Highly stable ytterbium promoted Ni/Î³-Al2O3 catalysts
methane

Applied Catalysis B: Environmental

119-120, 217-226

DOI: 10.1016/j.apcatb.2012.02.039

#	Article	IF	Citations
1	Mesoporous nanocrystalline ceriaâ€“zirconia solid solutions supported nickel based catalysts for CO2 reforming of CH4. International Journal of Hydrogen Energy, 2012, 37, 18001-18020.	3.8	79
2	Progress in Solid Oxide Fuel Cells with Nickel-Based Anodes Operating on Methane and Related Fuels. Chemical Reviews, 2013, 113, 8104-8151.	23.0	420
3	An investigation on the role of ytterbium in ytterbium promoted Î³-alumina-supported nickel catalysts for dry reforming of methane. International Journal of Hydrogen Energy, 2013, 38, 14223-14231.	3.8	13
4	Metalâ€“support interface of a novel Niâ€“CeO2 catalyst for dry reforming of methane. Catalysis Communications, 2013, 31, 25-31.	1.6	86
5	Catalytic behavior and surface species investigation over Î³-Al2O3 in dimethyl ether hydrolysis. Applied Catalysis A: General, 2013, 460-461, 99-105.	2.2	13
6	Co/CexZr1â^'xO2 solid-solution catalysts with cubic fluorite structure for carbon dioxide reforming of methane. Applied Catalysis B: Environmental, 2013, 136-137, 308-316.	10.8	58
7	Highly stable and active catalyst for hydrogen production from biogas. Journal of Power Sources, 2013, 238, 81-86.	4.0	58
8	Low metal content Co and Ni alumina supported catalysts for the CO2 reforming of methane. International Journal of Hydrogen Energy, 2013, 38, 2230-2239.	3.8	84
9	Inverse NiAl₂O₄ on LaAlO₃â€“Al₂O₃: Unique Catalytic Structure for Stable CO₂ Reforming of Methane. Journal of Physical Chemistry C, 2013, 117, 8120-8130.	1.5	171
10	Structure, surface morphology and electrical properties of evaporated Ni thin films: Effect of substrates, thickness and Cu underlayer. Thin Solid Films, 2014, 562, 229-238.	0.8	12
11	Effects of Yb2O3 promotor on the performance of Ni/SiC catalysts in CO2 reforming of CH4. Journal of Fuel Chemistry and Technology, 2014, 42, 719-726.	0.9	9
12	Catalytic performance of activated carbon supported cobalt catalyst for CO 2 reforming of CH 4. Journal of Colloid and Interface Science, 2014, 433, 149-155.	5.0	66
13	Y2O3-promoted NiO/SBA-15 catalysts highly active for CO2/CH4 reforming. International Journal of Hydrogen Energy, 2014, 39, 10927-10940.	3.8	95
14	The effect of impregnation strategy on structural characters and CO2 methanation properties over MgO modified Ni/SiO2 catalysts. Catalysis Communications, 2014, 54, 55-60.	1.6	132
15	Modifying alumina with CaO or MgO in supported Ni and Niâ€“Co catalysts and its effect on dry reforming of CH4. Journal of CO2 Utilization, 2015, 10, 67-77.	3.3	89
16	Influence of calcination temperature on textural and structural properties, reducibility, and catalytic behavior of mesoporous Î³-alumina-supported Niâ€“Mg oxides by one-pot template-free route. Journal of Catalysis, 2015, 329, 151-166.	3.1	63
17	Alumina coated nickel nanoparticles as a highly active catalyst for dry reforming of methane. Applied Catalysis B: Environmental, 2015, 179, 122-127.	10.8	108
18	Influence of Zirconia Phase on the Performance of Ni/ZrO₂ for Carbon Dioxide Reforming of Methane. ACS Symposium Series, 2015, , 135-153.	0.5	9

