Soon-Mok Choi

List of Publications by Year
in descending order

87 papers	1,175 citations	394421 19 h-index	477307 29 g-index
87 all docs	87 docs citations	87 times ranked	1301 citing authors

#	Article	IF	Citations
1	Boundary Engineering for the Thermoelectric Performance of Bulk Alloys Based on Bismuth Telluride. ChemSusChem, 2015, 8, 2312-2326.	6.8	68
2	Oxide-based thermoelectric power generation module using p-type Ca3Co4O9 and n-type (ZnO)7In2O3 legs. Energy Conversion and Management, 2011, 52, 335-339.	9.2	66
3	An enhancement of a thermoelectric power factor in a Ga-doped ZnO system: A chemical compression by enlarged Ga solubility. Applied Physics Letters, 2012, 100, .	3.3	62
4	Thermoelectric properties of the Bi-doped Mg2Si system. Current Applied Physics, 2011, 11, S388-S391.	2.4	52
5	Enhanced thermoelectric properties of Au nanodot-included Bi₂Te₃ nanotube composites. Journal of Materials Chemistry C, 2016, 4, 1313-1319.	5.5	50
6	Thermoelectric properties of Cu-dispersed bi0.5sb1.5te3. Nanoscale Research Letters, 2012, 7, 2.	5.7	48
7	Nanograined thermoelectric Bi2Te2.7Se0.3 with ultralow phonon transport prepared from chemically exfoliated nanoplatelets. Journal of Materials Chemistry A, 2013, 1, 12791.	10.3	39
8	Enhanced thermoelectric performance of n-type Cu_{0.008}Bi₂Te_{2.7}Se_{0.3} by band engineering. Journal of Materials Chemistry C, 2015, 3, 10604-10609.	5.5	34
9	Thermoelectric Properties of the Ca1âˆ’x R x MnO3 Perovskite System (R: Pr, Nd, Sm) for High-Temperature Applications. Journal of Electronic Materials, 2011, 40, 551-556.	2.2	33
10	A Power-Generation Test for Oxide-Based Thermoelectric Modules Using p-Type Ca3Co4O9 and n-Type Ca0.9Nd0.1MnO3 Legs. Journal of Electronic Materials, 2012, 41, 1247-1255.	2.2	32
11	Power-Generation Characteristics After Vibration and Thermal Stresses of Thermoelectric Unicouples with CoSb3/Ti/Mo(Cu) Interfaces. Journal of Electronic Materials, 2015, 44, 2124-2131.	2.2	26
12	Thermoelectric properties of Spark Plasma Sintered InxYbyLa0.3-x-yCo4Sb12 skutterudite system. Renewable Energy, 2012, 42, 36-40.	8.9	25
13	Influence of Silicon Doping on the Properties of Sputtered Ge2Sb2Te5Thin Film. Japanese Journal of Applied Physics, 2009, 48, 045503.	1.5	24
14	Thermoelectric properties of a doped Mg2Sn system. Renewable Energy, 2012, 42, 23-27.	8.9	24
15	Doping Effects on Thermoelectric Properties in the Mg2Sn System. Journal of Electronic Materials, 2012, 41, 1071-1076.	2.2	23
16	Enhancement of p-type thermoelectric properties in an Mg2Sn system. Journal of the Korean Physical Society, 2012, 60, 1717-1723.	0.7	22
17	Anisotropy of the thermoelectric figure of merit (ZT) in textured Ca3Co4O9 ceramics prepared by using a spark plasma sintering process. Journal of the Korean Physical Society, 2015, 66, 794-799.	0.7	21
18	A Resistance Ratio Analysis for CoSb3-Based Thermoelectric Unicouples. Journal of Electronic Materials, 2012, 41, 1004-1010.	2.2	19

