Ana Arenillas

List of Publications by Year
in descending order

194 papers	8,835 citations	38660 50 h-index	53109 85 g-index
194 all docs	194 docs citations	194 times ranked	8129 citing authors

#	Article	IF	Citations
1	Microwave heating processes involving carbon materials. Fuel Processing Technology, 2010, 91, 1-8.	3.7	833
2	CO2 capture by adsorption with nitrogen enriched carbons. Fuel, 2007, 86, 2204-2212.	3.4	451
3	CO2 capture using some fly ash-derived carbon materials. Fuel, 2005, 84, 2204-2210.	3.4	239
4	Thermal stability of polyethylenimine based carbon dioxide adsorbents and its influence on selection of regeneration strategies. Microporous and Mesoporous Materials, 2008, 116, 504-512.	2.2	236
5	Microwave-assisted pyrolysis of biomass feedstocks: the way forward?. Energy and Environmental Science, 2012, 5, 5481-5488.	15.6	234
6	Preparation of carbon dioxide adsorbents from the chemical activation of ureaâ€“formaldehyde and melamineâ€“formaldehyde resins. Fuel, 2007, 86, 22-31.	3.4	233
7	Simultaneous thermogravimetricâ€“mass spectrometric study on the pyrolysis behaviour of different rank coals. Journal of Analytical and Applied Pyrolysis, 1999, 50, 31-46.	2.6	189
8	Thermal behaviour during the pyrolysis of low rank perhydrous coals. Journal of Analytical and Applied Pyrolysis, 2003, 68-69, 371-385.	2.6	179
9	Application of thermogravimetric analysis to the evaluation of aminated solid sorbents for CO2 capture. Journal of Thermal Analysis and Calorimetry, 2008, 92, 601-606.	2.0	143
10	Ball lightning plasma and plasma arc formation during the microwave heating of carbons. Carbon, 2011, 49, 346-349.	5.4	139
11	Pyrolysis of glycerol over activated carbons for syngas production. Journal of Analytical and Applied Pyrolysis, 2009, 84, 145-150.	2.6	137
12	Microwave pyrolysis of microalgae for high syngas production. Bioresource Technology, 2013, 144, 240-246.	4.8	134
13	Surface modification of low cost carbons for their application in the environmental protection. Applied Surface Science, 2005, 252, 619-624.	3.1	122
14	A comparison of different methods for predicting coal devolatilisation kinetics. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 685-701.	2.6	119
15	An overview of novel technologies to valorise coke oven gas surplus. Fuel Processing Technology, 2013, 110, 150-159.	3.7	116
16	Characterisation of model compounds and a synthetic coal by TG/MS/FTIR to represent the pyrolysis behaviour of coal. Journal of Analytical and Applied Pyrolysis, 2004, 71, 747-763.	2.6	105
17	Carbon materials for H2 storage. International Journal of Hydrogen Energy, 2009, 34, 4575-4581.	3.8	103
18	Dry reforming of coke oven gases over activated carbon to produce syngas for methanol synthesis. Fuel, 2010, 89, 2897-2902.	3.4	102

