

Sawanta S Mali

List of Publications by Year in descending order

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36203

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222
all docs

222
docs citations

222
times ranked

10104
citing authors

#	ARTICLE	IF	CITATIONS
1	Template-free synthesis of MgO nanoparticles for effective photocatalytic applications. Powder Technology, 2013, 249, 456-462.	2.1	220
2	Cation distribution, structural, morphological and magnetic properties of $\text{Co}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$ ($x = 0-1$) nanoparticles. RSC Advances, 2015, 5, 2338-2345.	1.7	184
3	Ultrathin Atomic Layer Deposited TiO_2 for Surface Passivation of Hydrothermally Grown 1D TiO_2 Nanorod Arrays for Efficient Solid-State Perovskite Solar Cells. Chemistry of Materials, 2015, 27, 1541-1551.	3.2	170
4	Preparation and characterization of copper-doped anatase TiO_2 nanoparticles with visible light photocatalytic antibacterial activity. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 280, 32-38.	2.0	169
5	Electrospinning: A versatile technique for making of 1D growth of nanostructured nanofibers and its applications: An experimental approach. Applied Surface Science, 2017, 423, 641-674.	3.1	152
6	In situ processed gold nanoparticle-embedded TiO_2 nanofibers enabling plasmonic perovskite solar cells to exceed 14% conversion efficiency. Nanoscale, 2016, 8, 2664-2677.	2.8	143
7	p-i-n/n-i-p type planar hybrid structure of highly efficient perovskite solar cells towards improved air stability: synthetic strategies and the role of p-type hole transport layer (HTL) and n-type electron transport layer (ETL) metal oxides. Nanoscale, 2016, 8, 10528-10540.	2.8	125
8	Synthesis and characterization of $\text{Cu}_2\text{ZnSnS}_4$ thin films by SILAR method. Journal of Physics and Chemistry of Solids, 2012, 73, 735-740.	1.9	118
9	Highly stable and efficient solid-state solar cells based on methylammonium lead bromide ($\text{CH}_3\text{NH}_3\text{PbBr}_3$) perovskite quantum dots. NPG Asia Materials, 2015, 7, e208-e208.	3.8	117
10	Low-Cost Electrospun Highly Crystalline Kesterite $\text{Cu}_2\text{ZnSnS}_4$ Nanofiber Counter Electrodes for Efficient Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 1688-1696.	4.0	112
11	Highly porous Zinc Stannate (Zn_2SnO_4) nanofibers scaffold photoelectrodes for efficient methyl ammonium halide perovskite solar cells. Scientific Reports, 2015, 5, 11424.	1.6	112
12	Fully Air-Processed Dynamic Hot-Air-Assisted M:CsPbI ₂ Br (M: Eu ²⁺ , In ³⁺) for Stable Inorganic Perovskite Solar Cells. Matter, 2021, 4, 635-653.	5.0	109
13	Nanoarchitectures in dye-sensitized solar cells: metal oxides, oxide perovskites and carbon-based materials. Nanoscale, 2018, 10, 4987-5034.	2.8	108
14	Site Rubidium Cation Incorporated CsPbI_2Br Inorganic Perovskite Solar Cells Exceeding 17% Efficiency. Solar Rrl, 2020, 4, 2000164.	3.1	107
15	Nanostructured TiO_2 Sensitized with MoS_2 Nanoflowers for Enhanced Photodegradation Efficiency toward Methyl Orange. ACS Omega, 2021, 6, 17071-17085.	1.6	106
16	Novel synthesis of kesterite $\text{Cu}_2\text{ZnSnS}_4$ nanoflakes by successive ionic layer adsorption and reaction technique: Characterization and application. Electrochimica Acta, 2012, 66, 216-221.	2.6	105
17	Novel method for fabrication of room temperature polypyrrole-ZnO nanocomposite NO ₂ sensor. Measurement: Journal of the International Measurement Confederation, 2012, 45, 1989-1996.	2.5	103
18	Nanoporous nickel oxide thin films and its improved electrochromic performance: Effect of thickness. Applied Surface Science, 2011, 257, 2647-2656.	3.1	102

