

# Ricardo Santamaria

## List of Publications by Year in descending order

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139  
papers

6,359  
citations

76326

40  
h-index

76900

74  
g-index

139  
all docs

139  
docs citations

139  
times ranked

7096  
citing authors

#	ARTICLE	IF	CITATIONS
1	Waste-polystyrene foams-derived magnetic carbon material for adsorption and redox supercapacitor applications. <i>Journal of Cleaner Production</i> , 2021, 313, 127903.	9.3	28
2	Unraveling the relevance of carbon felts surface modification during electrophoretic deposition of nanocarbons on their performance as electrodes for the VO <sub>2</sub> <sup>+</sup> /VO <sub>2</sub> <sup>+</sup> redox couple. <i>Applied Surface Science</i> , 2021, 569, 151095.	6.1	10
3	No genome-wide DNA methylation changes found associated with medium-term reduced graphene oxide exposure in human lung epithelial cells. <i>Epigenetics</i> , 2020, 15, 283-293.	2.7	6
4	Insights on the Behavior of Imidazolium Ionic Liquids as Electrolytes in Carbon-Based Supercapacitors: An Applied Electrochemical Approach. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15818-15830.	3.1	34
5	Discussion on Operational Voltage and Efficiencies of Ionic-Liquid-Based Electrochemical Capacitors. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8541-8549.	3.1	25
6	A highly adhesive PIL/IL gel polymer electrolyte for use in flexible solid state supercapacitors. <i>Electrochimica Acta</i> , 2019, 299, 789-799.	5.2	63
7	LiFePO <sub>4</sub> /Mesoporous Carbon Hybrid Supercapacitor Based on LiTFSI/Imidazolium Ionic Liquid Electrolyte. <i>Journal of Physical Chemistry C</i> , 2018, 122, 1456-1465.	3.1	30
8	Mechanism and Stability of a Redox Supercapacitor Based on Methylene Blue: Effects of Degradation of the Redox Shuttle. <i>ACS Applied Energy Materials</i> , 2018, 1, 2306-2316.	5.1	18
9	High value activated carbons from waste polystyrene foams. <i>Microporous and Mesoporous Materials</i> , 2018, 267, 181-184.	4.4	57
10	Influence of the electrophoretic deposition parameters on the formation of suspended graphene-based films. <i>Materials and Design</i> , 2018, 160, 58-64.	7.0	15
11	Morphological changes in graphene materials caused by solvents. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 558, 73-79.	4.7	9
12	Unusual flexibility of mesophase pitch-derived carbon materials: An approach to the synthesis of graphene. <i>Carbon</i> , 2017, 115, 539-545.	10.3	31
13	Spark plasma sintered BaTiO <sub>3</sub> /graphene composites for thermoelectric applications. <i>Journal of the European Ceramic Society</i> , 2017, 37, 3741-3746.	5.7	18
14	Peculiarities of the production of graphene oxides with controlled properties from industrial coal liquids. <i>Fuel</i> , 2017, 203, 253-260.	6.4	16
15	Role of quinoline insoluble particles during the processing of coal tars to produce graphene materials. <i>Fuel</i> , 2017, 206, 99-106.	6.4	20
16	Experimental and Statistical Optimization of the Tensile Strength of Carbon Fibers from Pitches with Different Composition. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 3243-3250.	3.7	3
17	Biliquid Supercapacitors: a Simple and New Strategy to Enhance Energy Density in Asymmetric/Hybrid Devices. <i>Electrochimica Acta</i> , 2017, 254, 384-392.	5.2	16
18	Outstanding electrochemical performance of a graphene-modified graphite felt for vanadium redox flow battery application. <i>Journal of Power Sources</i> , 2017, 338, 155-162.	7.8	105

