Recent advances in thermoelectric nanocomposites

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Citation Report

#	Article	IF	CITATIONS
1	Transport properties of Ni, Co, Fe, Mn doped Cu0.01Bi2Te2.7Se0.3 for thermoelectric device applications. Journal of Applied Physics, 2012, 112, .	2.5	16
2	Atomically Thick Bismuth Selenide Freestanding Single Layers Achieving Enhanced Thermoelectric Energy Harvesting. Journal of the American Chemical Society, 2012, 134, 20294-20297.	13.7	279
3	Harvesting energy from low-grade heat based on nanofluids. Nano Energy, 2012, 1, 805-811.	16.0	39
5	Nanotechnologyâ€Enabled Energy Harvesting for Selfâ€Powered Microâ€∤Nanosystems. Angewandte Chemie - International Edition, 2012, 51, 11700-11721.	13.8	910
6	Unique hierarchical structure and high thermoelectric properties of antimony telluride pillar arrays. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	16
7	Enhanced thermoelectric performance of Ga-added Bi0.5Sb1.5Te3 films by flash evaporation. Intermetallics, 2012, 31, 321-324.	3.9	11
8	Thermoelectrics in misfit-layered oxides [(Ca,Ln)2CoO3]0.62[CoO2]: From bulk to nano. Nano Energy, 2012, 1, 456-465.	16.0	30
9	Thermoelectric properties of copper selenide with ordered selenium layer and disordered copper layer. Nano Energy, 2012, 1, 472-478.	16.0	271
10	Pyroelectric Nanogenerators for Driving Wireless Sensors. Nano Letters, 2012, 12, 6408-6413.	9.1	221
11	Solid-Solutioned Homojunction Nanoplates with Disordered Lattice: A Promising Approach toward "Phonon Class Electron Crystal―Thermoelectric Materials. Journal of the American Chemical Society, 2012, 134, 7971-7977.	13.7	71
12	Significant improvement of thermoelectric performance in nanostructured bismuth networks. Nano Energy, 2012, 1, 706-713.	16.0	7
13	Fabrication of Highly (0Â0Âl)-Textured Sb2Te3 Film and Corresponding Thermoelectric Device with Enhanced Performance. Journal of Electronic Materials, 2012, 41, 3031-3038.	2.2	21
14	Enhanced thermoelectric figure-of-merit in spark plasma sintered nanostructured n-type SiGe alloys. Applied Physics Letters, 2012, 101, .	3.3	133
15	Recent Advances in Nanostructured Thermoelectric Half-Heusler Compounds. Nanomaterials, 2012, 2, 379-412.	4.1	287
16	Effect of Silicon and Sodium on Thermoelectric Properties of Thallium-Doped Lead Telluride-Based Materials. Nano Letters, 2012, 12, 2324-2330.	9.1	64
17	Heavy Doping and Band Engineering by Potassium to Improve the Thermoelectric Figure of Merit in p-Type PbTe, PbSe, and PbTe _{1–<i>y</i>} Se _{<i>y</i>} . Journal of the American Chemical Society, 2012, 134, 10031-10038.	13.7	337
18	Low temperature thermoelectric properties of Bi2â^'xSbxTeSe2 crystals near the n–p crossover. Solid State Communications, 2012, 152, 1208-1211.	1.9	8
19	A hybrid energy cell for self-powered water splitting. Energy and Environmental Science, 2013, 6, 2429.	30.8	162

#	Article	IF	CITATIONS
20	Thermoelectric Nanomaterials. Springer Series in Materials Science, 2013, , .	0.6	114
21	Enhanced thermopower and thermoelectric performance through energy filtering of carriers in (Bi2Te3)0.2(Sb2Te3)0.8 bulk alloy embedded with amorphous SiO2 nanoparticles. Journal of Applied Physics, 2013, 114, .	2.5	91
22	High thermoelectric performance in n-type BiAgSeS due to intrinsically low thermal conductivity. Energy and Environmental Science, 2013, 6, 1750.	30.8	68
23	Nanostructuring of Conventional Thermoelectric Materials. Springer Series in Materials Science, 2013, , 303-320.	0.6	0
24	Structural and thermoelectric characterization of Ba substituted LaCoO3 perovskite-type materials obtained by polymerized gel combustion method. Journal of Alloys and Compounds, 2013, 579, 147-155.	5.5	36
25	Zintl phase compounds AM2Sb2 (A=Ca, Sr, Ba, Eu, Yb; M=Zn, Cd) and their substitution variants: a class of potential thermoelectric materials. Journal of Rare Earths, 2013, 31, 1029-1038.	4.8	52
26	Enhanced thermoelectric properties and layered structure of Sb2Te3 films induced by special (00l) crystal plane. Chemical Physics Letters, 2013, 584, 159-164.	2.6	19
27	Extending the 3ï‰ method: Thermal conductivity characterization of thin films. Review of Scientific Instruments, 2013, 84, 084904.	1.3	22
28	Preparation of amorphous and nanocrystalline sodium tantalum oxide photocatalysts with porous matrix structure for overall water splitting. Nano Energy, 2013, 2, 116-123.	16.0	69
29	Superlattice multinanolayered thin films of SiO ₂ /SiO ₂ + Ge for thermoelectric device applications. Journal of Intelligent Material Systems and Structures, 2013, 24, 1357-1364.	2.5	11
30	Coupled vibrational modes in multiple-filled skutterudites and the effects on lattice thermal conductivity reduction. Applied Physics Letters, 2013, 102, .	3.3	15
31	Photothermoelectric effect as a means for thermal characterization of nanocomposites based on intrinsically conducting polymers and carbon nanotubes. Journal of Applied Physics, 2013, 113, .	2.5	33
32	Fabrication and thermoelectric properties of Mg2Si-based composites using reduction reaction with additives. Intermetallics, 2013, 32, 72-80.	3.9	37
33	Facile synthesis of Cu7Te4 nanorods and the enhanced thermoelectric properties of Cu7Te4–Bi0.4Sb1.6Te3 nanocomposites. Nano Energy, 2013, 2, 4-11.	16.0	34
34	p-Type Bismuth Telluride-Based Composite Thermoelectric Materials Produced by Mechanical Alloying and Hot Extrusion. Journal of Electronic Materials, 2013, 42, 1429-1435.	2.2	27
35	Improvement of textured Bi1.6Pb0.4Sr2Co1.8O thermoelectric performances by metallic Ag additions. Ceramics International, 2013, 39, 1597-1602.	4.8	43
36	Fabrication and thermoelectric properties of c-axis oriented nanocrystalline Bi2Sr2Co2Oy thin films. Thin Solid Films, 2013, 534, 168-171.	1.8	2
37	A review on the enhancement of figure of merit from bulk to nano-thermoelectric materials. Nano Energy, 2013, 2, 190-212.	16.0	541

#	Article	IF	CITATIONS
38	Enhancing the Thermoelectric Properties of p-Type Bulk Bi-Sb-Te Nanocomposites via Solution-Based Metal Nanoparticle Decoration. Journal of Electronic Materials, 2013, 42, 1411-1416.	2.2	32
39	Assembly of metals and nanoparticles into novel nanocomposite superstructures. Scientific Reports, 2013, 3, .	3.3	38
40	Efficient, low-cost solar thermoelectric cogenerators comprising evacuated tubular solar collectors and thermoelectric modules. Applied Energy, 2013, 109, 51-59.	10.1	98
41	Effects of Different Morphologies of Bi2Te3 Nanopowders on Thermoelectric Properties. Journal of Electronic Materials, 2013, 42, 1140-1145.	2.2	58
42	Enhancement of the Thermoelectric Performance of Bi0.4Sb1.6Te3 Alloys by In and Ga Doping. Journal of Electronic Materials, 2013, 42, 1617-1621.	2.2	24
43	Thermal conductivity of core-shell nanocomposites for enhancing thermoelectric performance. Applied Physics Letters, 2013, 102, .	3.3	13
44	High Thermoelectric Performance via Hierarchical Compositionally Alloyed Nanostructures. Journal of the American Chemical Society, 2013, 135, 7364-7370.	13.7	344
45	Thermoelectric Property Study of Nanostructured pâ€Type Halfâ€Heuslers (Hf, Zr,) Tj ETQq1 1 0.784314 rgBT /Ov	erlock 10	Tf 50 462
46	Studies on the Bi ₂ Te ₃ –Bi ₂ Se ₃ –Bi ₂ Se ₃ –Bi ₂ S ₃ system for mid-temperature thermoelectric energy conversion. Energy and Environmental Science, 2013, 6, 552-560.	30.8	250
47	Enhanced thermoelectric performance in graphitic ZnO (0001) nanofilms. Journal of Applied Physics, 2013, 113, .	2.5	14
48	Influence of Te substitution on the structural and electronic properties of thermoelectric BiCuSeO. Journal of Materials Chemistry A, 2013, 1, 2921.	10.3	48
49	Silicon-Based Hybrid Energy Cell for Self-Powered Electrodegradation and Personal Electronics. ACS Nano, 2013, 7, 2808-2813.	14.6	125
50	Fabrication of Metal Alloy-Deposited Flexible MWCNT Buckypaper for Thermoelectric Applications. Journal of Nanomaterials, 2013, 2013, 1-6.	2.7	7
51	Modeling the Phonon Transport in Nanowire with Different Cross-Section. Applied Mechanics and Materials, 0, 401-403, 852-855.	0.2	1
52	Nanostructured Thermoelectric Materials. Springer Series in Materials Science, 2013, , 255-285.	0.6	17
53	Structure and Thermoelectric Properties of Nanostructured (Bi,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 14 Advances in Materials Physics and Chemistry, 2013, 03, 119-132.	7 Td (Sb)& 0.7	amp;lt;su 8
54	Large thermopower in the antiferromagnetic semiconductor BaMn2Bi2. Applied Physics Letters, 2013, 103, .	3.3	7
55	Carrier Mapping in Thermoelectric Materials. Materials Research Society Symposia Proceedings, 2013, 1543, 171-176.	0.1	3

#	Article	IF	CITATIONS
56	Multilayered structure and enhanced thermoelectric properties of Bi _{1.5} Sb _{0.5} Te ₃ film with preferential growth. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2611-2616.	1.8	12
57	A Review on the Fabrication of Polymer-Based Thermoelectric Materials and Fabrication Methods. Scientific World Journal, The, 2013, 2013, 1-17.	2.1	39
58	Improvement of Thermoelectric Properties Via Combination of Nanostructurization and Elemental Doping. Jom, 2014, 66, 2298-2308.	1.9	4
59	Electric and thermoelectric properties of CdTe/PbTe epitaxial nanocomposite. Functional Materials Letters, 2014, 07, 1440007.	1.2	1
60	Thermoelectric generators: Linking material properties and systems engineering for waste heat recovery applications. Sustainable Materials and Technologies, 2014, 1-2, 26-35.	3.3	192
61	Copper(I) oxide based thermoelectric powders and pastes with high Seebeck coefficients. Applied Physics Letters, 2014, 105, .	3.3	22
62	Thermoelectric properties of rare earth-doped n-type Bi2Se0.3Te2.7 nanocomposites. Bulletin of Materials Science, 2014, 37, 1007-1012.	1.7	13
63	Strong enhancement of phonon scattering through nanoscale grains in lead sulfide thermoelectrics. NPG Asia Materials, 2014, 6, e108-e108.	7.9	140
64	Towards high efficiency segmented thermoelectric unicouples. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 9-17.	1.8	80
65	Electron Microscopy for Characterization of Thermoelectric Nanomaterials. , 2014, , 427-536.		0
66	Preparation of thermoelectric Si:B/SiGe multilayer structures on quartz glasses by RF-magnetron sputtering with layer-by-layer annealing methods. Japanese Journal of Applied Physics, 2014, 53, 087102.	1.5	0
67	Improvement of thermoelectric properties induced by uniquely ordered lattice field in Bi2Se0.5Te2.5 pillar array. Journal of Solid State Chemistry, 2014, 215, 219-224.	2.9	17
68	A facile hydrothermal method for synthesis different morphologies of PbTe nanostructures. Journal of Industrial and Engineering Chemistry, 2014, 20, 3335-3341.	5.8	23
69	Electricity generation from low-temperature industrial excess heat—an opportunity for the steel industry. Energy Efficiency, 2014, 7, 203-215.	2.8	46
70	Mesoporous materials for clean energy technologies. Chemical Society Reviews, 2014, 43, 7681-7717.	38.1	422
71	A review of thermoelectric cooling: Materials, modeling and applications. Applied Thermal Engineering, 2014, 66, 15-24.	6.0	668
72	Effect of Suppression of Grain Growth of Hot Extruded (Bi0.2Sb0.8)2Te3 Thermoelectric Alloys by MoS2 Nanoparticles. Journal of Electronic Materials, 2014, 43, 2239-2246.	2.2	17
73	New promising bulk thermoelectrics: intermetallics, pnictides and chalcogenides. European Physical Journal B, 2014, 87, 1.	1.5	67

#	Article	IF	CITATIONS
74	Electric conductivity of a bulk composite based on Bi2Te3/SiO2 core-shell nanoparticles. Technical Physics Letters, 2014, 40, 65-68.	0.7	0
75	Low-Temperature, Solution-Based, Scalable Synthesis of Sb2Te3 Nanoparticles with an Enhanced Power Factor. Journal of Electronic Materials, 2014, 43, 2165-2173.	2.2	8

Thermoelectric properties of rare earth doped Ca3-xRExCo4O9 (RE = Dy, Er, Gd, and Tb; $x\hat{a}\in \infty=\hat{a}\in \infty$ 0, 0.01, 0.03,) Ti ETQq0.0 or gBT /C