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19	Hot-Air-Assisted Fully Air-Processed Barium Incorporated CsPbI ₂ Br Perovskite Thin Films for Highly Efficient and Stable All-Inorganic Perovskite Solar Cells. Nano Letters, 2019, 19, 6213-6220.	4.5	102
20	Nanoporous p-type NiOx electrode for p-i-n inverted perovskite solar cell toward air stability. Materials Today, 2018, 21, 483-500.	8.3	99
21	Surfactant free most probable TiO ₂ nanostructures via hydrothermal and its dye sensitized solar cell properties. Scientific Reports, 2013, 3, 3004.	1.6	97
22	Synthesis and visible light photocatalytic antibacterial activity of nickel-doped TiO ₂ nanoparticles against Gram-positive and Gram-negative bacteria. Journal of Photochemistry and Photobiology A: Chemistry, 2014, 294, 130-136.	2.0	96
23	Efficient planar n-i-p type heterojunction flexible perovskite solar cells with sputtered TiO ₂ electron transporting layers. Nanoscale, 2017, 9, 3095-3104.	2.8	92
24	Perovskite solar cells: In pursuit of efficiency and stability. Materials and Design, 2017, 136, 54-80.	3.3	83
25	PbS quantum dot sensitized anatase TiO ₂ nanocorals for quantum dot-sensitized solar cell applications. Dalton Transactions, 2012, 41, 6130.	1.6	82
26	Nanocoral architecture of TiO ₂ by hydrothermal process: Synthesis and characterization. Applied Surface Science, 2011, 257, 9737-9746.	3.1	79
27	Synthesis, Characterization of Hydrothermally Grown MWCNT@TiO ₂ Photoelectrodes and Their Visible Light Absorption Properties. ECS Journal of Solid State Science and Technology, 2012, 1, M15-M23.	0.9	76
28	Eosin-Y and N3-Dye sensitized solar cells (DSSCs) based on novel nanocoral TiO ₂ : A comparative study. Electrochimica Acta, 2012, 59, 113-120.	2.6	74
29	Nanobrick-like WO ₃ thin films: Hydrothermal synthesis and electrochromic application. Superlattices and Microstructures, 2014, 73, 290-295.	1.4	74
30	CSA doped polyaniline/CdS organic-inorganic nanohybrid: Physical and gas sensing properties. Ceramics International, 2012, 38, 5501-5506.	2.3	73
31	Enhanced electrochromic coloration in Ag nanoparticle decorated WO ₃ thin films. Electrochimica Acta, 2013, 102, 358-368.	2.6	73
32	Novel Synthesis and Characterization of Mesoporous ZnO Nanofibers by Electrospinning Technique. ACS Sustainable Chemistry and Engineering, 2013, 1, 1207-1213.	3.2	73
33	In-situ synthesis of Cu(OH) ₂ and CuO nanowire electrocatalysts for methanol electro-oxidation. Materials Letters, 2017, 187, 60-63.	1.3	72
34	Hydrothermal synthesis of rutile TiO ₂ nanoflowers using Brønsted Acidic Ionic Liquid [BAIL]: Synthesis, characterization and growth mechanism. CrystEngComm, 2012, 14, 1920.	1.3	71
35	Implementing Dopant-Free Hole-Transporting Layers and Metal-Incorporated CsPbI ₂ Br for Stable All-Inorganic Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 778-788.	8.8	71
36	Hydrothermal synthesis of rutile TiO ₂ with hierarchical microspheres and their characterization. CrystEngComm, 2011, 13, 6349.	1.3	69

