

# Velumani S

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2873293/publications.pdf>

Version: 2024-02-01

195  
papers

4,118  
citations

126708

33  
h-index

168136

53  
g-index

201  
all docs

201  
docs citations

201  
times ranked

4941  
citing authors

#	ARTICLE	IF	CITATIONS
1	TiO <sub>2</sub> thin film gas sensor for monitoring ammonia. <i>Materials Characterization</i> , 2007, 58, 680-684.	1.9	345
2	Experimental and SCAPS simulated formamidinium perovskite solar cells: A comparison of device performance. <i>Solar Energy</i> , 2020, 205, 349-357.	2.9	177
3	Structural and optical properties of hot wall deposited CdSe thin films. <i>Solar Energy Materials and Solar Cells</i> , 2003, 76, 347-358.	3.0	124
4	Microplastics in tourist beaches of Huatulco Bay, Pacific coast of southern Mexico. <i>Marine Pollution Bulletin</i> , 2016, 113, 530-535.	2.3	113
5	Structural and optical characterization of ball-milled copper-doped bismuth vanadium oxide (BiVO <sub>4</sub> ). <i>CrystEngComm</i> , 2015, 17, 3366-3375.	1.3	101
6	Development of CdTe thin films on flexible substrates—a review. <i>Solar Energy Materials and Solar Cells</i> , 2003, 76, 293-303.	3.0	86
7	Characterization of zinc phthalocyanine (ZnPc) for photovoltaic applications. <i>Applied Physics A: Materials Science and Processing</i> , 2003, 77, 383-389.	1.1	82
8	Structural, optical and Raman scattering studies on DC magnetron sputtered titanium dioxide thin films. <i>Solar Energy Materials and Solar Cells</i> , 2005, 88, 199-208.	3.0	80
9	Comparative studies of CdS thin films by chemical bath deposition techniques as a buffer layer for solar cell applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 7499-7518.	1.1	79
10	Structural and optical characterization of hot wall deposited Cd <sub>1-x</sub> Te <sub>x</sub> films. <i>Solar Energy Materials and Solar Cells</i> , 2003, 76, 359-368.	3.0	73
11	Synthesis and Characterization of Cadmium Sulfide Nanoparticles by Chemical Precipitation Method. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 8434-8439.	0.9	65
12	Camphor-mediated synthesis of carbon nanoparticles, graphitic shell encapsulated carbon nanocubes and carbon dots for bioimaging. <i>Scientific Reports</i> , 2016, 6, 21286.	1.6	56
13	Perspectives of chalcopyrite-based CIGSe thin-film solar cell: a review. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 7286-7314.	1.1	55
14	Structural and annealing studies of potentiostatically deposited Cu <sub>2</sub> O thin films. <i>Solar Energy Materials and Solar Cells</i> , 2005, 88, 209-216.	3.0	53
15	Electrical and optical properties of ultrasonically sprayed Al-doped zinc oxide thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 31-37.	1.7	53
16	Mechanochemical synthesis of nanostructured BiVO <sub>4</sub> and investigations of related features. <i>Materials Chemistry and Physics</i> , 2012, 135, 842-848.	2.0	53
17	Structural characterization of hot wall deposited cadmium selenide thin films. <i>Semiconductor Science and Technology</i> , 1998, 13, 1016-1024.	1.0	51
18	Nanostructured bismuth vanadate (BiVO <sub>4</sub> ) thin films for efficient visible light photocatalysis. <i>Materials Chemistry and Physics</i> , 2018, 205, 325-333.	2.0	50