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19	Influence of the carbonization temperature on the mechanical properties of thermoplastic polymer derived C/C-SiC composites. <i>Journal of the European Ceramic Society</i> , 2017, 37, 523-529.	5.7	39
20	C4F8 plasma treatment as an effective route for improving rate performance of natural/synthetic graphite anodes in lithium ion batteries. <i>Carbon</i> , 2016, 103, 28-35.	10.3	40
21	Enhancing energy density of carbon-based supercapacitors using Prussian Blue modified positive electrodes. <i>Electrochimica Acta</i> , 2016, 212, 848-855.	5.2	29
22	Enhancement of the rate performance of plasma-treated platelet carbon nanofiber anodes in lithium-ion batteries. <i>RSC Advances</i> , 2016, 6, 4810-4817.	3.6	2
23	Cokes of different origin as precursors of graphene oxide. <i>Fuel</i> , 2016, 166, 400-403.	6.4	33
24	Optimization of a carbon-based hybrid energy storage device with cerium (III) sulfate as redox electrolyte. <i>Journal of Power Sources</i> , 2016, 309, 50-55.	7.8	6
25	Graphene anchored palladium complex as efficient and recyclable catalyst in the Heck cross-coupling reaction. <i>Journal of Molecular Catalysis A</i> , 2016, 416, 140-146.	4.8	43
26	Dielectric behavior of ceramic-graphene composites around the percolation threshold. <i>Nanoscale Research Letters</i> , 2015, 10, 216.	5.7	18
27	New alternatives to graphite for producing graphene materials. <i>Carbon</i> , 2015, 93, 812-818.	10.3	37
28	CO <sub>2</sub> adsorption capacity and kinetics in nitrogen-enriched activated carbon fibers prepared by different methods. <i>Chemical Engineering Journal</i> , 2015, 281, 704-712.	12.7	63
29	Enhanced energy density of carbon-based supercapacitors using Cerium (III) sulphate as inorganic redox electrolyte. <i>Electrochimica Acta</i> , 2015, 168, 277-284.	5.2	38
30	Tuning graphene properties by a multi-step thermal reduction process. <i>Carbon</i> , 2015, 90, 160-163.	10.3	21
31	An approach to classification and capacitance expressions in electrochemical capacitors technology. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1084-1092.	2.8	181
32	A novel approach for the production of chemically activated carbon fibers. <i>Chemical Engineering Journal</i> , 2015, 260, 463-468.	12.7	39
33	N-enriched ACF from coal-based pitch blended with urea-based resin for CO <sub>2</sub> capture. <i>Microporous and Mesoporous Materials</i> , 2015, 201, 10-16.	4.4	23
34	Graphite Felt Modified with Bismuth Nanoparticles as Negative Electrode in a Vanadium Redox Flow Battery. <i>ChemSusChem</i> , 2014, 7, 914-918.	6.8	113
35	Activated carbon fibers prepared directly from stabilized fibers for use as electrodes in supercapacitors. <i>Materials Letters</i> , 2014, 136, 214-217.	2.6	27
36	A multi-step exfoliation approach to maintain the lateral size of graphene oxide sheets. <i>Carbon</i> , 2014, 80, 830-832.	10.3	14