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37	CdS-sensitized TiO ₂ nanocorals: hydrothermal synthesis, characterization, application. Photochemical and Photobiological Sciences, 2011, 10, 1652-1658.	1.6	69
38	High performing smart electrochromic device based on honeycomb nanostructured h-WO ₃ thin films: hydrothermal assisted synthesis. Dalton Transactions, 2015, 44, 2788-2800.	1.6	69
39	Low temperature aqueous chemical synthesis of CdS sensitized ZnO nanorods. Materials Letters, 2011, 65, 548-551.	1.3	66
40	Photoluminescence of zinc oxide nanopowder synthesized by a combustion method. Powder Technology, 2011, 208, 185-188.	2.1	66
41	Reduced graphene oxide (rGO) grafted zinc stannate (Zn ₂ SnO ₄) nanofiber scaffolds for highly efficient mixed-halide perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 12158-12169.	5.2	65
42	Transmission attenuation and chromic contrast characterization of R.F. sputtered WO ₃ thin films for electrochromic device applications. Electrochimica Acta, 2012, 85, 501-508.	2.6	64
43	Highly efficient thermally stable perovskite solar cells via Cs:NiO /CuSCN double-inorganic hole extraction layer interface engineering. Materials Today, 2019, 26, 8-18.	8.3	64
44	Development of nanocoral-like Cd(SSe) thin films using an arrested precipitation technique and their application. New Journal of Chemistry, 2014, 38, 5964-5974.	1.4	62
45	Simultaneous Improved Performance and Thermal Stability of Planar Metal Ion Incorporated CsPbI ₂ Br All-Inorganic Perovskite Solar Cells Based on MgZnO Nanocrystalline Electron Transporting Layer. Advanced Energy Materials, 2020, 10, 1902708.	10.2	61
46	Quantum dot sensitized solar cell based on TiO ₂ /CdS/CdSe/ZnS heterostructure. Electrochimica Acta, 2016, 203, 74-83.	2.6	60
47	Surfactant free microwave assisted synthesis of ZnO microspheres: Study of their antibacterial activity. Applied Surface Science, 2014, 307, 495-502.	3.1	57
48	Morphology-controlled synthesis and enhanced energy product (BH) _{max} of CoFe ₂ O ₄ nanoparticles. New Journal of Chemistry, 2018, 42, 15793-15802.	1.4	57
49	Development of Ag/ZnO/FTO thin film memristor using aqueous chemical route. Materials Science in Semiconductor Processing, 2015, 40, 523-526.	1.9	56
50	Electrodeposition of nano-granular tungsten oxide thin films for smart window application. Materials Letters, 2014, 134, 298-301.	1.3	54
51	Hybridization of Co ₃ O ₄ and MnO ₂ Nanostructures for High-Performance Nonenzymatic Glucose Sensing. ACS Sustainable Chemistry and Engineering, 2018, 6, 13248-13261.	3.2	54
52	A thiourea additive-based quadruple cation lead halide perovskite with an ultra-large grain size for efficient perovskite solar cells. Nanoscale, 2019, 11, 21824-21833.	2.8	53
53	Photoelectrochemical properties of CdS sensitized ZnO nanorod arrays: Effect of nanorod length. Journal of Applied Physics, 2012, 112, .	1.1	52
54	Effective light harvesting in CdS nanoparticle-sensitized rutile TiO ₂ microspheres. Electrochimica Acta, 2013, 90, 666-672.	2.6	52