#	Article	IF	Citations
19	Production of greenhouse gas free hydrogen by thermocatalytic decomposition of methane â€“ A review. Renewable and Sustainable Energy Reviews, 2015, 44, 221-256.	8.2	306
20	Understanding the role of lanthanide promoters on the structureâ€“activity of nanosized Ni/Î³-Al2O3 catalysts in carbon dioxide reforming of methane. Applied Catalysis A: General, 2015, 492, 160-168.	2.2	47
21	Role of MgO over Î³-Al2O3-supported Pd catalysts for carbon dioxide reforming of methane. Applied Catalysis B: Environmental, 2015, 170-171, 43-52.	10.8	63
22	Dry reforming of methane: Influence of process parametersâ€"A review. Renewable and Sustainable Energy Reviews, 2015, 45, 710-744.	8.2	649
23	Steam reforming of methane over Ni/SiO2 catalyst with enhanced coke resistance at low steam to methane ratio. Catalysis Today, 2015, 256, 130-136.	2.2	109
24	CO2 reforming of CH4 over efficient bimetallic Coâ€“Zr/AC catalyst for H2 production. International Journal of Hydrogen Energy, 2015, 40, 12868-12879.	3.8	39
25	Nickel on alumina catalysts for the production of hydrogen rich mixtures via the biogas dry reforming reaction: Influence of the synthesis method. International Journal of Hydrogen Energy, 2015, 40, 9183-9200.	3.8	181
26	Influence of reduction temperature on properties for pre-reforming of liquefied petroleum gas over mesoporous Î³-alumina supported Niâ€“MgO catalyst by one-pot template-free route. International Journal of Hydrogen Energy, 2015, 40, 16202-16214.	3.8	8
27	Sustainable technologies for the reclamation of greenhouse gas CO2. Journal of Cleaner Production, 2015, 103, 784-792.	4.6	71
28	The promotion effect of hydrogen spillover on CH4 reforming with CO2 over Rh/MCF catalysts. Applied Catalysis B: Environmental, 2015, 164, 168-175.	10.8	43
29	The catalytic methanation of coke oven gas over Ni-Ce/Al2O3 catalysts prepared by microwave heating: Effect of amorphous NiO formation. Applied Catalysis B: Environmental, 2015, 164, 18-30.	10.8	124
30	Ni-Sm/SiC catalysts prepared by hydrothermal method for carbon dioxide reforming of methane. Journal of Fuel Chemistry and Technology, 2016, 44, 1473-1478.	0.9	6
31	Nickel catalyst with outstanding activity in the DRM reaction prepared by high temperature calcination treatment. International Journal of Hydrogen Energy, 2016, 41, 8459-8469.	3.8	22
32	Role of poly(N-vinyl-2-pyrrolidone) in Ni dispersion for highly-dispersed Ni/SBA-15 catalyst and its catalytic performance in carbon dioxide reforming of methane. Applied Catalysis A: General, 2016, 524, 94-104.	2.2	27
33	Preparation of Ceriumâ€Doped Mesoporous Î³â€Alumina Supported Nickel Catalysts for Preâ€“reforming of Liquefied Petroleum Gas under Low Steam to Carbon Ratio. ChemistrySelect, 2016, 1, 1580-1587.	0.7	4
34	Alumina supported Ni and Co catalysts modified by Y2O3 via different impregnation strategies: Comparative analysis on structural properties and catalytic performance in methane reforming with CO2. International Journal of Hydrogen Energy, 2016, 41, 14732-14746.	3.8	38
35	Influence of Lanthanide Promoters on Ni/SBA-15 Catalysts for Syngas Production by Methane Dry Reforming. Procedia Engineering, 2016, 148, 1388-1395.	1.2	51
36	Promotional effects of rare earth elements (Sc, Y, Ce, and Pr) on NiMgAl catalysts for dry reforming of methane. RSC Advances, 2016, 6, 112215-112225.	1.7	44