#	Article	IF	Citations
19	Prediction of unburned carbon and NOx in a tangentially fired power station using single coals and blends. Fuel, 2005, 84, 2196-2203.	3.4	97
20	CO2 reforming of coke oven gas over a Ni/ʃ³Al2O3 catalyst to produce syngas for methanol synthesis. Fuel, 2012, 94, 197-203.	3.4	89
21	Energy consumption estimation in the scaling-up of microwave heating processes. Chemical Engineering and Processing: Process Intensification, 2015, 95, 1-8.	1.8	84
22	Activation of carbon nanofibres for hydrogen storage. Carbon, 2006, 44, 1376-1385.	5.4	79
23	A comparison of physical activation of carbon xerogels with carbon dioxide with chemical activation using hydroxides. Carbon, 2010, 48, 3157-3168.	5.4	77
24	Removal of naphthalene from aqueous solution on chemically modified activated carbons. Water Research, 2007, 41, 333-340.	5.3	76
25	A TG/DTA study on the effect of coal blending on ignition behaviour. Journal of Thermal Analysis and Calorimetry, 2004, 76, 603-614.	2.0	74
26	Tailoring the textural properties of activated carbon xerogels by chemical activation with KOH. Microporous and Mesoporous Materials, 2008, 115, 480-490.	2.2	74
27	Improving hydrogen storage in Ni-doped carbon nanospheres. International Journal of Hydrogen Energy, 2009, 34, 3070-3076.	3.8	73
28	Comparative study of conventional and microwave-assisted pyrolysis, steam and dry reforming of glycerol for syngas production, using a carbonaceous catalyst. Journal of Analytical and Applied Pyrolysis, 2010, 88, 155-159.	2.6	73
29	Coal structure and reactivity changes induced by chemical demineralisation. Fuel Processing Technology, 2002, 79, 273-279.	3.7	72
30	Optimization of microalgae oil extraction under ultrasound and microwave irradiation. Journal of Chemical Technology and Biotechnology, 2014, 89, 1779-1784.	1.6	72
31	Modelling NOx formation in coal particle combustion at high temperature: an investigation of the devolatilisation kinetic factors. Fuel, 1999, 78, 1171-1179.	3.4	70
32	Optimizing the electrochemical performance of aqueous symmetric supercapacitors based on an activated carbon xerogel. Journal of Power Sources, 2013, 241, 776-782.	4.0	68
33	Textural development and hydrogen adsorption of carbon materials from PET waste. Journal of Alloys and Compounds, 2004, 379, 280-289.	2.8	66
34	Microwave synthesis of micro-mesoporous activated carbon xerogels for high performance supercapacitors. Microporous and Mesoporous Materials, 2013, 168, 206-212.	2.2	63
35	Carbon foams from coals. A preliminary study. Fuel, 2005, 84, 2184-2189.	3.4	62
36	Fast microwave-assisted synthesis of tailored mesoporous carbon xerogels. Journal of Colloid and Interface Science, 2011, 357, 541-547.	5.0	62

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37	High value carbon materials from PET recycling. Applied Surface Science, 2004, 238, 304-308.	3.1	61
38	Mixtures of carbon and Ni/Al2O3 as catalysts for the microwave-assisted CO2 reforming of CH4. Fuel Processing Technology, 2011, 92, 1531-1536.	3.7	60
39	Carbonisation of resorcinolâ€“formaldehyde organic xerogels: Effect of temperature, particle size and heating rate on the porosity of carbon xerogels. Journal of Analytical and Applied Pyrolysis, 2013, 100, 111-116.	2.6	60
40	RF xerogels with tailored porosity over the entire nanoscale. Microporous and Mesoporous Materials, 2014, 195, 266-275.	2.2	60
41	Effects of activated carbon properties on the adsorption of naphthalene from aqueous solutions. Applied Surface Science, 2007, 253, 5741-5746.	3.1	58
42	Graphene-doped carbon xerogel combining high electrical conductivity and surface area for optimized aqueous supercapacitors. Carbon, 2017, 118, 291-298.	5.4	58
43	Influence of the microwave absorbent and moisture content on the microwave pyrolysis of an organic municipal solid waste. Journal of Analytical and Applied Pyrolysis, 2014, 105, 234-240.	2.6	57
44	Synthesis of carbon-supported nickel catalysts for the dry reforming of CH4. Fuel Processing Technology, 2010, 91, 765-769.	3.7	56
45	Nitric Oxide Reduction in Coal Combustion:Â Role of Char Surface Complexes in Heterogeneous Reactions. Environmental Science & Technology, 2002, 36, 5498-5503.	4.6	54
46	New process for producing methanol from coke oven gas by means of CO2 reforming. Comparison with conventional process. Fuel Processing Technology, 2013, 115, 215-221.	3.7	54
47	Ignition characteristics of coal blends in an entrained flow furnace. Fuel, 2007, 86, 2076-2080.	3.4	53
48	Development of adsorbent technologies for post-combustion CO2 capture. Energy Procedia, 2009, 1, 881-884.	1.8	53
49	Exploring New Routes in the Synthesis of Carbon Xerogels for Their Application in Electric Double-Layer Capacitors. Energy & Fuels, 2010, 24, 3334-3339.	2.5	52
50	Ignition behaviour of different rank coals in an entrained flow reactor. Fuel, 2005, 84, 2172-2177.	3.4	51
51	Development of microporous carbon xerogels by controlling synthesis conditions. Journal of Non-Crystalline Solids, 2008, 354, 817-825.	1.5	50
52	Simultaneous adjustment of the main chemical variables to fine-tune the porosity of carbon xerogels. Carbon, 2014, 78, 490-499.	5.4	50
53	Optimizing the performance of supercapacitors based on carbon electrodes and protic ionic liquids as electrolytes. Electrochimica Acta, 2013, 108, 361-368.	2.6	49
54	Synergetic effect of a mixture of activated carbon+Ni/Al2O3 used as catalysts for the CO2 reforming of CH4. Applied Catalysis A: General, 2010, 390, 78-83.	2.2	48

