JosÃ© MarÃ-a RodrÃ-guez-Izquierdo

List of Publications by Year
in descending order

73	2,465	172457	206112
papers	citations	29 h-index	48 g-index

73	73	73	2312
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The interpretation of HREM images of supported metal catalysts using image simulation: profile view images. Ultramicroscopy, 1998, 72, 135-164.	1.9	154
2	Behaviour of rare earth sesquioxides exposed to atmospheric carbon dioxide and water. Reactivity of Solids, 1987, 4, 23-40.	0.3	129
3	Reversibility of hydrogen chemisorption on a ceria-supported rhodium catalyst. Journal of Catalysis, 1992, 137, 1-11.	6.2	129
4	Application of the sol-gel methods to catalyst preparation. Journal of Non-Crystalline Solids, 1992, 147-148, 724-738.	3.1	121
5	Microstructural and chemical properties of ceria-supported rhodium catalysts reduced at 773 K. The Journal of Physical Chemistry, 1993, 97, 4118-4123.	2.9	108
6	Study of some aspects of the reactivity of La2O3 with CO2 and H2O. Journal of Materials Science, 1985, 20, 537-541.	3.7	103
7	Extension of preparation methods employed with ceramic materials to carbon honeycomb monoliths. Carbon, 2004, 42, 3251-3254.	10.3	90
8	High-resolution electron microscopy investigation of metalâ€“support interactions in Rh/TiO2. Journal of the Chemical Society, Faraday Transactions, 1996, 92, 2799-2809.	1.7	86
9	Thermal evolution of a sample of La2O3 exposed to the atmosphere. Thermochimica Acta, 1983, 66, 139-145.	2.7	74
10	Protection against corrosion in marine environments of AA5083 Alâ€“Mg alloy by lanthanide chlorides. Journal of Alloys and Compounds, 1997, 250, 455-460.	5.5	73
11	Characterization of La2O3/SiO2Mixed Oxide Catalyst Supports. Journal of Catalysis, 1999, 183, 53-62.	6.2	67
12	Producing C-S-H gel by reaction between silica oligomers and portlandite: A promising approach to repair cementitious materials. Cement and Concrete Research, 2020, 130, 106008.	11.0	61
13	Reversible changes in the redox behaviour of a Ce0.68Zr0.32O2 mixed oxide: effect of alternating the re-oxidation temperature after reduction at 1223 K. Chemical Communications, 1999, , 149-150.	4.1	59
14	Comments on "Redox Processes on Pure Ceria and Rh/CeO2 Catalyst Monitored by X-ray Absorption (Fast Acquisition Mode). The Journal of Physical Chemistry, 1995, 99, 11794-11796.	2.9	58
15	Oxygen buffering capacity of mixed cerium terbium oxide: a new material with potential applications in three-way catalysts. Chemical Communications, 1997, , 1545-1546.	4.1	55
16	Ceriumâ€“terbium mixed oxides as alternative components for three-way catalysts: a comparative study of Pt/CeTbOx and Pt/CeO2 model systems. Catalysis Today, 1999, 53, 607-612.	4.4	51
17	Image simulation and experimental HREM study of the metal dispersion in Rh/CeO2 catalysts. Influence of the reduction/reoxidation conditions. Applied Catalysis B: Environmental, 1998, 16, 127-138.	20.2	50
18	Metal-support interaction phenomena in rhodium/ceria and rhodium/titania catalysts: Comparative study by high-resolution transmission electron spectroscopy. Applied Catalysis A: General, 1993, 99, 1-8.	4.3	46

