

Soon-Mok Choi

List of Publications by Year in descending order

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87
all docs

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times ranked

1301
citing authors

#	ARTICLE	IF	CITATIONS
1	Concentration-dependent excess Cu doping behavior and influence on thermoelectric properties in Bi_2Te_3 . International Journal of Energy Research, 2022, 46, 3707-3713.	4.5	7
2	Ti Addition Effect on the Grain Structure Evolution and Thermoelectric Transport Properties of $\text{Hf}_{0.5}\text{Zr}_{0.5}\text{NiSn}_{0.98}\text{Sb}_{0.02}$ Half-Heusler Alloy. Materials, 2021, 14, 4029.	2.9	2
3	Different point defects originated from dissimilar deposition conditions in n-type Cu-doped Bi_2Te_3 films; crystal structure and thermoelectric property depending on Te-vacancy concentration. Journal of Materials Research and Technology, 2021, 15, 606-613.	5.8	3
4	Hf-Doping Effect on the Thermoelectric Transport Properties of n-Type $\text{Cu}_{0.01}\text{Bi}_2\text{Te}_{2.7}\text{Se}_{0.3}$. Applied Sciences (Switzerland), 2020, 10, 4875.	2.5	3
5	Thermal Conductivity Reduction by Tuning the Rattler Fraction in a p-type $\text{Ce}_y\text{Yb}_{1-y}\text{Fe}_3\text{CoSb}_{12}$ Double-filled Skutterudite. Journal of the Korean Physical Society, 2020, 77, 667-672.	0.7	3
6	Phase Formation Behavior and Thermoelectric Transport Properties of P-Type $\text{YbxFe}_3\text{CoSb}_{12}$ Prepared by Melt Spinning and Spark Plasma Sintering. Materials, 2020, 13, 87.	2.9	9
7	Stress-induced change of Cu-doped Bi_2Te_3 thin films for flexible thermoelectric applications. Materials Letters, 2020, 270, 127697.	2.6	10
8	Influence of Pd Doping on Electrical and Thermal Properties of n-Type $\text{Cu}_{0.008}\text{Bi}_2\text{Te}_{2.7}\text{Se}_{0.3}$ Alloys. Materials, 2019, 12, 4080.	2.9	9
9	Effective role of filling fraction control in p-type $\text{CexFe}_3\text{CoSb}_{12}$ skutterudite thermoelectric materials. Intermetallics, 2019, 105, 44-47.	3.9	12
10	Fabrication of Metallic Glass Powder for Brazing Paste for High-Temperature Thermoelectric Modules. Journal of Electronic Materials, 2018, 47, 3159-3163.	2.2	0
11	Charge Transport and Thermoelectric Properties of $(\text{Nd}_{1-z}\text{Yb}_z)_y\text{Fe}_4-x\text{Co}_x\text{Sb}_{12}$ Skutterudites. Journal of Electronic Materials, 2018, 47, 3143-3151.	2.2	5
12	Dependence of mechanical and thermoelectric properties of $\text{Mg}_2\text{Si-Sn}$ nanocomposites on interface density. Journal of Alloys and Compounds, 2018, 769, 53-58.	5.5	17
13	Thermoelectric Properties of $\text{Bi}_2\text{Te}_{3-y}\text{Se}_y$ Prepared by Mechanical Alloying and Hot Pressing. Journal of Electronic Materials, 2017, 46, 2623-2628.	2.2	8
14	Doping amount dependence of phase formation and microstructure evolution in heavily Cu-doped Bi_2Te_3 films for thermoelectric applications. CrystEngComm, 2017, 19, 2750-2757.	2.6	13
15	Enhanced Thermoelectric Properties of Melt-Spun p-Type $\text{Yb}_{0.9}\text{Fe}_3\text{CoSb}_{12}$. Journal of Electronic Materials, 2017, 46, 2839-2843.	2.2	9
16	Research for Brazing Materials of High-Temperature Thermoelectric Modules with CoSb_3 Thermoelectric Materials. Journal of Electronic Materials, 2017, 46, 3083-3088.	2.2	5
17	One-step growth of multilayer-graphene hollow nanospheres via the self-elimination of SiC nuclei templates. Scientific Reports, 2017, 7, 13774.	3.3	6
18	Control of electrical to thermal conductivity ratio for p-type $\text{LaxFe}_3\text{CoSb}_{12}$ thermoelectrics by using a melt-spinning process. Journal of Alloys and Compounds, 2017, 729, 1209-1214.	5.5	9

