Power-to-Gas Experimental Activities. Energies, 2022, 15, 5942.	1.6	3
100	Highly active Ni/CeO2/SiO2 catalyst for low-temperature CO2 methanation: Synergistic effect of small Ni particles and optimal amount of CeO2. Fuel Processing Technology, 2022, 236, 107418.	3.7	18
101	Kinetic modeling and reactor design of the direct synthesis of dimethyl ether for CO2 valorization. A review. Fuel, 2022, 327, 125148.	3.4	13
102	CO2 methanation over the Ni-based catalysts supported on nano-CeO2 with varied morphologies. Fuel, 2023, 331, 125755.	3.4	28
103	Experimental optimization analysis on operating conditions of CO removal process from hydrogen-rich reformate. International Journal of Hydrogen Energy, 2023, 48, 25216-25230.	3.8	1
104	Synergistic effect of double solvent and accelerator on efficient synthesis of nickel phyllosilicate for CO2 methanation. Journal of the Energy Institute, 2022, 105, 184-191.	2.7	2
105	Effect of Concentration of Nickel Precursor on the Synthesis of Ni Phyllosilicate for Co2 Methanation: The Promotion of Supersaturation. SSRN Electronic Journal, 0, , .	0.4	0
106	Autothermal CO ₂ hydrogenation reactor for renewable natural gas generation: experimental proof-of-concept. Reaction Chemistry and Engineering, 2022, 7, 2285-2297.	1.9	2
107	High-temperature Co-electrolysis of CO2/H2O and direct methanation over Co-impregnated SOEC. Bimetallic synergy between Co and Ni. International Journal of Hydrogen Energy, 2022, 47, 35017-35037.	3.8	7
108	A review of the indispensable role of oxygen vacancies for enhanced CO2 methanation activity over CeO2-based catalysts: Uncovering, influencing, and tuning strategies. International Journal of Hydrogen Energy, 2023, 48, 24663-24696.	3.8	24
109	Catalysis of Alloys: Classification, Principles, and Design for a Variety of Materials and Reactions. Chemical Reviews, 2023, 123, 5859-5947.	23.0	63
110	Comparative Study on Electrochemical and Thermochemical Pathways for Carbonaceous Fuel Generation Using Sunlight and Air. ACS Sustainable Chemistry and Engineering, 2022, 10, 13945-13954.	3.2	2

#	Article	IF	CITATIONS
111	Solvent-Free Synthesis of Nickel Nanoparticles as Catalysts for CO2 Hydrogenation to Methane. Catalysts, 2022, 12, 1274.	1.6	1
112	Recent Application of Core-Shell Nanostructured Catalysts for CO2 Thermocatalytic Conversion Processes. Nanomaterials, 2022, 12, 3877.	1.9	4
113	Enhancing Zn–CO2 battery with a facile Pd doped perovskite cathode for efficient CO2 to CO conversion. Energy, 2023, 263, 125688.	4.5	4
114	One-pot synthesis of hexagonal mesoporous silica confined Ni based catalysts with advanced CO2 methanation performance. Fuel, 2023, 333, 126411.	3.4	7
115	Effect of concentration of nickel precursor on the synthesis of Ni phyllosilicate for CO2 methanation: The promotion of supersaturation. Fuel, 2023, 333, 126440.	3.4	3
116	Progress in reaction mechanisms and catalyst development of ceria-based catalysts for low-temperature CO ₂ methanation. Green Chemistry, 2023, 25, 130-152.	4.6	17
117	Recent advances in reducible metal oxide catalysts for C1 reactions. Catalysis Science and Technology, 0, , .	2.1	1
118	MSW pyrolysis volatiles' reforming by incineration fly ash for both pyrolysis products upgrading and fly ash stabilization. Chemosphere, 2023, 313, 137536.	4.2	4
119	Recent Progress of Hydrogenation and Hydrogenolysis Catalysts Derived from Layered Double Hydroxides. Catalysts, 2022, 12, 1484.	1.6	2
120	A Review on Green Hydrogen Valorization by Heterogeneous Catalytic Hydrogenation of Captured CO2 into Value-Added Products. Catalysts, 2022, 12, 1555.	1.6	3
121	CO2 Hydrogenation to Renewable Methane on Ni/Ru Modified ZSM-5 Zeolites: The Role of the Preparation Procedure. Catalysts, 2022, 12, 1648.	1.6	1
122	Machine learning analysis of catalytic CO2 methanation. International Journal of Hydrogen Energy, 2023, 48, 24904-24914.	3.8	7
123	Perspectives on the Sustainable Steel Production Process: A Critical Review of the Carbon Dioxide (CO2) to Methane (CH4) Conversion Process. Profiles in Operations Research, 2023, , 361-391.	0.3	2
124	Methanation reactions for chemical storage and purification of hydrogen: Overview and structure-reactivity correlations in supported metals. International Journal of Hydrogen Energy, 2023, 48, 24915-24935.	3.8	5
125	CO2 methanation over Ni-Al LDH-derived catalyst with variable Ni/Al ratio. Journal of CO2 Utilization, 2023, 68, 102381.	3.3	11
126	One-step upgrading of real flue gas streams into syngas over alumina-supported catalysts. Fuel, 2023, 338, 127324.	3.4	2
127	Coal char supported Ni catalysts prepared for CO2 methanation by hydrogenation. International Journal of Hydrogen Energy, 2023, 48, 14608-14621.	3.8	5
128	The Capture and Catalytic Conversion of <scp>CO₂</scp> by Dendritic Mesoporous Silicaâ€Based Nanoparticles. Energy and Environmental Materials, 2024, 7, .	7.3	3