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37	Evaluating capacitive deionization for water desalination by direct determination of chloride ions. Desalination, 2014, 344, 396-401.	8.2	11
38	Graphene materials with different structures prepared from the same graphite by the Hummers and Brodie methods. Carbon, 2013, 65, 156-164.	10.3	345
39	Surface Area Measurement of Graphene Oxide in Aqueous Solutions. Langmuir, 2013, 29, 13443-13448.	3.5	195
40	Optimization of the size and yield of graphene oxide sheets in the exfoliation step. Carbon, 2013, 63, 576-578.	10.3	77
41	Correct use of the Langmuir-Hinshelwood equation for proving the absence of a synergy effect in the photocatalytic degradation of phenol on a suspended mixture of titania and activated carbon. Carbon, 2013, 55, 62-69.	10.3	146
42	Graphite oxide-based graphene materials as positive electrodes in vanadium redox flow batteries. Journal of Power Sources, 2013, 241, 349-354.	7.8	57
43	Thermally reduced graphite and graphene oxides in VRFBs. Nano Energy, 2013, 2, 1322-1328.	16.0	37
44	Critical temperatures in the synthesis of graphene-like materials by thermal exfoliation-reduction of graphite oxide. Carbon, 2013, 52, 476-485.	10.3	236
45	<sup>119</sup> Sn Mössbauer spectroscopy analysis of Sn-Co-C composites prepared from a Fuel Oil Pyrolysis precursor as anodes for Li-ion batteries. Materials Chemistry and Physics, 2013, 138, 747-754.	4.0	5
46	Voltage dependence of carbon-based supercapacitors for pseudocapacitance quantification. Electrochimica Acta, 2013, 95, 225-229.	5.2	34
47	An insight into the polymerization of anthracene oil to produce pitch using nuclear magnetic resonance. Fuel, 2013, 105, 471-476.	6.4	34
48	Characterisation and feasibility as carbon fibre precursors of isotropic pitches derived from anthracene oil. Fuel, 2012, 101, 9-15.	6.4	30
49	Supercapacitor modified with methylene blue as redox active electrolyte. Electrochimica Acta, 2012, 83, 241-246.	5.2	148
50	Carbon nanowalls thin films as nanostructured electrode materials in vanadium redox flow batteries. Nano Energy, 2012, 1, 833-839.	16.0	79
51	The effect of the parent graphite on the structure of graphene oxide. Carbon, 2012, 50, 275-282.	10.3	188
52	Thermally reduced graphite oxide as positive electrode in Vanadium Redox Flow Batteries. Carbon, 2012, 50, 828-834.	10.3	129
53	Further studies on the use of Raman spectroscopy and X-ray diffraction for the characterisation of TiC-containing carbon-carbon composites. Carbon, 2012, 50, 3240-3246.	10.3	12
54	Novel coal-based precursors for cokes with highly oriented microstructures. Fuel, 2012, 95, 400-406.	6.4	10

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55	Optimisation of the melt-spinning of anthracene oil-based pitch for isotropic carbon fibre preparation. <i>Fuel Processing Technology</i> , 2012, 93, 99-104.	7.2	45
56	Mechanisms of Energy Storage in Carbon-Based Supercapacitors Modified with a Quinoid Redox-Active Electrolyte. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17606-17611.	3.1	263
57	High performance activated carbon for benzene/toluene adsorption from industrial wastewater. <i>Journal of Hazardous Materials</i> , 2011, 192, 1525-1532.	12.4	58
58	Enhanced performance of a Bi-modified graphite felt as the positive electrode of a vanadium redox flow battery. <i>Electrochemistry Communications</i> , 2011, 13, 1379-1382.	4.7	164
59	Carbon materials as electrodes for electrosorption of NaCl in aqueous solutions. <i>Adsorption</i> , 2011, 17, 467-471.	3.0	34
60	Towards a Further Generation of High Energy Carbon-Based Capacitors by Using Redox-Active Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 1699-1701.	13.8	389
61	Influence of titanium carbide on the interlaminar shear strength of carbon fibre laminate composites. <i>Composites Science and Technology</i> , 2011, 71, 101-106.	7.8	2
62	Redox-active electrolyte for carbon nanotube-based electric double layer capacitors. <i>Electrochimica Acta</i> , 2011, 56, 3401-3405.	5.2	159
63	A unified process for preparing mesophase and isotropic material from anthracene oil-based pitch. <i>Fuel Processing Technology</i> , 2011, 92, 421-427.	7.2	14
64	Synthesis of activated carbons by chemical activation of new anthracene oil-based pitches and their optimization by response surface methodology. <i>Fuel Processing Technology</i> , 2011, 92, 1987-1992.	7.2	13
65	Behaviour of Ti-doped CFCs under thermal fatigue tests. <i>Fusion Engineering and Design</i> , 2011, 86, 121-125.	1.9	4
66	Improvement of thermal conductivity in 2D carbon-carbon composites by doping with TiC nanoparticles. <i>Materials Chemistry and Physics</i> , 2010, 122, 102-107.	4.0	18
67	Capacitance Evolution of Electrochemical Capacitors with Tailored Nanoporous Electrodes in Pure and Dissolved Ionic Liquids. <i>Fuel Cells</i> , 2010, 10, 834-839.	2.4	15
68	Oxidation behaviour of magnesia-carbon materials prepared with petroleum pitch as binder. <i>Journal of Analytical and Applied Pyrolysis</i> , 2010, 88, 207-212.	5.5	9
69	The effect of the substrate on pitch wetting behaviour. <i>Fuel Processing Technology</i> , 2010, 91, 1373-1377.	7.2	23
70	Evaluation of novel Ti-doped 3D carbon-carbon composites under transient thermal loads. <i>Fusion Engineering and Design</i> , 2010, 85, 813-818.	1.9	0
71	Comparison between Electrochemical Capacitors Based on NaOH- and KOH-Activated Carbons. <i>Energy &amp; Fuels</i> , 2010, 24, 3422-3428.	5.1	57
72	Capacitive Deionization of NaCl Solutions with Modified Activated Carbon Electrodes. <i>Energy &amp; Fuels</i> , 2010, 24, 3329-3333.	5.1	93

