JosÃ© A Odriozola

List of Publications by Year
in descending order

353	11,001	30070 54	64796 79
papers	citations	h-index	g-index

362	362	362	9387
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Catalytic combustion of volatile organic compounds on Au/CeO2/Al2O3 and Au/Al2O3 catalysts. Applied Catalysis A: General, 2002, 234, 65-78.	4.3	239
2	Gold supported on metal-doped ceria catalysts (M=Zr, Zn and Fe) for the preferential oxidation of CO (PROX). Journal of Catalysis, 2010, 276, 360-370.	6.2	180
3	Chemical CO2 recycling via dry and bi reforming of methane using Ni-Sn/Al2O3 and Ni-Sn/CeO2-Al2O3 catalysts. Applied Catalysis B: Environmental, 2018, 224, 125-135.	20.2	178
4	Unravelling the Role of Oxygen Vacancies in the Mechanism of the Reverse Waterâ€“Gas Shift Reaction by Operando DRIFTS and Ultravioletâ€“Visible Spectroscopy. ACS Catalysis, 2018, 8, 7455-7467.	11.2	178
5	Fe-doped ceria solids synthesized by the microemulsion method for CO oxidation reactions. Applied Catalysis B: Environmental, 2011, 106, 621-629.	20.2	155
6	Magnetic Vortex State Stability, Reversal and Dynamics in Restricted Geometries. Journal of Nanoscience and Nanotechnology, 2008, 8, 2745-2760.	0.9	149
7	Synthesis and Characterization of Ce_{1â^'x}Eu_xO_{2â^'x/2} Mixed Oxides and Their Catalytic Activities for CO Oxidation. Journal of Physical Chemistry C, 2009, 113, 5629-5635.	3.1	147
8	Structural and catalytic properties of lanthanide (La, Eu, Gd) doped ceria. Journal of Solid State Chemistry, 2011, 184, 3014-3020.	2.9	136
9	Hard nanocomposite Tiâ€“Siâ€“N coatings prepared by DC reactive magnetron sputtering. Surface and Coatings Technology, 2000, 133-134, 234-239.	4.8	115
10	Study of the stabilization of zinc phthalocyanine in sol-gel TiO2 for photodynamic therapy applications. Nanomedicine: Nanotechnology, Biology, and Medicine, 2010, 6, 777-785.	3.3	108
11	Influence of the surface adsorptionâ€“desorption processes on the ignition curves of volatile organic compounds (VOCs) complete oxidation over supported catalysts. Applied Catalysis B: Environmental, 2000, 26, 37-46.	20.2	106
12	Preparation and characterization of niobium oxide for the catalytic aldol condensation of acetone. Applied Catalysis A: General, 1999, 180, 411-420.	4.3	103
13	Pt vs. Au in waterâ€“gas shift reaction. Journal of Catalysis, 2014, 314, 1-9.	6.2	103
14	Manganese and iron oxides as combustion catalysts of volatile organic compounds. Applied Catalysis B: Environmental, 2009, 92, 194-201.	20.2	102
15	NOâ€“NH3 coadsorption on vanadia/titania catalysts: determination of the reduction degree of vanadium. Applied Catalysis B: Environmental, 2001, 29, 307-314.	20.2	100
16	Gold/hydroxyapatite catalystsSynthesis, characterization and catalytic activity to CO oxidation. Applied Catalysis B: Environmental, 2009, 87, 245-251.	20.2	98
17	Hydrogen production by methanol steam reforming on NiSn/MgOâ€“Al2O3 catalysts: The role of MgO addition. Applied Catalysis A: General, 2011, 392, 184-191.	4.3	97
18	Cu-modified cryptomelane oxide as active catalyst for CO oxidation reactions. Applied Catalysis B: Environmental, 2012, 123-124, 27-35.	20.2	95

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19	Iron-modified ceria and Au/ceria catalysts for Total and Preferential Oxidation of CO (TOX and PROX). Catalysis Today, 2010, 157, 155-159.	4.4	94
20	CO2 reforming of methane over Ni-Ru supported catalysts: On the nature of active sites by operando DRIFTS study. Journal of CO2 Utilization, 2018, 24, 509-515.	6.8	93
21	Effect of Fe and Ce on Al-pillared bentonite and their performance in catalytic oxidation reactions. Applied Catalysis A: General, 2007, 317, 120-128.	4.3	91
22	Fischerâ€“Tropsch synthesis in microchannels. Chemical Engineering Journal, 2011, 167, 536-544.	12.7	91
23	Gold supported CeO2/Al2O3 catalysts for CO oxidation: influence of the ceria phase. Catalysis Letters, 2005, 102, 289-297.	2.6	90
24	Outstanding performance of rehydrated Mg-Al hydrotalcites as heterogeneous methanolysis catalysts for the synthesis of biodiesel. Fuel, 2018, 211, 173-181.	6.4	89
25	In Situ Characterization of the Dynamic Goldâ^'Support Interaction over Ceria Modified Eu³⁺. Influence of the Oxygen Vacancies on the CO Oxidation Reaction. Journal of Physical Chemistry C, 2010, 114, 10857-10865.	3.1	88
26	AES and TDS study of the adsorption of NH3 and NO on V2O5 and TiO2 surfaces: Mechanistic implications. Journal of Catalysis, 1989, 119, 71-82.	6.2	86
27	Imaging of biomolecules with the scanning tunneling microscope: Problems and prospects. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1990, 8, 635-641.	2.1	82
28	Growth of hydroxyapatite in a biocompatible mesoporous ordered silica. Acta Biomaterialia, 2006, 2, 173-179.	8.3	81
29	Integration of methanol steam reforming and combustion in a microchannel reactor for H2 production: A CFD simulation study. Catalysis Today, 2009, 143, 25-31.	4.4	80
30	Methane steam reforming in a microchannel reactor for GTL intensification: A computational fluid dynamics simulation study. Chemical Engineering Journal, 2009, 154, 168-173.	12.7	80
31	Influence of the shape of Ni catalysts in the glycerol steam reforming. Applied Catalysis B: Environmental, 2012, 123-124, 379-390.	20.2	80
32	Thermal evolution of solâ€“gel-obtained phosphosilicate solids (SiPO). Journal of Non-Crystalline Solids, 2001, 292, 158-166.	3.1	79
33	Surface Dynamics of Au/CeO₂ Catalysts during CO Oxidation. Journal of Physical Chemistry C, 2007, 111, 14469-14475.	3.1	77
34	Synergy between gold and oxygen vacancies in gold supported on Zr-doped ceria catalysts for the CO oxidation. Applied Catalysis B: Environmental, 2015, 176-177, 385-395.	20.2	77
35	Oxidation of CO over gold supported on Zn-modified ceria catalysts. Catalysis Today, 2011, 172, 118-123.	4.4	76
36	Sub-ambient CO oxidation over mesoporous Co3O4: Effect of morphology on its reduction behavior and catalytic performance. Applied Catalysis A: General, 2012, 431-432, 9-17.	4.3	76

