## Advanced Thermoelectric Design: From Materials and S

Chemical Reviews 120, 7399-7515 DOI: 10.1021/acs.chemrev.0c00026

Citation Report

#	Article	IF	CITATIONS
1	Enhancing the Thermoelectric Performance of Calcium Cobaltite Ceramics by Tuning Composition and Processing. ACS Applied Materials & amp; Interfaces, 2020, 12, 47634-47646.	8.0	15
2	Rashba Effect Maximizes Thermoelectric Performance of GeTe Derivatives. Joule, 2020, 4, 2030-2043.	24.0	138
3	A Facile Chemical Synthesis of PbTe Nanostructures at Room Temperature. Nanomaterials, 2020, 10, 1915.	4.1	0
4	Bi2Te3-based applied thermoelectric materials: research advances and new challenges. National Science Review, 2020, 7, 1856-1858.	9.5	170
5	Spatially resolved thermoelectric effects in <i>operando</i> semiconductor–metal nanowire heterostructures. Nanoscale, 2020, 12, 20590-20597.	5.6	13
6	In situ crystal-amorphous compositing inducing ultrahigh thermoelectric performance of p-type Bi0.5Sb1.5Te3 hybrid thin films. Nano Energy, 2020, 78, 105379.	16.0	23
7	Hierarchical Structuring to Break the Amorphous Limit of Lattice Thermal Conductivity in High-Performance SnTe-Based Thermoelectrics. ACS Applied Materials & Interfaces, 2020, 12, 36370-36379.	8.0	20
8	A new type of novel salt-inclusion chalcogenide with ultralow thermal conductivity. Chemical Communications, 2020, 56, 15149-15152.	4.1	9
9	Efficient biodegradable flexible hydrophobic thermoelectric material based on biomass-derived nanocellulose film and copper iodide thin nanostructured layer. Solar Energy, 2020, 212, 231-240.	6.1	11
10	Realization of High Thermoelectric Performance in Polycrystalline Tin Selenide through Schottky Vacancies and Endotaxial Nanostructuring. Chemistry of Materials, 2020, 32, 9761-9770.	6.7	22
11	Rational structural design and manipulation advance SnSe thermoelectrics. Materials Horizons, 2020, 7, 3065-3096.	12.2	73
12	Decoupling phonon and carrier scattering at carbon nanotube/Bi2Te3 interfaces for improved thermoelectric performance. Carbon, 2020, 170, 191-198.	10.3	33
13	Optimized Strategies for Advancing n-Type PbTe Thermoelectrics: A Review. ACS Applied Materials & Interfaces, 2020, 12, 49323-49334.	8.0	51
14	Effects of annealing process on thermoelectric performance for Pb-doped BiCuSeO. Journal of Materials Science: Materials in Electronics, 2020, 31, 21623-21631.	2.2	2
15	Variable Rigidity Module with a Flexible Thermoelectric Device for Bidirectional Temperature Control. Soft Robotics, 2021, 8, 662-672.	8.0	8
16	Enhanced Charge Transport in Ca <sub>2</sub> MnO <sub>4</sub> -Layered Perovskites by Point Defect Engineering. ACS Applied Materials & Interfaces, 2020, 12, 49768-49776.	8.0	11
17	Innovative design of bismuth-telluride-based thermoelectric micro-generators with high output power. Energy and Environmental Science, 2020, 13, 3579-3591.	30.8	32
18	Bi–Zn codoping in GeTe synergistically enhances band convergence and phonon scattering for high thermoelectric performance. Journal of Materials Chemistry A, 2020, 8, 21642-21648.	10.3	36

#	Article	IF	CITATIONS
19	Lone-Electron-Pair Micelles Strengthen Bond Anharmonicity in MnPb16Sb14S38 Complex Sulfosalt Leading to Ultralow Thermal Conductivity. ACS Applied Materials & Interfaces, 2020, 12, 44991-44997.	8.0	10
20	Achieving Enhanced Thermoelectric Performance in (SnTe) <sub>1-<i>x</i></sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <i><sub>x</sub></i> and (SnTe) <sub>1-<i>y</i></sub> (Sb <sub>2</sub> Se <sub>3</sub> ) <i><sub>y</sub></i> Synthesized via Solvothermal Reaction and Sintering, ACS Applied Materials & amp: Interfaces, 2020, 12, 44805-44814.	8.0	26
21	Nanostructured monoclinic Cu <sub>2</sub> Se as a near-room-temperature thermoelectric material. Nanoscale, 2020, 12, 20536-20542.	5.6	26
22	Highly efficient n-type PbTe developed by advanced electronic structure engineering. Journal of Materials Chemistry C, 2020, 8, 13270-13285.	5.5	36
23	Realizing High Thermoelectric Performance in the ZnTe-Alloyed CuGaTe2 through Band Engineering. ACS Applied Energy Materials, 2020, 3, 12400-12406.	5.1	8
24	Insights into the Pt (111) Surface Aid in Predicting the Selective Hydrogenation Catalyst. Catalysts, 2020, 10, 1473.	3.5	3
25	Phonon and Carrier Transport Properties in Low-Cost and Environmentally Friendly SnS <sub>2</sub> : A Promising Thermoelectric Material. Chemistry of Materials, 2020, 32, 10348-10356.	6.7	32
26	Transport properties and electronic density-of-states of Zn-doped colusite Cu26Cr2Ge6S32. Applied Physics Letters, 2020, 117, 173902.	3.3	4
27	Promoted crystallisation and cationic ordering in thermoelectric Cu <sub>26</sub> V <sub>2</sub> Sn <sub>6</sub> 32 colusite by eccentric vibratory ball milling. Dalton Transactions, 2020, 49, 15828-15836.	3.3	10
28	Hierarchical Structures Advance Thermoelectric Properties of Porous n-type β-Ag <sub>2</sub> Se. ACS Applied Materials & Interfaces, 2020, 12, 51523-51529.	8.0	51
29	Enhancement of Ca3Co4O9+l̂´ thermoelectric properties by dispersing SiC nanoparticles. Ceramics International, 2021, 47, 6548-6553.	4.8	17
30	A new rapid synthesis of thermoelectric Sb2Te3 ingots using selective laser melting 3D printing. Materials Science in Semiconductor Processing, 2021, 123, 105551.	4.0	15
31	Two-dimensional WSe2/SnSe p-n junctions secure ultrahigh thermoelectric performance in n-type Pb/I Co-doped polycrystalline SnSe. Materials Today Physics, 2021, 16, 100306.	6.0	51
32	Achieving enhanced thermoelectric performance of Ca1â^'xâ^'yLaxSryMnO3 via synergistic carrier concentration optimization and chemical bond engineering. Chemical Engineering Journal, 2021, 408, 127364.	12.7	23
33	Enhancing thermoelectric performance of Sb2Te3 through swapped bilayer defects. Nano Energy, 2021, 79, 105484.	16.0	32
34	Pavonite homologues as potential n-type thermoelectric materials: crystal structure and performance. Materials Chemistry Frontiers, 2021, 5, 1283-1294.	5.9	8
35	Inverse optimization investigation for thermoelectric material from device level. Energy Conversion and Management, 2021, 228, 113669.	9.2	5
36	High-efficiency thermocells driven by thermo-electrochemical processes. Trends in Chemistry, 2021, 3, 561-574.	8.5	57

	CITATION R	EPORT	
#	Article	IF	CITATIONS
37	Realizing enhanced thermoelectric properties in Cu2S-alloyed SnSe based composites produced via solution synthesis and sintering. Journal of Materials Science and Technology, 2021, 78, 121-130.	10.7	38
38	Metavalent Bonding in Solids: Characteristic Representatives, Their Properties, and Design Options. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000482.	2.4	28
39	Rational band engineering and structural manipulations inducing high thermoelectric performance in n-type CoSb3 thin films. Nano Energy, 2021, 81, 105683.	16.0	82
40	Wearable fiber-based thermoelectrics from materials to applications. Nano Energy, 2021, 81, 105684.	16.0	92
41	Ultralow thermal conductivity in the quaternary semiconducting chalcogenide Cs <sub>4</sub> [Ho <sub>26</sub> Cd <sub>7</sub> Se <sub>48</sub> ] with an unprecedented closed cavity architecture. Inorganic Chemistry Frontiers, 2021, 8, 1049-1055.	6.0	4
42	Boosting the thermoelectric performance of p-type polycrystalline SnSe with high doping efficiency <i>via</i> precipitation design. Journal of Materials Chemistry A, 2021, 9, 2991-2998.	10.3	10
43	Recent developments in high-performance thermoelectric sulphides: an overview of the promising synthetic colusites. Journal of Materials Chemistry C, 2021, 9, 773-795.	5.5	33
44	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie, 2021, 133, 272-277.	2.0	7
45	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie - International Edition, 2021, 60, 268-273.	13.8	28
46	Structural control for high performance Bi <sub>2</sub> Te <sub>3–<i>x</i></sub> Se <sub><i>x</i>&lt; thermoelectric thin films. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 207303.</sub>	/su <b>b</b> >	0
47	Synthesis and physical properties of single-crystalline InTe: towards high thermoelectric performance. Journal of Materials Chemistry C, 2021, 9, 5250-5260.	5.5	18
48	Excellent thermoelectric performance achieved in Bi <sub>2</sub> Te <sub>3</sub> /Bi <sub>2</sub> S <sub>3</sub> @Bi nanocomposites. Chemical Communications, 2021, 57, 2555-2558.	4.1	14
49	Tin-selenide as a futuristic material: properties and applications. RSC Advances, 2021, 11, 6477-6503.	3.6	71
50	Excellent thermoelectric performance of boron-doped n-type Mg3Sb2-based materials via the manipulation of grain boundary scattering and control of Mg content. Science China Materials, 2021, 64, 1761-1769.	6.3	26
51	Modulation of the electronic structure and thermoelectric properties of orthorhombic and cubic SnSe by AgBiSe <sub>2</sub> alloying. Chemical Science, 2021, 12, 13074-13082.	7.4	20
52	Advances in half-Heusler alloys for thermoelectric power generation. Materials Advances, 2021, 2, 6246-6266.	5.4	90
53	Crystal Structure and Physical Properties of the Lanthanum Chalcoantimonate TlLa 2 Sb 3 Se 9. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 81-85.	1.2	0
54	Mechanistic insights into the anisotropic growth of ZnO nanoparticles deciphered through 2D size plots and multivariate analysis. Nanoscale Advances, 2021, 3, 6696-6703.	4.6	5

#	Article	IF	CITATIONS
55	Applications of thermodynamic calculations to practical TEG design: Mg <sub>2</sub> (Si <sub>0.3</sub> Sn <sub>0.7</sub> )/Cu interconnections. Journal of Materials Chemistry A, 2021, 9, 20436-20452.	10.3	6
56	Novel optimization perspectives for thermoelectric properties based on Rashba spin splitting: a mini review. Nanoscale, 2021, 13, 18032-18043.	5.6	10
57	Theoretical investigations of novel Janus Pb <sub>2</sub> SSe monolayer as a potential multifunctional material for piezoelectric, photovoltaic, and thermoelectric applications. Nanoscale, 2021, 13, 15611-15623.	5.6	12
58	Extraordinary thermoelectric performance of NaBaBi with degenerate and highly non-parabolic bands compared to LiBaSb and Bi <sub>2</sub> Te <sub>3</sub> . Sustainable Energy and Fuels, 2021, 5, 2441-2450.	4.9	3
59	Porous bismuth antimony telluride alloys with excellent thermoelectric and mechanical properties. Journal of Materials Chemistry A, 2021, 9, 4990-4999.	10.3	32
60	Lightweight wearable thermoelectric cooler with rationally designed flexible heatsink consisting of phase-change material/graphite/silicone elastomer. Journal of Materials Chemistry A, 2021, 9, 15696-15703.	10.3	35
61	Improving the thermoelectric performance of Ti-doped NbFeSb by substitutional doping of the Sb atoms with the isoelectric and heavy Bi atoms. Journal of Materials Chemistry C, 2021, 9, 12374-12387.	5.5	15
62	Ultralow thermal conductivity through the interplay of composition and disorder between thick and thin layers of makovickyite structure. Journal of Materials Chemistry C, 2021, 9, 11207-11215.	5.5	3
63	Thermogalvanic energy harvesting from forced convection cooling of 100–200 °C surfaces generating high power density. Sustainable Energy and Fuels, 2021, 5, 5967-5974.	4.9	13
65	Strongly reduced lattice thermal conductivity in Sn-doped rare-earth (M) filled skutterudites M <sub>x</sub> Co <sub>4</sub> Sb <sub>12â°y</sub> Sn <sub>y</sub> , promoted by Sb–Sn disordering and phase segregation. RSC Advances, 2021, 11, 26421-26431.	3.6	5
66	Intrinsically ultralow thermal conductive inorganic solids for high thermoelectric performance. Chemical Communications, 2021, 57, 4751-4767.	4.1	45
67	Remarkable thermoelectric property enhancement in Cu <sub>2</sub> SnS <sub>3</sub> –CuCo <sub>2</sub> S <sub>4</sub> nanocomposites <i>via</i> 3D modulation doping. Journal of Materials Chemistry A, 2021, 9, 16928-16935.	10.3	18
68	Hierarchical structures lead to high thermoelectric performance in Cu <sub>m+n</sub> Pb <sub>100</sub> Sb <sub>m</sub> Te <sub>100</sub> Se <sub>2m</sub> (CLAST). Energy and Environmental Science, 2021, 14, 451-461.	30.8	47
69	Heterogeneity induced dual luminescence properties of AgInS <sub>2</sub> and AgInS <sub>2</sub> –ZnS alloyed nanocrystals. Inorganic Chemistry Frontiers, 2021, 8, 3450-3462.	6.0	8
70	Hydrostatic Pressure Tuning of Thermal Conductivity for PbTe and PbSe Considering Pressure-Induced Phase Transitions. ACS Omega, 2021, 6, 3980-3990.	3.5	6
71	Pressureâ€dependent <scp>elastoâ€mechanical</scp> stability and thermoelectric properties of <scp> MYbF <sub>3</sub> </scp> (M = Rb, Cs) materials for renewable energy. International Journal of Energy Research, 2021, 45, 8711-8723.	4.5	48
72	A Robust System for Thermoelectric Device Characterization. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-7.	4.7	2
73	Refined band structure plus enhanced phonon scattering realizes thermoelectric performance optimization in Cul–Mn codoped SnTe. Journal of Materials Chemistry A, 2021, 9, 13065-13070.	10.3	30

#	Article	IF	CITATIONS
74	Highly foldable and flexible films of PEDOT:PSS/Xuan paper composites for thermoelectric applications. Journal of Materials Chemistry A, 2021, 9, 8317-8324.	10.3	28
76	Phase Equilibria and Thermoelectric Properties in the Pb–Ga–Te System in the Vicinity of the PbGa <sub>6</sub> Te <sub>10</sub> Phase. Inorganic Chemistry, 2021, 60, 2771-2782.	4.0	13
77	Multiscale architectures boosting thermoelectric performance of copper sulfide compound. Rare Metals, 2021, 40, 2017-2025.	7.1	33
78	Enhanced Thermoelectric Performance of Carbon Nanotubes/Polyaniline Composites by Multiple Interface Engineering. ACS Applied Materials & Interfaces, 2021, 13, 6650-6658.	8.0	35
79	Improvement of power factor in the room temperature range of Mg <sub>2</sub> Sn <sub>1â^'x </sub> Ge <sub> x </sub> . Japanese Journal of Applied Physics, 2021, 60, SBBF06.	1.5	6
80	Transitioning from Si to SiGe Nanowires as Thermoelectric Material in Silicon-Based Microgenerators. Nanomaterials, 2021, 11, 517.	4.1	24
81	High-Pressure Rapid Preparation of High-Performance Binary Silver Sulfide Thermoelectric Materials. ACS Applied Energy Materials, 2021, 4, 1610-1618.	5.1	15
82	Autonomous Computing Materials. ACS Nano, 2021, 15, 3586-3592.	14.6	14
83	An Instant Change of Elastic Lattice Strain during Cu <sub>2</sub> Se Phase Transition: Origin of Abnormal Thermoelectric Properties. Advanced Functional Materials, 2021, 31, 2100431.	14.9	24
84	Metavalent Bonding in GeSe Leads to High Thermoelectric Performance. Angewandte Chemie - International Edition, 2021, 60, 10350-10358.	13.8	58
85	Discordant Gd and Electronic Band Flattening Synergistically Induce High Thermoelectric Performance in n-type PbTe. ACS Energy Letters, 0, , 1625-1632.	17.4	37
86	Improved Thermoelectric Properties of BiSbTe-AgBiSe <sub>2</sub> Alloys by Suppressing Bipolar Excitation. ACS Applied Energy Materials, 2021, 4, 2944-2950.	5.1	17
87	Effects of Disorder on the Electronic Structure and Thermoelectric Properties of an Inverse Full-Heusler Mn <sub>2</sub> CoAl Alloy. Chemistry of Materials, 2021, 33, 2543-2547.	6.7	16
88	Anomalous Thermopower and High <i>ZT</i> in GeMnTe <sub>2</sub> Driven by Spin's Thermodynamic Entropy. Research, 2021, 2021, 1949070.	5.7	4
89	Thermoelectric materials for space applications. CEAS Space Journal, 2021, 13, 325-340.	2.3	13
90	Parallel Dislocation Networks and Cottrell Atmospheres Reduce Thermal Conductivity of PbTe Thermoelectrics. Advanced Functional Materials, 2021, 31, 2101214.	14.9	41
91	Metavalent Bonding in GeSe Leads to High Thermoelectric Performance. Angewandte Chemie, 2021, 133, 10438-10446.	2.0	12
92	Issues and opportunities from Peltier effect in functionally-graded colusites: From SPS temperature modeling to enhanced thermoelectric performances. Applied Materials Today, 2021, 22, 100948.	4.3	6

#	Article	IF	CITATIONS
93	Bottom-Up (Cu, Ag, Au)/Al2O3/Bi2Te3 Assembled Thermoelectric Heterostructures. Micromachines, 2021, 12, 480.	2.9	4
94	High thermoelectric performance of highâ€mobility Gaâ€doped ZnO films via homogenous interface design. Journal of the American Ceramic Society, 2021, 104, 3992-3999.	3.8	14
95	Ultralow Thermal Conductivity in Diamondoid Structures and High Thermoelectric Performance in (Cu <sub>1–<i>x</i></sub> Ag <sub><i>x</i></sub> )(In <sub>1–<i>y</i></sub> Ga <sub><i>y</i></sub> )Te <s Journal of the American Chemical Society, 2021, 143, 5978-5989.</s 	ub <b>t82</b> %/sut	)>49
96	Rational Electronic and Structural Designs Advance BiCuSeO Thermoelectrics. Advanced Functional Materials, 2021, 31, 2101289.	14.9	48
97	CoSb <sub>3</sub> -Based Thin-Film Thermoelectric Devices with High Performance Via Electrode Optimization. ACS Applied Energy Materials, 2021, 4, 5265-5273.	5.1	9
98	Simultaneously optimized thermoelectric performance of n-type Cu2Se alloyed Bi2Te3. Journal of Solid State Chemistry, 2021, 296, 121987.	2.9	10
99	<i>Ab initio</i> thermoelectric calculations of ring-shaped bands in two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt; <mml:mrow> <mml:msub> <mml:mi>Bi</mml:mi> <mml:mi width="0.28em" /&gt; <mml:msub> <mml:mi>Bi</mml:mi> <mml:mn>2 </mml:mn> </mml:msub> <mml:msub> <mml:mi> Se</mml:mi> <!--</td--><td>1&gt;23.2 mml:mn&gt;3</td><td>:mn&gt;12 3</td></mml:msub></mml:mi </mml:msub></mml:mrow></mml:math 	1>23.2 mml:mn>3	:mn>12 3
100	, and <mml:math xmlns:mml="http://www.w3.org/1998/Math/. Physical Review B, 2021, 103, . Ultralow Thermal Conductivity in Earth-Abundant Cu <sub>1.6</sub> Bi <sub>4.8</sub> S <sub>8</sub> : Anharmonic Rattling of Interstitial Cu. Chemistry of Materials, 2021, 33, 2993-3001.	6.7	26
101	Comparison of thermoelectric properties of Bi2Te3 and Bi2Se0·3Te2.7 thin film materials synthesized by hydrothermal process and thermal evaporation. Ceramics International, 2021, 47, 11547-11559.	4.8	20
102	Potentially Wearable Thermoâ€Electrochemical Cells for Body Heat Harvesting: From Mechanism, Materials, Strategies to Applications. Advanced Science, 2021, 8, 2100669.	11.2	50
103	Augmentation of the thermoelectric properties of polycrystalline Tin selenides via formation of SnSe/SnSe\$\$_2\$\$ composites. Journal of Materials Science: Materials in Electronics, 2021, 32, 11781-11790.	2.2	5
104	Novel germanium-based σ-π conjugated oligourethanes containing dibenzofuran moieties in the backbone: Thermal, optical, electronic properties and theoretical simulations. European Polymer Journal, 2021, 148, 110373.	5.4	2
105	PANI coupled hierarchical Bi <sub>2</sub> S <sub>3</sub> nanoflowers based hybrid nanocomposite for enhanced thermoelectric performance. Nanotechnology, 2021, 32, 335705.	2.6	14
106	Enhanced thermoelectric performance in MnTe due to doping and in-situ nanocompositing effects by Ag2S addition. Journal of Materiomics, 2021, 7, 577-584.	5.7	11
107	Medium Entropyâ€Enabled High Performance Cubic GeTe Thermoelectrics. Advanced Science, 2021, 8, 2100220.	11.2	51
108	Design and production of a novel encapsulated nano phase change materials to improve thermal efficiency of a quintuple renewable geothermal/hydro/biomass/solar/wind hybrid system. Renewable Energy, 2021, 169, 358-378.	8.9	24
109	Constructing of highly porous thermoelectric structures with improved thermoelectric performance. Nano Research, 2021, 14, 3608-3615.	10.4	16
110	Bottom-Up Engineering Strategies for High-Performance Thermoelectric Materials. Nano-Micro Letters. 2021. 13. 119.	27.0	48

#	Article	IF	CITATIONS
111	Carbon allotrope hybrids advance thermoelectric development and applications. Renewable and Sustainable Energy Reviews, 2021, 141, 110800.	16.4	87
112	Entropy engineering promotes thermoelectric performance in p-type chalcogenides. Nature Communications, 2021, 12, 3234.	12.8	105
113	Engineering Copper lodide (Cul) for Multifunctional pâ€Type Transparent Semiconductors and Conductors. Advanced Science, 2021, 8, 2100546.	11.2	74
114	Recent Progress in Designing Thermoelectric Metal–Organic Frameworks. Small, 2021, 17, e2100505.	10.0	34
116	Selective Enhancement in Phonon Scattering Leads to a High Thermoelectric Figure-of-Merit in Graphene Oxide-Encapsulated ZnO Nanocomposites. ACS Applied Materials & Interfaces, 2021, 13, 23771-23786.	8.0	34
117	Inorganic Thermoelectric Fibers: A Review of Materials, Fabrication Methods, and Applications. Sensors, 2021, 21, 3437.	3.8	7
118	Thermoelectric materials with crystal-amorphicity duality induced by large atomic size mismatch. Joule, 2021, 5, 1183-1195.	24.0	27
119	Structural Evolution of Highâ€Performance Mnâ€Alloyed Thermoelectric Materials: A Case Study of SnTe. Small, 2021, 17, e2100525.	10.0	21
120	Identification of vibrational mode symmetry and phonon anharmonicity in SbCrSe3 single crystal using Raman spectroscopy. Science China Materials, 2021, 64, 2824-2834.	6.3	4
121	Demonstration of ultrahigh thermoelectric efficiency of â^¼7.3% in Mg3Sb2/MgAgSb module for low-temperature energy harvesting. Joule, 2021, 5, 1196-1208.	24.0	205
122	Enhanced Thermoelectric and Mechanical Performances in Sintered Bi <sub>0.48</sub> Sb <sub>1.52</sub> Te <sub>3</sub> –AgSbSe <sub>2</sub> Composite. ACS Applied Materials & Interfaces, 2021, 13, 24937-24944.	8.0	23
123	Effects of NbCl5-doping on the thermoelectric properties of polycrystalline Bi2S3. Journal of Solid State Chemistry, 2021, 297, 122043.	2.9	22
124	Ultrahigh Thermoelectric Performance in Environmentally Friendly SnTe Achieved through Stressâ€Induced Lotusâ€6eedpodâ€Like Grain Boundaries. Advanced Functional Materials, 2021, 31, 2101554.	14.9	43
125	Effect of band structure adjustment based of Cu site on the thermoelectric properties of BiCuSeO. Journal of Materials Science: Materials in Electronics, 2021, 32, 14956-14965.	2.2	1
126	Electrical Transport Properties of Liquid Pb-Li Alloys. Physica Scripta, 0, , .	2.5	0
127	Enhanced Thermoelectric Properties of Graphene/Cu3SbSe4 Composites. Journal of Electronic Materials, 2021, 50, 4880-4886.	2.2	2
128	Contrasting Cu Roles Lead to High Ranged Thermoelectric Performance of PbS. Advanced Functional Materials, 2021, 31, 2102185.	14.9	33
129	Advances in organic thermoelectric materials and devices for smart applications. SmartMat, 2021, 2, 426-445.	10.7	62

#	Article	IF	CITATIONS
130	A Brief Review of CoSb3-based Thermoelectric Materials and Modules for Mid-Temperature Power Generation. Ceramist, 2021, 24, 213-223.	0.1	1
131	Low carrier concentration leads to high in-plane thermoelectric performance in n-type SnS crystals. Science China Materials, 2021, 64, 3051-3058.	6.3	16
132	The thermoelectric performance of new structure SnSe studied by quotient graph and deep learning potential. Materials Today Energy, 2021, 20, 100665.	4.7	11
133	Flexible thermoelectric materials and devices: From materials to applications. Materials Today, 2021, 46, 62-108.	14.2	206
134	Asymmetric In-Plane Temperature Contribution in Longitudinal Spin Seebeck Effect Measurements in the Pt/WSe <sub>2</sub> /YIG Hybrid Structure. Journal of Physical Chemistry C, 2021, 125, 13059-13066.	3.1	4
135	Melt-spun Sn1â^'â^'Sb Mn Te with unique multiscale microstructures approaching exceptional average thermoelectric zT. Nano Energy, 2021, 84, 105879.	16.0	46
136	Slowing down the heat in thermoelectrics. InformaÄnÃ-Materiály, 2021, 3, 755-789.	17.3	57
137	Thermoelectric generation via tellurene for wearable applications: recent advances, research challenges, and future perspectives. Materials Today Energy, 2021, 20, 100625.	4.7	23
138	Thermal induced spin-polarized current protected by spin-momentum locking in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt;<mml:msub><mml:mi>ZrTe</mml:mi><mml:mn>5nanowires. Physical Review B, 2021, 104, .</mml:mn></mml:msub></mml:math 	l:m <b>a</b> æ/mn	nl:m2sub>
139	Enhanced Band Convergence and Ultra‣ow Thermal Conductivity Lead to High Thermoelectric Performance in SnTe. Angewandte Chemie, 2021, 133, 17827-17833.	2.0	16
140	Solution-Synthesized SnSe <sub>1–<i>x</i></sub> S <sub><i>x</i></sub> : Dual-Functional Materials with Enhanced Electrochemical Storage and Thermoelectric Performance. ACS Applied Materials & Interfaces, 2021, 13, 37201-37211.	8.0	10
141	Fiber-Based Thermoelectric Materials and Devices for Wearable Electronics. Micromachines, 2021, 12, 869.	2.9	13
142	Thermoelectric CoGeTe with an Orthorhombic Crystal Symmetry and Balance of the Electrical and Thermal Properties. Inorganic Chemistry, 2021, 60, 12331-12338.	4.0	1
143	Power generation and thermoelectric cooling enabled by momentum and energy multiband alignments. Science, 2021, 373, 556-561.	12.6	270
144	Understanding the electrical transports of <i>p</i> -type polycrystalline SnSe with effective medium theory. Applied Physics Letters, 2021, 119, .	3.3	8
145	All-Oxide p–n Junction Thermoelectric Generator Based on SnO <i><sub>x</sub></i> and ZnO Thin Films. ACS Applied Materials & Interfaces, 2021, 13, 35187-35196.	8.0	21
146	Engineering doping level for enhanced thermoelectric performance of carbon nanotubes/polyaniline composites. Composites Science and Technology, 2021, 210, 108797.	7.8	29
147	Suppression of secondary phase in CrN matrix to boost the high-temperature thermoelectric performance. Materials Today Physics, 2021, 19, 100420.	6.0	5

