Sumanta Sahoo

List of Publications by Year
in descending order

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76 papers	5,379 citations	76294 40 h-index	82499 72 g-index
77 all docs	77 docs citations	77 times ranked	4753 citing authors

#	Article	IF	Citations
1	Heteroatom doping of 2D graphene materials for electromagnetic interference shielding: a review of recent progress. Critical Reviews in Solid State and Materials Sciences, 2022, 47, 570-619.	6.8	68
2	Microwave as a Tool for Synthesis of Carbon-Based Electrodes for Energy Storage. ACS Applied Materials & Interfaces, 2022, 14, 20306-20325.	4.0	90
3	Recent progress in trimetallic/ternary-metal oxides nanostructures: Misinterpretation/misconception of electrochemical data and devices. Applied Materials Today, 2022, 26, 101297.	2.3	23
4	Laser processing of graphene and related materials for energy storage: State of the art and future prospects. Progress in Energy and Combustion Science, 2022, 91, 100981.	15.8	124
5	Research progress and future aspects: Metal selenides as effective electrodes. Energy Storage Materials, 2022, 47, 13-43.	9.5	92
6	SnS₂@Conducting Energy Level-Induced Functionalized Boron Nitride for an Asymmetric Supercapacitor. Energy & Fuels, 2022, 36, 2248-2259.	2.5	16
7	Hollow nano- and microstructures: Mechanism, composition, applications, and factors affecting morphology and performance. Coordination Chemistry Reviews, 2022, 458, 214429.	9.5	52
8	From 0D to 3D MXenes: their diverse syntheses, morphologies and applications. Materials Chemistry Frontiers, 2022, 6, 818-842.	3.2	24
9	An overview of recent progress in nanostructured carbon-based supercapacitor electrodes: From zero to bi-dimensional materials. Carbon, 2022, 193, 298-338.	5.4	168
10	MXene (Ti3C2Tx) supported CoS2/CuCo2S4 nanohybrid for highly stable asymmetric supercapacitor device. Journal of Energy Storage, 2022, 50, 104617.	3.9	20
11	MXene (Ti₃C₂T_x)-/Amine-Functionalized Graphene-Supported Self-Assembled Co₉S₈ Nanoflower for Ultrastable Hybrid Supercapacitor. Industrial & Engineering Chemistry Research, 2022, 61, 7727-7738.	1.8	15
12	Advances in pseudocapacitive and battery-like electrode materials for high performance supercapacitors. Journal of Materials Chemistry A, 2022, 10, 13190-13240.	5.2	137
13	Ternary Nanohybrid of Ni3S2/CoMoS4/MnO2 on Nickel Foam for Aqueous and Solid-State High-Performance Supercapacitors. Nanomaterials, 2022, 12, 1945.	1.9	12
14	A review on the current research on microwave processing techniques applied to graphene-based supercapacitor electrodes: An emerging approach beyond conventional heating. Journal of Energy Chemistry, 2022, 74, 252-282.	7.1	104
15	Direct growth of nickel cobalt layered double hydroxide on nickel foam via redox reaction between nitrate ion and ethanol for hybrid supercapacitors. Electrochimica Acta, 2021, 367, 137226.	2.6	49
16	Recent Progress in Electrospinning Technologies for Graphene-Based Materials. Carbon Nanostructures, 2021, , 1-34.	0.1	0
17	Carbon-based Multi-layered Films for Electronic Application: A Review. Journal of Electronic Materials, 2021, 50, 1845-1892.	1.0	14
18	Polyindole Booster for Ti₃C₂T_x MXene Based Symmetric and Asymmetric Supercapacitor Devices. ACS Applied Energy Materials, 2021, 4, 3712-3723.	2.5	62