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37	Comparative study of Au/Al2O3 and Au/CeO2-Al2O3 catalysts. Journal of Molecular Catalysis A, 2006, 252, 142-149.	4.8	72
38	Modified cryptomelane-type manganese dioxide nanomaterials for preferential oxidation of CO in the presence of hydrogen. Catalysis Today, 2010, 157, 160-165.	4.4	71
39	2,4-Dichlorophenoxyacetic acid (2,4-D) photodegradation using an Mn+/ZrO2 photocatalyst: XPS, UVâ€“vis, XRD characterization. Applied Catalysis B: Environmental, 2007, 73, 34-41.	20.2	70
40	Influence of the acidâ€“base properties over NiSn/MgOâ€“Al2O3 catalysts in the hydrogen production from glycerol steam reforming. International Journal of Hydrogen Energy, 2014, 39, 5704-5712.	7.1	69
41	Size-tailored Ru nanoparticles deposited over Î³-Al2O3 for the CO2 methanation reaction. Applied Surface Science, 2019, 483, 750-761.	6.1	69
42	In situ DRIFTS study of the SCR reaction of NO with NH3 in the presence of O2 over lanthanide doped V2O5/Al2O3 catalysts. Applied Catalysis B: Environmental, 1998, 19, 67-73.	20.2	68
43	Computational fluid dynamics study of heat transfer in a microchannel reactor for low-temperature Fischerâ€“Tropsch synthesis. Chemical Engineering Journal, 2010, 160, 915-922.	12.7	68
44	Functionalized biochars as supports for Pd/C catalysts for efficient hydrogen production from formic acid. Applied Catalysis B: Environmental, 2021, 282, 119615.	20.2	68
45	Nitrate removal using natural clays modified by acid thermoactivation. Applied Surface Science, 2007, 253, 5762-5766.	6.1	64
46	Synthesis of biodiesel from the methanolysis of sunflower oil using PURALÂ® Mgâ€“Al hydrotalcites as catalyst precursors. Applied Catalysis B: Environmental, 2010, 100, 299-309.	20.2	62
47	Role of water in the CO oxidation reaction on Au/CeO2: Modification of the surface properties. Applied Catalysis B: Environmental, 2008, 84, 119-124.	20.2	61
48	Gold promoted Cu/ZnO/Al2O3 catalysts prepared from hydrotalcite precursors: Advanced materials for the WGS reaction. Applied Catalysis B: Environmental, 2017, 201, 310-317.	20.2	61
49	Multicomponent Ni-CeO2 nanocatalysts for syngas production from CO2/CH4 mixtures. Journal of CO2 Utilization, 2018, 25, 68-78.	6.8	61
50	Influence of the preparation method in the metal-support interaction and reducibility of Ni-Mg-Al based catalysts for methane steam reforming. International Journal of Hydrogen Energy, 2019, 44, 19827-19840.	7.1	61
51	Molecular-dynamics simulations of liquid aluminum oxide. Physical Review B, 1998, 58, 2369-2371.	3.2	60
52	Washcoating of metallic monoliths and microchannel reactors. Studies in Surface Science and Catalysis, 2010, , 25-33.	1.5	60
53	IR spectroscopic insights into the coking-resistance effect of potassium on nickel-based catalyst during dry reforming of methane. Applied Catalysis B: Environmental, 2021, 285, 119822.	20.2	59
54	Au/CeO2 Catalysts: Structure and CO Oxidation Activity. Catalysts, 2016, 6, 158.	3.5	58

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55	Inâ€situ Raman spectroscopy study of Ru/TiO₂ catalyst in the selective methanation of CO. Journal of Raman Spectroscopy, 2016, 47, 189-197.	2.5	56
56	Intensification of hydrogen production by methanol steam reforming. International Journal of Hydrogen Energy, 2016, 41, 5250-5259.	7.1	56
57	Mono and bimetallic Cu-Ni structured catalysts for the water gas shift reaction. Applied Catalysis A: General, 2015, 497, 1-9.	4.3	55
58	Understanding the Role of the Acid Sites in 5-Hydroxymethylfurfural Oxidation to 2,5-Furandicarboxylic Acid Reaction over Gold Catalysts: Surface Investigation on Ce_xZr_{1â€“x}O₂ Compounds. ACS Catalysis, 2018, 8, 11154-11164.	11.2	55
59	Dehydration of glucose to 5-Hydroxymethlyfurfural on bifunctional carbon catalysts. Applied Catalysis B: Environmental, 2021, 286, 119938.	20.2	55
60	Influence of nitrogen content on the acid-base properties of aluminophosphate oxynitrides. Applied Catalysis A: General, 1996, 137, 9-23.	4.3	54
61	Synthesis and characterization of cryptomelane- and birnessite-type oxides: Precursor effect. Materials Characterization, 2007, 58, 776-781.	4.4	54
62	Glycerol steam reforming on bimetallic NiSn/CeO2â€“MgOâ€“Al2O3 catalysts: Influence of the support, reaction parameters and deactivation/regeneration processes. Applied Catalysis A: General, 2015, 492, 38-47.	4.3	54
63	Nucleation and growth of manganese oxides on metallic surfaces as a tool to prepare metallic monoliths. Applied Catalysis A: General, 2007, 325, 205-212.	4.3	53
64	WGS and CO-PrOx reactions using gold promoted copper-ceria catalysts: â€œBulk CuO CeO2 vs. CuO CeO2/Al2O3 with low mixed oxide contentâ€• Applied Catalysis B: Environmental, 2016, 197, 62-72.	20.2	53
65	Catalytic combustion of volatile organic compounds on gold/titanium oxynitride catalysts. Applied Catalysis B: Environmental, 2005, 61, 177-183.	20.2	51
66	Ruâ€“Ni Catalyst in the Combined Dry-Steam Reforming of Methane: The Importance in the Metal Order Addition. Topics in Catalysis, 2016, 59, 303-313.	2.8	51
67	Molecular dynamics studies of the structure of Î³-alumina. Chemical Physics Letters, 1992, 192, 463-468.	2.6	50
68	Computer Simulation of .gamma.-Al2O3 Microcrystal. The Journal of Physical Chemistry, 1995, 99, 17872-17876.	2.9	49
69	The role of Au, Cu & CeO 2 and their interactions for an enhanced WGS performance. Applied Catalysis B: Environmental, 2016, 187, 98-107.	20.2	49
70	Selective CO methanation with structured RuO2/Al2O3 catalysts. Applied Catalysis B: Environmental, 2018, 236, 420-427.	20.2	49
71	State of gold on an Au/Al2O3 catalyst subjected to different pre-treatments: An FTIR study. Catalysis Communications, 2006, 7, 308-313.	3.3	48
72	Gold catalysts screening in base-free aerobic oxidation of glucose to gluconic acid. Catalysis Today, 2017, 279, 148-154.	4.4	48

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73	Monitoring the Reaction Mechanism in Model Biogas Reforming by Inâ€…Situ Transient and Steadyâ€State DRIFTS Measurements. ChemSusChem, 2017, 10, 1193-1201.	6.8	48
74	Lanthanide Doped V2O5/Al2O3Catalysts:Â Structureâ"Activity Relationship in the SCR of NOxâ€. Journal of Physical Chemistry B, 2000, 104, 3310-3319.	2.6	47
75	Boosting the activity of a Au/CeO2/Al2O3 catalyst for the WGS reaction. Catalysis Today, 2015, 253, 149-154.	4.4	47
76	Policies and Motivations for the CO2 Valorization through the Sabatier Reaction Using Structured Catalysts. A Review of the Most Recent Advances. Catalysts, 2018, 8, 578.	3.5	47
77	Gold supported on Fe, Ce, and Al pillared bentonites for CO oxidation reaction. Applied Catalysis B: Environmental, 2007, 72, 157-165.	20.2	46
78	Gold(iii) stabilized over ionic liquids grafted on MCM-41 for highly efficient three-component coupling reactions. Physical Chemistry Chemical Physics, 2013, 15, 16927.	2.8	46
79	Gold supported on CuOx/CeO2 catalyst for the purification of hydrogen by the CO preferential oxidation reaction (PROX). Fuel, 2014, 118, 176-185.	6.4	46
80	Pyridine adsorption on NiSn/MgOâ€"Al2O3: An FTIR spectroscopic study of surface acidity. Applied Surface Science, 2014, 317, 241-251.	6.1	46
81	Influence of gold particle size in Au/C catalysts for base-free oxidation of glucose. Catalysis Today, 2018, 306, 183-190.	4.4	46
82	The Role of Silicon in the Reactive-Elements Effect on the Oxidation of Conventional Austenitic Stainless Steel. Oxidation of Metals, 2007, 67, 87-105.	2.1	45
83	Photocatalytic degradation of 2,4-dichlorophenoxyacetic acid using nanocrystalline cryptomelane composite catalysts. Journal of Molecular Catalysis A, 2008, 281, 107-112.	4.8	45
84	Promoting effect of Sn on supported Ni catalyst during steam reforming of glycerol. International Journal of Hydrogen Energy, 2016, 41, 9234-9244.	7.1	45
85	Surface models for Î³-Al2O3from molecular dynamics simulations. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 3623-3628.	1.7	44
86	Samarium oxide (Sm2O3)/alumina catalysts for methane coupling. Influence of the structure of surface samarium-aluminum-oxygen phases on the reactivity. The Journal of Physical Chemistry, 1993, 97, 9233-9240.	2.9	44
87	Drifts, XPS, XAS, and ab Initio Study of Lanthanide Oxides Supported on .gamma.-Al2O3. The Journal of Physical Chemistry, 1995, 99, 4655-4660.	2.9	44
88	AISI 304 Austenitic stainless steels monoliths for catalytic applications. Chemical Engineering Journal, 2009, 148, 191-200.	12.7	44
89	Preferential oxidation of CO (CO-PROX) over CuOx/CeO2 coated microchannel reactor. Catalysis Today, 2012, 180, 105-110.	4.4	42
90	Surface structure of cubic aluminum oxide. Physical Review B, 1994, 50, 2561-2565.	3.2	41

