Nanostructured Thermoelectrics: Big Efficiency Gains f

Advanced Materials

22, 3970-3980

DOI: 10.1002/adma.201000839

Citation Report

#	Article	IF	Citations
2	Phonon engineering through crystal chemistry. Journal of Materials Chemistry, 2011, 21, 15843.	6.7	719
3	Thin Films of Geâ€“Sbâ€“Te-Based Phase Change Materials: Microstructure and in Situ Transformation. Chemistry of Materials, 2011, 23, 3871-3878.	3.2	37
4	Dispenser-printed planar thick-film thermoelectric energy generators. Journal of Micromechanics and Microengineering, 2011, 21, 104006.	1.5	130
5	Low-Temperature Thermoelectric Power Factor Enhancement by Controlling Nanoparticle Size Distribution. Nano Letters, 2011, 11, 225-230.	4.5	56
6	Assessing the Thermoelectric Properties of Sintered Compounds via High-ThroughputAb-InitioCalculations. Physical Review X, 2011, 1, .	2.8	92
7	Oxide thermoelectrics: The challenges, progress, and outlook. Journal of Materials Research, 2011, 26, 1762-1772.	1.2	261
8	Nanostructures Boost the Thermoelectric Performance of PbS. Journal of the American Chemical Society, 2011, 133, 3460-3470.	6.6	282
9	Thermoelectrics from Abundant Chemical Elements: High-Performance Nanostructured PbSeâ€“PbS. Journal of the American Chemical Society, 2011, 133, 10920-10927.	6.6	164
10	Seebeck effect in ZnO nanowires for micropower generation. Procedia Engineering, 2011, 25, 1481-1484.	1.2	13
11	Combination of large nanostructures and complex band structure for high performance thermoelectric lead telluride. Energy and Environmental Science, 2011, 4, 3640.	15.6	153
12	Reevaluation of PbTe1â^'xIx as high performance n-type thermoelectric material. Energy and Environmental Science, 2011, 4, 2090.	15.6	359
13	Colloidal Synthesis of Cu₂CdSnSe₄ Nanocrystals and Hot-Pressing to Enhance the Thermoelectric Figure-of-Merit. Journal of the American Chemical Society, 2011, 133, 15910-15913.	6.6	149
14	Size and Morphology Dependence of ZnO Nanoparticles Synthesized by a Fast Continuous Flow Hydrothermal Method. Crystal Growth and Design, 2011, 11, 4027-4033.	1.4	66
15	Enhanced thermoelectric figure of merit in SiGe alloy nanowires by boundary and hole-phonon scattering. Journal of Applied Physics, 2011, 110, .	1.1	66
16	Simultaneous Large Enhancements in Thermopower and Electrical Conductivity of Bulk Nanostructured Half-Heusler Alloys. Journal of the American Chemical Society, 2011, 133, 18843-18852.	6.6	236
17	Efficient thermoelectric van der Pauw measurements. Applied Physics Letters, 2011, 99, 022102.	1.5	20
18	Effects of confinement and orientation on the thermoelectric power factor of silicon nanowires. Physical Review B, 2011, 83, .	1.1	74
19	Wet Chemical Synthesis and a Combined X-ray and MÃ¶ssbauer Study of the Formation of FeSb₂ Nanoparticles. Inorganic Chemistry, 2011, 50, 11807-11812.	1.9	8

#	Article	IF	Citations
20	Surfactant-Free Synthesis of Bi₂Te₃â^'Te Microâ^'Nano Heterostructure with Enhanced Thermoelectric Figure of Merit. ACS Nano, 2011, 5, 3158-3165.	7.3	104
21	NeMo: A network model program for analyzing the thermoelectric properties of meso and nanostructured composite materials. Progress in Solid State Chemistry, 2011, 39, 97-107.	3.9	7
22	High thermoelectric figure of merit in nanostructured p-type PbTeâ€"MTe (M = Ca, Ba). Energy and Environmental Science, 2011, 4, 4675.	15.6	162
23	Formation of Inert Bi₂Se₃(0001) Cleaved Surface. Crystal Growth and Design, 2011, 11, 5507-5514.	1.4	112
24	Varying the concentration of single walled carbon nanotubes in thin film polymer composites, and its effect on thermoelectric power. Applied Physics Letters, 2011, 98, .	1.5	74
25	Recent Developments in Semiconductor Thermoelectric Physics and Materials. Annual Review of Materials Research, 2011, 41, 399-431.	4.3	618
26	Design and thermoreflectance imaging of high-speed SiGe superlattice microrefrigerators. Materials Research Society Symposia Proceedings, 2011, 1329, 1.	0.1	1
27	Searching for the best thermoelectrics through the optimization of transport distribution function. Journal of Applied Physics, 2011, 109, .	1.1	36
28	Material Optimization for Concentrated Solar Photovoltaic and Thermal Co-Generation. , 2011, , .		8
29	The effect of (00l) crystal plane orientation on the thermoelectric properties of Bi2Te3 thin film. Solid State Communications, 2011, 151, 1520-1523.	0.9	51
30	Widely variable Seebeck coefficient and enhanced thermoelectric power of PEDOT:PSS films by blending thermal decomposable ammonium formate. Organic Electronics, 2011, 12, 2159-2164.	1.4	83
31	Effect of cationic substitution on the thermoelectric properties of In4â^'xMxSe2.95 compounds (Mâ€‰=â€‰Na, Ca, Zn, Ga, Sn, Pb; xâ€‰=â€‰0.1). Applied Physics Letters, 2011, 99, .	1.5	34
32	Phase equilibria of Agâ€"Sbâ€"Te thermoelectric materials. Acta Materialia, 2011, 59, 6463-6472.	3.8	31
33	Thermoelectric and microstructural properties of Pb0.9â^'xSn0.1GexTe compounds prepared by spinodal decomposition. Journal of Solid State Chemistry, 2011, 184, 1172-1175.	1.4	8
34	Nanostructuring in Î²â€Zn₄Sb₃ with variable starting Zn compositions. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1652-1657.	0.8	25
35	C₆₀â€doping of nanostructured Biâ€"Sbâ€"Te thermoelectrics. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 2783-2789.	0.8	43
36	Semimetal/Semiconductor Nanocomposites for Thermoelectrics. Advanced Materials, 2011, 23, 2377-2383.	11.1	34
37	Thermoelectric Nanostructures: From Physical Model Systems towards Nanograined Composites. Advanced Energy Materials, 2011, 1, 713-731.	10.2	214

#	Article	IF	Citations
38	Radiationâ€Corrected Harman Method for Characterization of Thermoelectric Materials. Advanced Energy Materials, 2011, 1, 1007-1011.	10.2	12
39	Effects of partial anion substitution on the thermoelectric properties of silver(I) chalcogenide halides in the system Ag5Q2X with Q=Te, Se and S and X=Br and Cl. Journal of Solid State Chemistry, 2011, 184, 778-785.	1.4	7
40	Universal scaling relations for the thermoelectric power factor of semiconducting nanostructures. Physical Review B, 2011, 84, .	1.1	23
41	High-temperature thermoelectric properties of nanostructured Ca3Co4O9 thin films. Applied Physics Letters, 2011, 98, .	1.5	38
42	Ballistic thermoelectricity in double-bend nanowires. Applied Physics Letters, 2011, 98, 173107.	1.5	16
43	Influence of Sputtering Power of Te and Annealing on Sb-Te Thin Films Fabricated by RF and DC Co-Sputtering. Advanced Materials Research, 0, 194-196, 2400-2403.	0.3	3
44	Thermoelectric Properties of New Thallium Tellurides. Materials Research Society Symposia Proceedings, 2011, 1309, 23.	0.1	1
45	Power Generation Efficiency with Extremely Large Z factor Thermoelectric Material. Materials Research Society Symposia Proceedings, 2011, 1325, 9.	0.1	1
46	Microstructures and nanostructures in long-term annealed AgPb₁₈SbTe₂₀ (LAST-18) compounds and their influence on the thermoelectric properties. Journal of Materials Research, 2011, 26, 1800-1812.	1.2	18
47	Phonon Transport and Thermoelectricity in Defect-Engineered InAs Nanowires. Materials Research Society Symposia Proceedings, 2012, 1404, 36.	0.1	6
48	Thermal conductivity of nano-grained SrTiO3 thin films. Applied Physics Letters, 2012, 101, .	1.5	50
49	Bismuth nanowires with very low lattice thermal conductivity as revealed by the 3Ï‰ method. Nanotechnology, 2012, 23, 495711.	1.3	16
50	Seebeck coefficient of a quantum confined, high-electron-density electron gas in SrTiO3. Applied Physics Letters, 2012, 100, 161601.	1.5	15
51	Enhanced room temperature electronic and thermoelectric properties of the dilute bismuthide InGaBiAs. Journal of Applied Physics, 2012, 112, .	1.1	31
52	Effect of the energy dependence of the carrier scattering time on the thermoelectric power factor of quantum wells and nanowires. Applied Physics Letters, 2012, 100, .	1.5	9
53	Thermoelectric and magnetic properties of nanocrystalline La0.7Sr0.3CoO3. Journal of Applied Physics, 2012, 111, .	1.1	16
54	Thermal Conductance of Ballistic Point Contacts. Physical Review Letters, 2012, 108, 075901.	2.9	20
55	Thermal conductivity of semiconductor nanowires from micro to nano length scales. Journal of Applied Physics, 2012, 111, 024311.	1.1	28

#	Article	IF	Citations
56	Large thermoelectric power factor in p-type Si (110)/[110] ultra-thin-layers compared to differently oriented channels. Journal of Applied Physics, 2012, 112, .	1.1	12
57	Electronic structure and thermoelectric properties of nanostructured EuTi1âˆ’xNbxO3âˆ’Î´ (xâ€‰=â€‰0.00; 0.02). Applied Physics Letters, 2012, 101, .	1.5	21
58	Modeling and Characterization of Silicon Nanowire Networks for Thermoelectric Conversion. Materials Research Society Symposia Proceedings, 2012, 1456, 38.	0.1	0
59	Different Characterization Techniques toÂEvaluate Graphene and Its Properties. , 2012, , 95-138.		1
60	Thermoelectric transport in Bi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Te<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>/Sb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:	1.1	56
61	One-pot Chemical Synthesis of Zinc Antimonide Nanoparticles as Building Blocks for Nanostructured Thermoelectric Materials. Chemistry Letters, 2012, 41, 1529-1531.	0.7	7
62	Design and Realization of Nanostructured Inorganic Intergrowths. , 2012, , 1-20.		4
63	Concentrated solar thermoelectric generators. Energy and Environmental Science, 2012, 5, 9055.	15.6	227
64	Effect of point defects on the electronic density of states of ScN studied by first-principles calculations and implications for thermoelectric properties. Physical Review B, 2012, 86, .	1.1	65
65	Semiconductor nanowires for thermoelectrics. Journal of Materials Chemistry, 2012, 22, 22821.	6.7	51
66	Thermal and Thermoelectric Transport in Nanostructures and Low-Dimensional Systems. Nanoscale and Microscale Thermophysical Engineering, 2012, 16, 79-116.	1.4	113
67	Thermoelectric properties of porous multi-walled carbon nanotube/polyaniline core/shell nanocomposites. Nanotechnology, 2012, 23, 385701.	1.3	75
68	Ab initiostudy of the thermopower of biphenyl-based single-molecule junctions. Physical Review B, 2012, 86, .	1.1	43
69	n-Type Nanostructured Thermoelectric Materials Prepared from Chemically Synthesized Ultrathin Bi₂Te₃ Nanoplates. Nano Letters, 2012, 12, 640-647.	4.5	239
70	Electrical and structural properties of Bi2Te3 and Sb2Te3 thin films grown by the nanoalloying method with different deposition patterns and compositions. Journal of Materials Chemistry, 2012, 22, 11323.	6.7	48
71	Nanostructured thermoelectric materials: Current research and future challenge. Progress in Natural Science: Materials International, 2012, 22, 535-549.	1.8	630
72	Effects of Bi2Se3 Nanoparticle Inclusions on the Microstructure and Thermoelectric Properties of Bi2Te3-Based Nanocomposites. Journal of Electronic Materials, 2012, 41, 3411-3416.	1.0	18
73	Cu₂ZnGeSe₄ Nanocrystals: Synthesis and Thermoelectric Properties. Journal of the American Chemical Society, 2012, 134, 4060-4063.	6.6	199

#	Article	IF	Citations
74	Band Engineering of Thermoelectric Materials. Advanced Materials, 2012, 24, 6125-6135.	11.1	1,307
75	Bottom-up processing of thermoelectric nanocomposites from colloidal nanocrystal building blocks: the case of Ag2Teâ€“PbTe. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	30
76	Enhanced thermoelectric properties of Ba-filled skutterudites by grain size reduction and Ag nanoparticle inclusion. Journal of Materials Chemistry, 2012, 22, 2958-2964.	6.7	87
77	The realization of a high thermoelectric figure of merit in Ge-substituted Î²-Zn4Sb3 through band structure modification. Journal of Materials Chemistry, 2012, 22, 13977.	6.7	54
78	Very High Thermopower of Bi Nanowires with Embedded Quantum Point Contacts. Nano Letters, 2012, 12, 808-812.	4.5	24
79	Copper ion liquid-like thermoelectrics. Nature Materials, 2012, 11, 422-425.	13.3	1,700
80	Thermoelectric properties of HfN/ScN metal/semiconductor superlattices: a first-principles study. Journal of Physics Condensed Matter, 2012, 24, 415303.	0.7	21
81	Solution-Based Synthesis and Low-Temperature Transport Properties of CsBi₄Te₆. ACS Applied Materials & Interfaces, 2012, 4, 772-776.	4.0	11
82	Colloidal nanocrystal quantum dot assemblies as artificial solids. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, 030802.	0.9	111
83	Application of the wavelet transform to nanoscale thermal transport. Physical Review B, 2012, 86, .	1.1	27
84	Periodic Modulation of Sb Stoichiometry in Bi₂Te₃/Bi_{2â€“x}Sb_xTe₃ Multilayers Using Pulsed Electrodeposition. Crystal Growth and Design, 2012, 12, 1347-1353.	1.4	23
85	Resonant carrier scattering by core-shell nanoparticles for thermoelectric power factor enhancement. Applied Physics Letters, 2012, 100, 012102.	1.5	29
86	High thermoelectric figure-of-merit in p-type nanostructured (Bi,Sb)2Te3 fabricated via hydrothermal synthesis and evacuated-and-encapsulated sintering. Journal of Materials Chemistry, 2012, 22, 4825.	6.7	95
87	Influence of structure disorder on the lattice thermal conductivity of polycrystals: A frequency-dependent phonon-transport study. Journal of Applied Physics, 2012, 111, .	1.1	19
88	Effective medium formulation for phonon transport analysis of nanograined polycrystals. Journal of Applied Physics, 2012, 111, .	1.1	21
89	Thermoelectric properties of ultrathin silicon nanowires. Physical Review B, 2012, 86, .	1.1	77
90	Composition Control and Thermoelectric Properties of Quaternary Chalcogenide Nanocrystals: The Case of Stannite Cu₂CdSnSe₄. Chemistry of Materials, 2012, 24, 562-570.	3.2	153
91	Spark erosion: a high production rate method for producing Bi_{0.5}Sb_{1.5}Te₃nanoparticles with enhanced thermoelectric performance. Nanotechnology, 2012, 23, 415604.	1.3	88

#	Article	IF	Citations
92	Raising the Thermoelectric Performance of p-Type PbS with Endotaxial Nanostructuring and Valence-Band Offset Engineering Using CdS and ZnS. Journal of the American Chemical Society, 2012, 134, 16327-16336.	6.6	308
93	Influence of nanosized inclusions on the room temperature thermoelectrical properties of a p-type bismuthâ€“telluriumâ€“antimony alloy. Acta Materialia, 2012, 60, 4523-4530.	3.8	8
94	Thermoelectric properties and nonstoichiometry of GaGeTe. Journal of Solid State Chemistry, 2012, 193, 42-46.	1.4	19
95	Recent advances in thermoelectric nanocomposites. Nano Energy, 2012, 1, 42-56.	8.2	624
96	Thermoelectric properties of copper selenide with ordered selenium layer and disordered copper layer. Nano Energy, 2012, 1, 472-478.	8.2	271
97	Crystal Structure of FePb₄Sb₆Se₁₄ and its Structural Relationship with FePb₃Sb₄Se₁₀. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2012, 638, 2549-2554.	0.6	6
98	Crystallographic Control at the Nanoscale To Enhance Functionality: Polytypic Cu₂GeSe₃ Nanoparticles as Thermoelectric Materials. Chemistry of Materials, 2012, 24, 4615-4622.	3.2	79
99	Nontoxic and Abundant Copper Zinc Tin Sulfide Nanocrystals for Potential High-Temperature Thermoelectric Energy Harvesting. Nano Letters, 2012, 12, 540-545.	4.5	206
100	Thermal transport in nanostructures. AIP Advances, 2012, 2, .	0.6	138
102	High Thermoelectric and Reversible p-n-p Conduction Type Switching Integrated in Dimetal Chalcogenide. Journal of the American Chemical Society, 2012, 134, 18460-18466.	6.6	164
103	Energy harvesting: an integrated view of materials, devices and applications. Nanotechnology, 2012, 23, 502001.	1.3	130
104	Gravity-induced gradients in thermoelectric Mg2Si0.9925â^'Sn Sb0.0075. Acta Materialia, 2012, 60, 5745-5751.	3.8	23
105	Preparation of nano-sized Bi2Te3 thermoelectric material powders by cryogenic grinding. Progress in Natural Science: Materials International, 2012, 22, 201-206.	1.8	32
106	Topological insulator-based energy efficient devices. Proceedings of SPIE, 2012, , .	0.8	14
107	Nanostructured thermoelectric energy conversion and refrigeration devices. , 2012, , .		0
108	Thermal transport in crystalline Si/Ge nano-composites: Atomistic simulations and microscopic models. Applied Physics Letters, 2012, 100, .	1.5	20
109	Thermal conductivity of bulk and nanowire Mg<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Si<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mi>x</mml:mi></mml:msub></mml:math>Sn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:	1.1	486
110	Colloidal Nanocrystal-Based Gels and Aerogels: Material Aspects and Application Perspectives. Journal of Physical Chemistry Letters, 2012, 3, 8-17.	2.1	155

#	Article	IF	Citations
111	Seeing Is Believing: Weak Phonon Scattering from Nanostructures in Alkali Metal-Doped Lead Telluride. Nano Letters, 2012, 12, 343-347.	4.5	94
112	A high thermoelectric figure of merit ZT > 1 in Ba heavily doped BiCuSeO oxyselenides. Energy and Environmental Science, 2012, 5, 8543.	15.6	333
113	Thermoelectric Bi₂Te₃-improved charge collection for high-performance dye-sensitized solar cells. Energy and Environmental Science, 2012, 5, 6294-6298.	15.6	77
114	PbTeâ€“PbSnS2 thermoelectric composites: low lattice thermal conductivity from large microstructures. Energy and Environmental Science, 2012, 5, 8716.	15.6	54
115	Single Molecule Electronics and Devices. Sensors, 2012, 12, 7259-7298.	2.1	122
116	Tailoring effective thermoelectric tensors and high-density power generation in a tubular Bi0.5Sb1.5Te3/Ni composite with cylindrical anisotropy. Applied Physics Letters, 2012, 101, .	1.5	43
117	Thermoelectric properties of epitaxial TbAs:InGaAs nanocomposites. Journal of Applied Physics, 2012, 111, .	1.1	20
118	Effect of Silicon and Sodium on Thermoelectric Properties of Thallium-Doped Lead Telluride-Based Materials. Nano Letters, 2012, 12, 2324-2330.	4.5	64
119	Thermoelectrics with Earth Abundant Elements: High Performance p-type PbS Nanostructured with SrS and CaS. Journal of the American Chemical Society, 2012, 134, 7902-7912.	6.6	233
120	Perspectives on thermoelectrics: from fundamentals to device applications. Energy and Environmental Science, 2012, 5, 5147-5162.	15.6	1,080
121	Strong Phonon Scattering by Layer Structured PbSnS₂ in PbTe Based Thermoelectric Materials. Advanced Materials, 2012, 24, 4440-4444.	11.1	130
122	Enhancement of Thermoelectric Figure of Merit by the Insertion of MgTe Nanostructures in pâ€type PbTe Doped with Na₂Te. Advanced Energy Materials, 2012, 2, 1117-1123.	10.2	123
123	Telluriumâ€Free Thermoelectric: The Anisotropic nâ€Type Semiconductor Bi₂S₃. Advanced Energy Materials, 2012, 2, 634-638.	10.2	207
124	Increase in the Figure of Merit by Cd-Substitution in Sn1-xPbxTe and Effect of Pb/Sn Ratio on Thermoelectric Properties. Advanced Energy Materials, 2012, 2, 1218-1225.	10.2	22
125	A new class of doped nanobulk high-figure-of-merit thermoelectrics by scalable bottom-up assembly. Nature Materials, 2012, 11, 233-240.	13.3	462
126	Nanoscale Oxide Thermoelectrics. , 2012, , 315-340.		0
127	Electronic, vibrational, and transport properties of pnictogen-substituted ternary skutterudites. Physical Review B, 2012, 85, .	1.1	24
128	Improvement in the thermoelectric performance of the crystals of halogen-substituted In4Se3â^'xH0.03 (H = F, Cl, Br, I): Effect of halogen-substitution on the thermoelectric properties in In4Se3â^'x. Journal of Materials Chemistry, 2012, 22, 5730.	6.7	33

#	Article	IF	Citations
129	Numerical study of the thermoelectric power factor in ultra-thin Si nanowires. Journal of Computational Electronics, 2012, 11, 29-44.	1.3	8
130	Preferential growth of Bi2Te3 films with a nanolayer structure: enhancement of thermoelectric properties induced by nanocrystal boundaries. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	30
131	Printed Se-Doped MA n-Type Bi2Te3 Thick-Film Thermoelectric Generators. Journal of Electronic Materials, 2012, 41, 1481-1486.	1.0	43
132	Inorganic Colloidal Solution-Based Approach to Nanocrystal Synthesis of (Bi,Sb)2Te3. Journal of Electronic Materials, 2012, 41, 1573-1578.	1.0	2
133	MOCVD Growth of Erbium Monoantimonide Thin Film and Nanocomposites for Thermoelectrics. Journal of Electronic Materials, 2012, 41, 971-976.	1.0	5
134	Electronic Properties as a Function of Ag/Sb Ratio in Ag1â^'y Pb18Sb1+z Te20 Compounds. Journal of Electronic Materials, 2012, 41, 2065-2072.	1.0	8
135	Rattler-seeded InSb nanoinclusions from metastable indium-filled In0.1Co4Sb12 skutterudites for high-performance thermoelectrics. Acta Materialia, 2012, 60, 2178-2185.	3.8	43
136	Microstructure and thermoelectric properties of CoSb2.75Ge0.25â^'Te prepared by rapid solidification. Acta Materialia, 2012, 60, 3536-3544.	3.8	62
137	Thermoelectric Properties of Undoped and Doped (<scp><scp>Ti</scp></scp>_{0.75}<scp><scp>Sn</scp></scp>_{0.25})<scp><scp>O</scp></scp>₂. Journal of the American Ceramic Society, 2012, 95, 619-626.	2.0	11
138	Structural and vibrational properties of PVT grown Bi2Te3 microcrystals. Solid State Communications, 2012, 152, 1119-1122.	0.9	44
139	Thermoelectric transport coefficients of n-doped CaTiO3, SrTiO3 and BaTiO3: A theoretical study. Physica B: Condensed Matter, 2012, 407, 1114-1118.	1.3	31
140	Lowâ€Cost Highâ€Performance Zinc Antimonide Thin Films for Thermoelectric Applications. Advanced Materials, 2012, 24, 1693-1696.	11.1	60
141	Leadâ€Free Thermoelectrics: High Figure of Merit in pâ€type AgSn_mSbTe_{m+2}. Advanced Energy Materials, 2012, 2, 157-161.	10.2	74
142	Spark plasma sintering of a p-type Si1â^'x Ge x alloy: identification of the densification mechanism by isothermal and anisothermal methods. Journal of Materials Science, 2012, 47, 4313-4325.	1.7	12
143	Great enhancements in the thermoelectric power factor of BiSbTe nanostructured films with well-ordered interfaces. Nanoscale, 2013, 5, 7017.	2.8	53
144	An alternative strategy to construct interfaces in bulk thermoelectric material: nanostructured heterophase Bi2Te3/Bi2S3. RSC Advances, 2013, 3, 4673.	1.7	26
145	Electron energy filtering by a nonplanar potential to enhance the thermoelectric power factor in bulk materials. Physical Review B, 2013, 87, .	1.1	158
146	BiSbTeâ€Based Nanocomposites with High ZT: The Effect of SiC Nanodispersion on Thermoelectric Properties. Advanced Functional Materials, 2013, 23, 4317-4323.	7.8	404

