Pilar Ramirez de la Piscina

List of Publications by Year
in descending order

113 papers	5,124 citations	87843 38 h-index	91828 69 g-index
116 all docs	116 docs citations	116 times ranked	4229 citing authors

#	Article	IF	Citations
1	Efficient Production of Hydrogen over Supported Cobalt Catalysts from Ethanol Steam Reforming. Journal of Catalysis, 2002, 209, 306-317.	3.1	506
2	Use of biofuels to produce hydrogen (reformation processes). Chemical Society Reviews, 2008, 37, 2459.	18.7	260
3	CO-free hydrogen from steam-reforming of bioethanol over ZnO-supported cobalt catalysts. Applied Catalysis B: Environmental, 2003, 43, 355-369.	10.8	248
4	Highly effective conversion of CO2 to methanol over supported and promoted copper-based catalysts: influence of support and promoter. Applied Catalysis B: Environmental, 2001, 29, 207-215.	10.8	228
5	Effect of sodium addition on the performance of Coâ€“ZnO-based catalysts for hydrogen production from bioethanol. Journal of Catalysis, 2004, 222, 470-480.	3.1	197
6	In situ DRIFT-mass spectrometry study of the ethanol steam-reforming reaction over carbonyl-derived Co/ZnO catalysts. Journal of Catalysis, 2004, 227, 556-560.	3.1	172
7	Direct production of hydrogen from ethanolic aqueous solutions over oxide catalysts. Chemical Communications, 2001, , 641-642.	2.2	160
8	Catalytic performance for CO2 conversion to methanol of gallium-promoted copper-based catalysts: influence of metallic precursors. Applied Catalysis B: Environmental, 2001, 34, 255-266.	10.8	160
9	Low-temperature steam-reforming of ethanol over ZnO-supported Ni and Cu catalysts. Catalysis Today, 2006, 116, 361-366.	2.2	132
10	In situ magnetic characterisation of supported cobalt catalysts under steam-reforming of ethanol. Applied Catalysis A: General, 2003, 243, 261-269.	2.2	131
11	Oxidative steam-reforming of ethanol over Co/SiO2, Coâ€“Rh/SiO2 and Coâ€“Ru/SiO2 catalysts: Catalytic behavior and deactivation/regeneration processes. Journal of Catalysis, 2008, 257, 206-214.	3.1	129
12	Transformation of Co3O4during Ethanol Steam-Re-forming. Activation Process for Hydrogen Production. Chemistry of Materials, 2004, 16, 3573-3578.	3.2	120
13	Supported Ptâ€“Sn catalysts highly selective for isobutane dehydrogenation: preparation, characterization and catalytic behavior. Applied Catalysis A: General, 1999, 189, 77-86.	2.2	110
14	Effective and Highly Selective CO Generation from CO₂ Using a Polycrystalline Î±-Mo₂C Catalyst. ACS Catalysis, 2017, 7, 4323-4335.	5.5	108
15	Microcalorimetric and Infrared Studies of Ethanol and Acetaldehyde Adsorption to Investigate the Ethanol Steam Reforming on Supported Cobalt Catalysts. Journal of Physical Chemistry B, 2005, 109, 10813-10819.	1.2	101
16	CO2 hydrogenation to methanol over CuZnGa catalysts prepared using microwave-assisted methods. Catalysis Today, 2015, 242, 193-199.	2.2	96
17	X-ray diffraction study of Co3O4 activation under ethanol steam-reforming. Catalysis Today, 2007, 126, 148-152.	2.2	85
18	Development of Hexagonal Closed-Packed Cobalt Nanoparticles Stable at High Temperature. Chemistry of Materials, 2009, 21, 5637-5643.	3.2	81

