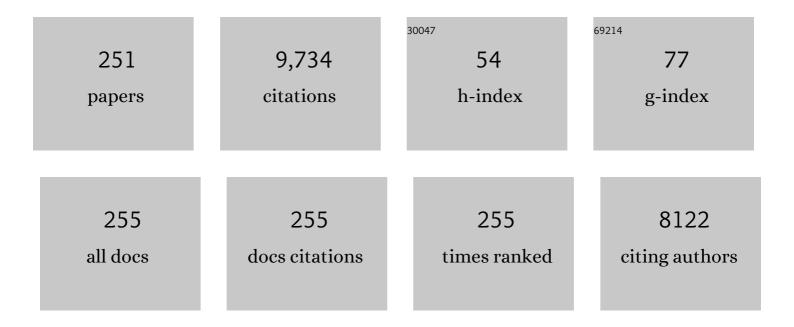
Maria Jesus Lazaro

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Thermocatalytic decomposition of methane over activated carbons: influence of textural properties and surface chemistry. International Journal of Hydrogen Energy, 2005, 30, 293-300.	3.8	188
2	Cherry stones as precursor of activated carbons for supercapacitors. Materials Chemistry and Physics, 2009, 114, 323-327.	2.0	180
3	Pt-Rich _{core} /Sn-Rich _{subsurface} /Pt _{skin} Nanocubes As Highly Active and Stable Electrocatalysts for the Ethanol Oxidation Reaction. Journal of the American Chemical Society, 2018, 140, 3791-3797.	6.6	166
4	Hydrogen production by thermo catalytic decomposition of methane on Ni-based catalysts: influence of operating conditions on catalyst deactivation and carbon characteristics. International Journal of Hydrogen Energy, 2005, 30, 1555-1567.	3.8	155
5	Analysis of the strategies for bridging the gap towards the Hydrogen Economy. International Journal of Hydrogen Energy, 2016, 41, 19500-19508.	3.8	148
6	Pt–Ru electrocatalysts supported on ordered mesoporous carbon for direct methanol fuel cell. Journal of Power Sources, 2010, 195, 4022-4029.	4.0	132
7	Investigation of several graphite-based electrodes for vanadium redox flow cell. Journal of Power Sources, 2013, 227, 15-23.	4.0	131
8	Platinum supported on functionalized ordered mesoporous carbon as electrocatalyst for direct methanol fuel cells. Journal of Power Sources, 2007, 169, 59-64.	4.0	127
9	Characterization of NiAl and NiCuAl catalysts prepared by different methods for hydrogen production by thermo catalytic decomposition of methane. Catalysis Today, 2006, 116, 271-280.	2.2	122
10	The effect of the functionalization of carbon nanofibers on their electronic conductivity. Carbon, 2010, 48, 4421-4431.	5.4	115
11	High temperature iron-based catalysts for hydrogen and nanostructured carbon production by methane decomposition. International Journal of Hydrogen Energy, 2011, 36, 7832-7843.	3.8	111
12	On the design of Pt-Sn efficient catalyst for carbon monoxide and ethanol oxidation in acid and alkaline media. Applied Catalysis B: Environmental, 2017, 200, 246-254.	10.8	110
13	Enhanced oxygen reduction activity and durability of Pt catalysts supported on carbon nanofibers. Applied Catalysis B: Environmental, 2012, 115-116, 269-275.	10.8	109
14	Recent progress on bimetallic NiCo and CoFe based electrocatalysts for alkaline oxygen evolution reaction: A review. Journal of Energy Chemistry, 2022, 67, 101-137.	7.1	109
15	Hydrogen production by methane decarbonization: Carbonaceous catalysts. International Journal of Hydrogen Energy, 2007, 32, 3320-3326.	3.8	107
16	Hydrogen production by thermocatalytic decomposition of methane over Ni-Al and Ni-Cu-Al catalysts: Effect of calcination temperature. Journal of Power Sources, 2007, 169, 150-157.	4.0	104
17	Influence of carbon nanofiber properties as electrocatalyst support on the electrochemical performance for PEM fuel cells. International Journal of Hydrogen Energy, 2010, 35, 9934-9942.	3.8	102
18	Production of hydrogen and carbon nanofibers by thermal decomposition of methane using metal catalysts in a fluidized bed reactor. International Journal of Hydrogen Energy, 2007, 32, 4821-4829.	3.8	99

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19	Decomposition of methane over Ni-SiO2 and Ni-Cu-SiO2 catalysts: Effect of catalyst preparation method. Applied Catalysis A: General, 2007, 329, 22-29.	2.2	90
20	Kinetic study of the thermal decomposition of methane using carbonaceous catalysts. Chemical Engineering Journal, 2008, 138, 301-306.	6.6	89
21	Structural characterization of biomass pyrolysis tars/oils from eucalyptus wood waste: effect of H2 pressure and sample configuration. Fuel, 1997, 76, 1013-1023.	3.4	88
22	Carbonaceous materials as catalysts for decomposition of methane. Chemical Engineering Journal, 2008, 140, 432-438.	6.6	87
23	Molecular mass distributions and structural characterisation of coal derived liquids. Fuel, 2000, 79, 323-337.	3.4	85
24	Synthesis and applications of carbon nanofibers: a review. Reviews in Chemical Engineering, 2020, 36, 493-511.	2.3	85
25	Functionalization of ordered mesoporous carbons synthesized with SBA-15 silica as template. Microporous and Mesoporous Materials, 2007, 103, 158-165.	2.2	84
26	Pd catalysts supported onto nanostructured carbon materials for CO2 valorization by electrochemical reduction. Applied Catalysis B: Environmental, 2015, 163, 83-95.	10.8	84
27	Influence of the surface potassium species in Fe–K/Al2O3 catalysts on the soot oxidation activity in the presence of NOx. Applied Catalysis B: Environmental, 2014, 152-153, 88-98.	10.8	82
28	Electrochemical oxidation of CO and methanol on Pt–Ru catalysts supported on carbon nanofibers: the influence of synthesis method. Applied Catalysis B: Environmental, 2015, 165, 676-686.	10.8	80
29	Electrochemical behavior of the carbon black Vulcan XC-72R: Influence of the surface chemistry. International Journal of Hydrogen Energy, 2018, 43, 7911-7922.	3.8	79
30	Thermo catalytic decomposition of methane over Ni–Mg and Ni–Cu–Mg catalysts. Applied Catalysis A: General, 2007, 333, 229-237.	2.2	78
31	Ni- and Fe-based catalysts for hydrogen and carbon nanofilament production by catalytic decomposition of methane in a rotary bed reactor. Fuel Processing Technology, 2011, 92, 1480-1488.	3.7	77
32	Hydrogen and multiwall carbon nanotubes production by catalytic decomposition of methane: Thermogravimetric analysis and scaling-up of Fe–Mo catalysts. International Journal of Hydrogen Energy, 2014, 39, 3698-3709.	3.8	77
33	N-doped graphene catalysts with high nitrogen concentration for the oxygen reduction reaction. Journal of Power Sources, 2019, 438, 227036.	4.0	77
34	Hydrogen storage by decalin dehydrogenation/naphthalene hydrogenation pair over platinum catalysts supported on activated carbon. International Journal of Hydrogen Energy, 2008, 33, 1329-1334.	3.8	76
35	Palladium-Based Catalysts as Electrodes for Direct Methanol Fuel Cells: A Last Ten Years Review. Catalysts, 2016, 6, 130.	1.6	75
36	Hydrogen production by thermo-catalytic decomposition of methane: Regeneration of active carbons using CO2. Journal of Power Sources, 2007, 169, 103-109.	4.0	73

