Morphology-dependent electrochemical supercapacitor polyanilineÂ nanostructures

Journal of Materials Chemistry A

5, 14041-14052

DOI: 10.1039/c7ta03279j

Citation Report

#	Article	IF	Citations
1	Facile Synthesis of Mn3O4 Nanoplates-Anchored Graphene Microspheres and Their Applications for Supercapacitors. Electrochimica Acta, 2017, 257, 155-164.	2.6	43
2	Construction of layer-by-layer sandwiched graphene/polyaniline nanorods/carbon nanotubes heterostructures for high performance supercapacitors. Electrochimica Acta, 2018, 272, 77-87.	2.6	138
3	Novel PANI/MnFe2O4 nanocomposite for low-cost supercapacitors with high rate capability. Journal of Materials Science: Materials in Electronics, 2018, 29, 6077-6085.	1.1	35
4	In situ preparation of highly stable polyaniline/W18O49 hybrid nanocomposite as efficient visible light photocatalyst for aqueous Cr(VI) reduction. Journal of Hazardous Materials, 2018, 353, 466-475.	6.5	46
5	Three-dimensional conductive porous organic polymers based on tetrahedral polythiophene for high-performance supercapacitors. New Journal of Chemistry, 2018, 42, 6247-6255.	1.4	40
6	Excellent Energy Storage of Sandwich-Structured PVDF-Based Composite at Low Electric Field by Introduction of the Hybrid CoFe₂O₄@BZTâ€“BCT Nanofibers. ACS Sustainable Chemistry and Engineering, 2018, 6, 403-412.	3.2	110
7	A hydrogel-mediated scalable strategy toward core-shell polyaniline/poly(acrylic acid)-modified carbon nanotube hybrids as efficient electrodes for supercapacitor applications. Applied Surface Science, 2018, 436, 189-197.	3.1	22
8	Realizing High Capacitance and Rate Capability in Polyaniline by Enhancing the Electrochemical Surface Area through Induction of Superhydrophilicity. ACS Applied Materials & Interfaces, 2018, 10, 676-686.	4.0	45
9	Electrically conductive polymer composites for smart flexible strain sensors: a critical review. Journal of Materials Chemistry C, 2018, 6, 12121-12141.	2.7	522
10	Effect of Different Electrolytes on the Supercapacitor Behavior of Single and Multilayered Electrode Materials Based on Multiwalled Carbon Nanotube/Polyaniline Composite. Macromolecular Chemistry and Physics, 2018, 219, 1800213.	1.1	6
11	Tuning polyaniline nanostructures via end group substitutions and their morphology dependent electrochemical performances. Polymer, 2018, 156, 128-135.	1.8	141
12	Quaternary ammonium functionalized Fe₃O₄ & P(GMA-AA-DVB) magnetic Janus particles as highly efficient catalysts for phase transfer reactions. Dalton Transactions, 2018, 47, 12893-12900.	1.6	7
13	Effects of Doping States of Polyaniline Thin Films on Their Photoâ€Responsive Properties under Visible and Nearâ€Infrared Irradiation. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1701019.	0.8	5
14	Silver Nanoparticles Decorated by Amino Groups on the Periphery of Litchi-Like P(MMA-AA-DVB)@Fe3O4 Microspheres for the Catalytic Reduction of Methyl Orange. Catalysis Letters, 2019, 149, 2873-2886.	1.4	11
15	Synthesis of Hollow Flower-Like Fe3O4/MnO2/Mn3O4 Magnetically Separable Microspheres with Valence Heterostructure for Dye Degradation. Catalysts, 2019, 9, 589.	1.6	18
16	Morphologyâ€dependent electrochemical performance of nitrogenâ€doped carbon dots@polyaniline hybrids for supercapacitors. International Journal of Energy Research, 2019, 43, 7529.	2.2	20
17	Synergistic Effects of Cobalt Molybdate@Phosphate Coreâ€“Shell Architectures with Ultrahigh Capacity for Rechargeable Hybrid Supercapacitors. ACS Applied Materials & Interfaces, 2019, 11, 41245-41257.	4.0	50
18	Facile bioactive yeast cell templated synthesis of laser stealth antimony doped tin oxide hollow microspheres. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 583, 123965.	2.3	21

