Influence of Cu Vacancy on Knit Coir Mat Structured Cu Quantum Dot Sensitized Solar Cells

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Citation Report

#	Article	IF	Citations
1	Noble metal-free counter electrodes utilizing Cu₂ZnSnS₄loaded with MoS₂for efficient solar cells based on ZnO nanowires co-sensitized with CuInS₂â€“CdSe quantum dots. Journal of Materials Chemistry A, 2015, 3, 14378-14388.	5.2	41
2	Cost-effective and morphology controllable PVP based highly efficient CuS counter electrodes for high-efficiency quantum dot-sensitized solar cells. Dalton Transactions, 2015, 44, 11340-11351.	1.6	35
3	Ultrafast Hole Trapping and Relaxation Dynamics in p-Type CuS Nanodisks. Journal of Physical Chemistry Letters, 2015, 6, 2671-2675.	2.1	97
4	Highly efficient, stable and reproducible CdSe-sensitized solar cells using copper sulfide as counter electrodes. Journal of Materials Chemistry A, 2015, 3, 6557-6564.	5.2	64
5	Novel high-temperature supercapacitor combined dye sensitized solar cell from a sulfated Î²-cyclodextrin/PVP/MnCO₃ composite. Journal of Materials Chemistry A, 2015, 3, 10225-10232.	5.2	54
6	Metal chalcogenides as counter electrode materials in quantum dot sensitized solar cells: a perspective. Journal of Materials Chemistry A, 2015, 3, 23074-23089.	5.2	105
7	Stacked Cu_{1.8}S nanoplatelets as counter electrode for quantum dot-sensitized solar cell. RSC Advances, 2015, 5, 100560-100567.	1.7	18
8	3D Graphene Frameworks with Uniformly Dispersed CuS as an Efficient Catalytic Electrode for Quantum Dot-Sensitized Solar Cells. Electrochimica Acta, 2016, 208, 288-295.	2.6	29
9	Interdigitated CuS/TiO2 Nanotube Bulk Heterojunctions Achieved via Ion Exchange. Electrochimica Acta, 2016, 199, 180-186.	2.6	17
10	A new probe into thin copper sulfide counter electrode with thickness below 100 nm for quantum dot-sensitized solar cells. Electrochimica Acta, 2016, 205, 45-52.	2.6	7
11	Controlled growth of a nanoplatelet-structured copper sulfide thin film as a highly efficient counter electrode for quantum dot-sensitized solar cells. RSC Advances, 2016, 6, 45809-45818.	1.7	12
12	Mechanochemically synthesized sub-5 nm sized CuS quantum dots with high visible-light-driven photocatalytic activity. Applied Surface Science, 2016, 384, 272-278.	3.1	66
13	Fabrication of CuS@Ni₃S₄â€•polyacrylonitrile textile fabric with enhanced reusability for the treatment of dyes wastewater. ChemistrySelect, 2016, 1, 3618-3622.	0.7	6
14	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.	1.9	25
15	Recent advances in counter electrodes of quantum dot-sensitized solar cells. RSC Advances, 2016, 6, 90082-90099.	1.7	41
16	Phase transformations of novel Cu_xS nanostructures as highly efficient counter electrodes for stable and reproducible quantum dot-sensitized solar cells. RSC Advances, 2016, 6, 101185-101197.	1.7	12
17	One-step fabrication of copper sulfide nanoparticles decorated on graphene sheets as highly stable and efficient counter electrode for CdS-sensitized solar cells. Japanese Journal of Applied Physics, 2016, 55, 112301.	0.8	17
18	Hydroxyl solvents prompted interwoven morphological deposition of iron sulfide nanoparticles as an effective counter electrode for quantum dot sensitized Solar cell. Electrochimica Acta, 2016, 204, 255-262.	2.6	10

