

# Yan-Zhong Pei

## List of Publications by Citations

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148  
papers

17,235  
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62  
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154  
ext. papers

20,095  
ext. citations

14  
avg, IF

7.03  
L-index

#	Paper	IF	Citations
148	Convergence of electronic bands for high performance bulk thermoelectrics. <i>Nature</i> , <b>2011</b> , 473, 66-9	50.4	2611
147	Ultrahigh power factor and thermoelectric performance in hole-doped single-crystal SnSe. <i>Science</i> , <b>2016</b> , 351, 141-4	33.3	1237
146	Band engineering of thermoelectric materials. <i>Advanced Materials</i> , <b>2012</b> , 24, 6125-35	24	998
145	High thermoelectric figure of merit in heavy hole dominated PbTe. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 2085	35.4	528
144	High Thermoelectric Performance in PbTe Due to Large Nanoscale Ag <sub>2</sub> Te Precipitates and La Doping. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 241-249	15.6	424
143	Low effective mass leading to high thermoelectric performance. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 7963	35.4	413
142	Heavily doped p-type PbSe with high thermoelectric performance: an alternative for PbTe. <i>Advanced Materials</i> , <b>2011</b> , 23, 1366-70	24	392
141	Lead telluride alloy thermoelectrics. <i>Materials Today</i> , <b>2011</b> , 14, 526-532	21.8	358
140	Reevaluation of PbTe <sub>1-x</sub> S <sub>x</sub> as high performance n-type thermoelectric material. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 2090	35.4	324
139	Stabilizing the optimal carrier concentration for high thermoelectric efficiency. <i>Advanced Materials</i> , <b>2011</b> , 23, 5674-8	24	323
138	Weak electron-phonon coupling contributing to high thermoelectric performance in n-type PbSe. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 9705-9	11.5	303
137	Beneficial Contribution of Alloy Disorder to Electron and Phonon Transport in Half-Heusler Thermoelectric Materials. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 5123-5130	15.6	290
136	Vacancy-induced dislocations within grains for high-performance PbSe thermoelectrics. <i>Nature Communications</i> , <b>2017</b> , 8, 13828	17.4	287
135	Optimum Carrier Concentration in n-Type PbTe Thermoelectrics. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400486	21.8	284
134	Tellurium as a high-performance elemental thermoelectric. <i>Nature Communications</i> , <b>2016</b> , 7, 10287	17.4	283
133	Low-Symmetry Rhombohedral GeTe Thermoelectrics. <i>Joule</i> , <b>2018</b> , 2, 976-987	27.8	275
132	Lattice Dislocations Enhancing Thermoelectric PbTe in Addition to Band Convergence. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606768	24	272

