Marta Sevilla

List of Publications by Year
in descending order

124 papers	18,657 citations	15504 65 h-index	16650 123 g-index
126 all docs	126 docs citations	126 times ranked	17768 citing authors

#	Article	IF	Citations
1	The production of carbon materials by hydrothermal carbonization of cellulose. Carbon, 2009, 47, 2281-2289.	10.3	1,550
2	Energy storage applications of activated carbons: supercapacitors and hydrogen storage. Energy and Environmental Science, 2014, 7, 1250-1280.	30.8	1,229
3	Chemical and Structural Properties of Carbonaceous Products Obtained by Hydrothermal Carbonization of Saccharides. Chemistry - A European Journal, 2009, 15, 4195-4203.	3.3	1,193
4	Sustainable porous carbons with a superior performance for CO2 capture. Energy and Environmental Science, 2011, 4, 1765.	30.8	892
5	Nâ€Doped Polypyrroleâ€Based Porous Carbons for CO₂ Capture. Advanced Functional Materials, 2011, 21, 2781-2787.	14.9	840
6	Black perspectives for a green future: hydrothermal carbons for environment protection and energy storage. Energy and Environmental Science, 2012, 5, 6796.	30.8	758
7	Direct Synthesis of Highly Porous Interconnected Carbon Nanosheets and Their Application as High-Performance Supercapacitors. ACS Nano, 2014, 8, 5069-5078.	14.6	654
8	Hydrothermal Carbonization of Abundant Renewable Natural Organic Chemicals for Highâ€Performance Supercapacitor Electrodes. Advanced Energy Materials, 2011, 1, 356-361.	19.5	538
9	Catalytic graphitization of templated mesoporous carbons. Carbon, 2006, 44, 468-474.	10.3	422
10	High density hydrogen storage in superactivated carbons from hydrothermally carbonized renewable organic materials. Energy and Environmental Science, 2011, 4, 1400.	30.8	411
11	Feâ€"N-Doped Carbon Capsules with Outstanding Electrochemical Performance and Stability for the Oxygen Reduction Reaction in Both Acid and Alkaline Conditions. ACS Nano, 2016, 10, 5922-5932.	14.6	403
12	Polypyrroleâ€Derived Activated Carbons for Highâ€Performance Electrical Doubleâ€Layer Capacitors with Ionic Liquid Electrolyte. Advanced Functional Materials, 2012, 22, 827-834.	14.9	396
13	Hydrothermal carbonization of biomass as a route for the sequestration of CO2: Chemical and structural properties of the carbonized products. Biomass and Bioenergy, 2011, 35, 3152-3159.	5.7	341
14	Chemical and structural properties of carbonaceous products obtained by pyrolysis and hydrothermal carbonisation of corn stover. Soil Research, 2010, 48, 618.	1.1	332
15	Assessment of the Role of Micropore Size and N-Doping in CO₂ Capture by Porous Carbons. ACS Applied Materials & Interfaces, 2013, 5, 6360-6368.	8.0	324
16	Biomassâ€Derived Carbon Quantum Dot Sensitizers for Solidâ€State Nanostructured Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 4463-4468.	13.8	315
17	Sulfur-containing activated carbons with greatly reduced content of bottle neck pores for double-layer capacitors: a case study for pseudocapacitance detection. Energy and Environmental Science, 2013, 6, 2465.	30.8	309
18	High-performance CO2 sorbents from algae. RSC Advances, 2012, 2, 12792.	3.6	227

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19	Hierarchical Microporous/Mesoporous Carbon Nanosheets for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2015, 7, 4344-4353.	8.0	220
20	N-doped porous carbon capsules with tunable porosity for high-performance supercapacitors. Journal of Materials Chemistry A, 2015, 3, 2914-2923.	10.3	214