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19	Uniform growth of ZnS nanoflakes for high-performance supercapacitor applications. Journal of Energy Storage, 2021, 36, 102408.	3.9	62
20	Induced conducting energy-levels in a boron nitride nano-framework for asymmetric supercapacitors in high charge-mobility ionic electrolytes. Composites Part B: Engineering, 2021, 212, 108728.	5.9	18
21	Recent progress on carbon-based composite materials for microwave electromagnetic interference shielding. Carbon, 2021, 177, 304-331.	5.4	239
22	Effects of TiO2 and GO nanoparticles on the thermomechanical properties of bioactive poly-HEMA nanocomposites. Iranian Polymer Journal (English Edition), 2021, 30, 1089-1099.	1.3	6
23	Microwave-assisted thin reduced graphene oxide-cobalt oxide nanoparticles as hybrids for electrode materials in supercapacitor. Journal of Energy Storage, 2021, 40, 102724.	3.9	137
24	Current trends in MXene research: properties and applications. Materials Chemistry Frontiers, 2021, 5, 7134-7169.	3.2	30
25	A review of the microwave-assisted synthesis of carbon nanomaterials, metal oxides/hydroxides and their composites for energy storage applications. Nanoscale, 2021, 13, 11679-11711.	2.8	93
26	Novel Nanoporous Ti-Phosphonate Metalâ€“Organic Framework for Selective Sensing of 2,4,6-Trinitrophenol and a Promising Electrode in an Energy Storage Device. ACS Sustainable Chemistry and Engineering, 2021, 9, 14224-14237.	3.2	42
27	A facile synthesis of boron nitride supported zinc cobalt sulfide nano hybrid as high-performance pseudocapacitive electrode material for asymmetric supercapacitors. Journal of Energy Storage, 2020, 32, 101993.	3.9	53
28	Heteroatom doped graphene engineering for energy storage and conversion. Materials Today, 2020, 39, 47-65.	8.3	400
29	Facile functionalization of boron nitride (BN) for the development of high-performance asymmetric supercapacitors. New Journal of Chemistry, 2020, 44, 8106-8119.	1.4	30
30	Present status of biomass-derived carbon-based composites for supercapacitor application. , 2020, , 373-415.		10
31	Adsorbed Cr(VI) based activated carbon/polyaniline nanocomposite: A superior electrode material for asymmetric supercapacitor device. Composites Part B: Engineering, 2020, 193, 107913.	5.9	46
32	Graphene research and their outputs: Status and prospect. Journal of Science: Advanced Materials and Devices, 2020, 5, 10-29.	1.5	318
33	Facile synthesis of NiCo2O4 nanorods for electrocatalytic oxidation of methanol. Journal of Saudi Chemical Society, 2020, 24, 434-444.	2.4	22
34	Recent progress in the synthesis of graphene and derived materials for next generation electrodes of high performance lithium ion batteries. Progress in Energy and Combustion Science, 2019, 75, 100786.	15.8	379
35	A review on synthesis of graphene, h-BN and MoS2 for energy storage applications: Recent progress and perspectives. Nano Research, 2019, 12, 2655-2694.	5.8	283
36	A 3D walking palm-like coreâ€“shell CoMoO₄@NiCo₂S₄@nickel foam composite for high-performance supercapacitors. Dalton Transactions, 2019, 48, 3853-3861.	1.6	103

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37	Boron Nitride based Ternary Nanocomposites with Different Carbonaceous Materials Decorated by Polyaniline for Supercapacitor Application. ChemistrySelect, 2019, 4, 3672-3680.	0.7	29
38	Present Status and Prospect of Graphene Research. Carbon Nanostructures, 2019, , 1-29.	0.1	2
39	Mesoporous Feâ€“Niâ€“Co ternary oxide nanoflake arrays on Ni foam for high-performance supercapacitor applications. Journal of Industrial and Engineering Chemistry, 2018, 63, 181-190.	2.9	71
40	Poly(anilineâ€coâ€pyrrole)-spaced graphene aerogel for advanced supercapacitor electrodes. Journal of Electroanalytical Chemistry, 2018, 810, 154-160.	1.9	41
41	Room-temperature synthesis of NiS hollow spheres on nickel foam for high-performance supercapacitor electrodes. Materials Letters, 2018, 210, 105-108.	1.3	51
42	Low temperature atomic layer deposited molybdenum nitride-Ni-foam composite: An electrode for efficient charge storage. Electrochemistry Communications, 2018, 93, 114-118.	2.3	25
43	Nanostructured 3D zinc cobaltite/nitrogen-doped reduced graphene oxide composite electrode for supercapacitor applications. Journal of Industrial and Engineering Chemistry, 2017, 54, 205-217.	2.9	58
44	Highly Uniform Atomic Layer-Deposited MoS₂@3D-Ni-Foam: A Novel Approach To Prepare an Electrode for Supercapacitors. ACS Applied Materials & Interfaces, 2017, 9, 40252-40264.	4.0	117
45	Facile Synthesis of Three-Dimensional Ternary ZnCo₂O₄/Reduced Graphene Oxide/NiO Composite Film on Nickel Foam for Next Generation Supercapacitor Electrodes. ACS Sustainable Chemistry and Engineering, 2017, 5, 241-251.	3.2	176
46	How to Enhance the Performance of Graphene/Metal Oxide Nanocomposite Supercapacitors. ECS Meeting Abstracts, 2017, , .	0.0	0
47	Nanocomposites of Metal Oxide@Graphene@Ni Foam for Energy Storage Applications. ECS Meeting Abstracts, 2017, , .	0.0	0
48	Porous Ternary High Performance Supercapacitor Electrode Based on Reduced Graphene Oxide, NiMn2O4, and Polyaniline. Electrochimica Acta, 2016, 216, 386-396.	2.6	122
49	Facile synthesis of Fe₃O₄nanorod decorated reduced graphene oxide (RGO) for supercapacitor application. RSC Advances, 2016, 6, 107057-107064.	1.7	75
50	Chemical synthesis of 3D copper sulfide with different morphologies for high performance supercapacitors application. RSC Advances, 2016, 6, 14844-14851.	1.7	79
51	Defect-engineered mesoporous ternary nanoarchitecture of zinc-cobalt-oxide/nitrogen-doped graphene as anode material in lithium ion batteries. Carbon, 2015, 94, 455-463.	5.4	38
52	Graphene/Poly(aniline-co-pyrrole) Nanocomposite: Potential Candidate for Supercapacitor and Microwave Absorbing Applications. Journal of Nanoscience and Nanotechnology, 2015, 15, 6931-6941.	0.9	12
53	Microwave bottom-up route for size-tunable and switchable photoluminescent graphene quantum dots using acetylacetone: New platform for enzyme-free detection of hydrogen peroxide. Carbon, 2015, 81, 514-524.	5.4	93
54	Graphene and modified graphene-based polymer nanocomposites â€“ A review. Journal of Reinforced Plastics and Composites, 2014, 33, 1158-1170.	1.6	122