77	Structural and chemical modification of semiconductor nanocrystals. , 2014, , 50-94.		0
78	Organic Thermoelectric Materials: Emerging Green Energy Materials Converting Heat to Electricity Directly and Efficiently. Advanced Materials, 2014, 26, 6829-6851.	21.0	773
79	Bi2S3 nanonetwork as precursor for improved thermoelectric performance. Nano Energy, 2014, 4, 113-122.	16.0	64
80	Improved thermoelectric properties of Bi ₂ Te _{3â``<i>x</i>} Se _{<i>x</i>} alloys by melt spinning and resistance pressing sintering. Journal Physics D: Applied Physics, 2014, 47, 115101.	2.8	41
81	Enhanced thermoelectric properties of the flexible tellurium nanowire film hybridized with single-walled carbon nanotube. Synthetic Metals, 2014, 198, 340-344.	3.9	20
82	Optimization of the carrier concentration in phase-separated half-Heusler compounds. Journal of Materials Chemistry A, 2014, 2, 13513-13518.	10.3	47
83	Recent advances in thermoelectric materials and solar thermoelectric generators – a critical review. RSC Advances, 2014, 4, 46860-46874.	3.6	122
84	Silicon-based hybrid cell for harvesting solar energy and raindrop electrostatic energy. Nano Energy, 2014, 9, 291-300.	16.0	225
85	Composition Modulation of Ag ₂ Te Nanowires for Tunable Electrical and Thermal Properties. Nano Letters, 2014, 14, 5398-5404.	9.1	80
86	Recent progress in thermoelectric materials. Science Bulletin, 2014, 59, 2073-2091.	1.7	113
87	Macro and Micro-Scale Features of Thermoelectric PbTe (Br, Na) Systems: Micro-FTIR Spectroscopy, Micro-Seebeck Measurements, and SEM/EDX Observations. Journal of Electronic Materials, 2014, 43, 3785-3791.	2.2	2
88	Improvement of Thermoelectric Properties in (Bi0.5Sb0.5)2Te3 Films of Nanolayered Pillar Arrays. Journal of Electronic Materials, 2014, 43, 3098-3104.	2.2	6
89	Enhanced thermoelectric properties of the n-type Magnéli phase WO _{2.90} : reduced thermal conductivity through microstructure engineering. Journal of Materials Chemistry A, 2014, 2, 13492-13497.	10.3	21
90	The panoscopic approach to high performance thermoelectrics. Energy and Environmental Science, 2014, 7, 251-268.	30.8	834
91	Effects of morphology on the thermoelectric properties of Al-doped ZnO. RSC Advances, 2014, 4, 12353.	3.6	68

#	Article	IF	CITATIONS
92	Novel precursors for synthesis of dendrite-like PbTe nanostructures and investigation of photoluminescence behavior. Advanced Powder Technology, 2014, 25, 1585-1592.	4.1	35
93	Facile precipitation of two phase alloys in SnTe0.75Se0.25 with improved power factor. Journal of Alloys and Compounds, 2014, 587, 420-427.	5.5	18
95	Numerical simulation, parametric study and optimization of thermoelectric generators for self-cooling of devices. , 2014, , .		3
96	Nanocomposites for thermoelectrics and thermal engineering. MRS Bulletin, 2015, 40, 746-752.	3.5	40
97	Co-In-Sb Ternary System (I): Isothermal Sections and Liquidus Projection. Metallurgical and Materials Transactions E, 2015, 2, 236-249.	0.5	1
98	Thermoelectric properties of spark plasma sintered lead telluride nanocubes. Journal of Materials Research, 2015, 30, 2638-2648.	2.6	12
99	Electronic transport and thermoelectric properties of double-filled Pr1â^'z Yb z Fe4â^'x Co x Sb12 skutterudites. Journal of the Korean Physical Society, 2015, 67, 1208-1213.	0.7	5
100	First-Principles Based Phonon Calculation and Raman Spectroscopy Measurement of RuGa ₂ and RuAl ₂ with High Thermoelectric Power Factor. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 591-596.	0.4	0
101	The influence of non-idealities on the thermoelectric power factor of nanostructured superlattices. Journal of Applied Physics, 2015, 118, 224301.	2.5	22
102	Futuristic Nanomaterials and Composites: Part I. Jom, 2015, 67, 2844-2847.	1.9	1
103	Recent Advancements in Nanogenerators for Energy Harvesting. Small, 2015, 11, 5611-5628.	10.0	74
104	Synthesis and high temperature thermoelectric properties of Yb0.25Co4Sb12-(Ag2Te)x(Sb2Te3)1â^'x nanocomposites. Frontiers in Chemistry, 2015, 3, 53.	3.6	5
105	Solution-phase synthesis and thermal conductivity of nanostructured CdSe, In ₂ Se ₃ , and composites thereof. Journal of Materials Chemistry A, 2015, 3, 13483-13491.	10.3	9
106	Thermoelectric properties of Na-doped Zintl compound: Mg3â^'Na Sb2. Acta Materialia, 2015, 93, 187-193.	7.9	131
107	Decrease of Ca3Co4O9+l̃´thermal conductivity by Yb-doping. Ceramics International, 2015, 41, 12529-12534.	4.8	9
108	Controlled growth of bismuth antimony telluride Bi Sb2â~Te3 nanoplatelets and their bulk thermoelectric nanocomposites. Nano Energy, 2015, 15, 688-696.	16.0	94
109	Thermoelectric effects in graphene nanostructures. Journal of Physics Condensed Matter, 2015, 27, 133204.	1.8	137
110	Grain size effect on electrical resistivity of bulk nanograined Bi2Te3 material. Materials Characterization, 2015, 99, 175-179.	4.4	32

#	Article	IF	CITATIONS
111	High thermoelectric and mechanical performance in highly dense Cu _{2â^x} S bulks prepared by a melt-solidification technique. Journal of Materials Chemistry A, 2015, 3, 9432-9437.	10.3	176
112	Concepts for medium-high to high temperature thermoelectric heat-to-electricity conversion: a review of selected materials and basic considerations of module design. Translational Materials Research, 2015, 2, 025001.	1.2	93
113	Numerical Simulation and Parametric Study of Heat-Driven Self-Cooling of Electronic Devices. Journal of Thermal Science and Engineering Applications, 2015, 7, .	1.5	5
114	Giant enhancement in thermoelectric performance of copper selenide by incorporation of different nanoscale dimensional defect features. Nano Energy, 2015, 13, 36-46.	16.0	158
115	Characterization and thermoelectric properties of Bi0.4Sb1.6Te3 nanostructured bulk prepared by mechanical alloying and microwave activated hot pressing. Ceramics International, 2015, 41, 6817-6823.	4.8	30
116	The Effects of Te ^{2â~'} and I ^{â~'} Substitutions on the Electronic Structures, Thermoelectric Performance, and Hardness in Meltâ€Quenched Highly Dense Cu _{2â€<i>x</i>} Se. Advanced Electronic Materials, 2015, 1, 1400015.	5.1	51
117	Current progress and future challenges in thermoelectric power generation: From materials to devices. Acta Materialia, 2015, 87, 357-376.	7.9	447
118	Improved Thermoelectric Performance of Silver Nanoparticlesâ€Dispersed Bi ₂ Te ₃ Composites Deriving from Hierarchical Twoâ€Phased Heterostructure. Advanced Functional Materials, 2015, 25, 966-976.	14.9	243
119	Superior intrinsic thermoelectric performance with zT of 1.8 in single-crystal and melt-quenched highly dense Cu2-xSe bulks. Scientific Reports, 2015, 5, 7671.	3.3	83
120	n-type thermoelectric material Mg ₂ Sn _{0.75} Ge _{0.25} for high power generation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3269-3274.	7.1	191
121	Enhanced thermoelectric performance of spark plasma sintered copper-deficient nanostructured copper selenide. Journal of Physics and Chemistry of Solids, 2015, 81, 100-105.	4.0	48
122	Enhancement of thermoelectric performance in n-type PbTe1â^'Se by doping Cr and tuning Te:Se ratio. Nano Energy, 2015, 13, 355-367.	16.0	36
123	A new n-type half-Heusler thermoelectric material NbCoSb. Materials Research Bulletin, 2015, 70, 773-778.	5.2	89
124	Ultrafast carriers dynamics in filled-skutterudites. Applied Physics Letters, 2015, 106, 231902.	3.3	4
125	Performance and mass optimization of thermoelectric microcoolers. International Journal of Thermal Sciences, 2015, 97, 143-151.	4.9	17
126	Experimental Realization of Extreme Heat Flux Concentration with Easy-to-Make Thermal Metamaterials. Scientific Reports, 2015, 5, 11552.	3.3	73
127	The effect of nickel doping on electron and phonon transport in the n-type nanostructured thermoelectric material CoSbS. Journal of Materials Chemistry C, 2015, 3, 10442-10450.	5.5	47
128	Enhanced thermoelectric performance of Bi2S3 by synergistical action of bromine substitution and copper nanoparticles. Nano Energy, 2015, 13, 554-562.	16.0	91

#	Article	IF	CITATIONS
129	Tuning thermal conductance across sintered silicon interface by local nanostructures. Nano Energy, 2015, 13, 601-608.	16.0	24
130	Enhanced thermoelectric properties of n-type Bi2Te2.7Se0.3 by indium and sodium co-doping. Functional Materials Letters, 2015, 08, 1550008.	1.2	6
131	Magnéli phases Ti4O7 and Ti8O15 and their carbon nanocomposites via the thermal decomposition-precursor route. Journal of Solid State Chemistry, 2015, 229, 235-242.	2.9	29
132	Thermoelectric properties of Ge doped n-type Ti _x Zr _{1â^'x} NiSn _{0.975} Ge _{0.025} half-Heusler alloys. Journal of Materials Chemistry A, 2015, 3, 12507-12514.	10.3	26
133	Hybrid Films of Graphene and Carbon Nanotubes for High Performance Chemical and Temperature Sensing Applications. Small, 2015, 11, 3485-3493.	10.0	54
134	Boundary Engineering for the Thermoelectric Performance of Bulk Alloys Based on Bismuth Telluride. ChemSusChem, 2015, 8, 2312-2326.	6.8	68
135	Enhanced thermoelectric performance of BiSbTe-based composites incorporated with amorphous Si ₃ N ₄ nanoparticles. RSC Advances, 2015, 5, 34251-34256.	3.6	31
136	Thermoelectric power factor: Enhancement mechanisms and strategies for higher performance thermoelectric materials. Materials Science and Engineering Reports, 2015, 97, 1-22.	31.8	311
137	Protective properties of YSZ/Ti film deposited on CoSb 3 thermoelectric material. Corrosion Science, 2015, 98, 163-169.	6.6	5
138	Optimization of the random multilayer structure to break the random-alloy limit of thermal conductivity. Applied Physics Letters, 2015, 106, .	3.3	53
139	Contrasting the Role of Mg and Ba Doping on the Microstructure and Thermoelectric Properties of p-Type AgSbSe ₂ . ACS Applied Materials & Interfaces, 2015, 7, 23047-23055.	8.0	29
140	Mechanical properties and microstructure of spark plasma sintered nanostructured p-type SiGe thermoelectric alloys. Materials and Design, 2015, 87, 414-420.	7.0	31
141	Microstructure and thermoelectric properties of a ZrNi1.1Sn half-Heusler alloy. Acta Materialia, 2015, 85, 290-300.	7.9	46
142	Study on thermoelectric performance by Na doping in nanostructured Mg1-Na Ag0.97Sb0.99. Nano Energy, 2015, 11, 640-646.	16.0	74
143	Enhanced Thermoelectric Performance of PEDOT:PSS Flexible Bulky Papers by Treatment with Secondary Dopants. ACS Applied Materials & 2015, 7, 94-100.	8.0	194
144	High Performance Oxides-Based Thermoelectric Materials. Jom, 2015, 67, 211-221.	1.9	71
145	Enhancement of thermoelectric properties of Yb-filled skutterudites by an Ni-Induced "core–shell― structure. Journal of Materials Chemistry A, 2015, 3, 1010-1016.	10.3	63
146	Thermoelectric properties of pulsed current sintered nanocrystalline Al-doped ZnO by chemical vapour synthesis. Journal of Materials Chemistry A, 2015, 3, 189-197.	10.3	48

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#	Article	IF	CITATIONS
147	Thermoelectrical properties of lutetium-doped Bi2Te3 bulk samples prepared from flower-like nanopowders. Journal of Alloys and Compounds, 2015, 619, 401-405.	5.5	54
148	Synthesis and Thermoelectric Properties of C ₆₀ /Cu ₂ GeSe ₃ Composites. Journal of Nanomaterials, 2016, 2016, 1-7.	2.7	6
149	Nitrogen-Doped Carbon Nanotube/Polymer Nanocomposites Towards Thermoelectric Applications. , 0, ,		1
150	A Review on Electroactive Polymers for Waste Heat Recovery. Materials, 2016, 9, 485.	2.9	14
151	Enhanced Thermoelectric Performance of Cu2SnSe3-Based Composites Incorporated with Nano-Fullerene. Materials, 2016, 9, 629.	2.9	14
152	Thermoelectric characteristics of uniaxially deformed n‣i in the temperature range 85–355 K. Physica Status Solidi (B): Basic Research, 2016, 253, 1929-1936.	1.5	1
153	Recent advances in thermoelectric materials. Progress in Materials Science, 2016, 83, 330-382.	32.8	572
154	High temperature thermoelectric properties of skutterudite-Bi2Te3 nanocomposites. Intermetallics, 2016, 76, 33-40.	3.9	10
155	Integration: An Effective Strategy to Develop Multifunctional Energy Storage Devices. Advanced Energy Materials, 2016, 6, 1501867.	19.5	138
156	Thermoelectric Properties of Indium(III)â€Doped Copper Antimony Selenide Thin Films Deposited Using a Microwaveâ€Assisted Technique. Energy Technology, 2016, 4, 835-842.	3.8	23
157	On the tuning of electrical and thermal transport in thermoelectrics: an integrated theory–experiment perspective. Npj Computational Materials, 2016, 2, .	8.7	399
158	Thermal transport size effects in silicon membranes featuring nanopillars as local resonators. Applied Physics Letters, 2016, 108, .	3.3	42
159	Liquidus Projections of Bi-Se-Ga and Bi-Se-Te Ternary Systems. Metallurgical and Materials Transactions E, 2016, 3, 281-290.	0.5	0
160	On the effectiveness of the thermoelectric energy filtering mechanism in low-dimensional superlattices and nano-composites. Journal of Applied Physics, 2016, 120, .	2.5	22
161	Review of Recent Developments in Thermoelectric Materials. , 2016, , .		2
162	Efficient thermoelectric energy conversion in Pb0.95Mn0.05Te p-n couple. Applied Physics Letters, 2016, 108, .	3.3	4
163	Accurate measurement of Seebeck coefficient. Review of Scientific Instruments, 2016, 87, 064701.	1.3	12
164	First-Principles-Based Phonon Calculation and Raman Spectroscopy Measurement of RuGa ₂ and RuAl ₂ with High Thermoelectric Power Factors. Materials Transactions, 2016, 57, 1050-1054.	1.2	3

