Sunkara Srinivasa Rao

List of Publications by Year
in descending order

51 papers	1,484 citations	257450 24 h-index	330143 37 g-index

51 all docs	51 docs citations	51 times ranked	1624 citing authors

#	Article	IF	Citations
1	Carbon nanotube/metal-sulfide composite flexible electrodes for high-performance quantum dot-sensitized solar cells and supercapacitors. Scientific Reports, 2017, 7, 46519.	3.3	134
2	Cobalt sulfide thin film as an efficient counter electrode for dye-sensitized solar cells. Electrochimica Acta, 2014, 133, 174-179.	5.2	73
3	Facile synthesis of efficient construction of tungsten disulfide/iron cobaltite nanocomposite grown on nickel foam as a battery-type energy material for electrochemical supercapacitors with superior performance. Journal of Colloid and Interface Science, 2022, 609, 434-446.	9.4	69
4	NiMoO₄@NiWO₄ honeycombs as a high performance electrode material for supercapacitor applications. Dalton Transactions, 2018, 47, 9057-9063.	3.3	68
5	Synthesis of nanostructured metal sulfides via a hydrothermal method and their use as an electrode material for supercapacitors. New Journal of Chemistry, 2018, 42, 19183-19192.	2.8	53
6	One-step hydrothermal synthesis of CuS@MnS on Ni foam for high performance supercapacitor electrode material. Electrochimica Acta, 2019, 305, 467-473.	5.2	53
7	Facile chemical bath deposition of CuS nano peas like structure as a high efficient counter electrode for quantum-dot sensitized solar cells. Journal of Electroanalytical Chemistry, 2015, 739, 20-27.	3.8	48
8	Facile synthesis of ZnWO4@WS2 cauliflower-like structures for supercapacitors with enhanced electrochemical performance. Journal of Electroanalytical Chemistry, 2019, 841, 86-93.	3.8	47
9	Hydrothermal synthesis and pseudocapacitive properties of morphology-tuned nickel sulfide (NiS) nanostructures. New Journal of Chemistry, 2018, 42, 2733-2742.	2.8	45
10	Achieving copper sulfide leaf like nanostructure electrode for high performance supercapacitor and quantum-dot sensitized solar cells. Applied Surface Science, 2018, 435, 666-675.	6.1	44
11	Enhanced photovoltaic performance and morphological control of the PbS counter electrode grown on functionalized self-assembled nanocrystals for quantum-dot sensitized solar cells via cost-effective chemical bath deposition. Journal of Materials Chemistry C, 2015, 3, 10195-10206.	5.5	37
12	Time Varied Morphology Controllable Fabrication of NiS Nanosheets Structured Thin Film and its Application as a Counter Electrode for QDSSC. Journal of Physical Chemistry C, 2015, 119, 11419-11429.	3.1	35
13	Optimal-Temperature-Based Highly Efficient NiS Counter Electrode for Quantum-Dot-Sensitized Solar Cells. European Journal of Inorganic Chemistry, 2014, 2014, 4281-4286.	2.0	34
14	Nickel doped cobalt sulfide as a high performance counter electrode for dye-sensitized solar cells. Applied Surface Science, 2015, 328, 78-85.	6.1	34
15	One-Pot Hydrothermal Synthesis of Novel Cu-MnS with PVP Cabbage-Like Nanostructures for High-Performance Supercapacitors. Energies, 2018, 11, 1590.	3.1	34
16	Highly efficient and stable quantum dot-sensitized solar cells based on a Mn-doped CuS counter electrode. RSC Advances, 2015, 5, 2963-2967.	3.6	32
17	Fabrication of a snail shell-like structured MnO₂@CoNiO₂ composite electrode for high performance supercapacitors. RSC Advances, 2017, 7, 12301-12308.	3.6	31
18	A cabbage leaf like nanostructure of a NiS@ZnS composite on Ni foam with excellent electrochemical performance for supercapacitors. Dalton Transactions, 2019, 48, 578-586.	3.3	31

