Li-Dong Zhao

List of Publications by Year
in descending order

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277 papers	33,126 citations	5248 83 h-index	3997 176 g-index
289 all docs	289 docs citations	289 times ranked	12725 citing authors

#	Article	IF	Citations
1	Realizing ranged performance in SnTe through integrating bands convergence and DOS distortion. Journal of Materiomics, 2022, 8, 184-194.	2.8	17
2	Honeycomb-like puckered PbSe with wide bandgap as promising thermoelectric material: a first-principles prediction. Materials Today Energy, 2022, 23, 100914.	2.5	11
3	Realizing synergistic optimization of thermoelectric properties in n-type BiSbSe3 polycrystals via co-doping zirconium and halogen. Materials Today Physics, 2022, 22, 100608.	2.9	7
4	Anomalous transverse optical phonons in SnTe and PbTe. Physical Review B, 2022, 105, .	1.1	7
5	Outstanding CdSe with Multiple Functions Leads to High Performance of GeTe Thermoelectrics. Advanced Energy Materials, 2022, 12, .	10.2	21
6	Ultrahigh carrier mobility contributes to remarkably enhanced thermoelectric performance in n-type PbSe. Energy and Environmental Science, 2022, 15, 346-355.	15.6	45
7	Enhanced thermoelectric perfromance in cubic form of SnSe stabilized through enformatingly alloying AgSbTe2. Acta Materialia, 2022, 227, 117681.	3.8	16
8	Synergistically enhanced electrical transport properties of SrTiO₃via Fermi level regulation and modulation doping. Journal of Materials Chemistry C, 2022, 10, 13851-13859.	2.7	1
9	Remarkable electron and phonon transports in low-cost SnS: A new promising thermoelectric material. Science China Materials, 2022, 65, 1143-1155.	3.5	9
10	Investigations on the Thermoelectric Transport Properties in the Holeâ€doped La₂CuO₄. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2022, 648, .	0.6	2
11	Synergistically optimizing carrier and phonon transport properties in n-type PbTe through I doping and SnSe alloying. Materials Today Energy, 2022, 26, 100983.	2.5	5
12	Highâ€Ranged ZT Value Promotes Thermoelectric Cooling and Power Generation in nâ€Type PbTe. Advanced Energy Materials, 2022, 12, .	10.2	36
13	A promising thermoelectrics In4SnSe4 with a wide bandgap and cubic structure composited by layered SnSe and In4Se3. Journal of Materiomics, 2022, 8, 982-991.	2.8	5
14	High thermoelectric performance realized through manipulating layered phonon-electron decoupling. Science, 2022, 375, 1385-1389.	6.0	194
15	Oneâ€“One Correspondence between n-Type SnTe Thermoelectric and Topological Phase Transition. Chemistry of Materials, 2022, 34, 3423-3429.	3.2	11
16	Distinct electron and hole transports in SnSe crystals. Science Bulletin, 2022, 67, 1105-1107.	4.3	16
17	Synergistically enhanced thermoelectric properties in n-type Bi6Cu2Se4O6 through inducing resonant levels. Acta Materialia, 2022, 232, 117930.	3.8	13
18	Enhanced thermoelectric performance in SnTe due to the energy filtering effect introduced by Bi2O3. Materials Today Energy, 2022, 25, 100985.	2.5	13

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19	Unidentified major p-type source in SnSe: Multivacancies. NPG Asia Materials, 2022, 14, .	3.8	8
20	Boosting thermoelectric performance of n-type PbS through synergistically integrating In resonant level and Cu dynamic doping. Journal of Physics and Chemistry of Solids, 2021, 148, 109640.	1.9	26
21	Enhanced thermoelectric performance in Cl-doped BiSbSe3 with optimal carrier concentration and effective mass. Journal of Materials Science and Technology, 2021, 70, 67-72.	5.6	17
22	Preparing bulk Cu-Ni-Mn based thermoelectric alloys and synergistically improving their thermoelectric and mechanical properties using nanotwins and nanoprecipitates. Materials Today Physics, 2021, 17, 100332.	2.9	17
23	Boosting the thermoelectric performance of GeTe by manipulating the phase transition temperature via Sb doping. Journal of Materials Chemistry C, 2021, 9, 6484-6490.	2.7	19