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37	Study of the deactivation mechanism of carbon blacks used in methane decomposition. International Journal of Hydrogen Energy, 2008, 33, 4104-4111.	3.8	71
38	Parametric study of the decomposition of methane using a NiCu/Al2O3 catalyst in a fluidized bed reactor. International Journal of Hydrogen Energy, 2010, 35, 9801-9809.	3.8	69
39	Effect of the support properties on the preparation and performance of platinum catalysts supported on carbon nanofibers. Journal of Power Sources, 2009, 192, 144-150.	4.0	67
40	Synthesis and performance of platinum supported on ordered mesoporous carbons as catalyst for PEM fuel cells: Effect of the surface chemistry of the support. International Journal of Hydrogen Energy, 2011, 36, 9805-9814.	3.8	66
41	Behaviour of different industrial waste oils in a pyrolysis process: metals distribution and valuable products. Journal of Analytical and Applied Pyrolysis, 2000, 55, 171-183.	2.6	65
42	Carbon nanofiber-based counter electrodes for low cost dye-sensitized solar cells. Journal of Power Sources, 2014, 250, 242-249.	4.0	65
43	Effects of reaction conditions on hydrogen production and carbon nanofiber properties generated by methane decomposition in a fixed bed reactor using a NiCuAl catalyst. Journal of Power Sources, 2009, 192, 35-42.	4.0	64
44	Calibration of Size Exclusion Chromatography in 1-Methyl-2-pyrrolidinone for Coal-Derived Materials Using Standards and Mass Spectrometry. Energy & Fuels, 1999, 13, 1212-1222.	2.5	63
45	Carbon monoxide and ethanol oxidation on PtSn supported catalysts: Effect of the nature of the carbon support and Pt:Sn composition. Applied Catalysis B: Environmental, 2015, 168-169, 33-41.	10.8	63
46	A Comparative Study of Bitumen Molecular-Weight Distributions. Energy & Fuels, 1999, 13, 552-557.	2.5	61
47	Hydrogen production by catalytic decomposition of methane using a Fe-based catalyst in a fluidized bed reactor. Journal of Natural Gas Chemistry, 2012, 21, 367-373.	1.8	60
48	Molecular mass determinations in coal-derived liquids by MALDI mass spectrometry and size-exclusion chromatography. Fuel, 1997, 76, 1225-1233.	3.4	59
49	Pt and PtRu electrocatalysts supported on carbon xerogels for direct methanol fuel cells. Journal of Power Sources, 2011, 196, 4226-4235.	4.0	59
50	TiO2 as textural promoter on high loaded Ni catalysts for methane decomposition. International Journal of Hydrogen Energy, 2008, 33, 3320-3329.	3.8	58
51	A comparative study of V2O5/AC and V2O5/Al2O3 catalysts for the selective catalytic reduction of NO by NH3. Chemical Engineering Journal, 2009, 149, 173-182.	6.6	58
52	Synergetic effects in the co-pyrolysis of coal and petroleum residues: influences of coal mineral matter and petroleum residue mass ratio. Journal of Analytical and Applied Pyrolysis, 2000, 55, 29-41.	2.6	56
53	Carbon monoxide and methanol oxidation at platinum catalysts supported on ordered mesoporous carbon: the influence of functionalization of the support. Physical Chemistry Chemical Physics, 2008, 10, 6796.	1.3	56
54	CO tolerant PtRu–MoOx nanoparticles supported on carbon nanofibers for direct methanol fuel cells. Journal of Power Sources, 2009, 186, 299-304.	4.0	55