#	Article	IF	Citations
19	A strategy to enhance the efficiency of dye-sensitized solar cells by the highly efficient TiO2/ZnS photoanode. Dalton Transactions, 2015, 44, 2447-2455.	3.3	30
20	The effect of manganese in a CdS/PbS colloidal quantum dot sensitized TiO₂ solar cell to enhance its efficiency. New Journal of Chemistry, 2015, 39, 4805-4813.	2.8	26
21	Investigation on novel CuS/NiS composite counter electrode for hindering charge recombination in quantum dot sensitized solar cells. Journal of Electroanalytical Chemistry, 2016, 777, 123-132.	3.8	25
22	Enhancing the photovoltaic performance and stability of QDSSCs using surface reinforced Pt nanostructures with controllable morphology and superior electrocatalysis via cost-effective chemical bath deposition. Dalton Transactions, 2016, 45, 3450-3463.	3.3	25
23	A hydrothermal reaction combined with a post anion-exchange reaction of hierarchically nanostructured NiCo₂S₄ for high-performance QDSSCs and supercapacitors. New Journal of Chemistry, 2017, 41, 10037-10047.	2.8	25
24	The synthesis and characterization of lead sulfide with cube-like structure as a counter electrode in the presence of urea using a hydrothermal method. New Journal of Chemistry, 2015, 39, 7379-7388.	2.8	24
25	Dice-Like Nanostructure of a CuS@PbS Composite for High-Performance Supercapacitor Electrode Applications. Energies, 2018, 11, 1624.	3.1	24
26	Synthesis of CNTs on ZnO/NiS composite as an advanced electrode material for high-performance supercapacitors. Journal of Energy Storage, 2020, 28, 101199.	8.1	24
27	Reduced recombination with an optimized barrier layer on TiO₂ in PbS/CdS core shell quantum dot sensitized solar cells. New Journal of Chemistry, 2016, 40, 3423-3431.	2.8	23
28	Construction of novel nanocomposite ZnO@CoFe₂O₄ microspheres grown on nickel foam for high performance electrochemical supercapacitors. Analytical Methods, 2018, 10, 223-229.	2.7	23
29	Facile synthesis of nanoparticles anchored on honeycomb-like MnCo2S4 nanostructures as a binder-free electroactive material for supercapacitors. Journal of Energy Storage, 2020, 27, 101159.	8.1	23
30	Multiple structural defects in poor crystalline nickelâ€doped tungsten disulfide nanorods remarkably enhance supercapacitive performance. International Journal of Energy Research, 2022, 46, 14227-14239.	4.5	23
31	Densely packed zinc sulfide nanoparticles on TiO₂ for hindering electron recombination in dye-sensitized solar cells. New Journal of Chemistry, 2016, 40, 9176-9186.	2.8	22
32	Influence of solvents in the preparation of cobalt sulfide for supercapacitors. Royal Society Open Science, 2017, 4, 170427.	2.4	22
33	Facile synthesis of FeS2/PVP composite as high-performance electrodes for supercapacitors. Journal of Energy Storage, 2020, 28, 101216.	8.1	22
34	The effect of TiO₂ nanoflowers as a compact layer for CdS quantum-dot sensitized solar cells with improved performance. Dalton Transactions, 2015, 44, 12852-12862.	3.3	21
35	Improved photovoltaic performance of quantum dot-sensitized solar cells using multi-layered semiconductors with the effect of a ZnSe passivation layer. New Journal of Chemistry, 2017, 41, 5942-5949.	2.8	21
36	Exploring the effect of manganese in lead sulfide quantum dot sensitized solar cell to enhance the photovoltaic performance. RSC Advances, 2015, 5, 33136-33145.	3.6	20

#	Article	IF	Citations
37	Well-dispersed NiS nanoparticles grown on a functionalized CoS nanosphere surface as a high performance counter electrode for quantum dot-sensitized solar cells. RSC Advances, 2016, 6, 29003-29019.	3.6	20
38	A Novel Off-Grid Optimal Hybrid Energy System for Rural Electrification of Tanzania Using a Closed Loop Cooled Solar System. Energies, 2018, 11, 905.	3.1	20
39	Enhance the performance of quantum dot-sensitized solar cell by manganese-doped ZnS films as a passivation layer. Organic Electronics, 2015, 26, 200-207.	2.6	18
40	Layer by layer approach to enhance capacitance using metal sulfides for supercapacitor applications. Materials Letters, 2018, 231, 64-67.	2.6	15
41	The influence of in situ deposition techniques on PbS seeded CdS/CdSe for enhancing the photovoltaic performance of quantum dot sensitized solar cells. Journal of Electroanalytical Chemistry, 2016, 773, 27-38.	3.8	13
42	Low-cost solution processed nano millet like structure CoS2 film superior to pt as counter electrode for quantum dot sensitized solar cells. Electronic Materials Letters, 2015, 11, 485-493.	2.2	11
43	Development of Novel and Ultra-High-Performance Supercapacitor Based on a Four Layered Unique Structure. Electronics (Switzerland), 2018, 7, 121.	3.1	10
44	In situ synthesis of CuS nano platelets on nano wall networks of Ni foam and its application as an efficient counter electrode for quantum dot sensitized solar cells. Organic Electronics, 2017, 42, 115-122.	2.6	9
45	One-pot facile synthesis of nanorice-like structured CuS@WS2 as an advanced electroactive material for high-performance supercapacitors. SN Applied Sciences, 2020, 2, 1.	2.9	9
46	Solution processed metal-doped NiS/PEDOT:PSS composite thin films as an efficient electrode for quantum-dot sensitized solar cells. Materials Research Bulletin, 2018, 102, 369-378.	5.2	7
47	Facile Synthesis of Coral Reef-Like ZnO/CoS2 Nanostructure on Nickel Foam as an Advanced Electrode Material for High-Performance Supercapacitors. Energies, 2021, 14, 4925.	3.1	7
48	An innovative catalyst design as an efficient electro catalyst and its applications in quantum-dot sensitized solar cells and the oxygen reduction reaction for fuel cells. New Journal of Chemistry, 2017, 41, 2098-2111.	2.8	6
49	Hierarchical nanospheres of NiCoS/NF for high-performance supercapacitors. Nano Structures Nano Objects, 2019, 19, 100366.	3.5	6
50	Effectively constructed by the interior and interface coexisting design of cobaltâ€doped <scp> NiFe ₂ S ₄ </scp> nanosheets for highâ€performance supercapacitors. International Journal of Energy Research, 2022, 46, 9358-9370.	4.5	6
51	Hydrothermal synthesis of layered CoS@WS2 nanocomposite as a potential electrode for high-performance supercapacitor applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 16290-16298.	2.2	2