Carbon properties and their role in supercapacitors

DOI: 10.1016/j.jpowsour.2006.02.065
Journal of Power Sources, 2006, 157, 11-27.

#	Paper	IF	Citations
2318	Design of Hierarchically Porous Carbons with Interlinked Hydrophilic and Hydrophobic Surface and Their Capacitive Behavior.		
2317	Analytical Interfacial Layer Model for the Capacitance and Electrokinetics of Charged Aqueous Interfaces.		
2316	Mesoporous Carbon Materials as Electrodes for Electrochemical Double-Layer Capacitor. **2006**, 973, 1		2
2315	Novel Nanoporous Carbon Derived from Coal Tar Pitch/polyethylene Glycol Diacid Blends as Electrodes for Ultracapacitors. **2006**, 973, 1		
2314	Effect of activated carbon and electrolyte on properties of supercapacitor. **2007**, 17, 1328-1333		29
2313	Electric double layer capacitor with low series resistance fabricated by carbon nanotube addition. **2007**, 16, 1154-1158		36
2312	Nanowindow-regulated specific capacitance of supercapacitor electrodes of single-wall carbon nanohorns. **2007**, 129, 20-1		275
2311	High Electroactivity of Polyaniline in Supercapacitors by Using a Hierarchically Porous Carbon Monolith as a Support. **2007**, 17, 3083-3087		389
2310	Self-Sustained Thin Webs Consisting of Porous Carbon Nanofibers for Supercapacitors via the Electrospinning of Polyacrylonitrile Solutions Containing Zinc Chloride. **2007**, 19, 2341-2346		352
2309	Correlation between capacitances of porous carbons in acidic and aprotic EDLC electrolytes. **2007**, 9, 1242-1246		88
2308	R&D considerations for the performance and application of electrochemical capacitors. **2007**, 53, 1083-1091		782
2307	Capacitance response of carbons in solvent-free ionic liquid electrolytes. **2007**, 9, 1567-1572		110
2306	Nickel hydroxide/activated carbon composite electrodes for electrochemical capacitors. *Journal of Power Sources*, **2007**, 164, 425-429	8.9	97
2305	Frequency, thermal and voltage supercapacitor characterization and modeling. *Journal of Power Sources*, **2007**, 165, 928-934	8.9	281
2304	Strategies for high-performance supercapacitors for HEV. *Journal of Power Sources*, **2007**, 174, 89-93	8.9	90
2303	Electrode materials for ionic liquid-based supercapacitors. *Journal of Power Sources*, **2007**, 174, 648-652	8.9	60
2302	Solid state double layer capacitor based on a polyether polymer electrolyte blend and nanostructured carbon black electrode composites. *Journal of Power Sources*, **2008**, 177, 652-659	8.9	30

2301	Hydrogen in thin Pd-based layers deposited on reticulated vitreous carbon. A new system for electrochemical capacitors. *Journal of Power Sources*, **2008**, 185, 1598-1604	8.9	26
2300	Morphological reason for enhancement of electrochemical double layer capacitances of various acetylene blacks by electrochemical polarization. **2008**, 53, 5789-5795		9
2299	Quantitative limitation of active site and characteristics of chemical oxidized well-aligned carbon nanotubes. **2008**, 516, 5236-5240		5
2298	Effect of ball-milling technology on pore structure and electrochemical properties of activated carbon. **2008**, 12, 372-376		9
2297	A universal model for nanoporous carbon supercapacitors applicable to diverse pore regimes, carbon materials, and electrolytes. **2008**, 14, 6614-26		465
2296	3D aperiodic hierarchical porous graphitic carbon material for high-rate electrochemical capacitive energy storage. **2008**, 47, 373-6		1604
2295	Theoretical model for nanoporous carbon supercapacitors. **2008**, 47, 520-4		475
2294	Direct Growth of Flexible Carbon Nanotube Electrodes. **2008**, 20, 566-570		153
2293	3D Aperiodic Hierarchical Porous Graphitic Carbon Material for High-Rate Electrochemical Capacitive Energy Storage. **2008**, 120, 379-382		441
2292	Theoretical Model for Nanoporous Carbon Supercapacitors. **2008**, 120, 530-534		57
2291	High voltage, asymmetric EDLCs based on xerogel carbon and hydrophobic IL electrolytes. *Journal of Power Sources*, **2008**, 178, 490-496	8.9	97
2290	Electropolymerization of high stable poly(3,4-ethylenedioxythiophene) in ionic liquids and its potential applications in electrochemical capacitor. *Journal of Power Sources*, **2008**, 179, 858-862	8.9	127
2289	Electrochemical capacitor performance of N-doped mesoporous carbons prepared by ammoxidation. *Journal of Power Sources*, **2008**, 180, 671-675	8.9	168
2288	Anthraquinone modified carbon fabric supercapacitors with improved energy and power densities. *Journal of Power Sources*, **2008**, 181, 182-185	8.9	114
2287	Electrochemical and capacitive properties of thin-layer carbon black electrodes. *Journal of Power Sources*, **2008**, 181, 186-192	8.9	37
2286	Improvement in electrochemical capacitance of carbon materials by nitric acid treatment. *Journal of Power Sources*, **2008**, 184, 668-674	8.9	51
2285	Safe, high-energy supercapacitors based on solvent-free ionic liquid electrolytes. *Journal of Power Sources*, **2008**, 185, 1575-1579	8.9	213
2284	Cationic starch as a precursor to prepare porous activated carbon for application in supercapacitor electrodes. **2008**, 69, 2420-2425		29

2283	Camphoric carbon nanobeads □A new electrode material for supercapacitors. **2008**, 10, 977-979	13
2282	Improvement of the structural and chemical properties of a commercial activated carbon for its application in electrochemical capacitors. **2008**, 53, 2210-2216	204
2281	EDLC performance of carbide-derived carbons in aprotic and acidic electrolytes. **2008**, 53, 7111-7116	66
2280	Enhanced life-cycle supercapacitors by thermal treatment of mesophase-derived activated carbons. **2008**, 54, 305-310	49
2279	Nanoemulsion drug delivery by ketene based polyester synthesized using electron rich carbon/silica composite surface. **2008**, 65, 292-9	7
2278	Surface functional groups of carbons and the effects of their chemical character, density and accessibility to ions on electrochemical performance. **2008**, 46, 1475-1488	651
2277	Preparation of monodisperse carbon nanospheres for electrochemical capacitors. **2008**, 10, 1067-1070	105
2276	Nanoporous carbon electrode from waste coffee beans for high performance supercapacitors. **2008**, 10, 1594-1597	373
2275	Improved capacitance characteristics during electrochemical charging of carbon nanotubes modified with polyoxometallate monolayers. **2008**, 53, 3862-3869	66
2274	Electrochemical characterizations of carbon nanomaterials by the cavity microelectrode technique. **2008**, 53, 7675-7680	104
2273	Competitive effect of KOH activation on the electrochemical performances of carbon nanotubes for EDLC: Balance between porosity and conductivity. **2008**, 53, 7730-7735	112
2272	Mesoporous carbon□manganese oxide composite as negative electrode material for supercapacitors. **2008**, 110, 167-176	54
2271	Comparison between changes of ultracapacitors model parameters during calendar life and power cycling ageing tests. **2008**, 48, 1473-1478	30
2270	Graphene-based ultracapacitors. **2008**, 8, 3498-502	6815
2269	Synthesis and Electrochemical Property of Boron-Doped Mesoporous Carbon in Supercapacitor. **2008**, 20, 7195-7200	451
2268	5,5□Bis(methylthio)-2,2□bithiophene: A Potential Cathode Electroactive Material for Energy Storage Devices. **2008**, 112, 3989-3997	32
2267	Materials for electrochemical capacitors. **2008**, 7, 845-54	12536
2266	Easy synthesis of ordered meso/macroporous carbon monolith for use as electrode in electrochemical capacitors. **2008**, 62, 548-551	45

2265	Batteries and electrochemical capacitors. **2008**, 61, 43-47	157
2264	Recent Advances in Adsorption Processes for Environmental Protection and Security. **2008**,	6
2263	Direct synthesis of porous carbon nanotubes and its performance as conducting material of supercapacitor electrode. **2008**, 17, 993-998	20
2262	Relation between the ion size and pore size for an electric double-layer capacitor. **2008**, 130, 2730-1	1755
2261	Concept for Charge Storage in Electrochemical Capacitors with Functionalized Carbon Electrodes. **2008**, 11, A202	22
2260	Ultracapacitors self discharge modelling using a physical description of porous electrode impedance. **2008**,	9
2259	The Study of Electric Field of High-Power Supercapacitors. **2008**,	
2258	Poly(3,4-ethylenedioxythiophene) nanotubes as electrode materials for a high-powered supercapacitor. **2008**, 19, 215710	184
2257	Graphitic Carbon Nanofibers Synthesized by the Chemical Vapor Deposition (CVD) Method and Their Electrochemical Performances in Supercapacitors. **2008**, 22, 4139-4145	42
2256	Cation Trapping in Highly Porous Carbon Electrodes for EDLC Cells. **2008**, 155, A745	57
2255	Energy Options for Wireless Sensor Nodes. **2008**, 8, 8037-8066	126
2254	Developing of Carbon Based Materials Wettability as Supercapacitors Electrodes. **2009**,	
2253	Degradation Responses of Activated-Carbon-Based EDLCs for Higher Voltage Operation and Their Factors. **2009**, 156, A563	126
2252	Characterization of electrical conductivity in a zeolitelike material. **2009**, 95, 152112	13
2251	Pseudocapacitive Behavior of Carbon Nanoparticles Modified by Phosphomolybdic Acid. **2009**, 156, A921	47
2250	Photoluminescence and electron paramagnetic resonance studies of springlike carbon nanofibers. **2009**, 95, 073115	16
2249	HIERARCHICAL POROUS MATERIALS: CAPILLARIES IN NANOPOROUS CARBON. **2009**, 02, 135-138	22
2248	Electrical Double-Layer Capacitance of Zeolite-Templated Carbon in Organic Electrolyte. **2009**, 156, A1	95

2247	Cherry stones as precursor of activated carbons for supercapacitors. **2009**, 114, 323-327		157
2246	Preparation and characterization of nanostructured NiO/MnO2 composite electrode for electrochemical supercapacitors. **2009**, 44, 1122-1126		55
2245	Electrochemical characterization of core-shell carbon-encapsulated magnetic nanoparticles. **2009**, 63, 1435-1438		6
2244	Improvement on the Cold Cranking Capacity of Commercial Vehicle by Using Supercapacitor and Lead-Acid Battery Hybrid. **2009**, 58, 1097-1105		29
2243	. **2009**, 58, 3917-3929		90
2242	Investigation of the ion storage/transfer behavior in an electrical double-layer capacitor by using ordered microporous carbons as model materials. **2009**, 15, 5355-63		133
2241	Influence of the OMCs pore structures on the capacitive performances of supercapacitor. **2009**, 4, 654-659		7
2240	Analysis of the dynamic behavior changes of supercapacitors during calendar life test under several voltages and temperatures conditions. **2009**, 49, 1391-1397		12
2239	Electron rich porous carbon/silica matrix from rice husk and its characterization. **2009**, 16, 239-245		15
2238	Electrochemical behavior of wound supercapacitors with propylene carbonate and acetonitrile based nonaqueous electrolytes. **2009**, 16, 247-252		10
2237	Polymeric nanomaterials as electrolyte and electrodes in supercapacitors. **2009**, 2, 733-739		27
2236	Enhanced electrical capacitance of porous carbons by nitrogen enrichment and control of the pore structure. **2009**, 118, 28-34		70
2235	Manganese oxide□arbon composite as supercapacitor electrode materials. **2009**, 123, 260-267		139
2234	Double-layer capacitance of waste coffee ground activated carbons in an organic electrolyte. **2009**, 11, 974-977		123
2233	Voltammetric quantification of the spontaneous chemical modification of carbon black by diazonium coupling. **2009**, 54, 2305-2311		40
2232	LiPF6 based ethylene carbonate□imethyl carbonate electrolyte for high power density electrical double layer capacitor. **2009**, 54, 4587-4594		55
2231	Progress of electrochemical capacitor electrode materials: A review. **2009**, 34, 4889-4899		1107
2230	Boron and nitrogen co-doped porous carbon and its enhanced properties as supercapacitor. *Journal of Power Sources*, **2009**, 186, 551-556	8.9	305

2229	Wide-temperature range operation supercapacitors from nanostructured activated carbon fabric. *Journal of Power Sources*, **2009**, 193, 944-949	8.9	132
2228	Carbon nanosheets as the electrode material in supercapacitors. *Journal of Power Sources*, **2009**, 194, 1208-1212	8.9	150
2227	Nanotechnology for sustainable energy. **2009**, 13, 2373-2384		387
2226	Specific capacitance of electrochemical capacitor using RuO2 loading arc-soot/activated carbon composite electrode. **2009**, 146, 434-438		20
2225	Preparation of high surface area activated carbon from corn by chemical activation using potassium hydroxide. **2009**, 87, 1059-1064		72
2224	An activated carbon with high capacitance from carbonization of a resorcinolformaldehyde resin. **2009**, 11, 715-718		106
2223	Multiwall carbon nanotube supported poly(3,4-ethylenedioxythiophene)/manganese oxide nano-composite electrode for super-capacitors. **2009**, 54, 7148-7155		122
2222	Effects of oxidation and heat treatment of acetylene blacks on their electrochemical double layer capacitances. **2009**, 47, 226-233		12
2221	Effect of surface phosphorus functionalities of activated carbons containing oxygen and nitrogen on electrochemical capacitance. **2009**, 47, 1576-1584		107
2220	Effect of mesoporosity on specific capacitance of carbons. **2009**, 47, 1598-1604		59
2219	Role of functional groups on the microwave attenuation and electric resistivity of activated carbon fiber cloth. **2009**, 47, 1814-1823		69
2218	Functionalization of glassy carbon spheres by ball milling of aryl diazonium salts. **2009**, 47, 2186-2193		35
2217	High performance of nanoporous carbon in cryogenic hydrogen storage and electrochemical capacitance. **2009**, 47, 2259-2268		70
2216	Enhancement mechanism of electrochemical capacitance in nitrogen-/boron-doped carbons with uniform straight nanochannels. **2009**, 25, 11961-8		177
2215	Voltammetry and redox charge storage capacity of ferrocene-functionalized silica nanoparticles. **2009**, 25, 10370-5		29
2214	Supercapacitor Devices Based on Graphene Materials. **2009**, 113, 13103-13107		2018
2213	High specific capacitance conducting polymer supercapacitor electrodes based on poly(tris(thiophenylphenyl)amine). **2009**, 19, 6977		135
2212	Empirical Analysis of the Contributions of Mesopores and Micropores to the Double-Layer Capacitance of Carbons. **2009**, 113, 19335-19343		58

2211	Nanostructured MnO2/exfoliated graphite composite electrode as supercapacitors. **2009**, 487, 564-567	32
2210	Highly conductive paper for energy-storage devices. **2009**, 106, 21490-4	1048
2209	Carbon-based materials as supercapacitor electrodes. **2009**, 38, 2520-31	5357
2208	Highly stable performance of supercapacitors from phosphorus-enriched carbons. **2009**, 131, 5026-7	514
2207	Carbon nanotube arrays and their composites for electrochemical capacitors and lithium-ion batteries. **2009**, 2, 932	224
2206	Ageing assessment of supercapacitors during calendar life and power cycling tests. **2009**,	4
2205	Nanoscale design to enable the revolution in renewable energy. **2009**, 2, 559	311
2204	CAPACITORS | Electrochemical Capacitors: Ionic Liquid Electrolytes. **2009**, 649-657	8
2203	Planar MEMS Supercapacitor using Carbon Nanotube Forests. **2009**,	37
2202	Direct Redox Deposition of Manganese Oxide on Multiscaled Carbon Nanotube/Microfiber Carbon Electrode for Electrochemical Capacitor. **2009**, 156, A378	86
2201	Capacitance of KOH activated carbide-derived carbons. **2009**, 11, 4943-5	81
2200	Kinetic model of the electrochemical oxidation of graphitic carbon in acidic environments. **2009**, 11, 11557-67	64
2199	Materials for electrochemical capacitors. **2009**, 320-329	136
2198	Materials for electrochemical capacitors. **2010**, 138-147	12
2197	Carbon nanotube thin films: fabrication, properties, and applications. **2010**, 110, 5790-844	786
2196	Graphene/Polyaniline Nanofiber Composites as Supercapacitor Electrodes. **2010**, 22, 1392-1401	1884
2195	A Computational Study of the Behavior of the Ionic Liquid [BMIM+][PF6]Confined Inside Multiwalled Carbon Nanotubes. **2010**, 114, 15478-15485	85
2194	Cellulose composites prepared using ionic liquids (ILs) - Blood Compatibility to Batteries. **2010**, 133-152	5

2193	Graphene-based materials as supercapacitor electrodes. **2010**, 20, 5983		1171
2192	A comparison of the aging of electrochemical double layer capacitors with acetonitrile and propylene carbonate-based electrolytes at elevated voltages. **2010**, 55, 2352-2357		131
2191	Modelling the effects of charge redistribution during self-discharge of supercapacitors. **2010**, 55, 7516-7523		159
2190	Rate capability of graphite materials as negative electrodes in lithium-ion capacitors. **2010**, 55, 3330-3335		222
2189	Highly mesoporous carbonaceous material of activated carbon beads for electric double layer capacitor. **2010**, 55, 7334-7340		42
2188	Preparation and electrochemical properties of mesoporous Co3O4 crater-like microspheres as supercapacitor electrode materials. **2010**, 10, 1422-1426		96
2187	Performance of carbon–carbon supercapacitors based on organic, aqueous and ionic liquid electrolytes. *Journal of Power Sources*, **2010**, 195, 5814-5819	8.9	291
2186	Preparation of porous doped carbons and the high performance in electrochemical capacitors. **2010**, 131, 89-96		77
2185	Bioinspired peptide nanotubes: Deposition technology and physical properties. **2010**, 169, 62-66		19
2184	Ru oxide/carbon fabric composites for supercapacitors. **2010**, 14, 231-240		18
2183	Electrodeposited platinum catalysts over hierarchical carbon monolithic support. **2010**, 40, 257-263		28
2182	Bioinspired peptide nanotubes as supercapacitor electrodes. **2010**, 45, 6374-6378		49
2181	Effect of chemical modification of graphite nanoplatelets on electrochemical performance of MnO2 electrodes. **2010**, 21, 619-624		7
2180	Electrochemical capacitors of flower-like and nanowire structured MnO2 by a sonochemical method. **2010**, 123, 331-336		44
2179	Porous carbons prepared from deoiled asphalt and their electrochemical properties for supercapacitors. **2010**, 64, 1868-1870		34
2178	Recent Advances in Understanding the Capacitive Storage in Microporous Carbons. **2010**, 10, 819-824		31
2177	Mesoporous Carbon Design for Ionic Liquid-Based, Double-Layer Supercapacitors. **2010**, 10, 840-847		57
2176	The Influence of Conductive Additives and Inter-Particle Voids in Carbon EDLC Electrodes. **2010**, 10, 856-864		45

2175	Pseudocapacitance Effects for Enhancement of Capacitor Performance. **2010**, 10, 848-855		25
2174	Nanohybrid Capacitor: The Next Generation Electrochemical Capacitors. **2010**, 10, 825-833		213
2173	Nanostructured carbon and carbon nanocomposites for electrochemical energy storage applications. **2010**, 3, 136-68		563
2172	Differentiation of bulk and surface contribution to supercapacitance in amorphous and crystalline NiO. **2010**, 3, 1367-70		41
2171	Effect of the Ionic Conductivity on the Performance of Polyelectrolyte-Based Supercapacitors. **2010**, 20, 4344-4350		66
2170	Nitrogen-containing hydrothermal carbons with superior performance in supercapacitors. **2010**, 22, 5202-6		789
2169	Designed smart system of the sandwiched and concentric architecture of RuO2/C/RuO2 for high performance in electrochemical energy storage. **2010**, 16, 3598-603		54
2168	Contribution of calendar ageing modes in the performances degradation of supercapacitors during power cycling. **2010**, 50, 1796-1803		23
2167	Electrochemical cell studies based on non-aqueous magnesium electrolyte for electric double layer capacitor applications. *Journal of Power Sources*, **2010**, 195, 662-666	8.9	21
2166	Microstructure and electrochemical double-layer capacitance of carbon electrodes prepared by zinc chloride activation of sugar cane bagasse. *Journal of Power Sources*, **2010**, 195, 912-918	8.9	396
2165	Elaboration of a microstructured inkjet-printed carbon electrochemical capacitor. *Journal of Power Sources*, **2010**, 195, 1266-1269	8.9	375
2164	Electrophoretic deposition of graphene nanosheets on nickel foams for electrochemical capacitors. *Journal of Power Sources*, **2010**, 195, 3031-3035	8.9	222
2163	Asymmetric capacitor based on superior porous NiZnCo oxide/hydroxide and carbon electrodes. *Journal of Power Sources*, **2010**, 195, 3017-3024	8.9	111
2162	Poly(ethylene terephthalate)-based carbons as electrode material in supercapacitors. *Journal of Power Sources*, **2010**, 195, 3810-3813	8.9	21
2161	High-rate nano-crystalline Li4Ti5O12 attached on carbon nano-fibers for hybrid supercapacitors. *Journal of Power Sources*, **2010**, 195, 6250-6254	8.9	255
2160	Evaluation on carbon nanocapsules for supercapacitors using a titanium cavity electrode. *Journal of Power Sources*, **2010**, 195, 5122-5129	8.9	13
2159	Effects of carbonization temperature on microstructure and electrochemical performances of phenolic resin-based carbon spheres. **2010**, 71, 214-218		23
2158	Nitrogen-enriched bituminous coal-based active carbons as materials for supercapacitors. **2010**, 89, 3457-3467		51

2157	Oxidation of activated carbon by dry and wet methods. **2010**, 91, 1768-1775	146
2156	Activated carbon prepared from PVDC by NaOH activation as electrode materials for high performance EDLCs with non-aqueous electrolyte. **2010**, 35, 632-637	47
2155	Preparation of mesophase-pitch-based activated carbons for electric double layer capacitors with high energy density. **2010**, 130, 224-228	42
2154	Polyfluorinated boron cluster [B12F11H]2− based electrolytes for supercapacitors: Overcharge protection. **2010**, 12, 636-639	15
2153	A high-performance carbon derived from polyaniline for supercapacitors. **2010**, 12, 1279-1282	83
2152	Graphene nanosheets as electrode material for electric double-layer capacitors. **2010**, 55, 4812-4819	297
2151	Preparation and electrochemical performance of polyaniline-based carbon nanotubes as electrode material for supercapacitor. **2010**, 55, 7021-7027	221
2150	Rapid microwave-assisted synthesis of graphene nanosheet/Co3O4 composite for supercapacitors. **2010**, 55, 6973-6978	423
2149	Effect of pyrolysis temperature on the microstructure of disordered carbon nanowires. **2010**, 519, 91-95	8
2148	Facile synthesis of activated carbon/carbon nanotubes compound for supercapacitor application. **2010**, 156, 500-504	53
2147	Preparation and characterization of metal-doped carbon aerogel for supercapacitor. **2010**, 10, 947-951	46
2146	Physical, electrochemical and supercapacitive properties of activated carbon pellets from pre-carbonized rubber wood sawdust by CO2 activation. **2010**, 10, 1071-1075	63
2145	Bimodal, templated mesoporous carbons for capacitor applications. **2010**, 48, 1056-1063	51
2144	Electrochemical properties of graphene nanosheet/carbon black composites as electrodes for supercapacitors. **2010**, 48, 1731-1737	478
2143	A dilatometric and small-angle X-ray scattering study of the electrochemical activation of mesophase pitch-derived carbon in non-aqueous electrolyte solution. **2010**, 48, 1880-1888	40
2142	A review of the control of pore structure in MgO-templated nanoporous carbons. **2010**, 48, 2690-2707	210
2141	The effects of fullerene (C60) crystal structure on its electrochemical capacitance. **2010**, 48, 3676-3681	12
2140	Porous carbons prepared by using metal–organic framework as the precursor for supercapacitors. **2010**, 48, 3599-3606	302

2139	Structural and electrochemical modification of graphitic carbons by vapor-phase iodine-incorporation. **2010**, 48, 4178-4189	13
2138	A carbon in molten carbonate anode model for a direct carbon fuel cell. **2010**, 55, 1958-1965	58
2137	Development of new nanocomposite based on nanosized-manganese oxide and carbon nanotubes for high performance electrochemical capacitors. **2010**, 55, 3428-3433	64
2136	Polyfurfuryl alcohol derived activated carbons for high power electrical double layer capacitors. **2010**, 55, 7495-7500	23
2135	Capacitive deionization as an electrochemical means of saving energy and delivering clean water. Comparison to present desalination practices: Will it compete?. **2010**, 55, 3845-3856	680
2134	Carbon aerogels as electrode material for electrical double layer supercapacitors Synthesis and properties. **2010**, 55, 7501-7505	90
2133	Porous polyaniline exhibits highly enhanced electrochemical capacitance performance. **2010**, 55, 5819-5822	70
2132	Surface Modified Ordered Mesoporous Carbon Supports for Electrochemical Applications. **2010**,	
2131	Electrochemical Capacitors: Effect of Activated Carbon Pore Characteristics on the Capacitance Performance of Ionic Liquid Electrolytes. **2010**,	
2130	Effect of diffuse layer and pore shapes in mesoporous carbon supercapacitors. **2010**, 25, 1469-1475	46
2129	Optimum Interparticle Porosity for Charge Storage in a Packed Bed of Nanoporous Particles. **2010**, 157, A469	8
2128	Impact of the ageing of supercapacitors in power cycling on the behaviour of hybrid electric vehicles applications. **2010**,	4
2127	Nanostructured materials for the construction of asymmetrical supercapacitors. **2010**, 224, 479-503	60
2126	Properties of Nitrogen-Functionalized Ordered Mesoporous Carbon Prepared Using Polypyrrole Precursor. **2010**, 157, B1665	110
2125	INFLUENCE OF PORE STRUCTURE ON THE ELECTROCHEMICAL PERFORMANCE OF ACTIVATED CARBON AS ELECTRODE MATERIAL FOR AQUEOUS SUPERCAPACITORS. **2010**, 03, 201-205	3
2124	Bioinspired nanostructural peptide materials for supercapacitor electrodes. **2010**, 25, 1661-1666	27
2123	Modern Theories of Carbon-Based Electrochemical Capacitors: A Short Review. **2010**,	2
2122	Structure and Capacitive Properties of Porous Nanocrystalline VN Prepared by Temperature-Programmed Ammonia Reduction of V2O5. **2010**, 22, 914-921	134

2121	Stepwise nanopore evolution in one-dimensional nanostructures. **2010**, 10, 1409-13	218
2120	Ultrathin, transparent, and flexible graphene films for supercapacitor application. **2010**, 96, 253105	316
2119	Batteries and charge storage devices based on electronically conducting polymers. **2010**, 25, 1561-1574	89
2118	Supercapacitors Based on Metal Electrodes Prepared from Nanoparticle Mixtures at Room Temperature. **2010**, 1, 1428-1431	45
2117	Electrochemical Energy Storage: The Benefits of Nanomaterials. 155-176	
2116	Supergrowth of Aligned Carbon Nanotubes Directly on Carbon Papers and Their Properties as Supercapacitors. **2010**, 114, 15223-15227	64
2115	Carbon nanotube/manganese oxide ultrathin film electrodes for electrochemical capacitors. **2010**, 4, 3889-96	632
2114	Molecular insights into the potential and temperature dependences of the differential capacitance of a room-temperature ionic liquid at graphite electrodes. **2010**, 132, 14825-33	261
2113	Integration of Carbon Nanotubes to C-MEMS for On-chip Supercapacitors. **2010**, 9, 734-740	55
2112	A detailed view on the polycondensation of ionic liquid monomers towards nitrogen doped carbon materials. **2010**, 20, 6746	222
2111	Activated Carbon Fiber for Super-Capacitor Electrode. **2010**, 97-101, 510-513	4
2110	Growth of Polyaniline on Hollow Carbon Spheres for Enhancing Electrocapacitance. **2010**, 114, 19867-19874	187
2109	Atomistic Insight on the Charging Energetics in Subnanometer Pore Supercapacitors. **2010**, 114, 18012-18016	48
2108	Facile and controllable electrochemical reduction of graphene oxide and its applications. **2010**, 20, 743-748	702
2107	Exposed Edge Planes of Cup-Stacked Carbon Nanotubes for an Electrochemical Capacitor. **2010**, 1, 2099-2103	31
2106	Effects of a block copolymer as multifunctional fillers on ionic conductivity, mechanical properties, and dimensional stability of solid polymer electrolytes. **2010**, 114, 13637-43	20
2105	Ion Transport Behavior in Triblock Copolymer-Templated Ordered Mesoporous Carbons with Different Pore Symmetries. **2010**, 114, 18745-18751	50
2104	Nanopores Activated Carbon Rice Husk. **2010**,	3

2103	Study of the Synthesis Conditions of Carbon Nanocoils for Energetic Applications **2010**, 24, 3361-3365	23
2102	Curvature effects in carbon nanomaterials: Exohedral versus endohedral supercapacitors. **2010**, 25, 1525-1531	121
2101	Energy storage in electrochemical capacitors: designing functional materials to improve performance. **2010**, 3, 1238	914
2100	Synthesis and electrochemical properties of electrospun V2O5 nanofibers as supercapacitor electrodes. **2010**, 20, 6720	255
2099	Conducting Polyaniline Nanowire Arrays for High Performance Supercapacitors. **2010**, 114, 8062-8067	442
2098	Fabrication and characterization of flexible and high capacitance supercapacitors based on MnO2/CNT/papers. **2010**, 160, 2510-2514	81
2097	Characterization of graphene-based supercapacitors fabricated on Al foils using Au or Pd thin films as interlayers. **2010**, 160, 2613-2617	26
2096	Charge storage mechanism in nanoporous carbons and its consequence for electrical double layer capacitors. **2010**, 368, 3457-67	199
2095	Nanoporous carbon supercapacitors in an ionic liquid: a computer simulation study. **2010**, 4, 2345-55	237
2094	Efficient Capacitor Materials from Active Carbons Based on Coconut Shell/Melamine Precursors **2010**, 24, 3429-3435	34
2093	Molecular dynamics simulations of atomically flat and nanoporous electrodes with a molten salt electrolyte. **2010**, 12, 170-82	103
2092	Nanostructured carbon electrodes. **2010**, 20, 3553	58
2091	Perfluorosulfonic Acid Based Electrochemical Double-Layer Capacitor. **2010**, 157, A600	9
2090	Carbon microelectrodes with a renewable surface. **2010**, 82, 2020-8	166
2089	Tuning of Capacitance Behavior of NiO Using Anionic, Cationic, and Nonionic Surfactants by Hydrothermal Synthesis. **2010**, 114, 5203-5210	235
2088	Enhancement of Electrochemical Performance of Macroporous Carbon by Surface Coating of Polyaniline. **2010**, 22, 1195-1202	146
2087	Exploring New Routes in the Synthesis of Carbon Xerogels for Their Application in Electric Double-Layer Capacitors. **2010**, 24, 3334-3339	40
2086	Molecular Dynamics Study of Interfacial Confinement Effects of Aqueous NaCl Brines in Nanoporous Carbon **2010**, 114, 20539-20546	40

2085	Structure and dynamics of electrical double layers in organic electrolytes. **2010**, 12, 5468-79	84
2084	Particle Size Effect of Silver Nanoparticles Decorated Single Walled Carbon Nanotube Electrode for Supercapacitors. **2010**, 157, A179	92
2083	The Role of Nanostructure in the Electrochemical Oxidation of Model-Carbon Materials in Acidic Environments. **2010**, 157, B820	36
2082	Hybrid MnO2/disordered mesoporous carbon nanocomposites: synthesis and characterization as electrochemical pseudocapacitor electrodes. **2010**, 20, 390-398	73
2081	Synthesis and characterization of RuO(2)/poly(3,4-ethylenedioxythiophene) composite nanotubes for supercapacitors. **2010**, 12, 4309-16	112
2080	Mesoporous carbon nanospheres with an excellent electrocapacitive performance. **2011**, 21, 2274-2281	153
2079	Continuous carbide-derived carbon films with high volumetric capacitance. **2011**, 4, 135-138	157
2078	High to ultra-high power electrical energy storage. **2011**, 13, 20714-23	109
2077	A divided potential driving self-discharge process for single-walled carbon nanotube based supercapacitors. **2011**, 1, 989	27
2076	Monolithic electrode for electric double-layer capacitors based on macro/meso/microporous S-Containing activated carbon with high surface area. **2011**, 21, 2060	141
2075	Carbon Fabric Supported Manganese and Ruthenium Oxide Thin Films for Supercapacitors. **2011**, 158, A241	18
2074	Electrochemical Evaluation of a Novel Boron Doped Diamond (BDD) Material for Application as Potential Electrochemical Capacitor. **2011**, 44, 2005-2018	5
2073	Alkali Halide Interfacial Behavior in a Sequence of Charged Slit Pores. **2011**, 115, 23610-23619	18
2072	Supercapacitors: Electrode Materials Aspects. **2011**,	3
2071	In Situ CVD Synthesis of Wrinkled Scale-Like Carbon Arrays on ZnO Template and Their Use to Supercapacitors. **2011**, 115, 25155-25159	18
2070	Beta-phased Ni(OH)2 nanowall film with reversible capacitance higher than theoretical Faradic capacitance. **2011**, 47, 9651-3	244
2069	Ilmenite FeTiO3 Nanoflowers and Their Pseudocapacitance. **2011**, 115, 17297-17302	42
2068	Carbon coated textiles for flexible energy storage. **2011**, 4, 5060	438

2067	Supercapacitors Based on 3D Nanostructured Electrodes. **2011**, 477-521	
2066	Direct preparation of 1-PSA modified graphene nanosheets by supercritical fluidic exfoliation and its electrochemical properties. **2011**, 21, 3462-3466	74
2065	Nitrogen-containing microporous carbon nanospheres with improved capacitive properties. **2011**, 4, 717-724	789
2064	Morphology and pore control in carbon materials via templating. **2011**, 1, 1620	70
2063	Vanadium nitride/carbon nanotube nanocomposites as electrodes for supercapacitors. **2011**, 21, 13268	139
2062	Towards organic energy storage: characterization of 2,5-bis(methylthio)thieno[3,2-b]thiophene. **2011**, 21, 9553	22
2061	Graphene-Based Supercapacitors: A Computer Simulation Study. **2011**, 115, 23574-23583	85
2060	Flexible energy storage devices based on graphene paper. **2011**, 4, 1277	497
2059	Hydrothermal carbonization of biomass residuals: a comparative review of the chemistry, processes and applications of wet and dry pyrolysis. **2011**, 2, 71-106	1013
2058	Graphene based new energy materials. **2011**, 4, 1113	1637
2057	Oscillation of capacitance inside nanopores. **2011**, 11, 5373-7	240
2056	Electric Double Layer Capacitance of Graphene-Like Materials Derived from Single-Walled Carbon Nanotubes. **2011**, 50, 01AF07	
2055	Printable photo-supercapacitor using single-walled carbon nanotubes. **2011**, 4, 413-416	167
2054	Design and tailoring of a hierarchical graphene-carbon nanotube architecture for supercapacitors. **2011**, 21, 2374-2380	370
2053	Fast ion transport and high capacitance of polystyrene-based hierarchical porous carbon electrode material for supercapacitors. **2011**, 21, 1970-1976	202
2052	Flexible supercapacitors based on cloth-supported electrodes of conducting polymer nanowire array/SWCNT composites. **2011**, 21, 16373	190
2051	Carboxylic acid functionalized MWNT coated poly(methyl methacrylate) microspheres and their electroresponse. **2011**, 20, 275-278	16
2050	Alkali-treated graphene oxide as a solid base catalyst: synthesis and electrochemical capacitance of graphene/carbon composite aerogels. **2011**, 21, 18537	102

2049	Electrochemistry on Carbon-Nanotube-Modified Surfaces. **2011**, 117-168	
2048	Supercapacitors: Electrode Materials Aspects. **2011**,	2
2047	The role of nanomaterials in redox-based supercapacitors for next generation energy storage devices. **2011**, 3, 839-55	681
2046	Polyaniline-Coated Electro-Etched Carbon Fiber Cloth Electrodes for Supercapacitors. **2011**, 115, 23584-23590	196
2045	Paper supercapacitors by a solvent-free drawing method. **2011**, 4, 3368	263
2044	Functionalized Graphene-Based Nanocomposites for Supercapacitor Application. **2011**, 115, 14006-14013	321
2043	Preventing Graphene Sheets from Restacking for High-Capacitance Performance. **2011**, 115, 23192-23197	310
2042	Preparation and characterization of carbon aerogel microspheres by an inverse emulsion polymerization. **2011**, 357, 793-797	28
2041	Preparation of polyaniline/2-dimensional hexagonal mesoporous carbon composite for supercapacitor. **2011**, 161, 1623-1628	25
2040	Electrochemical characterization of in situ polypyrrole coated graphene nanocomposites. **2011**, 161, 1713-1719	100
2039	Synthesis of nano-scale coated manganese oxide on graphite nanofibers and their high electrochemical performance. **2011**, 161, 1966-1971	5
2038	Hierarchical porous carbons: design, preparation, and performance in energy storage. **2011**, 26, 171-179	86
2037	The effect of carbon particle morphology on the electrochemical properties of nanocarbon/polyaniline composites in supercapacitors. **2011**, 26, 180-186	31
2036	High performance supercapacitors based on highly conductive nitrogen-doped graphene sheets. **2011**, 13, 12554-8	233
2035	Nanostructured carbon-based electrodes: bridging the gap between thin-film lithium-ion batteries and electrochemical capacitors. **2011**, 4, 1972	319
2034	Intercalation of mesoporous carbon spheres between reduced graphene oxide sheets for preparing high-rate supercapacitor electrodes. **2011**, 4, 1866	394
2033	Effects of Pore Size and Pore Loading on the Properties of Ionic Liquids Confined Inside Nanoporous CMK-3 Carbon Materials. **2011**, 115, 3034-3042	55
2032	Heterogeneity in the Dynamics of the Ionic Liquid [BMIM+][PF6]Confined in a Slit Nanopore. **2011**, 115, 16544-16554	74

2031	Ultrathin planar graphene supercapacitors. **2011**, 11, 1423-7		1020
2030	Graphene and carbon nanotube composite electrodes for supercapacitors with ultra-high energy density. **2011**, 13, 17615-24		525
2029	Prospective materials and applications for Li secondary batteries. **2011**, 4, 1986		502
2028	Reversible redox reaction on the oxygen-containing functional groups of an electrochemically modified graphite electrode for the pseudo-capacitance. **2011**, 21, 18753		84
2027	Designing Nanostructured Carbon Xerogels. **2011**,		4
2026	How supercapacitors reach end of life criteria during calendar life and power cycling tests. **2011**, 51, 1976-1979		17
2025	Electrochemical double layer capacitor and lithium-ion capacitor based on carbon black. *Journal of Power Sources*, **2011**, 196, 8836-8842	8.9	137
2024	Self-discharge analysis and characterization of supercapacitors for environmentally powered wireless sensor network applications. *Journal of Power Sources*, **2011**, 196, 8866-8873	8.9	75
2023	A high-performance three-dimensional micro supercapacitor based on self-supporting composite materials. *Journal of Power Sources*, **2011**, 196, 10465-10471	8.9	120
2022	Porous carbon nanospheres derived from chlorination of bis(cyclopentadienyl)titanium dichloride and their electrochemical capacitor performance. **2011**, 130, 243-250		12
2021	Electrochemically dispersed nickel oxide nanoparticles on multi-walled carbon nanotubes. **2011**, 131, 8-11		13
2020	Preparation of activated carbon from sorghum pith and its structural and electrochemical properties. **2011**, 46, 413-419		70
2019	Microwave synthesis and electrochemical characterization of mesoporous carbon@Bi2O3 composites. **2011**, 46, 687-691		34
2018	High voltage electrochemical double layer capacitor containing mixtures of ionic liquids and organic carbonate as electrolytes. **2011**, 13, 814-817		123
2017	Carbon/PbO2 asymmetric electrochemical capacitor based on methanesulfonic acid electrolyte. **2011**, 56, 8122-8128		63
2016	Capacitive matching of pore size and ion size in the negative and positive electrodes for supercapacitors. **2011**, 56, 9248-9256		23
2015	Synthesis of nitrogen doped microporous carbons prepared by activation-free method and their high electrochemical performance. **2011**, 56, 10130-10136		36
2014	Effects of heat treatment on the structure of LDPE-derived solid carbons. **2011**, 172, 1126-1136		8