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55	Hydrothermal growth of photoelectrochemically active titanium dioxide cauliflower-like nanostructures. <i>Electrochimica Acta</i> , 2014, 117, 470-479.	2.6	51
56	Synthesis of SnO ₂ nanofibers and nanobelts electron transporting layer for efficient perovskite solar cells. <i>Nanoscale</i> , 2018, 10, 8275-8284.	2.8	51
57	Bio-inspired Carbon Hole Transporting Layer Derived from Aloe Vera Plant for Cost-Effective Fully Printable Mesoscopic Carbon Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 31280-31290.	4.0	51
58	Enhanced electrochromic performance of f-MWCNT-WO ₃ composite. <i>Electrochimica Acta</i> , 2011, 58, 556-561.	2.6	48
59	Microwave-assisted rapid synthesis of highly porous TiO ₂ thin films with nanocrystalline framework for efficient photoelectrochemical conversion. <i>Electrochimica Acta</i> , 2014, 143, 89-97.	2.6	48
60	Hydrothermal synthesis of WO ₃ nanoflowers on etched ITO and their electrochromic properties. <i>Electrochimica Acta</i> , 2017, 246, 1112-1120.	2.6	48
61	Synthesis of cadmium sulfide spongy balls with nanoconduits for effective light harvesting. <i>Electrochimica Acta</i> , 2011, 56, 2762-2768.	2.6	47
62	Polyaniline based electrodes for electrochemical supercapacitor: Synergistic effect of silver, activated carbon and polyaniline. <i>Journal of Electroanalytical Chemistry</i> , 2014, 724, 21-28.	1.9	47
63	In ₂ O ₃ nanocapsules for rapid photodegradation of crystal violet dye under sunlight. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 287-297.	5.0	47
64	Limitations of dual and complementary inorganic-organic electrochromic device for smart window application and its colorimetric analysis. <i>Synthetic Metals</i> , 2011, 161, 1105-1112.	2.1	46
65	Low temperature growth of CuS nanoparticles by reflux condensation method. <i>Progress in Solid State Chemistry</i> , 2011, 39, 108-113.	3.9	46
66	Room temperature deposition of nanostructured Bi ₂ Se ₃ thin films for photoelectrochemical application: effect of chelating agents. <i>New Journal of Chemistry</i> , 2013, 37, 2821.	1.4	46
67	From nanocorals to nanorods to nanoflowers nanoarchitecture for efficient dye-sensitized solar cells at relatively low film thickness: All Hydrothermal Process. <i>Scientific Reports</i> , 2014, 4, 5451.	1.6	45
68	A solution processed nanostructured p-type NiO electrode for efficient inverted perovskite solar cells. <i>Nanoscale</i> , 2016, 8, 19189-19194.	2.8	45
69	Efficient maximization of coloration by modification in morphology of electrodeposited NiO thin films prepared with different surfactants. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 253-263.	1.2	43
70	Single-step synthesis of 3D nanostructured TiO ₂ as a scattering layer for vertically aligned 1D nanorod photoanodes and their dye-sensitized solar cell properties. <i>CrystEngComm</i> , 2013, 15, 5660.	1.3	42
71	Novel synthesis of interconnected nanocubic PbS thin films by facile aqueous chemical route. <i>Journal of Materials Science: Materials in Electronics</i> , 2014, 25, 3762-3770.	1.1	42
72	Anti-Solvent Assisted Crystallization Processed Methylammonium Bismuth Iodide Cuboids towards Highly Stable Lead-Free Perovskite Solar Cells. <i>ChemistrySelect</i> , 2017, 2, 1578-1585.	0.7	42

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73	Hybrid Physicochemical Synthesis and Electrochromic Performance of WO ₃ /MoO ₃ Thin Films. <i>Electroanalysis</i> , 2014, 26, 2388-2397.	1.5	41
74	Colloidal stability of polyethylene glycol functionalized Co _{0.5} Zn _{0.5} Fe ₂ O ₄ nanoparticles: effect of pH, sample and salt concentration for hyperthermia application. <i>RSC Advances</i> , 2014, 4, 12662.	1.7	41
75	PVA and PEG functionalised LSMO nanoparticles for magnetic fluid hyperthermia application. <i>Materials Characterization</i> , 2015, 102, 209-220.	1.9	41
76	Polymer assisted deposition of electrochromic tungsten oxide thin films. <i>Journal of Alloys and Compounds</i> , 2010, 493, 335-339.	2.8	40
77	Single step hydrothermal synthesis of hierarchical TiO ₂ microflowers with radially assembled nanorods for enhanced photovoltaic performance. <i>RSC Advances</i> , 2014, 4, 47278-47286.	1.7	40
78	Synthesis of nanoporous Mo:BiVO ₄ thin film photoanodes using the ultrasonic spray technique for visible-light water splitting. <i>Nanoscale Advances</i> , 2019, 1, 799-806.	2.2	40
79	Photoelectrocatalysis of Cefotaxime Using Nanostructured TiO ₂ Photoanode: Identification of the Degradation Products and Determination of the Toxicity Level. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 18152-18162.	1.8	38
80	A Merrifield resin supported Pd-NHC complex with a spacer (Pd-NHC@SP-PS) for the Sonogashira coupling reaction under copper- and solvent-free conditions. <i>New Journal of Chemistry</i> , 2015, 39, 2333-2341.	1.4	38
81	Chemically grown vertically aligned 1D ZnO nanorods with CdS coating for efficient quantum dot sensitized solar cells (QDSSC): a controlled synthesis route. <i>Dalton Transactions</i> , 2013, 42, 16961.	1.6	37
82	Effect of organic capping agent on the photocatalytic activity of MgO nanoflakes obtained by thermal decomposition route. <i>Ceramics International</i> , 2013, 39, 323-330.	2.3	37
83	Highly efficient mixed-halide mixed-cation perovskite solar cells based on rGO-TiO ₂ composite nanofibers. <i>Energy</i> , 2019, 189, 116396.	4.5	37
84	Reduced methylammonium triple-cation Rb _{0.05} (FAPbI ₃) _{0.95} (MAPbBr ₃) _{0.05} perovskite solar cells based on a TiO ₂ /SnO ₂ bilayer electron transport layer approaching a stabilized 21% efficiency: the role of antisolvents. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17516-17528.	5.2	37
85	Gas sensing properties of 3D mesoporous nanostructured ZnO thin films. <i>New Journal of Chemistry</i> , 2018, 42, 13573-13580.	1.4	35
86	Electro-optical properties of copper phthalocyanines (CuPc) vacuum deposited thin films. <i>RSC Advances</i> , 2012, 2, 2100.	1.7	34
87	Simplistic toxic to non-toxic hydrothermal route to synthesize Cu ₂ ZnSnS ₄ nanoparticles for solar cell applications. <i>Solar Energy</i> , 2015, 122, 1146-1153.	2.9	34
88	A facile and low cost strategy to synthesize Cd _{1-x} Zn _x Se thin films for photoelectrochemical performance: effect of zinc content. <i>RSC Advances</i> , 2015, 5, 55658-55668.	1.7	33
89	Effect of substrate on the nanostructured Bi ₂ Se ₃ thin films for solar cell applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 2385-2393.	1.1	33
90	Pseudocapacitive-battery-like behavior of cobalt manganese nickel sulfide (CoMnNiS) nanosheets grown on Ni-foam by electrodeposition for realizing high capacity. <i>RSC Advances</i> , 2018, 8, 40198-40209.	1.7	33