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19	Bimetallic Silica-Supported Catalysts Based on Niâ˜Sn, Pdâ˜Sn, and Ptâ˜Sn as Materials in the CO Oxidation Reaction. Chemistry of Materials, 1998, 10, 1333-1342.	3.2	80
20	Critical effect of carbon vacancies on the reverse water gas shift reaction over vanadium carbide catalysts. Applied Catalysis B: Environmental, 2020, 267, 118719.	10.8	69
21	Hydrogen production from the steam reforming of bio-butanol over novel supported Co-based bimetallic catalysts. Bioresource Technology, 2012, 107, 482-486.	4.8	67
22	Ethanol reforming processes over ZnO-supported palladium catalysts: Effect of alloy formation. Journal of Molecular Catalysis A, 2006, 250, 44-49.	4.8	65
23	Platinumâ€“Tin Catalysts Supported on Silica Highly Selective forn-Hexane Dehydrogenation. Journal of Catalysis, 1997, 166, 44-52.	3.1	58
24	H2 production by oxidative steam reforming of ethanol over K promoted Co-Rh/CeO2-ZrO2 catalysts. Energy and Environmental Science, 2010, 3, 487.	15.6	58
25	Crotonaldehyde hydrogenation over alumina- and silica-supported Ptâ€“Sn catalysts of different composition. In situ DRIFT study. Physical Chemistry Chemical Physics, 2000, 2, 3063-3069.	1.3	54
26	Structural changes and activation treatment in a Co/SiO2 catalyst for Fischerâ€“Tropsch synthesis. Catalysis Today, 2006, 114, 422-427.	2.2	51
27	Influence of Metallic Precursors on the Preparation of Silica-Supported Ptsn Alloy: Characterization and Reactivity in the Catalytic Activation of CO2. Journal of Catalysis, 1995, 156, 139-146.	3.1	49
28	Development of robust Co-based catalysts for the selective H2-production by ethanol steam-reforming. The Fe-promoter effect. International Journal of Hydrogen Energy, 2008, 33, 3601-3606.	3.8	48
29	Ga-promoted copper-based catalysts highly selective for methanol steam reforming to hydrogen; relation with the hydrogenation of CO2 to methanol. International Journal of Hydrogen Energy, 2015, 40, 11261-11266.	3.8	45
30	New supported Pd catalysts for the direct transformation of ethanol to ethyl acetate under medium pressure conditions. Catalysis Today, 2005, 107-108, 431-435.	2.2	44
31	Oxidative steam reforming of bio-butanol for hydrogen production: effects of noble metals on bimetallic CoM/ZnO catalysts (M=Ru, Rh, Ir, Pd). Applied Catalysis B: Environmental, 2014, 145, 56-62.	10.8	44
32	Reactions of propene on supported molybdenum and tungsten oxides. Journal of Molecular Catalysis A, 1995, 95, 147-154.	4.8	43
33	Support effect on the formation of the well-defined PtSn alloy from a Ptî—¸Sn bimetallic complex. Catalytic properties in the activation of CO2. Journal of Molecular Catalysis A, 1997, 118, 101-111.	4.8	43
34	Nature and location of cerium in Ce-loaded Y zeolites as revealed by HRTEM and spectroscopic techniques. Microporous and Mesoporous Materials, 2007, 100, 276-286.	2.2	43
35	Vapour phase hydrogenation of crotonaldehyde over magnesia-supported platinumâ€“tin catalysts. Physical Chemistry Chemical Physics, 2001, 3, 1782-1788.	1.3	42
36	Efficient hydrogen production from bio-butanol oxidative steam reforming over bimetallic Coâ€“Ir/ZnO catalysts. Green Chemistry, 2012, 14, 1035.	4.6	42