#	Article	IF	Citations
147	Alternative Strategies for Thermoelectric Materials Development. NATO Science for Peace and Security Series B: Physics and Biophysics, 2013, , 1-24.	0.2	5
148	Thermoelectric properties of CuInTe2/graphene composites. CrystEngComm, 2013, 15, 6648.	1.3	60
149	$ per W metrics for thermoelectric power generation: beyond ZT. Energy and Environmental Science, 2013, 6, 2561-2571.	15.6	201
150	High performance bulk thermoelectrics via a panoscopic approach. Materials Today, 2013, 16, 166-176.	8.3	421
151	Hydrothermal synthesis and thermoelectric transport properties of Sb2Te3â€“Te heterogeneous nanostructures. CrystEngComm, 2013, 15, 2978.	1.3	19
152	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.	2.8	36
153	Effectively decoupling electrical and thermal conductivity of polymer composites. Carbon, 2013, 65, 105-111.	5.4	45
154	The effect of structural vacancies on the thermoelectric properties of (Cu2Te)1â^'x(Ga2Te3)x. Journal of Solid State Chemistry, 2013, 201, 262-269.	1.4	22
155	Giant Thermovoltage in Single InAs Nanowire Field-Effect Transistors. Nano Letters, 2013, 13, 3638-3642.	4.5	56
156	The effect of secondary phase on thermoelectric properties of Zn4Sb3 compound. Nano Energy, 2013, 2, 1172-1178.	8.2	35
157	Compositional Sensitivity of Microstructures and Thermoelectric Properties of Ag1â^'x Pb18Sb1+y Te20 Compounds. Journal of Electronic Materials, 2013, 42, 1422-1428.	1.0	4
158	Grain-Size-Dependent Thermoelectric Properties of SrTiO3 3D Superlattice Ceramics. Journal of Electronic Materials, 2013, 42, 1568-1572.	1.0	12
159	Nanograin Effects on the Thermoelectric Properties of Poly-Si Nanowires. Journal of Electronic Materials, 2013, 42, 2393-2401.	1.0	5
160	Enhanced thermoelectric performance of a BiCuSeO system via band gap tuning. Chemical Communications, 2013, 49, 8075.	2.2	111
161	Rapid preparation of CeFe4Sb12 skutterudite by melt spinning: rich nanostructures and high thermoelectric performance. Journal of Materials Chemistry A, 2013, 1, 12657.	5.2	101
162	Cu2HgSnSe4 nanoparticles: synthesis and thermoelectric properties. CrystEngComm, 2013, 15, 8966.	1.3	25
163	Thermoelectricity in semiconductor nanowires. Physica Status Solidi - Rapid Research Letters, 2013, 7, 767-780.	1.2	27
164	Effect of solution pH value on thermoelectric performance of free-standing PEDOT:PSS films. Synthetic Metals, 2013, 185-186, 31-37.	2.1	38

#	Article	IF	Citations
165	Temperature dependent thermoelectric properties of freestanding few layer graphene/polyvinylidene fluoride composite thin films. Synthetic Metals, 2013, 165, 56-59.	2.1	28
166	Facile synthesis of preferential Bi0.5Sb1.5Te3.0 nanolayered thin films with high power factor by the controllable layer thickness. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	12
167	Preferential Scattering by Interfacial Charged Defects for Enhanced Thermoelectric Performance in Few-layered n-type Bi2Te3. Scientific Reports, 2013, 3, 3212.	1.6	107
168	Thermal conductivity of ZnTe nanowires. Journal of Applied Physics, 2013, 114, .	1.1	17
169	Hot-injection synthesis and characterization of monodispersed ternary Cu2SnSe3 nanocrystals for thermoelectric applications. Journal of Alloys and Compounds, 2013, 581, 646-652.	2.8	42
170	Structure-transformation-induced abnormal thermoelectric properties in semiconductor copper selenide. Materials Letters, 2013, 93, 121-124.	1.3	75
171	Correlation between processing conditions, microstructure and charge transport in half-Heusler alloys. Journal of Solid State Chemistry, 2013, 201, 280-287.	1.4	5
172	Enhancing thermoelectric properties of organic composites through hierarchical nanostructures. Scientific Reports, 2013, 3, 3448.	1.6	298
173	Thermoelectric properties of Mg doped p-type BiCuSeO oxyselenides. Journal of Alloys and Compounds, 2013, 551, 649-653.	2.8	146
174	Direct synthesis of BiCuChO-type oxychalcogenides by mechanical alloying. Journal of Solid State Chemistry, 2013, 203, 187-191.	1.4	28
175	Heat Transfer in Thermoelectric Materials and Devices. Journal of Heat Transfer, 2013, 135, .	1.2	119
176	Enhancing thermopower and hole mobility in bulk p-type half-Heuslers using full-Heusler nanostructures. Nanoscale, 2013, 5, 9419.	2.8	44
177	Texturation boosts the thermoelectric performance of BiCuSeO oxyselenides. Energy and Environmental Science, 2013, 6, 2916.	15.6	326
178	Sintering and annealing effects on ZnO microstructure and thermoelectric properties. Acta Materialia, 2013, 61, 3314-3323.	3.8	41
179	A Promising Midâ€Temperature Thermoelectric Material Candidate: Pb/Snâ€Codoped In₄Pb_xSn_ySe₃. Advanced Materials, 2013, 25, 4800-4806.	11.1	55
180	Prospects of Thin-Film Thermoelectric Devices for Hot-Spot Cooling and On-Chip Energy Harvesting. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3, 2059-2067.	1.4	41
181	Thermoelectric power factor optimization in PEDOT:PSS tellurium nanowire hybrid composites. Physical Chemistry Chemical Physics, 2013, 15, 4024.	1.3	188
182	Hierarchical Bi2Se3 microrods: microwave-assisted synthesis, growth mechanism and their related properties. CrystEngComm, 2013, 15, 1618.	1.3	40

#	Article	IF	Citations
183	Thermoelectric performance of the ordered In4Se3â€“In composite constructed by monotectic solidification. Journal of Materials Chemistry A, 2013, 1, 8844.	5.2	23
184	Phase morphology effects on the thermoelectric properties of Pb0.25Sn0.25Ge0.5Te. Acta Materialia, 2013, 61, 1499-1507.	3.8	74
185	Facile synthesis of Cu7Te4 nanorods and the enhanced thermoelectric properties of Cu7Te4â€“Bi0.4Sb1.6Te3 nanocomposites. Nano Energy, 2013, 2, 4-11.	8.2	34
186	Composite thermoelectric materials with embedded nanoparticles. Journal of Materials Science, 2013, 48, 2767-2778.	1.7	48
187	Thermal stability and thermoelectric properties of Mg2Si0.4Sn0.6 and Mg2Si0.6Sn0.4. Journal of Materials Science, 2013, 48, 2002-2008.	1.7	26
188	Effects of interface geometry on the thermoelectric properties of laterally microstructured ZnOâ€based thin films. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 119-124.	0.8	6
189	Thermoelectricity in atom-sized junctions at room temperatures. Scientific Reports, 2013, 3, 3326.	1.6	42
190	A transient ballisticâ€“diffusive heat conduction model for heat pulse propagation in nonmetallic crystals. International Journal of Heat and Mass Transfer, 2013, 66, 592-602.	2.5	27
191	Enhanced thermoelectric performance in n-type Bi2Te2.994Cl0.006/In2Te3 composite. Journal of Alloys and Compounds, 2013, 563, 285-288.	2.8	18
192	Reaction evolution and alternating layer formation in Sn/(Bi0.25Sb0.75)2Te3 and Sn/Sb2Te3 couples. Journal of Alloys and Compounds, 2013, 553, 106-112.	2.8	35
193	Fabrication and thermoelectric properties of c-axis oriented nanocrystalline Bi2Sr2Co2Oy thin films. Thin Solid Films, 2013, 534, 168-171.	0.8	2
194	Strong Bounds on Onsager Coefficients and Efficiency for Three-Terminal Thermoelectric Transport in a Magnetic Field. Physical Review Letters, 2013, 110, 070603.	2.9	140
195	Compressive creep behavior of cast Bi2Te3. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 565, 321-325.	2.6	14
196	Organic ligand displacement by metal salts to enhance nanoparticle functionality: thermoelectric properties of Ag2Te. Journal of Materials Chemistry A, 2013, 1, 4864.	5.2	54
197	Progress, Challenges, and Opportunities in Two-Dimensional Materials Beyond Graphene. ACS Nano, 2013, 7, 2898-2926.	7.3	4,062
198	Colloidal synthesis and thermoelectric properties of Cu₂SnSe₃nanocrystals. Journal of Materials Chemistry A, 2013, 1, 1421-1426.	5.2	86
199	Role of Sodium Doping in Lead Chalcogenide Thermoelectrics. Journal of the American Chemical Society, 2013, 135, 4624-4627.	6.6	128
200	Enhanced thermoelectric properties of p-type nanostructured PbTeâ€“MTe (M = Cd, Hg) materials. Energy and Environmental Science, 2013, 6, 1529.	15.6	115

#	Article	IF	Citations
201	Fully Organic Nanocomposites with High Thermoelectric Power Factors by using a Dualâ€Stabilizer Preparation. Energy Technology, 2013, 1, 265-272.	1.8	66
202	Nanoengineering thermoelectrics for 21st century: Energy harvesting and other trends in the field. Renewable and Sustainable Energy Reviews, 2013, 24, 288-305.	8.2	243
203	Clean Energy. Interface Science and Technology, 2013, 19, 279-383.	1.6	12
204	Fabrication by Coaxial-Type Vacuum Arc Evaporation Method and Characterization of Bismuth Telluride Thin Films. Journal of Electronic Materials, 2013, 42, 1814-1819.	1.0	11
205	Ternary and quaternary metal chalcogenide nanocrystals: synthesis, properties and applications. Journal of Materials Chemistry C, 2013, 1, 3756.	2.7	548
206	Beneficial Contribution of Alloy Disorder to Electron and Phonon Transport in Halfâ€Heusler Thermoelectric Materials. Advanced Functional Materials, 2013, 23, 5123-5130.	7.8	349
207	Thermal to Electrical Energy Conversion of Skutterudite-Based Thermoelectric Modules. Journal of Electronic Materials, 2013, 42, 1389-1399.	1.0	69
208	Thermoelectric properties of Zn-doped Ca5In2Sb6. Dalton Transactions, 2013, 42, 9713.	1.6	46
209	Effect of Interfacial Properties on Polymerâ€“Nanocrystal Thermoelectric Transport. Advanced Materials, 2013, 25, 1629-1633.	11.1	219
210	High-Performance Tellurium-Free Thermoelectrics: All-Scale Hierarchical Structuring of p-Type PbSeâ€“MSe Systems (M = Ca, Sr, Ba). Journal of the American Chemical Society, 2013, 135, 5152-5160.	6.6	135
211	Enhancing Seebeck Effects by Using Excited States in Organic Semiconducting Polymer MEH-PPV Based on Multilayer Electrode/Polymer/Electrode Thin-Film Structure. Journal of Physical Chemistry C, 2013, 117, 10264-10269.	1.5	22
212	High Thermoelectric Performance via Hierarchical Compositionally Alloyed Nanostructures. Journal of the American Chemical Society, 2013, 135, 7364-7370.	6.6	344
213	Controlling Metallurgical Phase Separation Reactions of the Ge_{0.87}Pb_{0.13}Te Alloy for High Thermoelectric Performance. Advanced Energy Materials, 2013, 3, 815-820.	10.2	202
214	T-Shaped Bi₂Te₃â€“Te Heteronanojunctions: Epitaxial Growth, Structural Modeling, and Thermoelectric Properties. Journal of Physical Chemistry C, 2013, 117, 12458-12464.	1.5	59
215	Microstructure evolution of sputtered BiSbâ€“Te thermoelectric films during post-annealing and its effects on the thermoelectric properties. Journal of Alloys and Compounds, 2013, 553, 343-349.	2.8	19
216	GaAs nanopillars by self-assembled droplet etching. Journal of Crystal Growth, 2013, 378, 446-449.	0.7	2
217	Large Enhancements of Thermopower and Carrier Mobility in Quantum Dot Engineered Bulk Semiconductors. Journal of the American Chemical Society, 2013, 135, 7486-7495.	6.6	109
218	Vapor Phase Conversion Synthesis of Higher Manganese Silicide (MnSi_{1.75}) Nanowire Arrays for Thermoelectric Applications. Chemistry of Materials, 2013, 25, 632-638.	3.2	35

#	Article	IF	Citations
219	Rational Design of Advanced Thermoelectric Materials. Advanced Energy Materials, 2013, 3, 549-565.	10.2	264
220	Simultaneous increase in electrical conductivity and Seebeck coefficient in highly boron-doped nanocrystalline Si. Nanotechnology, 2013, 24, 205402.	1.3	129
221	Enhanced thermoelectric performance in graphitic ZnO (0001) nanofilms. Journal of Applied Physics, 2013, 113, .	1.1	14
222	The influence of Bi doping in the thermoelectric properties of co-sputtering deposited bismuth antimony telluride thin films. Materials Research Bulletin, 2013, 48, 333-336.	2.7	18
223	Gate-Modulated Thermoelectric Power Factor of Hole Gas in Geâ€“Si Coreâ€“Shell Nanowires. Nano Letters, 2013, 13, 1196-1202.	4.5	69
224	Analysis of Phase Separation in High Performance PbTeâ€“PbS Thermoelectric Materials. Advanced Functional Materials, 2013, 23, 747-757.	7.8	52
225	Thermoelectric properties of single crystal Sc1â^'xErxAs:InGaAs nanocomposites. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	5
226	Homogeneous precipitation synthesis and thermoelectric properties of Ca₂Co₂O₅ceramics. Advances in Applied Ceramics, 2013, 112, 331-336.	0.6	6
227	Attrition-enhanced nanocomposite synthesis of indium-filled, iron-substituted skutterudite antimonides for improved performance thermoelectrics. Materials Research Society Symposia Proceedings, 2013, 1490, 27-32.	0.1	2
228	A new thermoelectric concept using large area PN junctions. Materials Research Society Symposia Proceedings, 2013, 1543, 3-8.	0.1	11
229	Electron and phonon transport in Co-doped FeV0.6Nb0.4Sb half-Heusler thermoelectric materials. Journal of Applied Physics, 2013, 114, 134905.	1.1	54
230	Optimizing thermoelectric power factor by means of a potential barrier. Journal of Applied Physics, 2013, 114, .	1.1	48
231	Alloy enhanced anisotropy in the thermal conductivity of SixGe1â^'x nanowires. Journal of Applied Physics, 2013, 114, .	1.1	18
232	Singleâ€<scp>S</scp>ource Precursorâ€<scp>B</scp>ased Deposition of Sb₂<scp>T</scp>e₃ Films by MOCVD^{**}. Chemical Vapor Deposition, 2013, 19, 235-241.	1.4	32
233	Optimization of the thermoelectric properties of nanostructured silicon. Journal of Applied Physics, 2013, 114, 214507.	1.1	18
234	Phase stability of ScN-based solid solutions for thermoelectric applications from first-principles calculations. Journal of Applied Physics, 2013, 114, 073512.	1.1	30
235	Multi-terminal thermoelectric transport in a magnetic field: bounds on Onsager coefficients and efficiency. New Journal of Physics, 2013, 15, 105003.	1.2	75
236	LOW TEMPERATURE THERMOELECTRIC PROPERTIES AND AGING PHENOMENA OF NANOSTRUCTURED p-TYPEBi_{2-X}Sb_XTe₃(x =) Tj ETQq1 1 0.784314 rgBT	1.1	

#	Article	IF	Citations
237	Integration of ZnO and CuO nanowires into a thermoelectric module. Beilstein Journal of Nanotechnology, 2014, 5, 927-936.	1.5	27
239	Thermal-to-electric energy conversion using ferroelectric film capacitors. Journal of Applied Physics, 2014, 116, 164111.	1.1	0
240	Thermoelectric generators: Linking material properties and systems engineering for waste heat recovery applications. Sustainable Materials and Technologies, 2014, 1-2, 26-35.	1.7	192
241	Reduce thermal conductivity by forming a nano-phononic crystal on a Si slab. Europhysics Letters, 2014, 106, 56002.	0.7	5
242	Band structure engineering through orbital interaction for enhanced thermoelectric power factor. Applied Physics Letters, 2014, 104, .	1.5	64
243	Low lattice thermal conductivity in Pb₅Bi₆Se₁₄, Pb₃Bi₂S₆, and PbBi₂S₄: promising thermoelectric materials in the cannizzarite, lillianite, and galenobismuthite homologous series. Journal of Materials Chemistry A, 2014, 2, 20048-20058.	5.2	59
244	Variations of thermoelectric properties of Mg2.2Si1â^'Snâ^'0.013Sb0.013 materials with different Si/Sn ratios. Journal of Solid State Chemistry, 2014, 220, 157-162.	1.4	5
245	Ballistic thermoelectric transport in structured nanowires. New Journal of Physics, 2014, 16, 065018.	1.2	20
246	Graphene mediated growth of polycrystalline indium phosphide nanowires and monocrystalline-core, polycrystalline-shell silicon nanowires on copper. Journal of Crystal Growth, 2014, 406, 41-47.	0.7	6
247	Workload dependent evaluation of thin-film thermoelectric devices for on-chip cooling and energy harvesting. , 2014, , .		4
248	Enhancing efficiency and power of quantum-dots resonant tunneling thermoelectrics in three-terminal geometry by cooperative effects. Journal of Applied Physics, 2014, 116, .	1.1	41
249	Elastic constants determined by nanoindentation for p-type thermoelectric half-Heusler. Journal of Applied Physics, 2014, 116, .	1.1	19
250	Radial quasiballistic transport in time-domain thermoreflectance studied using Monte Carlo simulations. Applied Physics Letters, 2014, 104, .	1.5	41
251	How much improvement in thermoelectric performance can come from reducing thermal conductivity?. Applied Physics Letters, 2014, 104, .	1.5	21
252	PbTe-based thermoelectric nanocomposites with reduced thermal conductivity by SiC nanodispersion. Applied Physics Letters, 2014, 104, .	1.5	42
253	Optimization of the Telluride Tl_{10â€“xâ€“y}Sn_xBi_yTe₆ for the TherÂmoelectric Energy Conversion. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2014, 640, 774-780.	0.6	12
254	Thermoelectric properties of an N-type siliconâ€“germanium alloy related to the presence of silica nodules dispersed in the microstructure. Scripta Materialia, 2014, 93, 40-43.	2.6	6
255	Thermoelectric properties of indium doped PbTe1-ySey alloys. Journal of Applied Physics, 2014, 116, .	1.1	27

#	Article	IF	Citations
256	High temperature thermoreflectance imaging and transient Harman characterization of thermoelectric energy conversion devices. Journal of Applied Physics, 2014, 116, .	1.1	9
257	Ultrathin GaN nanowires: Electronic, thermal, and thermoelectric properties. Physical Review B, 2014, 89, .	1.1	26
258	Thermal transport along Bi2Te3 topological insulator nanowires. Applied Physics Letters, 2014, 105, .	1.5	16
259	Enhancement of the Seebeck Coefficient in Stacked Bi₂Se₃ Nanoplates by Energy Filtering. European Journal of Inorganic Chemistry, 2014, 2014, 2625-2630.	1.0	4
260	Waste Thermal Energy Harvesting (I): Thermoelectric Effect. Lecture Notes in Energy, 2014, , 263-403.	0.2	5
261	Thermoelectric Materials and Devices. RSC Nanoscience and Nanotechnology, 2014, , 107-141.	0.2	1
262	Synthesis and characterisation of zinc oxide nanoparticles for thermoelectric application. Materials Research Innovations, 2014, 18, S6-350-S6-353.	1.0	10
263	Layered oxychalcogenide in the Biâ€“Cuâ€“Oâ€“Se system as good thermoelectric materials. Semiconductor Science and Technology, 2014, 29, 064001.	1.0	42
264	Nano Bulk Thermoelectrics: Concepts, Techniques, and Modeling. Lecture Notes in Nanoscale Science and Technology, 2014, , 141-183.	0.4	17
265	Electron Transport Engineering by Nanostructures for Efficient Thermoelectrics. Lecture Notes in Nanoscale Science and Technology, 2014, , 41-92.	0.4	3
266	Fineâ€Grained and Nanostructured AgPb_mSbTe_{m+2} Alloys with High Thermoelectric Figure of Merit at Medium Temperature. Advanced Energy Materials, 2014, 4, 1300937.	10.2	38
267	Influence of in situ formed MoSi2 inclusions on the thermoelectrical properties of an N-type siliconâ€“germanium alloy. Acta Materialia, 2014, 64, 429-442.	3.8	36
268	Thermoelectric Enhancement in Polyaniline Composites with Polypyrrole-Functionalized Multiwall Carbon Nanotubes. Journal of Electronic Materials, 2014, 43, 1181-1187.	1.0	19
269	Electric Properties of Semiconductor Nanopillars. Journal of Electronic Materials, 2014, 43, 1972-1975.	1.0	4
270	Transparent aluminium zinc oxide thin films with enhanced thermoelectric properties. Journal of Materials Chemistry A, 2014, 2, 6649-6655.	5.2	97
271	Nanoscale thermal transport. II. 2003â€“2012. Applied Physics Reviews, 2014, 1, 011305.	5.5	1,277
272	Enhanced Thermoelectric Power Factor of Na_xCoO₂ Thin Films by Structural Engineering. Advanced Energy Materials, 2014, 4, 1301927.	10.2	29
273	Silicon nanostructures for thermoelectric devices: A review of the current state of the art. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1235-1249.	0.8	86

#	Article	IF	Citations
274	Applying Quantitative Microstructure Control in Advanced Functional Composites. Advanced Functional Materials, 2014, 24, 2135-2153.	7.8	63
275	Contrasting role of antimony and bismuth dopants on the thermoelectric performance of lead selenide. Nature Communications, 2014, 5, 3640.	5.8	98
276	Inâ€...Situ Studies of Solvothermal Synthesis of Energy Materials. ChemSusChem, 2014, 7, 1594-1611.	3.6	128
277	Enhancement of the Thermoelectric Performance of Polycrystalline In₄Se_{2.5} by Copper Intercalation and Bromine Substitution. Advanced Energy Materials, 2014, 4, 1300599.	10.2	71
278	Decoupling Interrelated Parameters for Designing High Performance Thermoelectric Materials. Accounts of Chemical Research, 2014, 47, 1287-1295.	7.6	122
279	Precipitate morphologies of pseudobinary <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si54.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">Sb</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="normal">Te</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>	3.8	18
280	Evaluation of the Structure and Transport Properties of Nanostructured Antimony Telluride (Sb2Te3). Journal of Electronic Materials, 2014, 43, 1927-1932.	1.0	10
281	Microstructural and vibrational properties of PVT grown Sb2Te3 crystals. Solid State Communications, 2014, 177, 16-19.	0.9	70
282	Power Factor Enhancement by Inhomogeneous Distribution of Dopants in Two-Phase Nanocrystalline Systems. Journal of Electronic Materials, 2014, 43, 1896-1904.	1.0	20
283	BoltzWann: A code for the evaluation of thermoelectric and electronic transport properties with a maximally-localized Wannier functions basis. Computer Physics Communications, 2014, 185, 422-429.	3.0	219
284	Investigation of Seebeck Effect in ZnO Nanowires for Micropower Generation in Autonomous Sensor Systems. Lecture Notes in Electrical Engineering, 2014, , 245-249.	0.3	0
285	Microwave Synthesis of Microstructured and Nanostructured Metal Chalcogenides from Elemental Precursors in Phosphonium Ionic Liquids. Journal of the American Chemical Society, 2014, 136, 15465-15468.	6.6	43
286	Numerical simulation of nanostructured thermoelectric generator considering surface to surrounding convection. International Communications in Heat and Mass Transfer, 2014, 56, 146-151.	2.9	24
287	Thermoelectric infrared microsensors based on a periodically suspended thermopile integrating nanostructured Ge/SiGe quantum dots superlattice. Journal of Applied Physics, 2014, 116, .	1.1	5
288	Hierarchically structured TiO₂ for Ba-filled skutterudite with enhanced thermoelectric performance. Journal of Materials Chemistry A, 2014, 2, 20629-20635.	5.2	50
289	Carbon Nanotube-Based Polymer Composite Thermoelectric Generators. ACS Symposium Series, 2014, , 191-211.	0.5	4
290	Tailoring bismuth telluride nanostructures using a scalable sintering process and their thermoelectric properties. CrystEngComm, 2014, 16, 7956-7962.	1.3	21
291	Thermoelectric performance of multiphase XNiSn (X = Ti, Zr, Hf) half-Heusler alloys. Journal of Materials Chemistry A, 2014, 2, 6107-6114.	5.2	72