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19	Highly stable ceria-zirconia-yttria supported Ni catalysts for syngas production by CO 2 reforming of methane. Applied Surface Science, 2017, 426, 864-873.	6.1	46
20	Characterisation of rare earth oxide supported metal catalysts. Study of some ceria supported rhodium phases. Catalysis Today, 1988, 2, 653-662.	4.4	43
21	Rational design of nanostructured, noble metal free, ceriaâ€“zirconia catalysts with outstanding low temperature oxygen storage capacity. Journal of Materials Chemistry A, 2013, 1, 4836.	10.3	42
22	Reducibility of ceriaâ€“lanthana mixed oxides under temperature programmed hydrogen and inert gas flow conditions. Journal of Alloys and Compounds, 1997, 250, 449-454.	5.5	41
23	Promoting effect of lanthana in the hydrogenation of carbon monoxide over supported rhodium catalysts. Applied Catalysis, 1988, 42, 77-89.	0.8	40
24	Preparation and characterization of Ceï£¿Mnï£¿O composites with applications in catalytic wet oxidation processes. Surface and Interface Analysis, 2004, 36, 752-755.	1.8	36
25	Structure of highly dispersed metals and oxides: exploring the capabilities of high-resolution electron microscopy. Surface and Interface Analysis, 2000, 29, 411-421.	1.8	35
26	The role of the carbonaceous deposits in the Catalytic Wet Oxidation (CWO) of phenol. Catalysis Communications, 2006, 7, 639-643.	3.3	34
27	Preparation and characterization of a praseodymium oxide to be used as a catalytic support. Journal of Alloys and Compounds, 1992, 180, 271-279.	5.5	31
28	Preparation of rhodium catalysts dispersed on TiO2SiO2 aerogels. Journal of Non-Crystalline Solids, 1992, 147-148, 758-763.	3.1	30
29	The key role of highly dispersed rhodium in the chemistry of hydrogenâ€“ceria systems. Journal of the Chemical Society Chemical Communications, 1992, , 460-462.	2.0	30
30	Originally prepared carbon-based honeycomb monoliths with potential application asÂVOCs adsorbents. Comptes Rendus Chimie, 2006, 9, 1215-1220.	0.5	27
31	Investigation by Means of H2 Adsorption, Diffraction, and Electron Microscopy Techniques of a Cerium/Terbium Mixed Oxide Supported on a Lanthana-Modified Alumina. Chemistry of Materials, 2002, 14, 844-850.	6.7	26
32	Deactivation of Pt/MnOxâ€“CeO2 catalysts for the catalytic wet oxidation of phenol: Formation of carbonaceous deposits and leaching of manganese. Catalysis Today, 2010, 154, 195-201.	4.4	25
33	The effect of reaction conditions on the apparent deactivation of Ceâ€“Zr mixed oxides for the catalytic wet oxidation of phenol. Catalysis Today, 2012, 180, 25-33.	4.4	25
34	Catalytic behavior of lanthana promoted Rh/SiO2 catalysts: influence of the preparation procedure. Applied Catalysis A: General, 2001, 208, 111-123.	4.3	24
35	Preparation of lanthana supported rhodium catalysts. Occurrence of heavy carbonation phenomena on the support.. Applied Catalysis, 1987, 31, 267-273.	0.8	22
36	Characterization of an experimental TPDâ€”MS system. Quantitative calibrations. Thermochimica Acta, 1983, 70, 249-256.	2.7	21

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37	Improving the Redox Response Stability of Ceria-Zirconia Nanocatalysts under Harsh Temperature Conditions. Chemistry of Materials, 2017, 29, 9340-9350.	6.7	21
38	An alternative way of reporting on the redox behaviour of ceria-based catalytic materials: Temperatureâ€“chemical environmentâ€“oxidation state diagrams. Catalysis Communications, 2005, 6, 582-585.	3.3	20
39	Solid state chemistry of the preparation of lanthana-supported metal catalysts ? study of the impregnation step. Journal of Materials Science, 1987, 22, 3793-3800.	3.7	19
40	Nanostructural evolution of high loading Rh/lanthana catalysts through the preparation and reduction steps. Catalysis Today, 1999, 52, 29-43.	4.4	19
41	HREM characterization of metal catalysts supported on rare-earth oxides: samarium oxide as support. Ultramicroscopy, 1990, 34, 60-65.	1.9	18
42	Influence of the preparation procedure on the chemical and microstructural properties of lanthana promoted Rh/SiO2 catalysts. Journal of Alloys and Compounds, 1997, 250, 461-466.	5.5	18
43	Ultrasound as a tool for the preparation of gels: effect on the textural properties of TiO2-SiO2 aerogels. Journal of Materials Science, 1993, 28, 2191-2195.	3.7	16
44	Study of the reduction/reoxidation cycle in a La/Ce/Tb mixed oxide. Journal of Alloys and Compounds, 1994, 207-208, 196-200.	5.5	16
45	Electron Microscopy Investigations of Nanostructured Ce/Mn Oxides for Catalytic Wet Oxidation. Journal of Physical Chemistry C, 2010, 114, 8981-8991.	3.1	16
46	TPD-MS study of carbonation and hydration of Yb2O3(C). Collection of Czechoslovak Chemical Communications, 1983, 48, 2205-2212.	1.0	16
47	Characterization of samaria samples stabilized in air. Journal of the Less Common Metals, 1985, 110, 433-439.	0.8	15
48	Comments on the preparation of M/4f oxide catalysts. Applied Catalysis, 1986, 21, 379-382.	0.8	13
49	Study of the support evolution through the process of preparation of rhodium/lanthana catalysts. Journal of the Chemical Society Faraday Transactions I, 1987, 83, 2279.	1.0	13
50	An atomically efficient, highly stable and redox active Ce0.5Tb0.5Ox (3% mol.)/MgO catalyst for total oxidation of methane. Journal of Materials Chemistry A, 2019, 7, 8993-9003.	10.3	12
51	A novel procedure for accurate estimations of the lattice parameter of supported nanoparticles from the analysis of plan view HREM images: Application to the structural investigation of Pd/CeO2 catalysts. Catalysis Today, 2012, 180, 174-183.	4.4	11
52	Study of the aging in air of a cubic sample of samaria. Materials Research Bulletin, 1987, 22, 131-138.	5.2	10
53	Metal-Support Interaction Phenomena in Some High Metal Loading Lanthana Supported Rhodium Catalysts. Studies in Surface Science and Catalysis, 1989, , 123-132.	1.5	10
54	Study of the interaction of two hexagonal neodymium oxides with atmospheric CO2 and H2O. Journal of Materials Science, 1988, 23, 1474-1480.	3.7	9