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55	New concept for energy storage: Microwave-induced carbon gasification with CO2. Energy Conversion and Management, 2014, 78, 559-564.	4.4	48
56	Effect of the grinding behaviour of coal blends on coal utilisation for combustion. Powder Technology, 1999, 105, 351-356.	2.1	47
57	Ni-doped carbon xerogels for H2 storage. Carbon, 2010, 48, 2722-2733.	5.4	47
58	Change of self-discharge mechanism as a fast tool for estimating long-term stability of ionic liquid based supercapacitors. Journal of Power Sources, 2018, 396, 220-229.	4.0	47
59	Modification of combustion behaviour and NO emissions by coal blending. Fuel Processing Technology, 2002, 77-78, 111-117.	3.7	46
60	CO2 removal potential of carbons prepared by co-pyrolysis of sugar and nitrogen containing compounds. Journal of Analytical and Applied Pyrolysis, 2005, 74, 298-306.	2.6	46
61	Role of coal characteristics in the electrochemical behaviour of hybrid direct carbon fuel cells. Energy and Environmental Science, 2016, 9, 2868-2880.	15.6	46
62	On the mechanism of reactive adsorption of dibenzothiophene on organic waste derived carbons. Applied Surface Science, 2007, 253, 5899-5903.	3.1	45
63	Synthetic coal chars for the elucidation of NO heterogeneous reduction mechanisms. Fuel, 2007, 86, 41-49.	3.4	45
64	The effect of the carbon surface chemistry and electrolyte pH on the energy storage of supercapacitors. RSC Advances, 2014, 4, 32398-32404.	1.7	45
65	Integrated microwave drying, pyrolysis and gasification for valorisation of organic wastes to syngas. Fuel, 2014, 132, 20-26.	3.4	43
66	Modelling of NO formation in the combustion of coal blends. Fuel, 2002, 81, 627-636.	3.4	42
67	Equilibrium prediction of CO2 reforming of coke oven gas: Suitability for methanol production. Chemical Engineering Science, 2012, 82, 95-103.	1.9	42
68	Effect of carbon type on the performance of a direct or hybrid carbon solid oxide fuel cell. RSC Advances, 2014, 4, 18792-18800.	1.7	42
69	Microwave Heating Applied to Pyrolysis. , 0, , .		41
70	Influence of porosity and surface groups on the catalytic activity of carbon materials for the microwave-assisted CO2 reforming of CH4. Fuel, 2010, 89, 4002-4007.	3.4	40
71	A visual validation of the combined effect of pH and dilution on the porosity of carbon xerogels. Microporous and Mesoporous Materials, 2016, 223, 89-93.	2.2	40
72	Relationship between structure and reactivity of carbonaceous materials. Journal of Thermal Analysis and Calorimetry, 2004, 76, 593-602.	2.0	39

