

Sandesh R Jadkar

List of Publications by Year in descending order

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times ranked

2766
citing authors

#	ARTICLE	IF	CITATIONS
1	Solution-processed Cd-substituted CZTS nanocrystals for sensitized liquid junction solar cells. Journal of Alloys and Compounds, 2022, 890, 161575.	2.8	9
2	Preparation and characterization of In_2Se_3 thin-film photoanodes for photoelectrochemical water splitting. Journal of Solid State Electrochemistry, 2022, 26, 219-232.	1.2	9
3	3D Urchin-like Hierarchical Black TiO_2 Hollow Nanospheres: A Highly Active and Stable Electrocatalyst for Water Oxidation in Alkaline and Neutral Media. ACS Applied Energy Materials, 2022, 5, 674-684.	2.5	3
4	Humidity sensor properties of hydrothermally grown rutile- TiO_2 microspheres on interdigital electrodes (IDEs). Journal of Materials Science: Materials in Electronics, 2022, 33, 11825-11840.	1.1	1
5	Annealing temperature effect on structural and optoelectronic properties of In_2Se_3 thin films towards highly stable photodetector applications. Journal of Molecular Structure, 2022, 1265, 133336.	1.8	7
6	Role of Solvents in the Preparation of Methylammonium Bismuth Iodide (MBI) Perovskite Films for Self-Biased Photodetector Applications. ACS Applied Electronic Materials, 2022, 4, 2793-2804.	2.0	6
7	Investigations of the structural, optoelectronic and band alignment properties of $\text{Cu}_2\text{ZnSnS}_4$ prepared by hot-injection method towards low-cost photovoltaic applications. Journal of Alloys and Compounds, 2021, 854, 157093.	2.8	23
8	Carbon functionalized bismuth vanadate thin films based photoelectrochemical logic gates. Journal of Alloys and Compounds, 2021, 855, 157524.	2.8	4
9	An innovative approach for waste heat utilization from municipal biogas plant. AIP Conference Proceedings, 2021, , .	0.3	0
10	Weather Station for Solar PV Power Plant Using Arduino Mega. , 2021, , .		2
11	Field Emission Characteristics of Double Walled TiO_2 Nanotubes. ES Materials & Manufacturing, 2021, , .	1.1	1
12	Phase stability investigation of CsPbI_3 perovskite for solar cell application. AIP Conference Proceedings, 2021, , .	0.3	3
13	Charge - discharge cycle performance of lead acid battery for energy storage application. AIP Conference Proceedings, 2021, , .	0.3	0
14	Investigation of optical and structural properties of ZnSe nanocrystals for heterojunction solar cell applications. AIP Conference Proceedings, 2021, , .	0.3	1
15	2D alignment of zinc oxide@ZIF8 nanocrystals for photoelectrochemical water splitting. New Journal of Chemistry, 2021, 45, 3498-3507.	1.4	12
16	Synthesis and Characterization of Various Doped TiO_2 Nanocrystals for Dye-Sensitized Solar Cells. ACS Omega, 2021, 6, 3470-3482.	1.6	48
17	Role of Deposition Pressure on Properties of Phosphorus Doped Hydrogenated Nano-Crystalline Silicon (nc-Si:H) Thin Films Prepared by the Cat-CVD Method. Recent Innovations in Chemical Engineering, 2021, 14, 46-57.	0.2	0
18	Photoelectrochemical performance of MWCNT@Ag@ZnO ternary hybrid: a study of Ag loading and MWCNT garnishing. Journal of Materials Science, 2021, 56, 8627-8642.	1.7	8

