Raghavan B Rakhi

List of Publications by Year
in descending order

72 papers	6,825 citations	109321 35 h-index	82547 72 g-index
73 all docs	73 docs citations	73 times ranked	9375 citing authors

#	Article	IF	Citations
1	Co-MoS2 nanoflower coated carbon fabric as a flexible electrode for supercapacitor. Materials Today: Proceedings, 2022, 50, 1-6.	1.8	8
2	Amperometric cholesterol biosensor based on cholesterol oxidase and Pt-Au/ MWNTs modified glassy carbon electrode. Materials Today: Proceedings, 2022, 50, 34-39.	1.8	9
3	Manganese cobalt oxide nanoflakes for electrochemical energy storage. Journal of Materials Science: Materials in Electronics, 2022, 33, 8484-8492.	2.2	10
4	WS₂ Nanoflowers as Efficient Electrode Materials for Supercapacitors. Energy Technology, 2022, 10, 2100976.	3.8	33
5	High-frequency electrochemical double layer capacitor based on carbon nanotubes ink coated eggshell membrane electrodes. Journal of Energy Storage, 2022, 45, 103799.	8.1	9
6	3Dâ€Architectured MoS₂â€Microflowerâ€Modified Electrodes toward Electrochemical Determination of Imidacloprid. ChemistrySelect, 2022, 7, .	1.5	4
7	One pot synthesis of tungsten oxide nanomaterial and application in the field of flexible symmetric supercapacitor energy storage device. Materials Today: Proceedings, 2022, 62, 848-851.	1.8	8
8	A study on the effect of phase conversion of tungsten nanostructures on their electrochemical energy storage performance. Materials Advances, 2022, 3, 5900-5910.	5.4	16
9	Tunable Capacitive Behavior in Metallopolymer-based Electrochromic Thin Film Supercapacitors. ACS Applied Materials & Interfaces, 2022, 14, 31900-31910.	8.0	10
10	Direct growth of Mn(OH)2/Co(OH)2 nanocomposite on carbon cloth for flexible supercapacitor electrodes. Journal of Energy Storage, 2021, 33, 102151.	8.1	10
11	Solvothermal synthesis of CuFeS2 nanoflakes as a promising electrode material for supercapacitors. Journal of Energy Storage, 2021, 33, 102063.	8.1	16
12	Cu-Fe based oxides and selenides as advanced electrode materials for high performance symmetric supercapacitors. Materials Letters, 2021, 296, 129827.	2.6	5
13	MnCo2O4 nanoneedles self-organized microstructures for supercapacitors. Materials Today Communications, 2021, 28, 102720.	1.9	16
14	Voltammetric determination of hydrogen peroxide using MoS2 modified glassy carbon electrodes. Materials Letters, 2021, 301, 130258.	2.6	13
15	High performance supercapacitors based on MoS2 nanostructures with near commercial mass loading. Journal of Alloys and Compounds, 2020, 819, 152963.	5.5	46
16	MoSe2 nanoflowers as efficient electrode materials for supercapacitors. Journal of Materials Science: Materials in Electronics, 2020, 31, 20571-20577.	2.2	19
17	Experimental investigations on combustion characteristics of fuel briquettes made from vegetable market waste and saw dust. Materials Today: Proceedings, 2020, 33, 3826-3831.	1.8	17
18	Development of ZnO@rGO nanocomposites for the enzyme free electrochemical detection of urea and glucose. Materials Advances, 2020, 1, 1939-1951.	5.4	22

