Jeyanthinath Mayandi

List of Publications by Year
in descending order

88 papers	1,395 citations	411340 20 h-index	425179 34 g-index
90 all docs	90 docs citations	90 times ranked	2329 citing authors

#	Article	IF	Citations
1	Impact of coupled plasmonic effect with multishaped silver nanoparticles on efficiency of dye sensitized solar cells. Journal of Alloys and Compounds, 2022, 894, 162339.	2.8	16
2	Influence of PVP on Bi25FeO40 microcubes for Supercapacitors and Dye-Sensitized Solar Cells applications. Journal of Materials Science: Materials in Electronics, 2022, 33, 9512-9524.	1.1	6
3	Influence of polymer initiators in light guiding in a cyanobacterium incorporated (poly)-methyl methacrylate matrix. Materials Letters, 2022, 314, 131845.	1.3	0
4	Thin films made by reactive sputtering of high entropy alloy FeCoNiCuGe: Optical, electrical and structural properties. Thin Solid Films, 2022, 744, 139083.	0.8	3
5	High entropy alloy CrFeNiCoCu sputter deposited films: Structure, electrical properties, and oxidation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, .	0.9	3
6	The use of urea as an Nâ€doping 3D hierarchical preserving agent for titanium dioxide nanostructures tailored for dyeâ€sensitized solar cells. International Journal of Energy Research, 2022, 46, 9533-9548.	2.2	6
7	<scp> Bi ₂ S ₃ </scp> can do it all: Sensitizer, counter electrode, and supercapacitor for symmetric solar cell assisted <scp>photoâ€supercapacitor</scp>. International Journal of Energy Research, 2022, 46, 11065-11078.	2.2	13
8	Excellent photocatalytic activity of Ag2O loaded ZnO/NiO nanocomposites in sun-light and their biological applications. Chemical Physics Letters, 2022, 796, 139566.	1.2	13
9	The Effects of Substrate Temperature on the Growth, Microstructural and Magnetic Properties of Gadolinium-Containing Films on Aluminum Nitride. Surfaces, 2022, 5, 321-333.	1.0	1
10	Mechanical, Structural and Optical Properties of the Silicon Nanowire Arrays. Zeitschrift Fur Physikalische Chemie, 2021, 235, 497-509.	1.4	0
11	Reaction induced multifunctional TiO2 rod/particle nanostructured materials for screen printed dye sensitized solar cells. Ceramics International, 2021, 47, 8094-8104.	2.3	4
12	Structural, optical and electrical studies on zinc doped barium strontium titanate as photo-anode for DSSC device. Materials Today: Proceedings, 2021, 35, 48-52.	0.9	29
13	Influence of Al-Cu doping on the efficiency of BiFeO3 based perovskite solar cell (PSC). Materials Today: Proceedings, 2021, 35, 62-65.	0.9	2
14	Reinforcement of alumina with carbon nano cones and characterization. Materials Today: Proceedings, 2021, 35, 57-61.	0.9	1
15	Influence of tin (IV) doping on structural and optical properties of rhombohedral barium titanate (BaTiO3). Materials Today: Proceedings, 2021, 35, 13-16.	0.9	16
16	Al-doped ZnO prepared by co-precipitation method and its thermoelectric characteristics. Materials Letters, 2021, 288, 129352.	1.3	21
17	Assessment of the design efficacy of Eu2+ ion embedded thick scattering layers for operational photovoltaics. Applied Surface Science Advances, 2021, 4, 100067.	2.9	2
18	Technical review: Improvement of mechanical properties and suitability towards armor applications â€“ Alumina composites. Ceramics International, 2021, 47, 23693-23701.	2.3	15

