Laura Pastor PÃ©rez

List of Publications by Year
in descending order

71 papers	2,452 citations	201385 27 h-index	223531 46 g-index
76 all docs	76 docs citations	76 times ranked	2582 citing authors

#	Article	IF	Citations
1	Catalytic Upgrading of Biomass Model Compounds: Novel Approaches and Lessons Learnt from Traditional Hydrodeoxygenation â€“ a Review. ChemCatChem, 2019, 11, 924-960.	1.8	167
2	CO2 valorisation via Reverse Water-Gas Shift reaction using advanced Cs doped Fe-Cu/Al2O3 catalysts. Journal of CO2 Utilization, 2017, 21, 423-428.	3.3	156
3	Highly efficient Ni/CeO2-Al2O3 catalysts for CO2 upgrading via reverse water-gas shift: Effect of selected transition metal promoters. Applied Catalysis B: Environmental, 2018, 232, 464-471.	10.8	141
4	Ni stabilised on inorganic complex structures: superior catalysts for chemical CO2 recycling via dry reforming of methane. Applied Catalysis B: Environmental, 2018, 236, 458-465.	10.8	141
5	Understanding the promoter effect of Cu and Cs over highly effective Î²-Mo2C catalysts for the reverse water-gas shift reaction. Applied Catalysis B: Environmental, 2019, 244, 889-898.	10.8	101
6	Membrane-based technologies for biogas upgrading: a review. Environmental Chemistry Letters, 2020, 18, 1649-1658.	8.3	87
7	Switchable Catalysts for Chemical CO₂ Recycling: A Step Forward in the Methanation and Reverse Waterâ€“Gas Shift Reactions. ACS Sustainable Chemistry and Engineering, 2020, 8, 4614-4622.	3.2	69
8	Synthetic natural gas production from CO2 over Ni-x/CeO2-ZrO2 (x = Fe, Co) catalysts: Influence of promoters and space velocity. Catalysis Today, 2018, 317, 108-113.	2.2	64
9	CO2 valorisation via reverse water-gas shift reaction using promoted Fe/CeO2-Al2O3 catalysts: Showcasing the potential of advanced catalysts to explore new processes design. Applied Catalysis A: General, 2020, 593, 117442.	2.2	61
10	Improving Fe/Al2O3 Catalysts for the Reverse Water-Gas Shift Reaction: On the Effect of Cs as Activity/Selectivity Promoter. Catalysts, 2018, 8, 608.	1.6	56
11	Carbon stabilised saponite supported transition metal-alloy catalysts for chemical CO2 utilisation via reverse water-gas shift reaction. Applied Catalysis B: Environmental, 2020, 261, 118241.	10.8	56
12	CO2 methanation in the presence of methane: Catalysts design and effect of methane concentration in the reaction mixture. Journal of the Energy Institute, 2020, 93, 415-424.	2.7	53
13	CeO 2 -promoted Ni/activated carbon catalysts for the waterâ€“gas shift (WGS) reaction. International Journal of Hydrogen Energy, 2014, 39, 17589-17599.	3.8	49
14	Effect of the CeO2 synthesis method on the behaviour of Pt/CeO2 catalysis for the water-gas shift reaction. International Journal of Hydrogen Energy, 2019, 44, 21837-21846.	3.8	47
15	Hydrodeoxygenation of guaiacol: Tuning the selectivity to cyclohexene by introducing Ni nanoparticles inside carbon nanotubes. Fuel, 2016, 172, 65-69.	3.4	46
16	Biogas Upgrading Via Dry Reforming Over a Ni-Sn/CeO2-Al2O3 Catalyst: Influence of the Biogas Source. Energies, 2019, 12, 1007.	1.6	46
17	Solventâ€and Ligandâ€free Diboration of Alkynes and Alkenes Catalyzed by Platinum Nanoparticles on Titania. ChemCatChem, 2014, 6, 857-865.	1.8	43
18	Low temperature glycerol steam reforming on bimetallic PtSn/C catalysts: On the effect of the Sn content. Fuel, 2017, 194, 222-228.	3.4	42