#	ARTICLE	IF	CITATIONS
19	Deposition Time-dependent Study of Structural and Optical Properties of PbS Thin Films Grown by CBD Method. Recent Innovations in Chemical Engineering, 2021, 14, 35-45.	0.2	0
20	Amorphous-to-Nanocrystalline Transition in Silicon Thin Films by Hydrogen Diluted Silane Using PE-CVD Method. Recent Innovations in Chemical Engineering, 2021, 14, 58-70.	0.2	0
21	Ternary Cu ₂ SnS ₃ : Synthesis, Structure, Photoelectrochemical Activity, and Heterojunction Band Offset and Alignment. Chemistry of Materials, 2021, 33, 1983-1993.	3.2	30
22	Experimental and Theoretical Investigation of the Structural and Optoelectronic Properties of Fe-Doped Lead-Free Cs ₂ AgBiCl ₆ Double Perovskite. Chemistry - A European Journal, 2021, 27, 7408-7417.	1.7	28
23	Solution-processed electrochemical synthesis of ZnFe ₂ O ₄ photoanode for photoelectrochemical water splitting. Journal of Solid State Electrochemistry, 2021, 25, 1835-1846.	1.2	7
24	Influence of Au plasmons and their synergistic effects with ZnO nanorods for photoelectrochemical water splitting applications. Journal of Materials Science: Materials in Electronics, 2021, 32, 20525-20538.	1.1	3
25	An interlinked computational-experimental investigation into SnS nanoflakes for field emission applications. New Journal of Chemistry, 2021, 45, 11768-11779.	1.4	3
26	Hydrothermally synthesized CuO nanostructures and their application in humidity sensing. AIP Conference Proceedings, 2021, , .	0.3	7
27	A novel fast charging technique using supercapacitors. AIP Conference Proceedings, 2021, , .	0.3	2
28	Seed-layer-free deposition of well-oriented ZnO nanorods thin films by SILAR and their photoelectrochemical studies. International Journal of Hydrogen Energy, 2020, 45, 5783-5792.	3.8	40
29	Uncovering the origin of enhanced field emission properties of rGO-MnO ₂ heterostructures: a synergistic experimental and computational investigation. RSC Advances, 2020, 10, 25988-25998.	1.7	9
30	Investigating the effect of solvent vapours on crystallinity, phase, and optical, morphological and structural properties of organolead halide perovskite films. RSC Advances, 2020, 10, 39995-40004.	1.7	12
31	Experimental and Theoretical Study into Interface Structure and Band Alignment of the Cu ₂ Zn _{1-x} Cd _x SnS ₄ Heterointerface for Photovoltaic Applications. ACS Applied Energy Materials, 2020, 3, 5153-5162.	2.5	25
32	Highly stable and Pb-free bismuth-based perovskites for photodetector applications. New Journal of Chemistry, 2020, 44, 11282-11290.	1.4	16
33	Optical, structural and morphological study of CdS nanoparticles: role of sulfur source. Nanomaterials and Energy, 2020, 9, 72-81.	0.1	18
34	Room Temperature Synthesis of Transparent and Conducting Indium Tin Oxide Films with High Mobility and Figure of Merit by RF-Magnetron Sputtering. Journal of Electronic Materials, 2019, 48, 7192-7202.	1.0	6
35	Cs ₂ TiBi ₆ : a new lead-free halide double perovskite with direct band gap. Journal of Physics Condensed Matter, 2019, 31, 445902.	0.7	35
36	Probing the effect of selenium substitution in kesterite-Cu ₂ ZnSnS ₄ nanocrystals prepared by hot injection method. Journal of Materials Science: Materials in Electronics, 2019, 30, 14781-14790.	1.1	8