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73	H2 storage in carbon materials. Adsorption, 2008, 14, 557-566.	1.4	38
74	Microwave drying as an effective method to obtain porous carbon xerogels. Journal of Non-Crystalline Solids, 2008, 354, 4024-4026.	1.5	37
75	Carbon xerogels graphitized by microwave heating as anode materials in lithium-ion batteries. Carbon, 2018, 137, 384-394.	5.4	37
76	The effect of the textural properties of bituminous coal chars on NO emissions. Fuel, 1999, 78, 1779-1785.	3.4	36
77	Pyrolysis of activated carbons exhausted with organic compounds. Journal of Analytical and Applied Pyrolysis, 2005, 74, 518-524.	2.6	36
78	Performance of Direct Carbon Fuel Cells Operated on Coal and Effect of Operation Mode. Journal of the Electrochemical Society, 2014, 161, F588-F593.	1.3	35
79	Comparing the composition of the synthesis-gas obtained from the pyrolysis of different organic residues for a potential use in the synthesis of bioplastics. Journal of Analytical and Applied Pyrolysis, 2015, 111, 55-63.	2.6	35
80	Remarkable electrochemical stability of one-step synthesized Pd nanoparticles supported on graphene and multi-walled carbon nanotubes. Nano Energy, 2014, 9, 142-151.	8.2	34
81	Combustion behaviour of ultra clean coal obtained by chemical demineralisation. Fuel, 2003, 82, 2145-2151.	3.4	33
82	Growth of nanofilaments on carbon-based materials from microwave-assisted decomposition of CH4. Applied Surface Science, 2008, 254, 3553-3557.	3.1	33
83	Syngas from CO2 reforming of coke oven gas: Synergetic effect of activated carbon/Niâ€“Î³Al2O3 catalyst. International Journal of Hydrogen Energy, 2011, 36, 13361-13368.	3.8	32
84	Heterogeneous reduction of nitric oxide on synthetic coal chars. Fuel, 2005, 84, 2275-2279.	3.4	31
85	Dielectric characterization of biodegradable wastes during pyrolysis. Fuel, 2016, 172, 146-152.	3.4	31
86	Determinant influence of the electrical conductivity versus surface area on the performance of graphene oxide-doped carbon xerogel supercapacitors. Carbon, 2018, 126, 456-463.	5.4	30
87	Naphthalene adsorption on activated carbons using solvents of different polarity. Adsorption, 2008, 14, 343-355.	1.4	29
88	Syngas obtained by microwave pyrolysis of household wastes as feedstock for polyhydroxyalkanoate production in Rhodospirillum rubrum. Microbial Biotechnology, 2017, 10, 1412-1417.	2.0	29
89	Influence of char structure on reactivity and nitric oxide emissions. Fuel Processing Technology, 2002, 77-78, 103-109.	3.7	28
90	A Comparative Tg-Ms Study of the Carbonization Behavior of Different Pitches. Energy & Fuels, 2002, 16, 935-943.	2.5	27

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91	Pulses of microwave radiation to improve coke grindability. Fuel, 2012, 102, 65-71.	3.4	27
92	An electrical conductivity translator for carbons. Measurement: Journal of the International Measurement Confederation, 2014, 56, 215-218.	2.5	27
93	Effect of Olive Kernel thermal treatment (torrefaction vs. slow pyrolysis) on the physicochemical characteristics and the CO2 or H2O gasification performance of as-prepared biochars. International Journal of Hydrogen Energy, 2020, , .	3.8	27
94	Comparison between the reactivity of coal and synthetic coal modelsâ˜†. Fuel, 2003, 82, 2001-2006.	3.4	26
95	Developing strategies for the regeneration of polyethylenimine based CO2 adsorbents. Energy Procedia, 2009, 1, 875-880.	1.8	26
96	Optimization of the process variables in the microwave-induced synthesis of carbon xerogels. Journal of Sol-Gel Science and Technology, 2014, 69, 488-497.	1.1	26
97	Advances in tailoring the porosity of tannin-based carbon xerogels. Industrial Crops and Products, 2016, 82, 100-106.	2.5	26
98	Performance of carbon xerogel-graphene hybrids as electrodes in aqueous supercapacitors. Electrochimica Acta, 2018, 276, 28-36.	2.6	26
99	Microwave-assisted synthesis of CuO/ZnO and CuO/ZnO/Al2O3 precursors using urea hydrolysis. Solid State Ionics, 2009, 180, 1372-1378.	1.3	24
100	CO2 Separation and Capture Properties of Porous Carbonaceous Materials from Leather Residues. Materials, 2013, 6, 4641-4653.	1.3	24
101	Exploring the potential of resorcinol-formaldehyde xerogels as thermal insulators. Microporous and Mesoporous Materials, 2017, 244, 50-54.	2.2	24
102	Textural characterisation of activated carbons obtained from poly(ethylene terephthalate) by carbon dioxide activation. Studies in Surface Science and Catalysis, 2002, , 537-543.	1.5	23
103	Microwave-induced cracking of pyrolytic tars coupled to microwave pyrolysis for syngas production. Bioresource Technology, 2016, 218, 687-691.	4.8	23
104	Aqueous and organic inks of carbon xerogels as models for studying the role of porosity in lithium-ion battery electrodes. Materials and Design, 2016, 109, 282-288.	3.3	22
105	Desiccant capability of organic xerogels: Surface chemistry vs porous texture. Microporous and Mesoporous Materials, 2016, 232, 70-76.	2.2	22
106	Structural Changes in Polyethylene Terephthalate (PET) Waste Materials Caused by Pyrolysis and CO2 Activation. Adsorption Science and Technology, 2006, 24, 439-450.	1.5	21
107	Studying chemical activation in carbon xerogels. Journal of Materials Science, 2009, 44, 6583-6590.	1.7	21
108	Heterogeneous reaction mechanisms of the reduction of nitric oxide on carbon surfaces: a theoretical analysis. Theoretical Chemistry Accounts, 2010, 127, 95-108.	0.5	21