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55	Combined effect of expanded graphite and multiwall carbon nanotubes on the thermo mechanical, morphological as well as electrical conductivity of in situ bulk polymerized polystyrene composites. Composites Part A: Applied Science and Manufacturing, 2014, 56, 181-191.	3.8	41
56	Research updates on graphene oxideâ€based polymeric nanocomposites. Polymer Composites, 2014, 35, 2297-2310.	2.3	47
57	Transition Metal-Doped Polyaniline/Single-Walled Carbon Nanotubes Nanocomposites: Efficient Electrode Material for High Performance Supercapacitors. ACS Sustainable Chemistry and Engineering, 2014, 2, 1114-1127.	3.2	91
58	Sonochemical synthesis and characterization of amineâ€modified graphene/conducting polymer nanocomposites. Journal of Applied Polymer Science, 2013, 128, 1476-1483.	1.3	6
59	Preparation and characterization of polypyrrole/modified multiwalled carbon nanotube nanocomposites polymerized in situ in the presence of barium titanate. Journal of Applied Polymer Science, 2013, 128, 698-705.	1.3	11
60	Graphene/polypyrrole nanofiber nanocomposite as electrode material for electrochemical supercapacitor. Polymer, 2013, 54, 1033-1042.	1.8	161
61	Fabrication of transitionâ€metalâ€doped polypyrrole/multiwalled carbon nanotubes nanocomposites for supercapacitor applications. Journal of Applied Polymer Science, 2013, 130, 554-562.	1.3	46
62	Investigations on copper chloride doped polyaniline composites as efficient electrode materials for supercapacitor applications. Journal of Materials Science: Materials in Electronics, 2013, 24, 576-585.	1.1	38
63	In Situ Synthesis of Graphene/Amine-Modified Graphene, Polypyrrole Composites in Presence of SrTiO₃for Supercapacitor Applications. Polymer-Plastics Technology and Engineering, 2013, 52, 213-220.	1.9	24
64	Copper chlorideâ€doped polyaniline/multiwalled carbon nanotubes nanocomposites: Superior electrode material for supercapacitor applications. Polymer Composites, 2013, 34, 517-525.	2.3	23
65	Microwave absorption behaviour of MWCNT based nanocomposites in X-band region. EXPRESS Polymer Letters, 2013, 7, 212-223.	1.1	102
66	One Pot Synthesis of Graphene by Exfoliation of Graphite in ODCB. Graphene, 2013, 02, 42-48.	0.3	26
67	Facile synthesis of polypyrrole nanofiber and its enhanced electrochemical performances in different electrolytes. EXPRESS Polymer Letters, 2012, 6, 965-974.	1.1	39
68	Effect of nanosilica and polyphosphazene elastomer on the in situ fibrillation of liquid crystalline polymer (LCP) and thermo-mechanical properties of polybutylene terephthalate (PBT)/LCP blend system. Materials & Design, 2012, 42, 184-191.	5.1	24
69	Novel approach for the selective dispersion of MWCNTs in the Nylon/SAN blend system. Composites Part A: Applied Science and Manufacturing, 2012, 43, 1242-1251.	3.8	35
70	Synthesis and Electrochemical Characterization of Modified Graphene/Polypyrrole Nanocomposites. Macromolecular Symposia, 2012, 315, 177-187.	0.4	8
71	Doping Effect of Polyaniline/MWCNT Composites on Capacitance and Cyclic Stability of Supercapacitors. Journal of Nanoscience and Nanotechnology, 2012, 12, 2704-2710.	0.9	2
72	Investigations on doping of poly(3-methyl-thiophene) composites for supercapacitor applications. Macromolecular Research, 2012, 20, 351-357.	1.0	24

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73	Modified graphene/polyaniline nanocomposites for supercapacitor application. Macromolecular Research, 2012, 20, 415-421.	1.0	41
74	Compatibilization of polyetherimide/liquid crystalline polymer blend using modified multiwalled carbon nanotubes and polyphosphazene as compatibilizers. Journal of Applied Polymer Science, 2012, 124, 629-637.	1.3	19
75	Electrochemical characterization of in situ polypyrrole coated graphene nanocomposites. Synthetic Metals, 2011, 161, 1713-1719.	2.1	112
76	Effect of polyphosphazene and modified carbon nanotubes on the morphological and thermo-mechanical properties of polyphenylene sulfide and liquid crystalline polymer blend system. Journal of Materials Science, 2011, 46, 7672-7680.	1.7	7