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91	Efficient and Stable All-Inorganic Niobium-Incorporated CsPbI ₂ Br-Based Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 27176-27183.	4.0	33
92	Boosting the Stability of Fully-Inorganic Perovskite Solar Cells through Samarium Doped CsPbI ₂ Br Perovskite. ACS Sustainable Chemistry and Engineering, 2020, 8, 16364-16371.	3.2	32
93	Facile designing and assessment of photovoltaic performance of hydrothermally grown kesterite Cu ₂ ZnSnS ₄ thin films: Influence of deposition time. Solar Energy, 2020, 201, 102-115.	2.9	32
94	Enhanced optical modulation due to SPR in gold nanoparticles embedded WO ₃ thin films. Journal of Alloys and Compounds, 2011, 509, 1729-1733.	2.8	31
95	TiO ₂ /PbS/ZnS heterostructure for panchromatic quantum dot sensitized solar cells synthesized by wet chemical route. Optical Materials, 2017, 73, 781-792.	1.7	31
96	Farming of ZnO nanorod-arrays via aqueous chemical route for photoelectrochemical solar cell application. Ceramics International, 2012, 38, 6461-6467.	2.3	30
97	Evaluation of various diameters of titanium oxide nanofibers for efficient dye sensitized solar cells synthesized by electrospinning technique: A systematic study and their application. Electrochimica Acta, 2015, 166, 356-366.	2.6	30
98	Hollow In ₂ O ₃ microcubes for sensitive and selective detection of NO ₂ gas. Journal of Alloys and Compounds, 2019, 806, 726-736.	2.8	30
99	Gallium Cationic Incorporated Compact TiO ₂ as an Efficient Electron-Transporting Layer for Stable Perovskite Solar Cells. Matter, 2019, 1, 452-464.	5.0	30
100	Mesoporous architecture of TiO ₂ microspheres via controlled template assisted route and their photoelectrochemical properties. Journal of Materials Science: Materials in Electronics, 2017, 28, 304-316.	1.1	29
101	Single-step hydrothermally grown nanosheet-assembled tungsten oxide thin films for sensitive and selective NO ₂ gas detection. Journal of Materials Science, 2018, 53, 6094-6105.	1.7	29
102	Quantum Dot Based Solar Cells: Role of Nanoarchitectures, Perovskite Quantum Dots, and Charge-Transporting Layers. ChemSusChem, 2019, 12, 4724-4753.	3.6	29
103	Microwave assisted synthesis, characterization and thermoelectric properties of nanocrystalline copper antimony selenide thin films. RSC Advances, 2014, 4, 51632-51639.	1.7	28
104	Langmuir-Blodgett self organized nanocrystalline tungsten oxide thin films for electrochromic performance. RSC Advances, 2015, 5, 26923-26931.	1.7	28
105	A Dual-Retarded Reaction Processed Mixed-Cation Perovskite Layer for High-Efficiency Solar Cells. Advanced Functional Materials, 2019, 29, 1807420.	7.8	28
106	Efficient dye-sensitized solar cells based on hierarchical rutile TiO ₂ microspheres. CrystEngComm, 2012, 14, 8156.	1.3	27
107	Terbium-Doped and Dual-Passivated CsPb(I _{1-x} Br _x) ₃ Inorganic Perovskite Solar Cells with Improved Air Thermal Stability and High Efficiency. Advanced Materials, 2022, 34, e2203204.	11.1	27
108	Simplistic surface active agents mediated morphological tweaking of CdS thin films for photoelectrochemical solar cell performance. Current Applied Physics, 2014, 14, 1669-1676.	1.1	26

