Fernando Rubiera

List of Publications by Year
in descending order

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181 papers	11,738 citations	23500 58 h-index	31759 101 g-index
181 all docs	181 docs citations	181 times ranked	8839 citing authors

#	Article	IF	Citations
1	Influence of torrefaction on the grindability and reactivity of woody biomass. Fuel Processing Technology, 2008, 89, 169-175.	3.7	634
2	CO2 capture by adsorption with nitrogen enriched carbons. Fuel, 2007, 86, 2204-2212.	3.4	451
3	Thermal behaviour and kinetics of coal/biomass blends during co-combustion. Bioresource Technology, 2010, 101, 5601-5608.	4.8	445
4	Surface modification of activated carbons for CO2 capture. Applied Surface Science, 2008, 254, 7165-7172.	3.1	417
5	Hypercrosslinked organic polymer networks as potential adsorbents for pre-combustion CO2 capture. Journal of Materials Chemistry, 2011, 21, 5475.	6.7	302
6	Post-combustion CO2 capture with a commercial activated carbon: Comparison of different regeneration strategies. Chemical Engineering Journal, 2010, 163, 41-47.	6.6	292
7	Valorisation of spent coffee grounds as CO2 adsorbents for postcombustion capture applications. Applied Energy, 2012, 99, 272-279.	5.1	243
8	Sustainable biomass-based carbon adsorbents for post-combustion CO2 capture. Chemical Engineering Journal, 2013, 230, 456-465.	6.6	211
9	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
10	Development of low-cost biomass-based adsorbents for postcombustion CO2 capture. Fuel, 2009, 88, 2442-2447.	3.4	187
11	Mechanical durability and combustion characteristics of pellets from biomass blends. Bioresource Technology, 2010, 101, 8859-8867.	4.8	186
12	Developing almond shell-derived activated carbons as CO2 adsorbents. Separation and Purification Technology, 2010, 71, 102-106.	3.9	185
13	Production of microporous biochars by single-step oxidation: Effect of activation conditions on CO2 capture. Applied Energy, 2014, 114, 551-562.	5.1	181
14	Thermal behaviour during the pyrolysis of low rank perhydrous coals. Journal of Analytical and Applied Pyrolysis, 2003, 68-69, 371-385.	2.6	179
15	Single particle ignition and combustion of anthracite, semi-anthracite and bituminous coals in air and simulated oxy-fuel conditions. Combustion and Flame, 2014, 161, 1096-1108.	2.8	174
16	High-pressure co-gasification of coal with biomass and petroleum coke. Fuel Processing Technology, 2009, 90, 926-932.	3.7	173
17	Kinetics of CO2 adsorption on cherry stone-based carbons in CO2/CH4 separations. Chemical Engineering Journal, 2017, 307, 249-257.	6.6	148
18	Oxy-fuel combustion of coal and biomass blends. Energy, 2012, 41, 429-435.	4.5	144

