

# Clara Blanco

## List of Publications by Year in descending order

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125  
papers

6,179  
citations

70961

41  
h-index

76769

74  
g-index

125  
all docs

125  
docs citations

125  
times ranked

6985  
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	7.2	389
2	Graphene materials with different structures prepared from the same graphite by the Hummers and Brodie methods. <i>Carbon</i> , 2013, 65, 156-164.	5.4	345
3	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.	1.5	263
4	Critical temperatures in the synthesis of graphene-like materials by thermal exfoliation-reduction of graphite oxide. <i>Carbon</i> , 2013, 52, 476-485.	5.4	236
5	The effect of the parent graphite on the structure of graphene oxide. <i>Carbon</i> , 2012, 50, 275-282.	5.4	188
6	An approach to classification and capacitance expressions in electrochemical capacitors technology. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 1084-1092.	1.3	181
7	Effects of thermal treatment of activated carbon on the electrochemical behaviour in supercapacitors. <i>Electrochimica Acta</i> , 2007, 52, 4969-4973.	2.6	172
8	Chemicals from Coal Coking. <i>Chemical Reviews</i> , 2014, 114, 1608-1636.	23.0	166
9	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.	2.3	164
10	Redox-active electrolyte for carbon nanotube-based electric double layer capacitors. <i>Electrochimica Acta</i> , 2011, 56, 3401-3405.	2.6	159
11	An activated carbon monolith as an electrode material for supercapacitors. <i>Carbon</i> , 2009, 47, 195-200.	5.4	158
12	Supercapacitor modified with methylene blue as redox active electrolyte. <i>Electrochimica Acta</i> , 2012, 83, 241-246.	2.6	148
13	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. <i>Carbon</i> , 2013, 55, 62-69.	5.4	146
14	Thermally reduced graphite oxide as positive electrode in Vanadium Redox Flow Batteries. <i>Carbon</i> , 2012, 50, 828-834.	5.4	129
15	Graphite Felt Modified with Bismuth Nanoparticles as Negative Electrode in a Vanadium Redox Flow Battery. <i>ChemSusChem</i> , 2014, 7, 914-918.	3.6	113
16	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.	4.0	105
17	Long-term cycling of carbon-based supercapacitors in aqueous media. <i>Electrochimica Acta</i> , 2009, 54, 4481-4486.	2.6	95
18	Capacitive Deionization of NaCl Solutions with Modified Activated Carbon Electrodes. <i>Energy &amp; Fuels</i> , 2010, 24, 3329-3333.	2.5	93

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19	Activated carbon produced from Sasol-Lurgi gasifier pitch and its application as electrodes in supercapacitors. <i>Carbon</i> , 2006, 44, 441-446.	5.4	91
20	Carbon nanowalls thin films as nanostructured electrode materials in vanadium redox flow batteries. <i>Nano Energy</i> , 2012, 1, 833-839.	8.2	79
21	Optimization of the size and yield of graphene oxide sheets in the exfoliation step. <i>Carbon</i> , 2013, 63, 576-578.	5.4	77
22	Enhanced Hydrogen-Transfer Catalytic Activity of Iridium N-Heterocyclic Carbenes by Covalent Attachment on Carbon Nanotubes. <i>ACS Catalysis</i> , 2013, 3, 1307-1317.	5.5	77
23	A comparative study of air-blown and thermally treated coal-tar pitches. <i>Carbon</i> , 2000, 38, 517-523.	5.4	73
24	A study of pitch-based precursors for general purpose carbon fibres. <i>Carbon</i> , 2002, 40, 2719-2725.	5.4	70
25	The adsorption of chromium (VI) from industrial wastewater by acid and base-activated lignocellulosic residues. <i>Journal of Hazardous Materials</i> , 2007, 144, 400-405.	6.5	67
26	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.	6.6	63
27	Mesophase development in petroleum and coal-tar pitches and their blends. <i>Journal of Analytical and Applied Pyrolysis</i> , 2003, 68-69, 409-424.	2.6	60
28	High performance activated carbon for benzene/toluene adsorption from industrial wastewater. <i>Journal of Hazardous Materials</i> , 2011, 192, 1525-1532.	6.5	58
29	Comparison between Electrochemical Capacitors Based on NaOH- and KOH-Activated Carbons. <i>Energy &amp; Fuels</i> , 2010, 24, 3422-3428.	2.5	57
30	Graphite oxide-based graphene materials as positive electrodes in vanadium redox flow batteries. <i>Journal of Power Sources</i> , 2013, 241, 349-354.	4.0	57
31	High value activated carbons from waste polystyrene foams. <i>Microporous and Mesoporous Materials</i> , 2018, 267, 181-184.	2.2	57
32	Influence of fibre-matrix interface on the fracture behaviour of carbon-carbon composites. <i>Journal of the European Ceramic Society</i> , 2003, 23, 2857-2866.	2.8	54
33	Enhanced life-cycle supercapacitors by thermal treatment of mesophase-derived activated carbons. <i>Electrochimica Acta</i> , 2008, 54, 305-310.	2.6	54
34	Tailored graphene materials by chemical reduction of graphene oxides of different atomic structure. <i>RSC Advances</i> , 2012, 2, 9643.	1.7	51
35	The stabilisation of carbon fibres studied by micro-thermal analysis. <i>Carbon</i> , 2003, 41, 165-171.	5.4	49
36	Large diameter carbon fibres from mesophase pitch. <i>Carbon</i> , 2002, 40, 2109-2116.	5.4	46

