Patricia Benito

List of Publications by Year
in descending order

83 papers	2,459 citations	172457 29 h-index	223800 46 g-index
85 all docs	85 docs citations	85 times ranked	2471 citing authors

#	Article	IF	Citations
1	Steam reforming of clean biogas over Rh and Ru open-cell metallic foam structured catalysts. Catalysis Today, 2022, 383, 74-83.	4.4	11
2	Catalytic Upgrading of Clean Biogas to Synthesis Gas. Catalysts, 2022, 12, 109.	3.5	7
3	Insights into the Electrochemical Reduction of 5â€Hydroxymethylfurfural at High Current Densities. ChemSusChem, 2022, 15, .	6.8	14
4	Effect of Fe and La on the Performance of NiMgAl HT-Derived Catalysts in the Methanation of CO₂ and Biogas. Industrial & Engineering Chemistry Research, 2022, 61, 10511-10521.	3.7	9
5	Ruâ€"CeO₂ and Niâ€"CeO₂ Coated on Open-Cell Metallic Foams by Electrodeposition for the CO₂ Methanation. Industrial & Engineering Chemistry Research, 2021, 60, 6730-6741.	3.7	10
6	AgCu Bimetallic Electrocatalysts for the Reduction of Biomass-Derived Compounds. ACS Applied Materials & Interfaces, 2021, 13, 23675-23688.	8.0	35
7	Promotion effect of rare earth elements (Ce, Nd, Pr) on physicochemical properties of M-Al mixed oxides (Mâ€‰=â€‰Cu, Ni, Co) and their catalytic activity in N2O decomposition. Journal of Materials Science, 2021, 56, 15012-15028.	3.7	8
8	N2O catalytic decomposition on electrodeposited Rh-based open-cell metallic foams. Chemical Engineering Journal, 2020, 379, 122259.	12.7	24
9	Coating of Rh/Mg/Al Hydrotalciteâ€Like Materials on FeCrAl Fibers by Electrodeposition and Application for Syngas Production. Energy Technology, 2020, 8, 1901018.	3.8	4
10	Ba-Ni-Hexaaluminate as a New Catalyst in the Steam Reforming of 1-Methyl Naphthalene and Methane. Catalysis Letters, 2020, 150, 1605-1617.	2.6	5
11	Open-cell foams coated by Ni/X/Al hydrotalcite-type derived catalysts (X = Ce, La, Y) for CO2 methanation. Journal of CO2 Utilization, 2020, 42, 101327.	6.8	8
12	Understanding structure-activity relationships in highly active La promoted Ni catalysts for CO2 methanation. Applied Catalysis B: Environmental, 2020, 278, 119256.	20.2	46
13	FeCrAl as a Catalyst Support. Chemical Reviews, 2020, 120, 7516-7550.	47.7	59
14	Ag Electrodeposited on Cu Openâ€Cell Foams for the Selective Electroreduction of 5â€Hydroxymethylfurfural. ChemElectroChem, 2020, 7, 1238-1247.	3.4	23
15	Electrodeposition of Rh/Mg/Al hydroxides with different Mg-contents on metallic foams as catalyst precursors. Applied Clay Science, 2020, 191, 105599.	5.2	3
16	Geopolymer composites for the catalytic cleaning of tar in biomass-derived gas. Renewable Energy, 2019, 131, 1107-1116.	8.9	15
17	Insights into coated NiCrAl open-cell foams for the catalytic partial oxidation of CH₄. Reaction Chemistry and Engineering, 2019, 4, 1768-1778.	3.7	8
18	Effect of Neodymium on the Physicoâ€chemical Properties and N 2 O Decomposition Activity of Co(Cu)â^'Al Mixed Oxides. ChemCatChem, 2019, 11, 5580-5592.	3.7	6