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19	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
20	Effect of biomass blending on coal ignition and burnout during oxy-fuel combustion. Fuel, 2008, 87, 2753-2759.	3.4	141
21	Combustion of single biomass particles in air and in oxy-fuel conditions. Biomass and Bioenergy, 2014, 64, 162-174.	2.9	138
22	Co-gasification of different rank coals with biomass and petroleum coke in a high-pressure reactor for H2-rich gas production. Bioresource Technology, 2010, 101, 3230-3235.	4.8	131
23	Breakthrough adsorption study of a commercial activated carbon for pre-combustion CO2 capture. Chemical Engineering Journal, 2011, 171, 549-556.	6.6	129
24	Different Approaches for the Development of Low-Cost CO2 Adsorbents. Journal of Environmental Engineering, ASCE, 2009, 135, 426-432.	0.7	125
25	Surface modification of low cost carbons for their application in the environmental protection. Applied Surface Science, 2005, 252, 619-624.	3.1	122
26	A comparison of different methods for predicting coal devolatilisation kinetics. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 685-701.	2.6	119
27	Kinetic models comparison for steam gasification of different nature fuel chars. Journal of Thermal Analysis and Calorimetry, 2008, 91, 779-786.	2.0	117
28	On the limits of CO2 capture capacity of carbons. Separation and Purification Technology, 2010, 74, 225-229.	3.9	117
29	Biomass devolatilization at high temperature under N2 and CO2: Char morphology and reactivity. Energy, 2015, 91, 655-662.	4.5	109
30	High-pressure gasification reactivity of biomass chars produced at different temperatures. Journal of Analytical and Applied Pyrolysis, 2009, 85, 287-293.	2.6	108
31	Kinetic models comparison for non-isothermal steam gasification of coalâ€“biomass blend chars. Chemical Engineering Journal, 2010, 161, 276-284.	6.6	108
32	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
33	Effect of oxy-fuel combustion with steam addition on coal ignition and burnout in an entrained flow reactor. Energy, 2011, 36, 5314-5319.	4.5	105
34	CO2 Capture, Use, and Storage in the Cement Industry: State of the Art and Expectations. Energies, 2020, 13, 5692.	1.6	103
35	Grindability and combustion behavior of coal and torrefied biomass blends. Bioresource Technology, 2015, 191, 205-212.	4.8	101
36	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

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37	Oxy-fuel combustion kinetics and morphology of coal chars obtained in N2 and CO2 atmospheres in an entrained flow reactor. Applied Energy, 2012, 91, 67-74.	5.1	97
38	Pelletization of wood and alternative residual biomass blends for producing industrial quality pellets. Fuel, 2019, 251, 739-753.	3.4	94
39	Evaluation of ammonia modified and conventionally activated biomass based carbons as CO2 adsorbents in postcombustion conditions. Separation and Purification Technology, 2011, 80, 96-104.	3.9	93
40	Ammoxidation of carbon materials for CO2 capture. Applied Surface Science, 2010, 256, 6843-6849.	3.1	86
41	Kinetic models for the oxy-fuel combustion of coal and coal/biomass blend chars obtained in N2 and CO2 atmospheres. Energy, 2012, 48, 510-518.	4.5	86
42	Production of fuel-cell grade H2 by sorption enhanced steam reforming of acetic acid as a model compound of biomass-derived bio-oil. Applied Catalysis B: Environmental, 2016, 184, 64-76.	10.8	81
43	Adsorption performance indicators for the CO2/CH4 separation: Application to biomass-based activated carbons. Fuel Processing Technology, 2016, 142, 361-369.	3.7	81
44	Sorption enhanced catalytic steam gasification process: a direct route from lignocellulosic biomass to high purity hydrogen. Energy and Environmental Science, 2012, 5, 6358.	15.6	77
45	Removal of naphthalene from aqueous solution on chemically modified activated carbons. Water Research, 2007, 41, 333-340.	5.3	76
46	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
47	Predicting Mixed-Gas Adsorption Equilibria on Activated Carbon for Precombustion CO₂ Capture. Langmuir, 2013, 29, 6042-6052.	1.6	74
48	Coal structure and reactivity changes induced by chemical demineralisation. Fuel Processing Technology, 2002, 79, 273-279.	3.7	72
49	Application of response surface methodology to assess the combined effect of operating variables on high-pressure coal gasification for H2-rich gas production. International Journal of Hydrogen Energy, 2010, 35, 1191-1204.	3.8	72
50	Carbon adsorbents for CO2 capture from bio-hydrogen and biogas streams: Breakthrough adsorption study. Chemical Engineering Journal, 2015, 269, 148-158.	6.6	71
51	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
52	Textural development and hydrogen adsorption of carbon materials from PET waste. Journal of Alloys and Compounds, 2004, 379, 280-289.	2.8	66
53	Comparison of the gasification performance of multiple biomass types in a bubbling fluidized bed. Energy Conversion and Management, 2018, 176, 309-323.	4.4	66
54	A comparison of two methods for producing CO2 capture adsorbents. Energy Procedia, 2009, 1, 1107-1113.	1.8	65

