

patrick Da Costa

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2434292/publications.pdf>

Version: 2024-02-01

223
papers

7,088
citations

50276

46
h-index

91884

69
g-index

228
all docs

228
docs citations

228
times ranked

5777
citing authors

#	ARTICLE	IF	CITATIONS
1	Photocatalytic degradation of methyl green dye in aqueous solution over natural clay-supported ZnO–TiO ₂ catalysts. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016, 315, 25-33.	3.9	169
2	La-promoted Ni-hydrotalcite-derived catalysts for dry reforming of methane at low temperatures. <i>Fuel</i> , 2016, 182, 8-16.	6.4	154
3	Ni-containing Ce-promoted hydrotalcite derived materials as catalysts for methane reforming with carbon dioxide at low temperature – On the effect of basicity. <i>Catalysis Today</i> , 2015, 257, 59-65.	4.4	153
4	Novel Ni-La-hydrotalcite derived catalysts for CO ₂ methanation. <i>Catalysis Communications</i> , 2016, 83, 5-8.	3.3	139
5	Spectroscopic and chemical characterization of active and inactive Cu species in NO decomposition catalysts based on Cu-ZSM5. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 4590-4601.	2.8	133
6	Methane dry reforming over hydrotalcite-derived Ni–Mg–Al mixed oxides: the influence of Ni content on catalytic activity, selectivity and stability. <i>Catalysis Science and Technology</i> , 2016, 6, 6705-6715.	4.1	122
7	Hybrid plasma-catalytic methanation of CO ₂ at low temperature over ceria zirconia supported Ni catalysts. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 11584-11592.	7.1	116
8	Low temperature dry methane reforming over Ce, Zr and CeZr promoted Ni–Mg–Al hydrotalcite-derived catalysts. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 11616-11623.	7.1	113
9	Enhanced catalytic stability through non-conventional synthesis of Ni/SBA-15 for methane dry reforming at low temperatures. <i>Applied Catalysis A: General</i> , 2015, 504, 143-150.	4.3	107
10	Promotion effect of zirconia on Mg(Ni,Al)O mixed oxides derived from hydrotalcites in CO ₂ methane reforming. <i>Applied Catalysis B: Environmental</i> , 2018, 223, 36-46.	20.2	107
11	Photocatalytic decolorization of cationic and anionic dyes over ZnO nanoparticle immobilized on natural Tunisian clay. <i>Applied Clay Science</i> , 2018, 152, 148-157.	5.2	107
12	Hydrogen and syngas production by methane dry reforming on SBA-15 supported nickel catalysts: On the effect of promotion by Ce _{0.75} Zr _{0.25} O ₂ mixed oxide. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 127-139.	7.1	106
13	DRIFT study of the interaction of NO and O ₂ with the surface of Ce _{0.62} Zr _{0.38} O ₂ as deNO _x catalyst. <i>Catalysis Today</i> , 2008, 137, 288-291.	4.4	105
14	The influence of nickel content on the performance of hydrotalcite-derived catalysts in CO ₂ methanation reaction. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 23548-23555.	7.1	103
15	Kinetics and Mechanism of Steady-State Catalytic NO Decomposition Reactions on Cu–ZSM5. <i>Journal of Catalysis</i> , 2002, 209, 75-86.	6.2	99
16	A Short Review on the Catalytic Activity of Hydrotalcite-Derived Materials for Dry Reforming of Methane. <i>Catalysts</i> , 2017, 7, 32.	3.5	96
17	Fe-clay-plate as a heterogeneous catalyst in photo-Fenton oxidation of phenol as probe molecule for water treatment. <i>Applied Clay Science</i> , 2014, 91-92, 46-54.	5.2	94
18	Examination of the influence of La promotion on Ni state in hydrotalcite-derived catalysts under CO ₂ methanation reaction conditions: Operando X-ray absorption and emission spectroscopy investigation. <i>Applied Catalysis B: Environmental</i> , 2018, 232, 409-419.	20.2	87