#	Article	IF	Citations
19	Investigating New Routes for Biomass Upgrading: â€œH2-Freeâ€• Hydrodeoxygenation Using Ni-Based Catalysts. ACS Sustainable Chemistry and Engineering, 2019, 7, 16041-16049.	3.2	40
20	Effect of cold Ar plasma treatment on the catalytic performance of Pt/CeO2 in water-gas shift reaction (WGS). Applied Catalysis B: Environmental, 2018, 225, 121-127.	10.8	39
21	Catalytic Conversion of Palm Oil to Bio-Hydrogenated Diesel over Novel N-Doped Activated Carbon Supported Pt Nanoparticles. Energies, 2020, 13, 132.	1.6	37
22	Bio-methane and bio-methanol co-production from biogas: A profitability analysis to explore new sustainable chemical processes. Journal of Cleaner Production, 2020, 265, 121909.	4.6	36
23	Bimetallic Cuâ€"Ni catalysts for the WGS reaction â€" Cooperative or uncooperative effect?. International Journal of Hydrogen Energy, 2019, 44, 4011-4019.	3.8	35
24	Stepping towards a low-carbon economy. Formic acid from biogas as case of study. Applied Energy, 2020, 268, 115033.	5.1	35
25	Carbon nanotube-supported Niâ€"CeO2 catalysts. Effect of the support on the catalytic performance in the low-temperature WGS reaction. Carbon, 2016, 101, 296-304.	5.4	31
26	Understanding the opportunities of metalâ€"organic frameworks (MOFs) for CO₂capture and gas-phase CO₂conversion processes: a comprehensive overview. Reaction Chemistry and Engineering, 2021, 6, 787-814.	1.9	31
27	Highly Active and Selective Multicomponent Feâ€"Cu/CeO₂â€"Al₂O₃ Catalysts for CO₂ Upgrading via RWGS: Impact of Fe/Cu Ratio. ACS Sustainable Chemistry and Engineering, 2021, 9, 12155-12166.	3.2	30
28	Noble Metal Supported on Activated Carbon for â€œHydrogen Freeâ€• HDO Reactions: Exploring Economically Advantageous Routes for Biomass Valorisation. ChemCatChem, 2019, 11, 4434-4441.	1.8	29
29	Transition Metal Carbides (TMCs) Catalysts for Gas Phase CO2 Upgrading Reactions: A Comprehensive Overview. Catalysts, 2020, 10, 955.	1.6	29
30	Highly active Cu-ZnO catalysts for the WGS reaction at mediumâ€"high space velocities: Effect of the support composition. International Journal of Hydrogen Energy, 2017, 42, 10747-10751.	3.8	28
31	Cost-effective routes for catalytic biomass upgrading. Current Opinion in Green and Sustainable Chemistry, 2020, 23, 1-9.	3.2	27
32	In-situ HDO of guaiacol over nitrogen-doped activated carbon supported nickel nanoparticles. Applied Catalysis A: General, 2021, 620, 118033.	2.2	27
33	Robust mesoporous bimetallic yolkâ€"shell catalysts for chemical CO2 upgrading via dry reforming of methane. Reaction Chemistry and Engineering, 2018, 3, 433-436.	1.9	26
34	Nickel Phosphide Catalysts as Efficient Systems for CO2 Upgrading via Dry Reforming of Methane. Catalysts, 2021, 11, 446.	1.6	26
35	Conversion of CO2 to added value products via rWGS using Fe-promoted catalysts: Carbide, metallic Fe or a mixture?. Journal of Energy Chemistry, 2022, 66, 635-646.	7.1	26
36	Ir supported over carbon materials for the selective hydrogenation of chloronitrobenzenes. Catalysis Today, 2015, 249, 72-78.	2.2	25

#	ARTICLE	IF	CITATIONS
37	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.	2.2	25
38	Synthesis of palladium nanoparticles over graphite oxide and carbon nanotubes by reduction in ethylene glycol and their catalytic performance on the chemoselective hydrogenation of para-chloronitrobenzene. Applied Catalysis A: General, 2016, 513, 89-97.	2.2	24
39	Multicomponent NiSnCeO 2 /C catalysts for the low-temperature glycerol steam reforming. Applied Catalysis A: General, 2017, 529, 118-126.	2.2	24
40	Ni-CeO2/C Catalysts with Enhanced OSC for the WGS Reaction. Catalysts, 2015, 5, 298-309.	1.6	23
41	Analysis of the potential for biogas upgrading to syngas via catalytic reforming in the United Kingdom. Renewable and Sustainable Energy Reviews, 2021, 144, 110939.	8.2	23
42	Synthesis of palladium nanoparticles on carbon nanotubes and graphene for the chemoselective hydrogenation of para-chloronitrobenzene. Catalysis Communications, 2016, 75, 55-59.	1.6	22
43	Yolk-Shell structured NiCo@SiO2 nanoreactor for CO2 upgrading via reverse water-gas shift reaction. Catalysis Today, 2022, 383, 358-367.	2.2	22
44	Versatile Ni-Ru catalysts for gas phase CO2 conversion: Bringing closer dry reforming, reverse water gas shift and methanation to enable end-products flexibility. Fuel, 2022, 315, 123097.	3.4	22
45	â€œH2-freeâ€•demethoxylation of guaiacol in subcritical water using Pt supported on N-doped carbon catalysts: A cost-effective strategy for biomass upgrading. Journal of Energy Chemistry, 2021, 58, 377-385.	7.1	19
46	Advantages of Yolk Shell Catalysts for the DRM: A Comparison of Ni/ZnO@SiO2 vs. Ni/CeO2 and Ni/Al2O3. Chemistry, 2019, 1, 3-16.	0.9	18
47	Novel process for carbon capture and utilization and saline wastes valorization. Journal of Natural Gas Science and Engineering, 2020, 73, 103071.	2.1	18
48	Effect of Cu and Cs in the Î²-Mo2C System for CO2 Hydrogenation to Methanol. Catalysts, 2020, 10, 1213.	1.6	18
49	Ni-Phosphide catalysts as versatile systems for gas-phase CO2 conversion: Impact of the support and evidences of structure-sensitivity. Fuel, 2022, 323, 124301.	3.4	17
50	Promoter effect of sodium in graphene-supported Ni and Niâ€“CeO2 catalyst for the low-temperature WGS reaction. Applied Catalysis A: General, 2015, 505, 98-104.	2.2	16
51	Biogas upgrading to biomethane as a local source of renewable energy to power light marine transport: Profitability analysis for the county of Cornwall. Waste Management, 2022, 137, 81-88.	3.7	16
52	Sustainable routes for acetic acid production: Traditional processes vs a low-carbon, biogas-based strategy. Science of the Total Environment, 2022, 840, 156663.	3.9	15
53	Bimetallic PtSn/C catalysts obtained via SOMC/M for glycerol steam reforming. Journal of Colloid and Interface Science, 2015, 459, 160-166.	5.0	13
54	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.	2.2	13