#	ARTICLE Design and optimization of automotive thermoelectric generators for maximum fuel efficiency	IF 9.2	Citations 88
166	Thermoelectric Nanocomposites for Thermal Energy Conversion. Nanoscience and Technology, 2016, , 371-443.	1.5	5
167	Co-doping of Al and Bi to control the transport properties for improving thermoelectric performance of Mg2Si. Scripta Materialia, 2016, 116, 11-15.	5.2	20
168	Thermoelectric Performance of n-Type Bi2Te3/Cu Composites Fabricated by Nanoparticle Decoration and Spark Plasma Sintering. Journal of Electronic Materials, 2016, 45, 1927-1934.	2.2	27
170	Toward "Phonon Glass Electron Crystal―in Solid-Solutioned Homojunction Nanoplates with Disordered Lattice. Springer Theses, 2016, , 65-78.	0.1	0
171	Scanning near-field thermoelectric microscopy for subsurface nanoscale thermoelectric behavior. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	3
172	Nanoscale thermoelectric properties of Bi2Te3 – Graphene nanocomposites: Conducting atomic force, scanning thermal and kelvin probe microscopy studies. Journal of Alloys and Compounds, 2016, 681, 394-401.	5.5	49
173	Preparation and properties of ZnSb thermoelectric material through mechanical-alloying and Spark Plasma Sintering. Chemical Engineering Journal, 2016, 299, 126-134.	12.7	34
174	Analysis and Implications of Structural Complexity in Low Lattice Thermal Conductivity High Thermoelectric Performance PbTe–PbSnS ₂ Composites. Chemistry of Materials, 2016, 28, 3771-3777.	6.7	7
175	The Fragility of Thermoelectric Power Factor in Cross-Plane Superlattices in the Presence of Nonidealities: A Quantum Transport Simulation Approach. Journal of Electronic Materials, 2016, 45, 1584-1588.	2.2	20
176	Microstructure and thermoelectric properties of Sb doped Hf0.25Zr0.75NiSn Half-Heusler compounds with improved carrier mobility. Intermetallics, 2016, 74, 1-7.	3.9	18
177	High thermoelectric performance of Bi-Te alloy: Defect engineering strategy. Current Applied Physics, 2016, 16, 1202-1215.	2.4	34
178	Hybrid Cell Composed of Triboelectric Nanogenerator. Green Energy and Technology, 2016, , 307-350.	0.6	1
179	Stable n-type thermoelectric multilayer thin films with high power factor from carbonaceous nanofillers. Nano Energy, 2016, 28, 426-432.	16.0	96
180	Real-time tracking of the hierarchical structure of biodegradable poly(butylene succinate- co) Tj ETQq0 0 0 rgBT / Technology, 2016, 134, 201-208.	Overlock 7.8	10 Tf 50 187 19
181	High thermoelectric performance of polycrystalline In ₄ Se _{3â^î^(} (Cul) _x : synergistic effects of the Se-deficiency and Cul-doping. Inorganic Chemistry Frontiers, 2016, 3, 1566-1571.	6.0	10
183	Ce1â^'xSrxZnSbO: New thermoelectric materials formed between intermetallics and oxides. Journal of Alloys and Compounds, 2016, 688, 849-853.	5.5	12
184	Nanocluster metal films as thermoelectric material for radioisotope mini battery unit. Chemical Physics, 2016, 478, 2-7.	1.9	10

#	Article	IF	CITATIONS
185	Enhancing the thermoelectric performance of nanosized CoSb ₃ via short-range percolation of electrically conductive WTe ₂ inclusions. Journal of Materials Chemistry A, 2016, 4, 13874-13880.	10.3	38
186	Smart Materials for Controlled Droplet Motion. , 2016, , 204-237.		0
187	Rationally Designing High-Performance Bulk Thermoelectric Materials. Chemical Reviews, 2016, 116, 12123-12149.	47.7	1,624
188	A review on nanostructures of high-temperature thermoelectric materials for waste heat recovery. Renewable and Sustainable Energy Reviews, 2016, 64, 635-659.	16.4	251
189	Tailored semiconducting carbon nanotube networks with enhanced thermoelectric properties. Nature Energy, 2016, 1, .	39.5	270
190	Nanomechanical probing of the layer/substrate interface of an exfoliated InSe sheet on sapphire. Scientific Reports, 2016, 6, 26970.	3.3	14
191	Enhanced thermoelectric performance of solution-derived bismuth telluride based nanocomposites via liquid-phase Sintering. Nano Energy, 2016, 30, 630-638.	16.0	78
192	Pore Morphology and Reduction Behavior in Alumina Ceramics Fabricated by Spark Plasma Sintering (SPS). Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2016, 63, 282-288.	0.2	0
193	Optimizing phonon scattering by nanoprecipitates in lead chalcogenides. Applied Physics Letters, 2016, 108, 113901.	3.3	6
194	Lattice thermal conduction in ultra-thin nanocomposites. Journal of Applied Physics, 2016, 119, 244309.	2.5	3
195	Engineering Thermal Conductivity for Balancing Between Reliability and Performance of Bulk Thermoelectric Generators. Advanced Functional Materials, 2016, 26, 3678-3686.	14.9	25
196	Enhancement of thermoelectric performance of phase pure Zintl compounds Ca1â^'Yb Zn2Sb2, Ca1â^'Eu Zn2Sb2, and Eu1â^'Yb Zn2Sb2 by mechanical alloying and hot pressing. Nano Energy, 2016, 25, 136-144.	16.0	67
197	Investigation of the bipolar effect in the thermoelectric material CaMg ₂ Bi ₂ using a first-principles study. Physical Chemistry Chemical Physics, 2016, 18, 16566-16574.	2.8	83
198	An active thermography approach for thermal and electrical characterization of thermoelectric materials. Journal Physics D: Applied Physics, 2016, 49, 285601.	2.8	10
199	Thermoelectric properties of n-type half-Heusler compounds (Hf0.25Zr0.75)1–Nb NiSn. Acta Materialia, 2016, 113, 41-47.	7.9	54
200	Effects of Thallium Doping on the Transport Properties of Bi2Te3 Alloy. Journal of Electronic Materials, 2016, 45, 3053-3058.	2.2	10
201	Highâ€Performance Thermoelectric Paper Based on Double Carrierâ€Filtering Processes at Nanowire Heterojunctions. Advanced Energy Materials, 2016, 6, 1502181.	19.5	157
202	Lithium Doping to Enhance Thermoelectric Performance of MgAgSb with Weak Electronâ \in "Phonon Coupling. Advanced Energy Materials, 2016, 6, 1502269.	19.5	122

#	Article	IF	CITATIONS
203	Simple model for effective thermal conductivity of bulk nanostructured materials. International Journal of Thermal Sciences, 2016, 104, 13-19.	4.9	5
204	Enhanced thermoelectric performance of xMoS2–TiS2 nanocomposites. Journal of Alloys and Compounds, 2016, 666, 346-351.	5.5	19
205	Thermoelectric properties of melt spun PbTe with multi-scaled nanostructures. Journal of Alloys and Compounds, 2016, 662, 368-373.	5.5	18
206	New insight into the material parameter B to understand the enhanced thermoelectric performance of Mg ₂ Sn _{1â^'xâ~'y} Ge _x Sb _y . Energy and Environmental Science, 2016, 9, 530-539.	30.8	83
207	Enhancing thermoelectric performance of Bi ₂ Te ₃ -based nanostructures through rational structure design. Nanoscale, 2016, 8, 8681-8686.	5.6	70
208	Thermoelectric properties of Bi-based Zintl compounds Ca _{1â^'x} Yb _x Mg ₂ Bi ₂ . Journal of Materials Chemistry A, 2016, 4, 4312-4320.	10.3	92
209	Free-Standing Reduced Graphene Oxide Paper with High Electrical Conductivity. Journal of Electronic Materials, 2016, 45, 1290-1295.	2.2	32
210	On-chip thermoelectric module comprised of oxide thin film legs. Energy Conversion and Management, 2016, 114, 251-257.	9.2	22
211	Grain structure evolution at sintering of the bulk Bi2Te3 nanomaterial under hot pseudo-isostatic pressure. Journal of Materials Science, 2016, 51, 3415-3421.	3.7	2
212	Improving the Thermoelectric Properties of Polyaniline by Introducing Poly(3,4-ethylenedioxythiophene). Journal of Electronic Materials, 2016, 45, 1813-1820.	2.2	11
213	Fabrication of Microstructured thermoelectric Bi2Te3 thin films by seed layer assisted electrodeposition. Materials Science in Semiconductor Processing, 2016, 46, 17-22.	4.0	13
214	Modulation doping and energy filtering as effective ways to improve the thermoelectric power factor. Journal of Computational Electronics, 2016, 15, 16-26.	2.5	36
216	Studies on thermoelectric figure of merit of Na-doped p-type polycrystalline SnSe. Journal of Materials Chemistry A, 2016, 4, 1848-1854.	10.3	210
217	Anisotropic n-Type Bi ₂ Te ₃ –In ₂ Te ₃ Thermoelectric Material Produced by Seeding Zone Melting and Solid State Transformation. Crystal Growth and Design, 2016, 16, 617-624.	3.0	10
218	Effect of Nanostructuring and High-Pressure Torsion Process on Thermal Conductivity of Carrier-Doped Chalcopyrite. Journal of Electronic Materials, 2016, 45, 1642-1647.	2.2	12
219	Recent progress in half-Heusler thermoelectric materials. Materials Research Bulletin, 2016, 76, 107-112.	5.2	157
220	Role of Ag in textured-annealed Bi2Ca2Co1.7Ox thermoelectric ceramic. Acta Materialia, 2016, 102, 273-283.	7.9	22
221	Effects of antimony content in MgAg0.97Sbx on output power and energy conversion efficiency. Acta Materialia. 2016. 102. 17-23.	7.9	45

#	Article	IF	CITATIONS
222	Low-cost, abundant binary sulfides as promising thermoelectric materials. Materials Today, 2016, 19, 227-239.	14.2	257
223	High thermoelectric performance in Bi2-xPbxBa2Co2Oy promoted by directional growth and annealing. Journal of the European Ceramic Society, 2016, 36, 67-74.	5.7	26
224	An extended thermodynamic model for size-dependent thermoelectric properties at nanometric scales: Application to nanofilms, nanocomposites and thin nanocomposite films. Applied Mathematical Modelling, 2016, 40, 2143-2160.	4.2	20
225	Towards higher thermoelectric performance of Bi2Te3 via defect engineering. Scripta Materialia, 2016, 111, 39-43.	5.2	100
226	Review of ocean tidal, wave and thermal energy technologies. Renewable and Sustainable Energy Reviews, 2017, 72, 590-604.	16.4	314
227	Nanocomposites from Solutionâ€Synthesized PbTeâ€BiSbTe Nanoheterostructure with Unity Figure of Merit at Lowâ€Medium Temperatures (500–600 K). Advanced Materials, 2017, 29, 1605140.	21.0	70
228	Improvement of thermoelectric properties and their correlations with electron effective mass in Cu1.98SxSe1â°'x. Scientific Reports, 2017, 7, 40436.	3.3	31
229	Thermoelectric and thermal transport properties of complex oxide thin films, heterostructures and superlattices. Journal of Materials Research, 2017, 32, 183-203.	2.6	20
230	The "electron crystal―behavior in copper chalcogenides Cu ₂ X (X = Se, S). Journal of Materials Chemistry A, 2017, 5, 5098-5105.	10.3	81
231	Grain Boundary Engineering for Achieving High Thermoelectric Performance in nâ€7ype Skutterudites. Advanced Energy Materials, 2017, 7, 1602582.	19.5	194
232	Influence of nanoparticle size distribution on the thermal conductivity of particulate nanocomposites. Europhysics Letters, 2017, 117, 24001.	2.0	27
233	Mechanically Durable and Flexible Thermoelectric Films from PEDOT:PSS/PVA/Bi _{0.5} Sb _{1.5} Te ₃ Nanocomposites. Advanced Electronic Materials, 2017, 3, 1600554.	5.1	80
234	The microscopic origin of low thermal conductivity for enhanced thermoelectric performance of Yb doped MgAgSb. Acta Materialia, 2017, 128, 227-234.	7.9	49
236	Experimental Study on Thermal Conductivity and Hardness of Cu and Ni Nanoparticle Packed Bed for Thermoelectric Application. Nanoscale Research Letters, 2017, 12, 189.	5.7	12
237	Thermoelectric properties of I-doped n-type Bi 2 Te 3 -based material prepared by hydrothermal and subsequent hot pressing. Progress in Natural Science: Materials International, 2017, 27, 203-207.	4.4	46
238	Spontaneous solid-state foaming of nanocrystalline thermoelectric compounds at elevated temperatures. Nano Energy, 2017, 36, 223-232.	16.0	14
239	High anisotropic thermoelectric effect in palladium phosphide sulphide. Physica Status Solidi (B): Basic Research, 2017, 254, .	1.5	9
240	Protective Properties of Various Coatings on CoSb3 Thermoelectric Material. Journal of Electronic Materials, 2017, 46, 3036-3042.	2.2	3

