

M Teresa Izquierdo

List of Publications by Year in descending order

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132
papers

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#	ARTICLE	IF	CITATIONS
1	Qualification of operating conditions to extend oxygen carrier utilization in the scaling up of chemical looping processes. <i>Chemical Engineering Journal</i> , 2022, 430, 132602.	6.6	13
2	Effect of the Fe content on the behavior of synthetic oxygen carriers in a 1.5 kW biomass chemical looping gasification unit. <i>Fuel</i> , 2022, 309, 122193.	3.4	16
3	Iron-based oxygen carrier particles produced from micronized size minerals or industrial wastes. <i>Powder Technology</i> , 2022, 396, 637-647.	2.1	5
4	Coal and biomass combustion with CO ₂ capture by CLOU process using a magnetic Fe-Mn-supported CuO oxygen carrier. <i>Fuel</i> , 2022, 314, 122742.	3.4	10
5	Roles of Surface Chemistry and Texture of Nanoporous Activated Carbons in CO ₂ Capture. <i>ACS Applied Nano Materials</i> , 2022, 5, 3843-3854.	2.4	12
6	Novel magnetic manganese-iron materials for separation of solids used in high-temperature processes: Application to oxygen carriers for chemical looping combustion. <i>Fuel</i> , 2022, 320, 123901.	3.4	10
7	Production of hydrogen by chemical looping reforming of methane and biogas using a reactive and durable Cu-based oxygen carrier. <i>Fuel</i> , 2022, 322, 124250.	3.4	26
8	Influence of an Oxygen Carrier on the CH ₄ Reforming Reaction Linked to the Biomass Chemical Looping Gasification Process. <i>Energy & Fuels</i> , 2022, 36, 9460-9469.	2.5	10
9	CO ₂ outperforms KOH as an activator for high-rate supercapacitors in aqueous electrolyte. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 167, 112716.	8.2	12
10	Biomass chemical looping gasification for syngas production using ilmenite as oxygen carrier in a 1.5 kWth unit. <i>Chemical Engineering Journal</i> , 2021, 405, 126679.	6.6	84
11	Influence of activation conditions on textural properties and performance of activated biochars for pyrolysis vapors upgrading. <i>Fuel</i> , 2021, 289, 119759.	3.4	22
12	Evaluation of the redox capability of manganese-titanium mixed oxides for thermochemical energy storage and chemical looping processes. <i>Fuel Processing Technology</i> , 2021, 211, 106579.	3.7	15
13	On the optimization of physical and chemical stability of a Cu/Al ₂ O ₃ impregnated oxygen carrier for chemical looping combustion. <i>Fuel Processing Technology</i> , 2021, 215, 106740.	3.7	28
14	Behavior of a manganese-iron mixed oxide doped with titanium in reducing the oxygen demand for CLC of biomass. <i>Fuel</i> , 2021, 292, 120381.	3.4	10
15	Cu-Mn oxygen carrier with improved mechanical resistance: Analyzing performance under CLC and CLOU environments. <i>Fuel Processing Technology</i> , 2021, 217, 106819.	3.7	13
16	Optimization of synthesis gas production in the biomass chemical looping gasification process operating under auto-thermal conditions. <i>Energy</i> , 2021, 226, 120317.	4.5	30
17	Development of a magnetic Cu-based oxygen carrier for the chemical looping with oxygen uncoupling (CLOU) process. <i>Fuel Processing Technology</i> , 2021, 218, 106836.	3.7	23
18	Syngas Production in a 1.5 kW _{th} Biomass Chemical Looping Gasification Unit Using Fe and Mn Ores as the Oxygen Carrier. <i>Energy & Fuels</i> , 2021, 35, 17182-17196.	2.5	30