#	Article	IF	Citations
37	Syngas production with dry reforming of methane over Ni/ZSM-5 catalysts. Journal of Natural Gas Science and Engineering, 2016, 33, 657-665.	2.1	43
38	Highly Selective Hydrogenation of Biomass-Derived Furfural into Furfuryl Alcohol Using a Novel Magnetic Nanoparticles Catalyst. Energy & Fuels, 2016, 30, 2216-2226.	2.5	100
39	Structure-activity relationships of nanoscale MnOx/CeO2 heterostructured catalysts for selective oxidation of amines under eco-friendly conditions. Applied Catalysis B: Environmental, 2016, 185, 213-224.	10.8	114
40	SiO₂-stabilized Ni/t-ZrO₂ catalysts with ordered mesopores: one-pot synthesis and their superior catalytic performance in CO methanation. Catalysis Science and Technology, 2016, 6, 3529-3543.	2.1	20
41	Influence of nickel content on structural and surface properties, reducibility and catalytic behavior of mesoporous Î³-alumina-supported Niâ€"Mg oxides for pre-reforming of liquefied petroleum gas. Catalysis Science and Technology, 2016, 6, 3049-3063.	2.1	16
42	Niâ€"Al bimetallic catalysts for preparation of multiwalled carbon nanotubes from polypropylene: Influence of the ratio of Ni/Al. Applied Catalysis B: Environmental, 2016, 181, 769-778.	10.8	54
44	Bimetallic Cu-Ni catalysts supported on MCM-41 and Ti-MCM-41 porous materials for hydrodeoxygenation of lignin model compound into transportation fuels. Fuel Processing Technology, 2017, 162, 87-97.	3.7	93
45	Synergistic Effect of CeO₂ in CH₄/CO₂ Dry Reforming Reaction over Stable <i>x</i>CeO₂ <i>y</i>Ni/MCM-22 Catalysts. Industrial & Engineering Chemistry Research, 2017, 56, 7445-7453.	1.8	23
46	Effect of a Swelling Agent on the Performance of Ni/Porous Silica Catalyst for CH₄â€"CO₂ Reforming. Langmuir, 2017, 33, 10632-10644.	1.6	30
47	A sintering and carbon-resistant Ni-SBA-15 catalyst prepared by solid-state grinding method for dry reforming of methane. Journal of CO2 Utilization, 2017, 17, 10-19.	3.3	117
48	CH4/CO2 reforming over highly active catalysts that is Ce-promoted Ni supported on KIT-1 with wormlike pore structure. Russian Journal of Applied Chemistry, 2017, 90, 801-810.	0.1	0
49	Smart designing of metal-support interface for imperishable dry reforming catalyst. Applied Catalysis A: General, 2018, 556, 137-154.	2.2	53
50	Bimetallic Ni-Co/SBA-15 catalysts prepared by urea co-precipitation for dry reforming of methane. Applied Catalysis A: General, 2018, 554, 95-104.	2.2	113
51	Progress in Ni-based anode materials for direct hydrocarbon solid oxide fuel cells. Journal of Materials Science, 2018, 53, 8747-8765.	1.7	42
52	Regeneration study of Ni/hydroxyapatite spent catalyst from dry reforming. Catalysis Today, 2018, 310, 107-115.	2.2	57
53	An overview on conversion technologies to produce value added products from CH4 and CO2 as major biogas constituents. Renewable and Sustainable Energy Reviews, 2018, 98, 56-63.	8.2	74
54	Ni stabilised on inorganic complex structures: superior catalysts for chemical CO2 recycling via dry reforming of methane. Applied Catalysis B: Environmental, 2018, 236, 458-465.	10.8	141
55	A review of recent developments in hydrogen production via biogas dry reforming. Energy Conversion and Management, 2018, 171, 133-155.	4.4	270