#	Article	IF	Citations
19	EFFECTS OF SINGLE CROUCH WALKING GAITS ON FATIGUE DAMAGES OF LOWER EXTREMITY MAIN MUSCLES. Journal of Mechanics in Medicine and Biology, 2019, 19, 1940046.	0.3	11
20	Synthesis of yolk-shell structure Fe3O4/P(MAA-MBAA)-PPy/Au/ void/TiO2 magnetic microspheres as visible light active photocatalyst for degradation of organic pollutants. Journal of Alloys and Compounds, 2019, 810, 151807.	2.8	39
21	Solid polyaniline dendrites consisting of high aspect ratio branches self-assembled using sodium lauryl sulfonate as soft templates: Synthesis and electrochemical performance. Polymer, 2019, 182, 121808.	1.8	128
22	Preparation of Antiâ€Nonspecific Adsorption Chitosanâ€Based Bovine Serum Albumin Imprinted Polymers with Outstanding Adsorption Capacity and Selective Recognition Ability Based on Magnetic Microspheres. Macromolecular Materials and Engineering, 2019, 304, 1800731.	1.7	15
23	Study of chromatographic fractions from carbon dots isolated by column chromatography and a binary gradient elution via RP-HPLC. Analytical Methods, 2019, 11, 760-766.	1.3	14
24	An air-stable electrochromic conjugated microporous polymer as an emerging electrode material for hybrid energy storage systems. Journal of Materials Chemistry A, 2019, 7, 16397-16405.	5.2	96
25	Superior electrochemical water oxidation of novel NiS@FeS2 nanocomposites. Materials Science in Semiconductor Processing, 2019, 101, 174-182.	1.9	24
26	Recent Progress on Graphene/Polyaniline Composites for High-performance Supercapacitors. Materials, 2019, 12, 1451.	1.3	40
27	Three-dimensional core-shell Fe3O4/Polyaniline coaxial heterogeneous nanonets: Preparation and high performance supercapacitor electrodes. Electrochimica Acta, 2019, 315, 114-123.	2.6	272
28	Redox-active doped polypyrrole microspheres induced by phosphomolybdic acid as supercapacitor electrode materials. Synthetic Metals, 2019, 252, 135-141.	2.1	18
29	Oxygen vacancy-enriched MoO_{3â^'x} nanobelts for asymmetric supercapacitors with excellent room/low temperature performance. Journal of Materials Chemistry A, 2019, 7, 13205-13214.	5.2	92
30	Synthesis of morphology-tunable electroactive biomass/graphene composites using metal ions for supercapacitors. Nanoscale, 2019, 11, 7304-7316.	2.8	24
31	Surfactant tuned morphology of mesoporous Î²-Co(OH)2/CMC nanoflakes: a prospective candidate for supercapacitors. Journal of Solid State Electrochemistry, 2019, 23, 1325-1338.	1.2	21
32	Challenge between sequence presences of conductive additives on flexibility, dielectric and supercapacitance behaviors of nanofibrillated template of bacterial cellulose aerogels. European Polymer Journal, 2019, 115, 335-345.	2.6	42
33	Recent advancements of polyaniline-based nanocomposites for supercapacitors. Journal of Power Sources, 2019, 424, 108-130.	4.0	305
34	Hydrophilic Fe₃O₄ nanoparticles prepared by ferrocene as highâ€efficiency heterogeneous Fenton catalyst for the degradation of methyl orange. Applied Organometallic Chemistry, 2019, 33, e4826.	1.7	12
35	Self-Assembly and Surface Tension Induced Fractal Conductive Network in Ternary Polymer System. ACS Applied Polymer Materials, 2019, 1, 493-499.	2.0	6
36	Preparation of magnetic Fe 3 O 4 /P (GMAâ€DVB)â€PEI/Pd highly efficient catalyst with coreâ€shell structure. Applied Organometallic Chemistry, 2019, 33, e4850.	1.7	14

