Marta Sevilla

List of Publications by Year
in descending order

124 papers	18,657 citations	17776 65 h-index	18944 123 g-index
126 all docs	126 docs citations	126 times ranked	20235 citing authors

#	Article	IF	Citations
1	Monodisperse Porous Carbon Nanospheres with Ultraâ€High Surface Area for Energy Storage in Electrochemical Capacitors. Batteries and Supercaps, 2022, 5, .	2.4	3
2	More Sustainable Chemical Activation Strategies for the Production of Porous Carbons. ChemSusChem, 2021, 14, 94-117.	3.6	137
3	Introduction to (photo)electrocatalysis for renewable energy. Chemical Communications, 2021, 57, 1540-1542.	2.2	3
4	Synthesis strategies of templated porous carbons beyond the silica nanocasting technique. Carbon, 2021, 178, 451-476.	5.4	66
5	Cellulose as a Precursor of Highâ€Performance Energy Storage Materials in Liâ€“S Batteries and Supercapacitors. Energy Technology, 2021, 9, 2100268.	1.8	5
6	Molten salt strategies towards carbon materials for energy storage and conversion. Energy Storage Materials, 2021, 38, 50-69.	9.5	90
7	Model carbon materials derived from tannin to assess the importance of pore connectivity in supercapacitors. Renewable and Sustainable Energy Reviews, 2021, 151, 111600.	8.2	14
8	Dense (non-hollow) carbon nanospheres: synthesis and electrochemical energy applications. Materials Today Nano, 2021, 16, 100147.	2.3	11
9	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.	10.2	39
10	Highly Packed Monodisperse Porous Carbon Microspheres for Energy Storage in Supercapacitors and Liâˆ’S Batteries. ChemElectroChem, 2020, 7, 3798-3810.	1.7	10
11	Boosting High-Performance in Lithiumâ€“Sulfur Batteries via Dilute Electrolyte. Nano Letters, 2020, 20, 5391-5399.	4.5	93
12	Straightforward synthesis of Sulfur/N,S-codoped carbon cathodes for Lithium-Sulfur batteries. Scientific Reports, 2020, 10, 4866.	1.6	29
13	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.	2.5	28
14	Pore Characteristics for Efficient CO₂ Storage in Hydrated Carbons. ACS Applied Materials & Interfaces, 2019, 11, 44390-44398.	4.0	18
15	High-Rate Capability of Supercapacitors Based on Tannin-Derived Ordered Mesoporous Carbons. ACS Sustainable Chemistry and Engineering, 2019, 7, 17627-17635.	3.2	46
16	Sustainable supercapacitor electrodes produced by the activation of biomass with sodium thiosulfate. Energy Storage Materials, 2019, 18, 356-365.	9.5	118
17	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.	5.2	77
18	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.	2.4	41

#	Article	IF	Citations
19	CO2 Storage on Nanoporous Carbons. Green Energy and Technology, 2019, , 287-330.	0.4	8
20	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.	4.0	34
21	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.	2.5	23
22	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.	2.2	34
23	One-step synthesis of ultra-high surface area nanoporous carbons and their application for electrochemical energy storage. Carbon, 2018, 131, 193-200.	5.4	119
24	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.	4.0	146
25	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.	3.2	57
26	Ironâ€“Nitrogen-Doped Dendritic Carbon Nanostructures for an Efficient Oxygen Reduction Reaction. ACS Applied Energy Materials, 2018, 1, 6560-6568.	2.5	16
27	Synthesis of perfectly ordered mesoporous carbons by water-assisted mechanochemical self-assembly of tannin. Green Chemistry, 2018, 20, 5123-5132.	4.6	62
28	Free-standing hybrid films based on graphene and porous carbon particles for flexible supercapacitors. Sustainable Energy and Fuels, 2017, 1, 127-137.	2.5	37
29	Beyond KOH activation for the synthesis of superactivated carbons from hydrochar. Carbon, 2017, 114, 50-58.	5.4	203
30	One-Pot Synthesis of Biomass-Based Hierarchical Porous Carbons with a Large Porosity Development. Chemistry of Materials, 2017, 29, 6900-6907.	3.2	110
31	A Green Approach to Highâ€Performance Supercapacitor Electrodes: The Chemical Activation of Hydrochar with Potassium Bicarbonate. ChemSusChem, 2016, 9, 1880-1888.	3.6	173
32	Graphene-cellulose tissue composites for high power supercapacitors. Energy Storage Materials, 2016, 5, 33-42.	9.5	53
33	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.	7.3	403
34	Commentary: Methods of calculating the volumetric performance of a supercapacitor. Energy Storage Materials, 2016, 4, 154-155.	9.5	20
35	Efficient metal-free N-doped mesoporous carbon catalysts for ORR by a template-free approach. Carbon, 2016, 106, 179-187.	5.4	185
36	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.	5.2	33