24	Hierarchical structures lead to high thermoelectric performance in Cu_{m+n}Pb₁₀₀Sb_mTe₁₀₀Se_{2m} (CLAST). Energy and Environmental Science, 2021, 14, 451-461.	15.6	47
25	Realizing high thermoelectric properties in p-type polycrystalline SnSe by inducing DOS distortion. Rare Metals, 2021, 40, 2819-2828.	3.6	33
26	Contrasting Thermoelectric Transport Properties of n-Type PbS Induced by Adding Ni and Zn. ACS Applied Energy Materials, 2021, 4, 6284-6289.	2.5	5
27	Nanoscale bubble domains with polar topologies in bulk ferroelectrics. Nature Communications, 2021, 12, 3632.	5.8	57
28	Contrasting Cu Roles Lead to High Ranged Thermoelectric Performance of PbS. Advanced Functional Materials, 2021, 31, 2102185.	7.8	33
29	Low carrier concentration leads to high in-plane thermoelectric performance in n-type SnS crystals. Science China Materials, 2021, 64, 3051-3058.	3.5	16
30	Dynamic carrier transports and low thermal conductivity in nâ€type layered InSe thermoelectrics. Aggregate, 2021, 2, e92.	5.2	14
31	Realizing N-type SnTe Thermoelectrics with Competitive Performance through Suppressing Sn Vacancies. Journal of the American Chemical Society, 2021, 143, 8538-8542.	6.6	51
32	Slowing down the heat in thermoelectrics. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 755-789.	8.5	57
33	Thermal diffusivity and its lower bound in orthorhombic SnSe. Physical Review B, 2021, 104, .	1.1	4
34	An Update Review on N-Type Layered Oxyselenide Thermoelectric Materials. Materials, 2021, 14, 3905.	1.3	12
35	Physical insights on the low lattice thermal conductivity of AgInSe2. Materials Today Physics, 2021, 19, 100428.	2.9	20
36	Power generation and thermoelectric cooling enabled by momentum and energy multiband alignments. Science, 2021, 373, 556-561.	6.0	270

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37	Understanding the electrical transports of p-type polycrystalline SnSe with effective medium theory. Applied Physics Letters, 2021, 119, .	1.5	8
38	Realizing high doping efficiency and thermoelectric performance in n-type SnSe polycrystals via bandgap engineering and vacancy compensation. Materials Today Physics, 2021, 20, 100452.	2.9	16
39	Band structure and microstructure modulations enable high quality factor to elevate thermoelectric performance in Ge0.9Sb0.1Te-x%FeTe2. Materials Today Physics, 2021, 20, 100444.	2.9	16
40	Anisotropic thermoelectric transport properties in polycrystalline SnSe₂ *. Chinese Physics B, 2021, 30, 067101.	0.7	5
41	Enhancing thermoelectric performance of n-type Bi6Cu2Se4O6 through introducing transition metal elements. Scripta Materialia, 2021, 202, 114010.	2.6	10
42	Thermo-phototronic effect in p-type Na-doped SnS single crystals for enhanced self-powered photodetectors. Nano Energy, 2021, 88, 106268.	8.2	18
43	Band convergence and nanostructure modulations lead to high thermoelectric performance in SnPb0.04Te-y% AgSbTe2. Materials Today Physics, 2021, 21, 100505.	2.9	17
44	Bridging the miscibility gap towards higher thermoelectric performance of PbS. Acta Materialia, 2021, 220, 117337.	3.8	17
45	Rationally optimized carrier effective mass and carrier density leads to high average ZT value in n-type PbSe. Journal of Materials Chemistry A, 2021, 9, 23011-23018.	5.2	15
46	Realizing high thermoelectric performance in SnSe₂<i>via</i> intercalating Cu. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 208401.	0.2	3
47	Evaluation on the Thermoelectric Cooling Ability of PbTe. ACS Applied Energy Materials, 2021, 4, 11813-11818.	2.5	5
48	Synergistically optimizing charge and phonon transport properties in n-type PbTe via introducing ternary compound AgSb(Se, Te)2. Journal of Alloys and Compounds, 2020, 815, 152463.	2.8	15
49	Electrical and Thermal Transport Properties of n â€type Bi 6 Cu 2 Se 4 O 6 (2BiCuSeO + 2Bi 2 O 2 Se). Annalen Der Physik, 2020, 532, 1900340.	0.9	11