2013	Polarizable energy-storage membrane based on ionic condensation and decondensation. **2011**, 4, 3960		7
2012	Reduction of graphite oxide using alcohols. **2011**, 21, 3443-3447		342
2011	The right kind of interior for multifunctional electrode architectures: carbon nanofoam papers with aperiodic submicrometre pore networks interconnected in 3D. **2011**, 4, 1913		98
2010	Modern kinds of electric energy storages and their application in independent and centralized power systems. **2011**, 58, 883-893		8
2009	New accelerated method of impregnation by aqueous electrolyte of carbon black gas-diffusion electrodes to study their structural and electrochemical characteristics. **2011**, 47, 1268-1273		5
2008	Effect of activation on the carbon fibers from phenolformaldehyde resins for electrochemical supercapacitors. **2011**, 41, 1357-1366		20
2007	Composite films prepared by immersion deposition of manganese oxide in carbon nanotubes grown on graphite for supercapacitors. **2011**, 46, 7328-7334		6
2006	Electrochemical capacitance study on Co3O4 nanowires for super capacitors application. **2011**, 22, 601-606		37
2005	Synthesis of nanocast ordered mesoporous carbons and their application as electrode materials for supercapacitor. **2011**, 18, 23-30		22
2004	Activated carbon prepared from polyaniline base by K2CO3 activation for application in supercapacitor electrodes. **2011**, 15, 579-585		49
2003	The effect of pre-carbonization of mesophase pitch-based activated carbons on their electrochemical performance for electric double-layer capacitors. **2011**, 15, 787-794		20
2002	Preparation of activated carbon from polyaniline by zinc chloride activation as supercapacitor electrodes. **2011**, 15, 2667-2674		47
2001	The electrochemistry of activated carbonaceous materials: past, present, and future. **2011**, 15, 1563-1578		132
2000	Carbon materials as electrodes for electrosorption of NaCl in aqueous solutions. **2011**, 17, 467-471		30
1999	Investigation of the impact of stacking pressure on a double-layer supercapacitor. *Journal of Power Sources*, **2011**, 196, 523-529	8.9	19
1998	Conducting-polymer-based supercapacitor devices and electrodes. *Journal of Power Sources*, **2011**, 196, 1-12	8.9	2699
1997	Performance and stability of electrochemical capacitor based on anthraquinone modified activated carbon. *Journal of Power Sources*, **2011**, 196, 4117-4122	8.9	160
1996	Enhanced capacitance in partially exfoliated multi-walled carbon nanotubes. *Journal of Power Sources*, **2011**, 196, 5209-5214	8.9	94

1995	Capacitance improvement of supercapacitor active material based on activated carbon fiber working with a Li-ion containing electrolyte. *Journal of Power Sources*, **2011**, 196, 5774-5778	8.9	10
1994	Influence of the PAni morphology deposited on the carbon fiber: An analysis of the capacitive behavior of this hybrid composite. **2011**, 511, 73-76		12
1993	Development of easy made low cost bindless monolithic electrodes from biomass with controlled properties to be used as electrochemical capacitors. **2011**, 102, 2781-7		80
1992	Stable ultrahigh specific capacitance of NiO nanorod arrays. **2011**, 4, 658-665		152
1991	Electrochemical growth of dispersing nickel oxide nanoparticles on carbon nanotubes. **2011**, 30, 661-665		2
1990	Preparation and performance of cobalt-doped carbon aerogel for supercapacitor. **2011**, 28, 492-496		10
1989	Electrosynthesis and capacitive performance of polyaniline–polypyrrole composite. **2011**, 32, 1-5		25
1988	Supercapacitive energy storage based on ion-conducting channels in hydrophilized organic network. **2011**, 49, 1234-1240		5
1987	Hierarchical micro- and mesoporous carbide-derived carbon as a high-performance electrode material in supercapacitors. **2011**, 7, 1108-17		263
1986	Brick-and-Mortar Self-Assembly Approach to Graphitic Mesoporous Carbon Nanocomposites. **2011**, 21, 2208-2215		93
1985	One-Step Electrochemical Synthesis of Graphene/Polyaniline Composite Film and Its Applications. **2011**, 21, 2989-2996		434
1984	Bioinspired effective prevention of restacking in multilayered graphene films: towards the next generation of high-performance supercapacitors. **2011**, 23, 2833-8		888
1983	Promising carbons for supercapacitors derived from fungi. **2011**, 23, 2745-8		289
1982	Carbon materials for chemical capacitive energy storage. **2011**, 23, 4828-50		2273
1981	Manganese Oxide/Carbon Aerogel Composite: an Outstanding Supercapacitor Electrode Material. **2011**, 1, 901-907		154
1980	A Novel Lithium-Doping Approach for an Advanced Lithium Ion Capacitor. **2011**, 1, 1002-1006		105
1979	An All-Solid-State Flexible Micro-supercapacitor on a Chip. **2011**, 1, 1068-1072		315
1978	Single-Walled Carbon Nanotube Dispersion Structures for Improved Energy Density in Supercapacitors. **2011**, 115-127		

1977	Material advancements in supercapacitors: From activated carbon to carbon nanotube and graphene. **2011**, 89, 1342-1357		129
1976	Carbon nanotubes for sustainable energy applications. **2011**, 4, 913-25		78
1975	Capacitance properties of graphite oxide/poly(3,4-ethylene dioxythiophene) composites. **2011**, 121, 892-898		42
1974	Bis(2,2'-biphenoxy)borates for electrochemical double-layer capacitor electrolytes. **2011**, 17, 3082-5		12
1973	Metal oxide thin film based supercapacitors. **2011**, 11, 255-270		666
1972	High performance supercapacitors based on reduced graphene oxide in aqueous and ionic liquid electrolytes. **2011**, 49, 573-580		555
1971	Vitreous carbon micro-lattice structures. **2011**, 49, 1025-1032		41
1970	Effect of molecular grafting on the pore size distribution and the double layer capacitance of activated carbon for electrochemical double layer capacitors. **2011**, 49, 1340-1348		135
1969	Preparation, structure and supercapacitance of bonded carbon nanofiber electrode materials. **2011** , 49, 2380-2388		179
1968	Surface characteristics and electrochemical capacitances of carbon aerogels obtained from resorcinol and pyrocatechol using boric and oxalic acids as polymerization catalysts. **2011**, 49, 3808-3819		56
1967	An asymmetric supercapacitor with anthraquinone and dihydroxybenzene modified carbon fabric electrodes. **2011**, 13, 147-149		110
1966	Synthesis of carbon-coated graphene electrodes and their electrochemical performance. **2011**, 56, 6547-6553		43
1965	Improving the actuating response of carbon nanotube/ionic liquid composites by the addition of conductive nanoparticles. **2011**, 49, 3560-3570		55
1964	Electrochemical study of double-walled carbon nanotube electrode/block polyether-lithium bis(trifluorosulphonyl)imide salt polymer electrolyte interface. **2011**, 56, 4650-4656		4
1963	Simulation of electric double layer capacitors with mesoporous electrodes: Effects of morphology and electrolyte permittivity. **2011**, 56, 6189-6197		60
1962	Carbon materials with tailored porosity by self-assembly method: Influence of the synthesis conditions. **2011**, 143, 30-36		8
1961	Matrix circuit model for an electric double layer capacitor. *Journal of Power Sources*, **2011**, 196, 865-867	8.9	
1960	Hierarchical porous carbons prepared by an easy one-step carbonization and activation of phenolformaldehyde resins with high performance for supercapacitors. *Journal of Power Sources*, **2011**, 196, 1615-1619	8.9	76

1959	Modeling and characterization of supercapacitors for wireless sensor network applications. *Journal of Power Sources*, **2011**, 196, 4128-4135	8.9	79
1958	High-frequency carbon supercapacitors from polyfurfuryl alcohol. *Journal of Power Sources*, **2011**, 196, 7816-7822	8.9	19
1957	Electrospinning materials for energy-related applications and devices. *Journal of Power Sources*, **2011**, 196, 4886-4904	8.9	353
1956	Capacitance studies of cobalt compound nanowires prepared via electrodeposition. *Journal of Power Sources*, **2011**, 196, 5215-5222	8.9	23
1955	Electrochemical micro-capacitors of patterned electrodes loaded with manganese oxide and carbon nanotubes. *Journal of Power Sources*, **2011**, 196, 5761-5768	8.9	70
1954	KOH modified graphene nanosheets for supercapacitor electrodes. *Journal of Power Sources*, **2011**, 196, 6003-6006	8.9	149
1953	Effect of poly(3,4-ethylenedioxythiophene) (PEDOT) in carbon-based composite electrodes for electrochemical supercapacitors. *Journal of Power Sources*, **2011**, 196, 7823-7827	8.9	112
1952	A study on charge storage mechanism of □MnO2 by occupying tunnels with metal cations (Ba2+, K+). *Journal of Power Sources*, **2011**, 196, 7860-7867	8.9	45
1951	Direct synthesis of high concentration N-doped coiled carbon nanofibers from amine flames and its electrochemical properties. *Journal of Power Sources*, **2011**, 196, 7868-7873	8.9	38
1950	The role of the electric conductivity of carbons in the electrochemical capacitor performance. **2011**, 657, 176-180		58
1949	Asymmetric capacitance response from the chemical characteristics of activated carbons in KOH electrolyte. **2011**, 659, 161-167		23
1948	Graphene based materials: Past, present and future. **2011**, 56, 1178-1271		2607
1947	Preparation of Activated Carbons for Electrochemical Capacitors by Microwave Heating. **2011**, 704-705, 1061-1067		
1946	Preparation and Electrochemical Characteristics of Nitrogen-Doped Mesoporous Carbon Using Surfactants as Carbon Source. **2011**, 239-242, 2573-2577		
1945	Electrohydrodynamic atomization deposition and patterning of a carbon nano-suspension. **2011**, 225, 149-154		
1944	Excellent Rate Capability in H2SO4 of a Porous Carbon Prepared by Template Method Using a Mazzite Mineral as Template. **2011**, 230-232, 1173-1176		
1943	Ultracapacitors Based on Graphene/MWNT Composite Films. **2011**, 1344, 1		
1942	Electrochemical Charge Storage Properties of Vertically Aligned Carbon Nanotube Films: The Activation-Enhanced Length Effect. **2011**, 158, K217		2

1941	Preparation and Capacitive Behavior of Dandelion-Like MnO2Nanofibre/Activated Carbon Microbeads Composite for the Application of Supercapacitor. **2011**, 2011, 1-6	2
1940	An Experimental Research on Electrochemical Impedance Spectra of New High-Specific Energy EDLC. **2011**, 675-677, 65-68	2
1939	Supercapacitive Behaviors of Hierarchically Porous Carbons Prepared by Metal Oxide/Surfactant Templates. **2012**, 159, A431-A437	9
1938	The Influence of Pore Structure and Surface Groups on the Performance of High Voltage Electrochemical Double Layer Capacitors Containing Adiponitrile-Based Electrolyte. **2012**, 159, A2053-A2059	35
1937	Influence of Chemical Modification of Activated Carbon Surface on Performance of Supercapacitors. **2012**, 455-456, 427-429	
1936	Azolylborates for Electrochemical Double Layer Capacitor Electrolytes. **2012**, 226, 141-149	
1935	Synthesis and Characterization of Manganese Oxide/CNTs Composites as Electrochemical Capacitor Electrode Materials. **2012**, 519, 197-200	
1934	Stable lithium-ion cathodes from nanocomposites of VO2 nanowires and CNTs. **2012**, 23, 475701	15
1933	Ordered Macroporous Carbon/Polyaniline Nanocomposites as Electrode Materials for Supercapacitors. **2012**, 722, 25-30	
1932	Effect of Ag-Doping on the Capacitive Behavior of Amorphous Manganese Dioxide Electrodes. **2012**, 2, 18-22	9
1931	Analysis of the solvation structure of rubidium bromide under nanoconfinement. **2012**, 38, 1209-1220	3
1930	Synthesis and Characterization of Ni/CNTs Electrodes and their Supercapacitors Performance. **2012**, 507, 48-51	
1929	Electrochemical Properties of Nitrogen-Enriched Templated Microporous Carbons in Different Aqueous Electrolytes. **2012**, 571, 27-37	
1928	Breathing of Graphite Particles in a Lithium-Ion Battery. **2012**, 5, 047101	5
1927	Different Characterization Techniques to Evaluate Graphene and Its Properties. **2012**, 118-161	
1926	Promising porous carbon derived from celtuce leaves with outstanding supercapacitance and CO capture performance. **2012**, 4, 5800-6	334
1925	Electrochemical Study of Functionalized Carbon Nano-Onions for High-Performance Supercapacitor Electrodes. **2012**, 116, 15068-15075	79
1924	Synthesis of mesoporous carbons for supercapacitors from coal tar pitch by coupling microwave-assisted KOH activation with a MgO template. **2012**, 50, 4911-4921	225

1923	Graphene for energy conversion and storage in fuel cells and supercapacitors. **2012**, 1, 534-551	548
1922	A high density of vertically-oriented graphenes for use in electric double layer capacitors. **2012**, 50, 5481-5488	117
1921	Non-faradic carbon nanotube-based supercapacitors: state of the art. **2012**, 60, 10401	7
1920	Transparent, flexible supercapacitors from nano-engineered carbon films. **2012**, 2, 773	177
1919	Surface Analysis of Supercapacitor Electrodes After Long-Lasting Constant Current Tests in Organic Electrolyte. **2012**, 159, A1141-A1147	15
1918	Flexible solid-state supercapacitors based on carbon nanoparticles/MnO2 nanorods hybrid structure. **2012**, 6, 656-61	893
1917	Energy and environmental applications of carbon nanotubes. **2012**, 10, 265-273	105
1916	Capacitance of electrochemical double layer capacitors. **2012**, 86, 225-231	12
1915	Insights into the influence of pore size distribution and surface functionalities in the behaviour of carbon supercapacitors. **2012**, 86, 241-247	48
1914	Capacitance behavior of KOH activated mesocarbon microbeads in different aqueous electrolytes. **2012**, 86, 260-267	73
1913	Improve the Supercapacity Performance of MnO2-Decorated Graphene by Controlling the Oxidization Extent of Graphene. **2012**, 116, 25226-25232	87
1912	Tuning graphene surface chemistry to prepare graphene/polypyrrole supercapacitors with improved performance. **2012**, 1, 723-731	67
1911	Carbon nanowalls synthesis by means of atmospheric dcPECVD method. **2012**, 249, 2625-2628	12
1910	High temperature all solid state supercapacitor based on multi-walled carbon nanotubes and poly[2,5 benzimidazole]. **2012**, 16, 3215-3226	40
1909	Coal tar pitch-based porous carbon by one dimensional nano-sized MgO template. **2012**, 73, 1428-1431	24
1908	Optimization of MnO2/CNW composite electrodes for energy storage application. **2012**,	
1907	Enhancement of the electrocapacitive performance of manganese dioxide by introducing a microporous carbon spheres network. **2012**, 14, 5966-72	27
1906	Formation of graphitic tubules from ordered mesoporous carbon and their effect on supercapacitive energy storage. **2012**, 22, 21472	27

1905	Role of textural properties and surface functionalities of selected carbons on the electrochemical behaviour of ionic liquid based-supercapacitors. **2012**, 2, 8439	28
1904	Relationship between intrinsic capacitance and thickness of graphene nanosheets. **2012**, 22, 13091	8
1903	Facile synthetic fabrication of iron oxide particles and novel hydrogen superoxide supercapacitors. **2012**, 2, 6672	65
1902	Sustainable nitrogen-doped porous carbon with high surface areas prepared from gelatin for supercapacitors. **2012**, 22, 19088	331
1901	Relationships between structure and activity of carbon as a multifunctional support for electrocatalysts. **2012**, 14, 9475-85	18
1900	A new hybrid architecture consisting of highly mesoporous CNT/carbon nanofibers from starch. **2012**, 22, 20554	24
1899	Carbon aerogel /polyaniline composite as supercapacitors packaging applications. **2012**,	1
1898	Out-of-plane growth of CNTs on graphene for supercapacitor applications. **2012**, 23, 015301	123
1897	Evaluation of GO/MnO2 composites as supercapacitors in neutral electrolytes: role of graphite oxide oxidation level. **2012**, 22, 23525	34
1896	New Insights into the Relationship between Micropore Properties, Ionic Sizes, and Electric Double-Layer Capacitance in Monolithic Carbon Electrodes. **2012**, 116, 26197-26203	35
1895	Coconut-Shell-Based Porous Carbons with a Tunable Micro/Mesopore Ratio for High-Performance Supercapacitors. **2012**, 26, 5321-5329	174
1894	On the Influence of Pore Size and Pore Loading on Structural and Dynamical Heterogeneities of an Ionic Liquid Confined in a Slit Nanopore. **2012**, 116, 5169-5181	79
1893	Graphene for energy harvesting/storage devices and printed electronics. **2012**, 10, 1-8	98
1892	Synthesis of polythiophene thin films by simple successive ionic layer adsorption and reaction (SILAR) method for supercapacitor application. **2012**, 162, 1400-1405	57
1891	A novel asymmetric pseudocapacitor based on poly(5,12-dihydrothieno [3?,4?:2,3][1,4]dioxocino[6,7-b]quinoxaline) coated graphite anode and poly(ethylenedioxythiophene) coated graphite cathode. **2012**, 162, 1434-1442	18
1890	Porous carbon for electrochemical capacitors prepared from a resorcinol/formaldehyde-based organic aquagel with nano-sized particles. **2012**, 22, 7158	48
1889	Enhanced capacitive deionization performance of graphene/carbon nanotube composites. **2012**, 22, 14696	276
1888	A review of electrode materials for electrochemical supercapacitors. **2012**, 41, 797-828	6816

1887	Electrostatic spray deposition of graphene nanoplatelets for high-power thin-film supercapacitor electrodes. **2012**, 16, 3341-3348		48
1886	Electrochemistry at nanoporous interfaces: new opportunity for electrocatalysis. **2012**, 14, 448-63		137
1885	KOH activation of carbon-based materials for energy storage. **2012**, 22, 23710		1696
1884	Effect of surfactant on high capacitance of galvanostatically deposited MnO2. **2012**, 676, 35-39		16
1883	Supercapacitive properties of porous carbon nanofibers via the electrospinning of metal alkoxide-graphene in polyacrylonitrile. **2012**, 87, 157-161		31
1882	Nanostructured carbon for energy storage and conversion. **2012**, 1, 195-220		797
1881	Capacitive properties of PANI/MnO2 synthesized via simultaneous-oxidation route. **2012**, 532, 1-9		68
1880	The effects of cell assembly compression on the performance of carbon electrochemical double-layer capacitor electrodes. *Journal of Power Sources*, **2012**, 215, 179-187	8.9	6
1879	High energy ultracapacitor based on carbon xerogel electrodes and sodium sulfate electrolyte. *Journal of Power Sources*, **2012**, 214, 137-141	8.9	19
1878	Effect of reduced graphene oxide on the properties of an activated carbon cloth/polyaniline flexible electrode for supercapacitor application. *Journal of Power Sources*, **2012**, 217, 6-12	8.9	90
1877	Effect of aqueous electrolytes on the electrochemical behaviors of supercapacitors based on hierarchically porous carbons. *Journal of Power Sources*, **2012**, 216, 290-296	8.9	179
1876	Preparation, surface characteristics, and electrochemical double-layer capacitance of KOH-activated carbon aerogels and their O- and N-doped derivatives. *Journal of Power Sources*, **2012**, 219, 80-88	8.9	61
1875	Active pore space utilization in nanoporous carbon-based supercapacitors: Effects of conductivity and pore accessibility. *Journal of Power Sources*, **2012**, 220, 243-252	8.9	53
1874	Electrochemical capacitance of mesoporous tungsten oxynitride in aqueous electrolytes. *Journal of Power Sources*, **2012**, 220, 298-305	8.9	36
1873	Second generation □anohybrid supercapacitor□Evolution of capacitive energy storage devices. **2012**, 5, 9363		563
1872	Renewing functionalized graphene as electrodes for high-performance supercapacitors. **2012**, 24, 6348-55		355
1871	Lithiumbatterien und elektrische Doppelschichtkondensatoren: aktuelle Herausforderungen. **2012**, 124, 10134-10166		176
1870	Challenges facing lithium batteries and electrical double-layer capacitors. **2012**, 51, 9994-10024		2149

1869	Catechol-modified activated carbon prepared by the diazonium chemistry for application as active electrode material in electrochemical capacitor. **2012**, 4, 3788-96	95
1868	Variation of electrochemical capacitor performance with Room Temperature Ionic Liquid electrolyte viscosity and ion size. **2012**, 14, 6094-100	43
1867	Electrochemical Supercapacitors. **2012**, 317-382	10
1866	Oxide Nanostructures for Energy Storage. **2012**, 269-302	4
1865	Electrochemical Charge Storage Properties of Vertically Aligned Carbon Nanotube Films: Effects of Thermal Oxidation. **2012**, 116, 19526-19534	4
1864	Carbon nanotubes and metalloporphyrins and metallophthalocyanines-based materials for electroanalysis. **2012**, 16, 713-740	39
1863	Thermal treatment effects on charge storage performance of graphene-based materials for supercapacitors. **2012**, 4, 3239-46	47
1862	Three-dimensional nanohybrids of Mn3O4/ordered mesoporous carbons for high performance anode materials for lithium-ion batteries. **2012**, 22, 16640	89
1861	Nanocomposites and macroscopic materials: assembly of chemically modified graphene sheets. **2012**, 41, 6160-77	262
1860	Exploring the large voltage range of carbon/carbon supercapacitors in aqueous lithium sulfate electrolyte. **2012**, 5, 9611	262
1859	Carbon and Nickel Oxide/Carbon Composites as Electrodes for Supercapacitors. **2012**, 28, 931-936	23
1858	Synthesis of PEDOT-modified graphene composite materials as flexible electrodes for energy storage and conversion applications. **2012**, 37, 13880-13886	63
1857	Supercapacitive behaviors of activated mesocarbon microbeads coated with polyaniline. **2012**, 37, 14365-14372	33
1856	High hydrogen storage capacity of rice hull based porous carbon. **2012**, 37, 18888-18894	29
1855	Porous lanthanum doped NiO microspheres for supercapacitor application. **2012**, 682, 37-44	65
1854	NaClO4 and NaPF6 as potential non-aqueous electrolyte salts for electrical double layer capacitor application. **2012**, 82, 309-313	36
1853	Electrochemical study of anthraquinone groups, grafted by the diazonium chemistry, in different aqueous media-relevance for the development of aqueous hybrid electrochemical capacitor. **2012**, 82, 250-256	59
1852	Homogeneous growth of nano-sized β-Ni(OH)2 on reduced graphene oxide for high-performance supercapacitors. **2012**, 81, 321-329	89

1851	A two-stage, self-aligned vertical densification process for as-grown CNT forests in supercapacitor applications. **2012**, 188, 261-267	28
1850	5-hydroxymethylfurfural as a potential monomer for the preparation of carbon aerogel. **2012**, 136, 837-844	9
1849	Easy synthesis of polyaniline-based mesoporous carbons and their high electrochemical performance. **2012**, 163, 140-146	37
1848	Nanostructured activated carbons from natural precursors for electrical double layer capacitors. **2012**, 1, 552-565	392
1847	Graphene-based multilayers: Critical evaluation of materials assembly techniques. **2012**, 7, 430-447	112
1846	Graphene-polymer composites. **2012**, 40, 012018	8
1845	MULTIWALLED CARBON NANOTUBES BASED NANOCOMPOSITES FOR SUPERCAPACITORS: A REVIEW OF ELECTRODE MATERIALS. **2012**, 07, 1230002	67
1844	A facile synthetic route for well defined multilayer films of graphene and PEDOTvia an electrochemical method. **2012**, 22, 1899-1903	40
1843	Carbon. **2012**, 41-79	
1842	Vertically aligned BCN nanotubes with high capacitance. **2012**, 6, 5259-65	172
1841	The preparation of graphene decorated with manganese dioxide nanoparticles by electrostatic adsorption for use in supercapacitors. **2012**, 50, 5034-5043	44
1840	Graphene-based supercapacitors in the parallel-plate electrode configuration: ionic liquids versus organic electrolytes. **2012**, 154, 249-63; discussion 313-33, 465-71	62
1839	Tobacco Stem-Based Activated Carbons for High Performance Supercapacitors. **2012**, 21, 1956-1961	25
1838	Effect of Compression Pressure on the Physical and Electrochemical Properties of Activated Carbon Monoliths Electrodes for Supercapacitor Application. **2012**, 501, 13-18	8
1837	Nanomaterials and nanocomposites for high energy/high power supercapacitors. **2012**,	
1836	Gel Polymer Electrolyte Based Electrical Double Layer Capacitors: Comparative Study with Multiwalled Carbon Nanotubes and Activated Carbon Electrodes. **2012**, 116, 26118-26127	105
1835	Printable thin film supercapacitors utilizing single crystal cobalt hydroxide nanosheets. **2012**, 2, 1508-1515	43
1834	Three-dimensional hierarchical porous carbon with a bimodal pore arrangement for capacitive deionization. **2012**, 22, 23835	140

1833	Aqueous Molecular Sieving and Strong Gas Adsorption in Highly Porous MOFs with a Facile Synthesis. **2012**, 24, 4647-4652	42
1832	Structure and Dynamics of an Ionic Liquid Confined Inside a Charged Slit Graphitic Nanopore. **2012**, 116, 14504-14513	54
1831	Carbon Nanocoils as Unusual Electrode Materials for Supercapacitors. **2012**, 159, A464-A469	15
1830	Integrated synthesis of poly(o-phenylenediamine)-derived carbon materials for high performance supercapacitors. **2012**, 24, 6524-9	160
1829	High pseudocapacitance of MnO2 nanoparticles in graphitic disordered mesoporous carbon at high scan rates. **2012**, 22, 3160	77
1828	Binary metal hydroxide nanorods and multi-walled carbon nanotube composites for electrochemical energy storage applications. **2012**, 22, 21630	71
1827	Design of Hierarchical Porous Carbonaceous Foams from a Dual-Template Approach and Their Use as Electrochemical Capacitor and Li Ion Battery Negative Electrodes. **2012**, 116, 1408-1421	125
1826	Functional Metal Oxide Nanostructures. **2012**,	20
1825	Chemical approaches toward graphene-based nanomaterials and their applications in energy-related areas. **2012**, 8, 630-46	335
1824	Flexible pillared graphene-paper electrodes for high-performance electrochemical supercapacitors. **2012**, 8, 452-9	276
1823	Carbon-based nanostructured materials and their composites as supercapacitor electrodes. **2012**, 22, 767-784	579
1822	Carbon electrodes with high pseudocapacitance for supercapacitors. **2012**, 48, 424-433	10
1821	Functional Carbon Materials From Ionic Liquid Precursors. **2012**, 213, 1132-1145	91
1820	Nitrogen- and Oxygen-Enriched Carbon With Square Tubular Structure Prepared From Polyaniline as Electrode for Supercapacitors. **2012**, 12, 892-897	12
1819	Ultrahigh-rate supercapacitors based on eletrochemically reduced graphene oxide for ac line-filtering. **2012**, 2, 247	494
1818	An overview of the applications of graphene-based materials in supercapacitors. **2012**, 8, 1805-34	1082
1817	Hierarchically Structured Porous Materials for Energy Conversion and Storage. **2012**, 22, 4634-4667	697
1816	Carbonized Chicken Eggshell Membranes with 3D Architectures as High-Performance Electrode Materials for Supercapacitors. **2012**, 2, 431-437	510

1815	Composite Carbon Nanotube/Carbon Electrodes for Electrical Double-Layer Super Capacitors. **2012**, 124, 1600-1603	22
1814	Nitrogen-doped carbon monolith for alkaline supercapacitors and understanding nitrogen-induced redox transitions. **2012**, 18, 5345-51	317
1813	Edge-enriched, porous carbon-based, high energy density supercapacitors for hybrid electric vehicles. **2012**, 5, 535-41	55
1812	Carbon-based electrochemical capacitors. **2012**, 5, 480-99	436
1811	Carbon Nanotubes Applications: Solar and Fuel Cells, Hydrogen Storage, Lithium Batteries, Supercapacitors, Nanocomposites, Gas, Pathogens, Dyes, Heavy Metals and Pesticides. **2012**, 3-46	9
1810	Performance of nanotube-based electrodes from temperature-controlled electrophoretic deposition. **2012**, 42, 501-508	2
1809	A simple and controllable nanostructure comprising non-conductive poly(vinylidene fluoride) and graphene nanosheets for supercapacitor. **2012**, 6, 149-159	4
1808	Electric Pulse Discharge Activated Carbon Supercapacitors for Transportation Application. **2012**, 64, 393-399	2
1807	Significantly enhanced rate capability in supercapacitors using carbide-derived carbons electrode with superior microstructure. **2012**, 16, 1263-1270	9
1806	Comparison of carbon aerogel and carbide-derived carbon as electrode materials for non-aqueous supercapacitors with high performance. **2012**, 16, 2717-2722	11
1805	Highly stable performance of supercapacitors using microporous carbon derived from phenolÐmelamineÐformaldehyde resin. **2012**, 16, 2661-2666	15
1804	Electrochemical properties of Mn-doped activated carbon aerogel as electrode material for supercapacitor. **2012**, 12, 233-237	34
1803	High temperature and low current density synthesis of Mn3O4 porous nano spheres: Characterization and electrochemical properties. **2012**, 12, 544-549	47
1802	Mn-doped activated carbon aerogel as electrode material for pseudo-capacitive supercapacitor: Effect of activation agent. **2012**, 12, 1074-1080	9
1801	Electrochemical performance of carbon gels with variable surface chemistry and physics. **2012**, 50, 3324-3332	42
1800	Rapid thermal pyrolysis of interferometrically patterned resist. **2012**, 50, 2894-2898	3
1799	High-performance charge storage by N-containing nanostructured carbon derived from polyaniline. **2012**, 50, 3915-3927	102
1798	Effects of the addition of graphite oxide to the precursor of a nanoporous carbon on the electrochemical performance of the resulting carbonaceous composites. **2012**, 50, 4144-4154	24

1797	CVD generated mesoporous hollow carbon spheres as supercapacitors. **2012**, 396, 246-250		58
1796	The volumetric capacitance of microporous carbons in organic electrolyte. **2012**, 16, 34-36		24
1795	Effect of porosity variation on the electrochemical behavior of vertically aligned multi-walled carbon nanotubes. **2012**, 19, 138-141		16
1794	All solid supercapacitor based on activated carbon and poly [2,5-benzimidazole] for high temperature application. **2012**, 59, 296-303		91
1793	The evolution of electrochemical functionality of carbons derived from glucose during pyrolysis and activation. **2012**, 60, 392-400		18
1792	Electrodeposition of carbon nanotube/carbon fabric composite using cetyltrimethylammonium bromide for high performance capacitor. **2012**, 60, 449-455		14
1791	Physical interpretation of cyclic voltammetry for measuring electric double layer capacitances. **2012**, 64, 130-139		101
1790	A comparison of single-wall carbon nanotube electrochemical capacitor electrode fabrication methods. **2012**, 65, 37-43		32
1789	Rapid potential step charging of paper-based polypyrrole energy storage devices. **2012**, 70, 91-97		57
1788	Improved electrochemical performance of hierarchical porous carbon/polyaniline composites. **2012** , 74, 98-104		29
1787	Highly conductive, mesoporous carbon nanofiber web as electrode material for high-performance supercapacitors. **2012**, 75, 325-331		121
1786	Fine tuning of the supercapacitive performance of nanoporous carbon electrodes with different pore diameters. **2012**, 77, 256-261		26
1785	Pore structure and electrochemical performances of tannin-based carbon cryogels. **2012**, 39, 274-282		54
1784	Activated carbons from KOH-activation of argan (Argania spinosa) seed shells as supercapacitor electrodes. **2012**, 111, 185-90		305
1783	Fabrication and characterization of single walled nanotube supercapacitor electrodes with uniform pores using electrophoretic deposition. **2012**, 134, 68-73		16
1782	Nitrogen-doped hollow carbon spheres with enhanced electrochemical capacitive properties. **2012**, 47, 1625-1629		12
1781	MoO3 nanoparticles distributed uniformly in carbon matrix for supercapacitor applications. **2012**, 66, 102-105		72
1780	Ageing of electrochemical double layer capacitors. *Journal of Power Sources*, **2012**, 203, 262-273	8.9	88

1779	Carbon black supercapacitors employing thin electrodes. *Journal of Power Sources*, **2012**, 201, 347-352	8.9	99
1778	Adiponitrile-based electrochemical double layer capacitor. *Journal of Power Sources*, **2012**, 204, 213-219	8.9	113
1777	A novel mesoporous carbon with straight tunnel-like pore structure for high rate electrochemical capacitors. *Journal of Power Sources*, **2012**, 204, 230-235	8.9	52
1776	Hierarchical porous carbon hollow-spheres as a high performance electrical double-layer capacitor material. *Journal of Power Sources*, **2012**, 211, 92-96	8.9	116
1775	Shape-alterable and -recoverable graphene/polyurethane bi-layered composite film for supercapacitor electrode. *Journal of Power Sources*, **2012**, 213, 350-357	8.9	37
1774	Controlled synthesis of MnSn(OH)6/graphene nanocomposites and their electrochemical properties as capacitive materials. **2012**, 185, 172-179		14
1773	Improving the electrocapacitive properties of mesoporous CMK-5 carbon with carbon nanotubes and nitrogen doping. **2012**, 147, 86-93		48
1772	Effect of counter electrode reaction on coloration properties of phthalate-based electrochromic cell. **2012**, 99, 88-94		21
1771	Dispersity of materials obtained by mechanical activation and laser sintering of Al-C systems and used for production of electrochemical capacitors. **2012**, 74, 373-379		1
1770	Hierarchical Nanocomposites Derived from Nanocarbons and Layered Double Hydroxides - Properties, Synthesis, and Applications. **2012**, 22, 675-694		477
1769	Carbon nanocages as supercapacitor electrode materials. **2012**, 24, 347-52		441
1768	Composite carbon nanotube/carbon electrodes for electrical double-layer super capacitors. **2012**, 51, 1568-71		84
1767	New generation "nanohybrid supercapacitor". **2013**, 46, 1075-83		438
1766	Polyaniline-carbon nanofiber composite by a chemical grafting approach and its supercapacitor application. **2013**, 5, 8374-86		102
1765	Electrochemical Characterisation of Poly(aniline-co-N-methylaniline) and Poly(aniline-co-N-ethylaniline) Films on Pencil Graphite Electrode for Supercapacitor Applications. **2013**, 66, 825		2
1764	EKF-based estimation of SOC and temperature in ultracapacitors. **2013**,		5
1763	Morphology-Dependent Enhancement of the Pseudocapacitance of Template-Guided Tunable Polyaniline Nanostructures. **2013**, 117, 15009-15019		81
1762	Interaction of electrolyte molecules with carbon materials of well-defined porosity: characterization by solid-state NMR spectroscopy. **2013**, 15, 15177-84		76

1761	Doping carbons beyond nitrogen: an overview of advanced heteroatom doped carbons with boron, sulphur and phosphorus for energy applications. **2013**, 6, 2839		1320
1760	Dynamic electrosorption analysis: a viable liquid-phase characterization method for porous carbon?. **2013**, 1, 9332		8
1759	Manganese hexacyanoferrate/MnO2 composite nanostructures as a cathode material for supercapacitors. **2013**, 1, 2621		78
1758	A new family of fluidic precursors for the self-templated synthesis of hierarchical nanoporous carbons. **2013**, 49, 7289-91		28
1757	Small Particles of Chemically-Reduced Graphene with Improved Electrochemical Capacity. **2013**, 117, 15496-15504		13
1756	Nanoscale Dielectric Capacitors Composed of Graphene and Boron Nitride Layers: A First-Principles Study of High Capacitance at Nanoscale. **2013**, 117, 15327-15334		38
1755	Supercapacitive electrochemical performance of graphene-containing carbon aerogel prepared using polyethyleneimine-modified graphene oxide. **2013**, 13, 945-949		34
1754	Ni(OH)2 nanosheet @ Fe2O3 nanowire hybrid composite arrays for high-performance supercapacitor electrodes. **2013**, 2, 754-763		148
1753	An overview of carbon materials for flexible electrochemical capacitors. **2013**, 5, 8799-820		235
1752	Large scale synthesized sulphonated reduced graphene oxide: a high performance material for electrochemical capacitors. **2013**, 3, 14954		15
1751	Rational design of a high performance all solid state flexible micro-supercapacitor on paper. **2013**, 3, 15827		40
1750	Temperature influence on morphological progress of Ni(OH)2 thin films and its subsequent effect on electrochemical supercapacitive properties. **2013**, 1, 4793		157
1749	Graphene/poly(ortho-phenylenediamine) nanocomposite material for electrochemical supercapacitor. **2013**, 17, 2203-2212		37
1748	Integration of fuel cells and supercapacitors in electrical microgrids: Analysis, modelling and experimental validation. **2013**, 38, 11655-11671		36
1747	High-performance binder-free CoMn composite oxide supercapacitor electrode. *Journal of Power Sources*, **2013**, 230, 218-224	8.9	146
1746	Perspective: hybrid systems combining electrostatic and electrochemical nanostructures for ultrahigh power energy storage. **2013**, 6, 2578		29
1745	Facile fabrication of mesoporous manganese oxides as advanced electrode materials for supercapacitors. **2013**, 17, 2579-2588		11
1744	Synthesis of micro- and mesoporous carbon spheres for supercapacitor electrode. **2013**, 17, 2293-2301		86

1743	Cycling characteristics of high energy density, electrochemically activated porous-carbon supercapacitor electrodes in aqueous electrolytes. **2013**, 1, 10518	25
1742	Preparation of Carbonaceous Materials in Fused Carbonate Salts: Applications to Electrochemical Storages Devices. **2013**, 331-354	1
1741	Thermal-Induced Structural Evolution of Carbon-Encapsulated Iron Nanoparticles Generated by Two Different Methods. **2013**, 117, 19167-19174	15
1740	Carbon nano-onions for supercapacitor electrodes: recent developments and applications. **2013**, 1, 13703	101
1739	Nanoporous activated carbon fluidized bed catalytic oxidations of aqueous o, p and m-cresols: kinetic and thermodynamic studies. **2013**, 20, 4790-806	13
1738	Synthesis of nanosized MnO2 prepared by the polyol method and its application in high power supercapacitors. **2013**, 2, 1	9
1737	Planar thin film supercapacitor based on cluster-assembled nanostructured carbon and ionic liquid electrolyte. **2013**, 59, 212-220	44
1736	Carbon nanomaterials supported Ni(OH)2/NiO hybrid flower structure for supercapacitor. **2013**, 109, 370-380	89
1735	Pore morphology: a vital factor in determining electrochemical properties of electrical double layer capacitors. **2013**, 49, 9998-10000	24
1734	Restacking-inhibited 3D reduced graphene oxide for high performance supercapacitor electrodes. **2013**, 7, 9366-74	343
1733	Thickness dependent supercapacitor behaviour of sol-gel spin coated nanostructured vanadium pentoxide thin films. **2013**, 93, 1490-1499	10
1732	Composite organogels of graphene and activated carbon for electrochemical capacitors. **2013**, 1, 9196	58
1731	Influence of reactivation on the electrochemical performances of activated carbon based on coconut shell. **2013**, 25 Suppl 1, S110-7	11
1730	The mechanochemical synthesis of poly(3?,4?-ethylenedioxy-2,2?:5?,2?-terthiophene)/graphene nanoplatelet composites and the electrochemical performance. **2013**, 113, 382-389	6
1729	Graphene-Based and Other Electrochemical Double Layer Capacitors for Energy Harvesting Systems. **2013**, 2, M3135-M3139	7
1728	Nanostructured materials for supercapacitors. **2013**, 31, 050803	34
1727	Effect of deposition method and the surfactant on high capacitance of electrochemically deposited MnO2 on stainless steel substrate. **2013**, 690, 13-18	36
1726	Dynamic electrosorption analysis as an effective means to characterise the structure of bulk graphene assemblies. **2013**, 19, 3082-9	16