#	ARTICLE	IF	CITATIONS
19	Kinetics of catalyzed and non-catalyzed oxidation of soot from a diesel engine. <i>Catalysis Today</i> , 2007, 119, 252-256.	4.4	86
20	Yttrium promoted Ni-based double-layered hydroxides for dry methane reforming. <i>Journal of CO2 Utilization</i> , 2018, 27, 247-258.	6.8	83
21	Influence of preparation methods of LaCoO ₃ on the catalytic performances in the decomposition of N ₂ O. <i>Applied Catalysis B: Environmental</i> , 2009, 91, 596-604.	20.2	82
22	The First Single-Step Immobilization of a Calix-[4]-arene onto the Surface of Silica. <i>Chemistry of Materials</i> , 2002, 14, 3364-3368.	6.7	76
23	Synthesis strategies of ceria-zirconia doped Ni/SBA-15 catalysts for methane dry reforming. <i>Catalysis Communications</i> , 2015, 59, 108-112.	3.3	76
24	Hydrodesulfurization of 4,6-dimethyldibenzothiophene over promoted (Ni,P) alumina-supported molybdenum carbide catalysts: activity and characterization of active sites. <i>Journal of Catalysis</i> , 2004, 221, 365-377.	6.2	72
25	Mo-promoted Ni/Al ₂ O ₃ catalyst for dry reforming of methane. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 23500-23507.	7.1	71
26	Kinetics and mechanism of steady-state catalytic NO + O ₂ reactions on Pt/SiO ₂ and Pt/CeZrO ₂ . <i>Journal of Molecular Catalysis A</i> , 2004, 221, 127-136.	4.8	69
27	Simultaneous soot temperature and volume fraction measurements in axis-symmetric flames by a two-dimensional modulated absorption/emission technique. <i>Combustion and Flame</i> , 2015, 162, 2705-2719.	5.2	69
28	Low temperature hybrid plasma-catalytic methanation over Ni-Ce-Zr hydrotalcite-derived catalysts. <i>Catalysis Communications</i> , 2016, 83, 14-17.	3.3	69
29	On the role of organic nitrogen-containing species as intermediates in the hydrocarbon-assisted SCR of NO _x . <i>Applied Catalysis B: Environmental</i> , 2004, 54, 69-84.	20.2	64
30	Syngas production from dry methane reforming over yttrium-promoted nickel-KIT-6 catalysts. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 274-286.	7.1	64
31	Ni/zeolite X derived from fly ash as catalysts for CO ₂ methanation. <i>Fuel</i> , 2020, 267, 117139.	6.4	64
32	TiO ₂ /clay as a heterogeneous catalyst in photocatalytic/photochemical oxidation of anionic reactive blue 19. <i>Arabian Journal of Chemistry</i> , 2019, 12, 1454-1462.	4.9	63
33	Plasma DBD activated ceria-zirconia-promoted Ni-catalysts for plasma catalytic CO ₂ hydrogenation at low temperature. <i>Catalysis Communications</i> , 2017, 89, 73-76.	3.3	62
34	Influence of Ce/Zr molar ratio on catalytic performance of hydrotalcite-derived catalysts at low temperature CO ₂ methane reforming. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 23556-23567.	7.1	60
35	Synthetic gas bench study of a natural gas vehicle commercial catalyst in monolithic form: On the effect of gas composition. <i>Applied Catalysis B: Environmental</i> , 2009, 88, 386-397.	20.2	59
36	The influence of lanthanum incorporation method on the performance of nickel-containing hydrotalcite-derived catalysts in CO ₂ methanation reaction. <i>Catalysis Today</i> , 2018, 307, 205-211.	4.4	59

#	ARTICLE	IF	CITATIONS
37	Ni-Fe layered double hydroxide derived catalysts for non-plasma and DBD plasma-assisted CO ₂ methanation. International Journal of Hydrogen Energy, 2020, 45, 10423-10432.	7.1	59
38	Correlation between the surface properties and deNO _x activity of ceria-zirconia catalysts. Applied Catalysis B: Environmental, 2007, 74, 278-289.	20.2	58
39	Influence of Operational Parameters in the Heterogeneous Photo-Fenton Discoloration of Wastewaters in the Presence of an Iron-Pillared Clay. Industrial & Engineering Chemistry Research, 2013, 52, 16656-16665.	3.7	57
40	Synthesis Gas Production via Dry Reforming of Methane over Manganese Promoted Nickel/Cerium-Zirconium Oxide Catalyst. Industrial & Engineering Chemistry Research, 2018, 57, 16645-16656.	3.7	57
41	Impacts of oxygenated compounds concentration on sooting propensities and soot oxidative reactivity: Application to Diesel and Biodiesel surrogates. Fuel, 2017, 193, 241-253.	6.4	56
42	New catalysts for deep hydrotreatment of diesel fuel. Journal of Molecular Catalysis A, 2002, 184, 323-333.	4.8	55
43	Effects of a Pt/Ce _{0.68} Zr _{0.32} O ₂ catalyst and NO ₂ on the kinetics of diesel soot oxidation from thermogravimetric analyses. Fuel Processing Technology, 2011, 92, 363-371.	7.2	53
44	Tetralin hydrogenation catalyzed by Mo ₂ C/Al ₂ O ₃ and WC/Al ₂ O ₃ in the presence of H ₂ S. Catalysis Today, 2001, 65, 195-200.	4.4	52
45	Dry reforming of methane over Zr- and Y-modified Ni/Mg/Al double-layered hydroxides. Catalysis Communications, 2018, 117, 26-32.	3.3	51
46	Plasma-catalytic hybrid reactor: Application to methane removal. Catalysis Today, 2015, 257, 86-92.	4.4	50
47	Natural clay based nickel catalysts for dry reforming of methane: On the effect of support promotion (La, Al, Mn). International Journal of Hydrogen Energy, 2019, 44, 246-255.	7.1	50
48	Catalytic performances of platinum doped molybdenum carbide for simultaneous hydrodenitrogenation and hydrodesulfurization. Catalysis Today, 2007, 119, 31-34.	4.4	49
49	Structure, surface and reactivity of activated carbon: From model soot to Bio Diesel soot. Fuel, 2019, 257, 116038.	6.4	49
50	Deep hydrodesulphurization and hydrogenation of diesel fuels on alumina-supported and bulk molybdenum carbide catalysts. Fuel, 2004, 83, 1717-1726.	6.4	48
51	Dry reforming of methane over Ni/Ce _{0.62} Zr _{0.38} O ₂ catalysts: Effect of Ni loading on the catalytic activity and on H ₂ /CO production. Comptes Rendus Chimie, 2015, 18, 1242-1249.	0.5	48
52	Evolution of unburnt hydrocarbons under "cold-start" conditions from adsorption/desorption to conversion: On the screening of zeolitic materials. Applied Catalysis B: Environmental, 2014, 158-159, 48-59.	20.2	47
53	Sooting tendencies of primary reference fuels in atmospheric laminar diffusion flames burning into vitiated air. Combustion and Flame, 2014, 161, 1575-1586.	5.2	47
54	Catalytic activity of hydrotalcite-derived catalysts in the dry reforming of methane: on the effect of Ce promotion and feed gas composition. Reaction Kinetics, Mechanisms and Catalysis, 2017, 121, 185-208.	1.7	47