50	Realizing High Thermoelectric Performance in Polycrystalline SnSe via Silver Doping and Germanium Alloying. ACS Applied Energy Materials, 2020, 3, 2049-2054.	2.5	52
51	An approach of enhancing thermoelectric performance for p-type PbS: Decreasing electronic thermal conductivity. Journal of Alloys and Compounds, 2020, 820, 153453.	2.8	22
52	High thermoelectric figure of merit ZT > 1 in SnS polycrystals. Journal of Materiomics, 2020, 6, 77-85.	2.8	46
53	Band inversion induced multiple electronic valleys for high thermoelectric performance of SnTe with strong lattice softening. Nano Energy, 2020, 69, 104395.	8.2	80
54	Synergistically Enhancing Thermoelectric Performance of nâ€Type PbTe with Indium Doping and Sulfur Alloying. Annalen Der Physik, 2020, 532, 1900421.	0.9	19

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55	High-Quality SnSe₂ Single Crystals: Electronic and Thermoelectric Properties. ACS Applied Energy Materials, 2020, 3, 10787-10792.	2.5	34
56	Predicting the Potential Performance in P-Type SnS Crystals via Utilizing the Weighted Mobility and Quality Factor. Chinese Physics Letters, 2020, 37, 087104.	1.3	19
57	Symmetry and asymmetry in thermoelectrics. Journal of Materials Chemistry C, 2020, 8, 12054-12061.	2.7	14
58	Singleâ€Crystal SnSe Thermoelectric Fibers via Laserâ€Induced Directional Crystallization: From 1D Fibers to Multidimensional Fabrics. Advanced Materials, 2020, 32, e2002702.	11.1	57
59	Phonon and Carrier Transport Properties in Low-Cost and Environmentally Friendly SnS₂: A Promising Thermoelectric Material. Chemistry of Materials, 2020, 32, 10348-10356.	3.2	32
60	Investigation on carrier mobility when comparing nanostructures and bands manipulation. Nanoscale, 2020, 12, 12741-12747.	2.8	13
61	Influence of direct electric current on wetting behavior during brazing. Frontiers of Mechanical Engineering, 2020, 15, 496-503.	2.5	1
62	Thermoelectric transport properties of PbS and its contrasting electronic band structures. Scripta Materialia, 2020, 185, 76-81.	2.6	7
63	Key influencing factors for the thermal shock resistance of La2Zr2O7-based multilayer TBCs. Surface and Coatings Technology, 2020, 396, 125951.	2.2	18
64	Extremely low thermal conductivity from bismuth selenohalides with 1D soft crystal structure. Science China Materials, 2020, 63, 1759-1768.	3.5	38
65	Estimation of the potential performance in p-type SnSe crystals through evaluating weighted mobility and effective mass. Journal of Materiomics, 2020, 6, 671-676.	2.8	38
66	Sb2Si2Te6: A Robust New Thermoelectric Material. Trends in Chemistry, 2020, 2, 89-91.	4.4	15
67	Synergistically improving thermoelectric and mechanical properties of Ge0.94Bi0.06Te through dispersing nano-SiC. Scripta Materialia, 2020, 183, 22-27.	2.6	29
68	A telomerase-responsive nanoprobe with theranostic properties in tumor cells. Talanta, 2020, 215, 120898.	2.9	8
69	Molecular Construction from AgGaS₂ to CuZnPS₄: Defect-Induced Second Harmonic Generation Enhancement and Cosubstitution-Driven Band Gap Enlargement. Chemistry of Materials, 2020, 32, 3288-3296.	3.2	63
70	Ultrahigh Average ZT Realized in p-Type SnSe Crystalline Thermoelectrics through Producing Extrinsic Vacancies. Journal of the American Chemical Society, 2020, 142, 5901-5909.	6.6	94
71	Contrasting roles of small metallic elements M (M = Cu, Zn, Ni) in enhancing the thermoelectric performance of n-type PbM_{0.01}Se. Journal of Materials Chemistry A, 2020, 8, 5699-5708.	5.2	32
72	Enhancing thermoelectric performance of BiSbSe3 through improving carrier mobility via percolating carrier transports. Journal of Alloys and Compounds, 2020, 836, 155473.	2.8	13

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73	Improving the thermoelectric performance of p-type PbSe via synergistically enhancing the Seebeck coefficient and reducing electronic thermal conductivity. Journal of Materials Chemistry A, 2020, 8, 4931-4937.	5.2	34