#	Article	IF	Citations
292	Thermoelectric voltage measurements of atomic and molecular wires using microheater-embedded mechanically-controllable break junctions. Nanoscale, 2014, 6, 8235-8241.	2.8	33
293	Engineered cation vacancy plane responsible for the reduction in lattice thermal conductivity and improvement in the thermoelectric property of Ga₂Te₃-based semiconductors. RSC Advances, 2014, 4, 34104-34109.	1.7	5
294	Enhancement of thermoelectric power factor in Na_xCoO₂/Au multilayers. RSC Advances, 2014, 4, 57148-57152.	1.7	9
295	Low thermal conductivity and rapid synthesis of n-type cobalt skutterudite via a hydrothermal method. Journal of Materials Chemistry C, 2014, 2, 4213-4220.	2.7	35
296	Changes in the thermoelectric response of vitreous carbon due to the irradiation by Î³-rays. Radiation Effects and Defects in Solids, 2014, 169, 620-627.	0.4	4
297	Unexpected High-Temperature Stability of Î²-Zn₄Sb₃ Opens the Door to Enhanced Thermoelectric Performance. Journal of the American Chemical Society, 2014, 136, 1497-1504.	6.6	115
298	Size- effect induced high thermoelectric figure of merit in PbSe and PbTe nanowires. Physical Chemistry Chemical Physics, 2014, 16, 8114-8118.	1.3	15
299	An ab initio study of the thermoelectric enhancement potential in nano-grained TiNiSn. Physical Chemistry Chemical Physics, 2014, 16, 20023-20029.	1.3	84
300	WS₂ As an Excellent High-Temperature Thermoelectric Material. Chemistry of Materials, 2014, 26, 6628-6637.	3.2	92
301	Strain-assisted, low-temperature synthesis of high-performance thermoelectric materials. Physical Chemistry Chemical Physics, 2014, 16, 3529.	1.3	13
302	Ligand Coupling Symmetry Correlates with Thermopower Enhancement in Small-Molecule/Nanocrystal Hybrid Materials. ACS Nano, 2014, 8, 10528-10536.	7.3	19
303	Gated Si nanowires for large thermoelectric power factors. Applied Physics Letters, 2014, 105, .	1.5	12
304	Thermallyâ€Active Screw Dislocations in Si Nanowires and Nanotubes. Small, 2014, 10, 1756-1760.	5.2	31
305	Microstructural Control and Thermoelectric Properties of Misfit Layered Sulfides (LaS)_{1+m}TS₂ (T = Cr, Nb): The Natural Superlattice Systems. Chemistry of Materials, 2014, 26, 2684-2692.	3.2	39
306	Enhancing the thermoelectric figure of merit through the reduction of bipolar thermal conductivity with heterostructure barriers. Applied Physics Letters, 2014, 105, .	1.5	96
307	Tunable spin Seebeck effect in a double Rashba molecule embedded in an Aharonovâ€“Bohm interferometer. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 63, 311-316.	1.3	7
308	Influence of the MWCNT surface functionalization on the thermoelectric properties of melt-mixed polycarbonate composites. Composites Science and Technology, 2014, 101, 133-138.	3.8	94
309	A High-temperature, High-efficiency Solar Thermoelectric Generator Prototype. Energy Procedia, 2014, 49, 1460-1469.	1.8	60

#	Article	IF	Citations
310	Single-molecule electronics: from chemical design to functional devices. Chemical Society Reviews, 2014, 43, 7378-7411.	18.7	433
311	Site occupations of Zn in AgInSe₂-based chalcopyrites responsible for modified structures and significantly improved thermoelectric performance. RSC Advances, 2014, 4, 33897-33904.	1.7	20
312	Improved thermoelectric power output from multilayered polyethylenimine doped carbon nanotube based organic composites. Journal of Applied Physics, 2014, 115, .	1.1	41
313	The thermoelectric figure of merit for the single electron transistor. International Journal of Thermal Sciences, 2014, 86, 387-393.	2.6	3
314	Electrodeposition from supercritical fluids. Physical Chemistry Chemical Physics, 2014, 16, 9202.	1.3	41
315	Classical Nernst engine. Physical Review Letters, 2014, 112, 140601.	2.9	35
316	Low thermal conductivity of Al-doped ZnO with layered and correlated grains. RSC Advances, 2014, 4, 18370.	1.7	20
317	Indirect measurement of thermal conductivity in silicon nanowires. Journal of Applied Physics, 2014, 115, 084507.	1.1	24
318	Characterization of the thermal conductivity of La0.95Sr0.05CoO3 thermoelectric oxide nanofibers. Nano Research, 2014, 7, 1224-1231.	5.8	6
319	Half-Heusler thermoelectrics: a complex class of materials. Journal of Physics Condensed Matter, 2014, 26, 433201.	0.7	141
320	Composition Modulation of Ag₂Te Nanowires for Tunable Electrical and Thermal Properties. Nano Letters, 2014, 14, 5398-5404.	4.5	80
321	Microstructure of thermoelectric (Bi0.15Sb0.85)2Te3 film. Applied Physics A: Materials Science and Processing, 2014, 117, 1387-1392.	1.1	0
322	Indium Selenides: Structural Characteristics, Synthesis and Their Thermoelectric Performances. Small, 2014, 10, 2747-2765.	5.2	278
323	Thermoelectric transport properties of p-type silver-doped PbS within situAg₂S nanoprecipitates. Journal Physics D: Applied Physics, 2014, 47, 115303.	1.3	26
324	Large thermal biasing of individual gated nanostructures. Nano Research, 2014, 7, 579-587.	5.8	11
325	Thermal conductivity of a single Bi_{0.5}Sb_{1.5}Te₃single-crystalline nanowire. Nanotechnology, 2014, 25, 415704.	1.3	11
326	Galvanically Displaced Ultralong Pb_xSe_yNi_z Hollow Nanofibers with High Thermopower. Chemistry of Materials, 2014, 26, 2557-2566.	3.2	9
327	Controlling the nanostructure of bismuth telluride by selective chemical vapour deposition from a single source precursor. Journal of Materials Chemistry A, 2014, 2, 4865.	5.2	31

#	Article	IF	Citations
328	Preferential growth transformation of Bi0.5Sb1.5Te3 films induced by facile post-annealing process: Enhanced thermoelectric performance with layered structure. Thin Solid Films, 2014, 556, 270-276.	0.8	37
329	Synthesis, SPS processing and low temperature transport properties of polycrystalline FeSb2 with nano-scale grains. Materials Letters, 2014, 122, 289-291.	1.3	11
330	Giant Thermoelectric Effect in Graphene-Based Topological Insulators with Heavy Adatoms and Nanopores. Nano Letters, 2014, 14, 3779-3784.	4.5	89
331	The panoscopic approach to high performance thermoelectrics. Energy and Environmental Science, 2014, 7, 251-268.	15.6	834
332	Point Defect Engineering of Highâ€Performance Bismuthâ€Telluridesâ€Based Thermoelectric Materials. Advanced Functional Materials, 2014, 24, 5211-5218.	7.8	619
333	Thermoelectric Materials: A Brief Historical Survey from Metal Junctions and Inorganic Semiconductors to Organic Polymers. Israel Journal of Chemistry, 2014, 54, 534-552.	1.0	37
334	High Thermoelectric Performance of p-Type SnTe via a Synergistic Band Engineering and Nanostructuring Approach. Journal of the American Chemical Society, 2014, 136, 7006-7017.	6.6	553
335	Facile precipitation of two phase alloys in SnTe0.75Se0.25 with improved power factor. Journal of Alloys and Compounds, 2014, 587, 420-427.	2.8	18
336	A facile dedoping approach for effectively tuning thermoelectricity and acidity of PEDOT:PSS films. Organic Electronics, 2014, 15, 641-645.	1.4	117
337	Thermoelectric Properties of RE5X3(RE=Gd, La, X=Si, Ge). Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2014, 78, 225-229.	0.2	1
338	Simple compound manifests record-high thermoelectric performance. Physics Today, 2014, 67, 14-16.	0.3	20
340	Thermoelectric properties of Au nanoparticleâ€supported Sb_{1.6}<scp>B</scp>i_{0.4}<scp>T</scp>e₃ synthesized by a Î³â€ray irradiation method. Physica Status Solidi (B): Basic Research, 2014, 251, 162-167.	0.7	9
341	Growth and characterization of QDSL (Quantum Dots Superlattices) of metal silicides in an n-doped SiGe matrix for thermoelectric applications. , 2014, , .		2
342	Electronic Transport through Conical Nanosized GaAs Pillars. Materials Research Society Symposia Proceedings, 2015, 1735, 117.	0.1	0
343	Band and scattering tuning for high performance thermoelectric Sn1â^'xMnxTe alloys. Journal of Materiomics, 2015, 1, 307-315.	2.8	193
344	Effect of long- and short-range order on SiGe alloy thermal conductivity: Molecular dynamics simulation. Physical Review B, 2015, 91, .	1.1	12
345	Impeded thermal transport in Si multiscale hierarchical architectures with phononic crystal nanostructures. Physical Review B, 2015, 91, .	1.1	63
346	Nonequilibrium phonon mean free paths in anharmonic chains. Physical Review B, 2015, 92, .	1.1	11

#	Article	IF	Citations
347	Thermal Resistance of Transferred-Silicon-Nanomembrane Interfaces. Physical Review Letters, 2015, 115, 256101.	2.9	28
348	Thermoelectric power factor in nano- to microscale porous composites. Journal of Materials Research, 2015, 30, 2618-2627.	1.2	6
349	Phonon thermoelectric transistors and rectifiers. Physical Review B, 2015, 92, .	1.1	83
350	A Revisit to High Thermoelectric Performance of Single-layer MoS2. Scientific Reports, 2015, 5, 18342.	1.6	154
351	Ab Initio Description of Thermoelectric Properties Based on the Boltzmann Theory. , 2015, , 187-221.		0
352	Ultra-low Thermal Conductivity in Si/Ge Hierarchical Superlattice Nanowire. Scientific Reports, 2015, 5, 16697.	1.6	58
353	Control of Phonon Transport by Phononic Crystals and Application to Thermoelectric Materials. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 555-561.	0.2	0
354	Hierarchical Structures for High-Performance Chalcogenides: From Tellurides to Sulfides. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2015, 79, 538-547.	0.2	0
355	High-entropy alloys as high-temperature thermoelectric materials. Journal of Applied Physics, 2015, 118, .	1.1	105
356	Thermoelectric properties of the 3C, 2H, 4H, and 6H polytypes of the wide-band-gap semiconductors SiC, GaN, and ZnO. AIP Advances, 2015, 5, .	0.6	17
357	Effects of chemical intermixing on electrical and thermal contact conductances at metallized bismuth and antimony telluride interfaces. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	8
358	Imaging thermal conductivity with nanoscale resolution using a scanning spin probe. Nature Communications, 2015, 6, 8954.	5.8	74
359	Enhanced interfacial thermal transport in pnictogen tellurides metallized with a lead-free solder alloy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	5
360	Effects of Temperature-Dependent Material Properties on Temperature Variation in a Thermoelement. Journal of Electronic Materials, 2015, 44, 3612-3620.	1.0	16
361	Geometry Effects on the Phonon-Drag Contribution to Thermopower in a Coupled-Quantum-Well System at Low Temperature. Journal of Low Temperature Physics, 2015, 181, 160-170.	0.6	2
362	On Intensifying Carrier Impurity Scattering to Enhance Thermoelectric Performance in Crâ€Doped Ce_yCo₄Sb₁₂. Advanced Functional Materials, 2015, 25, 6660-6670.	7.8	77
363	Simultaneous Enhancement of Electrical Conductivity and Thermopower of Bi₂Te₃ by Multifunctionality of Native Defects. Advanced Materials, 2015, 27, 3681-3686.	11.1	97
364	Hydrothermal Synthesis Au-Bi2Te3 Nanocomposite Thermoelectric Film with a Hierarchical Sub-Micron Antireflection Quasi-Periodic Structure. International Journal of Molecular Sciences, 2015, 16, 12547-12559.	1.8	4

#	Article	IF	Citations
365	Enhanced Thermoelectric Performance in PbTeâ€“PbS Nanocomposites. Energy Harvesting and Systems, 2015, 2, 55-62.	1.7	1
366	Multi-Enhanced-Phonon Scattering Modes in Ln-Me-A Sites co-substituted LnMeA11O19 Ceramics. Scientific Reports, 2014, 4, 6823.	1.6	20
367	Band engineering via biaxial strain for enhanced thermoelectric performance in stannite-type Cu₂ZnSnSe₄. RSC Advances, 2015, 5, 24908-24914.	1.7	13
368	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. Nanoscale and Microscale Thermophysical Engineering, 2015, 19, 127-165.	1.4	69
369	Universal features of phonon transport in nanowires with correlated surface roughness. Applied Physics Letters, 2015, 106, .	1.5	43
370	High thermoelectric performance of all-oxide heterostructures with carrier double-barrier filtering effect. NPG Asia Materials, 2015, 7, e182-e182.	3.8	32
371	Thermoelectric effects in graphene nanostructures. Journal of Physics Condensed Matter, 2015, 27, 133204.	0.7	137
372	Grain size effect on electrical resistivity of bulk nanograined Bi2Te3 material. Materials Characterization, 2015, 99, 175-179.	1.9	32
373	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.	5.2	176
374	The role of nanoscale defect features in enhancing the thermoelectric performance of p-type nanostructured SiGe alloys. Nanoscale, 2015, 7, 12474-12483.	2.8	83
375	Thermal phonon transport in silicon nanowires and two-dimensional phononic crystal nanostructures. Applied Physics Letters, 2015, 106, .	1.5	61
376	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
377	A new generation of alloyed/multimetal chalcogenide nanowires by chemical transformation. Science Advances, 2015, 1, e1500714.	4.7	57
378	Prospects for thermoelectricity in quantum dot hybrid arrays. Nature Nanotechnology, 2015, 10, 997-1001.	15.6	59
379	High thermoelectric performance in graphene nanoribbons by graphene/BN interface engineering. Nanotechnology, 2015, 26, 495202.	1.3	41
380	Design and fabrication of energetic superlattice like-PTFE/Al with superior performance and application in functional micro-initiator. Nano Energy, 2015, 12, 597-605.	8.2	83
381	Controlling the Size, Shape, Phase, Band Gap, and Localized Surface Plasmon Resonance of Cu_{2â€“x}S and Cu_xIn_yS Nanocrystals. Chemistry of Materials, 2015, 27, 1786-1791.	3.2	71
382	Giant enhancement in thermoelectric performance of copper selenide by incorporation of different nanoscale dimensional defect features. Nano Energy, 2015, 13, 36-46.	8.2	158

#	Article	IF	Citations
383	The Effects of Te^{2â˜’} and I^{â˜’} Substitutions on the Electronic Structures, Thermoelectric Performance, and Hardness in Meltâ€Quenched Highly Dense Cu_{2â€x}Se. Advanced Electronic Materials, 2015, 1, 1400015.	2.6	51
384	Quantum Thermopower of Metallic Atomic-Size Contacts at Room Temperature. Nano Letters, 2015, 15, 1006-1011.	4.5	39
385	One-Step Chemical Synthesis of ZnO/Graphene Oxide Molecular Hybrids for High-Temperature Thermoelectric Applications. ACS Applied Materials & Interfaces, 2015, 7, 3224-3230.	4.0	59
386	Current progress and future challenges in thermoelectric power generation: From materials to devices. Acta Materialia, 2015, 87, 357-376.	3.8	447
387	Improved Thermoelectric Performance of Silver Nanoparticlesâ€Dispersed Bi₂Te₃ Composites Deriving from Hierarchical Twoâ€Phased Heterostructure. Advanced Functional Materials, 2015, 25, 966-976.	7.8	243
388	Thermal conductivity of ordered-disordered material: a case study of superionic Ag₂Te. Nanotechnology, 2015, 26, 025702.	1.3	27
389	Synthesis and Characterization of Melt-Spun Metastable Al6Ge5. Journal of Electronic Materials, 2015, 44, 948-952.	1.0	4
390	A way of achieving a low $/W and a decent power output from a thermoelectric device. Applied Energy, 2015, 139, 205-211.	5.1	12
391	Tuning phonon properties in thermoelectric materials. Reports on Progress in Physics, 2015, 78, 026501.	8.1	18
392	Transmission Electron Microscopy Study of Mg2Si0.5Sn0.5 Solid Solution for High-Performance Thermoelectrics. Journal of Electronic Materials, 2015, 44, 407-413.	1.0	12
393	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.	1.6	83
394	Prospects of Nanoscience with Nanocrystals. ACS Nano, 2015, 9, 1012-1057.	7.3	1,005
395	High Thermoelectric Performance of a Heterogeneous PbTe Nanocomposite. Chemistry of Materials, 2015, 27, 944-949.	3.2	102
396	Enhanced Thermoelectric Properties in Bulk Nanowire Heterostructure-Based Nanocomposites through Minority Carrier Blocking. Nano Letters, 2015, 15, 1349-1355.	4.5	118
397	Flexible thermoelectric fabrics based on self-assembled tellurium nanorods with a large power factor. Physical Chemistry Chemical Physics, 2015, 17, 8591-8595.	1.3	105
398	Atomistic mechanisms governing structural stability change of zinc antimony thermoelectrics. Applied Physics Letters, 2015, 106, 013904.	1.5	8
399	Performance and mass optimization of thermoelectric microcoolers. International Journal of Thermal Sciences, 2015, 97, 143-151.	2.6	17
400	Effects of additions of carbon nanotubes on the thermoelectric properties of Ni0.05Mo3Sb5.4Te1.6. Journal of Solid State Chemistry, 2015, 226, 164-169.	1.4	20

#	Article	IF	Citations
401	High-performance thermoelectric Cu2Se nanoplates through nanostructure engineering. Nano Energy, 2015, 16, 367-374.	8.2	218
402	Van der Waals epitaxial MOCVD-growth of (Bi_{<i>x</i>}Sb_{1â^'<i>x</i>})₂Te₃(0 <<i>x</i>< 1) films. Semiconductor Science and Technology, 2015, 30, 085021.	1.0	15
403	Quenching rattling modes in skutterudites with pressure. Physical Review B, 2015, 91, .	1.1	15
404	Low-Dimensional Transport and Large Thermoelectric Power Factors in Bulk Semiconductors by Band Engineering of Highly Directional Electronic States. Physical Review Letters, 2015, 114, 136601.	2.9	182
405	Effect of extended strain fields on point defect phonon scattering in thermoelectric materials. Physical Chemistry Chemical Physics, 2015, 17, 19410-19423.	1.3	55
406	Flexible thermoelectric materials and device optimization for wearable energy harvesting. Journal of Materials Chemistry C, 2015, 3, 10362-10374.	2.7	518
407	Electromagnetic induction by ferrofluid in an oscillating heat pipe. Applied Physics Letters, 2015, 106, .	1.5	20
408	Phonon wave interference and thermal bandgap materials. Nature Materials, 2015, 14, 667-674.	13.3	239
409	Novel layout of a bi-metallic nanoring for magnetic field pulse generation from light. New Journal of Physics, 2015, 17, 013049.	1.2	7
410	Effects of ball milling on microstructures and thermoelectric properties of higher manganese silicides. Journal of Alloys and Compounds, 2015, 641, 30-36.	2.8	50
411	State of the art Ag50-Sb Se50-Te alloys: Their high zT values, microstructures and related phase equilibria. Acta Materialia, 2015, 93, 38-45.	3.8	21
412	Synthesis and Characterization of Nanostructured Stannite Cu₂ZnSnSe₄ and Ag₂ZnSnSe₄ for Thermoelectric Applications. ACS Applied Materials & Interfaces, 2015, 7, 9752-9757.	4.0	57
413	Size dependence of thermoelectric power of Au nanoclusters with rough and smooth surface deposited onto highly oriented pyrolytic graphite. Applied Surface Science, 2015, 336, 359-363.	3.1	10
414	Performance analysis of a thermoelectric cooler with a corrugated architecture. Applied Energy, 2015, 147, 184-191.	5.1	41
415	Nanostructuring of Undoped ZnSb by Cryo-Milling. Journal of Electronic Materials, 2015, 44, 2578-2584.	1.0	17
416	Prospects of low-dimensional and nanostructured silicon-based thermoelectric materials: findings from theory and simulation. European Physical Journal B, 2015, 88, 1.	0.6	16
417	Effect of grain size on thermal transport in post-annealed antimony telluride thin films. Nanoscale Research Letters, 2015, 10, 20.	3.1	29
418	Thermoelectric properties of Ge doped n-type Ti_xZr_{1â^'x}NiSn_{0.975}Ge_{0.025}half-Heusler alloys. Journal of Materials Chemistry A, 2015, 3, 12507-12514.	5.2	26

#	Article	IF	Citations
419	Development of n-type cobaltocene-encapsulated carbon nanotubes with remarkable thermoelectric property. Scientific Reports, 2015, 5, 7951.	1.6	159
420	Processingâ€“Structureâ€“Property Relationships in Laser-Annealed PbSe Nanocrystal Thin Films. ACS Nano, 2015, 9, 4096-4102.	7.3	8
421	Thermal transport in free-standing silicon membranes: influence of dimensional reduction and surface nanostructures. European Physical Journal B, 2015, 88, 1.	0.6	27
422	Thermoelectric performance of p-type nanohybrids filled polymer composites. Nano Energy, 2015, 13, 327-335.	8.2	51
423	Nanostructured Thin Films of Thermoelectric Oxides. , 2015, , 123-155.		2
424	Quenched Phonon Drag in Silicon Nanowires Reveals Significant Effect in the Bulk at Room Temperature. Nano Letters, 2015, 15, 3159-3165.	4.5	32
425	Tuning Thermal Transport in Ultrathin Silicon Membranes by Surface Nanoscale Engineering. ACS Nano, 2015, 9, 3820-3828.	7.3	104
427	Synthesis, Structure, Thermoelectric Properties, and Band Gaps of Alkali Metal Containing Type I Clathrates: A₈Ga₈Si₃₈ (A = K, Rb, Cs) and K₈Al₈Si₃₈. Chemistry of Materials, 2015, 27, 2812-2820.	3.2	37
428	Superassembling of Bi₂Te₃hierarchical nanostructures for enhanced thermoelectric performance. Journal of Materials Chemistry A, 2015, 3, 10459-10465.	5.2	12
429	Thermoelectric power factor: Enhancement mechanisms and strategies for higher performance thermoelectric materials. Materials Science and Engineering Reports, 2015, 97, 1-22.	14.8	311
430	Sizeâ€dependent evolution of phonon confinement in colloidal Si nanoparticles. Journal of Raman Spectroscopy, 2015, 46, 1110-1116.	1.2	9
431	Morphological effects on the thermoelectric properties of Ti_{0.3}Zr_{0.35}Hf_{0.35}Ni_{1+Î´}Sn alloys following phase separation. Journal of Materials Chemistry C, 2015, 3, 11653-11659.	2.7	71
432	Panoscopically optimized thermoelectric performance of a half-Heusler/full-Heusler based in situ bulk composite Zr_{0.7}Hf_{0.3}Ni_{1+x}Sn: an energy and time efficient way. Physical Chemistry Chemical Physics, 2015, 17, 30090-30101.	1.3	35
433	Thermoelectric properties of single-layered SnSe sheet. Nanoscale, 2015, 7, 15962-15970.	2.8	256
434	First-principles study on lattice thermal conductivity of thermoelectrics HgTe in different phases. Journal of Applied Physics, 2015, 117, .	1.1	16
435	Enhanced thermoelectric power factor of Re-substituted higher manganese silicides with small islands of MnSi secondary phase. Journal of Materials Chemistry C, 2015, 3, 10500-10508.	2.7	44
436	Revisited phonon assignment and electro-mechanical properties of chromium disilicide. RSC Advances, 2015, 5, 19106-19116.	1.7	18
437	Thermal Cycling Behavior of Zinc Antimonide Thin Films for High Temperature Thermoelectric Power Generation Applications. ACS Applied Materials & Interfaces, 2015, 7, 17866-17873.	4.0	3