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91	Au/Al2O3 â€“ Efficient catalyst for 5-hydroxymethylfurfural oxidation to 2,5-furandicarboxylic acid. Catalysis Today, 2019, 333, 169-175.	4.4	41
92	Lanthanide oxides: preparation and ageing. Journal of the Chemical Society Dalton Transactions, 1984, , 87.	1.1	40
93	Depositionâ€“precipitation method to obtain supported gold catalysts: dependence of the acidâ€“base properties of the support exemplified in the system TiO2â€“TiOxNyâ€“TiN. Applied Catalysis A: General, 2003, 246, 365-372.	4.3	40
94	New redox deposition-precipitation method for preparation of supported manganese oxide catalysts. Catalysis Letters, 2005, 101, 151-157.	2.6	40
95	Design and testing of a microchannel reactor for the PROX reaction. Chemical Engineering Journal, 2011, 167, 634-642.	12.7	40
96	Surface basicity of a new family of catalysts: aluminophosphate oxynitride (ALPON). Journal of the Chemical Society, Faraday Transactions, 1995, 91, 4477-4479.	1.7	39
97	Steam reforming of methanol over supported Ni and Niâ€“Sn nanoparticles. International Journal of Hydrogen Energy, 2013, 38, 6646-6656.	7.1	39
98	Effect of Gold Particles Size over Au/C Catalyst Selectivity in HMF Oxidation Reaction. ChemCatChem, 2020, 12, 1177-1183.	3.7	39
99	Ruâ€“Ni/MgAl2O4 structured catalyst for CO2 methanation. Renewable Energy, 2020, 161, 120-132.	8.9	39
100	CO oxidation over gold-supported catalysts-coated ceramic foams prepared from stainless steel wastes. Applied Catalysis A: General, 2006, 302, 96-103.	4.3	38
101	Selective CO removal over Au/CeFe and CeCu catalysts in microreactors studied through kinetic analysis and CFD simulations. Chemical Engineering Journal, 2011, 167, 588-596.	12.7	38
102	Impact of Ceâ€“Fe synergism on the catalytic behaviour of Au/CeO₂â€“FeO_x/Al₂O₃for pure H₂production. Catalysis Science and Technology, 2013, 3, 779-787.	4.1	38
103	Dry Reforming of Ethanol and Glycerol: Mini-Review. Catalysts, 2019, 9, 1015.	3.5	38
104	Influence of phosphorus in vanadium-containing catalysts for NOx removal. Applied Catalysis, 1989, 55, 151-164.	0.8	37
105	Redox chemistry of gold in a Au/FeO /CeO2 CO oxidation catalyst. Catalysis Communications, 2009, 10, 1196-1202.	3.3	37
106	Does shaping catalysts modify active phase sites? A comprehensive in situ FTIR spectroscopic study on the performance of a model Ru/Al2O3 catalyst for the CO methanation. Chemical Engineering Journal, 2019, 357, 248-257.	12.7	37
107	Structure-sensitivity of formic acid dehydrogenation reaction over additive-free Pd NPs supported on activated carbon. Chemical Engineering Journal, 2021, 420, 127641.	12.7	35
108	Electrocatalytic CO2 conversion to C2 products: Catalysts design, market perspectives and techno-economic aspects. Renewable and Sustainable Energy Reviews, 2022, 161, 112329.	16.4	35

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109	Multiple Zeolite Structures from One Ionic Liquid Template. Chemistry - A European Journal, 2013, 19, 2122-2130.	3.3	34
110	O2-assisted Water Gas Shift reaction over structured Au and Pt catalysts. Applied Catalysis B: Environmental, 2016, 185, 337-343.	20.2	34
111	New concept for old reaction: Novel WGS catalyst design. Applied Catalysis B: Environmental, 2018, 238, 1-5.	20.2	34
112	Spectroscopic properties and potential energy curves of some low-lying electronic states of AlO, AlO+, LaO, and LaO+: An ab initioCASSCFstudy. International Journal of Quantum Chemistry, 1994, 52, 1329-1338.	2.0	33
113	Oxodiperoxomolybdenum complex immobilized onto ionic liquid modified SBA-15 as an effective catalysis for sulfide oxidation to sulfoxides using hydrogen peroxide. Catalysis Today, 2015, 255, 102-108.	4.4	33
114	Recycling of construction and demolition waste generated by building infrastructure for the production of glassy materials. Ceramics International, 2016, 42, 15217-15223.	4.8	33
115	Titania-Supported Gold Catalysts: Comparison between the Photochemical Phenol Oxidation and Gaseous CO Oxidation Performances. Catalysis Letters, 2008, 123, 198-206.	2.6	32
116	Aluminium anodisation for Au-CeO2/Al2O3-Al monoliths preparation. Chemical Engineering Journal, 2009, 151, 324-332.	12.7	32
117	CO oxidation at low temperature on Au/CePO4: Mechanistic aspects. Applied Catalysis B: Environmental, 2011, 107, 268-273.	20.2	32
118	In situ characterization of iron-promoted ceriaâ€“alumina gold catalysts during the water-gas shift reaction. Catalysis Today, 2013, 205, 41-48.	4.4	32
119	In situ DRIFTS study of the adsorptionâ€“oxidation of CH3OH on V2O5. Journal of Molecular Catalysis A, 2000, 161, 89-97.	4.8	31
120	Preparation of Au-CeO2 and Au-Al2O3/AISI 304 austenitic stainless steel monoliths and their performance in the catalytic oxidation of CO. Chemical Engineering Journal, 2008, 136, 390-397.	12.7	31
121	Gold nanoparticles on silica monospheres modified by amino groups. Microporous and Mesoporous Materials, 2009, 117, 530-534.	4.4	31
122	Influence of the O2/CO ratio and the presence of H2O and CO2 in the feed-stream during the preferential oxidation of CO (PROX) over a CuOx/CeO2-coated microchannel reactor. Catalysis Today, 2013, 203, 182-187.	4.4	31
123	Structuring Pt/CeO2/Al2O3 WGS catalyst: Introduction of buffer layer. Applied Catalysis B: Environmental, 2017, 200, 420-427.	20.2	31
124	Gold catalyst recycling study in base-free glucose oxidation reaction. Catalysis Today, 2018, 301, 72-77.	4.4	31
125	Bimetallic PdAu catalysts for formic acid dehydrogenation. International Journal of Hydrogen Energy, 2020, 45, 23056-23068.	7.1	31
126	Au and Pt Remain Unoxidized on a CeO₂-Based Catalyst during the Waterâ€“Gas Shift Reaction. Journal of the American Chemical Society, 2022, 144, 446-453.	13.7	31