1725	Activated carbon□arbon nanotube nanocomposite coatings for supercapacitor applications. **2013**, 232, 326-330		28
1724	Relation of micropores/mesopore ratio on high electrochemical performance of˝nano-porous carbons. *Journal of Power Sources*, **2013**, 244, 792-798	8.9	13
1723	Ordered mesoporous carbon nanospheres as electrode materials for high-performance supercapacitors. **2013**, 36, 66-70		74
1722	Layered sodium titanate nanostructures as a new electrode for high energy density supercapacitors. **2013**, 113, 141-148		38
1721	Optimizing the electrochemical performance of aqueous symmetric supercapacitors based on an activated carbon xerogel. *Journal of Power Sources*, **2013**, 241, 776-782	8.9	60
1720	Facile synthesis of mesoporous MnO2 microspheres for high performance AC//MnO2 aqueous hybrid supercapacitors. **2013**, 108, 497-505		71
1719	Electrochemical dispergation as a simple and effective technique toward preparation of NiO based nanocomposite for supercapacitor application. **2013**, 114, 356-362		35
1718	Electric double-layer capacitor based on an ionic clathrate hydrate. **2013**, 8, 1569-73		4
1717	Highly dispersed carbon nanotube/polypyrrole core/shell composites with improved electrochemical capacitive performance. **2013**, 1, 15230		58
1716	Highly ordered macroporous woody biochar with ultra-high carbon content as supercapacitor electrodes. **2013**, 113, 481-489		170
1715	Porous CuO nanosheet clusters prepared by a surfactant assisted hydrothermal method for high performance supercapacitors. **2013**, 3, 24099		60
1714	Liquid-mediated dense integration of graphene materials for compact capacitive energy storage. **2013**, 341, 534-7		1473
1713	Effect of Organic Sulfur Compounds in the Precursor on the Capacitance Performance of Prepared Activated Carbon. **2013**, 52, 15801-15807		4
1712	Novel electric double-layer capacitor with a coaxial fiber structure. **2013**, 25, 6436-41		314
1711	Electrosorption of environmental concerning anions on a highly porous carbon aerogel. **2013**, 708, 80-86		20
1710	Optimization of PEDOT films in ionic liquid supercapacitors: demonstration as a power source for polymer electrochromic devices. **2013**, 5, 13432-40		95
1709	Poly(thieno[3,4-b][1,4]dioxine) and poly([1,4]dioxino[2,3-c]pyrrole) derivatives: p- and n-dopable redox-active electrode materials for solid state supercapacitor applications. **2013**, 14, 3249-3259		20
1708	Layer-by-layer spray deposition and unzipping of single-wall carbon nanotube-based thin film electrodes for electrochemical capacitors. **2013**, 61, 525-536		34

1707	An investigation about the cycling stability of supercapacitors containing protic ionic liquids as electrolyte components. **2013**, 108, 226-231		56
1706	Electrical double-layer capacitance of micro- and mesoporous activated carbon prepared from rice husk and beet sugar. **2013**, 114, 617-626		91
1705	Easy synthesis of honeycomb hierarchical porous carbon and its capacitive performance. *Journal of Power Sources*, **2013**, 227, 118-122	8.9	27
1704	The influence of pore size and surface area of activated carbons on the performance of ionic liquid based supercapacitors. **2013**, 15, 17287-94		83
1703	Influence of pore structures on the electrochemical performance of asphaltene-based ordered mesoporous carbons. **2013**, 174, 67-73		28
1702	Carbon black directed synthesis of ultrahigh mesoporous carbon aerogels. **2013**, 63, 487-497		25
1701	A mesoporous carbon polymer actuator with superior performance to that of single-walled carbon nanotube polymer actuators. **2013**, 1, 5272		3
1700	Porous Hydrothermal Carbons. **2013**, 37-73		1
1699	Green Carbon. **2013**, 1-36		
1698	Detection of a spinning object using light's orbital angular momentum. **2013**, 341, 537-40		512
1697	Effect of high temperature treatment on electrochemical properties of activated carbon fabric in supercapacitor application. **2013**, 14, 1808-1816		8
1696	High performance supercapacitor using porous carbon nanomaterial from corn cob. **2013**,		2
1695	Superior capacitive and electrocatalytic properties of carbonized nanostructured polyaniline upon a low-temperature hydrothermal treatment. **2013**, 64, 472-486		62
1694	Electrochemical characteristics of discrete, uniform, and monodispersed hollow mesoporous carbon spheres in double-layered supercapacitors. **2013**, 8, 2627-33		17
1693	Wide electrochemical window of supercapacitors from coffee bean-derived phosphorus-rich carbons. **2013**, 6, 2330-9		111
1692	Porous Carbons from Nonporous MOFs: Influence of Ligand Characteristics on Intrinsic Properties of End Carbon. **2013**, 13, 4195-4199		124
1691	A perspective: carbon nanotube macro-films for energy storage. **2013**, 6, 3183-3201		153
1690	Hollow, spherical nitrogen-rich porous carbon shells obtained from a porous organic framework for the supercapacitor. **2013**, 5, 10280-7		180

1689	Supercapacitor Electrodes Produced through Evaporative Consolidation of Graphene Oxide-Water-Ionic Liquid Gels. **2013**, 160, A1653-A1660		54
1688	Moderating black powder chemistry for the synthesis of doped and highly porous graphene nanoplatelets and their use in electrocatalysis. **2013**, 25, 6284-90		209
1687	Polyaniline/carbon nanotube nanocomposite electrodes with biomimetic hierarchical structure for supercapacitors. **2013**, 1, 14719		64
1686	Synthesis of carbon nano-onion and nickel hydroxide/oxide composites as supercapacitor electrodes. **2013**, 3, 25891		48
1685	Nitrogen-enriched carbon electrodes in electrochemical capacitors: investigating accessible porosity using CM-SANS. **2013**, 15, 16774-8		17
1684	Modeling and Parameter Identification of Ultracapacitors for Hybrid Electrical Vehicles. **2013**,		5
1683	Facile treatment of wastewater produced in Hummer's method to prepare Mn3O4 nanoparticles and study their electrochemical performance in an asymmetric supercapacitor. **2013**, 3, 2398		32
1682	Metallocene/carbon hybrids prepared by a solution process for supercapacitor applications. **2013**, 1, 13120		30
1681	An investigation about the use of mixtures of sulfonium-based ionic liquids and propylene carbonate as electrolytes for supercapacitors. **2013**, 1, 12669		42
1680	Facile preparation of transition metal oxide–metal composites with unique nanostructures and their electrochemical performance as energy storage material. **2013**, 1, 14246		15
1679	Binderless thin films of zeolite-templated carbon electrodes useful for electrochemical microcapacitors with ultrahigh rate performance. **2013**, 15, 10331-4		17
1678	Tuning the porous texture and specific surface area of nanoporous carbons for supercapacitor electrodes by adjusting the hydrothermal synthesis temperature. **2013**, 1, 12962		33
1677	Architectural design of hierarchically ordered porous carbons for high-rate electrochemical capacitors. **2013**, 1, 2886		65
1676	Preparation of graphene/nano-MnO2 composite and its electrochemical performance as supercapacitor electrodes. **2013**,		
1675	Synthesis and electrochemical performance of polyaniline/MnO2 nanowire composites for supercapacitors. **2013**, 74, 360-365		67
1674	Graphene-beaded carbon nanofibers for use in supercapacitor electrodes: Synthesis and electrochemical characterization. *Journal of Power Sources*, **2013**, 222, 410-416	8.9	145
1673	A high-performance hard carbon for Li-ion batteries and supercapacitors application. *Journal of Power Sources*, **2013**, 223, 306-311	8.9	101
1672	Preparation and capacitive properties of the core–shell structure carbon aerogel microbeads-nanowhisker-like NiO composites. *Journal of Power Sources*, **2013**, 224, 317-323	8.9	42

1671	A New Partially Reduced Graphene Oxide Nanosheet/Polyaniline Nanowafer Hybrid as Supercapacitor Electrode Material. **2013**, 27, 568-575		110
1670	A high-energy-density supercapacitor with graphene□CMK-5 as the electrode and ionic liquid as the electrolyte. **2013**, 1, 2313		165
1669	Differentiate the pseudocapacitance and double-layer capacitance contributions for nitrogen-doped reduced graphene oxide in acidic and alkaline electrolytes. *Journal of Power Sources*, **2013**, 227, 300-308	8.9	345
1668	Template synthesis of hollow carbon spheres anchored on carbon nanotubes for high rate performance supercapacitors. **2013**, 52, 209-218		151
1667	Preparation and one-step activation of microporous carbon nanofibers for use as supercapacitor electrodes. **2013**, 51, 290-300		155
1666	High power supercap electrodes based on vertical aligned carbon nanotubes on aluminum. *Journal of Power Sources*, **2013**, 227, 218-228	8.9	56
1665	Microwave synthesis of micro-mesoporous activated carbon xerogels for high performance supercapacitors. **2013**, 168, 206-212		56
1664	3D carbon based nanostructures for advanced supercapacitors. **2013**, 6, 41-53		1255
1663	On the importance of the structure in the electrical conductivity of fishbone carbon nanofibers. **2013**, 48, 1423-1435		23
1662	Electrochemical impedance spectroscopy on nanostructured carbon electrodes grown by supersonic cluster beam deposition. **2013**, 15, 1		12
1661	Effect of pH-induced chemical modification of hydrothermally reduced graphene oxide on supercapacitor performance. *Journal of Power Sources*, **2013**, 233, 313-319	8.9	159
1660	Nitrogen-doped porous carbon for supercapacitor with long-term electrochemical stability. *Journal of Power Sources*, **2013**, 230, 50-58	8.9	233
1659	Anomalous effect of K ions on electrochemical capacitance of amorphous MnO2. *Journal of Power Sources*, **2013**, 234, 1-7	8.9	29
1658	Efficient preparation of biomass-based mesoporous carbons for supercapacitors with both high energy density and high power density. *Journal of Power Sources*, **2013**, 240, 109-113	8.9	291
1657	Rapid carbon activation via microwave irradiation of nongraphitic carbon doped with metallic potassium and tetrahydrofuran (THF). *Journal of Power Sources*, **2013**, 240, 306-313	8.9	4
1656	Electrochemical performance of supercapacitors with KOH activated mesophase carbon microbead electrodes. **2013**, 44, 611-616		16
1655	Performance characteristics of supercapacitor electrodes made of silicon carbide nanowires grown on carbon fabric. *Journal of Power Sources*, **2013**, 243, 648-653	8.9	73
1654	Multimodal porous carbon as a highly efficient electrode material in an electric double layer capacitor. **2013**, 182, 1-7		66

1653	High volumetric electrochemical performance of ultra-high density aligned carbon nanotube supercapacitors with controlled nanomorphology. **2013**, 111, 608-613		34
1652	Electrochemical and optical properties of poly(3,4-dimethylthiophene) and its copolymers with 3-methylthiophenein ionic liquids media. **2013**, 106, 13-22		11
1651	Activation of structural carbon fibres for potential applications in multifunctional structural supercapacitors. **2013**, 395, 241-8		60
1650	Gel-Based Activated Carbon Electrode For Supercapacitors. **2013**, 50, 53-58		1
1649	Ultrathin Co3O4 nanosheet arrays with high supercapacitive performance. **2013**, 3, 3537		165
1648	The Study of Activated Carbon/CNT/MoO3Electrodes for Aqueous Pseudo-Capacitors. **2013**, 160, A1489-A1496		18
1647	Microstructural and Morphological Effects on Charge Storage Properties in MnO2-Carbon Nanofibers Based Supercapacitors. **2013**, 160, A2315-A2321		26
1646	Lack of anodic capacitance causes power overshoot in microbial fuel cells. **2013**, 138, 353-8		69
1645	Influence of the textual properties of activated carbon nanofibers on the performance of electric double-layer capacitors. **2013**, 19, 1315-1319		29
1644	Supercapacitive performance of nitrogen-enriched carbons from carbonization of polyaniline/activated mesocarbon microbeads. *Journal of Power Sources*, **2013**, 227, 1-7	8.9	43
1643	Synthesis of Mn3O4-anchored graphene sheet nanocomposites via a facile, fast microwave hydrothermal method and their supercapacitive behavior. **2013**, 87, 801-808		90
1642	Facile synthesis of dual micro/macroporous carbonaceous foams by templating in highly concentrated water-in-oil emulsions. **2013**, 182, 102-108		11
1641	Ethanol-based synthesis of hierarchically porous carbon using nanocrystalline beta zeolite template for high-rate electrical double layer capacitor. **2013**, 60, 175-185		51
1640	Shape-controlled synthesis of ternary nickel cobaltite and their application in supercapacitors. **2013** , 707, 66-73		16
1639	Enhancing the capacitance of TiO2 nanotube arrays by a facile cathodic reduction process. *Journal of Power Sources*, **2013**, 239, 128-131	8.9	77
1638	Supercapacitors using binderless composite monolith electrodes from carbon nanotubes and pre-carbonized biomass residues. **2013**, 59, 370-379		51
1637	Comparison of electrochemical and electromechanical properties of a high performance carbon black polymer actuator and a single-walled carbon nanotube polymer actuator. **2013**, 176, 1103-1109		5
1636	Sustainable synthesis of phosphorus- and nitrogen-co-doped porous carbons with tunable surface properties for supercapacitors. *Journal of Power Sources*, **2013**, 239, 81-88	8.9	137

1635	Flexible energy storage devices based on carbon nanotube forests with built-in metal electrodes. **2013**, 195, 224-230		22
1634	Temperature and state-of-charge estimation in ultracapacitors based on extended Kalman filter. *Journal of Power Sources*, **2013**, 234, 234-243	8.9	53
1633	Macro-/microporous carbon for supercapacitors derived from rape seed shell. **2013**, 105, 43-46		11
1632	Photoresist-derived porous carbon for on-chip micro-supercapacitors. **2013**, 57, 395-400		95
1631	Freestanding three-dimensional graphene/MnO2 composite networks as ultralight and flexible supercapacitor electrodes. **2013**, 7, 174-82		1202
1630	Preparation of highly porous binderless activated carbon electrodes from fibres of oil palm empty fruit bunches for application in supercapacitors. **2013**, 132, 254-61		249
1629	Charge manipulation in molecules encapsulated inside single-wall carbon nanotubes. **2013**, 110, 086801		16
1628	Facile synthesis of polyaniline nanotubes using reactive oxide templates for high energy density pseudocapacitors. **2013**, 1, 3315		158
1627	Supercapacitors: Review of Materials and Fabrication Methods. **2013**, 139, 72-79		307
1626	SnO2-RuO2 composite films by chemical deposition for supercapacitor application. **2013**, 139, 416-422		35
1625	Emulsion-templated macroporous carbons synthesized by hydrothermal carbonization and their application for the enzymatic oxidation of glucose. **2013**, 6, 701-10		48
1624	Electrochemical Supercapacitors and Hybrid Systems. **2013**, 93-115		
1623	Synthesis of large area carbon nanosheets for energy storage applications. **2013**, 58, 59-65		44
1622	Electrical Double-Layer Capacitors and Carbons for EDLCs. **2013**, 131-165		23
1621	Modern Theories of Carbon-Based Electrochemical Capacitors. **2013**, 167-206		6
1620	Li-Ion-Based Hybrid Supercapacitors in Organic Medium. **2013**, 239-256		18
1619	General Properties of Electrochemical Capacitors. **2013**, 69-109		26
1618	EDLCs Based on Solvent-Free Ionic Liquids. **2013**, 289-306		6

1617	Enhanced activity of chemically synthesized hybrid graphene oxide/Mn3O4 composite for high performance supercapacitors. **2013**, 92, 205-215		195
1616	Hybrid nanostructured materials for high-performance electrochemical capacitors. **2013**, 2, 213-234		883
1615	Design and functionality of colloidal-crystal-templated materials--chemical applications of inverse opals. **2013**, 42, 2763-803		429
1614	Fabrication of high-surface-area graphene/polyaniline nanocomposites and their application in supercapacitors. **2013**, 5, 2685-91		273
1613	Low-temperature preparation of nitrogen-doped graphene for supercapacitors. **2013**, 56, 218-223		74
1612	Nanomaterials for energy conversion and storage. **2013**, 42, 3127-71		1188
1611	From dead leaves to high energy density supercapacitors. **2013**, 6, 1249		678
1610	Asymmetric hybrid capacitors based on activated carbon and activated carbon fibre–PANI electrodes. **2013**, 89, 326-333		82
1609	Effect of carbon blacks filler addition on electrochemical behaviors of Co3O4/graphene nanosheets as a supercapacitor electrodes. **2013**, 89, 516-522		118
1608	Asymmetric supercapacitor containing poly(3-methyl thiophene)-multiwalled carbon nanotubes nanocomposites and activated carbon. **2013**, 94, 182-191		48
1607	High performance supercapacitor prepared from hollow mesoporous carbon capsules with hierarchical nanoarchitecture. *Journal of Power Sources*, **2013**, 244, 799-805	8.9	114
1606	Enhanced supercapacitor performance of N-doped mesoporous carbons prepared from a gelatin biomolecule. **2013**, 14, 1563-9		40
1605	Electropolymerization of graphene oxide/polyaniline composite for high-performance supercapacitor. **2013**, 90, 95-100		173
1604	A novel solvothermal synthesis of Mn3O4/graphene composites for supercapacitors. **2013**, 90, 210-218		162
1603	Fabrication of porous carbon nanofibers with adjustable pore sizes as electrodes for supercapacitors. *Journal of Power Sources*, **2013**, 235, 289-296	8.9	223
1602	Applications of Mesoporous Molecular Sieves. **2013**, 465-511		
1601	Activated carbon from phenolic resin with controlled mesoporosity for an electric double-layer capacitor (EDLC). **2013**, 1, 6037		113
1600	Pyrrolic-structure enriched nitrogen doped graphene for highly efficient next generation supercapacitors. **2013**, 1, 2904		179

1599	Synthesis of superior carbon nanofibers with large aspect ratio and tunable porosity for electrochemical energy storage. **2013**, 1, 9449		54
1598	Metal□rganic frameworks as platforms for clean energy. **2013**, 6, 1656		768
1597	Chrysanthemum like carbon nanofiber foam architectures for supercapacitors. **2013**, 28, 912-917		13
1596	Hierarchically nanoperforated graphene as a high performance electrode material for ultracapacitors. **2013**, 9, 2801-9		33
1595	A novel asymmetric supercapacitor with an activated carbon cathode and a reduced graphene oxide□obalt oxide nanocomposite anode. *Journal of Power Sources*, **2013**, 242, 148-156	8.9	138
1594	Solid-state supercapacitors with ionic liquid based gel polymer electrolyte: Effect of lithium salt addition. *Journal of Power Sources*, **2013**, 243, 211-218	8.9	53
1593	Bi-material anode based on porous graphitic carbon for Li4Ti5O12-PGC/LiFePO4 hybrid battery capacitor. **2013**, 107, 413-418		12
1592	Fast vortex-assisted self-assembly of carbon nanoparticles on an air-water interface. **2013**, 117, 6524-33		6
1591	Self-discharge of electrochemical double layer capacitors. **2013**, 15, 8692-9		91
1590	Maricite (NaMn1/3Ni1/3Co1/3PO4)/Activated Carbon: Hybrid Capacitor. **2013**, 27, 3516-3522		60
1589	Microorganism-Derived Heteroatom-Doped Carbon Materials for Oxygen Reduction and Supercapacitors. **2013**, 23, 1305-1312		195
1588	Twisting carbon nanotube fibers for both wire-shaped micro-supercapacitor and micro-battery. **2013**, 25, 1155-9, 1224		635
1587	Outstanding performance of activated graphene based supercapacitors in ionic liquid electrolyte from □0 to 80 °C. **2013**, 2, 403-411		276
1586	Carbon nanotube/graphene composite for enhanced capacitive deionization performance. **2013**, 59, 464-471		189
1585	Carbon/carbon supercapacitors. **2013**, 22, 226-240		220
1584	Hydrothermal carbons from hemicellulose-derived aqueous hydrolysis products as electrode materials for supercapacitors. **2013**, 6, 374-82		138
1583	Performance of solid-state supercapacitors with ionic liquid 1-ethyl-3-methylimidazolium tris(pentafluoroethyl) trifluorophosphate based gel polymer electrolyte and modified MWCNT electrodes. **2013**, 105, 333-341		80
1582	Functional zeolitic-imidazolate-framework-templated porous carbon materials for CO2 capture and enhanced capacitors. **2013**, 8, 1879-85		110

1581	Electrochemical characterization and equivalent circuit modeling of single-walled carbon nanotube (SWCNT) coated electrodes. *Journal of Power Sources*, **2013**, 234, 208-216	8.9	31
1580	Investigation of carbon materials for use as a flowable electrode in electrochemical flow capacitors. **2013**, 98, 123-130		101
1579	Nuclear magnetic resonance study of ion adsorption on microporous carbide-derived carbon. **2013**, 15, 7722-30		65
1578	Effective microwave-assisted synthesis of graphene nanosheets/NiO composite for high-performance supercapacitors. **2013**, 37, 439-443		27
1577	Carbonaceous nickel oxide nano-composites: As electrode materials in electrochemical capacitor applications. *Journal of Power Sources*, **2013**, 237, 156-166	8.9	33
1576	Conducting polymers-based electrochemical supercapacitors□Progress and prospects. **2013**, 101, 109-129		311
1575	High performance graphene-poly (o-anisidine) nanocomposite for supercapacitor applications. **2013**, 141, 263-271		22
1574	Charge Storage Accessibility Factor as a Parameter Determining the Capacitive Performance of Nanoporous Carbon-Based Supercapacitors. **2013**, 1, 1024-1032		33
1573	Graphitic Mesoporous Carbons with Embedded Prussian Blue-Derived Iron Oxide Nanoparticles Synthesized by Soft Templating and Low-Temperature Graphitization. **2013**, 25, 2803-2811		59
1572	Supercapacitive behaviors of the nitrogen-enriched activated mesocarbon microbead in aqueous electrolytes. **2013**, 17, 1693-1700		15
1571	Interstratified hybrids of □hydroxides of nickel and cobalt as supercapacitor electrode materials. **2013**, 48, 2715-2719		29
1570	Polymer brush stabilized amorphous MnO2 on graphene oxide sheets as novel electrode materials for high performance supercapacitors. **2013**, 1, 8587		22
1569	Bimetallic molybdenum tungsten oxynitride: structure and electrochemical properties. **2013**, 1, 7889		28
1568	Microspherical polyaniline/graphene nanocomposites for high performance supercapacitors. *Journal of Power Sources*, **2013**, 243, 715-720	8.9	64
1567	General Introduction. **2013**, 1-11		
1566	A new conducting salt for high voltage propylene carbonate-based electrochemical double layer capacitors. **2013**, 110, 221-227		49
1565	Growth of vertically aligned carbon nanotubes on carbon fiber: thermal and electrochemical treatments. **2013**, 17, 1977-1984		7
1564	N/P-Codoped Thermally Reduced Graphene for High-Performance Supercapacitor Applications. **2013**, 117, 14912-14919		114

1563	Carbon-Based Nanomaterials for Electrochemical Energy Storage. **2013**, 299-326		
1562	Electrochemical Energy Storage: The Benefits of Nanomaterials. **2013**, 277-298		3
1561	Sandwich-Type Microporous Carbon Nanosheets for Enhanced Supercapacitor Performance. **2013**, 3, 1421-1427		130
1560	Thick vertically aligned carbon nanotube/carbon composite electrodes for electrical double-layer capacitors. **2013**, 58, 134-138		12
1559	Synthesis, surface characteristics, and electrochemical capacitance of Cu-doped carbon xerogel microspheres. **2013**, 55, 260-268		14
1558	Carbon□ulfur composites for Li□ batteries: status and prospects. **2013**, 1, 9382		664
1557	Polyaniline modified graphene and carbon nanotube composite electrode for asymmetric supercapacitors of high energy density. *Journal of Power Sources*, **2013**, 241, 423-428	8.9	152
1556	Analysis of Supercapacitor Energy Loss for Power Management in Environmentally Powered Wireless Sensor Nodes. **2013**, 28, 5391-5403		65
1555	Three dimensional few layer graphene and carbon nanotube foam architectures for high fidelity supercapacitors. **2013**, 2, 294-303		236
1554	Room-temperature synthesis of 3-dimentional Ag-graphene hybrid hydrogel with promising electrochemical properties. **2013**, 178, 769-774		20
1553	Effects of the functional groups on the electrochemical properties of ordered porous carbon for supercapacitors. **2013**, 105, 299-304		132
1552	Ultramicroporous carbon as electrode material for supercapacitors. *Journal of Power Sources*, **2013**, 228, 193-197	8.9	81
1551	Towards the selective modification of soft-templated mesoporous carbon materials by elemental fluorine for energy storage devices. **2013**, 1, 9327		19
1550	Easy and controlled synthesis of nitrogen-doped carbon. **2013**, 55, 98-107		35
1549	Metal-doped carbon xerogels for the electro-catalytic conversion of CO2 to hydrocarbons. **2013**, 56, 324-331		46
1548	Role of carbon matrix heteroatoms at synthesis of carbons for catalysis and energy applications. **2013**, 22, 174-182		13
1547	One step hydrothermal synthesis of micro-belts like □Ni(OH) 2 thin films for supercapacitors. **2013**, 39, 7255-7261		34
1546	Synthesis and super capacitance of goethite/reduced graphene oxide for supercapacitors. **2013**, 141, 310-317		25

1545	Recent Progress in the Replication of Hierarchical Biological Tissues. **2013**, 23, 4408-4422		31
1544	Nanoporous carbon black particles as an electrode material for electrochemical double layer capacitors. **2013**, 91, 323-325		10
1543	The role of plasma treatment on electrochemical capacitance of undoped and nitrogen doped carbon nanotubes. **2013**, 2, 71-81		3
1542	Influence of calcination temperature on the morphology and energy storage properties of cobalt oxide nanostructures directly grown over carbon cloth substrates. **2013**, 2, 1		17
1541	Hierarchical mesoporous carbon materials: preparation by direct tri-constituent co-assembly and the electrochemical performance. **2013**, 17, 927-935		16
1540	Enhanced electrical capacitance of porous carbon nanofibers derived from polyacrylonitrile and boron trioxide. **2013**, 88, 597-603		30
1539	The synergy effect on Li storage of LiFePO4 with activated carbon modifications. **2013**, 3, 20024		37
1538	Graphene as a Target for Polymer Synthesis. **2013**, 61-92		11
1537	Flexible high performance wet-spun graphene fiber supercapacitors. **2013**, 3, 23957		137
1536	Dynamic modeling of the electrical and thermal behavior of ultracapacitors. **2013**,		5
1535	S-doped micro/mesoporous carbon□graphene composites as efficient supercapacitors in alkaline media. **2013**, 1, 11717		126
1534	Electrochemical Characterization of Lithium Intercalation Processes of PAN-Based Carbon Fibers in a Microelectrode System. **2013**, 160, A1473-A1481		41
1533	Natural, cheap and environmentally friendly binder for supercapacitors. *Journal of Power Sources*, **2013**, 221, 14-20	8.9	69
1532	Mesoscale modeling of electric double layer capacitors with three-dimensional ordered structures. *Journal of Power Sources*, **2013**, 221, 252-260	8.9	60
1531	Composite electrodes of activated carbon derived from cassava peel and carbon nanotubes for supercapacitor applications. **2013**,		5
1530	Structural engineering for high energy and voltage output supercapacitors. **2013**, 19, 6451-8		18
1529	Improvement in the Characteristics of Electric Double Layer Capacitor Using a Mixture of Arc Black and Carbon Nanoballoon. **2013**, 52, 11NM05		1
1528	A Review of Electrospun Carbon Fibers as Electrode Materials for Energy Storage. **2013**, 17, 1390-1401		96

1527	Multilayer Polyoxometalates-Carbon Nanotube Composites for Electrochemical Capacitors. **2013**, 2, M3046-M3050	36
1526	Fluoroethylene Carbonate as Co-Solvent for Propylene Carbonate Based Electrical Double Layer Capacitors. **2013**, 160, A1025-A1030	15
1525	Ordered Mesoporous Carbon Nano Spheres as Electrode Material for Supercapacitors. **2013**, 320, 661-664	0
1524	Flexible and weaveable capacitor wire based on a carbon nanocomposite fiber. **2013**, 25, 5965-70	401
1523	Development of High Performance Electrochemical Capacitor: A Systematic Review of Electrode Fabrication Technique Based on Different Carbon Materials. **2013**, 2, M3101-M3119	38
1522	Electrochemical Performance of Graphene Nanosheets as Electrode Material for Supercapacitors. **2013**, 873, 581-586	
1521	Camphoric Carbon-Grafted Ni/NiO Nanowire Electrodes for High-Performance Energy-Storage Systems. **2013**, 78, 1258-1265	19
1520	Nickel-cobalt oxide coated CNTs as additives of activated carbon electrode for high-performance supercapacitors. **2013**,	
1519	Composite Carbon Nano-Tubes (CNT)/Activated Carbon Electrodes for Non-Aqueous Super Capacitors Using Organic Electrolyte Solutions. **2013**, 160, A1282-A1285	35
1518	All solid-state micro-supercapacitors using ionogel electrolyte. **2013**,	1
1517	Effects of ageing and incorporation of ion-exchange membrane on the electrosorption performance of activated carbon based electrodes modules. **2013**, 51, 3489-3496	11
1516	Evolution of Energy Storage on the Platform of Supercapacitors. **2013**, 81, 775-776	7
1515	Molecular Dynamics Study of Ionic Liquids in Graphite Nanopores. **2013**, 81, 808-810	8
1514	3.3-V-Rated EDLC Performance with an Alternative Conducting Agent (nc-RuO2^|^middot;nH2O/KB). **2013**, 81, 823-827	1
1513	. **2013**,	34
1512	Water plasma functionalized CNTs/MnO2 composites for supercapacitors. **2013**, 2013, 832581	12
1511	Porosity Evolution of Activated Carbon Fiber Prepared from Liquefied Wood. Part II: Water Steam Activation from 850 to 950 °C. **2014**, 9,	3
1510	Graphene/heparin template-controlled polyaniline nanofibers composite for high energy density supercapacitor electrode. **2014**, 1, 045051	2

1509	Effects of structural disorder and surface chemistry on electric conductivity and capacitance of porous carbon electrodes. **2014**, 172, 139-62	48
1508	Synthesis of boron, nitrogen co-doped porous carbon from asphaltene for high-performance supercapacitors. **2014**, 23, 086101	4
1507	In-situ and ex-situ measurements of thermal conductivity of supercapacitors. **2014**, 78, 373-383	14
1506	Ion Intercalation into Graphitic Carbon with a Low Surface Area for High Energy Density Supercapacitors. **2014**, 161, A1486-A1494	22
1505	Hierarchical activated mesoporous phenolic-resin-based carbons for supercapacitors. **2014**, 9, 2789-97	20
1504	Preparation and characterization of RuO 2 /polypyrrole electrodes for supercapacitors. **2014**, 197, 57-60	15
1503	Influence of the Oxygen Plasma Treatment on Carbon Electrode and Capacity of Supercapacitors. **2014**, 125, 1316-1319	1
1502	Electrochemical Performance of Supercapacitors Formed by PAni/CF and PAni/CNT/CF. **2014**, 58, 35-41	3
1501	Microwave Thermal Conversion of Oil Palm and Related Biomass for Biofuels and Biochars. **2014**, 606, 223-226	
1500	Electrochemical impedance spectroscopy of supercapacitors: A novel analysis approach using evolutionary programming. **2014**,	8
1499	Effects of activating agents of acids and alkalis on electrochemical properties of carbon spheres. **2014**, 16, 1	5
1498	A Gibbs-ensemble based technique for Monte Carlo simulation of electric double layer capacitors (EDLC) at constant voltage. **2014**, 140, 174110	10
1497	Carbon nanotube supercellulose supercapacitor. **2014**,	1
1496	Comparative Study of Two Protic Ionic Liquids as Electrolyte for Electrical Double-Layer Capacitors. **2014**, 161, A228-A238	30
1495	An ionic liquid template approach to graphene–carbon xerogel composites for supercapacitors with enhanced performance. **2014**, 2, 14329	26
1494	Facile synthesis of reduced graphene oxide-modified, nitrogen-doped carbon xerogel with enhanced electrochemical capacitance. **2014**, 148, 1171-1177	6
1493	Preparation of well-controlled porous carbon nanofiber materials by varying the compatibility of polymer blends. **2014**, 63, 1471-1477	43
1492	High Performance Supercapacitors Electrode Derived from the Pine Needles. **2014**, 1035, 385-391	

1491	Multifunctional structural energy storage composite supercapacitors. **2014**, 172, 81-103		84
1490	Comparison of carbon onions and carbon blacks as conductive additives for carbon supercapacitors in organic electrolytes. *Journal of Power Sources*, **2014**, 272, 1122-1133	8.9	75
1489	High-performance hybrid (electrostatic double-layer and faradaic capacitor-based) polymer actuators incorporating nickel oxide and vapor-grown carbon nanofibers. **2014**, 30, 14343-51		16
1488	Understanding the ageing process, recovering phase and fault diagnosis of electrochemical double layer capacitors. **2014**,		2
1487	One-pot hydrothermal synthesis of nitrogen-doped hierarchically porous carbon monoliths for supercapacitors. **2014**, 21, 1009-1014		15
1486	Electrochemical Properties of Graphene Nanosheet/Polyaniline Nanocomposite as Electrode for Supercapacitors. **2014**, 936, 364-368		1
1485	Chemical splitting of multiwalled carbon nanotubes to enhance electrochemical capacitance for supercapacitors. **2014**, 07, 1450057		2
1484	Effects of preparation temperature on electrochemical performance of nitrogen-enriched carbons. **2014**, 24, 3541-3550		5
1483	7. Sustainable carbon hybrid materials made by hydrothermal carbonization and their use in energy applications. **2014**,		2
1482	11. Batteries/Supercapacitors: Hybrids with CNTs. **2014**,		
1481	Effect of Pore Structure of Activated Carbon on its Electrochemical Performance in Non-Aqueous Electrolyte. **2014**, 1004-1005, 596-601		
1480	Thermal conductivity and temperature profiles in carbon electrodes for supercapacitors. *Journal of Power Sources*, **2014**, 246, 160-166	8.9	19
1479	Binderfree synthesis of high-surface-area carbon electrodes via CO2 activation of resorcinolFormaldehyde carbon xerogel disks: Analysis of activation process. **2014**, 76, 240-249		30
1478	Lithium niobate nanoflakes as electrodes for highly stable electrochemical supercapacitor devices. **2014**, 119, 84-87		12
1477	The supercapacitive behavior and excellent cycle stability of graphene/MnO 2 composite prepared by an electrostatic self-assembly process. **2014**, 39, 16151-16161		29
1476	Non-noble FeNX electrocatalysts supported on the reduced graphene oxide for oxygen reduction reaction. **2014**, 76, 386-400		69
1475	Spiro-(1,1?)-bipyrrolidinium tetrafluoroborate salt as high voltage electrolyte for electric double layer capacitors. *Journal of Power Sources*, **2014**, 265, 309-316	8.9	69
1474	Millimeter-long multilayer graphene nanoribbons prepared by wet chemical processing. **2014**, 71, 120-126		13

1473	Improving the characteristic of electric double layer capacitors using oxidized carbon nanoballoon. **2014**, 131, 207-213	8
1472	Polyaniline and polyaniline-carbon black nanostructures as electrochemical capacitor electrode materials. **2014**, 39, 8582-8589	33
1471	Enhanced electrical capacitance of tetraethyl orthosilicate-derived porous carbon nanofibers produced via electrospinning. **2014**, 714-715, 92-96	18
1470	Scaling laws for heat generation and temperature oscillations in EDLCs under galvanostatic cycling. **2014**, 75, 637-649	10
1469	Synthesis of starch-derived mesoporous carbon for electric double layer capacitor. **2014**, 245, 166-172	90
1468	E. grandis as a Biocarbons Precursor for Supercapacitor Electrode Application. **2014**, 5, 305-313	20
1467	Insight into the Capacitive Performance of Sulfur-Doped Nanoporous Carbons Modified by Addition of Graphene Phase. **2014**, 26, 109-120	46
1466	Nitrogen-doped graphene/carbon nanotube self-assembly for efficient oxygen reduction reaction in acid media. **2014**, 144, 760-766	86
1465	Conducting polymer nanowire arrays for high performance supercapacitors. **2014**, 10, 14-31	593
1464	KOH-activated depleted fullerene soot for electrochemical double-layer capacitors. **2014**, 44, 309-316	18
1463	Response surface modeling for optimization heterocatalytic Fenton oxidation of persistence organic pollution in high total dissolved solid containing wastewater. **2014**, 21, 1489-502	22
1462	A universal equivalent circuit for carbon-based supercapacitors. **2014**, 18, 1377-1387	94
1461	A rational template carbonization method for producing highly porous carbon for supercapacitor application. **2014**, 117, 55-61	27
1460	Enzymatic synthesis of polyaniline/multi-walled carbon nanotube composite with core shell structure and its electrochemical characterization for supercapacitor application. **2014**, 123, 151-157	76
1459	Carbons and electrolytes for advanced supercapacitors. **2014**, 26, 2219-51, 2283	1808
1458	Poly(3-methylthiophene)/Vertically Aligned Multi-walled Carbon Nanotubes: Electrochemical Synthesis, Characterizations and Electrochemical Storage Properties in Ionic Liquids. **2014**, 130, 754-765	26
1457	Efficient energy storage capabilities promoted by hierarchical MnCo2O4 nanowire-based architectures. **2014**, 4, 17230	46
1456	Facile fabrication and perfect cycle stability of 3D NiO@CoMoO4 nanocomposite on Ni foam for supercapacitors. **2014**, 4, 17884	45