#	ARTICLE	IF	CITATIONS
19	Structured Catalysts-Based on Open-Cell Metallic Foams for Energy and Environmental Applications. Studies in Surface Science and Catalysis, 2019, , 303-327.	1.5	12
20	Electrodeposition of CeO2 and Pd-CeO2 on small pore size metallic foams: Selection of deposition parameters. Catalysis Today, 2019, 334, 37-47.	4.4	17
21	Synthesis of isopropyl levulinate from furfural: Insights on a cascade production perspective. Applied Catalysis A: General, 2019, 575, 111-119.	4.3	29
22	Tunable copper-hydrotalcite derived mixed oxides for sustainable ethanol condensation to n-butanol in liquid phase. Journal of Cleaner Production, 2019, 209, 1614-1623.	9.3	43
23	Characterization of novel geopolymer â€“ Zeolite composites as solid adsorbents for CO2 capture. Chemical Engineering Journal, 2018, 341, 505-515.	12.7	96
24	Zeolite-geopolymer composite materials: Production and characterization. Journal of Cleaner Production, 2018, 171, 76-84.	9.3	98
25	Effect of metal nitrate concentration on the electrodeposition of hydrotalcite-like compounds on open-cell foams. Applied Clay Science, 2018, 151, 109-117.	5.2	8
26	Hydrotalcite-Type Materials Electrodeposited on Open-Cell Metallic Foams as Structured Catalysts. Inorganics, 2018, 6, 74.	2.7	1
27	One-step electrodeposition of Pdâ€“CeO₂ on high pore density foams for environmental catalytic processes. Catalysis Science and Technology, 2018, 8, 4678-4689.	4.1	25
28	Coprecipitated-like hydrotalcite-derived coatings on open-cell metallic foams by electrodeposition: Rh nanoparticles on oxide layers stable under harsh reaction conditions. Applied Catalysis A: General, 2018, 560, 12-20.	4.3	16
29	Insights into the Synthesis and Surface Functionalization of Mesoporous Carbon for Catalytic Applications. ChemistrySelect, 2017, 2, 7590-7596.	1.5	1
30	Bimetallic Nanoparticles as Efficient Catalysts: Facile and Green Microwave Synthesis. Materials, 2016, 9, 550.	2.9	33
31	Reactions involved in the electrodeposition of hydrotalcite-type compounds on FeCrAlloy foams and plates. Electrochimica Acta, 2016, 222, 1335-1344.	5.2	15
32	Evaluation of effect of soil organic matter on pores by <scp>¹H</scp> timeâ€domain magnetic resonance relaxometry and adsorptionâ€“desorption of <scp>N₂</scp>. European Journal of Soil Science, 2016, 67, 314-323.	3.9	4
33	Insights into the macroporosity of freeze-cast hierarchical geopolymers. RSC Advances, 2016, 6, 24635-24644.	3.6	27
34	Coprecipitation versus chemical vapour deposition to prepare Rh/Ni bimetallic catalysts. Applied Catalysis B: Environmental, 2015, 179, 150-159.	20.2	16
35	Nickel-substituted bariumhexaaluminates as novel catalysts in steam reforming of tars. Fuel Processing Technology, 2015, 140, 1-11.	7.2	12
36	The reducibility of highly stable Ni-containing species in catalysts derived from hydrotalcite-type precursors. RSC Advances, 2015, 5, 82282-82291.	3.6	14