#	Article	IF	CITATIONS
241	A Review on Organic Polymer-Based Thermoelectric Materials. Journal of Polymers and the Environment, 2017, 25, 1208-1218.	5.0	63
242	Thermoelectric Skutterudite/oxide nanocomposites: Effective decoupling of electrical and thermal conductivity by functional interfaces. Nano Energy, 2017, 31, 393-402.	16.0	34
243	Polypyrrole/Graphene/Polyaniline Ternary Nanocomposite with High Thermoelectric Power Factor. ACS Applied Materials & Interfaces, 2017, 9, 20124-20131.	8.0	130
244	Two-dimensional problem of thermoelectric materials with an elliptic hole or a rigid inclusion. International Journal of Thermal Sciences, 2017, 117, 184-195.	4.9	26
245	An insight into β-Zn4Sb3 from its crystal structure, thermoelectric performance, thermal stability and graded material. Materials Today Energy, 2017, 3, 72-83.	4.7	24
246	Energy Harvesting: Breakthrough Technologies Through Polymer Composites. Springer Series on Polymer and Composite Materials, 2017, , 1-42.	0.7	1
247	Minority Carrier Blocking to Enhance the Thermoelectric Performance of Solution-Processed Bi _{<i>x</i>} Sb _{2–<i>x</i>} Te ₃ Nanocomposites via a Liquid-Phase Sintering Process. ACS Applied Materials & Interfaces, 2017, 9, 12501-12510.	8.0	46
248	Theoretical Adjustment of Necessary Conditions for Enhancing Figure of Merit of Thin Thermoelectric Layers. Journal of Heat Transfer, 2017, 139, .	2.1	0
249	Enhancing thermoelectric performance of SnTe via nanostructuring particle size. Journal of Alloys and Compounds, 2017, 709, 575-580.	5.5	44
250	Development of air-stable n-type single-walled carbon nanotubes by doping with 2-(2-methoxyphenyl)-1,3-dimethyl-2,3-dihydro-1 H -benzo[d]imidazole and their thermoelectric properties. Synthetic Metals, 2017, 225, 76-80.	3.9	61
251	Densification and alloying of ball milled Silicon-Germanium powder mixture during spark plasma sintering. Advanced Powder Technology, 2017, 28, 506-513.	4.1	15
252	Influence of secondary phase dispersants and porosity on thermoelectric properties of β-Fe 0.91 Mn 0.09 Si 2. Journal of Alloys and Compounds, 2017, 698, 164-169.	5.5	5
253	Microstructure-dependent thermoelectric properties of polycrystalline InGaO3(ZnO)2 superlattice films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	6
254	Structural Complexity and Thermoelectric Properties of Quaternary and Quinary Tellurides (Ge <i>_x</i> Sn _{1–<i>x</i>}) _{0.8} (In <i>_y</i> Sb _{1–<i>y with 0 ≤i>x</i>,<i>y</i> ቤ1. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 1962-1970.}	<b ii>2/sub>)œub>0.13
255	Realizing high-performance thermoelectric power generation through grain boundary engineering of skutterudite-based nanocomposites. Nano Energy, 2017, 41, 501-510.	16.0	130
256	Designing High-Efficiency Nanostructured Two-Phase Heusler Thermoelectrics. Chemistry of Materials, 2017, 29, 9386-9398.	6.7	19
257	Thermal conductivity of thermoelectric material β-Cu2Se: Implications on phonon thermal transport. Applied Physics Letters, 2017, 111, .	3.3	9
258	High thermoelectric performance and low thermal conductivity in Cu2â^'yS1/3Se1/3Te1/3 liquid-like materials with nanoscale mosaic structures. Nano Energy, 2017, 42, 43-50.	16.0	73

#	Article	IF	CITATIONS
259	An alternative, faster and simpler method for the formation of hierarchically porous ZnO particles and their thermoelectric performance. RSC Advances, 2017, 7, 31960-31968.	3.6	22
260	Enhancement in thermoelectric performance of SiGe nanoalloys dispersed with SiC nanoparticles. Physical Chemistry Chemical Physics, 2017, 19, 25180-25185.	2.8	36
261	Hydrothermal synthesis of SnQ (<i>Q</i> = Te, Se, S) and their thermoelectric properties. Nanotechnology, 2017, 28, 455707.	2.6	24
262	A Microporous and Naturally Nanostructured Thermoelectric Metal-Organic Framework with Ultralow Thermal Conductivity. Joule, 2017, 1, 168-177.	24.0	159
264	Thermodynamics analysis of thermoelectric materials: Influence of cracking on efficiency of thermoelectric conversion. Applied Thermal Engineering, 2017, 127, 1442-1450.	6.0	41
265	Grain boundary engineering with nano-scale InSb producing high performance In Ce Co4Sb12+ skutterudite thermoelectrics. Journal of Materiomics, 2017, 3, 273-279.	5.7	33
266	Ultralow Lattice Thermal Conductivity of the Random Multilayer Structure with Lattice Imperfections. Scientific Reports, 2017, 7, 8134.	3.3	34
267	The effect of the backbone structure on the thermoelectric properties of donor–acceptor conjugated polymers. Polymer Chemistry, 2017, 8, 4644-4650.	3.9	54
268	New trends, strategies and opportunities in thermoelectric materials: A perspective. Materials Today Physics, 2017, 1, 50-60.	6.0	319
269	Direct Observation of Inherent Atomicâ€6cale Defect Disorders responsible for Highâ€Performance Ti _{1â~'} <i>_x</i> Hf <i>_x</i> NiSn _{1â^'} <i>_y</i> Sb <i> Halfâ€Heusler Thermoelectric Alloys. Advanced Materials, 2017, 29, 1702091.</i>	saabxoy <td>ub49x/i></td>	ub49x/i>
270	Recent progress and future challenges on thermoelectric Zintl materials. Materials Today Physics, 2017, 1, 74-95.	6.0	275
271	Designing hybrid architectures for advanced thermoelectric materials. Materials Chemistry Frontiers, 2017, 1, 2457-2473.	5.9	34
272	Exceptional thermoelectric performance of a "star-like―SnSe nanotube with ultra-low thermal conductivity and a high power factor. Physical Chemistry Chemical Physics, 2017, 19, 23247-23253.	2.8	7
273	The effect of rare earth ions on structural, morphological and thermoelectric properties of nanostructured tin oxide based perovskite materials. Materials Research Express, 2017, 4, 115024.	1.6	1
274	Performance improvement of a photovoltaic - Thermoelectric hybrid system subjecting to fluctuant solar radiation. Renewable Energy, 2017, 113, 1551-1558.	8.9	47
275	Nano-micro-porous skutterudites with 100% enhancement in ZT for high performance thermoelectricity. Nano Energy, 2017, 31, 152-159.	16.0	201
276	Paper-based origami flexible and foldable thermoelectric nanogenerator. Nano Energy, 2017, 31, 296-301.	16.0	125
277	The bridge between the materials and devices of thermoelectric power generators. Energy and Environmental Science, 2017, 10, 69-85.	30.8	143

#	Article	IF	CITATIONS
278	Enhanced Electronic Transport Properties of Se-Doped SnTe1â^'xSex Nanoparticles by Microwave-Assisted Solvothermal Method. Journal of Electronic Materials, 2017, 46, 2847-2853.	2.2	9
279	How nanoparticles can change the figure of merit, ZT, and mechanical properties of skutterudites. Materials Today Physics, 2017, 3, 48-69.	6.0	80
280	Suppressed Umklapp scattering ofÎ ² -FeSi2thin film and single crystalline nanowires. Nanotechnology, 2017, 28, 485702.	2.6	8
281	Structure of Bi2Se0.3Te2.7 alloy plates obtained by crystallization in a flat cavity by the Bridgman method. Semiconductors, 2017, 51, 1021-1023.	0.5	4
282	DFT study of electronic properties of noble d-metallic surface structures. Materials Today: Proceedings, 2017, 4, 12343-12348.	1.8	1
283	In Operando Study of Highâ€Performance Thermoelectric Materials for Power Generation: A Case Study of βâ€Zn ₄ sb ₃ . Advanced Electronic Materials, 2017, 3, 1700223.	5.1	17
284	Thermomass Theory: A Mechanical Pathway to Analyze Anomalous Heat Conduction in Nanomaterials. , 0, , .		2
285	Long-Term High-Temperature Stability of Directionally Grown [Bi2Ba2O4]p[CoO2] Rods. Materials, 2017, 10, 146.	2.9	2
286	Thermal Stability of P-Type BiSbTe Alloys Prepared by Melt Spinning and Rapid Sintering. Materials, 2017, 10, 617.	2.9	18
288	Compressibility and thermoelectric behavior of TiCoSb half-Heusler compound at high pressures. Intermetallics, 2018, 95, 137-143.	3.9	12
289	A p-type multi-wall carbon nanotube/Te nanorod composite with enhanced thermoelectric performance. RSC Advances, 2018, 8, 8739-8746.	3.6	24
290	An overview of thermoelectric films: Fabrication techniques, classification, and regulation methods. Chinese Physics B, 2018, 27, 047210.	1.4	12
291	Thermomechanical In Situ Monitoring of Bi2Te3 Thin Film and Its Relationship with Microstructure and Thermoelectric Performances. Electronic Materials Letters, 2018, 14, 426-431.	2.2	13
292	Design of segmented high-performance thermoelectric generators with cost in consideration. Applied Energy, 2018, 221, 112-121.	10.1	32
293	Routes for high-performance thermoelectric materials. Materials Today, 2018, 21, 974-988.	14.2	265
294	Thermoelectric Properties of Nickel and Boron Co-Substituted NaCo ₂ O ₄ Prepared by Electrospinning Technique. Nano Hybrids and Composites, 0, 19, 34-45.	0.8	8
295	Recent progress on nanostructured conducting polymers and composites: synthesis, application and future aspects. Science China Materials, 2018, 61, 303-352.	6.3	184
296	Thermo-element geometry optimization for high thermoelectric efficiency. Energy, 2018, 147, 672-680.	8.8	26

	Сітатіої	CITATION REPORT	
#	Article	IF	CITATIONS
298	Review of Micro Thermoelectric Generator. Journal of Microelectromechanical Systems, 2018, 27, 1-18.	2.5	189
299	Thermoelectric properties of Tl and I dual-doped Bi ₂ Te ₃ -based alloys. International Journal of Modern Physics B, 2018, 32, 1850123.	2.0	14
300	Variable-range hopping conductivity in Lu-doped Bi2Te3. Solid State Sciences, 2018, 76, 111-117.	3.2	15
301	Nanostructure design for drastic reduction of thermal conductivity while preserving high electrical conductivity. Science and Technology of Advanced Materials, 2018, 19, 31-43.	6.1	69
302	Hybrid thermoelectric battery electrode FeS2 study. Nano Energy, 2018, 45, 432-438.	16.0	35
303	Mechanisms of thermoelectric efficiency enhancement in Lu-doped Bi ₂ Te ₃ . Materials Research Express, 2018, 5, 015905.	1.6	24
304	Significant Role of Mg Stoichiometry in Designing High Thermoelectric Performance for Mg ₃ (Sb,Bi) ₂ -Based n-Type Zintls. Journal of the American Chemical Society, 2018, 140, 1910-1915.	13.7	125
305	Thermoelectric Properties of Topological Insulators. Physica Status Solidi (B): Basic Research, 2018, 255, 1800020.	1.5	37
306	High-performance SnSe thermoelectric materials: Progress and future challenge. Progress in Materials Science, 2018, 97, 283-346.	32.8	419
307	Effects of Lu and Tm Doping on Thermoelectric Properties of Bi2Te3 Compound. Journal of Electronic Materials, 2018, 47, 1362-1370.	2.2	29
308	High thermoelectric performance in Bi _{0.46} Sb _{1.54} Te ₃ nanostructured with ZnTe. Energy and Environmental Science, 2018, 11, 1520-1535.	30.8	239
309	Effect of 2D MoS 2 and Graphene interfaces with CoSb 3 nanoparticles in enhancing thermoelectric properties of 2D MoS 2 -CoSb 3 and Graphene-CoSb 3 nanocomposites. Ceramics International, 2018, 44, 10628-10634.	4.8	18
310	Fabrication of open-cell thermoelectric polymer nanocomposites by template-assisted multi-walled carbon nanotubes coating. Composites Part B: Engineering, 2018, 145, 100-107.	12.0	27
311	Improvement of Bi2Sr2Co2Oy thermoelectric performances by Na doping. Journal of Electroceramics, 2018, 40, 11-15.	2.0	21
312	Microstructure and thermoelectric properties of Bi1.9Lu0.1Te3 compound. Rare Metals, 2018, 37, 642-649.	7.1	4
313	Fabrication of n-type Bi 2 Te 3 film using electrophoretic deposition for thermoelectric applications. Surface and Coatings Technology, 2018, 343, 127-130.	4.8	5
314	High thermoelectric performance of α-MgAgSb for power generation. Energy and Environmental Science, 2018, 11, 23-44.	30.8	127
315	Advances in carbon nanotube n-type doping: Methods, analysis and applications. Carbon, 2018, 126, 257-270.	10.3	102