#	ARTICLE	IF	CITATIONS
55	On the Characterisation of Silver Species for SCR of NO _x with Ethanol. <i>Catalysis Letters</i> , 2009, 128, 25-30.	2.6	46
56	One-Step Synthesis of Highly Active and Stable NiO-ZrO _x for Dry Reforming of Methane. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 11441-11452.	3.7	46
57	Silver supported mesoporous SBA-15 as potential catalysts for SCR NO _x by ethanol. <i>Applied Catalysis B: Environmental</i> , 2009, 91, 640-648.	20.2	45
58	Catalytic combustion of methane over mesoporous silica supported palladium. <i>Catalysis Today</i> , 2011, 176, 36-40.	4.4	44
59	MnO _x -CeO ₂ mixed oxides as the catalyst for NO-assisted soot oxidation: The key role of NO adsorption/desorption on catalytic activity. <i>Applied Surface Science</i> , 2018, 462, 678-684.	6.1	43
60	Efficient removal of cadmium and 2-chlorophenol in aqueous systems by natural clay: Adsorption and photo-Fenton degradation processes. <i>Comptes Rendus Chimie</i> , 2018, 21, 253-262.	0.5	42
61	Transient Studies of Oxygen Removal Pathways and Catalytic Redox Cycles during NO Decomposition on Cu-ZSM5. <i>Journal of Physical Chemistry B</i> , 2002, 106, 9633-9641.	2.6	41
62	Impacts of esters' carbon chain length and concentration on sooting propensities and soot oxidative reactivity: Application to Diesel and Biodiesel surrogates. <i>Fuel</i> , 2018, 222, 586-598.	6.4	40
63	On the enhancing effect of Ce in Pd-MOR catalysts for NO _x CH ₄ -SCR: A structure-reactivity study. <i>Applied Catalysis B: Environmental</i> , 2016, 195, 121-131.	20.2	39
64	Sooting propensities of some gasoline surrogate fuels: Combined effects of fuel blending and air vitiation. <i>Combustion and Flame</i> , 2015, 162, 1840-1847.	5.2	38
65	Detailed Kinetic Analysis of Soot Oxidation by NO ₂ , NO, and NO + O ₂ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 4642-4654.	3.1	37
66	Particular characteristics of silver species on Ag-exchanged LTL zeolite in K and H form. <i>Microporous and Mesoporous Materials</i> , 2013, 169, 137-147.	4.4	37
67	CH ₄ -SCR of NO over Co and Pd ferrierite catalysts: Effect of preparation on catalytic performance. <i>Catalysis Today</i> , 2007, 119, 156-165.	4.4	36
68	A TEM and UV-visible study of silver reduction by ethanol in Ag-alumina catalysts. <i>Applied Catalysis A: General</i> , 2011, 406, 94-101.	4.3	36
69	Ni-Al hydrotalcite-like material as the catalyst precursors for the dry reforming of methane at low temperature. <i>Comptes Rendus Chimie</i> , 2015, 18, 1205-1210.	0.5	36
70	Ce- and Y-Modified Double-Layered Hydroxides as Catalysts for Dry Reforming of Methane: On the Effect of Yttrium Promotion. <i>Catalysts</i> , 2019, 9, 56.	3.5	35
71	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.	4.1	35
72	On the effect of yttrium promotion on Ni-layered double hydroxides-derived catalysts for hydrogenation of CO ₂ to methane. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 12169-12179.	7.1	35

#	ARTICLE	IF	CITATIONS
73	Soot volume fraction fields in unsteady axis-symmetric flames by continuous laser extinction technique. Optics Express, 2012, 20, 28742.	3.4	34
74	Plasma-assisted catalytic oxidation of methane. Applied Catalysis B: Environmental, 2008, 82, 50-57.	20.2	33
75	Synthetic gas bench study of a 4-way catalytic converter: Catalytic oxidation, NOx storage/reduction and impact of soot loading and regeneration. Applied Catalysis B: Environmental, 2009, 90, 339-346.	20.2	33
76	Effect of nickel incorporation into hydrotalcite-based catalyst systems for dry reforming of methane. Research on Chemical Intermediates, 2015, 41, 9485-9495.	2.7	32
77	Photo-Fenton oxidation of phenol over a Cu-doped Fe-pillared clay. Comptes Rendus Chimie, 2015, 18, 1161-1169.	0.5	32
78	Deep HDS on doped molybdenum carbides: From probe molecules to real feedstocks. Catalysis Today, 2005, 107-108, 520-530.	4.4	31
79	Reforming of Model Gasification Tar Compounds. Catalysis Letters, 2009, 128, 40-48.	2.6	31
80	Investigation of the nature of silver species on different Ag-containing NOx reduction catalysts: On the effect of the support. Applied Catalysis B: Environmental, 2014, 150-151, 204-217.	20.2	31
81	Sonocatalytic oxidation of EDTA in aqueous solutions over noble metal-free Co ₃ O ₄ /TiO ₂ catalyst. Applied Catalysis B: Environmental, 2019, 241, 570-577.	20.2	31
82	Structure-reactivity study of model and Biodiesel soot in model DPF regeneration conditions. Fuel, 2019, 239, 373-386.	6.4	31
83	Impacts on human mortality due to reductions in PM ₁₀ concentrations through different traffic scenarios in Paris, France. Science of the Total Environment, 2020, 698, 134257.	8.0	31
84	Numerical study of soot formation in laminar coflow diffusion flames of methane doped with primary reference fuels. Combustion and Flame, 2015, 162, 1153-1163.	5.2	30
85	Detailed Kinetic Modeling Study of NOx Oxidation and Storage and Their Interactions over Pt/Ba/Al ₂ O ₃ Monolith Catalysts. Journal of Physical Chemistry C, 2010, 114, 7102-7111.	3.1	29
86	Ni/CeO ₂ Nanoparticles Promoted by Yttrium Doping as Catalysts for CO ₂ Methanation. ACS Applied Nano Materials, 2020, 3, 12355-12368.	5.0	29
87	Carbon-resistant NiO-Y ₂ O ₃ -nanostructured catalysts derived from double-layered hydroxides for dry reforming of methane. Catalysis Today, 2021, 366, 103-113.	4.4	29
88	Investigation of Cu promotion effect on hydrotalcite-based nickel catalyst for CO ₂ methanation. Catalysis Today, 2022, 384-386, 133-145.	4.4	29
89	Experimental assessment of the sudden-reversal of the oxygen dilution effect on soot production in coflow ethylene flames. Combustion and Flame, 2017, 183, 242-252.	5.2	28
90	Natural clay-based Ni-catalysts for dry reforming of methane at moderate temperatures. Catalysis Today, 2018, 306, 51-57.	4.4	28