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19	Synthesis and Thermoelectric Properties of $Ce_{1-x}Pr_xFe_4Co_xSb_{12}$ Skutterudites. Journal of Electronic Materials, 2017, 46, 2634-2639.	2.2	8
20	Hetero-Nanowire Hybrid Films Prepared by Rolling-Up and Sputtering Methods: Effect of Hetero-Nanowires on Their Thermoelectric Properties. Journal of Nanoscience and Nanotechnology, 2017, 17, 7677-7680.	0.9	1
21	Enhanced Thermoelectric Performance of <i>p</i> -Type $Bi_{0.4}Sb_{1.6}Te_3$ by Excess Te Addition. Journal of Nanoscience and Nanotechnology, 2017, 17, 7681-7684.	0.9	1
22	Enhancement of the thermoelectric figure of merit in n-type $Cu_{0.008}Bi_2Te_{2.7}Se_{0.3}$ by using Nb doping. Journal of the Korean Physical Society, 2016, 68, 7-11.	0.7	1
23	Tunable thermoelectric transport properties of $Cu_{0.008}Bi_2Te_{2.7}Se_{0.3}$ via control of the spark plasma sintering conditions. Journal of the Korean Physical Society, 2016, 69, 811-815.	0.7	2
24	Charge transport and thermoelectric properties of double-filled $Nd_{1-x}Yb_xFe_4Co_xSb_{12}$ skutterudites. Journal of the Korean Physical Society, 2016, 68, 875-882.	0.7	5
25	Control of crystal growth and thermoelectric properties of sputter-deposited BiTe thin films embedded with alumina nanoparticles. CrystEngComm, 2016, 18, 9281-9285.	2.6	1
26	Thermoelectric Property of Ag-doped $ZnSb$ /Few-Layer Graphene Composites. Bulletin of the Korean Chemical Society, 2016, 37, 720-724.	1.9	0
27	Effects of doping on the positional uniformity of the thermoelectric properties of n-type $Bi_2Te_{2.7}Se_{0.3}$ polycrystalline bulks. Journal of the Korean Physical Society, 2016, 68, 17-21.	0.7	6
28	Enhanced thermoelectric properties of Au nanodot-included Bi_2Te_3 nanotube composites. Journal of Materials Chemistry C, 2016, 4, 1313-1319.	5.5	50
29	Thermal cycling properties of a lead-free positive temperature coefficient thermistor in the $Ba_{0.97}(Bi_{0.5}Na_{0.5})_{0.03}TiO_3$ system. Journal of the Korean Physical Society, 2016, 68, 121-125.	0.7	1
30	Defect-free SiC nanowires grown from Si-deposited graphite by thermal annealing: temperature-dependent nucleus formation and nanowire growth behaviors. CrystEngComm, 2016, 18, 5910-5915.	2.6	6
31	Reduction of Lattice Thermal Conductivity in PbTe Induced by Artificially Generated Pores. Advances in Condensed Matter Physics, 2015, 2015, 1-6.	1.1	7
32	Thermoelectric Transport Properties of Cu Nanoprecipitates Embedded in Bi_2Te_3 . Journal of Nanomaterials, 2015, 2015, 1-5.	2.7	8
33	Thermoelectric and transport properties of mechanically-alloyed $Bi_2Te_{3-y}Se_y$ solid solutions. Journal of the Korean Physical Society, 2015, 67, 1809-1813.	0.7	5
34	Water-induced room-temperature transformation of straight Ge/Si core/shell nanowires into circular silica nanotubes. CrystEngComm, 2015, 17, 6142-6148.	2.6	0
35	Optimization of Synthesis Conditions of $Na_{0.75}CoO_2$ for High Thermoelectric Performance. Journal of Electronic Materials, 2015, 44, 1408-1412.	2.2	3
36	Enhanced Thermoelectric Performance of p-Type Bi-Sb-Te Alloys by Codoping with Ga and Ag. Journal of Electronic Materials, 2015, 44, 1531-1535.	2.2	19