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37	Study of the Structure, Acidic, and Catalytic Properties of Binary Mixed-Oxide MoO3â^'ZrO2Systems. Chemistry of Materials, 2006, 18, 1581-1586.	3.2	41
38	Efficient hydrogen production from ethanol and glycerol by vapour-phase reforming processes with new cobalt-based catalysts. Bioresource Technology, 2011, 102, 3419-3423.	4.8	39
39	Coâ€“Cu Nanoparticles: Synthesis by Galvanic Replacement and Phase Rearrangement during Catalytic Activation. Langmuir, 2016, 32, 2267-2276.	1.6	37
40	Hydrogen production from methanol steam reforming over Al 2 O 3 - and ZrO 2 -modified CuOZnOGa 2 O 3 catalysts. International Journal of Hydrogen Energy, 2017, 42, 13704-13711.	3.8	37
41	Silica-supported PtSn alloy doped with Ga, In or, Tl. Journal of Molecular Catalysis A, 2003, 200, 251-259.	4.8	36
42	Waste biomass to liquids: Low temperature conversion of sugarcane bagasse to bio-oil. The effect of combined hydrolysis treatments. Biomass and Bioenergy, 2011, 35, 2106-2116.	2.9	36
43	Surface organometallic chemistry: evidence of disproportionation of dicobalt octacarbonyl to cobalt(2+) bis[dicarbonylcabaltate(1-)] at the surface of partially hydroxylated magnesia. Inorganic Chemistry, 1988, 27, 4030-4033.	1.9	33
44	In situ infrared spectroscopic study of the reaction pathway of the direct synthesis of n-butanol from ethanol over MgAl mixed-oxide catalysts. Catalysis Today, 2013, 213, 115-121.	2.2	33
45	HUSY zeolite modified by lanthanum: Effect of lanthanum introduction as a vanadium trap. Microporous and Mesoporous Materials, 2010, 133, 75-81.	2.2	32
46	Synthesis and Characterization of Ta2O5â^'ZrO2Systems:Â Structure, Surface Acidity, and Catalytic Properties.. Chemistry of Materials, 2007, 19, 1445-1451.	3.2	31
47	Hydrogen production from oxidative steam reforming of bio-butanol over CoIr-based catalysts: Effect of the support. Bioresource Technology, 2013, 128, 467-471.	4.8	31
48	Pt/Ta2O5â€“ZrO2 catalysts for vapour phase selective hydrogenation of crotonaldehyde. Applied Catalysis A: General, 2008, 349, 165-169.	2.2	30
49	Ruthenium supported on new TiO2â€“ZrO2 systems as catalysts for the partial oxidation of methane. Catalysis Today, 2010, 149, 248-253.	2.2	30
50	Renewable hydrogen production from oxidative steam reforming of bio-butanol over CoIr/CeZrO2 catalysts: Relationship between catalytic behaviour and catalyst structure. Applied Catalysis B: Environmental, 2014, 150-151, 47-56.	10.8	29
51	Differences in the vapour phase photocatalytic degradation of ammonia and ethanol in the presence of water as a function of TiO2 characteristics and the presence of O2. Catalysis Today, 2016, 266, 53-61.	2.2	27
52	Preparation of alumina-supported CuCo catalysts from cyanide complexes and their performance in CO hydrogenation. Applied Catalysis A: General, 1998, 170, 145-157.	2.2	26
53	H2-production from CO2-assisted ethanol steam reforming: The regeneration of Ni-based catalysts. International Journal of Hydrogen Energy, 2015, 40, 5256-5263.	3.8	26
54	Structure and reactivity of alumina-supported iron catalysts for ammonia synth. Journal of Catalysis, 1986, 98, 264-276.	3.1	24

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55	Methanol synthesis from CO2 and H2 over gallium promoted copper-based supported catalysts. Effect of hydrocarbon impurities in the CO2/H2 source. Physical Chemistry Chemical Physics, 2001, 3, 4837-4842.	1.3	24
56	Photocatalytic H 2 production from ethanol (aq) solutions: The effect of intermediate products. International Journal of Hydrogen Energy, 2016, 41, 19629-19636.	3.8	23
57	CO/CO2 hydrogenation and ethylene hydroformylation over silica-supported PdZn catalysts. Catalysis Letters, 2001, 72, 183-189.	1.4	21
58	Embedding catalytic nanoparticles inside mesoporous structures with controlled porosity: Au@TiO2. Journal of Materials Chemistry A, 2013, 1, 14170.	5.2	21
59	Preparation and characterization of bulk MoXC catalysts and their use in the reverse water-gas shift reaction. Catalysis Today, 2020, 356, 384-389.	2.2	21
60	Highly dispersed cobalt in CuCo/SiO2 cluster-derived catalyst. Journal of Molecular Catalysis A, 1999, 149, 225-232.	4.8	20
61	Study of ruthenium supported on Ta2O5â€“ZrO2 and Nb2O5â€“ZrO2 as catalysts for the partial oxidation of methane. Catalysis Today, 2009, 142, 308-313.	2.2	20
62	CO 2 reduction over Cu-ZnGaMO (M = Al, Zr) catalysts prepared by a sol-gel method: Unique performance for the RWGS reaction. Catalysis Today, 2017, 296, 181-186.	2.2	20
63	Behaviour of Pt/TiO2 catalysts with different morphological and structural characteristics in the photocatalytic conversion of ethanol aqueous solutions. Catalysis Today, 2020, 341, 13-20.	2.2	20
64	Catalytic Activity for Ammonia Synthesis of Iron Supported Catalysts Prepared from an Acid-modified ?-Al2O3 Method. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1984, 518, 227-233.	0.6	19
65	Selective synthesis of alcohols from syngas and hydroformylation of ethylene over supported cluster-derived cobalt catalysts. Catalysis Letters, 1996, 42, 87-91.	1.4	17
66	Hydrogen production from oxidative steam-reforming of n-propanol over Ni/Y2O3â€“ZrO2 catalysts. International Journal of Hydrogen Energy, 2012, 37, 7094-7100.	3.8	16
67	Photocatalytic H2 production from ethanol aqueous solution using TiO2 with tungsten carbide nanoparticles as co-catalyst. International Journal of Hydrogen Energy, 2020, 45, 20558-20567.	3.8	16
68	Co/SiO2 catalysts prepared from Co2(CO)8 for CO hydrogenation into alcohols and hydrocarbons: characterization by magnetic methods and temperature-programmed hydrogenation. Applied Catalysis A: General, 2001, 210, 75-81.	2.2	15
69	Direct transformation of ethanol into ethyl acetate through catalytic membranes containing Pd or Pd-Zn: comparison with conventional supported catalysts. Green Chemistry, 2011, 13, 2569.	4.6	15
70	Efficient CO 2 -regeneration of Ni/Y 2 O 3 La 2 O 3 ZrO 2 systems used in the ethanol steam reforming for hydrogen production. International Journal of Hydrogen Energy, 2016, 41, 19509-19517.	3.8	15
71	Modification of the surface acidity of $gamma;-alumina. Journal of Catalysis, 1984, 89, 531-532.	3.1	14
72	Chemistry of dicobalt octacarbonyl on zinc oxide. Homonuclear ion-pairing surface species related to catalytic activity in ethylene hydroformylation. Journal of Molecular Catalysis A, 1995, 96, 49-55.	4.8	14