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37	Highly Porous Renewable Carbons for Enhanced Storage of Energy-Related Gases (H₂ and) Tj ETQq1 1 0.784314 rgBT /Ove	3.2	64
38	Flexible, Freeâ€Standing and Holey Graphene Paper for Highâ€Power Supercapacitors. ChemNanoMat, 2016, 2, 1055-1063.	1.5	15
39	Aqueous Dispersions of Graphene from Electrochemically Exfoliated Graphite. Chemistry - A European Journal, 2016, 22, 17351-17358.	1.7	37
40	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.	5.2	195
41	A Simple Approach towards Highly Dense Solvated Graphene Films for Supercapacitors. ChemNanoMat, 2016, 2, 33-36.	1.5	16
42	Soy protein directed hydrothermal synthesis of porous carbon aerogels for electrocatalytic oxygen reduction. Carbon, 2016, 96, 622-630.	5.4	84
43	From Soybean residue to advanced supercapacitors. Scientific Reports, 2015, 5, 16618.	1.6	134
44	Hierarchical Microporous/Mesoporous Carbon Nanosheets for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2015, 7, 4344-4353.	4.0	220
45	Superior Capacitive Performance of Hydrocharâ€Based Porous Carbons in Aqueous Electrolytes. ChemSusChem, 2015, 8, 1049-1057.	3.6	65
46	Biomassâ€Derived Carbon Quantum Dot Sensitizers for Solidâ€State Nanostructured Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 4463-4468.	7.2	315
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.	5.4	98
48	Mesoporous carbons synthesized by direct carbonization of citrate salts for use as high-performance capacitors. Carbon, 2015, 88, 239-251.	5.4	113
49	N-doped microporous carbon microspheres for high volumetric performance supercapacitors. Electrochimica Acta, 2015, 168, 320-329.	2.6	66
50	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.	4.0	119
51	N-doped porous carbon capsules with tunable porosity for high-performance supercapacitors. Journal of Materials Chemistry A, 2015, 3, 2914-2923.	5.2	214
52	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.	1.8	28
53	Energy storage applications of activated carbons: supercapacitors and hydrogen storage. Energy and Environmental Science, 2014, 7, 1250-1280.	15.6	1,229
54	One-pot synthesis of microporous carbons highly enriched in nitrogen and their electrochemical performance. Journal of Materials Chemistry A, 2014, 2, 14439-14448.	5.2	74

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55	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.	3.2	111
56	Supercapacitive Behavior of Two Glucoseâ€Derived Microporous Carbons: Direct Pyrolysis versus Hydrothermal Carbonization. ChemElectroChem, 2014, 1, 2138-2145.	1.7	59
57	Direct Synthesis of Highly Porous Interconnected Carbon Nanosheets and Their Application as High-Performance Supercapacitors. ACS Nano, 2014, 8, 5069-5078.	7.3	654
58	Hydrothermal synthesis of microalgae-derived microporous carbons for electrochemical capacitors. Journal of Power Sources, 2014, 267, 26-32.	4.0	158
59	Carboxyl-functionalized mesoporous silicaâ€“carbon composites as highly efficient adsorbents in liquid phase. Microporous and Mesoporous Materials, 2013, 176, 78-85.	2.2	33
60	A general and facile synthesis strategy towards highly porous carbons: carbonization of organic salts. Journal of Materials Chemistry A, 2013, 1, 13738.	5.2	147
61	Fabrication of porous carbon monoliths with a graphitic framework. Carbon, 2013, 56, 155-166.	5.4	141
62	Functionalization of mesostructured silicaâ€“carbon composites. Materials Chemistry and Physics, 2013, 139, 281-289.	2.0	28
63	Polypyrrole-derived mesoporous nitrogen-doped carbons with intrinsic catalytic activity in the oxygen reduction reaction. RSC Advances, 2013, 3, 9904.	1.7	83
64	Hydrothermal Carbons from Hemicelluloseâ€Derived Aqueous Hydrolysis Products as Electrode Materials for Supercapacitors. ChemSusChem, 2013, 6, 374-382.	3.6	169
65	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.	15.6	309
66	Assessment of the Role of Micropore Size and N-Doping in CO₂ Capture by Porous Carbons. ACS Applied Materials & Interfaces, 2013, 5, 6360-6368.	4.0	324
67	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.	1.5	2
68	Black perspectives for a green future: hydrothermal carbons for environment protection and energy storage. Energy and Environmental Science, 2012, 5, 6796.	15.6	758
69	High-performance CO2 sorbents from algae. RSC Advances, 2012, 2, 12792.	1.7	227
70	Sulfonated mesoporous silicaâ€“carbon composites and their use as solid acid catalysts. Applied Surface Science, 2012, 261, 574-583.	3.1	76
71	One-step synthesis of silica@resorcinolâ€“formaldehyde spheres and their application for the fabrication of polymer and carbon capsules. Chemical Communications, 2012, 48, 6124.	2.2	203
72	Renewable Nitrogenâ€Doped Hydrothermal Carbons Derived from Microalgae. ChemSusChem, 2012, 5, 1834-1840.	3.6	135

