

# Patricia Pizarro

## List of Publications by Year in descending order

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75  
papers

4,733  
citations

81743

39  
h-index

95083

68  
g-index

77  
all docs

77  
docs citations

77  
times ranked

5034  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis strategies in the search for hierarchical zeolites. <i>Chemical Society Reviews</i> , 2013, 42, 4004-4035.	18.7	665
2	From 3D to 2D zeolite catalytic materials. <i>Chemical Society Reviews</i> , 2018, 47, 8263-8306.	18.7	230
3	Effect of metal-support interaction on the selective hydrodeoxygenation of anisole to aromatics over Ni-based catalysts. <i>Applied Catalysis B: Environmental</i> , 2014, 145, 91-100.	10.8	192
4	Progress in the design of zeolite catalysts for biomass conversion into biofuels and bio-based chemicals. <i>Catalysis Reviews - Science and Engineering</i> , 2018, 60, 1-70.	5.7	145
5	Hydrodeoxygenation of anisole as bio-oil model compound over supported Ni and Co catalysts: Effect of metal and support properties. <i>Catalysis Today</i> , 2015, 243, 163-172.	2.2	141
6	Thermochemical energy storage at high temperature via redox cycles of Mn and Co oxides: Pure oxides versus mixed ones. <i>Solar Energy Materials and Solar Cells</i> , 2014, 123, 47-57.	3.0	137
7	Hydrogen production by methane decomposition: Origin of the catalytic activity of carbon materials. <i>Fuel</i> , 2010, 89, 1241-1248.	3.4	134
8	Lamellar and pillared ZSM-5 zeolites modified with MgO and ZnO for catalytic fast-pyrolysis of eucalyptus woodchips. <i>Catalysis Today</i> , 2016, 277, 171-181.	2.2	116
9	Improving the Thermochemical Energy Storage Performance of the $Mn_{2}O_{3}/Mn_{3}O_{4}$ Redox Couple by the Incorporation of Iron. <i>ChemSusChem</i> , 2015, 8, 1947-1954.	3.6	114
10	Thermochemical heat storage based on the $Mn_{2}O_{3}/Mn_{3}O_{4}$ redox couple: influence of the initial particle size on the morphological evolution and cyclability. <i>Journal of Materials Chemistry A</i> , 2014, 2, 19435-19443.	5.2	112
11	Evaluation of transition metal phosphides supported on ordered mesoporous materials as catalysts for phenol hydrodeoxygenation. <i>Green Chemistry</i> , 2016, 18, 1938-1951.	4.6	109
12	Hierarchical TS-1 zeolite as an efficient catalyst for oxidative desulphurization of hydrocarbon fractions. <i>Applied Catalysis B: Environmental</i> , 2014, 146, 35-42.	10.8	101
13	Engineering the acidity and accessibility of the zeolite ZSM-5 for efficient bio-oil upgrading in catalytic pyrolysis of lignocellulose. <i>Green Chemistry</i> , 2018, 20, 3499-3511.	4.6	101
14	Hydrocarbons production through hydrotreating of methyl esters over Ni and Co supported on SBA-15 and Al-SBA-15. <i>Catalysis Today</i> , 2013, 210, 81-88.	2.2	94
15	Turning TS-1 zeolite into a highly active catalyst for olefin epoxidation with organic hydroperoxides. <i>Chemical Communications</i> , 2009, , 1407.	2.2	84
16	Assessing biomass catalytic pyrolysis in terms of deoxygenation pathways and energy yields for the efficient production of advanced biofuels. <i>Catalysis Science and Technology</i> , 2016, 6, 2829-2843.	2.1	82
17	Revisiting the $BaO_{2}/BaO$ redox cycle for solar thermochemical energy storage. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 8039-8048.	1.3	81
18	Study on the Synthesis of High-Surface-Area Mesoporous $TiO_{2}$ in the Presence of Nonionic Surfactants. <i>Industrial &amp; Engineering Chemistry Research</i> , 2004, 43, 2485-2492.	1.8	75