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55	Effect of LiBr Addition to 1-Methyl-2-pyrrolidinone in the Size-Exclusion Chromatography of Coal-Derived Materials. Energy & Fuels, 1998, 12, 174-182.	2.5	54
56	Vanadium supported on carbon-coated monoliths for the SCR of NO at low temperature: effect of pore structure. Applied Catalysis B: Environmental, 2004, 50, 235-242.	10.8	53
57	Influence of the support on the physicochemical properties of Pt electrocatalysts: Comparison of catalysts supported on different carbon materials. Materials Chemistry and Physics, 2011, 127, 335-341.	2.0	53
58	Non-isothermal versus isothermal technique to evaluate kinetic parameters of coal pyrolysis. Journal of Analytical and Applied Pyrolysis, 1998, 47, 111-125.	2.6	52
59	Influence of nickel crystal domain size on the behaviour of Ni and NiCu catalysts for the methane decomposition reaction. Applied Catalysis A: General, 2009, 363, 199-207.	2.2	52
60	Carbon-based catalytic briquettes for the reduction of NO: Effect of H2SO4 and HNO3 carbon support treatment. Fuel, 2008, 87, 2058-2068.	3.4	51
61	The effect of carbon nanofiber properties as support for PtRu nanoparticles on the electrooxidation of alcohols. Applied Catalysis B: Environmental, 2013, 132-133, 13-21.	10.8	51
62	Strain Effects on the Oxidation of CO and HCOOH on Au–Pd Core–Shell Nanoparticles. ACS Catalysis, 2017, 7, 1673-1680.	5.5	51
63	Bifunctional N-doped graphene Ti and Co nanocomposites for the oxygen reduction and evolution reactions. Renewable Energy, 2018, 125, 182-192.	4.3	51
64	Activity of NiCuAl catalyst in methane decomposition studied using a thermobalance and the structural changes in the Ni and the deposited carbon. International Journal of Hydrogen Energy, 2008, 33, 2515-2524.	3.8	50
65	Electrocatalysts for low temperature fuel cells. Catalysis Today, 2017, 285, 3-12.	2.2	50
66	Electrochemical performance of low temperature PEMFC with surface tailored carbon nanofibers as catalyst support. International Journal of Hydrogen Energy, 2012, 37, 393-404.	3.8	49
67	Structure of vanadium oxide supported on mesoporous carbon-coated monoliths and relationship with its catalytic performance in the SCR of NO at low temperatures. Journal of Catalysis, 2004, 223, 395-403.	3.1	48
68	In situ hydrogen generation from cycloalkanes using a Pt/CNF catalyst. Catalysis Today, 2008, 138, 203-209.	2.2	48
69	Towards an optimal synthesis route for the preparation of highly mesoporous carbon xerogel-supported Pt catalysts for the oxygen reduction reaction. Applied Catalysis B: Environmental, 2014, 147, 947-957.	10.8	48
70	Choice of Extraction Voltage and Matrix in the Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry of Coal Tar Pitch — Pyridine Insolubles. Rapid Communications in Mass Spectrometry, 1997, 11, 638-645.	0.7	47
71	Role of sulphates on the mechanism of NH3-SCR of NO at low temperatures over presulphated vanadium supported on carbon-coated monoliths. Journal of Catalysis, 2005, 233, 166-175.	3.1	47
72	NH3-SCR of NO at low temperatures over sulphated vanadia on carbon-coated monoliths: Effect of H2O and SO2 traces in the gas feed. Applied Catalysis B: Environmental, 2006, 66, 281-287.	10.8	47

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73	Iron–nitrogen-functionalized carbon as efficient oxygen reduction reaction electrocatalyst in microbial fuel cells. International Journal of Hydrogen Energy, 2016, 41, 19637-19644.	3.8	47
74	Sulfurized carbon xerogels as Pt support with enhanced activity for fuel cell applications. Applied Catalysis B: Environmental, 2016, 192, 260-267.	10.8	46
75	Optimizing the synthesis of carbon nanofiber based electrocatalysts for fuel cells. Applied Catalysis B: Environmental, 2013, 132-133, 22-27.	10.8	45
76	Influence of the nature of the carbon support on the activity of Pt/C catalysts for ethanol and carbon monoxide oxidation. Journal of Catalysis, 2017, 348, 22-28.	3.1	45
77	Size Exclusion Chromatography of Soots and Coal-Derived Materials with 1-Methyl-2-pyrrolidinone as Eluent:  Observations on High Molecular Mass Material. Energy & Fuels, 2000, 14, 1009-1020.	2.5	44
78	Characterisation of tars from the co-pyrolysis of waste lubricating oils with coal. Fuel, 2001, 80, 179-194.	3.4	44
79	Influence of support's oxygen functionalization on the activity of Pt/carbon xerogels catalysts for methanol electro-oxidation. International Journal of Hydrogen Energy, 2012, 37, 7180-7191.	3.8	44
80	Pt–Ru catalysts supported on carbon xerogels for PEM fuel cells. International Journal of Hydrogen Energy, 2012, 37, 7200-7211.	3.8	44
81	Carbon-based catalysts: Synthesis and applications. Comptes Rendus Chimie, 2015, 18, 1229-1241.	0.2	44
82	Oxygen-Functionalized Highly Mesoporous Carbon Xerogel Based Catalysts for Direct Methanol Fuel Cell Anodes. Journal of Physical Chemistry C, 2013, 117, 13045-13058.	1.5	43
83	A study of the mechanisms of NO reduction over vanadium loaded activated carbon catalysts. Chemical Engineering Journal, 2008, 144, 10-20.	6.6	42
84	Electrochemical performance of Pd and Au–Pd core–shell nanoparticles on surface tailored carbon black as catalyst support. International Journal of Hydrogen Energy, 2012, 37, 7152-7160.	3.8	42
85	Comparative study of Pt catalysts supported on different high conductive carbon materials for methanol and ethanol oxidation. Electrochimica Acta, 2013, 102, 19-27.	2.6	41
86	Co-pyrolysis of a mineral waste oil/coal slurry in a continuous-mode fluidized bed reactor. Journal of Analytical and Applied Pyrolysis, 2002, 65, 239-252.	2.6	40
87	Novel activated carbon-based catalyst for the selective catalytic reduction of nitrogen oxide. Catalysis Today, 2005, 102-103, 142-147.	2.2	40
88	The graphitization of carbon nanofibers produced by the catalytic decomposition of natural gas. Carbon, 2009, 47, 2563-2570.	5.4	39
89	Structural characterization of tar from a coal gasification plant: Comparison with a coke oven tar and a crude oil flash-column residue. Fuel, 1997, 76, 101-113.	3.4	38
90	Synergetic effects in the co-pyrolysis of samca coal and a model aliphatic compound studied by analytical pyrolysis. Journal of Analytical and Applied Pyrolysis, 2002, 65, 197-206.	2.6	38

