Xun Shi

List of Publications by Year
in descending order

245	19,678	14124 69	14386 132
papers	citations	h-index	g-index

252	252	252	9734
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Entropy engineering induced exceptional thermoelectric and mechanical performances in Cu2-Ag Te1-2S Se. Acta Materialia, 2022, 224, 117512.	3.8	36
2	Enhanced thermal stability and oxidation resistance in La3-Te4 by compositing metallic nickel particles. Acta Materialia, 2022, 224, 117526.	3.8	6
3	Phase-modulated mechanical and thermoelectric properties of Ag2S1-xTex ductile semiconductors. Journal of Materiomics, 2022, 8, 656-661.	2.8	31
4	Novel meta-phase arising from large atomic size mismatch. Matter, 2022, 5, 605-615.	5.0	20
5	A Fully Flexible Intelligent Thermal Touch Panel Based on Intrinsically Plastic Ag₂S Semiconductor. Advanced Materials, 2022, 34, e2107479.	11.1	23
6	Key properties of inorganic thermoelectric materialsâ€”tables (version 1). JPhys Energy, 2022, 4, 022002.	2.3	51
7	Towards a better understanding of the forming and resistive switching behavior of Ti-doped HfO_{<i>x</i>} RRAM. Journal of Materials Chemistry C, 2022, 10, 5896-5904.	2.7	16
8	Thermoelectric Performance Optimization of n-Type La3âˆ’xSmxTe4/Ni Composites via Sm Doping. Energies, 2022, 15, 2353.	1.6	1
9	Exceptionally Heavy Doping Boosts the Performance of Iron Silicide for Refractory Thermoelectrics. Advanced Energy Materials, 2022, 12, .	10.2	17
10	Structural Modularization of Cu₂Te Leading to High Thermoelectric Performance near the Mottâ€“Ioffeâ€“Regel Limit. Advanced Materials, 2022, 34, e2108573.	11.1	20
11	Phase Transition Behaviors and Thermoelectric Properties of CuAgTe_{1â€“<i>x</i>}Se_{<i>x</i>} near 400 K. ACS Applied Materials & Interfaces, 2022, 14, 1015-1023.	4.0	6
12	High-Throughput Screening for Thermoelectric Semiconductors with Desired Conduction Types by Energy Positions of Band Edges. Journal of the American Chemical Society, 2022, 144, 8030-8037.	6.6	13
13	Considering the Role of Ion Transport in Diffusonâ€Dominated Thermal Conductivity. Advanced Energy Materials, 2022, 12, .	10.2	27
14	High Performance Full-Inorganic Flexible Memristor with Combined Resistance-Switching. ACS Applied Materials & Interfaces, 2022, 14, 21173-21180.	4.0	21
15	Impact of oxygen concentration at the HfOx/Ti interface on the behavior of HfOx filamentary memristors. Journal of Materials Science, 2022, 57, 9299-9311.	1.7	8
16	High-Performance and Stable (Ag, Cd)-Containing ZnSb Thermoelectric Compounds. ACS Applied Materials & Interfaces, 2022, 14, 26662-26670.	4.0	6
17	Data-driven discovery of high-performance multicomponent solid solution thermoelectric materials. Materials Today Energy, 2022, 28, 101070.	2.5	1
18	Roomâ€temperature plastic inorganic semiconductors for flexible and deformable electronics. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 22-35.	8.5	55

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19	Creep behavior and post-creep thermoelectric performance of the n-type Skutterudite alloy Yb0.3Co4Sb12. Journal of Materiomics, 2021, 7, 89-97.	2.8	9
20	Organic thermoelectric materials. , 2021, , 183-219.		9
21	Design and fabrication of thermoelectric devices. , 2021, , 221-267.		2
22	Strategies to optimize thermoelectric performance. , 2021, , 19-50.		1
23	Measurement of thermoelectric properties. , 2021, , 51-80.		0
24	Review of inorganic thermoelectric materials. , 2021, , 81-145.		1
25	Thermopower and harvesting heat. Science, 2021, 371, 343-344.	6.0	80
26	Application of Entropy Engineering in Thermoelectrics. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2021, 36, 347.	0.6	11
