Ganesh Agawane

List of Publications by Year
in descending order

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Version: 2024-02-01

56	2,815	136885	168321
papers	citations	32 h-index	53 g-index

57	57	57	3187
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	CZTS based thin film solar cells: a status review. Materials Technology, 2013, 28, 98-109.	1.5	276
2	A review on pulsed laser deposited CZTS thin films for solar cell applications. Journal of Alloys and Compounds, 2015, 619, 109-121.	2.8	203
3	Studies of compositional dependent CZTS thin film solar cells by pulsed laser deposition technique: An attempt to improve the efficiency. Journal of Alloys and Compounds, 2012, 544, 145-151.	2.8	137
4	Gas sensing properties of hydrothermally grown ZnO nanorods with different aspect ratios. Sensors and Actuators B: Chemical, 2014, 190, 439-445.	4.0	115
5	Synthesis of fast response, highly sensitive and selective Ni:ZnO based NO 2 sensor. Chemical Engineering Journal, 2016, 286, 36-47.	6.6	106
6	Novel method for fabrication of room temperature polypyrroleâ€“ZnO nanocomposite NO2 sensor. Measurement: Journal of the International Measurement Confederation, 2012, 45, 1989-1996.	2.5	103
7	Fabrication of Cu2SnS3 thin film solar cells using pulsed laser deposition technique. Solar Energy Materials and Solar Cells, 2015, 138, 1-8.	3.0	103
8	Electrosynthesis of CZTS films by sulfurization of CZT precursor: Effect of soft annealing treatment. Applied Surface Science, 2013, 283, 74-80.	3.1	101
9	Room temperature chemical synthesis of Cu(OH)2 thin films for supercapacitor application. Journal of Alloys and Compounds, 2013, 573, 27-31.	2.8	99
10	Effect of post-annealing atmosphere on the grain-size and surface morphological properties of pulsed laser deposited CZTS thin films. Ceramics International, 2014, 40, 15097-15103.	2.3	90
11	Thickness dependent H2S sensing properties of nanocrystalline ZnO thin films derived by advanced spray pyrolysis. Sensors and Actuators B: Chemical, 2013, 177, 695-702.	4.0	86
12	Improved photoelectrochemical performance of Cu2ZnSnS4 (CZTS) thin films prepared using modified successive ionic layer adsorption and reaction (SILAR) sequence. Electrochimica Acta, 2014, 150, 136-145.	2.6	77
13	Structural, optical and electrical properties of chemically sprayed nanosized gallium doped CdO thin films. Journal of Alloys and Compounds, 2010, 496, 357-363.	2.8	65
14	Fabrication of 3.01% power conversion efficient high-quality CZTS thin film solar cells by a green and simple solâ€“gel technique. Materials Letters, 2015, 158, 58-61.	1.3	60
15	Non-toxic complexing agent Tri-sodium citrateâ€™s effect on chemical bath deposited ZnS thin films and its growth mechanism. Journal of Alloys and Compounds, 2012, 535, 53-61.	2.8	59
16	Non-vacuum mechanochemical route to the synthesis of Cu2SnS3 nano-ink for solar cell applications. Acta Materialia, 2015, 85, 314-321.	3.8	59
17	Cu2ZnSnS4 (CZTS)-based room temperature liquefied petroleum gas (LPG) sensor. Sensors and Actuators B: Chemical, 2014, 190, 408-413.	4.0	57
18	Preparation and characteristics of chemical bath deposited ZnS thin films: Effects of different complexing agents. Journal of Alloys and Compounds, 2012, 526, 25-30.	2.8	53

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19	Nitrogen dioxide sensing properties of sprayed tungsten oxide thin film sensor: Effect of film thickness. Journal of Colloid and Interface Science, 2015, 451, 245-254.	5.0	52
20	Influence of deposition temperature on morphological, optical, electrical and opto-electrical properties of highly textured nano-crystalline spray deposited CdO:Ga thin films. Applied Surface Science, 2010, 257, 93-101.	3.1	51
21	Structural, Optical, Electrical, and Dielectric Properties of the Spray-Deposited WO3 Thin Films. Journal of Materials Engineering and Performance, 2014, 23, 1204-1213.	1.2	51
22	Design and Growth of Quaternary Mg and Ga Codoped ZnO Thin Films with Transparent Conductive Characteristics. Crystal Growth and Design, 2011, 11, 4819-4824.	1.4	50
23	A facile and low cost synthesis of earth abundant element Cu2ZnSnS4 (CZTS) nanocrystals: Effect of Cu concentrations. Journal of Alloys and Compounds, 2012, 541, 192-197.	2.8	48
24	Temperature dependent structural, luminescent and XPS studies of CdO:Ga thin films deposited by spray pyrolysis. Journal of Alloys and Compounds, 2010, 506, 794-799.	2.8	47
25	Next generation promising Cu2(ZnxFe1â^'x)SnS4 photovoltaic absorber material prepared by pulsed laser deposition technique. Materials Letters, 2014, 137, 147-149.	1.3	44
26	A facile and low-cost synthesis of promising absorber materials on Cu2ZnSn(Sx,Se1â^'x)4 nanocrystals consisting of earth abundant elements with tunable band gap characteristics. Journal of Materials Chemistry, 2012, 22, 21727.	6.7	42
27	Facile method of synthesis of polyaniline-SnO2 hybrid nanocomposites: Microstructural, optical and electrical transport properties. Synthetic Metals, 2013, 178, 1-9.	2.1	42
28	Pulsed electrodeposited CZTS thin films: Effect of duty cycle. Materials Letters, 2013, 108, 316-319.	1.3	39
29	A chemical approach for synthesis of photoelectrochemically active Cu 2 ZnSnS 4 (CZTS) thin films. Solar Energy, 2014, 110, 221-230.	2.9	39
30	Green route fast synthesis and characterization of chemical bath deposited nanocrystalline ZnS buffer layers. Current Applied Physics, 2013, 13, 850-856.	1.1	34
31	Synthesis of simple, low cost and benign solâ€“gel Cu2ZnSnS4 thin films: influence of different annealing atmospheres. Journal of Materials Science: Materials in Electronics, 2015, 26, 1900-1907.	1.1	34
32	Simplistic toxic to non-toxic hydrothermal route to synthesize Cu2ZnSnS4 nanoparticles for solar cell applications. Solar Energy, 2015, 122, 1146-1153.	2.9	34
33	Spectroscopic properties of Er3+/Yb3+ co-doped fluorophosphate glasses for NIR luminescence and optical temperature sensor applications. Journal of Industrial and Engineering Chemistry, 2018, 67, 236-243.	2.9	29
34	Monodispersed wurtzite Cu₂SnS₃nanocrystals by phosphine and oleylamine free facile heat-up technique. CrystEngComm, 2016, 18, 2885-2893.	1.3	25
35	Fabrication of Cu 2 (Zn x Mg 1-x)SnS 4 thin films by pulsed laser deposition technique for solar cell applications. Materials Science in Semiconductor Processing, 2018, 76, 50-54.	1.9	25
36	Development of transparent conductive Mg and Ga co-doped ZnO thin films: Effect of Mg concentration. Surface and Coatings Technology, 2013, 231, 364-369.	2.2	24