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19	Enhanced dye-sensitized solar cell performance using strontium titanate perovskite integrated photoanodes modified with plasmonic silver nanoparticles. Journal of Alloys and Compounds, 2021, 889, 161693.	2.8	17
20	Partial oxidation of high entropy alloys: A route toward nanostructured ferromagnets. Materialia, 2021, 20, 101250.	1.3	2
21	Novel silver nanoparticles/activated carbon co-doped titania nanoparticles for enhanced antibacterial activity. Materials Letters, 2020, 258, 126775.	1.3	14
22	Misidentification of hexagonal phase as barium carbonate during chemical synthesis of barium titanate nanopowders. Materials Today: Proceedings, 2020, 23, 81-84.	0.9	2
23	The effect of post-deposition annealing conditions on structural and thermoelectric properties of sputtered copper oxide films. RSC Advances, 2020, 10, 29394-29401.	1.7	13
24	Investigating antireflection properties of hybrid silicon nanostructures comprising rod-like nanopores and nano-textured surface. Materials Letters, 2020, 275, 128087.	1.3	2
25	Screen printed multifunctional TiO2 photoanode with plasmonic Ag nanoparticles for performance enhancement of dye sensitized solar cell. Materials Letters, 2020, 276, 128194.	1.3	7
26	Optical absorption study of anthoxanthin based natural dyes for dye sensitized solar cells: Experimental and theoretical investigations. Materials Letters, 2020, 276, 128089.	1.3	5
27	Carbon-dioxide as annealing atmosphere to retain the electrical properties of indium-tin oxide. Materials Letters, 2020, 276, 128195.	1.3	2
28	Microstructure profiling and photoluminescence characteristics of V(1-x)2 Ni3xO5-Î´ compound systems. Materials Letters, 2020, 266, 127507.	1.3	5
29	Antibacterial and anticancer activity of hydrothermally-synthesized zinc oxide nanomaterials using natural extracts of neem, pepper and turmeric as solvent media. Nano Express, 2020, 1, 010029.	1.2	7
30	Demonstration of a simple encapsulation technique for prototype silicon solar cells. Materials Letters, 2020, 274, 128028.	1.3	6
31	Ethanol sensing characteristics of bismuth ferrite clad-modified fiber optic gas sensor. AIP Conference Proceedings, 2020, , .	0.3	0
32	Influence of metal assisted chemical etching time period on mesoporous structure in as-cut upgraded metallurgical grade silicon for solar cell application. Journal of Materials Science: Materials in Electronics, 2019, 30, 8676-8685.	1.1	18
33	Dual morphology titanium dioxide for dye sensitized solar cells. Ceramics International, 2019, 45, 7268-7277.	2.3	19
34	Effect of microwave power irradiation on TiO2 nano-structures and binder free paste screen printed dye sensitized solar cells. Ceramics International, 2019, 45, 4667-4673.	2.3	20
35	Effects of silver catalyst concentration in metal assisted chemical etching of silicon. Materials Letters, 2018, 221, 206-210.	1.3	42
36	Micromorphology analysis of sputtered indium tin oxide fabricated with variable ambient combinations. Materials Letters, 2018, 220, 169-171.	1.3	7