#	Article	IF	Citations
438	Hydrogenated nanocrystalline silicon thin films with promising thermoelectric properties. Applied Physics A: Materials Science and Processing, 2015, 120, 1497-1502.	1.1	11
439	Structural and compositional characterization of Bi1â^'Sb nanowire arrays grown by pulsed deposition to improve growth uniformity. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 668-674.	0.6	9
440	Enhanced average thermoelectric figure of merit of n-type PbTe_{1â^'x}I_xâ€“MgTe. Journal of Materials Chemistry C, 2015, 3, 10401-10408.	2.7	61
441	Thermal conductivity reduction by isoelectronic elements V and Ta for partial substitution of Nb in half-Heusler Nb_{(1â^'x)/2}V_{(1â^'x)/2}Ta_xCoSb. RSC Advances, 2015, 5, 102469-102476.	1.7	24
442	Chemical vapour deposition of antimony chalcogenides with positional and orientational control: precursor design and substrate selectivity. Journal of Materials Chemistry C, 2015, 3, 423-430.	2.7	46
443	Glassâ€Like Thermal Conductivity of (010)â€Textured Lanthanumâ€Doped Strontium Niobate Synthesized with Wet Chemical Deposition. Journal of the American Ceramic Society, 2015, 98, 624-628.	1.9	4
444	Connecting the Particles in the Box - Controlled Fusion of Hexamer Nanocrystal Clusters within an AB6 Binary Nanocrystal Superlattice. Scientific Reports, 2014, 4, 6731.	1.6	13
445	Nano-crystalline Agâ€“PbTe thermoelectric thin films by a multi-target PLD system. Applied Surface Science, 2015, 336, 283-289.	3.1	21
446	Material descriptors for predicting thermoelectric performance. Energy and Environmental Science, 2015, 8, 983-994.	15.6	241
447	High Performance Oxides-Based Thermoelectric Materials. Jom, 2015, 67, 211-221.	0.9	71
448	Multiple heteroatom induced carrier engineering and hierarchical nanostructures for high thermoelectric performance of polycrystalline In₄Se_{2.5}. Journal of Materials Chemistry A, 2015, 3, 1251-1257.	5.2	38
449	Learning from Nature: Binary Cooperative Complementary Nanomaterials. Small, 2015, 11, 1072-1096.	5.2	88
450	Crystal structure, microstructure, and thermoelectric properties of GeSb6Te10 prepared by spark plasma sintering. Journal of Alloys and Compounds, 2015, 618, 463-468.	2.8	18
451	Influence of Oxygen Partial Pressure during Processing on the Thermoelectric Properties of Aerosol-Deposited CuFeO2. Materials, 2016, 9, 227.	1.3	24
452	Electronic Structures and Thermoelectric Properties of Two-Dimensional MoS2/MoSe2 Heterostructures. Chinese Journal of Chemical Physics, 2016, 29, 445-452.	0.6	9
453	Investigation into the extremely low thermal conductivity in Ba heavily doped BiCuSeO. Nano Energy, 2016, 27, 167-174.	8.2	40
454	Harnessing Topological Band Effects in Bismuth Telluride Selenide for Large Enhancements in Thermoelectric Properties through Isovalent Doping. Advanced Materials, 2016, 28, 6436-6441.	11.1	44
455	Thermoelectric Enhancement of Different Kinds of Metal Chalcogenides. Advanced Energy Materials, 2016, 6, 1600498.	10.2	145

#	Article	IF	Citations
456	Toward Highâ€Thermoelectricâ€Performance Largeâ€Size Nanostructured BiSbTe Alloys via Optimization of Sinteringâ€Temperature Distribution. Advanced Energy Materials, 2016, 6, 1600595.	10.2	51
457	Outstanding Low Temperature Thermoelectric Power Factor from Completely Organic Thin Films Enabled by Multidimensional Conjugated Nanomaterials. Advanced Energy Materials, 2016, 6, 1502168.	10.2	239
458	Utilization of the Antiferromagnetic IrMn Electrode in Spin Thermoelectric Devices and Their Beneficial Hybrid for Thermopiles. Advanced Functional Materials, 2016, 26, 5507-5514.	7.8	21
459	Multiple Converged Conduction Bands in K₂Bi₈Se₁₃: A Promising Thermoelectric Material with Extremely Low Thermal Conductivity. Journal of the American Chemical Society, 2016, 138, 16364-16371.	6.6	130
460	Synthesis of Bi₂Te₃and (Bi_xSb_{1â^'x})₂Te₃nanoparticles using the novel IL [C₄mim]₃[Bi₃I₁₂]. Dalton Transactions, 2016, 45, 15326-15335.	1.6	28
462	Chapter 4 All-Scale Hierarchical PbTe. , 2016, , 125-158.		4
463	Study on the contact resistance of various metals (Au, Ti, and Sb) on Biâ€“Te and Sbâ€“Te thermoelectric films. Japanese Journal of Applied Physics, 2016, 55, 06JE03.	0.8	5
464	Thermal transport size effects in silicon membranes featuring nanopillars as local resonators. Applied Physics Letters, 2016, 108, .	1.5	42
465	Thermal Conductivity and Thermoelectric Power of Semiconductors. , 2016, , .		6
466	Impact of contact couplings on thermoelectric properties of anti, Fano, and Breit-Wigner resonant junctions. Journal of Applied Physics, 2016, 120, 184303.	1.1	12
467	Field-effect modulation of the thermoelectric characteristics of silicon nanowires on plastic substrates. Nanotechnology, 2016, 27, 485401.	1.3	1
468	Classification of Valleytronics in Thermoelectricity. Scientific Reports, 2016, 6, 22724.	1.6	40
469	Thermoelectric properties of semiconductor-metal composites produced by particle blending. APL Materials, 2016, 4, .	2.2	50
470	Enhancement of thermoelectric properties by energy filtering: Theoretical potential and experimental reality in nanostructured ZnSb. Journal of Applied Physics, 2016, 119, .	1.1	31
471	Solar thermoelectricity via advanced latent heat storage. AIP Conference Proceedings, 2016, , .	0.3	7
472	Alternative Precursors for the Synthesis of Binary Sb₂E₃ and Bi₂E₃ (E = S, Se, Te) Nanoparticles by the Hot Injection Method. European Journal of Inorganic Chemistry, 2016, 2016, 3673-3679.	1.0	8
473	Enhanced ZT of In_xCo₄Sb₁₂â€“InSb Nanocomposites Fabricated by Hydrothermal Synthesis Combined with Solidâ€“Vapor Reaction: A Signature of Phonon-Glass and Electron-Crystal Materials. ACS Applied Materials & Interfaces, 2016, 8, 35123-35131.	4.0	34
474	Research Update: Oxide thermoelectrics: Beyond the conventional design rules. APL Materials, 2016, 4, .	2.2	23

#	Article	IF	Citations
475	Research Update: Prediction of high figure of merit plateau in SnS and solid solution of (Pb,Sn)S. APL Materials, 2016, 4, .	2.2	29
476	Thermal conduction in Si and SiGe phononic crystals explained by phonon mean free path spectrum. Applied Physics Letters, 2016, 109, .	1.5	22
477	Control of Phonon Transport by Phononic Crystals and Application to Thermoelectric Materials. Materials Transactions, 2016, 57, 1022-1028.	0.4	2
478	Recent advances in 2D thermoelectric materials. Proceedings of SPIE, 2016, , .	0.8	4
479	Effect of spark plasma sintering conditions on the thermoelectric properties of (Bi0.25Sb0.75)2Te3 alloys. Journal of Alloys and Compounds, 2016, 678, 396-402.	2.8	25
480	Thermoelectric properties of Ni-doped BaSi₂. Functional Materials Letters, 2016, 09, 1650017.	0.7	5
481	Thermoelectric properties of PEDOT nanowire/PEDOT hybrids. Nanoscale, 2016, 8, 8033-8041.	2.8	88
482	Deposition of thermoelectric strontium hexaboride thin films by a low pressure CVD method. Journal of Crystal Growth, 2016, 449, 10-14.	0.7	22
483	Doping in controlling the type of conductivity in bulk and nanostructured thermoelectric materials. Journal of Solid State Chemistry, 2016, 240, 91-100.	1.4	8
484	Enhanced thermoelectric performance of chalcogenide Cu 2 CdSnSe 4 by ex-situ homogeneous nanoinclusions. Journal of Materiomics, 2016, 2, 179-186.	2.8	14
485	Chemical Pressure Schemes for the Prediction of Soft Phonon Modes: A Chemistâ€™s Guide to the Vibrations of Solid State Materials. Chemistry of Materials, 2016, 28, 3171-3183.	3.2	42
486	Enhanced thermoelectric properties of topological crystalline insulator PbSnTe nanowires grown by vapor transport. Nano Research, 2016, 9, 820-830.	5.8	22
488	Magnetic Ions Fully Substituted Wide Band-Gap Semiconductor Nanocrystals for Decoupled Optimization of Thermoelectric Properties. Springer Theses, 2016, , 91-102.	0.0	0
489	Pronounced effect of ZnTe nanoinclusions on thermoelectric properties of Cu2â^'x Se chalcogenides. Science China Materials, 2016, 59, 135-143.	3.5	17
490	Computational Prediction of High Thermoelectric Performance in Hole Doped Layered GeSe. Chemistry of Materials, 2016, 28, 3218-3226.	3.2	129
491	Carrier Scattering at Alloy Nanointerfaces Enhances Power Factor in PEDOT:PSS Hybrid Thermoelectrics. Nano Letters, 2016, 16, 3352-3359.	4.5	93
492	Solvothermally synthesized SnS nanorods with high carrier mobility leading to thermoelectric enhancement. RSC Advances, 2016, 6, 43985-43988.	1.7	21
493	Measuring methods for thermoelectric properties of one-dimensional nanostructural materials. RSC Advances, 2016, 6, 48933-48961.	1.7	14

#	Article	IF	Citations
494	Analysis and Implications of Structural Complexity in Low Lattice Thermal Conductivity High Thermoelectric Performance PbTeâ€“PbSnS₂ Composites. Chemistry of Materials, 2016, 28, 3771-3777.	3.2	7
495	Template-based syntheses for shape controlled nanostructures. Advances in Colloid and Interface Science, 2016, 234, 51-79.	7.0	108
496	Organically directed heterometallic chalcogenidometalates containing group 12(II)/13(III)/14(IV) metal ions and antimony(III). Coordination Chemistry Reviews, 2016, 322, 41-68.	9.5	61
497	Nonlinear phenomena in quantum thermoelectrics and heat. Comptes Rendus Physique, 2016, 17, 1060-1071.	0.3	55
498	Vanadium-free colusites Cu₂₆A₂Sn₆S₃₂(A = Nb, Ta) for environmentally friendly thermoelectrics. Journal of Materials Chemistry A, 2016, 4, 15207-15214.	5.2	58
499	Thermal phonon transport in Si thin film with dog-leg shaped asymmetric nanostructures. Japanese Journal of Applied Physics, 2016, 55, 085201.	0.8	5
500	An explanation of the Al2O3 nanofluid thermal conductivity based on the phonon theory of liquid. Energy, 2016, 116, 786-794.	4.5	101
501	Thermoelectric transport properties of high mobility organic semiconductors. Proceedings of SPIE, 2016, , .	0.8	2
502	Linear and nonlinear mesoscopic thermoelectric transport with coupling with heat baths. Comptes Rendus Physique, 2016, 17, 1047-1059.	0.3	28
503	Lead-free AgSn4SbTe6 nanocomposites with enhanced thermoelectric properties by SiC nanodispersion. Journal of Alloys and Compounds, 2016, 687, 246-251.	2.8	12
504	Enhanced thermoelectric performance of nanostructured CNTs/BiSbTe bulk composite from rapid pressure-quenching induced multi-scale microstructure. Journal of Materiomics, 2016, 2, 316-323.	2.8	23
505	Solid solution Pb_{1â^'x}Eu_xTe: constitution and thermoelectric behavior. Inorganic Chemistry Frontiers, 2016, 3, 1152-1159.	3.0	17
506	Lead-free tin chalcogenide thermoelectric materials. Inorganic Chemistry Frontiers, 2016, 3, 1449-1463.	3.0	42
507	Phase diagram of ternary Cu-Ga-Te system and thermoelectric properties of chalcopyrite CuGaTe2 materials. Acta Materialia, 2016, 118, 331-341.	3.8	13
508	Simultaneous improvement in electrical and thermal properties of interface-engineered BiSbTe nanostructured thermoelectric materials. Journal of Alloys and Compounds, 2016, 689, 899-907.	2.8	39
509	Foldable Thermoelectric Materials: Improvement of the Thermoelectric Performance of Directly Spun CNT Webs by Individual Control of Electrical and Thermal Conductivity. ACS Applied Materials & Interfaces, 2016, 8, 22142-22150.	4.0	80
510	Paper Thermoelectrics: Merging Nanotechnology with Naturally Abundant Fibrous Material. ACS Applied Materials & Interfaces, 2016, 8, 22182-22189.	4.0	23
511	Enhancing the thermoelectric performance of nanosized CoSb₃via short-range percolation of electrically conductive WTe₂ inclusions. Journal of Materials Chemistry A, 2016, 4, 13874-13880.	5.2	38

#	Article	IF	Citations
512	Role of chemically and thermally induced crystal lattice distortion in enhancing the Seebeck coefficient in complex tellurides. CrystEngComm, 2016, 18, 6632-6639.	1.3	2
513	New Insights into Intrinsic Point Defects in V₂VI₃ Thermoelectric Materials. Advanced Science, 2016, 3, 1600004.	5.6	317
514	Siliconâ€based nanocomposites for thermoelectric application. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 497-514.	0.8	21
515	A chemists view: Metal oxides with adaptive structures for thermoelectric applications. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 808-823.	0.8	54
516	Simultaneous enhancement in the power factor and thermoelectric performance of copper sulfide by In₂S₃ doping. Journal of Materials Chemistry A, 2016, 4, 12624-12629.	5.2	40
517	Electronic Structure and Transport Properties of Doped Lead Chalcogenides from First Principles. MRS Advances, 2016, 1, 4003-4010.	0.5	1
518	Rationally Designing High-Performance Bulk Thermoelectric Materials. Chemical Reviews, 2016, 116, 12123-12149.	23.0	1,624
519	Seebeck Coefficient Enhancement of ALD PbTe/PbSe Nanolaminate Structures Deposited inside Porous Silicon Templates. ECS Journal of Solid State Science and Technology, 2016, 5, P503-P508.	0.9	9
520	Nanostructure-enabled significant thermal transport enhancement across solid interfaces. , 2016, , .		0
521	Systhesizing SnTe nanocrystals leading to thermoelectric performance enhancement via an ultra-fast microwave hydrothermal method. Nano Energy, 2016, 28, 78-86.	8.2	79
522	Assembling Ï€-Conjugated Molecules with Negative Gaussian Curvature for Efficient Carbon-Based Metal-Free Thermoelectric Material. Journal of Physical Chemistry C, 2016, 120, 27829-27833.	1.5	7
523	Promising bulk nanostructured Cu₂Se thermoelectrics via high throughput and rapid chemical synthesis. RSC Advances, 2016, 6, 111457-111464.	1.7	38
524	Room temperature synthesis of fluorescent band gap tunable Cu 1 In 1â^'x Ga x Se 2.5 nanocrystals. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 509, 182-189.	2.3	7
525	Minimized thermal conductivity in highly stable thermal barrier W/ZrO2 multilayers. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	4
526	Solvent-free Fabrication of Carbon Nanotube/Resin Composite for Printable Thermoelectric Device. Chemistry Letters, 2016, 45, 875-877.	0.7	2
528	Efficiency bounds on thermoelectric transport in magnetic fields: The role of inelastic processes. Physical Review B, 2016, 94, .	1.1	43
529	Temperature-dependent thermal conductivity in silicon nanostructured materials studied by the Boltzmann transport equation. Physical Review B, 2016, 93, .	1.1	44
530	Spectral energy analysis of locally resonant nanophononic metamaterials by molecular simulations. Physical Review B, 2016, 93, .	1.1	50

#	Article	IF	Citations
531	Broadband phonon scattering in PbTe-based materials driven near ferroelectric phase transition by strain or alloying. Physical Review B, 2016, 93, .	1.1	28
532	Minority carrier blocking to enhance the thermoelectric figure of merit in narrow-band-gap semiconductors. Physical Review B, 2016, 93, .	1.1	85
533	Charge carrier effective mass and concentration derived from combination of Seebeck coefficient and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Te</mml:mi><mml:mprescripts /><mml:none /><mml:mn>125</mml:mn></mml:mmultiscripts></mml:math>NMR measurements in complex tellurides. Physical Review B, 2016, 93, .	1.1	23
535	A review on nanostructures of high-temperature thermoelectric materials for waste heat recovery. Renewable and Sustainable Energy Reviews, 2016, 64, 635-659.	8.2	251
536	Cross-plane thermal conductivity of (Ti,W)N/(Al,Sc)N metal/semiconductor superlattices. Physical Review B, 2016, 93, .	1.1	64
537	The first-principle study of the electronic, optical and thermoelectric properties of XTiO3 (X = Ca,ÂSr) Tj ETQq1 1 0.784314 rgBT /Ove	1.0	50
538	Organic thermoelectric materials for energy harvesting and temperature control. Nature Reviews Materials, 2016, 1, .	23.3	927
539	High-performance shape-engineerable thermoelectric painting. Nature Communications, 2016, 7, 13403.	5.8	122
540	Giant thermoelectric figure of merit in a noninteracting quantum dot system with massless Dirac fermions. Physical Review B, 2016, 94, .	1.1	1
541	Non-equilibrium processing leads to record high thermoelectric figure of merit in PbTeâ€“SrTe. Nature Communications, 2016, 7, 12167.	5.8	498
542	Enhanced thermoelectric properties of SnSe polycrystals via texture control. Physical Chemistry Chemical Physics, 2016, 18, 31821-31827.	1.3	53
543	In situ electrical modulation and monitoring of nanoporous gold morphology. Nanoscale, 2016, 8, 19551-19556.	2.8	12
544	Nanoscale arrays of antimony telluride single crystals by selective chemical vapor deposition. Scientific Reports, 2016, 6, 27593.	1.6	15
546	High-performance thermoelectric nanocomposites from nanocrystal building blocks. Nature Communications, 2016, 7, 10766.	5.8	224
547	Extraordinary Off-Stoichiometric Bismuth Telluride for Enhanced n-Type Thermoelectric Power Factor. Journal of the American Chemical Society, 2016, 138, 14458-14468.	6.6	85
548	Thermoelectric properties of copper chalcogenide alloys deposited via the solution-phase using a thiolâ€“amine solvent mixture. RSC Advances, 2016, 6, 99905-99913.	1.7	25
549	Thermoelectric transport through Majorana bound states and violation of Wiedemann-Franz law. Physical Review B, 2016, 94, .	1.1	27
550	Enhanced thermoelectric performance of solution-derived bismuth telluride based nanocomposites via liquid-phase Sintering. Nano Energy, 2016, 30, 630-638.	8.2	78

#	Article	IF	Citations
551	Optimizing phonon scattering by nanoprecipitates in lead chalcogenides. Applied Physics Letters, 2016, 108, 113901.	1.5	6
552	Minimum Thermal Conductivity in Weak Topological Insulators with Bismuthâ€Based Stack Structure. Advanced Functional Materials, 2016, 26, 5360-5367.	7.8	29
553	High Hole Mobility in Longâ€Range Ordered 2D Lead Sulfide Nanocrystal Monolayer Films. Advanced Functional Materials, 2016, 26, 5182-5188.	7.8	25
554	Thermoelectric Properties of Ni_{0.05}Mo₃Sb_{5.4}Te_{1.6} with Embedded SiC and Al₂O₃ Nanoparticles. European Journal of Inorganic Chemistry, 2016, 2016, 853-860.	1.0	9
555	Electronic structure and thermoelectric properties of (Mg2X)2 / (Mg2Y)2 (X, Y = Si, Ge, Sn) superlattices from first-principle calculations. European Physical Journal B, 2016, 89, 1.	0.6	4
556	Manipulating the temperature dependence of the thermal conductivity of graphene phononic crystal. Nanotechnology, 2016, 27, 265702.	1.3	32
557	Analysis of combined solar photovoltaic-nanostructured thermoelectric generator system. International Journal of Green Energy, 2016, 13, 1175-1184.	2.1	4
558	Thermoelectric properties of stannite-phase CuZn₂AS₄ (CZAS; A=Al, Ga and In) nanocrystals for solar energy conversion applications. Philosophical Magazine, 2016, 96, 2280-2299.	0.7	16
559	Predicted thermoelectric properties of natural superlattice structural compounds BaCu Ch F (Ch Â=ÂS,) Tj ETQq0 0 0 rgBT /Overlock 10	2.8	12
560	Thermoelectric properties of p-type Ag1â^'(Pb1â^'Sn) Sb1â^'Te+2. Journal of Solid State Chemistry, 2016, 242, 34-42.	1.4	6
561	CNT-grafted glass fibers as a smart tool for epoxy cure monitoring, UV-sensing and thermal energy harvesting in model composites. RSC Advances, 2016, 6, 55514-55525.	1.7	47
562	Recent advances in high-performance bulk thermoelectric materials. International Materials Reviews, 2016, 61, 379-415.	9.4	394
563	Low-temperature enhancement of the thermoelectric Seebeck coefficient in gated 2D semiconductor nanomembranes. Journal of Computational Electronics, 2016, 15, 27-33.	1.3	3
564	The effects of Sn-substitution on thermoelectric properties of In4â^'Sn Se3 ceramic. Ceramics International, 2016, 42, 5593-5599.	2.3	3
565	Effect of Annealing on Microstructure and Thermoelectric Properties of Sb-Doped Mg2Si0.5Sn0.5 Solid Solution. Journal of Electronic Materials, 2016, 45, 602-614.	1.0	1
566	New insight into the material parameter B to understand the enhanced thermoelectric performance of Mg₂Sn_{1â^'xâ^'y}Ge_xSb_y. Energy and Environmental Science, 2016, 9, 530-539.	15.6	83
567	Chemical and Thermoelectric Properties of Hot Pressed and Spark Plasma Sintered Type-I Clathrate Ba8Cu4.8Si41.2. Journal of Electronic Materials, 2016, 45, 1840-1845.	1.0	1
568	Simultaneous Thermoelectric Property Measurement and Incoherent Phonon Transport in Holey Silicon. ACS Nano, 2016, 10, 124-132.	7.3	102

#	Article	IF	Citations
569	Cd-doping a facile approach for better thermoelectric transport properties of BiCuSeO oxyselenides. RSC Advances, 2016, 6, 33789-33797.	1.7	48
570	Nanowires with dislocations for ultralow lattice thermal conductivity. Physical Chemistry Chemical Physics, 2016, 18, 9888-9892.	1.3	18
571	Enhanced thermoelectric efficiency of Cu2â˜Seâ€“Cu2S composite by incorporating Cu2S nanoparticles. Ceramics International, 2016, 42, 8395-8401.	2.3	30
572	Transition-metal-nitride-based thin films as novel energy harvesting materials. Journal of Materials Chemistry C, 2016, 4, 3905-3914.	2.7	110
573	On-chip thermoelectric module comprised of oxide thin film legs. Energy Conversion and Management, 2016, 114, 251-257.	4.4	22
574	Nanostructured Semiconducting PEDOTâ€“TiO₂/ZnO Hybrid Composites for Nanodevice Applications. Journal of Physical Chemistry C, 2016, 120, 4199-4210.	1.5	34
575	Large thermoelectric power factors and impact of texturing on the thermal conductivity in polycrystalline SnSe. Journal of Materials Chemistry C, 2016, 4, 1685-1691.	2.7	94
576	Chemically exfoliated transition metal dichalcogenide nanosheet-based wearable thermoelectric generators. Energy and Environmental Science, 2016, 9, 1696-1705.	15.6	237
577	Thermal conductivity of bulk and monolayer MoS ₂. Europhysics Letters, 2016, 113, 36002.	0.7	117
578	An analytical solution for quantum size effects on Seebeck coefficient. Physica Scripta, 2016, 91, 035803.	1.2	3
579	Modulation doping and energy filtering as effective ways to improve the thermoelectric power factor. Journal of Computational Electronics, 2016, 15, 16-26.	1.3	36
580	Anisotropic n-Type Bi₂Te₃â€“In₂Te₃ Thermoelectric Material Produced by Seeding Zone Melting and Solid State Transformation. Crystal Growth and Design, 2016, 16, 617-624.	1.4	10
581	Effect of host-mobility dependent carrier scattering on thermoelectric power factors of polymer composites. Nano Energy, 2016, 19, 128-137.	8.2	25
582	Power generation from nanostructured PbTe-based thermoelectrics: comprehensive development from materials to modules. Energy and Environmental Science, 2016, 9, 517-529.	15.6	287
583	Crystal growth of Bi2Te3 and noble cleaved (0001) surface properties. Journal of Solid State Chemistry, 2016, 236, 203-208.	1.4	31
584	Recent progress of organic and hybrid thermoelectric materials. Synthetic Metals, 2017, 225, 3-21.	2.1	148
585	Simultaneous measurement of in-plane and through-plane thermal conductivity using beam-offset frequency domain thermoreflectance. Review of Scientific Instruments, 2017, 88, 014902.	0.6	43
586	Enhanced thermoelectric properties of Pb_{1â˜x}Bi_xS prepared with hydrothermal synthesis and microwave sintering. Dalton Transactions, 2017, 46, 2129-2136.	1.6	15