#	ARTICLE	IF	CITATIONS
19	Electrodeposition and characterization of Fe doped CdSe thin films from aqueous solution. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 242-248.	1.7	48
20	Structural, electronic and optical features of molybdenum-doped bismuth vanadium oxide. <i>Materials Science in Semiconductor Processing</i> , 2015, 31, 618-623.	1.9	48
21	Effect of bismuth iodide ( $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \text{I} \text{I} \text{O} \text{.784314} \text{rgBT} \text{/Overlock} \text{10}$ ) interfacial layer with different HTL <sup>TM</sup> s in FAPI based perovskite solar cell “SCAPS” 1D study. <i>Solar Energy</i> , 2021, 210, 157-168.	2.9	47
22	Characterization of vacuum-evaporated ZnSe thin films. <i>Materials Characterization</i> , 2007, 58, 794-799.	1.9	42
23	AC and dielectric properties of vacuum evaporated InTe bilayer thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 269-272.	1.7	42
24	Influence of annealing on structural and optical properties of Zn <sub>3</sub> P <sub>2</sub> thin films. <i>Materials Characterization</i> , 2007, 58, 745-749.	1.9	41
25	Plasmonic/Magnetic Multifunctional nanoplatfom for Cancer Theranostics. <i>Scientific Reports</i> , 2016, 6, 34874.	1.6	41
26	Influence of surface phenomena in oxidative desulfurization with WO <sub>x</sub> /ZrO <sub>2</sub> catalysts. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 2037-2040.	1.1	40
27	Mechanical and machinability behaviors of woven coir fiber-reinforced polyester composite. <i>Fibers and Polymers</i> , 2013, 14, 1505-1514.	1.1	40
28	Structural and optical characterization of CuInSe <sub>2</sub> films deposited by hot wall vacuum evaporation method. <i>Vacuum</i> , 2007, 81, 813-818.	1.6	38
29	Fluorine doped zinc oxide thin films deposited by chemical spray, starting from zinc pentanedionate and hydrofluoric acid: Effect of the aging time of the solution. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 46-49.	1.7	38
30	Effect of Al concentrations on the electrodeposition and properties of transparent Al-doped ZnO thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2014, 25, 1761-1769.	1.1	38
31	Electrochemical deposition and characterization of Ni <sup>+</sup> P alloy thin films. <i>Materials Characterization</i> , 2007, 58, 800-804.	1.9	36
32	Proposal of a hybrid CHP system: SOFC/microturbine/absorption chiller. <i>International Journal of Energy Research</i> , 2010, 34, 1088-1095.	2.2	35
33	Scanning fluorescence-based ultrasensitive detection of dengue viral DNA on ZnO thin films. <i>Sensors and Actuators B: Chemical</i> , 2014, 202, 1338-1348.	4.0	35
34	Formation of ZnS nanorods by simple evaporation technique. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 153-156.	1.1	33
35	Electrical resistivity of thermally evaporated bismuth telluride thin films. <i>Solar Energy Materials and Solar Cells</i> , 2004, 81, 305-312.	3.0	33
36	Characterization of Bismuth Telluride thin films “Flash evaporation method. <i>Materials Characterization</i> , 2007, 58, 782-785.	1.9	33

#	ARTICLE	IF	CITATIONS
37	Electrosynthesis and characterization of lead oxide thin films. <i>Materials Characterization</i> , 2007, 58, 817-822.	1.9	32
38	Effect of rapid thermal annealing on the properties of PECVD SiNx thin films. <i>Materials Chemistry and Physics</i> , 2007, 106, 130-133.	2.0	31
39	Structural studies of mechano-chemically synthesized CuIn $_{1-x}$ Ga $_x$ Se $_2$ nanoparticles. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 216-221.	1.7	30
40	Aging effects on the stability of nitrogen-doped and un-doped InGaZnO thin-film transistors. <i>Materials Science in Semiconductor Processing</i> , 2015, 37, 129-134.	1.9	30
41	Structure-dependent anisotropy of the photoinduced optical nonlinearity in calcium doped ZnO nanorods grown by low cost hydrothermal method for photonic device applications. <i>Journal of Alloys and Compounds</i> , 2016, 658, 435-439.	2.8	30
42	Occurrence, distribution and provenance of micro plastics: A large scale quantitative analysis of beach sediments from southeastern coast of South Africa. <i>Science of the Total Environment</i> , 2020, 746, 141103.	3.9	30
43	Electronic and optical competence of TiO $_2$ /BiVO $_4$ nanocomposites in the photocatalytic processes. <i>Scientific Reports</i> , 2020, 10, 13507.	1.6	30
44	Chalcogenide BaZrS $_3$ perovskite solar cells: A numerical simulation and analysis using SCAPS-1D. <i>Optical Materials</i> , 2022, 126, 112250.	1.7	30
45	Structural studies on vacuum evaporated ZnSe/p-Si Schottky diodes. <i>Materials Chemistry and Physics</i> , 2007, 103, 305-311.	2.0	29
46	Experimental and theoretical investigations of structural and optical properties of CIGS thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 205-208.	1.7	29
47	Properties of Mechanochemically Synthesized ZnS Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 6600-6605.	0.9	28
48	Structural and optical characterization of mechanochemically synthesized copper doped CdS nanopowders. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2012, 177, 1452-1459.	1.7	28
49	Hot injection synthesis of Cu(In, Ga)Se $_2$ nanocrystals with tunable bandgap. <i>Optical Materials</i> , 2018, 79, 450-456.	1.7	28
50	Structure, magnetic and cytotoxic behaviour of solvothermally grown Fe $_3$ O $_4$ @Au core-shell nanoparticles. <i>Materials Characterization</i> , 2018, 142, 237-244.	1.9	28
51	Photocatalytic degradation of Orange G using TiO $_2$ /Fe $_3$ O $_4$ nanocomposites. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 15436-15444.	1.1	27
52	An investigation on silar Cu(In $_{1-x}$ Al $_x$ )Se $_2$ thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 209-215.	1.7	26
53	Effect of nitrate concentration on the electrochemical growth and properties of ZnO nanostructures. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 1217-1224.	1.1	26
54	Solution-based synthesis of high yield CZTS (Cu $_2$ ZnSnS $_4$ ) spherical quantum dots. <i>Superlattices and Microstructures</i> , 2015, 77, 305-312.	1.4	26