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37	Chemical activation of carbon mesophase pitches. <i>Journal of Colloid and Interface Science</i> , 2006, 298, 341-347.	5.0	46
38	Optimisation of the melt-spinning of anthracene oil-based pitch for isotropic carbon fibre preparation. <i>Fuel Processing Technology</i> , 2012, 93, 99-104.	3.7	45
39	Influence of electrode preparation on the electrochemical behaviour of carbon-based supercapacitors. <i>Journal of Applied Electrochemistry</i> , 2007, 37, 717-721.	1.5	43
40	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
41	A novel method to obtain a petroleum-derived mesophase pitch suitable as carbon fibre precursor. <i>Carbon</i> , 2003, 41, 445-452.	5.4	42
42	A novel approach for the production of chemically activated carbon fibers. <i>Chemical Engineering Journal</i> , 2015, 260, 463-468.	6.6	39
43	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.	2.8	39
44	Enhanced energy density of carbon-based supercapacitors using Cerium (III) sulphate as inorganic redox electrolyte. <i>Electrochimica Acta</i> , 2015, 168, 277-284.	2.6	38
45	Thermally reduced graphite and graphene oxides in VRFBs. <i>Nano Energy</i> , 2013, 2, 1322-1328.	8.2	37
46	New alternatives to graphite for producing graphene materials. <i>Carbon</i> , 2015, 93, 812-818.	5.4	37
47	Carbon materials as electrodes for electrosorption of NaCl in aqueous solutions. <i>Adsorption</i> , 2011, 17, 467-471.	1.4	34
48	Voltage dependence of carbon-based supercapacitors for pseudocapacitance quantification. <i>Electrochimica Acta</i> , 2013, 95, 225-229.	2.6	34
49	An insight into the polymerization of anthracene oil to produce pitch using nuclear magnetic resonance. <i>Fuel</i> , 2013, 105, 471-476.	3.4	34
50	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.	1.5	34
51	Cokes of different origin as precursors of graphene oxide. <i>Fuel</i> , 2016, 166, 400-403.	3.4	33
52	Graphene-NHC-iridium hybrid catalysts built through OH covalent linkage. <i>Carbon</i> , 2015, 83, 21-31.	5.4	31
53	Unusual flexibility of mesophase pitch-derived carbon materials: An approach to the synthesis of graphene. <i>Carbon</i> , 2017, 115, 539-545.	5.4	31
54	Preparation of Low Toxicity Pitches by Thermal Oxidative Condensation of Anthracene Oil. <i>Environmental Science &amp; Technology</i> , 2009, 43, 8126-8132.	4.6	30

