Shanmugan Subramani

List of Publications by Year
in descending order

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Version: 2024-02-01

95	735	567281	677142
papers	citations	15 h-index	22 g-index

95	95	95	725
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of the thermal performance of high-power LED using magnesium oxide thin film as heat spreader. Materials Chemistry and Physics, 2022, 277, 125588.	4.0	2
2	Investigation of in-plane heat distribution, thermal stability and mechanical properties of SS-(Fe3O4)/Ti/AlN/Ti/SiO2 as absorber coatings for efficient high temperature concentrated solar power systems. Journal of Alloys and Compounds, 2022, 901, 163576.	5.5	5
3	High-temperature AlN and Ti multilayer cermet for solar absorber coating: structural and optical properties. Indian Journal of Physics, 2022, 96, 3787-3795.	1.8	2
4	Testing and Analysis of Ar Plasma Processed LED at Different Ar Gas Flow Rate and Process Time: Thermal and Surface Verification. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2022, 12, 1007-1014.	2.5	0
5	Melt compounded polylactic acid-hexagonal boron nitride-aluminum oxide hybrid composites for electronic applications: impact of hybrid fillers on thermophysical, dielectric, optical, and hardness properties. Polymer-Plastics Technology and Materials, 2021, 60, 147-164.	1.3	4
6	Development of AlNB alloy in (Al/AlN/B) stacking sequence using RF reactive sputtering towards thermal management application. Journal of Materials Science: Materials in Electronics, 2021, 32, 577-589.	2.2	3
7	Synergetic effect of micro-hBN and nano-Al2O3 fillers on structural, surface, thermal, and mechanical properties of PLA/hBN/Al₂O₃ hybrid composites: experimental and theoretical investigation. Polymer-Plastics Technology and Materials, 2021, 60, 917-936.	1.3	0
8	High thermal conductivity, UV-stabilized poly(3-hydroxybutyrate-co-3-hydroxyvalerate) hybrid composites for electronic applications: effect of different hybrid fillers on structural, thermal, optical, and mechanical properties. Polymer-Plastics Technology and Materials, 2021, 60, 1273-1291.	1.3	4
9	Nanostructures multilayer MgO/ZnO thin film thermal interface material for LED applications: Thermal, optical, and surface temperature performance. Journal of Materials Science: Materials in Electronics, 2021, 32, 16008-16023.	2.2	4
10	Growth and performance analysis of BAlN alloy thin film on Al substrate as a heat spreader for effective thermal management applications on white-based high-power LED. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	1
11	Polysiloxane-graphite composites as thermal interface material for light emitting diode application: a study on impact of graphite nanopowder on thermal and surface properties. Polymer-Plastics Technology and Materials, 2020, 59, 106-115.	1.3	4
12	Influence of structural and surface properties of MgO thin film as a heat spreader on high power LED performance. Optical and Quantum Electronics, 2020, 52, 1.	3.3	2
13	Performance of 9.0ÂW light-emitting diode on various layers of magnesium oxide thin film thermal interface material. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	6
14	Performance analysis of MgO/ZnO multilayer thin film as heat spreader on Al substrates for high-power LED thermal management applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 15976-15990.	2.2	4
15	Zn thin film on Al metal as thermal substrates for LED application: thermal and optical performance. Optical and Quantum Electronics, 2020, 52, 1.	3.3	1
16	Optimization of process parameters of anodic aluminium oxide using an orthogonal array technique for thermal management applications. Journal of Materials Science: Materials in Electronics, 2020, 31, 18706-18720.	2.2	1
17	The impact of Fe3O4 on the performance of ultrathin Ti/AlN/Ti tandem coating on stainless-steel for solar selective absorber application. Results in Physics, 2020, 19, 103582.	4.1	6
18	Achievements in mid and high-temperature selective absorber coatings by physical vapor deposition (PVD) for solar thermal Application-A review. Journal of Alloys and Compounds, 2020, 839, 155510.	5.5	50