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55	Microstructure and catalytic properties of Rh and Ni dispersed on TiO2-SiO2 aerogels. Journal of Sol-Gel Science and Technology, 1994, 2, 831-836.	2.4	9
56	Pt/SiO2 Sonogels: Synthesis and Characterization. Langmuir, 1995, 11, 4328-4332.	3.5	9
57	Synthesis, characterization and performance of sol-gel prepared TiO2-SiO2catalysts and supports. Studies in Surface Science and Catalysis, 1995, , 461-470.	1.5	9
58	A facile one-pot hydrothermal synthesis as an efficient method to modulate the potassium content of cryptomelane and its effects on the redox and catalytic properties. Chinese Journal of Catalysis, 2019, 40, 940-952.	14.0	9
59	Honeycomb monolithic design to enhance the performance of Ni-based catalysts for dry reforming of methane. Catalysis Today, 2022, 383, 226-235.	4.4	8
60	Ultrathin Washcoat and Very Low Loading Monolithic Catalyst with Outstanding Activity and Stability in Dry Reforming of Methane. Nanomaterials, 2020, 10, 445.	4.1	8
61	Preparation of some rare earth oxide supported rhodium catalysts: Study of the supports. Materials Chemistry and Physics, 1987, 17, 433-443.	4.0	7
62	The chemistry in air of the rare-earth-metal sesquioxides. Comparative study of hexagonal and cubic neodymia samples. Journal of the Chemical Society Dalton Transactions, 1988, , 1765-1771.	1.1	7
63	Catalytic behaviour and surface properties of supported lanthana. Journal of Alloys and Compounds, 1992, 180, 295-301.	5.5	7
64	Influence of the noble metal on the properties as oxygen exchanger of Rh/LnOx systems (Ln: Ce,Tb): Application of the oxygen buffering capacity (OBC) technique. Journal of Alloys and Compounds, 2002, 344, 347-351.	5.5	6
65	Characterization of silica dispersed lanthana by CO2 adsorption. Journal of Alloys and Compounds, 1994, 207-208, 201-205.	5.5	5
66	Characterization of an experimental TPD-MS system. Reliability problems. Thermochimica Acta, 1986, 98, 319-326.	2.7	4
67	Analysis of some aspects of the catalytic behaviour of lanthanide oxides. Journal of the Less Common Metals, 1983, 94, 145-150.	0.8	3
68	Alcohol Decomposition as Reaction Test to Analyse the Catalytic Properties of 4f Oxides. Zeitschrift Fur Physikalische Chemie, 1983, 138, 229-238.	2.8	3
69	The influence of the structural nature of samaria on its behaviour against atmospheric CO2 and H2O. Materials Letters, 1987, 6, 71-74.	2.6	3
70	Thermal decomposition and FTIR study of pyridine adsorption on sonogel catalysts. Thermochimica Acta, 1995, 255, 319-328.	2.7	2
71	Influence of the textural properties on the catalytic activity of 4f oxides. Surface Technology, 1984, 22, 299-304.	0.4	1
72	Behaviour of neodymia as a support of highly dispersed rhodium. Inorganica Chimica Acta, 1987, 140, 49-51.	2.4	1

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73	Analysis and application of the theories that rationalize the crystalline structures of fluorite-related rare earth oxides. Catalysis Today, 2012, 180, 161-166.	4.4	0