#	Article	IF	CITATIONS
148	Enhanced Band Convergence and Ultra‣ow Thermal Conductivity Lead to High Thermoelectric Performance in SnTe. Angewandte Chemie - International Edition, 2021, 60, 17686-17692.	13.8	42
149	Solar-induced hybrid energy harvesters for advanced oxidation water treatment. IScience, 2021, 24, 102808.	4.1	16
150	Spark plasma sintered Bi-Sb-Te alloys derived from ingot scrap: Maximizing thermoelectric performance by tailoring their composition and optimizing sintering time. Nano Energy, 2021, 85, 106040.	16.0	36
151	Phonon–dislocation interaction and its impact on thermal conductivity. Journal of Applied Physics, 2021, 130, .	2.5	14
152	Heat source free water floating carbon nanotube thermoelectric generators. Scientific Reports, 2021, 11, 14707.	3.3	15
153	Abnormal thermal conduction in argyrodite-type Ag9FeS6-Te materials. Materials Today Physics, 2021, 19, 100410.	6.0	8
154	High-Performance Thermoelectric Energy Conversion: A Tale of Atomic Ordering in AgSbTe <sub>2</sub> . ACS Energy Letters, 2021, 6, 2825-2837.	17.4	42
155	Lone-pair engineering: Achieving ultralow lattice thermal conductivity and enhanced thermoelectric performance in Al-doped GeTe-based alloys. Materials Today Physics, 2021, 20, 100497.	6.0	15
156	Enhancing Thermoelectric Performance of Yb <sub>0.3</sub> Co <sub>4</sub> Sb <sub>12</sub> by Synergistically Optimized Carrier Concentration and Ionized Impurity Scattering. ACS Applied Materials & Interfaces, 2021, 13, 39533-39540.	8.0	8
157	Optimization of low resistivity molybdenum thin films for high-temperature microheater applications. Superlattices and Microstructures, 2021, 156, 106971.	3.1	4
158	Boron Strengthened GeTeâ€Based Alloys for Robust Thermoelectric Devices with High Output Power Density. Advanced Energy Materials, 2021, 11, 2102012.	19.5	39
159	Phase Tuning for Enhancing the Thermoelectric Performance of Solution-Synthesized Cu2–xS. ACS Applied Materials & Interfaces, 2021, 13, 39541-39549.	8.0	8
160	High thermoelectric performance enabled by convergence of nested conduction bands in Pb7Bi4Se13 with low thermal conductivity. Nature Communications, 2021, 12, 4793.	12.8	53
161	Optimizing Electronic Quality Factor toward Highâ€Performance Ge <sub>1â°</sub> <i><sub>x</sub></i> <sub>â°</sub> <i><sub>y</sub></i> Ta <i><sub>x</sub></i> Sb <i><sub>y Thermoelectrics: The Role of Transition Metal Doping. Advanced Materials, 2021, 33, e2102575.</sub></i>	/ 2/500b > < /	i∕√ī₽
162	Thermoelectric textile devices with thin films of nanocellulose and copper iodide. Journal of Materials Science: Materials in Electronics, 2021, 32, 23246-23265.	2.2	5
163	p-Type to n-Type Conversion through the "Bypass―Phase Transition in the Zintl-Phase Thermoelectric Materials. Chemistry of Materials, 2021, 33, 6761-6773.	6.7	10
164	Low lattice thermal conductivity and enhanced thermoelectric performance of SnTe via chemical electroless plating of Ag. Rare Metals, 2022, 41, 86-95.	7.1	18
165	A comparative study of thermoelectric Cu2TrTi3S8 (Tr = Co and Sc) thiospinels: Enhanced Seebeck coefficient via electronic structure modification. Journal of Alloys and Compounds, 2021, 871, 159548.	5.5	1

		CITATION REPORT	
# 166	ARTICLE Electronic structure modulation of Pb0.6Sn0.4Te via zinc doping and its effect on the thermoelectric properties. Journal of Alloys and Compounds, 2021, 872, 159681.	lF 5.5	CITATIONS 24
167	Investigation on Low-Temperature Thermoelectric Properties of Ag <sub>2</sub> Se Polycrystal Fabricated by Using Zone-Melting Method. Journal of Physical Chemistry Letters, 2021, 12, 8246-8255.	4.6	37
168	Magnetically enhanced thermoelectrics: a comprehensive review. Reports on Progress in Physics, 2021, 84, 096501.	20.1	14
169	Conducting polymer-based flexible thermoelectric materials and devices: From mechanisms to applications. Progress in Materials Science, 2021, 121, 100840.	32.8	160
170	Current Stateâ€ofâ€theâ€Art in the Interface/Surface Modification of Thermoelectric Materials. Advanced Energy Materials, 2021, 11, 2101877.	19.5	37
171	Recent Advances in Polyaniline-Based Thermoelectric Composites. CCS Chemistry, 2021, 3, 2547-2560.	7.8	30
172	Detrimental effects of impurity phases on the thermoelectric performance of Nb0.8Ti0.2Fe1.02Sb synthesized by arc-melting. Journal of Alloys and Compounds, 2021, 871, 159634.	5.5	8
173	Introducing PbSe quantum dots and manipulating lattice strain contributing to high thermoelectric performance in polycrystalline SnSe. Materials Today Physics, 2021, 21, 100542.	6.0	14
174	Synergistic Texturing and Bi/Sbâ€Te Antisite Doping Secure High Thermoelectric Performance in Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> â€Based Thin Films. Advanced Energy Materials, 2021, 11 2102578.	., 19.5	35
175	High ZT Value of Pure SnSe Polycrystalline Materials Prepared by High-Energy Ball Milling plus Hot Pressing Sintering. ACS Applied Materials & Interfaces, 2021, 13, 43011-43021.	8.0	5
176	Thermoelectric properties of Bi2-Ti O2Se with the shear exfoliation-restacking process. Journal of Alloys and Compounds, 2022, 892, 162147.	5.5	8
177	Anisotropic magneto-Seebeck effect in the antiferromagnetic semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt; <mml:mrow> <mml:mi>Fe </mml:mi> <mml:msub> <mml: Physical Review B, 2021, 104, .</mml: </mml:msub></mml:mrow></mml:math 	mi> <b>សe</b> <td>າ<b>l:ຫ</b>າi&gt;<mml:r< td=""></mml:r<></td>	າ <b>l:ຫ</b> າi> <mml:r< td=""></mml:r<>
178	Crystal structure, microstructure, and electronic transport properties of β-Zn4Sb3 thermoelectrics: effects of Zn intercalation and deintercalation. Materials Today Energy, 2021, 21, 100723.	4.7	3
179	Realizing high doping efficiency and thermoelectric performance in n-type SnSe polycrystals via bandgap engineering and vacancy compensation. Materials Today Physics, 2021, 20, 100452.	6.0	16
180	Effects of SiC doping on the thermoelectric properties of Bi1.9Ba0.1Sr2Co2Oy ceramics. Ceramics International, 2021, 47, 25045-25050.	4.8	9
181	Synergistic band convergence and defect engineering boost thermoelectric performance of SnTe. Journal of Materials Science and Technology, 2021, 86, 204-209.	10.7	27
182	Study on Enhancing the Thermoelectric Properties of Ti2CrSn Alloys. Metals, 2021, 11, 1503.	2.3	0
183	The charge localization deteriorating the thermoelectric properties: The case of kiddcreekite-type Cu6WSnSe8. Journal of Solid State Chemistry, 2021, 304, 122626.	2.9	2

#	Article	IF	Citations
184	Boronâ€Mediated Grain Boundary Engineering Enables Simultaneous Improvement of Thermoelectric and Mechanical Properties in Nâ€Type Bi <sub>2</sub> Te <sub>3</sub> . Small, 2021, 17, e2104067.	10.0	30
185	On manipulating the thermoelectric potential of p-type ZnO by nanostructuring. Materials Today Energy, 2021, 21, 100752.	4.7	5
186	Thermal management of thermoelectric generators for waste energy recovery. Applied Thermal Engineering, 2021, 196, 117291.	6.0	61
187	Wearable Thermoelectric Materials and Devices for Selfâ€Powered Electronic Systems. Advanced Materials, 2021, 33, e2102990.	21.0	221
188	(GeTe) <sub>1–<i>x</i></sub> (AgSnSe <sub>2</sub> ) <sub><i>x</i></sub> : Strong Atomic Disorder-Induced High Thermoelectric Performance near the loffe–Regel Limit. ACS Applied Materials & Interfaces, 2021, 13, 47081-47089.	8.0	22
189	Optimizing thermocouple's ZT through design innovation. Scientific Reports, 2021, 11, 19338.	3.3	2
190	Boosting the thermoelectric performance of n-type Bi2S3 by hierarchical structure manipulation and carrier density optimization. Nano Energy, 2021, 87, 106171.	16.0	39
191	Simultaneously enhanced strength and plasticity of Ag2Se-based thermoelectric materials endowed by nano-twinned CuAgSe secondary phase. Acta Materialia, 2021, 220, 117335.	7.9	27
192	Phase transition mechanism and bandgap engineering of Sb2S3 at gigapascal pressures. Communications Chemistry, 2021, 4, .	4.5	16
193	Optimized Mn and Bi co-doping in SnTe based thermoelectric material: A case of band engineering and density of states tuning. Journal of Materials Science and Technology, 2021, 85, 76-86.	10.7	43
194	Crystal Structure Classification of Copperâ€Based Sulfides as a Tool for the Design of Inorganic Functional Materials. Angewandte Chemie - International Edition, 2022, 61, .	13.8	25
195	Nanostructural manipulations for achieving record-high room temperature figure of merit in the ZnSb thin films. Materials Today Energy, 2021, 22, 100870.	4.7	6
196	Improving the thermoelectric performance of solution-processed polymer nanocomposites by introducing platinum acetylides with tailored intermolecular interactions. Chemical Engineering Journal, 2021, 419, 129624.	12.7	10
197	Nanoengineering Approaches to Tune Thermal and Electrical Conductivity of a BiSbTe Thermoelectric Alloy. Advanced Engineering Materials, 2022, 24, 2100955.	3.5	4
198	Crystal Structure Classification of Copperâ€Based Sulfides as a Tool for the Design of Inorganic Functional Materials. Angewandte Chemie, 2022, 134, .	2.0	6
199	Understanding bipolar thermal conductivity in terms of concentration ratio of minority to majority carriers. Journal of Materials Research and Technology, 2021, 14, 639-646.	5.8	6
200	Enhanced thermoelectric properties of Cu2-xSe by coordinating carrier concentration to reduce thermal conductivity. Ceramics International, 2022, 48, 248-255.	4.8	4
201	Thermoelectric performance of p-type (Bi,Sb)2Te3 incorporating amorphous Sb2S3 nanospheres. Chemical Engineering Journal, 2022, 430, 132738.	12.7	21

#	Article	IF	CITATIONS
202	MINIREVIEW: Crystalline organic metal chalcogenides for thermoelectric conversion. Composites Communications, 2021, 27, 100901.	6.3	2
203	Influence of graphene oxide nanosheets and multi-walled carbon nanotubes on the thermoelectric and mechanical properties of Mg2(Si0.3Sn0.7)0.99Sb0.01. Scripta Materialia, 2021, 203, 114103.	5.2	7
204	PEDOT:PSS/PVA/Te ternary composite fibers toward flexible thermoelectric generator. Composites Communications, 2021, 27, 100855.	6.3	33
205	High performance of p-type and n-type thermoelectric materials based on liquid crystal mixture and single-walled carbon nanotube composites. Composites Communications, 2021, 27, 100873.	6.3	5
206	Boosting thermoelectrics by alloying Cu2Se in SnTe-CdTe compounds. Journal of Materials Science and Technology, 2021, 89, 45-51.	10.7	9
207	Combined effect of N-methyl pyrrolidone and ferrocene derivatives on thermoelectric performance of n-type single-wall carbon nanotube-based composites. Chemical Engineering Journal, 2021, 421, 129718.	12.7	22
208	Achievement of extra-high thermoelectric performance in doped copper (I) sulfide. Journal of Alloys and Compounds, 2021, 878, 160128.	5.5	9
209	Ultralow lattice thermal conductivity and enhanced power generation efficiency realized in Bi2Te2.7Se0.3/Bi2S3 nanocomposites. Acta Materialia, 2021, 218, 117230.	7.9	45
210	Utilizing perylene diimmide as dopant to improve thermoelectric performance of PEDOT:PSS films. Composites Communications, 2021, 27, 100844.	6.3	7
211	From carbon nanotubes to highly adaptive and flexible high-performance thermoelectric generators. Nano Energy, 2021, 89, 106487.	16.0	34
212	Two-dimensional materials and their derivatives for high performance phase change materials: emerging trends and challenges. Energy Storage Materials, 2021, 42, 845-870.	18.0	47
213	Band convergence and nanostructure modulations lead to high thermoelectric performance in SnPb0.04Te-y% AgSbTe2. Materials Today Physics, 2021, 21, 100505.	6.0	17
214	High ZT and performance controllable thermoelectric devices based on electrically gated bismuth telluride thin films. Nano Energy, 2021, 89, 106472.	16.0	24
215	Fluorine doping for improved thermoelectric properties of spark plasma sintered bismuth telluride. Journal of Materials Science and Technology, 2021, 90, 225-235.	10.7	4
216	Optimising the thermoelectric properties of Bi2Sr2Co2Oy using Ag substitution and Nano-SiC doping. Ceramics International, 2021, 47, 30657-30664.	4.8	17
217	Electronic structure engineering in organic thermoelectric materials. Journal of Energy Chemistry, 2021, 62, 204-219.	12.9	30
218	The thermoelectric and mechanical properties of Mg2(Si0.3Sn0.7)0.99Sb0.01 prepared by one-step solid state reaction combined with hot-pressing. Journal of Alloys and Compounds, 2021, 881, 160546.	5.5	3
219	Enhanced thermoelectric performance of low carbon cement-based composites by reduced graphene oxide. Energy and Buildings, 2021, 250, 111279.	6.7	24

ARTICLE IF CITATIONS Enhanced thermoelectric performance in MXene/SnTe nanocomposites synthesized via a facile one-step 220 2.9 14 solvothermal method. Journal of Solid State Chemistry, 2021, 304, 122605. Double perovskite Pr2CoFeO6 thermoelectric oxide: Roles of Sr-doping and Micro/nanostructuring. 221 12.7 39 Chemical Engineering Journal, 2021, 425, 130668. Enhanced output power of thermoelectric modules with reduced contact resistance by adopting the 222 5.5 9 optimized Ni diffusion barrier layer. Journal of Alloys and Compounds, 2021, 884, 161119. Enhanced thermoelectric composite performance from mesoporous carbon additives in a commercial Bi0.5Sb1.5Te3 matrix. Journal of Materials Science and Technology, 2021, 94, 175-182. Electronic structure, elastic and optical properties of Bi2Te3/Sb2Te3 thermoelectric composites in the 224 6.3 8 periodic-superlattice thin films. Composites Communications, 2021, 28, 100917. SWCNT network evolution of PEDOT:PSS/SWCNT composites for thermoelectric application. Chemical 12.7 Engineering Journal, 2022, 428, 131137. P-type doping of transition metal elements to optimize the thermoelectric properties of CuGaTe2. 226 12.7 10 Chemical Engineering Journal, 2022, 427, 131807. High-sensitivity self-powered temperature/pressure sensor based on flexible Bi-Te thermoelectric film and porous microconed elastomer. Journal of Materials Science and Technology, 2022, 103, 1-7. Interface-enhanced thermoelectric output power in CrN/SrTiO3â<sup>^</sup> heterostructure. Journal of Energy 228 12.9 10 Chemistry, 2022, 64, 16-22. Achieving high-performance n-type PbTe via synergistically optimizing effective mass and carrier 229 concentration and suppressing lattice thermal conductivity. Chemical Engineering Journal, 2022, 428, 12.7 132601. Processing bulk insulating CaTiO3 into a high-performance thermoelectric material. Chemical 230 12.7 12 Engineering Journal, 2022, 428, 131121. Improvement of the thermoelectric properties of PEDOT:PSS films via DMSO addition and DMSO/salt post-treatment resolved from a fundamental view. Chemical Engineering Journal, 2022, 429, 132295. Optimized electronic performance in half-Heusler Ti-doped NbFeSb materials by stoichiometric tuning 232 5.5 11 at the Fe and Sb sites. Journal of Alloys and Compounds, 2022, 891, 162033. Synergistically Optimized Thermoelectric and Mechanical Properties in p  $\hat{a}\in T$  ype BiSbTe by a Microdroplet Deposition Technique. Energy Technology, 2021, 9, 2001024. 3.8 Dramatically enhanced Seebeck coefficient in GeMnTe2–NaBiTe2 alloys by tuning the Spin's 234 2.8 5 thermodynamic entropy. Physical Chemistry Chemical Physics, 2021, 23, 17866-17872. Rationally optimized carrier effective mass and carrier density leads to high average <i>ZT</i> value in n-type PbSe. Journal of Materials Chemistry A, 2021, 9, 23011-23018. Defect engineering in thermoelectric materials: what have we learned?. Chemical Society Reviews, 236 38.1 201 2021, 50, 9022-9054. Fiber-based thermoelectrics for solid, portable, and wearable electronics. Energy and Environmental 30.8 143 Science, 2021, 14, 729-764.

ARTICLE IF CITATIONS # Synthesis of Uniformly Sized Bi0.5Sb1.5Te3.0 Nanoparticles via Mechanochemical Process and 238 2.9 0 Wet-Milling for Reduced Thermal Conductivity. Materials, 2021, 14, 536. Effects of Bi doping on thermoelectric properties of Cu2Se materials by high-pressure synthesis. 2.3 9 Applied Physics A: Materials Science and Processing, 2021, 127, 1. Size-Sensitive Thermoelectric Properties of Electrolyte-Based Nanofluidic Systems. Journal of Physical 240 9 4.6 Chemistry Letters, 2021, 12, 1144-1149. Retarding Ostwald ripening through Gibbs adsorption and interfacial complexions leads to 241 30.8 high-performance SnTe thermoelectrics. Energy and Environmental Science, 2021, 14, 5469-5479. An Interdigital Planar Energy Harvesting/Storage Device Based On an Ionic Solid–Gel Polymer. ACS 242 4.3 12 Applied Electronic Materials, 2021, 3, 696-703. Computation-guided design of high-performance flexible thermoelectric modules for sunlight-to-electricity conversion. Energy and Environmental Science, 2020, 13, 3480-3488. 30.8 Time-Dependent Morphological Evolution of Bi<sub>2</sub>Te<sub>3</sub> Nanotubes: A Potential 244 Material for Thermoelectric Applications. ECS Journal of Solid State Science and Technology, 2020, 9, 1.8 4 105006. Electrothermal Simulation and Optimal Design of Thermoelectric Cooler Using Analytical Approach. 245 2.7 IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2022, 41, 3066-3077. Long-range ordering and local structural disordering of BiAgSe2 and BiAgSeTe thermoelectrics. 246 2.8 1 Physical Chemistry Chemical Physics, 2021, 23, 24328-24335. Stress/pressure-stabilized cubic polymorph of Li<sub>3</sub>Sb with improved thermoelectric 247 10.3 performance. Journal of Materials Chemistry A, 2021, 9, 25024-25031. Lightweight Flexible Biodegradable Thin-film Thermoelectric Module Based on Thin Films of CuI and 248 0 Nanocellulose., 2021,,. Recent trends in thermoelectrochemical cells and thermally regenerative batteries. Current Opinion 249 4.8 in Electrochemistry, 2021, 30, 100853. Allâ€Soft and Stretchable Thermogalvanic Gel Fabric for Antideformity Body Heat Harvesting Wearable. 250 19.5 52 Advanced Energy Materials, 2021, 11, 2102219. New Progress on Fiber-Based Thermoelectric Materials: Performance, Device Structures and Applications. Materials, 2021, 14, 6306. Enhanced Thermoelectric Performance of SnTe-Based Materials <i>via</i> Interface Engineering. ACS 252 8.0 13 Applied Materials & amp; Interfaces, 2021, 13, 50057-50064. Temperatureâ€induced phase transition in Cu4TiSe4. European Journal of Inorganic Chemistry, 0, , . High Carrier Mobility and High Figure of Merit in the CuBiSe<sub>2</sub> Alloyed GeTe. Advanced 254 19.5 52 Energy Materials, 2021, 11, 2102913. Advanced Multifunctional Aqueous Rechargeable Batteries Design: From Materials and Devices to 21.0 Systems. Advanced Materials, 2022, 34, e2104327.

# 256	ARTICLE Growth and characterization of Ag–Al2O3 composites thin films for thermoelectric power generation applications. Ceramics International, 2022, 48, 3647-3651.	IF 4.8	CITATIONS 5
257	High Thermoelectric Performance of <i>p</i> -Type PbTe Enabled by the Synergy of Resonance Scattering and Lattice Softening. ACS Applied Materials & Interfaces, 2021, 13, 49027-49042.	8.0	41
258	Enhanced Thermoelectric Performance Achieved in SnTe via the Synergy of Valence Band Regulation and Fermi Level Modulation. ACS Applied Materials & Interfaces, 2021, 13, 50037-50045.	8.0	18
259	Realizing p-type Mg2Sn Thermoelectrics via Ga-Doping and Point Defect Engineering. ACS Applied Energy Materials, 0, , .	5.1	6
260	Entropy Engineering Realized Ultralow Thermal Conductivity and High Seebeck Coefficient in Lead-Free SnTe. ACS Applied Energy Materials, 2021, 4, 12738-12744.	5.1	10
261	HPHT synthesis and enhanced thermoelectric transport properties of double-doped Co4Sb11TexSn1-x skutterudites. Journal of Alloys and Compounds, 2022, 894, 162426.	5.5	10
262	Emphanisis in Cubic (SnSe) <sub>0.5</sub> (AgSbSe <sub>2</sub> ) <sub>0.5</sub> : Dynamical Off-Centering of Anion Leads to Low Thermal Conductivity and High Thermoelectric Performance. Journal of the American Chemical Society, 2021, 143, 16839-16848.	13.7	37
263	Two-dimensional flexible thermoelectric devices: Using modeling to deliver optimal capability. Applied Physics Reviews, 2021, 8, .	11.3	29
264	Effect of Powder ALD Interface Modification on the Thermoelectric Performance of Bismuth. Advanced Materials Technologies, 2022, 7, 2100953.	5.8	20
265	Molybdenum as a versatile dopant in SnTe: a promising material for thermoelectric application. Energy Advances, 2022, 1, 9-14.	3.3	25
266	Selective co-doping improves the thermoelectric performance of SnTe: An outcome of electronic structure engineering. Journal of Alloys and Compounds, 2022, 892, 162221.	5.5	30
267	Effects of La doping induced carrier concentration regulation and band structure modification on thermoelectric properties of PbSe. Scripta Materialia, 2022, 208, 114360.	5.2	12
268	Se-alloying reducing lattice thermal conductivity of Ge0.95Bi0.05Te. Journal of Materials Science and Technology, 2022, 106, 249-256.	10.7	16
269	Enhanced thermoelectric properties of (015) plane-oriented n-type Bi <sub>2</sub> Se <sub>0.5</sub> Te <sub>2.5</sub> films with wide temperature range stability. CrystEngComm, 2020, 22, 7790-7793.	2.6	2
270	Performance Optimization for PbTe-Based Thermoelectric Materials. Frontiers in Energy Research, 2021, 9, .	2.3	8
271	Realizing Enhanced Thermoelectric Performance and Hardness in Icosahedral Cu <sub>5</sub> FeS <sub>4â^'</sub> <i><sub>x</sub></i> Se <i><sub>x</sub></i> with Highâ€Density Twin Boundaries. Small, 2022, 18, e2104592.	10.0	15
272	Impurity Removal Leading to High-Performance CoSb <sub>3</sub> -Based Skutterudites with Synergistic Carrier Concentration Optimization and Thermal Conductivity Reduction. ACS Applied Materials & Interfaces, 2021, 13, 54185-54193.	8.0	7
273	Achieving Ultralow Lattice Thermal Conductivity and High Thermoelectric Performance in GeTe Alloys via Introducing Cu <sub>2</sub> Te Nanocrystals and Resonant Level Doping. ACS Nano, 2021, 15, 19345-19356.	14.6	37

#	Article	IF	CITATIONS
274	Extremely Low Thermal Conductivity and Enhanced Thermoelectric Performance of Porous Gallium-Doped In <sub>2</sub> O <sub>3</sub> . ACS Applied Energy Materials, 2021, 4, 12943-12953.	5.1	5
275	Revealing Pt-seed-induced structural effects to tribological/electrical/thermoelectric modulations in two-dimensional PtSe2 using scanning probe microscopy. Nano Energy, 2022, 91, 106693.	16.0	9
276	Thermoelectric converter: Strategies from materials to device application. Nano Energy, 2022, 91, 106692.	16.0	127
277	Promising room temperature thermoelectric conversion efficiency of zinc-blende Agl from first principles. Journal of Physics Condensed Matter, 2021, 33, 015501.	1.8	2
278	Recent advances in carbon substrate supported nonprecious nanoarrays for electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 25773-25795.	10.3	71
279	Constructing n-type Ag2Se/CNTs composites toward synergistically enhanced thermoelectric and mechanical performance. Acta Materialia, 2022, 223, 117502.	7.9	48
280	Thermoelectric Generators: A comprehensive review of characteristics and applications. Applied Thermal Engineering, 2022, 201, 117793.	6.0	153
281	High-performance in n-type PbTe-based thermoelectric materials achieved by synergistically dynamic doping and energy filtering. Nano Energy, 2022, 91, 106706.	16.0	107
282	Solvent treatment of wet-spinning PEDOT:PSS fiber towards wearable thermoelectric energy harvesting. Synthetic Metals, 2022, 283, 116969.	3.9	19
283	An enhancement of thermoelectric performance in Na/Cd co-doped β-Zn4Sb3 prepared by NaCl flux. Journal of Solid State Chemistry, 2022, 306, 122754.	2.9	2
284	Phonon resonant effect in silicon membranes with different crystallographic orientations. International Journal of Heat and Mass Transfer, 2022, 183, 122144.	4.8	11
285	High near-room temperature figure of merit of n-type Bi2GeTe4-based thermoelectric materials via a stepwise optimization of carrier concentration. Chemical Engineering Journal, 2022, 433, 133775.	12.7	24
286	Ce Filling Limit and Its Influence on Thermoelectric Performance of Fe3CoSb12-Based Skutterudite Grown by a Temperature Gradient Zone Melting Method. Materials, 2021, 14, 6810.	2.9	3
287	Ultra-flexible β-Cu2-ΠSe-based p-type printed thermoelectric films. Applied Materials Today, 2022, 26, 101269.	4.3	8
288	Understanding and design of spin-driven thermoelectrics. Cell Reports Physical Science, 2021, 2, 100614.	5.6	12
289	Extremely low thermal conductivity of <i>β</i> â~Ga2O3 with porous structure. Journal of Applied Physics, 2021, 130, .	2.5	4
290	Room temperature aqueous-based synthesis of copper-doped lead sulfide nanoparticles for thermoelectric application. Chemical Engineering Journal, 2022, 433, 133837.	12.7	8
291	High seebeck coefficient and low thermal conductivity in Bi and In co-doped GeTe thermoelectric material. Journal of Materials Research and Technology, 2021, 15, 6312-6318.	5.8	17

#	Article	IF	CITATIONS
292	A transparent PEDOT:PSS/PVA-co-PE/epoxy thermoelectric composite device with excellent flexibility and environmental stability. Composites Science and Technology, 2022, 218, 109153.	7.8	17
293	Sustainable Self-Cooling Framework for Cooling Computer Chip Hotspots Using Thermoelectric Modules. Sustainability, 2021, 13, 12522.	3.2	2
294	Highâ€performance Stretchable Organic Thermoelectric Generator via Rational Thermal Interface Design for Wearable Electronics. Advanced Energy Materials, 2022, 12, .	19.5	27
295	Microstructurally Tailored Thin βâ€Ag <sub>2</sub> Se Films toward Commercial Flexible Thermoelectrics. Advanced Materials, 2022, 34, e2104786.	21.0	47
296	Optimized Thermoelectric Properties of Bi <sub>0.48</sub> Sb <sub>1.52</sub> Te <sub>3</sub> through AgCuTe Doping for Low-Grade Heat Harvesting. ACS Applied Materials & Interfaces, 2021, 13, 57514-57520.	8.0	19
297	Thermoelectric Properties of SiC-Nanocomposite n-Type Bi2(Te0.90Se0.10)3 Prepared by Mechanical Alloying and Microwave Sintering. Journal of Electronic Materials, 2022, 51, 516-521.	2.2	3
298	Enhanced thermoelectric properties from pore design via adjustment and elimination of residual stresses for Yb0.2(CoSb2.875Te0.125)4. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	0
299	Rational Composition and Structural Control for Enhancing Thermoelectric Properties in pâ€Type Bi 0.4 Sb 1.6 Te 3 Thin Films. Advanced Materials Interfaces, 0, , 2101812.	3.7	1
300	Achieving Highâ€Performance Ge <sub>0.92</sub> Bi <sub>0.08</sub> Te Thermoelectrics via LaB <sub>6</sub> â€Alloyingâ€Induced Band Engineering and Multiâ€5cale Structure Manipulation. Small, 2022, 18, e2105923.	10.0	5
301	Thermoelectric properties of medium-entropy PbSbTeSe alloy prepared by reactive spark plasma sintering. Materials Letters, 2022, 309, 131416.	2.6	7
302	Construction of a cement–rebar nanoarchitecture for a solutionâ€processed and flexible film of a Bi <sub>2</sub> Te <sub>3</sub> /CNT hybrid toward low thermal conductivity and high thermoelectric performance. , 2022, 4, 115-128.		21
303	(Ti <sub>0.2</sub> V <sub>0.2</sub> Cr <sub>0.2</sub> Nb <sub>0.2</sub> Ta <sub>0.2</sub> ) <sub>2</sub> AlCá highâ€entropy ceramics with low thermal conductivity. Journal of the American Ceramic Society, 2022, 105, 2764-2771.	à€"(Ti≺sut 3.8	)>0.2∖ 13
304	All-Day Uninterrupted Power Generator: Harvesting Energy from the Sun and Cold Space. SSRN Electronic Journal, 0, , .	0.4	1
305	Unusually high Seebeck coefficient arising from temperature-dependent carrier concentration in PbSe–AgSbSe <sub>2</sub> alloys. Journal of Materials Chemistry C, 2021, 9, 17365-17370.	5.5	5
306	Ultralow lattice thermal conductivity at room temperature in 2D KCuSe from first-principles calculations. Physical Chemistry Chemical Physics, 2022, 24, 3296-3302.	2.8	7
307	High Thermoelectric Performance Achieved in Sb-Doped GeTe by Manipulating Carrier Concentration and Nanoscale Twin Grains. Materials, 2022, 15, 406.	2.9	5
308	Raised solubility in SnTe by GeMnTe2 alloying enables converged valence bands, low thermal conductivity, and high thermoelectric performance. Nano Energy, 2022, 94, 106940.	16.0	22
309	Exceptionally low thermal conductivity realized in the chalcopyrite CuFeS2 via atomic-level lattice engineering. Nano Energy, 2022, 94, 106941.	16.0	19