1455	Electrochemical and electromechanical properties of carbon black/carbon fiber composite polymer actuator with higher performance than single-walled carbon nanotube polymer actuator. **2014**, 123, 340-345		20
1454	A generalized multi-dimensional mathematical model for charging and discharging processes in a supercapacitor. *Journal of Power Sources*, **2014**, 256, 369-382	8.9	18
1453	Effect of unequal load of carbon xerogel in electrodes on the electrochemical performance of asymmetric supercapacitors. **2014**, 44, 481-489		9
1452	Ionic Liquids Confined in a Realistic Activated Carbon Model: A Molecular Simulation Study. **2014**, 118, 1540-1553		40
1451	Sulfurized activated carbon for high energy density supercapacitors. *Journal of Power Sources*, **2014** , 252, 90-97	8.9	114
1450	Supercapacitors based on modified graphene electrodes with poly(ionic liquid). *Journal of Power Sources*, **2014**, 256, 264-273	8.9	65
1449	Effect of pre-lithiation degrees of mesocarbon microbeads anode on the electrochemical performance of lithium-ion capacitors. **2014**, 125, 22-28		101
1448	Supercapacitor carbon electrodes with high capacitance. **2014**, 18, 1351-1363		28
1447	Activated carbon aerogel containing graphene as electrode material for supercapacitor. **2014**, 50, 240-245		46
1446	Electrochemical polymerization of polyaniline doped with Zn2+ as the electrode material for electrochemical supercapacitors. **2014**, 18, 813-819		15
1445	Effects of structural properties of silicon carbide-derived carbons on their electrochemical double-layer capacitance in aqueous and organic electrolytes. **2014**, 18, 703-711		9
1444	Preparation and electrochemical behaviour of biomass based porous carbons as electrodes for supercapacitors a comparative investigation. **2014**, 31, 268-275		47
1443	Computer simulation of active layers in double-layer supercapacitors: Galvanostatics, determination of effective coefficients, and calculation of overall characteristics. **2014**, 50, 13-26		3
1442	Three-dimensional shape engineered, interfacial gelation of reduced graphene oxide for high rate, large capacity supercapacitors. **2014**, 26, 615-9, 505		349
1441	Porous CoO nanostructures grown on three-dimension graphene foams for supercapacitors electrodes. **2014**, 305, 433-438		57
1440	Preparation and electrochemical capacitive performance of polyaniline nanofiber-graphene oxide hybrids by oil water interfacial polymerization. **2014**, 189, 47-52		17
1439	Super long-life supercapacitors based on the construction of nanohoneycomb-like strongly coupled CoMoO(4)-3D graphene hybrid electrodes. **2014**, 26, 1044-51		574
1438	Effect of Visible-Light Exposure and Electrolyte Oxygen Content on the Capacitance of Sulfur-Doped Carbon. **2014**, 1, 565-572		22

1437	Presenting highest supercapacitance for TiO2/MWNTs nanocomposites: Novel method. **2014**, 247, 103-110		57
1436	Synthesis of graphene/vitamin C template-controlled polyaniline nanotubes composite for high performance supercapacitor electrode. **2014**, 55, 798-805		44
1435	Preparation of interconnected carbon nanofibers as electrodes for supercapacitors. **2014**, 127, 369-376		54
1434	A general approach for fabrication of nitrogen-doped graphene sheets and its application in supercapacitors. **2014**, 417, 270-7		74
1433	Recent Advances in Design and Fabrication of Electrochemical Supercapacitors with High Energy Densities. **2014**, 4, 1300816		1364
1432	Activated Carbon Modified by CNTs/Ni-Co Oxide as Hybrid Electrode Materials for High Performance Supercapacitors. **2014**, 13, 557-562		3
1431	Capacitance of carbon-based electrical double-layer capacitors. **2014**, 5, 3317		463
1430	Larger-scale fabrication of N-doped graphene-fiber mats used in high-performance energy storage. *Journal of Power Sources*, **2014**, 252, 113-121	8.9	44
1429	Supercapacitors Based on Flexible Substrates: An Overview. **2014**, 2, 325-341		140
1428	Synthesis of high-performance polyaniline/graphene oxide nanocomposites. **2014**, 26, 790-797		13
1427	Review of nanostructured carbon materials for electrochemical capacitor applications: advantages and limitations of activated carbon, carbide-derived carbon, zeolite-templated carbon, carbon aerogels, carbon nanotubes, onion-like carbon, and graphene. **2014**, 3, 424-473		398
1426	Electrochemical synthesis and capacitance properties of a novel poly(3,4-ethylenedioxythiophene bis-substituted bithiophene) electrode material. **2014**, 132, 67-74		30
1425	Production and Storage of Energy with One-Dimensional Semiconductor Nanostructures. **2014**, 39, 109-153		5
1424	Capacitive behaviour of thermally reduced graphene oxide in a novel ionic liquid containing di-cationic charge. **2014**, 193, 110-116		23
1423	The role of ionic electrolytes on capacitive performance of ZnO-reduced graphene oxide nanohybrids with thermally tunable morphologies. **2014**, 6, 1394-405		76
1422	Dual-layer-structured nickel hexacyanoferrate/MnO2 composite as a high-energy supercapacitive material based on the complementarity and interlayer concentration enhancement effect. **2014**, 6, 6196-201		63
1421	A flexible and high-voltage internal tandem supercapacitor based on graphene-based porous materials with ultrahigh energy density. **2014**, 10, 2285-92		51
1420	Vertical alignments of graphene sheets spatially and densely piled for fast ion diffusion in compact supercapacitors. **2014**, 8, 4580-90		261

1419	Kirkendall Effect Induced One-Step Fabrication of Tubular Ag/MnOx Nanocomposites for Supercapacitor Application. **2014**, 118, 6604-6611		45
1418	Graphitization as a Universal Tool to Tailor the Potential-Dependent Capacitance of Carbon Supercapacitors. **2014**, 4, 1400316		168
1417	Construction of high-energy-density supercapacitors from pine-cone-derived high-surface-area carbons. **2014**, 7, 1435-42		105
1416	Fast Response, vertically oriented graphene nanosheet electric double layer capacitors synthesized from C(2)H(2). **2014**, 8, 5873-82		113
1415	Anodic electrodeposition of a porous nickel oxide/hydroxide film on passivated nickel foam for supercapacitors. **2014**, 2, 7161-7164		54
1414	Phosphorous and nitrogen dual heteroatom doped mesoporous carbon synthesized via microwave method for supercapacitor application. *Journal of Power Sources*, **2014**, 250, 257-265	8.9	188
1413	First-Principles-Inspired Design Strategies for Graphene-Based Supercapacitor Electrodes. **2014**, 118, 4-15		97
1412	Hybrid energy storage: high voltage aqueous supercapacitors based on activated carbon–phosphotungstate hybrid materials. **2014**, 2, 1014-1021		115
1411	Carbon Materials for Electrochemical Capacitors. **2014**, 237-265		8
1410	Template Carbonization: Morphology and Pore Control. **2014**, 133-163		2
1409	Influence of quinone grafting via Friedel–Crafts reaction on carbon porous structure and supercapacitor performance. **2014**, 66, 654-661		29
1408	Carbon Nanotube Fiber Based Stretchable Wire-Shaped Supercapacitors. **2014**, 4, 1300759		271
1407	The preparation and electrochemical properties of MnO2/poly(3,4-ethylenedioxythiophene)/multiwalled carbon nanotubes hybrid nanocomposite and its application in a novel flexible micro-supercapacitor. **2014**, 121, 49-56		39
1406	An easy one-step electrosynthesis of graphene/polyaniline composites and electrochemical capacitor. **2014**, 67, 662-672		68
1405	Morphological modulation of polypyrrole thin films through oxidizing agents and their concurrent effect on supercapacitor performance. **2014**, 119, 1-10		61
1404	Electrosorption on activated biochar: effect of thermo-chemical activation treatment on the electric double layer capacitance. **2014**, 44, 141-157		56
1403	Performance of printable supercapacitors in an RF energy harvesting circuit. **2014**, 58, 42-46		49
1402	Novel hybrid nanocomposite based on poly(3,4-ethylenedioxythiophene)/multiwalled carbon nanotubes/graphene as electrode material for supercapacitor. **2014**, 189, 69-76		49

1401	Heterogeneous nanocarbon materials for oxygen reduction reaction. **2014**, 7, 576		792
1400	Facile growth of heparin-controlled porous polyaniline nanofiber networks and their application in supercapacitors. **2014**, 4, 5188		33
1399	Electrochemical anchoring of dual doping polypyrrole on graphene sheets partially exfoliated from graphite foil for high-performance supercapacitor electrode. *Journal of Power Sources*, **2014**, 249, 48-58	8.9	140
1398	A method to increase the energy density of supercapacitor cells by the addition of multiwall carbon nanotubes into activated carbon electrodes. **2014**, 68, 58-66		48
1397	Preparation of novel three-dimensional NiO/ultrathin derived graphene hybrid for supercapacitor applications. **2014**, 6, 1106-12		161
1396	Hierarchically porous carbons with partially graphitized structures for high rate supercapacitors. **2014**, 49, 363-370		11
1395	Non-aqueous hybrid supercapacitors fabricated with mesoporous TiO2 microspheres and activated carbon electrodes with superior performance. *Journal of Power Sources*, **2014**, 253, 80-89	8.9	68
1394	Fabrication of carbon nanotube/NiOx(OH)y nanocomposite by pulsed electrodeposition for supercapacitor applications. *Journal of Power Sources*, **2014**, 245, 324-330	8.9	43
1393	Synthesis of graphene from dry ice in flames and its application in supercapacitors. **2014**, 591, 78-81		30
1392	Preparation and Characterization of Microwave Reduced Graphite Oxide for High-Performance Supercapacitors. **2014**, 150, 269-278		82
1391	Energy-density enhancement of carbon-nanotube-based supercapacitors with redox couple in organic electrolyte. **2014**, 6, 19499-503		39
1390	Synthesis and electrochemical investigation of polyaniline/unzipped carbon nanotube composites as electrode material in supercapacitors. **2014**, 198, 345-356		41
1389	TiO2-entrained tubular carbon nanofiber and its electrochemical properties in the rechargeable Na-ion battery system. **2014**, 72, 309-314		7
1388	Electrochemical Performance of Hard Carbon as Negative Electrode in Lithium Ion Capacitor. **2014**, 472, 587-590		
1387	Graphitic Petal Micro-Supercapacitor Electrodes for Ultra-High Power Density. **2014**, 2, 897-905		40
1386	MOF-derived crumpled-sheet-assembled perforated carbon cuboids as highly effective cathode active materials for ultra-high energy density Li-ion hybrid electrochemical capacitors (Li-HECs). **2014**, 6, 4387-94		144
1385	Sulfur-rich carbon cryogels for supercapacitors with improved conductivity and wettability. **2014**, 2, 8472		81
1384	KOH self-templating synthesis of three-dimensional hierarchical porous carbon materials for high performance supercapacitors. **2014**, 2, 14844		141

1383	Capacitive performance enhancements of RuO2 nanocrystals through manipulation of preferential orientation growth originated from the synergy of Pluronic F127 trapping and annealing. **2014**, 6, 2861-71		18
1382	Fabrication of porous carbon spheres for high-performance electrochemical capacitors. **2014**, 4, 7538		65
1381	Micropore engineering of carbonized porous aromatic framework (PAF-1) for supercapacitors application. **2014**, 16, 12909-17		36
1380	Aqueous stabilisation of carbon-encapsulated superparamagnetic iron nanoparticles for biomedical applications. **2014**, 43, 13764-75		9
1379	Quantitative analysis of BF_4^- ions infiltrated into micropores of activated carbon fibers using nuclear magnetic resonance. **2014**, 4, 16726		5
1378	Nickel nanoparticles effect on the electrochemical energy storage properties of carbon nanocomposite films. **2014**, 25, 435401		14
1377	Preparation and electrochemical applications of spherical maltose-based templated carbon/MnO_x composite materials. **2014**, 148, 228-236		4
1376	Vertically aligned cobalt hydroxide nano-flake coated electro-etched carbon fiber cloth electrodes for supercapacitors. **2014**, 616-617, 35-39		5
1375	Studies in the capacitance properties of diaminoalkane-intercalated graphene. **2014**, 148, 220-227		6
1374	Recycling chicken eggshell membranes for high-capacity sodium battery anodes. **2014**, 4, 50950-50954		24
1373	Bowl-like carbon sheet for high-rate electrochemical capacitor application. *Journal of Power Sources*, **2014**, 272, 1-7	8.9	21
1372	Enhanced electrochemical performance of manganese dioxide spheres deposited on a titanium dioxide nanotube arrays substrate. *Journal of Power Sources*, **2014**, 272, 866-879	8.9	43
1371	Soft-template synthesis of vanadium oxynitride-carbon nanomaterials for supercapacitors. **2014**, 39, 16139-16150		30
1370	Carbon electrodeposition in molten salts: electrode reactions and applications. **2014**, 4, 35808-35817		88
1369	Heterostructured poly(3,6-dithien-2-yl-9H-carbazol-9-yl acetic acid)/TiO2 nanoparticles composite redox-active materials as both anode and cathode for high-performance symmetric supercapacitor applications. **2014**, 2, 6512-6524		21
1368	Ammonia Treatment of Activated Carbon Powders for Supercapacitor Electrode Application. **2014**, 161, A568-A575		39
1367	A copper based metal-organic framework as single source for the synthesis of electrode materials for high-performance supercapacitors and glucose sensing applications. **2014**, 39, 19609-19620		73
1366	A 3D hierarchical hybrid nanostructure of carbon nanotubes and activated carbon for high-performance supercapacitors. **2014**, 2, 3505		33

1365	Nitrogen-doped reduced graphene oxide for high-performance flexible all-solid-state micro-supercapacitors. **2014**, 2, 18125-18131	128
1364	Highly conductive carbon□CoO hybrid nanostructure arrays with enhanced electrochemical performance for asymmetric supercapacitors. **2014**, 2, 11776-11783	122
1363	Lithium-ion storage performance of camphoric carbon wrapped NiS nano/micro-hybrids. **2014**, 4, 11673-11679	24
1362	Hierarchical foam of exposed ultrathin nickel nanosheets supported on chainlike Ni-nanowires and the derivative chalcogenide for enhanced pseudocapacitance. **2014**, 6, 2618-23	68
1361	RF-PECVD growth and nitrogen plasma functionalization of CNTs on copper foil for electrochemical applications. **2014**, 49, 55-61	13
1360	Metal oxide/hydroxide-based materials for supercapacitors. **2014**, 4, 41910-41921	235
1359	Nitrogen rich graphene-cross-linked melamine formaldehyde carbon cryogels for supercapacitors. **2014**, 142, 101-107	13
1358	Textile energy storage in perspective. **2014**, 2, 10776	412
1357	Carbon nanotube balls and their application in supercapacitors. **2014**, 6, 706-11	28
1356	High-performance all solid-state micro-supercapacitor based on patterned photoresist-derived porous carbon electrodes and an ionogel electrolyte. **2014**, 2, 7997-8002	118
1355	All-solid-state flexible micro-supercapacitor arrays with patterned graphene/MWNT electrodes. **2014**, 79, 156-164	117
1354	A method to produce binderless supercapacitor electrode monoliths from biomass carbon and carbon nanotubes. **2014**, 60, 10-19	40
1353	Shape-controlled porous nanocarbons for high performance supercapacitors. **2014**, 2, 5236	47
1352	Synthesis and supercapacitive performance of hierarchically porous graphitic carbon monoliths containing cobalt nanoparticles. **2014**, 200, 245-252	13
1351	A hybrid supercapacitor based on flower-like Co(OH)2 and urchin-like VN electrode materials. **2014**, 2, 12724-12732	276
1350	Constructed uninterrupted charge-transfer pathways in three-dimensional micro/nanointerconnected carbon-based electrodes for high energy-density ultralight flexible supercapacitors. **2014**, 6, 210-8	47
1349	Interconnected network of MnO2 nanowires with a "cocoonlike" morphology: redox couple-mediated performance enhancement in symmetric aqueous supercapacitor. **2014**, 6, 10754-62	128
1348	Panoramic View of Electrochemical Pseudocapacitor and Organic Solar Cell Research in Molecularly Engineered Energy Materials (MEEM). **2014**, 118, 19505-19523	15

1347	A REVIEW OF METAL OXIDE COMPOSITE ELECTRODE MATERIALS FOR ELECTROCHEMICAL CAPACITORS. **2014**, 09, 1430002		104
1346	The effect of the carbon surface chemistry and electrolyte pH on the energy storage of supercapacitors. **2014**, 4, 32398-32404		33
1345	Design and synthesis of heteroatoms doped carbon/polyaniline hybrid material for high performance electrode in supercapacitor application. **2014**, 146, 242-248		82
1344	Cotton-based hollow carbon fibers with high specific surface area prepared by ammonia etching for supercapacitor application. **2014**, 4, 31300-31307		49
1343	High-Performance Hybrid Supercapacitor Enabled by a High-Rate Si-based Anode. **2014**, 24, 7433-7439		185
1342	Modifying the characteristics of carbon nanotubes grown on metallic substrates for ultracapacitor applications. **2014**, 115, 204309		3
1341	Advances and challenges for flexible energy storage and conversion devices and systems. **2014**, 7, 2101		650
1340	Preparation of Partially Reduced Graphene Oxide Nanosheets/Poly(Sodium 4-Styrenesulfonate) Composite with High Capacitance. **2014**, 147, 257-264		9
1339	Porous CoO nanobundles composited with 3D graphene foams for supercapacitors electrodes. **2014**, 137, 124-127		30
1338	Oligomer-salt derived 3D, heavily nitrogen doped, porous carbon for Li-ion hybrid electrochemical capacitors application. **2014**, 80, 462-471		77
1337	Oxidative precipitation of ruthenium oxide for supercapacitors: Enhanced capacitive performances by adding cetyltrimethylammonium bromide. *Journal of Power Sources*, **2014**, 268, 430-438	8.9	21
1336	High Performance Supercapacitors Based on the Electrodeposited Co3O4 Nanoflakes on Electro-etched Carbon Fibers. **2014**, 138, 9-14		40
1335	Preparation of vertically aligned carbon nanotubes and their electrochemical performance in supercapacitors. **2014**, 195, 252-259		18
1334	A Facile One-Pot Preparation of Dialdehyde Starch Reduced Graphene Oxide/Polyaniline Composite for Supercapacitors. **2014**, 139, 117-126		52
1333	Marked Increase in Hydrophobicity of Monolithic Carbon Cryogels via HCl Aging of Precursor Resorcinol–Formaldehyde Hydrogels: Application to 1-Butanol Recovery from Dilute Aqueous Solutions. **2014**, 118, 6866-6872		16
1332	Graphene–Single-Walled Carbon Nanotubes–Poly(3-methylthiophene) Ternary Nanocomposite for Supercapacitor Electrode Materials. **2014**, 53, 13030-13045		38
1331	Advanced asymmetric supercapacitor based on conducting polymer and aligned carbon nanotubes with controlled nanomorphology. **2014**, 9, 176-185		82
1330	Longitudinal unzipping of carbon nanotubes and their electrochemical performance in supercapacitors. **2014**, 14, 1335-1343		15

1329	On the development of activated carbons with high affinity for high voltage propylene carbonate based electrolytes. *Journal of Power Sources*, **2014**, 270, 379-385	8.9	9
1328	Effect of visible light and electrode wetting on the capacitive performance of S- and N-doped nanoporous carbons: Importance of surface chemistry. **2014**, 78, 540-558		34
1327	The Influence of Anion□Cation Combinations on the Physicochemical Properties of Advanced Electrolytes for Supercapacitors and the Capacitance of Activated Carbons. **2014**, 1, 1301-1311		34
1326	Influence of the boron precursor and drying method on surface properties and electrochemical behavior of boron-doped carbon gels. **2014**, 30, 1716-22		13
1325	Identifying pseudocapacitance of Fe2O3 in an ionic liquid and its application in asymmetric supercapacitors. **2014**, 2, 14550-14556		91
1324	One-step electrodeposited nickel cobalt sulfide nanosheet arrays for high-performance asymmetric supercapacitors. **2014**, 8, 9531-41		599
1323	Effect of surface transport properties on the performance of carbon plastic electrodes for flow battery applications. **2014**, 148, 104-110		14
1322	Solution processed sun baked electrode material for flexible supercapacitors. **2014**, 4, 20281-20289		10
1321	Evaluation of activated carbon fiber applied in supercapacitor electrodes. **2014**, 15, 1708-1714		12
1320	Preparation and electrochemical performance of carbon foam by direct pyrolysis of cyanate ester resin. **2014**, 109, 244-248		11
1319	Biocarbon Monoliths as Supercapacitor Electrodes: Influence of Wood Anisotropy on Their Electrical and Electrochemical Properties. **2014**, 161, A1806-A1811		29
1318	Ultra-high capacitance hematite thin films with controlled nanoscopic morphologies. **2014**, 6, 10643-9		20
1317	Reduced Graphene Oxide/Manganese Carbonate Hybrid Composite: High Performance Supercapacitor Electrode Material. **2014**, 147, 557-564		31
1316	Temperature effect on the binder-free nickel copper oxide nanowires with superior supercapacitor performance. **2014**, 6, 12981-9		31
1315	Low-cost, solution processable carbon nanotube supercapacitors and their characterization. **2014**, 117, 1329-1334		31
1314	Activated nitrogen-doped carbons from polyvinyl chloride for high-performance electrochemical capacitors. **2014**, 18, 49-58		13
1313	Partially graphitized ordered mesoporous carbons for high-rate supercapacitors. **2014**, 18, 2175-2182		7
1312	High-performance supercapacitors based on an ionic liquid-derived nanofibrillated mesoporous carbon. **2014**, 18, 2419-2424		23

1311	Mechanical exfoliation of graphite in 1-butyl-3-methylimidazolium hexafluorophosphate (BMIM-PF6) providing graphene nanoplatelets that exhibit enhanced electrocatalysis. *Journal of Power Sources*, **2014**, 271, 312-325	8.9	7
1310	All-solid-state supercapacitors with poly(3,4-ethylenedioxythiophene)-coated carbon fiber paper electrodes and ionic liquid gel polymer electrolyte. *Journal of Power Sources*, **2014**, 245, 857-865	8.9	135
1309	Capacitance performance of nanostructured ╫Ni(OH)2 with different morphologies grown on nickel foam. **2014**, 720-721, 115-120		12
1308	Electrochemical polymerization of polyaniline doped with Cu2+ as the electrode material for electrochemical supercapacitors. **2014**, 4, 5547		44
1307	A Review of Graphene-Based Electrochemical Microsupercapacitors. **2014**, 26, 30-51		277
1306	Humic acids as pseudocapacitive electrolyte additive for electrochemical double layer capacitors. *Journal of Power Sources*, **2014**, 255, 230-234	8.9	33
1305	Hierarchical Design of Porous Carbon Materialsfor Supercapacitors. **2014**, 443-460		
1304	Preparation and characterization of coaxial multiwalled carbon nanotubes/polyaniline tubular nanocomposites for electrochemical energy storage in the presence of sodium alginate. **2014**, 193, 48-57		39
1303	Redox Solute Doped Polypyrrole for High-Charge Capacity Polymer Electrodes. **2014**, 26, 1601-1607		53
1302	Creation of nanopores on graphene planes with MgO template for preparing high-performance supercapacitor electrodes. **2014**, 6, 6577-84		114
1301	Facile synthesis of nickel network supported three-dimensional graphene gel as a lightweight and binder-free electrode for high rate performance supercapacitor application. **2014**, 6, 2426-33		56
1300	Synthesis, Characterization, and Electrochemistry of Nanotubular Polypyrrole and Polypyrrole-Derived Carbon Nanotubes. **2014**, 118, 14770-14784		81
1299	Additive-Driven Self-Assembly of Well-Ordered Mesoporous Carbon/Iron Oxide Nanoparticle Composites for Supercapacitors. **2014**, 26, 2128-2137		118
1298	Influence of surface functionalities on ethanol adsorption characteristics in activated carbons for adsorption heat pumps. **2014**, 72, 160-165		19
1297	Layer-by-layer (LBL) assembly of graphene with p-phenylenediamine (PPD) spacer for high performance supercapacitor applications. **2014**, 4, 19908		43
1296	Preparation and electrochemical analysis of graphene/polyaniline composites prepared by aniline polymerization. **2014**, 40, 2519-2525		9
1295	Effect of surface area and heteroatom of porous carbon materials on electrochemical capacitance in aqueous and organic electrolytes. **2014**, 57, 1570-1578		30
1294	Hydrogenation of nanostructured semiconductors for energy conversion and storage. **2014**, 59, 2144-2161		14

1293	Optimal electrochemical performances of CO2 activated carbon aerogels for supercapacitors. **2014**, 29, 213-218		7
1292	An Ultracapacitor-Based No-Break System for Microcomputers. **2014**, 39, 4829-4836		
1291	Electrochemical performance of lithium ion capacitors with different types of negative electrodes. **2014**, 50, 594-598		9
1290	Electrochemical performance of pre-lithiated graphite as negative electrode in lithium-ion capacitors. **2014**, 50, 1050-1057		18
1289	Computer simulation of active layers in the electric double layer supercapacitor: Optimization of active layer charging modes and structure, calculation of overall characteristics. **2014**, 50, 208-222		4
1288	Composite electrodes of electrochemical capacitors based on carbon materials with different structure. **2014**, 50, 419-428		15
1287	Facile preparation of the novel structured □MnO2/Graphene nanocomposites and their electrochemical properties. **2014**, 27, 17-23		22
1286	The effect of acid treatment on thermally exfoliated graphite oxide as electrode for supercapacitors. **2014**, 138, 311-317		9
1285	Electrochemically Self-Doped TiO2 Nanotube Arrays for Supercapacitors. **2014**, 118, 5626-5636		223
1284	Carbon nanosheet buckypaper: A graphene-carbon nanotube hybrid material for enhanced supercapacitor performance. *Journal of Power Sources*, **2014**, 272, 979-986	8.9	30
1283	Co(OH) nanosheet-decorated graphene-CNT composite for supercapacitors of high energy density. **2014**, 15, 014206		41
1282	Capacitance of p- and n-doped graphenes is dominated by structural defects regardless of the dopant type. **2014**, 7, 1102-6		44
1281	Visible light driven photoelectrochemical water splitting on metal free nanoporous carbon promoted by chromophoric functional groups. **2014**, 79, 432-441		41
1280	Hydrothermal Nanocarbons. **2014**, 351-406		
1279	Inkjet-Printed Flexible Graphene-Based Supercapacitor. **2014**, 147, 610-616		80
1278	Capacitance behavior of nanostructured ? -MnO 2 /C composite electrode using different carbons matrix. **2014**, 5, 025005		7
1277	Electric double-layer capacitors based on highly graphitized nanoporous carbons derived from ZIF-67. **2014**, 20, 7895-900		344
1276	Electrochemical quartz crystal microbalance (EQCM) study of ion dynamics in nanoporous carbons. **2014**, 136, 8722-8		192

1275	Charging Mechanism and Moving Reaction Fronts in a Supercapacitor with Pseudocapacitance. **2014**, 161, A239-A246		11
1274	Easy synthesis of phosphorus-incorporated three-dimensionally ordered macroporous carbons with hierarchical pores and their use as electrodes for supercapacitors. **2014**, 115, 206-215		49
1273	Multilayer super-short carbon nanotube/reduced graphene oxide architecture for enhanced supercapacitor properties. *Journal of Power Sources*, **2014**, 247, 396-401	8.9	67
1272	Effect of the graphene phase presence in nanoporous S-doped carbon on photoactivity in UV and visible light. **2014**, 147, 842-850		22
1271	Structure and electrochemical properties of electrospun carbon fiber composites containing graphene. **2014**, 20, 3474-3479		42
1270	A novel route for preparation of high-performance porous carbons from hydrochars by KOH activation. **2014**, 447, 183-187		36
1269	Direct correlation between the measured electrochemical capacitance, wettability and surface functional groups of CarbonNanosheets. **2014**, 132, 574-582		32
1268	Effect of poly(sodium 4-styrenesulfonate) modified carbon black on the dispersion and properties of waterborne polyurethane nanocomposites. **2014**, 454, 1-7		18
1267	Effects of acid vapour mediated oxidization on the electrochemical performance of thermally exfoliated graphene. **2014**, 74, 195-206		23
1266	Nitrogen- and oxygen-containing hierarchical porous carbon frameworks for high-performance supercapacitors. **2014**, 134, 471-477		41
1265	Preparation and characterization of poly(sodium 4-styrenesulfonate)-decorated hydrophilic carbon black by one-step in situ ball milling. **2014**, 443, 135-140		16
1264	Synthesis and characterization of polyaniline and polyaniline–carbon nanotubes nanostructures for electrochemical supercapacitors. *Journal of Power Sources*, **2014**, 245, 475-481	8.9	81
1263	Architectured morphologies of chemically prepared NiO/MWCNTs nanohybrid thin films for high performance supercapacitors. **2014**, 6, 3176-88		146
1262	Flexible energy-storage devices: design consideration and recent progress. **2014**, 26, 4763-82		979
1261	Ionic liquid based EDLCs: influence of carbon porosity on electrochemical performance. **2014**, 172, 163-77		14
1260	Theoretical and practical energy limitations of organic and ionic liquid-based electrolytes for high voltage electrochemical double layer capacitors. *Journal of Power Sources*, **2014**, 250, 343-351	8.9	57
1259	Effects of the mesostructural order on the electrochemical performance of hierarchical micro–mesoporous carbons. **2014**, 2, 12023-12030		18
1258	Flexible supercapacitors based on carbon nanomaterials. **2014**, 2, 10756		337

1257	MnO2/carbon nanowall electrode for future energy storage application: effect of carbon nanowall growth period and MnO2 mass loading. **2014**, 4, 20479-20488		42
1256	Synthesis of spherical PANI particles via chemical polymerization in ionic liquid for high-performance supercapacitors. **2014**, 135, 550-557		45
1255	Rapid fabrication of graphene/ZnO composite thin film. **2014**, 53, 05HA01		1
1254	Experimental and modeling study on charge storage/transfer mechanism of graphene-based supercapacitors. *Journal of Power Sources*, **2014**, 268, 604-609	8.9	11
1253	Capacitive Behaviours of Phosphorus-Rich Carbons Derived from Lignocelluloses. **2014**, 137, 219-227		70
1252	Flexible coaxial-type fiber supercapacitor based on NiCo2O4 nanosheets electrodes. **2014**, 8, 44-51		212
1251	On the photoactivity of S-doped nanoporous carbons: Importance of surface chemistry and porosity. **2014**, 35, 807-814		10
1250	Control of number of graphene layers using ultrasound in supercritical CO2 and their application in lithium-ion batteries. **2014**, 85, 95-101		44
1249	Activated carbon made from cow dung as electrode material for electrochemical double layer capacitor. *Journal of Power Sources*, **2014**, 262, 224-231	8.9	213
1248	Tetraphenylborate-derived hierarchically porous carbons as efficient electrode materials for supercapacitors. *Journal of Power Sources*, **2014**, 246, 531-539	8.9	7
1247	Raman and Infrared Spectroscopic Characterization of Graphene. **2014**, 165-194		
1246	Graphene and Graphene-Based Nanocomposites for Electrochemical Energy Storage. **2014**, 221-248		
1245	Advanced Materials for Supercapacitors. **2015**, 423-449		
1244	High Energy-Density Electric Double-Layer and Hybrid Supercapacitors Based on Graphene Composites. **2015**, 1-22		
1243	Carbon-Based Hybrid Composites as Advanced Electrodes for Supercapacitors. **2015**, 399-431		1
1242	Nanostructures in Electrochromic Materials. **2015**, 249-288		
1241	Comparison of Characteristics of Supercapacitors and Other Electrochemical Devices. Characteristics of Commercial Supercapacitors. **2015**, 345-350		
1240	A New Approach towards Improving the Specific Energy and Specific Power of a Carbon-Based Supercapacitor using Platinum-Nanoparticles on Etched Stainless Steel Current Collector. **2015**, 83, 1053-1060		6

1239	Heteroatom-Doped Carbon Nanotubes as Advanced Electrocatalysts for Oxygen Reduction Reaction. **2015**, 1-16	3
1238	Physical and electrochemical properties of supercapacitor composite electrodes prepared from biomass carbon and carbon from green petroleum coke. **2015**,	6
1237	Polypyrrole/Inorganic Nanocomposites for Supercapacitors. **2015**, 419-447	
1236	Effect of electrolyte concentration on performance of supercapacitor carbon electrode from fibers of oil palm empty fruit bunches. **2015**,	4
1235	Layer-by-Layer Self-Assembled Graphene Multilayer Films via Covalent Bonds for Supercapacitor Electrodes. **2015**, 5, 14	16
1234	Carbon-Based Materials for Lithium-Ion Batteries, Electrochemical Capacitors, and Their Hybrid Devices. **2015**, 8, 2284-311	181
1233	Design Considerations for Unconventional Electrochemical Energy Storage Architectures. **2015**, 5, 1402115	224
1232	Systematically Controlled Pore System of Ordered Mesoporous Carbons Using Phosphoric Acid as the In situ Generated Catalysts for Carbonization and Activation. **2015**, 36, 2062-2067	4
1231	Sieving Effects in Electrical Double-Layer Capacitors Based on Neat [Al(hfip)4]□and [NTf2]□Ionic Liquids. **2015**, 2, 829-836	5
1230	Fast Ion and Electron Transport in a Supercapacitor Based on Monolithic Nanowire-Array Electrodes Prepared from a Defect-Free Anodic Aluminium Oxide Mold. **2015**, 2, 1500354	6
1229	Effect of Ball Milling and KOH Activation on Electrochemical Properties of Pitch-based Carbon Fibers. **2015**, 36, 2464-2468	0
1228	Flash Converted Graphene for Ultra-High Power Supercapacitors. **2015**, 5, 1500786	68
1227	Peculiar Properties of Mesoporous Synthetic Carbon/Graphene Phase Composites and their Effect on Supercapacitive Performance. **2015**, 8, 1955-65	10
1226	Electrochemical Capacitors Based on Carbon Electrodes in Aqueous Electrolytes. **2015**, 285-312	2
1225	CuCo2O4 Nanowires Grown on a Ni Wire for High-Performance, Flexible Fiber Supercapacitors. **2015**, 2, 1042-1047	80
1224	A review on the use of carbon nanostructured materials in electrochemical capacitors. **2015**, 39, 1955-1980	53
1223	A High-Performance Supercapacitor with Well-Dispersed Bi2O3 Nanospheres and Active-Carbon Electrodes. **2015**, 2015, 5751-5756	32
1222	The Effect of Potassium Impurities Deliberately Introduced into Activated Carbon Cathodes on the Performance of Lithium-Oxygen Batteries. **2015**, 8, 4235-41	11

1221	Mechanically Tough Large-Area Hierarchical Porous Graphene Films for High-Performance Flexible Supercapacitor Applications. **2015**, 27, 4469-4475		245
1220	ARTIFICIAL BARRIER FOR RIVERBANK FILTRATION AS IMPROVEMENT OF SOIL PERMEABILITY AND WATER QUALITY. **2015**, 74,		2
1219	Amorphous carbon nanocomposites. **2015**, 309-328		6
1218	High-Performance Supercapacitors Based on Ionic Liquids and a Graphene Nanostructure. **2015**,		7
1217	Synthesis of Nanoscale Heterostructures Comprised of Metal Nanowires, Carbon Nanotubes, and Metal Nanoparticles: Investigation of Their Structure and Electrochemical Properties. **2015**, 2015, 1-13		10
1216	Synthesis of Metal Oxide Decorated Polycarboxyphenyl Polymer-Grafted Multiwalled Carbon Nanotube Composites by a Chemical Grafting Approach for Supercapacitor Application. **2015**, 2015, 1-11		3
1215	Effect of carbonization temperature on the physical and electrochemical properties of supercapacitor electrode from fibers of oil palm empty fruit bunches. **2015**,		3
1214	. **2015**,		3
1213	. **2015**,		12
1212	Natural-gel derived, N-doped, ordered and interconnected 1D nanocarbon threads as efficient supercapacitor electrode materials. **2015**, 5, 51382-51391		11
1211	Supercapacitors based on camphor-derived meso/macroporous carbon sponge electrodes with ultrafast frequency response for ac line-filtering. **2015**, 3, 14105-14108		39
1210	Hybrid supercapacitors integrated rice husk based activated carbon with LiMn2O4. **2015**, 7, 023104		22
1209	Bi-functional electrode for UV detector and supercapacitor. **2015**, 15, 445-452		17
1208	Capacitive effects of nitrogen doping on cellulose-derived carbon nanofibers. **2015**, 160, 59-65		24
1207	Cyclic Voltammetry Analysis of Carbon Based Electrochemical Capacitor in Aqueous Electrolytes. **2015**, 761, 452-456		2
1206	Facile synthesis of polyaniline/NiCo2O4 nanocomposites with enhanced electrochemical properties for supercapacitors. **2015**, 21, 2615-2622		27
1205	Considerations for consistent characterization of electrochemical double-layer capacitor performance. *Journal of Power Sources*, **2015**, 290, 136-143	8.9	19
1204	Capacitance of Fe3O4/rGO nanocomposites in an aqueous hybrid electrochemical storage device. *Journal of Power Sources*, **2015**, 293, 42-50	8.9	30

1203	Self-assembly formation of NiCo2O4 superstructures with porous architectures for electrochemical capacitors. **2015**, 5, 53259-53266		15
1202	Toward New Solvents for EDLCs: From Computational Screening to Electrochemical Validation. **2015**, 119, 13413-13424		58
1201	Studies on the equivalent serial resistance of carbon supercapacitor. **2015**, 174, 596-600		38
1200	Freestanding one-dimensional manganese dioxide nanoflakes-titanium cabide/carbon core/double shell arrays as ultra-high performance supercapacitor electrode. *Journal of Power Sources*, **2015**, 293, 519-526	8.9	9
1199	Facile synthesis of ternary MnO2/graphene nanosheets/carbon nanotubes composites with high rate capability for supercapacitor applications. **2015**, 174, 345-355		54
1198	Hierarchically designed three-dimensional macro/mesoporous carbon frameworks for advanced electrochemical capacitance storage. **2015**, 21, 6157-64		47
1197	Different approaches to PVP/graphene composite film fabrication using electrohydrodynamic atomization technique. **2015**, 26, 2039-2044		5
1196	Electrochemical properties of carbon from oil palm kernel shell for high performance supercapacitors. **2015**, 174, 78-86		111
1195	Fabrication of tungsten decorated titania nanotube arrays as electrode materials for supercapacitor applications. **2015**, 40, 8769-8777		13
1194	Graphene and ionic liquids new gel paste electrodes for caffeic acid quantification. **2015**, 212, 248-255		30
1193	Design and synthesis of Ni-MOF/CNT composites and rGO/carbon nitride composites for an asymmetric supercapacitor with high energy and power density. **2015**, 3, 13874-13883		330
1192	Etching holes in graphene supercapacitor electrodes for faster performance. **2015**, 26, 234003		17
1191	Nanotechnology Advancements on Carbon Nanotube/Polypyrrole Composite Electrodes for Supercapacitors. **2015**, 479-510		24
1190	High-performance planar nanoscale dielectric capacitors. **2015**, 91,		18
1189	Nanoarrays: design, preparation and supercapacitor applications. **2015**, 5, 55856-55869		53
1188	Precursor-controlled and template-free synthesis of nitrogen-doped carbon nanoparticles for supercapacitors. **2015**, 5, 50063-50069		24
1187	High Performance Supercapacitor Electrode Materials Based on Activated Carbon and Conducting Polypyrrole. **2015**, 645-646, 1150-1155		1
1186	Sustainable supercapacitor components from cellulose. **2015**,		

1185	LiFePO4 □xNy thin-film electrodes coated on carbon fiber-modified current collectors for pseudocapacitors. **2015**, 596, 34-38	3
1184	Flexible Graphene Paper as a Binder-Free Anode Material for Lithium Ion Batteries. **2015**, 1095, 333-340	1
1183	Hierarchical Metal-Organic Framework Hybrids: Perturbation-Assisted Nanofusion Synthesis. **2015**, 48, 3044-52	84
1182	Graphene oxide/polyaniline nanotube composites synthesized in alkaline aqueous solution. **2015**, 210, 314-322	10
1181	Investigation of different aqueous electrolytes on the electrochemical performance of activated carbon-based supercapacitors. **2015**, 5, 107482-107487	66
1180	Preparing Desirable Activated Carbons from Agricultural Residues for Potential Uses in Water Treatment. **2015**, 6, 1029-1036	8
1179	An evaporation-induced tri-consistent assembly route towards nitrogen-doped carbon microfibers with ordered mesopores for high performance supercapacitors. **2015**, 17, 4724-9	14
1178	A composite of nanoporous carbon and thermally exfoliated graphite as an effective electrode material for supercapacitors. **2015**, 51, 501-508	4
1177	Assessment of supercapacitor based on carbon material synthesized from neem tree leaves. **2015**,	1
1176	Oxygen-enriched hierarchical porous carbon derived from biowaste sunflower heads for high-performance supercapacitors. **2015**, 5, 107785-107792	28
1175	Specific features of the electrical properties in partially graphitized porous biocarbons of beech wood. **2015**, 57, 1746-1751	4
1174	Hydrogen evolution reactions on carbon materials potentially useful in double-layer supercapacitors. **2015**, 85, 2699-2702	
1173	High-performance supercapacitor of electrodeposited porous 3D polyaniline nanorods on functionalized carbon fiber paper: Effects of hydrophobic and hydrophilic surfaces of conductive carbon paper substrates. **2015**, 4, 176-185	18
1172	Influence of graphene microstructures on electrochemical performance for supercapacitors. **2015**, 25, 379-385	203
1171	Freeze-drying for sustainable synthesis of nitrogen doped porous carbon cryogel with enhanced supercapacitor and lithium ion storage performance. **2015**, 26, 374003	53
1170	High surface area porous carbon for ultracapacitor application by pyrolysis of polystyrene containing pendant carboxylic acid groups prepared via click chemistry. **2015**, 4, 166-175	11
1169	Carbon microsphere from water hyacinth for supercapacitor electrode. **2015**, 47, 197-201	24
1168	Influence of pore symmetries on the supercapacitive performance of mesoporous carbons co-templated by F127 and PDMS□EO. **2015**, 206, 81-85	10