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19	High-Temperature Stability of Thermoelectric Skutterudite In0.25Co3FeSb12. Journal of Electronic Materials, 2012, 41, 1051-1056.	2.2	19
20	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
21	The effects of diffusion barrier layers on the microstructural and electrical properties in CoSb 3 thermoelectric modules. Journal of Alloys and Compounds, 2014, 617, 160-162.	5.5	18
22	Dependence of mechanical and thermoelectric properties of Mg2Si-Sn nanocomposites on interface density. Journal of Alloys and Compounds, 2018, 769, 53-58.	5.5	17
23	High temperature thermoelectric properties of Sr and Fe doped SmCoO3 perovskite structure. Current Applied Physics, 2011, 11, S260-S265.	2.4	16
24	Synthesis of Thermoelectric Mg2Si by Mechanical Alloying. Journal of the Korean Physical Society, 2010, 57, 1005-1009.	0.7	16
25	High-temperature Thermoelectric Properties of the Ca3-xKxCo4O9 (0 Â¡? x Â¡? 0.3) System. Journal of the Korean Physical Society, 2010, 57, 1054-1058.	0.7	14
26	Thermoelectric Properties of Spark Plasma-Sintered In4Se3-In4Te3. Journal of Electronic Materials, 2011, 40, 1024-1028.	2.2	13
27	Nanostructured thermoelectric cobalt oxide by exfoliation/restacking route. Journal of Applied Physics, 2012, 112, .	2.5	13
28	Effects of Spark Plasma Sintering Temperature on Thermoelectric Properties of Higher Manganese Silicide. Journal of Electronic Materials, 2013, 42, 2269-2273.	2.2	13
29	Cuâ€“Biâ€“Se-based pavonite homologue: a promising thermoelectric material with low lattice thermal conductivity. Journal of Materials Chemistry A, 2013, 1, 9768.	10.3	13
30	Doping amount dependence of phase formation and microstructure evolution in heavily Cu-doped Bi₂Te₃ films for thermoelectric applications. CrystEngComm, 2017, 19, 2750-2757.	2.6	13
31	Thermoelectric Properties of the Co-doped n-type CoSb3 Compound. Journal of the Korean Physical Society, 2010, 57, 1010-1014.	0.7	13
32	Synthesis Characteristics and Thermoelectric Properties of the Rare-earth-doped Mg2Si System. Journal of the Korean Physical Society, 2010, 57, 1072-1076.	0.7	13
33	Effective role of filling fraction control in p-type CexFe3CoSb12 skutterudite thermoelectric materials. Intermetallics, 2019, 105, 44-47.	3.9	12
34	A study of electrodes for thermoelectric oxides. Electronic Materials Letters, 2013, 9, 445-449.	2.2	10
35	Thermoelectric properties of a doped LaNiO3 perovskite system prepared using a spark-plasma sintering process. Electronic Materials Letters, 2013, 9, 513-516.	2.2	10
36	Solid-State Synthesis and Thermoelectric Properties of Mg2Si1âˆ’x Sn x. Journal of Electronic Materials, 2013, 42, 1490-1494.	2.2	10