#	Article	IF	CITATIONS
310	Improved Thermoelectric Performance for Î <sup>2</sup> -Zn4Sb3 by Na/Zn Co-doping. Journal of Electronic Materials, 2022, 51, 522-531.	2.2	1
311	Boosting the Thermoelectric Performance of PbSe from the Band Convergence Driven By Spinâ€Orbit Coupling. Advanced Energy Materials, 2022, 12, 2103287.	19.5	13
312	Synthesis and characterization of new multinary selenides Sn4In5Sb9Se25 and Sn6.13Pb1.87In5.00Sb10.12Bi2.88Se35. Journal of Solid State Chemistry, 2022, 307, 122855.	2.9	3
313	Grain boundary in NbCo(Pt)Sn half-Heusler compounds: Segregation and solute drag on grain boundary migration. Acta Materialia, 2022, 226, 117604.	7.9	5
314	A general design strategy for thermoelectric interface materials in n-type Mg3Sb1.5Bi0.5 single leg used in TEGs. Acta Materialia, 2022, 226, 117616.	7.9	31
315	Excellent dispersion effects of carbon nanodots on the thermoelectric properties of Bi2Te2.7Se0.3 with excessive Te. Journal of Alloys and Compounds, 2022, 899, 163296.	5.5	15
316	Investigation of the mechanical properties of MnSi via EBSD-nanoindentation coupling and ab-initio calculation. Journal of Alloys and Compounds, 2022, 900, 163458.	5.5	3
317	Layered thermoelectric materials: Structure, bonding, and performance mechanisms. Applied Physics Reviews, 2022, 9, .	11.3	25
318	Synergistic effect of grain boundaries and phonon engineering in Sb substituted Bi2Se3 nanostructures for thermoelectric applications. Journal of Colloid and Interface Science, 2022, 612, 97-110.	9.4	24
319	The effectiveness of the bonding layer to attain reliable thermoelectric structures. European Journal of Mechanics, A/Solids, 2022, 93, 104513.	3.7	9
320	Influence of SnSe on Thermoelectric Properties of TiS <sub>2</sub> - <i>x</i> SnSe Composites via Liquid-Assisted Shear Exfoliation. SSRN Electronic Journal, 0, , .	0.4	0
321	Study of Low Energy Ion Beam-Assisted Mixing in Al/Sb Bilayer. , 2021, , .		0
322	Printed Thermoelectrics. Advanced Materials, 2022, 34, e2108183.	21.0	33
323	Synergistic modulation of the thermoelectric performance of melt-spun p-type Mg <sub>2</sub> Sn <i>via</i> Na <sub>2</sub> S and Si alloying. Journal of Materials Chemistry A, 2022, 10, 5452-5459.	10.3	6
324	Passive Radiative Cooling Enables Improved Performance in Wearable Thermoelectric Generators. Small, 2022, 18, e2106875.	10.0	33
325	Ultralow Lattice Thermal Conductivity and Enhanced Mechanical Properties of Cu and Sb Co-Doped SnTe Thermoelectric Material with a Complex Microstructure Evolution. ACS Sustainable Chemistry and Engineering, 2022, 10, 1367-1372.	6.7	22
326	Review of thermal transport in phononic crystals. Materials Today Physics, 2022, 22, 100613.	6.0	39
327	Thermoelectric Coolers: Progress, Challenges, and Opportunities. Small Methods, 2022, 6, e2101235.	8.6	77

#	Article	IF	CITATIONS
328	A prototype thermoelectric module based on p-type colusite together with n-type nanostructured PbTe for power generation. Applied Physics Letters, 2022, 120, 013501.	3.3	6
329	Recent Developments of nâ€Type Organic Thermoelectric Materials: Influence of Structure Modification on Molecule Arrangement and Solution Processing. ChemSusChem, 2022, 15, .	6.8	13
330	Reaction mechanism of metal and pyrite under high-pressure and high-temperature conditions and improvement of the properties. Chinese Physics B, 2022, 31, 066206.	1.4	1
331	Geometrical Optimization and Transverse Thermoelectric Performances of Fe/Bi2Te2.7Se0.3 Artificially Tilted Multilayer Thermoelectric Devices. Micromachines, 2022, 13, 233.	2.9	6
332	SnSe:Kx intermetallic thermoelectric polycrystals prepared by arc-melting. Journal of Materials Science, 2022, 57, 8489-8503.	3.7	6
333	Enhanced covalency and nanostructured-phonon scattering lead to high thermoelectric performance in n-type PbS. Materials Today Energy, 2022, 24, 100953.	4.7	5
334	Phase Analysis and Thermoelectric Properties of Cu-Rich Tetrahedrite Prepared by Solvothermal Synthesis. Materials, 2022, 15, 849.	2.9	6
335	Effect of annealing on mechanical and thermoelectric properties of a Al2CoCrFeNi high-entropy alloy. Materials and Design, 2022, 213, 110313.	7.0	11
336	Rapid Selective Ablation and High-Precision Patterning for Micro-Thermoelectric Devices Using Femtosecond Laser Directing Writing. ACS Applied Materials & Interfaces, 2022, 14, 3066-3075.	8.0	13
337	Sintering pressure as a "scalpel―to enhance the thermoelectric performance of MgAgSb. Journal of Materials Chemistry C, 2022, 10, 3360-3367.	5.5	5
338	Deformation and Failure Mechanisms of Thermoelectric Type-I Clathrate Ba <sub>8</sub> Au <sub>6</sub> Ge <sub>40</sub> . ACS Applied Materials & Interfaces, 2022, 14, 4326-4334.	8.0	1
339	ds-Block Element-Enabled Cooperative Regulation of Electrical and Thermal Transport for Extraordinary N- and P-Type PbSe Thermoelectrics near Room Temperature. Chemistry of Materials, 2022, 34, 1862-1874.	6.7	8
340	Achieving high average power factor in tetrahedrite Cu12Sb4S13 via regulating electron-phonon coupling strength. Materials Today Physics, 2022, 22, 100590.	6.0	5
341	Broadening temperature plateau of high zTs in PbTe doped BiO·3Sb1·7Te3 through defect carrier regulation and multi-scale phonon scattering. Materials Today Physics, 2022, 22, 100610.	6.0	9
342	Thermoelectric performance of ZrNX (X = Cl, Br and I) monolayers. Physical Chemistry Chemical Physics, 2021, 24, 560-567.	2.8	10
343	Optimized thermoelectric properties of Bi <sub>0.48</sub> Sb <sub>1.52</sub> Te <sub>3</sub> /BN composites. Journal of Materials Chemistry C, 2022, 10, 3172-3177.	5.5	5
344	Seeking New Layered Oxyselenides with Promising Thermoelectric Performance. Advanced Functional Materials, 2022, 32, .	14.9	14
345	Boosting thermoelectric performance in Cu3SbS4-based compounds through incorporating SiC nanoparticles. Journal of Materials Science: Materials in Electronics, 2022, 33, 5214-5223.	2.2	3

#	Article	IF	CITATIONS
346	Ultrahigh carrier mobility contributes to remarkably enhanced thermoelectric performance in n-type PbSe. Energy and Environmental Science, 2022, 15, 346-355.	30.8	45
347	Two-dimensional layered architecture constructing energy and phonon blocks for enhancing thermoelectric performance of InSb. Science China Materials, 2022, 65, 1353.	6.3	2
348	High thermoelectric performance of NaF-doped Bi2Ca2Co2O ceramic samples. Journal of Materials Research and Technology, 2022, 17, 1598-1604.	5.8	7
349	Low thermal conductivity in franckeite heterostructures. Nanoscale, 2022, 14, 2593-2598.	5.6	4
350	Atomic Structure and Lattice Dynamics of CoSb <sub>3</sub> Skutterudite-Based Thermoelectrics. Chemistry of Materials, 2022, 34, 1213-1224.	6.7	9
351	Additive Manufacturing of Thermoelectrics: Emerging Trends and Outlook. ACS Energy Letters, 2022, 7, 720-735.	17.4	40
352	Low interfacial resistivity in CoSi2/ZrCoSb thermoelectric junctions. Materials Today Energy, 2022, 25, 100960.	4.7	5
353	Study on the influence of scale on the phase transition properties of nanoisland. Physica A: Statistical Mechanics and Its Applications, 2022, 593, 127004.	2.6	2
354	Thermoelectric and mechanical properties of PEDOT:PSS-coated Ag2Se nanowire composite fabricated via digital light processing based 3D printing. Composites Communications, 2022, 30, 101084.	6.3	14
355	Thermoelectric properties of Sr1-xLaxNb2O6-Î′ (0 < x ≤0.4) ceramics sintered under strongly-reducing conditions. Solid State Sciences, 2022, 125, 106830.	3.2	1
356	Achieving ultrahigh power factor in n-type Ag2Se thin films by carrier engineering. Materials Today Energy, 2022, 24, 100933.	4.7	12
357	Chimney-ladder sulfide Sr9Ti8S24 as a thermoelectric material with low thermal conductivity. Journal of Physics and Chemistry of Solids, 2022, 163, 110589.	4.0	0
358	Significant enhancement in thermoelectric properties of half-Heusler compound TiNiSn by grain boundary engineering. Journal of Alloys and Compounds, 2022, 901, 163686.	5.5	17
359	Enhanced thermoelectric perfromance in cubic form of SnSe stabilized through enformatingly alloying AgSbTe2. Acta Materialia, 2022, 227, 117681.	7.9	16
360	In-situ growth of high room temperature thermoelectric performance Ag2Se thin films. Materials Letters, 2022, 312, 131662.	2.6	7
361	New record high thermoelectric ZT of delafossite-based CuCrO2 thin films obtained by simultaneously reducing electrical resistivity and thermal conductivity via heavy doping with controlled residual stress. Applied Surface Science, 2022, 583, 152526.	6.1	5
362	High thermoelectric and mechanical performance in the n-type polycrystalline SnSe incorporated with multi-walled carbon nanotubes. Journal of Materials Science and Technology, 2022, 114, 55-61.	10.7	29
363	Tailoring orientation of microstructure for improving thermopower factor in Mg-doped CuCrO2 thick films. Applied Physics Letters, 2022, 120, .	3.3	3

#	Article	IF	CITATIONS
364	Electromigration reliability and activation energy of Bi2Te3 thermoelectric film. Applied Physics Letters, 2022, 120, 062105.	3.3	0
365	Geometric Study of Polymer Embedded Micro Thermoelectric Cooler with Optimized Contact Resistance. Advanced Electronic Materials, 2022, 8, .	5.1	9
366	Off-Centered Pb Interstitials in PbTe. Materials, 2022, 15, 1272.	2.9	2
367	Cheap, Large-Scale, and High-Performance Graphite-Based Flexible Thermoelectric Materials and Devices with Supernormal Industry Feasibility. ACS Applied Materials & Interfaces, 2022, 14, 8066-8075.	8.0	16
368	Flexible pCu2Se-nAg2Se thermoelectric devices via in situ conversion from printed Cu patterns. Chemical Engineering Journal, 2022, 435, 135172.	12.7	14
369	Thermoelectric Generator: Materials and Applications in Wearable Health Monitoring Sensors and Internet of Things Devices. Advanced Materials Technologies, 2022, 7, .	5.8	42
370	All-polymer wearable thermoelectrochemical cells harvesting body heat. IScience, 2021, 24, 103466.	4.1	8
371	Long-Range Cationic Order Collapse Triggered by S/Cl Mixed-Anion Occupancy Yields Enhanced Thermoelectric Properties in Cu <sub>5</sub> Sn <sub>2</sub> S <sub>7</sub> . Chemistry of Materials, 2021, 33, 9425-9438.	6.7	11
372	Valence band convergence and nanostructured phonon scattering trigger high thermoelectric performance in SnTe. Applied Physics Letters, 2021, 119, 253901.	3.3	7
373	Interfacial Engineering of Solution-Processed Bi2te3-Based Thermoelectric Nanocomposites Via Synergistic Control of Graphene Addition and Liquid-Phase-Sintering Process. SSRN Electronic Journal, 0, , .	0.4	0
374	RobustÂFlexible Pcu2se-Nag2se Thermoelectric DevicesÂVia in Situ Conversion from Printed Cu Patterns. SSRN Electronic Journal, 0, , .	0.4	0
375	Cubic-Spinel Agin5s8-Based Thermoelectric Materials: Synthesis, Phonon Transport and Defect Chemistry. SSRN Electronic Journal, 0, , .	0.4	0
376	Realizing high thermoelectric performance in non-nanostructured n-type PbTe. Energy and Environmental Science, 2022, 15, 1920-1929.	30.8	53
377	A high-efficiency GeTe-based thermoelectric module for low-grade heat recovery. Journal of Materials Chemistry A, 2022, 10, 7677-7683.	10.3	9
378	Enhanced dielectric and thermal properties of thermoplastic polyurethane/multi-walled carbon nanotube composites. Materials Today: Proceedings, 2022, 51, 2254-2259.	1.8	6
379	Remarkable electron and phonon transports in low-cost SnS: A new promising thermoelectric material. Science China Materials, 2022, 65, 1143-1155.	6.3	9
380	Low-temperature acanthite-like phase of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt; <mml:mrow> <mml:msub> <mml:mi>Cu</mml:mi> <mml:n mathvariant="normal"&gt;S </mml:n </mml:msub></mml:mrow>  : Electronic and transport properties. Physical Review B, 2022, 105.</mml:math 	וחאַ23.2	l:mn>
381	Enhancing anisotropy of thermal conductivity based on tandem acoustic Bragg reflectors. Journal of Applied Physics, 2022, 131, 075110.	2.5	1

#	Article	IF	CITATIONS
382	High thermoelectric properties with low thermal conductivity due to the porous structure induced by the dendritic branching in n-type PbS. Nano Research, 2022, 15, 4739-4746.	10.4	8
383	Weak donor-like effect to enhance the thermoelectric performance of Bi <sub>2</sub> Te2.79Se0.21 near room temperature. Functional Materials Letters, 2022, 15, .	1.2	0
384	Flexible in-plane thermoelectric modules based on nanostructured layers ZnO and ZnO:In. Materials Today: Proceedings, 2022, 62, 5729-5738.	1.8	2
385	Improved High-Temperature Thermoelectric Properties of Dual-Doped Ca <sub>3</sub> Co <sub>4</sub> O <sub>9</sub> . ACS Omega, 2022, 7, 6579-6590.	3.5	18
386	Computational search for itinerant <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"&gt;<mml:mi>n</mml:mi> -type and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -type magnetic semiconductors: Arsenopyrites as bipolar magnetic semiconductors. Physical Review B, 2022, 105</mml:math 	3.2	0
387	Screen-printed bismuth telluride nanostructured composites for flexible thermoelectric applications. JPhys Energy, 2022, 4, 024003.	5.3	11
388	Upcycling Silicon Photovoltaic Waste into Thermoelectrics. Advanced Materials, 2022, 34, e2110518.	21.0	25
389	Attosecond-Resolved Coherent Control of Lattice Vibrations in Thermoelectric SnSe. Journal of Physical Chemistry Letters, 2022, 13, 2584-2590.	4.6	4
390	Photonic Curing Enables Ultrarapid Processing of Highly Conducting β-Cu <sub>2â^Î</sub> Se Printed Thermoelectric Films in Less Than 10 ms. ACS Omega, 2022, 7, 10695-10700.	3.5	5
391	Enhancing Thermoelectric Properties of (Cu2Te)1â^'x-(BiCuTeO)x Composites by Optimizing Carrier Concentration. Materials, 2022, 15, 2096.	2.9	0
392	High-throughput optimization and fabrication of Bi2Te2.7Se0.3-based artificially tilted multilayer thermoelectric devices. Journal of the European Ceramic Society, 2022, 42, 3913-3919.	5.7	2
393	Chip-scale solar thermal electrical power generation. Cell Reports Physical Science, 2022, 3, 100789.	5.6	18
394	Multifunctional Wearable Thermoelectrics for Personal Thermal Management. Advanced Functional Materials, 2022, 32, .	14.9	75
395	Super-structured defects modulation for synergistically optimizing thermoelectric property in SnTe-based materials. Materials Today Physics, 2022, 23, 100645.	6.0	8
396	Synergistically Optimized Thermal Conductivity and Carrier Concentration in GeTe by Bi–Se Codoping. ACS Applied Materials & Interfaces, 2022, 14, 14359-14366.	8.0	9
397	Enhanced Thermoelectric Performance in Ternary Skutterudite Co(Ge <sub>0.5</sub> Te <sub>0.5</sub> ) <sub>3</sub> via Band Engineering. Inorganic Chemistry, 2022, 61, 4442-4452.	4.0	9
398	Highâ€Ranged <i>ZT</i> Value Promotes Thermoelectric Cooling and Power Generation in nâ€Type PbTe. Advanced Energy Materials, 2022, 12, .	19.5	36
399	Thermoelectric Properties of Cu2Te Nanoparticle Incorporated N-Type Bi2Te2.7Se0.3. Materials, 2022, 15, 2284.	2.9	7

#	Article	IF	CITATIONS
400	Improved Thermoelectric Performance of Inâ€Doped Quaternary Cu <sub>2</sub> MnSnSe <sub>4</sub> Alloys. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	2.4	1
401	Enhanced Thermoelectric Performance in SmMg <sub>2</sub> Bi <sub>2</sub> via Ca-Alloying and Ge-Doping. ACS Applied Energy Materials, 2022, 5, 5182-5190.	5.1	5
402	A promising thermoelectrics In4SnSe4 with a wide bandgap and cubic structure composited by layered SnSe and In4Se3. Journal of Materiomics, 2022, 8, 982-991.	5.7	5
403	n-type (Zr,Ti)NiSn half Heusler materials via mechanical alloying: Structure, Sb-doping and thermoelectric properties. Journal of Physics and Chemistry of Solids, 2022, 167, 110735.	4.0	9
404	Compromise of thermoelectric and mechanical properties in LiSbTe2 and LiBiTe2 alloyed SnTe. Acta Materialia, 2022, 231, 117922.	7.9	22
405	Structural Modularization of Cu <sub>2</sub> Te Leading to High Thermoelectric Performance near the Mott–loffe–Regel Limit. Advanced Materials, 2022, 34, e2108573.	21.0	20
406	Enhanced thermoelectric performance of conducting polymer composites by constructing sequential energy-filtering interfaces and energy barriers. Composites Science and Technology, 2022, 221, 109347.	7.8	17
407	Thermodynamic approaches to determine the vacancy concentration in defective Nb1-CoSb half-Heusler thermoelectric materials. Acta Materialia, 2022, 228, 117736.	7.9	5
408	Influence of SnSe on thermoelectric properties of TiS2-xSnSe composites via liquid-assisted shear exfoliation. Journal of Alloys and Compounds, 2022, , 164914.	5.5	0
409	Nanoarchitectonics of SnSe with the impacts of ultrasonic powers and ultraviolet radiations on physical and optoelectronic properties. Advanced Powder Technology, 2022, 33, 103517.	4.1	3
410	Thermodynamic and thermoelectric properties of titanium oxycarbide with metal vacancy. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 787-795.	4.9	5
411	Flat phonon modes driven ultralow thermal conductivities in Sr3AlSb3 and Ba3AlSb3 Zintl compounds. Applied Physics Letters, 2022, 120, .	3.3	6
412	Multi-Interface-Induced Thermal Conductivity Reduction and Thermoelectric Performance Improvement in a Cuâ $\in$ "Ni Alloy. ACS Applied Energy Materials, 0, , .	5.1	3
413	Realizing high thermoelectric performance in highly (0l0)-textured flexible Cu2Se thin film for wearable energy harvesting. Materials Today Physics, 2022, 24, 100659.	6.0	29
414	Multiple emerging nano-phases are at the origin of the low lattice thermal conductivity of SnSe?. Materials Today Physics, 2022, 24, 100656.	6.0	3
415	Enhanced thermoelectric performance of n-type Nb-doped PbTe by compensating resonant level and inducing atomic disorder. Materials Today Physics, 2022, 24, 100677.	6.0	11
416	MXene materials for advanced thermal management and thermal energy utilization. Nano Energy, 2022, 97, 107177.	16.0	56
417	Self-powered SnSe photodetectors fabricated by ultrafast laser. Nano Energy, 2022, 97, 107188.	16.0	22

CITATION REPORT ARTICLE IF CITATIONS Electron mean-free-path filtering in n-type SnSe for improved thermoelectric performance at room 5.5 6 temperature. Journal of Alloys and Compounds, 2022, 906, 164299. Designing good compatibility factor in segmented Bi0.5Sb1.5Te3 – GeTe thermoelectrics for high power 16.0 24 conversion efficiency. Nano Énergy, 2022, 96, 107147. Thermoelectrics for medical applications: Progress, challenges, and perspectives. Chemical 12.7 101 Engineering Journal, 2022, 437, 135268. Electronic structure and thermoelectric properties of orthorhombic spinel-derived AgInSnS4 compound: First-principles investigation. Computational Condensed Matter, 2022, 31, e00671. Enhancement of mechanical properties of InSb through twin boundary engineering. Scripta Materialia, 5.2 6 2022, 215, 114734. Simultaneous thermoosmotic and thermoelectric responses in nanoconfined electrolyte solutions: Effects of nanopore structures and membrane properties. Journal of Colloid and Interface Science, 9.4 2022, 618, 333-351. A novel high-entropy perovskite ceramics Sr0.9La0.1(Zr0.25Sn0.25Ti0.25Hf0.25)O3 with low thermal conductivity and high Seebeck coefficient. Journal of the European Ceramic Society, 2022, 42, 5.7 36 3480-3488. Interfacial engineering of solution-processed Bi2Te3-based thermoelectric nanocomposites via 12.7 10 graphene addition and liquid-phase-sintering process. Chemical Engineering Journal, 2022, 440, 135882. Simultaneously achieving high ZT and mechanical hardness in highly alloyed GeTe with symmetric 12.7 35 nanodomains. Chemical Engineering Journal, 2022, 441, 136131. Thermoelectric generator based on anisotropic wood aerogel for low-grade heat energy harvesting. Journal of Materials Science and Technology, 2022, 120, 150-158. Attaining enhanced thermoelectric performance in p-type (SnSe)1â€"(SnS2) produced via sintering their solution-synthesized micro/nanostructures. Journal of Materials Science and Technology, 2022, 120, 10.7 5 205-213. Enhanced Thermoelectric Properties of Cu<sub> x </sub>Se (1.75≤ â‰û.10) during Phase Transitions. 3.3 Chinese Physics Letters, 2021, 38, 117201. Total solar spectrum energy converter with integrated photovoltaics, thermoelectrics, and thermal energy storage: System modeling and design. International Journal of Energy Research, 2022, 46, 4.5 4 5731-5744. Effects of interfacial properties on conversion efficiency of Bi2Te3-based segmented thermoelectric 3.3 devices. Applied Physics Letters, 2021, 119, . Intermetallic Compound Re<sub>2</sub>Ga<sub>9</sub>Ge with Re- and Ge-Embedded Gallium Clusters: Synthesis, Crystal Structure, Chemical Bonding, and Physical Properties. Inorganic 4.0 3 Chemistry, 2022, 61, 568-578. Tuning the Anisotropic Thermal Transport in {110}-Silicon Membranes with Surface Resonances.

434	Ultralow Lattice Thermal Conductivity of Cubic CuFeS <sub>2</sub> Induced by Atomic Disorder. Chemistry of Materials, 2021, 33, 9795-9802.	6.7	15

14

435 Challenges for Thermoelectric Power Generation: From a Material Perspective. , 0, 1, .

#

418

420

421

422

424

426

428

430

432

Nanomaterials, 2022, 12, 123.

#	Article	IF	CITATIONS
436	A Solvothermal Synthetic Environmental Design for Highâ€Performance SnSeâ€Based Thermoelectric Materials. Advanced Energy Materials, 2022, 12, .	19.5	82
437	Surface Modification of Bismuth by ALD of Antimony Oxide for Suppressing Lattice Thermal Conductivity. ACS Applied Energy Materials, 2022, 5, 4041-4046.	5.1	9
438	Compression Induced Deformation Twinning Evolution in Liquid-Like Cu <sub>2</sub> Se. ACS Applied Materials & Interfaces, 2022, 14, 18671-18681.	8.0	4
439	High thermoelectric performance of BiCuSeO via minimizing the electronegativity difference in Bi–O layer. Materials Today Physics, 2022, 24, 100688.	6.0	1
440	Investigating the potential of AgZnO thin film composites for waste heat recovery using Seebeck data. Optical Materials, 2022, 127, 112318.	3.6	2
441	Stepwise Ge vacancy manipulation enhances the thermoelectric performance of cubic GeSe. Chemical Engineering Journal, 2022, 442, 136332.	12.7	14
442	Ultrafast high-temperature heating in air. Journal of the European Ceramic Society, 2022, 42, 4030-4039.	5.7	10
443	Review on grain size effects on thermal conductivity in ZnO thermoelectric materials. RSC Advances, 2022, 12, 5428-5438.	3.6	28
444	Investigations on the thermoelectric and thermodynamic properties of Y <sub>2</sub> CT <sub>2</sub> (T = O, F, OH). RSC Advances, 2022, 12, 14377-14383.	3.6	3
445	Multistage nanostructures induced by precursor phase spontaneous partitioning lead to an excellent thermoelectric performance in Cu <sub>1.8</sub> S <sub>0.8</sub> Se <sub>0.2</sub> . Journal of Materials Chemistry C, 0, , .	5.5	3
446	β-Ga <sub>2</sub> O <sub>3</sub> : a potential high-temperature thermoelectric material. Physical Chemistry Chemical Physics, 2022, 24, 12052-12062.	2.8	5
447	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.	0.3	1
448	Electronic Orbital Alignment and Hierarchical Phonon Scattering Enabling High Thermoelectric Performance p-Type Mg <sub>3</sub> Sb <sub>2</sub> Zintl Compounds. Research, 2022, 2022, 9842949.	5.7	5
449	Variable Range Hopping Model Based on Gaussian Disordered Organic Semiconductor for Seebeck Effect in Thermoelectric Device. Micromachines, 2022, 13, 707.	2.9	6
450	Modulation Doping Enables Ultrahigh Power Factor and Thermoelectric ZT in n‶ype Bi <sub>2</sub> Te <sub>2.7</sub> Se <sub>0.3</sub> . Advanced Science, 2022, 9, e2201353.	11.2	19
451	Enhancements of thermoelectric performance in n-type Bi2Te3-based nanocomposites through incorporating 2D Mxenes. Journal of the European Ceramic Society, 2022, 42, 4587-4593.	5.7	8
452	Ternary antimonide NaCd4Sb3: Hydride synthesis, crystal structure and transport properties. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 0, , .	1.2	2
453	Effect of perovskite template seeds on microstructures and thermoelectric properties of Ca0.87Ag0.1Dy0.03MnO3 ceramics. Ceramics International, 2022, 48, 23688-23696.	4.8	4

ARTICLE IF CITATIONS # Achieving High Thermoelectric Properties of Cu<sub>2</sub>Se via Lattice Softening and Phonon 5.1 9 454 Scattering Mechanism. ACS Applied Energy Materials, 2022, 5, 6453-6461. Flexible self-charging power sources. Nature Reviews Materials, 2022, 7, 870-886. 48.7 159 Polycrystalline NiSe-Alloyed SnSe with Improved Medium-Temperature Thermoelectric Performance. 456 5.16 Energy & amp; Fuels, 2022, 36, 5352-5359. Ultra-low thermal conductivity through the reduced phonon lifetime by microstructural and Umklapp scattering in Sn1a<sup>°</sup> xMnxSe<sup>°</sup> nanostructures. Journal of Alloys<sup>°</sup> and Compounds, 2022, 917, 165152 Wet-spun PEDOT:PSS/CNT composite fibers for wearable thermoelectric energy harvesting. Composites 458 6.3 28 Communications, 2022, 32, 101179. 3dâ€Transition metal doped two-dimensional SnTe: Modulation of thermoelectric properties. Materials 459 Today Communications, 2022, 31, 103656. Cubic-spinel AgIn5S8-based thermoelectric materials: synthesis, phonon transport and defect 460 4.7 4 chemistry. Materials Today Energy, 2022, 27, 101029. Thermal Concentration on Thermoelectric Thin Film for Efficient Solar Energy Harvesting. Coatings, 461 2.6 2022, 12, 630. The impact of a magnetic ion on the thermoelectric properties of copper-rich quaternary selenides. 462 5.3 1 JPhys Energy, 2022, 4, 034001. Graphite Nanosheets as Multifunctional Nanoinclusions to Boost the Thermoelectric Performance of 14.9 28 the Shearâ€Exfoliated Bi<sub>2</sub>0<sub>2</sub>Se. Advanced Functional Materials, 2022, 32, . Atomistic explanation of failure mechanisms of thermoelectric type-VIII clathrate Ba8Ga16Sn30. 0 464 1.9 Materials Today Communications, 2022, 31, 103605. Oxidation of thermoelectric Bi2Te3-based alloys by atomic layer deposition of Ru metal. Materials 2.6 Letters, 2022, 320, 132321. Formation of metastable cubic phase and thermoelectric properties in Mg3Bi2 films deposited by 466 6.1 7 magnetron sputtering. Applied Surface Science, 2022, 596, 153602. Realization of high thermoelectric performance in solution-synthesized porous Zn and Ga codoped SnSe nanosheets. Journal of Materials Chemistry A, 2022, 10, 12429-12437 Stretchable thermogalvanic hydrogel thermocell with record-high specific output power density 468 30.8 48 enabled by ion-induced crystallization. Energy and Environmental Science, 2022, 15, 2974-2982. Recent Advances in Energy Harvesting from Waste Heat Using Emergent Thermoelectric Materials., 2022, , 155-184. Facile Fabrication of N-Type Flexible CoSb3-xTex Skutterudite/PEDOT:PSS Hybrid Thermoelectric Films. 470 4.5 2 Polymers, 2022, 14, 1986. 471 Advances and outlook of TE-PCM system: a review., 2022, 1, .

