

# Convergence of electronic bands for high performance

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Citation Report

#	ARTICLE	IF	CITATIONS
3	Optimized thermoelectric properties of $\text{Mo}_3\text{Sb}_7\text{Te}_{10}$ with significant phonon scattering by electrons. Energy and Environmental Science, 2011, 4, 4086.	15.6	77
4	Recent advances in thermoelectrics. , 2011, , .		3
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10	High Performance Thermoelectrics from Earth-Abundant Materials: Enhanced Figure of Merit in PbS by Second Phase Nanostructures. Journal of the American Chemical Society, 2011, 133, 20476-20487.	6.6	433
11	High thermoelectric figure of merit in nanostructured p-type $\text{PbTe}_x\text{MTe}$ (M = Ca, Ba). Energy and Environmental Science, 2011, 4, 4675.	15.6	162
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1097	Twin Engineering in Solution-Synthesized Nonstoichiometric $\text{Cu}_5\text{FeS}_4$ Icosahedral Nanoparticles for Enhanced Thermoelectric Performance. <i>Advanced Functional Materials</i> , 2018, 28, 1705117.	7.8	53
1098	Ag-Segregation to Dislocations in PbTe-Based Thermoelectric Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 3609-3615.	4.0	74
1099	Recent progress towards high performance of tin chalcogenide thermoelectric materials. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2432-2448.	5.2	101
1100	Vanadium-Doping-Induced Resonant Energy Levels for the Enhancement of Thermoelectric Performance in Hf-Free $\text{ZrNiSn}$ Half-Heusler Alloys. <i>ACS Applied Energy Materials</i> , 2018, 1, 757-764.	2.5	63

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1102	Enhancing Molecular n-Type Doping of Donor-Acceptor Copolymers by Tailoring Side Chains. <i>Advanced Materials</i> , 2018, 30, 1704630.	11.1	217
1103	Thermoelectric properties of Ag-doped compound: Mg <sub>3-x</sub> Ag <sub>x</sub> Sb <sub>2</sub> . <i>Journal of Materiomics</i> , 2018, 4, 75-79.	2.8	17
1104	Transition from mobility-activated small polaron to carrier density-activated conduction of sol-gel-derived highly-oriented CuAlO <sub>2</sub> thin film and enhanced thermoelectric properties. <i>Ceramics International</i> , 2018, 44, 5950-5960.	2.3	7
1105	Enhancing Thermoelectric Performances of Bismuth Antimony Telluride via Synergistic Combination of Multiscale Structuring and Band Alignment by FeTe <sub>2</sub> Incorporation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 3689-3698.	4.0	66
1106	Influence of leg geometry configuration and contact resistance on the performance of annular thermoelectric generators. <i>Energy Conversion and Management</i> , 2018, 166, 337-342.	4.4	65
1107	Lattice Dynamics and Thermal Conductivity in Cu <sub>2</sub> Zn <sub>1-x</sub> CoxSnSe <sub>4</sub> . <i>Inorganic Chemistry</i> , 2018, 57, 6051-6056.	1.9	19
1108	Synthesis and thermoelectric properties of Rashba semiconductor BiTeBr with intensive texture. <i>Rare Metals</i> , 2018, 37, 274-281.	3.6	20
1109	Modulation of carrier concentration and microstructure for high performance Bi <sub>x</sub> Sb <sub>2-x</sub> Te <sub>3</sub> thermoelectrics prepared by rapid solidification. <i>Journal of Solid State Chemistry</i> , 2018, 264, 141-147.	1.4	9
1110	Enhanced thermoelectric performance of Na-doped PbTe synthesized under high pressure. <i>Science China Materials</i> , 2018, 61, 1218-1224.	3.5	29
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1112	Thermoelectric transport properties of rock-salt SnSe: first-principles investigation. <i>Journal of Materials Chemistry C</i> , 2018, 6, 12016-12022.	2.7	43
1113	Crystalline Solids with Intrinsically Low Lattice Thermal Conductivity for Thermoelectric Energy Conversion. <i>ACS Energy Letters</i> , 2018, 3, 1315-1324.	8.8	132
1114	Effect of nanostructure on thermoelectric properties of La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> in 300-600 K temperature range. <i>Materials Research Express</i> , 2018, 5, 055026.	0.8	6
1115	Single parabolic band behavior of thermoelectric p-type Cu <sub>4</sub> Mn <sub>2</sub> Te <sub>4</sub> . <i>Journal of Alloys and Compounds</i> , 2018, 753, 93-99.	2.8	8