1167	A colloidal pseudocapacitor: direct use of Fe(NO)□n electrode can lead to a high performance alkaline supercapacitor system. **2015**, 444, 49-57	28
1166	Life cycle assessment of producing emulsion-templated porous materials from Kraft black liquor □ comparison of a vegetable oil and a petrochemical solvent. **2015**, 91, 180-186	12
1165	Superior performance hybrid (electrostatic double-layer and faradaic capacitor) polymer actuators incorporating noble metal oxides and carbon black. **2015**, 210, 748-755	11
1164	One-step route synthesis of active carbon@La2NiO4/NiO hybrid coatings as supercapacitor electrode materials: Significant improvements in electrochemical performance. **2015**, 742, 1-7	24
1163	Activated carbon-based gas sensors: effects of surface features on the sensing mechanism. **2015**, 3, 3821-3831	64
1162	Sol-gel process-derived rich nitrogen-doped porous carbon through KOH activation for supercapacitors. **2015**, 158, 229-236	55
1161	Rational design of high-surface-area carbon nanotube/microporous carbon core-shell nanocomposites for supercapacitor electrodes. **2015**, 7, 4817-25	48
1160	Boric acid-mediated B,N-codoped chitosan-derived porous carbons with a high surface area and greatly improved supercapacitor performance. **2015**, 7, 5120-5	124
1159	Phosphorus- and nitrogen-co-doped particleboard based activated carbon in supercapacitor application. **2015**, 5, 16433-16438	29
1158	Mesoporous carbon black-aerogel composites with optimized properties for the electro-assisted removal of sodium chloride from brackish water. **2015**, 741, 42-50	28
1157	Investigation of polyaniline films doped with Fe3+ as the electrode material for electrochemical supercapacitors. **2015**, 165, 14-21	25
1156	Electrical double-layer capacitors. **2015**, 149-186	1
1155	Recent progress in synthesis, properties and potential applications of SiC nanomaterials. **2015**, 72, 1-60	316
1154	Titanium Dioxide Nanotube Films for Electrochemical Supercapacitors: Biocompatibility and Operation in an Electrolyte Based on a Physiological Fluid. **2015**, 162, A5065-A5069	29
1153	Preparation of lactose-based attapulgite template carbon materials and their electrochemical performance. **2015**, 19, 1171-1180	9
1152	Graphene for Supercapacitors. **2015**, 171-214	5
1151	Ultrahigh performance supercapacitor from lacey reduced graphene oxide nanoribbons. **2015**, 7, 3110-6	100
1150	Storing energy in plastics: a review on conducting polymers & their role in electrochemical energy storage. **2015**, 5, 11611-11626	144

1149	Asymmetric supercapacitors based on carbon nanofibre and polypyrrole/nanocellulose composite electrodes. **2015**, 5, 16405-16413		45
1148	Graphite nanosheets/nanoporous carbon black/cerium oxide nanoparticles as an electrode material for electrochemical capacitors. **2015**, 200, 117-122		5
1147	Solid-type supercapacitor of reduced graphene oxide-metal organic framework composite coated on carbon fiber paper. **2015**, 157, 69-77		133
1146	Supercapacitors with graphene oxide separators and reduced graphite oxide electrodes. *Journal of Power Sources*, **2015**, 279, 722-730	8.9	46
1145	Polyvinylpyrrolidone/polyvinyl butyral composite as a stable binder for castable supercapacitor electrodes in aqueous electrolytes. *Journal of Power Sources*, **2015**, 279, 323-333	8.9	38
1144	Activation of sucrose-derived carbon spheres for high-performance supercapacitor electrodes. **2015**, 5, 9307-9313		61
1143	Making a commercial carbon fiber cloth having comparable capacitances to carbon nanotubes and graphene in supercapacitors through a "top-down" approach. **2015**, 7, 3285-91		49
1142	Flexible and stackable laser-induced graphene supercapacitors. **2015**, 7, 3414-9		265
1141	Thermal conversion of core-shell metal-organic frameworks: a new method for selectively functionalized nanoporous hybrid carbon. **2015**, 137, 1572-80		1085
1140	Electrochemical Supercapacitors for Energy Storage and Conversion. **2015**, 1-25		105
1139	A facile low-temperature synthesis of highly distributed and size-tunable cobalt oxide nanoparticles anchored on activated carbon for supercapacitors. *Journal of Power Sources*, **2015**, 273, 945-953	8.9	45
1138	Facile Synthesis of Three Dimensional NiCo2O4@MnO2 Core□Shell Nanosheet Arrays and its Supercapacitive Performance. **2015**, 157, 31-40		78
1137	Preparation of microporous carbon nanofibers from polyimide by using polyvinyl pyrrolidone as template and their capacitive performance. *Journal of Power Sources*, **2015**, 278, 683-692	8.9	80
1136	Fabrication of flexible reduced graphene oxide□TiO2 freestanding films for supercapacitor application. **2015**, 5, 9904-9911		73
1135	Hierarchical NiMn2O4@CNT nanocomposites for high-performance asymmetric supercapacitors. **2015**, 5, 24607-24614		60
1134	Adsorption of Reactive Black-5 by Pine Needles Biochar Produced Via Catalytic and Non-catalytic Pyrolysis. **2015**, 40, 1269-1278		18
1133	Efficient impact milling method to make porous graphitic materials for electric double layer capacitors. **2015**, 45, 385-395		6
1132	Effect of reduction heat treatment in H2 atmosphere on structure and electrochemical properties of activated carbon. **2015**, 19, 1437-1446		10

1131	Directly carbonized lotus seedpod shells as high-stable electrode material for supercapacitors. **2015**, 21, 809-816	8
1130	Application and Uses of Graphene. **2015**, 1-38	13
1129	Nitrogen-containing nanoporous carbon derived from ethylenediamine tetraacetate magnesium and the electrochemical enhancement by the addition of Mg(OH)2. **2015**, 19, 795-803	3
1128	Supercapacitor Electrodes Based on Hierarchical Mesoporous MnOx/Nitrided TiO2 Nanorod Arrays on Carbon Fiber Paper. **2015**, 2, 1400446	21
1127	Improving Capacitance by Introducing Nitrogen Species and Defects into Graphene. **2015**, 2, 859-866	10
1126	Controlled droplet transport on a gradient adhesion surface. **2015**, 51, 6010-3	19
1125	A novel chemical preparation of Ni(OH)2/CuO nanocomposite thin films for supercapacitive applications. **2015**, 26, 2236-2242	15
1124	A simple microexplosion synthesis of graphene-based scroll-sheet conjoined nanomaterials for enhanced supercapacitor properties. **2015**, 172, 71-76	7
1123	Cost effective urea combustion derived mesoporous-Li2MnSiO4 as a novel material for supercapacitors. **2015**, 5, 25156-25163	11
1122	CHAPTER 9:Nanostructured Carbon Materials for Energy Conversion and Storage. **2015**, 445-506	
1121	One-dimensional nanostructures for flexible supercapacitors. **2015**, 3, 16382-16392	59
1120	Low-cost flexible supercapacitors with high-energy density based on nanostructured MnO2 and Fe2O3 thin films directly fabricated onto stainless steel. **2015**, 5, 12454	160
1119	Supercapacitor Carbon Monoliths Electrodes from Activation of Precarbonized Biomass Fibers Added with Cellulose Powder. **2015**, 1112, 299-302	
1118	Supercapacitive evaluation of carbon black/exfoliated graphite/MnO2 ternary nanocomposite electrode by continuous cyclic voltammetry. **2015**, 163, 38-44	22
1117	Influence of Temperature on Supercapacitor Components. **2015**, 27-69	
1116	Formation of carbon composite coatings by plasma spraying. **2015**, 122, 326-331	8
1115	"Thermal Charging" Phenomenon in Electrical Double Layer Capacitors. **2015**, 15, 5784-90	54
1114	Preparation of spiro-type quaternary ammonium salt via economical and efficient synthetic route as electrolyte for electric double-layer capacitor. **2015**, 22, 2435-2439	2

1113	High-Performance Supercapacitor of Functionalized Carbon Fiber Paper with High Surface Ionic and Bulk Electronic Conductivity: Effect of Organic Functional Groups. **2015**, 176, 504-513	67
1112	Nitrogen and phosphorus co-doped cubic ordered mesoporous carbon as a supercapacitor electrode material with extraordinary cyclic stability. **2015**, 3, 18001-18009	103
1111	Pronounced improvement of supercapacitor capacitance by using redox active electrolyte of p-phenylenediamine. **2015**, 176, 941-948	28
1110	CMOS compatible on-chip decoupling capacitor based on vertically aligned carbon nanofibers. **2015** , 107, 15-19	12
1109	Preparation of hierarchically porous carbon nanofoams for electrode materials of supercapacitors. **2015**, 5, 70297-70301	6
1108	Thermal Conversion of Lignin□Cellulose Composite Particles into Aggregates of Fine Carbon Grains Holding Micro- and Mesoporous Spaces. **2015**, 3, 1690-1695	8
1107	A durability study of carbon nanotube fiber based stretchable electronic devices under cyclic deformation. **2015**, 94, 352-361	16
1106	Microwave-Assisted Oxidation of Electrospun Turbostratic Carbon Nanofibers for Tailoring Energy Storage Capabilities. **2015**, 27, 4574-4585	14
1105	Conductive polymer/reduced graphene oxide/Au nano particles as efficient composite materials in electrochemical supercapacitors. **2015**, 353, 594-599	171
1104	Glucose-Reduced MnO2/Graphene Composites Electrode for Supercapacitor. **2015**, 1108, 39-43	
1103	High-Performance Supercapacitor Electrode Materials from Cellulose-Derived Carbon Nanofibers. **2015**, 7, 14946-53	144
1102	Studying the impact of metal oxide in the development of hybrid capacitor. **2015**,	
1101	A reduced graphene oxide modified metallic cobalt composite with superior electrochemical performance for supercapacitors. **2015**, 5, 63553-63560	49
1100	Graphene oxide as a dual-function conductive binder for PEEK-derived microporous carbons in high performance supercapacitors. **2015**, 2, 024006	3
1099	Relevance of the Semiconductor Microstructure in the Pseudocapacitance of the Electrodes Fabricated by EPD of Binder-Free □Ni(OH)2Nanoplatelets. **2015**, 162, D3001-D3012	17
1098	Carbon nanotubes decorated by mesoporous cobalt oxide as electrode material for lithium-ion batteries. **2015**, 635, 185-189	16
1097	The hybrid nanostructure of MnCo2O4.5 nanoneedle/carbon aerogel for symmetric supercapacitors with high energy density. **2015**, 7, 14401-12	76
1096	Self-assembled fullerene additives for boosting the capacity of activated carbon electrodes in supercapacitors. **2015**, 5, 63834-63838	9

1095	Nitrogen- and oxygen-containing activated carbons from sucrose for electrochemical supercapacitor applications. **2015**, 5, 63000-63011		41
1094	Capacitor simulation including of X-doped graphene (X = Li, Be, B) as two electrodes and (h-BN)m (m = 1⁄4) as the insulator. **2015**, 54, 085101		4
1093	High-Level Doping of Nitrogen, Phosphorus, and Sulfur into Activated Carbon Monoliths and Their Electrochemical Capacitances. **2015**, 27, 4703-4712		174
1092	Facile fabrication of porous carbon nanofibers by electrospun PAN/dimethyl sulfone for capacitive deionization. **2015**, 3, 13827-13834		69
1091	Electrochemical behaviour of activated carbons obtained via hydrothermal carbonization. **2015**, 3, 15558-15567		33
1090	Monitoring the process of densification of 3D and 4D (tridirectional and tetradirectional) carbon/carbon composites. **2015**, 34, 750-760		1
1089	Spherical potassium intercalated activated carbon beads for pulverised fuel CO2 post-combustion capture. **2015**, 94, 243-255		53
1088	2.5 V compact supercapacitors based on ultrathin carbon nanotube films for AC line filtering. **2015**, 3, 11801-11806		63
1087	CHAPTER 1:The Search for Functional Porous Carbons from Sustainable Precursors. **2015**, 3-49		4
1086	On the use of carbon black loaded nitrogen-doped carbon aerogel for the electrosorption of sodium chloride from saline water. **2015**, 170, 154-163		26
1085	Composite of mesocarbon microbeads/hard carbon as anode material for lithium ion capacitor with high electrochemical performance. **2015**, 747, 20-28		25
1084	Fabrication of polyaniline/urchin-like mesoporous TiO 2 spheres nanocomposite and its application in supercapacitors. **2015**, 163, 232-237		23
1083	A molecular hybrid polyoxometalate-organometallic moieties and its relevance to supercapacitors in physiological electrolytes. *Journal of Power Sources*, **2015**, 284, 524-535	8.9	16
1082	An Enzymatic Hybrid Electrode Platform Based on Chemically Modified Reduced Graphene Oxide Decorated with Palladium and Platinum Alloy Nanoparticles for Biosensing Applications. **2015**, 162, B185-B192		15
1081	Activation of hierarchically ordered mesoporous carbons for enhanced capacitive deionization application. **2015**, 205, 48-57		39
1080	Oxygen group-containing activated carbon aerogel as an electrode material for supercapacitor. **2015**, 70, 209-214		38
1079	Narrow-porous pitch-based carbon fibers of superior capacitance properties in aqueous electrolytes. **2015**, 167, 348-356		24
1078	Electrochemical performances of hydrothermal tannin-based carbons doped with nitrogen. **2015**, 70, 332-340		34

1077	Flexible, Highly Graphitized Carbon Aerogels Based on Bacterial Cellulose/Lignin: Catalyst-Free Synthesis and its Application in Energy Storage Devices. **2015**, 25, 3193-3202	219
1076	High-performance supercapacitors based on novel carbons derived from Sterculia lychnophora. **2015**, 5, 32159-32167	17
1075	One-Pot Hydrothermal Synthesis of Reduced Graphene Oxide/Multiwalled Carbon Nanotubes Composite Material on Nickel Foam for Efficient Supercapacitor Electrode. **2015**, 6, 373-381	6
1074	Graphene based integrated tandem supercapacitors fabricated directly on separators. **2015**, 15, 1-8	26
1073	Facile synthesis of three-dimensional structured carbon fiber-NiCo2O4-Ni(OH)2 high-performance electrode for pseudocapacitors. **2015**, 5, 9277	66
1072	Development of high-performance flexible solid state supercapacitor based on activated carbon and electrospun TiO2 nanofibers. **2015**, 101, 84-86	24
1071	High performance Na3V2 (PO4)3/C composite electrode for sodium-ion capacitors. **2015**, 21, 2633-2638	20
1070	The potential of Kraft black liquor to produce bio-based emulsion-templated porous materials. **2015**, 90, 15-20	12
1069	Graphene-based materials for flexible supercapacitors. **2015**, 44, 3639-65	851
1068	Spongy nitrogen-doped activated carbonaceous hybrid derived from biomass material/graphene oxide for supercapacitor electrodes. **2015**, 5, 40505-40513	51
1067	Microstructure, elastic and inelastic properties of partially graphitized biomorphic carbons. **2015**, 57, 586-591	5
1066	Synthesis and Capacitive Properties of Manganese Oxide Nanoparticles Dispersed on Hierarchical Porous Carbons. **2015**, 166, 107-116	33
1065	Metal–Organic frameworks and their derived nanostructures for electrochemical energy storage and conversion. **2015**, 8, 1837-1866	1246
1064	Spontaneous grafting of 9,10-phenanthrenequinone on porous carbon as an active electrode material in an electrochemical capacitor in an alkaline electrolyte. **2015**, 3, 6146-6156	60
1063	Recent advancement of nanostructured carbon for energy applications. **2015**, 115, 5159-223	598
1062	Sustainable process for all-carbon electrodes: Horticultural doping of natural-resource-derived nano-carbons for high-performance supercapacitors. **2015**, 91, 386-394	21
1061	Flexible Boron-Doped Laser-Induced Graphene Microsupercapacitors. **2015**, 9, 5868-75	410
1060	A Review for Aqueous Electrochemical Supercapacitors. **2015**, 3,	109

1059	A high performance supercapacitor based on a ceria/graphene nanocomposite synthesized by a facile sonochemical method. **2015**, 5, 46050-46058		122
1058	Microwave-assisted in situ synthesis of reduced graphene oxide/Mn3O4 composites for supercapacitor applications. **2015**, 5, 45061-45067		15
1057	Review on application of PEDOTs and PEDOT:PSS in energy conversion and storage devices. **2015**, 26, 4438-4462		347
1056	Capacitive charge storage at an electrified interface investigated via direct first-principles simulations. **2015**, 91,		20
1055	Hydroxyl-riched halloysite clay nanotubes serving as substrate of NiO nanosheets for high-performance supercapacitor. *Journal of Power Sources*, **2015**, 285, 210-216	8.9	53
1054	Nano Carbon Black Powder Synthesized via Liquid Phase Plasma Process as a Supercapacitor Active Material. **2015**, 162, A1445-A1450		8
1053	A novel Cr 2 O 3 -carbon composite as a high performance pseudo-capacitor electrode material. **2015**, 171, 142-149		47
1052	Specific Capacitance and Cyclic Stability of Graphene Based Metal/Metal Oxide Nanocomposites: A Review. **2015**, 31, 699-707		46
1051	Carbothermal synthesis of metal-functionalized nanostructures for energy and environmental applications. **2015**, 3, 13114-13188		156
1050	Preparation and electrochemical characteristics of electrospun water-soluble resorcinol/phenol-formaldehyde resin-based carbon nanofibers. **2015**, 5, 40884-40891		12
1049	Core□shell ultramicroporous@microporous carbon nanospheres as advanced supercapacitor electrodes. **2015**, 3, 11517-11526		145
1048	Triple hierarchical micro□meso□macroporous carbonaceous foams bearing highly monodisperse macroporosity. **2015**, 91, 311-320		29
1047	Charge storage and capacitance-type properties of multi-walled carbon nanotubes modified with ruthenium analogue of Prussian Blue. **2015**, 19, 2753-2762		6
1046	Graphene nanoplatelets with selectively functionalized edges as electrode material for electrochemical energy storage. **2015**, 31, 5676-83		23
1045	High-temperature supercapacitor with a proton-conducting metal pyrophosphate electrolyte. **2015** , 5, 7903		63
1044	N-doped microporous carbon microspheres for high volumetric performance supercapacitors. **2015** , 168, 320-329		58
1043	Functional group changes of polyacrylonitrile fibres during their oxidative, carbonization and electrochemical treatment. **2015**, 50, 4547-4564		27
1042	Synthesis and characterization of VO2(B)/graphene nanocomposite for supercapacitors. **2015**, 26, 4226-4233		34

1041	Electrochemical Performance of Carbon/MnO2Nanocomposites Prepared via Molecular Bridging as Supercapacitor Electrode Materials. **2015**, 162, A5179-A5184	46
1040	Graphitized hierarchical porous carbon nanospheres: simultaneous activation/graphitization and superior supercapacitance performance. **2015**, 3, 9565-9577	149
1039	The composite material based on Dawson-type polyoxometalate and activated carbon as the supercapacitor electrode. **2015**, 55, 149-152	22
1038	Self-standing carbon nanotube forest electrodes for flexible supercapacitors. **2015**, 5, 34335-34341	44
1037	Recent applications of nanomaterials in water desalination: A critical review and future opportunities. **2015**, 367, 37-48	178
1036	Non-covalent interactions and supercapacitance of pseudo-capacitive composite electrode materials (MWCNTCOOH/MnO2/PANI). **2015**, 208, 2-12	15
1035	Carbon nanotubes/activated carbon hybrid with ultrahigh surface area for electrochemical capacitors. **2015**, 168, 25-31	32
1034	Promising biomass-based activated carbons derived from willow catkins for high performance supercapacitors. **2015**, 166, 1-11	292
1033	Converting biowaste corncob residue into high value added porous carbon for supercapacitor electrodes. **2015**, 189, 285-291	230
1032	Flexible superior electrode architectures based on three-dimensional porous spinous □Fe2O3 with a high performance as a supercapacitor. **2015**, 44, 9581-7	28
1031	Large-scale synthesis and activation of polygonal carbon nanofibers with thin ribbon-like structures for supercapacitor electrodes. **2015**, 5, 31837-31844	29
1030	Nitrogen doped graphene via thermal treatment of composite solid precursors as a high performance supercapacitor. **2015**, 5, 30679-30686	53
1029	A novel SWCNT-polyoxometalate nanohybrid material as an electrode for electrochemical supercapacitors. **2015**, 7, 7934-41	55
1028	Printing nanostructured carbon for energy storage and conversion applications. **2015**, 92, 150-176	74
1027	Separating Faradaic and Non-Faradaic Charge Storage Contributions in Activated Carbon Electrochemical Capacitors Using Electrochemical Methods. **2015**, 162, A1246-A1254	36
1026	Graphene and Porous Nanocarbon Materials for Supercapacitor Applications. **2015**, 301-338	1
1025	Carbon-Based Supercapacitors Produced by the Activation of Graphene. **2015**, 211-225	16
1024	Nanostructured Activated Carbons for Supercapacitors. **2015**, 1-34	3

1023	Facile one-pot synthesis of highly porous carbon foams for high-performance supercapacitors using template-free direct pyrolysis. **2015**, 7, 8952-60		70
1022	Chemical versus electrochemical synthesis of carbon nano-onion/polypyrrole composites for supercapacitor electrodes. **2015**, 21, 5783-93		45
1021	Lamellar-structured biomass-derived phosphorus- and nitrogen-co-doped porous carbon for high-performance supercapacitors. **2015**, 39, 9497-9503		58
1020	Graphene-based Materials Used as the Catalyst Support for PEMFC Applications. **2015**, 2, 3797-3805		18
1019	Electrophoretically deposited graphene oxide and carbon nanotube composite for electrochemical capacitors. **2015**, 26, 415203		9
1018	Design and preparation of highly structure-controllable mesoporous carbons at the molecular level and their application as electrode materials for supercapacitors. **2015**, 3, 22781-22793		41
1017	Isolating the effect of pore size distribution on electrochemical double-layer capacitance using activated fluid coke. *Journal of Power Sources*, **2015**, 300, 190-198	8.9	17
1016	"Egg-Box"-Assisted Fabrication of Porous Carbon with Small Mesopores for High-Rate Electric Double Layer Capacitors. **2015**, 9, 11225-33		242
1015	Pre-lithiation design and lithium ion intercalation plateaus utilization of mesocarbon microbeads anode for lithium-ion capacitors. **2015**, 182, 156-164		44
1014	Diphenylcarbazide-based carbon materials: Novel redox additives for simply and largely improving the electrochemical performance. **2015**, 757, 29-35		1
1013	Fabrication of electrochemically reduced graphene oxide/cobalt oxide composite for charge storage electrodes. **2015**, 755, 151-157		13
1012	Recent progress in micro-scale energy storage devices and future aspects. **2015**, 3, 22507-22541		154
1011	Synthesis of Ni(OH)2 Nanoflakes Through a Novel Ion Diffusion Method Controlled by Ion Exchange Membrane and Electrochemical Supercapacitive Properties. **2015**, 184, 47-57		18
1010	Rechargeable PEM Fuel-Cell Batteries Using Porous Carbon Modified with Carbonyl Groups as Anode Materials. **2015**, 162, F868-F877		19
1009	Micro□mesoporous carbons from rice husk as active materials for supercapacitors. **2015**, 4, 1		20
1008	Preparation and electrochemical properties of RuO2-containing activated carbon nanofiber composites with hollow cores. **2015**, 174, 290-296		32
1007	Synthesis and characterization of Nitrogen-doped &CaCO3-decorated reduced graphene oxide nanocomposite for electrochemical supercapacitors. **2015**, 184, 193-202		26
1006	Heteroatom-Doped Graphitic Carbon Catalysts for Efficient Electrocatalysis of Oxygen Reduction Reaction. **2015**, 5, 7244-7253		422

1005	One-pot synthesis and electrochemical properties of graphene/SnO2/poly (p-phenylenediamine) ternary nanocomposites. **2015**, 652, 9-17	8
1004	Recent advances in designing and fabrication of planar micro-supercapacitors for on-chip energy storage. **2015**, 1, 82-102	92
1003	Facile method to synthesize a carbon layer embedded into titanium dioxide nanotubes with metal oxide decoration for electrochemical applications. **2015**, 3, 23754-23759	12
1002	Nitrogen-Doped Graphene as Electrode Material with Enhanced Energy Density for Next-Generation Supercapacitor Application. **2015**, 4, M88-M92	12
1001	Formation of Highly Conductive Boron-Doped Diamond on TiO2 Nanotubes Composite for Supercapacitor or Energy Storage Devices. **2015**, 162, A2085-A2092	21
1000	Four-Fold Increase in the Intrinsic Capacitance of Graphene through Functionalization and Lattice Disorder. **2015**, 119, 20369-20378	38
999	Development of Electron Transfer Mediator Using Modified Graphite Oxide/Cobalt for Enzymatic Fuel Cell. **2015**, 162, G113-G118	8
998	Mesoporous carbons for supercapacitors obtained by the pyrolysis of block copolymers. **2015**, 30, 302-309	10
997	Compressed porous graphene particles for use as supercapacitor electrodes with excellent volumetric performance. **2015**, 7, 18459-63	74
996	Development of electrochemical supercapacitors with uniform nanoporous silver network. **2015**, 182, 224-229	32
995	Ionic Liquids Containing Sulfonium Cations as Electrolytes for Electrochemical Double Layer Capacitors. **2015**, 119, 23865-23874	43
994	Carbon Nanocomposites for Electrochemical Capacitors. **2015**, 113, 511-518	8
993	Activated carbon nanospheres derived from bio-waste materials for supercapacitor applications a review. **2015**, 5, 88339-88352	129
992	Synthesis and highly efficient supercapacitor behavior of a novel poly pyrrole/ceramic oxide nanocomposite film. **2015**, 5, 91062-91068	55
991	An asymmetric supercapacitor with good electrochemical performances based on Ni(OH)2/AC/CNT and AC. **2015**, 182, 1159-1165	59
990	Recent development in the production of activated carbon electrodes from agricultural waste biomass for supercapacitors: A review. **2015**, 52, 1282-1293	441
989	Local structure distortion induced by Ti dopants boosting the pseudocapacitance of RuO2-based supercapacitors. **2015**, 7, 15450-61	16
988	Influence of Temperature on Supercapacitor Performance. **2015**, 71-114	2

987	Hierarchical porous carbon derived from lignin for high performance supercapacitor. **2015**, 484, 518-527	98
986	Characterization and organic electric-double-layer-capacitor application of KOH activated coal-tar-pitch-based carbons: Effect of carbonization temperature. **2015**, 87, 72-79	18
985	One-pot synthesis of graphene-molybdenum oxide hybrids and their application to supercapacitor electrodes. **2015**, 1, 27-32	34
984	Nanofurry magnetic carbon microspheres for separation processes and catalysis: synthesis, phase composition, and properties. **2015**, 50, 7353-7363	12
983	Supercapacitive behavior of microporous carbon derived from zinc based metal-organic framework and furfuryl alcohol. **2015**, 40, 13344-13356	12
982	The performance of supercapacitor electrodes developed from chemically activated carbon produced from waste tea. **2015**, 357, 696-703	136
981	Mesoporous carbons: recent advances in synthesis and typical applications. **2015**, 5, 83239-83285	119
980	Macroscopic indicators of fault diagnosis and ageing in electrochemical double layer capacitors. **2015**, 2, 8-24	17
979	TiC-carbide derived carbon electrolyte adsorption study by ways of X-ray scattering analysis. **2015**, 4, 17	4
978	Effect of Meso- and Micro-Porosity in Carbon Electrodes on Atomic Layer Deposition of Pseudocapacitive V2O5 for High Performance Supercapacitors. **2015**, 27, 6524-6534	65
977	Correlation of energy storage performance of supercapacitor with iso -propanol improved wettability of aqueous electrolyte on activated carbon electrodes of various apparent densities. **2015**, 159, 39-50	25
976	BioelectrochemicalStudy of ThermostablePycnoporus sanguineusCS43 Laccase Bioelectrodes Based on Pyrolytic Carbon Nanofibers for Bioelectrocatalytic O2Reduction. **2015**, 5, 7507-7518	24
975	Graphene in Supercapacitor Applications. **2015**, 20, 416-428	106
974	Zeolitic imidazolate framework-derived nitrogen-doped porous carbons as high performance supercapacitor electrode materials. **2015**, 85, 51-59	241
973	High rate capability supercapacitors assembled from wet-spun graphene films with a CaCO3 template. **2015**, 3, 1890-1895	26
972	Biochar activated by oxygen plasma for supercapacitors. *Journal of Power Sources*, **2015**, 274, 1300-13058.9	98
971	Conducting polymer-based flexible supercapacitor. **2015**, 3, 2-26	377
970	Polyaniline/partially exfoliated multi-walled carbon nanotubes based nanocomposites for supercapacitors. **2015**, 155, 402-410	66

969	Surface and porous characterization of activated carbon prepared from pyrolysis of biomass (rice straw) by two-stage procedure and its applications in supercapacitor electrodes. **2015**, 17, 736-747		55
968	From rice bran to high energy density supercapacitors: a new route to control porous structure of 3D carbon. **2014**, 4, 7260		101
967	Oxygen-rich hierarchical porous carbon derived from artemia cyst shells with superior electrochemical performance. **2015**, 7, 1132-9		219
966	Enhanced electrochemical sensing of polyphenols by an oxygen-mediated surface. **2015**, 5, 5024-5031		22
965	Nitrogen-doped ordered mesoporous carbons based on cyanamide as the dopant for supercapacitor. **2015**, 84, 335-346		192
964	Fe3O4/carbon coated silicon ternary hybrid composite as supercapacitor electrodes. **2015**, 328, 222-228		34
963	Nano-porous architecture of N-doped carbon nanorods grown on graphene to enable synergetic effects of supercapacitance. **2014**, 4, 7426		27
962	Acid base co-crystal converted into porous carbon material for energy storage devices. **2015**, 5, 9110-9115		5
961	Effect of catalytic graphitization on the electrochemical behavior of wood derived carbons for use in supercapacitors. *Journal of Power Sources*, **2015**, 278, 18-26	8.9	81
960	3D graphene nanomaterials for binder-free supercapacitors: scientific design for enhanced performance. **2015**, 7, 6957-90		148
959	N-doped structures and surface functional groups of reduced graphene oxide and their effect on the electrochemical performance of supercapacitor with organic electrolyte. *Journal of Power Sources*, **2015**, 278, 218-229	8.9	106
958	A flexible spiral-type supercapacitor based on ZnCo2O4 nanorod electrodes. **2015**, 7, 1921-6		194
957	N-doped porous carbon capsules with tunable porosity for high-performance supercapacitors. **2015** , 3, 2914-2923		175
956	Investigation of the capacitive performance of polyaniline/modified graphite composite electrodes. **2015**, 5, 3743-3747		11
955	Graphene nanosheets as electrode materials for supercapacitors in alkaline and salt electrolytes. **2015**, 31, 195-199		3
954	Effect of the capacity design of activated carbon cathode on the electrochemical performance of lithium-ion capacitors. **2015**, 153, 476-483		36
953	Fixing of highly soluble Br2/Br⁻ in porous carbon as a cathode material for rechargeable lithium ion batteries. **2015**, 3, 1879-1883		10
952	Controlling porosity in lignin-derived nanoporous carbon for supercapacitor applications. **2015**, 8, 428-32		157

951	Mixtures of Azepanium Based Ionic Liquids and Propylene Carbonate as High Voltage Electrolytes for Supercapacitors. **2015**, 153, 426-432		39
950	Conductive polyaniline composite films from aqueous dispersion: Performance enhancement by multi-walled carbon nanotube. **2015**, 199, 1-7		28
949	Low-temperature performance of aqueous electrochemical capacitors based on manganese oxides. **2015**, 157, 333-344		12
948	Lithographically defined three-dimensional pore-patterned carbon with nitrogen doping for high-performance ultrathin supercapacitor applications. **2014**, 4, 5392		28
947	Preparation of reduced graphite oxide with high volumetric capacitance in supercapacitors. **2015**, 51, 5598-601		51
946	Nickel cobaltite as an emerging material for supercapacitors: An overview. **2015**, 11, 377-399		354
945	Superior asymmetric supercapacitor based on Ni-Co oxide nanosheets and carbon nanorods. **2014**, 4, 3712		142
944	Synthesis and Electrochemical Properties of Co Doped MnO2 Framework with Nanofibrous Structure. **2015**, 12, E59-E64		3
943	Azepanium-based ionic liquids as green electrolytes for high voltage supercapacitors. *Journal of Power Sources*, **2015**, 273, 931-936	8.9	49
942	Activated Carbon, Carbon Blacks and Graphene Based Nanoplatelets as Active Materials for Electrochemical Double Layer Capacitors: A Comparative Study. **2015**, 162, A44-A51		30
941	Facile synthesis of wheat bran-derived honeycomb-like hierarchical carbon for advanced symmetric supercapacitor applications. **2015**, 19, 577-584		48
940	Fabrication of three-dimensional porous graphene□manganese dioxide composites as electrode materials for supercapacitors. **2015**, 465, 32-38		34
939	Zinc oxide/activated carbon nanofiber composites for high-performance supercapacitor electrodes. *Journal of Power Sources*, **2015**, 274, 512-520	8.9	177
938	High-performance asymmetric pseudocapacitor cell based on cobalt hydroxide/graphene and polypyrrole/graphene electrodes. *Journal of Power Sources*, **2015**, 275, 298-304	8.9	76
937	Impedance spectroscopy study of a catechol-modified activated carbon electrode as active material in electrochemical capacitor. *Journal of Power Sources*, **2015**, 274, 551-559	8.9	33
936	Sustainable carbon materials. **2015**, 44, 250-90		826
935	Comparison of melamine resin and melamine network as precursors for carbon electrodes. **2015**, 81, 239-250		27
934	Vertically-aligned BCN nanotube arrays with superior performance in electrochemical capacitors. **2014**, 4, 6083		23

933	An approach to classification and capacitance expressions in electrochemical capacitors technology. **2015**, 17, 1084-92		143
932	Synthesis and characterization of nanostructured ternary zinc manganese oxide as novel supercapacitor material. **2015**, 149-150, 721-727		52
931	Estimation of supercapacitor energy using a linear capacitance for applications in wireless sensor networks. *Journal of Power Sources*, **2015**, 275, 498-505	8.9	19
930	Using common salt to impart pseudocapacitive functionalities to carbon nanofibers. **2015**, 3, 377-385		40
929	One-dimensional nitrogen-containing carbon nanostructures. **2015**, 69, 61-182		85
928	The development supercapacitor from activated carbon by electroless plating—A review. **2015**, 42, 823-834		246
927	Silicon carbide nanowires@Ni(OH)2 core–shell structures on carbon fabric for supercapacitor electrodes with excellent rate capability. *Journal of Power Sources*, **2015**, 273, 479-485	8.9	69
926	Fabrication and electrochemical performance of nanoporous carbon derived from silicon oxycarbide. **2015**, 202, 97-105		19
925	Electrochemical properties of organic electrolyte solutions containing 1-ethyl-3-methylimidazolium tetrafluoroborate salt. **2015**, 41, 4749-4759		5
924	Centrifugal spinning: A novel approach to fabricate porous carbon fibers as binder-free electrodes for electric double-layer capacitors. *Journal of Power Sources*, **2015**, 273, 502-510	8.9	64
923	Temperature dependence of the electrical conductivity of activated carbons prepared from vine shoots by physical and chemical activation methods. **2015**, 209, 90-98		35
922	RETRACTED: An overview of mathematical modeling of electrochemical supercapacitors/ultracapacitors. *Journal of Power Sources*, **2015**, 273, 264-277	8.9	37
921	Carbon Nanotubes Supported Conducting Polymer Electrode for Supercapacitor. **2016**,		1
920	Hydroxy-Functionalized Graphene: A Proficient Energy Storage Material. **2016**, 06,		3
919	Optimizing the Pore Structure of Bio-Based ACFs through a Simple KOH-Steam Reactivation. **2016**, 9,		4
918	An Aqueous Metal-Ion Capacitor with Oxidized Carbon Nanotubes and Metallic Zinc Electrodes. **2016**, 4,		45
917	Design of Activated Carbon/Activated Carbon Asymmetric Capacitors. **2016**, 3,		37
916	Synthesis of Porous and Mechanically Compliant Carbon Aerogels Using Conductive and Structural Additives. **2016**, 2,		14

915	-doped TiO Nanotubes as an Effective Additive to Improve the Catalytic Capability of Methanol Oxidation for Pt/Graphene Nanocomposites. **2016**, 6,		15
914	Fabrication of (Co,Mn)3O4/rGO Composite for Lithium Ion Battery Anode by a One-Step Hydrothermal Process with H2O2 as Additive. **2016**, 11, e0164657		4
913	Graphene-Based Nanocomposites for Energy Storage. **2016**, 6, 1502159		233
912	High surface area carbon black (BP-2000) as a reinforcing agent for poly[( )-lactide]. **2016**, 133,		5
911	Thermal and Electrical Conductivity of Amorphous and Graphitized Carbide-Derived Carbon Monoliths. **2016**, 39, 1121-1129		11
910	Improvement in Photovoltaic Performance of Dye Sensitized Solar Cell Using Activated Carbon-TiO2 Composites-Based Photoanode. **2016**, 6, 1191-1195		5
909	High-Rate and High-Volumetric Capacitance of Compact Graphene Polyaniline Hydrogel Electrodes. **2016**, 6, 1600185		79
908	Investigating the thermal, mechanical, and electrochemical properties of PVdF/PVP nanofibrous membranes for supercapacitor applications. **2016**, 133,		20
907	A TEM study of morphological and structural degradation phenomena in LiFePO4-CB cathodes. **2016**, 40, 2022-2032		8
906	Charge storage mechanisms in electrochemical capacitors: Effects of electrode properties on performance. *Journal of Power Sources*, **2016**, 326, 613-623	8.9	51
905	Smart Electronic Textiles. **2016**, 55, 6140-69		371
904	Metal-Organic Frameworks Derived Porous Carbons: Syntheses, Porosity and Gas Sorption Properties. **2016**, 34, 157-174		29
903	Effects of microwave and oxygen plasma treatments on capacitive characteristics of supercapacitor based on multiwalled carbon nanotubes. **2016**, 55, 02BD05		13
902	Physical and Electrochemical Characterization of Palm Kernel Shell Biochar (PKSB) as Supercapacitor. **2016**, 62, 04003		0
901	Electric double-layer capacitors with tea waste derived activated carbon electrodes and plastic crystal based flexible gel polymer electrolytes. **2016**, 739, 012086		8
900	Cycling and floating performance of symmetric supercapacitor derived from coconut shell biomass. **2016**, 6, 115306		44
899	Electrodeposition of Fe2O3 nanoparticles and its supercapacitive properties. **2016**,		5
898	Nickel oxide aerogel for high performance supercapacitor electrodes. **2016**, 6, 112620-112624		22