#	Article	IF	Citations
37	Exploring the Effects of Acid Fuchsin on Microscopic Morphology and Properties for Polypyrrole. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 51-56.	0.1	3
38	Gold nanoparticles supported by amino groups on the surface of magnetite microspheres for the catalytic reduction of 4-nitrophenol. Journal of Materials Science, 2019, 54, 323-334.	1.7	113
39	Synthesis, characterization and catalytic performance of coreâ€shell structure magnetic Fe₃O₄/P(GMAâ€EGDMA)â€NH₂/HPGâ€COOHâ€Pd catalyst. Applied Organometallic Chemistry, 2019, 33, e4708.	1.7	31
40	Copper tungsten sulfide anchored on Ni-foam as a high-performance binder free negative electrode for asymmetric supercapacitor. Chemical Engineering Journal, 2019, 359, 409-418.	6.6	114
41	Application of Polyaniline for Liâ€ion Batteries, Lithiumâ€“Sulfur Batteries, and Supercapacitors. ChemSusChem, 2019, 12, 1591-1611.	3.6	101
42	Carbon Fiber/Polyaniline as a High Performance Electrode for a Symmetrical Supercapacitor. Journal of Electronic Materials, 2019, 48, 1054-1065.	1.0	3
43	Sonochemically recovered silver oxide nanoparticles from the wastewater of photo film processing units as an electrode material for supercapacitor and sensing of 2, 4, 6-trichlorophenol in agricultural soil samples. Ultrasonics Sonochemistry, 2019, 50, 255-264.	3.8	46
44	A dual-doped strategy to enhance the electrochemical performances of electropolymerized polyaniline electrodes for flexible energy storage. Materials Chemistry and Physics, 2020, 240, 122259.	2.0	16
45	Sensors based on conductive polymers and their composites: a review. Polymer International, 2020, 69, 7-17.	1.6	147
46	Supercapacitor and OER activity of transition metal (Mo, Co, Cu) sulphides. Journal of Physics and Chemistry of Solids, 2020, 138, 109240.	1.9	26
47	Nanomaterials of conducting polymers and its application in energy conversion and storage. , 2020, , 325-354.		5
48	Thermoâ€sensitive surface molecularly imprinted magnetic microspheres based on bioâ€macromolecules and their specific recognition of bovine serum albumin. Journal of Separation Science, 2020, 43, 996-1002.	1.3	10
49	Anionic surfactant doped synthesis of Poly Aniline Dendritic (PANID) fibers and its anti-corrosion performance. Materials Today Communications, 2020, 23, 100812.	0.9	1
50	Polyaniline nanotube synthesized from natural tubular halloysite template as high performance pseudocapacitive electrode. Electrochimica Acta, 2020, 331, 135259.	2.6	20
51	Influence of surfactant and molarity on the properties of bacterial cellulose/polyaniline: Experimental and density functional theory. Carbohydrate Polymers, 2020, 250, 116903.	5.1	12
52	Nanostructured conducting polymers and their composites: synthesis methodologies, morphologies and applications. Journal of Materials Chemistry C, 2020, 8, 10136-10159.	2.7	53
53	Electrochemical Investigation of Polypyrrole/Nd2O3 Nanocomposite as High Performance Supercapacitor Material on Mild Steel Substrate. International Journal of Electrochemical Science, 2020, 15, 11757-11768.	0.5	4
54	Impacts of SiC on the microstructure and wear performances of (SiCâ€“Al₃Ti)/7075 composites. Emerging Materials Research, 2020, 9, 716-724.	0.4	2

