G C Nayak

List of Publications by Year
in descending order

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82	2,293	172386	243529
papers	citations	29 h-index	44 g-index

86	86	86	2658
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Magical Allotropes of Carbon: Prospects and Applications. Critical Reviews in Solid State and Materials Sciences, 2016, 41, 257-317.	6.8	167
2	Electrochemical characterization of in situ polypyrrole coated graphene nanocomposites. Synthetic Metals, 2011, 161, 1713-1719.	2.1	112
3	Enhanced Specific Capacitance of Self-Assembled Three-Dimensional Carbon Nanotube/Layered Silicate/Polyaniline Hybrid Sandwiched Nanocomposite for Supercapacitor Applications. ACS Sustainable Chemistry and Engineering, 2016, 4, 1392-1403.	3.2	95
4	Effects of various surfactants on the dispersion stability and electrical conductivity of surface modified graphene. Journal of Alloys and Compounds, 2013, 562, 134-142.	2.8	91
5	Synthesis, characterization and sorption studies of a zirconium(<scp>iv</scp>) impregnated highly functionalized mesoporous activated carbons. RSC Advances, 2020, 10, 13783-13798.	1.7	73
6	Effect of waste cellulose fibres on the charge storage capacity of polypyrrole and graphene/polypyrrole electrodes for supercapacitor application. RSC Advances, 2015, 5, 27347-27355.	1.7	63
7	Microwave absorption properties of double-layer composites using CoZn/NiZn/MnZn-ferrite and titanium dioxide. Journal of Magnetism and Magnetic Materials, 2015, 377, 111-116.	1.0	63
8	Polyindole Booster for Ti₃C₂T_x MXene Based Symmetric and Asymmetric Supercapacitor Devices. ACS Applied Energy Materials, 2021, 4, 3712-3723.	2.5	62
9	Synthesis and characterization of CuO nanoparticles using strong base electrolyte through electrochemical discharge process. Bulletin of Materials Science, 2016, 39, 469-478.	0.8	56
10	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
11	A Review on Biodegradable Polymeric Materials Striving Towards the Attainment of Green Environment. Journal of Polymers and the Environment, 2018, 26, 838-865.	2.4	52
12	Hierarchical self-assembled nanoclay derived mesoporous CNT/polyindole electrode for supercapacitors. RSC Advances, 2016, 6, 64271-64284.	1.7	48
13	Facile electrochemical synthesis of few layered graphene from discharged battery electrode and its application for energy storage. Arabian Journal of Chemistry, 2017, 10, 556-565.	2.3	46
14	Template-free single pot synthesis of SnS₂@Cu₂O/reduced graphene oxide (rGO) nanoflowers for high performance supercapacitors. New Journal of Chemistry, 2017, 41, 2702-2716.	1.4	46
15	Shape controlled green synthesis of CuO nanoparticles through ultrasonic assisted electrochemical discharge process and its application for supercapacitor. Materials Chemistry and Physics, 2017, 198, 16-34.	2.0	46
16	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
17	CdS-CoFe₂O₄@Reduced Graphene Oxide Nanohybrid: An Excellent Electrode Material for Supercapacitor Applications. Industrial & Engineering Chemistry Research, 2018, 57, 1350-1360.	1.8	45
18	Modified graphene/polyaniline nanocomposites for supercapacitor application. Macromolecular Research, 2012, 20, 415-421.	1.0	41