21	One-step synthesis of silica@resorcinolâ€“formaldehyde spheres and their application for the fabrication of polymer and carbon capsules. Chemical Communications, 2012, 48, 6124.	4.1	203
22	Beyond KOH activation for the synthesis of superactivated carbons from hydrochar. Carbon, 2017, 114, 50-58.	10.3	203
23	The influence of pore size distribution on the oxygen reduction reaction performance in nitrogen doped carbon microspheres. Journal of Materials Chemistry A, 2016, 4, 2581-2589.	10.3	195
24	CO2 adsorption by activated templated carbons. Journal of Colloid and Interface Science, 2012, 366, 147-154.	9.4	194
25	Efficient metal-free N-doped mesoporous carbon catalysts for ORR by a template-free approach. Carbon, 2016, 106, 179-187.	10.3	185
26	A Green Approach to Highâ€Performance Supercapacitor Electrodes: The Chemical Activation of Hydrochar with Potassium Bicarbonate. ChemSusChem, 2016, 9, 1880-1888.	6.8	173
27	Hydrothermal Carbons from Hemicelluloseâ€Derived Aqueous Hydrolysis Products as Electrode Materials for Supercapacitors. ChemSusChem, 2013, 6, 374-382.	6.8	169
28	Hydrothermal synthesis of microalgae-derived microporous carbons for electrochemical capacitors. Journal of Power Sources, 2014, 267, 26-32.	7.8	158
29	Ultrahigh surface area polypyrrole-based carbons with superior performance for hydrogen storage. Energy and Environmental Science, 2011, 4, 2930.	30.8	155
30	Synthesis of Graphitic Carbon Nanostructures from Sawdust and Their Application as Electrocatalyst Supports. Journal of Physical Chemistry C, 2007, 111, 9749-9756.	3.1	147
31	A general and facile synthesis strategy towards highly porous carbons: carbonization of organic salts. Journal of Materials Chemistry A, 2013, 1, 13738.	10.3	147
32	Optimization of the Pore Structure of Biomass-Based Carbons in Relation to Their Use for CO₂ Capture under Low- and High-Pressure Regimes. ACS Applied Materials & Interfaces, 2018, 10, 1623-1633.	8.0	146
33	Fabrication of porous carbon monoliths with a graphitic framework. Carbon, 2013, 56, 155-166.	10.3	141
34	More Sustainable Chemical Activation Strategies for the Production of Porous Carbons. ChemSusChem, 2021, 14, 94-117.	6.8	137
35	Graphitic carbon nanostructures from cellulose. Chemical Physics Letters, 2010, 490, 63-68.	2.6	136
36	Renewable Nitrogenâ€Doped Hydrothermal Carbons Derived from Microalgae. ChemSusChem, 2012, 5, 1834-1840.	6.8	135

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37	From Soybean residue to advanced supercapacitors. Scientific Reports, 2015, 5, 16618.	3.3	134
38	Versatile Cellulose-Based Carbon Aerogel for the Removal of Both Cationic and Anionic Metal Contaminants from Water. ACS Applied Materials & Interfaces, 2015, 7, 25875-25883.	8.0	119
39	One-step synthesis of ultra-high surface area nanoporous carbons and their application for electrochemical energy storage. Carbon, 2018, 131, 193-200.	10.3	119
40	Sustainable supercapacitor electrodes produced by the activation of biomass with sodium thiosulfate. Energy Storage Materials, 2019, 18, 356-365.	18.0	118
41	Performance of templated mesoporous carbons in supercapacitors. Electrochimica Acta, 2007, 52, 3207-3215.	5.2	116
42	Mesoporous carbons synthesized by direct carbonization of citrate salts for use as high-performance capacitors. Carbon, 2015, 88, 239-251.	10.3	113
