Ricardo Santamaria

List of Publications by Year in Descending Order

139 papers	5,255 citations	37 h-index	67 g-index
139 ext. papers	5,767 ext. citations	7.1 avg, IF	5.47 L-index

#	Paper	IF	Citations
139	Waste-polystyrene foams-derived magnetic carbon material for adsorption and redox supercapacitor applications. *Journal of Cleaner Production*, **2021**, 313, 127903	10.3	6
138	Unraveling the relevance of carbon felts surface modification during electrophoretic deposition of nanocarbons on their performance as electrodes for the VO2+/VO2+ redox couple. *Applied Surface Science*, **2021**, 569, 151095	6.7	2
137	Insights on the Behavior of Imidazolium Ionic Liquids as Electrolytes in Carbon-Based Supercapacitors: An Applied Electrochemical Approach. *Journal of Physical Chemistry C*, **2020**, 124, 15818-15830	3.8	10
136	No genome-wide DNA methylation changes found associated with medium-term reduced graphene oxide exposure in human lung epithelial cells. *Epigenetics*, **2020**, 15, 283-293	5.7	2
135	Discussion on Operational Voltage and Efficiencies of Ionic-Liquid-Based Electrochemical Capacitors. *Journal of Physical Chemistry C*, **2019**, 123, 8541-8549	3.8	18
134	A highly adhesive PIL/IL gel polymer electrolyte for use in flexible solid state supercapacitors. *Electrochimica Acta*, **2019**, 299, 789-799	6.7	39
133	LiFePO4/Mesoporous Carbon Hybrid Supercapacitor Based on LiTFSI/Imidazolium Ionic Liquid Electrolyte. *Journal of Physical Chemistry C*, **2018**, 122, 1456-1465	3.8	22
132	Mechanism and Stability of a Redox Supercapacitor Based on Methylene Blue: Effects of Degradation of the Redox Shuttle. *ACS Applied Energy Materials*, **2018**, 1, 2306-2316	6.1	12
131	High value activated carbons from waste polystyrene foams. *Microporous and Mesoporous Materials* , **2018**, 267, 181-184	5.3	32
130	Influence of the electrophoretic deposition parameters on the formation of suspended graphene-based films. *Materials and Design*, **2018**, 160, 58-64	8.1	10
129	Morphological changes in graphene materials caused by solvents. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 558, 73-79	5.1	9
128	Unusual flexibility of mesophase pitch-derived carbon materials: An approach to the synthesis of graphene. *Carbon*, **2017**, 115, 539-545	10.4	22
127	Spark plasma sintered BaTiO 3 /graphene composites for thermoelectric applications. *Journal of the European Ceramic Society*, **2017**, 37, 3741-3746	6	16
126	Peculiarities of the production of graphene oxides with controlled properties from industrial coal liquids. *Fuel*, **2017**, 203, 253-260	7.1	8
125	Role of quinoline insoluble particles during the processing of coal tars to produce graphene materials. *Fuel*, **2017**, 206, 99-106	7.1	14
124	Experimental and Statistical Optimization of the Tensile Strength of Carbon Fibers from Pitches with Different Composition. *Industrial & Engineering Chemistry Research*, **2017**, 56, 3243-3250	3.9	3
123	Biliquid Supercapacitors: a Simple and New Strategy to Enhance Energy Density in Asymmetric/Hybrid Devices. *Electrochimica Acta*, **2017**, 254, 384-392	6.7	13

122	Outstanding electrochemical performance of a graphene-modified graphite felt for vanadium redox flow battery application. *Journal of Power Sources*, **2017**, 338, 155-162	8.9	81
121	Influence of the carbonization temperature on the mechanical properties of thermoplastic polymer derived C/C-SiC composites. *Journal of the European Ceramic Society*, **2017**, 37, 523-529	6	26