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127	Characterization of lanthanide oxide-promoted rhodium alumina catalysts. Inorganica Chimica Acta, 1987, 140, 45-47.	2.4	30
128	DRIFTS study of adsorbed formate species in the carbon dioxide and hydrogen reaction over rhodium catalysts. Applied Catalysis, 1991, 71, 219-231.	0.8	30
129	Deposition of Al-Fe pillared bentonites and gold supported Al-Fe pillared bentonites on metallic monoliths for catalytic oxidation reactions. Applied Catalysis A: General, 2009, 364, 166-173.	4.3	30
130	Effect of the alloy on micro-structured reactors for methanol steam reforming. Catalysis Today, 2013, 213, 145-154.	4.4	30
131	Deep insight into Zr/Fe combination for successful Pt/CeO₂/Al₂O₃ WGS catalyst doping. Catalysis Science and Technology, 2017, 7, 1556-1564.	4.1	30
132	Carbon Supported Gold Nanoparticles for the Catalytic Reduction of 4-Nitrophenol. Frontiers in Chemistry, 2019, 7, 548.	3.6	30
133	Characterization of Alkali-Doped Ni/SiO2 Catalysts. Journal of Physical Chemistry B, 1997, 101, 1782-1790.	2.6	29
134	2-Propanol oxidation over gold supported catalysts coated ceramic foams prepared from stainless steel wastes. Journal of Molecular Catalysis A, 2007, 277, 145-154.	4.8	29
135	Pt/TiO2 brain biocompatible nanoparticles: GBM treatment using the C6 model in Wistar rats. Acta Biomaterialia, 2008, 4, 2037-2044.	8.3	29
136	Au/TiO2 supported on ferritic stainless steel monoliths as CO oxidation catalysts. Applied Surface Science, 2013, 270, 169-177.	6.1	29
137	Could an efficient WGS catalyst be useful in the CO-PrOx reaction?. Applied Catalysis B: Environmental, 2014, 150-151, 554-563.	20.2	28
138	Catalytic screening of Au/CeO 2 -MO x /Al 2 O 3 catalysts (MÂ=ÂLa, Ni, Cu, Fe, Cr, Y) in the CO-PrOx reaction. International Journal of Hydrogen Energy, 2015, 40, 1782-1788.	7.1	28
139	The effect of ultrasound in the synthesis of clays used as catalysts in oxidation reactions. Catalysis Today, 2008, 133-135, 526-529.	4.4	27
140	A CFD study on the effect of the characteristic dimension of catalytic wall microreactors. AICHE Journal, 2012, 58, 2785-2797.	3.6	27
141	Metallic structured catalysts: Influence of the substrate on the catalytic activity. Applied Catalysis A: General, 2014, 478, 45-57.	4.3	27
142	Microreactors technology for hydrogen purification: Effect of the catalytic layer thickness on CuO /CeO2-coated microchannel reactors for the PROX reaction. Chemical Engineering Journal, 2015, 275, 45-52.	12.7	27
143	Cost-effective routes for catalytic biomass upgrading. Current Opinion in Green and Sustainable Chemistry, 2020, 23, 1-9.	5.9	27
144	In-situ HDO of guaiacol over nitrogen-doped activated carbon supported nickel nanoparticles. Applied Catalysis A: General, 2021, 620, 118033.	4.3	27

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145	Aluminum Anodization in Oxalic Acid: Controlling the Texture of Al₂O₃/Al Monoliths for Catalytic Aplications. Industrial & Engineering Chemistry Research, 2011, 50, 2117-2125.	3.7	26
146	Influence of Vanadium or Cobalt Oxides on the CO Oxidation Behavior of Au/MO_x/CeO₂â€“Al₂O₃ Systems. ChemCatChem, 2012, 4, 512-520.	3.7	26
147	Bimetallic Niâ€“Ru and Niâ€“Re Catalysts for Dry Reforming of Methane: Understanding the Synergies of the Selected Promoters. Frontiers in Chemistry, 2021, 9, 694976.	3.6	26
148	Current scenario and prospects in manufacture strategies for glass, quartz, polymers and metallic microreactors: A comprehensive review. Chemical Engineering Research and Design, 2021, 171, 13-35.	5.6	26
149	Title is missing!. Oxidation of Metals, 2002, 57, 33-51.	2.1	25
150	Fischer-tropsch catalyst deposition on metallic structured supports. Studies in Surface Science and Catalysis, 2007, 167, 79-84.	1.5	25
151	CO and VOCs oxidation over Pt/SiO2 catalysts prepared using silicas obtained from stainless steel slags. Catalysis Today, 2008, 133-135, 467-474.	4.4	25
152	Gold Nanoparticles on Yttrium Modified Titania: Support Properties and Catalytic Activity. Topics in Catalysis, 2011, 54, 219-228.	2.8	25
153	Effect of gold on a NiLaO3 perovskite catalyst for methane steam reforming. Applied Catalysis B: Environmental, 2014, 144, 846-854.	20.2	25
154	Flexible syngas production using a La2Zr2-xNixO7-Î´ pyrochlore-double perovskite catalyst: Towards a direct route for gas phase CO2 recycling. Catalysis Today, 2020, 357, 583-589.	4.4	25
155	Activation of rare earth oxide catalysts. Journal of the Less Common Metals, 1983, 94, 139-144.	0.8	24
156	â€œIn situâ€•drifts study of adsorbed species in the hydrogenation of carbon oxides. Catalysis Today, 1991, 9, 53-60.	4.4	24
157	In Situ Temperature-Programmed Diffuse Reflectance Infrared Fourier Transform Spectroscopy (TPDRIFTS) of V2O5/TiO2 Catalysts. Applied Spectroscopy, 1997, 51, 416-422.	2.2	24
158	Adsorption of Acetone onto MgO: Experimental and Theoretical Evidence for the Presence of a Surface Enolate. Angewandte Chemie - International Edition, 1999, 38, 506-509.	13.8	24
159	Surface oxygen vacancies in gold based catalysts for CO oxidation. RSC Advances, 2014, 4, 13145-13152.	3.6	24
160	CO/H2 adsorption on a Ru/Al2O3 model catalyst for Fischer Trospch: Effect of water concentration on the surface species. Applied Catalysis B: Environmental, 2018, 237, 986-995.	20.2	24
161	Chemisorption and surface reactions of molecular deuterium and hydrocarbons on the rhenium(0001) single-crystal surface clean and in the presence of co-adsorbed sulfur or carbon. The Journal of Physical Chemistry, 1987, 91, 5695-5705.	2.9	23
162	In situ diffuse reflectance infrared spectroscopy (DRIFTS) study of the reversibility of CdGeON sensors towards oxygen. Sensors and Actuators B: Chemical, 1996, 31, 197-202.	7.8	23

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163	Title is missing!. Oxidation of Metals, 1999, 52, 447-462.	2.1	23
164	DRIFTS study of methanol adsorption on Mgâ€“Al hydrotalcite catalysts for the transesterification of vegetable oils. Catalysis Communications, 2012, 17, 189-193.	3.3	23
165	Ni-CeO2/C Catalysts with Enhanced OSC for the WGS Reaction. Catalysts, 2015, 5, 298-309.	3.5	23
166	Synthesis and application of layered titanates in the photocatalytic degradation of phenol. Applied Catalysis B: Environmental, 2015, 163, 23-29.	20.2	23
167	Effect of potassium loading on basic properties of Ni/MgAl2O4 catalyst for CO2 reforming of methane. Journal of CO2 Utilization, 2021, 52, 101681.	6.8	23
168	A new strong basic high surface area catalyst: The nitrided aluminophosphate: AlPON and Ni-AlPON. Studies in Surface Science and Catalysis, 1995, , 381-389.	1.5	22
169	DRIFTS analysis of the CO2 detection mechanisms using LaOCl sensing material. Sensors and Actuators B: Chemical, 2005, 108, 484-489.	7.8	22
170	Apatite and Portland/apatite composite cements obtained using a hydrothermal method for retaining heavy metals. Journal of Hazardous Materials, 2008, 150, 99-108.	12.4	22
171	Sub-ambient CO oxidation over Au/MOx/CeO2-Al2O3 (M=Zn or Fe). Applied Catalysis A: General, 2012, 419-420, 58-66.	4.3	22
172	Stepping toward Efficient Microreactors for CO₂ Methanation: 3D-Printed Gyroid Geometry. ACS Sustainable Chemistry and Engineering, 2021, 9, 8198-8206.	6.7	22
173	Low cost rare earth elements deposition method for enhancing the oxidation resistance at high temperature of Cr2O3 and Al2O3 forming alloys. Journal of Alloys and Compounds, 2001, 323-324, 70-73.	5.5	21
174	Development of a modified CVD coating process for the enhancement of the high temperature oxidation resistance of Cr2O3 and Al2O3 forming alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2001, 300, 22-33.	5.6	21
175	Solâ€“gel obtained silicophosphates as materials to retain caesium at high temperatures. Journal of Materials Chemistry, 2003, 13, 67-74.	6.7	21
176	Microstructural characterization of Eurofer-ODS RAFM steel in the normalized and tempered condition and after thermal aging in simulated fusion conditions. Fusion Engineering and Design, 2005, 75-79, 1061-1065.	1.9	21
177	Ionic liquid templated TiO2 nanoparticles as a support in gold environmental catalysis. Applied Catalysis B: Environmental, 2009, 93, 140-148.	20.2	21
178	Low-temperature CO oxidation on multicomponent gold based catalysts. Frontiers in Chemistry, 2013, 1, 12.	3.6	21
179	Viability of Au/CeO₂â€“ZnO/Al₂O₃ Catalysts for Pure Hydrogen Production by the Waterâ€“Gas Shift Reaction. ChemCatChem, 2014, 6, 1401-1409.	3.7	21
180	H2 oxidation as criterion for PrOx catalyst selection: Examples based on Auâ€“CoO -supported systems. Journal of Catalysis, 2015, 326, 161-171.	6.2	21