74	Enhancing thermoelectric performance of n-type PbTe through separately optimizing phonon and charge transport properties. Journal of Alloys and Compounds, 2020, 828, 154377.	2.8	13
75	Carrier mobility does matter for enhancing thermoelectric performance. APL Materials, 2020, 8, 010901.	2.2	48
76	Band Sharpening and Band Alignment Enable High Quality Factor to Enhance Thermoelectric Performance in n-Type PbS. Journal of the American Chemical Society, 2020, 142, 4051-4060.	6.6	130
77	Large effective mass and low lattice thermal conductivity contributing to high thermoelectric performance of Zn-doped Cu5Sn2Se7. Journal of Alloys and Compounds, 2020, 826, 154154.	2.8	11
78	High-quality textured SnSe thin films for self-powered, rapid-response photothermoelectric application. Nano Energy, 2020, 72, 104742.	8.2	58
79	Temperature-driven nâ€“p conduction type switching without structural transition in a Cu-rich chalcogenide, NaCu₅S₃. Chemical Communications, 2020, 56, 4882-4885.	2.2	5
80	Seeking new, highly effective thermoelectrics. Science, 2020, 367, 1196-1197.	6.0	313
81	Thermoelectric Materials. Annalen Der Physik, 2020, 532, 2000435.	0.9	3
82	Contrasting Thermoelectric Transport Behaviors of p -Type PbS Caused by Doping Alkali Metals (Li and Na). Research, 2020, 2020, 4084532.	2.8	2
83	Oxygen adsorption and its influence on the thermoelectric performance of polycrystalline SnSe. Journal of Materials Chemistry C, 2019, 7, 10507-10513.	2.7	28
84	Synergistically optimizing interdependent thermoelectric parameters of n-type PbSe through introducing a small amount of Zn. Materials Today Physics, 2019, 9, 100102.	2.9	38
85	Enhancing Thermoelectric Performance of p-Type PbSe through Suppressing Electronic Thermal Transports. ACS Applied Energy Materials, 2019, 2, 8236-8243.	2.5	30
86	Enhancing thermoelectric transport properties of n-type PbS through introducing CaS/SrS. Journal of Solid State Chemistry, 2019, 280, 120995.	1.4	15
87	Comprehensive Investigation on the Thermoelectric Properties of pâ€Type PbTeâ€PbSeâ€PbS Alloys. Advanced Electronic Materials, 2019, 5, 1900609.	2.6	29
88	Pressure-induced enhancement of thermoelectric power factor in pristine and hole-doped SnSe crystals. RSC Advances, 2019, 9, 26831-26837.	1.7	7
89	Layered oxygen-containing thermoelectric materials: Mechanisms, strategies, and beyond. Materials Today, 2019, 29, 68-85.	8.3	66
90	Realizing High Thermoelectric Performance in GeTe through Optimizing Ge Vacancies and Manipulating Ge Precipitates. ACS Applied Energy Materials, 2019, 2, 7594-7601.	2.5	61

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91	Thermo-photoelectric coupled effect induced electricity in N-type SnSe:Br single crystals for enhanced self-powered photodetectors. Nano Energy, 2019, 66, 104111.	8.2	42
92	High thermoelectric performance in low-cost SnS _{0.91} Se _{0.09} crystals. Science, 2019, 365, 1418-1424.	6.0	395
93	Thermoelectric transport properties of n-type tin sulfide. Scripta Materialia, 2019, 170, 99-105.	2.6	29
94	Realizing Highâ€Ranged Outâ€ofâ€Plane ZTs in Nâ€Type SnSe Crystals through Promoting Continuous Phase Transition. Advanced Energy Materials, 2019, 9, 1901334.	10.2	83
95	Significant Optimization of Electronâ€“Phonon Transport of n-Type Bi₂O₂Se by Mechanical Manipulation of Se Vacancies via Shear Exfoliation. ACS Applied Materials & Interfaces, 2019, 11, 21603-21609.	4.0	48
96	Seeing atomic-scale structural origins and foreseeing new pathways to improved thermoelectric materials. Materials Horizons, 2019, 6, 1548-1570.	6.4	27
97	Synergistically optimizing interdependent thermoelectric parameters of n-type PbSe through alloying CdSe. Energy and Environmental Science, 2019, 12, 1969-1978.	15.6	99
98	Realizing n-type BiCuSeO through halogens doping. Ceramics International, 2019, 45, 14953-14957.	2.3	11