120	Enhancing energy density of carbon-based supercapacitors using Prussian Blue modified positive electrodes. *Electrochimica Acta*, **2016**, 212, 848-855	6.7	23
119	Enhancement of the rate performance of plasma-treated platelet carbon nanofiber anodes in lithium-ion batteries. *RSC Advances*, **2016**, 6, 4810-4817	3.7	1
118	Cokes of different origin as precursors of graphene oxide. *Fuel*, **2016**, 166, 400-403	7.1	26
117	Optimization of a carbon-based hybrid energy storage device with cerium (III) sulfate as redox electrolyte. *Journal of Power Sources*, **2016**, 309, 50-55	8.9	5
116	Graphene anchored palladium complex as efficient and recyclable catalyst in the Heck cross-coupling reaction. *Journal of Molecular Catalysis A*, **2016**, 416, 140-146		37
115	C4F8 plasma treatment as an effective route for improving rate performance of natural/synthetic graphite anodes in lithium ion batteries. *Carbon*, **2016**, 103, 28-35	10.4	26
114	New alternatives to graphite for producing graphene materials. *Carbon*, **2015**, 93, 812-818	10.4	28
113	CO2 adsorption capacity and kinetics in nitrogen-enriched activated carbon fibers prepared by different methods. *Chemical Engineering Journal*, **2015**, 281, 704-712	14.7	52
112	Enhanced energy density of carbon-based supercapacitors using Cerium (III) sulphate as inorganic redox electrolyte. *Electrochimica Acta*, **2015**, 168, 277-284	6.7	29
111	Tuning graphene properties by a multi-step thermal reduction process. *Carbon*, **2015**, 90, 160-163	10.4	19
110	An approach to classification and capacitance expressions in electrochemical capacitors technology. *Physical Chemistry Chemical Physics*, **2015**, 17, 1084-92	3.6	143
109	A novel approach for the production of chemically activated carbon fibers. *Chemical Engineering Journal*, **2015**, 260, 463-468	14.7	31
108	N-enriched ACF from coal-based pitch blended with urea-based resin for CO2 capture. *Microporous and Mesoporous Materials*, **2015**, 201, 10-16	5.3	19
107	Dielectric behavior of ceramic-graphene composites around the percolation threshold. *Nanoscale Research Letters*, **2015**, 10, 216	5	16
106	Graphite felt modified with bismuth nanoparticles as negative electrode in a vanadium redox flow battery. *ChemSusChem*, **2014**, 7, 914-8	8.3	85
105	Activated carbon fibers prepared directly from stabilized fibers for use as electrodes in supercapacitors. *Materials Letters*, **2014**, 136, 214-217	3.3	24

104	A multi-step exfoliation approach to maintain the lateral size of graphene oxide sheets. *Carbon*, **2014**, 80, 830-832	10.4	12
103	Evaluating capacitive deionization for water desalination by direct determination of chloride ions. *Desalination*, **2014**, 344, 396-401	10.3	7
102	Graphene materials with different structures prepared from the same graphite by the Hummers and Brodie methods. *Carbon*, **2013**, 65, 156-164	10.4	272
101	Surface area measurement of graphene oxide in aqueous solutions. *Langmuir*, **2013**, 29, 13443-8	4	155
100	Optimization of the size and yield of graphene oxide sheets in the exfoliation step. *Carbon*, **2013**, 63, 576-578	10.4	70
99	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	10.4	117
98	Graphite oxide-based graphene materials as positive electrodes in vanadium redox flow batteries. *Journal of Power Sources*, **2013**, 241, 349-354	8.9	44
97	Thermally reduced graphite and graphene oxides in VRFBs. *Nano Energy*, **2013**, 2, 1322-1328	17.1	33
96	Critical temperatures in the synthesis of graphene-like materials by thermal exfoliation–reduction of graphite oxide. *Carbon*, **2013**, 52, 476-485	10.4	188