27	High efficiency GeTe-based materials and modules for thermoelectric power generation. Energy and Environmental Science, 2021, 14, 995-1003.	15.6	101
28	Ductile Ag₂₀S₇Te₃ with Excellent Shapeâ€Conformability and High Thermoelectric Performance. Advanced Materials, 2021, 33, e2007681.	11.1	65
29	Ultralow Lattice Thermal Conductivity and Superhigh Thermoelectric Figureâ€ofâ€Merit in (Mg, Bi) Coâ€Doped GeTe. Advanced Materials, 2021, 33, e2008773.	11.1	112
30	Effect of Cu-doping on the magnetic and electrical transport properties of three-quarter Heusler alloy ZrCo1.5Sn. Journal of Applied Physics, 2021, 129, 125106.	1.1	3
31	Parallel Dislocation Networks and Cottrell Atmospheres Reduce Thermal Conductivity of PbTe Thermoelectrics. Advanced Functional Materials, 2021, 31, 2101214.	7.8	41
32	pâ€Type Plastic Inorganic Thermoelectric Materials. Advanced Energy Materials, 2021, 11, 2100883.	10.2	40
33	Quantifying charge carrier localization in chemically doped semiconducting polymers. Nature Materials, 2021, 20, 1414-1421.	13.3	61
34	Recent Developments in Flexible Thermoelectric Devices. Small Science, 2021, 1, 2100005.	5.8	74
35	Thermoelectric materials with crystal-amorphicity duality induced by large atomic size mismatch. Joule, 2021, 5, 1183-1195.	11.7	27
36	Uncovering design principles for amorphous-like heat conduction using two-channel lattice dynamics. Materials Today Physics, 2021, 18, 100344.	2.9	42

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37	Thermal Transport across Metal/Î²-Ga₂O₃ Interfaces. ACS Applied Materials & Interfaces, 2021, 13, 29083-29091.	4.0	21
38	Thermoelectrics: pâ€Type Plastic Inorganic Thermoelectric Materials (Adv. Energy Mater. 23/2021). Advanced Energy Materials, 2021, 11, 2170086.	10.2	4
39	Nano-scale compositional oscillation and phase intergrowth in Cu2S0.5Se0.5 and their role in thermal transport. Journal of Materials Science and Technology, 2021, 79, 222-229.	5.6	3
40	Novel Ultrahigh-Performance ZnO-Based Varistor Ceramics. ACS Applied Materials & Interfaces, 2021, 13, 35924-35929.	4.0	22
41	Atomic size mismatch: What if it is too large?. Matter, 2021, 4, 2618-2619.	5.0	3
42	Accelerating the Discovery of Cuâ€“Snâ€“S Thermoelectric Compounds via High-Throughput Synthesis, Characterization, and Machine Learning-Assisted Image Analysis. Chemistry of Materials, 2021, 33, 6918-6924.	3.2	8
43	Investigation on Low-Temperature Thermoelectric Properties of Ag₂Se Polycrystal Fabricated by Using Zone-Melting Method. Journal of Physical Chemistry Letters, 2021, 12, 8246-8255.	2.1	37
44	Thermoreflectance Imaging of (Ultra)wide Band-Gap Devices with MoS₂ Enhancement Coatings. ACS Applied Materials & Interfaces, 2021, 13, 42195-42204.	4.0	7
45	Enhanced thermoelectric performance in ductile Ag2S-based materials via doping iodine. Applied Physics Letters, 2021, 119, .	1.5	22
46	Thermal transport in defective and disordered materials. Applied Physics Reviews, 2021, 8, .	5.5	45
47	Intrinsic lamellar defects containing atomic Cu in Cu₂X (X = S, Se) thermoelectric materials. Journal of Materials Chemistry C, 2021, 9, 4173-4181.	2.7	7
48	Low-dimensional and nanocomposite thermoelectric materials. , 2021, , 147-182.		0
49	A low-cost and eco-friendly Br-doped Cu₇Sn₃S₁₀ thermoelectric compound with <i>zT</i> around unity. Journal of Materials Chemistry A, 2021, 9, 7946-7954.	5.2	23
50	Efficient lanthanide Gd doping promoting the thermoelectric performance of Mg₃Sb₂-based materials. Journal of Materials Chemistry A, 2021, 9, 25944-25953.	5.2	19
51	Thermoelectric properties and service stability of Ag-containing Cu2Se. Materials Today Physics, 2021, 21, 100550.	2.9	15