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37	Facile fabrication of silicon and aluminum oxide nanotubes using antimony telluride nanowires as templates. <i>Ceramics International</i> , 2015, 41, 12246-12252.	4.8	5
38	Transport and thermoelectric properties of Bi ₂ Te _{2.7} Se _{0.3} prepared by mechanical alloying and hot pressing. <i>Journal of the Korean Physical Society</i> , 2015, 66, 1726-1731.	0.7	8
39	Power-Generation Characteristics After Vibration and Thermal Stresses of Thermoelectric Unicouples with CoSb ₃ /Ti/Mo(Cu) Interfaces. <i>Journal of Electronic Materials</i> , 2015, 44, 2124-2131.	2.2	26
40	Boundary Engineering for the Thermoelectric Performance of Bulk Alloys Based on Bismuth Telluride. <i>ChemSusChem</i> , 2015, 8, 2312-2326.	6.8	68
41	Anisotropy of the thermoelectric figure of merit (ZT) in textured Ca ₃ Co ₄ O ₉ ceramics prepared by using a spark plasma sintering process. <i>Journal of the Korean Physical Society</i> , 2015, 66, 794-799.	0.7	21
42	Enhanced thermoelectric performance of n-type Cu _{0.008} Bi ₂ Te _{2.7} Se _{0.3} by band engineering. <i>Journal of Materials Chemistry C</i> , 2015, 3, 10604-10609.	5.5	34
43	Free-standing BiSbTe films derived from thermal annealing of sputter-deposited Sb ₂ Te ₃ /Bi ₂ Te ₃ multilayer films for thermoelectric applications. <i>CrystEngComm</i> , 2015, 17, 7522-7527.	2.6	9
44	Selective decoration of nanocrystals on single-crystalline PtTe nanowires based on a solid-state reaction. <i>RSC Advances</i> , 2015, 5, 80766-80771.	3.6	0
45	Thermoelectric properties of Bi ₂ Te ₃ -Bi ₂ Se ₃ solid solutions prepared by attrition milling and hot pressing. <i>Journal of the Korean Physical Society</i> , 2014, 65, 1908-1912.	0.7	6
46	Process controls for Bi ₂ Te ₃ -Sb ₂ Te ₃ prepared by mechanical alloying and hot pressing. <i>Journal of the Korean Physical Society</i> , 2014, 65, 2066-2070.	0.7	8
47	Thermal stability of the thermoelectric skutterudite In _{0.25} Co ₃ MnSb ₁₂ . <i>Journal of the Korean Physical Society</i> , 2014, 64, 79-83.	0.7	4
48	The effects of diffusion barrier layers on the microstructural and electrical properties in CoSb ₃ thermoelectric modules. <i>Journal of Alloys and Compounds</i> , 2014, 617, 160-162.	5.5	18
49	Thermoelectric properties of unoxidized graphene/Bi ₂ Te _{2.7} Se _{0.3} composites synthesized by exfoliation/reassembly method. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014, 8, 357-361.	2.4	9
50	A study of electrodes for thermoelectric oxides. <i>Electronic Materials Letters</i> , 2013, 9, 445-449.	2.2	10
51	Thermoelectric properties of a doped LaNiO ₃ perovskite system prepared using a spark-plasma sintering process. <i>Electronic Materials Letters</i> , 2013, 9, 513-516.	2.2	10
52	Effects of Process Variable Control on the Thermoelectric Properties of the Zn _{0.98} Ga(Al) _{0.02} O System. <i>Journal of Electronic Materials</i> , 2013, 42, 2056-2061.	2.2	9
53	Effects of Spark Plasma Sintering Temperature on Thermoelectric Properties of Higher Manganese Silicide. <i>Journal of Electronic Materials</i> , 2013, 42, 2269-2273.	2.2	13
54	Solid-State Synthesis and Thermoelectric Properties of Mg ₂ Si _{1-x} Sn _x . <i>Journal of Electronic Materials</i> , 2013, 42, 1490-1494.	2.2	10