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73	Effect of oxidation on the performance of low-temperature petroleum cokes as anodes in lithium ion batteries. <i>Journal of Applied Electrochemistry</i> , 2009, 39, 899-906.	2.9	2
74	Development of titanium-doped carbon-carbon composites. <i>Journal of Materials Science</i> , 2009, 44, 2525-2532.	3.7	7
75	Thermal curing of mesophase pitch: An alternative to oxidative stabilisation for the development of carbon-carbon composites. <i>Journal of Analytical and Applied Pyrolysis</i> , 2009, 86, 28-32.	5.5	7
76	Long-term cycling of carbon-based supercapacitors in aqueous media. <i>Electrochimica Acta</i> , 2009, 54, 4481-4486.	5.2	95
77	An activated carbon monolith as an electrode material for supercapacitors. <i>Carbon</i> , 2009, 47, 195-200.	10.3	158
78	Preparation of Low Toxicity Pitches by Thermal Oxidative Condensation of Anthracene Oil. <i>Environmental Science &amp; Technology</i> , 2009, 43, 8126-8132.	10.0	30
79	Behaviour of Ti-doped 3D carbon fibre composites under intense thermal shock tests. <i>Physica Scripta</i> , 2009, T138, 014055.	2.5	3
80	A study of Faradaic phenomena in activated carbon by means of macroelectrodes and single particle electrodes. <i>Journal of Electroanalytical Chemistry</i> , 2008, 618, 33-38.	3.8	5
81	Structural changes during pitch-based carbon granular composites carbonisation. <i>Journal of Materials Science</i> , 2008, 43, 906-921.	3.7	4
82	The effect of graphite addition on the mechanical and tribological properties of pitch-based granular carbon composites. <i>Journal of Materials Science</i> , 2008, 43, 4541-4549.	3.7	5
83	Effect of the thermal treatment of carbon-based electrodes on the electrochemical performance of supercapacitors. <i>Journal of Electroanalytical Chemistry</i> , 2008, 618, 17-23.	3.8	21
84	Enhanced life-cycle supercapacitors by thermal treatment of mesophase-derived activated carbons. <i>Electrochimica Acta</i> , 2008, 54, 305-310.	5.2	54
85	Carbon molecular sieves as model active electrode materials in supercapacitors. <i>Microporous and Mesoporous Materials</i> , 2008, 110, 431-435.	4.4	28
86	Mesophase from Anthracene Oil-Based Pitches. <i>Energy &amp; Fuels</i> , 2008, 22, 4146-4150.	5.1	22
87	Tin-carbon composites as anodic material in Li-ion batteries obtained by coprolysis of petroleum vacuum residue and SnO <sub>2</sub> . <i>Carbon</i> , 2007, 45, 1396-1409.	10.3	29
88	An insight into Faradaic phenomena in activated carbon investigated by means of the microelectrode technique. <i>Electrochemistry Communications</i> , 2007, 9, 2320-2324.	4.7	4
89	An insight into pitch/substrate wetting behaviour. The effect of the substrate processing temperature on pitch wetting capacity. <i>Fuel</i> , 2007, 86, 1046-1052.	6.4	18
90	Effects of thermal treatment of activated carbon on the electrochemical behaviour in supercapacitors. <i>Electrochimica Acta</i> , 2007, 52, 4969-4973.	5.2	172