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19	Influence of the Ni/P ratio and metal loading on the performance of Ni <sub>x</sub> Py/SBA-15 catalysts for the hydrodeoxygenation of methyl oleate. <i>Fuel</i> , 2015, 144, 60-70.	3.4	70
20	Advanced biofuels production by upgrading of pyrolysis bio-oil. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2017, 6, e245.	1.9	70
21	Biomass catalytic fast pyrolysis over hierarchical ZSM-5 and Beta zeolites modified with Mg and Zn oxides. <i>Biomass Conversion and Biorefinery</i> , 2017, 7, 289-304.	2.9	67
22	CO <sub>2</sub> adsorption on amine-functionalized clays. <i>Microporous and Mesoporous Materials</i> , 2019, 282, 38-47.	2.2	66
23	Methane catalytic decomposition over ordered mesoporous carbons: A promising route for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 9788-9794.	3.8	64
24	Enhancement of hydrocarbon production via artificial photosynthesis due to synergetic effect of Ag supported on TiO <sub>2</sub> and ZnO semiconductors. <i>Chemical Engineering Journal</i> , 2013, 224, 128-135.	6.6	63
25	Catalytic hydrodeoxygenation of m-cresol over Ni <sub>2</sub> P/hierarchical ZSM-5. <i>Catalysis Today</i> , 2018, 304, 72-79.	2.2	63
26	Photocatalytic degradation of imazapyr in water: Comparison of activities of different supported and unsupported TiO <sub>2</sub> -based catalysts. <i>Catalysis Today</i> , 2005, 101, 211-218.	2.2	61
27	Preparation of extruded catalysts based on TS-1 zeolite for their application in propylene epoxidation. <i>Catalysis Today</i> , 2009, 143, 151-157.	2.2	61
28	Ordered mesoporous carbons as highly active catalysts for hydrogen production by CH <sub>4</sub> decomposition. <i>Chemical Communications</i> , 2008, , 6585.	2.2	59
29	Tailoring the properties of hierarchical TS-1 zeolite synthesized from silanized protozeolitic units. <i>Applied Catalysis A: General</i> , 2012, 435-436, 32-42.	2.2	59
30	Hierarchical TS-1 zeolite synthesized from SiO <sub>2</sub> TiO <sub>2</sub> xerogels imprinted with silanized protozeolitic units. <i>Chemical Engineering Journal</i> , 2011, 171, 1428-1438.	6.6	58
31	Understanding Redox Kinetics of Iron-Doped Manganese Oxides for High Temperature Thermochemical Energy Storage. <i>Journal of Physical Chemistry C</i> , 2016, 120, 27800-27812.	1.5	57
32	Chemical insights on the activity of La <sub>1-x</sub> Sr <sub>x</sub> FeO <sub>3</sub> perovskites for chemical looping reforming of methane coupled with CO <sub>2</sub> -splitting. <i>Journal of CO<sub>2</sub> Utilization</i> , 2019, 31, 16-26.	3.3	56
33	Mesostructured SiO <sub>2</sub> -doped TiO <sub>2</sub> with enhanced thermal stability prepared by a soft-templating sol-gel route. <i>Microporous and Mesoporous Materials</i> , 2008, 111, 429-440.	2.2	50
34	Kinetic and autocatalytic effects during the hydrogen production by methane decomposition over carbonaceous catalysts. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 5671-5683.	3.8	49
35	Narrowing the mesopore size distribution in hierarchical TS-1 zeolite by surfactant-assisted reorganization. <i>Microporous and Mesoporous Materials</i> , 2014, 189, 71-82.	2.2	49
36	Bio-oil production by lignocellulose fast-pyrolysis: Isolating and comparing the effects of indigenous versus external catalysts. <i>Fuel Processing Technology</i> , 2017, 167, 563-574.	3.7	48