99	Dynamic Ag⁺-intercalation with AgSnSe₂ nano-precipitates in Cl-doped polycrystalline SnSe₂ toward ultra-high thermoelectric performance. Journal of Materials Chemistry A, 2019, 7, 9761-9772.	5.2	50
100	Realizing high thermoelectric performance of polycrystalline SnS through optimizing carrier concentration and modifying band structure. Journal of Alloys and Compounds, 2019, 789, 485-492.	2.8	34
101	Amphoteric Indium Enables Carrier Engineering to Enhance the Power Factor and Thermoelectric Performance in nâ€Type Ag_nPb₁₀₀In_nTe₁₀₀₊₂_n (LIST). Advanced Energy Materials, 2019, 9, 1900414.	10.2	60
102	Effects of temperature and pressure on the optical and vibrational properties of thermoelectric SnSe. Physical Chemistry Chemical Physics, 2019, 21, 8663-8678.	1.3	20
103	A highly porous thermal barrier coating based on Gd2O3â€“Yb2O3 co-doped YSZ. Surface and Coatings Technology, 2019, 366, 349-354.	2.2	22
104	Synergistically optimized electrical and thermal transport properties of polycrystalline SnSe via alloying SnS. Journal of Solid State Chemistry, 2019, 273, 85-91.	1.4	23
105	Realizing high thermoelectric performance in GeTe through decreasing the phase transition temperature via entropy engineering. Journal of Materials Chemistry A, 2019, 7, 26393-26401.	5.2	103
106	Probing exosome internalization pathways through confocal microscopy imaging. Chemical Communications, 2019, 55, 14015-14018.	2.2	16
107	Enhancing the thermoelectric performance of Bi2S3: A promising earth-abundant thermoelectric material. Frontiers of Physics, 2019, 14, 1.	2.4	24
108	Enhancing thermoelectric performance of SnTe via stepwisely optimizing electrical and thermal transport properties. Journal of Alloys and Compounds, 2019, 773, 571-584.	2.8	37

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109	Thermoelectric Material SnPb2Bi2S6: The 4,4L Member of Lillianite Homologous Series with Low Lattice Thermal Conductivity. Inorganic Chemistry, 2019, 58, 1339-1348.	1.9	10
110	Intrinsically Low Thermal Conductivity in BiSbSe₃: A Promising Thermoelectric Material with Multiple Conduction Bands. Advanced Functional Materials, 2019, 29, 1806558.	7.8	86
111	Wear behavior of HVOF-sprayed Al0.6TiCrFeCoNi high entropy alloy coatings at different temperatures. Surface and Coatings Technology, 2019, 358, 215-222.	2.2	86
112	Realizing High Thermoelectric Performance in p-Type SnSe through Crystal Structure Modification. Journal of the American Chemical Society, 2019, 141, 1141-1149.	6.6	137
113	Investigations on distinct thermoelectric transport behaviors of Cu in n-type PbS. Journal of Alloys and Compounds, 2019, 781, 820-830.	2.8	32
114	Highly Textured N-Type SnSe Polycrystals with Enhanced Thermoelectric Performance. Research, 2019, 2019, 9253132.	2.8	39
115	High performance of n-type (PbS)1-x-y(PbSe)x(PbTe)y thermoelectric materials. Journal of Alloys and Compounds, 2018, 744, 769-777.	2.8	29
116	Thermoelectric transport properties of Pbâ€“Snâ€“Teâ€“Se system. Rare Metals, 2018, 37, 343-350.	3.6	55
117	Remarkable electron and phonon band structures lead to a high thermoelectric performance ZT > 1 in earth-abundant and eco-friendly SnS crystals. Journal of Materials Chemistry A, 2018, 6, 10048-10056.	5.2	90
118	Thermoelectric transport properties of rock-salt SnSe: first-principles investigation. Journal of Materials Chemistry C, 2018, 6, 12016-12022.	2.7	43
119	High-performance SnSe thermoelectric materials: Progress and future challenge. Progress in Materials Science, 2018, 97, 283-346.	16.0	419
120	Anharmoncity and low thermal conductivity in thermoelectrics. Materials Today Physics, 2018, 4, 50-57.	2.9	242
121	Unusually large chemical potential shift in a degenerate semiconductor: Angle-resolved photoemission study of SnSe and Na-doped SnSe. Physical Review B, 2018, 97, .	1.1	13