#	Article	IF	Citations
181	Promoting effect of CeO2, ZrO2 and Ce/Zr mixed oxides on Co/Î³-Al2O3 catalyst for Fischer-Tropsch synthesis. Renewable Energy, 2019, 132, 1141-1150.	8.9	21
182	Experimental evidence of HCO species as intermediate in the fischer tropsch reaction using operando techniques. Applied Catalysis B: Environmental, 2020, 272, 119032.	20.2	21
183	Simultaneous Analysis of Gas Phase and Intermediates in the Hydrogenation of Carbon Oxides by DRIFTS. Applied Spectroscopy, 1993, 47, 1760-1766.	2.2	20
184	DRIFTS Chamber for in Situ and Simultaneous Study of Infrared and Electrical Response of Sensors. Applied Spectroscopy, 1995, 49, 1094-1096.	2.2	20
185	NH3 adsorption over lanthanide doped V2O5/Al2O3 catalysts. Journal of Alloys and Compounds, 2001, 323-324, 597-600.	5.5	20
186	AISI 304 austenitic stainless steel monoliths: Modification of the oxidation layer and catalytic coatings after deposition and its catalytic implications. Chemical Engineering Journal, 2010, 162, 1082-1090.	12.7	20
187	Tailoring structured WGS catalysts: Impact of multilayered concept on the water surface interactions. Applied Catalysis B: Environmental, 2018, 222, 124-132.	20.2	20
188	Effect of starch as binder in carbon aerogel and carbon xerogel preparation. Journal of Non-Crystalline Solids, 2019, 522, 119554.	3.1	20
189	Characterisation, surface hydrolysis and nitrogen stability in aluminophosphate oxynitride (AlPON) catalysts. Applied Catalysis A: General, 1999, 176, 177-187.	4.3	19
190	Phase Transformation and Structural Studies of EUROFER RAFM Alloy. Materials Science Forum, 2006, 514-516, 500-504.	0.3	19
191	Evidence of new Ni-O-K catalytic sites with superior stability for methane dry reforming. Applied Catalysis B: Environmental, 2022, 307, 121148.	20.2	19
192	Geometric and Electronic Structure of Amorphous Aluminophosphates. Ab Initio and Experimental Studies. Journal of Physical Chemistry B, 1997, 101, 9510-9516.	2.6	18
193	CO2 adsorption and surface basicity evaluation of aluminophosphate oxynitride (AlPON) catalysts. Catalysis Letters, 1998, 54, 159-164.	2.6	18
194	Study of aluminophosphate oxynitride (AlPON) materials by X-ray photoelectron (XPS) and diffuse reflectance Fourier transform IR spectroscopy (DRIFTS). Journal of Materials Chemistry, 1998, 8, 687-691.	6.7	18
195	Effects of nonstoichiometry in the melting process ofY2O3from molecular dynamics simulations. Physical Review B, 1999, 59, 11303-11307.	3.2	18
196	Ion microprobe study of the scale formed during high temperature oxidation of high silicon EN-1.4301 stainless steel. Nuclear Instruments & Methods in Physics Research B, 2001, 181, 394-398.	1.4	18
197	Physicochemical characterization and use of wastes from stainless steel mill. Environmental Progress and Sustainable Energy, 2010, 29, 471-480.	2.3	18
198	Gold supported cryptomelane-type manganese dioxide OMS-2 nanomaterials deposited on AISI 304 stainless steels monoliths for CO oxidation. Applied Catalysis A: General, 2012, 423-424, 137-145.	4.3	18

#	Article	IF	Citations
199	A direct in situ observation of water-enhanced proton conductivity of Eu-doped ZrO2: Effect on WGS reaction. Applied Catalysis B: Environmental, 2018, 231, 343-356.	20.2	18
200	XPS study of lutetium oxide samples with different hydration/carbonation degrees as a function of the preparation method. Applied Surface Science, 1987, 29, 40-48.	6.1	17
201	HCOOH hydrogenation over lanthanide-oxide-promoted Rh/Al2O3 catalysts. Applied Surface Science, 1993, 68, 565-573.	6.1	17
202	Anomalous scattering study of oxide scales formed at 1173 K on surface modified stainless steel. Journal of Materials Chemistry, 1998, 8, 2293-2298.	6.7	17
203	Au/CeO2 metallic monolith catalysts: influence of the metallic substrate. Gold Bulletin, 2013, 46, 221-231.	2.4	17
204	Pt/CePO4 catalysts for the WGS reaction: influence of the water-supplier role of the support on the catalytic performance. Journal of Materials Chemistry A, 2018, 6, 17001-17010.	10.3	17
205	Operando Spectroscopic Evidence of the Induced Effect of Residual Species in the Reaction Intermediates during CO₂ Hydrogenation over Ruthenium Nanoparticles. ChemCatChem, 2019, 11, 2063-2068.	3.7	17
206	EXAFS and DRIFTS study of lanthanide doped rhodium catalysts. Catalysis Letters, 1993, 18, 81-97.	2.6	16
207	Synthesis and characterization of solâ€“gel zirconia supported Pd and Ni catalysts. Catalysis Today, 2005, 107-108, 800-808.	4.4	16
208	Supported nickel catalysts with a controlled molecular architecture for the catalytic reformation of methane. Catalysis Today, 2010, 149, 394-400.	4.4	16
209	Gold supported on pillared clays for CO oxidation reaction: Effect of the clay aggregate size. Applied Clay Science, 2012, 69, 22-29.	5.2	16
210	Reductant atmospheres during slow pyrolysis of cellulose: First approach to obtaining efficient char-based catalysts in one pot. Journal of Analytical and Applied Pyrolysis, 2020, 148, 104821.	5.5	16
211	Lanthanide oxides: Thermochemical approach to hydration. Journal of Materials Science, 1987, 22, 1517-1520.	3.7	15
212	EXAFS data analysis for lanthanide sesquioxides. Journal of the Chemical Society, Faraday Transactions, 1994, 90, 2783.	1.7	15
213	Diffuse Reflectance Infrared (DRIFTS) and Mass Spectrometry Study of Thermal Stability of Aluminophosphate Oxynitrides (AlPON). Zeitschrift Fur Physikalische Chemie, 1997, 202, 21-29.	2.8	15
214	"â€˜In situâ€™' DRIFTS study of the SCR reaction of NO with ammonia over a high loading (15% weight) vanadiaâ€“titania catalyst. Physical Chemistry Chemical Physics, 1999, 1, 349-354.	2.8	15
215	Ionic liquid protected heteropoly acids for methanol dehydration. Catalysis Today, 2011, 171, 236-241.	4.4	15
216	Preferential oxidation of CO over Au/CuOxâ€“CeO2 catalyst in microstructured reactors studied through CFD simulations. Catalysis Today, 2013, 216, 283-291.	4.4	15