#	Article	IF	Citations
587	Multiâ€Scale Microstructural Thermoelectric Materials: Transport Behavior, Nonâ€Equilibrium Preparation, and Applications. Advanced Materials, 2017, 29, 1602013.	11.1	234
588	Influence of Thermally Activated Solid-State Crystal-to-Crystal Structural Transformation on the Thermoelectric Properties of the Ca_{5â€“x}Yb_xAl₂Sb₆ (1.0 â‰¤ x â‰¤ 5.0) System. Chemistry of Materials, 2017, 29, 1384-1395.	3.2	20
589	Metal-organic complexes-towards promising organic thermoelectric materials. Synthetic Metals, 2017, 225, 22-30.	2.1	35
590	Understanding Phonon Scattering by Nanoprecipitates in Potassium-Doped Lead Chalcogenides. ACS Applied Materials & Interfaces, 2017, 9, 3686-3693.	4.0	6
591	A new view for nanoparticle assemblies: from crystalline to binary cooperative complementarity. Chemical Society Reviews, 2017, 46, 1483-1509.	18.7	77
592	Bottom-up design of de novo thermoelectric hybrid materials using chalcogenide resurfacing. Journal of Materials Chemistry A, 2017, 5, 3346-3357.	5.2	44
593	Reviewâ€"Micro and Nano-Engineering Enabled New Generation of Thermoelectric Generator Devices and Applications. ECS Journal of Solid State Science and Technology, 2017, 6, N3036-N3044.	0.9	54
594	Potential for high thermoelectric performance in n-type Zintl compounds: a case study of Ba doped KAlSb₄. Journal of Materials Chemistry A, 2017, 5, 4036-4046.	5.2	55
595	Ultra-high Seebeck coefficient and low thermal conductivity of a centimeter-sized perovskite single crystal acquired by a modified fast growth method. Journal of Materials Chemistry C, 2017, 5, 1255-1260.	2.7	101
596	Hybrids composites of NCCO/PEDOT for thermoelectric applications. Synthetic Metals, 2017, 225, 103-107.	2.1	13
597	Direct measurement of thermoelectric properties of Î²-MnO2in its powder form. Applied Physics Letters, 2017, 110, 023102.	1.5	0
598	Thermoelectric and thermal transport properties of complex oxide thin films, heterostructures and superlattices. Journal of Materials Research, 2017, 32, 183-203.	1.2	20
599	Electronic and thermoelectric properties of the group-III nitrides (BN, AlN and GaN) atomic sheets under biaxial strains. Computational Materials Science, 2017, 130, 232-241.	1.4	35
600	Promising high temperature thermoelectric properties of dense Ba 2 Co 9 O 14 ceramics. Journal of the European Ceramic Society, 2017, 37, 2615-2620.	2.8	29
602	Influence of surface states and size effects on the Seebeck coefficient and electrical resistance of Bi1â^'xSbxnanowire arrays. Nanoscale, 2017, 9, 3169-3179.	2.8	17
603	Roles of vacuum tunnelling and contact mechanics in single-molecule thermopower. Scientific Reports, 2017, 7, 44276.	1.6	9
604	High thermopower and potential thermoelectric properties of crystalline LiH and NaH. Physical Review B, 2017, 95, .	1.1	26
605	Compromise and Synergy in Highâ€Efficiency Thermoelectric Materials. Advanced Materials, 2017, 29, 1605884.	11.1	1,098

#	Article	IF	Citations
607	Fabrication of transparent NiTe2 electrodes via magnetron sputtering combined with chemical exfoliation. Journal of Alloys and Compounds, 2017, 704, 607-613.	2.8	7
608	Compound Copper Chalcogenide Nanocrystals. Chemical Reviews, 2017, 117, 5865-6109.	23.0	670
609	High Thermoelectric Performance in Electron-Doped AgBi₃S₅ with Ultralow Thermal Conductivity. Journal of the American Chemical Society, 2017, 139, 6467-6473.	6.6	160
610	Process Principles for Large-Scale Nanomanufacturing. Annual Review of Chemical and Biomolecular Engineering, 2017, 8, 201-226.	3.3	10
611	Insights into the thermoelectric properties of SnSe from ab initio calculations. Physical Chemistry Chemical Physics, 2017, 19, 12804-12815.	1.3	42
612	Simultaneous optimization of electrical and thermal transport properties of Bi0.5Sb1.5Te3 thermoelectric alloy by twin boundary engineering. Nano Energy, 2017, 37, 203-213.	8.2	164
613	Microstructure and thermoelectric properties of Bi-Sb-Te bulk materials fabricated from rapidly solidified powders. Scripta Materialia, 2017, 136, 111-114.	2.6	16
614	A Series Circuit of Thermal Rectifiers: An Effective Way to Enhance Rectification Ratio. Small, 2017, 13, 1602726.	5.2	51
615	A Review on Organic Polymer-Based Thermoelectric Materials. Journal of Polymers and the Environment, 2017, 25, 1208-1218.	2.4	63
616	Substantial local variation of the Seebeck coefficient in gold nanowires. Nanoscale, 2017, 9, 9160-9166.	2.8	21
617	Dual-functional aniline-assisted wet-chemical synthesis of bismuth telluride nanoplatelets and their thermoelectric performance. Nanotechnology, 2017, 28, 235604.	1.3	12
618	Improvements of thermoelectric properties for p-type Cu_{1.8}S bulk materials via optimizing the mechanical alloying process. Inorganic Chemistry Frontiers, 2017, 4, 1192-1199.	3.0	26
619	An effective dual-solvent treatment for improving the thermoelectric property of PEDOT:PSS with white graphene. Journal of Materials Science, 2017, 52, 9806-9818.	1.7	39
620	Solution-Processed Cu2Se Nanocrystal Films with Bulk-Like Thermoelectric Performance. Scientific Reports, 2017, 7, 2765.	1.6	24
621	2D Black Phosphorus for Energy Storage and Thermoelectric Applications. Small, 2017, 13, 1700661.	5.2	139
622	Manufacturing Te/PEDOT Films for Thermoelectric Applications. ACS Applied Materials & Interfaces, 2017, 9, 20826-20832.	4.0	40
623	Effect of MultiSubstitution on the Thermoelectric Performance of the Ca_{11â^'x}Yb_xSb_{10â^'y}Ge_z (0 â‰) Tj ETQq0 0 0 rgBT /Ov Chemistry, 2017, 56, 7099-7110.	1.9	19
624	Formation of Epitaxially Connected Quantum Dot Solids: Nucleation and Coherent Phase Transition. Journal of Physical Chemistry Letters, 2017, 8, 2623-2628.	2.1	41

#	Article	IF	Citations
625	Transport properties of bismuth telluride compound prepared by mechanical alloying. AIP Conference Proceedings, 2017, , .	0.3	2
626	Directional Phonon Suppression Function as a Tool for the Identification of Ultralow Thermal Conductivity Materials. Scientific Reports, 2017, 7, 44379.	1.6	7
627	Photothermoelectric Effects and Large Photovoltages in Plasmonic Au Nanowires with Nanogaps. Journal of Physical Chemistry Letters, 2017, 8, 1739-1744.	2.1	37
628	The effect of nanostructure on the thermoelectric figure-of-merit of La 0.875 Sr 0.125 CoO 3. Journal of Alloys and Compounds, 2017, 711, 381-386.	2.8	10
629	An insight into Î²-Zn4Sb3 from its crystal structure, thermoelectric performance, thermal stability and graded material. Materials Today Energy, 2017, 3, 72-83.	2.5	24
630	On the Lorenz number of multiband materials. Physical Review B, 2017, 95, .	1.1	90
631	Minority Carrier Blocking to Enhance the Thermoelectric Performance of Solution-Processed Bi_xSb_{2â€“x}Te₃ Nanocomposites via a Liquid-Phase Sintering Process. ACS Applied Materials & Interfaces, 2017, 9, 12501-12510.	4.0	46
632	Terbium Ion Doping in Ca3Co4O9: A Step towards High-Performance Thermoelectric Materials. Scientific Reports, 2017, 7, 44621.	1.6	80
633	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.	2.1	61
634	Length Scale of Diffusive Phonon Transport in Suspended Thin Silicon Nanowires. Nano Letters, 2017, 17, 276-283.	4.5	28
635	Earth-Abundant and Non-Toxic SiX (X = S, Se) Monolayers as Highly Efficient Thermoelectric Materials. Journal of Physical Chemistry C, 2017, 121, 123-128.	1.5	41
636	Simultaneously enhancing the power factor and reducing the thermal conductivity of SnTe via introducing its analogues. Energy and Environmental Science, 2017, 10, 2420-2431.	15.6	116
637	Improved thermoelectric properties of nanocrystalline hydrogenated silicon thin films by post-deposition thermal annealing. Thin Solid Films, 2017, 642, 276-280.	0.8	13
638	Direct photolithographic patterning of cuprous oxide thin films via photoelectrodeposition. Journal of Materials Chemistry A, 2017, 5, 21765-21772.	5.2	8
639	A novel glass-fiber-aided cold-press method for fabrication of n-type Ag₂Te nanowires thermoelectric film on flexible copy-paper substrate. Journal of Materials Chemistry A, 2017, 5, 24740-24748.	5.2	73
640	Thermoelectric property enhancement via pore confinement in template grown bismuth telluride nanowire arrays. Nanotechnology, 2017, 28, 505401.	1.3	5
641	Ecoâ€Friendly SnTe Thermoelectric Materials: Progress and Future Challenges. Advanced Functional Materials, 2017, 27, 1703278.	7.8	312
642	Advances in thermoelectric materials research: Looking back and moving forward. Science, 2017, 357, .	6.0	1,613

#	Article	IF	Citations
643	Computationally guided discovery of thermoelectric materials. Nature Reviews Materials, 2017, 2, .	23.3	184
644	Structural properties of the thermoelectric material CuCrS₂ and of deintercalated Cu_xCrS₂ on different length scales: X-ray diffraction, pair distribution function and transmission electron microscopy studies. Journal of Materials Chemistry C, 2017, 5, 9331-9338.	2.7	18
645	Measurements of Ambipolar Seebeck Coefficients in Highâ€Mobility Diketopyrrolopyrrole Donorâ€“Acceptor Copolymers. Advanced Electronic Materials, 2017, 3, 1700225.	2.6	26
646	Enhancement in thermoelectric performance of SiGe nanoalloys dispersed with SiC nanoparticles. Physical Chemistry Chemical Physics, 2017, 19, 25180-25185.	1.3	36
647	First-principles and molecular dynamics study of thermoelectric transport properties of N-type silicon-based superlattice-nanocrystalline heterostructures. Journal of Applied Physics, 2017, 122, 085105.	1.1	12
648	Enhancing thermoelectric performance of Cu₂Se by doping Te. Physical Chemistry Chemical Physics, 2017, 19, 27664-27669.	1.3	30
649	Hydrothermal synthesis of SnQ (Q = Te, Se, S) and their thermoelectric properties. Nanotechnology, 2017, 28, 455707.	1.3	24
650	Fiber yarns/CNT hierarchical structures as thermoelectric generators. Materials Today: Proceedings, 2017, 4, 7070-7075.	0.9	20
651	High thermoelectric performances of monolayer SnSe allotropes. Nanoscale, 2017, 9, 16093-16100.	2.8	111
652	Thermoelectric properties of a strongly correlated layer. Physical Review B, 2017, 96, .	1.1	5
653	Extreme reduction of thermal conductivity by embedding Al 2 O 3 nanoparticles into single-crystalline Bi nanowires. Acta Materialia, 2017, 136, 315-322.	3.8	5
654	Atomistic origin of the reduced lattice thermal conductivity of silicon nanotubes. AIP Advances, 2017, 7, .	0.6	1
655	Thermoelectric cooperative effect in three-terminal elastic transport through a quantum dot. Journal of Applied Physics, 2017, 122, 044301.	1.1	15
656	Seebeck voltage measurement in undoped metal oxide semiconductors. Measurement Science and Technology, 2017, 28, 115002.	1.4	11
657	Significant Enhancement of the Thermoelectric Performance of Higher Manganese Silicide by Incorporating MnTe Nanophase Derived from Te Nanowire. Chemistry of Materials, 2017, 29, 7378-7389.	3.2	36
658	Processing of advanced thermoelectric materials. Science China Technological Sciences, 2017, 60, 1347-1364.	2.0	79
659	High performance co-sputtered Bi2Te3 thin films with preferred orientation induced by MgO substrates. Journal of Alloys and Compounds, 2017, 726, 532-537.	2.8	12
660	Band engineered p-type RGOâ€“CdSâ€“PANI ternary nanocomposites for thermoelectric applications. Sustainable Energy and Fuels, 2017, 1, 1766-1773.	2.5	26

#	Article	IF	Citations
661	Boosting the power factor with resonant states: A model study. Physical Review B, 2017, 96, .	1.1	13
663	Thermoelectric power factor of nanocomposite materials from two-dimensional quantum transport simulations. Physical Review B, 2017, 96, .	1.1	16
664	High thermoelectric performance of p-BiSbTe compounds prepared by ultra-fast thermally induced reaction. Energy and Environmental Science, 2017, 10, 2638-2652.	15.6	138
665	Interface and Morphology Control of the Thermal Conductivity in Coreâ€“Shell Particle Colloidal Crystals. Advanced Materials Interfaces, 2017, 4, 1700963.	1.9	10
666	Phonon thermal conductivity of scandium nitride for thermoelectrics from first-principles calculations and thin-film growth. Physical Review B, 2017, 96, .	1.1	30
667	Thermoelectric band engineering: The role of carrier scattering. Journal of Applied Physics, 2017, 122, .	1.1	39
668	The exploration of nonlinear elasticity and its efficient parameterization for crystalline materials. Journal of the Mechanics and Physics of Solids, 2017, 107, 76-95.	2.3	36
669	Fundamental aspects of steady-state conversion of heat to work at the nanoscale. Physics Reports, 2017, 694, 1-124.	10.3	470
670	Decouple electronic and phononic transport in nanotwinned structures: a new strategy for enhancing the figure-of-merit of thermoelectrics. Nanoscale, 2017, 9, 9987-9996.	2.8	31
671	Thermoelectric properties of an interacting quantum dot based heat engine. Physical Review B, 2017, 95, .	1.1	65
672	Ferroelectric phase transition and the lattice thermal conductivity of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Pb</mml:mi><mml:mrow><mml:mn>1</mml:mn></mml:mrow> alloys. Physical Review B, 2017, 95, .	3.7	39
673	Enhancing Thermoelectric Performance Using Nonlinear Transport Effects. Physical Review Applied, 2017, 7, .	1.5	28
674	Spectroscopic evidence for temperature-dependent convergence of light- and heavy-hole valence bands of PbQ (Q = Te, Se, S). Europhysics Letters, 2017, 117, 27006.	0.7	11
675	InAs nanowire superconducting tunnel junctions: Quasiparticle spectroscopy, thermometry, and nanorefrigeration. Nano Research, 2017, 10, 3468-3475.	5.8	10
676	Metallic Zn decorated Î²-Zn 4 Sb 3 with enhanced thermoelectric performance. Materials Letters, 2017, 203, 5-8.	1.3	6
677	Thermoelectric characteristics of nanocomposites made of HgSe and Ag nanoparticles for flexible thermoelectric devices. Nano Research, 2017, 10, 683-689.	5.8	5
678	Embedded-ZnO Nanowire Structure for High-Performance Transparent Thermoelectric Materials. Journal of Electronic Materials, 2017, 46, 3020-3024.	1.0	20
679	Skutterudite with graphene-modified grain-boundary complexion enhances zT enabling high-efficiency thermoelectric device. Energy and Environmental Science, 2017, 10, 183-191.	15.6	252

#	Article	IF	Citations
680	Cross-plane enhanced thermoelectricity and phonon suppression in graphene/MoS ₂ van der Waals heterostructures. 2D Materials, 2017, 4, 015012.	2.0	34
681	Synergetic combination of Te content and deposition temperature to optimize thermoelectric properties using sputtered bismuth telluride films. Journal of Alloys and Compounds, 2017, 690, 851-855.	2.8	14
682	Effect of the annealing on the power factor of un-doped cold-pressed SnSe. Applied Thermal Engineering, 2017, 111, 1426-1432.	3.0	21
683	ZnSb-based thin films prepared by ns-PLD for thermoelectric applications. Applied Surface Science, 2017, 418, 589-593.	3.1	15
684	Thermoelectric properties of SnSe₂monolayer. Journal of Physics Condensed Matter, 2017, 29, 015001.	0.7	84
685	Effect of Thermal Cycling on Zinc Antimonide Thin Film Thermoelectric Characteristics. Energy Procedia, 2017, 142, 519-524.	1.8	10
686	Thermoelectric energy converters under a trade-off figure of merit with broken time-reversal symmetry. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 093207.	0.9	12
687	Figure of merit analysis of nanostructured thermoelectric materials at room temperature. , 2017, , .		1
688	Temperature Dependence of the Seebeck Coefficient in Zinc Oxide Thin Films. Journal of Physics: Conference Series, 2017, 939, 012013.	0.3	0
689	First-Principles Calculations of Thermoelectric Properties of IVâ€“VI Chalcogenides 2D Materials. Frontiers in Mechanical Engineering, 2017, 3, .	0.8	27
690	Lithography independent nanostructuring of Bi<inf>2</inf>Te<inf>3</inf> thermoelectric devices. , 2017, , .		0
691	Structure and thermoelectric property of Te doped paracostibite CoSb1-Te S compounds. Journal of Solid State Chemistry, 2018, 262, 1-7.	1.4	10
692	Screw-Dislocated Nanostructures. SpringerBriefs in Applied Sciences and Technology, 2018, , 27-40.	0.2	1
693	In situdeformation and mechanical properties of bismuth telluride prepared via zone melting. Materials Research Express, 2018, 5, 035010.	0.8	4
694	Quantum materials for thermoelectricity. MRS Bulletin, 2018, 43, 187-192.	1.7	46
695	Synthesis and transport properties of p -type lead-free AgSn m SbSe 2 Te m thermoelectric systems. Materials Chemistry and Physics, 2018, 211, 321-328.	2.0	4
696	Modification of Bulk Heterojunction and Cl Doping for High-Performance Thermoelectric SnSe₂/SnSe Nanocomposites. ACS Applied Materials & Interfaces, 2018, 10, 15793-15802.	4.0	39
697	Enhanced thermoelectric properties of nano SiC dispersed Bi₂Sr₂Co₂O_y Ceramics. Materials Research Express, 2018, 5, 045510.	0.8	24

#	Article	IF	Citations
698	An overview of thermoelectric films: Fabrication techniques, classification, and regulation methods. Chinese Physics B, 2018, 27, 047210.	0.7	12
699	Two-Dimensional Tellurene as Excellent Thermoelectric Material. ACS Applied Energy Materials, 2018, 1, 1950-1954.	2.5	93
700	Graphene network in copper sulfide leading to enhanced thermoelectric properties and thermal stability. Nano Energy, 2018, 49, 267-273.	8.2	108
701	Effect of ball milling time on thermoelectric properties of bismuth telluride nanomaterials. AIP Conference Proceedings, 2018, , .	0.3	4
702	Selfâ€Powered Wearable Electronics Based on Moisture Enabled Electricity Generation. Advanced Materials, 2018, 30, e1705925.	11.1	207
703	Effect of Dislocation Arrays at Grain Boundaries on Electronic Transport Properties of Bismuth Antimony Telluride: Unified Strategy for High Thermoelectric Performance. Advanced Energy Materials, 2018, 8, 1800065.	10.2	40
704	Bandgap tuning and enhancement of seebeck coefficient in one dimensional GeSe. AIP Conference Proceedings, 2018, , .	0.3	7
705	Rocksalt nitride metal/semiconductor superlattices: A new class of artificially structured materials. Applied Physics Reviews, 2018, 5, 021101.	5.5	59
706	Temperature-dependent thermal and thermoelectric properties of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -type and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -type <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">c</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^’</mml:mo><mml:mi>x</mml:mi></mml:mrow></r	1.1	35
707	Comparison of four-probe thermal and thermoelectric transport measurements of thin films and nanostructures with microfabricated electro-thermal transducers. Journal Physics D: Applied Physics, 2018, 51, 103002.	1.3	11
708	Bi2O2Se nanosheet: An excellent high-temperature n-type thermoelectric material. Applied Physics Letters, 2018, 112, .	1.5	94
709	Solid-State Bonding of Bulk PbTe to Nickel Electrode for Thermoelectric Modules. ACS Applied Energy Materials, 2018, 1, 348-354.	2.5	14
710	Hybrid thermoelectric battery electrode FeS2 study. Nano Energy, 2018, 45, 432-438.	8.2	35
711	SnSeÂ+ÂAg2Se composite engineering with ball milling for enhanced thermoelectric performance. Rare Metals, 2018, 37, 333-342.	3.6	24
712	Large-scale synthesis of lead telluride (PbTe) nanotube-based nanocomposites with tunable morphology, crystallinity and thermoelectric properties. Applied Surface Science, 2018, 436, 785-790.	3.1	15
713	Structural, optical, thermoelectrical, and magnetic study of Zn 1â€x Co x O (0Ââ‰ÂxÂâ‰Â0.10) nanocrystals. International Journal of Applied Ceramic Technology, 2018, 15, 723-733.	1.1	15
714	Thermal investigation of nanostructured bulk thermoelectric materials with hierarchical structures: An effective medium approach. Journal of Applied Physics, 2018, 123, .	1.1	13
715	High Thermoelectric Performance of In₄Se₃-Based Materials and the Influencing Factors. Accounts of Chemical Research, 2018, 51, 240-247.	7.6	50

#	Article	IF	Citations
716	Low-energy ion beam synthesis of Ag endotaxial nanostructures in silicon. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	4
717	Crystalline Solids with Intrinsically Low Lattice Thermal Conductivity for Thermoelectric Energy Conversion. ACS Energy Letters, 2018, 3, 1315-1324.	8.8	132
718	Bendable thermoelectric generators composed of p- and n-type silver chalcogenide nanoparticle thin films. Nano Energy, 2018, 49, 333-337.	8.2	23
719	Solution-printable fullerene/TiS₂ organic/inorganic hybrids for high-performance flexible n-type thermoelectrics. Energy and Environmental Science, 2018, 11, 1307-1317.	15.6	172
720	Two-Dimensional Oxides: Recent Progress in Nanosheets. Zeitschrift Fur Physikalische Chemie, 2018, 233, 117-165.	1.4	28
721	Low-dimensional thermoelectricity in graphene: The case of gated graphene superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 101, 188-196.	1.3	15
722	Thermoelectrics based on metal oxide thin films. , 2018, , 441-464.		5
723	Enhancement in thermoelectric performance of Cu3SbSe4 thin films by In(III) doping; synthesized by arrested precipitation technique. Journal of Materials Science: Materials in Electronics, 2018, 29, 8793-8800.	1.1	10
724	Tuning the thermoelectric properties by manipulating copper in Cu2SnSe3 system. Journal of Alloys and Compounds, 2018, 748, 273-280.	2.8	13
725	Magnetic tunnel junction thermocouple for thermoelectric power harvesting. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1437-1440.	0.9	10
726	Odyssey of thermoelectric materials: foundation of the complex structure. Journal of Physics Communications, 2018, 2, 062001.	0.5	34
727	Quantitative nanoscale mapping of three-phase thermal conductivities in filled skutterudites via scanning thermal microscopy. National Science Review, 2018, 5, 59-69.	4.6	26
728	Thermoelectric properties of (DyNiSn)1â^'x(DyNiSb)x composite. Physica B: Condensed Matter, 2018, 536, 659-663.	1.3	19
729	Advances in carbon nanotube n-type doping: Methods, analysis and applications. Carbon, 2018, 126, 257-270.	5.4	102
730	A review on heat and mechanical energy harvesting from human â€“ Principles, prototypes and perspectives. Renewable and Sustainable Energy Reviews, 2018, 82, 3582-3609.	8.2	169
731	Efficient enhancement of thermoelectric performance of CdTe via dilute hole doping together with heavy isoelectronic doping. Journal of Alloys and Compounds, 2018, 737, 421-426.	2.8	3
732	Entropic, Enthalpic, and Kinetic Aspects of Interfacial Nanocrystal Superlattice Assembly and Attachment. Chemistry of Materials, 2018, 30, 54-63.	3.2	40
733	High Performance Thermoelectric Materials: Progress and Their Applications. Advanced Energy Materials, 2018, 8, 1701797.	10.2	548