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109	High energy ultracapacitor based on carbon xerogel electrodes and sodium sulfate electrolyte. Journal of Power Sources, 2012, 214, 137-141.	4.0	21
110	Direct utilization of lignite coal in a Coâ€“CeO 2 /YSZ/Ag solid oxide fuel cell. International Journal of Hydrogen Energy, 2015, 40, 14353-14363.	3.8	21
111	Effect of methanol content in commercial formaldehyde solutions on the porosity of RF carbon xerogels. Journal of Non-Crystalline Solids, 2015, 426, 13-18.	1.5	21
112	Comparative study of durability of hybrid direct carbon fuel cells with anthracite coal and bituminous coal. International Journal of Hydrogen Energy, 2016, 41, 18797-18806.	3.8	21
113	Application of infiltrated LSCMâ€“GDC oxide anode in direct carbon/coal fuel cells. Faraday Discussions, 2016, 190, 269-289.	1.6	21
114	Microwave-induced low temperature pyrolysis of macroalgae for unprecedented hydrogen-enriched syngas production. RSC Advances, 2014, 4, 38144-38151.	1.7	20
115	Effects of oxidative treatments with air and CO2 on vapour grown carbon nanofibres (VGCNFs) produced at industrial scale. Thermochimica Acta, 2004, 423, 99-106.	1.2	19
116	Agglomeration and Cleaning of Carbon Supported Palladium Nanoparticles in Electrochemical Environment. Electrocatalysis, 2014, 5, 204-212.	1.5	19
117	Well-defined meso/macroporous materials as a host structure for methane hydrate formation: Organic versus carbon xerogels. Chemical Engineering Journal, 2020, 402, 126276.	6.6	19
118	Acid-based resorcinol-formaldehyde xerogels synthesized by microwave heating. Journal of Sol-Gel Science and Technology, 2017, 84, 60-69.	1.1	18
119	The role of conductive additives on the performance of hybrid carbon xerogels as electrodes in aqueous supercapacitors. Electrochimica Acta, 2019, 295, 693-702.	2.6	18
120	Carbon nanofilament synthesis by the decomposition of CH4/CO2 under microwave heating. Carbon, 2007, 45, 1706-1709.	5.4	17
121	Precise determination of the point of solâ€“gel transition in carbon gel synthesis using a microwave heating method. Carbon, 2010, 48, 3305-3308.	5.4	17
122	A microwave-based method for the synthesis of carbon xerogel spheres. Carbon, 2012, 50, 3555-3560.	5.4	17
123	Oil fractions from the pyrolysis of diverse organic wastes: The different effects of conventional and microwave induced pyrolysis. Journal of Analytical and Applied Pyrolysis, 2015, 114, 256-264.	2.6	17
124	Ultralightâ€Weight Graphene Aerogels with Extremely High Electrical Conductivity. Small, 2021, 17, e2103407.	5.2	17
125	Load-dependent surface diffusion model for analyzing the kinetics of protein adsorption onto mesoporous materials. Journal of Colloid and Interface Science, 2018, 511, 27-38.	5.0	16
126	Effect of porous structure on doping and the catalytic performance of carbon xerogels towards the oxygen reduction reaction. Microporous and Mesoporous Materials, 2020, 293, 109811.	2.2	16