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55	Effect of mesoporosity on specific capacitance of carbons. Carbon, 2009, 47, 1598-1604.	5.4	65
56	Biomass co-firing under oxy-fuel conditions: A computational fluid dynamics modelling study and experimental validation. Fuel Processing Technology, 2014, 120, 22-33.	3.7	65
57	A study of the self-heating of fresh and oxidized coals by differential thermal analysis. Thermochimica Acta, 1996, 279, 93-101.	1.2	64
58	High value carbon materials from PET recycling. Applied Surface Science, 2004, 238, 304-308.	3.1	61
59	CFD modeling of oxy-coal combustion: Prediction of burnout, volatile and NO precursors release. Applied Energy, 2013, 104, 653-665.	5.1	59
60	Effects of activated carbon properties on the adsorption of naphthalene from aqueous solutions. Applied Surface Science, 2007, 253, 5741-5746.	3.1	58
61	Biogas purification by means of adsorption on pine sawdust-based activated carbon: Impact of water vapor. Chemical Engineering Journal, 2018, 353, 197-207.	6.6	58
62	CFD modelling of oxy-coal combustion in an entrained flow reactor. Fuel Processing Technology, 2011, 92, 1489-1497.	3.7	56
63	A study of oxy-coal combustion with steam addition and biomass blending by thermogravimetric analysis. Journal of Thermal Analysis and Calorimetry, 2012, 109, 49-55.	2.0	56
64	SURFACE AREA AND PORE SIZE CHANGES DURING SINTERING OF CALCIUM OXIDE PARTICLES. Chemical Engineering Communications, 1991, 109, 73-88.	1.5	54
65	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
66	Ignition characteristics of coal blends in an entrained flow furnace. Fuel, 2007, 86, 2076-2080.	3.4	53
67	Dynamic Performance of Biomass-Based Carbons for CO₂/CH₄ Separation. Approximation to a Pressure Swing Adsorption Process for Biogas Upgrading. Energy & Fuels, 2016, 30, 5005-5015.	2.5	53
68	Attrition of coal ash particles in a fluidized bed. Powder Technology, 1991, 66, 41-46.	2.1	52
69	Microporous phenolâ€“formaldehyde resin-based adsorbents for pre-combustion CO2 capture. Fuel, 2011, 90, 2064-2072.	3.4	52
70	Effect of operating conditions on the sorption enhanced steam reforming of blends of acetic acid and acetone as bio-oil model compounds. Applied Energy, 2016, 177, 579-590.	5.1	52
71	Ignition behaviour of different rank coals in an entrained flow reactor. Fuel, 2005, 84, 2172-2177.	3.4	51
72	Response surface methodology as an efficient tool for optimizing carbon adsorbents for CO2 capture. Fuel Processing Technology, 2013, 106, 55-61.	3.7	50

