

Suresh Perumal

List of Publications by Year in descending order

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Version: 2024-02-01

43
papers

2,114
citations

331259

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docs citations

44
times ranked

1847
citing authors

#	ARTICLE	IF	CITATIONS
1	High Thermoelectric Performance and Enhanced Mechanical Stability of <i>p</i> -type Ge _{1-x} Sb _x Te. Chemistry of Materials, 2015, 27, 7171-7178.	3.2	293
2	The origin of low thermal conductivity in Sn _{1-x} Sb _x Te: phonon scattering via layered intergrowth nanostructures. Energy and Environmental Science, 2016, 9, 2011-2019.	15.6	234
3	High performance thermoelectric materials and devices based on GeTe. Journal of Materials Chemistry C, 2016, 4, 7520-7536.	2.7	194
4	Realization of High Thermoelectric Figure of Merit in GeTe by Complementary Co-doping of Bi and In. Joule, 2019, 3, 2565-2580.	11.7	175
5	Effect of doping concentration on the structural and optical properties of pure and tin doped zinc oxide thin films by nebulizer spray pyrolysis (NSP) technique. Superlattices and Microstructures, 2012, 52, 500-513.	1.4	133
6	Reduction of thermal conductivity through nanostructuring enhances the thermoelectric figure of merit in Ge _{1-x} Bi _x Te. Inorganic Chemistry Frontiers, 2016, 3, 125-132.	3.0	128
7	Low Thermal Conductivity and High Thermoelectric Performance in Sb and Bi Codoped GeTe: Complementary Effect of Band Convergence and Nanostructuring. Chemistry of Materials, 2017, 29, 10426-10435.	3.2	117
8	Germanium Chalcogenide Thermoelectrics: Electronic Structure Modulation and Low Lattice Thermal Conductivity. Chemistry of Materials, 2018, 30, 5799-5813.	3.2	105
9	Ultrahigh Thermoelectric Figure of Merit and Enhanced Mechanical Stability of <i>p</i> -type AgSb _{1-x} Zn _x Te ₂ . ACS Energy Letters, 2017, 2, 349-356.	8.8	76
10	Ultrahigh Average Thermoelectric Figure of Merit, Low Lattice Thermal Conductivity and Enhanced Microhardness in Nanostructured (GeTe) _{1-x} (AgSbSe ₂) _x 100%. Chemistry - A European Journal, 2017, 23, 7438-7443.	1.7	60
11	Influence of film thickness on the properties of sprayed ZnO thin films for gas sensor applications. Superlattices and Microstructures, 2014, 71, 238-249.	1.4	57
12	Deposition and characterization of pure and Cd doped SnO ₂ thin films by the nebulizer spray pyrolysis (NSP) technique. Materials Science in Semiconductor Processing, 2013, 16, 825-832.	1.9	49
13	Role of substrate temperature on the properties of Na-doped ZnO thin film nanorods and performance of ammonia gas sensors using nebulizer spray pyrolysis technique. Journal of Alloys and Compounds, 2014, 582, 387-391.	2.8	49
14	Lanthanum doped copper oxide nanoparticles enabled proficient bi-functional electrocatalyst for overall water splitting. International Journal of Hydrogen Energy, 2020, 45, 24684-24696.	3.8	36
15	Evaluation of extracts of Borassus flabellifer dust as green inhibitors for aluminium corrosion in acidic media. Materials Science in Semiconductor Processing, 2019, 104, 104674.	1.9	34
16	Nanostructured Gd _x Zn _{1-x} O thin films by nebulizer spray pyrolysis technique: Role of doping concentration on the structural and optical properties. Superlattices and Microstructures, 2013, 59, 47-59.	1.4	29
17	NiO nanoflakes: Effect of anions on the structural, optical, morphological and magnetic properties. Journal of Magnetism and Magnetic Materials, 2017, 441, 787-794.	1.0	29
18	Synthesis and functional properties of nanostructured Gd-doped WO ₃ /TiO ₂ composites for sensing applications. Materials Science in Semiconductor Processing, 2020, 105, 104732.	1.9	28