1116	Thermoelectric Properties of Topological Insulators. <i>Physica Status Solidi (B): Basic Research</i> , 2018, 255, 1800020.	0.7	37
1117	Large thermoelectric power factor from crystal symmetry-protected non-bonding orbital in half-Heuslers. <i>Nature Communications</i> , 2018, 9, 1721.	5.8	111
1118	Large enhancement of thermoelectric performance in CuInTe <sub>2</sub> upon compression. <i>Materials Today Physics</i> , 2018, 5, 1-6.	2.9	38

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1120	The journey of tin chalcogenides towards high-performance thermoelectrics and topological materials. <i>Chemical Communications</i> , 2018, 54, 6573-6590.	2.2	84
1121	Effects of anion and cation doping on the thermoelectric properties of n-type PbS. <i>Journal of the European Ceramic Society</i> , 2018, 38, 3512-3517.	2.8	19
1122	Cornucopia of Structures in the Pseudobinary System (SnSe) <sub>x</sub> Bi <sub>2</sub> Se <sub>3</sub> : A Crystal-Chemical Copycat. <i>Inorganic Chemistry</i> , 2018, 57, 4427-4440.	1.9	11
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1126	Lead-free MnTe mid-temperature thermoelectric materials: facile synthesis, p-type doping and transport properties. <i>Journal of Materials Chemistry C</i> , 2018, 6, 4265-4272.	2.7	36
1127	Thermoelectric properties and thermal stability of Bi-doped PbTe single crystal. <i>Physica B: Condensed Matter</i> , 2018, 538, 154-159.	1.3	13
1128	Enhancement of Thermoelectric Performance in Na-Doped Pb <sub>0.6</sub> Sn <sub>0.4</sub> Te <sub>0.95</sub> Se <sub>0.05</sub> via Breaking the Inversion Symmetry, Band Convergence, and Nanostructuring by Multiple Elements Doping. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 11613-11622.	4.0	18
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1131	Tuning the thermoelectric properties by manipulating copper in Cu <sub>2</sub> SnSe <sub>3</sub> system. <i>Journal of Alloys and Compounds</i> , 2018, 748, 273-280.	2.8	13
1132	Enhancing thermoelectric performance of Cu-modified Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> by electroless plating and annealing. <i>Progress in Natural Science: Materials International</i> , 2018, 28, 218-224.	1.8	6
1133	High-Power-Density Skutterudite-Based Thermoelectric Modules with Ultralow Contact Resistivity Using Fe-Ni Metallization Layers. <i>ACS Applied Energy Materials</i> , 2018, 1, 1603-1611.	2.5	44
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1140	High thermoelectric performance of $\hat{\pm}$ -MgAgSb for power generation. <i>Energy and Environmental Science</i> , 2018, 11, 23-44.	15.6	127
1141	Enhanced thermoelectric properties of Cu <sub>1.8</sub> S by Ti-doping induced secondary phase. <i>Journal of Alloys and Compounds</i> , 2018, 731, 577-583.	2.8	26
1142	Enhancement of Thermoelectric Properties in SnTe with (Ag, In) Co-Doping. <i>Journal of Electronic Materials</i> , 2018, 47, 205-211.	1.0	28
1143	Achieving high Figure of Merit in p-type polycrystalline Sn <sub>0.98</sub> Se via self-doping and anisotropy-strengthening. <i>Energy Storage Materials</i> , 2018, 10, 130-138.	9.5	101
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1146	Comparison of Predicted Thermoelectric Energy Conversion Efficiency by Cumulative Properties and Reduced Variables Approaches. <i>Journal of Electronic Materials</i> , 2018, 47, 3085-3090.	1.0	2
1147	Band engineering in Mg <sub>3</sub> Sb <sub>2</sub> by alloying with Mg <sub>3</sub> Bi <sub>2</sub> for enhanced thermoelectric performance. <i>Materials Horizons</i> , 2018, 5, 59-64.	6.4	177
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1151	High thermoelectric performance of few-quintuple Sb <sub>2</sub> Te <sub>3</sub> nanofilms. <i>Nano Energy</i> , 2018, 43, 285-290.	8.2	51
1152	Thermoelectric Properties of Texture-Controlled (GeTe) <sub>x</sub> (AgSbTe <sub>2</sub> ) <sub>100-x</sub> (x=75, 80, 85, and 90) Alloys Fabricated by Gas-Atomization and Hot-Extrusion Processes. <i>Journal of Electronic Materials</i> , 2018, 47, 3119-3126.	1.0	5