52	Sprayable Î²-FeSi2 composite hydrogel for portable skin tumor treatment and wound healing. Biomaterials, 2021, 279, 121225.	5.7	43
53	High-performance n-type Ta₄SiTe₄/polyvinylidene fluoride (PVDF)/graphdiyne organicâ€“inorganic flexible thermoelectric composites. Energy and Environmental Science, 2021, 14, 6586-6594.	15.6	19
54	Thermoelectric Ag₂Se: Imperfection, Homogeneity, and Reproducibility. ACS Applied Materials & Interfaces, 2021, 13, 60192-60199.	4.0	28

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55	Enhanced Thermoelectric Properties of Cu_xSe (1.75â‰ x â‰2.10) during Phase Transitions. Chinese Physics Letters, 2021, 38, 117201.	1.3	7
56	Decoupling Thermoelectric Performance and Stability in Liquidâ€Like Thermoelectric Materials. Advanced Science, 2020, 7, 1901598.	5.6	36
57	Recent Advances in Liquidâ€Like Thermoelectric Materials. Advanced Functional Materials, 2020, 30, 1903867.	7.8	148
58	Conformal organicâ€"inorganic semiconductor composites for flexible thermoelectrics. Energy and Environmental Science, 2020, 13, 511-518.	15.6	67
59	A combined experiment and first-principles study on lattice dynamics of thermoelectric CuInTe2. Journal of Alloys and Compounds, 2020, 822, 153610.	2.8	14
60	Crystal Structure and Thermoelectric Properties of Cu₂Fe_{1â€"<i>x</i>}Mn_{<i>x</i>}SnSe₄ Diamond-like Chalcogenides. ACS Applied Energy Materials, 2020, 3, 2137-2146.	2.5	15
61	Enhanced Thermoelectric Performance and Service Stability of Cu₂Se Via Tailoring Chemical Compositions at Multiple Atomic Positions. Advanced Functional Materials, 2020, 30, 1908315.	7.8	46
62	Exceptional plasticity in the bulk single-crystalline van der Waals semiconductor InSe. Science, 2020, 369, 542-545.	6.0	163
63	Discovery of high-performance thermoelectric copper chalcogenide using modified diffusion-couple high-throughput synthesis and automated histogram analysis technique. Energy and Environmental Science, 2020, 13, 3041-3053.	15.6	43
64	Ternary Compounds Cu₃<i>R</i>Te₃ (<i>R</i> = Y, Sm, and Dy): A Family of New Thermoelectric Materials with Trigonal Structures. ACS Applied Materials & Interfaces, 2020, 12, 40486-40494.	4.0	3
65	Cu₂Se-Based liquid-like thermoelectric materials: looking back and stepping forward. Energy and Environmental Science, 2020, 13, 3307-3329.	15.6	106
66	Electrode interface optimization advances conversion efficiency and stability of thermoelectric devices. Nature Communications, 2020, 11, 2723.	5.8	101
67	Good stability and high thermoelectric performance of Fe doped Cu_{1.80}S. Physical Chemistry Chemical Physics, 2020, 22, 7374-7380.	1.3	22
68	The orderâ€"disorder transition in Cu₂Se and medium-range ordering in the high-temperature phase. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2020, 76, 201-207.	0.5	11
69	Interfacial behaviors of p-type CeyFexCo4â€"xSb12/Nb thermoelectric joints. Functional Materials Letters, 2020, 13, 2051020.	0.7	2
70	Analytical Models of Phononâ€"Point-Defect Scattering. Physical Review Applied, 2020, 13, .	1.5	55
71	Electronic origin of the enhanced thermoelectric efficiency of Cu2Se. Science Bulletin, 2020, 65, 1888-1893.	4.3	11
72	Number mismatch between cations and anions as an indicator for low lattice thermal conductivity in chalcogenides. Npj Computational Materials, 2020, 6, .	3.5	13

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73	Anion-site-modulated thermoelectric properties in Ge2Sb2Te5-based compounds. Rare Metals, 2020, 39, 1127-1133.	3.6	12
74	Doubled Thermoelectric Figure of Merit in p-Type Î²-FeSi₂ via Synergistically Optimizing Electrical and Thermal Transports. ACS Applied Materials & Interfaces, 2020, 12, 12901-12909.	4.0	21