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37	Manganese oxide-based thermochemical energy storage: Modulating temperatures of redox cycles by Fe <sup>2+</sup> /Cu co-doping. Journal of Energy Storage, 2016, 5, 169-176.	3.9	45
38	Photocatalytic hydrogen production in the water/methanol system using Pt/RE:NaTaO <sub>3</sub> (RE=La, Ce, Y). Journal of Energy Storage, 2016, 5, 177-184.	3.8	43
39	Development of crystallinity and photocatalytic properties in porous TiO <sub>2</sub> by mild acid treatment. Journal of Materials Chemistry, 2007, 17, 1178.	6.7	41
40	Guaiacol hydrodeoxygenation over Ni <sub>2</sub> P supported on 2D-zeolites. Catalysis Today, 2020, 345, 48-58.	2.2	41
41	Selective oxidation of benzyl alcohol using in situ generated H <sub>2</sub> O <sub>2</sub> over hierarchical Au-Pd titanium silicalite catalysts. Catalysis Science and Technology, 2013, 3, 2425.	2.1	39
42	Catalytic fast pyrolysis of biomass over Mg-Al mixed oxides derived from hydrotalcite-like precursors: Influence of Mg/Al ratio. Journal of Analytical and Applied Pyrolysis, 2018, 134, 362-370.	2.6	39
43	Ce-promoted Ni/SBA-15 catalysts for anisole hydrotreating under mild conditions. Applied Catalysis B: Environmental, 2016, 197, 206-213.	10.8	37
44	The crucial role of clay binders in the performance of ZSM-5 based materials for biomass catalytic pyrolysis. Catalysis Science and Technology, 2019, 9, 789-802.	2.1	35
45	Preparation of bimodal micro-mesoporous TiO <sub>2</sub> with tailored crystalline properties. Chemical Communications, 2004, , 1000-1001.	2.2	34
46	Synthesis of Hierarchical TS-1 Zeolite from Silanized Seeds. Topics in Catalysis, 2010, 53, 1319-1329.	1.3	34
47	ZSM-5 zeolites performance assessment in catalytic pyrolysis of PVC-containing real WEEE plastic wastes. Catalysis Today, 2022, 390-391, 210-220.	2.2	34
48	Advances in the design of ordered mesoporous materials for low-carbon catalytic hydrogen production. Journal of Materials Chemistry A, 2013, 1, 12016.	5.2	33
49	Enhanced photocatalytic hydrogen production by improving the Pt dispersion over mesostructured TiO <sub>2</sub> . International Journal of Hydrogen Energy, 2014, 39, 4812-4819.	3.8	33
50	Performance of MCM-22 zeolite for the catalytic fast-pyrolysis of acid-washed wheat straw. Catalysis Today, 2018, 304, 30-38.	2.2	32
51	Cross-reactivity of guaiacol and propionic acid blends during hydrodeoxygenation over Ni-supported catalysts. Fuel, 2018, 214, 187-195.	3.4	29
52	Mixed NaNb <sub>x</sub> Ta <sub>1-x</sub> O <sub>3</sub> perovskites as photocatalysts for H <sub>2</sub> production. Green Chemistry, 2015, 17, 1735-1743.	4.6	28
53	Improvement of the hierarchical TS-1 properties by silanization of protozeolitic units in presence of alcohols. Microporous and Mesoporous Materials, 2013, 166, 59-66.	2.2	27
54	Thermochemical valorization of camelina straw waste via fast pyrolysis. Biomass Conversion and Biorefinery, 2017, 7, 277-287.	2.9	27