#	Article	IF	Citations
316	Structural and Thermoelectric Properties of Bi85Sb15 Prepared by Non-equal Channel Angular Extrusion. Journal of Electronic Materials, 2018, 47, 242-250.	2.2	5
317	Metal oxides for thermoelectric power generation and beyond. Advanced Composites and Hybrid Materials, 2018, 1, 114-126.	21.1	98
318	Enhancing the thermoelectric performance of filled skutterudite nanocomposites in a wide temperature range via electroless silver plating. Scripta Materialia, 2018, 146, 136-141.	5.2	11
319	Enhancement of thermoelectric efficiency in Bi2Te3 via rare earth element doping. Scripta Materialia, 2018, 146, 91-94.	5.2	49
320	Enhanced thermoelectric performance of SnTe thin film through designing oriented nanopillar structure. Journal of Alloys and Compounds, 2018, 737, 167-173.	5.5	21
321	Structural and Electrical Properties of Na X COO2 Thermoelectric Synthesized via Citric-Nitrate Auto-Combustion Reaction. Journal of Physics: Conference Series, 2018, 1082, 012033.	0.4	1
322	Thermoelectric properties of Ni0.05Mo3Sb5.4Te1.6 composites with NiSb nanocoating. AIP Advances, 2018, 8, .	1.3	4
323	Thermal Conductivity of Nanostructured Semiconductor Alloys. , 2018, , 1-35.		2
324	An experimental study of a-Si/ZnO-stacked hetero-structures for potential thermoelectric energy harvesting applications. Applied Physics Letters, 2018, 113, 173901.	3.3	5
325	Highly-efficient thermoelectric pn-junction device based on bismuth telluride (Bi2Te3) and molybdenum disulfide (MoS2) thin films fabricated by RF magnetron sputtering technique. Journal of Applied Physics, 2018, 124, .	2.5	9
326	Thermoelectric Cooling. , 0, , .		6
327	Enhancing thermoelectric properties of p-type SiGe alloy through optimization of carrier concentration and processing parameters. Materials Science in Semiconductor Processing, 2018, 88, 239-249.	4.0	21
328	Characteristics of heteroâ€structured thermoelectric devices with a ―Si / Mg 2 Siâ€stacked thin film layers. Electronics Letters, 2018, 54, 1399-1401.	1.0	0
329	A Nanostructuring Method to Decouple Electrical and Thermal Transport through the Formation of Electrically Triggered Conductive Nanofilaments. Advanced Materials, 2018, 30, e1705385.	21.0	13
330	Particle size effect on the thermal conductivity reduction of silicon based thermoelectric composites. Sustainable Energy and Fuels, 2018, 2, 1764-1771.	4.9	16
331	Intrinsic phonon-limited charge carrier mobilities in thermoelectric SnSe. Physical Review B, 2018, 97,	3.2	78
332	Effect of Immersion Time on Corrosion Behavior of Single-Phase Alloy and Nanocomposite Bismuth Telluride-Based Thermoelectrics in NaCl Solution. Journal of Materials Engineering and Performance, 2018, 27, 3386-3393.	2.5	6
333	High Thermoelectric Performance in Crystallographically Textured n-Type Bi ₂ Te _{3–<i>x</i>} Se _{<i>x</i>} Produced from Asymmetric Colloidal Nanocrystals. ACS Nano, 2018, 12, 7174-7184.	14.6	114

#	Article	IF	CITATIONS
334	Analytic solutions of thermoelectric materials containing a circular hole with a straight crack. International Journal of Mechanical Sciences, 2018, 144, 731-738.	6.7	17
335	Structural Chemical Modification of Semiconductor Nano-Crystals. , 2018, , 1-52.		1
336	Manufacturing of Al and Mg nanocomposite microparticles. Manufacturing Letters, 2018, 17, 23-26.	2.2	5
337	Kinetic study of solid-state interfacial reactions of p-type (Bi,Sb)2Te3 thermoelectric materials with Sn and Sn–Ag–Cu solders. Journal of Alloys and Compounds, 2018, 767, 1133-1140.	5.5	13
338	In2O3-Based Thermoelectric Materials: The State of the Art and the Role of Surface State in the Improvement of the Efficiency of Thermoelectric Conversion. Crystals, 2018, 8, 14.	2.2	28
339	Thermoelectric and optical properties of half-Heusler compound TaCoSn: A first-principle study. Journal of Alloys and Compounds, 2018, 757, 118-123.	5.5	23
340	Two orders of magnitude reduction in silicon membrane thermal conductivity by resonance hybridizations. Physical Review B, 2018, 97, .	3.2	52
341	Highly fluidic liquid at homointerface generates grain-boundary dislocation arrays for high-performance bulk thermoelectrics. Acta Materialia, 2018, 159, 266-275.	7.9	19
342	Anisotropic thermoelectric properties of Bi1.9Lu0.1Te2.7Se0.3 textured via spark plasma sintering. Solid State Sciences, 2018, 84, 28-43.	3.2	25
343	Enhanced thermoelectric properties of two-dimensional conjugated polymers. Emergent Materials, 2018, 1, 67-76.	5.7	20
344	Suspension Characteristics and Electrophoretic Deposition ofp-Type Bi2Te3Films for Thermoelectric Applications. Journal of the Electrochemical Society, 2018, 165, D364-D369.	2.9	3
345	Thermoelectric Nanomaterials. , 2019, , 349-358.		4
346	Carbon Nanotube-Based Thermoelectric Devices. Nanostructure Science and Technology, 2019, , 551-560.	0.1	1
347	Ru Alloying Induced Enhanced Thermoelectric Performance in FeSi2-Based Compounds. ACS Applied Materials & Interfaces, 2019, 11, 32151-32158.	8.0	17
348	Enhanced thermoelectric properties of Bi ₂ S ₃ polycrystals through an electroless nickel plating process. RSC Advances, 2019, 9, 23029-23035.	3.6	5
349	Air-Stable n-Type Single-Walled Carbon Nanotubes Doped with Benzimidazole Derivatives for Thermoelectric Conversion and Their Air-Stable Mechanism. ACS Applied Nano Materials, 2019, 2, 4703-4710.	5.0	54
350	Kelvin probe force microscopy of the nanoscale electrical surface potential barrier of metal/semiconductor interfaces in ambient atmosphere. Beilstein Journal of Nanotechnology, 2019, 10, 1401-1411.	2.8	4
351	Improved Thermoelectric Performance of Ecoâ€Friendly βâ€FeSi 2 –SiGe Nanocomposite via Synergistic Hierarchical Structuring, Phase Percolation, and Selective Doping. Advanced Functional Materials, 2019, 29, 1903157.	14.9	27

#	Article	IF	CITATIONS
352	Anisotropy of thermal conductivity in In2Se3 nanostructures. Applied Surface Science, 2019, 494, 867-870.	6.1	15
353	Improved Thermoelectric Power Factor in Completely Organic Nanocomposite Enabled by <scp>l</scp> -Ascorbic Acid. ACS Applied Polymer Materials, 2019, 1, 1942-1947.	4.4	15
354	Synergistic boost of output power density and efficiency in In-Li–codoped SnTe. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21998-22003.	7.1	29
355	Enhanced Mechanical Properties of Na _{0.02} Pb _{0.98} Te/MoTe ₂ Thermoelectric Composites Through in-Situ-Formed MoTe ₂ . ACS Applied Materials & Interfaces, 2019, 11, 41472-41481.	8.0	12
356	Effect of gelatin on electrodeposition of tellurium from alkaline electrolyte. Materials Research Express, 2019, 6, 125908.	1.6	2
357	Facile synthesis of Ag ₂ Te nanowires and thermoelectric properties of Ag ₂ Te polycrystals sintered by spark plasma sintering. CrystEngComm, 2019, 21, 1718-1727.	2.6	30
358	High thermoelectric performance in high crystallinity epitaxial Si films containing silicide nanodots with low thermal conductivity. Applied Physics Letters, 2019, 115, 182104.	3.3	13
359	Spin-entropy induced thermopower and spin-blockade effect in CoO. Physical Review B, 2019, 100, .	3.2	6
360	Contrast of Evolution Characteristics of Boreal Summer and Winter Intraseasonal Oscillations over Tropical Indian Ocean. Journal of Meteorological Research, 2019, 33, 678-694.	2.4	2
361	Carbon nanotube fibers with enhanced longitudinal carrier mobility for high-performance all-carbon thermoelectric generators. Nanoscale, 2019, 11, 16919-16927.	5.6	41
362	Thermoelectric Devices by Half-Millimeter-Long Silicon Nanowires Arrays. IEEE Nanotechnology Magazine, 2019, 18, 921-924.	2.0	17
363	Microstructure and thermoelectric properties of p and n type doped β-FeSi2 fabricated by mechanical alloying and pulse plasma sintering. Materials Today: Proceedings, 2019, 8, 531-539.	1.8	8
364	Comprehensive modeling for geometric optimization of a thermoelectric generator module. Energy Conversion and Management, 2019, 183, 645-659.	9.2	56
365	A parametrical study on photo-electro-thermal performance of an integrated thermoelectric-photovoltaic cell. Renewable Energy, 2019, 138, 542-550.	8.9	26
366	Advanced thermal systems driven by paraffin-based phase change materials – A review. Applied Energy, 2019, 238, 582-611.	10.1	214
367	High efficient nanostructured PbSe0.5Te0.5 exhibiting broad figure-of-merit plateau. Journal of Alloys and Compounds, 2019, 785, 862-870.	5.5	8
368	Influence of the Sintering Temperature on the Thermoelectric Properties of the Bi1.9Gd0.1Te3 Compound. Semiconductors, 2019, 53, 615-619.	0.5	0
369	Silver content dependent thermal conductivity and thermoelectric properties of electrodeposited antimony telluride thin films. Scientific Reports, 2019, 9, 9242.	3.3	13

#	Article	IF	CITATIONS
370	Experimental investigations on a novel thermoelectric material (Na <i>_x</i> CoO ₂). International Journal of Ambient Energy, 2021, 42, 1846-1850.	2.5	0
371	Synthesis and Processing of Thermoelectric Nanomaterials, Nanocomposites, and Devices. , 2019, , 295-336.		8
372	Precision Interface Engineering of an Atomic Layer in Bulk Bi ₂ Te ₃ Alloys for High Thermoelectric Performance. ACS Nano, 2019, 13, 7146-7154.	14.6	66
373	Effect of La3+ substitution on the structural and thermoelectric properties of Ca3-La Co4O9+. Journal of the European Ceramic Society, 2019, 39, 3320-3326.	5.7	18
374	Enhancement in thermoelectric performance of electrochemically deposited platinum-bismuth telluride nanocomposite. Electrochimica Acta, 2019, 312, 62-71.	5.2	27
375	Thermoelectric power factor enhancement based on carrier transport physics in ultimately phonon-controlled Si nanostructures. Materials Today Energy, 2019, 13, 56-63.	4.7	39
376	Enhanced and stabilized n-type thermoelectric performance in α-CuAgSe by Ni doping. Materials Today Physics, 2019, 10, 100095.	6.0	13
377	Computational strategies for design and discovery of nanostructured thermoelectrics. Npj Computational Materials, 2019, 5, .	8.7	39
378	Controllable electrodeposition and mechanism research of nanostructured Bi2Te3 thin films with high thermoelectric properties. Applied Surface Science, 2019, 486, 65-71.	6.1	16
379	Data-driven analysis of electron relaxation times in PbTe-type thermoelectric materials. Science and Technology of Advanced Materials, 2019, 20, 511-520.	6.1	42
380	High-Throughput Screening for Advanced Thermoelectric Materials: Diamond-Like ABX ₂ Compounds. ACS Applied Materials & Interfaces, 2019, 11, 24859-24866.	8.0	72
381	Enhanced Thermoelectric Performance of Quaternary Cu _{2–2<i>x</i>} Ag _{2<i>x</i>} Se _{1–<i>x</i>} S <i>_x</i> Liquid-like Chalcogenides. ACS Applied Materials & Interfaces, 2019, 11, 13433-13440.	8.0	38
382	Achieving band convergence by tuning the bonding ionicity in nâ€ŧype Mg ₃ Sb ₂ . Journal of Computational Chemistry, 2019, 40, 1693-1700.	3.3	68
383	Magnetic iron doping in Cu2SnS3 ceramics for enhanced thermoelectric transport properties. Journal of Applied Physics, 2019, 125, .	2.5	30
385	Development of Thermoelectric Conversion Materials Using Carbon Nanotube Sheets. Bulletin of the Chemical Society of Japan, 2019, 92, 400-408.	3.2	39
386	Rare earth ytterbium enhanced thermoelectric properties of p-type Bi0.5Sb1.5Te3. Applied Physics Letters, 2019, 114, .	3.3	15
387	High thermoelectric performance in Cu ₂ Se superionic conductor with enhanced liquid-like behaviour by dispersing SiC. Journal of Materials Chemistry A, 2019, 7, 7006-7014.	10.3	71
388	Thermoelectric Properties of Zinc-Doped Indium Tin Oxide Thin Films Prepared Using the Magnetron Co-Sputtering Method. Coatings, 2019, 9, 788.	2.6	6