122	Measuring nano-scale thermal conductivity. National Science Review, 2018, 5, 2-2.	4.6	3
123	Homologous layered InFeO3(ZnO) m : new promising abradable seal coating materials. Rare Metals, 2018, 37, 79-94.	3.6	28
124	Attempting to realize n-type BiCuSeO. Journal of Solid State Chemistry, 2018, 258, 510-516.	1.4	28
125	Highly-anisotropic optical and electrical properties in layered SnSe. Nano Research, 2018, 11, 554-564.	5.8	114
126	Large enhancement of electrical transport properties of SnS in the out-of-plane direction by n-type doping: a combined ARPES and DFT study. Journal of Materials Chemistry A, 2018, 6, 24588-24594.	5.2	22

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127	Effect of Heat Treatment on the Phase Composition, Microstructure and Mechanical Properties of Al0.6CrFeCoNi and Al0.6CrFeCoNiSi0.3 High-Entropy Alloys. Metals, 2018, 8, 974.	1.0	12
128	Investigations on electrical and thermal transport properties of Cu2SnSe3 with unusual coexisting nanophases. Materials Today Physics, 2018, 7, 77-88.	2.9	25
129	The Atomic Circus: Small Electron Beams Spotlight Advanced Materials Down to the Atomic Scale. Advanced Materials, 2018, 30, e1802402.	11.1	27
130	The Thermoelectric Properties of SnSe Continue to Surprise: Extraordinary Electron and Phonon Transport. Chemistry of Materials, 2018, 30, 7355-7367.	3.2	79
131	Charge and phonon transport in PbTe-based thermoelectric materials. Npj Quantum Materials, 2018, 3, .	1.8	227
132	Approaching Topological Insulating States Leads to High Thermoelectric Performance in n-Type PbTe. Journal of the American Chemical Society, 2018, 140, 13097-13102.	6.6	77
133	3D charge and 2D phonon transports leading to high out-of-plane ZT in n-type SnSe crystals. Science, 2018, 360, 778-783.	6.0	859
134	Synergistically optimizing electrical and thermal transport properties of n -type PbSe. Progress in Natural Science: Materials International, 2018, 28, 275-280.	1.8	5
135	Excellent ZT achieved in Cu_{1.8}S thermoelectric alloys through introducing rare-earth trichlorides. Journal of Materials Chemistry A, 2018, 6, 14440-14448.	5.2	39
136	Extraordinary thermoelectric performance in n-type manganese doped Mg3Sb2 Zintl: High band degeneracy, tuned carrier scattering mechanism and hierarchical microstructure. Nano Energy, 2018, 52, 246-255.	8.2	188
137	A mimetic transpiration system for record high conversion efficiency in solar steam generator under one-sun. Materials Today Energy, 2018, 8, 166-173.	2.5	145
138	Investigations into the Surface Strain/Stress State in a Single-Crystal Superalloy via XRD Characterization. Metals, 2018, 8, 376.	1.0	3
139	High temperature oxidation behavior of Al0.6CrFeCoNi and Al0.6CrFeCoNiSi0.3 high entropy alloys. Journal of Alloys and Compounds, 2018, 764, 845-852.	2.8	87
140	Realization of n-type and enhanced thermoelectric performance of p-type BiCuSeO by controlled iron incorporation. Journal of Materials Chemistry A, 2018, 6, 13340-13349.	5.2	44
141	Realizing high performance n-type PbTe by synergistically optimizing effective mass and carrier mobility and suppressing bipolar thermal conductivity. Energy and Environmental Science, 2018, 11, 2486-2495.	15.6	200
142	Influence of defects on the thermoelectricity in SnSe: A comprehensive theoretical study. Physical Review B, 2018, 97, .	1.1	53
143	Effect of long-term heat-treatment at 1150 Â°C on the microstructure and properties of thermal barrier coatings based on ZrO 2 â€“4 mol.% Y 2 O 3 â€“1 mol.% Gd 2 O 3 â€“1 mol.% Yb 2 O 3. Surface and Coatings Technology, 2017, 318, 142-146.	2.2	11
144	Understanding Phonon Scattering by Nanoprecipitates in Potassium-Doped Lead Chalcogenides. ACS Applied Materials & Interfaces, 2017, 9, 3686-3693.	4.0	6

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145	Thermoelectric transport properties of polycrystalline SnSe alloyed with PbSe. Applied Physics Letters, 2017, 110, .	1.5	52