1153	Impact of Coinage Metal Insertion on the Thermoelectric Properties of GeTe Solid-State Solutions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 227-235.	1.5	49
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1156	Phase Boundary Mapping to Obtain n-type Mg <sub>3</sub> Sb <sub>2</sub> -Based Thermoelectrics. <i>Joule</i> , 2018, 2, 141-154.	11.7	274
1157	Ultra-high average figure of merit in synergistic band engineered Sn <sub>1-x</sub> Se <sub>0.95</sub> O <sub>0.1</sub> single crystals. <i>Materials Today</i> , 2018, 21, 501-507.	8.3	71
1158	Understanding the combustion process for the synthesis of mechanically robust SnSe thermoelectrics. <i>Nano Energy</i> , 2018, 44, 53-62.	8.2	51
1159	Crystal structure of high-performance thermoelectric materials by high resolution neutron powder diffraction. <i>Physica B: Condensed Matter</i> , 2018, 551, 64-68.	1.3	9
1160	High Performance Thermoelectric Materials: Progress and Their Applications. <i>Advanced Energy Materials</i> , 2018, 8, 1701797.	10.2	548
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1162	First-principles study of high spin-polarization and thermoelectric efficiency of ferromagnetic CoFeCrAs quaternary Heusler alloy. <i>Journal of Magnetism and Magnetic Materials</i> , 2018, 449, 493-499.	1.0	28
1163	Strain-induced enhancement of thermoelectric performance of TiS <sub>2</sub> monolayer based on first-principles phonon and electron band structures. <i>Nanotechnology</i> , 2018, 29, 015204.	1.3	56
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1171	Low lattice thermal conductivity and promising thermoelectric figure of merit of Zintl type TlInTe <sub>2</sub> . <i>Journal of Materials Chemistry C</i> , 2018, 6, 13269-13274.	2.7	30
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1176	Chalcopyrite $\text{ZnSnSb}_2$ : A Promising Thermoelectric Material. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 43682-43690.	4.0	22
1177	Exploring a Novel Atomic Layer with Extremely Low Lattice Thermal Conductivity: $\text{ZnPSe}_3$ and Its Thermoelectrics. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27917-27924.	1.5	18
1178	Detrimental Effects of Doping Al and Ba on the Thermoelectric Performance of GeTe. <i>Materials</i> , 2018, 11, 2237.	1.3	33
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1183	Structural and thermoelectric properties of copper sulphide powders. <i>Journal of Semiconductors</i> , 2018, 39, 122001.	2.0	23
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1202	Effect of the Processing Route on the Thermoelectric Performance of Nanostructured CuPb <sub>18</sub> SbTe <sub>20</sub> . <i>Inorganic Chemistry</i> , 2018, 57, 12976-12986.	1.9	29
1203	Thermoelectric properties of n-type transition metal-doped PbSe. <i>Materials Today Physics</i> , 2018, 6, 45-52.	2.9	23
1204	Synergistic optimization of carrier transport and thermal conductivity in Sn-doped Cu <sub>2</sub> Te. <i>Journal of Materials Chemistry A</i> , 2018, 6, 18928-18937.	5.2	29
1205	The Atomic Circus: Small Electron Beams Spotlight Advanced Materials Down to the Atomic Scale. <i>Advanced Materials</i> , 2018, 30, e1802402.	11.1	27
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1210	Charge and phonon transport in PbTe-based thermoelectric materials. <i>Npj Quantum Materials</i> , 2018, 3, .	1.8	227
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1212	High-Performance GeTe Thermoelectrics in Both Rhombohedral and Cubic Phases. <i>Journal of the American Chemical Society</i> , 2018, 140, 16190-16197.	6.6	108
1213	Methodology of Thermoelectric Power Factor Enhancement by Controlling Nanowire Interface. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 37709-37716.	4.0	72
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1221	Microstructure engineering beyond SnSe <sub>1-x</sub> S <sub>x</sub> solid solution for high thermoelectric performance. <i>Journal of Materiomics</i> , 2018, 4, 321-328.	2.8	18
1222	Enhanced electrical transport properties via Pb vacancies in single crystalline PbTe prepared by Te-flux method. <i>Physica B: Condensed Matter</i> , 2018, 550, 9-14.	1.3	1