#	Article	IF	CITATIONS
389	Current Research and Future Prospective of Iron-Based Heusler Alloys as Thermoelectric Materials. Nanotechnologies in Russia, 2019, 14, 281-289.	0.7	2
390	Organic Thermoelectrics and Thermoelectric Generators (TEGs). , 0, , .		4
391	Structural Transformations in (Bi, Sb)2Te3 Solid Solutions Grown by Spark Plasma Sintering. Journal of Physics: Conference Series, 2019, 1347, 012120.	0.4	1
392	Simultaneous energy harvesting and storage <i>via</i> solar-driven regenerative electrochemical cycles. Energy and Environmental Science, 2019, 12, 3370-3379.	30.8	55
393	Self-propagating high-temperature synthesis of Fe2TiSn based Heusler alloys with following spark plasma sintering. IOP Conference Series: Materials Science and Engineering, 2019, 558, 012042.	0.6	1
394	Novel Thermoelectric Materials and Device Design Concepts. , 2019, , .		12
395	Effect of Spark Plasma Sintering Temperature on Thermoelectric Properties of Grained Bi1.9Gd0.1Te3 Compound. Semiconductors, 2019, 53, 1838-1844.	0.5	0
396	Enhanced Thermoelectric Properties of Ga and Ce Double-Filled <i>p</i> -Type Skutterudites. Materials Transactions, 2019, 60, 1078-1082.	1.2	3
397	I-doped Cu2Se nanocrystals for high-performance thermoelectric applications. Journal of Alloys and Compounds, 2019, 772, 366-370.	5.5	47
398	Ink Processing for Thermoelectric Materials and Powerâ€Generating Devices. Advanced Materials, 2019, 31, e1804930.	21.0	48
399	Enhancement of Power Factor for Inherently Poor Thermal Conductor Ag ₈ GeSe ₆ by Replacing Ge with Sn. ACS Applied Energy Materials, 2019, 2, 654-660.	5.1	26
400	Sintering temperature effect on thermoelectric properties and microstructure of the grained Bi1.9Gd0.1Te3 compound. Journal of the European Ceramic Society, 2019, 39, 1193-1205.	5.7	16
401	Thermoelectrics: From history, a window to the future. Materials Science and Engineering Reports, 2019, 138, 100501.	31.8	341
402	Transverse magnetoresistance peculiarities of thermoelectric Lu-doped Bi2Te3 compound due to strong electrical disorder. Journal of Rare Earths, 2019, 37, 292-298.	4.8	11
403	Copper Sulfides: Earthâ€Abundant and Lowâ€Cost Thermoelectric Materials. Energy Technology, 2019, 7, 1800850.	3.8	45
404	Noncovalent Modification of Single-Walled Carbon Nanotubes Using Thermally Cleavable Polythiophenes for Solution-Processed Thermoelectric Films. ACS Applied Materials & Interfaces, 2019, 11, 4211-4218.	8.0	22
405	Thermoelectric performance of electrophoretically deposited p-type Bi2Te3 film. Applied Surface Science, 2019, 477, 27-31.	6.1	8
406	Electrochemical response of n-type bismuth telluride based thermoelectric materials in NaCl solutions: A comparison between a single-phase alloy and a nanocomposite containing MoS2 nano-particles. Arabian Journal of Chemistry, 2020, 13, 1858-1865	4.9	5

#	Article	IF	CITATIONS
407	A study on the electrochemical responses of p-type bismuth telluride-based thermoelectric materials in a 0.1†M NaCl solution: Comparing a nanocomposite with dispersed MoS2 nanoparticles and a single-phase alloy. Journal of Alloys and Compounds, 2020, 815, 152371.	5.5	4
408	Recent Advances in Liquid‣ike Thermoelectric Materials. Advanced Functional Materials, 2020, 30, 1903867.	14.9	148
409	Thermoelectric properties of the textured Bi1.9Gd0.1Te3 compounds spark-plasma-sintered at various temperatures. Journal of the European Ceramic Society, 2020, 40, 742-750.	5.7	21
410	Investigation of melt-spinning speed on the property of Yb0.2Ba0.1Al0.1Ga0.1In0.1La0.05Eu0.05Co3.75Fe0.25Sb12 skutterudites. Materials Letters, 2020, 260, 126960.	2.6	11
411	Enhanced thermoelectric performance of poly(3,4â€ethylenedioxythiophene):poly(4â€styrenesulfonate) (PEDOT:PSS) with longâ€ŧerm humidity stability via sequential treatment with trifluoroacetic acid. Polymer International, 2020, 69, 84-92.	3.1	33
412	Characterization of multiple-filled skutterudites with high thermoelectric performance. Journal of Alloys and Compounds, 2020, 814, 152272.	5.5	43
413	Quaternary compounds Ag ₂ XYSe ₄ (X  =  Ba, Sr; Y  = â€ thermoelectric materials. Journal Physics D: Applied Physics, 2020, 53, 115302.	‰Sn, Ge) 2.8	as novel po 14
414	Revealing nano-chemistry at lattice defects in thermoelectric materials using atom probe tomography. Materials Today, 2020, 32, 260-274.	14.2	73
415	Realizing Excellent Thermoelectric Performance of Sb ₂ Te ₃ Based Segmented Leg with a Wide Temperature Range Using One‣tep Sintering. Advanced Electronic Materials, 2020, 6, 1901178.	5.1	18
416	Achieving a High Average <i>zT</i> Value in Sb ₂ Te ₃ -Based Segmented Thermoelectric Materials. ACS Applied Materials & Interfaces, 2020, 12, 945-952.	8.0	26
417	Poly(3,4â€Ethylene Dioxythiophene)/Poly(Styrene Sulfonate) Electrodes in Electrochemical Cells for Harvesting Waste Heat. Energy Technology, 2020, 8, 1900998.	3.8	8
418	Fabrication and thermoelectric properties of Pb (Zn0.85Al0.15) Te-Te (y = 0, 0.04, 0.06, 0.08, and 0.11) nanocomposites. Ceramics International, 2020, 46, 6443-6453.	4.8	7
419	Nanostructural effect on thermoelectric properties in Si films containing iron silicide nanodots. Japanese Journal of Applied Physics, 2020, 59, SFFB01.	1.5	4
420	Thermoelectric properties of S-doped Cu2Se materials synthesized by high-pressure and high-temperature method. Modern Physics Letters B, 2020, 34, 2050006.	1.9	4
421	Synergetic Approach for Superior Thermoelectric Performance in PbTe-PbSe-PbS Quaternary Alloys and Composites. Energies, 2020, 13, 72.	3.1	9
422	Thermoelectric Properties of Polypyrrole Nanotubes. Macromolecular Research, 2020, 28, 973-978.	2.4	15
423	Analysis of structural and electronic properties of NiTiZ (Z = Si, Ge, Sn and Sb) under high-pressure using ab initio calculations. Materials Today Communications, 2020, 25, 101613.	1.9	4
424	Growth mechanism during the early stages of electrodeposition of bismuth telluride Bi2Te3 on ITO substrate. Materials Today: Proceedings, 2020, 30, 842-848.	1.8	9

ARTICLE IF CITATIONS Quenching Thermal Transport in Aperiodic Superlattices: A Molecular Dynamics and Machine Learning 425 8.0 39 Study. ACS Applied Materials & amp; Interfaces, 2020, 12, 8795-8804. Hierarchically nanostructured thermoelectric materials: challenges and opportunities for improved 426 1.5 power factors. European Physical Journal B, 2020, 93, 1. Active learning for the power factor prediction in diamond-like thermoelectric materials. Npj 427 8.7 43 Computational Materials, 2020, 6, . Ultralow thermal conductivity and high thermoelectric figure of merit in Cu2Te–Ag2Te composites. 428 Journal of Alloys and Compounds, 2020, 848, 156540. Enhanced mechanical and thermoelectric properties enabled by hierarchical structure in 429 16.0 26 medium-temperature Sb2Te3 based alloys. Nano Energy, 2020, 78, 105228. Electronic conductance and thermopower of single-molecule junctions of oligo(phenyleneethynylene) derivatives. Nanoscale, 2020, 12, 18908-18917. 5.6 Cu₂Se-Based liquid-like thermoelectric materials: looking back and stepping forward. 431 30.8 106 Energy and Environmental Science, 2020, 13, 3307-3329. Improvement of Thermoelectric Properties of Evaporated ZnO:Al Films by CNT and Au Nanocomposites. 3.1 Journal of Physical Chemistry C, 2020, 124, 12713-12722. Approaching high-performance of ordered structure Sb2Te3 film via unique angular intraplanar grain 433 3.3 6 boundaries. Scientific Reports, 2020, 10, 5978. Preparation, structural characteristics and optical parameters of the synthesized nano-crystalline 434 sulphur-doped Bi2Te2.85Se0.15 thermoelectric materials. Journal of Materials Science: Materials in 2.2 Electronics, 2020, 31, 10612-10627. Enhanced thermoelectric properties of hydrothermally synthesized n-type Se&Lu-codoped Bi2Te3. 435 17.434 Journal of Advanced Ceramics, 2020, 9, 424-431. Enhanced performance nanostructured thermoelectric converter for self-powering health sensors. 16.0 Nano Energy, 2020, 74, 104854. Enhanced Thermoelectric Performance of Bi_{0.46}Sb_{1.54}Te₃ 437 8.0 26 Nanostructured with CdTe. ACS Applied Materials & amp; Interfaces, 2020, 12, 26330-26341. Optical, optoelectronic, and photoelectric properties in moir Ã $\ensuremath{\mathbb{C}}$ superlattices of twist bilayer graphene. Materials Today Physics, 2020, 14, 100238. 6.0 Thermoelectric properties and magnetoelectric coupling in dually doped Cu2Sn1â[^]2xZnxFexS3. Journal 439 2.2 5 of Materials Science: Materials in Electronics, 2020, 31, 11801-11809. Correlation with the composition of the different parts of p-type Bi0.5Sb1.5Te3 sintered bulks and 440 their thermoelectric characteristics. Journal of Alloys and Compounds, 2020, 845, 156114. Microscopic origin of the extremely low thermal conductivity and outstanding thermoelectric performance of BiSbX₃ (X = S, Se) revealed by first-principles study. Physical Chemistry 441 2.8 12 Chemical Physics, 2020, 22, 15559-15566. Influence of spherical inclusions on effective thermoelectric properties of thermoelectric composite 442 1.4 materials. Chinese Physics B, 2020, 29, 057301.

ARTICLE IF CITATIONS # Conversion efficiency and effective properties of particulate-reinforced thermoelectric composites. 443 1.4 4 Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1. Advanced Thermoelectric Design: From Materials and Structures to Devices. Chemical Reviews, 2020, 444 47.7 1,248 120, 7399-7515. Promoted application potential of p-type Mg3Sb1.5Bi0.5 for the matched thermal expansion with its 445 5.713 n-type counterpart. Journal of Materiomics, 2020, 6, 729-735. Manipulating the Ge Vacancies and Ge Precipitates through Cr Doping for Realizing the 446 129 HighatePerformance GeTe Thermoelectric Material. Small, 2020, 16, e1906921. Study of heat conduction in three-layered structureâ€"a sandwich model. Physica Scripta, 2020, 95, 447 2.5 1 045222. Enhanced Thermoelectric and Mechanical Performance in n-Type Yb-Filled Skutterudites through Aluminum Alloying. ACS Applied Materials & amp; Interfaces, 2020, 12, 12930-12937. 448 8.0 A thin film efficient pn-junction thermoelectric device fabricated by self-align shadow mask. Scientific 449 3.3 25 Reports, 2020, 10, 1067. Highâ€Performance Thermoelectric SnSe: Aqueous Synthesis, Innovations, and Challenges. Advanced 450 11.2 156 Science, 2020, 7, 1902923. Enhanced Thermoelectric Properties of p-Type CaMg₂Bi₂ via a Synergistic 451 Effect Originated from Zn and Alkali-Metal Co-doping. ACS Applied Materials & amp; Interfaces, 2020, 12, 8.0 20 6015-6021. Novel synthesis and processing effects on the figure of merit for NbCoSn, NbFeSb, and ZrNiSn based half-Heusler thermoelectrics. Journal of Solid State Chemistry, 2020, 285, 121203. Enhanced thermopower in (013)-oriented silver selenide films produced by thermal annealing. Applied 453 12 2.3Physics A: Materials Science and Processing, 2020, 126, 1. An efficient mechanism for enhancing the thermoelectricity of twin graphene nanoribbons by introducing defects. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 122, 114160. Optimization and modulation for the moderate and high temperature thermoelectric properties of 455 1.9 3 PbSe via solid solution with PbS synthesized by HPHT. Modern Physics Letters B, 2020, 34, 2050185. Solubility study of Y in n-type YxCe0.15Co4Sb12 skutterudites and its effect on thermoelectric properties. Materials Today Physics, 2020, 13, 100206. 6.0 Influence of multi-sintering on the thermoelectric properties of Bi2Sr2Co2Oy ceramics. Modern 457 1.9 11 Physics Letters B, 2020, 34, 2050019. Enhanced thermal stability of Bi2Te3-based alloys via interface engineering with atomic layer deposition. Journal of the European Ceramic Society, 2020, 40, 3592-3599. Salt doping to improve thermoelectric power factor of organic nanocomposite thin films. RSC 459 3.6 14 Advances, 2020, 10, 11800-11807. Review of experimental approaches for improving zT of thermoelectric materials. Materials Science in Semiconductor Processing, 2021, 121, 105303.