146	Enhancing thermoelectric performance of n-type PbSe via additional meso-scale phonon scattering. Inorganic Chemistry Frontiers, 2017, 4, 719-726.	3.0	31
147	Thermoelectric transport properties of BaBiTe3-based materials. Journal of Solid State Chemistry, 2017, 249, 131-135.	1.4	3
148	Improvements of thermoelectric properties for p-type Cu_{1.8}S bulk materials via optimizing the mechanical alloying process. Inorganic Chemistry Frontiers, 2017, 4, 1192-1199.	3.0	26
149	Subtle Roles of Sb and S in Regulating the Thermoelectric Properties of Nâ€Type PbTe to High Performance. Advanced Energy Materials, 2017, 7, 1700099.	10.2	118
150	Boosting the Thermoelectric Performance of (Na,K)-Codoped Polycrystalline SnSe by Synergistic Tailoring of the Band Structure and Atomic-Scale Defect Phonon Scattering. Journal of the American Chemical Society, 2017, 139, 9714-9720.	6.6	168
151	Analysis of Nanoprecipitates in a Na-Doped PbTeâ€“SrTe Thermoelectric Material with a High Figure of Merit. ACS Applied Materials & Interfaces, 2017, 9, 21791-21797.	4.0	51
152	Record high thermoelectric performance in bulk SrTiO3 via nano-scale modulation doping. Nano Energy, 2017, 35, 387-395.	8.2	153
153	Effective dopants in p-type elementary Te thermoelectrics. RSC Advances, 2017, 7, 17682-17688.	1.7	24
154	Direct observation of vast off-stoichiometric defects in single crystalline SnSe. Nano Energy, 2017, 35, 321-330.	8.2	101
155	Enhancing thermoelectric performance of SnTe via nanostructuring particle size. Journal of Alloys and Compounds, 2017, 709, 575-580.	2.8	44
156	Effects of Sb Substitution by Sn on the Thermoelectric Properties of ZrCoSb. Journal of Electronic Materials, 2017, 46, 3076-3082.	1.0	19
157	Simultaneously enhancing the power factor and reducing the thermal conductivity of SnTe via introducing its analogues. Energy and Environmental Science, 2017, 10, 2420-2431.	15.6	116
158	Unexpected Large Hole Effective Masses in SnSe Revealed by Angle-Resolved Photoemission Spectroscopy. Physical Review Letters, 2017, 119, 116401.	2.9	47
159	Promising Thermoelectric Bulk Materials with 2D Structures. Advanced Materials, 2017, 29, 1702676.	11.1	228
160	Investigation on thermal transport and structural properties of InFeO 3 (ZnO) m with modulated layer structures. Acta Materialia, 2017, 136, 235-241.	3.8	18
161	Remarkable Roles of Cu To Synergistically Optimize Phonon and Carrier Transport in n-Type PbTe-Cu₂Te. Journal of the American Chemical Society, 2017, 139, 18732-18738.	6.6	230
162	Enhanced Electrical and Optoelectronic Characteristics of Few-Layer Type-II SnSe/MoS₂ van der Waals Heterojunctions. ACS Applied Materials & Interfaces, 2017, 9, 42149-42155.	4.0	54

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163	Synergistically optimizing thermoelectric transport properties of n-type PbTe via Se and Sn co-alloying. Journal of Alloys and Compounds, 2017, 724, 208-221.	2.8	59
164	Mercouri G. Kanatzidis: Excellence and Innovations in Inorganic and Solid-State Chemistry. Inorganic Chemistry, 2017, 56, 7582-7597.	1.9	7
165	Emulating Bilingual Synaptic Response Using a Junction-Based Artificial Synaptic Device. ACS Nano, 2017, 11, 7156-7163.	7.3	106
166	Influence of long time post annealing on thermal stability and thermophysical properties of plasma sprayed La2Zr2O7 coatings. Journal of Alloys and Compounds, 2017, 695, 2549-2555.	2.8	21
167	Integrating Band Structure Engineering with Allâ€Scale Hierarchical Structuring for High Thermoelectric Performance in PbTe System. Advanced Energy Materials, 2017, 7, 1601450.	10.2	157
168	BiCuSeO Thermoelectrics: An Update on Recent Progress and Perspective. Materials, 2017, 10, 198.	1.3	70
169	Investigation into the extremely low thermal conductivity in Ba heavily doped BiCuSeO. Nano Energy, 2016, 27, 167-174.	8.2	40
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