#	ARTICLE	IF	CITATIONS
55	Dielectric behavior, conduction and EPR active centres in BiVO <sub>4</sub> nanoparticles. Journal of Physics and Chemistry of Solids, 2013, 74, 1695-1702.	1.9	25
56	Manganese ferrite nanocubes as an MRI contrast agent. Materials Research Express, 2020, 7, 016107.	0.8	25
57	Deposition and characterization of ultrathin intrinsic zinc oxide (i-ZnO) films by radio frequency (RF) sputtering for propane gas sensing application. Journal of Materials Science: Materials in Electronics, 2018, 29, 15682-15692.	1.1	24
58	Structure and temperature dependence of conduction mechanisms in hot wall deposited CuInSe <sub>2</sub> thin films and effect of back contact layer in CuInSe <sub>2</sub> based solar cells. Vacuum, 2010, 84, 1220-1225.	1.6	22
59	Influence of working pressure on the structural, optical and electrical properties of sputter deposited AZO thin films. Materials Science in Semiconductor Processing, 2015, 37, 29-36.	1.9	22
60	Deposition and characterization of graded Cu(In <sub>1-x</sub> Ga <sub>x</sub> )Se <sub>2</sub> thin films by spray pyrolysis. Materials Chemistry and Physics, 2015, 162, 59-68.	2.0	22
61	Parametric optimization of mechanochemical process for synthesis of Cu(In, Ga) <sub>0.5</sub> Se <sub>2</sub> nanoparticles. Materials Science in Semiconductor Processing, 2015, 37, 151-158.	1.9	22
62	Cobalt ferrite nanowhiskers as T <sub>2</sub> MRI contrast agent. RSC Advances, 2015, 5, 17223-17227.	1.7	22
63	Copper and Bismuth incorporated mixed cation perovskite solar cells by one-step solution process. Solar Energy, 2021, 218, 226-236.	2.9	21
64	ZrO <sub>2</sub> /ZnO/TiO <sub>2</sub> Nanocomposite Coatings on Stainless Steel for Improved Corrosion Resistance, Biocompatibility, and Antimicrobial Activity. ACS Applied Materials & Interfaces, 2022, 14, 13801-13811.	4.0	21
65	Preparation and characterization of MnSe thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 257-262.	1.7	20
66	High Energy Ball-Milling Synthesis of Nanostructured Ag-Doped and BiVO <sub>4</sub> -Based Photocatalysts. ChemistrySelect, 2016, 1, 1278-1286.	0.7	20
67	Structural analysis of cobalt titanate nanoparticles obtained by sol-gel process. Applied Physics A: Materials Science and Processing, 2004, 78, 531-536.	1.1	19
68	Structural properties of In <sub>2</sub> Se <sub>3</sub> precursor layers deposited by spray pyrolysis and physical vapor deposition for CuInSe <sub>2</sub> thin-film solar cell applications. Thin Solid Films, 2015, 587, 112-116.	0.8	19
69	Electrochemical synthesis and characterization of zinc selenide thin films. Journal of Materials Science, 2006, 41, 3553-3559.	1.7	18
70	Effect of milling time and heat treatment on the composition of CuIn <sub>0.75</sub> Ga <sub>0.25</sub> Se <sub>2</sub> nanoparticle precursors and films. Journal of Nanoparticle Research, 2011, 13, 3033-3042.	0.8	17
71	Size modulation of nanocrystalline silicon embedded in amorphous silicon oxide by Cat-CVD. Thin Solid Films, 2011, 519, 4498-4501.	0.8	17
72	Electrochemical growth and characterization of iron doped cadmium sulfide thin films. Materials Science in Semiconductor Processing, 2015, 37, 215-222.	1.9	17