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91	Preparation of steam-activated carbons as catalyst supports. Journal of Analytical and Applied Pyrolysis, 2007, 78, 301-315.	2.6	38
92	Ni–Mg and Ni–Cu–Mg catalysts for simultaneous production of hydrogen and carbon nanofibersThe effect of calcination temperature. International Journal of Hydrogen Energy, 2008, 33, 1719-1728.	3.8	38
93	Pt supported on carbon nanofibers as electrocatalyst for low temperature polymer electrolyte membrane fuel cells. Electrochemistry Communications, 2009, 11, 1081-1084.	2.3	37
94	Carbon supports for the catalytic dehydrogenation of liquid organic hydrides as hydrogen storage and delivery system. International Journal of Hydrogen Energy, 2014, 39, 4109-4115.	3.8	37
95	Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry of kerogen extracts: effect of interactions between sample structure and matrix. Rapid Communications in Mass Spectrometry, 1997, 11, 1627-1634.	0.7	36
96	Low cost catalytic sorbents for NOx reduction. 1. Preparation and characterization of coal char impregnated with model vanadium components and petroleum coke ash. Fuel, 2002, 81, 1281-1296.	3.4	36
97	Vanadium supported on carbon coated honeycomb monoliths for the selective catalytic reduction of NO at low temperatures: Influence of the oxidation pre-treatment. Carbon, 2006, 44, 407-417.	5.4	36
98	Methanol-Tolerant M–N–C Catalysts for Oxygen Reduction Reactions in Acidic Media and Their Application in Direct Methanol Fuel Cells. Catalysts, 2018, 8, 650.	1.6	36
99	Planar chromatographic separation of petroleum residues and coal-derived liquids. Journal of Chromatography A, 1999, 830, 397-414.	1.8	35
100	Control of textural properties of ordered mesoporous materials. Microporous and Mesoporous Materials, 2008, 116, 292-298.	2.2	35
101	Influence on hydrogen production of the minor components of natural gas during its decomposition using carbonaceous catalysts. Journal of Power Sources, 2009, 192, 100-106.	4.0	35
102	Palladium–nickel catalysts supported on different chemically-treated carbon blacks for methanol oxidation in alkaline media. International Journal of Hydrogen Energy, 2016, 41, 19556-19569.	3.8	35
103	Matching average masses of pitch fractions of narrow polydispersity, derived from matrix-assisted laser desorption ionisation time-of-flight mass spectrometry, with the polystyrene calibration of SEC. Journal of Separation Science, 2003, 26, 1422-1428.	1.3	34
104	Carbon nanofibers as electrocatalyst support for fuel cells: Effect of hydrogen on their properties in CH4 decomposition. Journal of Power Sources, 2009, 192, 51-56.	4.0	34
105	Effect of Carbon Supports on Electrocatalytic Reactivity of Au–Pd Core–Shell Nanoparticles. Journal of Physical Chemistry C, 2012, 116, 6275-6282.	1.5	34
106	Metallic and carbonaceous –based catalysts performance in the solar catalytic decomposition of methane for hydrogen and carbon production. International Journal of Hydrogen Energy, 2012, 37, 9645-9655.	3.8	34
107	Synthesis and application of gold-carbon hybrids as catalysts for the hydroamination of alkynes. Applied Catalysis A: General, 2013, 456, 88-95.	2.2	34
108	Effect of polydispersity on the characterization of coal-derived liquids by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry: inferences from results for mixtures of polystyrene molecular mass standards. Rapid Communications in Mass Spectrometry, 1997, 11, 1845-1852.	0.7	33

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109	Vanadium loaded carbon-based catalysts for the reduction of nitric oxide. Applied Catalysis B: Environmental, 2006, 68, 130-138.	10.8	33
110	A novel rotary reactor configuration for simultaneous production of hydrogen and carbon nanofibers. International Journal of Hydrogen Energy, 2009, 34, 8016-8022.	3.8	33
111	Catalytic decomposition of methane and methane/CO2 mixtures to produce synthesis gas and nanostructured carbonaceous material. Fuel, 2011, 90, 2245-2253.	3.4	33
112	Tailoring Synthesis Conditions of Carbon Xerogels towards Their Utilization as Pt-Catalyst Supports for Oxygen Reduction Reaction (ORR). Catalysts, 2012, 2, 466-489.	1.6	33
113	The influence of carbon nanofiber support properties on the oxygen reduction behavior in proton conducting electrolyte-based direct methanol fuel cells. International Journal of Hydrogen Energy, 2012, 37, 6253-6260.	3.8	33
114	Towards new generation fuel cell electrocatalysts based on xerogel–nanofiber carbon composites. Journal of Materials Chemistry A, 2014, 2, 13713.	5.2	33
115	Oxidized carbon nanofibers supporting PtRu nanoparticles for direct methanol fuel cells. International Journal of Hydrogen Energy, 2014, 39, 5414-5423.	3.8	33
116	Carbon supported PdM (M = Fe, Co) electrocatalysts for formic acid oxidation. Influence of the Fe and Co precursors. International Journal of Hydrogen Energy, 2019, 44, 1640-1649.	3.8	33
117	Comparison of the fractionation of a coal tar pitch by solvent solubility and by planar chromatography. Fuel, 1999, 78, 795-801.	3.4	32
118	Determining a â€~safe' high-mass limit in matrix-assisted laser desorption/ionisation time-of-flight mass spectra of coal derived materials with reference to instrument noise. , 1999, 13, 1401-1412.		32
119	Technical electrodes catalyzed with PtRu on mesoporous ordered carbons for liquid direct methanol fuel cells. Journal of Solid State Electrochemistry, 2010, 14, 1027-1034.	1.2	32
120	Catalytic filters for the simultaneous removal of soot and NOx: Influence of the alumina precursor on monolith washcoating and catalytic activity. Catalysis Today, 2012, 191, 96-105.	2.2	32
121	Highly dispersed encapsulated AuPd nanoparticles on ordered mesoporous carbons for the direct synthesis of H2O2 from molecular oxygen and hydrogen. Chemical Communications, 2012, 48, 5316.	2.2	32
122	Valuable Products from Mineral Waste Oils Containing Heavy Metals. Environmental Science & Technology, 2000, 34, 3205-3210.	4.6	31
123	Electrocatalytic Properties of Strained Pd Nanoshells at Au Nanostructures: CO and HCOOH Oxidation. Journal of Physical Chemistry C, 2012, 116, 692-699.	1.5	31
124	Fuel cell performance of Pt electrocatalysts supported on carbon nanocoils. International Journal of Hydrogen Energy, 2014, 39, 5371-5377.	3.8	31
125	Carbon monoxide and methanol oxidations on carbon nanofibers supported Pt–Ru electrodes at different temperatures. Electrochimica Acta, 2015, 186, 359-368.	2.6	31
126	N-Doped Carbon Xerogels as Pt Support for the Electro-Reduction of Oxygen. Materials, 2017, 10, 1092.	1.3	31