897	Waste tea derived activated carbon/polyaniline composites as supercapacitor electrodes. **2016**,		3
896	Chemical Analysis of Casual Elements for Deterioration of Cylindrical EDLC. **2016**, 99, 36-43		0
895	Functional Carbon Materials from Ionic Liquid Precursors. **2016**, 21-42		2
894	Complex insight into the charge storage behavior of active carbons obtained by carbonization of the plane tree seed. **2016**, 222, 156-171		12
893	Strength and microplasticity of biocarbons prepared by carbonization in the presence of a catalyst. **2016**, 58, 703-710		3
892	Hierarchically porous heteroatom-doped carbon derived from flue gases for electrochemical energy storage. **2016**, 16, 420-427		8
891	An integrated nanocarbon□ellulose membrane for solid-state supercapacitors. **2016**, 61, 368-377		4
890	Preparation and characterisation of graphene oxide/ carbon nanotubes films. **2016**,		
889	Preparation and electrochemical performance of a polyaniline-carbon microsphere hybrid as a supercapacitor electrode. **2016**, 31, 594-599		9
888	High electrochemical performance of RuO2□e2O3 nanoparticles embedded ordered mesoporous carbon as a supercapacitor electrode material. **2016**, 106, 103-111		55
887	Anomalous or regular capacitance? The influence of pore size dispersity on double-layer formation. *Journal of Power Sources*, **2016**, 326, 660-671	8.9	98
886	Effect of the aromatic precursor flow rate on the morphology and properties of carbon nanostructures in plasma enhanced chemical vapor deposition. **2016**, 6, 32779-32788		9
885	High and rapid alkali cation storage in ultramicroporous carbonaceous materials. *Journal of Power Sources*, **2016**, 313, 142-151	8.9	37
884	A dual mesopore C-aerogel electrode for a high energy density supercapacitor. **2016**, 16, 658-664		15
883	Carbon nanotube/dendrimer hybrids as electrodes for supercapacitors. **2016**, 20, 1991-2000		5
882	Sonochemical preparation of a ytterbium oxide/reduced graphene oxide nanocomposite for supercapacitors with enhanced capacitive performance. **2016**, 6, 51211-51220		55
881	Development of Candle Soot Based Carbon Nanoparticles (CNPs)/Polyaniline Electrode and Its Comparative Study with CNPs/MnO2 in Supercapacitors. **2016**, 210, 190-198		17
880	Biobased Nano Porous Active Carbon Fibers for High-Performance Supercapacitors. **2016**, 8, 15205-15		159

879	Cobalt oxide nanoparticles embedded in flexible carbon nanofibers: attractive material for supercapacitor electrodes and CO2 adsorption. **2016**, 6, 52171-52179		25
878	Organic electrolytes for graphene-based supercapacitor: Liquid, gel or solid. **2016**, 7, 155-160		37
877	A novel method for the production of mesoporous activated carbon fibers from liquefied wood. **2016**, 178, 190-192		8
876	Electrochemical Characterization of Supercapacitor Electrodes Prepared by Activation of Green Monoliths Consist of Self-Adhesive Carbon Grains and Lignin. **2016**, 846, 545-550		2
875	Hierarchically nanostructured hollow carbon nanospheres for ultra-fast and long-life energy storage. **2016**, 106, 306-313		28
874	Insights into Bulk Electrolyte Effects on the Operative Voltage of Electrochemical Double-Layer Capacitors. **2016**, 120, 12325-12336		14
873	Review of Energy and Power of Supercapacitor Using Carbon Electrodes from Fibers of Oil Palm Fruit Bunches. **2016**, 846, 497-504		7
872	Facile preparation of nitrogen-doped porous carbon for high performance symmetric supercapacitor. **2016**, 20, 1613-1623		21
871	Synthesis of N-Doped Hollow-Structured Mesoporous Carbon Nanospheres for High-Performance Supercapacitors. **2016**, 8, 7194-204		156
870	Preparation of hierarchical porous graphene nanosheets with high specific surface area and their electrochemical behaviors in supercapacitors. **2016**, 177, 171-178		8
869	Single-crystal ▯NiS nanorod arrays with a hollow-structured Ni3S2 framework for supercapacitor applications. **2016**, 4, 7700-7709		156
868	Nitrogen-doped mesoporous carbons for high performance supercapacitors. **2016**, 379, 132-139		39
867	Pore size-controlled carbon aerogels for EDLC electrodes in organic electrolytes. **2016**, 16, 665-672		30
866	Asymmetric capacitors using lignin-based hierarchical porous carbons. *Journal of Power Sources*, **2016**, 326, 641-651	8.9	51
865	All-biomaterial supercapacitor derived from bacterial cellulose. **2016**, 8, 9146-50		77
864	Porosity-engineered carbons for supercapacitive energy storage using conjugated microporous polymer precursors. **2016**, 4, 7665-7673		100
863	Nitrogen-containing ultramicroporous carbon nanospheres for high performance supercapacitor electrodes. **2016**, 205, 132-141		109
862	Synthesis of hierarchical reduced graphene oxide/SnO 2 /polypyrrole ternary composites with high electrochemical performance. **2016**, 80, 303-308		26

861	Supercapacitors Based on Activated Silicon Carbide-Derived Carbon Materials and Ionic Liquid. **2016**, 163, A1317-A1325		25
860	Sustainable hierarchical porous carbon aerogel from cellulose for high-performance supercapacitor and CO2 capture. **2016**, 87, 229-235		116
859	Electrodeposited reduced-graphene oxide/cobalt oxide electrodes for charge storage applications. **2016**, 382, 34-40		19
858	Lignin-Based Composite Carbon Nanofibers. **2016**, 167-194		6
857	Active carbon/graphene hydrogel nanocomposites as a symmetric device for supercapacitors. **2016**, 24, 427-434		13
856	Highly flexible NiCo2O4/CNTs doped carbon nanofibers for CO2 adsorption and supercapacitor electrodes. **2016**, 476, 87-93		63
855	Synthesis of microporous carbon nanofibers with high specific surface using tetraethyl orthosilicate template for supercapacitors. **2016**, 41, 9383-9393		40
854	Suitable Conditions for the Use of Vanadium Nitride as an Electrode for Electrochemical Capacitor. **2016**, 163, A1077-A1082		51
853	Facile sonochemical synthesis of highly dispersed ultrafine Pd nanoparticle decorated carbon nano-onions with high metal loading and enhanced electrocatalytic activity. **2016**, 6, 83711-83719		8
852	The evolution of hierarchical porosity in self-templated nitrogen-doped carbons and its effect on oxygen reduction electrocatalysis. **2016**, 6, 80398-80407		33
851	Filtration: Frontiers of the Engineering and Science of Nanoltration A Far-Reaching Review. **2016**, 232-241		
850	Electrochemical behavior and stability of a commercial activated carbon in various organic electrolyte combinations containing Li-salts. **2016**, 218, 163-173		36
849	Solution-processed ultra-low-k thin films comprising single-walled aluminosilicate nanotubes. **2016**, 8, 17427-17432		11
848	Electrochemical behavior of activated carbon electrodes in electric double layer capacitors with tetrametylammonium bis(oxalato)borate electrolyte synthesized by microwave irradiation. **2016**, 89, 1000-1008		2
847	Millisecond photo-thermal process on significant improvement of supercapacitors performance. **2016**, 109, 186-195		5
846	Mesoporous Carbon Nanomaterials. **2016**, 505-540		
845	High Volumetric Energy Density Asymmetric Supercapacitors Based on Well-Balanced Graphene and Graphene-MnO Electrodes with Densely Stacked Architectures. **2016**, 12, 5217-5227		100
844	Cross-linked carbon network with hierarchical porous structure for high performance solid-state electrochemical capacitor. *Journal of Power Sources*, **2016**, 327, 488-494	8.9	20

843	A flexible and high-performance all-solid-state supercapacitor device based on Ni3S2 nanosheets coated ITO nanowire arrays on carbon fabrics. **2016**, 6, 75186-75193		27
842	The Basics of Organic Light-Emitting Diodes. **2016**, 223-252		1
841	Nickel Nanofoam/Different Phases of Ordered Mesoporous Carbon Composite Electrodes for Superior Capacitive Energy Storage. **2016**, 8, 22516-25		15
840	Environmentally Friendly Supercapacitors. **2016**, 351-492		6
839	Highly microporous carbons derived from a complex of glutamic acid and zinc chloride for use in supercapacitors. *Journal of Power Sources*, **2016**, 327, 535-542	8.9	27
838	Improved capacitive energy storage via surface functionalization of activated carbon as cathodes for lithium ion capacitors. **2016**, 109, 163-172		30
837	1D Ni-Co oxide and sulfide nanoarray/carbon aerogel hybrid nanostructures for asymmetric supercapacitors with high energy density and excellent cycling stability. **2016**, 8, 16292-16301		83
836	Bridging the performance gap between electric double-layer capacitors and batteries with high-energy/high-power carbon nanotube-based electrodes. **2016**, 4, 14586-14594		33
835	High-energy Li-ion hybrid supercapacitor enabled by a long life N-rich carbon based anode. **2016**, 213, 626-632		33
834	Morphic transitions of nanocarbons via laser pyrolysis of polyimide films. **2016**, 121, 275-286		40
833	Electrolytes for Electrochemical Supercapacitors. **2016**, 31-254		4
832	Buckypaper templating Ni□Co hydroxide nanosheets as free-standing electrodes for ultrathin and flexible supercapacitors. **2016**, 40, 8006-8011		20
831	Controllable Synthesis of Graphene by Plasma-Enhanced Chemical Vapor Deposition and Its Related Applications. **2016**, 3, 1600003		105
830	Thermal processing for graphene oxide supercapacitor electrode reduction and wetting. **2016**, 46, 1075-1084		11
829	Flexible solid□state supercapacitor of metal□organic framework coated on carbon nanotube film interconnected by electrochemically -codeposited PEDOT-GO. **2016**, 1, 285-289		44
828	Carbon supported Co9S8 hollow spheres assembled from ultrathin nanosheets for high-performance supercapacitors. **2016**, 183, 290-295		24
827	Mesoporous LixMn2O4 Thin Film Cathodes for Lithium-Ion Pseudocapacitors. **2016**, 10, 7572-81		194
826	Reaction process for ZnCl2 activation of phenol liquefied wood fibers. **2016**, 6, 78909-78917		17

825	Electrochemical properties of multi-walled carbon nanotubes treated with nitric acid for a supercapacitor electrode. **2016**, 506, 664-669		16
824	Facile fabrication of cross-linked carbon nanofiber via directly carbonizing electrospun polyacrylonitrile nanofiber as high performance scaffold for supercapacitors. **2016**, 215, 29-35		35
823	Thermostable gel polymer electrolyte based on succinonitrile and ionic liquid for high-performance solid-state supercapacitors. *Journal of Power Sources*, **2016**, 328, 510-519	8.9	99
822	Electric capacity of electrochemical capacitors with composite electrodes based on the aluminum□ctive carbon system. **2016**, 52, 762-769		1
821	Synthesis of a novel magnetite/nitrogen-doped reduced graphene oxide nanocomposite as high performance supercapacitor. **2016**, 302, 298-308		51
820	Preparation and modification of high performance porous carbons from petroleum coke for use as supercapacitor electrodes. **2016**, 31, 343-351		21
819	Fabrication and enhanced supercapacitive performance of graphene/nano-carbide derived carbon composites. **2016**, 41, 14820-14829		7
818	Novel interconnected hierarchical porous carbon electrodes derived from bio-waste of corn husk for supercapacitor applications. **2020**, 878, 114674		8
817	Novel carbon film induces precocious calcium oscillation to promote neuronal cell maturation. **2020** , 10, 17661		1
816	Structure and electrochemical performance of electrospun-ordered porous carbon/graphene composite nanofibers. **2020**, 11, 1280-1290		1
815	Toward Next-Generation Carbon-Based Materials Derived from Waste and Biomass for High-Performance Energy Applications. **2020**, 8, 2000714		3
814	Self-template/activation nitrogen-doped porous carbon materials derived from lignosulfonate-based ionic liquids for high performance supercapacitors.. **2020**, 10, 36504-36513		5
813	Supercapacitors in the Light of Solid Waste and Energy Management: A Review. **2020**, 4, 2000182		3
812	Synthesis and characterization of magnesium oxide / silver oxide electrode for supercapacitors by simple Sol-Gel process. **2020**, 32, 101958		2
811	Electrochemical oxidation of toluene with controlled selectivity: The effect of carbon anode. **2020**, 534, 147517		3
810	Preparation, characterization and electrical properties of alkali metal ions doped co-polymers based on TBF. **2020**, 262, 114687		2
809	The rational design of biomass-derived carbon materials towards next-generation energy storage: A review. **2020**, 134, 110308		49
808	Lignocellulose materials for supercapacitor and battery electrodes: A review. **2020**, 134, 110345		30

807	Fabrication of an efficient vanadium redox flow battery electrode using a free-standing carbon-loaded electrospun nanofibrous composite. **2020**, 10, 11153	9
806	Synthesis and characterization of reduced graphene oxide for energy storage application. **2020**,	
805	Hierarchically porous biochar for supercapacitor and electrochemical H2O2 production. **2020**, 402, 126171	24
804	Impact of polypyrrole incorporation on nickel oxide@multi walled carbon nanotube composite for application in supercapacitors. **2020**, 89, 106727	15
803	On the challenge of large energy storage by electrochemical devices. **2020**, 354, 136771	25
802	An intuitive review of supercapacitors with recent progress and novel device applications. **2020**, 31, 101652	75
801	Fabrication of Ordered Macro-Microporous Single-Crystalline MOF and Its Derivative Carbon Material for Supercapacitor. **2020**, 10, 1903750	51
800	Cost-Effective Synthesis of Efficient CoWO/Ni Nanocomposite Electrode Material for Supercapacitor Applications. **2020**, 10,	9
799	Metal-Free Carbon-Based Supercapacitors: A Comprehensive Review. **2020**, 1, 410-438	11
798	Investigating the Effect of Microstructure and Surface Functionalization of Mesoporous N-Doped Carbons on V4+/V5+ Kinetics. **2020**, 3, 11627-11640	8
797	Opening the internal structure for transport of ions: improvement of the structural and chemical properties of single-walled carbon nanohorns for supercapacitor electrodes.. **2020**, 10, 38357-38368	5
796	Synthesis of activated carbon from Salacca peel using hydrothermal carbonization and microwave assisted chemical activation as promising supercapacitor's electrode. **2020**,	1
795	Catalytic conversion of waste cooking oil into biodiesel using functionally advanced recyclable iron-impregnated activated carbon materials. **2020**, 1-16	3
794	Structural and Electrochemical Analysis of Decarburized Graphene Electrodes for Supercapacitor Applications. **2020**, 10, 1043	7
793	3D printed platform for testing supercapacitor materials. **2020**,	
792	True Meaning of Pseudocapacitors and Their Performance Metrics: Asymmetric versus Hybrid Supercapacitors. **2020**, 16, e2002806	142
791	Comparison of the electrochemical properties of activated carbon prepared from woody biomass with different lignin content. **2020**, 54, 1165-1180	2
790	MoS2/graphene composites: Fabrication and electrochemical energy storage. **2020**, 33, 470-502	36

789	A high energy density flexible symmetric supercapacitor based on Al-doped MnO2 nanosheets @ carbon cloth electrode materials. **2020**, 31, 16027-16036	6
788	Thin Chemisorbed Polyaniline Film on Cobalt Oxide as an Electrode for Hybrid Energy Storage Devices. **2020**, 5, 7973-7983	8
787	From cluster design to energy storage device engineering. **2020**, 31-58	
786	Hierarchically structured carbon electrodes derived from intrinsically microporous Tr□ger□ base polymers for high-performance supercapacitors. **2020**, 530, 147146	4
785	A graphene-covalent organic framework hybrid for high-performance supercapacitors. **2020**, 32, 448-457	39
784	Energy Storage in Supercapacitors: Focus on Tannin-Derived Carbon Electrodes. **2020**, 7,	16
783	Pseudocapacitance of chemically stable MnO2-NiO mixture layer on highly conductive Sb doped SnO2 nanowire arrays. **2020**, 260, 114637	2
782	Effect of the oxygen functional groups of activated carbon on its electrochemical performance for supercapacitors. **2020**, 35, 232-243	35
781	Sustainable production of self-activated bio-derived carbons through solar pyrolysis for their use in supercapacitors. **2020**, 150, 104901	13
780	Recent advances in biomass derived activated carbon electrodes for hybrid electrochemical capacitor applications: Challenges and opportunities. **2020**, 170, 1-29	50
779	Laser induced graphene with biopolymer electrolyte for supercapacitor applications. **2020**, 48, 365-365	1
778	Electric Heating Behavior of Reduced Oxide Graphene/Carbon Nanotube/Natural Rubber Composites with Macro-Porous Structure and Segregated Filler Network. **2020**, 12,	10
777	Enhanced electrochemical performance of flexible and eco-friendly starch/graphene oxide nanocomposite. **2020**, 6, e05292	11
776	Enhancing the Photoelectrochemical Water Oxidation Reaction of BiVO4 Photoanode by Employing Carbon Spheres as Electron Reservoirs. **2020**, 10, 13031-13039	18
775	Synthesis and characterization of Deccan hemp plant-based electrode material for supercapacitor applications. **2020**,	
774	Porous carbons derived from potato for high-performancesupercapacitors. **2020**, 26, 6319-6329	4
773	Activated Carbons and Their Evaluation in Electric Double Layer Capacitors. **2020**, 25,	8
772	. **2020**,	2

771	Carbon nanocomposite electrodes for electrical double layer capacitor. **2020**, 32, 101798	13
770	Graphitic Porous Carbon Derived from Waste Coffee Sludge for Energy Storage. **2020**, 13,	5
769	Geometrical effects on ionic diffusion in carbon-carbon symmetric supercapacitors. **2020**, 44, 12066-12080	1
768	Laser-induced graphitization of a forest-based ink for use in flexible and printed electronics. **2020**, 4,	12
767	Electrode Materials for Supercapacitors: A Review of Recent Advances. **2020**, 10, 969	81
766	Spherical Onion-Like Carbons. **2020**, 63-105	
765	New Limits for Stability of Supercapacitor Electrode Material Based on Graphene Derivative. **2020**, 10,	7
764	Study of the Active Carbon from Used Coffee Grounds as the Active Material for a High-Temperature Stable Supercapacitor with Ionic-Liquid Electrolyte. **2020**, 13,	8
763	Three-Dimensional Architectures in Electrochemical Capacitor Applications Insights, Opinions, and Perspectives. **2020**, 8,	1
762	Structural Changes of Activated Carbon Electrodes for EDLCs in the Manufacturing Process. **2020**, 26, 391-398	1
761	Graphene Ionic Liquid Interfacial Potential Drop from Density Functional Theory-Based Molecular Dynamics Simulations. **2020**, 124, 19548-19555	16
760	Gamma-radiated biochar carbon for improved supercapacitor performance.. **2020**, 10, 29910-29917	11
759	State-of-the-Art Applications of 2D Nanomaterials in Energy Storage. **2020**, 253-293	3
758	Recent Studies on Supercapacitors with Next-Generation Structures. **2020**, 11,	13
757	Bamboo-Based Activated Carbon as Binder-Free Electrode of Supercapacitor Application. **2020**, 1655, 012163	1
756	Activated Carbon Monolith Derived from Coconut Husk Fiber as Electrode Material for Supercapacitor Energy Storage. **2020**, 1655, 012164	1
755	Activated Carbons as Nanoporous Electron-Ion-Exchangers. **2020**, 56, 869-882	2
754	A Universal Strategy For N-Doped 2D Carbon Nanosheets With Sub-Nanometer Micropore For High-Performance Supercapacitor. **2020**,	5

753	Electrochemical evaluation of polyaniline/multi-walled carbon nanotube composite synthesized by microwave plasma polymerization as a supercapacitor electrode. **2020**, 757, 012036	2
752	Nickel Cobaltite Functionalized Silver Doped Carbon Xerogels as Efficient Electrode Materials for High Performance Symmetric Supercapacitor. **2020**, 13,	7
751	Rolled Supercapacitor Device Model Using Carbon-Sheet as Electrodes in KCl Electrolyte System. **2020**, 860, 53-58	2
750	Li-Ion Capacitors Based on Pre-fluorinated Lithium Powder Prepared with Perfluororesin (CYTOP) as Fluorine Source. **2020**, 49, 7448-7456	
749	Porous carbon materials derived from areca palm leaves for high performance symmetrical solid-state supercapacitors. **2020**, 55, 10751-10764	13
748	Recognition of Ionic Liquids as High-Voltage Electrolytes for Supercapacitors. **2020**, 8, 261	23
747	Fitting the porous texture of carbon electrodes to a binary ionic liquid electrolyte for the realization of low temperature EDLCs. **2020**, 350, 136416	7
746	3D-interconnected framework binary composite based on polypyrrole/textile polyacrylonitrile-derived activated carbon fiber felt as supercapacitor electrode. **2020**, 31, 10225-10233	3
745	Considerations for application of granular activated carbon as capacitive bioanode in bioelectrochemical systems. **2020**, 157, 782-792	11
744	PTFE/rGO Aerogels with Both Superhydrophobic and Superhydrophilic Properties for Electroreduction of Molecular Oxygen. **2020**, 34, 7573-7581	5
743	Europium oxide nanorod-reduced graphene oxide nanocomposites towards supercapacitors.. **2020**, 10, 17543-17551	7
742	Porous multi-channel carbon nanofiber electrodes using discarded polystyrene foam as sacrificial material for high-performance supercapacitors. **2020**, 50, 809-820	13
741	Polyaniline and heteroatoms□enriched carbon derived from Pithophora polymorpha composite for high performance supercapacitor. **2020**, 30, 101562	32
740	Supercapacitor Electrodes from Viscose-Based Activated Carbon Fibers: Significant Yield and Performance Improvement Using Diammonium Hydrogen Phosphate as Impregnating Agent. **2020**, 6, 17	6
739	Bismuth-Ferrite-Based Electrochemical Supercapacitors. **2020**,	1
738	Fabrication of all-solid-state textile supercapacitors based on industrial-grade multi-walled carbon nanotubes for enhanced energy storage. **2020**, 55, 10121-10141	10
737	Preparation of activated carbon via acidic dehydration of durian husk for supercapacitor applications. **2020**, 107, 107906	22
736	Recent advances in fluorine-doped/fluorinated carbon-based materials for supercapacitors. **2020**, 30, 367-384	36

735	Preparation of high surface area nitrogen doped graphene for the assessment of morphologic properties and nitrogen content impacts on supercapacitors. **2020**, 868, 114197	29
734	One-step fabrication of biomass-derived hierarchically porous carbon/MnO nanosheets composites for symmetric hybrid supercapacitor. **2020**, 526, 146696	81
733	Recent advancements of metal oxides/Nitrogen-doped graphene nanocomposites for supercapacitor electrode materials. **2020**, 30, 101486	34
732	Mechanochemical defect engineering of HKUST-1 and impact of the resulting defects on carbon dioxide sorption and catalytic cyclopropanation.. **2020**, 10, 19822-19831	6
731	Nitrogen and sulfur dual-doped porous carbon derived from coffee waste and cysteine for electrochemical energy storage. **2020**, 37, 1218-1225	3
730	Effect of an activating agent on the physicochemical properties and supercapacitor performance of naturally nitrogen-enriched carbon derived from Albizia procera leaves. **2020**, 13, 6161-6173	26
729	High-yield synthesis of N-rich polymer-derived porous carbon with nanorod-like structure and ultrahigh N-doped content for high-performance supercapacitors. **2020**, 399, 125671	31
728	Electropolymerized poly(3-methylthiophene) onto high density vertically aligned carbon nanotubes directly grown on aluminum substrate: Application to electrochemical capacitors. **2020**, 350, 136377	9
727	Co(OH)2/MXene composites for tunable pseudo-capacitance energy storage. **2020**, 353, 136607	21
726	An upgraded electro-Fenton treatment of wastewater using nanoclay-embedded graphene composite prepared via exfoliation of pencil rods by submerged liquid plasma. **2020**, 397, 122788	4
725	Acetonitrile confined in carbon nanotubes, part I: Structure, dynamic and transport properties. **2020**, 311, 113053	
724	2 Plasma surface activation and functionalization of carbon-based materials. **2020**, 17-32	
723	Influence of biomass components, temperature and pressure on the pyrolysis behavior and biochar properties of pine nut shells. **2020**, 313, 123682	32
722	Activated carbon synthesis from tangerine peel and its use in hydrogen storage. **2020**, 93, 2176-2185	29
721	Nitrogen doping of mesoporous graphene nanoflakes as a way to enhance their electrochemical performance in ionic liquid-based supercapacitors. **2020**, 30, 101464	4
720	Comparison of Laser-Synthetized Nanographene-Based Electrodes for Flexible Supercapacitors. **2020**, 11,	1
719	Should we pose a closure problem for capacitive charging of porous electrodes?. **2020**, 130, 34003	2
718	Nanoporous materials derived from metal-organic framework for supercapacitor application. **2020**, 30, 101525	21

717	Electrochemical Properties of Carbon Electrodes Modified with Nanoparticles of Fe4[Fe(CN)6]3, K2Co[Fe(CN)6], and Their Sodium-Containing Analogs. **2020**, 56, 451-458	2
716	Aerosol-assisted preparation of N-doped hierarchical porous carbon spheres cathodes toward high-stable lithium-ion capacitors. **2020**, 55, 13127-13140	2
715	Capacitance Enhancement of Hydrothermally Reduced Graphene Oxide Nanofibers. **2020**, 10,	6
714	Bio-Based Carbon Materials from Potato Waste as Electrode Materials in Supercapacitors. **2020**, 13, 2406	7
713	Graphene Based Aerogels: Fundamentals and Applications as Supercapacitors. **2020**, 30, 101549	23
712	A High Energy Density Self-supported and Bendable Organic Electrode for Redox Supercapacitors with a Wide Voltage Window. **2020**, 38, 522-530	7
711	Blocky electrode prepared from nickel-catalysed lignin assembled woodceramics. **2020**, 55, 7760-7774	2
710	Evaluation of the Covalent Functionalization of Carbon Nano-Onions with Pyrene Moieties for Supercapacitor Applications. **2020**, 13,	18
709	Electrochemical analysis of conducting reduced graphene oxide/polyaniline/polyvinyl alcohol nanofibers as supercapacitor electrodes. **2020**, 31, 5958-5965	9
708	2D materials as the basis of supercapacitor devices. **2020**, 97-130	0
707	Nitrogen and Phosphorus Co-doped Porous Carbon for High-Performance Supercapacitors. **2020**, 8, 105	10
706	Microstructure design of porous nanocarbons for ultrahigh-energy and power density supercapacitors in ionic liquid electrolyte. **2020**, 55, 7477-7491	8
705	Current Technology of Supercapacitors: A Review. **2020**, 49, 3520-3532	37
704	Electrode materials for supercapacitors. **2020**, 35-204	3
703	Probing the degradation of carbon black electrodes in the presence of chloride by electrochemical impedance spectroscopy. **2020**, 162, 502-509	6
702	Optimization of Electrochemical Flow Capacitor (EFC) design via finite element modeling. **2020**, 29, 101304	1
701	An Electrochemically Stable 2D Covalent Organic Framework for High-performance Organic Supercapacitors. **2020**, 38, 558-564	8
700	Capacitive Deionization of Water (A Review). **2020**, 56, 18-51	19

699	Preparation of activated carbon nanofibers using degradative solvent extraction products obtained from low-rank coal and their utilization in supercapacitors. **2020**, 10, 8172-8180	12
698	Tunable Synthesis of Hollow Co3O4 Nanoboxes and Their Application in Supercapacitors. **2020**, 10, 1208	13
697	N-Doping in Precursor Sol: Some Observations in Reference to In Situ-Grown Carbon Film Electrodes for Supercapacitor Applications. **2020**, 8, 1901479	5
696	One-step electrodeposition fabrication of iron cobalt sulfide nanosheet arrays on Ni foam for high-performance asymmetric supercapacitors. **2020**, 26, 2095-2106	1
695	Asymmetric supercapacitor featuring carbon nanotubes and nickel hydroxide grown on carbon fabric: A study of self-discharging characteristics. **2020**, 828, 154447	20
694	Advances in Layered Double Hydroxide/Carbon Nanocomposites Containing Ni2+ and Co2+/3+ for Supercapacitors. **2020**, 7,	10
693	3D interconnected graphene aerogels/carbon foam networks with balanced performance in specific surface area and electrical conductivity for supercapacitors. **2020**, 43, 1	1
692	The Effect of KOH Activator Concentration upon the Characteristics of Biomass-Derived Water Hyacinth Process on Lithium-Ion Capacitor. **2020**, 1000, 58-66	0
691	Silica depleted rice hull ash (SDRHA), an agricultural waste, as a high-performance hybrid lithium-ion capacitor. **2020**, 22, 4656-4668	10
690	The Effect of Nitrogen and Oxygen Dopants on the Morphology and Microstructure of Zinc Oxide Nanoparticles Incorporated Electrospun Poly(acrylonitrile) Based Activated Carbon Nanofibers. **2020**, 30, 4976-4988	3
689	Tailoring the morphology, crystalline structure, and electrochemical properties of nanostructured Bi2S3 using various solvent mixtures. **2020**, 9, 1	4
688	High-performance solid state supercapacitors based on intrinsically conducting polyaniline/MWCNTs composite electrodes. **2020**, 27, 1	11
687	Preparation and Improved Capacitive Behavior of NiO/TiO2 Nanocomposites as Electrode Material for Supercapacitor. **2020**, 16, 79-85	7
686	Chemical vapor deposition of 3D graphene/carbon nanotubes networks for hybrid supercapacitors. **2020**, 304, 111886	15
685	Enhancing the performance of activated carbon based scalable supercapacitors by heat treatment. **2020**, 514, 145895	48
684	A review on MXene for energy storage application: effect of interlayer distance. **2020**, 7, 022001	50
683	Postulates of Supercapacitor and Performance Assessment Parameters: A Technical Overview. **2020**, 21, 1911-1918	0
682	Carbon black reborn: Structure and chemistry for renewable energy harnessing. **2020**, 162, 604-649	60

681	Low temperature and highly efficient oxygen/sulfur dual-modification of nanoporous carbon under hydrothermal conditions for supercapacitor application. **2020**, 24, 761-770	3
680	Research progress on transition metal oxide based electrode materials for asymmetric hybrid capacitors. **2020**, 31, 2177-2188	50
679	Synthesis of in-situ doped hydrazine-oxalyl chloride based polyamides and their ionic conductivity studies. **2020**, 141, 109424	2
678	Polyaniline/MnO2/porous carbon nanofiber electrodes for supercapacitors. **2020**, 861, 113995	42
677	Functionalization of partially reduced graphene oxide by metal complex as electrode material in supercapacitor. **2020**, 46, 2595-2612	5
676	Explanation of anomalous rate capability enhancement by manganese oxide incorporation in carbon nanofiber electrodes for electrochemical capacitors. **2020**, 340, 135921	6
675	Robust electrochemical performance of polypyrrole (PPy) and polyindole (PIn) based hybrid electrode materials for supercapacitor application: A review. **2020**, 29, 101302	69
674	Low-Crystalline FeOOH Nanoflower Assembled Mesoporous Film Anchored on MWCNTs for High-Performance Supercapacitor Electrodes. **2020**, 5, 4532-4541	15
673	Formation of High Surface Area Hierarchical Porous Carbon Via a Novel Two Step Activation Process for Fast Supercapacitors. **2020**, 5, 2008-2014	1
672	Enhanced electrochemical double-layer capacitive performance with CO2 plasma treatment on activated carbon prepared from pyrolysis of pistachio shells. **2020**, 45, 8843-8852	19
671	A comprehensive study of supercapacitor Peukert constant dependence on voltage. **2020**, 27, 101004-101004	5
670	Electrode and symmetric supercapacitor device performance of boron-incorporated reduced graphene oxide synthesized by electrochemical exfoliation. **2020**, 2, e134	10
669	Band-gap engineering using metal-semiconductor interfaces for photocatalysis and supercapacitor application. **2020**, 391-451	
668	Bio-based electric devices. **2020**, 311-355	0
667	Rice husk-based hierarchical porous carbon for high performance supercapacitors: The structure-performance relationship. **2020**, 161, 432-444	49
666	Synthesis of porous carbon materials derived from laminaria japonica via simple carbonization and activation for supercapacitors. **2020**, 9, 3261-3271	37
665	Thermal Conversion of Triazine-Based Covalent Organic Frameworks to Nitrogen-Doped Nanoporous Carbons and Their Capacitor Performance. **2020**, 93, 414-420	8
664	Free-standing interconnected carbon nanofiber electrodes: new structural designs for supercapacitor application. **2020**, 31, 185403	9

663	Efficiency of capacitive deionization using carbon materials based electrodes for water desalination. **2020**, 859, 113840	23
662	Using Biochar and Coal as the Electrode Material for Supercapacitor Applications. **2020**, 7,	17
661	Electrochemical capacitors operating in aqueous electrolyte with volumetric characteristics improved by sustainable templating of electrode materials. **2020**, 338, 135788	6
660	Carbon Black as Conductive Additive and Structural Director of Porous Carbon Gels. **2020**, 13,	2
659	Ionic liquids under nanoscale confinement. **2020**, 5, 1736949	10
658	Effect of potential and current on electrodeposited MnO2 as a pseudocapacitor electrode: Surface morphology/chemistry and stability. **2020**, 831, 154838	7
657	Supercapacitive charge storage properties of porous carbons derived from pine nut shells. **2020**, 866, 114140	14
656	. **2020**,	2
655	Metal-organic frameworks-derived titanium dioxide□arbon nanocomposite for supercapacitor applications. **2020**, 44, 6269-6284	23
654	Understanding Self-assembly, Colloidal Behavior and Rheological Properties of Graphene Derivatives for High-performance Supercapacitor Fabrication. **2020**, 38, 423-434	7
653	ZIF-67 derived Co3S4 hollow microspheres and WS2 nanorods as a hybrid electrode material for flexible 2V solid-state supercapacitor. **2020**, 345, 136194	36
652	Prussian blue and its analogues as advanced supercapacitor electrodes. **2020**, 50, 206-229	66
651	Constructing N, O-Containing micro/mesoporous covalent triazine-based frameworks toward a detailed analysis of the combined effect of N, O heteroatoms on electrochemical performance. **2020**, 74, 104789	11
650	Interpreting Dynamic Interfacial Changes at Carbon Fiber Microelectrodes Using Electrochemical Impedance Spectroscopy. **2020**, 36, 4214-4223	4
649	A review of electrochemical energy storage behaviors based on pristine metal□rganic frameworks and their composites. **2020**, 416, 213341	94
648	Hierarchical porous biochar derived from cotinus coggygria flower by using a novel composite activator for supercapacitors. **2020**, 747, 137325	11
647	Morphological optimization and nitrogen functionalization of vertically oriented CNW for high performance electrical double layer capacitor electrode. **2020**, 348, 136210	6
646	Review of zinc dendrite formation in zinc bromine redox flow battery. **2020**, 127, 109838	28

645	Ultrafast microwave synthesis of rambutan-like CMK-3/carbon nanotubes nanocomposites for high-performance supercapacitor electrode materials. **2020**, 10, 6227		7
644	Enhancing biochar redox properties through feedstock selection, metal preloading and post-pyrolysis treatments. **2020**, 395, 125100		45
643	A stretchable vertically stacked microsupercapacitor with kirigami-bridged island structure: MnO2/graphene/Poly(3,4-ethylenedioxythiophene) nanocomposite electrode through pen lithography. *Journal of Power Sources*, **2020**, 453, 227898	8.9	10
642	Reversible control of magnetization in FeO nanoparticles by a supercapacitor. **2020**, 32, 334001		10
641	Emerging trends in poly(methyl methacrylate) containing carbonaceous reinforcements□Carbon nanotube, carbon black, and carbon fiber. **2020**, 36, 409-429		11
640	Improved electrosorption kinetics in meso/microporous carbon composite electrode for swift salt removal. **2021**, 359, 133-140		4
639	Current applications of smart nanotextiles and future trends. **2021**, 343-365		3
638	Preparation of activated carbon derived from oil palm empty fruit bunches and its modification by nitrogen doping for supercapacitors. **2021**, 28, 9-18		6
637	Carbon black-based porous sub-micron carbon fibers for flexible supercapacitors. **2021**, 537, 147914		12
636	A rod-like mesoporous carbon derived from agro-industrial cassava petiole waste for supercapacitor application. **2021**, 96, 662-671		4
635	Scalable spray-coated graphene-based electrodes for high-power electrochemical double-layer capacitors operating over a wide range of temperature. **2021**, 34, 1-11		24
634	Capacitor performance of MgO-templated carbons synthesized using hydrothermally treated MgO particles. **2021**, 310, 110646		1
633	Residue of Corncob Gasification as Electrode of Supercapacitors: An Experimental and Theoretical Study. **2021**, 12, 4123-4140		3
632	Carbon Related Materials. **2021**,		2
631	Direct growth of highly organized, 2D ultra-thin nano-accordion Ni-MOF@NiS2@C core-shell for high performance energy storage device. **2021**, 406, 126810		19
630	Fabrication of binary transition metal hydroxides and their nanocomposite with CNTs for electrochemical capacitor applications. **2021**, 47, 1191-1198		13
629	Facile synthesis of Zn3V2O8 nanostructured material and its enhanced supercapacitive performance. **2021**, 861, 157939		7
628	Waste activated carbon transformed to electrode of supercapacitor through combining with Co(OH)2. **2021**, 367, 137475		7

627	Efficient electrophoretic deposition of MXene/reduced graphene oxide flexible electrodes for all-solid-state supercapacitors. **2021**, 33, 102070	12
626	The improvement of organic redox flow battery performance by spherical mesoporous carbon prepared by sol-gel polymerization in water-oil emulsification technique. **2021**, 46, 6448-6460	2
625	Synergistic performance of simply fabricated polyaniline/carbon xerogel composite as supercapacitor electrode. **2021**, 880, 114848	3
624	Review on Current Progress of MnO2-Based Ternary Nanocomposites for Supercapacitor Applications. **2021**, 8, 291-336	20
623	Electrochemical fabrication and supercapacitor performances of metallo phthalocyanine/functionalized-multiwalled carbon nanotube/polyaniline modified hybrid electrode materials. **2021**, 33, 102049	24
622	In situ analysis of pore size effect of ionic solvation during the formation of double electric layers. **2021**, 880, 114846	0
621	Effect of conductive polypyrrole in poly(acrylonitrile-co-butyl acrylate) waterBased binder on the performance of electrochemical double-layer capacitors. **2021**, 25, 963-972	3
620	Advanced carbon nanomaterials for state-of-the-art flexible supercapacitors. **2021**, 36, 56-76	82
619	nHighly N/O co-doped carbon nanospheres for symmetric supercapacitors application with high specific energy. **2021**, 33, 102152	7
618	Biomass waste conversion into low-cost carbon-based materials for supercapacitors: A sustainable approach for the energy scenario. **2021**, 880, 114899	14
617	Facile synthesis and frequency-response behavior of supercapacitor electrode based on surface-etched nanoscaled-graphene platelets. **2021**, 609, 125587	3
616	Synthesis strategies towards amorphous porous carbons with selective oxygen functionalization for the application as reference material. **2021**, 171, 658-670	5
615	Electronic and ionic transport in organic materials and devices. **2021**, 71-105	
614	Necklace-like C-ZIF-8@MWCNTs fabricated by electrochemical deposition towards enhanced supercapacitor. **2021**, 853, 157368	12
613	Void-size-matched hierarchical 3D titania flowers in porous carbon as an electrode for high-density supercapacitive charge storage. **2021**, 858, 157649	7
612	Nanostructure Dependence of T-Nb 2 O 5 Intercalation Pseudocapacitance Probed Using Tunable Isomorphic Architectures. **2021**, 31, 2007826	10
611	Carbon aerogel and their polypyrrole composites used as capacitive materials. **2021**, 45, 1729-1747	8
610	Recent progress in carbon-based materials for supercapacitor electrodes: a review. **2021**, 56, 173-200	150