131	The Criteria for Beneficial Disorder in Thermoelectric Solid Solutions. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 1586-1596	15.6	252
130	Promoting SnTe as an Eco-Friendly Solution for p-PbTe Thermoelectric via Band Convergence and Interstitial Defects. <i>Advanced Materials</i> , <b>2017</b> , 29, 1605887	24	250
129	High Thermoelectric Figure of Merit in PbTe Alloys Demonstrated in PbTe $\delta$ Te. <i>Advanced Energy Materials</i> , <b>2012</b> , 2, 670-675	21.8	208
128	Lattice Strain Advances Thermoelectrics. <i>Joule</i> , <b>2019</b> , 3, 1276-1288	27.8	204
127	Manipulation of Phonon Transport in Thermoelectrics. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705617	24	199
126	High Band Degeneracy Contributes to High Thermoelectric Performance in p-Type Half-Heusler Compounds. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400600	21.8	198
125	Thermopower enhancement in Pb $_{1-x}$ MnxTe alloys and its effect on thermoelectric efficiency. <i>NPG Asia Materials</i> , <b>2012</b> , 4, e28-e28	10.3	195
124	Self-Tuning the Carrier Concentration of PbTe/Ag $_2$ Te Composites with Excess Ag for High Thermoelectric Performance. <i>Advanced Energy Materials</i> , <b>2011</b> , 1, 291-296	21.8	192
123	Interstitial Point Defect Scattering Contributing to High Thermoelectric Performance in SnTe. <i>Advanced Electronic Materials</i> , <b>2016</b> , 2, 1600019	6.4	186
122	Manipulation of ionized impurity scattering for achieving high thermoelectric performance in n-type MgSb-based materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 10548-10553	11.5	183
121	Realizing the High Thermoelectric Performance of GeTe by Sb-Doping and Se-Alloying. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 605-611	9.6	175
120	Electronic origin of the high thermoelectric performance of GeTe among the p-type group IV monotelellurides. <i>NPG Asia Materials</i> , <b>2017</b> , 9, e353-e353	10.3	172
119	Band and scattering tuning for high performance thermoelectric Sn $_{1-x}$ MnxTe alloys. <i>Journal of Materiomics</i> , <b>2015</b> , 1, 307-315	6.7	167
118	Low Sound Velocity Contributing to the High Thermoelectric Performance of AgSnSe. <i>Advanced Science</i> , <b>2016</b> , 3, 1600196	13.6	166
117	Magnetoelectric interaction and transport behaviours in magnetic nanocomposite thermoelectric materials. <i>Nature Nanotechnology</i> , <b>2017</b> , 12, 55-60	28.7	155
116	High Thermoelectric Efficiency of n-type PbS. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 488-495	21.8	149
115	High Thermoelectric Performance of Ag $_9$ GaSe $_6$ Enabled by Low Cutoff Frequency of Acoustic Phonons. <i>Joule</i> , <b>2017</b> , 1, 816-830	27.8	142
114	Combination of large nanostructures and complex band structure for high performance thermoelectric lead telluride. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 3640	35.4	137

113	Vacancy Manipulation for Thermoelectric Enhancements in GeTe Alloys. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 15883-15888	16.4	132
112	Defect Engineering for Realizing High Thermoelectric Performance in n-Type Mg <sub>3</sub> Sb <sub>2</sub> -Based Materials. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 2245-2250	20.1	130
111	Manipulation of Band Structure and Interstitial Defects for Improving Thermoelectric SnTe. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1803586	15.6	121
110	Boosting the thermoelectric performance of PbSe through dynamic doping and hierarchical phonon scattering. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 1848-1858	35.4	112
109	Alloying to increase the band gap for improving thermoelectric properties of Ag <sub>2</sub> Te. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 18256		112
108	Simultaneous Optimization of Carrier Concentration and Alloy Scattering for Ultrahigh Performance GeTe Thermoelectrics. <i>Advanced Science</i> , <b>2017</b> , 4, 1700341	13.6	108
107	Interstitial Defects Improving Thermoelectric SnTe in Addition to Band Convergence. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 563-568	20.1	106
106	Vacancy phonon scattering in thermoelectric In <sub>2</sub> Te <sub>3</sub> InSb solid solutions. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 122112	3.4	96
105	Rationalizing phonon dispersion for lattice thermal conductivity of solids. <i>National Science Review</i> , <b>2018</b> , 5, 888-894	10.8	95
104	Phonon scattering through a local anisotropic structural disorder in the thermoelectric solid solution Cu <sub>2</sub> Zn(1-x)Fe(x)GeSe <sub>4</sub> . <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 726-32	16.4	94
103	Lattice Softening Significantly Reduces Thermal Conductivity and Leads to High Thermoelectric Efficiency. <i>Advanced Materials</i> , <b>2019</b> , 31, e1900108	24	91
102	Vacancy scattering for enhancing the thermoelectric performance of CuGaTe <sub>2</sub> solid solutions. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 15464-15470	13	91
101	GeTe Thermoelectrics. <i>Joule</i> , <b>2020</b> , 4, 986-1003	27.8	89
100	Realizing high-performance thermoelectric power generation through grain boundary engineering of skutterudite-based nanocomposites. <i>Nano Energy</i> , <b>2017</b> , 41, 501-510	17.1	87
99	Thermoelectric Properties of Cu <sub>2</sub> SnSe <sub>4</sub> with Intrinsic Vacancy. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 6227-6232	3.6	85
98	Advances in Environment-Friendly SnTe Thermoelectrics. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 2349-2355	20.1	85
97	Thermoelectric Properties of SnS with Na-Doping. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 34033-34041	3.4	81
96	High-Performance GeTe Thermoelectrics in Both Rhombohedral and Cubic Phases. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 16190-16197	16.4	76