#	Article	IF	CITATIONS
472	Influence of SiC dispersion and Ba(Sr) substitution on the thermoelectric properties of Ca3Co4O9+l´. Ceramics International, 2022, 48, 24859-24865.	4.8	8
473	Thermally driven p–n–p multiple heteromorphic transformation facilitating high Seebeck coefficient for Ca <sub>0.8</sub> La <sub>0.2</sub> CeNbWO <sub>8+<i>δ</i></sub> . Journal of Applied Physics, 2022, 131, 195702.	2.5	0
474	Realizing high thermoelectric performance in GeTe by defect engineering on cation sites. Journal of Materials Chemistry C, 2022, 10, 9052-9061.	5.5	5
475	Direct ink writing of high-performance Bi <sub>2</sub> Te <sub>3</sub> -based thermoelectric materials using quasi-inorganic inks and interface engineering. Journal of Materials Chemistry A, 2022, 10, 12921-12927.	10.3	8
476	Recent Advances in 2D Material/Conducting Polymer Composites for Thermoelectric Energy Conversion. Macromolecular Materials and Engineering, 2022, 307, .	3.6	13
477	Novel Dithienopyrroleâ€Based Conjugated Copolymers: Importance of Backbone Planarity in Achieving High Electrical Conductivity and Thermoelectric Performance. Macromolecular Rapid Communications, 2022, 43, .	3.9	3
478	Highly ordered columnar ITO thin film with enhanced thermoelectric and mechanical performance over wide temperature range. Ceramics International, 2022, 48, 26188-26195.	4.8	5
479	Achieving high thermoelectric properties in PEDOT:PSS/SWCNTs composite films by a combination of dimethyl sulfoxide doping and NaBH4 dedoping. Carbon, 2022, 196, 718-726.	10.3	32
480	Parametric study of inserting internal spiral fins on the micro combustor performance for thermophotovoltaic systems. Renewable and Sustainable Energy Reviews, 2022, 165, 112595.	16.4	23
481	Revealing Multi-Stage Growth Mechanism of Kirkendall Voids at Electrode Interfaces of Bi2te3-Based Thermoelectric Devices by Using In-Situ Heating Tem Technique. SSRN Electronic Journal, 0, , .	0.4	Ο
482	A case of perfect convergence of light and heavy hole valence bands in SnTe: the role of Ge and Zn co-dopants. Materials Advances, 2022, 3, 5941-5946.	5.4	16
483	Hydrochromic Cspbbr3-Kbr Microcrystals for Flexible Anti-Counterfeiting and Wearable Self-Powered Biomechanical Monitoring. SSRN Electronic Journal, 0, , .	0.4	0
484	Lone-Pair-Like Interaction and Bonding Inhomogeneity Induce Ultralow Lattice Thermal Conductivity in Filled β-Manganese-Type Phases. Chemistry of Materials, 2022, 34, 6389-6401.	6.7	11
485	Interfacialâ€Modulated Growth of Nanostructured Bi <sub>2</sub> Te <sub>3</sub> Films for Enhancing Thermoelectric Performance. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, .	1.8	1
486	A flexible and smart shape memory alloy composite sheet based on efficient and bidirectional thermal management. International Journal of Smart and Nano Materials, 2022, 13, 315-329.	4.2	2
487	Ultraflexible PEDOT:PSS/Helical Carbon Nanotubes Film for All-in-One Photothermoelectric Conversion. ACS Applied Materials & amp; Interfaces, 2022, 14, 27083-27095.	8.0	25
488	Assessment of the laser floating zone processing of thermoelectric CuFe1–xNixO2 delafossites and their magnetic characterisation. Journal of Alloys and Compounds, 2022, , 165678.	5.5	1
489	Achieving High Thermoelectric Performance of Eco-Friendly SnTe-Based Materials by Selective Alloying and Defect Modulation. ACS Applied Materials & Interfaces, 2022, 14, 25802-25811.	8.0	9

#	Article	IF	CITATIONS
490	Synergistic Effect of Band and Nanostructure Engineering on the Boosted Thermoelectric Performance of nâ€Type Mg <sub>3+</sub> <i><sub>Î</sub></i> (Sb, Bi) <sub>2</sub> Zintls. Advanced Energy Materials, 2022, 12, .	19.5	41
491	Insights into Low Thermal Conductivity in Inorganic Materials for Thermoelectrics. Journal of the American Chemical Society, 2022, 144, 10099-10118.	13.7	57
492	Perspective— Powerful Micro/Nano-Scale Heat Engine: Thermoelectric Converter on Chip. , 2022, 1, 023402.		9
493	Crystal symmetry enables high thermoelectric performance of rhombohedral GeSe(MnCdTe2). Nano Energy, 2022, 100, 107434.	16.0	16
494	Simultaneously optimized thermoelectric and mechanical performance of p-type polycrystalline SnSe enabled by CNTs addition. Scripta Materialia, 2022, 218, 114846.	5.2	11
495	Copper telluride with manipulated carrier concentrations for high-performance solid-state thermoelectrics. Journal of Materials Science and Technology, 2022, 129, 190-195.	10.7	6
496	Preparation and thermoelectric properties of layered Bi <sub>1–<i>x</i></sub> Sb <sub><i>x</i></sub> Se nanocrystalline films. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 197301.	0.5	1
497	Thermoelectric properties of sulfide and selenide-based materials. , 2022, , 293-328.		1
498	The cross-interface energy-filtering effect at organic/inorganic interfaces balances the trade-off between thermopower and conductivity. Nanoscale, 2022, 14, 9419-9430.	5.6	4
499	Electronic structure and low-temperature thermoelectric transport of TiCoSb single crystals. Nanoscale, 0, , .	5.6	5
500	Phase Transition Enhanced Pyroelectric Nanogenerators for Self-Powered Temperature Sensors. SSRN Electronic Journal, 0, , .	0.4	0
501	Microwave Synthesis and Enhanced Thermoelectric Performance of p-Type Bi <sub>0.90</sub> Pb <sub>0.10</sub> Cu <sub>1–<i>x</i></sub> Fe <i><sub>x</sub></i> SeO Oxyselenides. ACS Applied Materials & Interfaces, 2022, 14, 27902-27910.	8.0	6
502	Ultra-fast fabrication of Bi2Te3 based thermoelectric materials by flash-sintering at room temperature combining with spark plasma sintering. Scientific Reports, 2022, 12, .	3.3	7
503	Realizing an enhanced Seebeck coefficient and extremely low thermal conductivity in anharmonic Sb-substituted SnSe nanostructures. Journal of Alloys and Compounds, 2022, , 165961.	5.5	3
504	Highâ€Performance Thermoelectric Material and Module Driven by Mediumâ€Entropy Engineering in SnTe. Advanced Functional Materials, 2022, 32, .	14.9	30
505	Cross-scale porous structure design leads to optimized thermoelectric performance and high output power for CaMnO3 ceramics and their uni-leg modules. Applied Materials Today, 2022, 29, 101557.	4.3	4
506	Ferroelectric BaTiO <sub>3</sub> Based Multiâ€Effects Coupled Materials and Devices. Advanced Electronic Materials, 2022, 8, .	5.1	10
507	Synergistic Manipulation of Interdependent Thermoelectric Parameters in SnTe–AgBiTe <sub>2</sub> Alloys by Mn Doping. ACS Applied Materials & Interfaces, 2022, 14, 29032-29038.	8.0	8

		15	0
#		IF	CITATIONS
508	Casting Process. Nanomaterials, 2022, 12, 2032.	4.1	3
509	Strain engineering on the thermoelectric performance of monolayer AlP3: A first-principles study. Physica E: Low-Dimensional Systems and Nanostructures, 2022, , 115365.	2.7	1
510	Development and heat transfer analysis of thermoelectric selfâ€powered fuelâ€fired residential boiler. Energy Science and Engineering, 2022, 10, 3344-3357.	4.0	3
511	Optimizing thermoelectric performance of CoSbS0.85Se0.15 by doping 3d transition metal ions M (M =) Tj ETQc	1 1 0.784 2.9	314 rgBT /O
512	Revealing an elusive metastable wurtzite CuFeS2 and the phase switching between wurtzite and chalcopyrite for thermoelectric thin films. Acta Materialia, 2022, 235, 118090.	7.9	10
513	All-day continuous electrical power generator by solar heating and radiative cooling from the sky. Applied Energy, 2022, 322, 119403.	10.1	16
514	Enhanced thermoelectric performance of the AlN/GaN bilayer. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 143, 115333.	2.7	2
515	The electronic structures and predominant thermoelectric performance of the twisted InSb/Graphene bilayer. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 143, 115358.	2.7	2
516	Decreased order-disorder transition temperature and enhanced phonon scattering in Ag-alloyed Cu3SbSe3. Journal of Alloys and Compounds, 2022, 919, 165829.	5.5	2
517	Antisite defect manipulation enables the high thermoelectric performance of p-type Bi2-Sb Te3 alloys for solid-state refrigeration. Materials Today Physics, 2022, 27, 100764.	6.0	3
518	Thermo-electrochemical cells for heat to electricity conversion: from mechanisms, materials, strategies to applications. Energy and Environmental Science, 2022, 15, 3670-3687.	30.8	33
519	Computational discovery of In <sub>2</sub> XY <sub>2</sub> (X, Y = S, Se, and Te; X ≠Y) monolayers as multifunctional energy conversion materials. Journal of Materials Chemistry C, 0, , .	5.5	4
520	Efficient Si Doping Promoting Thermoelectric Performance of Yb-Filled CoSb <sub>3</sub> -Based Skutterudites. ACS Applied Materials & Interfaces, 2022, 14, 30901-30906.	8.0	7
521	Enhanced near-room-temperature thermoelectric performance in GeTe. Rare Metals, 2022, 41, 3027-3034.	7.1	17
522	High Thermoelectric Performance of Janus Monolayer and Bilayer HfSSe. Physica Status Solidi (B): Basic Research, 2022, 259, .	1.5	4
523	High figure-of-merit and power generation in high-entropy GeTe-based thermoelectrics. Science, 2022, 377, 208-213.	12.6	233
524	Preparation and Characterization of Screen-Printed Cu2S/PEDOT:PSS Hybrid Films for Flexible Thermoelectric Power Generator. Nanomaterials, 2022, 12, 2430.	4.1	3
525	Thermoelectric performance of Ni, Co, and Fe nanoparticles incorporated into their metal borates glassy matrices. Canadian Journal of Chemical Engineering, 2023, 101, 1195-1206.	1.7	0

ARTICLE IF CITATIONS Highâ€Performance Thermoelectrics αâ€Ag9Ga1â€xTe6 Compounds with Ultraâ€low Lattice Thermal 526 2.0 0 Conductivity Originating from Ag9Te2 Motifs. Angewandte Chemie, 0, , . High-performance magnesium-based thermoelectric materials: Progress and challenges. Journal of 11.9 29 Magnesium and Alloys, 2022, 10, 1719-1736. Thermoelectric Zintl Compound In1â€xGaxTe: Pure Acoustic Phonon Scattering and Dopantâ€Induced 528 2.0 0 Deformation Potential Reduction and Lattice Shrink. Angewandte Chemie, 0, , Ultralow Lattice Thermal Conductivity and Improved Thermoelectric Performance in Cl-Doped Bi<sub>2</sub>Te<sub>3ê€"<i>x</i></sub>Se<sub><i>x</i></sub> Alloys. ACS Applied Materials & amp; Interfaces, 2022, 14, 33567-33579. Highâ€Performance Thermoelectric αâ€Ag<sub>9</sub>Ga<sub>1â^'<i>x</i></sub>Te<sub>6</sub> Compounds with Ultralow Lattice Thermal Conductivity Originating from 530 13.8 7 Ag<sub>9</sub>Te<sub>2</sub> Motifs. Angewandte Chemie - International Edition, 2022, 61, . Comprehensive Insights into Synthesis, Structural Features, and Thermoelectric Properties of High-Performance Inorganic Chalcogenide Nanomaterials for Conversion of Waste Heat to Electricity. ACS Applied Energy Materials, 2022, 5, 7913-7943. 5.1 Ba<sub>1/3</sub>CoO<sub>2</sub>: A Thermoelectric Oxide Showing a Reliable <i>ZT</i> of a<sup>1</sup>/40.55 at 600 532 8.0 8 °C in Air. ACS Applied Materials & amp; Interfaces, 2022, 14, 33355-33360. Dual Postâ€Treatments Boost Thermoelectric Performance of PEDOT:PSS Films and Their Devices. 533 3.6 Macromolecular Materials and Engineering, 2022, 307, . Thermoelectric Zintl Compound In<sub>1â''<i>x</i></sub>Ga<sub><i>x</i></sub>Te: Pure Acoustic 534 Phonon Scattering and Dopantâ€Induced Deformation Potential Reduction and Lattice Shrink. 13.8 12 Angewandte Chemie - International Edition, 2022, 61, . Smart fire-warning materials and sensors: Design principle, performances, and applications. Materials 31.8 Science and Engineering Reports, 2022, 150, 100690. Challenges and strategies to optimize the figure of merit: Keeping eyes on thermoelectric 536 10 4.0metamaterials. Materials Science in Semiconductor Processing, 2022, 150, 106944. Thermoelectric properties of Bi2O2Se-x%AgSnSe2 composites via liquid assisted shear exfoliation-537 5.5 restacking process. Journal of Alloys and Compounds, 2022, 921, 166087. Ni doping and rational annealing boost thermoelectric performance of nanostructured double 538 4.3 7 perovskite Pr1.8Sr0.2CoFeO6. Applied Materials Today, 2022, 29, 101580. Poly(phthalazinone ether ketone)  $\hat{a}$ €" Poly(3,4-ethylenedioxythiophene) fiber for thermoelectric and hydroelectric energy harvesting. Chemical Engineering Journal, 2022, 450, 138093. 12.7 A novel cascaded energy conversion system inducing efficient and precise cancer therapy. Bioactive 540 15.6 7 Materials, 2023, 20, 663-676. Highly Thermoelectric ZnO@MXene (Ti<sub>3</sub>C<sub>2</sub>T<sub><i>x</i></sub>) Composite Films Grown by Atomic Layer Deposition. ACS Applied Materials & amp; Interfaces, 2022, 14, 34562-34570. 541 Highâ€Performance Liquid Crystalline Polymer for Intrinsic Fireâ€Resistant and Flexible Triboelectric 542 21.0 48 Nanogenerators. Advanced Materials, 2022, 34, . Effective Mass for Holes in Paramagnetic, Plasmonic Cu<sub>5</sub>FeS<sub>4</sub> Semiconductor 543 3.1 Nanocrystals. Journal of Physical Chemistry C, O, , .

#	ARTICLE	IF	Citations
544	Superior Thermoelectric Performance of Robust Column-Layer ITO Thin Films Tuning by Profuse Interfaces. ACS Applied Materials & Interfaces, 2022, 14, 36258-36267.	8.0	2
545	Hydrochromic CsPbBr3-KBr Microcrystals for Flexible Anti-Counterfeiting and Wearable Self-Powered Biomechanical Monitoring. Chemical Engineering Journal, 2022, 450, 138279.	12.7	14
546	A flexible phase change organohydrogel created using Pickering emulsion technology for thermoelectric conversion and temperature sensing. Journal of Materials Chemistry A, 2022, 10, 18856-18865.	10.3	8
547	Enhancing the thermoelectric performance of Sb <sub>2</sub> Si <sub>2</sub> Te <sub>6</sub> by germanium doping. Journal of Materials Chemistry A, 2022, 10, 20489-20496.	10.3	6
548	Tunable Electrical Conductivity and Simultaneously Enhanced Thermoelectric and Mechanical Properties in nâ€ŧype Bi <sub>2</sub> Te <sub>3</sub> . Advanced Science, 2022, 9, .	11.2	36
549	Strong Anharmonicityâ€Induced Low Thermal Conductivity and High nâ€ŧype Mobility in the Topological Insulator Bi <sub>1.1</sub> Sb <sub>0.9</sub> Te <sub>2</sub> S. Angewandte Chemie, 2022, 134, .	2.0	5
550	Thermoelectric properties of the Janus PtSTe monolayer compared with its parent structures. Physical Review Materials, 2022, 6, .	2.4	3
551	Modular Nanostructures Facilitate Low Thermal Conductivity and Ultraâ€High Thermoelectric Performance in <i>n</i> â€Type SnSe. Advanced Materials, 2022, 34, .	21.0	42
552	Self-powered photoelectrochemical aptasensor based on AgInS2@Co/Ni-UiO-66@CDs photoelectrode for estradiosl detection. Mikrochimica Acta, 2022, 189, .	5.0	3
553	Enhancing thermocouple's efficiency using an electrostatic voltage. Scientific Reports, 2022, 12, .	3.3	0
554	Semiconductors flex thermoelectric power. Science, 2022, 377, 815-816.	12.6	13
555	Simultaneously Achieving Green p- and n-Type Single-Walled Carbon Nanotube Composites by Natural Amino Acids with High Performance for Thermoelectrics. ACS Sustainable Chemistry and Engineering, 2022, 10, 12009-12015.	6.7	12
556	Strong Anharmonicityâ€Induced Low Thermal Conductivity and High nâ€type Mobility in the Topological Insulator Bi <sub>1.1</sub> Sb <sub>0.9</sub> Te <sub>2</sub> S. Angewandte Chemie - International Edition, 2022, 61, .	13.8	8
557	Realizing a 10°C Cooling Effect in a Flexible Thermoelectric Cooler Using a Vortex Generator. Advanced Materials, 2022, 34, .	21.0	15
558	Enhancing thermoelectric and mechanical properties of p-type Cu3SbSe4-based materials via embedding nanoscale Sb2Se3. Materials Chemistry and Physics, 2022, 292, 126669.	4.0	6
559	Pressure-Induced Anisotropic to Isotropic Thermal Transport and Promising Thermoelectric Performance in Layered InSe. ACS Applied Energy Materials, 2022, 5, 10690-10701.	5.1	11
560	Self-rechargeable energizers for sustainability. EScience, 2022, 2, 347-364.	41.6	17
561	Advances and Challenges of AgSbSe <sub>2</sub> â€based Thermoelectric Materials. ChemNanoMat, 2022, 8, .	2.8	6

#	Article	IF	CITATIONS
562	Enhanced Thermoelectric Performance of GeTe-Based Composites Incorporated with Fe Nanoparticles. ACS Applied Materials & Interfaces, 2022, 14, 38854-38864.	8.0	16
563	Enhanced Performance of Monolithic Chalcogenide Thermoelectric Modules for Energy Harvesting via Co-optimization of Experiment and Simulation. ACS Applied Materials & Interfaces, 0, , .	8.0	7
564	Dramatic Enhancement of Thermoelectric Performance in PbTe by Unconventional Grain Shrinking in the Sintering Process. Advanced Materials, 2022, 34, .	21.0	20
565	Chemical stability and degradation mechanism of Mg3Sb2-Bi thermoelectrics towards room-temperature applications. Acta Materialia, 2022, 239, 118301.	7.9	12
566	Revealing multi-stage growth mechanism of Kirkendall voids at electrode interfaces of Bi2Te3-based thermoelectric devices with in-situ TEM technique. Nano Energy, 2022, 102, 107736.	16.0	12
567	Thermoelectric coolers for on-chip thermal management: Materials, design, and optimization. Materials Science and Engineering Reports, 2022, 151, 100700.	31.8	121
568	Phase transition enhanced pyroelectric nanogenerators for self-powered temperature sensors. Nano Energy, 2022, 102, 107657.	16.0	20
569	Advances in thermoelectric devices for localized cooling. Chemical Engineering Journal, 2022, 450, 138389.	12.7	34
570	Advances in the design and assembly of flexible thermoelectric device. Progress in Materials Science, 2023, 131, 101003.	32.8	140
571	Realizing high thermoelectric performance in magnetic field-assisted solution synthesized nanoporous SnSe integrated with quantum dots. Chemical Engineering Journal, 2023, 451, 138637.	12.7	3
572	Synthesis and Characterization of New Multinary Selenides A <sub>10</sub> B <sub>18</sub> Se <sub>37</sub> (A=Sn/Pb; B=In/Sb/Bi). European Journal of Inorganic Chemistry, 0, , .	2.0	1
573	Incompletely Decomposed In <sub>4</sub> SnSe <sub>4</sub> Leads to Highâ€Ranged Thermoelectric Performance in nâ€Type PbTe. Advanced Energy Materials, 2022, 12, .	19.5	10
574	Identifying polymorphic lattice positioning of copper and the effects on the thermoelectric performance of δ-LAST. Materials Today Physics, 2022, 27, 100833.	6.0	2
575	Extraordinary thermoelectric performance, thermal stability and mechanical properties of n-type Mg3Sb1.5Bi0.5 through multi-dopants at interstitial site. Materials Today Physics, 2022, 27, 100835.	6.0	8
576	Microstructure design via novel thermodynamic route to enhance the thermoelectric performance of GeTe. Materials Today Physics, 2022, 27, 100820.	6.0	2
577	Flexible PVA/PEDOT:PSS thermoelectric nanocomposite films prepared via an additive manufacturing process. Composites Communications, 2022, 35, 101312.	6.3	3
578	MXene as charge reservoir promotes the thermoelectric performance of layered metal selenide SnSe2. Acta Materialia, 2022, 241, 118369.	7.9	10
579	Highly tailorable, ultra-foldable, and resorbable thermoelectric paper for origami-enabled energy generation. Nano Energy, 2022, 103, 107824.	16.0	9

#	Article	IF	CITATIONS
580	Thermoelectric power factor of MnSb2X4 (XÂ=ÂS, Se) spinel chalcogenides – A DFT study. Computational Materials Science, 2022, 215, 111758.	3.0	2
581	High thermoelectric performance in GeTe with compositional insensitivity. Nano Energy, 2022, 103, 107809.	16.0	15
582	Enhancement of the power factor of SnSe by adjusting the crystal and energy band structures. Physical Chemistry Chemical Physics, 2022, 24, 24130-24136.	2.8	3
583	Bi <sub>0.33</sub> (Bi <sub>6</sub> S <sub>9</sub> )Br compositing in Bi <sub>2</sub> S <sub>3</sub> bulk materials forwards high thermoelectric properties. Physical Chemistry Chemical Physics, 2022, 24, 24290-24295.	2.8	2
584	Microstructural engineering of hydrated vanadium pentoxide for boosted zinc ion thermoelectrochemical cells. Journal of Materials Chemistry A, 2022, 10, 21446-21455.	10.3	11
585	Enhanced Thermoelectric Performance in High-Defect Snte Alloys: A Significant Role of Carrier Scattering. SSRN Electronic Journal, 0, , .	0.4	0
586	Ag <sub>2</sub> Se/nylon self-supporting composite films for wearable photo-thermoelectric generators with high output characteristics. Journal of Materials Chemistry A, 2022, 10, 21080-21092.	10.3	9
587	Effects of cation size on thermoelectricity of PEDOT:PSS/ionic liquid hybrid films for wearable thermoelectric generator application. Journal of Materials Chemistry A, 2022, 10, 18792-18802.	10.3	16
588	Highly Tailorable, Ultra-Foldable, and Resorbable Thermoelectric Paper for Origami-Enabled Energy Generation. SSRN Electronic Journal, 0, , .	0.4	0
589	High-Performance Post-Treatment-Free Pedot Based Thermoelectric with the Establishment of Long-Range Ordered Conductive Paths. SSRN Electronic Journal, 0, , .	0.4	0
590	Graphene Oxide Embedded in Bi2s3 Nanosheets by Hydrothermal Method to Enhance Thermoelectric Performance. SSRN Electronic Journal, 0, , .	0.4	0
591	All-scale hierarchical nanostructures and superior valence band convergence lead to ultra-high thermoelectric performance in cubic GeTe. Energy and Environmental Science, 2022, 15, 4625-4635.	30.8	23
592	Highly tailored gap-like structure for excellent thermoelectric performance. Energy and Environmental Science, 2022, 15, 4058-4068.	30.8	11
593	Recent advances in designing thermoelectric materials. Journal of Materials Chemistry C, 2022, 10, 12524-12555.	5.5	33
594	Antibonding induced anharmonicity leading to ultralow lattice thermal conductivity and extraordinary thermoelectric performance in CsK <sub>2</sub> X (X = Sb, Bi). Journal of Materials Chemistry C, 2022, 10, 15822-15832.	5.5	10
595	Thermoelectric properties of PbTe based single-walled carbon nanotube (SWCNT) composites. IOP Conference Series: Earth and Environmental Science, 2022, 1074, 012004.	0.3	0
596	Directional Thermal Diffusion Realizing Inorganic Sb <sub>2</sub> Te <sub>3</sub> /Te Hybrid Thin Films with High Thermoelectric Performance and Flexibility. Advanced Functional Materials, 2022, 32, .	14.9	51
597	Atomic layer deposition of ZnO layers on Bi2Te3 powders: Comparison of gas fluidization and rotary reactors. Ceramics International, 2022, , .	4.8	3

#	Article	IF	CITATIONS
598	Thermal Transport Properties of Phonons in Halide Perovskites. Advanced Materials, 2023, 35, .	21.0	3
599	Entropy engineering enhances the thermoelectric performance and microhardness of (GeTe)1â°'x(AgSb0.5Bi0.5Te2)x. Science China Materials, 2023, 66, 696-706.	6.3	8
600	The Role of Cation Vacancies in GeSe: Stabilizing Highâ€Symmetric Phase Structure and Enhancing Thermoelectric Performance. Advanced Energy and Sustainability Research, 2022, 3, .	5.8	6
601	Enhanced Thermoelectric Performance of ZnO-Based Thin Films via Interface Engineering. Crystals, 2022, 12, 1351.	2.2	9
602	Realizing zT > 2 in Environmentâ€Friendly Monoclinic Cu2S – Tetragonal Cu1.96S Nanoâ€Phase Junctions for Thermoelectrics. Angewandte Chemie, 0, , .	2.0	0
603	Effects of Ti Doping on TaFeSb Halfâ€Heuslers Estimated by a Single Parabolic Band Model. ChemNanoMat, 0, , .	2.8	1
604	Synergistically Optimized Carrier and Phonon Transport Properties in Bi–Cu <sub>2</sub> S Coalloyed GeTe. ACS Applied Materials & Interfaces, 2022, 14, 45621-45627.	8.0	2
605	Planar Zintl-phase high-temperature thermoelectric materials XCuSb (X = Ca, Sr, Ba) with low lattice thermal conductivity. Journal of Advanced Ceramics, 2022, 11, 1604-1612.	17.4	13
606	Skin-Deep Aspect of Thermopower in Bi <sub>2</sub> Q <sub>3</sub> , PbQ, and BiCuQO (Q = Se, Te): Hidden One-Dimensional Character of Their Band Edges Leading to High Thermopower. Accounts of Chemical Research, 2022, 55, 2811-2820.	15.6	1
607	Realizing <i>zT</i> >2 in Environmentâ€Friendly Monoclinic Cu <sub>2</sub> S—Tetragonal Cu <sub>1.96</sub> S Nanoâ€Phase Junctions for Thermoelectrics. Angewandte Chemie - International Edition, 2022, 61, .	13.8	13
608	Manipulating Single-Walled Carbon Nanotube Arrays for Flexible Photothermoelectric Devices. Jacs Au, 2022, 2, 2269-2276.	7.9	5
609	Assemblyâ€Free Fabrication of Highâ€Performance Flexible Inorganic Thinâ€Film Thermoelectric Device Prepared by a Thermal Diffusion. Advanced Energy Materials, 2022, 12, .	19.5	50
611	Thermoelectric Properties of PEDOT:PSS Containing Connected Copper Selenide Nanowires Synthesized by the Photoreduction Method. ACS Omega, 2022, 7, 32101-32107.	3.5	6
612	Post-Electric Current Treatment Approaching High-Performance Flexible n-Type Bi2Te3 Thin Films. Micromachines, 2022, 13, 1544.	2.9	4
613	Realizing High Energy Conversion Efficiency in a Novel Segmentedâ€Mg <sub>3</sub> (Sb,) Tj ETQq0 0 0 rgBT /O 2022, 12, .	verlock 1( 19.5	) Tf 50 187 T 18
614	Enhancing thermoelectric properties of p-type (Bi,Sb)2Te3 via porous structures. Ceramics International, 2023, 49, 4305-4312.	4.8	5
615	Inhibiting the bipolar effect via band gap engineering to improve the thermoelectric performance in n-type Bi2-Sb Te3 for solid-state refrigeration. Journal of Materials Science and Technology, 2023, 138, 50-58.	10.7	10
616	Accurate <i>in situ</i> measurements of thermoelectric transport properties at high pressure and high temperature. Review of Scientific Instruments, 2022, 93, 103901.	1.3	2

#	Article	IF	CITATIONS
617	Low thermal conductivity and thermoelectric properties of Si80Ge20 dispersed Bi2Sr2Co2Oy ceramics. Ceramics International, 2023, 49, 4707-4712.	4.8	6
618	Synthetic Strategies, Thermal Stability, and Optical Properties for Nanostructured Famatinite with Cu-Site Doping. Chemistry of Materials, 2022, 34, 9086-9097.	6.7	2
619	Achieving High Thermoelectric Performance in Mixed Naturalâ€Synthetic Tetrahedrites. ChemNanoMat, 2022, 8, .	2.8	2
620	Intrinsic ultra-low lattice thermal conductivity in orthorhombic BiSI: An excellent thermoelectric material. Journal of Alloys and Compounds, 2022, 929, 167347.	5.5	5
621	Synergistic optimization of electrical-thermal properties of dual vacancy Bilâ^'x-yPbyCulâ^'xSeO by improving mobility and reducing lattice thermal conductivity. Journal of the European Ceramic Society, 2022, 42, 7475-7480.	5.7	2
622	Enhancing the thermoelectric performance of solution-synthesized SnSe-based materials via incorporating Ti3C2T MXene. Materials Today Energy, 2022, 30, 101137.	4.7	5
623	Optimized thermal design for excellent wearable thermoelectric generator. Journal of Materials Chemistry A, 2022, 10, 24985-24994.	10.3	7
624	Crystal Growth and Thermoelectric Properties of Zintl Phase Mg <sub>3</sub> X <sub>2</sub> (X=Sb,) Tj ETQq1	1 9.38431	4 ṟgBT /Ov <mark>e</mark> r
625	Enhanced thermoelectric performance in high-defect SnTe alloys: a significant role of carrier scattering. Journal of Materials Chemistry A, 2022, 10, 23521-23530.	10.3	7
626	Metal chalcogenide materials: Synthesis, structure and properties. , 2022, , .		1
627	Regulating the Configurational Entropy to Improve the Thermoelectric Properties of (GeTe)1â^'x(MnZnCdTe3)x Alloys. Materials, 2022, 15, 6798.	2.9	2
628	Thermoelectric Properties of Co-Substituted Al–Pd–Re Icosahedral Quasicrystals. Materials, 2022, 15, 6816.	2.9	3
629	Comprehensive Insight into <i>p</i> -Type Bi <sub>2</sub> Te <sub>3</sub> -Based Thermoelectrics near Room Temperature. ACS Applied Materials & Interfaces, 2022, 14, 49425-49445.	8.0	25
630	Role of Pb Doping on the Thermoelectric Properties of Mg <sub>3</sub> Sb <sub>1.8â€y</sub> Bi <sub>0.2</sub> Pb <sub>y</sub> Alloys. ChemNanoMat, 2022, 8, .	2.8	0
631	Enhanced CO2 Photoreduction over Bi2Te3/TiO2 Nanocomposite via a Seebeck Effect. Catalysts, 2022, 12, 1323.	3.5	2
632	Atomic Level Defect Structure Engineering for Unusually High Average Thermoelectric Figure of Merit in nâ€īype PbSe Rivalling PbTe. Advanced Science, 2022, 9, .	11.2	21
633	Advancement of Electrochemical Thermoelectric Conversion with Molecular Technology. Angewandte Chemie, 2023, 135, .	2.0	1
634	Advanced Bacterial Cellulose Ionic Conductors with Gigantic Thermopower for Low-Grade Heat Harvesting. Nano Letters, 2022, 22, 8152-8160.	9.1	29