#	Article	IF	Citations
734	Optical and electronic transport properties of single-crystalline Bi₂Te₃ hexagonal nanoplates determined by infrared spectroscopy and first-principles calculations. Transactions of the Materials Research Society of Japan, 2018, 43, 311-317.	0.2	4
735	Areal density control of ZnO nanowires in physical vapor transport using Ge nanocrystals. Japanese Journal of Applied Physics, 2018, 57, 08NB07.	0.8	2
736	Remarkably high thermoelectric performance of Cu_{2â^'x}Li_xSe bulks with nanopores. Journal of Materials Chemistry A, 2018, 6, 23417-23424.	5.2	73
737	Review of the Thermoelectric Properties in Nanostructured Fe2VAl. Metals, 2018, 8, 864.	1.0	29
738	Chemical Insights into PbSeâ€“x%HgSe: High Power Factor and Improved Thermoelectric Performance by Alloying with Discordant Atoms. Journal of the American Chemical Society, 2018, 140, 18115-18123.	6.6	80
739	Comparison of the electronic and thermoelectric properties of three layered phases Bi2Te3, PbBi2Te4 and PbBi4Te7: LEGO thermoelectrics. AIP Advances, 2018, 8, .	0.6	11
740	Resonant Thermal Transport in Nanophononic Metamaterials. , 2018, , 1-21.		0
741	Laser-based setup for simultaneous measurement of the Seebeck coefficient and electrical conductivity for bulk and thin film thermoelectrics. Review of Scientific Instruments, 2018, 89, 113901.	0.6	1
742	Energy Harvesting from a Thermoelectric Zinc Antimonide Thin Film under Steady and Unsteady Operating Conditions. Materials, 2018, 11, 2365.	1.3	3
743	Criteria for power factor improvement in thermoelectric composite. Results in Physics, 2018, 11, 915-919.	2.0	9
744	Nanowires for energy: A review. Applied Physics Reviews, 2018, 5, 041305.	5.5	92
745	Thermoelectric materials and applications for energy harvesting power generation. Science and Technology of Advanced Materials, 2018, 19, 836-862.	2.8	413
746	Using the Callaway Model to Deduce Relevant Phonon Scattering Processes: The Importance of Phonon Dispersion. Physica Status Solidi (B): Basic Research, 2018, 255, 1800208.	0.7	9
747	Gold Catalyst-Assisted Metal Organic Chemical Vapor Deposition of Bi-Te-Ni-Cu-Au Complex Thermoelectric Materials on Anodic Aluminum Oxide Nanoporous Template. Coatings, 2018, 8, 166.	1.2	2
748	High-Performance Thermoelectric Materials for Solar Energy Application. , 2018, , 3-38.		4
749	Suspended InAs Nanowire-Based Devices for Thermal Conductivity Measurement Using the 3Ï‰ Method. Journal of Materials Engineering and Performance, 2018, 27, 6299-6305.	1.2	18
750	Bonding Hierarchy Gives Rise to High Thermoelectric Performance in Layered Zintl Compound BaAu2P4. Chemistry of Materials, 2018, 30, 7760-7768.	3.2	28
751	First principles calculations of Sr-based fluoroperovskite compounds under applied pressure. Chinese Journal of Physics, 2018, 56, 2992-3001.	2.0	3

#	Article	IF	Citations
752	Cause for the Orbital Ordering of Cs₂AgF₄ and Its Effect on Thermoelectric Properties. Inorganic Chemistry, 2018, 57, 11895-11900.	1.9	7
753	Two-Channel Thermal Transport in Orderedâ€“Disordered Superionic Ag₂Te and Its Traditionally Contradictory Enhancement by Nanotwin Boundary. Journal of Physical Chemistry Letters, 2018, 9, 5704-5709.	2.1	12
754	Theoretical and Experimental Methods for Determining the Thermal Conductivity of Nanostructures. SpringerBriefs in Physics, 2018, , 11-40.	0.2	0
755	Structure and Improved Thermoelectric Properties of Ag_{2x}Cr_{2â€“2x}Se₃ Compounds. Inorganic Chemistry, 2018, 57, 12125-12131.	1.9	5
756	Enormous suppression of phonon transport in silicon nanowires with five-fold twin boundary. Journal of Materials Chemistry A, 2018, 6, 18533-18542.	5.2	16
757	Low lattice thermal conductivity and excellent thermoelectric behavior in Li3Sb and Li3Bi. Journal of Physics Condensed Matter, 2018, 30, 425401.	0.7	13
758	Thermoelectric properties of bismuth telluride nanoplate thin films determined using combined infrared spectroscopy and first-principles calculation. Japanese Journal of Applied Physics, 2018, 57, 06HC02.	0.8	7
759	A Nanostructuring Method to Decouple Electrical and Thermal Transport through the Formation of Electrically Triggered Conductive Nanofilaments. Advanced Materials, 2018, 30, e1705385.	11.1	13
760	Microstructure and thermoelectric properties of p-type bismuth antimony telluride nanowires synthetized by template electrodeposition in polycarbonate membranes. Electrochimica Acta, 2018, 279, 258-268.	2.6	12
761	Coherent control of thermal phonon transport in van der Waals superlattices. Nanoscale, 2018, 10, 14432-14440.	2.8	13
762	Structural and thermoelectric properties of hydrothermal-processed Ag-doped Fe2O3. Ceramics International, 2018, 44, 15024-15034.	2.3	3
763	Interfacial phonon scattering and transmission loss in >1 Âµm thick silicon-on-insulator thin films. Physical Review B, 2018, 97, .	1.1	15
764	Surfactant-Induced Structural Phase Transitions and Enhanced Room Temperature Thermoelectric Performance in n-Type Bi₂Te₃ Nanostructures Synthesized via Chemical Route. ACS Applied Nano Materials, 2018, 1, 3236-3250.	2.4	13
765	Highly enhanced thermoelectric properties of Cu1.8S by introducing PbS. Journal of Alloys and Compounds, 2018, 764, 738-744.	2.8	25
766	Thermal Studies of Nanoporous Si Films with Pitches on the Order of 100 nm â€”Comparison between Different Pore-Drilling Techniques. Scientific Reports, 2018, 8, 9056.	1.6	22
767	Defect Engineering for High-Performance n-Type PbSe Thermoelectrics. Journal of the American Chemical Society, 2018, 140, 9282-9290.	6.6	123
768	Thin Film Tin Selenide (SnSe) Thermoelectric Generators Exhibiting Ultralow Thermal Conductivity. Advanced Materials, 2018, 30, e1801357.	11.1	126
769	Recent advances in inorganic material thermoelectrics. Inorganic Chemistry Frontiers, 2018, 5, 2380-2398.	3.0	63

#	Article	IF	Citations
770	Silicon-based nanostructures for integrated thermoelectric generators. Journal Physics D: Applied Physics, 2018, 51, 423001.	1.3	31
771	Measurement of the Thermoelectric Properties of Individual Nanostructures. Semiconductors and Semimetals, 2018, 98, 409-444.	0.4	9
772	Compositionally tunable ternary Bi₂(Se_{1â^'x}Te_x)₃ and (Bi_{1â^'y}Sb_y)₂Te₃ thin films via low pressure chemical vapour deposition. Journal of Materials Chemistry C, 2018, 6, 7734-7739.	2.7	15
773	Simultaneous Enhancement in Electrical Conductivity and Thermopower of nâ€Type NiETT/PVDF Composite Films by Annealing. Advanced Functional Materials, 2018, 28, 1803275.	7.8	39
774	Improved thermoelectric properties of nanostructured composites out of Bi1â^'xSbx nanoparticles and carbon phases. AIP Advances, 2018, 8, 075319.	0.6	2
775	Anisotropy of Transport Properties Correlated to Grain Boundary Density and Quantified Texture in Thick Oriented Ca3Co4O9 Ceramics. Materials, 2018, 11, 1224.	1.3	11
776	Uncertainty Quantification for a High Temperature Z-Meter Characterization System. , 2018, , .		2
777	Se-Sm co-doping strategy for tuning the structural and thermoelectric properties of GeTe-PbTe based alloys. Materials and Design, 2018, 157, 394-401.	3.3	12
778	Thermal Transport Analysis of Heterostructured Nanowires With Metal-Semiconductor Interfaces. , 2018, , .		2
779	CuAgSe nanocrystals: colloidal synthesis, characterization and their thermoelectric performance. Journal of Materials Science, 2018, 53, 14998-15008.	1.7	8
780	Continuous electrochemical heat engines. Energy and Environmental Science, 2018, 11, 2964-2971.	15.6	59
781	Mesoscopic Moment Equations for Heat Conduction: Characteristic Features and Slowâ€“Fast Mode Decomposition. Entropy, 2018, 20, 126.	1.1	10
782	Thermal Transport in Micro- and Nanoscale Systems. , 2018, , 277-327.		2
783	MnS Incorporation into Higher Manganese Silicide Yields a Green Thermoelectric Composite with High Performance/Price Ratio. Advanced Science, 2018, 5, 1800626.	5.6	16
784	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.	1.0	28
785	Nanostructured binary copper chalcogenides: synthesis strategies and common applications. Nanoscale, 2018, 10, 15130-15163.	2.8	73
786	Thermal phonon engineering by tailored nanostructures. Japanese Journal of Applied Physics, 2018, 57, 080101.	0.8	105
787	Impact of Sm alloying and thermal annealing on the structural and thermoelectric properties of (GeTe)0.85(Pb1-Sm Te)0.15 alloys. Journal of Alloys and Compounds, 2018, 755, 184-191.	2.8	7

#	Article	IF	Citations
788	Two orders of magnitude reduction in silicon membrane thermal conductivity by resonance hybridizations. Physical Review B, 2018, 97, .	1.1	52
789	Thermoelectric SnTe with Band Convergence, Dense Dislocations, and Interstitials through Sn Selfâ€Compensation and Mn Alloying. Small, 2018, 14, e1802615.	5.2	132
790	Seebeck coefficient of synthesized Titanium Dioxide thin film on FTO glass substrate. IOP Conference Series: Materials Science and Engineering, 2018, 342, 012051.	0.3	2
791	Thin Film Thermoelectric Materials: Classification, Characterization, and Potential for Wearable Applications. Coatings, 2018, 8, 244.	1.2	54
792	Energy Harvesting Research: The Road from Single Source to Multisource. Advanced Materials, 2018, 30, e1707271.	11.1	203
793	Enhanced Thermoelectric Properties of Codoped Cr2Se3: The Distinct Roles of Transition Metals and S. ACS Applied Materials & Interfaces, 2018, 10, 22389-22400.	4.0	18
794	A nanocomposite approach for enhancement of thermoelectric performance in Hafnium-free Half-Heuslers. Materialia, 2018, 1, 168-174.	1.3	26
795	Leadâ€Chalcogenide Colloidalâ€Quantumâ€Dot Solids: Novel Assembly Methods, Electronic Structure Control, and Application Prospects. Advanced Materials, 2018, 30, 1800082.	11.1	45
796	Thermoelectric Nanomaterials. , 2019, , 349-358.		4
797	Carbon Nanotube-Based Thermoelectric Devices. Nanostructure Science and Technology, 2019, , 551-560.	0.1	1
798	Quantum thermoelectrics based on two-dimensional semi-Dirac materials. Physical Review B, 2019, 100, .	1.1	17
799	Enhancement in the thermoelectric properties of Cu3SbSe4 by Sn doping. Journal of Materials Science: Materials in Electronics, 2019, 30, 16596-16605.	1.1	5
800	ThermoEPred-EL: Robust bandgap predictions of chalcogenides with diamond-like structure via feature cross-based stacked ensemble learning. Computational Materials Science, 2019, 169, 109117.	1.4	14
801	Enhanced thermoelectric properties of Pb-doped Cu1.8S polycrystalline materials. Solid State Sciences, 2019, 95, 105953.	1.5	10
802	Parameter-free model to estimate thermal conductivity in nanostructured materials. Physical Review B, 2019, 100, .	1.1	11
803	A carbon fiber thermoelectric generator integrated as a lamina within an 8-ply laminate epoxy composite: Efficient thermal energy harvesting by advanced structural materials. Applied Energy, 2019, 253, 113512.	5.1	33
804	Transition-Metal-Nitride-Based Thin Films as Novel Thermoelectric Materials. , 2019, , 121-138.		1
805	Thermoelectric power generation: from new materials to devices. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180450.	1.6	116

#	Article	IF	Citations
806	Improved Thermoelectric Performance of Ecoâ€Friendly Î²â€FeSi 2 â€“SiGe Nanocomposite via Synergistic Hierarchical Structuring, Phase Percolation, and Selective Doping. Advanced Functional Materials, 2019, 29, 1903157.	7.8	27
807	Enhancement of Thermoelectric Properties of Bismuth Telluride Composite with Gold Nano-Particles Inclusions Using Electrochemical Co-Deposition. Journal of the Electrochemical Society, 2019, 166, D508-D513.	1.3	21
808	Intrinsically low thermal conductivity of bismuth oxychalcogenides originating from interlayer coupling. Physical Chemistry Chemical Physics, 2019, 21, 18259-18264.	1.3	12
809	Tuning charge transport dynamics via clustering of doping in organic semiconductor thin films. Nature Communications, 2019, 10, 2827.	5.8	73
810	Epitaxial Growth of Bi2X3 Topological Insulators. Springer Series in Materials Science, 2019, , 319-349.	0.4	1
811	Graphene grain size-dependent synthesis of single-crystalline Sb2Te3 nanoplates and the interfacial thermal transport analysis by Raman thermometry. Carbon, 2019, 153, 164-172.	5.4	6
812	Facile synthesis of Ag₂Te nanowires and thermoelectric properties of Ag₂Te polycrystals sintered by spark plasma sintering. CrystEngComm, 2019, 21, 1718-1727.	1.3	30
813	Enhancing the Seebeck effect in Ge/Si through the combination of interfacial design features. Scientific Reports, 2019, 9, 16335.	1.6	16
814	Thermal conductivity variation of Bi2Te3 nanofilm with interfacial defects using molecular dynamics. AIP Advances, 2019, 9, 075210.	0.6	2
815	Influence of different substrate materials on thermoelectric module with bulk legs. Journal of Power Sources, 2019, 438, 227055.	4.0	13
816	Influence of TiO2 layer's nanostructure on its thermoelectric power factor. Applied Surface Science, 2019, 497, 143736.	3.1	15
817	Reduction in thermal conductivity and electrical resistivity in Cu2SnSe3/Cu2Se composite thermoelectric system. Materials Research Bulletin, 2019, 120, 110607.	2.7	19
818	High Figure of Merit in Gallium-Doped Nanostructured n-Type PbTe-xGeTe with Midgap States. Journal of the American Chemical Society, 2019, 141, 16169-16177.	6.6	76
819	Topological insulator nanoribbons â€“ A new paradigm for high thermoelectric performance. Nano Energy, 2019, 66, 104092.	8.2	6
820	Nanobulk Thermoelectric Materials Fabricated from Chemically Synthesized Cu₃Zn_{1â€“x}Al_xSnS_{5â€“y} Nanocrystals. ACS Omega, 2019, 4, 16402-16408.	1.6	7
821	2D semiconducting Î±-In2Se3 single crystals: Growth and huge anisotropy during transport. Journal of Alloys and Compounds, 2019, 810, 151968.	2.8	7
822	Space-charge-induced Seebeck effect in solid dielectrics. Journal of Applied Physics, 2019, 126, .	1.1	2
823	Quantum transport simulations for the thermoelectric power factor in 2D nanocomposites. Materials Today: Proceedings, 2019, 8, 690-695.	0.9	2

#	Article	IF	Citations
824	Application of Wavelet Transform to the study of Lattice Dynamics of two-dimensional Nanostructures. Materials Today: Proceedings, 2019, 18, 1524-1531.	0.9	1
825	Influence of the planar orientation of the substrate on thermoelectric response of SnSe thin films. Journal of Physics and Chemistry of Solids, 2019, 129, 347-353.	1.9	20
826	Heat and charge transport in bulk semiconductors with interstitial defects. Physical Review B, 2019, 99, .	1.1	10
827	Low cross-plane thermal conductivity of sub-1â€Âµm polycrystalline silicon thin films for thermoelectric applications. Energy Conversion and Management, 2019, 179, 243-248.	4.4	5
828	The use of strain to tailor electronic thermoelectric transport properties: A first principles study of 2H-phase CuAlO₂. Journal of Applied Physics, 2019, 125, 082531.	1.1	7
829	High Thermoelectric Power Factor and Efficiency from a Highly Dispersive Band in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>Ba</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>Bi</mml:mi><mml:mi>Au</mml:mi> Physical Review Applied, 2019, 11, .	1.5	49
830	Universal behavior of the thermoelectric figure of merit, zT, vs. quality factor. Materials Today Physics, 2019, 8, 43-48.	2.9	29
831	Thermoelectric properties of sorted semiconducting single-walled carbon nanotube sheets. Science and Technology of Advanced Materials, 2019, 20, 97-104.	2.8	22
832	Roles of AgSbTe₂ nanostructures in PbTe: controlling thermal properties of chalcogenides. Journal of Materials Chemistry C, 2019, 7, 3787-3794.	2.7	10
833	Surface Oxide Removal for Polycrystalline SnSe Reveals Near-Single-Crystal Thermoelectric Performance. Joule, 2019, 3, 719-731.	11.7	168
834	Ambient Surface Stability of Thin Film Nanocrystalline Cu3SbSe4 and Structureâ€“Property Relationships. ACS Applied Energy Materials, 2019, 2, 1903-1910.	2.5	8
835	Highly Passivated nâ€Type Colloidal Quantum Dots for Solutionâ€Processed Thermoelectric Generators with Large Output Voltage. Advanced Energy Materials, 2019, 9, 1901244.	10.2	12
836	Comprehensive calculations and prominent thermoelectric properties of Li3P and Li3As. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 2802-2808.	0.9	3
837	Synthesis and Processing of Thermoelectric Nanomaterials, Nanocomposites, and Devices. , 2019, , 295-336.		8
838	Precision Interface Engineering of an Atomic Layer in Bulk Bi₂Te₃ Alloys for High Thermoelectric Performance. ACS Nano, 2019, 13, 7146-7154.	7.3	66
839	Preparation of Gaâ€ZnO Nanoparticles Using Microwave and Ultrasonic Irradiation, and the Application of Poly(3,4â€ethylenedioxythiophene)â€poly(styrenesulfonate) Hybrid Thermoelectric Films. ChemistrySelect, 2019, 4, 6800-6804.	0.7	6
840	Optical and Physical Probing of Thermal Processes in Semiconductor and Plasmonic Nanocrystals. Annual Review of Physical Chemistry, 2019, 70, 353-377.	4.8	13
841	Enhancement in thermoelectric performance of electrochemically deposited platinum-bismuth telluride nanocomposite. Electrochimica Acta, 2019, 312, 62-71.	2.6	27

#	Article	IF	Citations
842	N-Type Bismuth Telluride Nanocomposite Materials Optimization for Thermoelectric Generators in Wearable Applications. Materials, 2019, 12, 1529.	1.3	35
843	Computational strategies for design and discovery of nanostructured thermoelectrics. Npj Computational Materials, 2019, 5, .	3.5	39
844	Production of polycrystalline Bi2Te3 nanostructures and the effect of annealing on their electrical conductivity. Microelectronic Engineering, 2019, 214, 44-49.	1.1	2
845	Effectiveness of nanoinclusions for reducing bipolar effects in thermoelectric materials. Computational Materials Science, 2019, 164, 91-98.	1.4	24
846	Non-linear enhancement of thermoelectric performance of a TiSe₂ monolayer due to tensile strain, from first-principles calculations. Journal of Materials Chemistry C, 2019, 7, 7308-7317.	2.7	22
847	P- and n-type thermoelectric cement composites with CVD grown p- and n-doped carbon nanotubes: Demonstration of a structural thermoelectric generator. Energy and Buildings, 2019, 191, 151-163.	3.1	77
848	The enhancement of thermoelectric performance of p-type Li doped Mg2Ge0.4Sn0.6 by Si addition. Scripta Materialia, 2019, 166, 122-127.	2.6	12
849	Design Strategy for High-Performance Thermoelectric Materials: The Prediction of Electron-Doped KZrCuSe₃. Chemistry of Materials, 2019, 31, 3018-3024.	3.2	23
850	Self-Powered, Rapid-Response, and Highly Flexible Humidity Sensors Based on Moisture-Dependent Voltage Generation. ACS Applied Materials & Interfaces, 2019, 11, 14249-14255.	4.0	74
851	The Role of Ligands in the Chemical Synthesis and Applications of Inorganic Nanoparticles. Chemical Reviews, 2019, 119, 4819-4880.	23.0	709
852	Seeded Lateral Solid-Phase Crystallization of the Perovskite Oxide SrTiO₃. Journal of Physical Chemistry C, 2019, 123, 7447-7456.	1.5	7
853	Enhancing the thermoelectric performance of Cu_{1.8}S by Sb/Sn co-doping and incorporating multiscale defects to scatter heat-carrying phonons. Journal of Materials Chemistry C, 2019, 7, 4026-4031.	2.7	29
854	One-Dimensional Nanostructure Engineering of Conducting Polymers for Thermoelectric Applications. Applied Sciences (Switzerland), 2019, 9, 1422.	1.3	23
855	Stretchable and dynamically stable promising two-dimensional thermoelectric materials: ScPÂand ScAs. Journal of Materials Chemistry A, 2019, 7, 12604-12615.	5.2	40
856	A facile synthesis, structural, morphological and electrical characterizations of Zn1-xCoxO nanocrystals for thermoelectric applications. Solid State Sciences, 2019, 91, 133-137.	1.5	3
857	Thermoelectric Conversion at 30 K in InAs/InP Nanowire Quantum Dots. Nano Letters, 2019, 19, 3033-3039.	4.5	59
858	Phonon Collapse and Second-Order Phase Transition in Thermoelectric SnSe. Physical Review Letters, 2019, 122, 075901.	2.9	92
859	Enhanced Density-of-States Effective Mass and Strained Endotaxial Nanostructures in Sb-Doped Pb_{0.97}Cd_{0.03}Te Thermoelectric Alloys. ACS Applied Materials & Interfaces, 2019, 11, 9197-9204.	4.0	66

#	Article	IF	Citations
860	Progress on PEDOT:PSS/Nanocrystal Thermoelectric Composites. Advanced Electronic Materials, 2019, 5, 1800822.	2.6	70
861	Progress and Perspective: Soft Thermoelectric Materials for Wearable and Internetâ€ofâ€Things Applications. Advanced Electronic Materials, 2019, 5, 1800823.	2.6	71
862	Ab initio based investigation of thermal transport in superlattices using the Boltzmann equation: Assessing the role of phonon coherence. Journal of Applied Physics, 2019, 125, 055107.	1.1	4
863	Emerging Theory, Materials, and Screening Methods: New Opportunities for Promoting Thermoelectric Performance. Annalen Der Physik, 2019, 531, 1800437.	0.9	83
864	Oxidation Protective Hybrid Coating for Thermoelectric Materials. Materials, 2019, 12, 573.	1.3	12
865	Performance Analysis of a Functionally Graded Thermoelectric Element with Temperature-Dependent Material Properties. Journal of Electronic Materials, 2019, 48, 5542-5554.	1.0	5
866	Electron Monte Carlo simulations of nanoporous Si thin filmsâ€"The influence of pore-edge charges. Journal of Applied Physics, 2019, 125, .	1.1	4
867	Rapid Prediction of Anisotropic Lattice Thermal Conductivity: Application to Layered Materials. Chemistry of Materials, 2019, 31, 2048-2057.	3.2	20
868	Organic Thermoelectrics and Thermoelectric Generators (TEGs). , 0, , .		4
869	Simultaneous Enhancement of Thermopower and Electrical Conductivity through Isovalent Substitution of Cerium in Bismuth Selenide Thermoelectric Materials. ACS Applied Materials & Interfaces, 2019, 11, 44026-44035.	4.0	18
870	Hierarchical Reinforcing Fibers for Energy Harvesting Applications - A Strength Study. Key Engineering Materials, 0, 827, 252-257.	0.4	5
871	High-efficiency half-Heusler thermoelectric modules enabled by self-propagating synthesis and topologic structure optimization. Energy and Environmental Science, 2019, 12, 3390-3399.	15.6	135
872	Observation of large anomalous Nernst effect in 2D layered materials Fe3GeTe2. Applied Physics Letters, 2019, 115, .	1.5	20
873	Nanostructured potential well/barrier engineering for realizing unprecedentedly large thermoelectric power factors. Materials Today Physics, 2019, 11, 100159.	2.9	18
874	Enhanced Thermoelectric Properties of Ga and Ce Double-Filled p-Type Skutterudites. Materials Transactions, 2019, 60, 1078-1082.	0.4	3
875	Thermal conductivity suppression in GaAsâ€"AlAs coreâ€"shell nanowire arrays. Nanoscale, 2019, 11, 20507-20513.	2.8	9
876	Review of high entropy ceramics: design, synthesis, structure and properties. Journal of Materials Chemistry A, 2019, 7, 22148-22162.	5.2	373
877	Significant Enhancement in Thermoelectric Power Factor of Bulk Nanostructured Calcium Cobalt Oxide Ceramics. ACS Applied Energy Materials, 2019, 2, 269-277.	2.5	9