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19	One Pot Solvothermal Synthesis of Sandwich-like Mg Al Layered Double Hydroxide anchored Reduced Graphene Oxide: An excellent electrode material for Supercapacitor. Electrochimica Acta, 2016, 219, 214-226.	2.6	40
20	Self-assembled GNS wrapped flower-like MnCo2O4 nanostructures for supercapacitor application. Journal of Solid State Chemistry, 2019, 271, 282-291.	1.4	40
21	Nanoclay-based hierarchical interconnected mesoporous CNT/PPy electrode with improved specific capacitance for high performance supercapacitors. Dalton Transactions, 2016, 45, 9113-9126.	1.6	39
22	Single pot fabrication of N doped reduced GO (N-rGO) /ZnO-CuO nanocomposite as an efficient electrode material for supercapacitor application. Vacuum, 2018, 157, 145-154.	1.6	39
23	Mixing sequence driven controlled dispersion of graphene oxide in PC/PMMA blend nanocomposite and its effect on thermo-mechanical properties. Current Applied Physics, 2017, 17, 1158-1168.	1.1	37
24	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
25	A V₂O₅ nanorod decorated graphene/polypyrrole hybrid electrode: a potential candidate for supercapacitors. New Journal of Chemistry, 2017, 41, 1704-1713.	1.4	35
26	Zn-doped SnO₂ nano-urchin-enriched 3D carbonaceous framework for supercapacitor application. New Journal of Chemistry, 2018, 42, 955-963.	1.4	34
27	Polyanilineâ€Stabilized Intertwined Networkâ€like Ferrocene/Graphene Nanoarchitecture for Supercapacitor Application. Chemistry - an Asian Journal, 2017, 12, 900-909.	1.7	31
28	Development of compatibilized SBR and EPR nanocomposites containing dual filler system. Materials & Design, 2012, 35, 878-885.	5.1	30
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	Current trends in MXene research: properties and applications. Materials Chemistry Frontiers, 2021, 5, 7134-7169.	3.2	30
31	Boron Nitride based Ternary Nanocomposites with Different Carbonaceous Materials Decorated by Polyaniline for Supercapacitor Application. ChemistrySelect, 2019, 4, 3672-3680.	0.7	29
32	Processing of PMMA nanocomposites containing biocompatible GO and TiO₂nanoparticles. Materials and Manufacturing Processes, 2018, 33, 1291-1298.	2.7	28
33	Development of PMMA/TiO2 nanocomposites as excellent dental materials. Journal of Mechanical Science and Technology, 2019, 33, 4755-4760.	0.7	28
34	Fabrication of nanoclay based graphene/polypyrrole nanocomposite: An efficient ternary electrode material for high performance supercapacitor. Applied Clay Science, 2015, 118, 231-238.	2.6	27
35	Development of FeCoB/Graphene Oxide based microwave absorbing materials for X-Band region. Journal of Magnetism and Magnetic Materials, 2015, 384, 224-228.	1.0	26
36	Nanoclay based graphene polyaniline hybrid nanocomposites: promising electrode materials for supercapacitors. RSC Advances, 2015, 5, 68334-68344.	1.7	26

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37	A time efficient reduction strategy for bulk production of reduced graphene oxide using selenium powder as a reducing agent. Journal of Materials Science, 2016, 51, 6156-6165.	1.7	25
38	Investigations on doping of poly(3-methyl-thiophene) composites for supercapacitor applications. Macromolecular Research, 2012, 20, 351-357.	1.0	24
39	From 0D to 3D MXenes: their diverse syntheses, morphologies and applications. Materials Chemistry Frontiers, 2022, 6, 818-842.	3.2	24
40	Effect of SiC coated MWCNTs on the thermal and mechanical properties of PEI/LCP blend. Composites Part A: Applied Science and Manufacturing, 2010, 41, 1662-1667.	3.8	23
41	Facile synthesis of NiCo2O4 nanorods for electrocatalytic oxidation of methanol. Journal of Saudi Chemical Society, 2020, 24, 434-444.	2.4	22
42	A cobalt(II) metal-organic framework featuring supercapacitor application. Journal of Solid State Chemistry, 2020, 282, 121093.	1.4	20
43	Dispersion of SiC coated MWCNTs in PEI/silicone rubber blend and its effect on the thermal and mechanical properties. Journal of Applied Polymer Science, 2011, 119, 3574-3581.	1.3	19
44	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
45	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
46	Improvement of the Properties of PC/LCP/MWCNT with or without Silane Coupling Agents. Polymer-Plastics Technology and Engineering, 2009, 48, 1107-1112.	1.9	17
47	A study on the properties of PC/LCP/MWCNT with and without compatibilizers. Journal of Polymer Research, 2010, 17, 265-272.	1.2	16
48	SnS₂@Conducting Energy Level-Induced Functionalized Boron Nitride for an Asymmetric Supercapacitor. Energy & Fuels, 2022, 36, 2248-2259.	2.5	16
49	Microwave Absorption Properties of Double-Layer RADAR Absorbing Materials Based on Doped Barium Hexaferrite/TiO₂/Conducting Carbon Black. Journal of Engineering (United States), 2014, 2014, 1-5.	0.5	15
50	Reduced-graphene-oxide-and-strontium-titanate-based double-layered composite: an efficient microwave-absorbing material. Bulletin of Materials Science, 2017, 40, 301-306.	0.8	15
51	A thermomechanical study on selective dispersion and different loading of graphene oxide in polypropylene/polycarbonate blends. Journal of Applied Polymer Science, 2017, 134, 45062.	1.3	15
52	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
53	Effect of MWNTs and SiC-Coated MWNTs on Properties of PEEK/LCP Blend. Journal of Nanotechnology, 2009, 2009, 1-6.	1.5	14
54	Fundamental of polymer blends and its thermodynamics. , 2017, , 27-55.		14