#	Article	IF	CITATIONS
635	Probing High-Temperature Oxidation of Thermoelectric Phases Yb <sub>14</sub> <i>M</i> Sb <sub>11</sub> ( <i>M</i> = Mg, Mn, Zn). ACS Applied Materials & Interfaces, 2022, 14, 47246-47254.	8.0	3
636	Roles of interface engineering in performance optimization of skutteruditeâ€based thermoelectric materials. , 2022, 1, 233-246.		6
637	Chemically derived graphene quantum dots for high-strain sensing. Journal of Materials Science and Technology, 2023, 141, 110-115.	10.7	11
638	Superior Thermoelectric Performance of Black Phosphorus in Elemental Tellurium. Advanced Energy Materials, 2022, 12, .	19.5	3
639	Advancement of Electrochemical Thermoelectric Conversion with Molecular Technology. Angewandte Chemie - International Edition, 2023, 62, .	13.8	16
640	Two-Dimensional β-PdX <sub>2</sub> (X=S, Se, and Te) Monolayers with Promising Potential for Thermoelectric Applications. Journal of Physical Chemistry C, 2022, 126, 17885-17893.	3.1	4
641	Flexible film and thermoelectric device of single-walled carbon nanotube@conductive metal-organic framework composite. Materials Today Nano, 2022, 20, 100276.	4.6	4
642	Hf Incorporation in (Ti,Zr)NiSn Half Heusler Solid Solutions via Mechanical Alloying. Energies, 2022, 15, 7885.	3.1	1
643	A novel high entropy perovskite oxide with co-substitution in A and B sites (Ca1/3Sr1/3Ba1/3)(Y1/4Zr1/2Nb1/4)O3 design, synthesis and structural characterization. Ceramics International, 2023, 49, 7920-7926.	4.8	2
644	Ultralow Lattice Thermal Conductivity in the Aikinite Structure Family, Cu <sub><i>x</i></sub> Pb <sub><i>x</i></sub> Bi <sub>2â€"<i>x</i></sub> S <sub>3</sub> , and Thermoelectric Properties of Cu <sub>0.14</sub> Pb <sub>0.14</sub> Bi <sub>1.86</sub> S <sub>3</sub> . ACS Applied Energy Materials, 2022, 5, 14222-14230	5.1	4
645	Enhancing the thermoelectric performance of β-Zn4Sb3 via progressive incorporation of Zn interstitials. Nano Energy, 2022, 104, 107967.	16.0	3
646	Achieving metal-like malleability and ductility in Ag2Te1-S inorganic thermoelectric semiconductors with high mobility. Innovation(China), 2022, 3, 100341.	9.1	10
647	Engineering thermal transport within Si thin films: The impact of nanoslot alignment and ion implantation. IScience, 2022, 25, 105386.	4.1	2
648	Coupled thermo-electric-mechanical modeling of hybrid thermoelectric-piezoelectric energy harvester. Sustainable Energy Technologies and Assessments, 2022, 54, 102845.	2.7	1
649	High-performance post-treatment-free PEDOT based thermoelectric with the establishment of long-range ordered conductive paths. Chemical Engineering Journal, 2023, 454, 140047.	12.7	5
650	Stretchable thermoelectric generators with enhanced output by infrared reflection for wearable application. Chemical Engineering Journal, 2023, 453, 139749.	12.7	8
651	Expedient secondary functions of flexible piezoelectrics for biomedical energy harvesting. Bioactive Materials, 2023, 22, 291-311.	15.6	15
652	Hydrogel-based printing strategy for high-performance flexible thermoelectric generators. Nanoscale, 2022, 14, 16857-16864.	5.6	2

#	Article	IF	CITATIONS
653	Microstructure change and thermal conductivity reduction in p-type Bi–Sb–Te thermoelectric materials using a metal fatty acid as process control agent. Applied Surface Science, 2023, 611, 155643.	6.1	4
654	Synergistic effects of Cul doping on enhancing thermoelectric performance for n-type Bi2O2Se fabricated by mechanical alloying. Scripta Materialia, 2023, 225, 115163.	5.2	7
655	Degenerate line modes in the surface and bulk phonon spectra of orthorhombic NaMgF3 perovskite. Applied Physics Letters, 2022, 121, .	3.3	5
656	Interface and Surface Engineering Realized High Efficiency of 13% and Improved Thermal Stability in Mg <sub>3</sub> Sb <sub>1.5</sub> Bi <sub>0.5</sub> â€Based Thermoelectric Generation Devices. Advanced Energy Materials, 2022, 12, .	19.5	16
657	Reduced Thermal Conductivity in Nanostructured AgSbTe2 Thermoelectric Material, Obtained by Arc-Melting. Nanomaterials, 2022, 12, 3910.	4.1	1
658	Soret Effect of Ionic Liquid Gels for Thermoelectric Conversion. Journal of Physical Chemistry Letters, 2022, 13, 10830-10842.	4.6	9
659	Green-in-green biohybrids as transient biotriboelectric nanogenerators. IScience, 2022, 25, 105494.	4.1	5
660	Nanoheterojunctionâ€Mediated Thermoelectric Strategy for Cancer Surgical Adjuvant Treatment and βâ€Elemene Combination Therapy. Advanced Materials, 2023, 35, .	21.0	24
661	Reduced Graphene Oxides Modified Bi <sub>2</sub> Te <sub>3</sub> Nanosheets for Rapid Photoâ€Thermoelectric Catalytic Therapy of Bacteriaâ€Infected Wounds. Advanced Functional Materials, 2023, 33, .	14.9	10
662	Advances in Versatile GeTe Thermoelectrics from Materials to Devices. Advanced Materials, 2023, 35, .	21.0	38
663	Realizing high thermoelectric performance of Cu and Ce co-doped p-type polycrystalline SnSe via inducing nanoprecipitation arrays. Journal of Advanced Ceramics, 2022, 11, 1671-1686.	17.4	11
664	Optimizing electrical and thermal transport properties of Ca3Co4O9 based thermoelectric materials by Ag and Fe co-addition. Materials Today Communications, 2022, 33, 104866.	1.9	4
665	Harvesting waste heat with flexible Bi2Te3 thermoelectric thin film. Nature Sustainability, 2023, 6, 180-191.	23.7	150
666	The enhanced effect of magnetism on the thermoelectric performance of a Crl <sub>3</sub> monolayer. Nanoscale, 2023, 15, 1032-1041.	5.6	3
667	Recent advances of electrodeposition of Bi <sub>2</sub> Te <sub>3</sub> and its thermoelectric applications in miniaturized power generation and cooling. International Materials Reviews, 2023, 68, 521-555.	19.3	6
668	Solvent-optimized monolithic SWCNT-based thermoelectric generator for efficient electricity harvesting from body heat and sunlight. Carbon, 2023, 203, 111-119.	10.3	6
669	Cellular structured Cu <sub>2</sub> Sn <sub>0.8</sub> Co <sub>0.2</sub> S <sub>3</sub> with enhanced thermoelectric performance realized by liquid-phase sintering. Journal of Materials Chemistry A, 2023, 11, 1447-1454.	10.3	4
670	Emerging homogeneous superlattices in CaTiO <sub>3</sub> bulk thermoelectric materials. Materials Horizons, 2023, 10, 454-465.	12.2	5

#	Article	IF	CITATIONS
671	Strengthened phonon scattering and band convergence synergistically realize the high-performance SnTe thermoelectric. Journal of Materials Chemistry A, 2023, 11, 649-656.	10.3	3
672	Effects of magnetism and size of nano-oxide inclusions on the thermoelectric properties of Ge <sub>0.96</sub> Bi <sub>0.06</sub> Te. Journal of Materials Chemistry A, 2023, 11, 1268-1280.	10.3	1
673	Enhancing the thermal stability of n-type Mg3+xSb1.5Bi0.49Te0.01 by defect manipulation. Nano Energy, 2023, 106, 108036.	16.0	7
674	Role of lattice thermal conductivity in thermoelectric properties of chalcopyrite-type antimonides XSiSb2 (X = Mg, Be): A DFT insight. Materials Chemistry and Physics, 2023, 295, 127190.	4.0	3
675	High-entropy MTiO3 perovskite oxides with glass-like thermal conductivity for thermoelectric applications. Journal of Alloys and Compounds, 2023, 937, 168366.	5.5	15
676	Excellent thermoelectric properties of monolayer MoS2-MoSe2 aperiodic superlattices. Applied Surface Science, 2023, 612, 155914.	6.1	9
677	First principles thermoelectric performance calculations of TiN, ZnS, and Ag2Se at low temperatures. Computational Condensed Matter, 2023, 34, e00771.	2.1	1
678	Preparation and structure dependent thermoelectric properties of flexible N-type nanostructured silver(I) selenide/multi-walled carbon nanotube composite film. Applied Surface Science, 2023, 613, 156150.	6.1	8
679	First-principles investigation on the novel half-Heusler VXTe (X=Cr, Mn, Fe, and Co) alloys for spintronic and thermoelectric applications. Materials Science in Semiconductor Processing, 2023, 155, 107233.	4.0	10
680	Realizing n-type CdSb with promising thermoelectric performance. Journal of Materials Science and Technology, 2023, 144, 54-61.	10.7	2
681	Emerging Chalcohalide Materials for Energy Applications. Chemical Reviews, 2023, 123, 327-378.	47.7	34
682	Grain Boundary Complexions Enable a Simultaneous Optimization of Electron and Phonon Transport Leading to Highâ€Performance GeTe Thermoelectric Devices. Advanced Energy Materials, 2023, 13, .	19.5	22
683	High Power Factor of Ag2Se/Ag/Nylon Composite Films for Wearable Thermoelectric Devices. Nanomaterials, 2022, 12, 4238.	4.1	3
684	Thermal Conductivity of a Porous Material with an Ordered Structure. , 2022, , .		2
685	Improving the thermoelectric properties of Bi2Te2.7Se0.3 through La2O3 dispersion. Applied Physics A: Materials Science and Processing, 2022, 128, .	2.3	6
686	Synthesis and topochemical conversion of plate-like perovskite CaMnO3 microcrystals. Ceramics International, 2023, 49, 7089-7093.	4.8	3
687	3D Printing of Liquid Metal Embedded Elastomers for Soft Thermal and Electrical Materials. ACS Applied Materials & Interfaces, 2022, 14, 55028-55038.	8.0	29
688	Defectâ€Engineeringâ€Stabilized AgSbTe <sub>2</sub> with High Thermoelectric Performance. Advanced Materials, 2023, 35, .	21.0	20

#	Article	IF	CITATIONS
689	Broad Temperature Plateau for High Thermoelectric Properties of n-Type Bi <sub>2</sub> Te <sub>2.7</sub> Se <sub>0.3</sub> by 3D Printing-Driven Defect Engineering. ACS Applied Materials & Interfaces, 2023, 15, 1296-1304.	8.0	5
690	A Review of Perovskite-Based Photodetectors and Their Applications. Nanomaterials, 2022, 12, 4390.	4.1	19
691	Ink casting and 3D-extrusion printing of the thermoelectric half-Heusler alloy Nb1-xCoSb. Additive Manufacturing Letters, 2022, , 100113.	2.1	0
693	Thermoelectric Performance Enhancement in Commercial Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> Materials by Introducing Gradient Cu-Doped Grain Boundaries. ACS Applied Materials & Interfaces, 2023, 15, 1167-1174.	8.0	6
694	Charge Balanced Vacancy Engineering to Enhance the Thermoelectric Properties of GeMnTe <sub>2</sub> . Physica Status Solidi (B): Basic Research, 2023, 260, .	1.5	1
695	Personal Cooling Garments: A Review. Polymers, 2022, 14, 5522.	4.5	6
696	Growth Features of Bi2Te3Sb1.5 Films on Polyimide Substrates Obtained by Pulsed Laser Deposition. Materials, 2022, 15, 8993.	2.9	1
697	Optimized weighted mobility induced high thermoelectric performance of ZnOâ€based multilayered thin films. Journal of the American Ceramic Society, 2023, 106, 2911-2917.	3.8	6
698	Advancement of Polyaniline/Carbon Nanotubes Based Thermoelectric Composites. Materials, 2022, 15, 8644.	2.9	10
699	Thermal-inert and ohmic-contact interface for high performance half-Heusler based thermoelectric generator. Nature Communications, 2022, 13, .	12.8	18
701	Spintronic Thermoelectric Properties of Amorphous Fe-Ti-Sb Thin Films. Journal of Electronic Materials, 0, , .	2.2	0
702	Realization of Band Convergence in p-Type TiCoSb Half-Heusler Alloys Significantly Enhances the Thermoelectric Performance. ACS Applied Materials & amp; Interfaces, 2023, 15, 942-952.	8.0	7
703	Non-equilibrium strategy for enhancing thermoelectric properties and improving stability of AgSbTe2. Nano Energy, 2023, 107, 108118.	16.0	16
704	Enhanced thermoelectric performance of Bi <sub>2</sub> Te <sub>3</sub> by La <sub>2</sub> O <sub>3</sub> dispersion. Modern Physics Letters B, 2022, 36, .	1.9	5
705	Wet-spun flexible carbon nanotubes/polyaniline fibers for wearable thermoelectric energy harvesting. Composites Part A: Applied Science and Manufacturing, 2023, 166, 107386.	7.6	9
706	Thermoelectric properties of layered oxyselenides with 3d transition metal ions. Journal of the American Ceramic Society, 2023, 106, 2918-2929.	3.8	7
707	Thermoelectric Response Enhanced by Surface/Edge States in Physical Nanogaps. Materials, 2023, 16, 660.	2.9	1
708	Thermoelectric Modules: Key Issues in Architectural Design and Contact Optimization. ChemNanoMat, 2023, 9, .	2.8	1

#	Article	IF	CITATIONS
709	Realization of an ultra-low lattice thermal conductivity in Bi2AgxSe3 nanostructures for enhanced thermoelectric performance. Journal of Colloid and Interface Science, 2023, 637, 340-353.	9.4	9
710	Theoretical determination of superior high-temperature thermoelectricity in an n-type doped 2H-Zrl <sub>2</sub> monolayer. Nanoscale, 2023, 15, 4397-4407.	5.6	5
711	Fine Tuning of Defects Enables High Carrier Mobility and Enhanced Thermoelectric Performance of n-Type PbTe. Chemistry of Materials, 2023, 35, 755-763.	6.7	22
712	Discordant Distortion in Cubic GeMnTe <sub>2</sub> and High Thermoelectric Properties of GeMnTe <sub>2</sub> - <i>x</i> %SbTe. Journal of the American Chemical Society, 2023, 145, 1988-1996.	13.7	8
713	Bismuth Telluride (Bi2Te3) nanocrystallites: Studies on growth morphology and its influence on the thermoelectric properties. Journal of Crystal Growth, 2023, 606, 127087.	1.5	6
714	Wearable power management system enables uninterrupted battery-free data-intensive sensing and transmission. Nano Energy, 2023, 107, 108107.	16.0	6
715	Advances in flexible hydrogels for light-thermal-electricity energy conversion and storage. Journal of Energy Storage, 2023, 60, 106618.	8.1	7
716	Self-hygroscopic and smart color-changing hydrogels as coolers for improving energy conversion efficiency of electronics. Nano Energy, 2023, 108, 108177.	16.0	20
717	Design of Bi2Te3-based thermoelectric generator in a widely applicable system. Journal of Power Sources, 2023, 559, 232661.	7.8	4
718	Enhanced Thermoelectric Performance in GeTe by Synergy of Midgap state and Band Convergence. Advanced Functional Materials, 2023, 33, .	14.9	7
719	Enhanced Density of States Facilitates High Thermoelectric Performance in Solution-Grown Ge- and In-Codoped SnSe Nanoplates. ACS Nano, 2023, 17, 801-810.	14.6	9
720	Applications in thermoelectric thin films. , 2023, , 459-473.		0
721	Improved thermoelectric properties in n-type polycrystalline SnSe <sub>0.95</sub> by PbCl <sub>2</sub> doping. Materials Advances, 2023, 4, 1372-1377.	5.4	2
722	High thermoelectric performance in entropy-driven Ge <sub>1â^2<i>x</i>â^2<i>y</i></sub> Pb <sub><i>x</i></sub> Sn <sub><i>x</i></sub> Sb <sub><i>y</i></sub> Te. Journal of Materials Chemistry A, 2023, 11, 12793-12801.	10.3	3
723	Silver Atom Off-Centering in Diamondoid Solid Solutions Causes Crystallographic Distortion and Suppresses Lattice Thermal Conductivity. Journal of the American Chemical Society, 2023, 145, 3211-3220.	13.7	14
724	In Situ Design of Highâ€Performance Dualâ€Phase GeSe Thermoelectrics by Tailoring Chemical Bonds. Advanced Functional Materials, 2023, 33, .	14.9	9
726	Ultrafast microwave-assisted solvothermal synthesis and characterization of near-spherical CoSb3 nanopowders. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	1
727	Advances in Ionic Thermoelectrics: From Materials to Devices. Advanced Energy Materials, 2023, 13, .	19.5	50

#	Article	IF	Citations
728	Tightened 1D/3D carbon heterostructure infiltrating phase change materials for solar–thermoelectric energy harvesting: Faster and better. , 2023, 5, .		15
729	Enhancing the thermoelectric performance of SnTe-CuSbSe <sub>2</sub> with an ultra-low lattice thermal conductivity. Journal of Materials Chemistry A, 2023, 11, 4310-4318.	10.3	12
730	Enhanced thermoelectric figure of merit in indium and ytterbium double-filled skutterudite bulk materials through simultaneously optimising power factor and reducing thermal conductivity. Journal of the European Ceramic Society, 2023, 43, 3370-3375.	5.7	2
731	Thermoelectric energy conversion in buildings. Materials Today Energy, 2023, 32, 101257.	4.7	8
732	Thermal convective effect on the performance of thermally regenerative electrochemical cycle against self-discharge. Applied Thermal Engineering, 2023, 225, 120160.	6.0	0
733	Research on Environmental Adaptability of High Temperature Transducer. , 2022, , .		0
734	Recent progress in phosphide materials for thermoelectric conversion. Journal of Materials Chemistry A, 2023, 11, 8453-8469.	10.3	3
735	Cryogenic thermoelectric enhancements in SbCl <sub>3</sub> -doped porous Bi <sub>0.85</sub> Sb <sub>0.15</sub> alloys. Journal of Materials Chemistry C, 2023, 11, 4056-4069.	5.5	1
736	Estimation of Temperature-Dependent Band Parameters for Bi-Doped SnSe with High Thermoelectric Performance. Ceramics, 2023, 6, 504-513.	2.6	7
737	Microstructural Manipulation for Enhanced Average Thermoelectric Performance: A Case Study of Tin Telluride. ACS Applied Materials & Interfaces, 2023, 15, 9656-9664.	8.0	8
738	Energy conversion materials for the space solar power station. Chinese Physics B, 2023, 32, 078802.	1.4	1
739	Synthesis and Characterization of Multinary Selenides A <sub>4</sub> B <sub>10</sub> Se <sub>19</sub> (A=Sn, Pb; B=Sb, Bi). Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2023, 649, .	1.2	0
740	Reclaim of Wrecked Bi-Te Based Materials In Peltier Modules In Thermopower Properties By Mechanical Milling. Cumhuriyet Science Journal, 2023, 44, 209-217.	0.3	0
741	A review of pressure manipulating structure and performance in thermoelectrics. Journal Physics D: Applied Physics, 2023, 56, 183001.	2.8	1
742	Metal Complex Molecular Junctions as Thermoelectric Devices. Chemistry - A European Journal, 0, , .	3.3	1
743	Enhanced thermoelectric performance of n-type PbSe by pyrite FeSe2 alloying. Journal of Alloys and Compounds, 2023, 941, 169008.	5.5	2
744	Energy harvesting from ambient heat sources using thermoelectric generator – A modelling study. Materials Today: Proceedings, 2023, , .	1.8	1
745	Raising the Thermoelectric Performance in Pb/In-Codoped BiCuSeO by Alleviating the Contradiction between Carrier Mobility and Lattice Thermal Conductivity. Materials Today Physics, 2023, , 101084.	6.0	2

ARTICLE IF CITATIONS Improved thermoelectric performance by microwave wet chemical synthesis of low thermal 746 2.7 0 conductivity SnTe. Physica B: Condensed Matter, 2023, , 414894. High Pressure Drives Microstructure Modification and <i>zT</i> Enhancement in Bismuth 747 8.0 Telluride-Based Alloys. ACS Applied Materials & amp; Interfaces, 2023, 15, 19250-19257. Prediction of superior thermoelectric performance in unexplored doped-BiCuSeO via machine 748 7.0 3 learning. Materials and Design, 2023, 229, 111868. Hybridization of n-type Bi2Te3 crystals with liquid-like copper chalcogenide elicits record-high 749 6.0 thermoelectric performance. Materials Today Physics, 2023, 34, 101065. Mechanical properties and thermal stability of nanostructured thermoelectric materials on the basis 750 5.5 8 of PbTe and GeTe. Journal of Alloys and Compounds, 2023, 946, 169364. Pressure induced bands convergence and strength enhancement in thermoelectric semiconductor β-InSe. Journal of Alloys and Compounds, 2023, 947, 169687. 5.5 752 Epitaxial tin selenide thin film thermoelectrics. Applied Surface Science, 2023, 623, 157034. 6.1 1 Graphene oxide embedded in Bi2S3 nanosheets by hydrothermal method to enhance thermoelectric 4.0 performance. Materials Chemistry and Physics, 2023, 301, 127643. Estimating the upper limit of the thermoelectric figure of merit in n- and p-type PbTe. Materials Science 754 4.0 1 in Semiconductor Processing, 2023, 160, 107428. Band modification towards high thermoelectric performance of SnSb2Te4 with strong anharmonicity driven by cation disorder. Journal of Materials Science and Technology, 2023, 154, 140-148. Intrinsically high thermoelectric performance in near-room-temperature α-MgAgSb materials. Acta 756 5 7.9 Materialia, 2023, 249, 118847. Optimized thermoelectric properties of flexible p-type Sb2Te3 thin film prepared by a facile thermal 5.5 diffusion method. Journal of Alloys and Compounds, 2023, 948, 169730. Condensed point defects enhance thermoelectric performance of rare-earth Lu-doped GeTe. Journal of 758 10.7 9 Materials Science and Technology, 2023, 151, 227-233. Magnetism Modulation for Cryogenic Thermoelectric Enhancements in Fe<sub>3</sub>O<sub>4</sub>Nanoparticle-Incorporated Bi<sub>0.85</sub>Sb<sub>0.15</sub>Nanocomposites. ACS Applied 8.0 Materials & amp; Interfaces, 2023, 15, 8105-8119. Cobalt doping of Mg3Sb2 monolayer: Improved thermoelectric performance. Physics Letters, Section A: 760 2.1 0 General, Atomic and Solid State Physics, 2023, 463, 128684. AgSbSe2 inclusions enabling high thermoelectric and mechanical performance in n-type Ag2Se-based composites. Acta Materialia, 2023, 248, 118753. Compositing Nanostructured Polyaniline with Single-Walled Carbon Nanotubes for High 762 4.5 1 Thermoelectric Performance. International Journal of Energy Research, 2023, 2023, 1-16. Enhanced Thermoelectric Performance of Mg-Doped AgSbTe<sub>2</sub> by Inhibiting the Formation of Ag<sub>2</sub>Te. ACS Applied Materials & amp; Interfaces, 2023, 15, 9508-9516.

	CITATION REI	PORT	
#	Article	IF	CITATIONS
764	Soft Fiber Electronics Based on Semiconducting Polymer. Chemical Reviews, 2023, 123, 4693-4763.	47.7	40
765	Wearable Thermoelectric Generators: Materials, Structures, Fabrications, and Applications. Physica Status Solidi - Rapid Research Letters, 2023, 17, .	2.4	1
766	Realizing high thermoelectric performance in n-type Bi2Te3 based thin films via post-selenization diffusion. Journal of Materiomics, 2023, 9, 618-625.	5.7	6
767	Colloidal Technologies forÂHeat Energy Recovery. Green Energy and Technology, 2023, , 49-104.	0.6	0
768	Enhanced thermoelectric performance of InSb through deep level impurity donor state induced by La doping. Materials Today Physics, 2023, 32, 101020.	6.0	0
769	Phonons, magnons and lattice thermal transport in 2H-NbSe2: A first principles study. Physica B: Condensed Matter, 2023, 655, 414739.	2.7	0
770	All-Solution-Processed Polythiophene/Carbon Nanotube Nanocomposites Integrated on Biocompatible Silk Fibroin Substrates for Wearable Thermoelectric Generators. ACS Applied Energy Materials, 2023, 6, 2602-2610.	5.1	3
771	Unraveling the structural details and thermoelectric transports of 2D-3D hetero-structure composites. Materials Today Physics, 2023, 32, 101018.	6.0	1
772	In-situ construction of all-scale hierarchical microstructure and thermoelectric properties of (Sr0.25Ca0.25Ba0.25La0.25)TiO3/Pb@Bi composite oxide ceramics. Journal of Materiomics, 2023, , .	5.7	3
773	Synergistic effects improve thermoelectric properties of zone-melted n-type Bi2Te2.7Se0.3. Materials Today Physics, 2023, 32, 101022.	6.0	9
774	Highly Electrical Conductive PEDOT:PSS/SWCNT Flexible Thermoelectric Films Fabricated by a High-Velocity Non-solvent Turbulent Secondary Doping Approach. ACS Applied Materials & Interfaces, 2023, 15, 10947-10957.	8.0	7
775	Ag Interstitial Inhibition and Phonon Scattering at the ZnSe Nano-Precipitates to Enhance the Thermoelectric Performance of Ag <sub>2</sub> Se. ACS Applied Energy Materials, 2023, 6, 2804-2811.	5.1	4
776	AgCuS: A Single Material Diode with Fast Switching Times. Advanced Functional Materials, 2023, 33, .	14.9	1
777	High thermoelectric and mechanical performance achieved by a hyperconverged electronic structure and low lattice thermal conductivity in GeTe through CuInTe <sub>2</sub> alloying. Journal of Materials Chemistry A, 2023, 11, 8119-8130.	10.3	11
778	Pushing the limit of synergy in SnTe-based thermoelectric materials leading to an ultra-low lattice thermal conductivity and enhanced <i>ZT</i> . Sustainable Energy and Fuels, 2023, 7, 1916-1929.	4.9	7
779	Highâ€Performance Industrialâ€Grade pâ€Type (Bi,Sb) <sub>2</sub> Te <sub>3</sub> Thermoelectric Enabled by a Stepwise Optimization Strategy. Advanced Materials, 2023, 35, .	21.0	23
780	Robust, Flexible Thermoelectric Film for Energy Harvesting by a Simple and Eco-Friendly Method. ACS Applied Materials & Interfaces, 2023, 15, 13144-13154.	8.0	3
781	Continuous Phase Change Materials for Power Generation from Daily Air Temperature Cycles. Advanced Materials Technologies, 0, , 2201639.	5.8	0

