Gengchao Wang

List of Publications by Year
in descending order

76 papers	3,316 citations	172457 29 h-index	149698 56 g-index
76 all docs	76 docs citations	76 times ranked	4858 citing authors

#	Article	IF	Citations
1	High-Performance Asymmetric Supercapacitor Based on Nanoarchitectured Polyaniline/Graphene/Carbon Nanotube and Activated Graphene Electrodes. ACS Applied Materials & Interfaces, 2013, 5, 8467-8476.	8.0	243
2	A self-healable and easily recyclable supramolecular hydrogel electrolyte for flexible supercapacitors. Journal of Materials Chemistry A, 2016, 4, 8769-8776.	10.3	238
3	All-solid-state asymmetric supercapacitor based on reduced graphene oxide/carbon nanotube and carbon fiber paper/polypyrrole electrodes. Journal of Materials Chemistry A, 2014, 2, 1458-1464.	10.3	220
4	Synthesis of poly(aniline-co-o-anisidine)-intercalated graphite oxide composite by delamination/reassembling method. Carbon, 2005, 43, 2564-2570.	10.3	155
5	Enhancing the Energy Density of Asymmetric Stretchable Supercapacitor Based on Wrinkled CNT@MnO₂ Cathode and CNT@polypyrrole Anode. ACS Applied Materials & Interfaces, 2015, 7, 15303-15313.	8.0	137
6	The perfect matching between the low-cost Fe₂O₃ nanowire anode and the NiO nanoflake cathode significantly enhances the energy density of asymmetric supercapacitors. Journal of Materials Chemistry A, 2015, 3, 6662-6670.	10.3	132
7	Fabrication and electrochemical characterization of polyaniline nanorods modified with sulfonated carbon nanotubes for supercapacitor applications. Electrochimica Acta, 2011, 56, 1366-1372.	5.2	125
8	Synthesis of hierarchical sulfonated graphene/MnO2/polyaniline ternary composite and its improved electrochemical performance. Journal of Power Sources, 2013, 241, 231-238.	7.8	118
9	Hierarchical composites of sulfonated graphene-supported vertically aligned polyaniline nanorods for high-performance supercapacitors. Journal of Power Sources, 2012, 215, 36-42.	7.8	101
10	The influence of crystalline and aggregate structure on PTC characteristic of conductive polyethylene/carbon black composite. European Polymer Journal, 1998, 34, 1221-1227.	5.4	100
11	A facile prestrain-stick-release assembly of stretchable supercapacitors based on highly stretchable and sticky hydrogel electrolyte. Journal of Power Sources, 2015, 284, 400-408.	7.8	96
12	Synthesis and characterization of polypyrrole/graphite oxide composite by in situ emulsion polymerization. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1329-1335.	2.1	89
13	High-performance stretchable supercapacitors based on intrinsically stretchable acrylate rubber/MWCNTs@conductive polymer composite electrodes. Journal of Materials Chemistry A, 2018, 6, 4432-4442.	10.3	82
14	Improving thermal conductivity and decreasing supercooling of paraffin phase change materials by n-octadecylamine-functionalized multi-walled carbon nanotubes. RSC Advances, 2014, 4, 36584-36590.	3.6	81
15	Improving the performance of PEDOT-PSS coated sulfur@activated porous graphene composite cathodes for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2014, 2, 18345-18352.	10.3	81
16	Irradiation preparation of reduced graphene oxide/carbon nanotube composites for high-performance supercapacitors. Journal of Power Sources, 2014, 245, 436-444.	7.8	66
17	A novel asymmetric supercapacitors based on binder-free carbon fiber paper@ nickel cobaltite nanowires and graphene foam electrodes. Journal of Power Sources, 2015, 273, 654-662.	7.8	62
18	A graphene/carbon nanotube@Ï€-conjugated polymer nanocomposite for high-performance organic supercapacitor electrodes. Journal of Materials Chemistry A, 2015, 3, 3880-3890.	10.3	58