#	Article	IF	Citations
56	A review of CH4CO2 reforming to synthesis gas over Ni-based catalysts in recent years (2010â€"2017). International Journal of Hydrogen Energy, 2018, 43, 15030-15054.	3.8	207
57	Hydrogen production from CH4 dry reforming over Sc promoted Ni / MCM-41. International Journal of Hydrogen Energy, 2019, 44, 20770-20781.	3.8	40
58	Methane decomposition and carbon deposition over Ni/ZrO2 catalysts: Comparison of amorphous, tetragonal, and monoclinic zirconia phase. International Journal of Hydrogen Energy, 2019, 44, 17887-17899.	3.8	51
59	Controlling the Reduction Extent for Metal Catalysts. ChemistrySelect, 2019, 4, 5496-5502.	0.7	1
60	Studies on the adsorption of phosphate using lanthanide functionalized KIT- 6. Microporous and Mesoporous Materials, 2019, 286, 77-83.	2.2	11
61	Treatment of phenol by catalytic wet air oxidation: a comparative study of copper and nickel supported on Î³-alumina, ceria and Î³-aluminaâ€"ceria. RSC Advances, 2019, 9, 8463-8479.	1.7	15
62	Effect of support oxygen storage capacity on the catalytic performance of Rh nanoparticles for CO2 reforming of methane. Applied Catalysis B: Environmental, 2019, 243, 490-501.	10.8	178
63	Dry reforming of methane using various catalysts in the process: review. Biomass Conversion and Biorefinery, 2020, 10, 567-587.	2.9	58
64	Relationship Between the Pore Structure of Mesoporous Silica Supports and the Activity of Nickel Nanocatalysts in the CO2 Reforming of Methane. Catalysts, 2020, 10, 51.	1.6	42
65	An investigation of the simultaneous presence of Cu and Zn in different Ni/Al2O3 catalyst loads using Taguchi design of experiment in steam reforming of methane. International Journal of Hydrogen Energy, 2020, 45, 691-702.	3.8	33
66	Effect of spinel inversion and metal-support interaction on the site activity of Mg-Al-Ox supported Co catalyst for CO2 reforming of CH4. Journal of CO2 Utilization, 2020, 37, 180-187.	3.3	20
67	Comprehensive study on the effect of magnesium loading over nickel-ordered mesoporous alumina for dry reforming of methane. Energy Conversion and Management, 2020, 225, 113470.	4.4	38
68	Carbon Dioxide Reforming of Methane over Mesoporous Alumina Supported Ni(Co), Ni(Rh) Bimetallic, and Ni(CoRh) Trimetallic Catalysts: Role of Nanoalloying in Improving the Stability and Nature of Coking. Energy & Fuels, 2020, 34, 16433-16444.	2.5	21
69	Catalytic Performance of Lanthanum Promoted Ni/ZrO2 for Carbon Dioxide Reforming of Methane. Processes, 2020, 8, 1502.	1.3	20
70	Promotional effect of magnesium oxide for a stable nickel-based catalyst in dry reforming of methane. Scientific Reports, 2020, 10, 13861.	1.6	42
71	Enhanced Coke Resistance and Antioxidation Stability of Î³â€Aluminaâ€Supported Nickelâ€Based Catalysts via Decoration with Lanthanum for Propane Preâ€Reforming. ChemistrySelect, 2020, 5, 2482-2488.	0.7	3
72	Valuation of catalytic activity of nickelâ€" <scp>zirconiaâ€based</scp> catalysts using lanthanum coâ€support for dry reforming of methane. International Journal of Energy Research, 2021, 45, 3899-3912.	2.2	21
73	Role of Mixed Oxides in Hydrogen Production through the Dry Reforming of Methane over Nickel Catalysts Supported on Modified Î³-Al2O3. Processes, 2021, 9, 157.	1.3	22