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19	Thermoelectric properties of chromium disilicide prepared by mechanical alloying. Journal of Materials Science, 2013, 48, 6018-6024.	1.7	25
20	Low thermal conductivity of endogenous manganese silicide/Si composites for thermoelectricity. Materials Letters, 2015, 155, 41-43.	1.3	25
21	Nanostructured $Ce_xZn_{1-x}O$ thin films: Influence of Ce doping on the structural, optical and electrical properties. Journal of Alloys and Compounds, 2014, 588, 170-176.	2.8	22
22	Expired Drugs: Environmentally Safe Inhibitors for Aluminium Corrosion in 1M H ₂ SO ₄ . Journal of Bio- and Tribo-Corrosion, 2018, 4, 1.	1.2	22
23	Discovery of carbon nanotubes in sixth century BC potteries from Keeladi, India. Scientific Reports, 2020, 10, 19786.	1.6	22
24	Effect of Composition on Thermoelectric Properties of Polycrystalline CrSi ₂ . Journal of Electronic Materials, 2013, 42, 1042-1046.	1.0	19
25	The effect of potential on electrodeposited CdSe thin films. Materials Science in Semiconductor Processing, 2012, 15, 174-180.	1.9	18
26	Effect of co-substitution of Mn and Al on thermoelectric properties of chromium disilicide. Journal of Materials Science, 2013, 48, 227-231.	1.7	16
27	Thermal conductivity of $\text{Fe}_{1-x}\text{Si}_2/\text{Si}$ endogenous composites formed by the eutectoid decomposition of Fe_2Si_5 . Journal of Materials Science, 2015, 50, 6713-6718.	1.7	16
28	Enhanced thermoelectric figure of merit in nano-structured Si dispersed higher manganese silicide. Materials Science in Semiconductor Processing, 2019, 104, 104649.	1.9	14
29	Synthesis, Characterization and Inhibition Performance of Schiff Bases for Aluminium Corrosion in 1M H ₂ SO ₄ Solution. Journal of Bio- and Tribo-Corrosion, 2020, 6, 1.	1.2	12
30	Dysprosium doped copper oxide (Cu _{1-x} Dy _x O) nanoparticles enabled bifunctional electrode for overall water splitting. International Journal of Hydrogen Energy, 2021, 46, 27585-27596.	3.8	12
31	Structural, microstructural, magnetic, and thermoelectric properties of bulk and nanostructured n-type CuFeS ₂ Chalcopyrite. Ceramics International, 2022, 48, 29039-29048.	2.3	11
32	Agarose as an Efficient Inhibitor for Aluminium Corrosion in Acidic Medium: An Experimental and Theoretical Study. Journal of Bio- and Tribo-Corrosion, 2017, 3, 1.	1.2	8
33	Effect of Refractory Tantalum Metal Filling on the Microstructure and Thermoelectric Properties of Co ₄ Sb ₁₂ Skutterudites. ACS Omega, 2021, 6, 3900-3909.	1.6	7
34	Cu _{1-x} RE _x O (RE=La, Dy) decorated dendritic CuS nanoarrays for highly efficient splitting of seawater into hydrogen and oxygen fuels. Applied Materials Today, 2021, 24, 101079.	2.3	7
35	Thermoelectric properties of p-type Si-rich higher manganese silicide for mid-temperature applications. Materials Letters, 2021, 302, 130444.	1.3	7
36	Thermoelectric Properties of Nano Structured CrSi _{2-x} Al _x . AIP Conference Proceedings, 2011, , .	0.3	5

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37	Experimental Investigation of Thermoelectric Power Generator Using D-Mannitol Phase Change Material for Transient Heat Recovery. ECS Journal of Solid State Science and Technology, 2021, 10, 061005.	0.9	4
38	Enhanced Refrigeration Capacity of Rare-Earth-Free Ni-Co-Mn-In-Si Heusler Alloys for Magnetic Refrigerants. ECS Journal of Solid State Science and Technology, 2021, 10, 091009.	0.9	4
39	Isovalent Bi substitution induced low thermal conductivity and high thermoelectric performance in n-type InSb. Ceramics International, 2022, 48, 29284-29290.	2.3	4
40	Crystal growth, surface morphology, mechanical and thermal properties of UV-nonlinear optical crystal: Mercury cadmium chloride thiocyanate (MCCTC) single crystal. IOP Conference Series: Materials Science and Engineering, 2020, 872, 012175.	0.3	3
41	Structure stability driven large magnetocaloric response in Ni-Co-Mn-In-Si Heusler alloy. Ceramics International, 2022, 48, 29059-29066.	2.3	3
42	Nanocomposites of GO/D-Mannitol Assisted Thermoelectric Power Generator for Transient Waste Heat Recovery. Journal of Nanomaterials, 2022, 2022, 1-9.	1.5	2
43	Corrosion Inhibition Efficiencies of Polymethacrylic Acid and Substituted Polymethacrylic Acid on Aluminium in 0.3M NaOH. ECS Journal of Solid State Science and Technology, 2021, 10, 101004.	0.9	0