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19	Metal ion-induced capacitance modulation in near-isostructural complexes-derived electrochromic coordination polymers. Materials Today Chemistry, 2020, 16, 100260.	3.5	5
20	Heterostructured MoS2-RuO2 nanocomposite: A promising electrode material for supercapacitors. Journal of Alloys and Compounds, 2020, 836, 155420.	5.5	47
21	Multifunctional nanohybrid material from discarded razor blades as cost-effective supercapacitor electrodes and oil-spill cleaners. Applied Surface Science, 2019, 487, 109-115.	6.1	10
22	Carbon Quantum Dot-Modified Carbon Paste Electrode-Based Sensor for Selective and Sensitive Determination of Adrenaline. ACS Omega, 2019, 4, 7903-7910.	3.5	50
23	Green synthesized gold nanoparticle dispersed porous carbon composites for electrochemical energy storage. Materials Science for Energy Technologies, 2019, 2, 389-395.	1.8	30
24	Preparation and properties of manipulated carbon nanotube composites and applications. , 2019, , 489-520.		17
25	Antibacterial and electrochemical activities of silver, gold, and palladium nanoparticles dispersed amorphous carbon composites. Applied Surface Science, 2019, 479, 96-104.	6.1	63
26	g-C₃N₄/CuO and g-C₃N₄/Co₃O₄ nanohybrid structures as efficient electrode materials in symmetric supercapacitors. RSC Advances, 2019, 9, 38430-38437.	3.6	33
27	2D organic-inorganic hybrid composite material as a high-performance supercapacitor electrode. Vacuum, 2019, 166, 335-340.	3.5	21
28	A Highâ€Performance Flexible Supercapacitor Anode Based On Polyaniline/Fe₃O₄ Composite@Carbon Cloth. ChemistrySelect, 2018, 3, 3234-3240.	1.5	21
29	Antimicrobial, electrochemical and photo catalytic activities of Zn doped Fe3O4 nanoparticles. Journal of Materials Science: Materials in Electronics, 2018, 29, 6040-6050.	2.2	30
30	Electrochemical Determination of Adrenaline Using MXene/Graphite Composite Paste Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 43343-43351.	8.0	129
31	One-pot synthesis of g-C₃N₄/MnO₂ and g-C₃N₄/SnO₂ hybrid nanocomposites for supercapacitor applications. Sustainable Energy and Fuels, 2018, 2, 2244-2251.	4.9	88
32	Titania nanotubes dispersed graphitic carbon nitride nanosheets as efficient electrode materials for supercapacitors. Journal of Materials Science: Materials in Electronics, 2018, 29, 16598-16608.	2.2	14
33	Reduced graphene oxide based ternary nanocomposite cathodes for high-performance aqueous asymmetric supercapacitors. Electrochimica Acta, 2017, 231, 539-548.	5.2	35
34	Zero-Dimensional Methylammonium Bismuth Iodide-Based Lead-Free Perovskite Capacitor. ACS Omega, 2017, 2, 5798-5802.	3.5	55
35	Direct Chemical Synthesis of MnO₂Nanowhiskers on Transition-Metal Carbide Surfaces for Supercapacitor Applications. ACS Applied Materials & Interfaces, 2016, 8, 18806-18814.	8.0	350
36	Novel amperometric glucose biosensor based on MXene nanocomposite. Scientific Reports, 2016, 6, 36422.	3.3	268

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37	Supercapacitors based on two dimensional VO 2 nanosheet electrodes in organic gel electrolyte. Electrochimica Acta, 2016, 220, 601-608.	5.2	58
38	Atmospheric effects on the photovoltaic performance of hybrid perovskite solar cells. Solar Energy Materials and Solar Cells, 2015, 137, 6-14.	6.2	117
39	Effect of Postetch Annealing Gas Composition on the Structural and Electrochemical Properties of Ti₂CT_x MXene Electrodes for Supercapacitor Applications. Chemistry of Materials, 2015, 27, 5314-5323.	6.7	771
40	Morphological and Electrochemical Cycling Effects in MnO₂ Nanostructures by 3D Electron Tomography. Advanced Functional Materials, 2014, 24, 3130-3143.	14.9	107
41	MnO₂: Morphological and Electrochemical Cycling Effects in MnO₂ Nanostructures by 3D Electron Tomography (Adv. Funct. Mater. 21/2014). Advanced Functional Materials, 2014, 24, 3106-3106.	14.9	2
42	Nanostructured cobalt sulfide-on-fiber with tunable morphology as electrodes for asymmetric hybrid supercapacitors. Journal of Materials Chemistry A, 2014, 2, 16190-16198.	10.3	191
43	Shape-controlled porous nanocarbons for high performance supercapacitors. Journal of Materials Chemistry A, 2014, 2, 5236.	10.3	53
44	Enhanced Rate Performance of Mesoporous Co₃O₄Nanosheet Supercapacitor Electrodes by Hydrous RuO₂Nanoparticle Decoration. ACS Applied Materials & Interfaces, 2014, 6, 4196-4206.	8.0	226
45	A general approach toward enhancement of pseudocapacitive performance of conducting polymers by redox-active electrolytes. Journal of Power Sources, 2014, 267, 521-526.	7.8	46
46	Morphology-Dependent Enhancement of the Pseudocapacitance of Template-Guided Tunable Polyaniline Nanostructures. Journal of Physical Chemistry C, 2013, 117, 15009-15019.	3.1	103
47	Conformal coating of Ni(OH)2 nanoflakes on carbon fibers by chemical bath deposition for efficient supercapacitor electrodes. Journal of Materials Chemistry A, 2013, 1, 14897.	10.3	96
48	Effect of pH-induced chemical modification of hydrothermally reduced graphene oxide on supercapacitor performance. Journal of Power Sources, 2013, 233, 313-319.	7.8	180
49	Facile synthesis of polyaniline nanotubes using reactive oxide templates for high energy density pseudocapacitors. Journal of Materials Chemistry A, 2013, 1, 3315.	10.3	182
50	Capacitance enhancement of polyaniline coated curved-graphene supercapacitors in a redox-active electrolyte. Nanoscale, 2013, 5, 4134.	5.6	151
51	Influence of calcination temperature on the morphology and energy storage properties of cobalt oxide nanostructures directly grown over carbon cloth substrates. Materials for Renewable and Sustainable Energy, 2013, 2, 1.	3.6	24
52	Substrate Dependent Self-Organization of Mesoporous Cobalt Oxide Nanowires with Remarkable Pseudocapacitance. Nano Letters, 2012, 12, 2559-2567.	9.1	778
53	Effect of oxygen vacancy distribution on the thermoelectric properties of La-doped SrTiO3 epitaxial thin films. Journal of Applied Physics, 2012, 112, .	2.5	18
54	Cerium Oxide Dispersed Multi Walled Carbon Nanotubes as Cathode Material for Flexible Field Emitters. Journal of Nanoscience and Nanotechnology, 2012, 12, 6718-6723.	0.9	5