#	Article	IF	Citations
217	Multicomponent Au/Cu-ZnO-Al2O3 catalysts: Robust materials for clean hydrogen production. Applied Catalysis A: General, 2018, 558, 91-98.	4.3	15
218	Sustainable routes for acetic acid production: Traditional processes vs a low-carbon, biogas-based strategy. Science of the Total Environment, 2022, 840, 156663.	8.0	15
219	Onset of perovskite formation in the catalytic system La2O3/?-Al2O3. Catalysis Letters, 1993, 21, 89-97.	2.6	14
220	In situ diffuse reflectance infrared (DRIFTS) identification of active sites in the CO + H2 reaction over lanthanide-modified Rh/Al2O3 catalysts. Applied Surface Science, 1995, 84, 391-399.	6.1	14
221	Ab Initio SCF-Mo Study of the Chemisorption of Methane on Al and La Oxide Surfaces. Journal of Catalysis, 1995, 156, 273-278.	6.2	14
222	Forced deactivation and postmortem characterization of a metallic microchannel reactor employed for the preferential oxidation of CO (PROX). Chemical Engineering Journal, 2016, 302, 650-662.	12.7	14
223	Characterization of AlPO systems, precursors of the novel basic catalyst family AlPON. Catalysis Letters, 1995, 34, 379-388.	2.6	13
224	Cr2O3 (0001) oxygen-terminating surface. A molecular dynamics study. Computational and Theoretical Chemistry, 1999, 463, 185-190.	1.5	13
225	Nanogold mesoporous iron promoted ceria catalysts for total and preferential CO oxidation reactions. Journal of Molecular Catalysis A, 2016, 414, 62-71.	4.8	13
226	Operando DRIFTS-MS Study of WGS and rWGS Reaction on Biochar-Based Pt Catalysts: The Promotional Effect of Na. Journal of Carbon Research, 2018, 4, 47.	2.7	13
227	Guaiacol hydrodeoxygenation in hydrothermal conditions using N-doped reduced graphene oxide (RGO) supported Pt and Ni catalysts: Seeking for economically viable biomass upgrading alternatives. Applied Catalysis A: General, 2021, 611, 117977.	4.3	13
228	Enhanced catalytic activity and stability of nanoshaped Ni/CeO2 for CO2 methanation in micro-monoliths. Catalysis Today, 2022, 383, 205-215.	4.4	13
229	Ni/YMnO3 perovskite catalyst for CO2 methanation. Applied Materials Today, 2021, 23, 101055.	4.3	13
230	The structural role of the carotenoid in the bacterial light-harvesting protein 2 (LH2) of Rhodonbacter capsulatus. A Fourier transform Raman spectroscopy and circular dichroism study. Photosynthesis Research, 1995, 46, 363-369.	2.9	12
231	The thermostabilising effect of La doping on Î³-Al2O3 a molecular dynamics simulation study. Solid State Ionics, 1997, 95, 73-79.	2.7	12
232	CO-Induced Morphology Changes in Zn-Modified Ceria: A FTIR Spectroscopic Study. Journal of Physical Chemistry C, 2012, 116, 5747-5756.	3.1	12
233	Influence of PVP in magnetic properties of NiSn nanoparticles prepared by polyol method. Journal of Magnetism and Magnetic Materials, 2012, 324, 4011-4018.	2.3	12
234	Ionic liquid immobilization on carbon nanofibers and zeolites: Catalyst design for the liquid-phase toluene chlorination. Comptes Rendus Chimie, 2015, 18, 324-329.	0.5	12

#	Article	IF	Citations
235	The role of carbon overlayers on Pt-based catalysts for H2-cleanup by CO-PROX. Surface Science, 2016, 648, 84-91.	1.9	12
236	3D-printed structured catalysts for CO2 methanation reaction: Advancing of gyroid-based geometries. Energy Conversion and Management, 2022, 258, 115464.	9.2	12
237	Hydration of Sm2O3 under mild conditions. Journal of the Less Common Metals, 1985, 109, 197-207.	0.8	11
238	Lanthanide oxides: Lu2O3 hydration. Journal of the Less Common Metals, 1985, 110, 425-432.	0.8	11
239	XAS study of transition metal ions in hydrotalcite-like compounds. Nuclear Instruments & Methods in Physics Research B, 1995, 97, 16-19.	1.4	11
240	Influence of alkali additives on activity and toxicity of H2S and thiophene over a Ni/SiO2 catalyst. Applied Catalysis A: General, 1998, 166, 163-172.	4.3	11
241	Catalytic nanomedicine: Functionalisation of nanostructured cryptomelane. Materials Chemistry and Physics, 2010, 120, 518-525.	4.0	11
242	Advances in Structured and Microstructured Catalytic Reactors for Hydrogen Production. , 2013, , 201-224.		11
243	Fischerâ€“Tropsch Synthesis Over Zr-Promoted Co/Î³-Al2O3 Catalysts. Topics in Catalysis, 2017, 60, 1285-1298.	2.8	11
244	Metal Micro-Monoliths for the Kinetic Study and the Intensification of the Water Gas Shift Reaction. Catalysts, 2018, 8, 594.	3.5	11
245	Phosphate-type supports for the design of WGS catalysts. Applied Catalysis B: Environmental, 2019, 244, 853-862.	20.2	11
246	Effect of the sulphonating agent on the catalytic behavior of activated carbons in the dehydration reaction of fructose in DMSO. Applied Catalysis A: General, 2021, 617, 118108.	4.3	11
247	Influence of the method of preparation on Yb2O3 hydration. Journal of Materials Science, 1985, 20, 1828-1834.	3.7	10
248	Effect of the precursor salt on the reactivity of Lu2O3. Journal of the Less Common Metals, 1985, 112, 347-354.	0.8	10
249	Characterization of a lutetia-alumina catalyst by CO2 adsorption. Applied Catalysis, 1986, 25, 207-213.	0.8	10
250	Rutherford backscattering spectrometry (RBS) characterization of oxide scale formed on (AISI-304) steel after surface deposition of lanthanum. Acta Materialia, 1996, 44, 675-681.	7.9	10
251	Influence of drying temperature on properties of Ni-MgO catalysts. Solid State Ionics, 1997, 95, 137-142.	2.7	10
252	Molecular-dynamics simulations of premelting processes inCr2O3. Physical Review B, 1998, 58, 6057-6062.	3.2	10

#	Article	IF	Citations
253	Pt/Al2O3/Al monoliths for the complete oxidation of toluene. Studies in Surface Science and Catalysis, 1998, 118, 157-166.	1.5	10
254	Synthesis and characterization of xerogel titania modified with Pd and Ni. Journal of Molecular Catalysis A, 2006, 253, 252-260.	4.8	10
255	Fibrous MnO₂ Nanoparticles with (2 Ã— 2) Tunnel Structures. Catalytic Activity in the Total Oxidation of Volatile Organic Compounds. Journal of Nanoscience and Nanotechnology, 2009, 9, 3837-3842.	0.9	10
256	Epimerization of glucose over ionic liquid/phosphomolybdate hybrids: structureâ€“activity relationship. Green Chemistry, 2018, 20, 1042-1049.	9.0	10
257	Montmorillonite-stabilized gold nanoparticles for nitrophenol reduction. Comptes Rendus Chimie, 2019, 22, 621-627.	0.5	10
258	Upgrading the PtCu intermetallic compounds: The role of Pt and Cu in the alloy. Catalysis Today, 2020, 356, 390-398.	4.4	10
259	Pursuing efficient systems for glucose transformation to levulinic acid: Homogeneous vs. heterogeneous catalysts and the effect of their co-action. Fuel, 2022, 318, 123712.	6.4	10
260	Lanthanide oxides: Yb2O3 hydration. Inorganica Chimica Acta, 1984, 94, 114-116.	2.4	9
261	Micropore formation mechanisms in Î³Al2O3. Surface Science, 1995, 322, 185-192.	1.9	9
262	Diffuse reflectance infrared spectra and their relation to the thermal stability of aluminophosphate oxynitrides as a function of nitrogen content. Journal of Non-Crystalline Solids, 1998, 238, 163-170.	3.1	9
263	Experimental and molecular dynamics simulation analysis of LaCrO3 precipitation in chromia scales. Acta Materialia, 2000, 48, 2951-2958.	7.9	9
264	Release Properties and Acute Biosecurity Determination of Collagen-Polyvinylpyrrolidone Loaded in Ordered Mesoporous Silica. Key Engineering Materials, 0, 391, 169-184.	0.4	9
265	New class of acid catalysts for methanol dehydration. Studies in Surface Science and Catalysis, 2010, , 601-604.	1.5	9
266	Highly porous hydrotalcite-like film growth on anodised aluminium monoliths. Studies in Surface Science and Catalysis, 2010, , 639-642.	1.5	9
267	Analysis of the variables that modify the robustness of Ti-SiO2 catalysts for alkene epoxidation: Role of silylation, deactivation and potential solutions. Molecular Catalysis, 2018, 459, 55-60.	2.0	9
268	Immobilization of Stabilized Gold Nanoparticles on Various Ceria-Based Oxides: Influence of the Protecting Agent on the Glucose Oxidation Reaction. Catalysts, 2019, 9, 125.	3.5	9
269	Adsorption and Dissociation of CO2 on Lanthanide Ion Promoted Rh/Al2O3 Catalysts. Studies in Surface Science and Catalysis, 1989, , 713-722.	1.5	8
270	Diffuse Reflectance FT-IR Characterization of Active Sites under Reaction Conditions: The Production of Oxygenates in the CO/H2 Reaction. Applied Spectroscopy, 1994, 48, 1208-1212.	2.2	8