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55	Characterisation and feasibility as carbon fibre precursors of isotropic pitches derived from anthracene oil. <i>Fuel</i> , 2012, 101, 9-15.	3.4	30
56	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.	1.5	30
57	Enhancing energy density of carbon-based supercapacitors using Prussian Blue modified positive electrodes. <i>Electrochimica Acta</i> , 2016, 212, 848-855.	2.6	29
58	Carbon molecular sieves as model active electrode materials in supercapacitors. <i>Microporous and Mesoporous Materials</i> , 2008, 110, 431-435.	2.2	28
59	Pitch-based carbon composites with granular reinforcements for frictional applications. <i>Carbon</i> , 2000, 38, 1043-1051.	5.4	27
60	Thermal degradation of lignocellulosic materials treated with several acids. <i>Journal of Analytical and Applied Pyrolysis</i> , 2005, 74, 337-343.	2.6	27
61	Activated carbon fibers prepared directly from stabilized fibers for use as electrodes in supercapacitors. <i>Materials Letters</i> , 2014, 136, 214-217.	1.3	27
62	The influence of carbon nanotubes characteristics in their performance as positive electrodes in vanadium redox flow batteries. <i>Sustainable Energy Technologies and Assessments</i> , 2015, 9, 105-110.	1.7	25
63	Effect of structural differences of carbon nanotubes and graphene based iridium-NHC materials on the hydrogen transfer catalytic activity. <i>Carbon</i> , 2016, 96, 66-74.	5.4	25
64	Multifunctional Silicone Rubber Nanocomposites by Controlling the Structure and Morphology of Graphene Material. <i>Polymers</i> , 2019, 11, 449.	2.0	25
65	Effects of Air-Blowing on the Molecular Size and Structure of Coal-Tar Pitch Components. <i>Energy &amp; Fuels</i> , 2002, 16, 1540-1549.	2.5	24
66	Customizing thermally-reduced graphene oxides for electrically conductive or mechanical reinforced epoxy nanocomposites. <i>European Polymer Journal</i> , 2017, 93, 1-7.	2.6	24
67	A novel method for mesophase separation. <i>Carbon</i> , 1997, 35, 1191-1193.	5.4	23
68	Separation and characterization of the isotropic phase and co-existing mesophase in thermally treated coal-tar pitches. <i>Carbon</i> , 2000, 38, 1169-1176.	5.4	23
69	The effect of the substrate on pitch wetting behaviour. <i>Fuel Processing Technology</i> , 2010, 91, 1373-1377.	3.7	23
70	Fabrication of C/SiC composites by combining liquid infiltration process and spark plasma sintering technique. <i>Ceramics International</i> , 2012, 38, 2171-2175.	2.3	23
71	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.	2.2	23
72	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.	2.6	22

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73	Influence of mesophase activation conditions on the specific capacitance of the resulting carbons. <i>Journal of Power Sources</i> , 2006, 156, 719-724.	4.0	22
74	Mesophase from Anthracene Oil-Based Pitches. <i>Energy &amp; Fuels</i> , 2008, 22, 4146-4150.	2.5	22
75	On the Chemical Composition of Thermally Treated Coal-Tar Pitches. <i>Energy &amp; Fuels</i> , 2001, 15, 214-223.	2.5	21
76	Pyrolysis behaviour of mesophase and isotropic phases isolated from the same pitch. <i>Journal of Analytical and Applied Pyrolysis</i> , 2002, 63, 251-265.	2.6	21
77	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.	1.9	21
78	Tuning graphene properties by a multi-step thermal reduction process. <i>Carbon</i> , 2015, 90, 160-163.	5.4	21
79	Study of carbon fibres and carbon-carbon composites by scanning thermal microscopy. <i>Journal of Microscopy</i> , 2002, 205, 21-32.	0.8	20
80	Development of new carbon honeycomb structures from cellulose and pitch. <i>Carbon</i> , 2002, 40, 541-550.	5.4	20
81	Enhancing the hydrogen transfer catalytic activity of hybrid carbon nanotube-based NHC-iridium catalysts by increasing the oxidation degree of the nanosupport. <i>Catalysis Science and Technology</i> , 2016, 6, 5504-5514.	2.1	20
82	Role of quinoline insoluble particles during the processing of coal tars to produce graphene materials. <i>Fuel</i> , 2017, 206, 99-106.	3.4	20
83	Monitoring coal-tar pitch composition changes during air-blowing by gas chromatography. <i>Journal of Chromatography A</i> , 2004, 1026, 231-238.	1.8	19
84	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.	3.4	18
85	Improvement of thermal conductivity in 2D carbon-carbon composites by doping with TiC nanoparticles. <i>Materials Chemistry and Physics</i> , 2010, 122, 102-107.	2.0	18
86	Tailoring micro-mesoporosity in activated carbon fibers to enhance SO <sub>2</sub> catalytic oxidation. <i>Journal of Colloid and Interface Science</i> , 2014, 428, 36-40.	5.0	18
87	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.	2.5	18
88	Texture studies of carbon and graphite tapes by XRD texture goniometry. <i>Journal of Materials Science</i> , 2002, 37, 5283-5290.	1.7	17
89	Pyrolysis behaviour of pitches modified with different additives. <i>Journal of Analytical and Applied Pyrolysis</i> , 2005, 73, 276-283.	2.6	17
90	Contribution of the isotropic phase to the rheology of partially anisotropic coal-tar pitches. <i>Carbon</i> , 1999, 37, 1059-1064.	5.4	16