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37	Chemical Synthesis and Characterization of Nano Alumina, Nano Composite of Carbonâ€“Alumina and Their Comparative Studies. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1827-1842.	1.4	7
38	Properties of Al-doped zinc oxide and In-doped zinc oxide bilayer transparent conducting oxides for solar cell applications. Materials Letters, 2018, 222, 50-53.	1.3	37
39	Visible light active photocatalyst: Hydrothermal green synthesized TiO 2 NPs for degradation of picric acid. Materials Letters, 2018, 222, 45-49.	1.3	41
40	Enhancing the anti-gastric cancer activity of curcumin with biocompatible and pH sensitive PMMA-AA/ZnO nanoparticles. Materials Science and Engineering C, 2018, 82, 182-189.	3.8	54
41	Influence of pH in La-doped SnO2 nanoparticles towards sensor applications. Ionics, 2017, 23, 2909-2917.	1.2	17
42	Biocompatible curcumin loaded PMMA-PEG/ZnO nanocomposite induce apoptosis and cytotoxicity in human gastric cancer cells. Materials Science and Engineering C, 2017, 80, 59-68.	3.8	69
43	Micro-Raman Scattering of Nanoscale Silicon in Amorphous and Porous Silicon. Zeitschrift Fur Physikalische Chemie, 2017, 231, 1585-1598.	1.4	16
44	Synthetic Method Dependent Physicochemical Properties and Electrochemical Performance of Ni-Doped ZnO. ChemistrySelect, 2017, 2, 9014-9023.	0.7	11
45	Magneto-chemotherapy for cervical cancer treatment with camptothecin loaded Fe₃O₄ functionalized Î²-cyclodextrin nanovehicle. RSC Advances, 2017, 7, 46271-46285.	1.7	31
46	Hydrogen adsorption on single walled carbon nanotubes-tungsten trioxide composite. International Journal of Hydrogen Energy, 2017, 42, 25294-25302.	3.8	6
47	Inhibition of growth ofS. epidermidisby hydrothermally synthesized ZnO nanoplates. Materials Research Express, 2017, 4, 075401.	0.8	16
48	Influence of Oxygen Concentration on the Performance of Ultra-Thin RF Magnetron Sputter Deposited Indium Tin Oxide Films as a Top Electrode for Photovoltaic Devices. Materials, 2016, 9, 63.	1.3	44
49	Synergistic effect of MgO/Ag co-doping on TiO2 for efficient antibacterial agents. Materials Letters, 2016, 184, 82-87.	1.3	17
50	Structural and optical characterization and efficacy of hydrothermal synthesized Cu and Ag doped zinc oxide nanoplate bactericides. Materials Chemistry and Physics, 2016, 184, 172-182.	2.0	58
51	Investigation of hydrogen storage in MWCNTâ€“TiO2 composite. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 80, 207-211.	1.3	9
52	A new method of preparing highly conductive ultra-thin indium tin oxide for plasmonic-enhanced thin film solar photovoltaic devices. Solar Energy Materials and Solar Cells, 2016, 149, 250-257.	3.0	46
53	Preparation of meta-stable phases of barium titanate by Sol-hydrothermal method. AIP Advances, 2015, 5, .	0.6	30
54	Zinc oxide formation in galvanized metallic wire by simple selective growth method. Superlattices and Microstructures, 2015, 82, 327-335.	1.4	1

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55	Photocatalytic degradation and antimicrobial applications of F-doped MWCNTs/TiO2 composites. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 139, 290-295.	2.0	34
56	Photocatalytic and antimicrobial activities of fluorine doped TiO2-carbon nano cones and disc composites. Materials Science in Semiconductor Processing, 2015, 31, 543-550.	1.9	9
57	A novel synthesis of tin oxide thin films by the sol-gel process for optoelectronic applications. AIP Advances, 2015, 5, .	0.6	76
58	Impact of carbon-fluorine doped titanium dioxide in the performance of an electrochemical sensing of dopamine and rosebengal sensitized solar cells. AIP Advances, 2015, 5, .	0.6	2
59	Peanut shaped ZnO microstructures: controlled synthesis and nucleation growth toward low-cost dye sensitized solar cells. Materials Research Express, 2015, 2, 066202.	0.8	23
60	Effect of electronic-insulating oxides overlayer on the performance of zinc oxide based dye sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 305, 37-44.	2.0	7
61	Effect of ambient combinations of argon, oxygen, and hydrogen on the properties of DC magnetron sputtered indium tin oxide films. AIP Advances, 2015, 5, .	0.6	45
62	Heterojunction thin films based on multifunctional metal oxides for photovoltaic application. , 2014, , .		0
63	A facile hydrothermal synthesis of SrTiO3 for dye sensitized solar cell application. Journal of Alloys and Compounds, 2014, 586, 456-461.	2.8	111
64	A comparative study of 1.5Î¼m photoluminescence from (Er, Si) and (Er, Ge) co-sputtered with Al2O3 on Si. Journal of Alloys and Compounds, 2014, 590, 5-8.	2.8	0
65	Preparation and characterization of ZnO/graphene nanocomposite for improved photovoltaic performance. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	25
66	Microwave assisted synthesis of zinc stannate nanocubes for dye sensitized solar cell application. Superlattices and Microstructures, 2014, 75, 775-784.	1.4	11
67	Enhanced photocatalytic, antimicrobial activity and photovoltaic characteristics of fluorine doped TiO2 synthesized under ultrasound irradiation. Journal of Fluorine Chemistry, 2013, 156, 209-213.	0.9	17
68	Preparation of DC reactive magnetron sputtered ZnO thin film towards photovoltaic applications. , 2013, , .		2
69	An in situ x-ray photoelectron spectroscopy study of the initial stages of rf magnetron sputter deposition of indium tin oxide on p-type Si substrate. Applied Physics Letters, 2013, 102, 021606.	1.5	14
70	Elemental distribution and oxygen deficiency of magnetron sputtered indium tin oxide films. Journal of Applied Physics, 2011, 109, .	1.1	49
71	Electrically active centers introduced in pâ€type Si by rapid thermal processing. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 725-728.	0.8	0
72	Chemical synthesis of silver nanoparticles for solar cell applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 924-927.	0.8	47