43	Surface Modification of CNTs with N-Doped Carbon: An Effective Way of Enhancing Their Performance in Supercapacitors. ACS Sustainable Chemistry and Engineering, 2014, 2, 1049-1055.	6.7	111
44	One-Pot Synthesis of Biomass-Based Hierarchical Porous Carbons with a Large Porosity Development. Chemistry of Materials, 2017, 29, 6900-6907.	6.7	110
45	Preparation and hydrogen storage capacity of highly porous activated carbon materials derived from polythiophene. International Journal of Hydrogen Energy, 2011, 36, 15658-15663.	7.1	103
46	Superactivated carbide-derived carbons with high hydrogenstorage capacity. Energy and Environmental Science, 2010, 3, 223-227.	30.8	102
47	High-surface area carbons from renewable sources with a bimodal micro-mesoporosity for high-performance ionic liquid-based supercapacitors. Carbon, 2015, 94, 41-52.	10.3	98
48	Synthetic Route to Nanocomposites Made Up of Inorganic Nanoparticles Confined within a Hollow Mesoporous Carbon Shell. Chemistry of Materials, 2007, 19, 5418-5423.	6.7	97
49	Boosting High-Performance in Lithiumâ€“Sulfur Batteries via Dilute Electrolyte. Nano Letters, 2020, 20, 5391-5399.	9.1	93
50	Molten salt strategies towards carbon materials for energy storage and conversion. Energy Storage Materials, 2021, 38, 50-69.	18.0	90
51	Synthesis of Uniform Mesoporous Carbon Capsules by Carbonization of Organosilica Nanospheres. Chemistry of Materials, 2010, 22, 2526-2533.	6.7	84
52	Soy protein directed hydrothermal synthesis of porous carbon aerogels for electrocatalytic oxygen reduction. Carbon, 2016, 96, 622-630.	10.3	84
53	Direct synthesis of graphitic carbon nanostructures from saccharides and their use as electrocatalytic supports. Carbon, 2008, 46, 931-939.	10.3	83
54	Polypyrrole-derived mesoporous nitrogen-doped carbons with intrinsic catalytic activity in the oxygen reduction reaction. RSC Advances, 2013, 3, 9904.	3.6	83

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55	Highly dispersed platinum nanoparticles on carbon nanocoils and their electrocatalytic performance for fuel cell reactions. Electrochimica Acta, 2009, 54, 2234-2238.	5.2	78
56	A sustainable approach to hierarchically porous carbons from tannic acid and their utilization in supercapacitive energy storage systems. Journal of Materials Chemistry A, 2019, 7, 14280-14290.	10.3	77
57	Sulfonated mesoporous silicaâ€“carbon composites and their use as solid acid catalysts. Applied Surface Science, 2012, 261, 574-583.	6.1	76
58	Highly porous S-doped carbons. Microporous and Mesoporous Materials, 2012, 158, 318-323.	4.4	75
59	One-pot synthesis of microporous carbons highly enriched in nitrogen and their electrochemical performance. Journal of Materials Chemistry A, 2014, 2, 14439-14448.	10.3	74
60	Saccharide-based graphitic carbon nanocoils as supports for PtRu nanoparticles for methanol electrooxidation. Journal of Power Sources, 2007, 171, 546-551.	7.8	71
61	Synthesis of Carbonâ€based Solid Acid Microspheres and Their Application to the Production of Biodiesel. ChemSusChem, 2010, 3, 1352-1354.	6.8	71
62	Encapsulation of nanosized catalysts in the hollow core of a mesoporous carbon capsule. Journal of Catalysis, 2007, 251, 239-243.	6.2	70
63	Enhancement of Hydrogen Storage Capacity of Zeolite-Templated Carbons by Chemical Activation. Journal of Physical Chemistry C, 2010, 114, 11314-11319.	3.1	68
64	Solid-phase synthesis of graphitic carbon nanostructures from iron and cobalt gluconates and their utilization as electrocatalyst supports. Physical Chemistry Chemical Physics, 2008, 10, 1433.	2.8	67