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37	Pdâ€“Cu interaction in Pd/Cu-MCM-41 catalysts: Effect of silica source and metal content. Catalysis Today, 2015, 246, 108-115.	4.4	15
38	Improvement in the coating homogeneity in electrosynthesized Rh structured catalysts for the partial oxidation of methane. Catalysis Today, 2015, 246, 154-164.	4.4	22
39	Synthesis of porous hierarchical geopolymer monoliths byÂice-templating. Microporous and Mesoporous Materials, 2015, 215, 206-214.	4.4	65
40	Stable Rh particles in hydrotalcite-derived catalysts coated on FeCrAlloy foams by electrosynthesis. Applied Catalysis B: Environmental, 2015, 179, 321-332.	20.2	21
41	Preparation of Pd/Cu MCM-41 catalysts for hydrodechlorination: Influence of the synthesis procedure. Microporous and Mesoporous Materials, 2014, 190, 1-9.	4.4	18
42	Role of Coating-Metallic Support Interaction in the Properties of Electrosynthesized Rh-Based Structured Catalysts. ACS Catalysis, 2014, 4, 3779-3790.	11.2	23
43	Role of the preparation method on properties of Pd/Cu-MCM-41 hydrodechlorinating catalysts. Catalysis Today, 2014, 235, 134-143.	4.4	12
44	Bagasse gasification in a 100 kWthsteam-oxygen blown circulating fluidized bed gasifier with catalytic and non-catalytic upgrading of the syngas using ceramic filters. , 2014, , .		3
45	Alkali-bonded ceramics with hierarchical tailored porosity. Applied Clay Science, 2013, 73, 56-64.	5.2	104
46	Role of the composition and preparation method inÂthe activity of hydrotalcite-derived Ru catalysts in the catalytic partial oxidation of methane. International Journal of Hydrogen Energy, 2013, 38, 15128-15139.	7.1	33
47	Effect of metallic Si addition on polymerization degree of in situ foamed alkali-aluminosilicates. Ceramics International, 2013, 39, 7657-7668.	4.8	68
48	Electrosynthesis of Ni/Al and Mg/Al Layered Double Hydroxides on Pt and FeCrAlloy supports: Study and control of the pH near the electrode surface. Electrochimica Acta, 2013, 108, 596-604.	5.2	22
49	Coating of FeCrAlloy foam with Rh catalysts: Optimization of electrosynthesis parameters and catalyst composition. Catalysis Today, 2012, 197, 162-169.	4.4	21
50	Steamâ€“O₂ Blown Circulating Fluidized-Bed (CFB) Biomass Gasification: Characterization of Different Residual Chars and Comparison of Their Gasification Behavior to Thermogravimetric (TG)-Derived Pyrolysis Chars. Energy & Fuels, 2012, 26, 722-739.	5.1	12
51	Platinum supported on alkaline and alkaline earth metal-doped alumina as catalysts for dry reforming and partial oxidation of methane. Applied Catalysis A: General, 2012, 433-434, 1-11.	4.3	40
52	Combustion study of partially gasified willow and DDGS chars using TG analysis and COMSOL modeling. Biomass and Bioenergy, 2012, 39, 356-369.	5.7	16
53	High temperature water-gas shift step in the production of clean hydrogen rich synthesis gas from gasified biomass. Biomass and Bioenergy, 2011, 35, S123-S131.	5.7	15
54	Steam reforming of hot gas from gasified wood types and miscanthus biomass. Biomass and Bioenergy, 2011, 35, S116-S122.	5.7	20