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73	Composition and structure of Pd nanoclusters in SiOx thin film. Journal of Applied Physics, 2011, 109, 084329.	1.1	12
74	STM observation of pit formation and evolution during the epitaxial growth of Si on Si(001) surface. Chinese Physics B, 2010, 19, 106102.	0.7	1
75	Deep level transient spectroscopy studies of electrically active centers in solar-grade Si. , 2010, , .		1
76	The formation of Er-oxide nanoclusters in SiO2 thin films with excess Si. Journal of Applied Physics, 2009, 106, 014305.	1.1	8
77	Electrical Properties of Silicon with Bistable Impurity Complexes. Materials Research Society Symposia Proceedings, 2009, 1210, 1.	0.1	0
78	Characterization of Ag Nanocrystals for use in Solar Cell Applications. Materials Research Society Symposia Proceedings, 2009, 1211, 1.	0.1	1
79	An experimental study of charge distribution in crystalline and amorphous Si nanoclusters in thin silica films. Journal of Applied Physics, 2008, 103, .	1.1	29
80	Characterization of amorphous and crystalline silicon nanoclusters in ultra thin silica layers. Journal of Applied Physics, 2008, 104, 094315.	1.1	5
81	Ion beam synthesized luminescent Si nanocrystals embedded in SiO2 films and the role of damage on nucleation during annealing. Surface and Coatings Technology, 2007, 201, 8482-8485.	2.2	3
82	Scanning probe measurements on luminescent Si nanoclusters in SiO2 films. Thin Solid Films, 2007, 515, 6375-6380.	0.8	6
83	Infrared electroluminescence from a Si MOS structure with Ge in the oxide. Journal of Luminescence, 2007, 127, 362-366.	1.5	0
84	Luminescence from silicon nanoparticles in SiO2: atomic force microscopy and transmission electron microscopy studies. Physica Scripta, 2006, T126, 77-80.	1.2	5
85	A STUDY ON THE PRECIPITATION OF Ge-RICH NANOPARTICLES IN A LUMINESCENT (Er, Ge) CO-DOPED SiO2 FILM SPUTTERED WITH Ar + O2 PLASMA. International Journal of Nanoscience, 2006, 05, 493-498.	0.4	0
86	Strain-Mediated Uniform Islands in Stacked Ge/Si(001) Layers. Japanese Journal of Applied Physics, 2004, 43, 7411-7414.	0.8	0
87	Controlling the Electrical Properties of Reactively Sputtered High Entropy Alloy CrFeNiCoCu Films. Journal of Electronic Materials, 0, , 1.	1.0	1
88	Microstructure profiling, lattice dynamics, and morphological studies on multi-excitonic vanadium bismuth oxide compound systems. Journal of the Australian Ceramic Society, 0, , .	1.1	0