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19	Impact of aluminum oxide nanopowder on thermal, optical and surface properties of polysiloxane-aluminum oxide composites as elastomeric thermal pad for light emitting diode application. Polymer-Plastics Technology and Materials, 2020, 59, 1124-1137.	1.3	1
20	Heat transfer enhancement in lightâ€emitting diode packaging employing different molar concentration of magnesium oxide thin films as a heat spreader. International Journal of Energy Research, 2020, 44, 9527-9537.	4.5	7
21	Synthesis and analysis of anodic aluminum oxide-nanopore structure on Al substrates for efficient thermal management in electronic packaging. Journal of Materials Science: Materials in Electronics, 2020, 31, 9641-9649.	2.2	10
22	Synthesis and characterization of hexagonal boron nitride coating on polyethylene terephthalate. Iranian Polymer Journal (English Edition), 2019, 28, 969-976.	2.4	4
23	Effect of substrate temperature deposition on the thermal and optical performance of ZnO thin films as thermal interface material. Optical and Quantum Electronics, 2019, 51, 1.	3.3	1
24	Influence of Molar Concentration: Sol-Gel Synthesized Magnesium Oxide Thin Films for High Power Light Emitting Diode Thermal Management. IOP Conference Series: Earth and Environmental Science, 2019, 268, 012118.	0.3	8
25	Impact of ZnO Nanoparticles on Thermal Properties of Poly(3-hydroxybutyrate-co-10 mol %) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	E0	4
26	Synthesis of MgO Thin Film on Aluminum and Copper Substrates as Thermal Interface Materials. IEEE Transactions on Electron Devices, 2019, 66, 1450-1457.	3.0	12
27	Structural and surface analysis of chemical vapor deposited boron doped aluminum nitride thin film on aluminum substrates. Materials Science-Poland, 2019, 37, 395-403.	1.0	7
28	Performance of Chemical Vapor Deposited Boron-Doped AlN Thin Film as Thermal Interface Materials for 3-W LED: Thermal and Optical Analysis. Acta Metallurgica Sinica (English Letters), 2018, 31, 97-104.	2.9	6
29	EVALUATION ON THE THERMAL AND STRUCTURAL PROPERTIES OF COPPER ALUMINUM OXIDE (Cu-Al2O3) THIN FILM ON AL SUBSTRATE: EFFECT OF ANNEALING TEMPERATURE. Surface Review and Letters, 2018, 25, 1950017.	1.1	1
30	Variation of thermal resistance with input current and ambient temperature in low-power SMD LED. Microelectronics International, 2018, 35, 1-11.	0.6	2
31	Performance of Cu-Al₂O₃ thin film as thermal interface material in LED package: thermal transient and optical output analysis. Microelectronics International, 2018, 35, 33-44.	0.6	9
32	Thermal performance of LED fixed on CVD processed ZnO thin film on Al substrates at various O₂ gas flow rates. AIMS Materials Science, 2018, 5, 246-256.	1.4	5
33	Thermal and optical performance of chemical vapor deposited zinc oxide thin film as thermal interface material for high power LED. AIMS Materials Science, 2018, 5, 402-413.	1.4	5
34	Poly (3-hydroxybutyrate-co-15 mol% 3hydroxyhexanoate)/ZnO nanocomposites by solvent casting method: a study of optical, surface, and thermal properties. Materials Research Express, 2017, 4, 015301.	1.6	10
35	Impact of ZnO Nanoparticles on Dielectric and Optical Properties of Poly (3-hydroxybutyrate) for Electronics Applications. Polymer-Plastics Technology and Engineering, 2017, 56, 1495-1504.	1.9	9
36	Properties of undoped ZnO and Mg doped ZnO thin films by sol-gel method for optoelectronic applications. Journal of the Australian Ceramic Society, 2017, 53, 421-431.	1.9	24