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55	Effect of modified MWCNT on the properties of PPO/LCP blend. Journal of Materials Science, 2011, 46, 2050-2057.	1.7	13
56	Lanthanide (III) Metalâ€Organic Frameworks: Syntheses, Structures and Supercapacitor Application. ChemistrySelect, 2019, 4, 10624-10631.	0.7	12
57	Manipulating selective dispersion of reduced graphene oxide in polycarbonate/nylon 66 based blend nanocomposites for improved thermo-mechanical properties. RSC Advances, 2017, 7, 22145-22155.	1.7	11
58	One pot solvothermal synthesis of novel solid state N-Doped TiO2/n-Gr for efficient energy storage devices. Vacuum, 2019, 164, 88-97.	1.6	11
59	Influence of graphene oxide on the static and dynamic mechanical behavior of compatibilized polypropylene nanocomposites. Materialpruefung/Materials Testing, 2019, 61, 986-990.	0.8	11
60	Modification of MWCNT and its effect on ABS/LCP blend system. Journal of Applied Polymer Science, 2013, 129, 57-64.	1.3	10
61	Nanoclay Co-Doped CNT/Polyaniline Nanocomposite: A High-Performance Electrode Material for Supercapacitor Applications. ChemistrySelect, 2017, 2, 8807-8817.	0.7	10
62	Vibration Welding of Amorphous Thermoplastic Nanocomposites. Materials and Manufacturing Processes, 2012, 27, 786-790.	2.7	9
63	Boosted electrochemical performance of TiO2 decorated RGO/CNT hybrid nanocomposite by UV irradiation. Vacuum, 2019, 160, 421-428.	1.6	9
64	Synthesis and Electrochemical Characterization of Modified Graphene/Polypyrrole Nanocomposites. Macromolecular Symposia, 2012, 315, 177-187.	0.4	8
65	Development of coreâ€shell structure aided by SiCâ€coated MWNT in ABS/LCP blend. Polymers for Advanced Technologies, 2010, 21, 272-278.	1.6	7
66	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
67	Tribological behaviour and characterisation of Ni-WS2 composite coating. International Journal of Surface Science and Engineering, 2016, 10, 240.	0.4	7
68	Graphene oxide and TiO₂ based PMMA nanocomposites for dental applications: A comprehensive study of the mechanical properties. IOP Conference Series: Materials Science and Engineering, 2018, 377, 012082.	0.3	7
69	Titania-Coated Magnetite and Ni-Ferrite Nanocomposite-Based RADAR Absorbing Materials for Camouflaging Application. Polymer-Plastics Technology and Engineering, 2015, 54, 1483-1493.	1.9	6
70	Conductive Polymer Composites Based on Carbon Nanomaterials. Springer Series on Polymer and Composite Materials, 2017, , 117-142.	0.5	6
71	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
72	Development of EPDM nanocomposites in presence of compatibiliser. Plastics, Rubber and Composites, 2011, 40, 146-150.	0.9	3

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73	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
74	Paints and Coating of Multicomponent Product. Springer Series in Materials Science, 2016, , 157-226.	0.4	2
75	5-Benzoyl triazole as new structural dimension in glycoconjugates. Carbohydrate Research, 2018, 469, 23-30.	1.1	2
76	Mechanical and thermal behavior of pHEMA and pHEMA nanocomposites targeting for dental materials. Applied Nanoscience (Switzerland), 2021, 11, 1257-1265.	1.6	2
77	Present Status and Prospect of Graphene Research. Carbon Nanostructures, 2019, , 1-29.	0.1	2
78	CHAPTER 10. Recycling of Rubber Blends for Durable Construction. RSC Green Chemistry, 2018, , 259-274.	0.0	2
79	LCP Based Polymer Blend Nanocomposites. , 2016, , 251-272.		1
80	CHAPTER 11. Recycling of Rubber Composites and Nanocomposites. RSC Green Chemistry, 2018, , 275-309.	0.0	1
81	Polycarbosilane-derived silicon carbide-functionalized multi-walled carbon nanotubes and influence on the polyethersulfone nanocomposites. Journal of Composite Materials, 2011, 45, 2225-2236.	1.2	0
82	Artificial Neural Network-Based Approach for Prediction of Surface Energy in Polymeric Composites Using Machine Vision in Scanning Electron Microscopy Study. Journal of Advanced Microscopy Research, 2011, 6, 116-125.	0.3	0