65	Preparation, Characterization, and Enzyme Immobilization Capacities of Superparamagnetic Silica/Iron Oxide Nanocomposites with Mesostructured Porosity. Chemistry of Materials, 2009, 21, 1806-1814.	6.7	67
66	N-doped microporous carbon microspheres for high volumetric performance supercapacitors. Electrochimica Acta, 2015, 168, 320-329.	5.2	66
67	Synthesis strategies of templated porous carbons beyond the silica nanocasting technique. Carbon, 2021, 178, 451-476.	10.3	66
68	Superior Capacitive Performance of Hydrocharâ€Based Porous Carbons in Aqueous Electrolytes. ChemSusChem, 2015, 8, 1049-1057.	6.8	65
69	Highly Porous Renewable Carbons for Enhanced Storage of Energy-Related Gases (H₂ and) Tj ETQq1 1 0.784314 rgBT /Ove	6.7	64
70	Synthesis of perfectly ordered mesoporous carbons by water-assisted mechanochemical self-assembly of tannin. Green Chemistry, 2018, 20, 5123-5132.	9.0	62
71	Fabrication of Monodisperse Mesoporous Carbon Capsules Decorated with Ferrite Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 3648-3654.	3.1	60
72	Supercapacitive Behavior of Two Glucoseâ€Derived Microporous Carbons: Direct Pyrolysis versus Hydrothermal Carbonization. ChemElectroChem, 2014, 1, 2138-2145.	3.4	59

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73	Synthesis of magnetically separable adsorbents through the incorporation of protected nickel nanoparticles in an activated carbon. Carbon, 2006, 44, 1954-1957.	10.3	57
74	A Green Route to High-Surface Area Carbons by Chemical Activation of Biomass-Based Products with Sodium Thiosulfate. ACS Sustainable Chemistry and Engineering, 2018, 6, 16323-16331.	6.7	57
75	Graphene-cellulose tissue composites for high power supercapacitors. Energy Storage Materials, 2016, 5, 33-42.	18.0	53
76	Synthesis of Highly Uniform Mesoporous Sub-Micrometric Capsules of Silicon Oxycarbide and Silica. Chemistry of Materials, 2007, 19, 3096-3098.	6.7	50
77	Easy synthesis of graphitic carbon nanocoils from saccharides. Materials Chemistry and Physics, 2009, 113, 208-214.	4.0	46
78	Synthesis of colloidal silica nanoparticles of a tunable mesopore size and their application to the adsorption of biomolecules. Journal of Colloid and Interface Science, 2010, 349, 173-180.	9.4	46
79	High-Rate Capability of Supercapacitors Based on Tannin-Derived Ordered Mesoporous Carbons. ACS Sustainable Chemistry and Engineering, 2019, 7, 17627-17635.	6.7	46
80	On the electrical double-layer capacitance of mesoporous templated carbons. Carbon, 2005, 43, 3012-3015.	10.3	45
81	Activation of carbide-derived carbons: a route to materials with enhanced gas and energy storage properties. Journal of Materials Chemistry, 2011, 21, 4727-4732.	6.7	41
82	Sustainable Salt Templateâ€Assisted Chemical Activation for the Production of Porous Carbons with Enhanced Power Handling Ability in Supercapacitors. Batteries and Supercaps, 2019, 2, 701-711.	4.7	41
83	Anatase TiO₂ Confined in Carbon Nanopores for Highâ€Energy Liâ€Ion Hybrid Supercapacitors Operating at High Rates and Subzero Temperatures. Advanced Energy Materials, 2020, 10, 1902993.	19.5	39
84	Mesostructured silicaâ€"carbon composites synthesized by employing surfactants as carbon source. Microporous and Mesoporous Materials, 2010, 134, 165-174.	4.4	38