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73	FTIR study of the interaction of CO and CO2 with silica-supported PtSn alloy. Applied Surface Science, 1998, 134, 217-224.	3.1	14
74	Surface Structure and Reactivity of Catalysts for Ammonia Synthesis. Zeitschrift Fur Physikalische Chemie, 1983, 135, 235-250.	1.4	13
75	Activation of carbon dioxide by a silica-supported platinumâ€“tin bimetallic complex. Journal of the Chemical Society Chemical Communications, 1994, , 2555-2556.	2.0	13
76	H2 production from oxidative steam reforming of 1-propanol and propylene glycol over yttria-stabilized supported bimetallic Niâ€“M (MÂ=ÂPt, Ru, Ir) catalysts. International Journal of Hydrogen Energy, 2014, 39, 5225-5233.	3.8	13
77	Supported Pt/Sn complexes as catalysts in the hydroformylation of olefins. Journal of Molecular Catalysis, 1992, 74, 401-408.	1.2	12
78	Evidence of multi-component interaction in a Vâ€“Ceâ€“HUSY catalyst: Is the ceriumâ€“EFAL interaction the key of vanadium trapping?. Microporous and Mesoporous Materials, 2008, 115, 253-260.	2.2	11
79	An in-situ DRIFTS-MS study of the photocatalytic H2 production from ethanol(aq) vapour over Pt/TiO2 and Pt Ga/TiO2 catalysts. International Journal of Hydrogen Energy, 2018, 43, 16922-16928.	3.8	11
80	Study of Ni/CeO2â€“ZnO catalysts in the production of H2 from acetone steam reforming. International Journal of Hydrogen Energy, 2019, 44, 12628-12635.	3.8	10
81	Bimetallic Pdâ€“Zn silica-supported catalyst for CO hydrogenation. In situ DRIFT study. Journal of Molecular Catalysis A, 2000, 164, 297-300.	4.8	9
82	Promoter effect of Ga in Pt/Ga-TiO 2 catalysts for the photo-production of H 2 from aqueous solutions of ethanol. Catalysis Today, 2017, 287, 85-90.	2.2	9
83	Surface Structure of ?-Alumina-Supported Iron Catalysts for Ammonia Synthesis. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1985, 528, 195-201.	0.6	8
84	Simple kinetic-thermometric determination of submicrogram quantities of ruthenium based on its catalytic effect on the Ce(IV)-As(III) reaction. Thermochimica Acta, 1988, 127, 209-216.	1.2	8
85	Use of Nb2O5 as nickel passivating agent: characterisation of the Ni/Nb2O5/SiO2 system. Catalysis Today, 2003, 78, 459-465.	2.2	8
86	Catalytic behavior of unsupported Co materials in the reformation of ethanol to hydrogen: An in situ diffuse reflectance infrared Fourier transform (DRIFT)-mass spectrometry study. Pure and Applied Chemistry, 2008, 80, 2397-2403.	0.9	8
87	Understanding bifunctional behavior of Ni/HZSM5 catalyst under isobutane atmosphere. Molecular Catalysis, 2018, 458, 145-151.	1.0	8
88	Preparation and catalytic activity for ammonia synthesis of several ruthenium supported catalysts. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1985, 522, 235-240.	0.6	7
89	Catalytic oxidation of 2,6-di-t-butyl-4-methylphenol by a supported iron complex. Journal of the Chemical Society Chemical Communications, 1988, , 1075.	2.0	7
90	Kinetic-thermometric study of hydrogen peroxide decomposition in basic media catalyzed by Mn(II). Thermochimica Acta, 1988, 125, 319-325.	1.2	6