609	Understanding and Tuning the Electrical Conductivity of Activated Carbon: A State-of-the-Art Review. **2021**, 46, 1-37	20
608	Supercapacitor Devices. **2021**, 39-79	5
607	Functional Carbon Electrodes from Phyllanthus acidus Leaves as High Performance of Supercapacitors. **2021**, 813-829	
606	Porous N self-doped carbon materials for high-performance supercapacitors via nanosized silica template combined with pyrolysis method. **2021**, 32, 2774-2783	1
605	Building next-generation supercapacitors with battery type Ni(OH)2. **2021**, 9, 15542-15585	14
604	MOF(ZM)/Potassium Citrate-Derived Composite Porous Carbon and Its Electrochemical Properties. **2021**, 09, 462-479	
603	Super Capacitance of Metal Oxide Nanoparticles. **2021**, 1759-1771	
602	High-performance symmetric supercapacitor based on molybdenum disulfide/poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate) composite electrodes deposited by spray-coating. **2021**, 45, 9021-9038	2
601	Nanoconfinement of Ionic Liquid into Porous Carbon Electrodes. **2021**, 125, 1292-1303	5
600	Review of Graphene Supercapacitors and Different Modified Graphene Electrodes. **2021**, 12, 1-15	2
599	Liquid Phase Deposition of Nanostructured Materials for Supercapacitor Applications. **2021**, 725-763	1
598	Untangling the respective effects of heteroatom-doped carbon materials in batteries, supercapacitors and the ORR to design high performance materials. **2021**, 14, 2036-2089	86
597	Electrical double-layer capacitors. **2021**, 199-237	1
596	Activated carbon: Synthesis, properties, and applications. **2021**, 783-827	0
595	Performance studies of bamboo based nano activated carbon electrode material for supercapacitor applications. **2021**, 46, 4510-4514	
594	Nano-Tech Electronic Applications. **2021**, 279-313	
593	Activated carbons effectively purified by post-heat treatment under vacuum conditions. **2021**, 31, 973-984	3
592	A review on the recent advances in hybrid supercapacitors. **2021**, 9, 15880-15918	81

591	Recent Advances in Hybrid Supercapacitors. **2021**, 75-113	
590	Modeling of Equivalent Circuit Analysis of Degraded Electric Double-Layer Capacitors. **2021**, 14,	0
589	Conductive nanofibrous materials for supercapacitors. **2021**, 157-170	1
588	High-performance ultracapacitor electrodes realized by 3-dimensionally bicontinuous block copolymer nanostructures with enhanced ion kinetics. **2021**, 9, 16119-16128	0
587	Capacitive Deionization of Water with Electrodes Based on Nanoporous Activated Carbon and a Mosaic Cation–Anion Exchange Membrane. **2021**, 57, 68-79	1
586	Chitosan-based materials for supercapacitor applications: a review. **2021**, 9, 17592-17642	17
585	Triboelectric Nanogenerator: Structure, Mechanism, and Applications. **2021**, 15, 258-287	75
584	Supercapacitors based on graphene and its hybrids. **2021**, 129-157	
583	Overview of Electrode Materials Progressed for Application in Electrochemical Supercapacitors: An Update. **2021**, 33, 1039-1050	0
582	N, P co-doped porous carbon from cross-linking cyclophosphazene for high-performance supercapacitors. **2021**, 881, 114952	2
581	Progress of Metal Chalcogenides in Supercapacitors. **2021**, 424-424	4
580	3D Graphene Nanocomposite by Electrospinning for Supercapacitor. **2021**, 93-118	
579	Ti3C2Tx MXene for electrode materials of supercapacitors. **2021**, 9, 11501-11529	41
578	Chemical supercapacitors: a review focusing on metallic compounds and conducting polymers. **2021**, 9, 1970-2017	67
577	Conducting polymeric nanocomposite for supercapattery. **2021**, 63-91	1
576	Reciclagem de fibras de carbono oriundas de comp□sitos estruturais de matriz ep□i por processo t□mico de pir□lse e aplica□ como materiais de eletrodo em supercapacitores. **2021**, 26,	0
575	Supercapacitors based on two-dimensional metal oxides, hydroxides, and its graphene-based hybrids. **2021**, 193-215	0
574	Phase Changing Materials Based Super Capacitors. **2021**,	

573	Magnetic and electrochemical characteristics of carbon-modified magnetic nanoparticles. **2021**, 235-252	1
572	Functionalized Carbon Nanotube and MnO Nanoflower Hybrid as an Electrode Material for Supercapacitor Application. **2021**, 12,	3
571	A robust magnesiothermic reduction combined self-activation strategy towards highly-curved carbon nanosheets for advanced zinc-ion hybrid supercapacitors applications. **2021**, 32, 185403	3
570	Milling Time-Dependent Lithium/Sodium Storage Performance of Carbons Synthesized by a Mechanochemical Reaction. **2021**, 35, 4596-4603	2
569	Envisaging Future Energy Storage Materials for Supercapacitors: An Ensemble of Preliminary Attempts. **2021**, 6, 1127-1161	3
568	Graphene-Based Coronal Hybrids for Enhanced Energy Storage. **2021**, 2021, 1-15	4
567	Understanding and Correcting Unwanted Influences on the Signal from Electrochemical Gas Sensors. **2021**, 6, 1295-1304	5
566	Effect of ionic conductivity in polymer-gel electrolytes containing iodine-based redox mediators for efficient, flexible energy storage systems. **2021**, 94, 384-389	4
565	Enhanced electrochemical performance of hierarchical porous carbon/polyaniline composite for supercapacitor applications. **2021**, 2, 010013	
564	Preparation of Porous Carbon Nanofiber Electrodes Derived from 6FDA-Durene/PVDF Blends and Their Electrochemical Properties. **2021**, 13,	
563	Low-Cost Carbon Xerogels Derived from Phenol–Formaldehyde Resin for Organic Electric Double-Layer Capacitors. **2021**, 9, 2000918	1
562	Does high sulphur coal have the potential to produce high performance - low cost supercapacitors?. **2021**, 22, 100899	2
561	Highly electrochemical active composites based on capacitive graphene/aniline oligomer hybrid for high-performance sustainable energy storage devices. **2021**, 368, 137587	4
560	Lignocellulose based Bio-waste Materials derived Activated Porous Carbon as Superior Electrode Materials for High-Performance Supercapacitor. **2021**, 34, 102229	19
559	Layered materials and their heterojunctions for supercapacitor applications: a review. 1-32	4
558	Effect of various aqueous electrolytes on the electrochemical performance of V2O5 spindle-like nanostructures as electrode material for supercapacitor application. **2021**, 32, 6623-6635	2
557	High-Temperature Degradation Tests on Electric Double-Layer Capacitors: The Effect of Residual Voltage on Degradation. **2021**, 14,	
556	A First Outlook of Sputtered FeWO4 Thin Films for Micro-Supercapacitor Electrodes. **2021**, 168, 030524	2

555	Supercapacitor electrode materials: addressing challenges in mechanism and charge storage. **2021**,	13
554	Renewable and environmentally friendly of ed shoots leaves biomass-based carbon electrode materials for supercapacitor energy storage. **2021**, 1811, 012135	0
553	Two-dimensional materials and synthesis, energy storage, utilization, and conversion applications of two-dimensional MXene materials. **2021**, 45, 9878-9894	2
552	In Situ and Operando Characterizations of 2D Materials in Electrochemical Energy Storage Devices. **2021**, 1, 2000076	23
551	Effect of acid treatment substrate for supercapacitor electrode based on multi-walled carbon nanotubes. **2021**, 1835, 012106	1
550	Hierarchical Lignin-Based Carbon Matrix and Carbon Dot Composite Electrodes for High-Performance Supercapacitors. **2021**, 6, 7851-7861	5
549	High sensitivity of multi-sensing materials based on reduced graphene oxide and natural rubber: The synergy between filler segregation and macro-porous morphology. **2021**, 205, 108689	18
548	Preparation and characterization of activated carbon/ultra-high molecular weight polyethylene composites. **2021**, 42, 2728	2
547	Enhancing hydrothermal formation of MnO2 nanoneedles over nanographite structures obtained by electrochemical exfoliation. **2021**, 44, 1	4
546	Morphology formation mechanism and electrochemical performance of poly(o-phenylenediamine) based electrode materials. **2021**, 273, 116688	3
545	The prospects and challenges of solar electrochemical capacitors. **2021**, 35, 102294	3
544	A review on three-dimensional graphene: Synthesis, electronic and biotechnology applications-The Unknown Riddles. **2021**, 15, 348-357	1
543	Promising nature-based activated carbon derived from flowers of Borassus flabellifer for supercapacitor applications. 1	1
542	Effective cost and high-performance supercapacitor electrodes from Syzygium oleana leave biomass wastes. **2021**, 1811, 012134	1
541	Porous monoliths of 3D graphene for electric double-layer supercapacitors. **2021**, 3, 193-224	6
540	Highly Porous Cu2O Photocathode via Electrochemical Reconstruction of Dense Thin Films. **2021**, 168, 032504	0
539	Electrospun nanofiber-based soft electronics. **2021**, 13,	41
538	Janus Graphene Oxide Sheets with FeO Nanoparticles and Polydopamine as Anodes for Lithium-Ion Batteries. **2021**, 13, 14786-14795	12

537	Performance analysis, challenges and future perspectives of nickel based nanostructured electrodes for electrochemical supercapacitors. **2021**, 11, 564-599	23
536	Materials and Fabrication. 15-65	
535	Graphene: A promising candidate for charge regulation in high-performance lithium-ion batteries. **2021**, 14, 4370	8
534	Deciphering the Incredible Supercapacitor Performance of Conducting Biordered Ultramicroporous Graphitic Carbon. **2021**, 4, 4416-4427	9
533	A facile soft-template synthetic approach of surface integrated nitrogen-rich carbon nanospheres for light-weight supercapacitors. **2021**, 1229, 129788	2
532	Synthesis of zeolite-templated carbons using oxygen-containing organic solvents. **2021**, 318, 111038	2
531	Theories and models of supercapacitors with recent advancements: impact and interpretations. **2021**, 2, 022004	7
530	Redox Mechanism Contributions to the Behaviour of Electrochemical Capacitor Materials. **2021**, 168, 050503	1
529	Introduction. **2021**, 1-13	
528	Novel preparation and high electrical performance effect of Mn-doped ultra-high surface area activated carbon (USAC) as an additive for Ni hybrid capacitors. **2021**, 32, 1116-1126	2
527	Impact of carbon pores size on ionic liquid based-supercapacitor performance. **2021**, 588, 705-712	10
526	Nanomaterial-Based Electrochemical Sensors: Mechanism, Preparation, and Application in Biomedicine. **2021**, 1, 2000104	5
525	Synergy of Oxygen Plasma and Al2O3 Atomic Layer Deposition on Improved Electrochemical Stability of Activated Carbon-Based Supercapacitor. **2021**, 9,	0
524	Emergence of melanin-inspired supercapacitors. **2021**, 37, 101075	41
523	Electrochemical Supercapacitors (a Review). **2021**, 57, 311-347	13
522	In situ construction of hierarchical polyaniline/SnS@carbon nanotubes on carbon fibers for high-performance supercapacitors. **2021**, 588, 84-93	5
521	Methodology for the identification of carbonyl absorption maxima of carbon surface oxides in DRIFT spectra. **2021**, 3, 100020	1
520	Recent advances in anode materials for potassium-ion batteries: A review. 1	23

519	Revealing the Impact of Hierarchical Pore Organization in Supercapacitor Electrodes by Coupling Ionic Dynamics at Micro- and Macroscales. **2021**, 11, 2100700	9
518	Modified Activated Carbon on Electric Double Layer Capacitor Applications. **2021**, 1912, 012025	
517	Incorporation of Graphitic Porous Carbon for Synthesis of Composite Carbon Aerogel with Enhanced Electrochemical Performance. **2021**, 12, 204-211	0
516	The role of vacuum based technologies in solid oxide fuel cell development to utilize industrial waste carbon for power production. **2021**, 142, 110803	10
515	Kraft lignin-derived free-standing carbon nanofibers mat for high-performance all-solid-state supercapacitor. **2021**, 264, 124454	10
514	Supercapacitor with Carbon/MoS2 Composites. **2021**, 9,	3
513	Surface-Modified Carbon Synthesized from Palm Kernel Shell for Electric Double-Layer Capacitor Applications. 884, 423-429	
512	One-Pot Synthesis of Bismuth Sulfide Nanostructures as an Active Electrode Material for Aqueous Hybrid Capacitors. **2021**, 14, 2670	1
511	Carbon material with high specific surface area and high pseudocapacitance: Possible application in supercapacitors. **2021**, 319, 111063	4
510	Effect of Polyaniline Mass Composition on Electrochemical of Active Carbon/Polyaniline as Supercapacitor Electrode. **2021**, 1125, 012001	0
509	Properties of electrochemically copolymerized aniline and melamine on functionalized multiwalled-carbon nanotube film electrodes. e2100021	0
508	New-Generation Materials for Flexible Supercapacitors. **2021**, 277-313	0
507	Cyclodextrin-assisted fabrication of hierarchically porous carbon sheet with O/N defects for electrical double-layer supercapacitor. **2021**, 32, 15046-15058	0
506	Binary nanocomposites of reduced graphene oxide and cobalt (II, III) oxide for supercapacitor devices. 1-15	2
505	Ruthenium modified defatted spent coffee catalysts for supercapacitor and methanolysis application. **2021**, 3, e243	8
504	Glycerol derived mesopore-enriched hierarchically carbon nanosheets as the cathode for ultrafast zinc ion hybrid supercapacitor applications. **2021**, 379, 138170	8
503	Fabrication Approaches of Energy Storage Materials for Flexible Supercapacitors. **2021**, 533-547	
502	Aqueous Electrolytes for Flexible Supercapacitors. **2021**, 349-412	

501	Ternary hybrid nanocomposites of polypyrrole nanotubes with 2D self-assembled heterostructures of protonated g-C3N4-rGO as supercapacitor electrodes. **2021**, 27, 3153-3168	1
500	Transition metal dichalcogenide (TMDs) electrodes for supercapacitors: a comprehensive review. **2021**, 33,	12
499	On symmetry breaking of dual polyhedra of non-crystallographic group H. **2021**, 77, 296-316	
498	Recent advances in the rational design of 2D MXenes in energy conversion and storage systems. **2021**, 45, 17563-17576	0
497	Electrochemical fabrication of polyaniline/graphene paper (PANI/GP) supercapacitor electrode materials on free-standing flexible graphene paper. 095400832110231	3
496	Cucurbit[8]uril-derived porous carbon as high-performance electrode material for ionic liquid-based supercapacitor. **2021**, 38, 102527	1
495	Bi-functional nature cupric bound high pores activated carbon electrode enhanced electrochemical properties for energy storage and energy conversion system. **2021**, 890, 115245	0
494	Investigation of H2SO4 and KOH aqueous electrolytes on the electrochemical performance of activated carbon derived from areca catechu husk. **2021**, 1940, 012033	1
493	Biomass-derived porous carbons as supercapacitor electrodes A review. **2021**, 36, 546-572	16
492	Sol-gel synthesized carbon nanoparticles as supercapacitor electrodes with ultralong cycling stability. 1-8	3
491	Hierarchically Porous Polymer and Carbon Monoliths via Controlled/Living Radical Polymerization. 1-29	0
490	Study of the influence of different activator agents on the dimensions, mass, volume, and density of activated carbon monoliths for large-scale practical applications. **2021**, 1940, 012032	
489	Metal/Metal Oxide Nanoparticles-Composited Porous Carbon for High-Performance Supercapacitors. **2021**, 38, 102479	17
488	Designing Ultrasmall Carbon Nanospheres with Tailored Sizes and Textural Properties for High-Rate High-Energy Supercapacitors. **2021**, 13, 32916-32929	4
487	Defatted spent coffee grounds-supported cobalt catalyst as a promising supercapacitor electrode for hydrogen production and energy storage. 1	2
486	Comparing diazonium modified and unmodified activated carbon cloths for energy storage in supercapacitors. e2100084	
485	Extraordinary compatibility to mass loading and rate capability of hierarchically porous carbon nanorods electrode derived from the waste tire pyrolysis oil.	1
484	Preparation of Cotton Fiber-derived Porous-carbon Materials and Their Application as High-performance Supercapacitors. 1-8	0

483	Identification of the different contributions of pseudocapacitance and quantum capacitance and their electronic-structure-based intrinsic transport kinetics in electrode materials. **2021**, 775, 138666	4
482	Application of carbon paste concurrent with investigation of water electrolysis in paper-based closed bipolar electrochemistry. 1	
481	Synthesis of Carbon-Supported MnO2 Nanocomposites for Supercapacitors Application. **2021**, 11, 784	6
480	Redox Active Organic-Carbon Composites for Capacitive Electrodes: A Review. **2021**, 2, 407-440	12
479	Activated Carbon Derived from Cellulose and Cellulose Acetate Microspheres as Electrode Materials for Symmetric Supercapacitors in Aqueous Electrolytes. **2021**, 35, 12653-12665	8
478	Nanodots Derived from Layered Materials: Synthesis and Applications. **2021**, 33, e2006661	8
477	3D Printed Micro-Electrochemical Energy Storage Devices: From Design to Integration. **2021**, 31, 2104909	20
476	Research progress on biomass-derived carbon electrode materials for electrochemical energy storage and conversion technologies. **2021**, 46, 26053-26073	12
475	Covalent Immobilization of Polyaniline Doped with Ag or Cu on Carbon Nanotubes for Ethylene Chemical Sensing. **2021**, 11,	2
474	Lightweight Through-Hole Copper Foil as a Current Collector for Lithium-Ion Batteries. **2021**, 13, 42266-42275	2
473	A review on Supercapacitors: types and components. **2021**, 1973, 012015	4
472	Effect of Different Metals Doped in Nickel Oxide Nanomaterials on Electrochemical Capacitive Performance.	
471	Facile Synthesis of Coral Reef-Like ZnO/CoS2 Nanostructure on Nickel Foam as an Advanced Electrode Material for High-Performance Supercapacitors. **2021**, 14, 4925	2
470	Miniaturization of transition metal hydroxides to hydroxide dots: A direction to realize giant cyclic stability and electrochemical performance. **2021**, 45, 20356	3
469	Self-organized hierarchically porous carbon coated on carbon cloth for high-performance freestanding supercapacitor electrodes. **2021**, 895, 115456	8
468	Flax-Derived Carbon: A Highly Durable Electrode Material for Electrochemical Double-Layer Supercapacitors. **2021**, 11,	1
467	Low-Cost Activated Carbon Electrodes from Waste Maple Leaves for Organic Electric Double-Layer Capacitors. **2021**, 168, 080532	0
466	Recent advances in the rational design of 2D MXenes in energy conversion and storage systems. **2021**, 45, 20448	1

465	CoPO Microplate/Bacterial Cellulose-Derived Carbon Nanofiber Composites with Enhanced Electrochemical Performance. **2021**, 11,	2
464	Activated carbon- supported Vanado-nickelate (IV) based hybrid materials for energy application. **2021**, 40, 102727	4
463	Graphene Fiber-Based Wearable Supercapacitors: Recent Advances in Design, Construction, and Application.. **2021**, 5, e2100502	9
462	Zn(ClO4)2 aqueous solution‐based Zn thin foil|carbon cloth two-electrode single-cell characteristics. 1	2
461	IPMC Based Flexible Platform: A Boon to the Alternative Energy Solution.	1
460	Lignocellulosic Biomass-Derived Carbon Electrodes for Flexible Supercapacitors: An Overview. **2021**, 14,	6
459	Chitin and chitosan based biopolymer derived electrode materials for supercapacitor applications: A critical review. **2021**, 104, 155-155	19
458	Synthesis of biochemically reduced graphene-oxide/Fe0 containing polyaniline ternary hybrid composite through interfacial polymerization for supercapacitors. **2021**, 44, 1	0
457	Enhancing electrochemical capacitor performance through the application of nanostructured carbon materials as conducting additives. **2021**, 169, 108647	0
456	Charge Capacitance and Hydrogen Storage Capacity of Drop Cast and Electrodeposited Reduced Graphene Oxide Coatings. **2021**, 168, 090506	1
455	Aqueous-based, high-density nanoporous carbon xerogels with high specific surface area for supercapacitors. 1	0
454	Carbon-based slurry electrodes for energy storage and power supply systems. **2021**, 40, 461-489	8
453	Surface and diffusion charge contribution study of neem leaves derived porous carbon electrode for supercapacitor applications using acidic, basic, and neutral electrolytes. **2021**, 41, 103000	2
452	Crumpled MXene Electrodes for Ultrastretchable and High-Area-Capacitance Supercapacitors. **2021**, 21, 7561-7568	9
451	Lignocellulose-based free-standing hybrid electrode with natural vessels-retained, hierarchically pores-constructed and active materials-loaded for high-performance hybrid oxide supercapacitor. **2021**, 187, 903-910	1
450	Performance enhancement of graphene/GO/rGO based supercapacitors: A comparative review. **2021**, 28, 102685	4
449	Mohr's salt assisted KOH activation strategy to customize S-doped hierarchical carbon frameworks enabling satisfactory rate performance of supercapacitors. **2021**, 876, 160203	5
448	New bifunctional carbon material of metal-free pomegranate peel catalyst and supercapacitor for highly efficient hydrogen production and energy storage.	1

447	sp2–sp3 Hybrid Porous Carbon Materials Applied for Supercapacitors. **2021**, 14, 5990		2
446	Synthesis and plasma treatment of nitrogen-doped graphene fibers for high-performance supercapacitors. **2021**, 48, 2058-2058		3
445	Performance of Copper Sulfide Hollow Rods in a Supercapacitor Based on Flexible Substrates. 1		0
444	Chelate mediated synthesis of novel Mn2V2O7 and MnV2O6 materials with hierarchical morphological structures and improved redox behavior via multi-walled carbon nanotubes for asymmetric supercapacitors. *Journal of Power Sources*, **2021**, 506, 230193	8.9	0
443	A systematic preparation mechanism for directional regulation of pore structure in activated carbon including specific surface area and pore hierarchy. **2021**, 158, 105266		3
442	Monte Carlo simulations and mean-field modeling of electric double layers at weakly and moderately charged spherical macroions. **2021**, 104, 034609		1
441	PAN/lignin and LaMnO3-derived hybrid nanofibers for self-standing high-performance energy storage electrode materials. 1		2
440	A review on novel activation strategy on carbonaceous materials with special morphology/texture for electrochemical storage. **2021**, 60, 572-590		21
439	Carbon materials for stable Li metal anodes: Challenges, solutions, and outlook.		9
438	Manganese dioxide/cobalt tungstate/ nitrogen-doped carbon nano-onions nanocomposite as new supercapacitor electrode. **2021**, 48, 295-295		7
437	Design principles of high-voltage aqueous supercapacitors. **2021**, 21, 100739		8
436	Gill inspired hierarchical wrinkles of reduced graphene oxide encapsulated carbon nanotubes with significantly boosted supercapacitor performance. **2021**, 47, 26712-26719		1
435	Unraveling the Role of Oxides in Electrochemical Performance of Activated Carbons for High Voltage Symmetric Electric Double-Layer Capacitors. 2100130		0
434	Physical and chemical mechanisms that influence the electrical conductivity of lignin-derived biochar. **2021**, 5, 100088		5
433	Simple technique of multiwalled carbon nanotubes growth on aluminum foil for supercapacitors. **2021**, 272, 115342		1
432	Pencil peel derived mixed phase activated carbon and metal-organic framework derived cobalt-tungsten oxide for high-performance hybrid supercapacitors. **2021**, 142, 111396		5
431	Recent advances in potassium-ion hybrid capacitors: Electrode materials, storage mechanisms and performance evaluation. **2021**, 41, 108-132		36
430	Construction of hierarchically porous biomass carbon using iodine as pore-making agent for energy storage. **2021**, 599, 351-359		3

429	2-amino-6-methylpyridine based salt converted to carbon electrode material for supercapacitive application. **2021**, 1244, 130895		
428	Enhanced surface and electrochemical properties of nitrogen-doped reduced graphene oxide by violet laser treatment for high charge storage and lower self-discharge supercapacitors. *Journal of Power Sources*, **2021**, 513, 230517	8.9	1
427	An instantaneous metal organic framework to prepare ultra-high pore volume porous carbon for lithium ion capacitors. **2021**, 565, 150528		1
426	Deep eutectic solvent mediated nanostructured copper oxide as a positive electrode material for hybrid supercapacitor device. **2021**, 341, 117319		4
425	Waste coffee grounds derived nanoporous carbon incorporated with carbon nanotubes composites for electrochemical double-layer capacitors in organic electrolyte. **2021**, 43, 103169		7
424	Electrical conductivity of porous binary powder mixtures. **2021**, 162, 104026		0
423	Oxidized-co-crumpled multiscale porous architectures of MXene for high performance supercapacitors. **2021**, 887, 161304		8
422	Renewable banana-peel-derived activated carbon as an inexpensive and efficient electrode material showing fascinating supercapacitive performance. **2021**, 9, 106398		3
421	Using crude residual glycerol as precursor of sustainable activated carbon electrodes for capacitive deionization desalination. **2022**, 429, 132209		4
420	A new potassium dual-ion hybrid supercapacitor based on battery-type Ni(OH) nanotube arrays and pseudocapacitor-type VO-anchored carbon nanotubes electrodes. **2022**, 607, 462-469		8
419	Heat and mass transfer performance of proton exchange membrane fuel cells with electrode of anisotropic thermal conductivity. **2022**, 182, 121957		4
418	Biopolymer-based (nano)materials for supercapacitor applications. **2021**, 609-671		0
417	Introduction. **2021**, 1-34		
416	Chapter 3:Synthesis of Carbon Nanotube/Graphene Hybrids by Chemical Vapor Deposition. **2021**, 53-76		
415	Low-cost supercapacitor based on colloidal graphite. **2021**, 24,		0
414	Two-birds-one-stone: multifunctional supercapacitors beyond traditional energy storage. **2021**, 14, 1854-1896		67
413	Sustainable electrode material for high-energy supercapacitor: biomass-derived graphene-like porous carbon with three-dimensional hierarchically ordered ion highways. **2021**, 23, 12807-12821		50
412	Electrode Material Selection for Supercapacitors. **2021**, 159-200		6

411	Electrochemistry, ion adsorption and dynamics in the double layer: a study of NaCl(aq) on graphite. **2021**, 12, 11166-11180	9
410	Surface modification of nanoporous carbon using gamma irradiation treatment as supercapacitor material. **2021**,	1
409	Analysis of the Influence of Different Mechanical Delaminating Process on the Electrochemical Performance of MXene Films. **2021**, 411-419	
408	Engineered MoSe2/WSe2 based heterostructures for efficient hydrogen evolution reaction. **2021**, 45, 4787-4791	6
407	Recent progress in and prospects for supercapacitor materials based on metal oxide or hydroxide/biomass-derived carbon composites.	4
406	Recycling of Plastics into Advance Carbon Nanomaterials and Their Application in Energy Storage System. **2021**, 259-281	0
405	Graphene for Energy Solutions and its Printable Applications. 191-236	1
404	Graphene-Polypyrrole Nanocomposite: An Ideal Electroactive Material for High Performance Supercapacitors. 225-244	1
403	Highly Strong and Tough Double-Crosslinked Hydrogel Electrolyte for Flexible Supercapacitors. **2020**, 7, 1007-1015	13
402	Anodic Dissolution of Al Current Collectors in Unconventional Solvents for High Voltage Electrochemical Double-Layer Capacitors. **2017**, 10, 4178-4189	21
401	Sustainable Energy-Storage Materials from Lignin□Graphene Nanocomposite-Derived Porous Carbon Film. **2017**, 5, 1927-1935	23
400	Superior Performance of Electrochemical Double Layer Supercapacitor Made with Asphaltene Derived Activated Carbon Fibers. **2020**, 8, 2000588	4
399	Advanced Energy Devices: Lithium Ion Battery and High Energy Capacitor. **2013**, 1149-1173	1
398	Capacitor to Supercapacitor. **2020**, 53-89	27
397	Activated Carbon as Electrode Materials for Supercapacitors. **2020**, 113-144	16
396	Transition Metal Oxide/Activated Carbon-Based Composites as Electrode Materials for Supercapacitors. **2020**, 145-178	15
395	Bio-Inspired Engineering of 3D Carbon Nanostructures. **2016**, 365-420	1
394	Carbon Nanofibers. **2013**, 233-262	25

393	Application of Carbon Nanotubes for Resolving Issues and Challenges on Electrochemical Capacitors. **2015**, 415-445		1
392	Monolithic Electrode for Electric Double-Layer Capacitors Based on Macro/Meso/Microporous S-Containing Activated Carbon with High Surface Area. **2013**, 79-89		3
391	Graphene Reinforced Biopolymer Nanocomposites in Energy Storage Applications. **2021**, 233-250		1
390	Self-support wood-derived carbon/polyaniline composite for high-performance supercapacitor electrodes. **2020**, 43, 1		4
389	Journey from supercapacitors to supercapatteries: recent advancements in electrochemical energy storage systems. **2020**, 3, 347-367		26
388	Nitrogen doped heat treated and activated hydrothermal carbon: NEXAFS examination of the carbon surface at different temperatures. **2018**, 128, 179-190		26
387	Asymmetric Carbon Supercapacitor with Activated Expanded Graphite as Cathode and Pinecone Tree Activated Carbon as Anode Materials. **2017**, 105, 4098-4103		14
386	A one-step preparation and enhanced electrochemical properties of C-TiO2 composite films. **2017**, 254, 320-327		7
385	Nitrogen-doped mesoporous graphene nanoflakes for high performance ionic liquid supercapacitors. **2020**, 353, 136463		9
384	Superior environmentally friendly stretchable supercapacitor based on nitrogen-doped graphene/hydrogel and single-walled carbon nanotubes. **2020**, 30, 101505		9
383	Propionitrile as a single organic solvent for high voltage electric double-layer capacitors. *Journal of Power Sources*, **2020**, 463, 228134	8.9	4
382	Soft-Matter Nanotubes: A Platform for Diverse Functions and Applications. **2020**, 120, 2347-2407		81
381	Microscopic dynamics in room-temperature ionic liquids confined in materials for supercapacitor applications. **2020**, 4, 1554-1576		11
380	Surface-coordinated metal-organic framework thin films (SURMOFs) for electrocatalytic applications. **2020**, 12, 12712-12730		17
379	Porous carbon-carbon composite electrodes for vanadium redox flow batteries synthesized by twin polymerization.. **2020**, 10, 41926-41935		2
378	Correlation between the Molecular Structure of Reducing Agent and pH of Graphene Oxide Dispersion on the Formation of 3D-Graphene Networks. **2020**, 9, 071003		26
377	Industrial Production of Double-Layer Capacitors. **2009**, 429-467		3
376	Supercapacitors. **2014**, 41-70		1

375	Formation and Characterization of Carbon and Nickel Oxide/Carbon Composites for Supercapacitors. **2011**, 119, 253-255	8
374	Fabrication of sensitive enzymatic biosensor based on multi-layered reduced graphene oxide added PtAu nanoparticles-modified hybrid electrode. **2017**, 12, e0173553	32
373	Electrospun Metal Oxide/Carbon Nanofiber Composite Electrode for Supercapacitor Application. **2015**, 26, 239-246	3
372	Synthesis and Characterization of PVdF/PVP-Based Electrospun Membranes as Separators for Supercapacitor Applications. **2016**, 2, 43-51	4
371	Synthesis of Mesoporous NiFe2O4 Nanoparticles for Enhanced Supercapacitive Performance. **2018**, 6, 51-55	17
370	Biomass-derived nitrogen-doped porous carbons (NPC) and NPC/ polyaniline composites as high performance supercapacitor materials. **2018**,	59
369	Electrochemical Performance of Activated Carbon Electrode Materials with Various Post Treatments for EDLC. **2014**, 24, 285-292	4
368	Effect of Conductive Additive Amount on Electrochemical Performances of Organic Supercapacitors. **2016**, 26, 696-703	4
367	Capacitive Properties of Mesoporous Mn-Co Oxide Derived from a Mixed Oxalate. **2012**, 03, 377-383	4
366	A Single-Step Process for Preparing Supercapacitor Electrodes from Carbon Nanotubes. **2011**, 01, 11-15	23
365	Electrochemical Properties of Activated Polyacrylonitrile/pitch Carbon Fibers Produced Using Electrospinning. **2009**, 30, 1967-1972	36
364	Electrochemical Capacitors Based on Aligned Carbon Nanotubes Directly Synthesized on Tantalum Substrates. **2010**, 31, 3697-3702	24
363	Electrochemical Performance of Activated Carbons/Mn3O4-Carbon Blacks for Supercapacitor Electrodes. **2013**, 34, 2343-2347	11
362	Fluoroethylene Carbonate Addition Effect on Electrochemical Properties of Mixed Carbonate-based Organic Electrolyte Solution for a Capacitor. **2014**, 35, 466-470	5
361	Facile Synthesis of Co3O4/Mildly Oxidized Multiwalled Carbon Nanotubes/Reduced Mildly Oxidized Graphene Oxide Ternary Composite as the Material for Supercapacitors. **2014**, 35, 1349-1355	3
360	Effect of crystallinity on the electrochemical properties of carbon black electrodes. **2011**, 12, 252-255	16
359	Activated carbons prepared from mixtures of coal tar pitch and petroleum pitch and their electrochemical performance as electrode materials for electric double-layer capacitor. **2015**, 16, 78-85	9
358	Morphologies and surface properties of cellulose-based activated carbon nanoplates. **2016**, 20, 32-38	5

357	Enhancing the performance of electrochemical capacitor electrodes by modifying their carbon nanopores with redox-active materials. **2019**, 2019, 103-113	8
356	Electric Double Layer Capacitance of Graphene-Like Materials Derived from Single-Walled Carbon Nanotubes. **2011**, 50, 01AF07	3
355	Influence of Oxygen-/Nitrogen-containing Functional Groups on the Performance of Electrical Double-Layer Capacitor. **2012**, 50, 1043-1048	3
354	Interfacial Assembly and Applications of Functional Mesoporous Materials. **2021**, 121, 14349-14429	24
353	Lignin-Derived Materials for Supercapacitors. **2021**, 1-51	
352	Understanding the pore-structure dependence of supercapacitive performance for microporous carbon in aqueous KOH and H2SO4 electrolytes. **2021**, 139422	1
351	Low-cost activated carbon bio-wasted-based for enhanced capacitive properties of symmetric supercapacitor. **2021**, 2049, 012007	
350	Nickel Cobaltite: A Positive Electrode Material for Hybrid Supercapacitors. **2021**, 14, 5384	0
349	Wood-Derived Monolithic Ultrathick Porous Carbon Electrodes Filled with Reduced Graphene Oxide for High-Performance Supercapacitors with Ultrahigh Areal Capacitances. **2021**, 8, 4328	2
348	The effect of nitrogen-doped carbon nano-onions on the third order nonlinear optical responses of CoWO4-MnO2 nanocomposites. **2021**, 248, 168209	2
347	High mass load of oxygen-enriched microporous hollow carbon spheres as electrode for supercapacitor with solar charging station application. **2021**, 608, 1514-1525	4
346	Fabrication, characterization and corrosion feature evaluation of mild steel in 1 M HCl by nanoparticle-modified activated carbon. 1	0
345	Less Expensive and Eco-Friendly Preparation of Activated Carbon Derived from Coffee Leaf as an Supercapacitors Electrode. **2021**, 2049, 012019	
344	Environmental life cycle assessment of supercapacitor electrode production using algae derived biochar aerogel. **2021**, 3, 701-714	1
343	Carbon Electrodes in Perovskite Photovoltaics. **2021**, 14,	2
342	Modulating the electrochemical capacitance of NiFe2O4 by an external magnetic field for energy storage application. **2021**, 901, 115758	0
341	Waste tire-derived porous nitrogen-doped carbon black as an electrode material for supercapacitors. **2021**, 24, 100535	0
340	An investigation on the pore characteristics of dates stone based microwave activated carbon nanostructures. **2021**, 120, 108662	2

339	Recent progress on porous carbon derived from Zn and Al based metal-organic frameworks as advanced materials for supercapacitor applications. **2021**, 44, 103263	8
338	Evolution and recent developments of high performance electrode material for supercapacitors: A review. **2021**, 44, 103366	10
337	Electrochemical Characteristics of Carbonaceous Materials for Energy Storable Electrode Fabrication. **2010**, 24, 57-63	
336	The Electrochemical Properties of Supercapacitor for Smart Grid Energy Storage System with Variation of MWCNT/Super P Content. **2010**, 23, 843-847	
335	Enhanced Capacitance of Porous Carbon Electrodes through Deposition of Small Amounts of NiO. **2011**, 120, 66-69	
334	Electrochemical Supercapacitors electrochemical supercapacitors and Hybrid Systems hybrid systems. **2012**, 3426-3443	
333	Surface Characterization of Graphene. **2013**, 73-90	
332	Encyclopedia of Applied Electrochemistry. **2014**, 1013-1025	1
331	Synthesis and application of carbon nanostructured materials as the electrodes of supercapacitors. **2014**, 49-55	
330	Thermal Modeling of Supercapacitors. **2015**, 115-141	2
329	Nanocomposite Sodium Transition Metal Phosphate Prepared via Combustion Route for Hybrid Capacitor. **2015**, 1325-1335	
328	Introduction. **2015**, 1-26	
327	Nanocomposite Sodium Transition Metal Phosphate Prepared via Combustion Route for Hybrid Capacitor. 1325-1335	
326	The Surface Modification of Electrode with Solid Electrolyte Interphase for Hybrid Supercapacitor. **2015**, 10, 1102-1106	1
325	Cluster-Assembled Carbon Thin Films for Planar Supercapacitors. 1-7	
324	Hybrid Modeling of Membrane Processes. **2016**, 149-172	
323	Structural Characterization and EDLC-Electrode Performance of Coal-Tar-Pitch Activated Carbon Using K2CO3 Treatment. **2016**, 26, 460-467	1
322	Experimental Procedures and Materials. **2018**, 39-62	

321	Useful Effects of Fumed Silica Nanoparticles in an Ionic Liquid Electrolyte for High Temperature Supercapacitor. **2018**, 28, 43-49	1
320	Preparation of Potassium Niobate Nanosheet Composite as Electrode for Supercapacitors. **2018**, 08, 726-735	
319	Polyacrylonitrile and activated carbon composite for electric double layer capacitors.	
318	Conducting nanocomposite coatings. **2019**, 73-117	
317	High Temperature Supercapacitor with Free Standing Quasi-solid Composite Electrolytes. **2019**, 29, 121-128	1
316	Polymer Electrolyte Membranes Consisting of PVA-g-POEM Graft Copolymers for Supercapacitors. **2019**, 29, 323-328	
315	ZnO/rGO Nanocomposite for Supercapacitor Energy Storage Applications. **2020**, 565-577	
314	Introduction. **2020**, 1-10	
313	Structure and electrochemical characteristics of composites based on multi-walled carbon nanotubes and manganese oxide. **2020**,	0
312	Microwave hybrid heating (MHH) of Ni-based alloy powder on Ni and steel-based metals A review on fundamentals and parameters. **2021**, 5, 58-58	0
311	Oxygen-Rich Non-Graphitic Carbon Derived from ´Citrus sinensis´ for High-Energy Density Pseudocapacitive Charge Storage. **2020**, 5, 14993-15003	
310	Understanding the charge storage mechanism of supercapacitors: in situ/operando spectroscopic approaches and theoretical investigations.	13
309	Towards separator-free structural composite supercapacitors. **2022**, 217, 109126	3
308	Super Capacitance of Metal Oxide Nanoparticles. **2020**, 1-14	
307	Controllable synthesis of N-doped carbon nanohorns: tip from closed to half-closed, used as efficient electrocatalysts for oxygen evolution reaction.. **2021**, 11, 35463-35471	3
306	Bioenergy-Byproducts Based Electrodes for Flexible Supercapacitors. **2020**, 437-464	
305	Energy exchange modeling of supercapacitors for E-mobility applications. **2020**,	
304	Modelo de operador fraccional para describir la dinmica de lossupercondensadores. **2020**, 19, 79-86	0