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127	Synergetic Effects in the Copyrolysis of Coal/Petroleum Residue Mixtures by Pyrolysis/Gas Chromatography:Â Influence of Temperature, Pressure, and Coal Nature. Energy & Fuels, 1998, 12, 963-968.	2.5	30
128	Electrochemical reactors for CO 2 reduction: From acid media to gas phase. International Journal of Hydrogen Energy, 2016, 41, 19756-19765.	3.8	30
129	Effect of oxygen and structural properties on the electrical conductivity of powders of nanostructured carbon materials. Powder Technology, 2018, 340, 380-388.	2.1	30
130	CoTiO3/NrGO nanocomposites for oxygen evolution and oxygen reduction reactions: Synthesis and electrocatalytic performance. Electrochimica Acta, 2020, 331, 135396.	2.6	30
131	Valorization of Lube Oil Waste by Pyrolysis. Energy & Fuels, 1997, 11, 1165-1170.	2.5	29
132	Gas diffusion electrodes for methanol electrooxidation studied by a new DEMS configuration: Influence of the diffusion layer. International Journal of Hydrogen Energy, 2012, 37, 7141-7151.	3.8	29
133	On the importance of the structure in the electrical conductivity of fishbone carbon nanofibers. Journal of Materials Science, 2013, 48, 1423-1435.	1.7	29
134	The release of nitrogen during the combustion of coal chars: the role of volatile matter and surface area. Fuel, 1996, 75, 1014-1024.	3.4	28
135	Changes in sample reactivity and catalyst deactivation during early stages of the hydrocracking of a coal extract. Fuel, 1998, 77, 1261-1272.	3.4	27
136	Fractionation of a wood tar pitch by planar chromatography for the characterisation of large molecular mass materials. Journal of Chromatography A, 1999, 840, 107-115.	1.8	27
137	Influence of the Synthesis Method for Pt Catalysts Supported on Highly Mesoporous Carbon Xerogel and Vulcan Carbon Black on the Electro-Oxidation of Methanol. Catalysts, 2015, 5, 392-405.	1.6	27
138	Performance and stability of counter electrodes based on reduced few-layer graphene oxide sheets and reduced graphene oxide quantum dots for dye-sensitized solar cells. Electrochimica Acta, 2019, 306, 396-406.	2.6	27
139	Catalytic activity of fullerenes for hydrocracking coal extracts. Fuel, 1997, 76, 207-214.	3.4	26
140	Large Molecular Mass Materials in Coal-Derived Liquids by 252Cf-Plasma and Matrix-Assisted Laser Desorption Mass Spectrometry. Energy & Fuels, 1998, 12, 485-492.	2.5	26
141	Vanadium-loaded carbon-based monoliths for the on-board NO reduction: Experimental study of operating conditions. Chemical Engineering Journal, 2008, 144, 343-351.	6.6	26
142	Influence of the synthesis method on the properties of Pt catalysts supported on carbon nanocoils for ethanol oxidation. Journal of Power Sources, 2011, 196, 4236-4241.	4.0	26
143	Electrochemical oxidation of ordered mesoporous carbons and the influence of graphitization. Electrochimica Acta, 2019, 303, 167-175.	2.6	26
144	Study of the Surface Chemistry of Modified Carbon Nanofibers by Oxidation Treatments in Liquid Phase. Journal of Nanoscience and Nanotechnology, 2009, 9, 4164-4169.	0.9	25

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145	Catalytic decomposition of biogas to produce H2-rich fuel gas and carbon nanofibers. Parametric study and characterization. International Journal of Hydrogen Energy, 2012, 37, 7067-7076.	3.8	25
146	Graphitized carbon nanofibers for use as anodes in lithium-ion batteries: Importance of textural and structural properties. Journal of Power Sources, 2012, 198, 303-307.	4.0	25
147	Spectroelectrochemical Study of Carbon Monoxide and Ethanol Oxidation on Pt/C, PtSn(3:1)/C and PtSn(1:1)/C Catalysts. Molecules, 2016, 21, 1225.	1.7	25
148	Methanol Oxidation at Diamond-Supported Pt Nanoparticles: Effect of the Diamond Surface Termination. Journal of Physical Chemistry C, 2013, 117, 21735-21742.	1.5	24
149	Study of the Synthesis Conditions of Carbon Nanocoils for Energetic Applications. Energy & Fuels, 2010, 24, 3361-3365.	2.5	23
150	Insulating diamond particles as substrate for Pd electrocatalysts. Chemical Communications, 2011, 47, 7656.	2.2	23
151	Carbon-Based Composites as Electrocatalysts for Oxygen Evolution Reaction in Alkaline Media. Materials, 2021, 14, 4984.	1.3	23
152	Biomass waste-derived nitrogen and iron co-doped nanoporous carbons as electrocatalysts for the oxygen reduction reaction. Electrochimica Acta, 2021, 387, 138490.	2.6	23
153	Trace elements in coal derived liquids: analysis by ICP-MS and Mössbauer spectroscopy. Fuel, 2000, 79, 57-67.	3.4	22
154	The graphitization of carbon nanofibers produced by catalytic decomposition of methane: Synergetic effect of the inherent Ni and Si. Fuel, 2010, 89, 2160-2162.	3.4	22
155	Catalytic decomposition of methane for the simultaneous co-production of CO2-free hydrogen and carbon nanofibre based polymers. Fuel, 2011, 90, 430-432.	3.4	22
156	Me (Cu, Co, V)-K/Al2O3 supported catalysts for the simultaneous removal of soot and nitrogen oxides from diesel exhausts. Chemical Engineering Science, 2013, 87, 75-90.	1.9	22
157	Crystal Growth, Structural Phase Transitions, and Optical Gap Evolution of CH ₃ NH ₃ Pb(Br _{1–<i>x</i>} Cl _{<i>x</i>}) ₃ Perovskites. Crystal Growth and Design, 2019, 19, 918-924.	1.4	22
158	Structural Features of Large Molecular Mass Material in Coal-Derived Liquids: Catalytic Hydrocracking of the Pyridine-Insoluble Fraction of a Coal-Tar Pitch. European Journal of Mass Spectrometry, 2000, 6, 39-48.	0.5	21
159	Identification of organically associated trace elements in wood and coal by inductively coupled plasma mass spectrometry. , 2000, 14, 317-328.		21
160	Characterization and kinetic study of carbon-based briquettes for the reduction of NO. Carbon, 2006, 44, 2399-2403.	5.4	21
161	Ethanol Oxidation on Snâ€modified Pt Singleâ€Crystal Electrodes: New Mechanistic Insights from Onâ€line Electrochemical Mass Spectrometry. ChemElectroChem, 2016, 3, 2196-2201.	1.7	21
162	Noble metal-free catalysts supported on carbon for CO 2 electrochemical reduction. Journal of CO2 Utilization, 2017, 18, 41-52.	3.3	21