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127	Surface characterisation of synthetic coal chars made from model compounds. Carbon, 2004, 42, 1345-1350.	5.4	15
128	Growth of carbon nanofilaments on coal foams. Fuel, 2009, 88, 46-53.	3.4	15
129	Hybrid direct carbon fuel cell anode processes investigated using a 3-electrode half-cell setup. International Journal of Hydrogen Energy, 2015, 40, 1945-1958.	3.8	15
130	Towards a feasible and scalable production of bio-xerogels. Journal of Colloid and Interface Science, 2015, 456, 138-144.	5.0	15
131	Organic and Carbon Gels. Advances in Sol-gel Derived Materials and Technologies, 2019, , .	0.3	15
132	Thermogravimetricâ€“mass spectrometric study on the evolution of nitrogen compounds during coal devolatilisation. Journal of Analytical and Applied Pyrolysis, 2002, 65, 57-70.	2.6	14
133	Preparation of Ni-doped carbon nanospheres with different surface chemistry and controlled pore structure. Applied Surface Science, 2008, 254, 3993-4000.	3.1	14
134	Hybrid Direct Carbon Fuel Cells with Different Types of Mineral Coal. ECS Transactions, 2013, 57, 3013-3021.	0.3	14
135	Effect of fuel thermal pretreament on the electrochemical performance of a direct lignite coal fuel cell. Solid State Ionics, 2016, 288, 140-146.	1.3	14
136	Multiphase graphitisation of carbon xerogels and its dependence on their pore size. Carbon, 2019, 152, 704-714.	5.4	14
137	Mixtures of Steel-Making Slag and Carbons as Catalyst for Microwave-Assisted Dry Reforming of CH4. Chinese Journal of Catalysis, 2012, 33, 1115-1118.	6.9	13
138	Electrochemical behavior and capacitance properties of carbon xerogel/multiwalled carbon nanotubes composites. Journal of Solid State Electrochemistry, 2012, 16, 1067-1076.	1.2	13
139	Influence of alkaline compounds on the porosity of resorcinol-formaldehyde xerogels. Journal of Non-Crystalline Solids, 2016, 452, 286-290.	1.5	13
140	Selectivity matters: Graphene oxide-mediated oxidative coupling of benzylamine to Nâ€‘benzylidine-1-phenylmethanamine under microwave irradiation. Journal of Molecular Catalysis A, 2015, 406, 19-22.	4.8	12
141	Graphene oxide-catalysed oxidation reaction of unsaturated compounds under microwave irradiation. Catalysis Communications, 2015, 72, 133-137.	1.6	12
142	Protein adsorption and activity on carbon xerogels with narrow pore size distributions covering a wide mesoporous range. Carbon, 2017, 118, 743-751.	5.4	12
143	Microporous carbon spheres derived from resorcinol-formaldehyde solutions. A new approach to coat supports. Microporous and Mesoporous Materials, 2017, 252, 154-160.	2.2	12
144	Effect of unequal load of carbon xerogel in electrodes on the electrochemical performance of asymmetric supercapacitors. Journal of Applied Electrochemistry, 2014, 44, 481-489.	1.5	11

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145	Influence of carrier gas on microwave-induced pyrolysis. Journal of Analytical and Applied Pyrolysis, 2015, 113, 153-157.	2.6	11
146	Superhydrophobic and breathable resorcinol-formaldehyde Xerogels. Journal of Non-Crystalline Solids, 2017, 471, 202-208.	1.5	11
147	Textural properties in density-separated coal fractions. Fuel, 1999, 78, 1631-1637.	3.4	10
148	Supercritical gas extracts from low-quality coals: on the search of new precursors for carbon materials. Fuel Processing Technology, 2004, 86, 205-222.	3.7	10
149	Effect of carbon support on the kinetic behaviour of a metal hydride electrode. Electrochimica Acta, 2009, 54, 2010-2017.	2.6	10
150	Carbon xerogels as electrochemical supercapacitors. Relation between impedance physicochemical parameters and electrochemical behaviour. International Journal of Hydrogen Energy, 2012, 37, 10249-10255.	3.8	10
151	Understanding the Influence of the Biomass-Derived Alcohols on the Activity and Stability of Pt Nanoparticles Supported on Graphene Nanoribbons. Electrocatalysis, 2017, 8, 151-163.	1.5	10
152	Tortuosity of the porous structure of carbon gels. Carbon, 2021, 171, 921-930.	5.4	10
153	Biodesulfurization of Coals of Different Rank:Â Effect on Combustion Behavior. Environmental Science & Technology, 1999, 33, 476-481.	4.6	9
154	A study of mesophase formation from a low temperature coal tar pitch using formaldehyde as a promoter for polymerisation. Carbon, 2004, 42, 2762-2765.	5.4	9
155	Evaluation of the combustion behaviour of perhydrous coals by thermal analysis. Journal of Thermal Analysis and Calorimetry, 2005, 81, 333-337.	2.0	9
156	A comparison of characterization methods based on N2 and CO2 adsorption for the assessment of the pore size distribution of carbons. Studies in Surface Science and Catalysis, 2007, 160, 319-326.	1.5	9
157	Electrochemical effect of carbon nanospheres on an AB5 alloy. International Journal of Hydrogen Energy, 2012, 37, 14978-14982.	3.8	9
158	The enhancement of porosity of carbon xerogels by using additives. Microporous and Mesoporous Materials, 2015, 217, 39-45.	2.2	9
159	An underrated variable essential for tailoring the structure of xerogel: the methanol content of commercial formaldehyde solutions. Journal of Sol-Gel Science and Technology, 2017, 83, 478-488.	1.1	9
160	Advantages of microwave-assisted synthesis of silica gels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 604, 125248.	2.3	9
161	A comparison of ASA values determined by different methods. Carbon, 2002, 40, 1381-1383.	5.4	8
162	Carbon Gels and Their Applications: A Review of Patents. , 2017, , 25-52.		8