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73	Hydrogen production from food wastes and gas post-treatment by CO2 adsorption. Waste Management, 2012, 32, 60-66.	3.7	49
74	Unconventional biomass fuels for steam gasification: Kinetic analysis and effect of ash composition on reactivity. Energy, 2018, 155, 426-437.	4.5	48
75	Effect of the grinding behaviour of coal blends on coal utilisation for combustion. Powder Technology, 1999, 105, 351-356.	2.1	47
76	Influence of storage time on the quality and combustion behaviour of pine woodchips. Energy, 2010, 35, 3066-3071.	4.5	47
77	Modification of combustion behaviour and NO emissions by coal blending. Fuel Processing Technology, 2002, 77-78, 111-117.	3.7	46
78	On the mechanism of reactive adsorption of dibenzothiophene on organic waste derived carbons. Applied Surface Science, 2007, 253, 5899-5903.	3.1	45
79	Synthetic coal chars for the elucidation of NO heterogeneous reduction mechanisms. Fuel, 2007, 86, 41-49.	3.4	45
80	Developing activated carbon adsorbents for pre-combustion CO2 capture. Energy Procedia, 2009, 1, 599-605.	1.8	44
81	Oxy-coal combustion in an entrained flow reactor: Application ofÂspecific char and volatile combustion and radiation models for oxy-firing conditions. Energy, 2013, 62, 255-268.	4.5	44
82	H2 production by sorption enhanced steam reforming of biomass-derived bio-oil in a fluidized bed reactor: An assessment of the effect of operation variables using response surface methodology. Catalysis Today, 2015, 242, 19-34.	2.2	44
83	Experimental and Simulation Study of Adsorption in Postcombustion Conditions Using a Microporous Biochar. 1. CO‹sub›2‹/sub› and N‹sub›2‹/sub› Adsorption. Industrial & Engineering Chemistry Research, 2016, 55, 3097-3112.	1.8	43
84	On the effect of biogas composition on the H2 production by sorption enhanced steam reforming (SESR). Renewable Energy, 2020, 160, 575-583.	4.3	43
85	Modelling of NO formation in the combustion of coal blends. Fuel, 2002, 81, 627-636.	3.4	42
86	Multifunctional Pd/Niâ€“Co Catalyst for Hydrogen Production by Chemical Looping Coupled With Steam Reforming of Acetic Acid. ChemSusChem, 2014, 7, 3063-3077.	3.6	42
87	Pelletization properties of raw and torrefied pine sawdust: Effect of co-pelletization, temperature, moisture content and glycerol addition. Fuel, 2018, 215, 290-297.	3.4	41
88	Sulfur removal by fine coal cleaning processes. Fuel, 1997, 76, 1187-1194.	3.4	40
89	Geochemistry, mineralogy and technological properties of coals from Rio Maior (Portugal) and PeÃ±arroya (Spain) basins. International Journal of Coal Geology, 2006, 67, 171-190.	1.9	40
90	Influence of oxidation upon the CO2 capture performance of a phenolic-resin-derived carbon. Fuel Processing Technology, 2013, 110, 53-60.	3.7	40

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91	Hubs and clusters approach to unlock the development of carbon capture and storage â€“ Case study in Spain. Applied Energy, 2021, 300, 117418.	5.1	40
92	Relationship between structure and reactivity of carbonaceous materials. Journal of Thermal Analysis and Calorimetry, 2004, 76, 593-602.	2.0	39
93	Assessing the influence of biomass properties on the gasification process using multivariate data analysis. Energy Conversion and Management, 2019, 184, 649-660.	4.4	39
94	NO emissions in oxyâ€coal combustion with the addition of steam in an entrained flow reactor. , 2011, 1, 180-190.		38
95	Green coffee based CO2 adsorbent with high performance in postcombustion conditions. Fuel, 2015, 140, 633-648.	3.4	37
96	Microalgae: Potential precursors of CO2 adsorbents. Journal of CO2 Utilization, 2018, 26, 454-464.	3.3	37
97	The effect of the textural properties of bituminous coal chars on NO emissions. Fuel, 1999, 78, 1779-1785.	3.4	36
98	Pyrolysis of activated carbons exhausted with organic compounds. Journal of Analytical and Applied Pyrolysis, 2005, 74, 518-524.	2.6	36
99	Post-combustion CO2 capture adsorbents from spent coffee grounds. Energy Procedia, 2013, 37, 134-141.	1.8	36
100	CO 2 adsorbent pellets produced from pine sawdust: Effect of coal tar pitch addition. Applied Energy, 2015, 144, 182-192.	5.1	35
101	Evaluating the Feasibility of a TSA Process Based on Steam Stripping in Combination with Structured Carbon Adsorbents To Capture CO₂ from a Coal Power Plant. Energy & Fuels, 2017, 31, 9760-9775.	2.5	35
102	Evaluation of a novel multibed heat-integrated vacuum and temperature swing adsorption post-combustion CO2 capture process. Applied Energy, 2019, 250, 916-925.	5.1	35
103	Combustion behaviour of ultra clean coal obtained by chemical demineralisation. Fuel, 2003, 82, 2145-2151.	3.4	33
104	Renewable hydrogen production from biogas by sorption enhanced steam reforming (SESR): A parametric study. Energy, 2021, 218, 119491.	4.5	33
105	Experimental and Simulation Study of Adsorption in Postcombustion Conditions Using a Microporous Biochar. 2. H₂O, CO₂, and N₂ Adsorption. Industrial & Engineering Chemistry Research, 2016, 55, 6854-6865.	1.8	32
106	Heterogeneous reduction of nitric oxide on synthetic coal chars. Fuel, 2005, 84, 2275-2279.	3.4	31
107	Cyclic operation of a fixed-bed pressure and temperature swing process for CO2 capture: Experimental and statistical analysis. International Journal of Greenhouse Gas Control, 2013, 12, 35-43.	2.3	31
108	Influence of Water Vapor on CO₂ Adsorption Using a Biomass-Based Carbon. Industrial & Engineering Chemistry Research, 2014, 53, 15488-15499.	1.8	31