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73	CO2 adsorption by activated templated carbons. Journal of Colloid and Interface Science, 2012, 366, 147-154.	5.0	194
74	Highly porous S-doped carbons. Microporous and Mesoporous Materials, 2012, 158, 318-323.	2.2	75
75	Polypyrroleâ€Derived Activated Carbons for Highâ€Performance Electrical Doubleâ€Layer Capacitors with Ionic Liquid Electrolyte. Advanced Functional Materials, 2012, 22, 827-834.	7.8	396
76	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.	1.3	24
77	Enhanced Protection of Carbon-Encapsulated Magnetic Nickel Nanoparticles through a Sucrose-Based Synthetic Strategy. Journal of Physical Chemistry C, 2011, 115, 5294-5300.	1.5	34
78	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
79	Ultrahigh surface area polypyrrole-based carbons with superior performance for hydrogen storage. Energy and Environmental Science, 2011, 4, 2930.	15.6	155
80	Sustainable porous carbons with a superior performance for CO2 capture. Energy and Environmental Science, 2011, 4, 1765.	15.6	892
81	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.	2.8	9
82	High density hydrogen storage in superactivated carbons from hydrothermally carbonized renewable organic materials. Energy and Environmental Science, 2011, 4, 1400.	15.6	411
83	Preparation and hydrogen storage capacity of highly porous activated carbon materials derived from polythiophene. International Journal of Hydrogen Energy, 2011, 36, 15658-15663.	3.8	103
84	Hydrothermal Carbonization of Abundant Renewable Natural Organic Chemicals for High-Performance Supercapacitor Electrodes. Advanced Energy Materials, 2011, , n/a-n/a.	10.2	0
85	Nâ€Doped Polypyrroleâ€Based Porous Carbons for CO₂ Capture. Advanced Functional Materials, 2011, 21, 2781-2787.	7.8	840
86	Hydrothermal Carbonization of Abundant Renewable Natural Organic Chemicals for Highâ€Performance Supercapacitor Electrodes. Advanced Energy Materials, 2011, 1, 356-361.	10.2	538
87	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.	2.9	341
88	Graphitic carbon nanostructures from cellulose. Chemical Physics Letters, 2010, 490, 63-68.	1.2	136
89	Silica@Carbon mesoporous nanorattle structures synthesised by means of a selective etching strategy. Materials Letters, 2010, 64, 1587-1590.	1.3	11
90	Synthesis of Carbonâ€based Solid Acid Microspheres and Their Application to the Production of Biodiesel. ChemSusChem, 2010, 3, 1352-1354.	3.6	71