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37	Solid-State Synthesis and Thermoelectric Properties of Mg2+xSi0.7Sn0.3Sbm. Journal of Nanomaterials, 2013, 2013, 1-4.	2.7	10
38	Stress-induced change of Cu-doped Bi2Te3 thin films for flexible thermoelectric applications. Materials Letters, 2020, 270, 127697.	2.6	10
39	Effects of Process Variable Control on the Thermoelectric Properties of the Zn0.98Ga(Al)0.02O System. Journal of Electronic Materials, 2013, 42, 2056-2061.	2.2	9
40	Thermoelectric properties of unoxidized graphene/Bi₂Te_{2.7}Se_{0.3} composites synthesized by exfoliation/reâ€assembly method. Physica Status Solidi - Rapid Research Letters, 2014, 8, 357-361.	2.4	9
41	Free-standing Biâ€"Sbâ€"Te films derived from thermal annealing of sputter-deposited Sb₂Te₃/Bi₂Te₃multilayer films for thermoelectric applications. CrystEngComm, 2015, 17, 7522-7527.	2.6	9
42	Enhanced Thermoelectric Properties of Melt-Spun p-Type Yb0.9Fe3CoSb12. Journal of Electronic Materials, 2017, 46, 2839-2843.	2.2	9
43	Control of electrical to thermal conductivity ratio for p-type LaxFe3CoSb12 thermoelectrics by using a melt-spinning process. Journal of Alloys and Compounds, 2017, 729, 1209-1214.	5.5	9
44	Influence of Pd Doping on Electrical and Thermal Properties of n-Type Cu0.008Bi2Te2.7Se0.3 Alloys. Materials, 2019, 12, 4080.	2.9	9
45	Phase Formation Behavior and Thermoelectric Transport Properties of P-Type YbxFe3CoSb12 Prepared by Melt Spinning and Spark Plasma Sintering. Materials, 2020, 13, 87.	2.9	9
46	Formation of Dense Pore Structure by Te Addition in Bi0.5Sb1.5Te3: An Approach to Minimize Lattice Thermal Conductivity. Journal of Nanomaterials, 2013, 2013, 1-5.	2.7	8
47	Process controls for Bi2Te3-Sb2Te3 prepared by mechanical alloying and hot pressing. Journal of the Korean Physical Society, 2014, 65, 2066-2070.	0.7	8
48	Thermoelectric Transport Properties of Cu Nanoprecipitates Embedded<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"><mml:msub><mml:mrow><mml:mtext>Bi</mml:mtext></mml:mrow><mml:mrow><mml:mtext>2</mml:mtext></mml:mrow> Journal of Nanomaterials, 2015, 2015, 1-5.	2.7	8
49	Transport and thermoelectric properties of Bi2Te2.7Se0.3 prepared by mechanical alloying and hot pressing. Journal of the Korean Physical Society, 2015, 66, 1726-1731.	0.7	8
50	Thermoelectric Properties of Bi2Te3â^'y Se y :I m Prepared by Mechanical Alloying and Hot Pressing. Journal of Electronic Materials, 2017, 46, 2623-2628.	2.2	8
51	Synthesis and Thermoelectric Properties of Ce1â^'z Pr z Fe4â^'x Co x Sb12 Skutterudites. Journal of Electronic Materials, 2017, 46, 2634-2639.	2.2	8
52	Transport Properties of Sn-doped CoSb3 Skutterudites. Journal of the Korean Physical Society, 2010, 57, 1000-1005.	0.7	8
53	Control of selective and catalyst-free growth of Sb2Te3 and Te nanowires from sputter-deposited Al-Sb-Te thin films. CrystEngComm, 2012, 14, 4255.	2.6	7
54	Reduction of Lattice Thermal Conductivity in PbTe Induced by Artificially Generated Pores. Advances in Condensed Matter Physics, 2015, 2015, 1-6.	1.1	7

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55	Concentrationâ€dependent excess Cu doping behavior and influence on thermoelectric properties in <scp> Bi ₂ Te ₃ </scp>. International Journal of Energy Research, 2022, 46, 3707-3713.	4.5	7
56	Catalyst-free growth of Sb2Te3 nanowires. Materials Letters, 2011, 65, 812-814.	2.6	6
57	Thermoelectric properties of Bi-doped Mg2Si1âˆ’x Sn x prepared by mechanical alloying. Journal of the Korean Physical Society, 2013, 63, 2153-2157.	0.7	6
58	Thermoelectric properties of Bi2Te3-Bi2Se3 solid solutions prepared by attrition milling and hot pressing. Journal of the Korean Physical Society, 2014, 65, 1908-1912.	0.7	6
59	Effects of doping on the positional uniformity of the thermoelectric properties of n-type Bi2Te2.7Se0.3 polycrystalline bulks. Journal of the Korean Physical Society, 2016, 68, 17-21.	0.7	6
60	One-step growth of multilayer-graphene hollow nanospheres via the self-elimination of SiC nuclei templates. Scientific Reports, 2017, 7, 13774.	3.3	6
61	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
62	Thermoelectric and transport properties of mechanically-alloyed Bi2Te3-y Se y solid solutions. Journal of the Korean Physical Society, 2015, 67, 1809-1813.	0.7	5
63	Facile fabrication of silicon and aluminum oxide nanotubes using antimony telluride nanowires as templates. Ceramics International, 2015, 41, 12246-12252.	4.8	5
64	Charge transport and thermoelectric properties of double-filled Nd1â€“z Yb z Fe4â€“x Co x Sb12 skutterudites. Journal of the Korean Physical Society, 2016, 68, 875-882.	0.7	5
65	Research for Brazing Materials of High-Temperature Thermoelectric Modules with CoSb3 Thermoelectric Materials. Journal of Electronic Materials, 2017, 46, 3083-3088.	2.2	5
66	Charge Transport and Thermoelectric Properties of (Nd1âˆ’z Yb z) y Fe4âˆ’x Co x Sb12 Skutterudites. Journal of Electronic Materials, 2018, 47, 3143-3151.	2.2	5
67	Thermal stability of the thermoelectric skutterudite In0.25Co3MnSb12. Journal of the Korean Physical Society, 2014, 64, 79-83.	0.7	4
68	Determination of the Thermoelectric Properties in Filled-Skutterudite Systems by Controlling the Process Variables. Japanese Journal of Applied Physics, 2012, 51, 09ML02.	1.5	4
69	Optimization of Synthesis Conditions of Na0.75CoO2 for High Thermoelectric Performance. Journal of Electronic Materials, 2015, 44, 1408-1412.	2.2	3
70	Hf-Doping Effect on the Thermoelectric Transport Properties of n-Type Cu0.01Bi2Te2.7Se0.3. Applied Sciences (Switzerland), 2020, 10, 4875.	2.5	3
71	Thermal Conductivity Reduction by Tuning the Rattler Fraction in a p-type CeyYb1âˆ’yFe3CoSb12 Double-filled Skutterudite. Journal of the Korean Physical Society, 2020, 77, 667-672.	0.7	3
72	Different point defects originated from dissimilar deposition conditions in n-type Cu-doped Bi2Te3 films; crystal structure and thermoelectric property depending on Te-vacancy concentration. Journal of Materials Research and Technology, 2021, 15, 606-613.	5.8	3