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19	Phase Transformations of Copper Sulfide Nanocrystals: Towards Highly Efficient Quantumâ€Dotâ€Sensitized Solar Cells. ChemPhysChem, 2016, 17, 771-776.	1.0	40
20	In situ synthesis of two-dimensional leaf-like Cu₂ZnSnS₄ plate arrays as a Pt-free counter electrode for efficient dye-sensitized solar cells. Green Chemistry, 2016, 18, 2793-2801.	4.6	52
21	Pulsed voltage deposited lead selenide thin film as efficient counter electrode for quantum-dot-sensitized solar cells. Applied Surface Science, 2016, 369, 436-442.	3.1	29
22	A Player Often Neglected: Electrochemical Comprehensive Analysis of Counter Electrodes for Quantum Dot Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 7766-7776.	4.0	15
23	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.	1.6	25
24	Microwave-Assisted Hydrothermal Synthesis of CuS Nanoplate Films on Conductive Substrates as Efficient Counter Electrodes for Liquid-Junction Quantum Dot-Sensitized Solar Cells. Journal of the Electrochemical Society, 2017, 164, H215-H224.	1.3	24
25	Compound Copper Chalcogenide Nanocrystals. Chemical Reviews, 2017, 117, 5865-6109.	23.0	670
26	Oneâ€Step Synthesis of a MoS₂â^'CuS Composite with High Electrochemical Activity as an Effective Counter Electrode for CdS/CdSe Sensitized Solar Cells. ChemElectroChem, 2017, 4, 1984-1989.	1.7	13
27	Carbon nanotube/metal-sulfide composite flexible electrodes for high-performance quantum dot-sensitized solar cells and supercapacitors. Scientific Reports, 2017, 7, 46519.	1.6	134
28	Improving the efficiency of quantum-dot-sensitized solar cells by optimizing the growth time of the CuS counter electrode. Applied Surface Science, 2017, 416, 446-453.	3.1	23
29	Improving the stability of CdS quantum dot sensitized solar cell using highly efficient and porous CuS counter electrode. Journal of Renewable and Sustainable Energy, 2017, 9, .	0.8	15
30	Three-dimensional nanostructured electrodes for efficient quantum-dot-sensitized solar cells. Nano Energy, 2017, 32, 130-156.	8.2	73
31	Diversified copper sulfide (Cu_{2â^'x}S) micro-/nanostructures: a comprehensive review on synthesis, modifications and applications. Nanoscale, 2017, 9, 11357-11404.	2.8	154
32	Phase Transformation and Evolution of Localized Surface Plasmon Resonance in Cu_{2â€“x}S Thin Films Deposited at 60 Â°C. Journal of Physical Chemistry C, 2017, 121, 25440-25446.	1.5	18
33	Enhanced Photocatalytic Performance under Visible and Near-Infrared Irradiation of Cu1.8Se/Cu3Se2 Composite via a Phase Junction. Nanomaterials, 2017, 7, 19.	1.9	29
34	H3PO4 treated surface modified CuS counter electrodes with high electrocatalytic activity for enhancing photovoltaic performance of quantum dot-sensitized solar cells. Applied Surface Science, 2018, 440, 1022-1026.	3.1	16
35	Investigation of metal sulfide composites as counter electrodes for improved performance of quantum dot sensitized solar cells. Materials Research Bulletin, 2018, 100, 198-205.	2.7	10
36	Carbon vacancy-induced enhancement of the visible light-driven photocatalytic oxidation of NO over g-C 3 N 4 nanosheets. Applied Surface Science, 2018, 430, 380-389.	3.1	189