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109	Simplistic construction of cadmium sulfoselenide thin films via a hybrid chemical process for enhanced photoelectrochemical performance. RSC Advances, 2015, 5, 40283-40296.	1.7	26
110	Designing of novel efficient photoactive ternary Zn _{1-x} Cu _{2x} Se thin film materials via hydrothermal route: Photoelectrochemical (PEC) cell study. Materials Science in Semiconductor Processing, 2020, 105, 104727.	1.9	26
111	Ionic liquid assisted synthesis of h-MoO ₃ hollow microrods and their application for electrochemical sensing of Imidacloprid pesticide in vegetables. Journal of Molecular Liquids, 2021, 324, 115119.	2.3	26
112	Photoelectrochemically active surfactant free single step hydrothermal mediated titanium dioxide nanorods. Journal of Materials Science: Materials in Electronics, 2014, 25, 4501-4511.	1.1	25
113	Synthesis of SnS ₂ thin film via non vacuum arrested precipitation technique for solar cell application. Materials Letters, 2016, 180, 23-26.	1.3	25
114	Synthesis of a nanostructured rutile TiO ₂ electron transporting layer via an etching process for efficient perovskite solar cells: impact of the structural and crystalline properties of TiO ₂ . Journal of Materials Chemistry A, 2017, 5, 12340-12353.	5.2	25
115	Development of Pt-Carbon catalysts using MCM-41 template for HI decomposition reaction in S ⁺ thermochemical cycle. International Journal of Hydrogen Energy, 2012, 37, 3602-3611.	3.8	24
116	Fully-inorganic strontium incorporated CsPbI ₂ Br perovskite solar cells with promoted efficiency and stability. Journal of Energy Chemistry, 2021, 62, 451-458.	7.1	24
117	Thermoelectric Properties of Indium(III)-Doped Copper Antimony Selenide Thin Films Deposited Using a Microwave-Assisted Technique. Energy Technology, 2016, 4, 835-842.	1.8	23
118	Hydrothermally grown 3D hierarchical TiO ₂ based on electrochemically anodized 1D TiO ₂ nanostructure for supercapacitor. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	23
119	Highly reliable multilevel resistive switching in a nanoparticulated In ₂ O ₃ thin-film memristive device. Journal Physics D: Applied Physics, 2019, 52, 175306.	1.3	23
120	Effect of annealing on the supercapacitor performance of CuO-PAA/CNT films. Journal of Solid State Electrochemistry, 2012, 16, 25-33.	1.2	22
121	Novel-approach for fabrication of CdS thin films for photoelectrochemical solar cell application. Journal of Materials Science: Materials in Electronics, 2014, 25, 5606-5617.	1.1	22
122	Tuning the analog and digital resistive switching properties of TiO ₂ by nanocompositing Al-doped ZnO. Materials Science in Semiconductor Processing, 2020, 115, 105110.	1.9	22
123	Structural, morphological, and optical studies of hydrothermally synthesized Nb-added TiO ₂ for DSSC application. Ceramics International, 2021, 47, 25580-25592.	2.3	22
124	Thermoelectric properties of nanocrystalline Cu ₃ SbSe ₄ thin films deposited by a self-organized arrested precipitation technique. New Journal of Chemistry, 2015, 39, 5661-5668.	1.4	21
125	Photocurrent enhancement in a Cu ₂ Cd(SSe) ₂ photoanode synthesized via an arrested precipitation route. New Journal of Chemistry, 2016, 40, 3277-3288.	1.4	21
126	Influence of disordered morphology on electrochromic stability of WO ₃ /PPy. Journal of Alloys and Compounds, 2016, 669, 240-245.	2.8	21