#	Article	IF	CITATIONS
782	Thermovoltaic Effect, a Novel Phenomenon on Nonpolar ZnO (101Ì0) Surfaces. Journal of Physical Chemistry C, 2023, 127, 5145-5152.	3.1	0
783	Lead Vacancy Promotes Sodium Solubility to Achieve Ultraâ€High <i>zT</i> in Only Ternary Pb <sub>1â€</sub> <i><sub>x</sub></i> Na <i><sub>x</sub></i> Te. Small, 2023, 19, .	10.0	5
784	Review on Fiber-Based Thermoelectrics: Materials, Devices, and Textiles. Advanced Fiber Materials, 2023, 5, 1105-1140.	16.1	7
785	Different concentrations of Ti4+ as a donor and electronic properties of Bi2-xTixO3. Frontiers in Materials, 0, 10, .	2.4	1
786	Ti-doping inducing high-performance flexible p-type Bi0.5Sb1.5Te3-based thin film. Ceramics International, 2023, 49, 18584-18591.	4.8	3
787	Enhanced Thermoelectric Performance of n-Type PbTe <i>via</i> Carrier Concentration Optimization over a Broad Temperature Range. ACS Applied Materials & amp; Interfaces, 0, , .	8.0	1
788	Degradation of Methylene Blue by Hot Electrons Transfer in SnSe. Advanced Materials Interfaces, 2023, 10, .	3.7	1
789	Ultralow lattice thermal conductivity and improved thermoelectric performance in a Hf-free half-Heusler compound modulated by entropy engineering. Journal of Materials Chemistry A, 2023, 11, 8150-8161.	10.3	6
790	Doping by Design: Enhanced Thermoelectric Performance of GeSe Alloys Through Metavalent Bonding. Advanced Materials, 2023, 35, .	21.0	22
791	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501.	4.2	19
791 792	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501. SiGe quantum wells implementation in Si based nanowires for solar cells applications. Digest Journal of Nanomaterials and Biostructures, 2023, 18, 327-342.	4.2 0.8	19 0
791 792 793	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501.         SiGe quantum wells implementation in Si based nanowires for solar cells applications. Digest Journal of Nanomaterials and Biostructures, 2023, 18, 327-342.         Water-Free SbOx ALD Process for Coating Bi2Te3 Particles. Coatings, 2023, 13, 641.	4.2 0.8 2.6	19 0 0
791 792 793 794	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501.         SiGe quantum wells implementation in Si based nanowires for solar cells applications. Digest Journal of Nanomaterials and Biostructures, 2023, 18, 327-342.         Water-Free SbOx ALD Process for Coating Bi2Te3 Particles. Coatings, 2023, 13, 641.         Advances in Ag <sub>2</sub> Se-based thermoelectrics from materials to applications. Energy and Environmental Science, 2023, 16, 1870-1906.	<ul> <li>4.2</li> <li>0.8</li> <li>2.6</li> <li>30.8</li> </ul>	19 0 0 35
791 792 793 794 795	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501.SiCe quantum wells implementation in Si based nanowires for solar cells applications. Digest Journal of Nanomaterials and Biostructures, 2023, 18, 327-342.Water-Free SbOx ALD Process for Coating Bi2Te3 Particles. Coatings, 2023, 13, 641.Advances in Ag <sub>2</sub> Se-based thermoelectrics from materials to applications. Energy and Environmental Science, 2023, 16, 1870-1906.Fine electron and phonon transports manipulation by Mn compensation for high thermoelectric performance of Sb2Te3(SnTe)n materials. Materials Today Physics, 2023, 33, 101055.	<ul> <li>4.2</li> <li>0.8</li> <li>2.6</li> <li>30.8</li> <li>6.0</li> </ul>	19       0       0       35       2
<ul> <li>791</li> <li>792</li> <li>793</li> <li>794</li> <li>795</li> <li>796</li> </ul>	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501.SiGe quantum wells implementation in Si based nanowires for solar cells applications. Digest Journal of Nanomaterials and Biostructures, 2023, 18, 327-342.Water-Free SbOx ALD Process for Coating Bi2Te3 Particles. Coatings, 2023, 13, 641.Advances in Ag <sub>2</sub> Se-based thermoelectrics from materials to applications. Energy and Environmental Science, 2023, 16, 1870-1906.Fine electron and phonon transports manipulation by Mn compensation for high thermoelectric performance of Sb2Te3(SnTe)n materials. Materials Today Physics, 2023, 33, 101055.Upgrading Electricity Generation and Electromagnetic Interference Shielding Efficiency via Phasea€Change Feedback and Simple Origami Strategy. Advanced Science, 2023, 10, .	<ul> <li>4.2</li> <li>0.8</li> <li>2.6</li> <li>30.8</li> <li>6.0</li> <li>11.2</li> </ul>	19         0         35         2         16
<ul> <li>791</li> <li>792</li> <li>793</li> <li>794</li> <li>795</li> <li>796</li> <li>797</li> </ul>	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501.         SiGe quantum wells implementation in Si based nanowires for solar cells applications. Digest Journal of Nanomaterials and Biostructures, 2023, 18, 327-342.         Water-Free SbOx ALD Process for Coating Bi2Te3 Particles. Coatings, 2023, 13, 641.         Advances in Ag <sub>2</sub> Se-based thermoelectrics from materials to applications. Energy and Environmental Science, 2023, 16, 1870-1906.         Fine electron and phonon transports manipulation by Mn compensation for high thermoelectric performance of Sb2Te3(SnTe)n materials. Materials Today Physics, 2023, 33, 101055.         Upgrading Electricity Generation and Electromagnetic Interference Shielding Efficiency via PhaseateChange Feedback and Simple Origami Strategy. Advanced Science, 2023, 10, .         Advances in bismuth-telluride-based thermoelectric devices: Progress and challenges. EScience, 2023, 3, 100122.	<ul> <li>4.2</li> <li>0.8</li> <li>2.6</li> <li>30.8</li> <li>6.0</li> <li>11.2</li> <li>41.6</li> </ul>	19         0         35         2         16         25
<ul> <li>791</li> <li>792</li> <li>793</li> <li>794</li> <li>795</li> <li>796</li> <li>797</li> <li>798</li> </ul>	Roadmap on energy harvesting materials. JPhys Materials, 2023, 6, 042501.         SiGe quantum wells implementation in Si based nanowires for solar cells applications. Digest Journal of Nanomaterials and Biostructures, 2023, 18, 327-342.         Water-Free SbOx ALD Process for Coating Bi2Te3 Particles. Coatings, 2023, 13, 641.         Advances in Ag <sub>2</sub> Se-based thermoelectrics from materials to applications. Energy and Environmental Science, 2023, 16, 1870-1906.         Fine electron and phonon transports manipulation by Mn compensation for high thermoelectric performance of Sb2Te3(SnTe)n materials. Materials Today Physics, 2023, 33, 101055.         Upgrading Electricity Generation and Electromagnetic Interference Shielding Efficiency via Phaseä€Change Feedback and Simple Origami Strategy. Advanced Science, 2023, 10, .         Advances in bismuth-telluride-based thermoelectric devices: Progress and challenges. EScience, 2023, 3, 100122.         All-day uninterrupted thermoelectric generator by simultaneous harvesting of solar heating and radiative cooling. Optics Express, 2023, 31, 14495.	<ul> <li>4.2</li> <li>0.8</li> <li>2.6</li> <li>30.8</li> <li>6.0</li> <li>11.2</li> <li>41.6</li> <li>3.4</li> </ul>	19         0         35         2         16         25         3

#	Article	IF	CITATIONS
800	Linking Polaron Signatures to Charge Transport in Doped Thiophene Polymers. ACS Applied Energy Materials, 2023, 6, 3960-3969.	5.1	0
801	Realizing Enhanced Thermoelectric Performance in Zintl-Phase SrCuSb by Reducing the Thermal Conductivity. ACS Applied Energy Materials, 2023, 6, 3970-3976.	5.1	1
802	Effects of Oxygen on Lattice Defects in Single-Crystalline Mg2Si Thermoelectrics. Nanomaterials, 2023, 13, 1222.	4.1	0
803	Optimization of the Thermoelectric Properties of SnSe <sub>2</sub> Using First-Principles Calculations. Journal of Physical Chemistry C, 2023, 127, 6916-6924.	3.1	6
804	Thermodynamic Analysis on the Performance of Barocaloric Refrigeration Systems Using Neopentyl Glycol as the Refrigerant. Journal of Thermal Science, 2023, 32, 1063-1073.	1.9	5
805	Highly efficient thermoelectric cooling performance of ultrafine-grained and nanoporous materials. Materials Today, 2023, 65, 5-13.	14.2	15
806	Asymmetric Thermoelectric Performance Tuning in Low-Cost ZrFe <sub><i>x</i></sub> Ni <sub>1–<i>x</i></sub> Sb Double Half-Heusler Materials. ACS Applied Energy Materials, 2023, 6, 4305-4316.	5.1	9
807	Physics and technology of thermoelectric materials and devices. Journal Physics D: Applied Physics, 2023, 56, 333001.	2.8	10
808	Iron Garnet Thin Films for Applications in Magnonics and Spintronics. , 2023, , 777-795.		2
809	Decoupled electron and phonon transport in thermoelectric GeTe compounded with multi-walled carbon nanotubes. Materials Today Physics, 2023, 34, 101081.	6.0	4
810	Multiscale architected porous materials for renewable energy conversion and storage. Energy Storage Materials, 2023, 59, 102768.	18.0	6
811	Staggered circular nanoporous graphene converts electromagnetic waves into electricity. Nature Communications, 2023, 14, .	12.8	81
812	Origin of improved average power factor and mechanical properties of SnTe with high-dose Bi2Te3 alloying. Ceramics International, 2023, 49, 21916-21922.	4.8	3
813	Realizing high thermoelectric performance for p-type SiGe in medium temperature region via TaC compositing. Journal of Materiomics, 2023, 9, 984-991.	5.7	5
814	Metavalent Bonding-Mediated Dual 6s <sup>2</sup> Lone Pair Expression Leads to Intrinsic Lattice Shearing in n-Type TIBiSe <sub>2</sub> . Journal of the American Chemical Society, 2023, 145, 9292-9303.	13.7	18
816	Impact of resonant state formation and band convergence in In and Sr co-doped SnTe thermoelectric material evaluated via the single parabolic band model. Journal of Alloys and Compounds, 2023, 954, 170144.	5.5	6
817	Optimizing the doping efficiency and thermoelectric properties of isoindigo-based conjugated polymers using side chain engineering. Journal of Materials Chemistry C, 2023, 11, 6874-6883.	5.5	1
818	As-based ternary Janus monolayers for efficient thermoelectric and photocatalytic applications. Journal of Materials Chemistry A, 2023, 11, 10413-10424.	10.3	10

## # ARTICLE

DFT Study of Structural, Electronic, Thermoelectric and Elastic Properties of KPdX3 (X = F, Cl, Br, and) Tj ETQq0 0 0 225 // Overlock 10 Tf

820	Characterizations of thermoelectric ceramics. , 2023, , 305-326.		0
821	High-performance thermoelectric ceramics and their applications. , 2023, , 347-362.		0
822	Ultralow Lattice Thermal Conductivity and High Thermoelectric Performance in Ge <sub>1–<i>x</i>–<i>y</i></sub> Bi <sub><i>x</i></sub> Ca <sub><i>y</i></sub> Te with Ultrafine Ferroelectric Domain Structure. ACS Applied Materials & Interfaces, 2023, 15, 21187-21197.	8.0	1
823	Progress and challenges of emerging MXene based materials for thermoelectric applications. IScience, 2023, 26, 106718.	4.1	6
824	Thermoelectric properties of SiC nanocomposite Mg2Si0.4Sn0.6 with Sb doping prepared by vacuum induction levitation melting and spark plasma sintering. Vacuum, 2023, 213, 112135.	3.5	2
825	Investigating the effect of defect states and to enhance the electrical conductivity of p-type Vanadium-doped MoS2 for wearable thermoelectric application. Journal of Alloys and Compounds, 2023, 960, 170317.	5.5	8
826	Thermoelectric properties and Kondo transition in the pseudoâ€gap metals TiNiSi and TiNiGe. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 0, , .	1.2	0
827	Synergetic Enhancement of Strength–Ductility and Thermoelectric Properties of Ag <sub>2</sub> Te by Domain Boundaries. Advanced Materials, 2023, 35, .	21.0	9
828	Transparent-flexible thermoelectric module from In/Ga co-doped ZnO thin films. Chemical Engineering Journal, 2023, 465, 142954.	12.7	5
829	Thermoelectric properties of acene molecular junctions. Wuli Xuebao/Acta Physica Sinica, 2023, 72, 124401.	0.5	1
830	Synthesis and characterization of new homologue multinary selenides, <scp> M <sub>2</sub> Sb <sub>5</sub> Bi <sub>5</sub> Se <sub>17</sub> </scp> (M = Sn, Pb). Journal of the Chinese Chemical Society, 2023, 70, 1038-1047.	1.4	0
831	Engineering of Thermoelectric Composites Based on Silver Selenide in Aqueous Solution and Ambient Temperature. ACS Applied Electronic Materials, 0, , .	4.3	2
832	Superior multiphase interfaces in AgCuTe-based composite with significantly enhanced thermoelectric properties. Journal of Advanced Ceramics, 2023, 12, 1511-1520.	17.4	2
833	Bacterial cellulose hydrogel-based wearable thermo-electrochemical cells for continuous body heat harvest. Nano Energy, 2023, 112, 108482.	16.0	5
834	The Interplay of Magnetism and Thermoelectricity: A Review. , 2023, 2, .		2
835	Electrical Property Enhancement in Orientationâ€Modulated Perovskite Laâ€Đoped SrTiO <sub>3</sub> Thermoelectric Thin Films. Advanced Functional Materials, 2023, 33, .	14.9	5
836	Copper-Based Diamond-like Thermoelectric Compounds: Looking Back and Stepping Forward. Materials, 2023, 16, 3512.	2.9	0

#	Article	IF	CITATIONS
837	Effects of AgSnSe2 addition on the thermoelectric properties of Bi0.5Sb1.5Te3. Journal of Alloys and Compounds, 2023, 956, 170399.	5.5	3
838	Ordered-vacancy defect chalcopyrite ZnIn2Te4: A potential thermoelectric material with low lattice thermal conductivity. Journal of Solid State Chemistry, 2023, 324, 124076.	2.9	0
839	Tuning band structure and texture for improved thermoelectric performance in BiSe. Journal of Alloys and Compounds, 2023, 958, 170482.	5.5	3
840	Inelastic X-ray Scattering Measurement on Single-Crystalline GeSn Thin Film. Journal of Electronic Materials, 0, , .	2.2	0
841	Effect of carrier doping on the electronic states of earth-abundant Fe–Al–Si thermoelectric materials. Materials Research Express, 2023, 10, 055506.	1.6	0
842	Ultrafast and Cost-Effective Fabrication of High-Performance Carbon-Based Flexible Thermoelectric Hybrid Films and Their Devices. ACS Applied Materials & Interfaces, 2023, 15, 25650-25660.	8.0	6
843	Phase diagrams of Bi–Sb–Se–Te system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2023, 81, 102560.	1.6	1
844	Good thermoelectric performance and stability in copper sulfide synthesized by hydrothermal method and densified by HP technique. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
845	Employing multi-functional SnSe inclusions to boost the thermoelectric performance of the shear-exfoliated Bi2Te2.7Se0.3. Acta Materialia, 2023, 254, 119023.	7.9	4
847	Ag doping effect on electronic and thermoelectric properties of SrTiO3 (0 0 1) surface. Computational Materials Science, 2023, 227, 112274.	3.0	0
848	Tuning the Saturated Vapor Pressure of Solvothermal Synthesis to Boost the Thermoelectric Performance of Pristine Bi <sub>2</sub> Te <sub>3</sub> Polycrystals by Anisotropy Strengthening. ACS Applied Energy Materials, 2023, 6, 6227-6236.	5.1	3
849	Lattice plainification advances highly effective SnSe crystalline thermoelectrics. Science, 2023, 380, 841-846.	12.6	75
850	Challenges and opportunities in low-dimensional thermoelectric nanomaterials. Materials Today, 2023, 66, 137-157.	14.2	12
851	Scalable-produced 3D elastic thermoelectric network for body heat harvesting. Nature Communications, 2023, 14, .	12.8	11
852	Gate voltage enhances the thermoelectric transport of quantum dots in graphene nanoribbons. Computational Materials Science, 2023, 227, 112207.	3.0	1
853	Effective decoupling of grain boundaries and secondary phase interfaces for enhanced thermoelectric performance of Cu1.8S/WS2 nanocomposites. Journal of Alloys and Compounds, 2023, 960, 170796.	5.5	0
854	Recent trends of ternary, quaternary half-Heusler thermoelectric materials and contact resistance effect on their power output efficiency. Materials Letters, 2023, 347, 134647.	2.6	2
855	Unveiling the mechanical and dynamical stability to the contribution of transport properties of FeNbSb: A first principle approach. Computational Condensed Matter, 2023, 36, e00821.	2.1	2

		CITATION R	EPORT	
#	Article		IF	Citations
856	Development and Applications of Thermoelectric Oxide Ceramics and Devices. Energies,	2023, 16, 4475.	3.1	2
857	Substituted (P, As, Sb, S and Se) two-dimensional Bi <sub>2</sub> Te <sub>3</sub> mon stress at high temperature: achieving high thermoelectric performance. New Journal of C 2023, 47, 13309-13319.	olayer under hemistry,	2.8	1
858	Opening the Bandgap of Metallic Halfâ€Heuslers via the Introduction of d–d Orbital In Advanced Science, 2023, 10, .	teractions.	11.2	4
859	Approaching high thermoelectric performance in p-type Cu3SbS4-based materials by rati electronic and nano/microstructural engineering. Chemical Engineering Journal, 2023, 46	onal 59, 143965.	12.7	3
860	Flexible Thermoelectric Devices with Flexible Heatsinks of Phase-Change Materials and St Interconnectors of Semi-Liquid Metals. ACS Applied Materials & Interfaces, 2023, 15	tretchable 5, 29330-29340.	8.0	6
861	Decoupling thermoelectric parameters induces significantly enhanced thermoelectric pro oxygen-functionalized graphene nanoribbon. Diamond and Related Materials, 2023, 137	perties of , 110103.	3.9	1
862	Thermoelectric and Photoelectric Dual Modulated Sensors for Human Internet of Things in Accurate Fire Recognition and Warning. Advanced Functional Materials, 2023, 33, .	Application	14.9	10
863	Ultra-high power factor of p-type Bi <sub>2</sub> Se <sub>3</sub> for room-temperature thermoelectric applications. Chemical Communications, 2023, 59, 8119-8122.	e	4.1	2
864	Accelerated measurement of electrical resistivity and Seebeck coefficient for thin-layer thermoelectric materials. Measurement Science and Technology, 2023, 34, 095908.		2.6	0
865	Surface Chemistry and Band Engineering in AgSbSe <sub>2</sub> : Toward High Thermo Performance. ACS Nano, 2023, 17, 11923-11934.	electric	14.6	6
866	Direct Conversion of Phaseâ $\!$	Peltier Effect.	21.0	4
867	Firstâ€Principles Study on Electronic and Thermal Transport Properties of FeRuTiX Quate Compounds (X=Si, Ge, Sn). Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2023,	rnary Heusler 649, .	1.2	1
868	High thermoelectric and mechanical performance in strong-textured n-type Bi2Te2.7Se0. temperature gradient method. Chemical Engineering Journal, 2023, 470, 144085.	.3 by	12.7	1
869	Realizing high in-plane carrier mobility in n-type SnSe crystals through deformation poter modification. Energy and Environmental Science, 2023, 16, 3128-3136.	ntial	30.8	10
870	High-performance integrated chip-level thermoelectric device for power generation and r detection. Nano Energy, 2023, 114, 108611.	nicroflow	16.0	3
872	AiiDA-defects: an automated and fully reproducible workflow for the complete characteridefect chemistry in functional materials. Electronic Structure, 2023, 5, 024009.	ization of	2.8	2
874	Quasi-one-dimensional bulk thermoelectrics. Joule, 2023, 7, 1108-1110.		24.0	9
875	Optimization of thermoelectric properties in elemental tellurium via high pressure. Chine 0, , .	se Physics B,	1.4	0

#	Article	IF	CITATIONS
876	Enhanced thermoelectric performance of Sb-doped Mg2Si0.4Sn0.6 via doping, alloying and nanoprecipitation. Journal of Materiomics, 2024, 10, 285-292.	5.7	0
877	A novel two-stage thermophotovoltaic-thermoelectric system based on micro combustion. Applied Thermal Engineering, 2023, 232, 121018.	6.0	3
878	Nanostructured n-Type Polycrystalline SnSe Materials for Thermoelectric Applications. ACS Applied Nano Materials, 2023, 6, 11754-11763.	5.0	2
879	Continuous contact problem of interaction between two arbitrarily positioned flat stamps on the thermoelectric material. Acta Mechanica, 2023, 234, 4719-4732.	2.1	0

Mg Compensating Design in the Meltingâ€Sintering Method For Highâ€Performance Mg<sub>3</sub>(Bi,) Tj ETQq000 rgBT/Overlock

881	Sb Alloying for Engineering Highâ€Thermoelectric <i>zT</i> of CuGaTe <sub>2</sub> . Advanced Energy and Sustainability Research, 2023, 4, .	5.8	5
882	Compositing effects for high thermoelectric performance of Cu2Se-based materials. Nature Communications, 2023, 14, .	12.8	26
883	Enhanced Thermoelectric Properties and Flexibility of 2D Bi <sub>2</sub> Si <sub>2</sub> Te <sub>6</sub> Nanosheets and PEDOT:PSS-Based Thermoelectric Composites. ACS Applied Polymer Materials, 2023, 5, 3677-3685.	4.4	2
884	The peculiar potential of transition metal dichalcogenides for thermoelectric applications: A perspective on future computational research. Journal of Applied Physics, 2023, 133, .	2.5	1
885	High-performance copper selenide nanocomposites for power generation. Journal of the European Ceramic Society, 2023, 43, 5255-5262.	5.7	0
886	Inelastic Neutron Scattering Study of Phonon Dispersion Relation in Higher Manganese Silicides. Crystals, 2023, 13, 741.	2.2	1
887	Co/GeTe interfacial reactions and Co-Ge-Te phase equilibria. Journal of the Taiwan Institute of Chemical Engineers, 2023, 146, 104890.	5.3	3
888	Enhanced Thermoelectric Performance and Low Thermal Conductivity in Cu <sub>2</sub> GeTe <sub>3</sub> with Identified Localized Symmetry Breakdown. Inorganic Chemistry, 2023, 62, 7273-7282.	4.0	0
889	BiCuSeO based thermoelectric materials: Innovations and challenges. Materials Today Physics, 2023, 35, 101104.	6.0	3
890	Perspective and advances on ionic thermoelectric energy conversion. , 0, 2, .		0
891	Design, synthesis, and application of some two-dimensional materials. Chemical Science, 2023, 14, 5266-5290.	7.4	6
892	Liquid-like copper chalcogenide modulates electron donors in high-performance n-type PbTe thermoelectrics. Cell Reports Physical Science, 2023, 4, 101413.	5.6	1
893	Smart fire-safety cotton fabric with fire-warning capability via dual working mechanisms. Cellulose, 2023, 30, 6015-6030.	4.9	3

#	Article	IF	CITATIONS
894	Thermoelectric properties of Zn-doped In0.95Ga0.05Sb crystals grown by directional solidification. Journal of Materials Science, 2023, 58, 7995-8004.	3.7	1
895	Interfacial thermal stresses of segmented thermoelectric generators. Journal of Thermal Stresses, 2023, 46, 574-587.	2.0	Ο
896	In-doping induced resonant level and thermoelectric performance enhancement in n-type GeBi2Te4 single crystals with intrinsically low lattice thermal conductivity. Chemical Engineering Journal, 2023, 467, 143529.	12.7	4
897	Promising novel thermoelectric materials: two-dimensional penta-like PtPX (X = S, Se, Te) nanosheets. Journal of Materials Chemistry C, 2023, 11, 9449-9464.	5.5	2
899	High‣ensitivity Flexible Thermocouple Sensor Arrays Via Printing and Photonic Curing. Advanced Functional Materials, 0, , .	14.9	3
900	Functional materials for solar thermophotovoltaic devices in energy conversion applications: a review. Frontiers in Energy Research, 0, 11, .	2.3	2
901	Performance optimization of a dual-thermoelectric-liquid hybrid system for central processing unit cooling. Energy Conversion and Management, 2023, 290, 117222.	9.2	12
902	Extremely Low Lattice Thermal Conductivity Leading to Superior Thermoelectric Performance in Cu <sub>4</sub> TiSe <sub>4</sub> . ACS Applied Materials & Interfaces, 2023, 15, 32453-32462.	8.0	3
903	Recent advances, challenges, and perspective of copperâ€based liquidâ€like thermoelectric chalcogenides: A review. EcoMat, 2023, 5, .	11.9	2
904	Gibbs Adsorption and Zener Pinning Enable Mechanically Robust Highâ€Performance Bi <sub>2</sub> Te <sub>3</sub> â€Based Thermoelectric Devices. Advanced Science, 2023, 10, .	11.2	6
905	Unveiling the Thermoelectric Performances of Zn1â^'xFexSe Nanoparticles Prepared by the Hydrothermal Method. Inorganics, 2023, 11, 286.	2.7	0
906	Enhanced thermoelectric performance of MoS2-Bi2S3 nanocomposites via low energy carrier filtering effect. Surfaces and Interfaces, 2023, 41, 103140.	3.0	0
907	Bismuthene nanosheets prepared by an environmentally friendly method and their thermoelectric epoxy nanocomposites. Advanced Industrial and Engineering Polymer Research, 2023, , .	4.7	2
908	Strain-engineered thermophysical properties ranging from band-insulating to topological insulating phases in l²-antimonene. Nanoscale, 0, , .	5.6	0
910	Effects of Te-doping on the thermoelectric properties of InGaSb crystals. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
911	High Thermoelectric Performance in Ti <sub>3</sub> C <sub>2</sub> T <i><sub>x</sub></i> MXene/Sb <sub>2</sub> Te <sub>3</sub> Composite Film for Highly Flexible Thermoelectric Devices. Global Challenges, 2024, 8, .	3.6	1
912	Advancing Thermoelectric Materials: A Comprehensive Review Exploring the Significance of One-Dimensional Nano Structuring. Nanomaterials, 2023, 13, 2011.	4.1	4
913	Fast Fabrication of Highâ€Performance CoSb <sub>3</sub> â€Based Thermoelectric Skutterudites via Oneâ€Step Ybâ€Promoted Peritectic Solidification. Advanced Functional Materials, 2023, 33, .	14.9	ο

	CITATION	Report	
# 914	ARTICLE Synthesis-temperature-dependent phase composition manipulation toward high thermoelectric	IF 10.7	CITATIONS 2
915	Recent advances in interface engineering of thermoelectric nanomaterials. Materials Chemistry Frontiers, 2023, 7, 4707-4722.	5.9	2
916	Protonâ€Coupled Electron Transfer Aided Thermoelectric Energy Conversion and Storage. Angewandte Chemie - International Edition, 2023, 62, .	13.8	1
917	Cellulose-Based Ionic Conductor: An Emerging Material toward Sustainable Devices. Chemical Reviews, 2023, 123, 9204-9264.	47.7	30
918	Proton oupled Electron Transfer Aided Thermoelectric Energy Conversion and Storage. Angewandte Chemie, 2023, 135, .	2.0	0
919	Thermal transport in 2D nanophononic metamaterials embedded with cylindrical arrays. Physics Letters, Section A: General, Atomic and Solid State Physics, 2023, 481, 128997.	2.1	0
920	Molecular electronics: an Australian perspective. Australian Journal of Chemistry, 2023, , .	0.9	0
921	Phonon engineering significantly reducing thermal conductivity of thermoelectric materials: a review. Rare Metals, 2023, 42, 2825-2839.	7.1	6
922	Tellurium-nanowire-doped thermoelectric hydrogel with high stretchability and seebeck coefficient for low-grade heat energy harvesting. Nano Energy, 2023, 115, 108708.	16.0	5
923	A short account of thermoelectric film characterization techniques. Materials Today Physics, 2023, 36, 101173.	6.0	4
924	A self-powered human gait monitoring sensor for osteoarthritis prevention. APL Materials, 2023, 11, .	5.1	0
925	Tailoring the Thermoelectric Performance of the Layered Topological Insulator SnSb <sub>2</sub> Te <sub>4</sub> through Bi Positional Doping at the Sn and Sb Cation Sites. ACS Applied Electronic Materials, 2023, 5, 4504-4513.	4.3	2
926	Enhancing thermoelectric performance in P-type Mg3Sb2-based Zintls through optimization of band gap structure and nanostructuring. Journal of Materials Science and Technology, 2024, 170, 25-32.	10.7	2
927	Advances in Flexible Thermoelectric Materials and Devices Fabricated by Magnetron Sputtering. Small Science, 0, , .	9.9	4
928	High-performance Sb2Si2Te6 thermoelectric device. Materials Today Energy, 2023, 37, 101370.	4.7	1
929	Direct Current Treatment Tuning Crystallinity Leading to High-Performance p-Type Sb <sub>2</sub> Te <sub>3</sub> Flexible Thin Films. ACS Applied Materials & Interfaces, 0, , .	8.0	0
930	Enhanced thermoelectric properties of n-type Bi2Te2.7Se0.3 materials by TiO2 ceramic nanoparticle dispersion-induced energy filtering effect. Ceramics International, 2023, 49, 32144-32152.	4.8	4
931	Modified flake Al powder by ZrO2 coating as potential low infrared radiation material for high temperature over 500°C. Materials Chemistry and Physics, 2023, 308, 128236.	4.0	0

#	Article	IF	CITATIONS
932	Controlling the shape of hexagonal structure by growth condition improves the thermoelectric properties of p-type Bi-Te films. Journal of the European Ceramic Society, 2023, 43, 7493-7498.	5.7	1
933	Thermoelectric enhancement in A-site deficient high-entropy perovskite (Sr0.25Ca0.25La0.25Ba0.25)1-xTiO3±δ ceramics by fine manipulating cation vacancies. Chemical Engineering Journal, 2023, 472, 144974.	12.7	2
934	Influence of halogen elements in organic salts on n-type doping of CNT yarn for thermoelectric applications. RSC Advances, 2023, 13, 22226-22233.	3.6	2
935	High Thermoelectric Performance of Large Size Bi2Te2.7Se0.3 Alloy Ingots. Journal of Electronic Materials, 2023, 52, 6682-6689.	2.2	4
936	High-Performance Sb-Doped GeTe Thermoelectric Thin Film and Device. Acta Metallurgica Sinica (English Letters), 2023, 36, 1699-1708.	2.9	5
937	Significantly improved thermoelectric performance of SnSe originating from collaborative adjustment between valence and conduction bands, mass fluctuations, and local strain. Physical Chemistry Chemical Physics, 0, , .	2.8	1
938	Effect of Different pH in HKMG on the Selection Ratio of Al and Poly Removal Rates. ECS Journal of Solid State Science and Technology, 2023, 12, 084003.	1.8	1
939	High Thermoelectric Performance in Cu <sub>2</sub> SnS <sub>3</sub> by Control Over Phaseâ€Dependent Mobility Edge. Advanced Energy Materials, 2023, 13, .	19.5	3
940	Deviceâ€Level Optimization of <i>n</i> â€Type Mg <sub>3</sub> (Sb, Bi) <sub>2</sub> â€Based Thermoelectric Modules toward Applications: A Perspective. Advanced Functional Materials, 2023, 33, .	14.9	3
941	Investigating the stretchability of doped poly(3-hexylthiophene)-block-poly(butyl acrylate) conjugated block copolymer thermoelectric thin films. Chemical Engineering Journal, 2023, 472, 145121.	12.7	0
942	Co-Sb-Te Phase Equilibria and Co/Sb2Te3 Interfacial Reactions. Journal of Phase Equilibria and Diffusion, 0, , .	1.4	0
945	Flexible Carbon Nanotubeâ€Epitaxially Grown Nanocrystals for Microâ€Thermoelectric Modules. Advanced Materials, 2023, 35, .	21.0	3
946	Reduced thermal conductivity and improved ZT of Cu-doped SnS-based bulk thermoelectric materials via compositing SnS nano-fiber strategy. Ceramics International, 2023, , .	4.8	1
947	Evolution of Thermoelectric Generators: From Application to Hybridization. Small, 2023, 19, .	10.0	6
948	Stacking fault-induced strengthening mechanism in thermoelectric semiconductor Bi2Te3. Matter, 2023, 6, 3087-3098.	10.0	4
949	Enhancing the thermoelectric performance of MgAgSb-based materials with heavy Zn-doped. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
950	Enhanced Thermoelectric Properties of Nb-Doped Ti(FeCoNi)Sb Pseudo-Ternary Half-Heusler Alloys Prepared Using the Microwave Method. Materials, 2023, 16, 5528.	2.9	0
951	Flexible thermoelectric energy harvesting system based on polymer composites. Chemical Engineering Journal, 2023, 473, 145297.	12.7	3