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163	The combined impact of carbon type and catalyst-aided gasification process on the performance of a Direct Carbon Solid Oxide Fuel Cell. Solid State Ionics, 2018, 317, 268-275.	1.3	8
164	The synergistic catalyst-carbonates effect on the direct bituminous coal fuel cell performance. International Journal of Hydrogen Energy, 2019, 44, 10033-10042.	3.8	8
165	Exploring the application of carbon xerogels as anodes for sodium-ion batteries. Microporous and Mesoporous Materials, 2020, 308, 110542.	2.2	8
166	Effect of the porosity and microstructure on the mechanical properties of organic xerogels. Journal of Materials Science, 2021, 56, 10312-10325.	1.7	8
167	Use of Nitrogen Stable Isotope Analysis To Understand Char Nitrogen Evolution during the Fluidized-Bed Co-combustion of Coal and Sewage Sludge. Energy & Fuels, 2005, 19, 485-488.	2.5	7
168	Application of Ternary Carbonate in Hybrid Direct Coal Fuel Cells. ECS Transactions, 2014, 59, 281-288.	0.3	7
169	Synthesis of hydrophobic resorcinolâ€“formaldehyde xerogels by grafting with silanes. Reactive and Functional Polymers, 2017, 120, 92-97.	2.0	7
170	The relevance of conductive additive addition methodology for optimizing the performance of electrodes based on carbon xerogels in aqueous supercapacitors. Journal of Electroanalytical Chemistry, 2019, 836, 45-49.	1.9	7
171	Carbon/silica hybrid aerogels with controlled porosity by a quick one-pot synthesis. Journal of Non-Crystalline Solids, 2021, 569, 120992.	1.5	7
172	Facile Synthesis of Unsupported Pd Aerogel for High Performance Formic Acid Microfluidic Fuel Cell. Materials, 2022, 15, 1422.	1.3	7
173	Ni-Doped Carbons as a Carbon Support for Metal Hydride Electrodes. Energy & Fuels, 2010, 24, 3302-3306.	2.5	6
174	Ecotoxicity tests on solid residues from microwave induced pyrolysis of different organic residues: An addendum. Journal of Analytical and Applied Pyrolysis, 2016, 121, 329-332.	2.6	6
175	On the desiccant capacity of the mesoporous RF-xerogels. Microporous and Mesoporous Materials, 2017, 248, 1-6.	2.2	6
176	Curing Temperature Effect on Mechanical Strength of Smokeless Fuel Briquettes Prepared with Humates. Energy & Fuels, 2003, 17, 419-423.	2.5	5
177	Designing Nanostructured Carbon Xerogels. , 0, , .		5
178	Graphitized Carbon Xerogels for Lithium-Ion Batteries. Materials, 2020, 13, 119.	1.3	5
179	Materiales carbonosos obtenidos a partir del reciclado de PET. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 547-549.	0.9	5
180	A promising silicon/carbon xerogel composite for high-rate and high-capacity lithium-ion batteries. Electrochimica Acta, 2022, 426, 140790.	2.6	5

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