#	ARTICLE	IF	CITATIONS
73	Structural studies of BaTiO <sub>3</sub> :Er <sup>3+</sup> and BaTiO <sub>3</sub> :Yb <sup>3+</sup> powders synthesized by hydrothermal method. Journal of Rare Earths, 2014, 32, 1016-1021.	2.5	16
74	Biofunctionalized MnFe <sub>2</sub> O <sub>4</sub> @Au core-shell nanoparticles for pH-responsive drug delivery and hyperthermal agent for cancer therapy. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 993-1003.	1.9	16
75	Mechanical activation of TiO <sub>2</sub> /Fe <sub>2</sub> O <sub>3</sub> nanocomposite for arsenic adsorption: effect of ball-to-powder ratio and milling time. Journal of Nanostructure in Chemistry, 2021, 11, 619-632.	5.3	16
76	Electrosynthesis and studies on Cadmium-Indium-Selenide thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 236-241.	1.7	15
77	Band structure calculations of Cu(In <sub>1-x</sub> Ga <sub>x</sub> )Se <sub>2</sub> . Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 200-204.	1.7	15
78	Mathematical Modeling and Optimization of Mechanical Properties of Short Coir Fiber-Reinforced Vinyl Ester Composite Using Genetic Algorithm Method. Mechanics of Advanced Materials and Structures, 2014, 21, 559-565.	1.5	15
79	Highly transparent RF magnetron-sputtered indium tin oxide films for a-Si:H/c-Si heterojunction solar cells amorphous/crystalline silicon. Materials Science in Semiconductor Processing, 2014, 24, 225-230.	1.9	15
80	Role of Schottky barrier height at source/drain contact for electrical improvement in high carrier concentration amorphous InGaZnO thin film transistors. Materials Science in Semiconductor Processing, 2015, 38, 50-56.	1.9	15
81	Fabrication and characterization of n-CdSe <sub>0.7</sub> Te <sub>0.3</sub> /p-CdSe <sub>0.15</sub> Te <sub>0.85</sub> solar cell. Vacuum, 2010, 84, 1216-1219.	1.6	14
82	Uniform 3D hydrothermally deposited zinc oxide nanorods with high haze ratio. Materials Science in Semiconductor Processing, 2015, 37, 99-104.	1.9	14
83	SF <sub>6</sub> /Ar plasma textured periodic glass surface morphologies with high transmittance and haze ratio of ITO:Zr films for amorphous silicon thin film solar cells. Vacuum, 2015, 117, 91-97.	1.6	14
84	Structural and optical properties of CZTS nanoparticles prepared by a colloidal process. Rare Metals, 2021, 40, 2602-2609.	3.6	14
85	Impact of target power on the properties of sputtered intrinsic zinc oxide (i-ZnO) thin films and its thickness dependence performance on CISE solar cells. Optical Materials, 2021, 119, 111350.	1.7	14
86	Dielectric properties of vacuum deposited Bi <sub>2</sub> Te <sub>3</sub> thin films. Solar Energy Materials and Solar Cells, 2005, 88, 187-198.	3.0	13
87	Optimization of mechanical properties of non-woven short sisal fibre-reinforced vinyl ester composite using factorial design and GA method. Bulletin of Materials Science, 2013, 36, 575-583.	0.8	13
88	Structural Properties of Ultrasonically Sprayed Al-Doped ZnO (AZO) Thin Films: Effect of ZnO Buffer Layer on AZO. Journal of Electronic Materials, 2015, 44, 699-705.	1.0	13
89	Effect of sodium doping on graded Cu(In <sub>1-x</sub> Ga <sub>x</sub> )Se <sub>2</sub> thin films prepared by chemical spray pyrolysis. Materials Science in Semiconductor Processing, 2015, 37, 37-45.	1.9	13
90	Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> thin-films prepared from selenized nanocrystals ink. RSC Advances, 2019, 9, 18420-18428.	1.7	13