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37	Composition-Dependent Electrocatalytic Activity of Cobalt Sulfides for Triiodide Reduction in Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2018, 122, 13267-13276.	1.5	15
38	Quantum dot-sensitized solar cells. Chemical Society Reviews, 2018, 47, 7659-7702.	18.7	344
40	Pulsed voltage deposited hierarchical dendritic PbS film as a highly efficient and stable counter electrode for quantum-dot-sensitized solar cells. Journal of Materials Chemistry C, 2018, 6, 6823-6831.	2.7	16
41	An Optimum Electrochemical Production Method of Few-Layers and Few-Defective Graphene. ECS Journal of Solid State Science and Technology, 2019, 8, M75-M84.	0.9	1
42	Performance improvement strategies for quantum dot-sensitized solar cells: a review. Journal of Materials Chemistry A, 2019, 7, 2464-2489.	5.2	90
43	Optimum Electrochemical Production Method of Few-Layers and Few-Defective Graphene. SSRN Electronic Journal, 0, , .	0.4	0
44	Preparation of CoS₂ counter electrode on Ni sheet for QDSSCs via electrophoretic deposition of ZIF-67. Journal Physics D: Applied Physics, 2019, 52, 215105.	1.3	4
45	Recent progress in quantum dot sensitized solar cells: an inclusive review of photoanode, sensitizer, electrolyte, and the counter electrode. Journal of Materials Chemistry C, 2019, 7, 4911-4933.	2.7	93
46	Recent progress in quantum dot-sensitized solar cells employing metal chalcogenides. Journal of Materials Chemistry A, 2019, 7, 26205-26226.	5.2	35
47	The effect of CuS counter electrodes for the CdS/CdSe quantum dot co-sensitized solar cells based on zinc titanium mixed metal oxides. Journal of Materials Science, 2019, 54, 4884-4892.	1.7	15
48	In Situ Microwaveâ€Assisted Fabrication of Hierarchically Arranged Metal Sulfide Counter Electrodes to Boost Stability and Efficiency of Quantum Dotâ€Sensitized Solar Cells. Advanced Materials Interfaces, 2019, 6, 1801745.	1.9	10
49	Optimizing the Multiwall Carbon Nanotubes Counter Electrode by Depositing CuS Quantum Dots. IEEE Journal of Photovoltaics, 2019, 9, 119-123.	1.5	0
50	Microwave-assisted synthesis of localized surface plasmon resonance enhanced bismuth selenide (Bi2Se3) layers for non-enzymatic glucose sensing. Journal of Electroanalytical Chemistry, 2020, 856, 113629.	1.9	21
51	A novel strategy to design a multilayer functionalized Cu₂S thin film counter electrode with enhanced catalytic activity and stability for quantum dot sensitized solar cells. Nanoscale Advances, 2020, 2, 833-843.	2.2	6
52	Enhanced performance of all solid-state quantum dot-sensitized solar cells via synchronous deposition of PbS and CdS quantum dots. New Journal of Chemistry, 2020, 44, 505-512.	1.4	3
53	Heat-treatment-induced development of the crystalline structure and chemical stoichiometry of a CuxS counter electrode, and the influence on performance of quantum-dot-sensitized solar cells. Journal of Colloid and Interface Science, 2020, 579, 805-814.	5.0	8
54	Transition metal nanohybrid as efficient and stable counter electrode for heterostructure quantum dot sensitized solar cells: A trial. Solar Energy, 2020, 201, 674-681.	2.9	15
55	Influence of deposition temperature on the structural, morphological, optical and photoelectrochemical properties of CBD deposited Cu2SnS3 thin films. Journal of Alloys and Compounds, 2020, 831, 154768.	2.8	22

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56	Performance of functionalized 1T-MoS2 as composite counter electrode material for QDSSCs and its analogy with 2H-MoS2. Materials Research Bulletin, 2021, 134, 111096.	2.7	11
57	Optimization of cobalt-manganese binary sulfide for high performance supercapattery devices. Electrochimica Acta, 2021, 368, 137529.	2.6	76
58	In situ solvothermal growth of Cu2ZnSnS4 thin film for counter electrode of dye-sensitized solar cells. Solid State Sciences, 2021, 113, 106547.	1.5	8
59	Bimetallic copper nickel sulfide electrocatalyst by one step chemical bath deposition for efficient and stable overall water splitting applications. Journal of Colloid and Interface Science, 2022, 606, 101-112.	5.0	56
60	Magnetron sputtered tungsten di-sulfide: An efficient battery grade electrode for supercapattery devices. Journal of Energy Storage, 2022, 46, 103861.	3.9	20
61	Epitaxial Engineering Strategy to Amplify Localized Surface Plasmon Resonance and Electrocatalytic Activity Enhancement in Layered Bismuth Selenide by Phosphorus Functionalization. Batteries and Supercaps, 2022, 5, .	2.4	5
62	Stability of quantum dot-sensitized solar cells: A review and prospects. Nano Energy, 2022, 94, 106854.	8.2	29
63	Multifunctional photoâ€electrocatalysts of copper sulfides prepared via pulsed laser ablation in liquid: Phase formation kinetics and photoâ€electrocatalytic activity. International Journal of Energy Research, 2022, 46, 8201-8217.	2.2	5
64	Graphene quantum dots and CuS microflowers anchored rGO composite counter electrode for the enhanced performance of quantum dot sensitized solar cells. Diamond and Related Materials, 2022, 125, 109033.	1.8	7
65	Green AgBiSe2/AgBiS2 core shell quantum dots for stable solar cells by robust SILAR method. Journal of Cleaner Production, 2022, 366, 132760.	4.6	11
66	Interface architecture of low-cost and stable three-dimensional composite counter electrodes for QDSCs. Inorganic Chemistry Frontiers, 2022, 9, 6567-6573.	3.0	2
67	Towards Environment Friendly Hydrothermally Synthesized Li+, Rb+, In3+ Intercalated Phosphotungstate (PW12O40) Thin Films. Materials, 2023, 16, 888.	1.3	0
68	Manganese (Sulfide/Oxide) based electrode materials advancement in supercapattery devices. Materials Science in Semiconductor Processing, 2023, 158, 107366.	1.9	22
77	Metal-chalcogenides nanocomposites as counter electrodes for quantum dots sensitized solar cells. , 2024, , 167-185.		0