#	Article	IF	Citations
74	Promoting dry reforming of methane <i>via</i> bifunctional NiO/dolomite catalysts for production of hydrogen-rich syngas. RSC Advances, 2021, 11, 6667-6681.	1.7	11
75	An insight into the effects of synthesis methods on catalysts properties for methane reforming. Journal of Environmental Chemical Engineering, 2021, 9, 105052.	3.3	25
76	Screening Transition Metals (Mn, Fe, Co, and Cu) Promoted Ni-Based CO₂ Methanation Bimetal Catalysts with Advanced Low-Temperature Activities. Industrial & Engineering Chemistry Research, 2021, 60, 8056-8072.	1.8	24
77	Single-Pass Conversion of CO₂/CH₄ Mixtures over the Low-Loading Ru/Î³-Al₂O₃ for Direct Biogas Upgrading into Renewable Natural Gas. Energy & Fuels, 2021, 35, 10062-10074.	2.5	9
78	Lanthanide oxide modified nickel supported on mesoporous silica catalysts for dry reforming of methane. International Journal of Hydrogen Energy, 2021, 46, 31608-31622.	3.8	27
79	Ceria-modified nickel supported on porous silica as highly active and stable catalyst for dry reforming of methane. Fuel, 2021, 301, 121027.	3.4	23
80	A review of recent efforts to promote dry reforming of methane (DRM) to syngas production via bimetallic catalyst formulations. Applied Catalysis B: Environmental, 2021, 296, 120210.	10.8	182
81	Single-step production of hydrogen-rich syngas from toluene using multifunctional Ni-dolomite catalysts. Chemical Engineering Journal, 2021, 425, 131522.	6.6	17
82	Catalysts for CO₂ reforming of CH₄: a review. Journal of Materials Chemistry A, 2021, 9, 12495-12520.	5.2	93
83	Support Induced Effects on the Ir Nanoparticles Activity, Selectivity and Stability Performance under CO2 Reforming of Methane. Nanomaterials, 2021, 11, 2880.	1.9	23
84	Lanthanoid-containing Ni-based catalysts for dry reforming of methane: A review. International Journal of Hydrogen Energy, 2022, 47, 4489-4535.	3.8	39
85	Application of Metal-Based Nanocatalysts for Addressing Environmental Issues and Energy Demand. Catalysts, 2021, 11, 1521.	1.6	0
86	Methanation of CO₂ over <i>Y</i>b-Promoted Ni/Al₂O₃ Catalysts Prepared by Solution Combustion. Energy & Fuels, 2022, 36, 5360-5374.	2.5	4
87	Barium-Promoted Yttriaâ€“Zirconia-Supported Ni Catalyst for Hydrogen Production via the Dry Reforming of Methane: Role of Barium in the Phase Stabilization of Cubic ZrO₂. ACS Omega, 2022, 7, 16468-16483.	1.6	25
88	Controllable synthesis of xPtâ€“yNiO/MgOâ€“PWAC nanoparticles and high-efficiency conversion for CO2/CH4 reforming reaction. Journal of CO2 Utilization, 2022, 61, 102063.	3.3	4
89	Dry (CO2) reforming of methane over zirconium promoted Ni-MgO mixed oxide catalyst: Effect of Zr addition. Journal of CO2 Utilization, 2022, 62, 102082.	3.3	18
90	Dysprosium promotion on Co/Al2O3 catalysts towards enhanced hydrogen generation from methane dry reforming. Fuel, 2022, 324, 124818.	3.4	27
91	Cost Effective Wo3-Î³-Al2o3 Supported Nickel Catalyst System for Hydrogen Gas Production Through Dry Reforming of Methane. SSRN Electronic Journal, 0, , .	0.4	0

#	Article	IF	Citations
92	Toward syngas production from simulated biogas dry reforming: Promotional effect of calcium on cobalt-based catalysts performance. Fuel, 2022, 326, 125106.	3.4	21
93	Autothermal CO₂ hydrogenation reactor for renewable natural gas generation: experimental proof-of-concept. Reaction Chemistry and Engineering, 2022, 7, 2285-2297.	1.9	2
94	Effect of Modified Alumina Support on the Performance of Ni-Based Catalysts for CO2 Reforming of Methane. Catalysts, 2022, 12, 1066.	1.6	13
95	Influence of synthesis routes on the performance of Ni nano-sized catalyst supported on CeO₂-Al₂O₃ in the dry reforming of methane. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2022, 13, 035011.	0.7	6
96	Syngas production from methane dry reforming via optimization of tungsten trioxide-promoted mesoporous Î³-alumina supported nickel catalyst. International Journal of Hydrogen Energy, 2023, 48, 26492-26505.	3.8	12
97	Carbon Dioxide Reforming of Methane Over Co/Al2O3 Catalysts Doped with Manganese. Topics in Catalysis, 2023, 66, 247-261.	1.3	4
98	Enhancement of syngas production from dry reforming of methane over Co/Al2O3 catalyst: Insight into the promotional effects of europium and neodymium. Journal of the Energy Institute, 2022, 105, 314-322.	2.7	11
99	The role of catalyst synthesis on the enhancement of nickel praseodymium (III) oxide for the conversion of greenhouse gases to syngas. Clean Technologies and Environmental Policy, 0, , .	2.1	0
100	Comparative studies on promotional effect of Pr6O11, Nd2O3 and Sm2O3 on Niâ€"SiO2 for pressurized carbon dioxide reforming of methane. Journal of Rare Earths, 2023, 41, 830-838.	2.5	3
101	Insight into the role of material basicity in the coke formation and performance of Ni/Al2O3 catalyst for the simulated- biogas dry reforming. Journal of the Energy Institute, 2023, 108, 101252.	2.7	6
102	Unraveling the effects of Ce/Zr molar ratio in mesoporous CexZr1âˆ'xO2 on the performance of dry reforming of methane over the supported Ni catalysts. Chemical Engineering Research and Design, 2023, 193, 626-640.	2.7	1