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163	Carbon xerogels electrochemical oxidation and correlation with their physico-chemical properties. Carbon, 2019, 144, 382-394.	5.4	21
164	Metal-ion pillared clays as hydrocracking catalysts (II): effect of contact time on products from coal extracts and petroleum distillation residuesa~†. Fuel, 2003, 82, 2309-2321.	3.4	20
165	Comparison of the Quaternary Aromatic Carbon Contents of a Coal, a Coal Extract, and Its Hydrocracking Products by NMR Methods. Energy & Fuels, 2003, 17, 1616-1629.	2.5	20
166	Influence of the Alkali Promoter on the Activity and Stability of Transition Metal (Cu, Co, Fe) Based Structured Catalysts for the Simultaneous Removal of Soot and NOx. Topics in Catalysis, 2013, 56, 493-498.	1.3	20
167	Platinum Ruthenium Catalysts Supported on Carbon Xerogel for Methanol Electroâ€Oxidation: Influence of the Catalyst Synthesis Method. ChemCatChem, 2013, 5, 3770-3780.	1.8	20
168	Carbon Nanofibers as Advanced Pd Catalyst Supports for the Air Electrode of Alkaline Metal–Air Batteries. ChemPlusChem, 2015, 80, 1384-1388.	1.3	20
169	The role of Sn, Ru and Ir on the ethanol electrooxidation on Pt3M/TiCN electrocatalysts. International Journal of Hydrogen Energy, 2015, 40, 14519-14528.	3.8	20
170	Low cost catalytic sorbents for NOx reduction. 3. NO reduction tests using NH3 as reducing agent. Fuel, 2004, 83, 875-884.	3.4	19
171	Characterization of nanofibrous carbon produced at pilot-scale in a fluidized bed reactor by methane decomposition. Chemical Engineering Journal, 2010, 156, 170-176.	6.6	19
172	H ₂ â^'CH ₄ Mixtures Produced by Carbon-Catalyzed Methane Decomposition as a Fuel for Internal Combustion Engines. Energy & Fuels, 2010, 24, 3340-3345.	2.5	19
173	Influence of the inherent metal species on the graphitization of methane-based carbon nanofibers. Carbon, 2012, 50, 5387-5394.	5.4	19
174	Combined pyrolysis-combustion cycle: effects of operating conditions on sulfur and calorific value distribution in coal pyrolysis. Fuel, 1994, 73, 1214-1220.	3.4	18
175	Metal-ion pillared clays as hydrocracking catalysts (I): Catalyst preparation and assessment of performance at short contact times. Fuel, 2002, 81, 449-459.	3.4	18
176	Carbon-Supported Fe Catalysts forCO2Electroreduction to High-Added Value Products: A DEMS Study: Effect of the Functionalization of the Support. International Journal of Electrochemistry, 2011, 2011, 1-13.	2.4	18
177	Palladium–nickel materials as cathode electrocatalysts for alkaline fuel cells. International Journal of Hydrogen Energy, 2016, 41, 22538-22546.	3.8	18
178	Tantalum-based electrocatalysts prepared by a microemulsion method for the oxygen reduction and evolution reactions. Electrochimica Acta, 2019, 317, 261-271.	2.6	18
179	Promotion by a second metal or SO2 over vanadium supported on mesoporous carbon-coated monoliths for the SCR of NO at low temperature. Catalysis Today, 2005, 102-103, 177-182.	2.2	17
180	Vanadium loaded carbon-based monoliths for the on-board no reduction: Influence of temperature and period of the oxidation treatment. Chemical Engineering Journal, 2010, 160, 623-633.	6.6	17