95	Single parabolic band behavior of thermoelectric p-type CuGaTe <sub>2</sub> . <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 209-214	7.1	75
94	Extraordinary n-Type Mg SbBi Thermoelectrics Enabled by Yttrium Doping. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903387	24	74
93	Realization of higher thermoelectric performance by dynamic doping of copper in n-type PbTe. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 3089-3098	35.4	73
92	Optimized thermoelectric properties of Mo <sub>3</sub> Sb <sub>7</sub> Te <sub>x</sub> with significant phonon scattering by electrons. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 4086	35.4	70
91	Anomalous electrical conductivity of n-type Te-doped Mg <sub>3.2</sub> Sb <sub>1.5</sub> Bi <sub>0.5</sub> . <i>Materials Today Physics</i> , <b>2017</b> , 3, 1-6	8	67
90	Crystal Structure Induced Ultralow Lattice Thermal Conductivity in Thermoelectric Ag <sub>9</sub> AlSe <sub>6</sub> . <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1800030	21.8	64
89	Dopants effect on the band structure of PbTe thermoelectric material. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 092102	3.4	64
88	Promising thermoelectric performance in van der Waals layered SnSe <sub>2</sub> . <i>Materials Today Physics</i> , <b>2017</b> , 3, 127-136	8	63
87	Substitutional defects enhancing thermoelectric CuGaTe <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 5314-5320	13	62
86	Significant band engineering effect of YbTe for high performance thermoelectric PbTe. <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 12410-12417	7.1	57
85	Tellurium doped n-type Zintl Zr <sub>3</sub> Ni <sub>3</sub> Sb <sub>4</sub> thermoelectric materials: Balance between carrier-scattering mechanism and bipolar effect. <i>Materials Today Physics</i> , <b>2017</b> , 2, 54-61	8	56
84	Heterogeneous Distribution of Sodium for High Thermoelectric Performance of p-type Multiphase Lead-Chalcogenides. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1501047	21.8	56
83	Applying Quantitative Microstructure Control in Advanced Functional Composites. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2135-2153	15.6	55
82	Rational design of p-type thermoelectric PbTe: temperature dependent sodium solubility. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 8725	13	54
81	Material Design Considerations Based on Thermoelectric Quality Factor. <i>Springer Series in Materials Science</i> , <b>2013</b> , 3-32	0.9	53
80	Dilute Cu <sub>2</sub> Te-alloying enables extraordinary performance of r-GeTe thermoelectrics. <i>Materials Today Physics</i> , <b>2019</b> , 9, 100096	8	52
79	Manipulation of Solubility and Interstitial Defects for Improving Thermoelectric SnTe Alloys. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 1969-1974	20.1	51
78	Electronic quality factor for thermoelectrics. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	49