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73	An Optimization of Composition Ratio among Triple-Filled Atoms inIn0.3-x-yBaxCeyCo4Sb12System. Journal of Nanomaterials, 2013, 2013, 1-7.	2.7	2
74	Tunable thermoelectric transport properties of Cu0.008Bi2Te2.7Se0.3 via control of the spark plasma sintering conditions. Journal of the Korean Physical Society, 2016, 69, 811-815.	0.7	2
75	Ti Addition Effect on the Grain Structure Evolution and Thermoelectric Transport Properties of Hf0.5Zr0.5NiSn0.98Sb0.02 Half-Heusler Alloy. Materials, 2021, 14, 4029.	2.9	2
76	Crystallization Properties of Ge_{1-<i>x</i>}Sb_{<i>x</i>}Thin Films (<i>x</i>=) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.5	2
77	Crystallization Properties of Ge1-xSbxThin Films (x= 0.58â€"0.88). Japanese Journal of Applied Physics, 2011, 50, 045805.	1.5	1
78	Enhancement of the thermoelectric figure of merit in n-type Cu0.008Bi2Te2.7Se0.3 by using Nb doping. Journal of the Korean Physical Society, 2016, 68, 7-11.	0.7	1
79	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
80	Thermal cycling properties of a lead-free positive temperature coefficient thermistor in the Ba0.97(Bi0.5Na0.5)0.03TiO3 system. Journal of the Korean Physical Society, 2016, 68, 121-125.	0.7	1
81	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
82	Enhanced Thermoelectric Performance of <i>p</i>-Type Bi_{0.4}Sb_{1.6}Te₃ by Excess Te Addition. Journal of Nanoscience and Nanotechnology, 2017, 17, 7681-7684.	0.9	1
83	Water-induced room-temperature transformation of straight Ge/Si core/shell nanowires into circular silica nanotubes. CrystEngComm, 2015, 17, 6142-6148.	2.6	0
84	Selective decoration of nanocrystals on single-crystalline PtTe nanowires based on a solid-state reaction. RSC Advances, 2015, 5, 80766-80771.	3.6	0
85	Thermoelectric Property of Agâ€doped <scp>ZnSb</scp>/Fewâ€Layerâ€Graphene Composites. Bulletin of the Korean Chemical Society, 2016, 37, 720-724.	1.9	0
86	Fabrication of Metallic Glass Powder for Brazing Paste for High-Temperature Thermoelectric Modules. Journal of Electronic Materials, 2018, 47, 3159-3163.	2.2	0
87	Design of additives with different physical properties to control nanostructures of n-type Bi2Te3 thermoelectric thin films grown by a sputtering process. Journal of the Korean Physical Society, 0, , .	0.7	0