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55	Deactivation of a Ni-Based Reforming Catalyst During the Upgrading of the Producer Gas, from Simulated to Real Conditions. Topics in Catalysis, 2011, 54, 746-754.	2.8	10
56	Electrochemical Preparation of Pd Seeds/Inorganic Multilayers on Structured Metallic Fibres. , 2011, , 409-418.		0
57	Structural characterization and thermal properties of polyamide 6.6/Mg, Al/adipate-LDH nanocomposites obtained by solid state polymerization. Journal of Solid State Chemistry, 2010, 183, 1645-1651.	2.9	36
58	Combined Use of Synchrotronâ€Radiationâ€Based Imaging Techniques for the Characterization of Structured Catalysts. Advanced Functional Materials, 2010, 20, 4117-4126.	14.9	40
59	Novel Rh-based structured catalysts for the catalytic partial oxidation of methane. Catalysis Today, 2010, 157, 183-190.	4.4	40
60	A novel electrochemical route for the catalytic coating of metallic supports. Studies in Surface Science and Catalysis, 2010, , 51-58.	1.5	23
61	Hydrotalcite-type precursors of active catalysts for hydrogen production. Applied Clay Science, 2010, 48, 250-259.	5.2	72
62	Effect of post-synthesis microwaveâ€"hydrothermal treatment on the properties of layered double hydroxides and related materials. Applied Clay Science, 2010, 48, 218-227.	5.2	57
63	Microwaves and layered double hydroxides: A smooth understanding. Pure and Applied Chemistry, 2009, 81, 1459-1471.	1.9	38
64	Carboxylate-intercalated layered double hydroxides aged under microwaveâ€"hydrothermal treatment. Journal of Solid State Chemistry, 2009, 182, 18-26.	2.9	36
65	Ni-catalysts obtained from silicate intercalated HTlcs active in the catalytic partial oxidation of methane: Influence of the silicate content. Catalysis Today, 2009, 142, 78-84.	4.4	22
66	Production of carbon nanotubes from methaneUse of Co-Zn-Al catalysts prepared by microwave-assisted synthesis. Chemical Engineering Journal, 2009, 149, 455-462.	12.7	62
67	Electrochemical synthesis of novel structured catalysts for H2 production. Applied Catalysis B: Environmental, 2009, 91, 563-572.	20.2	46
68	Dispersion characterization in layered double hydroxide/Nylon 66 nanocomposites using FIB imaging. Journal of Applied Polymer Science, 2008, 108, 4108-4113.	2.6	9
69	Microwave-assisted reconstruction of Ni,Al hydrotalcite-like compounds. Journal of Solid State Chemistry, 2008, 181, 987-996.	2.9	49
70	Microwave-hydrothermally aged Zn,Al hydrotalcite-like compounds: Influence of the composition and the irradiation conditions. Microporous and Mesoporous Materials, 2008, 110, 292-302.	4.4	70
71	Microwave-Assisted Homogeneous Precipitation of Hydrotalcites by Urea Hydrolysis. Inorganic Chemistry, 2008, 47, 5453-5463.	4.0	76
72	Highly conductive Ni steam reforming catalysts prepared by electrodeposition. Chemical Communications, 2008, , 2917.	4.1	34

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73	Effect of silicates on the structure of Ni-containing catalysts obtained from hydrotalcite-type precursors. Catalysis Today, 2007, 128, 258-263.	4.4	24
74	Nanosize cobalt oxide-containing catalysts obtained through microwave-assisted methods. Catalysis Today, 2007, 128, 129-137.	4.4	84
75	Stabilization of Co2+ in layered double hydroxides (LDHs) by microwave-assisted ageing. Journal of Solid State Chemistry, 2007, 180, 873-884.	2.9	62
76	Incidence of Microwave Hydrothermal Treatments on the Crystallinity Properties of Hydrotalciteâ€like Compounds. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2007, 633, 1815-1819.	1.2	22
77	Co-Containing LDHs Synthesized by the Microwave-Hydrothermal Method. Materials Science Forum, 2006, 514-516, 1241-1245.	0.3	0
78	Uniform Fast Growth of Hydrotalcite-like Compounds. Crystal Growth and Design, 2006, 6, 1961-1966.	3.0	66
79	Influence of microwave radiation on the textural properties of layered double hydroxides. Microporous and Mesoporous Materials, 2006, 94, 148-158.	4.4	104
80	Microwave-treated layered double hydroxides containing Ni2+ and Al3+: The effect of added Zn2+. Journal of Solid State Chemistry, 2006, 179, 3784-3797.	2.9	59
81	Influence of the Microwave Radiation on the Thermal Properties of Ni,Al Hydrotalcite-Like Compounds. Materials Science Forum, 2006, 514-516, 1284-1288.	0.3	1
82	Microwave-assisted catalysts for the CPO of methane. Studies in Surface Science and Catalysis, 2006, 162, 761-768.	1.5	3
83	Incidencia de la radiaciÃ³n microondas en la cristalinidad de materiales laminares. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 56-58.	1.9	7