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91	Support and precursor effects on the preparation of new heterogenized Pt/Sn catalysts for the selective hydroformylation of 1-pentene. Catalysis Letters, 1992, 14, 45-49.	1.4	6
92	Relationship between surface properties of PtSn-SiO2 catalysts and their catalytic performance for the CO2 and propylene reaction to yield hydroxybutanoic acid. Applied Organometallic Chemistry, 2000, 14, 783-788.	1.7	6
93	Catalytic Processes for Activation of CO2. , 2013, , 1-26.		6
94	Monitoring the insertion of Pt into Cu_{2â^'x}Se nanocrystals: a combined structural and chemical approach for the analysis of new ternary phases. Nanoscale, 2020, 12, 16627-16638.	2.8	6
95	Theoretical and experimental study of the interaction of CO on TiC surfaces: Regular versus low coordinated sites. Surface Science, 2013, 613, 63-73.	0.8	5
96	Surface acidity determination of several gamma-aluminas using a thermometric method. Thermochimica Acta, 1988, 127, 355-361.	1.2	4
97	Adsorption of group VIII metal cyanide complexes on acid-modified Î³-alumina. Applied Catalysis, 1989, 49, 259-271.	1.1	4
98	Support effect on the n-hexane dehydrogenation reaction over platinum-tin catalysts. Studies in Surface Science and Catalysis, 1998, , 647-652.	1.5	4
99	VO²⁺ Reaction with Hydrotalcite and HydrotalciteâEDerived Oxide: The Effect of the Vanadium Loading on the Structure of Catalyst Precursors and on the Vanadium Species. European Journal of Inorganic Chemistry, 2013, 2013, 241-247.	1.0	4
100	Activation of dinitrogen molecule on the surface of iron (or ruthenium) based catalysts. Reaction Kinetics and Catalysis Letters, 1984, 24, 179-182.	0.6	3
101	Surface structure of ?-Alumina-Supported Ruthenium Catalysts for ammonia synthesis. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1986, 532, 235-240.	0.6	3
102	Thermometric titration of surface acid sites of acid-modified silica-magnesia. Journal of Catalysis, 1988, 111, 227-230.	3.1	3
103	CO hydrogenation over potassium promoted iron, cobalt, and nickel Catalysts Prepared from Cyanide Complexes. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 1990, 582, 197-210.	0.6	3
104	Iron-based ammonia synthesis catalysts prepared via non-oxidic precursors. Applied Catalysis, 1990, 59, 249-265.	1.1	2
105	Study of the activation process and catalytic behaviour of a supported iron ammonia synthesis catalyst. Applied Surface Science, 1993, 72, 103-111.	3.1	2
106	Catalytic reaction of CO2 with C2H4 on supported Pt-Sn bimetallic catalysts. Studies in Surface Science and Catalysis, 1998, , 153-158.	1.5	2
107	Ti-containing hybrid mesoporous organosilicas as photocatalysts for H2 production from ethanol. Journal of Materials Research and Technology, 2021, 14, 2115-2123.	2.6	2
108	Carbonyl Compounds as Metallic Precursors of Tailored Supported Catalysts. , 0, , 313-345.		2

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109	Cobalt(II) determination at PPB levels based on its catalytic effect on the hydrazine-hydrogen peroxide reaction. Thermochimica Acta, 1988, 130, 241-248.	1.2	1
110	Thermometric study of the bromate-iodide reaction catalysed by Mo(VI). Thermochimica Acta, 1989, 142, 107-115.	1.2	1
111	Surface basicity modification of Î³-Alumina: study by thermometric titration. Thermochimica Acta, 1989, 138, 303-308.	1.2	1
112	On The Reaction between Carbon Dioxide, Ethylene, and Water over Supported Platinumâ€“Tin Catalysts. A Combined Driftâ€“Mass Spectrometry Study. Journal of Catalysis, 2001, 197, 220-223.	3.1	1
113	Biohydrogen and Biomethane Production. RSC Green Chemistry, 2018, , 300-339.	0.0	0