#	ARTICLE	IF	CITATIONS
91	Solution based synthesis of Cu(In,Ga)Se <sub>2</sub> microcrystals and thin films. RSC Advances, 2019, 9, 35197-35208.	1.7	13
92	Graphene oxide decorated TiO <sub>2</sub> and BiVO <sub>4</sub> nanocatalysts for enhanced visible-light-driven photocatalytic bacterial inactivation. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 418, 113374.	2.0	13
93	Morphology control and optical properties of ZnO nanostructures grown by ultrasonic synthesis. Advances in Nano Research, 2013, 1, 59-70.	0.9	13
94	Electrochemical deposition and studies on CdCr <sub>2</sub> S <sub>4</sub> thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 249-252.	1.7	12
95	Regression modelling and optimisation of cutting parameters through Nelder-Mead simplex search and CCFD during drilling of sisal-glass/vinyl ester composites. International Journal of Machining and Machinability of Materials, 2013, 14, 1.	0.1	12
96	Lu <sub>2</sub> O <sub>3</sub> :Eu <sup>3+</sup> glass ceramic films: Synthesis, structural and spectroscopic studies. Materials Research Bulletin, 2014, 51, 418-425.	2.7	12
97	Atomic Structure Characterization of Au-Pd Bimetallic Nanoparticles by Aberration-Corrected Scanning Transmission Electron Microscopy. Journal of Physical Chemistry C, 2014, 118, 22383-22388.	1.5	12
98	Effects of interface trap density on the electrical performance of amorphous InSnZnO thin-film transistor. Journal of Semiconductors, 2015, 36, 024007.	2.0	12
99	Optimization of Cu(In, Ga)Se <sub>2</sub> (CIGSe) thin film solar cells parameters through numerical simulation and experimental study. Solar Energy, 2021, 224, 298-308.	2.9	12
100	Theoretical and Experimental analysis of ZnPc for its local ordering and electronic structure. Applied Physics A: Materials Science and Processing, 2004, 79, 1913-1918.	1.1	11
101	Characterization of Zinc-phthalocyanine-CdS composite thin films for photovoltaic applications. Vacuum, 2010, 84, 1212-1215.	1.6	11
102	Study of Low Resistivity and High Work Function ITO Films Prepared by Oxygen Flow Rates and N <sub>2</sub> /O Plasma Treatment for Amorphous/Crystalline Silicon Heterojunction Solar Cells. Journal of Nanoscience and Nanotechnology, 2014, 14, 9237-9241.	0.9	11
103	Synthesis of Cu <sub>1-x</sub> Ga <sub>x</sub> Se <sub>2</sub> Nanoparticles by Thermal Decomposition Method with Tunable Ga Content. Journal of Nanoscience and Nanotechnology, 2015, 15, 8388-8394.	0.9	11
104	Water-dispersible magnetite nanoparticles as T <sub>2</sub> MR imaging contrast agent. Biomedical Physics and Engineering Express, 2017, 3, 015011.	0.6	11
105	Preparation and characterization of Cu <sub>2</sub> ZnSnSe <sub>4</sub> and Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> powders by ball milling process for solar cells application. Materials Research Express, 2017, 4, 125501.	0.8	11
106	Engineered Zr/Zn/Ti oxide nanocomposite coatings for multifunctionality. Applied Surface Science, 2021, 563, 150353.	3.1	11
107	Characterization of electrodeposited Zn <sub>1-x</sub> Hg <sub>x</sub> Se thin films. Semiconductor Science and Technology, 2005, 20, 749-754.	1.0	10
108	Characterization on pulsed laser deposited nanocrystalline ZnO thin films. Vacuum, 2010, 84, 1199-1203.	1.6	10

#	ARTICLE	IF	CITATIONS
109	PLASMON RESONANCE AND RAMAN MODES IN $\text{Pb}$ NANOPARTICLES OBTAINED IN EXTRACT OF <i>OPUNTIA FICUS-INDICA</i> PLANT. <i>Nano</i> , 2014, 09, 1450070.	0.5	10
110	Synthesis of ZnO nanorods using different precursor solutions and their two terminal device characterization. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 5724-5734.	1.1	10
111	Structural and photoelectrical characterization of hot wall deposited $\text{CuInSe}_2$ thin films and the fabrication of $\text{CuInSe}_2$ based solar cells. <i>Materials Characterization</i> , 2007, 58, 701-707.	1.9	9
112	Electrosynthesis and studies on Cadmium-Iron-Sulphide thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2010, 174, 231-235.	1.7	9
113	One-dimensional ordered growth of magneto-crystalline and biocompatible cobalt ferrite nano-needles. <i>Materials Letters</i> , 2014, 135, 67-70.	1.3	9
114	Light scattering effect of ITO:Zr/AZO films deposited on periodic textured glass surface morphologies for silicon thin film solar cells. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 823-828.	1.1	9
115	Light trapping by hydrothermally deposited zinc oxide nanostructures with high haze ratio. <i>Materials Science in Semiconductor Processing</i> , 2015, 37, 51-56.	1.9	9
116	Boosting the mobility and bias stability of oxide-based thin-film transistors with ultra-thin nanocrystalline $\text{InSnO:Zr}$ layer. <i>Applied Physics Letters</i> , 2015, 106, 033501.	1.5	9
117	Electronic structure and optical properties of $\text{SnO}_2\text{:F}$ from PBE0 hybrid functional calculations. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 15423-15435.	1.1	9
118	Time-dependent evolution pathway of $\text{CuInSe}_2$ nanocrystals by low-temperature process. <i>Advanced Powder Technology</i> , 2019, 30, 2980-2988.	2.0	9
119	Comparative study of optimised molybdenum back-contact deposition with different barriers ( $\text{Ti}$ , $\text{ZnO}$ ) on stainless steel substrate for flexible solar cell application. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 7524-7538.	1.1	9
120	Review on the effects due to alkali metals on copper-indium-gallium-selenide solar cells. <i>Materials Today Energy</i> , 2021, 20, 100617.	2.5	9
121	Thickness dependent properties of hot wall deposited $\text{CdSe}$ films. <i>Journal of Materials Science Letters</i> , 2003, 22, 25-28.	0.5	8
122	Dielectric and conduction studies on hot-wall deposited $\text{CdSe}$ films. <i>Solar Energy Materials and Solar Cells</i> , 2004, 81, 323-338.	3.0	8
123	Electrical conduction in zinc phosphide thin films. <i>Materials Characterization</i> , 2007, 58, 730-734.	1.9	8
124	Effect of pH on Composition, Structure and Magnetic Properties of Electrodeposited Co-Ni Alloys. <i>Advanced Materials Research</i> , 2009, 68, 52-59.	0.3	8
125	Effect of the Milling Time of the Precursors on the Physical Properties of Sprayed Aluminum-Doped Zinc Oxide ( $\text{ZnO:Al}$ ) Thin Films. <i>Materials</i> , 2012, 5, 1404-1412.	1.3	8
126	Synthesis and optical properties of $\text{BaTiO}_3\text{:Eu}^{3+}\text{@SiO}_2$ glass ceramic nano particles. <i>Journal of Sol-Gel Science and Technology</i> , 2014, 72, 435-442.	1.1	8