75	Cu3ErTe3: a new promising thermoelectric material predicated by high-throughput screening. Materials Today Physics, 2020, 12, 100180.	2.9	20
76	Thermoelectric Properties of Nanoâ€grained Mooihoekite Cu₉Fe₉S₁₆. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2020, 646, 1116-1121.	0.6	11
77	Alloy scattering of phonons. Materials Horizons, 2020, 7, 1452-1456.	6.4	39
78	Crystalline Structure-Dependent Mechanical and Thermoelectric Performance in Ag2Se1â€xSx System. Research, 2020, 2020, 6591981.	2.8	55
79	Thermal Conductivity during Phase Transitions. Advanced Materials, 2019, 31, e1806518.	11.1	80
80	Copper chalcogenide thermoelectric materials. Science China Materials, 2019, 62, 8-24.	3.5	111
81	Ru Alloying Induced Enhanced Thermoelectric Performance in FeSi2-Based Compounds. ACS Applied Materials & Interfaces, 2019, 11, 32151-32158.	4.0	17
82	Ultralow Thermal Conductivity and High-Temperature Thermoelectric Performance in n-Type K_{2.5}Bi_{8.5}Se₁₄. Chemistry of Materials, 2019, 31, 5943-5952.	3.2	25
83	High-Efficiency and Stable Thermoelectric Module Based on Liquid-Like Materials. Joule, 2019, 3, 1538-1548.	11.7	126
84	Are Cu₂Teâ€Based Compounds Excellent Thermoelectric Materials?. Advanced Materials, 2019, 31, e1903480.	11.1	72
85	Largely Enhanced Seebeck Coefficient and Thermoelectric Performance by the Distortion of Electronic Density of States in Ge₂Sb₂Te₅. ACS Applied Materials & Interfaces, 2019, 11, 34046-34052.	4.0	38
86	Flexible thermoelectrics: from silver chalcogenides to full-inorganic devices. Energy and Environmental Science, 2019, 12, 2983-2990.	15.6	188
87	Thermoelectric properties of non-stoichiometric Cu2+<i>x</i>Sn1â^'<i>x</i>S3 compounds. Journal of Applied Physics, 2019, 126, .	1.1	35
88	Lattice dynamics of thermoelectric palladium sulfide. Journal of Alloys and Compounds, 2019, 798, 484-492.	2.8	11
89	Flexible Thermoelectric Materials and Generators: Challenges and Innovations. Advanced Materials, 2019, 31, e1807916.	11.1	419
90	Ultrahigh figureâ€ofâ€merit of Cu₂Se incorporated with carbon coated boron nanoparticles. InformaÄnÃ-MateriÃ¡ly, 2019, 1, 108-115.	8.5	47

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91	Thermodynamics, kinetics and electronic properties of point defects in Î²-FeSi₂. Physical Chemistry Chemical Physics, 2019, 21, 10497-10504.	1.3	15
92	Enhanced Thermoelectric Performance of Quaternary Cu_{2â€“2<i>x</i>}Ag_{2<i>x</i>}Se_{1â€“<i>x</i>}S<i>_x</i> Liquid-like Chalcogenides. ACS Applied Materials & Interfaces, 2019, 11, 13433-13440.	4.0	38
93	Thermoelectric properties of n-type Cu₄Sn₇S₁₆-based compounds. RSC Advances, 2019, 9, 7826-7832.	1.7	26
94	Nanoscale pores plus precipitates rendering high-performance thermoelectric SnTe1-xSex with refined band structures. Nano Energy, 2019, 60, 1-7.	8.2	86
95	Aguilarite Ag₄SSe Thermoelectric Material: Natural Mineral with Low Lattice Thermal Conductivity. ACS Applied Materials & Interfaces, 2019, 11, 12632-12638.	4.0	30
96	Lattice Softening Significantly Reduces Thermal Conductivity and Leads to High Thermoelectric Efficiency. Advanced Materials, 2019, 31, e1900108.	11.1	171
97	Superior performance and high service stability for GeTe-based thermoelectric compounds. National Science Review, 2019, 6, 944-954.	4.6	96
98	Quasi-two-dimensional GeSbTe compounds as promising thermoelectric materials with anisotropic transport properties. Applied Physics Letters, 2019, 114, .	1.5	23
99	Nanoscale Behavior and Manipulation of the Phase Transition in Singleâ€Crystal Cu₂Se. Advanced Materials, 2019, 31, e1804919.	11.1	31
100	Thermoelectric properties of Ag₂S superionic conductor with intrinsically low lattice thermal conductivity. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 090201.	0.2	25