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19	Effect of the Presence of Siloxanes in Biogas Chemical Looping Combustion. <i>Energy & Fuels</i> , 2021, 35, 14984-14994.	2.5	6
20	Model carbon materials derived from tannin to assess the importance of pore connectivity in supercapacitors. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 151, 111600.	8.2	14
21	Biomass chemical looping gasification for syngas production using LD Slag as oxygen carrier in a 1.5 kWth unit. <i>Fuel Processing Technology</i> , 2021, 222, 106963.	3.7	39
22	Upgrading of pine tannin biochars as electrochemical capacitor electrodes. <i>Journal of Colloid and Interface Science</i> , 2021, 601, 863-876.	5.0	21
23	Synthesis of bio-based xerogels from lignin precipitated from the black liquor of the paper industry for supercapacitors electrodes. <i>Biomass and Bioenergy</i> , 2021, 155, 106296.	2.9	2
24	Nanostructured tin oxide materials for the sub-ppm detection of indoor formaldehyde pollution. <i>Talanta</i> , 2020, 208, 120396.	2.9	9
25	Coal combustion via Chemical Looping assisted by Oxygen Uncoupling with a manganese-iron mixed oxide doped with titanium. <i>Fuel Processing Technology</i> , 2020, 197, 106184.	3.7	33
26	Structure and electrochemical properties of carbon nanostructures derived from nickel(II) and iron(II) phthalocyanines. <i>Journal of Advanced Research</i> , 2020, 22, 85-97.	4.4	14
27	Oxygen-promoted hydrogen adsorption on activated and hybrid carbon materials. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 30767-30782.	3.8	25
28	Biomass Chemical Looping Gasification of pine wood using a synthetic Fe ₂ O ₃ /Al ₂ O ₃ oxygen carrier in a continuous unit. <i>Bioresource Technology</i> , 2020, 316, 123908.	4.8	65
29	Synthesis and properties of carbon microspheres based on tannin-sucrose mixtures treated in hydrothermal conditions. <i>Industrial Crops and Products</i> , 2020, 154, 112564.	2.5	16
30	Activated carbon xerogels derived from phenolic oil: Basic catalysis synthesis and electrochemical performances. <i>Fuel Processing Technology</i> , 2020, 205, 106427.	3.7	7
31	Improving the oxygen demand in biomass CLC using manganese ores. <i>Fuel</i> , 2020, 274, 117803.	3.4	17
32	Evaluation of different strategies to improve the efficiency of coal conversion in a 50 kWth Chemical Looping combustion unit. <i>Fuel</i> , 2020, 271, 117514.	3.4	18
33	High-Rate Capability of Supercapacitors Based on Tannin-Derived Ordered Mesoporous Carbons. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17627-17635.	3.2	46
34	Thermochemical assessment of chemical looping assisted by oxygen uncoupling with a MnFe-based oxygen carrier. <i>Applied Energy</i> , 2019, 251, 113340.	5.1	20
35	Evaluation of Mn-Fe mixed oxide doped with TiO ₂ for the combustion with CO ₂ capture by Chemical Looping assisted by Oxygen Uncoupling. <i>Applied Energy</i> , 2019, 237, 822-835.	5.1	37
36	Comparative study of fuel-N and tar evolution in chemical looping combustion of biomass under both iG-CLC and CLOU modes. <i>Fuel</i> , 2019, 236, 598-607.	3.4	31