85	Synthesis and characterisation of mesoporous carbons of large textural porosity and tunable pore size by templating mesostructured HMS silica materials. Microporous and Mesoporous Materials, 2004, 74, 49-58.	4.4	37
86	Aqueous Dispersions of Graphene from Electrochemically Exfoliated Graphite. Chemistry - A European Journal, 2016, 22, 17351-17358.	3.3	37
87	Free-standing hybrid films based on graphene and porous carbon particles for flexible supercapacitors. Sustainable Energy and Fuels, 2017, 1, 127-137.	4.9	37
88	Microstructure and magnetism of nanoparticles with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î³</mml:mi><mml:mtext>-Fe</mml:mtext></mml:mrow></mml:math>core surrounded by<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î±</mml:mi><mml:mtext>-Fe</mml:mtext></mml:mrow></mml:math>and iron oxide shells. Physical Review B, 2010, 81, .	3.2	34
89	Enhanced Protection of Carbon-Encapsulated Magnetic Nickel Nanoparticles through a Sucrose-Based Synthetic Strategy. Journal of Physical Chemistry C, 2011, 115, 5294-5300.	3.1	34
90	Boosting the Oxygen Reduction Electrocatalytic Performance of Nonprecious Metal Nanocarbons via Triple Boundary Engineering Using Protic Ionic Liquids. ACS Applied Materials & Interfaces, 2019, 11, 11298-11305.	8.0	34

#	ARTICLE	IF	CITATIONS
91	Iron/Nitrogen co-doped mesoporous carbon synthesized by an endo-templating approach as an efficient electrocatalyst for the oxygen reduction reaction. Microporous and Mesoporous Materials, 2019, 278, 280-288.	4.4	34
92	Magnetically separable bimodal mesoporous carbons with a large capacity for the immobilization of biomolecules. Carbon, 2009, 47, 2519-2527.	10.3	33
93	Carboxyl-functionalized mesoporous silicaâ€“carbon composites as highly efficient adsorbents in liquid phase. Microporous and Mesoporous Materials, 2013, 176, 78-85.	4.4	33
94	Defining a performance map of porous carbon sorbents for high-pressure carbon dioxide uptake and carbon dioxideâ€“methane selectivity. Journal of Materials Chemistry A, 2016, 4, 14739-14751.	10.3	33
95	Signatures of Clustering in Superparamagnetic Colloidal Nanocomposites of an Inorganic and Hybrid Nature. Small, 2008, 4, 254-261.	10.0	30
96	Straightforward synthesis of Sulfur/N,S-codoped carbon cathodes for Lithium-Sulfur batteries. Scientific Reports, 2020, 10, 4866.	3.3	29
97	Functionalization of mesostructured silicaâ€“carbon composites. Materials Chemistry and Physics, 2013, 139, 281-289.	4.0	28
98	Detailed carbon chemistry in charcoals from preâ€<scp>E</scp>uropean <scp>M</scp>Äori gardens of <scp>N</scp>ew <scp>Z</scp>ealand as a tool for understanding biochar stability in soils. European Journal of Soil Science, 2014, 65, 83-95.	3.9	28
99	N/S-Co-doped Porous Carbon Nanoparticles Serving the Dual Function of Sulfur Host and Separator Coating in Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 3397-3407.	5.1	28
100	Fabrication of mesoporous SiO2â€“Câ€“Fe3O4/Î³â€“Fe2O3 and SiO2â€“Câ€“Fe magnetic composites. Journal of Colloid and Interface Science, 2009, 340, 230-236.	9.4	24
101	Co nanoparticles inserted into a porous carbon amorphous matrix: the role of cooling field and temperature on the exchange bias effect. Physical Chemistry Chemical Physics, 2011, 13, 927-932.	2.8	24
102	A simple and general approach for <i>in situ</i> synthesis of sulfurâ€“porous carbon composites for lithiumâ€“sulfur batteries. Sustainable Energy and Fuels, 2019, 3, 3498-3509.	4.9	23