95	119Sn Mössbauer spectroscopy analysis of SnO2–C composites prepared from a Fuel Oil Pyrolysis precursor as anodes for Li-ion batteries. *Materials Chemistry and Physics*, **2013**, 138, 747-754	4.4	4
94	Voltage dependence of carbon-based supercapacitors for pseudocapacitance quantification. *Electrochimica Acta*, **2013**, 95, 225-229	6.7	29
93	An insight into the polymerization of anthracene oil to produce pitch using nuclear magnetic resonance. *Fuel*, **2013**, 105, 471-476	7.1	25
92	Characterisation and feasibility as carbon fibre precursors of isotropic pitches derived from anthracene oil. *Fuel*, **2012**, 101, 9-15	7.1	28
91	Supercapacitor modified with methylene blue as redox active electrolyte. *Electrochimica Acta*, **2012**, 83, 241-246	6.7	130
90	Carbon nanowalls thin films as nanostructured electrode materials in vanadium redox flow batteries. *Nano Energy*, **2012**, 1, 833-839	17.1	62
89	The effect of the parent graphite on the structure of graphene oxide. *Carbon*, **2012**, 50, 275-282	10.4	165
88	Thermally reduced graphite oxide as positive electrode in Vanadium Redox Flow Batteries. *Carbon*, **2012**, 50, 828-834	10.4	115
87	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	10.4	10

86	Novel coal-based precursors for cokes with highly oriented microstructures. *Fuel*, **2012**, 95, 400-406	7.1	8
85	Optimisation of the melt-spinning of anthracene oil-based pitch for isotropic carbon fibre preparation. *Fuel Processing Technology*, **2012**, 93, 99-104	7.2	42
84	Mechanisms of Energy Storage in Carbon-Based Supercapacitors Modified with a Quinoid Redox-Active Electrolyte. *Journal of Physical Chemistry C*, **2011**, 115, 17606-17611	3.8	241
83	High performance activated carbon for benzene/toluene adsorption from industrial wastewater. *Journal of Hazardous Materials*, **2011**, 192, 1525-32	12.8	42
82	Enhanced performance of a Bi-modified graphite felt as the positive electrode of a vanadium redox flow battery. *Electrochemistry Communications*, **2011**, 13, 1379-1382	5.1	141
81	Carbon materials as electrodes for electrosorption of NaCl in aqueous solutions. *Adsorption*, **2011**, 17, 467-471	2.6	30
80	Towards a further generation of high-energy carbon-based capacitors by using redox-active electrolytes. *Angewandte Chemie - International Edition*, **2011**, 50, 1699-701	16.4	343
79	Influence of titanium carbide on the interlaminar shear strength of carbon fibre laminate composites. *Composites Science and Technology*, **2011**, 71, 101-106	8.6	1
78	Redox-active electrolyte for carbon nanotube-based electric double layer capacitors. *Electrochimica Acta*, **2011**, 56, 3401-3405	6.7	143
77	A unified process for preparing mesophase and isotropic material from anthracene oil-based pitch. *Fuel Processing Technology*, **2011**, 92, 421-427	7.2	12
76	Synthesis of activated carbons by chemical activation of new anthracene oil-based pitches and their optimization by response surface methodology. *Fuel Processing Technology*, **2011**, 92, 1987-1992	7.2	13
75	Behaviour of Ti-doped CFCs under thermal fatigue tests. *Fusion Engineering and Design*, **2011**, 86, 121-125	1.7	4
74	. *Energy & Fuels*, **2010**, 24, 3422-3428	4.1	49
73	Capacitive Deionization of NaCl Solutions with Modified Activated Carbon Electrodes *Energy & Fuels*, **2010**, 24, 3329-3333	4.1	80
72	Improvement of thermal conductivity in 2D carbon carbon composites by doping with TiC nanoparticles. *Materials Chemistry and Physics*, **2010**, 122, 102-107	4.4	16