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55	Nanograined thermoelectric Bi ₂ Te _{2.7} Se _{0.3} with ultralow phonon transport prepared from chemically exfoliated nanoplatelets. <i>Journal of Materials Chemistry A</i> , 2013, 1, 12791.	10.3	39
56	Thermoelectric properties of Bi-doped Mg ₂ Si _{1-x} Sn _x prepared by mechanical alloying. <i>Journal of the Korean Physical Society</i> , 2013, 63, 2153-2157.	0.7	6
57	Cu-Bi-Se-based pavonite homologue: a promising thermoelectric material with low lattice thermal conductivity. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9768.	10.3	13
58	Formation of Dense Pore Structure by Te Addition in Bi _{0.5} Sb _{1.5} Te ₃ : An Approach to Minimize Lattice Thermal Conductivity. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-5.	2.7	8
59	An Optimization of Composition Ratio among Triple-Filled Atoms in In _{0.3-x} YBa _x Ce _y Co ₄ Sb ₁₂ System. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-7.	2.7	2
60	Solid-State Synthesis and Thermoelectric Properties of Mg _{2+x} Si _{0.7} Sn _{0.3} Sb _m . <i>Journal of Nanomaterials</i> , 2013, 2013, 1-4.	2.7	10
61	Nanostructured thermoelectric cobalt oxide by exfoliation/restacking route. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	13
62	An enhancement of a thermoelectric power factor in a Ga-doped ZnO system: A chemical compression by enlarged Ga solubility. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	62
63	Control of selective and catalyst-free growth of Sb ₂ Te ₃ and Te nanowires from sputter-deposited Al-Sb-Te thin films. <i>CrystEngComm</i> , 2012, 14, 4255.	2.6	7
64	Thermoelectric properties of Cu-dispersed Bi _{0.5} Sb _{1.5} Te ₃ . <i>Nanoscale Research Letters</i> , 2012, 7, 2.	5.7	48
65	A Power-Generation Test for Oxide-Based Thermoelectric Modules Using p-Type Ca ₃ Co ₄ O ₉ and n-Type Ca _{0.9} Nd _{0.1} MnO ₃ Legs. <i>Journal of Electronic Materials</i> , 2012, 41, 1247-1255.	2.2	32
66	A Resistance Ratio Analysis for CoSb ₃ -Based Thermoelectric Unicouples. <i>Journal of Electronic Materials</i> , 2012, 41, 1004-1010.	2.2	19
67	High-Temperature Stability of Thermoelectric Skutterudite In _{0.25} Co ₃ FeSb ₁₂ . <i>Journal of Electronic Materials</i> , 2012, 41, 1051-1056.	2.2	19
68	Doping Effects on Thermoelectric Properties in the Mg ₂ Sn System. <i>Journal of Electronic Materials</i> , 2012, 41, 1071-1076.	2.2	23
69	Thermoelectric properties of Spark Plasma Sintered In _x Y _{by} La _{0.3-x-y} Co ₄ Sb ₁₂ skutterudite system. <i>Renewable Energy</i> , 2012, 42, 36-40.	8.9	25
70	Thermoelectric properties of a doped Mg ₂ Sn system. <i>Renewable Energy</i> , 2012, 42, 23-27.	8.9	24
71	Enhancement of p-type thermoelectric properties in an Mg ₂ Sn system. <i>Journal of the Korean Physical Society</i> , 2012, 60, 1717-1723.	0.7	22
72	Determination of the Thermoelectric Properties in Filled-Skutterudite Systems by Controlling the Process Variables. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 09ML02.	1.5	4

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73	Catalyst-free growth of Sb ₂ Te ₃ nanowires. Materials Letters, 2011, 65, 812-814.	2.6	6
74	High temperature thermoelectric properties of Sr and Fe doped SmCoO ₃ perovskite structure. Current Applied Physics, 2011, 11, S260-S265.	2.4	16
75	Thermoelectric properties of the Bi-doped Mg ₂ Si system. Current Applied Physics, 2011, 11, S388-S391.	2.4	52
76	Thermoelectric Properties of the Ca _{1-x} R _x MnO ₃ Perovskite System (R: Pr, Nd, Sm) for High-Temperature Applications. Journal of Electronic Materials, 2011, 40, 551-556.	2.2	33
77	Thermoelectric Properties of Spark Plasma-Sintered In ₄ Se ₃ -In ₄ Te ₃ . Journal of Electronic Materials, 2011, 40, 1024-1028.	2.2	13
78	Oxide-based thermoelectric power generation module using p-type Ca ₃ Co ₄ O ₉ and n-type (ZnO) ₇ In ₂ O ₃ legs. Energy Conversion and Management, 2011, 52, 335-339.	9.2	66
79	Crystallization Properties of Ge _{1-x} Sb _x Thin Films (x= 0.58~0.88). Japanese Journal of Applied Physics, 2011, 50, 045805.	1.5	1
80	Crystallization Properties of Ge _{1-x} Sb _x Thin Films (x=) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.5	2
81	Transport Properties of Sn-doped CoSb ₃ Skutterudites. Journal of the Korean Physical Society, 2010, 57, 1000-1005.	0.7	8
82	Synthesis of Thermoelectric Mg ₂ Si by Mechanical Alloying. Journal of the Korean Physical Society, 2010, 57, 1005-1009.	0.7	16
83	Thermoelectric Properties of the Co-doped n-type CoSb ₃ Compound. Journal of the Korean Physical Society, 2010, 57, 1010-1014.	0.7	13
84	High-temperature Thermoelectric Properties of the Ca _{3-x} K _x Co ₄ O ₉ (0 ≤ x ≤ 0.3) System. Journal of the Korean Physical Society, 2010, 57, 1054-1058.	0.7	14
85	Synthesis Characteristics and Thermoelectric Properties of the Rare-earth-doped Mg ₂ Si System. Journal of the Korean Physical Society, 2010, 57, 1072-1076.	0.7	13
86	Influence of Silicon Doping on the Properties of Sputtered Ge ₂ Sb ₂ Te ₅ Thin Film. Japanese Journal of Applied Physics, 2009, 48, 045503.	1.5	24
87	Design of additives with different physical properties to control nanostructures of n-type Bi ₂ Te ₃ thermoelectric thin films grown by a sputtering process. Journal of the Korean Physical Society, 0, , .	0.7	0