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91	Influence of electrode preparation on the electrochemical behaviour of carbon-based supercapacitors. <i>Journal of Applied Electrochemistry</i> , 2007, 37, 717-721.	2.9	43
92	Electrochemical improvement of low-temperature petroleum cokes by chemical oxidation with H <sub>2</sub> O <sub>2</sub> for their use as anodes in lithium ion batteries. <i>Electrochimica Acta</i> , 2006, 52, 1281-1289.	5.2	7
93	Activated carbon produced from Sasol-Lurgi gasifier pitch and its application as electrodes in supercapacitors. <i>Carbon</i> , 2006, 44, 441-446.	10.3	91
94	Iron-carbon composites as electrode materials in lithium batteries. <i>Carbon</i> , 2006, 44, 1762-1772.	10.3	20
95	Influence of mesophase activation conditions on the specific capacitance of the resulting carbons. <i>Journal of Power Sources</i> , 2006, 156, 719-724.	7.8	22
96	Influence of the oxidative stabilisation treatment time on the electrochemical performance of anthracene oils cokes as electrode materials for lithium batteries. <i>Journal of Power Sources</i> , 2006, 161, 1324-1334.	7.8	8
97	Chemical activation of carbon mesophase pitches. <i>Journal of Colloid and Interface Science</i> , 2006, 298, 341-347.	9.4	46
98	Thermal degradation of lignocellulosic materials treated with several acids. <i>Journal of Analytical and Applied Pyrolysis</i> , 2005, 74, 337-343.	5.5	27
99	Pyrolysis behaviour of pitches modified with different additives. <i>Journal of Analytical and Applied Pyrolysis</i> , 2005, 73, 276-283.	5.5	17
100	Pitch/coke wetting behaviour. <i>Fuel</i> , 2005, , .	6.4	9
101	Preparation and characterisation of pitch-based granular composites to be used in tribological applications. <i>Wear</i> , 2005, 258, 1706-1716.	3.1	5
102	Composite electrode materials for lithium-ion batteries obtained by metal oxide addition to petroleum vacuum residua. <i>Carbon</i> , 2005, 43, 923-936.	10.3	12
103	Influence of oxidative stabilization on the electrochemical behaviour of coal tar pitch derived carbons in lithium batteries. <i>Electrochimica Acta</i> , 2005, 50, 1225-1232.	5.2	22
104	Effect of oxidative stabilization on the electrochemical performance of carbon mesophases as electrode materials for lithium batteries. <i>Journal of Solid State Electrochemistry</i> , 2005, 9, 627-633.	2.5	5
105	Lignocellulose/pitch based composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2005, 36, 649-657.	7.6	14
106	The influence of processing temperature on the structure and properties of mesophase-based polygranular graphites. <i>Journal of Materials Science</i> , 2004, 39, 1213-1220.	3.7	16
107	Improvement of the thermal stability of lignocellulosic materials by treatment with sulphuric acid and potassium hydroxide. <i>Journal of Analytical and Applied Pyrolysis</i> , 2004, 72, 131-139.	5.5	22
108	A thermoanalytical study of the co-pyrolysis of coal-tar pitch and petroleum pitch. <i>Fuel</i> , 2004, 83, 1257-1265.	6.4	80