103	Templated Synthesis of Mesoporous Superparamagnetic Polymers. Advanced Functional Materials, 2007, 17, 2321-2327.	14.9	21
104	Nickel nanoparticles deposited into an activated porous carbon: synthesis, microstructure and magnetic properties. Physica Status Solidi - Rapid Research Letters, 2009, 3, 4-6.	2.4	21
105	Control of the structural properties of mesoporous polymers synthesized using porous silica materials as templates. Microporous and Mesoporous Materials, 2008, 112, 319-326.	4.4	20
106	Commentary: Methods of calculating the volumetric performance of a supercapacitor. Energy Storage Materials, 2016, 4, 154-155.	18.0	20
107	Pore Characteristics for Efficient CO₂ Storage in Hydrated Carbons. ACS Applied Materials & Interfaces, 2019, 11, 44390-44398.	8.0	18
108	A Simple Approach towards Highly Dense Solvated Graphene Films for Supercapacitors. ChemNanoMat, 2016, 2, 33-36.	2.8	16

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109	Ironâ€"Nitrogen-Doped Dendritic Carbon Nanostructures for an Efficient Oxygen Reduction Reaction. ACS Applied Energy Materials, 2018, 1, 6560-6568.	5.1	16
110	Flexible, Freeâ€Standing and Holey Graphene Paper for Highâ€Power Supercapacitors. ChemNanoMat, 2016, 2, 1055-1063.	2.8	15
111	Model carbon materials derived from tannin to assess the importance of pore connectivity in supercapacitors. Renewable and Sustainable Energy Reviews, 2021, 151, 111600.	16.4	14
112	Exchange-bias and superparamagnetic behaviour of Fe nanoparticles embedded in a porous carbon matrix. Journal of Non-Crystalline Solids, 2008, 354, 5219-5221.	3.1	13
113	Silica@Carbon mesoporous nanorattle structures synthesised by means of a selective etching strategy. Materials Letters, 2010, 64, 1587-1590.	2.6	11
114	Dense (non-hollow) carbon nanospheres: synthesis and electrochemical energy applications. Materials Today Nano, 2021, 16, 100147.	4.6	11
115	Control of crystalline phases in magnetic Fe nanoparticles inserted inside a matrix of porous carbon. Journal of Magnetism and Magnetic Materials, 2010, 322, 1300-1303.	2.3	10
116	Highly Packed Monodisperse Porous Carbon Microspheres for Energy Storage in Supercapacitors and Liâ^'S Batteries. ChemElectroChem, 2020, 7, 3798-3810.	3.4	10
117	Onion-like nanoparticles with Î³-Fe core surrounded by a Î±-Fe/Fe-oxide double shell. Journal of Alloys and Compounds, 2011, 509, S320-S322.	5.5	9
118	CO2 Storage on Nanoporous Carbons. Green Energy and Technology, 2019, , 287-330.	0.6	8
119	Cellulose as a Precursor of Highâ€Performance Energy Storage Materials in Liâ€"S Batteries and Supercapacitors. Energy Technology, 2021, 9, 2100268.	3.8	5
120	Introduction to (photo)electrocatalysis for renewable energy. Chemical Communications, 2021, 57, 1540-1542.	4.1	3
121	Monodisperse Porous Carbon Nanospheres with Ultraâ€High Surface Area for Energy Storage in Electrochemical Capacitors. Batteries and Supercaps, 2022, 5, .	4.7	3
122	Facile synthesis of graphitic carbons decorated with SnO2 nanoparticles and their application as high capacity lithium-ion battery anodes. Journal of Applied Electrochemistry, 2012, 42, 901-908.	2.9	2
123	Monodisperse Porous Carbon Nanospheres with Ultraâ€High Surface Area for Energy Storage in Electrochemical Capacitors. Batteries and Supercaps, 0, , .	4.7	2
124	Hydrothermal Carbonization of Abundant Renewable Natural Organic Chemicals for High-Performance Supercapacitor Electrodes. Advanced Energy Materials, 2011, , n/a-n/a.	19.5	0