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109	Modeling a biogas upgrading PSA unit with a sustainable activated carbon derived from pine sawdust. Sensitivity analysis on the adsorption of CO2 and CH4 mixtures. Chemical Engineering Journal, 2022, 428, 132564.	6.6	30
110	Intrinsic char reactivity of plastic waste (PET) during CO2 gasification. Fuel Processing Technology, 2010, 91, 1776-1781.	3.7	29
111	Effect of the Pressure and Temperature of Devolatilization on the Morphology and Steam Gasification Reactivity of Coal Chars. Energy & Fuels, 2010, 24, 5586-5595.	2.5	29
112	Evaluation of the cyclic capacity of low-cost carbon adsorbents for post-combustion CO2 capture. Energy Procedia, 2011, 4, 1228-1234.	1.8	29
113	Towards Bio-upgrading of Biogas: Biomass Waste-based Adsorbents. Energy Procedia, 2014, 63, 6527-6533.	1.8	29
114	Influence of char structure on reactivity and nitric oxide emissions. Fuel Processing Technology, 2002, 77-78, 103-109.	3.7	28
115	Optimization of a Bubbling Fluidized Bed Plant for Low-Temperature Gasification of Biomass. Energies, 2017, 10, 306.	1.6	28
116	Cherryâ€stonesâ€based activated carbons as potential adsorbents for CO₂/CH₄ separation: effect of the activation parameters. , 2015, 5, 812-825.		27
117	Development of carbon-based vacuum, temperature and concentration swing adsorption post-combustion CO2 capture processes. Chemical Engineering Journal, 2019, 375, 122002.	6.6	27
118	Thermodynamic Analysis of Biomass Gasification Using Aspen Plus: Comparison of Stoichiometric and Non-Stoichiometric Models. Energies, 2021, 14, 189.	1.6	27
119	Comparison between the reactivity of coal and synthetic coal modelsâ˜†. Fuel, 2003, 82, 2001-2006.	3.4	26
120	Pelletization of torrefied biomass with solid and liquid bio-additives. Renewable Energy, 2020, 151, 175-183.	4.3	26
121	Water Vapor Adsorption on Biomass Based Carbons under Post-Combustion CO2 Capture Conditions: Effect of Post-Treatment. Materials, 2016, 9, 359.	1.3	25
122	Co-pelletization of pine sawdust and refused derived fuel (RDF) to high-quality waste-derived pellets. Journal of Cleaner Production, 2021, 328, 129635.	4.6	25
123	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
124	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
125	Water vapour adsorption by a coffee-based microporous carbon: effect on CO₂capture. Journal of Chemical Technology and Biotechnology, 2015, 90, 1592-1600.	1.6	21
126	Vacuum swing CO2 adsorption cycles in Waste-to-Energy plants. Chemical Engineering Journal, 2020, 382, 122841.	6.6	21