#	Article	IF	CITATIONS
181	Carbon Nanocoils as Unusual Electrode Materials for Supercapacitors. Journal of the Electrochemical Society, 2012, 159, A464-A469.	1.3	17
182	Nitrogen Doped Ordered Mesoporous Carbon as Support of PtRu Nanoparticles for Methanol Electro-Oxidation. Energies, 2018, 11, 831.	1.6	17
183	Low-cost sorbents for demetalisation of waste oils via pyrolysis. Journal of Analytical and Applied Pyrolysis, 2001, 57, 119-131.	2.6	16
184	Characterization of Chars Obtained from Co-pyrolysis of Coal and Petroleum Residues. Energy & Fuels, 2002, 16, 878-886.	2.5	16
185	Study of Configuration and Coating Thickness of Vanadium on Carbon-Coated Monoliths in the SCR of NO at Low Temperature. Industrial & Engineering Chemistry Research, 2004, 43, 4073-4079.	1.8	16
186	Vanadium-loaded carbon-based monoliths for on-board NO reduction: Influence of nature and concentration of the oxidation agent on activity. Catalysis Today, 2008, 137, 222-227.	2.2	16
187	Carbon Nanofiber Growth Optimization for Their Use as Electrocatalyst Support in Proton Exchange Membrane (PEM) Fuel Cells. Journal of Nanoscience and Nanotechnology, 2009, 9, 4353-4359.	0.9	16
188	Modification of the properties of carbon nanocoils by different treatments in liquid phase. Microporous and Mesoporous Materials, 2011, 142, 55-61.	2.2	16
189	Influence of gas hourly space velocity on the activity of monolithic catalysts for the simultaneous removal of soot and NOx. Comptes Rendus Chimie, 2015, 18, 1007-1012.	0.2	16
190	Methanol tolerant Pt 2 CrCo catalysts supported on ordered mesoporous carbon for the cathode of DMFC. International Journal of Hydrogen Energy, 2016, 41, 19645-19655.	3.8	16
191	Co-Pyrolysis of Coals and Lube Oil Wastes in a Bench-Scale Unit. Energy & Fuels, 1999, 13, 907-913.	2.5	15
192	Low cost catalytic sorbents for NOx reduction. 2. Tests with no reduction reactivesâ~†. Fuel, 2003, 82, 771-782.	3.4	15
193	Low-cost carbon-based briquettes for the reduction of no emissions from medium–small stationary sources. Catalysis Today, 2007, 119, 175-180.	2.2	15
194	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
195	Nanostructured Carbon Materials as Supports in the Preparation of Direct Methanol Fuel Cell Electrocatalysts. Catalysts, 2013, 3, 671-682.	1.6	15
196	Tailoring carbon xerogels' properties to enhance catalytic activity of Pt catalysts towards methanol oxidation. International Journal of Hydrogen Energy, 2015, 40, 14736-14745.	3.8	15
197	Oxidation of CO and Methanol on Pd-Ni Catalysts Supported on Different Chemically-Treated Carbon Nanofibers. Nanomaterials, 2016, 6, 187.	1.9	15
198	Influence of thermal treatments on the stability of Pd nanoparticles supported on graphitised ordered mesoporous carbons. International Journal of Hydrogen Energy, 2016, 41, 19570-19578.	3.8	15

#	Article	IF	CITATIONS
199	Vanadium loaded carbon-based monoliths for the on-board No reduction: Influence of vanadia and tungsten loadings. Chemical Engineering Journal, 2009, 155, 68-75.	6.6	14
200	DEMS strategy for the determination of the difference in surface acidity of carbon materials. Electrochemistry Communications, 2018, 90, 87-90.	2.3	14
201	Graphene oxide nanofibers: A nanocarbon material with tuneable electrochemical properties. Applied Surface Science, 2020, 509, 144774.	3.1	14
202	Optimization of the Catalytic Layer for Alkaline Fuel Cells Based on Fumatech Membranes and Ionomer. Catalysts, 2020, 10, 1353.	1.6	14
203	Bi-functional carbon-based catalysts for unitized regenerative fuel cells. Journal of Catalysis, 2020, 387, 138-144.	3.1	14
204	Electrochemical Performance and Alkaline Stability of Cross-linked Quaternized Polyepichlorohydrin/PvDF Blends for Anion-Exchange Membrane Fuel Cells. Journal of Physical Chemistry C, 2021, 125, 5494-5504.	1.5	14
205	Transformation of CoFe2O4 spinel structure into active and robust CoFe alloy/N-doped carbon electrocatalyst for oxygen evolution reaction. Journal of Colloid and Interface Science, 2022, 625, 70-82.	5.0	14
206	CH4 and CO2 partial pressures influence and deactivation study on the Catalytic Decomposition of Biogas over a Ni catalyst. Fuel, 2013, 111, 778-783.	3.4	13
207	Stability and catalytic properties of nanostructured carbons in electrochemical environments. Journal of Catalysis, 2017, 355, 156-166.	3.1	13
208	Capacitance Enhancement of Hydrothermally Reduced Graphene Oxide Nanofibers. Nanomaterials, 2020, 10, 1056.	1.9	13
209	Carbon nanofiber-supported tantalum oxides as durable catalyst for the oxygen evolution reaction in alkaline media. Renewable Energy, 2021, 178, 307-317.	4.3	13
210	Catalytic hydrocracking of primary maceral concentrate extracts prepared in a flowing solvent reactor. Fuel, 2002, 81, 185-202.	3.4	12
211	Solvent degradation during coal liquefaction in a flowing-solvent reactor. Fuel, 2004, 83, 157-179.	3.4	12
212	Carbon nanocoils as catalysts support for methanol electrooxidation: AÂDifferential Electrochemical Mass Spectrometry (DEMS) study. Journal of Power Sources, 2013, 239, 72-80.	4.0	12
213	Effect of molybdophosphoric acid in iron and cobalt graphene/chitosan composites for oxygen reduction reaction. International Journal of Hydrogen Energy, 2017, 42, 28093-28101.	3.8	12
214	Effect of the Dendrimer Generation Used in the Synthesis of Pt-Ru Nanoparticles Supported on Carbon Nanofibers on the Catalytic Activity towards Methanol Oxidation. Energies, 2017, 10, 159.	1.6	12
215	Low-cost carbon-based briquettes for the reduction of NO emissions: Optimal preparation procedure and influence in operating conditions. Journal of Analytical and Applied Pyrolysis, 2010, 88, 80-90.	2.6	11

Soot oxidation in the presence of NO over alumina-supported bimetallic catalysts K \hat{a} \in "Me (Me=Cu, Co,) Tj ETQq0 0.0 rgBT /Overlock 10 2.2 rgBT /Overlock 10 rgBT /Overlock 10 2.2 rgBT /Overlock 10 rgBT /