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37	Investigation of rheological, structural, surface, optical and thermal properties of low temperature produced silver doped ZnO thick film as thermal interface material in lighting application. Journal of Materials Science: Materials in Electronics, 2017, 28, 10112-10121.	2.2	4
38	Structural and thermal performance of Ag, Ni, and Ag/Ni thin films as thermal interface material for light-emitting diode application. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	6
39	THERMALLY-DRIVEN STRUCTURAL CHANGES OF SPUTTERED COPPER ALUMINUM OXIDE FILMS (Cuâ€“Al₂O₃) GROWN BY LAYER STACKING METHOD. Surface Review and Letters, 2017, 24, 1850002.	1.1	0
40	Low temperature produced calcium-doped zinc oxide thick film via screen printing technique as thermal interface material in LED application. Journal of Materials Science: Materials in Electronics, 2017, 28, 13371-13378.	2.2	1
41	Structural Analysis of ZnO Nanoparticles Reinforced P(3HB-co-15Âmol% 3HHx) Bioplastic Composite. Journal of Polymers and the Environment, 2017, 25, 1251-1261.	5.0	9
42	Effect of ethyl cellulose on thermal resistivity of thixotropic ZnO nano-particle paste for thermal interface material in light emitting diode application. Materials Science in Semiconductor Processing, 2017, 58, 61-67.	4.0	5
43	Heat transfer enhancement in MOSFET mounted on different FR4 substrates by thermal transient measurement. Chinese Physics B, 2017, 26, 098901.	1.4	1
44	Structural and Optical Properties of Ultra-high Pure Hot Water Processed Ga2O3 Thin Film. Medziagotyra, 2016, 22, .	0.2	1
45	Testing and Analysis of Boron-Doped Aluminum Nitride Thin-Film-Coated Al as Thermal Substrates in PCB Fabrication for LED Application. IEEE Transactions on Electron Devices, 2016, 63, 4839-4844.	3.0	10
46	Properties of inductively coupled N2plasma processed AlInN thin film prepared by post annealing of rf sputtered Al/InN stack. Materials Research Express, 2016, 3, 126301.	1.6	1
47	GROWTH OF SPUTTERED-ALUMINUM OXIDE THIN FILMS ON Si (100) AND Si (111) SUBSTRATES WITH Al2O3 BUFFER LAYER. Surface Review and Letters, 2016, 23, 1650016.	1.1	0
48	Structural, morphological, optical and electrical properties of NiO films prepared on Si (100) and glass substrates at different thicknesses. Materials Research Express, 2016, 3, 116405.	1.6	16
49	Analysis of ZnO Thin Film as Thermal Interface Material for High Power Light Emitting Diode Application. Journal of Electronic Packaging, Transactions of the ASME, 2016, 138, .	1.8	2
50	Optical performance of high power LED on silver and nickel thin film coated aluminum substrates using sputtering process. Optical and Quantum Electronics, 2016, 48, 1.	3.3	2
51	Influence of annealed Cuâ€“Al2O3 thin film on the performance of high power LED: thermal and optical analysis. Optical and Quantum Electronics, 2016, 48, 1.	3.3	9
52	Thermal resistance of high power LED influenced by ZnO thickness and surface roughness parameter. Microelectronics International, 2016, 33, 15-22.	0.6	2
53	Structural and surface characterization of undoped ZnO and Cu doped ZnO using solâ€“gel spin coating method. Journal of Materials Science: Materials in Electronics, 2016, 27, 3520-3530.	2.2	27
54	Thermal Contact Conductance Analysis of Nitride and Carbonitride Thin Film Coatings for Thermal Interface Material Application. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 5801-5809.	2.2	3

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55	Thermal transient analysis of LED using carbon doped AlN film deposited on metal substrate as heat sink. Optical and Quantum Electronics, 2015, 47, 1245-1253.	3.3	4
56	Antibacterial Activity and Electrical Properties of Gold Nanoparticle Doped Ceria-Rice Husk Silica (Au/Ce-Silica) Nanocomposites Derived From Biomass. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2015, 45, 304-308.	0.6	7
57	Thermal Performance of High Power LED on Boron Doped Aluminium Nitride Thin Film Coated Copper Substrates. Journal of Scientific Research and Reports, 2015, 5, 109-119.	0.2	12
58	Thermal Transient Analysis of High-Power Green LED Fixed on BN Coated Al Substrates as Heatsink. IEEE Transactions on Electron Devices, 2014, 61, 3213-3216.	3.0	10
59	Structural and surface analysis of AlInN thin films synthesized by elemental stacks annealing. Materials Research Express, 2014, 1, 026403.	1.6	7
60	Thermal Resistance Analysis of High Power Light Emitting Diode Using Aluminum Nitride Thin Film-Coated Copper Substrates as Heat Sink. Journal of Electronic Packaging, Transactions of the ASME, 2014, 136, .	1.8	18
61	Synthesis and Properties of Nano Structured SnO2 Thin Films Prepared by Hot Water Oxidation of Metallic Sn Thin Film. Materials Focus, 2014, 3, 48-54.	0.4	5
62	Influence of AlN Thin Film as Thermal Interface Material on Thermal and Optical Properties of High-Power LED. IEEE Transactions on Device and Materials Reliability, 2014, 14, 30-34.	2.0	14
63	Study on thermal performance of high power LED employing aluminum filled epoxy composite as thermal interface material. Microelectronics Journal, 2014, 45, 1726-1733.	2.0	48
64	Thermal resistance of CNTs-based thermal interface material for high power solid state device packages. Applied Physics A: Materials Science and Processing, 2014, 114, 1145-1152.	2.3	18
65	BN thin film as thermal interface mateiral for high power LED: thermal resistance and optical analysis. Optical and Quantum Electronics, 2014, 46, 337-344.	3.3	9
66	Surface and electrical properties of plasma processed RF sputtered GaN thin films. EPJ Applied Physics, 2014, 68, 30303.	0.7	1
67	Influence of Cu Layer on Structural and Optical Properties of Copper Oxides Prepared as Stacks. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 35-44.	2.2	0
68	Thermal analysis of single slope single basin solar still with fin wick material in the basin. , 2013, , .		2
69	Study on thermal performance of high power LED employing aluminium filled epoxy composite as thermal interface material. , 2013, , .		2
70	Thermal resistance of high power LED on surface modified heat sink. Frontiers of Optoelectronics, 2013, 6, 160-166.	3.7	1
71	Thermal simulation analysis of high power LED system using two-resistor compact LED model. , 2013, , .		3
72	Performance Testing of 3-W LED Mounted on ZnO Thin Film Coated Al as Heat Sink Using Dual Interface Method. IEEE Transactions on Electron Devices, 2013, 60, 2290-2295.	3.0	12