#	ARTICLE	IF	CITATIONS
91	Mg-promotion of Ni natural clay-supported catalysts for dry reforming of methane. RSC Advances, 2018, 8, 19627-19634.	3.6	28
92	Excess-methane dry and oxidative reforming on Ni-containing hydrotalcite-derived catalysts for biogas upgrading into synthesis gas. International Journal of Hydrogen Energy, 2018, 43, 11981-11989.	7.1	28
93	Plasma-catalytic hybrid process for CO ₂ methanation: optimization of operation parameters. Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 629-643.	1.7	27
94	Catalysed diesel particulate filter: Study of the reactivity of soot arising from biodiesel combustion. Catalysis Today, 2011, 176, 219-224.	4.4	26
95	Title is missing!. Catalysis Letters, 2001, 72, 91-97.	2.6	25
96	Ceria and zirconia modified natural clay based nickel catalysts for dry reforming of methane. International Journal of Hydrogen Energy, 2017, 42, 23508-23516.	7.1	25
97	Highly Carbon-Resistant Y Doped NiOâ€ZrO _m Catalysts for Dry Reforming of Methane. Catalysts, 2019, 9, 1055.	3.5	25
98	Kinetic modelling of the oxidation of a wide range of carbon materials. Combustion and Flame, 2012, 159, 64-76.	5.2	24
99	Effect of Biodiesel impurities (K, Na, P) on non-catalytic and catalytic activities of Diesel soot in model DPF regeneration conditions. Fuel Processing Technology, 2020, 199, 106293.	7.2	24
100	Identification of the active acid sites of fluorinated alumina catalysts dedicated to n-butene/isobutane alkylation. Applied Catalysis A: General, 2003, 251, 369-383.	4.3	23
101	Kinetic Modeling Study of the Oxidation of Carbon Monoxideâ€Hydrogen Mixtures over Pt/Al ₂ O ₃ and Rh/Al ₂ O ₃ Catalysts. Journal of Physical Chemistry C, 2011, 115, 20225-20236.	3.1	23
102	Understanding of tri-reforming of methane over Ni/Mg/Al hydrotalcite-derived catalyst for CO ₂ utilization from flue gases from natural gas-fired power plants. Journal of CO ₂ Utilization, 2020, 42, 101317.	6.8	23
103	Tailoring physicochemical and electrical properties of Ni/CeZrO _x doped catalysts for high efficiency of plasma catalytic CO ₂ methanation. Applied Catalysis B: Environmental, 2021, 294, 120233.	20.2	23
104	Plasma catalytic oxidation of methane on alumina-supported noble metal catalysts. Applied Catalysis B: Environmental, 2008, 84, 214-222.	20.2	22
105	Modelling the kinetics of NO oxidation and NO _x storage over platinum, ceria and ceria zirconia. Applied Catalysis B: Environmental, 2012, 111-112, 415-423.	20.2	22
106	Influence of synthesis parameters of SBA-15 supported palladium catalysts for methane combustion and simultaneous NO _x reduction. Microporous and Mesoporous Materials, 2014, 183, 1-8.	4.4	22
107	Vanadium promoted Ni(Mg,Al)O hydrotalcite-derived catalysts for CO ₂ methanation. International Journal of Hydrogen Energy, 2021, 46, 17776-17783.	7.1	22
108	Structured Pd₃-Al₂O₃ Prepared by Washcoated Deposition on a Ceramic Honeycomb for Compressed Natural Gas Applications. Journal of Nanoparticles, 2015, 2015, 1-9.	1.4	21