303	Nitrik asit ile modifiye edilmi biyok le temelli aktif karbonun s perkapasit performans n n incelenmesi. **2020**, 35, 1243-1256	1
302	Rapid Carbothermal Shock Enhances the Double-Layer Response of Graphene Oxide Carbon Nanotube Electrodes. **2021**, 35, 17919-17929	1
301	Preparation and capacitive property of graphene oxide composite supercapacitor electrodes functionalized by Fe-based metal rganic frameworks. 1	0
300	Mesoporous carbon materials for electrochemical energy storage and conversion.	0
299	Nanostructured Carbon-Based Electrode Materials for Supercapacitor Applications. **2021**, 317-355	1
298	Carbon Materials as Electrodes of Electrochemical Double-Layer Capacitors: Textural and Electrochemical Characterization. **2021**, 149-185	
297	Preparation of Anode Material for Lithium Battery from Activated Carbon. **2021**, 10, 91-96	1
296	Molybdenum Disulfide (MoS2) and Its Nanocomposites as High-Performance Electrode Material for Supercapacitors. **2021**, 59-90	
295	Effect of a Carbon Matrix on the Properties of Nanocomposites Based on Highly Dispersed Carbon Black. **2020**, 54, 392-400	
294	The role of nanomaterials for supercapacitors and hybrid devices. **2021**, 19, 99-136	1
293	SWCNTs/phthalocyanine polymer composite derived nitrogen self-doped graphene-like carbon for high-performance supercapacitors electrodes. **2022**, 277, 125433	0
292	Advanced Semiconductor/Conductor Materials. **2022**, 557-596	1
291	Carbon cryogel preparation and characterization. **2021**, 108727	0
290	Sustainable Materials from Fish Industry Waste for Electrochemical Energy Systems. **2021**, 14, 7928	4
289	Processing and activation of tire-derived char: A review. **2021**, 155, 111860	2
288	An overview of supercapacitors electrode materials based on metal organic frameworks and future perspectives.	0
287	Coal-Derived Activated Carbon for Electrochemical Energy Storage: Status on Supercapacitor, Li-Ion Battery, and Li Battery Applications. **2021**, 35, 18285-18307	1
286	Chromium (III) doped polycrystalline MgAl2O4 nanoparticles for photocatalytic and supercapacitor applications. **2021**, 161, 110491	2

285	Inverse Opaline Metallic Membrane Addresses the Tradeoff Between Volumetric Capacitance and Areal Capacitance of Supercapacitor. 2102802		3
284	An approach for quantum capacitance of graphene, carbon nanotube, silicene and hexagonal boron nitride nanoscale supercapacitors by non-equilibrium Green function method. **2021**, 31, 100313		0
283	A Review of Supercapacitors: Materials Design, Modification, and Applications. **2021**, 14, 7779		19
282	Conducting polymer hydrogel based electrode materials for supercapacitor applications. **2021**, 103510		8
281	Asymmetric polyoxometalate-polypyrrole composite electrode material for electrochemical energy storage supercapacitors. **2021**, 115856		4
280	Influence of sequential HTC pre-treatment and pyrolysis on wet food-industry wastes: Optimisation toward nitrogen-rich hierarchical carbonaceous materials intended for use in energy storage solutions. **2021**, 151648		1
279	High-Energy Asymmetric Supercapacitor Based on the Nickel Cobalt Oxide (NiCo2O4) Nanostructure Material and Activated Carbon Derived from Cocoa Pods.		3
278	Fluoride electrosorption by hybrid La(III)-activated carbon electrodes under the influence of the La(III) content and the polarization profile. **2021**, 106926		1
277	Graphene Hybrids Intercalated with 2D Redox-Active Covalent Organic Framework as High-Performance Capacitive Materials.		
276	AlCl3-graphite intercalation compounds as negative electrode materials for lithium-ion capacitors. **2021**, 9, 27459-27467		0
275	Nitrogen-doped porous carbon microsphere with high surface area for supercapacitors and capacitive deionization. **2022**, 29, 415		0
274	Carbon-cloth-supported nickel hydroxide anodes for electrochemical hermally-activated chemical (E-TAC) water splitting. **2022**, 10, 726-739		2
273	Two-dimensional MXenes for electrochemical energy storage applications.		6
272	Ion-pore size match effects and high-performance cucurbit[8]uril-carbon-based supercapacitors. **2022**, 405, 139827		1
271	Reversible surface reconstruction of Na3NiCO3PO4: A battery type electrode for pseudocapacitor applications. *Journal of Power Sources*, **2022**, 520, 230903	8.9	0
270	Development of carbon-based copper sulfide nanocomposites for high energy supercapacitor applications: A comprehensive review. **2022**, 46, 103886		3
269	High capacitive storage behavior of hierarchically porous hollow-carbon spheres derived from the coupling of template-directing and post-activation methodology. **2022**, 122, 108816		0
268	Electrostatic self-assembly assisted hydrothermal synthesis of bimetallic NiCo2S4@N, S co-doped graphene for high performance asymmetric supercapacitors. **2022**, 404, 139751		1

267	Highly stable Megalopolis lignite based N and S self-doped hierarchically porous activated carbons for high performance supercapacitors and ash content effects on performance. **2022**, 46, 103817	1
266	Supercapacitive properties of nickel molybdate/rGO hybrids prepared by the hydrothermal method. **2022**, 29, 101638	1
265	NiS/activated carbon composite derived from sodium lignosulfonate for long cycle-life asymmetric supercapacitors. **2022**, 900, 163546	1
264	Enhancing the Performance of a Metal-Free Self-Supported Carbon Felt-Based Supercapacitor with Facile Two-Step Electrochemical Activation.. **2022**, 12,	2
263	Preparation and Characterization of PANI/MWCNT/RGO Ternary Composites as Electrode Materials for Supercapacitors. **2022**, 51, 1409-1420	3
262	Construction of Desirable NiCoTe2 Nanosheet Arrays on a Carbon Cloth Substrate as a Positive Electrode Material for a High-Performance Asymmetric Supercapacitor. **2022**, 28, 153	
261	Recent progress in the development of porous carbon-based electrodes for sensing applications.. **2022**,	1
260	Electrode Materials for Supercapacitors in Hybrid Electric Vehicles: Challenges and Current Progress. **2022**, 7, 6	5
259	A Comprehensive Review on Supercapacitor Applications and Developments. **2022**, 15, 674	19
258	Electrode materials from cuprous oxide and chitin nanofibrils for supercapacitors with high specific capacity. 1	1
257	Porosity of Nanostructured Carbon Thin Films. **2022**, 159-179	
256	Oxides free materials as anodes for zinc-bromine batteries. **2022**, 201-217	
255	ReviewBiowaste as a Source of Conductive Carbon. **2022**, 11, 021001	0
254	Production of Activated Carbon Electrode for Energy Storage Application in Supercapacitors via KOH Activation of Waste Termite Biomass. **2022**, 13, 2689	0
253	Al-MOF-derived spindle-like hierarchical porous activated carbon for advanced supercapacitors.. **2022**,	1
252	Increasing the oxygen-containing functional groups of oxidized multi-walled carbon nanotubes to improve high-rate-partial-state-of-charge performance.. **2022**, 12, 4475-4483	
251	Insights into binding mechanisms of size-selected graphene binders for flexible and conductive porous carbon electrodes. **2022**, 403, 139696	0
250	Bridging Electronics and Micro Energy Storage. **2022**, 59-84	

249	A critical review on production, modification and utilization of biochar. **2022**, 161, 105405	4
248	Electrochemical performance of Quercus infectoria as a supercapacitor carbon electrode material.	0
247	Recent advances on fiber-reinforced multifunctional composites for structural supercapacitors. **2022**, 4, 012001	0
246	Active-screen plasma surface multi-functionalisation of biopolymers and carbon-based materials An overview. **2022**, 128188	0
245	Gold nanoparticles for power retention in electrochemical capacitors with KSCN-based aqueous electrolyte. **2022**, 14, 100087	
244	Carbon material/MnO2 as conductive skeleton for supercapacitor electrode material: A review. **2022**, 158, 112131	8
243	Assemble 2D redox-active covalent organic framework/graphene hybrids as high-performance capacitive materials. **2022**, 190, 412-421	3
242	Microwave-assisted synthesis of nitrogen-doped pineapple leaf fiber-derived activated carbon with manganese dioxide nanofibers for high-performance coin- and pouch-cell supercapacitors. **2022**, 7, 100434	2
241	Hydrogen Bond Donors Influence on the Electrochemical Performance of Composite Graphene Electrodes/Deep Eutectic Solvents Interface. **2022**, 3, 129-142	1
240	Activated green carbon-based 2-D nanofabric mats for ultra-flexible all-solid-state supercapacitor. **2022**, 49, 104193	2
239	Metal oxide-conducting polymer-based composite electrodes for energy storage applications. **2022** , 195-251	
238	Superior Cycling Performance Of ́Nic2o4/Rgo/Nf Composites for Asymmetric Supercapacitors.	
237	Electrophoretic deposition of carbon nanotubes on aluminium for capacitor application. **2022**, 38, 1-7	0
236	Nanocomposites for Energy Storage Applications. **2022**, 533-565	
235	Supercapacitors: Current Trends and Future Opportunities. **2022**, 1047-1089	
234	Biomass-derived porous carbon materials: synthesis, designing, and applications for supercapacitors.	4
233	Comparative Behavior of Viscose-Based Supercapacitor Electrodes Activated by KOH, HO, and CO.. **2022**, 12,	0
232	Correlation of EDLC Capacitance with Physical Properties of Polyethylene Terephthalate Added Pitch-Based Activated Carbon.. **2022**, 27,	1

231	MXene based Heterostructures for electrode materials of Batteries: A Review. **2022**, 1225, 012018	
230	Synthesis of Graphene/Silver/Molybdenum Disulphide Composite for Supercapacitor Application. 1054, 21-30	
229	A Better Zn-Ion Storage Device: Recent Progress for Zn-Ion Hybrid Supercapacitors.. **2022**, 14, 64	5
228	Supercapacitors Fabrication and Performance Evaluation Techniques.	
227	Hydrothermal synthesis of nanocages of Mn-Co Prussian blue analogue and charge storage investigation of the derived Mn-Co oxide@/rGO composites. **2022**, 32, 100350	
226	All-Solid-State High-Voltage Supercapacitors Using an Ionic Plastic Crystal-Based Electrolyte. **2022**, 10,	0
225	Polymer Derived Carbon Nanostructure Electrodes for Solid-State Supercapacitor.	0
224	Advances in micro-supercapacitors (MSCs) with high energy density and fast charge-discharge capabilities for flexible bioelectronic devices: A review.	1
223	Review: Influencing Factors and Suppressing Strategies of the Self-Discharge for Carbon Electrode Materials in Supercapacitors. **2022**, 169, 030504	1
222	Ion Dynamics at the Carbon Electrode/Electrolyte Interface: Influence of Carbon Nanotubes Types.. **2022**, 15,	1
221	Revisiting the Effect of Pyrolysis Temperature and Type of Activation on the Performance of Carbon Electrodes in an Electrochemical Capacitor.. **2022**, 15,	0
220	New Structural Insights into Densely Assembled Reduced Graphene Oxide Membranes. 2201535	4
219	Waste cigarette butt-derived B, N doped bifunctional hierarchical mesoporous carbon for supercapacitor and oxygen reduction reaction. **2022**, 643, 128775	1
218	Sugar beet pulp derived oxygen-rich porous carbons for supercapacitor applications. **2022**, 51, 104363	3
217	The in-depth description of phonon transport mechanisms for XC (X=Si, Ge) under hydrostatic pressure: Considering pressure-induced phase transitions. **2022**, 191, 122851	0
216	Supercapacitor with electrodes based on high-purity single-walled carbon nanotubes. **2021**, 2086, 012067	
215	Mo-katk□Mikroalg Kullan□arak Enerji Depolama Amal□Sperkapasit□ □etimi.	
214	Rutenyum Katk□Nanot□ Kullan□arak S□perkapasit□ Elektrot □etimi.	

213	Insights into the Influence of Key Preparation Parameters on the Performance of MoS2/Graphene Oxide Composites as Active Materials in Supercapacitors. **2021**, 11, 1553	0
212	Application of the Supercapacitor for Energy Storage in China: Role and Strategy. **2022**, 12, 354	4
211	Chemically Treated Carbon Nanofiber Materials for Supercapacitors. **2021**, 501, 264-269	1
210	Size Effect of Activated Carbons on Catalytic Degradation of Nitroaromatic Compounds in Carbon-Sulfide Reduction Systems. **2022**, 2, 189-197	
209	Supercapacitors: An introduction. **2022**, 459-466	
208	Sustainable Synthesis of N/S-Doped Porous Carbon from Waste-Biomass as Electroactive Material for Energy Harvesting. **2022**, 12, 436	2
207	Soybean root-derived heteroatoms co-doped porous carbon with ultra-high specific surface area for high performance supercapacitors. **2022**, 109044	0
206	Biodegradable Molybdenum (Mo) and Tungsten (W) Devices: One Step Closer towards Fully-Transient Biomedical Implants.. **2022**, 22,	1
205	Recent advances in solid-state supercapacitors: From emerging materials to advanced applications.	1
204	Remote Plasma-Induced Synthesis of Self-Assembled MoS/Carbon Nanowall Nanocomposites and Their Application as High-Performance Active Materials for Supercapacitors.. **2022**, 12,	0
203	Effect of cobalt doping on the enhanced energy storage performance of 2D vanadium diselenide: Experimental and theoretical investigations.. **2022**,	1
202	Macro- and Nano-Porous 3D-Hierarchical Carbon Lattices for Extraordinarily High Capacitance Supercapacitors. 2201544	3
201	Lignosulfonate functionalized nanomaterials for enhancement of the electrochemical performance of polyaniline. **2022**, 153457	0
200	Recent advances in two-dimensional MXenes for power and smart energy systems. **2022**, 50, 104604	2
199	Data_Sheet_1.docx. **2020**,	
198	Nitrogen-Enriched Activated Carbons Via Dual N-Doping Processes: Electrode Material for High Gravimetric- and Volumetric-Performance Supercapacitor.	
197	Laser-Assisted Growth of Carbon-Based Materials by Chemical Vapor Deposition. **2022**, 8, 24	0
196	Knowledge and Technology Used in Capacitive Deionization of Water. **2022**, 12, 459	3

195	The formation of uniform graphene-polyaniline hybrids using a completely miscible cosolvent that have an excellent electrochemical performance. **2022**, 37, 381-390	1
194	Fabrication of Metal Sulfides/Graphene Nanocomposites for the Applications in Supercapacitors. II: NiMnCuS/Graphene. **2022**, 15,	
193	Green synthesis and electrochemical performances of ZnO/graphene nanocomposites. 1	0
192	Synthesis of Needle-like Nanostructure Composite Electrode of Co3O4/rGO/NF for High-Performance Symmetric Supercapacitor. **2022**, 12, 664	2
191	Direct Laser Writing of Graphitic Carbon from Liquid Precursors.	2
190	Chitosan-derived N-doped porous carbon with enhanced nitrogen concentration and tailored nitrogen configuration. **2022**, 57, 8739-8751	0
189	Facile hydrothermal synthesis of high-performance binary silver-cobalt-sulfide for supercapattery devices. **2022**, 52, 104847	0
188	Fabrication and electrical response of flexible supercapacitor based on activated carbon from bamboo. **2017**, 14, 1600258	6
187	Activated Carbon Mediated Hydrothermally Synthesized CuO Thin Films for Electrochemical Supercapacitors.	0
186	Transition Metal Dichalcogenides (TMDs) Nanocomposites-Based Supercapacitors. **2022**, 77-101	
185	Fundamentals, Mechanism, and Materials for Hybrid Supercapacitors. **2022**, 71-100	1
184	ULP Receivers in Self-Powered Industrial loT Applications: Challenges and Prospects. **2022**,	0
183	Supercapacitors for Short-term, High Power Energy Storage. **2022**, 71-98	0
182	V2O5 nano sheets assembled on nitrogen doped multiwalled carbon nanotubes/carboxy methyl cellulose composite for two-electrode configuration of supercapacitor applications. **2022**,	1
181	Nitrogen-Doped High Surface Area Porous Carbon Material Derived from Biomass and Ionic Liquid for High-Performance Supercapacitors.	0
180	An overview of patents and recent development in flexible supercapacitors. **2022**, 52, 104887	0
179	Nitrogen-doped porous nanocarbons-conducting polymer composite film electrodes for flexible supercapacitors.	
178	Facile Synthesis of Nitrogen/Sulfur Co-doped Three-Dimensional Holey Graphene Hydrogels for High Supercapacitive Performance.	0

177	Evaluation of Activated Carbon and Platinum Black as High-Capacitance Materials for Platinum Electrodes. **2022**, 22, 4278	0
176	Tunable decorated flake interlayers of functionalized graphene oxide for energy storage devices. **2022**, 128,	
175	Fabrication of a flexible quasi-solid-state asymmetric supercapacitor device based on a spherical honeycomb like ZnMn2O4@Ni(OH)2 hybrid core-shell electrode material with superior electrochemical performances. **2022**, 4, 100404	0
174	Porosity-induced improvement in KOH activation of chitin nanofiber-based porous carbon leading to ultrahigh specific capacitance.	2
173	Electrochemical performance of Palmyra palm shell activated carbon prepared by carbonization followed by microwave reflux treatment. **2022**, 9, 065603	0
172	Recent progress in stretchable and self-healable supercapacitors: active materials, mechanism, and device construction. **2022**, 32, 073001	
171	Proton Acid Doped Superior Capacitive Performances of Pseudocapacitance Electrodes for Energy Storage. **2022**, 9,	0
170	A 3D-Printed, Freestanding Carbon Lattice for Sodium Ion Batteries. 2202277	1
169	Hydrothermal development of a novel NiO/rGO nanocomposites for dual supercapacitor and photocatalytic applications. **2022**, 126425	0
168	Eco-Friendly Preparation of Biomass-Derived Porous Carbon and Its Electrochemical Properties.	2
167	Recent development and prospective of carbonaceous material, conducting polymer and their composite electrode materials for supercapacitor □A review. **2022**, 52, 104937	3
166	Activated carbon derived from cherry flower biowaste with a self-doped heteroatom and large specific surface area for supercapacitor and sodium-ion battery applications. **2022**, 303, 135290	5
165	Catalytic and pseudocapacitive energy storage performance of metal (Co, Ni, Cu and Mn) ferrite nanostructures and nanocomposites. **2022**, 130, 100995	1
164	Porous carbon from conducting polymers for electrochemical applications. **2022**, 147-180	
163	Supercapacitors: a review on electrode materials and models based on conjugated polymers. **2022**, 335-365	
162	Porous Carbon Spheres Derived from Hemicelluloses for Supercapacitor Application. **2022**, 23, 7101	0
161	Approaches to Enhancing Electrical Conductivity of Pristine Metal□Organic Frameworks for Supercapacitor Applications. 2203307	3
160	A Review on Challenges to Remedies of MnO2 based Transition-metal oxide, hydroxide, and layered double hydroxide Composites for Supercapacitor Applications. **2022**, 104033	6

159	Preparation of matrix-grafted graphene/poly(poly(ethylene glycol) methyl ether methacrylate) nanocomposite gel polymer electrolytes by reversible addition-fragmentation chain transfer polymerization for lithium ion batteries. **2022**, 176, 111419	0
158	Fundamentals and recent progress of Sn-based electrode materials for supercapacitors: A comprehensive review. **2022**, 53, 105187	2
157	In situ grown of thulium/samarium mixed metal□rganic frameworks onto Ni foam as outstanding binder-free battery type high-performance electrode for supercapacitors. **2022**, 53, 105194	
156	Supercapacitor and battery performances of multi-component nanocomposites: Real circuit and equivalent circuit model analysis. **2022**, 53, 105093	1
155	CO2 outperforms KOH as an activator for high-rate supercapacitors in aqueous electrolyte. **2022**, 167, 112716	1
154	A facile fabrication of ratiometric electrochemical sensor for sensitive detection of riboflavin based on hierarchical porous biochar derived from KOH-activated Soulangeana sepals.	2
153	Enzymatic Laser-Induced Graphene Biosensor for Electrochemical Sensing of the Herbicide Glyphosate. 2200057	0
152	Surface modification of activated carbon with silver nanoparticles for electrochemical double layer capacitors. **2022**, 54, 105367	2
151	Recent advances in bio-based electrode materials in supercapacitor applications: Energy storage materials and technologies. **2022**, 3, 1-13	
150	Recent advances in bio-based electrode materials in supercapacitor applications: Energy storage materials and technologies. **2022**, 3, 1-13	
149	Recent advances in bio-based electrode materials in supercapacitor applications: Energy storage materials and technologies. **2022**, 3, 1-13	
148	Biomass-based metal-free catalyst as a promising supercapacitor electrode for energy storage. **2022**, 33, 18111-18123	
147	Advances in Microfluidic Technologies for Energy Storage and Release Systems. 2200060	
146	The synthesis of porous carbons from a lignin-rich residue for high-performance supercapacitors. **2022**, 37, 743-751	0
145	Hydroxyapatite supported PdxIn100-x as a novel electrocatalyst for high-efficiency glucose electrooxidation. **2022**,	2
144	Renewable palm oil sticks biomass-derived unique hierarchical porous carbon nanostructure as sustainability electrode for symmetrical supercapacitor.	1
143	Battery-Supercapacitor Energy Storage Systems for Electrical Vehicles: A Review. **2022**, 15, 5683	6
142	Covalent organic frameworks (COFs)-derived nitrogen-doped carbon/reduced graphene oxide nanocomposite as electrodes materials for supercapacitors. **2022**, 55, 105375	1

141	Pore-size effect of activated carbons on the electrochemical performances of symmetric supercapacitors under compression. **2022**, 55, 105438	0
140	High energy density solid-state supercapacitors based on porous carbon electrodes derived from pre-treated bio-waste precursor sugarcane bagasse. **2022**, 55, 105421	0
139	Nanocarbon-based electrode materials applied for supercapacitors.	4
138	A critical review on polyimide derived carbon materials for high-performance supercapacitor electrodes. **2022**, 55, 105667	1
137	Disjoining pressure of room temperature ionic liquid in charged slit carbon nanopore: Molecular dynamics study. **2022**, 366, 120307	0
136	Micro-electrochemical capacitors: Progress and future status. **2022**, 55, 105702	2
135	Facile fabrication of 2D porous carbon nano-flake electrodes for high-performance flexible on-chip micro-supercapacitors. **2022**, 55, 105696	0
134	Triethylammonium thiocyanate ionic liquid electrolyte-based supercapacitor fabricated using coconut shell-derived electronically conducting activated charcoal electrode material. **2022**, 55, 105628	0
133	Roles of mass transfer and cell architecture in electrochemical desalination performance using polyglycerol activated carbon electrodes. **2023**, 452, 139226	0
132	Polymer derived honeycomb-like carbon nanostructures for high capacitive supercapacitor application. **2023**, 201, 49-59	1
131	Toward High-Performance Flexible Micro-Supercapacitors: In-Situ Construction of 2D Porous Carbon Nanosheets with A Unique Polycrystalline-like Micro-Morphological Feature.	1
130	Synthesis, properties, and application of biomass-derived graphene-like material. **2022**, 189-208	0
129	Hierarchical Assembled Ag2cumno4 Nanoflakes as a Novel Electrode Material for Energy Storage Applications.	0
128	Nanostructured materials for electrochemical capacitors. **2022**,	0
127	Engineered Biochar as Supercapacitors. **2022**, 259-290	0
126	Roles of Mass Transfer and Cell Architecture in Electrochemical Desalination Performance Using Polyglycerol Activated Carbon Electrodes.	0
125	Analysis of Transportation Electrification and Fast Charging. **2022**, 57-79	0
124	Highly stretchable and flexible supercapacitors based on electrospun PEDOT:SSEBS electrodes.	1

123	Molecular firefighting biocomposites for plastic life-cycle management: fabrication, use and upcycling. **2022**, 24, 7531-7544	1
122	Metal oxide-based nanocomposites for supercapacitive applications. **2022**, 187-211	0
121	Next-Generation Energy Storage and Optoelectronic Nanodevices. **2022**, 223-239	0
120	Electrochemical Capacitor Based on Reduced Graphene Oxide/NiS2 Composite.	0
119	Recent Advances in Titanium Carbide MXene (Ti3C2Tx) Cathode Material for Lithium–Air Battery.	0
118	Recent Advance in Two-Dimensional MXenes: New Horizons in Flexible Batteries and Supercapacitors Technologies. **2022**,	1
117	Recent Advancement in Rational Design Modulation of MXene: A Voyage from Environmental Remediation to Energy Conversion and Storage.	1
116	Ultrahigh Energy Density and Long-Life Cyclic Stability of Surface-Treated Aluminum-Ion Supercapacitors. **2022**, 14, 45059-45072	0
115	Metal-Free Homocoupling of Pyrene inside the Pores of Mesoporous Carbons via Electrochemical Oxidation: Application for Electrochemical Capacitors. **2022**, 7, 35245-35255	1
114	2D-TMDs based electrode material for supercapacitor applications.	2
113	Smart Electronic Textile-Based Wearable Supercapacitors. 2203856	3
112	Excellent cyclic stability of symmetric and asymmetric supercapacitors constructed by graphene deposited Cu and Ni electrodes. **2022**, 46, 20801-20810	0
111	High-Throughput Electrospinning of Biomaterials. **2022**, 341-352	0
110	Recent Advanced Supercapacitor: A Review of Storage Mechanisms, Electrode Materials, Modification, and Perspectives. **2022**, 12, 3708	1
109	Hierarchical Assembled Ag2CuMnO4 Nanoflakes as a Novel Electrode Material for Energy Storage Applications. **2022**, 167783	0
108	Advances in Supercapacitor Development: Materials, Processes, and Applications.	0
107	Microplotter Printing of Hierarchically Organized Planar NiCo2O4 Nanostructures. **2022**, 67, 1848-1854	3
106	Preparation of N,P Co-doped Porous Carbon Derived from Daylily for Supercapacitor Applications. **2022**, 7, 37564-37571	0

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105	Review on Recent Modifications in Nickel Metal-Organic Framework Derived Electrode (Ni-MOF) Materials for Supercapacitors.	2
104	Porous activated carbon derived from natural waste honeycomb and paper wasp hive and its application in quasi-solid-state supercapacitor.	0
103	MXenes: Advances in the synthesis and application in supercapacitors and batteries.	0
102	Current advances of nickel based metal organic framework and their nanocomposites for high performance supercapacitor applications: A critical review. **2022**, 56, 105897	1
101	Optimization of preparation of lignite-based activated carbon for high-performance supercapacitors with response surface methodology. **2022**, 56, 105913	0
100	3D g-C3N4/Mn3O4 heterostructures towards high energy density supercapacitor. **2022**, 926, 116928	0
99	Electrochemical energy storage systems. **2023**, 259-282	0
98	Oxidation state, local structure distortion, and defect structure analysis of Cu doped □MnO2 correlated to conductivity and dielectric properties. **2022**, 8, e11459	0
97	Review article on the performance of electrochemical capacitors when altered metals doped with nickel oxide nanomaterials. **2022**, 24,	0
96	SiO-Sn2Fe@C composites with uniformly distributed Sn2Fe nanoparticles as fast-charging anodes for lithium-ion batteries. **2022**,	0
95	A facile one-step microwave synthesis of Pt deposited on N & P co-doped graphene intercalated carbon black - An efficient cathode electrocatalyst for PEM fuel cell. **2022**,	1
94	A comprehensive review of supercapacitors: Properties, electrodes, electrolytes and thermal management systems based on phase change materials. **2022**, 56, 106023	1
93	Recent trends in noble-metals based composite materials for supercapacitors: A comprehensive and development review. **2023**, 100, 100817	0
92	From wood to supercapacitor electrode material via fast pyrolysis. **2023**, 57, 106179	0
91	Bio-inspired adenine-benzoquinone-adenine pillar grafted graphene oxide materials with excellent cycle stability for high energy and power density supercapacitor applications. **2023**, 58, 106399	1
90	Next generation 2D materials for anodes in battery applications. **2023**, 556, 232256	0
89	WS2-Based Nanomaterials for Visible-Light Photocatalytic Degradation of Organic Pollutants. 185-205	0
88	Interactive Nanomaterials for Energy Storage and Conversion. 27-81	0

87	Efficient Design Paradigm for Harvesting Solar Energy: Dynamic Tunability of Heating/Cooling Mode Using Advanced Nanotechnology. 233-261	0
86	Hydrothermal Carbonization vs. Pyrolysis: Effect on the Porosity of the Activated Carbon Materials. **2022**, 14, 15982	0
85	Polyacrylonitrile-b-Polystyrene Block Copolymer-Derived Hierarchical Porous Carbon Materials for Supercapacitor. **2022**, 14, 5109	0
84	Effect of Alcohol Tail Length on Aggregate Behavior of Alcohol and AOT at the Water-scCO2 Interface: MD Simulation Study. 263-288	0
83	Editors□Biographies. 289-290	0
82	Penicillin fermentation residue biochar as a high-performance electrode for membrane capacitive deionization. **2023**, 17,	0
81	Preface. ix-x	0
80	Green Electrocatalytical Synthesis of Ammonia Using Solid Oxide Electrolysis Cells. 155-184	0
79	Atomic Layer Deposition Synthesis of Iron, Cobalt, and Nickel Chalcogenides for Electrocatalysis Applications. 117-135	0
78	Challenges and opportunities in free-standing supercapacitors research. **2022**, 10, 110903	0
77	Effect of Protonation Doping of Polyaniline Electrodes using Hydrochloric Acid on Its Pseudocapacitor Capacitance. **2022**, 2376, 012006	0
76	Calix[n]arene-Based Coordination Cage and Its Application to Electrocatalysis. 137-154	0
75	Nanostructured Materials for Sustainable Energy: Design, Evaluation, and Applications.	0
74	Title, Copyright, Foreword. i-v	0
73	Two-Dimensional Metal Phosphorus Trichalcogenide Nanostructure for Sustainable Energy Conversion. 1-25	0
72	Subject Index. 295-298	0
71	Solar-Driven Photothermocatalytic Dry Reforming of Methane for Syngas Production. 207-232	0
70	Organic-Carbon Composites for Next Generation Capacitive Electrodes. 83-115	0

69	Taming Electrowetting Using Highly Concentrated Aqueous Solutions. **2022**, 126, 21071-21083	1
68	The role of oxygen heteroatoms in the surface (electro)chemistry of carbon materials. **2022**, 1, 162-174	0
67	Nitrogen-enriched activated carbons via dual N-doping processes: Electrode material for high gravimetric- and volumetric-performance supercapacitor. **2022**, 56, 106040	0
66	Tuning Sugar Biomass Waste Conversion for the Preparation of Carbon Materials for Supercapacitors and Catalysts for Oxygen Reduction. 2201145	1
65	Polyaniline-tungsten oxide nanocomposite co-electrodeposited onto anodized graphene oxide nanosheets/graphite electrode for high performance supercapacitor device.	0
64	Pd/Hemin-rGO as a bifunctional electrocatalyst for enhanced ethanol oxidation reaction in alkaline media and hydrogen evolution reaction in acidic media. **2022**,	0
63	Binder-free cupric-ion containing zinc sulfide nanoplates-like structure for flexible energy storage devices. **2022**, 137660	0
62	Hotspots and Tendencies of Energy Optimization Based on Bibliometric Review. **2023**, 16, 158	0
61	Ultrafastly activated needle coke as electrode material for supercapacitors. **2022**,	2
60	Interlacing Rod and Sphere Morphology of MnO2 in RGO/NiO/MnO2 Ternary Nanocomposites for Supercapacitive Applications. **2022**, 169, 123505	0
59	Enhancement of the Performance Properties of Pure Cotton Fabric by Incorporating Conducting Polymer (PEDOT:PSS) for Flexible and Foldable Electrochemical Applications.	0
58	Emerging trends in biomass-derived porous carbon materials for energy storage application: a critical review. **2023**, 100320	3
57	Prussian blue analogue derived NiCoSe4 coupling with nitrogen-doped carbon nanofibers for pseudocapacitive electrodes. **2023**, 108152	0
56	Progress on carbon for electrochemical capacitors. **2023**, 2, 20220021	1
55	Performance of supercapacitors with RuO2 electrodes spray deposited with aqueous/organic solvent mixtures: effect of substrate temperature. 1-20	0
54	Solid-liquid interfaces/interphases in electrochemical capacitors: theoretical considerations, practical relevance, and state-of-the-art in-situ/in-operando characterization tools. **2023**,	0
53	Fabrication and electrochemical evaluation of polyhedral PANI-coated Co 3 O 4 electrode for supercapacitors application.	0
52	CO2-negative fuel production using low-CO2 electricity: Syngas from a combination of methane pyrolysis and dry reforming with techno-economic analysis. **2023**, 277, 116624	0

51	Enhanced specific capacity and cycling stability of flexible nanocellulose-based pseudocapacitive electrodes by controlled nanostructuring of polyaniline. **2023**, 441, 141830	0
50	Active Carbon-Based Electrode Materials from Petroleum Waste for Supercapacitors. **2023**, 9, 4	0
49	Nanocarbons (graphene, etc.), MXenes for energy storage applications. **2023**, 275-320	0
48	Potential impact of smart-hybrid supercapacitors in novel electronic devices and electric vehicles. **2023**, 795-850	0
47	Supercapacitors□ew developments. **2023**, 39-64	0
46	Fundamental understanding of charge storage mechanism. **2023**, 65-82	0
45	Electrode materials for EDLC and pseudocapacitors. **2023**, 179-198	0
44	Effect of applied potential polarity on electrochemical properties of electrophoretically deposited activated carbon on an indium tin oxide substrate. **2023**, 37, 102660	0
43	Self-template activated carbons for aqueous supercapacitors. **2023**, 36, e00582	0
42	Supercapacitor and electrochemical techniques: A brief review. **2023**, 5, 100885	0
41	Chemically Deposited Iron Chalcogenide-Based Carbon Composites for Supercapacitor Applications. **2023**, 83-121	0
40	One-Step Solvothermal Synthesis by Ethylene Glycol to Produce N-rGO for Supercapacitor Applications. **2023**, 13, 666	0
39	Fomes fomentarius as a Bio-Template for Heteroatom-Doped Carbon Fibers for Symmetrical Supercapacitors. **2023**, 15, 846	0
38	Improved electrochemical performance of sandwich-structured N-rich C@MnO2@C electrodes. **2023**, 207, 154-161	0
37	Production of novel activated carbon fibers from smoked cigarette wastes using NaOH.	0
36	Critical review on recent developments in conducting polymer nanocomposites for supercapacitors. **2023**, 295, 117326	0
35	Microwave-synthesized Bismuth oxide/Activated Carbon felt composite as electrode for ultra-high supercapacitors performance. **2023**, 18, 100128	0
34	Revisiting the performance of electrical double-layer capacitors implementing a sodium perchlorate water-in-salt electrolyte. **2023**, 450, 142212	0

33	Ultra-high specific surface area porous carbons derived from Chinese medicinal herbal residues with potential applications in supercapacitors and CO2 capture. **2023**, 666, 131327	0
32	Controllable preparation of N-doped porous carbons with enhanced porosity and energy storage capacity using high internal phase emulsion template. **2023**, 301, 127646	0
31	High stability asymmetric supercapacitor cell developed with novel microwave-synthesized graphene-stabilized ruthenium antimonide nanomaterial. **2023**, 63, 106853	0
30	Insights into the impact of interlayer spacing on MXene-based electrodes for supercapacitors: A review. **2023**, 65, 107341	0
29	Hydrothermal nitrogen doping of anthracene oil-derived activated carbons for wide voltage asymmetric capacitors. **2023**, 60, 106704	0
28	Physicochemical Modeling of Electrochemical Impedance in Solid-State Supercapacitors. **2023**, 16, 1232	0
27	CNT yarn based solid state linear supercapacitor with multi-featured capabilities for wearable and implantable devices. **2023**, 57, 136-170	0
26	Polypyrrole embedded in nickel-cobalt sulfide nanosheets grown on nickel particles passivated silicon nanowire arrays for high-performance supercapacitors. **2023**, 461, 141745	0
25	Ag nanoparticles anchored reduced graphene oxide sheets@nickel oxide nanoflakes nanocomposites for enhanced capacitive performance of supercapacitors. **2023**, 150, 110519	0
24	Preparation of hierarchical porous carbon through one-step KOH activation of coconut shell biomass for high-performance supercapacitor. **2023**, 34,	0
23	The Progress and Comprehensive Analysis of Supercapacitors for Alternating Current Line Filtering: A Review. **2023**, 6,	0
22	Recent developments, challenges and future prospects of magnetic field effects in supercapacitors. **2023**, 11, 5495-5519	0
21	Reduced graphene oxide decorated transition metal manganese vanadium oxide nanorods for electrochemical supercapacitors and photocatalytic degradation of pollutants in water. **2023**, 144, 104762	0
20	Size Effect of Electrolyte Ions on the Electric Double-Layer Structure and Supercapacitive Behavior. **2023**, 6, 3155-3166	0
19	Review of the role of ionic liquids in two-dimensional materials. **2023**, 18,	0
18	Recent Advances in Two-Dimensional MXene for Supercapacitor Applications: Progress, Challenges, and Perspectives. **2023**, 13, 919	0
17	Laser-patterned PEDOT:PSS-aramid nanofiber composite electrodes for in-plane supercapacitors with high performance, shape-diversity and ultrahigh deformation resistance. **2023**, 462, 142209	0
16	New architecture of 3D graphene with enhanced properties obtained by cold rolling. **2023**, 207, 116-128	0

15	Lignin-Derived Carbonaceous Materials for Supercapacitor Applications. **2023**, 65-115	0
14	Porous Carbon Materials for Supercapacitor Applications. **2023**, 117-146	0
13	Recent progress in block copolymer soft-template-assisted synthesis of versatile mesoporous materials for energy storage systems. **2023**, 11, 7358-7386	0
12	Unlocking the full energy densities of carbon-based supercapacitors. **2023**, 11, 517-546	0
11	Symmetric and Asymmetric Supercapacitors of ITO Glass and Film Electrodes Consisting of Carbon Dot and Magnetite. **2023**, 9, 162	0
10	Electrochemical properties of MnO2-based carbon nanomaterials for energy storage and electrochemical sensing. **2023**, 34,	0
9	Dual Origin of Viscoelasticity in Polymer-Carbon Black Hydrogels: A Rheometry and Electrical Spectroscopy Study. **2023**, 56, 2298-2308	0
8	Vanadium MXenes materials for next-generation energy storage devices. **2023**, 34, 252001	0
7	Black Liquor and Wood Char-Derived Nitrogen-Doped Carbon Materials for Supercapacitors. **2023**, 16, 2551	0
6	N, O co-doped micro-mesoporous carbon obtained by sustainable conversion of biomass waste for supercapacitors. **2023**, 34,	0
5	Multielement Doped Barium Strontium Titanate Nanomaterials as Capacitors. **2023**, 2023, 1-22	0
4	Carbon-based nanomaterials for supercapacitor applications. **2023**, 325-342	0
3	Electrocatalytic performance investigation of NiCo2O4 nanostructures prepared by hydrothermal method and thermal post-annealing treatment. **2023**, 294, 116508	0
2	Improving the rate capability of microporous activated carbon-based supercapacitor electrodes using non-porous graphene oxide.	0
1	Dual redox electrolytes for improving the performance of asymmetric supercapacitors constructed from heteroatom-doped green carbon spheres. **2023**, 957, 170452	0