#	Article	IF	Citations
271	Determination of nitrogen in metallic phases using the (d, pÎ³)15N nuclear reaction. Nuclear Instruments & Methods in Physics Research B, 2002, 188, 96-101.	1.4	8
272	Acidity characterization of a titanium and sulfate modified vermiculite. Materials Research Bulletin, 2008, 43, 1630-1640.	5.2	8
273	Intensifying glycerol steam reforming on a monolith catalyst: A reaction kinetic model. Chemical Engineering Journal, 2016, 306, 933-941.	12.7	8
274	Au-supported on Fe-doped ceria solids prepared in water-in-oil microemulsions: Catalysts for CO oxidation. Catalysis Today, 2016, 278, 140-149.	4.4	8
275	Improving the activity of gold nanoparticles for the water-gas shift reaction using TiO₂â€“Y₂O₃: an example of catalyst design. Physical Chemistry Chemical Physics, 2018, 20, 22076-22083.	2.8	8
276	5-Hydroxymethyl-2-Furfural Oxidation Over Au/CexZr1-xO2 Catalysts. Frontiers in Chemistry, 2020, 8, 461.	3.6	8
277	Estimate of the Basicity of Ln2O3-Bi2O3 Catalysts for Oxidative Coupling of Methane Through Diffuse-Reflectance UV-vis Experiments. Journal of Catalysis, 1994, 148, 399-402.	6.2	7
278	Study of corrosion-protected AlN samples by X-ray photoelectron spectroscopy and diffuse reflectance IR Fourier transform spectroscopy. Journal of Materials Chemistry, 1995, 5, 1223-1226.	6.7	7
279	Sol-gel Synthesis of Liâ€“ZrSiO4. Journal of Materials Research, 2000, 15, 1490-1495.	2.6	7
280	Theoretical investigations of NMR chemical shieldings on the AlPON catalyst system. Journal of Non-Crystalline Solids, 2000, 263-264, 189-194.	3.1	7
281	Influence of the ionic liquid presence on the selective oxidation of glucose over molybdenum based catalysts. Catalysis Today, 2016, 278, 82-90.	4.4	7
282	Colombian metallurgical coke as catalysts support of the direct coal liquefaction. Fuel, 2019, 255, 115748.	6.4	7
283	Mass spectrometry and in situ infrared diffuse reflectance analysis of the decomposition of HCOOH adsorbed on Ln2O3-promoted Rh/Al2O3catalysts. Journal of the Chemical Society, Faraday Transactions, 1993, 89, 3307-3312.	1.7	6
284	Study of the reaction of lanthanum nitrate with metal oxides present in the scale formed at high temperatures on stainless steel. Journal of Materials Science, 1995, 30, 5146-5150.	3.7	6
285	Influence of the Nickel Reduction Degree on the Toxicity of H2S and Thiophene over a Ni/SiO2Catalyst. Journal of Catalysis, 1996, 162, 349-358.	6.2	6
286	Study of the stability of AlPON catalysts in an aqueous environment. Journal of the European Ceramic Society, 1997, 17, 1979-1982.	5.7	6
287	Surface studies of SiC/SiCf composites exposed to relevant fusion reactor conditions. Surface and Interface Analysis, 2000, 30, 98-100.	1.8	6
288	XPS and DRIFTS Study of Cerium in Ce-Si-Al-O-N Glasses. Materials Science Forum, 2000, 325-326, 283-288.	0.3	6

#	Article	IF	Citations
289	Ion beam characterisation of ODS steel samples after long term annealing conditions. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 493-496.	1.4	6
290	Nanostructured Spark Plasma Sintered <scp><scp>Ceâ€TZP</scp></scp> Ceramics. Journal of the American Ceramic Society, 2012, 95, 901-906.	3.8	6
291	Microprocess Technology for Hydrogen Purification. , 2013, , 225-243.		6
292	Catalysts on Metallic Surfaces: Monoliths and Microreactors. , 2016, , 81-120.		6
293	Au/CeO2-ZnO/Al2O3 as Versatile Catalysts for Oxidation Reactions: Application in Gas/Liquid Environmental Processes. Frontiers in Chemistry, 2019, 7, 504.	3.6	6
294	Extended X-ray absorption fine structure study of sulphur poisoned Ni/SiO2 catalysts. Applied Catalysis A: General, 1994, 110, 197-205.	4.3	5
295	Oxidative coupling of methane over tetragonal Bi2O3-Ln2O3phases. Journal of Materials Chemistry, 1995, 5, 175-181.	6.7	5
296	Analysis of the elements sputtered during the lanthanum implantation in stainless steels. Nuclear Instruments & Methods in Physics Research B, 1998, 139, 344-349.	1.4	5
297	High-temperature oxidation behaviour of EN-1.4301 stainless-steel after surface Ce deposition by a modified CVD method. Surface and Interface Analysis, 2000, 30, 176-180.	1.8	5
298	Ethyl acetate combustion catalyzed by oxidized brass micromonoliths. Studies in Surface Science and Catalysis, 2010, 175, 661-664.	1.5	5
299	Gold Functionalized Supported Ionic Liquids Catalyst for CO Oxidation. Catalysts, 2011, 1, 52-68.	3.5	5
300	Boosting water activation determining-step in WGS reaction on structured catalyst by Mo-doping. Catalysis Today, 2022, 383, 193-204.	4.4	5
301	Evaluation of the Oxygen Mobility in CePO₄-Supported Catalysts: Mechanistic Implications on the Waterâ€“Gas Shift Reaction. Journal of Physical Chemistry C, 2020, 124, 16391-16401.	3.1	5
302	Catalytic reforming of model biomass-derived producer gas. Fuel, 2022, 320, 123843.	6.4	5
303	The effect of support surface hydroxyls on selective CO methanation with Ru based catalysts. Applied Catalysis A: General, 2022, 641, 118678.	4.3	5
304	CO2 methanation on Ni/YMn1-xAlxO3 perovskite catalysts. Applied Materials Today, 2022, 29, 101577.	4.3	5
305	Molecular dynamics simulation of the structure of the catalytic system La2O3-Î³-Al2O3. Computational and Theoretical Chemistry, 1993, 287, 161-166.	1.5	4
306	Influence of Oxygen in the Sensing Properties of Cadmium and Germanium Oxynitride. Langmuir, 1996, 12, 1495-1499.	3.5	4