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19	Improving the dielectric properties of poly(vinylidene fluoride) composites by using poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10	5.5	52
20	A Novel Flexible Supercapacitor Based on Cross-Linked PVDF-HFP Porous Organogel Electrolyte and Carbon Nanotube Paper@Ï€-Conjugated Polymer Film Electrodes. ACS Sustainable Chemistry and Engineering, 2015, 3, 2067-2076.	6.7	47
21	A novel electrode material based on a highly homogeneous polyaniline/titanium oxide hybrid for high-rate electrochemical capacitors. Journal of Materials Chemistry, 2010, 20, 10598.	6.7	46
22	A high-resilience and conductive composite binder for lithium-sulfur batteries. Chemical Engineering Journal, 2020, 389, 124404.	12.7	43
23	Self-Assembly of Polyethylene Glycol-Grafted Carbon Nanotube/Sulfur Composite with Nest-like Structure for High-Performance Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2016, 8, 6061-6071.	8.0	42
24	Green Preparation of Expandable Graphite and Its Application in Flame-Resistance Polymer Elastomer. Industrial & Engineering Chemistry Research, 2017, 56, 5253-5261.	3.7	40
25	Fabrication of porous lithium titanate self-supporting anode for high performance lithium-ion capacitor. Journal of Energy Chemistry, 2020, 50, 344-350.	12.9	40
26	High-performance lithium-sulfur batteries based on self-supporting graphene/carbon nanotube foam@sulfur composite cathode and quasi-solid-state polymer electrolyte. Chemical Engineering Journal, 2018, 332, 8-15.	12.7	39
27	Promising graphene/carbon nanotube foam@Ï€-conjugated polymer self-supporting composite cathodes for high-performance rechargeable lithium batteries. Carbon, 2015, 94, 864-871.	10.3	37
28	Nano storage-boxes constructed by the vertical growth of MoS2 on graphene for high-performance Li-S batteries. Journal of Energy Chemistry, 2022, 66, 91-99.	12.9	37
29	Rational synthesis of novel Ï€-conjugated poly(1,5-diaminoanthraquinone) for high-performance supercapacitors. RSC Advances, 2014, 4, 7774-7779.	3.6	34
30	Rearrangement of Ion Transport Path on Nano-Cross-linker for All-Solid-State Electrolyte with High Room Temperature Ionic Conductivity. ACS Nano, 2021, 15, 20489-20503.	14.6	31
31	Stretchable fluoroelastomer quasi-solid-state organic electrolyte for high-performance asymmetric flexible supercapacitors. Journal of Materials Chemistry A, 2016, 4, 14839-14848.	10.3	29
32	High energy-density organic supercapacitors based on optimum matching between GNS/aMWCNT@polyaniline nanocone arrays cathode and GNS/aMWCNT@poly(1,5-diaminoanthraquinone) nanoparticles anode. Chemical Engineering Journal, 2017, 326, 9-16.	12.7	29
33	Effects of synthetic conditions on the structure and electrical properties of polyaniline nanofibers. Journal of Materials Science, 2008, 43, 197-202.	3.7	28
34	Poly(2,5-dimercapto-1,3,4-thiadiazole)/sulfonated graphene composite as cathode material for rechargeable lithium batteries. Journal of Applied Electrochemistry, 2011, 41, 377-382.	2.9	28
35	Preparation and supercapacitance performance of manganese oxide nanosheets/graphene/carbon nanotubes ternary composite film. Electrochimica Acta, 2014, 125, 488-496.	5.2	27
36	Unique holey graphene/carbon dots frameworks by microwave-initiated chain reduction for high-performance compressible supercapacitors and reusable oil/water separation. Journal of Materials Chemistry A, 2019, 7, 22054-22062.	10.3	27