#	ARTICLE	IF	CITATIONS
109	Alumina supported cobalt–palladium catalysts for the reduction of NO by methane in stationary sources. <i>Catalysis Today</i> , 2007, 119, 166-174.	4.4	20
110	NO _x Reduction over CeO ₂ –ZrO ₂ Supported Iridium Catalyst in the Presence of Propanol. <i>Topics in Catalysis</i> , 2004, 30/31, 97-101.	2.8	19
111	Titanium Dioxide Supported on Different Porous Materials as Photocatalyst for the Degradation of Methyl Green in Wastewaters. <i>Advances in Materials Science and Engineering</i> , 2015, 2015, 1-10.	1.8	19
112	Stable NiO–CeO ₂ nanoparticles with improved carbon resistance for methane dry reforming. <i>Journal of Rare Earths</i> , 2022, 40, 57-62.	4.8	19
113	Electrocatalytic behaviour of CeZrO _x -supported Ni catalysts in plasma assisted CO ₂ methanation. <i>Catalysis Science and Technology</i> , 2020, 10, 4532-4543.	4.1	18
114	Effect of Na and K impurities on the performance of Ni/CeZrO _x catalysts in DBD plasma-catalytic CO ₂ methanation. <i>Fuel</i> , 2021, 306, 121639.	6.4	18
115	Stochastic Simulation and Single Events Kinetic Modeling: Application to Olefin Oligomerization. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 4308-4316.	3.7	17
116	Ceria–zirconia-supported rhodium catalyst for NO _x reduction from coal combustion flue gases. <i>Applied Catalysis B: Environmental</i> , 2009, 90, 535-544.	20.2	17
117	Organic pollutants oxidation by needle/plate plasma discharge: On the influence of the gas nature. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 82, 185-192.	3.6	17
118	The effect of adsorbed oxygen species on carbon-resistance of Ni-Zr catalyst modified by Al and Mn for dry reforming of methane. <i>Catalysis Today</i> , 2022, 384-386, 257-264.	4.4	17
119	Improvement of the activity of CO ₂ methanation in a hybrid plasma-catalytic process in varying catalyst particle size or under pressure. <i>Journal of CO₂ Utilization</i> , 2021, 46, 101471.	6.8	17
120	Dry reforming of methane over Ni–ZrO _x catalysts doped by manganese: On the effect of the stability of the structure during time on stream. <i>Applied Catalysis A: General</i> , 2021, 617, 118120.	4.3	17
121	Supported Molybdenum Carbides Lie Between Metallic and Sulfided Catalysts for Deep HDS. <i>Catalysis Letters</i> , 2003, 86, 133-138.	2.6	16
122	The effect of the Rh–Al, Pt–Al and Pt–Rh–Al surface alloys on NO conversion to N ₂ on alumina supported Rh, Pt and Pt–Rh catalysts. <i>Catalysis Today</i> , 2007, 119, 187-193.	4.4	16
123	Extension of a kinetic model for NO oxidation and NO _x storage to fixed-bed Pt/Ba/Al ₂ O ₃ catalysts. <i>Catalysis Communications</i> , 2010, 12, 54-57.	3.3	16
124	Controlled preparation of CoPdSiBEA zeolite catalysts for selective catalytic reduction of NO with methane and their characterisation by XRD, DR UV–vis, TPR, XPS. <i>Catalysis Today</i> , 2011, 176, 72-76.	4.4	16
125	Multi-scale flow simulation of automotive catalytic converters. <i>Chemical Engineering Science</i> , 2014, 116, 161-171.	3.8	16
126	Influence of gas hourly space velocity on the activity of monolithic catalysts for the simultaneous removal of soot and NO _x . <i>Comptes Rendus Chimie</i> , 2015, 18, 1007-1012.	0.5	16

#	ARTICLE	IF	CITATIONS
127	Methane, Propene and Toluene Oxidation by Plasma-Pd/ γ -Al ₂ O ₃ Hybrid Reactor: Investigation of a Synergetic Effect. Topics in Catalysis, 2017, 60, 326-332.	2.8	16
128	Biofuel Impact on Diesel Engine After-Treatment: Deactivation Mechanisms and Soot Reactivity. Emission Control Science and Technology, 2018, 4, 15-32.	1.5	16
129	Synthesis strategies of Zr- and Y-promoted mixed oxides derived from double-layered hydroxides for syngas production via dry reforming of methane. International Journal of Hydrogen Energy, 2021, 46, 12128-12144.	7.1	16
130	Tailoring the yttrium content in Ni-Ce-Y/SBA-15 mesoporous silicas for CO ₂ methanation. Catalysis Today, 2021, 382, 104-119.	4.4	16
131	Ultrasmall bimetallic Cu/ZnOx nanoparticles encapsulated in UiO-66 by deposition-precipitation method for CO ₂ hydrogenation to methanol. Fuel, 2022, 324, 124694.	6.4	16
132	Selective reduction of NO _x by hydrogen and methane in natural gas stationary sources over alumina-supported Pd, Co and Co/Pd catalysts. Catalysis Today, 2008, 137, 179-184.	4.4	15
133	Methane oxidation by NO and O ₂ from reverse spillover on alumina supported palladium catalysts. Catalysis Communications, 2008, 9, 1704-1708.	3.3	15
134	Mesostructured or Alumina-mesostructured Silica SBA-16 as Potential Support for NO _x Reduction and Ethanol Oxidation. Catalysis Letters, 2010, 139, 50-55.	2.6	15
135	Catalytic performance of platinum doped tungsten carbide in simultaneous hydrodenitrogenation and hydrodesulphurization. Applied Catalysis B: Environmental, 2010, 93, 241-249.	20.2	15
136	Study of the use of fluidized bed plasma reactors for the treatment of alumina supported palladium catalyst: Application for SCR NO _x by CH ₄ in stationary sources. Catalysis Communications, 2010, 12, 20-24.	3.3	15
137	Palladium catalysts supported on sulfated ceria-zirconia for the selective catalytic reduction of NO _x by methane: Catalytic performances and nature of active Pd species. Catalysis Today, 2011, 176, 242-249.	4.4	15
138	SCR NO _x mechanistic study with a mixture of hydrocarbons representative of the exhaust gas from coal combustion over Rh/Ce 0.62 Zr 0.38 O ₂ catalyst. Fuel, 2015, 150, 21-28.	6.4	15
139	Solution combustion synthesis as an alternative synthesis route for novel Ni-Mg-Al mixed-oxide catalyst for CO ₂ methanation. Journal of CO ₂ Utilization, 2022, 60, 101983.	6.8	15
140	Impact of the Catalyst/Soot Ratio on Diesel Soot Oxidation Pathways. Energy & Fuels, 2012, 26, 6091-6097.	5.1	14
141	Ni-Mo ₂ C supported on alumina as a substitute for Ni-Mo reduced catalysts supported on alumina material for dry reforming of methane. Comptes Rendus Chimie, 2018, 21, 247-252.	0.5	14
142	Effect of Acid-Base Sites Ratio on the Catalytic Activity to Obtain 5-HMF from Glucose Using Al ₂ O ₃ -TiO ₂ -W Catalysts. ChemistrySelect, 2018, 3, 12854-12864.	1.5	14
143	Modified layered clays as catalysts for ethanol oxidation. Catalysis Today, 2011, 176, 154-158.	4.4	13
144	Catalytic activity of layered aluminosilicates for VOC oxidation in the presence of NO _x . Comptes Rendus Chimie, 2015, 18, 1106-1113.	0.5	13