71	Capacitance Evolution of Electrochemical Capacitors with Tailored Nanoporous Electrodes in Pure and Dissolved Ionic Liquids. *Fuel Cells*, **2010**, 10, 834-839	2.9	14
70	Oxidation behaviour of magnesia carbon materials prepared with petroleum pitch as binder. *Journal of Analytical and Applied Pyrolysis*, **2010**, 88, 207-212	6	8
69	The effect of the substrate on pitch wetting behaviour. *Fuel Processing Technology*, **2010**, 91, 1373-1377	7.2	21

68	Evaluation of novel Ti-doped 3D carbon–carbon composites under transient thermal loads. *Fusion Engineering and Design*, **2010**, 85, 813-818	1.7	
67	Effect of oxidation on the performance of low-temperature petroleum cokes as anodes in lithium ion batteries. *Journal of Applied Electrochemistry*, **2009**, 39, 899-906	2.6	1
66	Development of titanium-doped carbon–carbon composites. *Journal of Materials Science*, **2009**, 44, 2525-2532	4.5	7
65	Thermal curing of mesophase pitch: An alternative to oxidative stabilisation for the development of carbon–carbon composites. *Journal of Analytical and Applied Pyrolysis*, **2009**, 86, 28-32	6	6
64	Long-term cycling of carbon-based supercapacitors in aqueous media. *Electrochimica Acta*, **2009**, 54, 4481-4486	6.7	83
63	An activated carbon monolith as an electrode material for supercapacitors. *Carbon*, **2009**, 47, 195-200	10.4	140
62	Preparation of low toxicity pitches by thermal oxidative condensation of anthracene oil. *Environmental Science & Technology*, **2009**, 43, 8126-32	10.3	28
61	Behaviour of Ti-doped 3D carbon fibre composites under intense thermal shock tests. *Physica Scripta*, **2009**, T138, 014055	2.6	3
60	Mesophase from Anthracene Oil-Based Pitches. *Energy & Fuels*, **2008**, 22, 4146-4150	4.1	21
59	A study of Faradaic phenomena in activated carbon by means of macroelectrodes and single particle electrodes. *Journal of Electroanalytical Chemistry*, **2008**, 618, 33-38	4.1	5
58	Structural changes during pitch-based carbon granular composites carbonisation. *Journal of Materials Science*, **2008**, 43, 906-921	4.3	4
57	The effect of graphite addition on the mechanical and tribological properties of pitch-based granular carbon composites. *Journal of Materials Science*, **2008**, 43, 4541-4549	4.3	5
56	Effect of the thermal treatment of carbon-based electrodes on the electrochemical performance of supercapacitors. *Journal of Electroanalytical Chemistry*, **2008**, 618, 17-23	4.1	20
55	Enhanced life-cycle supercapacitors by thermal treatment of mesophase-derived activated carbons. *Electrochimica Acta*, **2008**, 54, 305-310	6.7	49
54	Carbon molecular sieves as model active electrode materials in supercapacitors. *Microporous and Mesoporous Materials*, **2008**, 110, 431-435	5.3	25
53	Tin–carbon composites as anodic material in Li-ion batteries obtained by copyrolysis of petroleum vacuum residue and SnO2. *Carbon*, **2007**, 45, 1396-1409	10.4	27
52	An insight into Faradaic phenomena in activated carbon investigated by means of the microelectrode technique. *Electrochemistry Communications*, **2007**, 9, 2320-2324	5.1	4
51	An insight into pitch/substrate wetting behaviour. The effect of the substrate processing temperature on pitch wetting capacity. *Fuel*, **2007**, 86, 1046-1052	7.1	17

50	Effects of thermal treatment of activated carbon on the electrochemical behaviour in supercapacitors. *Electrochimica Acta*, **2007**, 52, 4969-4973	6.7	148