#	ARTICLE	IF	CITATIONS
127	Influence of defect luminescence and structural modification on the electrical properties of Magnesium Doped Zinc Oxide Nanorods. Superlattices and Microstructures, 2017, 106, 58-66.	1.4	8
128	Design and evaluation of surface functionalized superparamagneto-plasmonic nanoparticles for cancer therapeutics. International Journal of Pharmaceutics, 2017, 524, 16-29.	2.6	8
129	Electrical, structural, and topographical properties of direct current (DC) sputtered bilayer molybdenum thin films. Journal of Materials Science: Materials in Electronics, 2018, 29, 15671-15681.	1.1	8
130	Telescoping synthesis and goldilocks of CZTS nanocrystals. Materials Research Bulletin, 2019, 111, 342-349.	2.7	8
131	Impact of selenization temperature on the performance of sequentially evaporated CuInSe <sub>2</sub> thin film solar cells. Materials Science in Semiconductor Processing, 2022, 137, 106215.	1.9	8
132	Electrochemical Deposition and Characterization of Cd-Fe-Se Thin Films. Advanced Materials Research, 0, 68, 69-76.	0.3	7
133	Structural and electrochemical characterization of sputter-deposited nitrided NiCr alloys. Journal of Solid State Electrochemistry, 2005, 9, 535-546.	1.2	6
134	Electrodeposition and characterization of HgSe thin films. Materials Characterization, 2007, 58, 735-739.	1.9	6
135	Cytotoxicity of semiconductor nanoparticles in A549 cells is attributable to their intrinsic oxidant activity. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	6
136	Gold-Iron oxide yolk-shell nanoparticles (YSNPs) as magnetic probe for fluorescence-based detection of 3 base mismatch DNA. Colloids and Surfaces B: Biointerfaces, 2019, 176, 431-438.	2.5	6
137	Selective laser sintering of metallic oxide powder mixtures for bi/tri-metallic-oxide formation. Materials Letters, 2021, 286, 129215.	1.3	6
138	Photoluminescence and persistent photoconductivity of Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN heterostructures. Applied Physics A: Materials Science and Processing, 2007, 86, 521-524.	1.1	5
139	An (ITO or AZO)/ZnO/Cu(In <sub>1-x</sub> Ga <sub>x</sub> ) <sub>2</sub> Se <sub>2</sub> superstrate thin film solar cell structure prepared by spray pyrolysis. , 2011, , .		5
140	Structural and optical properties of molybdenum doped bismuth vanadate powders. , 2014, , .		5
141	Structural, morphological and optical properties of sol-gel prepared Cu doped BiVO <sub>4</sub> powders. , 2015, , .		5
142	Inorganic nanoflotillas as engineered particles for drug and gene delivery. , 2016, , 429-483.		5
143	Unveiling the impact of Cu content on the physical properties and photovoltaic performance of solution-processed Cu(In,Ga)Se <sub>2</sub> solar cell absorber. International Journal of Energy Research, 2021, 45, 6966-6984.	2.2	5
144	Efficient 2T CsK <sub>2</sub> Pb(1-x)Sn <sub>x</sub> Br <sub>3</sub> Tin Incorporated Narrow Bandgap Perovskite Tandem Solar Cells: A Numerical Study with Current Matching Conditions. Advanced Theory and Simulations, 2021, 4, 2100121.	1.3	5