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37	Effect of thermal annealing and cooling rate on CBD grown CdS thin films. Journal of Materials Science: Materials in Electronics, 2019, 30, 20354-20359.	1.1	2
38	Investigation of growth mechanism for highly oriented TiO ₂ nanorods: the role of reaction time and annealing temperature. SN Applied Sciences, 2019, 1, 1.	1.5	19
39	Field emission investigations of solvothermal synthesized and soaked rutile-TiO ₂ nanostructures. Journal of Materials Science: Materials in Electronics, 2019, 30, 4920-4930.	1.1	5
40	Electrodeposition of highly porous ZnO nanostructures with hydrothermal amination for efficient photoelectrochemical activity. International Journal of Hydrogen Energy, 2019, 44, 11459-11471.	3.8	19
41	Solvothermal Growth of PbBi ₂ Se ₄ Nano-Flowers: A Material for Humidity Sensor and Photodetector Applications. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900065.	0.8	8
42	Interface Structure and Band Alignment of CZTS/CdS Heterojunction: An Experimental and First-Principles DFT Investigation. Materials, 2019, 12, 4040.	1.3	10
43	Ag ⁺ Au ⁺ Bimetal Incorporated ZnO Nanorods Photo-Anodes for Efficient Photoelectrochemical Splitting of Water. Energy Technology, 2019, 7, 233-239.	1.8	10
44	Solvothermal synthesis of tin sulfide (SnS) nanorods and investigation of its field emission properties. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	24
45	Chemical spray pyrolysis synthesis of covellite copper sulphide (CuS) thin films for economical counter electrode for DSSCs. Journal of Materials Science: Materials in Electronics, 2018, 29, 4940-4947.	1.1	18
46	CZTS/CdS: interface properties and band alignment study towards photovoltaic applications. Journal of Materials Science: Materials in Electronics, 2018, 29, 4201-4210.	1.1	24
47	Bilayered ZnO/Nb ₂ O ₅ photoanode for dye sensitized solar cell. International Journal of Modern Physics B, 2018, 32, 1840046.	1.0	19
48	Hydrothermal synthesis of rGO-PbBi ₂ Se ₄ composite and investigation of its structural, chemical and field emission properties. Journal of Materials Science: Materials in Electronics, 2018, 29, 10494-10503.	1.1	2
49	Single-Stroke Synthesis of Tin Sulphide/Oxide Nanocomposites Within Engineering Thermoplastic and Their Humidity Response. Journal of Nanoscience and Nanotechnology, 2018, 18, 3441-3447.	0.9	0
50	Synthesis of Cubic Nanocrystalline Silicon Carbide (3C-SiC) Films by HW-CVD Method. Silicon, 2017, 9, 421-429.	1.8	13
51	Optical antenna effect on SiNWs/CuS photodiodes. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600635.	0.8	2
52	Chlorophyll-a/ZnO Nanorod Based Hybrid Photoanodes for Enhanced Photoelectrochemical Splitting of Water. ChemistrySelect, 2017, 2, 1911-1916.	0.7	4
53	Synthesis of β -WO ₃ thin films by hot wire-CVD and investigation of its humidity sensing properties. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600717.	0.8	11
54	Enhanced photosplitting of water using ultrathin cobalt sulfide nanoflakes-sensitized zinc oxide nanorods array. Ionics, 2017, 23, 3401-3408.	1.2	7

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55	Effect of calcination temperature on the properties of CZTS absorber layer prepared by RF sputtering for solar cell applications. <i>Materials for Renewable and Sustainable Energy</i> , 2017, 6, 1.	1.5	37
56	A simple chemical route to synthesis the CuSe and CuS counter electrodes for titanium oxide based quantum dot solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 14394-14401.	1.1	14
57	Rose Bengal sensitized niobium pentaoxide photoanode for dye sensitized solar cell application. <i>AIP Conference Proceedings</i> , 2017, , .	0.3	9
58	Structural, Electronic, and Optical Properties of Cu ₂ NiSnS ₄ : A Combined Experimental and Theoretical Study toward Photovoltaic Applications. <i>Chemistry of Materials</i> , 2017, 29, 3133-3142.	3.2	90
59	Electrochemical deposition of p-CdTe nanoparticle thin films for solar cell applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 18745-18754.	1.1	9
60	Synthesis of orthorhombic-molybdenum trioxide (1±-MoO3) thin films by hot wire-CVD and investigations of its humidity sensing properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 15790-15796.	1.1	44
61	Synergistic effect of Ag plasmon- and reduced graphene oxide-embedded ZnO nanorod-based photoanodes for enhanced photoelectrochemical activity. <i>Journal of Materials Science</i> , 2017, 52, 13572-13585.	1.7	18
62	Synthesis of crystalline umangite phase of copper selenide (Cu ₃ Se ₂) for TiO ₂ photoanode-based solar cell application. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 2677-2685.	1.2	3
63	Green synthesis and dye-sensitized solar cell application of rutile and anatase TiO ₂ nanorods. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 2713-2718.	1.2	15
64	Electrochemical synthesis of 1D ZnO nanoarchitectures and their role in efficient photoelectrochemical splitting of water. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 2639-2648.	1.2	46
65	Synthesis, characterization, and photovoltaic properties of TiO ₂ /CdTe core-shell heterostructure for semiconductor-sensitized solar cells (SSSCs). <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 2665-2676.	1.2	5
66	Substrate temperature dependent structural, optical, morphology and electrical properties of RF sputtered CdTe thin films for solar cell application. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 12405-12411.	1.1	7
67	Effect of plasma treatment on multilayer graphene: X-ray photoelectron spectroscopy, surface morphology investigations and work function measurements. <i>RSC Advances</i> , 2016, 6, 48843-48850.	1.7	22
68	Electrodeposition of template free hierarchical ZnO nanorod arrays via a chloride medium. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 12357-12364.	1.1	4
69	Temperature Dependent Raman Spectroscopy and Sensing Behavior of Few Layer SnSe ₂ Nanosheets. <i>ChemistrySelect</i> , 2016, 1, 5380-5387.	0.7	35
70	Emitter passivation of silicon solar cell via organic coating at room temperature. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 12459-12463.	1.1	2
71	Influence of RF power on structural optical and electrical properties of hydrogenated nano-crystalline silicon (nc-Si:H) thin films deposited by PE-CVD. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 12365-12373.	1.1	4
72	Hot wire chemical vapor deposited multiphase silicon carbide (SiC) thin films at various filament temperatures. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 12340-12350.	1.1	4