#	Article	IF	Citations
878	Hierarchical nanostructuring approaches for thermoelectric materials with high power factors. Physical Review B, 2019, 99, .	1.1	31
879	Thermoelectrics: From history, a window to the future. Materials Science and Engineering Reports, 2019, 138, 100501.	14.8	341
880	From solâ€“gel prepared porous silica to monolithic porous Mg2Si/MgO composite materials. Journal of Sol-Gel Science and Technology, 2019, 89, 295-302.	1.1	3
881	Fabrication and electrical properties of Bi2-xSbxTe3 ternary nanopillars array films. Ceramics International, 2019, 45, 3244-3249.	2.3	5
882	Thermoelectric properties of nano-bulk bismuth telluride prepared with spark plasma sintered nano-plates. Current Applied Physics, 2019, 19, 97-101.	1.1	8
883	An Integrated Approach to Thermoelectrics: Combining Phonon Dynamics, Nanoengineering, Novel Materials Development, Module Fabrication, and Metrology. Advanced Energy Materials, 2019, 9, 1801304.	10.2	26
884	High thermoelectric performance in Cu2Se/CDs hybrid materials. Journal of Alloys and Compounds, 2020, 813, 152204.	2.8	43
885	Preparation, Structure, and enhanced thermoelectric properties of Sm-doped BiCuSeO oxyselenide. Materials and Design, 2020, 185, 108263.	3.3	29
886	Recent Advances in Liquidâ€Like Thermoelectric Materials. Advanced Functional Materials, 2020, 30, 1903867.	7.8	148
887	DFT modeling of thermoelectric and optical features of novel MgxSn1-xSe (xÂ= 6%, 12% & 18%). Journal of Molecular Graphics and Modelling, 2020, 94, 107484.	1.3	6
888	Thermal Conductivity Reduction in a Nanophononic Metamaterial versus a Nanophononic Crystal: A Review and Comparative Analysis. Advanced Functional Materials, 2020, 30, 1906718.	7.8	42
889	First-principles prediction of large thermoelectric efficiency in superionic Li₂SnX₃ (X = S, Se). Physical Chemistry Chemical Physics, 2020, 22, 878-889.	1.3	9
890	Revealing nano-chemistry at lattice defects in thermoelectric materials using atom probe tomography. Materials Today, 2020, 32, 260-274.	8.3	73
891	First-principles investigation of low-dimension MSe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e2111" altimg="si62.svg"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:math>(M = Ti, Hf, Zr) configurations as promising thermoelectric materials. Journal of Physics and Chemistry of Solids, 2020, 139, 109322.	1.9	8
892	Enhanced thermopower in covalent graphiteâ€“molecule contacts. Physical Chemistry Chemical Physics, 2020, 22, 1466-1474.	1.3	1
893	Enhancing the thermoelectric properties of Bi2Ba2Co2Oy by dispersing SiC nanoparticles based on Na element doping. Ceramics International, 2020, 46, 6899-6905.	2.3	16
894	Effect of abnormal grain growth on thermoelectric properties of hot-pressed Bi0.5Sb1.5Te3 alloys. Journal of Alloys and Compounds, 2020, 817, 153284.	2.8	14
895	Thermoelectric properties of YSb: A first-principles approach. Materials Today: Proceedings, 2020, 26, 3416-3419.	0.9	0

#	Article	IF	Citations
896	Review of wearable thermoelectric energy harvesting: From body temperature to electronic systems. Applied Energy, 2020, 258, 114069.	5.1	356
897	Stacking faults modulation for scattering optimization in GeTe-based thermoelectric materials. Nano Energy, 2020, 68, 104347.	8.2	77
898	Anomalous electronic and thermoelectric transport properties in cubic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Rb</mml:mi><mml:mn>3</mml:mn> antiperovskite. Physical Review B, 2020, 102, .	3.1	24
899	Monolayer Ag₂S: Ultralow Lattice Thermal Conductivity and Excellent Thermoelectric Performance. ACS Applied Energy Materials, 2020, 3, 10147-10153.	2.5	14
900	Tuning Optimum Temperature Range of Bi₂Te₃â€Based Thermoelectric Materials by Defect Engineering. Chemistry - an Asian Journal, 2020, 15, 2775-2792.	1.7	46
901	Design of Graphene Phononic Crystals for Heat Phonon Engineering. Micromachines, 2020, 11, 655.	1.4	9
902	Influence of dislocations on thermal conductivity of strontium titanate. Applied Physics Letters, 2020, 117, .	1.5	32
903	Comparative analysis of the thermoelectric properties of the non-textured and textured Bi1.9Gd0.1Te3 compounds. Journal of Solid State Chemistry, 2020, 290, 121559.	1.4	19
904	Hierarchically nanostructured thermoelectric materials: challenges and opportunities for improved power factors. European Physical Journal B, 2020, 93, 1.	0.6	12
905	Quantized thermoelectric Hall effect induces giant power factor in a topological semimetal. Nature Communications, 2020, 11, 6167.	5.8	43
906	N-type organic thermoelectrics: demonstration of ZTâ€‰>â€‰0.3. Nature Communications, 2020, 11, 5694.	5.8	98
907	Nanostructural evolution in vapor deposited phase-separating binary alloy films of non-equimolar compositions: Insights from a 3D phase-field approach. Journal of Applied Physics, 2020, 128, 175303.	1.1	9
908	A Highly Conductive Conjugated Polyelectrolyte for Flexible Organic Thermoelectrics. ACS Applied Energy Materials, 2020, 3, 8667-8675.	2.5	11
909	Electron-Transparent Thermoelectric Coolers Demonstrated with Nanoparticle and Condensation Thermometry. ACS Nano, 2020, 14, 11510-11517.	7.3	11
910	The Effect of Janus Asymmetry on Thermal Transport in SnSSe. Journal of Physical Chemistry C, 2020, 124, 17476-17484.	1.5	30
911	Theoretical model for predicting thermoelectric properties of tin chalcogenides. Physical Chemistry Chemical Physics, 2020, 22, 18989-19008.	1.3	26
912	Ultralow thermal conductivity and high thermoelectric figure of merit in Cu2Teâ€“Ag2Te composites. Journal of Alloys and Compounds, 2020, 848, 156540.	2.8	13
913	Coexistence of High Electron Conduction and Low Heat Conduction in Tungsten Oxide Epitaxial Films with 1D Atomic Defect Tunnels. ACS Applied Electronic Materials, 2020, 2, 2507-2513.	2.0	8

#	Article	IF	Citations
914	Enhanced thermoelectricity at the ultra-thin film limit. Applied Physics Letters, 2020, 117, .	1.5	9
915	Photoinitiated Transformation of Nanocrystal Superlattice Polymorphs Assembled at a Fluid Interface. Advanced Materials Interfaces, 2020, 7, 2001064.	1.9	3
916	Epoxy/Glass Fiber Nanostructured p- and n-Type Thermoelectric Enabled Model Composite Interphases. Applied Sciences (Switzerland), 2020, 10, 5352.	1.3	10
917	Investigating the thermoelectric performance of n-type SnSe: the synergistic effect of NbCl₅ doping and dislocation engineering. Journal of Materials Chemistry C, 2020, 8, 13244-13252.	2.7	31
918	Influence of Nanostructuration on the Vibrational, Electronic, and Optical Properties of CrSi₂ Thin Films. Journal of Physical Chemistry C, 2020, 124, 28267-28276.	1.5	3
919	Mixed-conduction mechanism of Cr2Ge2Te6 film enabling positive temperature dependence of electrical conductivity and seebeck coefficient. Results in Materials, 2020, 8, 100155.	0.9	8
920	First-Principles Study of Anharmonic Lattice Dynamics in Low Thermal Conductivity <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>AgCrSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> : Evidence for a Large Resonant Four-Phonon Scattering. Physical Review Letters, 2020, 125, 245901.	2.9	52
921	Effect of Microwave Processing and Glass Inclusions on Thermoelectric Properties of P-Type Bismuth Antimony Telluride Alloys for Wearable Applications. Energies, 2020, 13, 4524.	1.6	8
922	Effect of Gallium Substitution in Cu₃Al_{1â€“x}Ga_xSnS₅ Nanobulk Materials on Thermoelectric Properties. ACS Applied Energy Materials, 2020, 3, 5784-5791.	2.5	2
923	Coupled Dynamics of Colloidal Nanoparticle Spreading and Self-Assembly at a Fluidâ€“Fluid Interface. Langmuir, 2020, 36, 6106-6115.	1.6	19
924	Room temperature thermoelectric performance of Methyl Ammonium Lead Iodide Perovskite and their MWCNT-PANI composites. Materials Today Chemistry, 2020, 17, 100275.	1.7	9
925	First principles calculations on the thermoelectric properties of bulk Au₂S with ultra-low lattice thermal conductivity*. Chinese Physics B, 2020, 29, 087202.	0.7	9
926	Layered materials with 2D connectivity for thermoelectric energy conversion. Journal of Materials Chemistry A, 2020, 8, 12226-12261.	5.2	74
927	Tuning the electronic transport properties of p-type GaS monolayer by the application of biaxial strain. Materials Today: Proceedings, 2020, 28, 1673-1678.	0.9	1
928	Inverse Design of Ultralow Lattice Thermal Conductivity Materials via Materials Database Screening of Lone Pair Cation Coordination Environment. Journal of Physical Chemistry Letters, 2020, 11, 5577-5583.	2.1	11
929	The use of strain and grain boundaries to tailor phonon transport properties: A first-principles study of 2H-phase CuAlO2. II. Journal of Applied Physics, 2020, 127, .	1.1	2
930	Specialized Hardware and Software for The Study of Thermoelectric Properties of Semiconductors. , 2020, , .		1
931	Periodic Nanoslot Patterns as an Effective Approach to Improving the Thermoelectric Performance of Thin Films. Physical Review Applied, 2020, 13, .	1.5	8

#	Article	IF	Citations
932	Ultra-low thermal conductivity of roughened silicon nanowires: Role of phonon-surface bond order imperfection scattering*. Chinese Physics B, 2020, 29, 086502.	0.7	7
933	Advances in Atomic Layer Deposition (ALD) Nanolaminate Synthesis of Thermoelectric Films in Porous Templates for Improved Seebeck Coefficient. Materials, 2020, 13, 1283.	1.3	12
934	Identifying the Origins of High Thermoelectric Performance in Group IIIA Element Doped PbS. ACS Applied Materials & Interfaces, 2020, 12, 14203-14212.	4.0	12
935	Inorganic thermoelectric materials: A review. International Journal of Energy Research, 2020, 44, 6170-6222.	2.2	119
936	Enhancement of the thermoelectric power factor by tuning the carrier concentration in Cu-rich and Ge-poor colusites Cu26+xNb2Ge6â^'xS32. Journal of Materials Chemistry C, 2020, 8, 6442-6449.	2.7	5
937	Investigation of Thermal Properties and Thermal Stability of the Sn-Pb-Te System Materials for the Thermoelectric Generator Application. , 2020, , .		1
938	Waste Recycling in Thermoelectric Materials. Advanced Energy Materials, 2020, 10, 1904159.	10.2	62
939	Nanostructured calcium cobalt oxide Ca3Co4O9 as thermoelectric material. Effect of nanostructure on local coordination, Co charge state and thermoelectric properties. Journal of Physics and Chemistry of Solids, 2020, 143, 109474.	1.9	7
940	Chalcogenides by Design: Functionality through Metavalent Bonding and Confinement. Advanced Materials, 2020, 32, e1908302.	11.1	179
941	High-pressure, high temperature synthesis of a mesoporous Î±-quartz/bismuth nanowire composite. Solid State Sciences, 2020, 101, 106125.	1.5	1
942	Investigation of micro-indentation hardness of Bi2Te3 based composite thermoelectric materials. AIP Conference Proceedings, 2020, , .	0.3	3
943	Thermoelectric Properties of Semiconducting Polymers. Annual Review of Materials Research, 2020, 50, 551-574.	4.3	29
944	Thermoelectric porous MOF based hybrid materials. APL Materials, 2020, 8, .	2.2	17
945	Nanoscale defect structures advancing high performance n-type PbSe thermoelectrics. Coordination Chemistry Reviews, 2020, 421, 213437.	9.5	41
946	Investigation of the electronic and thermoelectric properties of hydrogenated monolayer germanene under biaxial tensile and compressive strains by DFT approach. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 124, 114339.	1.3	10
947	Enhanced thermoelectric performance in Ga Co4Sb12.3-Te skutterudites via suppressing bipolar effects for commercial application. Journal of Materiomics, 2020, 6, 240-247.	2.8	6
948	Effect of variation of metal and nonâ€•metal elements on various properties of rareâ€•earthâ€•based inverse perovskites Gd₃XY (X = Ga, In and Y = B, N). International Journal of Quantum Chemistry, 2020, 120, e26197.	1.0	10
949	Enhancing the Thermoelectric Performance of Polycrystalline SnSe by Decoupling Electrical and Thermal Transport through Carbon Fiber Incorporation. ACS Applied Materials & Interfaces, 2020, 12, 12910-12918.	4.0	22

#	Article	IF	Citations
950	High-Performance Ag-Modified Bi_{0.5}Sb_{1.5}Te₃ Films for the Flexible Thermoelectric Generator. ACS Applied Materials & Interfaces, 2020, 12, 7358-7365.	4.0	77
951	Development of topological insulator and topological crystalline insulator nanostructures. Nanotechnology, 2020, 31, 192001.	1.3	15
952	Solution synthesis ultrathin PbTe0.5Se0.5 nanowires and the low lattice thermal conductivity. Journal of Physics and Chemistry of Solids, 2020, 141, 109370.	1.9	3
953	Temperature-Dependent Structural Variation and Cu Substitution in Thermoelectric Silver Selenide. ACS Applied Energy Materials, 2020, 3, 2160-2167.	2.5	22
954	In-situ resonant band engineering of solution-processed semiconductors generates high performance n-type thermoelectric nano-inks. Nature Communications, 2020, 11, 2069.	5.8	23
955	Mechanical and Thermoelectric Properties of Eutectic Composite (Bi, Sb)2Te3/Te Thermoelectric Material. Transactions of the Indian Institute of Metals, 2020, 73, 1147-1155.	0.7	5
956	Exploring electronic, optoelectronic, and thermoelectric properties of ternary compound MgSrSe2 from first-principles study. AIP Advances, 2020, 10, 045010.	0.6	3
957	Organic thermoelectricity based on DNA molecules. Physica Scripta, 2020, 95, 065004.	1.2	1
958	Heat-driven acoustic phonons in lamellar nanoplatelet assemblies. Nanoscale, 2020, 12, 9661-9668.	2.8	5
959	Low-dimensional thermoelectricity in aperiodic gated graphene superlattices. Journal of Applied Physics, 2020, 127, .	1.1	4
960	Thermoelectric properties of nanostructured porous-polysilicon thin films. Nano Energy, 2021, 80, 105553.	8.2	13
961	Poly(3,4-ethylenedioxythiophene) (PEDOT) as promising thermoelectric materials and devices. Chemical Engineering Journal, 2021, 404, 126552.	6.6	64
962	Thermodynamic phase diagram and thermoelectric properties of LiMgZ (Zâ€‰=â€‰P, As, Bi): ab initio method study. Philosophical Magazine, 2021, 101, 369-386.	0.7	17
963	Low intrinsic thermal conductivity of Spark Plasma Sintered dense KNbO3 and NaNbO3 perovskite ceramics. Thermochimica Acta, 2021, 695, 178807.	1.2	8
964	Structural control for high performance Bi₂Te_{3â€“<i>x</i>}Se_{<i>x</i>} thermoelectric thin films. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 207303.	0	0
965	High-performance cement/SWCNT thermoelectric nanocomposites and a structural thermoelectric generator device towards large-scale thermal energy harvesting. Journal of Materials Chemistry C, 2021, 9, 14421-14438.	2.7	21
966	SnSe, the rising star thermoelectric material: a new paradigm in atomic blocks, building intriguing physical properties. Materials Horizons, 2021, 8, 1847-1865.	6.4	29
967	Ferromagnetic Silicene Superlattice Based Thermoelectric Flexible Renewable Energy Generator Device. IEEE Access, 2021, 9, 103564-103572.	2.6	4

#	Article	IF	Citations
968	First-principles predictions of low lattice thermal conductivity and high thermoelectric performance of AZnSb (A = Rb, Cs). RSC Advances, 2021, 11, 15486-15496.	1.7	6
969	Bridging Structural Inhomogeneity to Functionality: Pair Distribution Function Methods for Functional Materials Development. Advanced Science, 2021, 8, 2003534.	5.6	44
970	Towards Modeling Thermoelectric Properties of Anisotropic Polycrystalline Materials. SSRN Electronic Journal, 0, , .	0.4	0
971	Porous bismuth antimony telluride alloys with excellent thermoelectric and mechanical properties. Journal of Materials Chemistry A, 2021, 9, 4990-4999.	5.2	32
972	Thermal deposition method for pâ€“n patterning of carbon nanotube sheets for planar-type thermoelectric generator. Journal of Materials Chemistry A, 2021, 9, 12188-12195.	5.2	15
973	Materials development and module fabrication in highly efficient lead tellurides. , 2021, , 247-267.		0
974	Order-Determined Structural and Energy Transport Dynamics in Solid-Supported Interfacial Methanol. Nano Letters, 2021, 21, 1440-1445.	4.5	2
975	Dissociation of GaSb in n-Type PbTe: off-Centered Gallium Atom and Weak Electronâ€“Phonon Coupling Provide High Thermoelectric Performance. Chemistry of Materials, 2021, 33, 1842-1851.	3.2	23
976	Substitutions and dislocations enabled extraordinary n-type thermoelectric PbTe. Materials Today Physics, 2021, 17, 100355.	2.9	44
977	Buckled hexagonal carbon selenium nanosheet for thermoelectric performance. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	1
978	Thermal and electrical properties of InxAl1-xN alloy. IOP Conference Series: Materials Science and Engineering, 2021, 1120, 012030.	0.3	0
979	Theoretical investigation of novel half Heusler compounds MRhSb (M = Nb & Ta): For optoelectronic and thermoelectric applications. International Journal of Quantum Chemistry, 2021, 121, e26656.	1.0	0
980	Recent progress of radiation response in nanostructured tungsten for nuclear application. Tungsten, 2021, 3, 20-37.	2.0	15
981	Learning the best nanoscale heat engines through evolving network topology. Communications Physics, 2021, 4, .	2.0	4
982	Superior thermoelectric performance of Î±-Se₂Te monolayer. Materials Research Express, 2021, 8, 045507.	0.8	4
983	Thermoelectric Properties of Cu2Se Nano-Thin Film by Magnetron Sputtering. Materials, 2021, 14, 2075.	1.3	22
984	Suppression of thermal conductivity and electronic correlations in Fe1â^'xRuxSb2 (0) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.5	3
985	An Approach toward the Realization of a Through-Thickness Glass Fiber/Epoxy Thermoelectric Generator. Materials, 2021, 14, 2173.	1.3	5

#	Article	IF	Citations
986	Nanostructured Teâ€'SnTe eutectic composites with enhanced thermoelectric performance. Journal of Alloys and Compounds, 2021, 860, 158245.	2.8	3
987	Dopant-Assisted Matrix Stabilization Enables Thermoelectric Performance Enhancement in n-Type Quantum Dot Films. ACS Applied Materials & Interfaces, 2021, 13, 18999-19007.	4.0	3
988	The origin of the lattice thermal conductivity enhancement at the ferroelectric phase transition in GeTe. Npj Computational Materials, 2021, 7, .	3.5	42
989	Manipulation of Defects for Highâ€Performance Thermoelectric PbTeâ€Based Alloys. Small Structures, 2021, 2, 2100016.	6.9	10
990	Features for the design of a specialized information-measuring system for the study of thermoelectric properties of semiconductors. Eastern-European Journal of Enterprise Technologies, 2021, 2, 23-31.	0.3	0
991	Thermoelectric Properties of Textured Materials Based on Bismuth Telluride with Nanograined and Micrograined Structures Prepared by Spark Plasma Sintering. Nanobiotechnology Reports, 2021, 16, 316-322.	0.2	0
992	Constructing of highly porous thermoelectric structures with improved thermoelectric performance. Nano Research, 2021, 14, 3608-3615.	5.8	16
993	Bottom-Up Engineering Strategies for High-Performance Thermoelectric Materials. Nano-Micro Letters, 2021, 13, 119.	14.4	48
994	Advanced Glass Fiber Polymer Composite Laminate Operating as a Thermoelectric Generator: A Structural Device for Micropower Generation and Potential Large-Scale Thermal Energy Harvesting. ACS Applied Materials & Interfaces, 2021, 13, 24138-24153.	4.0	11
995	Thermoelectric Performance of Ge-Doped Mg2Si0.35Sn0.65 Thin Films. Journal of Materials Engineering and Performance, 2021, 30, 4045-4052.	1.2	2
996	Surprisingly high in-plane thermoelectric performance in a-axis-oriented epitaxial SnSe thin films. Materials Today Physics, 2021, 18, 100399.	2.9	17
997	Eliciting Highâ€Performance Thermoelectric Materials via Phase Diagram Engineering: A Review. Advanced Energy and Sustainability Research, 2021, 2, 2100054.	2.8	10
998	Enhanced thermoelectric performance of van der Waals Tellurium via vacancy engineering. Materials Today Physics, 2021, 18, 100379.	2.9	10
999	New Type of Thermoelectric CdSSe Nanowire Chip. ACS Applied Materials & Interfaces, 2021, 13, 30959-30966.	4.0	8
1000	Polaronic transport and thermoelectricity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>Mn</mml:mi></mml:mrow><mml:mn>3</m single crystals. Physical Review B, 2021, 103, .	1.1	16
1001	Thermal Transport Study on Nanoslot-Patterned Thin Films. , 2021, , .		0
1002	Significant enhancement of thermoelectric properties of conducting PTB7 polymer by addition of appropriate dopants. Journal of Applied Polymer Science, 2021, 138, 51378.	1.3	0
1003	AgSn[Bi1â^'xSbx]Se3: Synthesis, Structural Characterization, and Electrical Behavior. Crystals, 2021, 11, 864.	1.0	4

#	Article	IF	Citations
1004	Rationalizing the enhancement of the thermoelectric properties of PEDOT:PSS by secondary doping. Applied Physics Letters, 2021, 119, .	1.5	10
1005	Nano-scale compositional oscillation and phase intergrowth in Cu2S0.5Se0.5 and their role in thermal transport. Journal of Materials Science and Technology, 2021, 79, 222-229.	5.6	3
1006	Thermoelectric Properties of Strained Î²-Cu₂Se. ACS Applied Materials & Interfaces, 2021, 13, 34367-34373.	4.0	20
1007	Geometry and Greatly Enhanced Thermoelectric Performance of Monolayer MXY Transitionâ€Metal Dichalcogenide: MoSTe as an Example. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100166.	1.2	5
1008	Nanostructuring Bi₂Te₃-Based Thermoelectric Thin-Films Grown Using Pulsed Laser Deposition. , 0, , .		1
1009	Potential of functionalized single walled carbon nanotubes in flexible thermoelectrics. Journal of Materials Science, 2021, 56, 17112-17130.	1.7	2
1010	Novel thermoelectric performance of 2D 1T- Se₂Te and SeTe₂ with ultralow lattice thermal conductivity but high carrier mobility. Nanotechnology, 2021, 32, 455401.	1.3	18
1011	Progress of microscopic thermoelectric effects studied by micro- and nano-thermometric techniques. Frontiers of Physics, 2022, 17, 1.	2.4	5
1012	Research status and performance optimization of medium-temperature thermoelectric material SnTe. Chinese Physics B, 2022, 31, 047307.	0.7	6
1013	High Thermoelectric Performance Achieved in Bulk Selenium with Nanostructural Building Blocks. ACS Applied Electronic Materials, 2021, 3, 3824-3834.	2.0	5
1014	Research progress of p-type Fe-based skutterudite thermoelectric materials. Frontiers of Materials Science, 2021, 15, 317-333.	1.1	13
1015	Physics of surface vibrational resonances: pillared phononic crystals, metamaterials, and metasurfaces. Reports on Progress in Physics, 2021, 84, 086502.	8.1	94
1016	Enhanced Nâ€Type Doping of a Naphthalene Diimide Based Copolymer by Modification of the Donor Unit. Advanced Electronic Materials, 2021, 7, 2100407.	2.6	10
1017	Microscopic origin of the high thermoelectric figure of merit of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -doped SnSe. Physical Review B, 2021, 104, .	1.1	7
1018	Highly Enhanced Thermoelectric and Mechanical Properties of Bi-Sb-Te Compounds by Carrier Modulation and Microstructure Adjustment. ACS Applied Materials & Interfaces, 2021, 13, 45589-45599.	4.0	10
1019	Effects of SiC doping on the thermoelectric properties of Bi1.9Ba0.1Sr2Co2Oy ceramics. Ceramics International, 2021, 47, 25045-25050.	2.3	9
1020	High thermoelectric power factor of pure and vanadium-alloyed chromium nitride thin films. Materials Today Communications, 2021, 28, 102493.	0.9	9
1021	Analysis of ternary AlGaX₂(XÂ=ÂAs, Sb) compounds for opto-electronic and renewable energy devices using density functional theory. Physica Scripta, 2021, 96, 125706.	1.2	19