49	Influence of electrode preparation on the electrochemical behaviour of carbon-based supercapacitors. *Journal of Applied Electrochemistry*, **2007**, 37, 717-721	2.6	37
48	Influence of the oxidative stabilisation treatment time on the electrochemical performance of anthracene oils cokes as electrode materials for lithium batteries. *Journal of Power Sources*, **2006**, 161, 1324-1334	8.9	8
47	Chemical activation of carbon mesophase pitches. *Journal of Colloid and Interface Science*, **2006**, 298, 341-7	9.3	43
46	Electrochemical improvement of low-temperature petroleum cokes by chemical oxidation with H2O2 for their use as anodes in lithium ion batteries. *Electrochimica Acta*, **2006**, 52, 1281-1289	6.7	6
45	Activated carbon produced from Sasol-Lurgi gasifier pitch and its application as electrodes in supercapacitors. *Carbon*, **2006**, 44, 441-446	10.4	75
44	Iron□arbon composites as electrode materials in lithium batteries. *Carbon*, **2006**, 44, 1762-1772	10.4	18
43	Influence of mesophase activation conditions on the specific capacitance of the resulting carbons. *Journal of Power Sources*, **2006**, 156, 719-724	8.9	21
42	Lignocellulose/pitch based composites. *Composites Part A: Applied Science and Manufacturing*, **2005**, 36, 649-657	8.4	9
41	Thermal degradation of lignocellulosic materials treated with several acids. *Journal of Analytical and Applied Pyrolysis*, **2005**, 74, 337-343	6	18
40	Pyrolysis behaviour of pitches modified with different additives. *Journal of Analytical and Applied Pyrolysis*, **2005**, 73, 276-283	6	16
39	Pitch/coke wetting behaviour. *Fuel*, **2005**,	7.1	4
38	Preparation and characterisation of pitch-based granular composites to be used in tribological applications. *Wear*, **2005**, 258, 1706-1716	3.5	5
37	Composite electrode materials for lithium-ion batteries obtained by metal oxide addition to petroleum vacuum residua. *Carbon*, **2005**, 43, 923-936	10.4	10
36	Influence of oxidative stabilization on the electrochemical behaviour of coal tar pitch derived carbons in lithium batteries. *Electrochimica Acta*, **2005**, 50, 1225-1232	6.7	18
35	Effect of oxidative stabilization on the electrochemical performance of carbon mesophases as electrode materials for lithium batteries. *Journal of Solid State Electrochemistry*, **2005**, 9, 627-633	2.6	5
34	The influence of processing temperature on the structure and properties of mesophase-based polygranular graphites. *Journal of Materials Science*, **2004**, 39, 1213-1220	4.3	15
33	Improvement of the thermal stability of lignocellulosic materials by treatment with sulphuric acid and potassium hydroxide. *Journal of Analytical and Applied Pyrolysis*, **2004**, 72, 131-139	6	20

32	A thermoanalytical study of the co-pyrolysis of coal-tar pitch and petroleum pitch. *Fuel*, **2004**, 83, 1257-1265	7.1	57
31	Preparation of pitch-based carbon–copper composites for electrical applications. *Fuel*, **2004**, 83, 1625-1634	7.1	25
30	Monitoring coal-tar pitch composition changes during air-blowing by gas chromatography. *Journal of Chromatography A*, **2004**, 1026, 231-8	4.5	13
29	Influence of Granular Carbons on the Thermal Reactivity of Pitches. *Energy & Fuels*, **2004**, 18, 22-29	4.1	3
28	Optimization of the preparation conditions of polygranular carbons from mesophase. *Journal of Materials Science*, **2003**, 38, 427-435	4.3	6
27	Pyrolysis behaviour of stabilized self-sintering mesophase. *Carbon*, **2003**, 41, 413-422	10.4	27