#	Article	IF	Citations
55	Research Progress on Porous Carbon Supported Metal/Metal Oxide Nanomaterials for Supercapacitor Electrode Applications. Industrial & Engineering Chemistry Research, 2020, 59, 6347-6374.	1.8	132
56	Effect of Aniline Concentration on the Morphology and Electrochemical Properties of DBSA-Doped Polyaniline for Flexible Supercapacitor Electrode Materials. Journal of Electronic Materials, 2020, 49, 3751-3760.	1.0	11
57	Application Progress of Polyaniline, Polypyrrole and Polythiophene in Lithium-Sulfur Batteries. Polymers, 2020, 12, 331.	2.0	85
58	Lightweight aerogels based on bacterial cellulose/silver nanoparticles/polyaniline with tuning morphology of polyaniline and application in soft tissue engineering. International Journal of Biological Macromolecules, 2020, 152, 57-67.	3.6	64
59	Microstructure and high temperature oxidation behavior of the Al2O3 CPED coating on TiAl alloy. Journal of Alloys and Compounds, 2020, 828, 154271.	2.8	27
60	In-situ growth of flexible 3D hollow tubular Cu2S nanorods on Cu foam for high electrochemical performance supercapacitor. Journal of Materiomics, 2020, 6, 192-199.	2.8	15
61	Analysis of Charge Storage Behavior in Redoxâ€electrolyte Based Batteryâ€likeâ€systems: A Case Study on Zrâ€doped Ceria. ChemistrySelect, 2020, 5, 1628-1639.	0.7	15
62	Interconnected polyaniline nanostructures: Enhanced interface for better supercapacitance retention. Polymer, 2021, 212, 123169.	1.8	12
63	Bacterial cellulose/polyaniline nanocomposite aerogels as novel bioadsorbents for removal of hexavalent chromium: Experimental and simulation study. Journal of Cleaner Production, 2021, 278, 123817.	4.6	53
64	Synthesis of 3D Ni3Se2 nano-architectures for electrochemical energy storage and conversion. Journal of Alloys and Compounds, 2021, 855, 157479.	2.8	4
65	Poly(vinylideneâ€coâ€hexafluoropropylene) membrane modified with glass fibers and polyvinyl pyrrolidone: Mechanical and electrochemical properties. Journal of Applied Polymer Science, 2021, 138, 50229.	1.3	2
66	MnO2 corolla-like magnetic molecularly imprinted microspheres with enhanced adsorption capacity and specificity recognition to bovine serum albumin. Chemical Engineering Journal, 2021, 405, 126655.	6.6	18
67	Hybrid Polyaniline/Liquid Crystalline CNT Fiber Composite for Ultimate Flexible Supercapacitors. ACS Applied Energy Materials, 2021, 4, 1130-1142.	2.5	26
68	Nanoarchitectured conducting polymers: Rational design and relative activity for next-generation supercapacitors. , 2021, , 27-58.		0
69	Facile two-step synthesis of nanofiber polyaniline/graphene/cuprous oxide composite with enhanced photocatalytic performance. Applied Nanoscience (Switzerland), 2021, 11, 983-993.	1.6	7
70	Fabrication of hollow flower-like magnetic Fe3O4/C/MnO2/C3N4 composite with enhanced photocatalytic activity. Scientific Reports, 2021, 11, 2597.	1.6	20
71	Pretreatment of hydroxy-terminated polybutadiene (HTPB)/toluene diisocyanate (TDI) binder system for biodegradation. Advanced Composites and Hybrid Materials, 2021, 4, 96-103.	9.9	6
72	Preparation and properties of ethylene-acrylate salt ionomer/polypropylene antistatic alloy. Advanced Composites and Hybrid Materials, 2021, 4, 104-113.	9.9	21