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91	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.	5.0	46
92	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.	1.0	10
93	Mesostructured silicaâ€"carbon composites synthesized by employing surfactants as carbon source. Microporous and Mesoporous Materials, 2010, 134, 165-174.	2.2	38
94	Chemical and structural properties of carbonaceous products obtained by pyrolysis and hydrothermal carbonisation of corn stover. Soil Research, 2010, 48, 618.	0.6	332
95	Enhancement of Hydrogen Storage Capacity of Zeolite-Templated Carbons by Chemical Activation. Journal of Physical Chemistry C, 2010, 114, 11314-11319.	1.5	68
96	Synthesis of Uniform Mesoporous Carbon Capsules by Carbonization of Organosilica Nanospheres. Chemistry of Materials, 2010, 22, 2526-2533.	3.2	84
97	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, .	1.1	34
98	Superactivated carbide-derived carbons with high hydrogenstorage capacity. Energy and Environmental Science, 2010, 3, 223-227.	15.6	102
99	Easy synthesis of graphitic carbon nanocoils from saccharides. Materials Chemistry and Physics, 2009, 113, 208-214.	2.0	46
100	Chemical and Structural Properties of Carbonaceous Products Obtained by Hydrothermal Carbonization of Saccharides. Chemistry - A European Journal, 2009, 15, 4195-4203.	1.7	1,193
101	Highly dispersed platinum nanoparticles on carbon nanocoils and their electrocatalytic performance for fuel cell reactions. Electrochimica Acta, 2009, 54, 2234-2238.	2.6	78
102	Fabrication of mesoporous SiO2â€"Câ€"Fe3O4/Î³â€"Fe2O3 and SiO2â€"Câ€"Fe magnetic composites. Journal of Colloid and Interface Science, 2009, 340, 230-236.	5.0	24
103	The production of carbon materials by hydrothermal carbonization of cellulose. Carbon, 2009, 47, 2281-2289.	5.4	1,550
104	Magnetically separable bimodal mesoporous carbons with a large capacity for the immobilization of biomolecules. Carbon, 2009, 47, 2519-2527.	5.4	33
105	Nickel nanoparticles deposited into an activated porous carbon: synthesis, microstructure and magnetic properties. Physica Status Solidi - Rapid Research Letters, 2009, 3, 4-6.	1.2	21
106	Preparation, Characterization, and Enzyme Immobilization Capacities of Superparamagnetic Silica/Iron Oxide Nanocomposites with Mesostructured Porosity. Chemistry of Materials, 2009, 21, 1806-1814.	3.2	67
107	Signatures of Clustering in Superparamagnetic Colloidal Nanocomposites of an Inorganic and Hybrid Nature. Small, 2008, 4, 254-261.	5.2	30
108	Direct synthesis of graphitic carbon nanostructures from saccharides and their use as electrocatalytic supports. Carbon, 2008, 46, 931-939.	5.4	83

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109	Control of the structural properties of mesoporous polymers synthesized using porous silica materials as templates. Microporous and Mesoporous Materials, 2008, 112, 319-326.	2.2	20
110	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.	1.3	67
111	Exchange-bias and superparamagnetic behaviour of Fe nanoparticles embedded in a porous carbon matrix. Journal of Non-Crystalline Solids, 2008, 354, 5219-5221.	1.5	13
112	Fabrication of Monodisperse Mesoporous Carbon Capsules Decorated with Ferrite Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 3648-3654.	1.5	60
113	Synthesis of Graphitic Carbon Nanostructures from Sawdust and Their Application as Electrocatalyst Supports. Journal of Physical Chemistry C, 2007, 111, 9749-9756.	1.5	147
114	Synthesis of Highly Uniform Mesoporous Sub-Micrometric Capsules of Silicon Oxycarbide and Silica. Chemistry of Materials, 2007, 19, 3096-3098.	3.2	50
115	Synthetic Route to Nanocomposites Made Up of Inorganic Nanoparticles Confined within a Hollow Mesoporous Carbon Shell. Chemistry of Materials, 2007, 19, 5418-5423.	3.2	97
116	Templated Synthesis of Mesoporous Superparamagnetic Polymers. Advanced Functional Materials, 2007, 17, 2321-2327.	7.8	21
117	Saccharide-based graphitic carbon nanocoils as supports for PtRu nanoparticles for methanol electrooxidation. Journal of Power Sources, 2007, 171, 546-551.	4.0	71
118	Encapsulation of nanosized catalysts in the hollow core of a mesoporous carbon capsule. Journal of Catalysis, 2007, 251, 239-243.	3.1	70
119	Performance of templated mesoporous carbons in supercapacitors. Electrochimica Acta, 2007, 52, 3207-3215.	2.6	116
120	Catalytic graphitization of templated mesoporous carbons. Carbon, 2006, 44, 468-474.	5.4	422
121	Synthesis of magnetically separable adsorbents through the incorporation of protected nickel nanoparticles in an activated carbon. Carbon, 2006, 44, 1954-1957.	5.4	57
122	On the electrical double-layer capacitance of mesoporous templated carbons. Carbon, 2005, 43, 3012-3015.	5.4	45
123	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.	2.2	37
124	Monodisperse Porous Carbon Nanospheres with Ultraâ€High Surface Area for Energy Storage in Electrochemical Capacitors. Batteries and Supercaps, 0, , .	2.4	2