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37	Chemical Looping Combustion of gaseous and solid fuels with manganese-iron mixed oxide as oxygen carrier. <i>Energy Conversion and Management</i> , 2018, 159, 221-231.	4.4	61
38	Optimization of Li_4SiO_4 synthesis conditions by a solid state method for maximum CO_2 capture at high temperature. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3249-3257.	5.2	53
39	Chemical looping combustion of biomass: CLOU experiments with a Cu-Mn mixed oxide. <i>Fuel Processing Technology</i> , 2018, 172, 179-186.	3.7	61
40	Chemical Looping Combustion of different types of biomass in a 0.5 kWth unit. <i>Fuel</i> , 2018, 211, 868-875.	3.4	72
41	High-Temperature CO_2 Capture by Li_4SiO_4 Sorbents: Effect of CO_2 Concentration and Cyclic Performance under Representative Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 13802-13810.	1.8	16
42	Negative CO_2 emissions through the use of biofuels in chemical looping technology: A review. <i>Applied Energy</i> , 2018, 232, 657-684.	5.1	166
43	Ordered mesoporous carbons obtained by soft-templating of tannin in mild conditions. <i>Microporous and Mesoporous Materials</i> , 2018, 270, 127-139.	2.2	54
44	Lithium-based sorbents for high temperature CO_2 capture: Effect of precursor materials and synthesis method. <i>Fuel</i> , 2018, 230, 45-51.	3.4	40
45	Excellent electrochemical performances of nanocast ordered mesoporous carbons based on tannin-related polyphenols as supercapacitor electrodes. <i>Journal of Power Sources</i> , 2017, 344, 15-24.	4.0	57
46	Titanium substituted manganese-ferrite as an oxygen carrier with permanent magnetic properties for chemical looping combustion of solid fuels. <i>Fuel</i> , 2017, 195, 38-48.	3.4	56
47	Rice straw-based activated carbons doped with SiC for enhanced hydrogen adsorption. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 11534-11540.	3.8	30
48	Outstanding electrochemical performance of highly N- and O-doped carbons derived from pine tannin. <i>Green Chemistry</i> , 2017, 19, 2653-2665.	4.6	63
49	Mercury emissions from coal combustion in fluidized beds under oxy-fuel and air conditions: Influence of coal characteristics and O_2 concentration. <i>Fuel Processing Technology</i> , 2017, 167, 695-701.	3.7	6
50	Spray granulated Cu-Mn oxygen carrier for chemical looping with oxygen uncoupling (CLOU) process. <i>International Journal of Greenhouse Gas Control</i> , 2017, 65, 76-85.	2.3	24
51	Chemical Looping Combustion of Biomass: An Approach to BECCS. <i>Energy Procedia</i> , 2017, 114, 6021-6029.	1.8	22
52	Easy Preparation of Tannin-Based Ag Catalysts for Ethylene Epoxidation. <i>ChemistrySelect</i> , 2017, 2, 8509-8516.	0.7	3
53	Evaluation of $(\text{Mn}_x\text{Fe}_{1-x})_2\text{TiyO}_z$ Particles as Oxygen Carrier for Chemical Looping Combustion. <i>Energy Procedia</i> , 2017, 114, 302-308.	1.8	6
54	Influence of crystal/particle size and gold content of a structured Au/C based sorbent on mercury capture. <i>Journal of Physics and Chemistry of Solids</i> , 2017, 110, 173-179.	1.9	7