#	Article	IF	Citations
74	Preparation of polyaniline nanorods/manganese dioxide nanoflowers core/shell nanostructure and investigation of electrochemical performances. Advanced Composites and Hybrid Materials, 2021, 4, 938-945.	9.9	52
75	Synthesis of walnutâ€like polyaniline by using polyvinyl alcohol micellar template with excellent film transmission. Journal of Applied Polymer Science, 2021, 138, 50701.	1.3	2
76	Display of hidden properties of flexible aerogel based on bacterial cellulose/polyaniline nanocomposites with helping of multiscale modeling. European Polymer Journal, 2021, 146, 110251.	2.6	26
77	Stretchable Transparent Conductive Films Based on Ag Nanowires for Flexible Circuits and Tension Sensors. ACS Applied Nano Materials, 2021, 4, 3760-3766.	2.4	11
78	Impacts of chain extenders on thermal property, degradation, and rheological performance of poly(butylene adipate-co-terephthalate). Journal of Materials Research, 2021, 36, 3134-3144.	1.2	11
79	Fully organic polyaniline nanotubes as electrode material for durable supercapacitor. Journal of Energy Storage, 2021, 39, 102662.	3.9	18
80	Interior design of hierarchical micro/nanostructures for enhancing energy storage ability of polyanilines through frozen interfacial polymerization. Electrochimica Acta, 2021, 386, 138448.	2.6	5
81	Plasma electrolytic deposition of Î±-Al2O3 on TiNb fibres and their mechanical properties. Ceramics International, 2021, 47, 32915-32926.	2.3	6
82	Surlyn resin ionic interlayer-based laminated glass: preparation and property analysis. Advanced Composites and Hybrid Materials, 2022, 5, 229-237.	9.9	7
83	Fabrication of ternary MXene/MnO2/polyaniline nanostructure with good electrochemical performances. Advanced Composites and Hybrid Materials, 2021, 4, 1082-1091.	9.9	81
84	In situ-grown Co3O4 nanorods on carbon cloth for efficient electrocatalytic oxidation of urea. Journal of Nanostructure in Chemistry, 2021, 11, 735-749.	5.3	25
85	Microstructure control for high-capacitance polyaniline. Electrochimica Acta, 2021, 391, 138977.	2.6	21
86	Fungus bran-derived nanoporous carbon with layered structure and rime-like support for enhanced symmetric supercapacitors. Journal of Nanostructure in Chemistry, 2021, 11, 769-784.	5.3	13
87	2-aminopyridine functionalized magnetic coreâ€“shell Fe3O4@polypyrrole composite for removal of Mn (VII) from aqueous solution by double-layer adsorption. Separation and Purification Technology, 2021, 277, 119455.	3.9	44
88	A novel phosphorous and silicon-containing benzoxazine: highly efficient multifunctional flame-retardant synergist for polyoxymethylene. Advanced Composites and Hybrid Materials, 2021, 4, 127-137.	9.9	46
89	Conductive polyaniline nanorods enhanced methane production from anaerobic wastewater treatment. Polymer, 2017, 120, 236-243.	1.8	82
90	Dopamine-modified aramid fibers reinforced epoxidized natural rubber nanocomposites. Composites Communications, 2022, 29, 100996.	3.3	21
91	Reinforcing and toughening blends of recycled acrylonitrile-butadiene-styrene/recycled high-impact polystyrene through ionic crosslinking. Surfaces and Interfaces, 2022, 28, 101607.	1.5	7