#	ARTICLE	IF	CITATIONS
145	Aging of Commercial Diesel Oxidation Catalysts: A preliminary Structure/Reactivity Study. Topics in Catalysis, 2016, 59, 1039-1043.	2.8	13
146	Coupling experiment and simulation analysis to investigate physical parameters of CO ₂ methanation in a plasma-catalytic hybrid process. Plasma Processes and Polymers, 2020, 17, 1900261.	3.0	13
147	Methane activation by NO ₂ on Co loaded SBA-15 catalysts: The effect of mesopores (length, diameter) on the catalytic activity. Catalysis Today, 2008, 137, 191-196.	4.4	12
148	Study of the surface evolution of nitrogen species on CuO/CeZrO ₂ catalysts. Reaction Kinetics, Mechanisms and Catalysis, 2013, 109, 43-56.	1.7	12
149	NO _x SCR with decane using Ag-MFI catalysts: on the effect of silver content and co-cation presence. Catalysis Science and Technology, 2016, 6, 3038-3048.	4.1	12
150	Probing the local radiative quenching during the transition from a non-smoking to a smoking laminar coflow ethylene/air non-premixed flame. Combustion and Flame, 2019, 203, 120-129.	5.2	12
151	CO ₂ reforming in CH ₄ over Ni ³⁺ -Al ₂ O ₃ nano catalyst: Effect of cold plasma surface discharge. Applied Surface Science, 2020, 501, 144175.	6.1	12
152	Hydrodeoxygenation of benzyl alcohol on transition-metal-containing mixed oxides catalysts derived from layered double hydroxide precursors. Catalysis Today, 2021, 366, 235-244.	4.4	12
153	Co-Precipitated Ni-Mg-Al Hydrotalcite-Derived Catalyst Promoted with Vanadium for CO ₂ Methanation. Molecules, 2021, 26, 6506.	3.8	12
154	Methanol interaction with NO ₂ : An attempt to identify intermediate compounds in CH ₄ -SCR of NO with Co/Pd-HFER catalyst. Catalysis Today, 2008, 137, 157-161.	4.4	11
155	Effect of the Synthesis Method on Alumina Supported Silver Based Catalyst for NO _x Selective Reduction by Ethanol. Topics in Catalysis, 2009, 52, 1781-1785.	2.8	11
156	deNO _x over Ag/H-ZSM-5: Study of NO ₂ interaction with ethanol. Catalysis Today, 2011, 176, 81-87.	4.4	11
157	Effect of Biofuels on Catalyzed Diesel Particulate Filter Regeneration. Topics in Catalysis, 2013, 56, 462-466.	2.8	11
158	Catkin linked nano-Co ₃ O ₄ catalyst built-in organic microreactor by PEMOCVD method for trace CO oxidation at room temperature. Microfluidics and Nanofluidics, 2014, 16, 141-148.	2.2	11
159	Operando FT-IR study on basicity improvement of Ni(Mg, Al)O hydrotalcite-derived catalysts promoted by glow plasma discharge. Plasma Science and Technology, 2019, 21, 045503.	1.5	11
160	Effect of low loading of yttrium on Ni-based layered double hydroxides in CO ₂ reforming of CH ₄ . Reaction Kinetics, Mechanisms and Catalysis, 2019, 126, 611-628.	1.7	11
161	Ni-based catalysts for plasma-assisted CO ₂ methanation. Current Opinion in Green and Sustainable Chemistry, 2021, 32, 100540.	5.9	11
162	Effect of cobalt promotion on hydrotalcite-derived nickel catalyst for CO ₂ methanation. Applied Materials Today, 2021, 25, 101211.	4.3	11