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55	Mercury capture by a structured Au/C regenerable sorbent under oxycoal combustion representative and real conditions. <i>Fuel</i> , 2017, 207, 821-829.	3.4	16
56	No removal in the selective catalytic reduction process over Cu and Fe exchanged type Y zeolites synthesized from coal fly ash. <i>Energy Sources, Part A: Recovery, Utilization and Environmental Effects</i> , 2016, 38, 1183-1188.	1.2	6
57	Long-lasting Cu-based oxygen carrier material for industrial scale in Chemical Looping Combustion. <i>International Journal of Greenhouse Gas Control</i> , 2016, 52, 120-129.	2.3	60
58	Physisorption, chemisorption and spill-over contributions to hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 17442-17452.	3.8	41
59	Sugarcane molasses as a pseudocapacitive material for supercapacitors. <i>RSC Advances</i> , 2016, 6, 88826-88836.	1.7	18
60	Assessment of hydrogen storage in activated carbons produced from hydrothermally treated organic materials. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 12146-12156.	3.8	53
61	Functionalized, hierarchical and ordered mesoporous carbons for high-performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2016, 4, 6140-6148.	5.2	32
62	Sulphur, nitrogen and mercury emissions from coal combustion with CO ₂ capture in chemical looping with oxygen uncoupling (CLOU). <i>International Journal of Greenhouse Gas Control</i> , 2016, 46, 28-38.	2.3	55
63	The fate of mercury in fluidized beds under oxy-fuel combustion conditions. <i>Fuel</i> , 2016, 167, 75-81.	3.4	18
64	High surface area Highly N-doped carbons from hydrothermally treated tannin. <i>Industrial Crops and Products</i> , 2015, 66, 282-290.	2.5	44
65	A Critical Short Review of Equilibrium and Kinetic Adsorption Models for VOCs Breakthrough Curves Modelling. <i>Adsorption Science and Technology</i> , 2015, 33, 851-869.	1.5	21
66	Effect of thermal treatments on the morphology, chemical state and lattice structure of gold nanoparticles deposited onto carbon structured monoliths. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2015, 468, 140-150.	2.3	12
67	Mercury capture by a regenerable sorbent under oxycoal combustion conditions: Effect of SO ₂ and O ₂ on capture efficiency. <i>Chemical Engineering Science</i> , 2015, 122, 232-239.	1.9	20
68	Novel methodology for gold nanoparticles deposition on carbon monolith supports. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2014, 441, 91-100.	2.3	7
69	Influence of activation atmosphere used in the chemical activation of almond shell on the characteristics and adsorption performance of activated carbons. <i>Fuel Processing Technology</i> , 2014, 119, 74-80.	3.7	76
70	Kinetics of the hydrothermal treatment of tannin for producing carbonaceous microspheres. <i>Bioresource Technology</i> , 2014, 151, 271-277.	4.8	55
71	Mercury Release and Speciation in Chemical Looping Combustion of Coal. <i>Energy & Fuels</i> , 2014, 28, 2786-2794.	2.5	34
72	Activated carbons obtained from sewage sludge by chemical activation: Gas-phase environmental applications. <i>Journal of Environmental Management</i> , 2014, 140, 145-151.	3.8	37

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73	Hydrogen storage in activated carbons produced from coals of different ranks: Effect of oxygen content. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 4996-5002.	3.8	54
74	Release of pollutant components in CLC of lignite. <i>International Journal of Greenhouse Gas Control</i> , 2014, 22, 15-24.	2.3	65
75	Relevance of the catalytic activity on the performance of a NiO/CaAl ₂ O ₄ oxygen carrier in a CLC process. <i>Applied Catalysis B: Environmental</i> , 2014, 147, 980-987.	10.8	35
76	Hydrogen uptake of high surface area-activated carbons doped with nitrogen. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 10453-10460.	3.8	48
77	High-performances carbonaceous adsorbents for hydrogen storage. <i>Journal of Physics: Conference Series</i> , 2013, 416, 012024.	0.3	2
78	Adsorption of toluene and toluene-water vapor mixture on almond shell based activated carbons. <i>Adsorption</i> , 2013, 19, 1137-1148.	1.4	31
79	Toluene and n-hexane adsorption and recovery behavior on activated carbons derived from almond shell wastes. <i>Fuel Processing Technology</i> , 2013, 110, 1-7.	3.7	35
80	Influence of temperature and regeneration cycles on Hg capture and efficiency by structured Au/C regenerable sorbents. <i>Journal of Hazardous Materials</i> , 2013, 260, 247-254.	6.5	42
81	Impact of synthesis conditions of KOH activated carbons on their hydrogen storage capacities. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 14278-14284.	3.8	46
82	Nitrogen-doped carbon materials produced from hydrothermally treated tannin. <i>Carbon</i> , 2012, 50, 5411-5420.	5.4	127
83	Pyrrhotite deposition through thermal projection to simulate iron sulphide slagging in oxyfuel combustion. <i>Fuel</i> , 2012, 101, 197-204.	3.4	12
84	Effect of H ₂ S on the behaviour of an impregnated NiO-based oxygen-carrier for chemical-looping combustion (CLC). <i>Applied Catalysis B: Environmental</i> , 2012, 126, 186-199.	10.8	50
85	Activated carbons doped with Pd nanoparticles for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 5072-5080.	3.8	73
86	Tail-end Hg capture on Au/carbon-monolith regenerable sorbents. <i>Journal of Hazardous Materials</i> , 2011, 193, 304-310.	6.5	24
87	Optimization of activated carbons for hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 11746-11751.	3.8	72
88	Conversion of almond shell to activated carbons: Methodical study of the chemical activation based on an experimental design and relationship with their characteristics. <i>Biomass and Bioenergy</i> , 2011, 35, 1235-1244.	2.9	38
89	Enhancement of nitric oxide removal by ammonia on a low-rank coal based carbon by sulphuric acid treatment. <i>Fuel Processing Technology</i> , 2011, 92, 1362-1367.	3.7	21
90	Activated carbons with appropriate micropore size distribution for hydrogen adsorption. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 5431-5434.	3.8	54