#	Article	IF	Citations
92	The effect of synergistic/inhibitory mechanism of terephthalic acid and glycerol on the puncture, tearing, and degradation properties of PBSeT copolyesters. Advanced Composites and Hybrid Materials, 2022, 5, 1335-1349.	9.9	8
93	All pseudocapacitive MXene-MnO2 flexible asymmetric supercapacitor. Journal of Energy Storage, 2022, 45, 103715.	3.9	100
94	Fabrication of magnetic <scp>Fe₃O₄</scp>/<scp>MnO₂</scp>/<scp>TiO₂</scp>/polypyrrole heterostructure for efficient adsorption of Mn⁷⁺ from aqueous solution. Journal of Applied Polymer Science, 2022, 139, .	1.3	13
95	A Self-Assembly Polyaniline Films for the High-Performance Ammonia Gas Sensor. SSRN Electronic Journal, 0, , .	0.4	0
96	Influence of different dopants and redox forms of PANI in its crystal structure, morphology, electrochemical energy storage to variable extent, unique properties and kinetics. Bulletin of Materials Science, 2022, 45, 1.	0.8	5
97	Polymer Electrode Materials for Lithiumâ€ion Batteries. Advanced Functional Materials, 2022, 32, .	7.8	52
98	Magnetic <scp>Fe₃O₄</scp>/polypyrroleâ€salicylaldehyde composite for efficient removal of Mn (<scp>VII</scp>) from aqueous solution by doubleâ€layer adsorption. Journal of Applied Polymer Science, 2022, 139, .	1.3	10
99	Self-assembly polyaniline films for the high-performance ammonia gas sensor. Sensors and Actuators B: Chemical, 2022, 365, 131928.	4.0	21
100	Overview of MXene/conducting polymer composites for supercapacitors. Journal of Energy Storage, 2022, 52, 105008.	3.9	63
101	Porous carbon from conducting polymers for electrochemical applications. , 2022, , 147-180.		0
102	Maneuvering Applications of Covalent Organic Frameworks via Frameworkâ€Morphology Modulation. Advanced Materials, 2022, 34, .	11.1	39
103	Overview of MXene and conducting polymer matrix composites for electromagnetic wave absorption. Advanced Composites and Hybrid Materials, 2022, 5, 704-754.	9.9	133
104	Design of Boron Carbonitrides-Polyaniline (BCN-PANI) assembled supercapacitor with high voltage window. Journal of Colloid and Interface Science, 2022, 626, 544-553.	5.0	12
105	Factors affecting the growth formation of nanostructures and their impact on electrode materials: A systematic review. Materials Today Physics, 2022, 27, 100844.	2.9	28
106	Recent progress of polyaniline-based composites in the field of microwave absorption. Synthetic Metals, 2022, 291, 117190.	2.1	9
107	Nanocellulose-based aerogel electrodes for supercapacitors: A review. Carbohydrate Polymers, 2022, 297, 120039.	5.1	17
108	MXene-MnO2-CoNi layered double hydroxides//activated carbon flexible asymmetric supercapacitor. Journal of Energy Storage, 2022, 55, 105668.	3.9	22
109	Carboxylated multi-walled carbon nanotube/polyaniline composites for high-performance supercapacitor electrodes. Advanced Composite Materials, 0, , 1-18.	1.0	1

#	Article	IF	Citations
110	Progress of metal organic frameworks-based composites in electromagnetic wave absorption. Materials Today Physics, 2023, 30, 100950.	2.9	29
112	Polyaniline-conjugated graphiteâ€“montmorillonite composite electrode prepared by in situ electropolymerization for supercapacitor applications. Chemical Papers, 2023, 77, 2923-2928.	1.0	5
113	Bioinspired photothermal polyaniline composite polyurethane sponge: Interlayer engineering for high-concentration seawater desalination. Separation and Purification Technology, 2023, 311, 123181.	3.9	8
114	Spiny Spherical Nickelâ€“Cobalt Bimetallic Sulfide Nanocomposite for High-Energy-Density Pseudocapacitor. Energy & Fuels, 2023, 37, 1396-1403.	2.5	2
115	Charge transport and low-frequency conductance noise in metal-nanoparticle embedded one-dimensional conducting polymer nanotubes: multiple resistive switching phenomena. Materials Today Nano, 2023, 22, 100312.	2.3	0
116	A Simple Route to Fabricate Ultralong and Uniform Polypyrrole Nanowires with High Electrochemical Capacitance for Supercapacitor Electrodes. ACS Applied Polymer Materials, 2023, 5, 1254-1263.	2.0	8
117	Progress of layered double hydroxide-based materials for supercapacitors. Materials Chemistry Frontiers, 2023, 7, 1520-1561.	3.2	29
118	Carbon and Metal Doped Polyaniline (PANI) for Energy Storage. Composites Science and Technology, 2023, , 331-359.	0.4	0
123	Low-cost composite electrode consisting of graphite, colloidal graphite and montmorillonite with enhanced electrochemical performance for general electroanalytical techniques and device fabrication. Chemical Papers, 0, , .	1.0	0