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127	Kinetic Parameters and Reactivity for the Steam Gasification of Coal Chars Obtained under Different Pyrolysis Temperatures and Pressures. Energy & Fuels, 2011, 25, 3574-3580.	2.5	20
128	Precombustion CO2 capture by means of phenolâ€“formaldehyde resin-derived carbons: From equilibrium to dynamic conditions. Separation and Purification Technology, 2012, 98, 531-538.	3.9	20
129	Coal and biomass cofiring. , 2019, , 117-140.		20
130	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
131	Ignition and NO Emissions of Coal and Biomass Blends under Different Oxy-fuel Atmospheres. Energy Procedia, 2013, 37, 1405-1412.	1.8	19
132	Carbon Monoliths in Adsorption-based Post-combustion CO2 Capture. Energy Procedia, 2017, 114, 2341-2352.	1.8	19
133	Separation of CO2 in a Solid Waste Management Incineration Facility Using Activated Carbon Derived from Pine Sawdust. Energies, 2017, 10, 827.	1.6	19
134	Changes in textural properties of limestone and dolomite during calcination. Thermochimica Acta, 1991, 179, 125-134.	1.2	18
135	Effects of thermal treatment on the composition and properties of air-blown anthracene oils. Fuel, 2001, 80, 1229-1238.	3.4	17
136	Numerical investigation of NO emissions from an entrained flow reactor under oxy-coal conditions. Fuel Processing Technology, 2012, 93, 53-64.	3.7	17
137	Simplistic approach for preliminary screening of potential carbon adsorbents for CO2 separation from biogas. Journal of CO2 Utilization, 2018, 28, 207-215.	3.3	17
138	Measuring heat capacity of activated carbons for CO2 capture. Journal of CO2 Utilization, 2019, 33, 148-156.	3.3	17
139	Influence of biological desulphurisation on coal combustion performance. Fuel Processing Technology, 1997, 52, 165-173.	3.7	16
140	Nutritional, carbon and energy evaluation of Eucalyptus nitens short rotation bioenergy plantations in northwestern Spain. IForest, 2016, 9, 303-310.	0.5	16
141	Blends of bio-oil/biogas model compounds for high-purity H2 production by sorption enhanced steam reforming (SESR): Experimental study and energy analysis. Chemical Engineering Journal, 2022, 432, 134396.	6.6	16
142	Development of macroporosity in activated carbons by effect of coal preoxidation and burn-off. Fuel, 1998, 77, 625-630.	3.4	15
143	Surface characterisation of synthetic coal chars made from model compounds. Carbon, 2004, 42, 1345-1350.	5.4	15
144	Evaluation of Microporous Biochars Produced by Single-step Oxidation for Postcombustion CO2 Capture under Humid Conditions. Energy Procedia, 2014, 63, 693-702.	1.8	15

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145	Sustainable coffeeâ€based CO₂ adsorbents: toward a greener production via hydrothermal carbonization. , 2018, 8, 309-323.		15
146	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
147	Ignition behavior of coal and biomass blends under oxy-firing conditions with steam additions. , 2013, 3, 397-414.		14
148	Functionalized glycidyl methacrylate based polymers as stationary phases for protein retention. Separation and Purification Technology, 2002, 27, 1-10.	3.9	13
149	Residual pyrolysis biochar as additive to enhance wood pellets quality. Renewable Energy, 2021, 180, 850-859.	4.3	13
150	The importance of thermal behaviour and petrographic composition for understanding the characteristics of a Portuguese perhydrous Jurassic coal. International Journal of Coal Geology, 2010, 84, 237-247.	1.9	11
151	Phenol-Formaldehyde Resin-Based Carbons for CO2 Separation at Sub-Atmospheric Pressures. Energies, 2016, 9, 189.	1.6	11
152	Experimental Study on the Kinetics of CO₂ and H₂O Adsorption on Honeycomb Carbon Monoliths under Cement Flue Gas Conditions. ACS Sustainable Chemistry and Engineering, 2022, 10, 2107-2124.	3.2	11
153	Textural properties in density-separated coal fractions. Fuel, 1999, 78, 1631-1637.	3.4	10
154	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
155	Effect of coâ€gasification of biomass and petroleum coke with coal on the production of gases. , 2012, 2, 304-313.		10
156	Adsorption-based Process Modelling for Post-combustion CO2 Capture. Energy Procedia, 2017, 114, 2353-2361.	1.8	10
157	Enhanced capacity to CO2 sorption in humid conditions with a K-doped biocarbon. Journal of Energy Chemistry, 2019, 34, 208-219.	7.1	10
158	Biodesulfurization of Coals of Different Rank:Â Effect on Combustion Behavior. Environmental Science & Technology, 1999, 33, 476-481.	4.6	9
159	Evaluation of the combustion behaviour of perhydrous coals by thermal analysis. Journal of Thermal Analysis and Calorimetry, 2005, 81, 333-337.	2.0	9
160	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
161	Prediction of attrition in a continuous fluid-bed system. Powder Technology, 1991, 67, 291-293.	2.1	8
162	A comparison of ASA values determined by different methods. Carbon, 2002, 40, 1381-1383.	5.4	8