#	Article	IF	CITATIONS
217	PtRu Nanoparticles Deposited by the Sulfite Complex Method on Highly Porous Carbon Xerogels: Effect of the Thermal Treatment. Catalysts, 2013, 3, 744-756.	1.6	11
218	Morphological characterization of vanadium oxide supported on carbon-coated monoliths using AFM. Applied Surface Science, 2004, 228, 135-142.	3.1	10
219	Carbon based catalytic briquettes for the reduction of NO: Catalyst scale-up. Catalysis Today, 2008, 137, 209-214.	2.2	10
220	Formation of hydrogen and filamentous carbon over a Ni–Cu–Al2O3 catalyst through ethane decomposition. Applied Catalysis A: General, 2011, 394, 220-227.	2.2	10
221	Ni-Based Composites from Chitosan Biopolymer a One-Step Synthesis for Oxygen Evolution Reaction. Catalysts, 2019, 9, 471.	1.6	10
222	Fractionation of Coal Extracts Prior to Hydrocracking:  An Attempt to Link Sample Structure to Conversion Levels and Catalyst Fouling. Energy & Fuels, 2001, 15, 1153-1165.	2.5	9
223	Iron-Based Electrocatalysts Supported on Nanostructured Carbon to Enhance Oxygen Reduction in Microbial Fuel Cells. ECS Transactions, 2016, 72, 9-15.	0.3	8
224	Insights on the Electrochemical Oxidation of Ordered Mesoporous Carbons. Journal of the Electrochemical Society, 2020, 167, 024511.	1.3	8
225	Oxidised Carbon Nanofibers as Platinum Support for Proton Exchange Membrane (PEM) Fuel Cells. Sensor Letters, 2008, 6, 1059-1067.	0.4	8
226	Titanium Dioxide/N-Doped Graphene Composites as Non-Noble Bifunctional Oxygen Electrocatalysts. Industrial & Engineering Chemistry Research, 2021, 60, 18817-18830.	1.8	8
227	Influence of Nitrogen and Sulfur Doping of Carbon Xerogels on the Performance and Stability of Counter Electrodes in Dye Sensitized Solar Cells. Catalysts, 2022, 12, 264.	1.6	8
228	Observation of high-mass liquids in the condensate from the pyrolysis of coals in a methane flame. Fuel, 1999, 78, 861-863.	3.4	7
229	Modification of the surface chemistry of mesoporous carbons obtained through colloidal silica templates. Materials Chemistry and Physics, 2009, 118, 249-253.	2.0	7
230	Catalytic filters for the simultaneous removal of soot and NOx: Effect of CO2 and steam on the exhaust gas of diesel engines. Catalysis Today, 2011, 176, 134-138.	2.2	7
231	Electrochemical Behavior of Pt–Ru Catalysts Supported on Graphitized Ordered Mesoporous Carbons toward CO and Methanol Oxidation. Surfaces, 2019, 2, 1-15.	1.0	7
232	Mesoporous Ce–Fe–Ni nanocomposites encapsulated in carbon-nanofibers: Synthesis, characterization and catalytic behavior in oxygen evolution reaction. Carbon, 2022, 196, 186-202.	5.4	7
233	Preparation of polymer composites using nanostructured carbon produced at large scale by catalytic decomposition of methane. Materials Chemistry and Physics, 2013, 137, 859-865.	2.0	6
234	On the influence of the alumina precursor in Fe-K/Al2O3 structured catalysts for the simultaneous removal of soot and NOx: From surface properties to reaction mechanism. Comptes Rendus Chimie, 2014, 17, 681-686.	0.2	6

#	Article	IF	CITATIONS
235	Evidence obtained by gas chromatography—mass spectrometry of conversion of alkanes into aromatic compounds during coal pyrolysis. Journal of Chromatography A, 1993, 655, 155-161.	1.8	5
236	A Case of Late-Stage Lymphogranuloma Venereum in a Woman in Europe. Sexually Transmitted Diseases, 2013, 40, 792-793.	0.8	5
237	Effect of 1-octanethiol as an electrolyte additive on the performance of the iron-air battery electrodes. Journal of Solid State Electrochemistry, 2021, 25, 225-230.	1.2	5
238	Distribution of the activation energies for the thermal decomposition of organic and pyritic sulphur in coal. Fuel Processing Technology, 1993, 36, 319-325.	3.7	4
239	Titanium carbonitride–graphene composites assembled with organic linkers as electrocatalytic supports for methanol oxidation reaction. Catalysis Today, 2020, 356, 101-109.	2.2	4
240	Non-precious Melamine/Chitosan Composites for the Oxygen Reduction Reaction: Effect of the Transition Metal. Frontiers in Materials, 2020, 7, .	1.2	4
241	Ordered Mesoporous Carbon as a Support of Pd Catalysts for CO2 Electrochemical Reduction. Catalysts, 2020, 10, 912.	1.6	4
242	Use of Dendrimers during the Synthesis of Pt-Ru Electrocatalysts for PEM Fuel Cells: Effects on the Physical and Electrochemical Properties. International Journal of Electrochemistry, 2011, 2011, 1-7.	2.4	3
243	On-Site Production of Hydrogen from Mineral Waste Oils by Thermocatalytic Decomposition:Â An Aragon Case Study. Environmental Science & Technology, 2005, 39, 6871-6876.	4.6	2
244	Characterization of Carbon Nanofibers Grown Over Ni and Ni-Cu Catalysts. Journal of Nanoscience and Nanotechnology, 2009, 9, 4170-4179.	0.9	2
245	Response to the comments on "Metallic and carbonaceous-based catalysts performance in the solar catalytic decomposition of methane for hydrogen and carbon production―by A. Rollinson. International Journal of Hydrogen Energy, 2012, 37, 14716-14717.	3.8	2
246	Non platinum-based cathode catalyst systems for direct methanol fuel cells. , 2020, , 289-316.		2
247	Cesium as Alkali Promoter in Me-Cs (Me = Cu, Co, Fe)/ Al ₂ 0 ₃ Structured Catalysts for the Simultaneous Removal of Soot and NO _x . Modern Research in Catalysis, 2013, 02, 57-62.	1.2	2
248	Influence of Synthesis pH on Textural Properties of Carbon Xerogels as Supports for Pt/CXs Catalysts for Direct Methanol Fuel Cells. International Journal of Electrochemistry, 2012, 2012, 1-9.	2.4	1
249	Electrocatalytic Performance of Palladium-Based Electrocatalysts Supported on Carbon Nanotubes for Formic Acid Oxidation. ECS Transactions, 2019, 92, 317-324.	0.3	1
250	A preface to the special issue on "The 5th Iberian Symposium on Hydrogen, Fuel Cells and Advanced Batteries (HYCELTEC 2015), 5–8 July 2015, Tenerife, Spainâ€: International Journal of Hydrogen Energy, 2016, 41, 19499.	3.8	0
251	Influence of the Alumina Precursor on the Activity of Structured Fe–K/Al2O3 Catalysts Towards the Simultaneous Removal of Soot and NOx. Topics in Catalysis, 2017, 60, 355-360.	1.3	0