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37	Kesterite CZTS nanocrystals: pHâ€dependent synthesis. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1531-1534.	0.8	23
38	The synergistic influence of anionic bath immersion time on the photoelectrochemical performance of CZTS thin films prepared by a modified SILAR sequence. RSC Advances, 2014, 4, 18537.	1.7	23
39	Sulfur ion concentration dependent morphological evolution of CdS thin films and its subsequent effect on photo-electrochemical performance. Physical Chemistry Chemical Physics, 2016, 18, 28024-28032.	1.3	23
40	Photoluminescence quenching of a CdS nanoparticles/ZnO nanorods coreâ€“shell heterogeneous film and its improved photovoltaic performance. Optical Materials, 2014, 37, 766-772.	1.7	20
41	Longer lifetime of Er3+/Yb3+ co-doped fluorophosphate glasses for optical amplifier applications. Journal of Non-Crystalline Solids, 2017, 471, 65-71.	1.5	20
42	Studies on the effect of nozzle-to-substrate distance on the structural, electrical and optical properties of spray deposited CdIn2O4 thin films. Applied Surface Science, 2010, 256, 3522-3530.	3.1	17
43	The green hydrothermal synthesis of nanostructured Cu2ZnSnSe4 as solar cell material and study of their structural, optical and morphological properties. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	17
44	Non-toxic novel route synthesis and characterization of nanocrystalline ZnSxSe1â^'x thin films with tunable band gap characteristics. Materials Research Bulletin, 2014, 55, 106-113.	2.7	16
45	Study on the effects of different sulfur vaporization temperature on the properties of CuInS2 thin films. Applied Surface Science, 2013, 270, 572-577.	3.1	15
46	Preparation and characterization of chemical bath deposited nanocrystalline ZnSe thin films using Na3-citrate and hydrazine hydrate: A comparative study. Materials Letters, 2013, 106, 186-189.	1.3	13
47	Novel reduced toxic route synthesis and characterization of chemical bath deposited ZnSe thin films. Ceramics International, 2014, 40, 367-374.	2.3	13
48	Low temperature epitaxial growth and characterization of Ga-doped ZnO thin films on Al2O3 (0001) substrates prepared with different buffer layers. Applied Surface Science, 2012, 258, 5073-5079.	3.1	11
49	Opto-structural and electrical properties of chemically grown Ga doped MoBi2Se5 thin films. Journal of Materials Science: Materials in Electronics, 2013, 24, 4669-4676.	1.1	11
50	Thermo-mechanical studies on Er3+-doped fluorophosphate glasses for near infrared lasers. Ceramics International, 2017, 43, 11177-11181.	2.3	9
51	A Promising Modified SILAR Sequence for the Synthesis of Photoelectrochemically Active Cu₂ZnSnS₄ (CZTS) Thin Films. Israel Journal of Chemistry, 2015, 55, 1098-1102.	1.0	8
52	Effects of Cu/In compositional ratio on the characteristics of CuInS2 absorber layers prepared by sulfurization of metallic precursors. Electronic Materials Letters, 2012, 8, 191-197.	1.0	7
53	Correlation between soft annealing conditions and structural, microstructural, morphological, and optical properties of CuInS2 thin films prepared by sulfurization of stacked precursor. Journal of Crystal Growth, 2014, 394, 49-54.	0.7	5
54	Studies on the Controlling of the Microstructural and Morphological Properties of Al Doped ZnO Thin Films Prepared by Hydrothermal Method. Japanese Journal of Applied Physics, 2013, 52, 10MA06.	0.8	3

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55	Fabrication of 5.2% efficient Cu₂ZnSn(S,Se)₄ solar cells using DCâ€sputtered metal precursors followed by sulfoâ€selenization. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 708-712.	0.8	2
56	Spectroscopic properties of Er3+/Yb3+ co-doped fluorophosphate glasses for optical device applications. , 2018, , .		0