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37	Poly(ionic liquid)-Based Quasi-Solid-State Copolymer Electrolytes for Dynamic-Reversible Adsorption of Lithium Polysulfides in Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2019, 11, 38136-38146.	8.0	27
38	Preparation and characterization of composites of polyaniline nanorods and multiwalled carbon nanotubes coated with polyaniline. Journal of Applied Polymer Science, 2007, 106, 4241-4247.	2.6	25
39	Synthesis and electrochemical capacitance performance of polyaniline doped with lignosulfonate. RSC Advances, 2015, 5, 76116-76121.	3.6	25
40	Long-life flexible supercapacitors based on nitrogen-doped porous graphene@Ï€-conjugated polymer film electrodes and porous quasi-solid-state polymer electrolyte. Electrochimica Acta, 2019, 317, 250-260.	5.2	24
41	Waterâ€dispersible conducting polyaniline/nanoâ€SiO₂ composites without any stabilizer. Journal of Applied Polymer Science, 2008, 107, 403-408.	2.6	20
42	Fully integrated design of intrinsically stretchable electrodes for stretchable supercapacitors. Energy Storage Materials, 2021, 39, 130-138.	18.0	19
43	High-Performance-Integrated Stretchable Supercapacitors Based on a Polyurethane Organo/Hydrogel Electrolyte. ACS Applied Materials & Interfaces, 2022, 14, 622-632.	8.0	19
44	Dual Li-ion migration channels in an ester-rich copolymer/ionic liquid quasi-solid-state electrolyte for high-performance Liâ€“S batteries. Journal of Materials Chemistry A, 2021, 9, 2459-2469.	10.3	18
45	Poly(aniline-2-sulfonic acid) modified multiwalled carbon nanotubes with good aqueous dispersibility. Journal of Colloid and Interface Science, 2008, 317, 199-205.	9.4	17
46	Alkali-Resistant Quasi-Solid-State Electrolyte for Stretchable Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 27701-27709.	8.0	17
47	Polyaniline/reduced graphene oxide hydrogel film with attached graphite current collector for flexible supercapacitors. Journal of Materials Science: Materials in Electronics, 2018, 29, 3025-3034.	2.2	17
48	Anticorrosive properties of epoxy resin coatings cured by aniline/pâ€phenylenediamine copolymer. Journal of Applied Polymer Science, 2009, 112, 1988-1993.	2.6	15
49	Effect of Carbon Black Modified with Polyaniline on Resistivity Behavior of Polyethylene/Carbon Black Composites. Journal of Macromolecular Science - Physics, 2007, 47, 65-75.	1.0	14
50	Electrical and electrochemical properties of poly(2,5-dimercapto-1,3,4-thiadiazole)-polyaniline adduct intercalated graphite oxide composites. Materials Chemistry and Physics, 2010, 122, 224-229.	4.0	14
51	Synthesis, curing behavior and thermal properties of silicon-containing hybrid polymers with Siâ€”Câ‰¡C units. Polymer International, 2014, 63, 1531-1536.	3.1	14
52	Synthesis and electrochemical performances of a novel two-dimensional nanocomposite: polyaniline-coated laponite nanosheets. Journal of Materials Science, 2014, 49, 6830-6837.	3.7	14
53	Rational design of modified fluororubber-based quasi-solid-state electrolyte for flexible supercapacitors with enhanced performance. Chemical Engineering Journal, 2019, 378, 122244.	12.7	13
54	A novel poly(vinyl carbonate-co-butyl acrylate) quasi-solid-state electrolyte as a strong catcher for lithium polysulfide in Liâ€“S batteries. Electrochimica Acta, 2020, 332, 135463.	5.2	13