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1224	Thermoelectric Cooling. , 0, , .		6
1225	Arrays of Planar Vacancies in Superior Thermoelectric Ge <sub>1-x</sub> Cd <sub>x</sub> Bi <sub>y</sub> Te <sub>1-z</sub> with Band Convergence. <i>Advanced Energy Materials</i> , 2018, 8, 1801837.	4.0	16
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1228	Investigation of electronic properties of Nd doped PbS. <i>Physica B: Condensed Matter</i> , 2018, 550, 311-316.	1.3	4
1229	Structure and Improved Thermoelectric Properties of $\text{Ag}_2\text{Cr}_2\text{Se}_3$ Compounds. <i>Inorganic Chemistry</i> , 2018, 57, 12125-12131.	1.9	5
1230	Approaching Topological Insulating States Leads to High Thermoelectric Performance in n-Type PbTe. <i>Journal of the American Chemical Society</i> , 2018, 140, 13097-13102.	6.6	77
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1792	Synergistic effect of $\text{CuInSe}_2$ alloying on enhancing the thermoelectric performance of $\text{Cu}_2\text{SnSe}_3$ compounds. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21181-21188.	5.2	10
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1931	Recent Progress of Two-Dimensional Thermoelectric Materials. Nano-Micro Letters, 2020, 12, 36.	14.4	218
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1939	Achieving high room-temperature thermoelectric performance in cubic $\text{AgCuTe}$ . <i>Journal of Materials Chemistry A</i> , 2020, 8, 4790-4799.	5.2	46
1940	Enhanced thermoelectric performance of $\text{PbTe}$ -based nanocomposites through element doping and $\text{SiC}$ nanoparticles dispersion. <i>Scripta Materialia</i> , 2020, 179, 86-91.	2.6	20
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1955	Enhancing thermoelectric properties of monolayer GeSe via strain-engineering: A first principles study. <i>Applied Surface Science</i> , 2020, 521, 146256.	3.1	27
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1985	Synergistic effect of indium nano-inclusions to enhance interface phonon scattering in polycrystalline SnSe for thermoelectric applications. <i>Journal of Alloys and Compounds</i> , 2021, 856, 157358.	2.8	8
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1990	Band flattening and phonon-defect scattering in cubic $\text{SnSe}/\text{AgSbTe}_2$ alloy for thermoelectric enhancement. <i>Materials Today Physics</i> , 2021, 16, 100298.	2.9	20
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1995	Realizing enhanced thermoelectric properties in $\text{Cu}_2\text{S}$ -alloyed SnSe based composites produced via solution synthesis and sintering. <i>Journal of Materials Science and Technology</i> , 2021, 78, 121-130.	5.6	38
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2002	Thermoelectric performance of copper-rich $\text{Zn}_2\text{-Cu}_2\text{Se}$ films with Ag-doping by magnetron sputtering. <i>Materials Chemistry and Physics</i> , 2021, 260, 124143.	2.0	12
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2036	Synergistic manifestation of band and scattering engineering in single aliovalent Sb alloyed anharmonic SnTe alloy in concurrence with rule of parsimony. <i>Materials Advances</i> , 0, , .	2.6	4
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2238	A comparative study of thermoelectric Cu <sub>2</sub> TrTi <sub>3</sub> S <sub>8</sub> (Tr = Co and Sc) thiospinels: Enhanced Seebeck coefficient via electronic structure modification. <i>Journal of Alloys and Compounds</i> , 2021, 871, 159548.	2.8	1
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2830	Enhanced Thermoelectric Performance of Ni <sub>1-x</sub> Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> via In Situ Formation of NiTe <sub>2</sub> Channels. <i>ACS Applied Energy Materials</i> , 2022, 5, 14127-14135.	2.5	0
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2950	Band Effective Masses of Cubic (GeTe) <sub>1-x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>x</sub> and Its Anisotropy. <i>Materials Transactions</i> , 2023, 64, 522-526.	0.4	0
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