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55	High energy density supercapacitors using macroporous kitchen sponges. Journal of Materials Chemistry, 2012, 22, 14394.	6.7	83
56	Nanostructured Ternary Electrodes for Energyâ€Storage Applications. Advanced Energy Materials, 2012, 2, 381-389.	19.5	170
57	Nanoroses of Nickel Oxides: Synthesis, Electron Tomography Study, and Application in CO Oxidation and Energy Storage. ChemSusChem, 2012, 5, 1241-1248.	6.8	30
58	Conducting polymer/carbon nanocoil composite electrodes for efficient supercapacitors. Journal of Materials Chemistry, 2012, 22, 5177.	6.7	89
59	Electrochemical Energy Storage Devices Using Electrodes Incorporating Carbon Nanocoils and Metal Oxides Nanoparticles. Journal of Physical Chemistry C, 2011, 115, 14392-14399.	3.1	101
60	High-Performance Nanostructured Supercapacitors on a Sponge. Nano Letters, 2011, 11, 5165-5172.	9.1	670
61	High performance supercapacitors using metal oxide anchored graphene nanosheet electrodes. Journal of Materials Chemistry, 2011, 21, 16197.	6.7	280
62	Enhancement of the energy storage properties of supercapacitors using graphene nanosheets dispersed with metal oxide-loaded carbon nanotubes. Journal of Power Sources, 2011, 196, 8858-8865.	7.8	127
63	A cholesterol biosensor based on gold nanoparticles decorated functionalized graphene nanoplatelets. Thin Solid Films, 2011, 519, 5667-5672.	1.8	55
64	Electron field emission from magnetic nanomaterial encapsulated multi-walled carbon nanotubes. Applied Physics A: Materials Science and Processing, 2010, 98, 195-202.	2.3	13
65	Metal decorated graphene nanosheets as immobilization matrix for amperometric glucose biosensor. Sensors and Actuators B: Chemical, 2010, 145, 71-77.	7.8	260
66	A Glucose Biosensor Based on Deposition of Glucose Oxidase onto Crystalline Gold Nanoparticle Modified Carbon Nanotube Electrode. Journal of Physical Chemistry B, 2009, 113, 3190-3194.	2.6	102
67	Electron field emitters based on multi-walled carbon nanotubes coated with conducting polymer/metal/metal-oxide composites. Journal of Experimental Nanoscience, 2009, 4, 67-76.	2.4	16
68	Electron field emission properties of conducting polymer coated multi walled carbon nanotubes. Applied Surface Science, 2008, 254, 6770-6774.	6.1	36
69	Synthesis and hydrogen storage properties of carbon nanotubes. International Journal of Hydrogen Energy, 2008, 33, 381-386.	7.1	52
70	Electron field emitters based on multiwalled carbon nanotubes decorated with nanoscale metal clusters. Journal of Nanoparticle Research, 2008, 10, 179-189.	1.9	31
71	Field emission from carbon nanotubes on a graphitized carbon fabric. Carbon, 2008, 46, 1656-1663.	10.3	44
72	Effect of Purity and Substrate on Field Emission Properties of Multi-walled Carbon Nanotubes. Nanoscale Research Letters, 2007, 2, 331-336.	5.7	13