77	Wearable Thermoelectric Materials and Devices for Self-Powered Electronic Systems. <i>Advanced Materials</i> , <b>2021</b> , 33, e2102990	24	49
76	Thermoelectric properties of GeSe. <i>Journal of Materiomics</i> , <b>2016</b> , 2, 331-337	6.7	46
75	Chemical composition tuning in quaternary p-type Pb-chalcogenides--a promising strategy for enhanced thermoelectric performance. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 1835-40	3.6	46
74	Limit of zT enhancement in rocksalt structured chalcogenides by band convergence. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	44
73	Manipulation of charge transport in thermoelectrics. <i>Npj Quantum Materials</i> , <b>2017</b> , 2,	5	41
72	Engineering the Thermoelectric Transport in Half-Heusler Materials through a Bottom-Up Nanostructure Synthesis. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700446	21.8	40
71	Revelation of Inherently High Mobility Enables MgSb as a Sustainable Alternative to n-BiTe Thermoelectrics. <i>Advanced Science</i> , <b>2019</b> , 6, 1802286	13.6	40
70	Thermoelectric Enhancements in PbTe Alloys Due to Dislocation-Induced Strains and Converged Bands. <i>Advanced Science</i> , <b>2020</b> , 7, 1902628	13.6	39
69	Promising Thermoelectric Ag <sub>5</sub> Te <sub>3</sub> with Intrinsic Low Lattice Thermal Conductivity. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 2470-2477	20.1	38
68	Design of High-Performance Disordered Half-Heusler Thermoelectric Materials Using 18-Electron Rule. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1905044	15.6	38
67	Thermoelectric Materials: Band Engineering of Thermoelectric Materials (Adv. Mater. 46/2012). <i>Advanced Materials</i> , <b>2012</b> , 24, 6124-6124	24	38
66	Validity of rigid band approximation of PbTe thermoelectric materials. <i>APL Materials</i> , <b>2013</b> , 1, 011101	5.7	38
65	Realizing a 14% single-leg thermoelectric efficiency in GeTe alloys. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	38
64	Orbital Alignment for High Performance Thermoelectric YbCd <sub>2</sub> Sb <sub>2</sub> Alloys. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 5339-5345	9.6	37
63	Sb induces both doping and precipitation for improving the thermoelectric performance of elemental Te. <i>Inorganic Chemistry Frontiers</i> , <b>2017</b> , 4, 1066-1072	6.8	35
62	Thermoelectric Transport Properties of Cd Bi GeTe Alloys. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 39904-39911	9.5	35
61	Maximization of transporting bands for high-performance SnTe alloy thermoelectrics. <i>Materials Today Physics</i> , <b>2019</b> , 9, 100091	8	34
60	Advances in Thermoelectric Mg <sub>3</sub> Sb <sub>2</sub> and Its Derivatives. <i>Small Methods</i> , <b>2018</b> , 2, 1800022	12.8	34

59	Cu Interstitials Enable Carriers and Dislocations for Thermoelectric Enhancements in n-PbTe <sub>0.75</sub> Se <sub>0.25</sub> . <i>Chem</i> , <b>2020</b> , 6, 523-537	16.2	33
58	Performance optimization and single parabolic band behavior of thermoelectric MnTe. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 19143-19150	13	33
57	High thermoelectric power factor in alloys based on CoSi. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 022115	3.4	32
56	High Thermoelectric Power Factor Near Room Temperature in Full-Heusler Alloys. <i>Journal of Electronic Materials</i> , <b>2009</b> , 38, 1221-1223	1.9	31
55	Charge Transport in Thermoelectric SnSe Single Crystals. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 689-694	20.1	30
54	Efficient Sc-Doped Mg <sub>3.05</sub> ScxSbBi Thermoelectrics Near Room Temperature. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 8987-8994	9.6	30
53	Single parabolic band transport in p-type EuZn <sub>2</sub> Sb <sub>2</sub> thermoelectrics. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 24185-24192	13	29
52	Thermoelectric properties of Ag <sub>9</sub> Ga <sub>6</sub> S <sub>6</sub> with ultralow lattice thermal conductivity. <i>Materials Today Physics</i> , <b>2018</b> , 6, 60-67	8	28
51	Thermoelectric performance of tellurium-reduced quaternary p-type lead-halogenide composites. <i>Acta Materialia</i> , <b>2014</b> , 80, 365-372	8.4	26
50	Alloying for orbital alignment enables thermoelectric enhancement of EuCd <sub>2</sub> Sb <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 12773-12778	13	25
49	Solute manipulation enabled band and defect engineering for thermoelectric enhancements of SnTe. <i>Information Materials</i> , <b>2019</b> , 1, 571-581	23.1	23
48	Substitutions and dislocations enabled extraordinary n-type thermoelectric PbTe. <i>Materials Today Physics</i> , <b>2021</b> , 17, 100355	8	23
47	First-principles study on band structures and electrical transports of doped-SnTe. <i>Journal of Materiomics</i> , <b>2016</b> , 2, 158-164	6.7	20
46	Fabrication and Thermoelectric Properties of Single-Crystal Argyrodite Ag <sub>8</sub> SnSe <sub>6</sub> . <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2603-2610	9.6	18
45	Experimental revelation of multiband transport in heavily doped BaCd <sub>2</sub> Sb <sub>2</sub> with promising thermoelectric performance. <i>Materials Today Physics</i> , <b>2019</b> , 8, 123-127	8	18
44	Atomic disordering advances thermoelectric group IV telluride alloys with a multiband transport. <i>Materials Today Physics</i> , <b>2020</b> , 15, 100247	8	17
43	Improved thermoelectric performance of Nb-doped lead selenide. <i>Journal of Alloys and Compounds</i> , <b>2014</b> , 600, 91-95	5.7	17
42	Parallel Dislocation Networks and Cottrell Atmospheres Reduce Thermal Conductivity of PbTe Thermoelectrics. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101214	15.6	15