#	Article	IF	CITATIONS
952	Advances in Ag2S-based thermoelectrics for wearable electronics: progress and perspective. Chemical Engineering Journal, 2023, 473, 145236.	12.7	3
953	Unlocking microwatt power: enhanced performance of Fe–V–Al thin films in thermoelectric microgenerators. Journal of Materials Chemistry A, 0, , .	10.3	Ο
954	Stretchable polyvinyl alcohol and sodium alginate double network ionic hydrogels for low-grade heat harvesting with ultrahigh thermopower. Materials Today Energy, 2023, 37, 101383.	4.7	2
955	Chemical Bonding Tuned Lattice Anharmonicity Leads to a High Thermoelectric Performance in Cubic AgSnSbTe <sub>3</sub> . Angewandte Chemie - International Edition, 2023, 62, .	13.8	2
956	Chemical Bonding Tuned Lattice Anharmonicity Leads to a High Thermoelectric Performance in Cubic AgSnSbTe <sub>3</sub> . Angewandte Chemie, 2023, 135, .	2.0	3
957	Recent progress of thermoelectric applications for cooling/heating, power generation, heat flux sensor and potential prospect of their integrated applications. Thermal Science and Engineering Progress, 2023, 45, 102064.	2.7	4
958	Ion Steric Effect Induces Giant Enhancement of Thermoelectric Conversion in Electrolyte-Filled Nanochannels. Nano Letters, 2023, 23, 8264-8271.	9.1	1
959	Flexible thermoelectric generator and energy management electronics powered by body heat. Microsystems and Nanoengineering, 2023, 9, .	7.0	8
960	Transport Properties of Cd- and Ni-Doped CuIn(S,Se,Te) <sub>2</sub> -Based Semiconductors. ACS Applied Electronic Materials, 0, , .	4.3	0
961	High Thermoelectric Derformance of Nonôf Stelichiometric and Oriented CaTe Thin Films Small 2022, 19		9
	Thermoelectric Performance of Nonaestorchiometric and Oriented Gere Thirt Hins. Small, 2023, 19, .	10.0	0
962	Soft Phonon Modes Lead to Suppressed Thermal Conductivity in Ag-Based Chalcopyrites under High Pressure. Physical Chemistry Chemical Physics, 0, , .	2.8	0
962 963	Soft Phonon Modes Lead to Suppressed Thermal Conductivity in Ag-Based Chalcopyrites under High Pressure. Physical Chemistry Chemical Physics, 0, , . Intrinsically Low Thermal Conductivity in a Novel Cu  Modified ZrS <sub>2</sub> Compound with Asymmetric Bonding. Small, 0, , .	10.0 2.8 10.0	0 0
962 963 964	Soft Phonon Modes Lead to Suppressed Thermal Conductivity in Ag-Based Chalcopyrites under High Pressure. Physical Chemistry Chemical Physics, 0, , .         Intrinsically Low Thermal Conductivity in a Novel Cuâ€6 Modified ZrS <sub>2</sub> Compound with Asymmetric Bonding. Small, 0, , .         The Synthesis and Crystal Structure of Six Quaternary Lithium-Alkaline Earth Metal Alumo-Silicides and Alumo-Germanides, A2LiAlTt2 (A = Mg, Ca, Sr, Ba; Tt = Si, Ge). Inorganics, 2023, 11, 351.	10.0 2.8 10.0 2.7	0 0 0
962 963 964 965	Soft Phonon Modes Lead to Suppressed Thermal Conductivity in Ag-Based Chalcopyrites under High         Pressure. Physical Chemistry Chemical Physics, 0, , .         Intrinsically Low Thermal Conductivity in a Novel Cu  Modified ZrS <sub>2</sub> Compound with         Asymmetric Bonding. Small, 0, , .         The Synthesis and Crystal Structure of Six Quaternary Lithium-Alkaline Earth Metal Alumo-Silicides and Alumo-Germanides, A2LiAlTt2 (A = Mg, Ca, Sr, Ba; Tt = Si, Ge). Inorganics, 2023, 11, 351.         Flexible, durable, green thermoelectric composite fabrics for textile-based wearable energy harvesting and self-powered sensing. Composites Science and Technology, 2023, 243, 110245.	10.0 2.8 10.0 2.7 7.8	0 0 0 3
962 963 964 965	Soft Phonon Modes Lead to Suppressed Thermal Conductivity in Ag-Based Chalcopyrites under High Pressure. Physical Chemistry Chemical Physics, 0, , .         Intrinsically Low Thermal Conductivity in a Novel Cuâ€6 Modified ZrS <sub>2</sub> Compound with Asymmetric Bonding. Small, 0, , .         The Synthesis and Crystal Structure of Six Quaternary Lithium-Alkaline Earth Metal Alumo-Silicides and Alumo-Germanides, A2LiAlTt2 (A = Mg, Ca, Sr, Ba; Tt = Si, Ge). Inorganics, 2023, 11, 351.         Flexible, durable, green thermoelectric composite fabrics for textile-based wearable energy harvesting and self-powered sensing. Composites Science and Technology, 2023, 243, 110245.         Enhancing thermoelectric performance of PEDOT: PSS: A review of treatment and nanocomposite strategies. , 2024, 1, 16-38.	10.0 2.8 10.0 2.7 7.8	0 0 0 3 2
962 963 964 965 966	Soft Phonon Modes Lead to Suppressed Thermal Conductivity in Ag-Based Chalcopyrites under High         Pressure. Physical Chemistry Chemical Physics, 0, , .         Intrinsically Low Thermal Conductivity in a Novel Cuâ€6 Modified ZrS <sub>2</sub> Compound with         Asymmetric Bonding. Small, 0, , .         The Synthesis and Crystal Structure of Six Quaternary Lithium-Alkaline Earth Metal Alumo-Silicides and Alumo-Germanides, A2LiAlTt2 (A = Mg, Ca, Sr, Ba; Tt = Si, Ge). Inorganics, 2023, 11, 351.         Flexible, durable, green thermoelectric composite fabrics for textile-based wearable energy harvesting and self-powered sensing. Composites Science and Technology, 2023, 243, 110245.         Enhancing thermoelectric performance of PEDOT: PSS: A review of treatment and nanocomposite strategies. , 2024, 1, 16-38.         An Automatic Apparatus for Simultaneous Measurement of Seebeck Coefficient and Electrical Resistivity. Energies, 2023, 16, 6319.	10.0 2.8 10.0 2.7 7.8 3.1	0 0 0 3 2 1
962 963 964 965 966 967	Soft Phonon Modes Lead to Suppressed Thermal Conductivity in Ag-Based Chalcopyrites under High Pressure. Physical Chemistry Chemical Physics, 0, , .         Intrinsically Low Thermal Conductivity in a Novel CuâCE Modified ZrS <sub>2</sub> Compound with Asymmetric Bonding, Small, 0, , .         The Synthesis and Crystal Structure of Six Quaternary Lithium-Alkaline Earth Metal Alumo-Silicides and Alumo-Germanides, A2LiAITt2 (A = Mg, Ca, Sr, Ba; Tt = Si, Ge). Inorganics, 2023, 11, 351.         Flexible, durable, green thermoelectric composite fabrics for textile-based wearable energy harvesting and self-powered sensing. Composites Science and Technology, 2023, 243, 110245.         Enhancing thermoelectric performance of PEDOT: PSS: A review of treatment and nanocomposite strategies., 2024, 1, 16-38.         An Automatic Apparatus for Simultaneous Measurement of Seebeck Coefficient and Electrical Resistivity. Energies, 2023, 16, 6319.         Carbon materials for hybrid evaporation-induced electricity generation systems. Green Chemistry, 2023, 25, 7470-7484.	10.0 2.8 10.0 2.7 7.8 3.1 9.0	0 0 0 3 2 1 2

#	Article	IF	CITATIONS
970	Preparation of carbon nanotube/inorganic nanoparticle composite films: CNTs with exfoliated Bi <sub>2</sub> Si <sub>2</sub> Te <sub>6</sub> nanosheets for carbon-based thermoelectric generator applications. CrystEngComm, 2023, 25, 5553-5559.	2.6	1
971	Twist-Angle-Dependent Phonon Transport of van der Waals MoSe <sub>2</sub> Thermoelectric Materials for the Recycling of Waste Heat. ACS Applied Nano Materials, 2023, 6, 15685-15696.	5.0	1
972	Mechanism of Thermoelectric Performance Enhancement in CaMg <sub>2</sub> Bi <sub>2</sub> â€Based Materials with Different Cation Site Doping. Small, 2024, 20, .	10.0	2
973	Progress and perspectives in thermoelectric generators for waste-heat recovery and space applications. Journal of Applied Physics, 2023, 134, .	2.5	1
974	Ceâ€filled Ni <sub>1.5</sub> Co <sub>2.5</sub> Sb <sub>12</sub> Skutterudite Thin Films with Recordâ€High Figure of Merit And Device Performance. Advanced Energy Materials, 2023, 13, .	19.5	5
975	A brief review on the recent development of phonon engineering and manipulation at nanoscales. International Journal of Extreme Manufacturing, 2024, 6, 012007.	12.7	2
976	Thermoelectric Materials and Applications: A Review. Energies, 2023, 16, 6409.	3.1	7
977	Atom Probe Tomography Advances Chalcogenide Phaseâ€Change and Thermoelectric Materials. Physica Status Solidi (A) Applications and Materials Science, 0, , .	1.8	4
978	Inhibiting Mg Diffusion and Evaporation by Forming Mgâ€Rich Reservoir at Grain Boundaries Improves the Thermal Stability of Nâ€Type Mg <sub>3</sub> Sb <sub>2</sub> Thermoelectrics. Small, 2024, 20, .	10.0	0
979	Editorial: Calculation and design of two-dimensional thermoelectric and piezoelectric materials. Frontiers in Physics, 0, 11, .	2.1	1
980	Magnesium-based energy materials: Progress, challenges, and perspectives. Journal of Magnesium and Alloys, 2023, 11, 3896-3925.	11.9	8
982	Highâ€Efficiency Thermoelectric Module Based on Highâ€Performance Bi <sub>0.42</sub> Sb <sub>1.58</sub> Te <sub>3</sub> Materials. Advanced Functional Materials, 2023, 33, .	14.9	2
983	Enhancing thermoelectric properties of AgSbTe2 thin films by modulating vacancies and microstructures. Materials Today Energy, 2023, 38, 101421.	4.7	0
984	Effect of Off-Stoichiometry and Point Defects on Thermoelectric Properties of a <i>W</i> -Substituted Fe <sub>2</sub> VAl Heusler Compound. ACS Applied Energy Materials, 2023, 6, 8256-8265.	5.1	0
985	Anionic entanglement-induced giant thermopower in ionic thermoelectric material Gelatin-CF3SO3K–CH3SO3K. EScience, 2023, 3, 100169.	41.6	1
986	Optimized Thermoelectric Performance and Plasticity of Ductile Semiconductor Ag <sub>2</sub> S <sub>0.5</sub> Se <sub>0.5</sub> Via Dualâ€Phase Engineering. Advanced Energy Materials, 2023, 13, .	19.5	11
987	Off-centering thermoelectrics. , 2023, 1, 100048.		0
988	epiq: An open-source software for the calculation of electron-phonon interaction related properties. Computer Physics Communications, 2024, 295, 108950.	7.5	2

#	Article	IF	CITATIONS
989	Low-grade heat to hydrogen: Current technologies, challenges and prospective. Renewable and Sustainable Energy Reviews, 2023, 188, 113842.	16.4	1
990	Thermoelectric Optimization of n-Type AgBiSe <sub>2</sub> via Se Vacancy Control and Transition-Metal Doping. ACS Applied Energy Materials, 2023, 6, 9709-9715.	5.1	0
991	Challenges and perspective recent trends of enhancing the efficiency of thermoelectric materials on the basis of PbTe. Materials Today Communications, 2023, 37, 107083.	1.9	6
992	Unique Semiâ€Coherent Nanostructure Advancing Thermoelectrics of <i>N</i> â€Type PbSe. Advanced Functional Materials, 0, , .	14.9	2
993	Investigations of microstructures and thermoelectric properties of TiNiSn half-Heusler compounds with micro- and nano-scale copper additions. Journal of Alloys and Compounds, 2023, 967, 171728.	5.5	1
994	Improved thermoelectric power factor of multilayered poly(3,4-ethylenedioxythiophene) polystyrene sulfonate and Cu2Se thin films. Thin Solid Films, 2023, 784, 140090.	1.8	0
995	Constructing cell-membrane-mimic grain boundaries for high-performance n-type Ag2Se using high-dielectric-constant TiO2. Journal of Materials Science and Technology, 2024, 179, 138-144.	10.7	1
996	Synergetic effect of Bi and Al co-doping in GeTe-based thermoelectric materials leading to optimized carrier concentration tuning and high ZT. Journal of Alloys and Compounds, 2024, 970, 172574.	5.5	1
997	High-Performance Thermoelectric Flexible Ag <sub>2</sub> Se-Based Films with Wave-Shaped Buckling via a Thermal Diffusion Method. ACS Applied Materials & Interfaces, 2023, 15, 47158-47167.	8.0	0
998	Solvothermally silver doping boosting the thermoelectric performance of polycrystalline Bi2Te3. Chemical Engineering Journal, 2023, 475, 146428.	12.7	4
999	The role of nanostructuring strategies in PbTe on enhancing thermoelectric efficiency. Materials Today Energy, 2023, 37, 101416.	4.7	1
1000	Tailoring band structure and Ge precipitates through Er and Sb/Bi co-doping to realize high thermoelectric performance in GeTe. Chemical Engineering Journal, 2023, 474, 145820.	12.7	2
1001	Improved thermoelectric properties of AB stacking bilayer graphene by Sr-intercalation according to chemical potential. Materials Today Communications, 2023, 37, 107118.	1.9	0
1002	Photolithographic p–n patterning of single-walled carbon nanotube sheets using photobase generators. Journal of Materials Chemistry A, 2023, 11, 23278-23287.	10.3	1
1003	Anisotropic Electron and Phonon Transport Properties in Pnictogen Chalcohalides: PnSI (Pn = Sb, Bi). ACS Applied Energy Materials, 2023, 6, 10639-10651.	5.1	0
1004	Structural modulation and resonant level enable high thermoelectric performance of GeTe in the mid-to-low temperature range. Journal of Materials Chemistry A, 2023, 11, 20497-20505.	10.3	3
1005	Effect of self-assemble macropores on high-temperature thermoelectric performance of CaMnO3 ceramics. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	0
1006	Self-triggered thermoelectric nanoheterojunction for cancer catalytic and immunotherapy. Nature Communications, 2023, 14, .	12.8	5

#	Article	IF	CITATIONS
1007	Solar cell-based hybrid energy harvesters towards sustainability. , 2023, 2, 230011-230011.		10
1008	Functional materials for powering and implementing next-generation miniature sensors. Materials Today, 2023, 69, 333-354.	14.2	0
1009	Reinforcing bond covalency for high thermoelectric performance in Cu3SbSe4-based thermoelectric material. Science China Materials, 2023, 66, 3644-3650.	6.3	2
1011	Decorated dislocations lead to dynamically optimized thermoelectric performance in N-type PbTe. Materials Today Physics, 2023, 37, 101198.	6.0	4
1012	Thermoelectric properties of the aliovalent half-Heusler alloy Zn <sub>0.5</sub> Ti <sub>0.5</sub> NiSb with intrinsic low thermal conductivity. Journal of Materials Chemistry A, 0, , .	10.3	0
1013	Carrier type control in cement-based thermoelectric composites with carbon nanotube and SrTiO3 nanoparticles. Materials Today Communications, 2023, 37, 106973.	1.9	0
1014	Preparation, morphology and thermoelectric performance of PEDOT/CuI nanocomposites. Functional Composite Materials, 2023, 4, .	1.4	0
1015	Review of textile-based wearable electronics: From the structure of the multi-level hierarchy textiles. Nano Energy, 2023, 117, 108898.	16.0	7
1016	Alloying and Doping Control in the Layered Metal Phosphide Thermoelectric CaCuP. ACS Applied Electronic Materials, 0, , .	4.3	0
1017	An overview of environmental energy harvesting by thermoelectric generators. Renewable and Sustainable Energy Reviews, 2023, 187, 113723.	16.4	7
1018	Advances in Ag2S-based thermoelectrics for wearable electronics: Progress and perspective. Chemical Engineering Journal, 2023, 475, 146194.	12.7	2
1020	Intrinsic conductivity as an indicator for better thermoelectrics. Energy and Environmental Science, 2023, 16, 5381-5394.	30.8	2
1021	Thermoelectric Conversion Efficiency of 4% in Environmental-Friendly Kesterite Single Crystal. Materials Transactions, 2023, 64, 2535-2541.	1.2	0
1022	High thermoelectric performance of aluminum-doped cuprous selenide thin films with exceptional flexibility for wearable applications. Nano Energy, 2023, 117, 108930.	16.0	1
1023	Effects of quantum size on the thermoelectric properties of bismuth. Physical Chemistry Chemical Physics, 0, , .	2.8	0
1024	Constructing quasi-layered and self-hole doped SnSe oriented films to achieve excellent thermoelectric power factor and output power density. Science Bulletin, 2023, 68, 2769-2778.	9.0	2
1025	Enhanced figure of merit for famatinite Cu3SbSe4 via band structure tuning and hierarchical architecture. Journal of Materiomics, 2023, 9, 1263-1272.	5.7	0
1026	Phase Composition and Thermoelectric Properties of Epitaxial CrMoVN Thin Films. Advanced Energy and Sustainability Research, 2023, 4, .	5.8	1

#	Article	IF	CITATIONS
1027	p-type Sn0.98Ag0.02Se with low thermal conductivity synthesized by hydrothermal method. Journal of the European Ceramic Society, 2024, 44, 1636-1646.	5.7	1
1028	Decoupled thermal and electric response to external excitations in graphene. Physical Review B, 2023, 108, .	3.2	1
1029	Realizing ultrahigh room-temperature seebeck coefficient and thermoelectric properties in SnTe-based alloys through carrier modulation and band convergence. Acta Materialia, 2023, 261, 119412.	7.9	3
1030	Growth of high carrier mobility 2-Dimensional hexagonal Bi2Te3-xSex nanoplatelets and its thermoelectric performance studies. Journal of Crystal Growth, 2024, 625, 127442.	1.5	0
1031	Two-step phase manipulation by tailoring chemical bonds results in high-performance GeSe thermoelectrics. Innovation(China), 2023, 4, 100522.	9.1	4
1032	Realizing p-type performance in low-thermal-conductivity BiSbSe3 via lead doping. Rare Metals, 2023, 42, 3601-3606.	7.1	4
1033	Realizing the Ultralow Lattice Thermal Conductivity of Cu3SbSe4 Compound via Sulfur Alloying Effect. Nanomaterials, 2023, 13, 2730.	4.1	0
1034	Enhancement of Thermoelectric Performance of Single-Walled Carbon Nanotubes/Small Organic Molecule Hybrids by Fine-Tuning of the Alkyl Chain Length. ACS Applied Electronic Materials, 2023, 5, 5573-5579.	4.3	0
1035	Fabrication and investigation of carbon nanotubes-p-Bi2Te3-textile composite based temperature gradient sensors. Journal of Materials Science: Materials in Electronics, 2023, 34, .	2.2	1
1036	Piezoelectricity, Pyroelectricity, and Ferroelectricity in Biomaterials and Biomedical Applications. Advanced Materials, 2024, 36, .	21.0	7
1037	N-Type Thermoelectric AgBiPbS <sub>3</sub> with Nanoprecipitates and Low Thermal Conductivity. Inorganic Chemistry, 2023, 62, 17905-17912.	4.0	1
1038	Enhanced Thermoelectric Properties of Sb2Te3 Thin Films by In Doping. Coatings, 2023, 13, 1784.	2.6	0
1039	Multifunctional, Wearable, and Wireless Sensing System via Thermoelectric Fabrics. Engineering, 2023,	6.7	2
1040	Enhanced thermoelectric performance of iso-valent Al substituted Bi2S3 via carrier tuning and multiscale phonon scattering. Materials Chemistry and Physics, 2024, 312, 128506.	4.0	0
1041	Advancements in Microwave Absorption Motivated by Interdisciplinary Research. Advanced Materials, 2024, 36, .	21.0	2
1042	Highly porous thermoelectric composites with high figure of merit and low thermal conductivity from solution-synthesized porous Bi <sub>2</sub> Si <sub>2</sub> Te <sub>6</sub> nanosheets. Dalton Transactions, 0, , .	3.3	0
1043	Thermoelectric figure-of-merit of metastable crystalline ST12 germanium allotrope. Materials Today Physics, 2023, , 101270.	6.0	0
1045	High-efficiency segmented thermoelectric power generation modules constructed from all skutterudites. Cell Reports Physical Science, 2023, 4, 101651.	5.6	1

#	Article	IF	CITATIONS
1046	Adaptable sublattice stabilized high-entropy materials with superior thermoelectric performance. Energy and Environmental Science, 2023, 16, 6046-6057.	30.8	5
1047	Enabling giant thermopower by heterostructure engineering of hydrated vanadium pentoxide for zinc ion thermal charging cells. Nature Communications, 2023, 14, .	12.8	2
1048	Enhanced thermoelectric and mechanical properties of polycrystalline cubic SnSe by AgBiTe2 alloying. Journal of Alloys and Compounds, 2024, 971, 172754.	5.5	0
1049	xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si2.svg"> <mml:mrow><mml:mi mathvariant="normal"&gt;C<mml:msub><mml:mi mathvariant="normal"&gt;u<mml:mrow><mml:mn>2</mml:mn><mml:mo>-</mml:mo><mml:mi mathvariant="normal"&gt;x</mml:mi </mml:mrow></mml:mi </mml:msub><mml:mtext>Se</mml:mtext></mml:mi </mml:mrow> <td>6.1 :math&gt;</td> <td>0</td>	6.1 :math>	0
1050	nanobelts, prepared by magnetron sputtering, Applied Surface Science, 2024, 644, 158779. Improved Thermoelectric Performance of Sb2Te3 Nanosheets by Coating Pt Particles in Wide Medium-Temperature Zone. Materials, 2023, 16, 6961.	2.9	0
1051	A review on structural characteristics and thermoelectric properties of mid-temperature range Chalcogenide-based thermoelectric materials. Journal of Materials Science, 2023, 58, 16591-16633.	3.7	0
1052	Recent development in flexible organic thermoelectric fibers for wearable devices. Materials Today Chemistry, 2023, 34, 101774.	3.5	1
1053	Enhanced thermoelectric performance of CuSbSe2 via Mn doping. Journal of Alloys and Compounds, 2024, 971, 172595.	5.5	0
1054	Thermoelectric properties of sputter deposited Bi2Te3–PbTe multilayer thin films. Physica B: Condensed Matter, 2024, 673, 415467.	2.7	1
1055	Phase-dependent microstructure modification leads to high thermoelectric performance in n-type layered SnSe2. Acta Materialia, 2024, 263, 119504.	7.9	3
1056	Isovalent co-alloying contributes to considerable improvement in thermoelectric performance of BiSe bulks with weak anisotropy. Journal of Materiomics, 2023, , .	5.7	1
1057	Flexible thermoelectric generator fabricated by screen printing method from suspensions based on Bi2Te2.8Se0.2 and Bi0.5Sb1.5Te3. Journal of Central South University, 2023, 30, 2906-2918.	3.0	0
1058	Thermoelectric performance of lead-free manganese telluride via alkaline Mg doping for mid-temperature application. Journal of Alloys and Compounds, 2024, 976, 172840.	5.5	0
1059	Modulating structures to decouple thermoelectric transport leads to high performance in polycrystalline SnSe. Journal of Materials Chemistry A, 2023, 12, 144-152.	10.3	1
1060	Mitochondria-targeting Cu <sub>3</sub> VS <sub>4</sub> nanostructure with high copper ionic mobility for photothermoelectric therapy. Science Advances, 2023, 9, .	10.3	6
1061	Enhanced thermoelectric properties of Mm-filled p-type (Fe, Co)Sb3 skutterudites via Co/Fe ratio regulation and extra Sb compensation. Journal of Alloys and Compounds, 2024, 972, 172815.	5.5	0
1062	Hg Doping Induced Reduction in Structural Disorder Enhances the Thermoelectric Performance in AgSbTe <sub>2</sub> . Journal of the American Chemical Society, 2023, 145, 25392-25400.	13.7	3
1063	A PEDOT:PSS nanocomposite film doped with black phosphorus modified with silver nanoparticles for wearable photothermoelectric generators. Journal of Materials Chemistry A, 2023, 11, 24890-24901.	10.3	1

#	Article	IF	CITATIONS
1064	Anti-freezing hydrogel thermocells with confined microcrystallization for enhanced low-grade heat harvest. Chemical Engineering Journal, 2023, 478, 147380.	12.7	1
1065	Band structure modification and multi-scale phonon scattering synergistically boosts the thermoelectric performance of antimony incorporated MoS2. Journal of Alloys and Compounds, 2024, 977, 172835.	5.5	1
1066	Entropyâ€Mediated Stable Structural Evolution of Prussian White Cathodes for Longâ€Life Naâ€Ion Batteries. Angewandte Chemie - International Edition, 2024, 63, .	13.8	2
1067	Advances in n-type Bi2O2Se thermoelectric materials: Progress and perspective. Materials Today Physics, 2023, 39, 101292.	6.0	2
1068	A synergetic effect of piezoelectric energy harvester to enhance thermoelectric Power: An effective hybrid energy harvesting method. Energy Conversion and Management, 2023, 298, 117774.	9.2	1
1069	In Situ Synthesis of High Thermoelectric Performance Bi2Te3 Flexible Thin Films through Thermal Diffusion Engineering. Coatings, 2023, 13, 2018.	2.6	0
1070	Rattling-like behavior and band convergence induced ultra-low lattice thermal conductivity in MgAl2Te4 monolayer. Journal of Materiomics, 2023, , .	5.7	0
1071	High fire safety thermal protective composite aerogel with efficient thermal insulation and reversible fire warning performance for firefighting clothing. Chemical Engineering Journal, 2023, 477, 147187.	12.7	8
1072	Polymer-based thermoelectric fibers and composites: Individual and combined approaches towards enhanced efficiency. Materials Today Communications, 2024, 38, 107682.	1.9	0
1074	Mixed Ionic–Electronic Conducting Hydrogels with Carboxylated Carbon Nanotubes for High Performance Wearable Thermoelectric Harvesters. ACS Applied Materials & Interfaces, 2023, 15, 56072-56083.	8.0	1
1075	Screening strategy for developing thermoelectric interface materials. Science, 2023, 382, 921-928.	12.6	12
1076	Structural, magnetic, and thermomagnetic properties of Co2FeAl/(W,Ti) thin films: Role of non-ferromagnetic metal thickness. Sensors and Actuators A: Physical, 2023, 363, 114776.	4.1	0
1077	Learning from Polymeric Ï€â€Backbone to Film Sequences Unravels that a Coexistence of Bilayered and Mixed Morphologies Optimally Strengthens Thermoelectrics. Advanced Energy Materials, 2024, 14, .	19.5	0
1078	Enhanced thermoelectric performance enabled by compositing ZrO2 in n-type SiGe alloy with low thermal conductivity. Rare Metals, 2024, 43, 1167-1176.	7.1	0
1079	Transparent charge transfer complex with high thermoelectric performance. Joule, 2023, , .	24.0	0
1080	Ultra-low thermal conductivity and improved thermoelectric performance in La2O3-dispersed Bi2Sr2Co2Oy ceramics. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2024, 299, 116976.	3.5	3
1081	Predictable thermoelectric performance of directly synthesized Bi0.5Sb1.5Te3 using laser powder bed fusion additive manufacturing. Ceramics International, 2024, 50, 2921-2930.	4.8	0
1082	Thermoelectric and mechanical performance of NiTiAl Heusler compound. Vacuum, 2024, 219, 112772.	3.5	0