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109	Preparation of pitch-based carbon-copper composites for electrical applications. <i>Fuel</i> , 2004, 83, 1625-1634.	6.4	29
110	Monitoring coal-tar pitch composition changes during air-blowing by gas chromatography. <i>Journal of Chromatography A</i> , 2004, 1026, 231-238.	3.7	19
111	Influence of Granular Carbons on the Thermal Reactivity of Pitches. <i>Energy &amp; Fuels</i> , 2004, 18, 22-29.	5.1	3
112	Optimization of the preparation conditions of polygranular carbons from mesophase. <i>Journal of Materials Science</i> , 2003, 38, 427-435.	3.7	8
113	Pyrolysis behaviour of stabilized self-sintering mesophase. <i>Carbon</i> , 2003, 41, 413-422.	10.3	28
114	A novel method to obtain a petroleum-derived mesophase pitch suitable as carbon fibre precursor. <i>Carbon</i> , 2003, 41, 445-452.	10.3	42
115	Preventing mesophase growth in petroleum pitches by the addition of coal-tar pitch. <i>Carbon</i> , 2003, 41, 1854-1857.	10.3	15
116	Electrochemical, textural and microstructural effects of mechanical grinding on graphitized petroleum coke for lithium and sodium batteries. <i>Carbon</i> , 2003, 41, 3003-3013.	10.3	57
117	Mesophase development in petroleum and coal-tar pitches and their blends. <i>Journal of Analytical and Applied Pyrolysis</i> , 2003, 68-69, 409-424.	5.5	60
118	Relationship between chemical composition and pyrolysis behaviour of a medium temperature pitch (or Lurgi-gasifier pitch). <i>Fuel Processing Technology</i> , 2003, 84, 63-77.	7.2	15
119	The effect of the reinforcing carbon on the microstructure of pitch-based granular composites. <i>Journal of Microscopy</i> , 2003, 209, 81-93.	1.8	7
120	Influence of granular carbons on pitch properties. <i>Fuel</i> , 2003, 82, 1241-1250.	6.4	18
121	Effects of Air-Blowing on the Molecular Size and Structure of Coal-Tar Pitch Components. <i>Energy &amp; Fuels</i> , 2002, 16, 1540-1549.	5.1	24
122	Pyrolysis behaviour of petroleum pitches prepared at different conditions. <i>Journal of Analytical and Applied Pyrolysis</i> , 2002, 63, 223-239.	5.5	33
123	Pyrolysis behaviour of mesophase and isotropic phases isolated from the same pitch. <i>Journal of Analytical and Applied Pyrolysis</i> , 2002, 63, 251-265.	5.5	21
124	On the chemistry of the oxidative stabilization and carbonization of carbonaceous mesophase. <i>Fuel</i> , 2002, 81, 2061-2070.	6.4	57
125	A study of pitch-based precursors for general purpose carbon fibres. <i>Carbon</i> , 2002, 40, 2719-2725.	10.3	70
126	On the Chemical Composition of Thermally Treated Coal-Tar Pitches. <i>Energy &amp; Fuels</i> , 2001, 15, 214-223.	5.1	21



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127	Structural Characterization of High-Softening-Point Pitches By Oxidation with RuO <sub>4</sub> . Energy & Fuels, 2001, 15, 128-134.	5.1	7
128	Assessment of the oxidative stabilisation of carbonaceous mesophase by thermal analysis techniques. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 911-926.	5.5	21
129	Influence of granular carbons on the pyrolysis behaviour of coal-tar pitches. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 825-840.	5.5	12
130	Co-pyrolysis of an aromatic petroleum residue with triphenylsilane. Carbon, 2001, 39, 1001-1011.	10.3	12
131	A comparative study of air-blown and thermally treated coal-tar pitches. Carbon, 2000, 38, 517-523.	10.3	73
132	Pitch-based carbon composites with granular reinforcements for frictional applications. Carbon, 2000, 38, 1043-1051.	10.3	27
133	Separation and characterization of the isotropic phase and co-existing mesophase in thermally treated coal-tar pitches. Carbon, 2000, 38, 1169-1176.	10.3	23
134	Microstructure and properties of pitch-based carbon composites. Journal of Microscopy, 1999, 196, 213-224.	1.8	11
135	Influence of pressure variations on the formation and development of mesophase in a petroleum residue. Carbon, 1999, 37, 445-455.	10.3	26
136	Contribution of the isotropic phase to the rheology of partially anisotropic coal-tar pitches. Carbon, 1999, 37, 1059-1064.	10.3	16
137	Pyrolysis of petroleum residues: I. Yields and product analyses. Carbon, 1999, 37, 1567-1582.	10.3	46
138	A novel method for mesophase separation. Carbon, 1997, 35, 1191-1193.	10.3	23
139	A new parameter relating the properties of semicokes and the resulting sintered carbons. Carbon, 1995, 33, 1182-1184.	10.3	2