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91	Adsorption and compression contributions to hydrogen storage in activated anthracites. International Journal of Hydrogen Energy, 2010, 35, 9038-9045.	3.8	67
92	Coal fly ash based carbons for SO ₂ removal from flue gases. Waste Management, 2010, 30, 1341-1347.	3.7	32
93	Experimental evidence of an upper limit for hydrogen storage at 77 K on activated carbons. Carbon, 2010, 48, 1902-1911.	5.4	79
94	Preparation and characterization of carbon-enriched coal fly ash. Journal of Environmental Management, 2008, 88, 1562-1570.	3.8	35
95	Carbon-enriched coal fly ash as a precursor of activated carbons for SO ₂ removal. Journal of Hazardous Materials, 2008, 155, 199-205.	6.5	51
96	Novel carbon based catalysts for the reduction of NO: Influence of support precursors and active phase loading. Catalysis Today, 2008, 137, 215-221.	2.2	15
97	Denitrification of Stack Gases in the Presence of Low-Rank Coal-Based Carbons Activated with Steam. Energy & Fuels, 2007, 21, 2033-2037.	2.5	9
98	Low-cost carbon-based briquettes for the reduction of NO emissions from medium-sized small stationary sources. Catalysis Today, 2007, 119, 175-180.	2.2	15
99	Unburnt carbon from coal fly ashes as a precursor of activated carbon for nitric oxide removal. Journal of Hazardous Materials, 2007, 143, 561-566.	6.5	48
100	Hydrogen adsorption studies on single wall carbon nanotubes. Carbon, 2004, 42, 1243-1248.	5.4	154
101	Title is missing!. Oxidation of Metals, 2003, 59, 395-407.	1.0	3
102	Curing temperature effect on mechanical strength of smokeless fuel briquettes prepared with molasses. Fuel, 2003, 82, 943-947.	3.4	41
103	Curing temperature effect on smokeless fuel briquettes prepared with molasses and H ₃ PO ₄ . Fuel, 2003, 82, 1669-1673.	3.4	11
104	Low-temperature co-pyrolysis of a low-rank coal and biomass to prepare smokeless fuel briquettes. Journal of Analytical and Applied Pyrolysis, 2003, 70, 665-677.	2.6	89
105	Curing time effect on mechanical strength of smokeless fuel briquettes. Fuel Processing Technology, 2003, 80, 155-167.	3.7	22
106	Study of the curing temperature effect on binders for smokeless briquettes by Fourier transform infrared spectroscopy. Vibrational Spectroscopy, 2003, 31, 81-87.	1.2	10
107	Curing Temperature Effect on Mechanical Strength of Smokeless Fuel Briquettes Prepared with Humates. Energy & Fuels, 2003, 17, 419-423.	2.5	5
108	A novel approach for characterising carbon catalysts by TAP experiments. Studies in Surface Science and Catalysis, 2002, 144, 255-260.	1.5	2