#	Article	IF	CITATIONS
1083	Weavable Thermoelectrics: Advancements, Controversies, and Future Developments. Materials Futures, 0, , .	8.4	4
1084	Effect of Inevitable Heat Leap on the Conversion Efficiency of Thermoelectric Generators. Physical Review Letters, 2023, 131, .	7.8	3
1085	Derivation of generalized thermoelectric energy equations and the study of thermoelectric irreversible processes based on energy, exergy, and entransy analysis. Energy Science and Engineering, 2024, 12, 39-51.	4.0	0
1086	Pressure-induced remarkable four-phonon interaction and enhanced thermoelectric conversion efficiency in CulnTe2. Materials Today Physics, 2023, 39, 101283.	6.0	1
1087	Realizing 10% Conversion Efficiency by Contact Engineering of Mg <sub>3</sub> Sb <sub>1.5</sub> Bi <sub>0.5</sub> for Medium Temperature Thermoelectric Power Generation. ACS Applied Electronic Materials, 0, , .	4.3	0
1088	Large Mechanosensitive Thermoelectric Enhancement in Metallo-Organic Magnetic Molecules. Nano Letters, 2023, 23, 10719-10724.	9.1	2
1089	Breaking a bottleneck for thermoelectric generators. Science, 2023, 382, 882-883.	12.6	1
1090	Achieving high thermoelectric conversion efficiency in Bi <sub>2</sub> Te <sub>3</sub> -based stepwise legs through bandgap tuning and chemical potential engineering. Dalton Transactions, 2023, 53, 123-135.	3.3	0
1091	Topical review: characterization of chalcopyrite CuGa(In)Te <sub>2</sub> compounds for high thermoelectric performance. Journal Physics D: Applied Physics, 2024, 57, 083001.	2.8	0
1092	Crystal growth and thermoelectric properties of Sn-doped Bi2Se3. Journal of Crystal Growth, 2024, 627, 127510.	1.5	0
1093	High-Performance Paper-Based Thermoelectric Generator from Cu <sub>2</sub> SnS <sub>3</sub> Nanocubes and Bulk-Traced Bismuth. ACS Applied Materials & Interfaces, 2023, 15, 56022-56033.	8.0	1
1094	Entropyâ€Mediated Stable Structural Evolution of Prussian White Cathodes for Longâ€Life Naâ€Ion Batteries. Angewandte Chemie, 2024, 136, .	2.0	0
1095	Enhanced Thermoelectric Performance of <i>P</i> â€Type (Bi,Sb) <sub>2</sub> Te <sub>3</sub> by Incorporating Nonâ€Stoichiometric Ag <sub>5</sub> Te <sub>3</sub> and Refining Teâ€Se Ratio. Small Methods, 0, , .	8.6	0
1096	Synergistically carrier and phonon transport advance Ag dynamic doped <i>n</i> -type PbTe thermoelectrics <i>via</i> Mn alloying. Journal of Materials Chemistry A, O, , .	10.3	0
1097	Enhancing conductivity on p-type (Bi,Sb)2Te3 surface by introducing slip trace. Materials Today Chemistry, 2023, 34, 101832.	3.5	0
1098	Enhancing Thermoelectric Performance in Cubic CuCdInSe <sub>3</sub> Compounds via Pressure-Induced Twin Boundary Engineering. ACS Applied Energy Materials, 0, , .	5.1	0
1099	Unravelling the need for balancing band convergence and resonant level in Sn <sub>1â^'<i>x</i>â^'<i>y</i></sub> In <sub><i>x</i></sub> Mn <sub><i>y</i></sub> Te for high thermoelectric performance. Journal of Materials Chemistry A, 2024, 12, 1166-1175.	10.3	1
1100	Strain-Induced Defect Evolution for the Construction of Porous Cu <sub>2–<i>x</i></sub> Se with Enhanced Thermoelectric Performance. ACS Applied Materials & Interfaces, 0, , .	8.0	0

#	Article	IF	CITATIONS
1101	Carrier filtering effect for enhanced thermopower in a body-centered tetragonal ruthenate. Physical Review Materials, 2023, 7, .	2.4	0
1103	First-principles calculations to investigate Structural, mechanical, electronic, magnetic and thermoelectric properties of MRh2O4 (MÂ=ÂMg, Mn, Cd) spinel oxides. Journal of Magnetism and Magnetic Materials, 2024, 589, 171605.	2.3	0
1106	Preparation of the Thermoelement Surfaces and Investigation of Ohmic Film Contacts Formed on Them by Different Methods. Journal of Surface Investigation, 2023, 17, 1207-1216.	0.5	0
1108	Enhancement of the thermoelectric performance of half-metallic full-Heusler Mn2VAl alloys via antisite defect engineering and Si partial substitution. Journal of Materiomics, 2024, 10, 511-519.	5.7	0
1109	Effect of NaF Doping on the Microstructure and Thermoelectric Performance of BiCuSeO Ceramics. Coatings, 2023, 13, 2069.	2.6	0
1110	Functionally separated electronic band engineering via multi-element doping plus high-density defects advances board-temperature-range thermoelectric performance in GeTe. Chemical Engineering Journal, 2024, 480, 148135.	12.7	1
1111	Estimation of the Highest Thermoelectric Performance of the Bi-Doped SnTe at Room Temperature. Journal of Korean Institute of Metals and Materials, 2023, 61, 915-922.	1.0	0
1112	Boron- and Nitrogen-Embedded Polycyclic Arenes as an Emerging Class of Organic Semiconductors. Chemistry of Materials, 2023, 35, 10277-10294.	6.7	0
1113	Computational study of the thermoelectric properties and lattice dynamics of Li2MN2 (MÂ=ÂZr or Hf). Materials Research Bulletin, 2024, 172, 112650.	5.2	0
1114	Asymmetric Sandwich Janus Structure for Highâ€Performance Textileâ€Based Thermo–Hydroelectric Generators Toward Human Health Monitoring. Advanced Functional Materials, 0, , .	14.9	0
1115	Magnetocaloric and thermoelectric properties of two-phase composite Eu8Ga15.25Ge30.75. Journal of Alloys and Compounds, 2024, 976, 173177.	5.5	0
1116	Highly stabilized thermoelectric performance in natural minerals. Joule, 2023, , .	24.0	1
1117	Thermoelectric Transport of a Novel Zrâ€Based Halfâ€Heusler Highâ€Entropy Alloy. Energy Technology, 0, , .	3.8	0
1118	High power factor and ultra-low lattice thermal conductivity in Sn W Te alloys via interstitial defects modulation. Journal of Alloys and Compounds, 2024, 976, 173187.	5.5	0
1119	Advanced Nanoscale Materials for Thermoelectric Applications. Nanomaterials, 2023, 13, 3165.	4.1	0
1120	From Academia to Industry: Criteria for Upscaling Ionic Liquid-Based Thermo-Electrochemical Cells for Large-Scale Applications. Energies, 2024, 17, 1.	3.1	0
1121	Modulation of interface modes for resonance-induced enhancement of the interfacial thermal conductance in pillar-based Si/Ge nanowires. Physical Review B, 2023, 108, .	3.2	1
1122	Low lattice thermal conductivity and improved power factor in Ga-substituted CuSbTe2 alloys for mid-temperature thermoelectric application. Emergent Materials, 2024, 7, 163-170.	5.7	0

ARTICLE IF CITATIONS Interface Engineering for High-Performance Thermoelectric Carbon Nanotube Films. ACS Applied 1123 8.0 0 Materials & amp; Interfaces, 0, , . Enhanced thermoelectric performance and mechanical strength in <scp>GeTe</scp> enable power 1124 17.3 generation and cooling. InformaÄnÃ-MateriÃily, 0, , . 1125 THERMAL CONDUCTIVITY OF A PRINTED THERMOELECTRIC FILM., 2023, , . 0 van der Waals p-n heterostructure GaSe/SnS2: high thermoelectric figure of merit and strong anisotropy. Nanoscale, O, , . Effects of substitutional doping CsSn0.75A0.2513 (A=B, Sb) in the thermoelectric properties of the  $B-\hat{I}^3$ 1127 3.0 0 phase from first principles. Computational Materials Science, 2024, 233, 112751. Anharmonicity and weak bonding-driven extraordinary thermoelectric performance in wrinkled SnSe 4.8 monolayer with low lattice thermal conductivity. Ceramics International, 2024, 50, 9591-9603. Optimization of the thermoelectric properties of Nb-doped Bi2S3 via high pressure and high 1129 3.8 0 temperature. International Journal of Refractory Metals and Hard Materials, 2024, 119, 106541. Realizing High Thermoelectric Properties in Bi<sub>2</sub>S<sub>3</sub> Bulk via Band Engineering 1130 10.0 and Nanorods Compositing. Small, 0, , . Research of thermoelectric null-thermostat. Vestnik Dagestanskogo Gosudarstvennogo TehniÄeskogo 1131 0.1 0 Universiteta: TehniÄeskie Nauki, 2023, 50, 6-13. Enhancing Electrical Properties of N-type Bismuth Telluride Alloys through Graphene Oxide Incorporation in Extrusion 3D Printing., 2023, 30, 318-323. Thermoelectric Cooling Performance Enhancement in BiSeTe Alloy by Microstructure Modulation via 1133 0 9.9 Hot Extrusion. Small Science, 2024, 4, . Extremely Low Lattice Thermal Conductivity and Significantly Enhanced Near-Room-Temperature Thermoelectric Performance in α-Cu<sub>2</sub>Se through the Incorporation of Porous Carbon. ACS Applied Materials & amp; Interfaces, 2024, 16, 1333-1341. 8.0 Band Engineering Through Pbâ€Doping of Nanocrystal Building Blocks to Enhance Thermoelectric 1135 8.6 0 Performance in Cu<sub>3</sub>SbSe<sub>4</sub>. Small Methods, 0, , . Thermoelectric Properties of Mg3(Bi,Sb)2 under Finite Temperatures and Pressures: A First-Principles 4.1 Study. Nanomaterials, 2024, 14, 84. Porous Resistive Heater-Supported Bi<sub><i>x</i></sub>Sb<sub>2â€"<i>x</i></sub>Te<sub>3</sub> Thermoelectric Heterogeneous Catalysts for H<sub>2</sub>O<sub>2</sub> Production. ACS Applied 1137 0 5.1Energy Materials, 0, , . Advances in flexible inorganic thermoelectrics. , 2023, 1, 296-343. Effect of uniaxial compressive strain on the thermoelectric properties of two-dimensional HfNF. 1139 2.50 Physica Scripta, 0, , . An Efficient Electrothermal Model of a Thermoelectric Converter for a Thermal Energy Harvesting 1140 3.1 Process Simulation and Electronic Circuits Powering. Energies, 2024, 17, 204.

#	Article	IF	CITATIONS
1141	Additive manufacturing of thermoelectric materials: materials, synthesis and manufacturing: a review. Journal of Materials Science, 0, , .	3.7	0
1142	Weak electron-phonon coupling contributing to enhanced thermoelectric performance in n-type TiCoSb half-Heusler alloys. Journal of Alloys and Compounds, 2024, 976, 173275.	5.5	0
1143	Ionogels: Preparation, Properties and Applications. Advanced Functional Materials, 2024, 34, .	14.9	2
1144	Full-landscape selection rules of electrons and phonons and temperature-induced effects in 2D silicon and germanium allotropes. Npj Computational Materials, 2024, 10, .	8.7	0
1145	Impact of Zn doping on the structural properties and thermoelectric performance of CuCr <sub>0.85</sub> Mg <sub>(0.15-x)</sub> Zn <sub>x</sub> O <sub>2</sub> (x ≤0.05) delafossite materials. Advanced Composite Materials, 0, , 1-16.	1.9	0
1146	Lattice dynamics and thermoelectric properties of diamondoid materials. , 2024, 3, 5-28.		3
1147	Performance analysisÂof photodetectors based on 2D materials and heterostructures. Critical Reviews in Solid State and Materials Sciences, 0, , 1-87.	12.3	0
1148	Comprehensive study of nanostructured Bi <sub>2</sub> Te <sub>3</sub> thermoelectric materials – insights from synchrotron radiation XRD, XAFS, and XRF techniques. RSC Advances, 2024, 14, 1875-1887.	3.6	0
1149	Enhanced thermoelectric performance of Sr0.875La0.1TiO3-δ based composites through Bi-rich inclusions in internal and external reduction environments. Ceramics International, 2024, 50, 6175-6183.	4.8	0
1150	Off entering of Ge Atoms in GeBi <sub>2</sub> Te <sub>4</sub> and Impact on Thermoelectric Performance. Advanced Functional Materials, 2024, 34, .	14.9	0
1151	Anomalous enhancement of thermoelectric power factor in multiple two-dimensional electron gas system. Nature Communications, 2024, 15, .	12.8	0
1152	Construct Amorphous Polymer Interface to Enhance the Thermoelectric Performance of Commercial Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> Materials. ACS Applied Materials & Interfaces, 2024, 16, 3586-3592.	8.0	0
1153	Optimization of Carrier Concentration in Cu <sub>22</sub> Sn <sub>10</sub> S <sub>32</sub> through In- and Zn-Doping for Enhanced Thermoelectric Performance. ACS Applied Energy Materials, 2024, 7, 508-516.	5.1	0
1154	Influence of metal organic framework glasses on thermoelectric properties of AgSb0.96Zn0.04Te2 alloy. Journal of Non-Crystalline Solids, 2024, 627, 122816.	3.1	0
1155	Graphene-derived composites: a new Frontier in thermoelectric energy conversion. Energy Advances, 2024, 3, 389-412.	3.3	0
1156	Decoupling Carrier-Phonon Scattering Boosts the Thermoelectric Performance of n-Type GeTe-Based Materials. Journal of the American Chemical Society, 2024, 146, 1681-1689.	13.7	3
1157	Germanium-telluride-based thermoelectrics. , 2024, 1, 109-123.		0
1159	Simultaneously Boosting Thermoelectric and Mechanical Properties of n-Type Mg <sub>3</sub> Sb <sub>1.5</sub> Bi <sub>0.5</sub> -Based Zintls through Energy-Band and Defect Engineering. ACS Nano, 2024, 18, 1678-1689.	14.6	0

#	Article	IF	CITATIONS
1160	Augmented near-room-temperature power factor of homogenously grown thermoelectric ZnO films. Applied Physics Letters, 2024, 124, .	3.3	0
1161	Developing a Multiband Electronic Band Structure Model and Predictive Maps for Bismuth-Rich Mg <sub>3</sub> (Sb <sub>1–<i>x</i></sub> Bi <sub><i>x</i></sub> ) <sub>2</sub> Thermoelectric Materials. ACS Applied Materials & Interfaces, 2024, 16, 2263-2269.	8.0	0
1163	Regulatable thermoelectric effect in heterostructured ferromagnetic nanomultilayers. Applied Physics Letters, 2024, 124, .	3.3	0
1164	Non-destructive tuning of thermoelectric power factor of ZnO by surface-confined optical gating. Applied Surface Science, 2024, 652, 159256.	6.1	0
1165	High-performance Bi0.4Sb1.6Te3 alloy prepared by a low-cost method for wearable real-time power supply and local cooling. Chemical Engineering Journal, 2024, 481, 148530.	12.7	0
1166	Highâ€Throughput Strategies in the Discovery of Thermoelectric Materials. Advanced Materials, 2024, 36, .	21.0	1
1167	A Novel Optimization Method for TEG System Performance Based on Temperature and Heat Flux. Energy Technology, 2024, 12, .	3.8	0
1168	Nanostructured Cu12+Sb4S13 tetrahedrites prepared by solvothermal synthesis in 1-(2-aminoethyl)piperazine for efficient thermal energy harvesting. Journal of Alloys and Compounds, 2024, 977, 173337.	5.5	0
1169	Giant Band Convergence and High Thermoelectric Performance in <i>n</i> â€Type PbSe Induced by Spinâ€Orbit Coupling. Advanced Functional Materials, 2024, 34, .	14.9	1
1170	A facile <i>in-situ</i> reaction method for preparing flexible Sb <sub>2</sub> Te <sub>3</sub> thermoelectric thin films. , 0, 4, .		0
1171	Overall numerical simulation of chemical-thermal-electric conversion for an all-in-one thermoelectric generator based on micro scale combustion. Energy, 2024, 292, 130307.	8.8	0
1172	STEM in situ thermal wave observations for investigating thermal diffusivity in nanoscale materials and devices. Science Advances, 2024, 10, .	10.3	0
1173	Engineering the p-n switch: Mastering intrinsic point defects in Sb2Te3-dominant alloys. Acta Materialia, 2024, 266, 119675.	7.9	0
1174	A day-night solar thermoelectric generator enabled by phase change material and forced water cooling. Solar Energy, 2024, 268, 112315.	6.1	0
1175	Thermoelectric properties and thermal stability of Cd-doped Cu2Se thermoelectric materials. Vacuum, 2024, 222, 112993.	3.5	0
1176	Enhanced Electrical, Thermal, and Mechanical Properties of SnTe through Equimolar Multication Alloying for Suitable Device Applications. ACS Applied Energy Materials, 2024, 7, 1149-1161.	5.1	1
1177	Optimization of Mechanical and Thermoelectric Properties of SnTeâ€Based Semiconductors by Mn Alloying Modulated Precipitation Evolution. Small, 0, , .	10.0	0
1178	Tuning the optoelectronic and thermoelectric properties of vacancy-ordered halide perovskites Cs2Ge(1-x)PtxCl6 (x=0, 0.25, 0.50, 0.75 and 1.00) via substitutional doping of Pt using first-principles approach. Materials Chemistry and Physics. 2024, 315, 128947.	4.0	0

#	Article	IF	CITATIONS
1179	Chemical bond engineering toward extraordinary power factor and service stability in thermoelectric copper selenide. Joule, 2024, 8, 416-429.	24.0	0
1180	Crystal-liquid duality driven ultralow two-channel thermal conductivity in α-MgAgSb. Applied Physics Reviews, 2024, 11, .	11.3	0
1181	Actively and reversibly controlling thermal conductivity in solid materials. Physics Reports, 2024, 1058, 1-32.	25.6	0
1182	Design and Fabrication of Microarchitected Thermoelectric Generators: Prospects and Challenges. Advanced Engineering Materials, 2024, 26, .	3.5	0
1183	Advancing n-type Mg3+δSb1.5Bi0.47Te0.03-based thermoelectric Zintls via sc-doping-driven band and defect engineering. Chemical Engineering Journal, 2024, 482, 149051.	12.7	0
1184	Enhanced thermoelectric and mechanical properties of Bi0.5Sb1.5Te3 alloy with dispersed yttrium oxide ceramic nanoparticles. Rare Metals, 2024, 43, 1758-1768.	7.1	0
1185	Realizing the high thermoelectric performance of highly preferentially oriented SnSe based nanorods <i>via</i> band alignment. Energy and Environmental Science, 2024, 17, 1612-1623.	30.8	2
1186	Mathematical Modeling of Thermophysical Processes in a Thermoelectric Device for Cooling the Brain. BioNanoScience, 0, , .	3.5	0
1187	Optimized thermoelectric performance driven by Aâ€site deficient in Sr <sub><i>x</i></sub> La <sub>0.1</sub> TiO <sub>3â^²</sub> <sub><i>Î^</i></sub> /TiO <sub>2â^²</sub> <i composites. Journal of the American Ceramic Society, 2024, 107, 4717-4728.</i 	>y8 <b>.</b> ∦> <td>ıb<b>ı</b></td>	ıb <b>ı</b>
1188	High thermoelectric performance of PbSe via a synergistic band engineering and dislocation approach. Scripta Materialia, 2024, 244, 116003.	5.2	0
1189	Hydraulic-driven adaptable morphing active-cooling elastomer with bioinspired bicontinuous phases. Nature Communications, 2024, 15, .	12.8	0
1190	Thermoelectric properties of Bi2Te3 films with low-angle grain boundaries formed through high pulse current density. Chemical Engineering Journal, 2024, 484, 149519.	12.7	0
1191	Enhanced thermoelectric properties of Bi2Te2.7Se0.3/hexagonal BN composites and optimized modules for power generation. Ceramics International, 2024, 50, 15209-15217.	4.8	0
1192	Realizing high mechanical and thermoelectric properties of N-type Bi2Te2.7Se0.3 ingots through powder sintering and carrier concentration regulation. Journal of the European Ceramic Society, 2024, 44, 5088-5095.	5.7	0
1193	Strong Intervalley Scattering-Induced Renormalization of Electronic and Thermal Transport Properties and Selection Rule Analysis in 2D Tellurium. ACS Nano, 0, , .	14.6	0
1194	Reliability Investigation of Silicide-Based Thermoelectric Modules. ACS Applied Materials & Interfaces, 2024, 16, 8006-8015.	8.0	0
1195	Dilute Sb Doping Yields Softer <i>p</i> â€īype Bi <sub>2</sub> Te <sub>3</sub> Thermoelectrics. Advanced Electronic Materials, 0, , .	5.1	0
1196	Excellent thermoelectric performance of layered trigonal crystals XPt2Se3 (X = K, Rb). Applied Physics Letters, 2024, 124, .	3.3	0

#	Article	IF	CITATIONS
1197	High thermoelectric performance in n-type bismuth sulfide by carrier concentration tuning and dense nanodomains. Journal of the European Ceramic Society, 2024, 44, 5096-5104.	5.7	0
1198	Recovery and thermoelectric performance optimization of p-type bismuth telluride waste by secondary zone-melting. Journal of Materials Science: Materials in Electronics, 2024, 35, .	2.2	0
1199	One-dimensional van der Waals BiSBr: an anisotropic thermoelectric mineral. Physical Chemistry Chemical Physics, 2024, 26, 7124-7136.	2.8	0
1200	Simple Synthesis and Thermoelectric Properties of Mg2 + xSi0.5Sn0.5Sb0.075 Materials with Heterogeneous Microstructure. Korean Journal of Chemical Engineering, 2024, 41, 533-538.	2.7	0
1201	Temperature and composition insensitivity of thermoelectric properties of high-entropy half-heusler compounds. Acta Materialia, 2024, 268, 119761.	7.9	0
1202	Enhanced compressive strength and thermoelectric performance in carbon microspheres reinforced cement-based thermoelectric materials. Materials Letters, 2024, 361, 136129.	2.6	0
1203	Thermal Stability of Thick Films Based on Low-Temperature Thermoelectric Materials of Bi-Te-Se and Bi-Te-Sb Systems Modified with Copper-Oxide Additives. Semiconductors, 2023, 57, 28-30.	0.5	0
1204	Progress in the study of binary chalcogenide-based thermoelectric compounds. Journal of Solid State Chemistry, 2024, 334, 124617.	2.9	0
1205	Fast response 2D semiconductor gas sensor for memory-type NO2 detection: Test system construction, performance evaluation, and mechanism study. Materials Science in Semiconductor Processing, 2024, 174, 108249.	4.0	0
1206	Large Electrical Conductivity and Thermoelectric Power Factor of Pulsed Laser-Deposited Zn <sub>1–<i>x</i></sub> Ga <sub><i>x</i></sub> O Thin Films. ACS Applied Energy Materials, 2024, 7, 1693-1699.	5.1	0
1207	Harvesting Thermal Energy through Pyroelectric and Thermoelectric Nanomaterials for Catalytic Applications. Catalysts, 2024, 14, 159.	3.5	0
1208	A nanotwin-based physical model for designing robust layered bismuth telluride thermoelectric semiconductor. Cell Reports Physical Science, 2024, 5, 101841.	5.6	0
1209	Theoretical Maximum Thermoelectric Performance of <i>p</i> â€Type Hf―and Zrâ€Doped NbFeSb Halfâ€Heusler Compounds. Advanced Electronic Materials, 0, , .	5.1	0
1210	Sulfur Vacancy-Driven Band Splitting and Phonon Anharmonicity Enhance the Thermoelectric Performance in <i>n</i> -Type CuFeS <sub>2</sub> . ACS Applied Energy Materials, 2024, 7, 2008-2020.	5.1	0
1211	Enhanced thermoelectric properties of Bi2Sr2Co2Oy ceramics by dispersing B2O3 additive. Applied Physics A: Materials Science and Processing, 2024, 130, .	2.3	0
1212	Crystal Structure and Molten Salt Environment Cooperatively Controlling the Morphology of the Plate-like CaMnO <sub>3</sub> Template through Topochemical Conversion. Inorganic Chemistry, 2024, 63, 4628-4635.	4.0	0
1213	Flexible phase change materials based on hexagonal boron nitride (hBN) surface modification and styrene-butadiene-styrene (SBS)/low-density polyethylene (LDPE) crosslinking for battery thermal management applications. Chemical Engineering Journal, 2024, 485, 150110.	12.7	0
1214	Influence of synthesis method and processing on the thermoelectric properties of CoSb3 skutterudites. Journal of Materials Science: Materials in Electronics, 2024, 35, .	2.2	0

#	Article	IF	CITATIONS
1215	Optimizing Thermoelectric Properties through Compositional Engineering in Ag-Deficient AgSbTe <sub>2</sub> Synthesized by Arc Melting. ACS Applied Electronic Materials, 0, , .	4.3	0
1216	Ultralow Thermal Conductivity of a Chalcogenide System Pt <sub>3</sub> Bi <sub>4</sub> Q <sub>9</sub> (Q = S, Se) Driven by the Hierarchy of Rigid [Pt <sub>6</sub> Q <sub>12</sub> ] <sup>12–</sup> Clusters Embedded in Soft Bi-Q Sublattice. Journal of the American Chemical Society, 2024, 146, 7352-7362.	13.7	Ο
1217	Thermoelectric and Magnetic Properties of Biphasic ZrFe <sub>0.5</sub> Ni <sub>0.5</sub> Sb Double Half-Heusler and ZrNiSb Half-Heusler Induced by Co Doping. ACS Applied Electronic Materials, 2024, 6, 1829-1840.	4.3	0
1218	Ultrahigh thermoelectric properties of <i>p</i> â€ŧype Bi <sub><i>x</i></sub> Sb <sub>2â^²<i>x</i></sub> Te <sub>3</sub> thin films with exceptional flexibility for wearable energy harvesting. , 0, , .		0
1219	High wide-temperature-range thermoelectric performance in n-PbSe integrated with quantum dots. Journal of Materials Chemistry A, 2024, 12, 8583-8591.	10.3	0
1220	High thermoelectric performance of GeTe-MnTe alloy driven by spin degree of freedom. Materials Today Physics, 2024, 43, 101393.	6.0	0
1221	Achieving high carrier mobility and thermoelectric performance in nearly twin-free rhombohedral GeTe (00l) films. Materials Today Energy, 2024, 42, 101550.	4.7	0
1222	Realizing High Thermoelectric Performance in GeTeâ€Based Supersaturated Solid Solutions. Advanced Energy Materials, 2024, 14, .	19.5	0
1223	Temperature-dependent compression properties and failure mechanisms of ZrNiSn-based half-Heusler thermoelectric compounds. Journal of Materials Science and Technology, 2024, 193, 29-36.	10.7	0
1224	Graphite sheet assisted photovoltaic -thermoelectric generator for hydrogen generation from seawater. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2024, 46, 4064-4077.	2.3	0
1225	High thermoelectric properties in polycrystalline SnSe materials realized by rare earth halide Co-doping. Ceramics International, 2024, 50, 20515-20524.	4.8	0
1226	All-SnTe-Based Thermoelectric Power Generation Enabled by Stepwise Optimization of n-Type SnTe. Journal of the American Chemical Society, 2024, 146, 8727-8736.	13.7	0
1227	Boosting Thermoelectric Performance via Weakening Carrierâ€Phonon Coupling in BiCuSeOâ€Graphene Composites. Small Methods, 0, , .	8.6	0
1228	Point defects, doping and the path to n-type SnTe. Journal of Alloys and Compounds, 2024, 986, 174157.	5.5	0
1229	Synergistic strategy for enhancing the thermoelectric properties of Bi0.5Sb1.5Te3 with excess Te through low-temperature liquid phase sintering method. Journal of the European Ceramic Society, 2024, 44, 5765-5773.	5.7	0
1230	Mesoscopic combinatorial design of anisotropic graphitic carbon with ordered porous frameworks for thermoelectric conversion. Carbon, 2024, 224, 119052.	10.3	0
1231	Semiconductor–Semimetal Composite Engineering Enabling Recordâ€High Thermoelectric Power Density for Lowâ€Temperature Energy Harvesting. Advanced Functional Materials, 0, , .	14.9	0
1232	Copper-Enriched Nanostructured Conductive Thermoelectric Copper(I) Iodide Films Obtained by Chemical Solution Deposition on Flexible Substrates. Ukrainian Journal of Physics, 2024, 69, 115.	0.2	0

#	Article	IF	CITATIONS
1233	Realizing Ultrahigh Thermoelectric Performance in nâ€Type PbSe Through Lattice Planification and Introducing Liquidâ€Like Cu Ions. Advanced Functional Materials, 0, , .	14.9	0
1234	Highâ€Performance CaMg <sub>2</sub> Bi <sub>2</sub> â€Based Thermoelectric Materials Driven by Lattice Softening and Orbital Alignment via Cadmium Doping. Advanced Functional Materials, 0, , .	14.9	0
1235	A Case Study of Multimodal, Multi-institutional Data Management for the Combinatorial Materials Science Community. Integrating Materials and Manufacturing Innovation, 0, , .	2.6	0
1236	PEDOT-based thermoelectric composites: Preparation, mechanism and applications. Chinese Chemical Letters, 2024, , 109804.	9.0	0
1237	Texture and Se vacancy optimization induces high thermoelectric performance in Bi2Se3 flexible thin films. Rare Metals, 2024, 43, 2796-2804.	7.1	0
1238	Vacancies tailoring lattice anharmonicity of Zintl-type thermoelectrics. Nature Communications, 2024, 15, .	12.8	0
1239	Multinary Tetrahedrite (Cu <sub>12–<i>x</i>–<i>y</i></sub> M <sub><i>x</i></sub> N <sub><i>y</i></sub> Sb <sub>4</sub> S <sub> Nanoparticles: Tailoring Thermal and Optical Properties with Copper-Site Dopants. Chemistry of Materials, 2024, 36, 3246-3258.</sub>	13) 6.7	0
1240	Argon Plasma Bombardment Induces Surfaceâ€Rich Sn Vacancy Defects to Enhance the Thermoelectric Performance of Polycrystalline SnSe. Advanced Functional Materials, 0, , .	14.9	0
1241	Simultaneous manipulation of electrical and thermal properties to improve the thermoelectric performance of CuInTe2. Journal of Alloys and Compounds, 2024, 987, 174158.	5.5	0
1242	Nature-inspired interfacial engineering for energy harvesting. , 2024, 1, 218-233.		0
1243	The Failure Mechanism of Micro Thermoelectric Devices under the Action of the Temperature Field. ACS Applied Materials & Interfaces, 2024, 16, 16505-16514.	8.0	0
1244	Electro-optic and transport properties with stability parameters of cubic KMgX ( $\langle i \rangle X \langle i \rangle = P$ , As, Sb,) Tj ETQq1 1 C.	).784314 r 1.9	gBT /Overlo 0
1246	Anisotropic anomalous Nernst effect of metallic nickel assembled by aligned nanowires. Journal of Materials Science, 2024, 59, 4596-4604.	3.7	0
1247	Grid-plainification enables medium-temperature PbSe thermoelectrics to cool better than Bi <sub>2</sub> Te <sub>3</sub> . Science, 2024, 383, 1204-1209.	12.6	0
1248	A Novel PDMS-Based Flexible Thermoelectric Generator Fabricated by Ag2Se and PEDOT:PSS/Multi-Walled Carbon Nanotubes with High Output Performance Optimized by Embedded Eutectic Gallium–Indium Electrodes. Nanomaterials, 2024, 14, 542.	4.1	0