101	Improved electrical transport properties and optimized thermoelectric figure of merit in lithium-doped copper sulfides. Rare Metals, 2018, 37, 282-289.	3.6	27
102	Significantly optimized thermoelectric properties in high-symmetry cubic Cu₇PSe₆compounds<i>via</i>entropy engineering. Journal of Materials Chemistry A, 2018, 6, 6493-6502.	5.2	55
103	Improved Thermoelectric Performance in Nonstoichiometric Cu_{2+Î´}Mn_{1â^'Î´}SnSe₄ Quaternary Diamondlike Compounds. ACS Applied Materials & Interfaces, 2018, 10, 10123-10131.	4.0	24
104	Thermoelectric properties of polycrystalline palladium sulfide. RSC Advances, 2018, 8, 13154-13158.	1.7	14
105	Multiple phase transitions and structural oscillations in thermoelectric Cu2S at elevating temperatures. Ceramics International, 2018, 44, 13076-13081.	2.3	10
106	Room-temperature ductile inorganic semiconductor. Nature Materials, 2018, 17, 421-426.	13.3	262
107	Minimum thermal conductivity in the context of <i>diffuson</i>-mediated thermal transport. Energy and Environmental Science, 2018, 11, 609-616.	15.6	221
108	Intrinsically High Thermoelectric Performance in AgInSe₂ nâ€Type Diamondâ€Like Compounds. Advanced Science, 2018, 5, 1700727.	5.6	66

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109	Thermoelectric properties of Cu₂Se_{1âˆ’x}Te_x solid solutions. Journal of Materials Chemistry A, 2018, 6, 6977-6986.	5.2	70
110	Pressure-induced superconductivity in palladium sulfide. Journal of Physics Condensed Matter, 2018, 30, 155703.	0.7	8
111	Synthesis and Thermoelectric Properties of Charge-Compensated S_{<i>y</i>}Pd_{<i>x</i>}Co_{4â€“<i>x</i>}Sb₁₂ Skutterudites. ACS Applied Materials & Interfaces, 2018, 10, 625-634.	4.0	28
112	How to Measure Thermoelectric Properties Reliably. Joule, 2018, 2, 2183-2188.	11.7	65
113	Phonon diffraction and dimensionality crossover in phonon-interface scattering. Communications Physics, 2018, 1, .	2.0	28
114	Pressure-induced enhancement of thermoelectric performance in palladium sulfide. Materials Today Physics, 2018, 5, 64-71.	2.9	28
115	Pressure-induced structural phase transition and electrical properties of Cu2S. Journal of Alloys and Compounds, 2018, 766, 813-817.	2.8	3
116	Discovery of High-Performance Thermoelectric Chalcogenides through Reliable High-Throughput Material Screening. Journal of the American Chemical Society, 2018, 140, 10785-10793.	6.6	134
117	Suppression of atom motion and metal deposition in mixed ionic electronic conductors. Nature Communications, 2018, 9, 2910.	5.8	148
118	Phonon anharmonicity in thermoelectric palladium sulfide by Raman spectroscopy. Applied Physics Letters, 2018, 113, .	1.5	27
119	Meltâ€Centrifuged (Bi,Sb)₂Te₃: Engineering Microstructure toward High Thermoelectric Efficiency. Advanced Materials, 2018, 30, e1802016.	11.1	133
120	Giant enhancement of the figure-of-merit over a broad temperature range in nano-boron incorporated Cu₂Se. Journal of Materials Chemistry A, 2018, 6, 18409-18416.	5.2	49
121	Understanding the Intrinsic Carrier Transport in Highly Oriented Poly(3-hexylthiophene): Effect of Side Chain Regioregularity. Polymers, 2018, 10, 815.	2.0	17
122	Observation of High Seebeck Coefficient and Low Thermal Conductivity in [SrO]-Intercalated CuSbSe2 Compound. Chemistry of Materials, 2018, 30, 5539-5543.	3.2	23
123	Enhanced Thermoelectric Performance in n-Type Bi₂Te₃-Based Alloys via Suppressing Intrinsic Excitation. ACS Applied Materials & Interfaces, 2018, 10, 21372-21380.	4.0	76
124	Entropy optimized phase transitions and improved thermoelectric performance in n-type liquid-like Ag9GaSe6 materials. Materials Today Physics, 2018, 5, 20-28.	2.9	70