#	Article	IF	CITATIONS
461	Heterostructured Bismuth Telluride Selenide Nanosheets for Enhanced Thermoelectric Performance. Small Science, 2021, 1, 2000021.	9.9	16
462	The thermoeletric performance of nanoporous SnSe assembled by hollow cage cluster. Applied Surface Science, 2021, 537, 147692.	6.1	2
463	State of the art in composition, fabrication, characterization, and modeling methods of cement-based thermoelectric materials for low-temperature applications. Renewable and Sustainable Energy Reviews, 2021, 137, 110361.	16.4	24
464	Transport properties of a molybdenum antimonide-telluride with dispersed NiSb nanoparticles. Materials Chemistry and Physics, 2021, 260, 124061.	4.0	1
465	Thermoelectric transport properties in chalcogenides ZnX (X=S, Se): From the role of electron-phonon couplings. Journal of Materiomics, 2021, 7, 310-319.	5.7	24
466	Two-dimensional WS ₂ /MoS ₂ heterostructures: properties and applications. Nanoscale, 2021, 13, 5594-5619.	5.6	73
467	Zintl phases for thermoelectric applications. , 2021, , 157-182.		6
468	Hydrogenation and oxidation enhances the thermoelectric performance of Si ₂ BN monolayer. New Journal of Chemistry, 2021, 45, 3892-3900.	2.8	8
469	Progress of hybrid nanocomposite materials for thermoelectric applications. Materials Advances, 2021, 2, 1927-1956.	5.4	22
470	Ionic thermoelectric materials for near ambient temperature energy harvesting. Applied Physics Letters, 2021, 118, .	3.3	40
471	Pressure-Induced Enhancement of Thermoelectric Figure of Merit and Structural Phase Transition in TiNiSn. Journal of Physical Chemistry Letters, 2021, 12, 1046-1051.	4.6	12
472	Ultra-high Seebeck coefficient of nanostructured Sb-substituted PbTe and fabrication of a thermoelectric generator module. Bulletin of Materials Science, 2021, 44, 1.	1.7	4
473	Enhanced thermoelectric efficiency of the bulk composites consisting of "Bi2Te3 matrix―and "filler Ni@NiTe2 inclusions― Scripta Materialia, 2021, 194, 113710.	5.2	11
474	Chemical Route to Yb ₁₄ MgSb ₁₁ Composites with Nanosized Iron Inclusions for the Reduction of Thermal Conductivity. ACS Applied Energy Materials, 2021, 4, 3748-3756.	5.1	6
475	The multi-dimensional approach to synergistically improve the performance of inorganic thermoelectric materials: A critical review. Arabian Journal of Chemistry, 2021, 14, 103103.	4.9	17
476	Forming the locally-gradient Ni@NiTe2 domains from initial Ni inclusions embedded into thermoelectric Bi2Te3 matrix. Materials Letters, 2021, 290, 129451.	2.6	9
477	Synthesis and Properties of Thermoelectric Nanomaterial AgInSe2 with a Chalcopyrite Structure. Nanobiotechnology Reports, 2021, 16, 357-362.	0.6	1
478	Boosting Thermoelectric–Mechanical Properties of BiSb-Based Material by SiC Nanocomposites. Jom, 2021, 73, 2808-2818.	1.9	4

#	Article	IF	CITATIONS
479	Enhanced Thermoelectric Properties of Graphene/Cu3SbSe4 Composites. Journal of Electronic Materials, 2021, 50, 4880-4886.	2.2	2
480	On thermal stability of nanocrystalline Ag–Cu-S powders. Journal of Nanoparticle Research, 2021, 23, 1.	1.9	3
481	Stretchable and Freezeâ€Tolerant Organohydrogel Thermocells with Enhanced Thermoelectric Performance Continually Working at Subzero Temperatures. Advanced Functional Materials, 2021, 31, 2104071.	14.9	53
482	Ceramic composites based on Ca Co O and La NiO with enhanced thermoelectric properties. Open Ceramics, 2021, 6, 100103.	2.0	5
483	Effect of Cul on the thermoelectric properties of recycled n-type Bi2(Te, Se)3 scraps. Vacuum, 2021, 189, 110226.	3.5	1
484	Gel-based thermocells for low-grade heat harvesting. Europhysics Letters, 2021, 135, 26001.	2.0	10
485	Room-temperature thermoelectric materials: Challenges and a new paradigm. Journal of Materiomics, 2022, 8, 427-436.	5.7	34
486	Microstructure and thermoelectric properties of the medium-entropy block-textured BiSbTe1.5Se1.5 alloy. Journal of Alloys and Compounds, 2021, 872, 159743.	5.5	13
487	Hot rolling process for texture development and grain refinement of n-type Bi2Te3 alloys. Materials Letters, 2021, 301, 130278.	2.6	2
488	A record high average ZT over a wide temperature range in a Single-layer Sb2Si2Te6. Applied Surface Science, 2021, 567, 150873.	6.1	3
489	Expand band gap and suppress bipolar excitation to optimize thermoelectric performance of Bi0.35Sb1.65Te3 sintered materials. Materials Today Physics, 2021, 21, 100544.	6.0	15
490	One way for thermoelectric performance enhancement of group IIIB monochalcogenides. Solid State Communications, 2021, 339, 114485.	1.9	0
491	Thermoelectric materials and transport physics. Materials Today Physics, 2021, 21, 100519.	6.0	77
492	The thermoelectric and mechanical properties of Mg2(Si0.3Sn0.7)0.99Sb0.01 prepared by one-step solid state reaction combined with hot-pressing. Journal of Alloys and Compounds, 2021, 881, 160546.	5.5	3
493	Thin-films on cellulose paper to construct thermoelectric generator of promising power outputs suitable for low-grade heat recovery. Materials Today Communications, 2021, 29, 102738.	1.9	13
494	Constructing multi-type defects in In0.1Sb1.9Te3-(MgB2) composites: Simultaneously enhancing the thermoelectric and mechanical properties. Nano Energy, 2021, 90, 106530.	16.0	10
495	Enhanced thermoelectric performance and mechanical strength of n-type BiTeSe materials produced via a composite strategy. Chemical Engineering Journal, 2022, 428, 131205.	12.7	26
496	N-type amorphous silicon-germanium thin films with embedded nanocrystals as a novel thermoelectric material of elevated ZT. Journal of Alloys and Compounds, 2022, 890, 161843.	5.5	17

#	Article	IF	CITATIONS
497	Optimization of thermoelectric power factor of (013)-oriented Ag2Se films via thermal annealing. Materials Research Bulletin, 2022, 145, 111525.	5.2	9
498	Polymer and polymer-based nanocomposite materials for energy. , 2021, , 237-262.		0
499	Thermoeletric Heusler Compounds. Springer Series in Materials Science, 2016, , 249-267.	0.6	3
500	Thermal transport in thermoelectric materials with chemical bond hierarchy. Journal of Physics Condensed Matter, 2019, 31, 183002.	1.8	19
501	Optimizing phonon scattering by tuning surface-interdiffusion-driven intermixing to break the random-alloy limit of thermal conductivity. Physical Review Materials, 2018, 2, .	2.4	4
502	Time-Dependent Morphological Evolution of Bi ₂ Te ₃ Nanotubes: A Potential Material for Thermoelectric Applications. ECS Journal of Solid State Science and Technology, 2020, 9, 105006.	1.8	4
503	Microstructure and Electrical Characterization of Thermoelectric Nanocrystalline Bi2 Te3 Synthesized by Mechanical Alloying. Materials Research, 2019, 22, .	1.3	7
504	The Influence of Leg Shape on Thermoelectric Performance Under Constant Temperature and Heat Flux Boundary Conditions. Frontiers in Materials, 2020, 7, .	2.4	21
505	The Electronic Transport Channel Protection and Tuning in Real Space to Boost the Thermoelectric Performance of Mg _{3+ <i>ì´</i>} Sb _{2- <i>y</i>} Bi <i> _y </i> near Room Temperature. Research, 2020, 2020, 1672051.	5.7	29
506	Effect of Ag additions on the Bi _{1.6} Pb _{0.4} Sr ₂ Co _{1.8thermoelectric properties. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2013, 52, 93-97.}	t; Ω <suł	o>x
507	Design and Preparation of High-Performance Bulk Thermoelectric Materials with Defect Structures. Journal of the Korean Ceramic Society, 2017, 54, 75-85.	2.3	25
508	Wybrane możliwości zastosowania nanostruktur w inżynierii środowiska. Journal of Civil Engineering, Environment and Architecture, 2015, XXXII, 611-617.	0.0	1
509	Effect of Co-Doping on Thermoelectric Properties of n-Type Bi2Te3 Nanostructures Fabricated Using a Low-Temperature Sol-Gel Method. Nanomaterials, 2021, 11, 2719.	4.1	5
510	Bismuth induced Cu7Te4/Sb2Te3 nanocomposites for higher thermoelectric power factor and carrier properties. Journal of Materials Science: Materials in Electronics, 2022, 33, 8804-8814.	2.2	1
511	MODEL OF β- FeSi ₂ NANOCRYSTALLITE "EMERSION―PROCESS DURING SILICON LAYER OVERGROWTH. , 2013, , .		0
512	Thermoelectric properties of the Bi2Te3 nanocrystalline bulk alloy pressed by the high-pressure sintering. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 047201.	0.5	0
513	High Thermoelectric Performance due to Nanoprecipitation, Band Convergence, and Interface Potential Barrier in PbTe-PbSe-PbS Quaternary Alloys and Composites. , 2019, , 105-136.		0
515	Interfacial engineering effect and bipolar conduction of Ni- doped MoS2 nanostructures for thermoelectric application. Journal of Alloys and Compounds, 2022, 895, 162493.	5.5	24

ARTICLE IF CITATIONS Conducting polymer electrodes in electrochemical cells for waste heat harvesting., 2019,,. 0 516 Thermal Conductivity of Nanostructured Semiconductor Alloys., 2020, 917-951. The Quest for High-Efficiency Thermoelectric Generators for Extracting Electricity from Waste Heat. 518 1.9 2 Jom, 2021, 73, 4070-4084. Achieving synergistic performance through highly compacted microcrystalline rods induced in Mo doped GeTe based compounds. Materials Today Physics, 2022, 22, 100571. Porous Mg2(SiSn) thermoelectric composite with ultra-low thermal conductivity in submillimeter 520 2.3 2 scale. Applied Physics A: Materials Science and Processing, 2021, 127, . Accurate and explainable machine learning for the power factors of diamond-like thermoelectric materials. Journal of Materiomics, 2022, 8, 633-639. 5.7 Improved thermoelectric properties in ceramic composites based on Ca3Co4O9 and Na2Ca2Nb4O13. 522 2.0 1 Open Ceramics, 2021, 8, 100198. A comprehensive study on piezo-phototronic effect for increasing efficiency of solar cells: A review. 523 4.6 Optics and Laser Technology, 2022, 149, 107779. Carrier grain boundary scattering in thermoelectric materials. Energy and Environmental Science, 524 30.8 145 2022, 15, 1406-1422. Realizing synergistic optimization of thermoelectric properties in n-type BiSbSe3 polycrystals via 6.0 co-doping zirconium and halogen. Materials Today Physics, 2022, 22, 100608. Nanostructured Bulk Thermoelectric Materials for Energy Harvesting. NIMS Monographs, 2022, , 526 0.3 5 199-231. Flexible and wearable thermoelectric PEDOT devices., 2022, , 219-256. Thermoelectric and Photothermoelectric Properties of Nanocomposite Films Based on 528 4.3 8 Polybenzimidazole and Carbon Nanotubes. ACS Applied Electronic Materials, 2022, 4, 386-393. Features of microstructure and thermoelectric properties of the cermet composites based on grained 529 Bi2Te3 matrix with locally-gradient Ni@NiTe2 inclusions. Chinese Journal of Physics, 2022, 77, 24-35. Cheap, Large-Scale, and High-Performance Graphite-Based Flexible Thermoelectric Materials and Devices with Supernormal Industry Feasibility. ACS Applied Materials & amp; Interfaces, 2022, 14, 530 8.0 16 8066-8075. The Effect of Reactive Electric Field-Assisted Sintering of MoS2/Bi2Te3 Heterostructure on the Phase Integrity of Bi2Te3 Matrix and the Thermoelectric Properties. Materials, 2022, 15, 53. Electronic and Lattice Thermal Conductivity Switching by 3Dâ°'2D Crystal Structure Transition in Nonequilibrium (Pb_{1â^'}<i>_{</i>>Sub></i>>Sub></i>>Sub>x}</i>>Se. Advanced Electronic 532 5.16 Materials, 2022, 8, . High-throughput optimization and fabrication of Bi2Te2.7Se0.3-based artificially tilted multilayer thermoelectric devices. Journal of the European Ceramic Society, 2022, 42, 3913-3919.

# 534	ARTICLE Electronic Topological Transition as a Route to Improve Thermoelectric Performance in Bi _{0.5} Sb _{1.5} Te ₃ . Advanced Science, 2022, 9, e2105709.	IF 11.2	CITATIONS
535	Thermoelectric films and periodic structures and spin Seebeck effect systems: facets of performance optimization. Materials Today Energy, 2022, 25, 100965.	4.7	19
536	Novel Wearable Pyrothermoelectric Hybrid Generator for Solar Energy Harvesting. ACS Applied Materials & Interfaces, 2022, 14, 17330-17339.	8.0	12
537	Reaction Sintering of Ca3Co4O9 with BiCuSeO Nanosheets for High-Temperature Thermoelectric Composites. Journal of Electronic Materials, 2022, 51, 532-542.	2.2	2
538	Enhancement of high temperature thermoelectric performance of cobaltite based materials for automotive exhaust thermoelectric generators. Smart Materials and Structures, 2022, 31, 025017.	3.5	1
539	Homo-composition and hetero-structure nanocomposite Pnma Bi2SeS2 - Pnnm Bi2SeS2 with high thermoelectric performance. Nature Communications, 2021, 12, 7192.	12.8	22
540	Challenges for Thermoelectric Power Generation: From a Material Perspective. , 0, 1, .		14
542	Investigations on the thermoelectric and thermodynamic properties of Y ₂ CT ₂ (T = O, F, OH). RSC Advances, 2022, 12, 14377-14383.	3.6	3
543	Flexible Organic Thermoelectric Nanocomposites: Transport Properties and Applications. , 2023, , 666-684.		1
544	Ultra-low thermal conductivity through the reduced phonon lifetime by microstructural and Umklapp scattering in Sn1â^'xMnxSe nanostructures. Journal of Alloys and Compounds, 2022, 917, 165152.	5.5	6
545	Structure, Magnetic and Thermoelectric Properties of High Entropy Selenides Bi0.6Sb0.6In0.4Cr0.4Se3. , 0, 1, .		2
546	Asymmetrical Transport Distribution Function: Skewness as a Key to Enhance Thermoelectric Performance. Research, 2022, 2022, .	5.7	6
547	Energyâ€Saving Pathways for Thermoelectric Nanomaterial Synthesis: Hydrothermal/Solvothermal, Microwaveâ€Assisted, Solutionâ€Based, and Powder Processing. Advanced Science, 2022, 9, .	11.2	60
548	Significantly improved thermoelectric properties of Nb-doped ZrNiSn half-Heusler compounds. Chemical Engineering Journal, 2022, 449, 137898.	12.7	11
549	Data-Driven Enhancement of ZT in SnSe-Based Thermoelectric Systems. Journal of the American Chemical Society, 2022, 144, 13748-13763.	13.7	16
550	Enhancing thermoelectric properties of isotope graphene nanoribbons via machine learning guided manipulation of disordered antidots and interfaces. International Journal of Heat and Mass Transfer, 2022, 197, 123332.	4.8	4
551	Extraordinary thermoelectric performance, thermal stability and mechanical properties of n-type Mg3Sb1.5Bi0.5 through multi-dopants at interstitial site. Materials Today Physics, 2022, 27, 100835.	6.0	8
552	Thermoelectric Nanostructured Perovskite Materials. , 0, , .		1