41	Compromise between band structure and phonon scattering in efficient n-Mg <sub>3</sub> Sb <sub>2</sub> -xBix thermoelectrics. <i>Materials Today Physics</i> , <b>2021</b> , 18, 100362	8	15
40	Thermoelectric properties of n-type Nb-doped Ag <sub>8</sub> SnSe <sub>6</sub> . <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 135101	2.5	15
39	Near-room-temperature rhombohedral Ge <sub>1</sub> -Pb Te thermoelectrics. <i>Materials Today Physics</i> , <b>2020</b> , 15, 100260	8	14
38	Spark Plasma Sintered Bulk Nanocomposites of BiTeSe Nanoplates Incorporated Ni Nanoparticles with Enhanced Thermoelectric Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 31816-31823	8.5	13
37	Na-doping enables both dislocations and holes in EuMg <sub>2</sub> Sb <sub>2</sub> for thermoelectric enhancements. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 8345-8351	13	13
36	A record thermoelectric efficiency in tellurium-free modules for low-grade waste heat recovery.. <i>Nature Communications</i> , <b>2022</b> , 13, 237	17.4	13
35	Manipulation of Band Degeneracy and Lattice Strain for Extraordinary PbTe Thermoelectrics. <i>Research</i> , <b>2020</b> , 2020, 8151059	7.8	13
34	An over 10% module efficiency obtained using non-Bi <sub>2</sub> Te <sub>3</sub> thermoelectric materials for recovering heat of . <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 6506-6513	35.4	13
33	Ternary thermoelectric AB <sub>2</sub> C <sub>2</sub> Zintl. <i>Journal of Alloys and Compounds</i> , <b>2020</b> , 821, 153497	5.7	11
32	Resonant doping in BiCuSeO thermoelectrics from first principles. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 931-936	13	10
31	Thermoelectric p-Type Ag <sub>9</sub> GaTe <sub>6</sub> with an Intrinsically Low Lattice Thermal Conductivity. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 1892-1898	6.1	10
30	Thermally insulative thermoelectric argyrodites. <i>Materials Today</i> , <b>2021</b> , 48, 198-198	21.8	10
29	MnTe <sub>2</sub> as a novel promising thermoelectric material. <i>Journal of Materiomics</i> , <b>2018</b> , 4, 215-220	6.7	9
28	Texturization-Induced In-Plane High-Performance Thermoelectrics and Inapplicability of the Debye Model to Out-of-Plane Lattice Thermal Conductivity in Misfit-Layered Chalcogenides. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 48079-48085	9.5	9
27	Origin of resistivity anomaly in p-type leads chalcogenide multiphase compounds. <i>AIP Advances</i> , <b>2015</b> , 5, 053601	1.5	8
26	Promising cubic MnGeTe <sub>2</sub> thermoelectrics. <i>Science China Materials</i> , <b>2019</b> , 62, 379-388	7.1	7
25	Anharmonic lattice dynamics of Te and its counter-intuitive strain dependent lattice thermal conductivity. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 5970-5974	7.1	6
24	Thermoelectric properties of Cu <sub>4</sub> Ge <sub>3</sub> Se <sub>5</sub> with an intrinsic disordered zinc blende structure. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 3431-3437	13	6