125	The â€œelectron crystalâ€• behavior in copper chalcogenides Cu₂X (X = Se, S). Journal of Materials Chemistry A, 2017, 5, 5098-5105.	5.2	81
126	Lattice Dislocations Enhancing Thermoelectric PbTe in Addition to Band Convergence. Advanced Materials, 2017, 29, 1606768.	11.1	365

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127	Strong anisotropy in thermoelectric properties of CNT/PANI composites. Carbon, 2017, 114, 1-7.	5.4	69
128	Compound Defects and Thermoelectric Properties of Self-Charge Compensated Skutterudites Se_{<i>y</i>}Co₄Sb_{12â€“<i>x</i>}Se_{<i>x</i>}. ACS Applied Materials & Interfaces, 2017, 9, 22713-22724.	4.0	27
129	Thermoelectric properties of copper-deficient Cu2-Se (0.05 â‰ x â‰ 0.25) binary compounds. Ceramics International, 2017, 43, 11142-11148.	2.3	67
130	Crystal structure across the Î² to Î± phase transition in thermoelectric Cu_{2âˆ’<i>x</i>}Se. IUCrJ, 2017, 4, 476-485.	1.0	65
131	Ultrahigh Thermoelectric Performance in SrNb_{0.2}Ti_{0.8}O₃ Oxide Films at a Submicrometer-Scale Thickness. ACS Energy Letters, 2017, 2, 915-921.	8.8	21
132	Realizing a thermoelectric conversion efficiency of 12% in bismuth telluride/skutterudite segmented modules through full-parameter optimization and energy-loss minimized integration. Energy and Environmental Science, 2017, 10, 956-963.	15.6	274
133	Multiple nanostructures in high performance Cu2S0.5Te0.5 thermoelectric materials. Ceramics International, 2017, 43, 7866-7869.	2.3	20
134	Vacancy-induced dislocations within grains for high-performance PbSe thermoelectrics. Nature Communications, 2017, 8, 13828.	5.8	360
135	A Chemical Understanding of the Band Convergence in Thermoelectric CoSb₃ Skutterudites: Influence of Electron Population, Local Thermal Expansion, and Bonding Interactions. Chemistry of Materials, 2017, 29, 1156-1164.	3.2	50
136	Cu₈GeSe₆-based thermoelectric materials with an argyrodite structure. Journal of Materials Chemistry C, 2017, 5, 943-952.	2.7	93
137	An argyrodite-type Ag₉GaSe₆ liquid-like material with ultralow thermal conductivity and high thermoelectric performance. Chemical Communications, 2017, 53, 11658-11661.	2.2	84
138	Solidâ€State Explosive Reaction for Nanoporous Bulk Thermoelectric Materials. Advanced Materials, 2017, 29, 1701148.	11.1	110
139	High thermoelectric performance and low thermal conductivity in Cu2âˆ’yS1/3Se1/3Te1/3 liquid-like materials with nanoscale mosaic structures. Nano Energy, 2017, 42, 43-50.	8.2	73
140	Significant enhancement of figure-of-merit in carbon-reinforced Cu2Se nanocrystalline solids. Nano Energy, 2017, 41, 164-171.	8.2	103
141	Ultrahigh thermoelectric performance in Cu 2âˆ’y Se 0.5 S 0.5 liquid-like materials. Materials Today Physics, 2017, 1, 14-23.	2.9	130
142	Enhanced Thermoelectric Performance through Tuning Bonding Energy in Cu₂Se_{1â€“<i>x</i>}S_{<i>x</i>} Liquid-like Materials. Chemistry of Materials, 2017, 29, 6367-6377.	3.2	179
143	Enhanced stability and thermoelectric figure-of-merit in copper selenide by lithium doping. Materials Today Physics, 2017, 1, 7-13.	2.9	93
144	Ultrahigh thermoelectric performance in Cu₂Se-based hybrid materials with highly dispersed molecular CNTs. Energy and Environmental Science, 2017, 10, 1928-1935.	15.6	298

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145	Extremely low thermal conductivity and high thermoelectric performance in liquid-like Cu₂Se_{1âˆ’x}S_x polymorphic materials. Journal of Materials Chemistry A, 2017, 5, 18148-18156.	5.2	86
146	Entropy as a Geneâ€Like Performance Indicator Promoting Thermoelectric Materials. Advanced Materials, 2017, 29, 1702712.	11.1	218