#	Article	IF	Citations
307	Application of Temperature-Programmed Diffuse Reflectance Infrared Fourier Transform Spectroscopy to the Study of the Thermal Evolution of the Species Present in a Reacted Selective Catalytic Reduction V2O5 /TiO2 Catalyst. Applied Spectroscopy, 1999, 53, 800-804.	2.2	4
308	High Temperature Oxidation of a High N, High Si, Mn Free Austenitic Stainless Steel. Materials Science Forum, 2002, 383, 125-130.	0.3	4
309	Cerium SiAlON Glasses as a Model for the Immobilisation of Nuclear High Level Wastes. Materials Science Forum, 2002, 383, 87-96.	0.3	4
310	Charge-transfer molecular dynamics of aluminium nitride. Chemical Physics Letters, 2002, 356, 127-132.	2.6	4
311	An approach to the chemistry of fracture in oxynitride glasses. Annales De Chimie: Science Des Materiaux, 2003, 28, 79-86.	0.4	4
312	Selfâ€Assembling of Er₂O₃â€“TiO₂ Mixed Oxide Nanoplatelets by a Templateâ€Free Solvothermal Route. Chemistry - A European Journal, 2009, 15, 12426-12434.	3.3	4
313	Structured Catalysts for Volatile Organic Compound Removal. , 2013, , 233-256.		4
314	Understanding the Role of the Cosolvent in the Zeolite Template Function of Imidazolium-Based Ionic Liquid. Journal of Physical Chemistry B, 2014, 118, 3650-3660.	2.6	4
315	Phase assembly and electrical conductivity of spark plasma sintered CeO2â€“ZrO2 ceramics. Journal of Materials Science, 2014, 49, 6353-6362.	3.7	4
316	Monolithic stirrer reactor: The selective lactose oxidation in liquid phase over Au/Al2O3 nanostructured catalysts. Molecular Catalysis, 2020, 481, 110219.	2.0	4
317	Zr and Fe on Pt/ <scp> CeO ₂ â€MO _x </scp> / <scp> Al ₂ O ₃ </scp> catalysts for <scp>WGS</scp> reaction. International Journal of Energy Research, 2021, 45, 13978-13989.	4.5	4
318	Metal micromonoliths for the cleaning of H2 by means of methanation reactions. Catalysis Today, 2022, 383, 216-225.	4.4	4
319	Recent advances on gas-phase CO2 conversion: Catalysis design and chemical processes to close the carbon cycle. Current Opinion in Green and Sustainable Chemistry, 2022, 36, 100647.	5.9	4
320	The kinetics of Ln2O3 Hydration under mild conditions. Journal of Thermal Analysis, 1987, 32, 637-643.	0.6	3
321	Surface characterization of nitrides and oxynitrides of groups IIIA and IVA. Journal of the European Ceramic Society, 1997, 17, 1989-1999.	5.7	3
322	DRIFTS Study of Acetone Adsorption over AlPON Catalysts. Materials Science Forum, 2002, 383, 105-110.	0.3	3
323	Time-resolved operando DRIFTS-MS study of the moisture tolerance of small-pore SAPO-34 molecular sieves during CH4/CO2 separation. Microporous and Mesoporous Materials, 2020, 298, 110071.	4.4	3
324	Understanding the promotional effect of Pt/CeO2 in cobalt-catalyzed Fischer-Tropsch synthesis using operando infrared spectroscopy at moderated pressures. Fuel, 2022, 312, 122964.	6.4	3

#	Article	IF	Citations
325	Lanthanide oxides: effect of CO2 on the Yb2O3 hydration. Inorganica Chimica Acta, 1984, 94, 117-119.	2.4	2
326	Sputtering studies during lanthanum implantation in stainless steels. Nuclear Instruments & Methods in Physics Research B, 1997, 127-128, 791-795.	1.4	2
327	Oxide scale depth profiling of lanthanum-deposited AISI-304: An ion beam analysis. Nuclear Instruments & Methods in Physics Research B, 1998, 136-138, 1045-1051.	1.4	2
328	The Crystalline Structure of Germanium Oxynitrides within the CdZnGeON Family. Materials Science Forum, 2000, 325-326, 25-30.	0.3	2
329	Synthesis of MIBK from Acetone in a Single Step over Ni/AlPON Catalysts. Materials Science Forum, 2000, 325-326, 83-90.	0.3	2
330	Determination of nitrogen partitioning coefficients in superduplex stainless steels by NRA using a nuclear microprobe. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2208-2211.	1.4	2
331	The effect of water on particle size, porosity and the rate of drug release from implanted titania reservoirs. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 93B, 401-406.	3.4	2
332	Synthesis of ionic liquid templated zeolite like structures. Studies in Surface Science and Catalysis, 2010, 175, 597-600.	1.5	2
333	Liquid-phase oxidation with hydrogen peroxide of benzyl alcohol and xylenes on Ca10(PO4)6(OH)2 â€“ CaWO4. Comptes Rendus Chimie, 2016, 19, 1156-1165.	0.5	2
334	Elucidation of Water Promoter Effect of Proton Conductor in WGS Reaction over Pt-Based Catalyst: An Operando DRIFTS Study. Catalysts, 2020, 10, 841.	3.5	2
335	Unravelling the role of Fe in trimetallic Fe-Cu-Pt/Al2O3 catalysts for CO-PROX reaction. Molecular Catalysis, 2022, 517, 112015.	2.0	2
336	In Situ DRIFTS-MS Methanol Adsorption Study onto Supported NiSn Nanoparticles: Mechanistic Implications in Methanol Steam Reforming. Nanomaterials, 2021, 11, 3234.	4.1	2
337	Thiophene hydrogenolysis using temperature-programmed surface reaction as a tool to study poison toxicity. Applied Catalysis A: General, 1995, 132, L1-L7.	4.3	1
338	XAS study of V2O5/Al2O3 catalysts doped with rare earth oxides. Physica B: Condensed Matter, 1995, 208-209, 679-680.	2.7	1
339	The Short-Range Structure of Aluminophosphate Oxynitride Catalysts. An ab Initio and Experimental Study. Journal of Physical Chemistry B, 1999, 103, 10850-10857.	2.6	1
340	Surface Stability of Amorphous Aluminophosphate Oxynitrides (AlPON). Materials Science Forum, 2000, 325-326, 71-76.	0.3	1
341	Charge-Transfer Interaction Potential for AlN. Materials Science Forum, 2002, 383, 171-176.	0.3	1
342	Mechanical properties of Sialon glass after swift heavy-ion bombardment. Annales De Chimie: Science Des Materiaux, 2003, 28, 71-78.	0.4	1

#	Article	IF	Citations
343	Free-Carbon Surface for PtCu Nanoparticles: An In Situ Near Ambient Pressure X-ray Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2020, 124, 19046-19056.	3.1	1
344	How a small modification in the imidazolium-based SDA can determine the zeolite structure? MFI vs. TON. Microporous and Mesoporous Materials, 2021, 322, 111160.	4.4	1
345	Influence of the Lanthanide Oxides on the Catalytic Behavior of Au/Al₂O₃ Catalysts for Total and Preferential CO Oxidation. Advanced Chemistry Letters, 2013, 1, 237-246.	0.1	1
346	Distribution of basic centres on Yb2O3 surfaces. Surface Technology, 1984, 23, 225-230.	0.4	0
347	Reactivity of Lu2O3: ordered lattice defects induced by its preparation method. Journal of the Less Common Metals, 1987, 127, 266-267.	0.8	0
348	Methane Coupling Over Sm-Al Mixed Oxides. Studies in Surface Science and Catalysis, 1994, 82, 377-385.	1.5	0
349	Ab Initio and Experimental Studies on the Structure of Amorphous Aluminophosphate Oxynitrides (AlPON). Materials Science Forum, 2000, 325-326, 313-318.	0.3	0
350	Solubility of uranium at very low concentration in RAFM steel. Journal of Nuclear Materials, 2002, 307-311, 544-546.	2.7	0
351	Silica-based materials for reclamation of 135Cs at high temperatures. Journal of Materials Science Letters, 2002, 21, 1175-1177.	0.5	0
352	Raman Investigation Of Nanostructured Titania For Drug Delivery. , 2010, , .		0
353	Impact of structured catalysts in amine oxidation under mild conditions. Catalysis Today, 2016, 273, 266-272.	4.4	0