#	ARTICLE	IF	CITATIONS
145	Spectroscopic ellipsometry (SE) studies on vacuum-evaporated ZnSe thin films. <i>Materials Characterization</i> , 2007, 58, 715-720.	1.9	4
146	Electrical, optical, and topographical properties of RF magnetron sputtered aluminum-doped zinc oxide (AZO) thin films complemented by first-principles calculations. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 15383-15395.	1.1	4
147	Selenization of CIS and CIGS layers deposited by chemical spray pyrolysis. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 15369-15375.	1.1	4
148	Cu, Mo-doped and pristine-BiVO <sub>4</sub> thin films prepared by rf sputtering process for photocatalytic applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 15770-15775.	1.1	4
149	Effects of changes on temperature and fluorine concentration in the structural, optical and electrical properties of SnO <sub>2</sub> :F thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 15563-15581.	1.1	4
150	Numerical Optimization of Materials Properties for High-Efficiency CIGSe Thin Film Solar Cells Using SCAPS-1D Simulator. , 2021, , .		4
151	Space charge limited current conduction in Bi <sub>2</sub> Te <sub>3</sub> thin films. <i>Materials Characterization</i> , 2007, 58, 842-846.	1.9	3
152	Effect of thickness on the structural, optical and electrical properties of MW-CBD CdZnS thin films. , 2009, , .		3
153	Structural and Optical Studies of Hot Wall Vacuum Evaporated CdTeSn Thin Films. <i>Advanced Materials Research</i> , 0, 68, 77-83.	0.3	3
154	Microstructural Characterization of Electro-Deposited CdSe Thin Films. <i>Advanced Materials Research</i> , 0, 68, 44-51.	0.3	3
155	Deposition and characterization of ZnO:Al thin films by ultrasonic spray pyrolysis. , 2009, , .		3
156	Properties of CuInGaSe thin films prepared by chemical spray pyrolysis. , 2010, , .		3
157	CO adsorption in PdxCoyXz (X = Au, Mo, Ni) tertiary alloy nanocatalysts for PEM fuel cells-a theoretical analysis. <i>International Journal of Energy Research</i> , 2011, 35, 594-600.	2.2	3
158	Structural, Morphological, Topographical, and Electrical Properties of Selenized Stacked CIGSe Layers by Evaporation Technique. , 2018, , .		3
159	Unraveling rapid one-pot synthesis of Cu(In,Ga)Se <sub>2</sub> microcrystal light absorber with tunable morphology and its influence on the solar cell performance. <i>Materials Letters</i> , 2022, 306, 130928.	1.3	3
160	Large Area (10 x10 cm <sup>2</sup> ) Production of CdS Buffer Layer for Solar Cells by Chemical Bath Method. , 2020, , .		3
161	Numerical Study of the Recombination Profiles in CIGSe Thin Film Solar Cells Through Silvaco Atlas Simulator after using Experimental Parameters. , 2021, , .		3
162	Laser damage studies on hot-wall-deposited cadmium selenide films. <i>Journal of Materials Science Letters</i> , 1997, 16, 1974-1976.	0.5	2