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91	Peculiarities of the production of graphene oxides with controlled properties from industrial coal liquids. <i>Fuel</i> , 2017, 203, 253-260.	3.4	16
92	Biliquid Supercapacitors: a Simple and New Strategy to Enhance Energy Density in Asymmetric/Hybrid Devices. <i>Electrochimica Acta</i> , 2017, 254, 384-392.	2.6	16
93	Main structural features of graphene materials controlling the transport properties of epoxy resin-based composites. <i>European Polymer Journal</i> , 2018, 101, 56-65.	2.6	16
94	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.	3.7	15
95	Influence of the electrophoretic deposition parameters on the formation of suspended graphene-based films. <i>Materials and Design</i> , 2018, 160, 58-64.	3.3	15
96	Lignocellulose/pitch based composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2005, 36, 649-657.	3.8	14
97	A unified process for preparing mesophase and isotropic material from anthracene oil-based pitch. <i>Fuel Processing Technology</i> , 2011, 92, 421-427.	3.7	14
98	A multi-step exfoliation approach to maintain the lateral size of graphene oxide sheets. <i>Carbon</i> , 2014, 80, 830-832.	5.4	14
99	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.	3.7	13
100	Composite electrode materials for lithium-ion batteries obtained by metal oxide addition to petroleum vacuum residua. <i>Carbon</i> , 2005, 43, 923-936.	5.4	12
101	Further studies on the use of Raman spectroscopy and X-ray diffraction for the characterisation of TiC-containing carbon-carbon composites. <i>Carbon</i> , 2012, 50, 3240-3246.	5.4	12
102	Reduced graphene oxide membranes in ocular regenerative medicine. <i>Materials Science and Engineering C</i> , 2020, 114, 111075.	3.8	12
103	Microstructure and properties of pitch-based carbon composites. <i>Journal of Microscopy</i> , 1999, 196, 213-224.	0.8	11
104	Evaluating capacitive deionization for water desalination by direct determination of chloride ions. <i>Desalination</i> , 2014, 344, 396-401.	4.0	11
105	Novel coal-based precursors for cokes with highly oriented microstructures. <i>Fuel</i> , 2012, 95, 400-406.	3.4	10
106	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.	3.1	10
107	Pitch/coke wetting behaviour. <i>Fuel</i> , 2005, , .	3.4	9
108	Oxidation behaviour of magnesia-carbon materials prepared with petroleum pitch as binder. <i>Journal of Analytical and Applied Pyrolysis</i> , 2010, 88, 207-212.	2.6	9

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109	Morphological changes in graphene materials caused by solvents. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018, 558, 73-79.	2.3	9
110	Micro-thermal analysis as a technique for in situ characterisation of the softening behaviour of the isotropic phase and mesophase in thermally treated pitches. <i>Carbon</i> , 2002, 40, 132-135.	5.4	8
111	Structural Characterization of High-Softening-Point Pitches By Oxidation with RuO <sub>4</sub> . <i>Energy &amp; Fuels</i> , 2001, 15, 128-134.	2.5	7
112	Development of titanium-doped carbon-carbon composites. <i>Journal of Materials Science</i> , 2009, 44, 2525-2532.	1.7	7
113	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.	2.6	7
114	Influence of the alignment degree of CVD-grown carbon nanotubes on their functionalization and adsorption capacity. <i>Diamond and Related Materials</i> , 2013, 37, 1-7.	1.8	6
115	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.	4.0	6
116	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.	1.3	6
117	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.	1.9	5
118	Manufacturing and high heat-flux testing of brazed actively cooled mock-ups with Ti-doped graphite and CFC as plasma-facing materials. <i>Physica Scripta</i> , 2009, T138, 014062.	1.2	5
119	An insight into Faradaic phenomena in activated carbon investigated by means of the microelectrode technique. <i>Electrochemistry Communications</i> , 2007, 9, 2320-2324.	2.3	4
120	Behaviour of Ti-doped CFCs under thermal fatigue tests. <i>Fusion Engineering and Design</i> , 2011, 86, 121-125.	1.0	4
121	Behaviour of Ti-doped 3D carbon fibre composites under intense thermal shock tests. <i>Physica Scripta</i> , 2009, T138, 014055.	1.2	3
122	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.	1.8	3
123	Influence of titanium carbide on the interlaminar shear strength of carbon fibre laminate composites. <i>Composites Science and Technology</i> , 2011, 71, 101-106.	3.8	2
124	Local structure of Iridium organometallic catalysts covalently bonded to carbon nanotubes.. <i>Journal of Physics: Conference Series</i> , 2016, 712, 012052.	0.3	1
125	Evaluation of novel Ti-doped 3D carbon-carbon composites under transient thermal loads. <i>Fusion Engineering and Design</i> , 2010, 85, 813-818.	1.0	0