#	Article	IF	Citations
55	Catalytic Steam Reforming of Toluene: Understanding the Influence of the Main Reaction Parameters over a Reference Catalyst. Energies, 2020, 13, 813.	1.6	13
56	Effect of the surface oxidation of carbon nanotubes on the selective cyclization of citronellal. Applied Catalysis A: General, 2016, 524, 25-31.	2.2	12
57	Catalytic upgrading of acetone, butanol and ethanol (ABE): A step ahead for the production of added value chemicals in bio-refineries. Renewable Energy, 2020, 156, 1065-1075.	4.3	12
58	Plasmaâ€Assisted Synthesis of Monodispersed and Robust Ruthenium Ultrafine Nanocatalysts for Organosilane Oxidation and Oxygen Evolution Reactions. ChemCatChem, 2017, 9, 4159-4163.	1.8	11
59	Lignin to Monoaromatics with a Carbon-Nanofiber-Supported Niâ€“CeO_{2â€“<i>x</i>} Catalyst Synthesized in a One-Pot Hydrothermal Process. ACS Sustainable Chemistry and Engineering, 2021, 9, 12800-12812.	3.2	11
60	K-Promoted Ni-Based Catalysts for Gas-Phase CO2 Conversion: Catalysts Design and Process Modelling Validation. Frontiers in Chemistry, 2021, 9, 785571.	1.8	10
61	Catalytic Upgrading of a Biogas Model Mixture via Low Temperature DRM Using Multicomponent Catalysts. Topics in Catalysis, 2020, 63, 281-293.	1.3	9
62	Carbothermally generated copperâ€“molybdenum carbide supported on graphite for the CO₂ hydrogenation to methanol. Catalysis Science and Technology, 2021, 11, 4051-4059.	2.1	7
63	Design of Full-Temperature-Range RWGS Catalysts: Impact of Alkali Promoters on Ni/CeO₂. Energy & Fuels, 2022, 36, 6362-6373.	2.5	7
64	The Success Story of Gold-Based Catalysts for Gas- and Liquid-Phase Reactions: A Brief Perspective and Beyond. Frontiers in Chemistry, 2019, 7, 691.	1.8	6
65	Integration of Fossil Fuel-based with Bio-based Industries: The Use of Waste Streams and Biomass to Produce Syngas and Added Value Products. IFAC-PapersOnLine, 2019, 52, 616-621.	0.5	5
66	Physicochemical comparison of precipitated calcium carbonate for different configurations of a biogas upgrading unit. Journal of Chemical Technology and Biotechnology, 2019, 94, 2256-2262.	1.6	5
67	Influence of Reaction Parameters on the Catalytic Upgrading of an Acetone, Butanol, and Ethanol (ABE) Mixture: Exploring New Routes for Modern Biorefineries. Frontiers in Chemistry, 2019, 7, 906.	1.8	5
68	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.	3.2	4
69	Biogas as a Renewable Energy Source: Focusing on Principles and Recent Advances of Membrane-Based Technologies for Biogas Upgrading. Environmental Chemistry for A Sustainable World, 2020, , 95-120.	0.3	1
70	14. Gas phase reactions for chemical CO2 upgrading. , 2019, , 249-280.		0
71	Integrating Oil Refineries and Bio-refineries: Upgrading Acetone, Butanol and Ethanol to High-Value Products. Computer Aided Chemical Engineering, 2019, 46, 349-354.	0.3	0