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73	Thermal resistance studies of surface modified heat sink for 3W LED using transient curve. Microelectronics International, 2013, 30, 77-84.	0.6	18
74	Rhombohedral In<inf>2</inf>O<inf>3</inf> thin films preparation from in metal film using Oxygen plasma. , 2012, , .		0
75	Optical properties of amorphous ZnO thin film prepared from boiled Zn thin film in ultra high pure water. EPJ Applied Physics, 2012, 58, 30301.	0.7	4
76	Electrical and morphological analysis of oxygen plasma treated Zn metal thin films. EPJ Applied Physics, 2012, 58, 10802.	0.7	1
77	Formation of Copper oxide thin films from RF sputtered Cu thin film by ultra high pure boiled water. , 2012, , .		1
78	Optical Properties and Surface Morphology of Zinc Telluride Thin Films Prepared by Stacked Elemental Layer Method. Medziagotyra, 2012, 18, .	0.2	2
79	Properties of Ag layered in Te/Cd stack prepared by stacked elemental layer method. Electronic Materials Letters, 2012, 8, 263-268.	2.2	2
80	An effect of N+ ion bombardment on the properties of CdTe thin films. Radiation Physics and Chemistry, 2012, 81, 201-207.	2.8	41
81	Synthesis of In2O3 Thin Films from Indium Thin Film by Hot-Water Oxidation Method. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 6-9.	2.2	5
82	Studies on morphological change and optical properties for various Zn concentrations in CdTe thin film prepared by stacked elemental layer method. Journal of Alloys and Compounds, 2011, 509, 2143-2148.	5.5	16
83	Synthesis and properties of 10% Zn layered CdTe thin films by SEL method. EPJ Applied Physics, 2011, 56, 10301.	0.7	1
84	Thermal analysis of power LED employing dual interface method and water flow as a cooling system. Thermochimica Acta, 2011, 523, 237-244.	2.7	38
85	Influence of Sm3+ ion in structural, morphological, and electrochemical properties of LiMn2O4 synthesized by microwave calcination. Ionics, 2010, 16, 351-360.	2.4	29
86	Effect of Ar+ ion irradiation on structural and optical properties of e-beam evaporated cadmium telluride thin films. Materials Science in Semiconductor Processing, 2010, 13, 298-302.	4.0	17
87	Morphological Studies on Ag Doped CdTe Thin Films Prepared By Stacked Elemental Layer (SEL) Method. , 2010, , .		0
88	Studies on Structural Properties of CdTe (Doped Ag) Thin Films on Glass Substrates-Solar Cell Applications. , 2010, , .		0
89	Synthesis of Nano-Structured Sb₂Te₃ Thin Films by Stacked Elemental Layer Method. Journal of Nanoelectronics and Optoelectronics, 2010, 5, 304-309.	0.5	0
90	Synthesis and characterization of 10% Sb doped CdTe thin films by stacked elemental layer (SEL) method. Materials Letters, 2009, 63, 1189-1191.	2.6	23

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91	Performance study on an acrylic mirror boosted solar distillation unit utilizing seawater. Desalination, 2008, 230, 281-287.	8.2	39
92	Structural and Optical Properties of Zn Doped CdTe Thin Films by Stacked Elemental Layer Method. Advanced Materials Research, 0, 383-390, 3279-3285.	0.3	0
93	A Study on the Effect of Process Parameters on Surface Topography of Al Thin Films on Various Substrates Using AFM. Advanced Materials Research, 0, 383-390, 903-908.	0.3	0
94	Synthesis and Properties of Sb Layered Te/Cd Stack Prepared by Elemental Stack Method. Advanced Materials Research, 0, 488-489, 76-81.	0.3	2
95	Influence of composition ratio on the thermal performance of AlNB nanocomposite for an efficient heat spreading in solid-state lighting package (LED). Journal of Materials Science: Materials in Electronics, 0, , 1.	2.2	0