#	Article	IF	Citations
1022	Two-dimensional Al2I2Se2: A promising anisotropic thermoelectric material. Journal of Alloys and Compounds, 2021, 876, 160191.	2.8	37
1023	Thermoelectric properties of (GeTe)1-x[(Ag2Te)0.4(Sb2Te3)0.6]x alloys. Rare Metals, 2022, 41, 921-930.	3.6	15
1024	Enhanced thermoelectric performance of BiSe by Sn doping and ball milling. Ceramics International, 2021, 47, 26375-26382.	2.3	10
1025	Colloidal synthesis of diamond-like compound Cu2SnTe3 and thermoelectric properties of (Cu0.96InTe2)1â^'(Cu2SnTe3) solid solutions. Chemical Engineering Journal, 2021, 422, 129985.	6.6	8
1026	High electrical transport performance and ultralow thermal conductivity realized in Ga doped single-layer octagon-square nitrogene. Applied Surface Science, 2021, 563, 150244.	3.1	0
1027	High temperature Siâ€“Ge alloy towards thermoelectric applications: A comprehensive review. Materials Today Physics, 2021, 21, 100468.	2.9	38
1028	Bridging the miscibility gap towards higher thermoelectric performance of PbS. Acta Materialia, 2021, 220, 117337.	3.8	17
1029	Electronic structure engineering in organic thermoelectric materials. Journal of Energy Chemistry, 2021, 62, 204-219.	7.1	30
1030	Enhanced thermoelectric performance of Cu1.8S via lattice softening. Chemical Engineering Journal, 2022, 428, 131153.	6.6	15
1031	Bismuth telluride. , 2021, , 45-67.		1
1032	Defect engineering in thermoelectric materials: what have we learned?. Chemical Society Reviews, 2021, 50, 9022-9054.	18.7	201
1033	Beyond 3D-traditional materials thermoelectric materials. , 2021, , 163-193.		1
1034	The ultralow thermal conductivity and tunable thermoelectric properties of surfactant-free SnSe nanocrystals. RSC Advances, 2021, 11, 28072-28080.	1.7	4
1035	An electronic phase diagram of hole-doped BiCuSeO crystals determined by transport characterization under various growth conditions. CrystEngComm, 2021, 23, 273-281.	1.3	5
1036	Local Droplet Etching: Self-assembled Nanoholes for Quantum Dots and Nanopillars. Lecture Notes in Nanoscale Science and Technology, 2013, , 363-384.	0.4	2
1037	Nanoscale Self-assembled Oxide Bulk Thermoelectrics. Lecture Notes in Nanoscale Science and Technology, 2014, , 327-361.	0.4	2
1038	Control Thermal Conductivity of Semiconductor Nanowires: Phononics Engineering. Lecture Notes in Nanoscale Science and Technology, 2014, , 185-210.	0.4	1
1039	One-Dimensional Bi-Based Nanostructures for Thermoelectrics. Lecture Notes in Nanoscale Science and Technology, 2014, , 237-254.	0.4	2

#	Article	IF	Citations
1040	Thermoelectric Generator Power Converter System Configurations: A Review. , 2014, , 151-166.		5
1041	Resonant Thermal Transport in Nanophononic Metamaterials. , 2020, , 953-973.		1
1042	Nanostructuring and Porosity in Anisotropic Thermoelectric Materials Prepared by Bottom-Up Processing. Springer Series in Materials Science, 2013, , 177-191.	0.4	1
1043	Thermal expansion induced reduction of lattice thermal conductivity in light crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3514-3518.	0.9	9
1044	Emerging members of two-dimensional materials: bismuth-based ternary compounds. 2D Materials, 2021, 8, 012004.	2.0	26
1045	Absence of confinement in (SrTiO3)/(SrTi0.8Nb0.2O3) superlattices. Physical Review Materials, 2018, 2, .	0.9	1
1046	Microstructure and Electrical Characterization of Thermoelectric Nanocrystalline Bi2 Te3 Synthesized by Mechanical Alloying. Materials Research, 2019, 22, .	0.6	7
1047	THIN FILM THERMOELECTRIC CHARACTERIZATION TECHNIQUES. Annual Review of Heat Transfer, 2013, 16, 51-99.	0.3	12
1048	Influence of Cu on Transport Properties of Thermoelectric Thin Film Fabricated via Magnetron Co-sputtering Method. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2014, 29, 215-219.	0.6	1
1049	Effects of Hydrogen Reduction in Microstructure, Mechanical and Thermoelectric Properties of Gas Atomized n-type Bi2Te2.7 Se0.3 Material. Journal of Korean Powder Metallurgy Institute, 2016, 23, 126-131.	0.2	5
1050	Spectral and Finite Difference Solutions of the Hyperbolic Heat Transport Equation for Thermoelectric Thin Films. Applied Mathematics, 2013, 04, 22-27.	0.1	6
1051	Improved Thermoelectric Performance of Monolayer HfS₂ by Strain Engineering. ACS Omega, 2021, 6, 29820-29829.	1.6	22
1052	Effect of Co-Doping on Thermoelectric Properties of n-Type Bi2Te3 Nanostructures Fabricated Using a Low-Temperature Sol-Gel Method. Nanomaterials, 2021, 11, 2719.	1.9	5
1053	Metal Halide Perovskites as Emerging Thermoelectric Materials. ACS Energy Letters, 2021, 6, 3882-3905.	8.8	40
1054	High Thermoelectric Figure of Merit of FeSb2â^'x Thin Films via Defect Engineering for Low-Temperature Cooling Applications. Journal of Electronic Materials, 2021, 50, 6724-6732.	1.0	2
1055	Does Lowâ€Level Substitution Aid in Improving Thermoelectric Properties? A Case Study of M_{0.1}Ni_{0.9}Cr₂S₄ (Mâ€‰=â€‰Mn, In). Advanced Engineering Materials, 2022, 24, 2100828.	1.6	1
1056	Enhanced Thermoelectric Performance of Polycrystalline Si0.8Ge0.2 Alloys through the Addition of Nanoscale Porosity. Nanomaterials, 2021, 11, 2591.	1.9	7
1057	Bismuth induced Cu7Te4/Sb2Te3 nanocomposites for higher thermoelectric power factor and carrier properties. Journal of Materials Science: Materials in Electronics, 2022, 33, 8804-8814.	1.1	1

#	Article	IF	Citations
1058	Nanoelectronic Applications of Molecular Junctions. Springer Tracts in Modern Physics, 2013, , 231-272.	0.1	0
1059	Thermoelectric properties of chalcopyrite Cu3Ga5Te9 with Sb non-isoelectronic substitution for Cu and Te. Wuli Xuebao/Acta Physica Sinica, 2014, 63, 057201.	0.2	5
1060	Nanostructured Thermoelectric Materials. , 2015, , 1-9.		0
1061	Thermoelectric properties of the Bi2Te3 nanocrystalline bulk alloy pressed by the high-pressure sintering. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 047201.	0.2	0
1062	Nanostructured Thermoelectric Materials. , 2016, , 2739-2747.		0
1063	Nanostructured Polymers and Polymer/Inorganic Nanocomposites for Thermoelectric Applications. Engineering Materials and Processes, 2017, , 559-576.	0.2	1
1064	Thermal Transport in Micro- and Nanoscale Systems. , 2017, , 1-51.		1
1066	Thermoelectric Properties of an Array of Carbon Nanotubes under Uniaxial Compression after Annealing. Metallofizika I Noveishie Tekhnologii, 2018, 40, 169-182.	0.2	1
1067	Organic Hierarchical Thermoelectric Materials. RSC Energy and Environment Series, 2019, , 170-212.	0.2	0
1068	Chapter 5. Properties and Applications of Layered Thermoelectric Materials. RSC Smart Materials, 2019, , 129-164.	0.1	0
1069	Electron Irradiation of Carbon Nanotubes. Springer Proceedings in Physics, 2019, , 547-551.	0.1	0
1071	Synthesis of Organic Thermoelectric Materials. RSC Energy and Environment Series, 2019, , 65-116.	0.2	1
1072	Thermoelectric Properties of MnSi1.74-1.75:Ge<i>m</i> Prepared by Solid-State Reaction and Hot Pressing. Journal of Korean Institute of Metals and Materials, 2019, 57, 264-269.	0.4	3
1073	Method for Predicting Thermoelectric Module Efficiency Using MATLAB/Simulink. Journal of Korean Institute of Metals and Materials, 2021, 59, 829-837.	0.4	1
1074	Thermal Properties of Solids and the Size Effect. Mechanical Engineering Series, 2020, , 175-253.	0.1	0
1075	Thermal transport in nanoporous holey silicon membranes investigated with optically induced transient thermal gratings. Journal of Applied Physics, 2020, 128, .	1.1	6
1076	Structural, electronic and thermoelectric properties of two-dimensional GeSe bilayer. AIP Conference Proceedings, 2020, , .	0.3	0
1077	Research Background and Current Situation. , 2020, , 1-26.		0

#	Article	IF	Citations
1078	SPECIALIZED SOFTWARE AND HARDWARE FOR IMPEDANCE SPECTROSCOPY OF THERMOELECTRIC ENERGY CONVERTERS. Measuring Equipment and Metrology, 2020, 81, 18-24.	0.1	1
1079	Strong interlayer coupling in two-dimensional PbSe with high thermoelectric performance. Journal of Physics Condensed Matter, 2021, 33, 325701.	0.7	4
1080	Advances in thermoelectric (GeTe) x (AgSbTe2)100-x. Chinese Physics B, 0, , .	0.7	1
1081	Removal of Spectral Distortion Due to Echo for Ultrashort THz Pulses Propagating Through Multilayer Structures with Thick Substrate. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 1142.	1.2	4
1082	Nonlinear Thermopower Behaviour of N-Type Carbon Nanofibres and Their Melt Mixed Polypropylene Composites. Polymers, 2022, 14, 269.	2.0	5
1084	Features of microstructure and thermoelectric properties of the cermet composites based on grained Bi2Te3 matrix with locally-gradient Ni@NiTe2 inclusions. Chinese Journal of Physics, 2022, 77, 24-35.	2.0	6
1085	Optimized thermoelectric properties of Bi_{0.48}Sb_{1.52}Te₃/BN composites. Journal of Materials Chemistry C, 2022, 10, 3172-3177.	2.7	5
1086	Compositional engineering of metal-xanthate precursors toward (Bi_{1â^'x}Sb_x)₂S₃ (0 â‰ x â‰ 0.05) films with enhanced room temperature thermoelectric performance. Journal of Materials Chemistry C, 2022, 10, 1718-1726.	2.7	6
1087	Use of anti-solvent to enhance thermoelectric response of hybrid halide perovskite thin films. Japanese Journal of Applied Physics, 2022, 61, SE1019.	0.8	2
1088	Thermoactive Smart Electrospun Nanofibers. Macromolecular Rapid Communications, 2022, 43, e2100694.	2.0	14
1089	Significant enhancement in thermoelectric properties of half-Heusler compound TiNiSn by grain boundary engineering. Journal of Alloys and Compounds, 2022, 901, 163686.	2.8	17
1090	Analytical calculation of scattering from spin impurity and entanglement generation for edge states of Kaneâ€“Mele model. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 139, 115127.	1.3	1
1091	Optimization of high-energy ball milling process for uniform p-type Bi-Sb-Te thermoelectric material powder. Korean Journal of Chemical Engineering, 2022, 39, 1227-1231.	1.2	5
1092	Periodic DLC Interlayer-Functionalized Biâ€“Sbâ€“Te-Based Nanostructures: A Novel Concept for Building Heterogenized Superarchitectures with Enhanced Thermoelectric Performance. ACS Applied Materials & Interfaces, 2022, 14, 9307-9317.	4.0	4
1093	Controlled grain boundary interfaces of reduced graphene oxide in Ag2Se matrix for low lattice thermal conductivity and enhanced power factor for thermoelectric applications. Journal of Power Sources, 2022, 525, 231045.	4.0	10
1094	First-Principles Investigation on the Significant Anisotropic Thermoelectric Transport Performance of a Hf₂Cl₄ Monolayer. Journal of Physical Chemistry C, 2022, 126, 525-533.	1.5	13
1095	Soft Organic Thermoelectric Materials: Principles, Current State of the Art and Applications. Small, 2022, 18, e2104922.	5.2	32
1097	General strategies to improve thermoelectric performance with an emphasis on tin and germanium chalcogenides as thermoelectric materials. Journal of Materials Chemistry A, 2022, 10, 6872-6926.	5.2	26

#	Article	IF	Citations
1098	Screening for new thermoelectric material: A semiconducting TaS3 with nanoporous structure. Journal of Materiomics, 2022, 8, 1031-1037.	2.8	1
1099	Enhancing the thermoelectric properties through hierarchical structured materials fabricated through successive arrangement of different microstructure. Journal of Alloys and Compounds, 2022, , 164803.	2.8	1
1100	First-Principles Computational Exploration of Thermoelectric Properties of Bulk-GaN and Monolayer-GaN. Journal of Electronic Materials, 2022, 51, 3317-3328.	1.0	6
1101	Computational prediction of thermoelectric properties of 2D materials. Electronic Structure, 2022, 4, 023001.	1.0	7
1102	Atomic coordination dictates vibrational characteristics and thermal conductivity in amorphous carbon. Npj Computational Materials, 2022, 8, .	3.5	10
1103	Towards modeling thermoelectric properties of anisotropic polycrystalline materials. Acta Materialia, 2022, 228, 117743.	3.8	1
1104	Honeycomb-like puckered PbTe monolayer: A promising n-type thermoelectric material with ultralow lattice thermal conductivity. Journal of Alloys and Compounds, 2022, 907, 164439.	2.8	25
1105	Energy-dependent carrier scattering at weak localizations leading to decoupling of thermopower and conductivity. Carbon, 2022, 194, 62-71.	5.4	3
1106	Fundamental Processes and Practical Considerations of Lead Chalcogenide Mesocrystals Formed via Self-Assembly and Directed Attachment of Nanocrystals at a Fluid Interface. Chemistry of Materials, 2021, 33, 9457-9472.	3.2	6
1107	Suppressing thermal conductivity of nano-grained thermoelectric material using acoustically hard nanoparticles. Journal of Applied Physics, 2021, 130, .	1.1	4
1108	Inkjet printing of epitaxially connected nanocrystal superlattices. Nano Research, 2022, 15, 4536-4543.	5.8	5
1109	Sensitive Metal-Semiconductor Nanothermocouple Fabricated by FIB to Investigate Laser Beams with Nanometer Spatial Resolution. Sensors, 2022, 22, 287.	2.1	1
1110	Study of the Annealing Effects of Sputtered Bi₂Te₃ Thin Films with Full Thermoelectric Figure of Merit Characterization. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	1.2	3
1111	Figure of merit enhancement in thermoelectric materials based on Î³â€Ln_{0.8}Yb_{0.2}S_{1.5â€}_y (LnÂ=ÂGd, Dy) solid solutions. Journal of the American Ceramic Society, 2022, 105, 2813-2822.	1.9	8
1112	Thermal Conductivity of GaAs Nanowire Arrays Measured by the 3Ï‰ Method. Nanomaterials, 2022, 12, 1288.	1.9	4
1113	Spin-orbit coupling effects on thermoelectric transport properties in quantum dots. Physical Review B, 2022, 105, .	1.1	1
1114	Multistage nanostructures induced by precursor phase spontaneous partitioning lead to an excellent thermoelectric performance in Cu_{1.8}S_{0.8}Se_{0.2}. Journal of Materials Chemistry C, 0, , .	2.7	3
1115	Recent progress in electronâ€“phonon interaction of twoâ€dimensional materials. Nano Select, 2022, 3, 1112-1122.	1.9	5

#	Article	IF	Citations
1116	Improvement of the thermoelectric properties of GeTe- and SnTe-based semiconductors aided by the engineering based on phase diagram. International Journal of Materials Research, 2022, 113, 340-350.	0.1	1
1117	Out-of-plane thermoelectric performance for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -doped GeSe. Physical Review B, 2022, 105, .	1.1	6
1118	Grain boundary engineered, multilayer graphene incorporated LaCoO3 composites with enhanced thermoelectric properties. Ceramics International, 2022, 48, 24454-24461.	2.3	5
1119	High Throughput Nanoimaging of Thermal Conductivity and Interfacial Thermal Conductance. Nano Letters, 2022, 22, 4325-4332.	4.5	12
1120	Investigating the Effect of Steric Hindrance within CdS Single-Source Precursors on the Material Properties of AACVD and Spin-Coat-Deposited CdS Thin Films. Inorganic Chemistry, 2022, 61, 8206-8216.	1.9	6
1122	Thermoelectric Properties of an Individual Suspended Single-Crystalline Sb2Se3 Nanowire. Journal of Thermal Science, 0, , .	0.9	3
1123	Vacancy-Induced Temperature-Dependent Thermal and Magnetic Properties of Holmium-Substituted Bismuth Ferrite Nanoparticle Compacts. ACS Applied Materials & Interfaces, 2022, 14, 25886-25897.	4.0	4
1124	Monolayer Sc₂I₂S₂: An Excellent n-Type Thermoelectric Material with Significant Anisotropy. ACS Applied Energy Materials, 2022, 5, 7230-7239.	2.5	9
1125	Beyond T-graphene: Two-dimensional tetragonal allotropes and their potential applications. Applied Physics Reviews, 2022, 9, .	5.5	23
1126	Thermoelectric transport properties of armchair graphene nanoribbon heterostructures. Journal of Physics Condensed Matter, 2022, 34, 335302.	0.7	2
1127	Tunable Anisotropic Lattice Thermal Conductivity in One-Dimensional Superlattices from Molecular Dynamics Simulations. Journal of Thermal Science, 2022, 31, 1068-1075.	0.9	5
1128	Lateral transition-metal dichalcogenide heterostructures for high efficiency thermoelectric devices. Nanoscale, 2022, 14, 11750-11759.	2.8	10
1129	High Thermoelectric Performance of Janus Monolayer and Bilayer HfSSe. Physica Status Solidi (B): Basic Research, 2022, 259, .	0.7	4
1130	Adaptive thermoelectric cooling system for Energy-Efficient local and transient heat management. Applied Thermal Engineering, 2022, 216, 119060.	3.0	6
1131	Data-Driven Enhancement of ZT in SnSe-Based Thermoelectric Systems. Journal of the American Chemical Society, 2022, 144, 13748-13763.	6.6	16
1132	Temperature gradient sensing mechanism using liquid crystal droplets with 0.1-mK-level detection accuracy and high spatial resolution. Scientific Reports, 2022, 12, .	1.6	4
1133	Resolution of the Cationic Distribution in Synthetic Germanite Cu₂₂Fe₈Ge₄S₃₂ by an Experimental Combinatorial Approach Based on Synchrotron Resonant Powder Diffraction Data: A Case Study and Guidelines for Analogous Compounds. Chemistry of Materials, 2022, 34, 7434-7445.	3.2	0
1134	Dramatic Enhancement of Thermoelectric Performance in PbTe by Unconventional Grain Shrinking in the Sintering Process. Advanced Materials, 2022, 34, .	11.1	20

#	Article	IF	Citations
1135	Potentiodynamic Deposition of Cu Doped BixCuySb2-x-yTez Thin Film as Thermoelectric Materials. International Journal of Electrochemical Science, 2022, 17, 221055.	0.5	1
1136	Thermoelectric generators as an alternative for reliable powering of wearable devices with wasted heat. Journal of Solid State Chemistry, 2022, 316, 123543.	1.4	6
1137	Thermoelectric properties of Ag-doped CuI: a temperature dependent optical phonon study. Physical Chemistry Chemical Physics, 2022, 24, 24228-24237.	1.3	2
1138	Preparation, Characterization, Photoluminescence Spectra and Thermoelectric Properties of Nanostructured Pb1-Xsbxte Alloys. SSRN Electronic Journal, 0, , .	0.4	0
1139	Thermoelectric Nanostructured Perovskite Materials. , 0, , .		1
1140	In situ nitriding of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>2</mml:mn></mml:r during laser surface remelting to manipulate microstructure and crystalline defects. Physical Review Materials, 2022, 6, .	0.9	2
1141	Isotropic pressure-induced electronic band structure of BaTiO₃, SrTiO₃ and CaTiO₃ with its impact on structural and optical properties: ab-initio calculation. Molecular Simulation, 0, , 1-15.	0.9	1
1142	Enhancing thermoelectric properties of p-type (Bi,Sb)2Te3 via porous structures. Ceramics International, 2023, 49, 4305-4312.	2.3	5
1143	Grain growth and phase transformation of nano-sized titanium dioxide powder during heatÂtreatment and spark plasma sintering. Journal of Materials Research and Technology, 2022, 20, 4409-4418.	2.6	5
1144	Inverse design in nanoscale heat transport via interpolating interfacial phonon transmission. Structural and Multidisciplinary Optimization, 2022, 65, .	1.7	2
1145	Enhanced Thermoelectric Performance of Ni_xBi_{0.5}Sb_{1.5}Te₃via In Situ Formation of NiTe₂ Channels. ACS Applied Energy Materials, 2022, 5, 14127-14135.	2.5	0
1146	Atomic Simulations of Si@Ge and Ge@Si Nanowires for Mechanical and Thermal Properties. Crystals, 2022, 12, 1447.	1.0	1
1147	Engineering thermal transport within Si thin films: The impact of nanoslot alignment and ion implantation. IScience, 2022, 25, 105386.	1.9	2
1148	High-performance thermoelectric monolayer Î³-GeSe and its group-IV monochalcogenide isostructural family. Chemical Engineering Journal, 2023, 454, 140242.	6.6	16
1149	Thermoelectric properties variation in antimony telluride nanofilm using molecular dynamics. Materials Research Express, 2022, 9, 115008.	0.8	2
1150	Phase-field modeling of nanostructural evolution in physical vapor deposited phase-separating ternary alloy films. Modelling and Simulation in Materials Science and Engineering, 2022, 30, 084004.	0.8	0
1151	Weak Electronâ€“Phonon Coupling and Enhanced Thermoelectric Performance in nâ€type PbTeâ€“Cu₂Se via Dynamic Phase Conversion. Advanced Energy Materials, 2023, 13, .	10.2	18
1152	Synergistic Approach Toward a Reproducible High zT in n-Type and p-Type Superionic Thermoelectric Ag₂Te. ACS Applied Materials & Interfaces, 0, , .	4.0	3

#	Article	IF	Citations
1153	Study on the Thermoelectric Properties of n-Type Polycrystalline SnSe by CeCl₃ Doping. ACS Applied Energy Materials, 2022, 5, 15093-15101.	2.5	6
1154	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.	1.5	1
1155	Strain engineering and thermoelectric performance of Janus monolayers of titanium dichalcogenides: A DFT study. Computational Materials Science, 2023, 218, 111925.	1.4	6
1156	The thermoelectric properties of XTe (X = Ge, Sn and Pb) monolayers from first-principles calculations. Physica Scripta, 2022, 97, 125709.	1.2	1
1157	Recent Progress on Interfaces in Nanomaterials for Nuclear Radiation Resistance. ChemNanoMat, 2023, 9, .	1.5	4
1158	Physics-guided co-designing flexible thermoelectrics with techno-economic sustainability for low-grade heat harvesting. Science Advances, 2023, 9, .	4.7	15
1159	Thermoelectric Modules: Key Issues in Architectural Design and Contact Optimization. ChemNanoMat, 2023, 9, .	1.5	1
1160	Investigation of PbSnTeSe High-Entropy Thermoelectric Alloy: A DFT Approach. Materials, 2023, 16, 235.	1.3	2
1161	Semiconductor Thermal and Electrical Properties Decoupled by Localized Phonon Resonances. Advanced Materials, 2023, 35, .	11.1	3
1162	Strain Tunable Thermoelectric Material: Janus ZrSSe Monolayer. Langmuir, 2023, 39, 2719-2728.	1.6	5
1163	Effects of Localized Interface Phonons on Heat Conductivity in Ingredient Heterogeneous Solids. Chinese Physics Letters, 2023, 40, 036801.	1.3	4
1164	Enhancement of thermoelectric power factor in nanostructured cadmium oxide via zinc doping for high-temperature thermoelectric applications. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	0
1165	Recent Progress in Colloidal Quantum Dot Thermoelectrics. Advanced Materials, 2023, 35, .	11.1	1
1166	Role of Tellurium Ions for Electrochemically Synthesized Zinc Telluride 2D Structures on Nonconductive Substrate. Advanced Materials Interfaces, 2023, 10, .	1.9	0
1167	Advances in Ag₂Se-based thermoelectrics from materials to applications. Energy and Environmental Science, 2023, 16, 1870-1906.	15.6	35
1168	Bottom-up fabrication of FeSb2 nanowires on crystalline GaAs substrates with ion-induced pre-patterning. Frontiers in Physics, 0, 11, .	1.0	0
1169	TEXplorer.org: Thermoelectric material properties data platform for experimental and first-principles calculation results. APL Materials, 2023, 11, .	2.2	4
1173	Oxide thermoelectrics: a review and a case study. , 2023, , 137-152.		0

#	Article	IF	Citations
1185	Ultrafast and Nanoscale Energy Transduction Mechanisms and Coupled Thermal Transport across Interfaces. ACS Nano, 2023, 17, 14253-14282.	7.3	8
1209	Attaining Prescribed Isotropic Effective Thermal Conductivity via Topology Optimization and Symmetry Exploitation. , 2023, , .		0
1213	Germanium-telluride-based thermoelectrics. , 2024, 1, 109-123.		0