#	Article	IF	CITATIONS
553	Optimization of Co additive amount to improve thermoelectric properties of β-FeSi ₂ . Japanese Journal of Applied Physics, 2022, 61, 111002.	1.5	3
554	Skin-Deep Aspect of Thermopower in Bi ₂ Q ₃ , PbQ, and BiCuQO (Q = Se, Te): Hidden One-Dimensional Character of Their Band Edges Leading to High Thermopower. Accounts of Chemical Research, 2022, 55, 2811-2820.	15.6	1
555	Insights into the Classification of Nanoinclusions of Composites for Thermoelectric Applications. ACS Applied Electronic Materials, 2022, 4, 4781-4796.	4.3	7
556	Thermoelectric Properties of PEDOT:PSS Containing Connected Copper Selenide Nanowires Synthesized by the Photoreduction Method. ACS Omega, 2022, 7, 32101-32107.	3.5	6
557	Enhancing thermoelectric properties of p-type (Bi,Sb)2Te3 via porous structures. Ceramics International, 2023, 49, 4305-4312.	4.8	5
558	Ultrahigh thermoelectric performance of Janus α-STe ₂ and α-SeTe ₂ monolayers. Physical Chemistry Chemical Physics, 0, , .	2.8	0
559	Thermoelectric Materials. , 2022, , .		0
560	Comprehensive Insight into <i>p</i> -Type Bi ₂ Te ₃ -Based Thermoelectrics near Room Temperature. ACS Applied Materials & Interfaces, 2022, 14, 49425-49445.	8.0	25
561	First-Principles Investigation of Structural, Thermoelectric, and Optical Properties of Half-Heusler Compound ScRhTe under Varied Pressure. Crystals, 2022, 12, 1472.	2.2	3
562	Microstructure change and thermal conductivity reduction in p-type Bi–Sb–Te thermoelectric materials using a metal fatty acid as process control agent. Applied Surface Science, 2023, 611, 155643.	6.1	4
563	Nanoheterojunctionâ€Mediated Thermoelectric Strategy for Cancer Surgical Adjuvant Treatment and βâ€Elemene Combination Therapy. Advanced Materials, 2023, 35, .	21.0	24
564	Insights into interfacial thermal conductance in Bi2Te3-based systems for thermoelectrics. Materials Today Physics, 2023, 30, 100953.	6.0	7
565	Comparative analysis of morphology 1D and 2D particles effect in starting powders on microstructure and thermoelectric properties of grained Bi2Te2.7Se0.3 compound. Solid State Sciences, 2023, 135, 107083.	3.2	1
566	The effect of interdiffusion during formation of epitaxial Ca intercalated layered silicene film on its thermoelectric power factor. Japanese Journal of Applied Physics, 2023, 62, SD1004.	1.5	1
567	Ultrahigh power factor in thermally evaporated Bi/Ag ₂ Se bi-layer obtained using thermal inter-diffusion. Journal of Applied Physics, 2022, 132, 235303.	2.5	0
568	Recent Developments in Thermoelectric Generation: A Review. Sustainability, 2022, 14, 16821.	3.2	11
569	Selective Dissolutionâ€Derived Nanoporous Design of Impurityâ€Free Bi ₂ Te ₃ Alloys with High Thermoelectric Performance. Small, 2023, 19, .	10.0	4
570	Anomalous grain growth in sintered Bi2Ca2Co2â^'xCuxOy + Ag ceramic composites by Cu doping. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	1

#	Article	IF	CITATIONS
571	Fine Tuning of Defects Enables High Carrier Mobility and Enhanced Thermoelectric Performance of n-Type PbTe. Chemistry of Materials, 2023, 35, 755-763.	6.7	22
572	Improved Thermoelectric Performance of NbCoSb with Intrinsic Nb Vacancies and Ni-Doping-Induced Band Degeneracy. ACS Applied Energy Materials, 0, , .	5.1	1
573	Grain boundary engineering strategy for simultaneously reducing the electron concentration and lattice thermal conductivity in n-type Bi2Te2.7Se0.3-based thermoelectric materials. Journal of the European Ceramic Society, 2023, 43, 3376-3382.	5.7	7
574	Uplimit (ZT)max and effective merit parameter B* of thermoelectric semiconductors. Materials Today Physics, 2023, 31, 100989.	6.0	3
575	Revealing the decisive factors of the lattice thermal conductivity reduction by electron-phonon interactions in half-Heusler semiconductors. Materials Today Physics, 2023, 31, 100993.	6.0	1
576	Tuning Thermoelectric Conversion Performance of BiSbTe/Epoxy Flexible Films with Dot Magnetic Arrays. ACS Applied Materials & Interfaces, 2023, 15, 7112-7119.	8.0	5
577	Facile composite engineering to boost thermoelectric power conversion in ZnSb device. Journal of Physics and Chemistry of Solids, 2023, 178, 111329.	4.0	0
578	Highly deformable Ag2Te1-xSex-based thermoelectric compounds. Materials Today Physics, 2023, 33, 101051.	6.0	1
579	Advances in Ag ₂ Se-based thermoelectrics from materials to applications. Energy and Environmental Science, 2023, 16, 1870-1906.	30.8	35
580	First-Principle Calculations to Investigate the Elastic, Thermoelectric, and Electronic Performances of XRhSn (X = V, Nb, Ta) Half-Heusler Compounds. Journal of Superconductivity and Novel Magnetism, 0,	1.8	1
581	Enhancement in Power Factor of Al-Doped Cu2Se Thermoelectric Compound Prepared by Combustion Synthesis via Spark Plasma Sintering Technique. Electronic Materials Letters, 0, , .	2.2	0
582	TEXplorer.org: Thermoelectric material properties data platform for experimental and first-principles calculation results. APL Materials, 2023, 11, .	5.1	4
583	Thermoelectric properties of acene molecular junctions. Wuli Xuebao/Acta Physica Sinica, 2023, 72, 124401.	0.5	1
584	Strainâ€Mediated Lattice Rotation Design for Enhancing Thermoelectric Performance in Bi ₂ S ₂ Se. Advanced Functional Materials, 2023, 33, .	14.9	3
585	Electromagnetic Radiation Effects on MgO-Based Magnetic Tunnel Junctions: A Review. Molecules, 2023, 28, 4151.	3.8	4
586	Improved thermoelectric performance of Co-doped β-FeSi ₂ by Ni substitution. Materials Advances, 2023, 4, 2821-2830.	5.4	1
587	Unveiling the mechanical and dynamical stability to the contribution of transport properties of FeNbSb: A first principle approach. Computational Condensed Matter, 2023, 36, e00821.	2.1	2
588	Anomalous thermal transport in MgSe with diamond phase under pressure. Physical Review B, 2023, 107, .	3.2	1

#	Article	IF	CITATIONS
589	ZrNiSn-based compounds with high thermoelectric performance and ultralow lattice thermal conductivity via introduction of multiscale scattering centers. Journal of Materiomics, 2024, 10, 200-209.	5.7	0
590	Advancing Thermoelectric Materials: A Comprehensive Review Exploring the Significance of One-Dimensional Nano Structuring. Nanomaterials, 2023, 13, 2011.	4.1	4
591	Complex microstructure induced high thermoelectric performances of p-type Bi–Sb–Te alloys. Materials Chemistry and Physics, 2023, 307, 128156.	4.0	1
592	Scrap Recovery of nâ€Type Bismuth Telluride Ingot by Second Zone Melting and PbBr ₂ Doping. Energy Technology, 0, , .	3.8	0
593	A brief review on the recent development of phonon engineering and manipulation at nanoscales. International Journal of Extreme Manufacturing, 2024, 6, 012007.	12.7	2
594	Determination of Seebeck coefficient originating from phonon-drag effect using Si single crystals at different carrier densities. Scientific Reports, 2023, 13, .	3.3	4
595	Insights into Interfacial Thermal Resistance in Bi ₂ Te ₃ /Graphene Composites for Thermoelectric Applications. Journal of Physical Chemistry C, 2023, 127, 19796-19804.	3.1	1
596	Improved thermoelectric power factor of multilayered poly(3,4-ethylenedioxythiophene) polystyrene sulfonate and Cu2Se thin films. Thin Solid Films, 2023, 784, 140090.	1.8	0
597	Anisotropic Electron and Phonon Transport Properties in Pnictogen Chalcohalides: PnSI (Pn = Sb, Bi). ACS Applied Energy Materials, 2023, 6, 10639-10651.	5.1	0
598	Sustainable utilisation and transformation of the thermal energy from coalfield fires: A comprehensive review. Applied Thermal Engineering, 2023, 233, 121164.	6.0	4
600	An Analysis of Thermoelectric Properties of Skutterudites. Physica Status Solidi (B): Basic Research, O,	1.5	1
601	Enhancing the Thermoelectric Performance of Cu2S/CuO Nanocomposites Through Energy-FilteringÂeffect and Phonon Scattering. Journal of Inorganic and Organometallic Polymers and Materials, 0, , .	3.7	0
602	Lattice thermal conductivity of embedded nanoparticle composites: the role of particle size distribution. Nanotechnology, 2024, 35, 055701.	2.6	0
603	Effect of Synthesis Factors on Microstructure and Thermoelectric Properties of FeTe2 Prepared by Solid-State Reaction. Materials, 2023, 16, 7170.	2.9	2
604	Polymer-based thermoelectric fibers and composites: Individual and combined approaches towards enhanced efficiency. Materials Today Communications, 2024, 38, 107682.	1.9	0
605	Simulating study of cochlear sensors based on PVDF organic polymer materials. Ferroelectrics, 2023, 615, 358-368.	0.6	0
606	Ultra-low thermal conductivity and improved thermoelectric performance in La2O3-dispersed Bi2Sr2Co2Oy ceramics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2024, 299, 116976.	3.5	3
607	Understanding secondary phase inclusion and composition variations in the microstructure design of n-type Bi ₂ Te ₃ alloys via selective dissolution of KCl. Journal of Advanced Ceramics, 2023, , .	17.4	0

#	Article	IF	CITATIONS
608	Machine learning based models to investigate the thermoelectric performance of carbon nanotube-polyaniline nanocomposites. Computational Materials Science, 2024, 232, 112601.	3.0	0
609	Ultralow thermal conductivity of amorphous silicon-germanium thin films for alloy and disorder scattering determined by 31‰ method and nanoindentation. Applied Physics Express, 0, , .	2.4	0
612	Thermoelectric Properties of Mg3(Bi,Sb)2 under Finite Temperatures and Pressures: A First-Principles Study. Nanomaterials, 2024, 14, 84.	4.1	0
613	Ultrahigh thermoelectric power factor achieved in Yb filled CoSb3 skutterudites through additional Al doping. Chemical Engineering Journal, 2024, 481, 148457.	12.7	2
614	Thermoelectric properties of half-Heusler alloys. International Materials Reviews, 2024, 69, 83-106.	19.3	0
615	Effect of Starting Powder Particle Size on the Thermoelectric Properties of Hot-Pressed Bi0.3Sb1.7Te3 Alloys. Materials, 2024, 17, 318.	2.9	1
616	The MatHubâ \in 3d firstâ \in principles repository and the applications on thermoelectrics. , 2024, 2, .		0
617	Investigating the novel thermoelectric properties of magnesium, calcium, and barium divanadate oxides (XV2O6 where X = Mg, Ca, and Ba) for waste heat recovery applications in energy harvesting devices. Applied Physics A: Materials Science and Processing, 2024, 130, .	2.3	0
618	Enhanced thermoelectric performance of n-type Bi2(Se, Te)3 bulk nanocomposites through Ti doping. Ceramics International, 2024, 50, 16301-16308.	4.8	0
619	Boosting Thermoelectric Performance of PbBi ₂ Te ₄ via Reduced Carrier Scattering and Intensified Phonon Scattering. Small, 0, , .	10.0	0
620	Ionic thermoelectric gels and devices: Progress, opportunities, and challenges. EnergyChem, 2024, 6, 100123.	19.1	0
621	DFT assessments of optical and thermoelectric characteristics of (III/V)-doped elements into graphene sheets. Modern Physics Letters B, 0, , .	1.9	0
622	Boosting Thermoelectric Performance in Nanocrystalline Ternary Skutterudite Thin Films through Metallic CoTe ₂ Integration. ACS Applied Materials & Interfaces, 2024, 16, 14770-14780.	8.0	0
623	Effect of the Spark-Plasma-Sintering Temperature on the Structure, Crystallographic Texture, and Thermoelectric Properties of Materials Based on One-Dimensional Particles of Bi2Te2.7Se0.3. Nanobiotechnology Reports, 2023, 18, S90-S100.	0.6	0
624	Study for thermoelectric performance enhancement of group IVB (C, Si, Ge, Sn,Pb)-VB (P, As, Sb, Bi) monolayers. Physica B: Condensed Matter, 2024, , 415832.	2.7	0