23	Transport Properties of CdSb Alloys with a Promising Thermoelectric Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 27098-27103	9.5	6
22	Leveraging bipolar effect to enhance transverse thermoelectricity in semimetal MgPb for cryogenic heat pumping. <i>Nature Communications</i> , <b>2021</b> , 12, 3837	17.4	6
21	Editorial for rare metals, special issue on advanced thermoelectric materials. <i>Rare Metals</i> , <b>2018</b> , 37, 257-358	3.58	5
20	Effect of Ge Doping on Thermoelectric Properties of $Sr_{1-x}Co_4Sb_{12-x}Ge_x$ . <i>Japanese Journal of Applied Physics</i> , <b>2008</b> , 47, 7470-7473	1.4	5
19	Thermoelectric properties of Ni-doped BaSi <sub>2</sub> . <i>Functional Materials Letters</i> , <b>2016</b> , 09, 1650017	1.2	5
18	One-Order Decreased Lattice Thermal Conductivity of SnSe Crystals by the Introduction of Nanometer SnSe <sub>2</sub> Secondary Phase. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 27666-27671	3.8	5
17	Considering the Role of Ion Transport in Diffusion-Dominated Thermal Conductivity. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2200717	21.8	5
16	Manipulation of Defects for High-Performance Thermoelectric PbTe-Based Alloys. <i>Small Structures</i> , <b>2021</b> , 2, 2100016	8.7	4
15	Nearly isotropic transport properties in anisotropically structured n-type single-crystalline Mg <sub>3</sub> Sb <sub>2</sub> . <i>Materials Today Physics</i> , <b>2021</b> , 21, 100508	8	4
14	Ultralow and glass-like lattice thermal conductivity in crystalline BaAg <sub>2</sub> Te <sub>2</sub> : Strong fourth-order anharmonicity and crucial diffusive thermal transport. <i>Materials Today Physics</i> , <b>2021</b> , 21, 100487	8	4
13	Ultralow lattice thermal conductivity enables high thermoelectric performance in BaAg <sub>2</sub> Te <sub>2</sub> alloys. <i>Materials Today Physics</i> , <b>2022</b> , 22, 100591	8	3
12	Revealing the origin of dislocations in PbSbSe (0 Nanoscale, <b>2020</b> , 12, 19165-19169	7.7	3
11	Linear dependence of the Hall coefficient of 1% Na doped PbTe with varying magnetic field. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 1273-1275	1.6	2
10	Dynamic disorder phonon scattering mediated by Cu atomic hopping and diffusion in Cu <sub>3</sub> SbSe <sub>3</sub> . <i>Npj Computational Materials</i> , <b>2020</b> , 6,	10.9	2
9	Evaluation of Thermoelectric Properties of Ag <sub>0.366</sub> Sb <sub>0.558</sub> Te. <i>Annalen Der Physik</i> , <b>2020</b> , 532, 1900561	2.6	1
8	Soft-mode dynamics in the ferroelectric phase transition of GeTe. <i>Npj Computational Materials</i> , <b>2021</b> , 7,	10.9	1
7	Thermoelectric properties of (GeTe) <sub>1-x</sub> [(Ag <sub>2</sub> Te) <sub>0.4</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>0.6</sub> ] <sub>x</sub> alloys. <i>Rare Metals</i> , <b>2019</b> , 38, 100-104	5.5	1
6	Lead Chalcogenide Thermoelectric Materials <b>2019</b> , 83-104		0

- 5 Enhanced Thermoelectric Performance in Ge Sb Te/FeGe Composites Enabled by Hierarchical Defects. *Small*, **2021**, 17, e2100915 11 ○
- 4 Thermoelectric Transport Properties of TmAg Cu<sub>1</sub>-Te<sub>2</sub> solid solutions. *Journal of Materiomics*, **2021**, 7, 886-893 6.7 ○
- 3 Individualization of optimal operation currents for promoting multi-stage thermoelectric cooling. *Materials Today Physics*, **2022**, 100746 8 ○
- 2  Ge<sub>0.86</sub>Pb<sub>0.1</sub>Bi<sub>0.04</sub>Te<sup>\*</sup>. *Fizika i Tekhnika Poluprovodnikov*, **2022**, 56, 261 ○
- 1 SnTe-Based Thermoelectrics **2019**, 63-81