#	Article	IF	CITATIONS
129	Recent Advances on Fine-Tuning Engineering Strategies of CeO2-Based Nanostructured Catalysts Exemplified by CO2 Hydrogenation Processes. Catalysts, 2023, 13, 275.	1.6	6
130	Methanation of CO/CO2 for power to methane process: Fundamentals, status, and perspectives. Journal of Energy Chemistry, 2023, 80, 182-206.	7.1	13
131	Performance of Hydroxyapatite-Supported Catalysts for Methane Production Via CO2 Hydrogenation on Semi-Pilot Scale. Waste and Biomass Valorization, 0, , .	1.8	0
132	Toward Carbon Monoxide Methanation at Mild Conditions on Dual-Site Catalysts. Journal of the American Chemical Society, 0, , .	6.6	3
133	Direct flue gas hydrogenation to methane over hydroxyapatite-supported nickel catalyst. Fuel Processing Technology, 2023, 245, 107750.	3.7	2
134	Roadmap to the sustainable synthesis of polymers: From the perspective of CO2 upcycling. Progress in Materials Science, 2023, 135, 101103.	16.0	5
135	A short overview of Power-to-Methane: Coupling preparation of feed gas with CO2 methanation. Chemical Engineering Science, 2023, 274, 118692.	1.9	3
136	Combining Theoretical and Experimental Methods to Probe Confinement within Microporous Solid Acid Catalysts for Alcohol Dehydration. ACS Catalysis, 2023, 13, 5955-5968.	5.5	4
137	RuCu bimetallic catalyst on N-doped mesoporous carbon for high-performance CO2 methanation. Carbon Capture Science & Technology, 2023, 6, 100100.	4.9	2
138	CO ₂ Methanation over Cobalt Nanoparticles Embedded in ZIF‣–Derived Porous Carbon. ChemCatChem, 2023, 15, .	1.8	11
139	Reactive Separations of CO/CO ₂ mixtures over Ru–Co Single Atom Alloys. ACS Catalysis, 2023, 13, 2449-2461.	5.5	3
140	Recent progress and perspective on integrated CO2 capture and utilization. Current Opinion in Green and Sustainable Chemistry, 2023, 40, 100771.	3.2	6
141	Enhanced low-temperature CO2 methanation over Ni/ ZrO2-Al2O3 catalyst: Effect of Al addition on catalytic performance and reaction mechanism. Journal of CO2 Utilization, 2023, 69, 102415.	3.3	14
142	Facile and efficient synthesis of ordered mesoporous MIL-53(Al)-derived Ni catalysts with improved activity in CO2 methanation. Journal of Environmental Chemical Engineering, 2023, 11, 109456.	3.3	8
143	Wood Ash Filter Material Characterization as a Carrier Material for <i>Ex-Situ</i> Biomethanation of Biogas in Biotrickling Filter Reactors. Environmental and Climate Technologies, 2023, 27, 92-102.	0.5	1
144	CeO2-supported Fe, Co and Ni toward CO2 hydrogenation: Tuning catalytic performance via metal-support interaction. Journal of Rare Earths, 2023, 41, 926-932.	2.5	6
145	CO2 methanation enhanced with a cyclic SERP process using a commercial Ni-based catalyst mixed with 3A zeolite as adsorbent. Chemical Engineering Journal, 2023, 461, 141897.	6.6	6
146	Atomic Structural Origin of the High Methanol Selectivity over In ₂ O ₃ –Metal Interfaces: Metal–Support Interactions and the Formation of a InO _{<i>x</i>} Overlayer in Ru/In ₂ O ₃ Catalysts during CO ₂ Hydrogenation. ACS Catalysis, 2023. 13. 3187-3200.	5.5	26

#	Article	IF	CITATIONS
147	CO2 Methanation over Nickel Catalysts: Support Effects Investigated through Specific Activity and Operando IR Spectroscopy Measurements. Catalysts, 2023, 13, 448.	1.6	9
148	Spatially Formed Tenacious Nickel-Supported Bimetallic Catalysts for CO2 Methanation under Conventional and Induction Heating. International Journal of Molecular Sciences, 2023, 24, 4729.	1.8	5
149	Enhanced Low-Temperature CO ₂ Methanation over Bimetallic Ni–Ru Catalysts. Industrial & Engineering Chemistry Research, 2023, 62, 4344-4355.	1.8	7
150	Highly Dispersed Antisintering Cu Catalyst from Cu–Al Spinel Oxide Obtained by Using Surface Solid Reaction for Reverse Water–Gas Shift. Industrial & Engineering Chemistry Research, 2023, 62, 5533-5542.	1.8	2
151	Optical emission spectroscopy study in CO ₂ methanation with plasma. Japanese Journal of Applied Physics, 2023, 62, SI1008.	0.8	3
152	CO2 Methanation: Solvent-Free Synthesis of Nickel-Containing Catalysts from Complexes with Ethylenediamine. Materials, 2023, 16, 2616.	1.3	Ο
153	Heterogeneous Electrocatalysis of Carbon Dioxide to Methane. Methane, 2023, 2, 148-175.	0.8	3
154	Soft-templated NiO–CeO2 mixed oxides for biogas upgrading by direct CO2 methanation. International Journal of Hydrogen Energy, 2023, , .	3.8	0
155	Photothermal catalysis in CO2 reduction reaction: Principles, materials and applications. New Carbon Materials, 2023, 38, 283-300.	2.9	3
159	Understanding the complexity in bridging thermal and electrocatalytic methanation of CO ₂ . Chemical Society Reviews, 2023, 52, 3627-3662.	18.7	15
190	Recent Trends in Plasma-Assisted CO2 Methanation: A Critical Review of Recent Studies. Plasma Chemistry and Plasma Processing, 2023, 43, 1335-1383.	1.1	2