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163	Changes in coal char reactivity and texture during combustion in an entrained flow reactor. Journal of Thermal Analysis and Calorimetry, 2007, 90, 859-863.	2.0	8
164	Adsorption Performance Indicator to Screen Carbon Adsorbents for Post-combustion CO2 Capture. Energy Procedia, 2017, 114, 2362-2371.	1.8	8
165	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
166	H2 production by steam reforming with in situ CO2 capture of biomass-derived bio-oil. Energy Procedia, 2014, 63, 6815-6823.	1.8	7
167	Curing Temperature Effect on Mechanical Strength of Smokeless Fuel Briquettes Prepared with Humates. Energy & Fuels, 2003, 17, 419-423.	2.5	5
168	Doped phenol-formaldehyde resins as precursors for precombustion CO2 capture adsorbents. Energy Procedia, 2011, 4, 1222-1227.	1.8	5
169	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
170	Dynamic cyclic performance of phenol-formaldehyde resin-derived carbons for pre-combustion CO2 capture: An experimental study. Energy Procedia, 2013, 37, 127-133.	1.8	4
171	Prediction of combustion efficiency in a fluidized bed combustor by statistical experimental design. Fuel, 1991, 70, 861-864.	3.4	3
172	Active surface area of carbon materials determined by different methods. Studies in Surface Science and Catalysis, 2002, 144, 209-216.	1.5	3
173	Kinetic study of the reaction of a metallurgical coke with CO2. Solid State Ionics, 1990, 38, 75-80.	1.3	2
174	Progress in pilot, largeâ€scale projects as an inducement for CCUS deployment. , 2013, 3, 97-98.		2
175	Biomass Pelletization: Contribution to Renewable Power Generation Scenarios. Biofuels and Biorefineries, 2019, , 269-294.	0.5	1
176	STUDY OF THE EVOLUTION OF NITROGEN COMPOUNDS DURING COAL DEVOLATILIZATION. Clean Air, 2005, 6, 393-408.	0.0	1
177	NOx EMISSIONS AND COMBUSTIBILITY CHARACTERISTICS OF COAL BLENDS. Clean Air, 2005, 6, 83-97.	0.0	1
178	Coal characterisation strategy for physical desulphurisation processes. Coal Science and Technology, 1995, , 1545-1548.	0.0	0
179	A STUDY OF THE HETEROGENEOUS REDUCTION OF NO ON BITUMINOUS COAL CHARS. International Journal of Energy for A Clean Environment, 2004, 5, 18.	0.6	0
180	Supercritical gas extracts from low-quality coals: on the search of new precursors for carbon materials. Fuel Processing Technology, 2004, 86, 205-205.	3.7	0

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181	Raw Materials, Selection, Preparation and Characterization. Green Energy and Technology, 2011, , 11-22.	0.4	0