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109	Mechanism of interaction of pyrite with hematite as simulation of slagging and fireside tube wastage in coal combustion. <i>Thermochimica Acta</i> , 2002, 390, 103-111.	1.2	17
110	DSC study of curing in smokeless briquetting. <i>Thermochimica Acta</i> , 2001, 371, 41-44.	1.2	9
111	Different approaches to proximate analysis by thermogravimetry analysis. <i>Thermochimica Acta</i> , 2001, 370, 91-97.	1.2	104
112	Aluminosilicates transformations in combustion followed by DSC. <i>Thermochimica Acta</i> , 2001, 373, 173-180.	1.2	41
113	Modifications to the surface chemistry of low-rank coal-based carbon catalysts to improve flue gas nitric oxide removal. <i>Applied Catalysis B: Environmental</i> , 2001, 33, 315-324.	10.8	42
114	Influence of the Activation Temperature on the SO ₂ Removal Capacity and Mechanical Performance of Pelletized Activated Chars. <i>Environmental Technology (United Kingdom)</i> , 2001, 22, 1081-1089.	1.2	4
115	Effect of binder addition on the mechanical and physicochemical properties of low rank coal char briquettes. <i>Carbon</i> , 1999, 37, 1833-1841.	5.4	40
116	Influence of low-rank coal char properties on their SO ₂ removal capacity from flue gases. 2. Activated chars. <i>Carbon</i> , 1998, 36, 263-268.	5.4	43
117	Influence of Char Physicochemical Features on the Flue Gas Nitric Oxide Reduction with Chars. <i>Environmental Science & Technology</i> , 1998, 32, 4017-4022.	4.6	36
118	Influence of low-rank coal char properties on their SO ₂ removal capacity from flue gases: I. Non-activated chars. <i>Carbon</i> , 1997, 35, 1005-1011.	5.4	53
119	Iron from two different catalytic precursors in coal hydrogenation. <i>Coal Science and Technology</i> , 1995, , 1335-1338.	0.0	0
120	Role of Iron in Dry Coal Hydroconversion. <i>Energy & Fuels</i> , 1995, 9, 753-759.	2.5	8
121	Relation between release of conversion products in coal liquefaction and cross-linking. <i>Fuel</i> , 1994, 73, 925-928.	3.4	2
122	Char formation and release of liquids in catalysed hydrolysis. <i>Fuel Processing Technology</i> , 1994, 37, 87-97.	3.7	1
123	Iron catalyzed hydrogenation of high sulphur content coals. <i>Fuel Processing Technology</i> , 1993, 36, 177-184.	3.7	13
124	From coal to char. <i>Carbon</i> , 1992, 30, 375-378.	5.4	8
125	Segregation of straw/sand mixtures in fluidized beds in non-steady state. <i>Powder Technology</i> , 1991, 68, 31-35.	2.1	14
126	COAL BEHAVIOUR IN DRY RAPID CATALYTIC HYDROGENATION. , 1991, , 814-817.		1

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127	Comparative study of residues from dry hydrogenation and low temperature pyrolysis. Fuel Processing Technology, 1990, 25, 241-250.	3.7	1
128	Evaluation of coal conversion by swelling measurement. Fuel Processing Technology, 1990, 24, 171-178.	3.7	3
129	Network swelling of coals. Fuel, 1990, 69, 892-895.	3.4	13
130	Operational Experience of Biomass Combustion Using Chemical Looping Processes. , 0, , .		0
131	Chemical Looping Combustion of Biomass: Clou Experiments with a Cu-Mn Mixed Oxide. , 0, , .		0
132	In-Situ Co2 Capture in Magnesium Production Industrial Processes. SSRN Electronic Journal, 0, , .	0.4	0