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55	Exploring the Redox Behavior of La <sub>0.6</sub> Sr <sub>0.4</sub> Mn <sub>1-x</sub> Al <sub>x</sub> O <sub>3</sub> Perovskites for CO <sub>2</sub> -Splitting in Thermochemical Cycles. Topics in Catalysis, 2017, 60, 1108-1118.	1.3	26
56	Exploring the thermochemical heat storage capacity of AMn <sub>2</sub> O <sub>4</sub> (A <sup>2+</sup> =Li or Cu) spinels. Solid State Ionics, 2018, 320, 316-324.	1.3	26
57	Thermochemical Heat Storage at High Temperatures using Mn <sub>2</sub> O <sub>3</sub> /Mn <sub>3</sub> O <sub>4</sub> System: Narrowing the Redox Hysteresis by Metal Co-doping. Energy Procedia, 2015, 73, 263-271.	1.8	24
58	Synthesis of Nickel Phosphide Nanorods as Catalyst for the Hydrotreating of Methyl Oleate. Topics in Catalysis, 2012, 55, 991-998.	1.3	22
59	Assessing Cr incorporation in Mn <sub>2</sub> O <sub>3</sub> /Mn <sub>3</sub> O <sub>4</sub> redox materials for thermochemical heat storage applications. Journal of Energy Storage, 2021, 33, 102028.	3.9	20
60	Enhanced performance of CH <sub>4</sub> dry reforming over La <sub>0.9</sub> Sr <sub>0.1</sub> FeO <sub>3</sub> /YSZ under chemical looping conditions. Fuel, 2022, 309, 122122.	3.4	20
61	Hydrogen production through catalytic methane decomposition promoted by pure silica materials. International Journal of Hydrogen Energy, 2015, 40, 5237-5243.	3.8	19
62	Hydrogen production by methane decomposition over pure silica SBA-15 materials. Catalysis Today, 2016, 277, 152-160.	2.2	18
63	Scaling Up of Bio-Oil Upgrading during Biomass Pyrolysis over ZrO <sub>2</sub> /ZSM-5/Attapulgite. ChemSusChem, 2019, 12, 2428-2438.	3.6	17
64	Hydrogen production by methane decomposition over MnO <sub>x</sub> /YSZ catalysts. International Journal of Hydrogen Energy, 2016, 41, 19382-19389.	3.8	14
65	Catalytic Copyrolysis of Lignocellulose and Polyethylene Blends over HBeta Zeolite. Industrial & Engineering Chemistry Research, 2019, 58, 6243-6254.	1.8	14
66	Design of efficient Mn-based redox materials for thermochemical heat storage at high temperatures. AIP Conference Proceedings, 2016, , .	0.3	13
67	Transition Metal Phosphide Nanoparticles Supported on SBA-15 as Highly Selective Hydrodeoxygenation Catalysts for the Production of Advanced Biofuels. Journal of Nanoscience and Nanotechnology, 2015, 15, 6642-6650.	0.9	12
68	Pyrolysis of microalgae for fuel production. , 2017, , 259-281.		12
69	On the Feasibility of Using Hierarchical ZSM-5 and Beta Zeolites as Supports of Metal Phosphides for Catalytic Hydrodeoxygenation of Phenol. Energy Technology, 2019, 7, 1900214.	1.8	12
70	Factors influencing the photocatalytic activity of Alkali Nb Ta perovskites for hydrogen production from aqueous methanol solutions. International Journal of Hydrogen Energy, 2016, 41, 19921-19928.	3.8	11
71	Cascade Deoxygenation Process Integrating Acid and Base Catalysts for the Efficient Production of Second-Generation Biofuels. ACS Sustainable Chemistry and Engineering, 2019, 7, 18027-18037.	3.2	11
72	Determining the Role of Fe-Doping on Promoting the Thermochemical Energy Storage Performance of (Mn <sub>1-x</sub> Fe <sub>x</sub> ) <sub>3</sub> O <sub>4</sub> Spinels. Small Methods, 2021, 5, e2100550.	4.6	8

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73	Hydrogen production by catalytic methane decomposition over rice husk derived silica. Fuel, 2021, 306, 121697.	3.4	8
74	Transportation Biofuels via the Pyrolysis Pathway: Status and Prospects. , 2017, , 1-33.		3
75	Transportation Biofuels via the Pyrolysis Pathway: Status and Prospects. , 2019, , 1081-1112.		0