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73	Nanostructured BiOI@GO composite: facile room temperature synthesis with enhanced multifunctionality in field emission and photocatalytic activity. RSC Advances, 2016, 6, 83084-83090.	1.7	19
74	Temperature dependent Raman spectroscopy of electrochemically exfoliated few layer black phosphorus nanosheets. RSC Advances, 2016, 6, 76551-76555.	1.7	40
75	A simple chemical route to synthesis the CuS nanocrystal powder at room temperature and phase transition. Journal of Materials Science: Materials in Electronics, 2016, 27, 11783-11789.	1.1	9
76	High performance humidity sensor and photodetector based on SnSe nanorods. Materials Research Express, 2016, 3, 105038.	0.8	62
77	Influence of carbon and phosphorus doping on electronic properties of ZnO. Journal of Materials Science: Materials in Electronics, 2016, 27, 12318-12322.	1.1	9
78	Highly Transparent Wafer-Scale Synthesis of Crystalline WS ₂ Nanoparticle Thin Film for Photodetector and Humidity-Sensing Applications. ACS Applied Materials & Interfaces, 2016, 8, 3359-3365.	4.0	226
79	Large area chemical vapor deposition of monolayer transition metal dichalcogenides and their temperature dependent Raman spectroscopy studies. Nanoscale, 2016, 8, 3008-3018.	2.8	186
80	Influence of RF power on structural, morphology, electrical, composition and optical properties of Al-doped ZnO films deposited by RF magnetron sputtering. Journal of Materials Science: Materials in Electronics, 2016, 27, 1134-1143.	1.1	26
81	Structural, Optical and Electrical Properties of Spray Pyrolysis Deposited CdS Films. Macromolecular Symposia, 2015, 347, 9-15.	0.4	8
82	Dye sensitized solar cell with lawsone dye using a ZnO photoanode: experimental and TD-DFT study. RSC Advances, 2015, 5, 17647-17652.	1.7	38
83	Dramatic Enhancement in Photoresponse of In ₂ S ₃ through Suppression of Dark Conductivity by Synthetic Control of Defect-Induced Carrier Compensation. ACS Applied Materials & Interfaces, 2015, 7, 17671-17681.	4.0	27
84	Temperature-Dependent Raman Spectroscopy of Titanium Trisulfide (TiS ₃) Nanoribbons and Nanosheets. ACS Applied Materials & Interfaces, 2015, 7, 24185-24190.	4.0	89
85	ZnO nanocactus loaded with gold nanoparticles for dye sensitized solar cells. , 2014, , .		3
86	Passivation of n-type emitter and p-type base in solar cells via oxygen terminated silicon nanoparticles. Progress in Photovoltaics: Research and Applications, 2013, 21, 1146-1152.	4.4	2
87	High growth rate of a-SiC:H films using ethane carbon source by HW-CVD method. Bulletin of Materials Science, 2013, 36, 1177-1185.	0.8	0
88	Fabrication and Studies on FTO/(Compact ZnO/Porous ZnO: Eosin-Y)/C: FTO Solar Cell. International Journal of Green Nanotechnology, 2012, 4, 528-533.	0.3	6
89	Development of alkaline earth sulphide based nanophosphors embedded in PDMS polymer matrix for UV sensor applications. , 2012, , .		1
90	Efficient dye-sensitized solar cells based on hierarchical rutile TiO ₂ microspheres. CrystEngComm, 2012, 14, 8156.	1.3	27

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91	Highly conducting phosphorous doped n-type nc-Si:H films by HW-CVD for c-Si heterojunction solar cells. RSC Advances, 2012, 2, 9873.	1.7	5