#	ARTICLE	IF	CITATIONS
163	Modelling of a Lean NO _x -Trap system with NO/NO ₂ differentiation and sulfur poisoning. SAE International Journal of Fuels and Lubricants, 0, 3, 414-424.	0.2	10
164	New Approach for Understanding the Oxidation Stability of Neopolyol Ester Lubricants Using a Small-Scale Oxidation Test Method. ACS Omega, 2018, 3, 10449-10459.	3.5	10
165	Modified fly ash, a waste material from the energy industry, as a catalyst for the CO ₂ reduction to methane. Energy, 2022, 243, 122718.	8.8	10
166	Fluidized bed plasma for pre-treatment of Co-ferrierite catalysts: An approach to NO _x abatement. Catalysis Today, 2011, 176, 234-238.	4.4	9
167	Hysteresis effect study on diesel oxidation catalyst for a better efficiency of SCR systems. Catalysis Today, 2012, 191, 52-58.	4.4	9
168	Microwave Plasma Treatment for Catalyst Preparation: Application to Alumina Supported Silver Catalysts for SCR NO _x by Ethanol. Modern Research in Catalysis, 2013, 02, 68-82.	1.7	9
169	On the Effect of Preparation Methods of PdCe-MOR Catalysts as NO _x CH ₄ -SCR System for Natural Gas Vehicles Application. Catalysts, 2015, 5, 1815-1830.	3.5	9
170	Potential synergic effect between MOR and BEA zeolites in NO _x SCR with methane: A dual bed design approach. Applied Catalysis A: General, 2015, 506, 246-253.	4.3	9
171	Selective reduction of NO _x by hydrogen and methane in natural gas stationary sources over alumina supported Pd, Co and Co/Pd catalysts. Catalysis Today, 2008, 137, 185-190.	4.4	8
172	On the Efficiency of NH ₃ -SCR Catalysts for Heavy Duty Vehicles Running on Compressed Natural Gas in Synthetic Gas Bench Scale. Topics in Catalysis, 2013, 56, 45-49.	2.8	8
173	Natural Hematite and Siderite as Heterogeneous Catalysts for an Effective Degradation of 4-Chlorophenol via Photo-Fenton Process. ChemEngineering, 2018, 2, 29.	2.4	8
174	Optimizing Washcoating Conditions for the Preparation of Zeolite-Based Cordierite Monoliths for NO _x -CH ₄ -SCR: A Required Step for Real Application. Industrial & Engineering Chemistry Research, 2019, 58, 11799-11810.	3.7	8
175	Novel Nickel- and Magnesium-Modified Cenospheres as Catalysts for Dry Reforming of Methane at Moderate Temperatures. Catalysts, 2019, 9, 1066.	3.5	8
176	Novel Preparation of Cu and Fe Zirconia Supported Catalysts for Selective Catalytic Reduction of NO with NH ₃ . Catalysts, 2021, 11, 55.	3.5	8
177	Unraveling catalytic properties by yttrium promotion on mesoporous SBA-16 supported nickel catalysts towards CO ₂ methanation. Fuel, 2022, 317, 122829.	6.4	8
178	On the Effect of Cobalt Promotion over Ni/CeO ₂ Catalyst for CO ₂ Thermal and Plasma Assisted Methanation. Catalysts, 2022, 12, 36.	3.5	8
179	Nickel-magnesium-modified cenospheres for CO ₂ methanation. International Journal of Hydrogen Energy, 2022, 47, 27944-27960.	7.1	8
180	Enhancement of 3-Way CNG Catalyst Performance at High Temperature Due to the Presence of Water in the Feed: On the Role of Steam Reforming of Methane and on the Influence of Ageing. Topics in Catalysis, 2009, 52, 1972-1976.	2.8	7

#	ARTICLE	IF	CITATIONS
181	Investigation of oxide catalysts activity in the NO _x neutralisation with organic reductants. Applied Surface Science, 2010, 256, 5572-5575.	6.1	7
182	Heterogeneous TiO ₂ -Fe-plate catalyst for the discoloration and mineralization of aqueous solutions of cationic and anionic dyes. Desalination and Water Treatment, 2016, 57, 13505-13517.	1.0	7
183	Magnetic control of flame stability: Application to oxygen-enriched and carbon dioxide-diluted sooting flames. Proceedings of the Combustion Institute, 2019, 37, 5637-5644.	3.9	7
184	Chapter 5 A three-function model reaction for designing DeNO _x catalysts. Studies in Surface Science and Catalysis, 2007, , 145-173.	1.5	6
185	Hydrogenolysis of carbon-halogen and carbon-carbon bonds over Pd/Nb ₂ O ₅ -Al ₂ O ₃ catalysts. Catalysis Communications, 2009, 10, 1757-1761.	3.3	6
186	Elaboration of an Accelerated Oven CNG Heavy Duty Vehicles Catalyst Ageing for Road Ageing Simulation. Topics in Catalysis, 2013, 56, 267-272.	2.8	6
187	On the influence of the alumina precursor in Fe-K/Al ₂ O ₃ structured catalysts for the simultaneous removal of soot and NO _x : From surface properties to reaction mechanism. Comptes Rendus Chimie, 2014, 17, 681-686.	0.5	6
188	Histopathologic and Ultrastructural Features of Gold Thread Implanted in the Skin for Facial Rejuvenation. American Journal of Dermatopathology, 2015, 37, 773-777.	0.6	6
189	Ceria promotion over Ni-containing hydrotalcite-derived catalysts for CO ₂ /methane reforming. E3S Web of Conferences, 2017, 14, 02039.	0.5	6
190	Experimental investigation on the influence of the presence of alkali compounds on the performance of a commercial Pt-Pd/Al ₂ O ₃ diesel oxidation catalyst. Clean Technologies and Environmental Policy, 2018, 20, 715-725.	4.1	6
191	Nickel Supported Modified Ceria Zirconia Lanthanum/ Praseodymium/Yttrium Oxides Catalysts for Syngas Production through Dry Methane Reforming. Materials Science Forum, 0, 941, 2214-2219.	0.3	6
192	High Performance Tunable Catalysts Prepared by Using 3D Printing. Materials, 2021, 14, 5017.	2.9	6
193	Î ³ -Alumina-Supported Ni-Mo Carbides as Promising Catalysts for CO ₂ Methanation. Modern Research in Catalysis, 2017, 06, 135-145.	1.7	6
194	Mechanism of the Reduction by Ammonia of Nitrates Stored onto a Pt-Ba/Al ₂ O ₃ LNT Catalyst. Topics in Catalysis, 2013, 56, 1906-1915.	2.8	5
195	Syngas Production via CO ₂ Reforming of Methane over Aluminum-Promoted NiO-10Al ₂ O ₃ -ZrO ₂ Catalyst. ACS Omega, 2021, 6, 22383-22394.	3.5	5
196	Boosting CO ₂ reforming of methane via the metal-support interaction in mesostructured SBA-16-derived Ni nanoparticles. Applied Materials Today, 2022, 26, 101354.	4.3	5
197	Comparative Study of Natural Gas Vehicles Commercial Catalysts in Monolithic Form. , 2007, , .		4
198	Sulfur Deactivation of NO _x Storage Catalysts: A Multiscale Modeling Approach. Oil and Gas Science and Technology, 2013, 68, 995-1005.	1.4	4