26	A novel method to obtain a petroleum-derived mesophase pitch suitable as carbon fibre precursor. *Carbon*, **2003**, 41, 445-452	10.4	34
25	Preventing mesophase growth in petroleum pitches by the addition of coal-tar pitch. *Carbon*, **2003**, 41, 1854-1857	10.4	11
24	Electrochemical, textural and microstructural effects of mechanical grinding on graphitized petroleum coke for lithium and sodium batteries. *Carbon*, **2003**, 41, 3003-3013	10.4	54
23	Mesophase development in petroleum and coal-tar pitches and their blends. *Journal of Analytical and Applied Pyrolysis*, **2003**, 68-69, 409-424	6	48
22	Relationship between chemical composition and pyrolysis behaviour of a medium temperature pitch (or Lurgi-gasifier pitch). *Fuel Processing Technology*, **2003**, 84, 63-77	7.2	14
21	The effect of the reinforcing carbon on the microstructure of pitch-based granular composites. *Journal of Microscopy*, **2003**, 209, 81-93	1.9	5
20	Influence of granular carbons on pitch properties?. *Fuel*, **2003**, 82, 1241-1250	7.1	16
19	Pyrolysis behaviour of petroleum pitches prepared at different conditions. *Journal of Analytical and Applied Pyrolysis*, **2002**, 63, 223-239	6	23
18	Pyrolysis behaviour of mesophase and isotropic phases isolated from the same pitch. *Journal of Analytical and Applied Pyrolysis*, **2002**, 63, 251-265	6	17
17	On the chemistry of the oxidative stabilization and carbonization of carbonaceous mesophase. *Fuel*, **2002**, 81, 2061-2070	7.1	39
16	A study of pitch-based precursors for general purpose carbon fibres. *Carbon*, **2002**, 40, 2719-2725	10.4	61
15	Effects of Air-Blowing on the Molecular Size and Structure of Coal-Tar Pitch Components. *Energy & Fuels*, **2002**, 16, 1540-1549	4.1	20

14	Assessment of the oxidative stabilisation of carbonaceous mesophase by thermal analysis techniques. *Journal of Analytical and Applied Pyrolysis*, **2001**, 58-59, 911-926	6	15
13	Influence of granular carbons on the pyrolysis behaviour of coal-tar pitches. *Journal of Analytical and Applied Pyrolysis*, **2001**, 58-59, 825-840	6	10
12	Co-pyrolysis of an aromatic petroleum residue with triphenylsilane. *Carbon*, **2001**, 39, 1001-1011	10.4	11
11	On the Chemical Composition of Thermally Treated Coal-Tar Pitches. *Energy & Fuels*, **2001**, 15, 214-223	4.1	19
10	Structural Characterization of High-Softening-Point Pitches By Oxidation with RuO4. *Energy & Fuels*, **2001**, 15, 128-134	4.1	7
9	A comparative study of air-blown and thermally treated coal-tar pitches. *Carbon*, **2000**, 38, 517-523	10.4	66
8	Pitch-based carbon composites with granular reinforcements for frictional applications. *Carbon*, **2000**, 38, 1043-1051	10.4	25
7	Separation and characterization of the isotropic phase and co-existing mesophase in thermally treated coal-tar pitches. *Carbon*, **2000**, 38, 1169-1176	10.4	18
6	Microstructure and properties of pitch-based carbon composites. *Journal of Microscopy*, **1999**, 196, 213-224	1.9	6
5	Influence of pressure variations on the formation and development of mesophase in a petroleum residue. *Carbon*, **1999**, 37, 445-455	10.4	24
4	Contribution of the isotropic phase to the rheology of partially anisotropic coal-tar pitches. *Carbon*, **1999**, 37, 1059-1064	10.4	14
3	Pyrolysis of petroleum residues: I. Yields and product analyses. *Carbon*, **1999**, 37, 1567-1582	10.4	42
2	A novel method for mesophase separation. *Carbon*, **1997**, 35, 1191-1193	10.4	19
1	A new parameter relating the properties of semicokes and the resulting sintered carbons. *Carbon*, **1995**, 33, 1182-1184	10.4	2