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127	A <i>Smart-Bottle</i> ™ humidifier-assisted air-processed CuSCN inorganic hole extraction layer towards highly-efficient, large-area and thermally-stable perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 10246-10255.	5.2	21
128	Surfactant assisted approach to development of efficient WO ₃ photoanode for natural dye sensitized solar cell. <i>Solar Energy</i> , 2021, 220, 371-383.	2.9	21
129	Synthesis and characterization of spray pyrolyzed nanocrystalline CeO ₂ /SiO ₂ thin films as passive counter electrodes. <i>Solar Energy Materials and Solar Cells</i> , 2010, 94, 781-787.	3.0	20
130	Effect of surfactant on optical and structural properties of chemically deposited MoBi ₂ S ₅ thin films. <i>New Journal of Chemistry</i> , 2012, 36, 1807.	1.4	20
131	Photoluminescence quenching of a CdS nanoparticles/ZnO nanorods core-shell heterogeneous film and its improved photovoltaic performance. <i>Optical Materials</i> , 2014, 37, 766-772.	1.7	20
132	Influence of laser repetition rate on the Cu ₂ ZnSn(SSe) ₄ thin films synthesized via pulsed laser deposition technique. <i>Solar Energy Materials and Solar Cells</i> , 2016, 157, 331-336.	3.0	20
133	Large area, waterproof, air stable and cost effective efficient perovskite solar cells through modified carbon hole extraction layer. <i>Materials Today Chemistry</i> , 2017, 4, 53-63.	1.7	20
134	Chalcogenide nanocomposite electrodes grown by chemical etching of Ni foam as electrocatalyst for efficient oxygen evolution reaction. <i>International Journal of Energy Research</i> , 2020, 44, 1233-1243.	2.2	20
135	Fabrication of enhanced sensitive and selective porous indium oxide nanocube sensor for NO ₂ detection. <i>Ceramics International</i> , 2021, 47, 2430-2440.	2.3	20
136	Synthesis of fibrous reticulate nanocrystalline n-type MoBi ₂ (Se _{1-x} Tex) ₅ thin films: Thermocooling applications. <i>Materials Research Bulletin</i> , 2012, 47, 3860-3867.	2.7	19
137	The influence of coating on the structural, magnetic and colloidal properties of LSMO manganite and the heating mechanism for magnetic fluid hyperthermia application. <i>New Journal of Chemistry</i> , 2014, 38, 3678.	1.4	19
138	Synthesis, characterization and photoelectrochemical properties of PbS sensitized vertically aligned ZnO nanorods: modified aqueous route. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 6897-6906.	1.1	19
139	Enhanced photoelectrochemical performance of novel p-type MoBiCuSe ₄ thin films deposited by a simple surfactant-mediated solution route. <i>RSC Advances</i> , 2016, 6, 24985-24994.	1.7	19
140	Investigating the Role of Selenium-Ion Concentration on Optoelectronic Properties of the Cu ₂ ZnSn(S _{1-x} Se _x) ₄ Thin Films. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 10868-10881.	1.8	19
141	Fabrication of an electrochromic device by using WO ₃ thin films synthesized using facile single-step hydrothermal process. <i>Thin Solid Films</i> , 2019, 673, 86-93.	0.8	18
142	Triton-X mediated interconnected nanowalls network of cadmium sulfide thin films via chemical bath deposition and their photoelectrochemical performance. <i>Solid State Sciences</i> , 2014, 36, 41-46.	1.5	17
143	Morphologically controlled electrodeposition of fern shaped Bi ₂ Te ₃ thin films for photoelectrochemical performance. <i>Journal of Electroanalytical Chemistry</i> , 2015, 758, 178-190.	1.9	17
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