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55	A post-oxidation strategy for the synthesis of graphene/carbon nanotube-supported polyaniline nanocomposites as advanced supercapacitor electrodes. RSC Advances, 2015, 5, 24599-24606.	3.6	12
56	Elastic, Conductive Coating Layer for Selfâ€Standing Sulfur Cathode Achieving Long Lifespan Liâ€“S Batteries. Advanced Energy Materials, 2020, 10, 1904026.	19.5	12
57	Anilineâ€Based Disulfide/Aniline Copolymers as a High Energyâ€Storage Material. Macromolecular Chemistry and Physics, 2009, 210, 2118-2124.	2.2	11
58	Enhanced dielectric properties of polymer composite films induced by encapsulated MWCNTs with a one coreâ€two shell structure. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 948-956.	2.1	11
59	Intercalation of conducting poly(N-propane sulfonic acid aniline) in V2O5 xerogel. Journal of Applied Polymer Science, 2007, 103, 2569-2574.	2.6	10
60	Electrophoresis-microwave synthesis of S,N-doped graphene foam for high-performance supercapacitors. Journal of Materials Chemistry A, 2021, 9, 15766-15775.	10.3	10
61	Distinct Photovoltaic Performance of Hierarchical Nanostructures Self-Assembled from Multiblock Copolymers. ACS Applied Materials & Interfaces, 2018, 10, 22552-22561.	8.0	9
62	Synthesis and characterization of electrically conductive and fluorescent poly(N-[5-(8-hydroxyquinoline)methyl]aniline)/V2O5 xerogel hybrids. Synthetic Metals, 2009, 159, 366-371.	3.9	8
63	Synthesis and characterization of a poly(aniline-based disulfide)/diisocyanate-modified graphite oxide hybrid by a grafting technique. European Polymer Journal, 2011, 47, 1630-1635.	5.4	8
64	Synthesis and characterization of poly(o-anisidine)/V2O5 and poly(o-anthranilic acid)/V2O5 nanocomposites. Polymer International, 2005, 54, 1082-1087.	3.1	7
65	Meltâ€processed polyaniline nanofibers/LDPE/EAA conducting composites. Polymer Composites, 2008, 29, 1177-1182.	4.6	7
66	Activated hierarchical porous carbon@Ï€-conjugated polymer composite as cathode for high-performance lithium storage. Journal of Solid State Electrochemistry, 2016, 20, 2169-2177.	2.5	7
67	Melt processable conducting poly(aniline-co-o-anisidine)/linear low-density polyethylene composites with ethylene-acrylic acid copolymer as compatibilizer. Journal of Applied Polymer Science, 2005, 98, 1511-1516.	2.6	6
68	Poly(anilineâ€coâ€oâ€anisidine)/Sulfonated Carbon Nanotubes Composites Prepared by Surface Adsorption Method. Journal of Macromolecular Science - Physics, 2008, 47, 743-753.	1.0	6
69	Improving Resistanceâ€Temperature Characteristic of Polyethylene/Carbon Black Composites by Poly(3,4â€Ethylenedioxythiophene)â€Functionalized Multilayer Graphene. Macromolecular Chemistry and Physics, 2020, 221, 2000144.	2.2	6
70	Synthesis, cure and pyrolysis behavior of heat-resistant boron-silicon hybrid polymer containing acetylene. Journal of Applied Polymer Science, 2012, 126, 1322-1327.	2.6	4
71	Improving the dielectric performance of poly(vinylidene fluoride)/polyaniline nanorod composites by stretchâ€induced crystal transition. Polymer International, 2018, 67, 1103-1111.	3.1	4
72	Stretchable Sodium-Ion Capacitors Based on Coaxial CNT Supported Na2Ti3O7 with High Capacitance Contribution. Nanoscale, 0, , .	5.6	4

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73	â€œIntegrated Interlockingâ€•architecture improving cycle stability of supercapacitors based on Self-Supporting electrodes. Chemical Engineering Journal, 2022, 450, 137918.	12.7	4
74	Preparation of poly(aniline-co-o-anisidine)-intercalated mesostructured manganese oxide composites by exchange reaction. Materials Research Bulletin, 2008, 43, 2145-2152.	5.2	3
75	Synthesis and performance of cross-linked PEDOT:MOI-P(SS-HEA) transparent conductive films by UV irradiation. RSC Advances, 2016, 6, 29592-29597.	3.6	2
76	Simultaneous Improvement of the Mechanical and Flame-Retardant Properties of a Composite Elastomer by a Biomimetic Modified Multilayer Graphene. Journal of Macromolecular Science - Physics, 2021, 60, 708-726.	1.0	0