#	ARTICLE	IF	CITATIONS
199	Shock-induced cavitation as a way of accelerating phenol oxidation in aqueous media. Chemical Engineering and Processing: Process Intensification, 2017, 112, 47-55.	3.6	4
200	Physical and chemical characterization of shock-induced cavitation. Ultrasonics Sonochemistry, 2020, 69, 105270.	8.2	4
201	Nickel Supported Modified Zirconia Catalysts for CO ₂ Methanation in DBD Plasma Catalytic Hybrid Process. Materials Science Forum, 0, 1016, 894-899.	0.3	4
202	Metallic active species for deNO _x SCR by methane with Co and Pd/Co HFER catalysts. Studies in Surface Science and Catalysis, 2008, 174, 1033-1038.	1.5	3
203	On the Effect of Poor Metals (Al, Ga, In) on the NO _x Conversion in Ethanol Selective Catalytic Reduction. Topics in Catalysis, 2009, 52, 1786-1790.	2.8	3
204	A Molecular Approach for Unraveling Surface Phase Transitions: Sulfation of BaO as a Model NO _x Trap. Chemistry - A European Journal, 2012, 18, 10511-10514.	3.3	3
205	Multiscale Modeling of Barium Sulfate Formation from BaO. Industrial & Engineering Chemistry Research, 2013, 52, 9086-9098.	3.7	3
206	Application of PdCe-HMOR Catalyst as NO _x CH ₄ -SCR System for Heavy-Duty Vehicles Moved by Natural Gas. Topics in Catalysis, 2016, 59, 982-986.	2.8	3
207	Plasma-Catalytic Removal of NO _x in Mobile and Stationary Sources. Springer Series on Atomic, Optical, and Plasma Physics, 2019, , 115-144.	0.2	3
208	The reduction of NO by hydrocarbons over Pd-Co/ZSM-5: The components of the catalyst and their role in the process. Studies in Surface Science and Catalysis, 2004, 154, 2509-2513.	1.5	2
209	Multi-Scale Modeling Study of Barium Nitrate Reduction in NO _x Traps. Topics in Catalysis, 2013, 56, 140-144.	2.8	2
210	The Effect of Ni Precursor Salts on Diatomite Supported Ni-Mg Catalysts in Methanation of CO ₂ . Materials Science Forum, 0, 1016, 1417-1422.	0.3	2
211	Nanoporous Carbonaceous Adsorbents for Enrichment of Ventilation Air Methane (VAM) with Methane. , 2019, , .		2
212	Selective reduction of NO _x in diesel exhaust with hydrocarbons over alumina in NEDC conditions. Topics in Catalysis, 2007, 42-43, 27-31.	2.8	1
213	Fluidized Bed Plasmas Reactor for Catalyst Synthesis and Pretreatment. Application for Pollution Abatement in Stationary and Mobile Sources. Advanced Materials Research, 0, 89-91, 118-123.	0.3	1
214	Impact of Thermal and Engine Ageing on a Fully Formulated Lean NO _x Trap. , 2012, , .		1
215	Influence of Catalyst Composition on NO _x Trap Performances. Topics in Catalysis, 2013, 56, 261-266.	2.8	1
216	On the Comprehension of Mechanical, Thermal and Chemical Evolution of Exhaust Gases after Treatment Catalysts. Materials Science Forum, 0, 783-786, 1979-1985.	0.3	1

#	ARTICLE	IF	CITATIONS
217	Nanooxides Derived from Hydrotalcites as Catalysts for Dry Methane Reforming Reaction - Effect of [Ni(EDTA)] ²⁺ Adsorption Time. Materials Science Forum, 2016, 879, 396-401.	0.3	1
218	Ni-Containing Catalysts. Catalysts, 2021, 11, 645.	3.5	1
219	Influence of the Alumina Precursor on the Activity of Structured Fe ^K /Al ₂ O ₃ Catalysts Towards the Simultaneous Removal of Soot and NOx. Topics in Catalysis, 2017, 60, 355-360.	2.8	0
220	Syngas Production by Dry Methane Reforming over Mg Doped NiO-ZrO ₂ Catalysts. Materials Science Forum, 2016, 1585-1590.	0.3	0
221	4 CO ₂ hydrogenation by plasma-assisted catalysis for fuel production: power-to-gas application. , 2021, , 213-250.		0
222	Methane: A New Open Access Journal. Methane, 2022, 1, 70-71.	2.2	0
223	Transition metal-based catalysts for CO ₂ methanation and hydrogenation. , 2022, , 59-93.		0