147	Suppressed intrinsic excitation and enhanced thermoelectric performance in Ag_xBi_{0.5}Sb_{1.5âˆ’x}Te₃. Journal of Materials Chemistry C, 2017, 5, 12619-12628.	2.7	49
148	Skutterudite with graphene-modified grain-boundary complexion enhances zT enabling high-efficiency thermoelectric device. Energy and Environmental Science, 2017, 10, 183-191.	15.6	252
149	Study on the High Temperature Interfacial Stability of Ti/Mo/Yb0.3Co4Sb12 Thermoelectric Joints. Applied Sciences (Switzerland), 2017, 7, 952.	1.3	14
150	Roles of Cu in the Enhanced Thermoelectric Properties in Bi0.5Sb1.5Te3. Materials, 2017, 10, 251.	1.3	51
151	Thermoelectric Devices for Power Generation: Recent Progress and Future Challenges. Advanced Engineering Materials, 2016, 18, 194-213.	1.6	307
152	On the tuning of electrical and thermal transport in thermoelectrics: an integrated theoryâ€“experiment perspective. Npj Computational Materials, 2016, 2, .	3.5	399
153	Designing high-performance layered thermoelectric materials through orbital engineering. Nature Communications, 2016, 7, 10892.	5.8	203
154	Electrical and thermal transports of binary copper sulfides Cu<i>x</i>S with <i>x</i> from 1.8 to 1.96. APL Materials, 2016, 4, .	2.2	59
155	Structure family and polymorphous phase transition in the compounds with soft sublattice: Cu2Se as an example. Journal of Chemical Physics, 2016, 144, 194502.	1.2	35
156	Electrical transportation performances of Nbâ€“SrTiO3 regulated by the anion related chemical atmospheres. Materials and Design, 2016, 97, 7-12.	3.3	4
157	Enhanced thermoelectric performance in rare-earth filled-skutterudites. Journal of Materials Chemistry C, 2016, 4, 4374-4379.	2.7	31
158	Thermoelectric performance of Cu_{1âˆ’xâˆ’Î´}Ag_xInTe₂ diamond-like materials with a pseudocubic crystal structure. Inorganic Chemistry Frontiers, 2016, 3, 1167-1177.	3.0	44
159	High efficiency Bi₂Te₃-based materials and devices for thermoelectric power generation between 100 and 300 Â°C. Energy and Environmental Science, 2016, 9, 3120-3127.	15.6	358
160	Quaternary Pseudocubic Cu₂TMSnSe₄ (TM = Mn, Fe, Co) Chalcopyrite Thermoelectric Materials. Advanced Electronic Materials, 2016, 2, 1600312.	2.6	39
161	Thermoelectric materials step up. Nature Materials, 2016, 15, 691-692.	13.3	236
162	Non-epitaxial pulsed laser deposition of Ag2Se thermoelectric thin films for near-room temperature applications. Ceramics International, 2016, 42, 12490-12495.	2.3	34

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163	Recent advances in high-performance bulk thermoelectric materials. International Materials Reviews, 2016, 61, 379-415.	9.4	394
164	Reduction of thermal conductivity by low energy multi-Einstein optic modes. Journal of Materiomics, 2016, 2, 187-195.	2.8	53
165	Optimized thermoelectric properties in pseudocubic diamond-like CuGaTe₂ compounds. Journal of Materials Chemistry A, 2016, 4, 1277-1289.	5.2	57
166	Cu-based thermoelectric materials. Energy Storage Materials, 2016, 3, 85-97.	9.5	247
167	Dislocation strain as the mechanism of phonon scattering at grain boundaries. Materials Horizons, 2016, 3, 234-240.	6.4	108
168	Photo-induced enhancement of the power factor of Cu2S thermoelectric films. Scientific Reports, 2015, 5, 16291.	1.6	26
169	Self-limited kinetics of electron doping in correlated oxides. Applied Physics Letters, 2015, 107, .	1.5	24
170	Electrical and thermal transport properties of Y b<i>x</i>Co4Sb12 filled skutterudites with ultrahigh carrier concentrations. AIP Advances, 2015, 5, .	0.6	31
171	Ultrahigh Thermoelectric Performance in Mosaic Crystals. Advanced Materials, 2015, 27, 3639-3644.	11.1	195
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