#	ARTICLE	IF	CITATIONS
163	Synthesis and Characterization of NiCr Self-Assembled Nanorings. Journal of Nano Research, 2010, 9, 101-108.	0.8	2
164	Characterizations of a Selenized Cu(In <sub>1-x</sub> Ga <sub>x</sub> )Se <sub>2</sub> Thin Film Absorber Layer Fabricated By a Three-Stage Hybrid Method. , 2018, , .		2
165	Statistical experimental design to optimize RF-sputtered NiTiO <sub>3</sub> thin films. Journal of Materials Science: Materials in Electronics, 2020, 31, 7434-7444.	1.1	2
166	Introduction to photovoltaics and alternative materials for silicon in photovoltaic energy conversion. , 2021, , 131-173.		2
167	Growth of In <sub>2</sub> Se <sub>3</sub> Thin Films Prepared by the Pneumatic Spray Pyrolysis Method for Thin Film Solar Cells Applications. , 2020, , .		2
168	Experimental and theoretical analysis of electropolymerized PMeT thin films. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3058-3068.	2.4	1
169	Band structure and Optical properties CdTe and CdSn <sub>3</sub> Te <sub>4</sub> thin films. AIP Conference Proceedings, 2008, , .	0.3	1
170	Mechano-chemical Synthesis, Deposition and Structural Characterization of CIGS. Materials Research Society Symposia Proceedings, 2009, 1210, 1.	0.1	1
171	Preparation and Microstructural Studies of Electrodeposited FeSe Thin Films. Advanced Materials Research, 0, 68, 60-68.	0.3	1
172	Structural, photoluminescence and electrical properties of MW-CBD CdZnS thin films. , 2010, , .		1
173	Structural and dielectrical studies on mechano-chemically synthesized indium doped CdS nanopowders. Journal of Materials Science, 2011, 46, 5417-5422.	1.7	1
174	Synthesis and Characterization of Bimetallic Ni <sub>50</sub> Pt <sub>50</sub> Catalyst Supported on SiO <sub>2</sub> for N <sub>2</sub> O Decomposition. Journal of Nanoscience and Nanotechnology, 2015, 15, 9473-9481.	0.9	1
175	Low Wavenumber Raman Modes and Plasmon Resonance in Cd Nanoparticles Obtained in Extract of <i>Opuntia Ficus-Indica</i> Plant. Nano, 2015, 10, 1550100.	0.5	1
176	Synthesis and Characterization of Polyol-Assisted Nano Cu <sub>0.2</sub> Ni <sub>0.2</sub> Sn <sub>0.2</sub> Ba <sub>0.4</sub> Fe <sub>2</sub> O <sub>4</sub> by a Wet Hydroxyl Route. Journal of Electronic Materials, 2017, 46, 4835-4841.	1.0	1
177	Structural and morphological data of RF-Sputtered BiVO <sub>4</sub> thin films. Data in Brief, 2018, 17, 526-528.	0.5	1
178	12 Possible Orientations of organic Formamidineium cation and its structural analysis by First Principles calculations using Van der Waals-Density functional Theory. , 2018, , .		1
179	Properties Of Ultra-Thin Radio-frequency Sputtered Aluminum Doped Zinc Oxide Thin Films For Solar Cell Applications. , 2020, , .		1
180	Structural features and morphology of titanium dioxide-bismuth vanadate heterojunctions. CrystEngComm, 2021, 23, 7679-7690.	1.3	1

#	ARTICLE	IF	CITATIONS
181	Stability threshold of formamidineum lead iodide determined by strain amplitudes. Journal Physics D: Applied Physics, 2020, 53, 504003.	1.3	1
182	XIV International Materials Research Congress: Symposium 7, Materials Characterization " Cancun, August 2005. Materials Characterization, 2007, 58, 671.	1.9	0
183	Deposition of nanocrystalline-silicon by Cat-CVD method and its characterization. , 2009, , .		0
184	Symposium on advances in semiconducting materials. Vacuum, 2010, 84, 1181.	1.6	0
185	Preparation, deposition of Cu(In<math>x</math>&#x2112;<math>x</math>/inf>Ga<math>x</math>/inf>)<math>Se</math><math>2</math>/inf> nanopowder thin films by non-vacuum processes and its characterization. , 2011, , .		0
186	Group III-nitrides nanostructures. , 2012, , .		0
187	Effect of milling time on mechanically alloyed Cu(In, Ga)Se<math>2</math>/inf> nanoparticles. , 2014, , .		0
188	Oxidation of In<math>2</math>/inf>Se<math>3</math>/inf> precursor films and its effects on preparation of CuInSe<math>2</math>/inf> based thin film solar cells. , 2014, , .		0
189	Improvement of data retention characteristics of OSOSO multi-stacked MIS capacitor for flat panel display technology. Materials Science in Semiconductor Processing, 2015, 37, 9-13.	1.9	0
190	Facile one pot synthesis of single phase kesterite Cu <sub>2</sub> ZnSnS <sub>4</sub> nanocrystals. , 2016, , .		0
191	Influence of reaction time on Cu(In,Ga)Se <sub>2</sub> particles synthesis by thermal decomposition method. , 2016, , .		0
192	Recent trends in Advanced Functional Semiconducting Materials (selected papers from the IMRC2019,) Tj ETQq0 0 0 rgBT /Overlock 10 Journal of Materials Science: Materials in Electronics, 2020, 31, 7285-7285.	1.1	0
193	Photocatalysis using bismuth-based heterostructured nanomaterials for visible light harvesting. , 2021, , 289-328.		0
194	Characterization of BiVO <sub>4</sub> Modified TiO <sub>2</sub> and its Application in the Water Treatment. , 2020, , .		0
195	Synthesis and Characterization of Epoxy-Rich TMOs Deposited on Stainless Steel for Corrosion Applications. Coatings, 2022, 12, 387.	1.2	0