

Jiehe Sui

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101
papers

3,781
citations

29
h-index

60
g-index

108
ext. papers

4,677
ext. citations

10.4
avg, IF

5.5
L-index

#	Paper	IF	Citations
101	A high thermoelectric figure of merit $ZT > 1$ in Ba heavily doped BiCuSeO oxyselenides. <i>Energy and Environmental Science</i> , 2012 , 5, 8543	35.4	292
100	Texturation boosts the thermoelectric performance of BiCuSeO oxyselenides. <i>Energy and Environmental Science</i> , 2013 , 6, 2916	35.4	273
99	MoSe ₂ nanosheets perpendicularly grown on graphene with Mo π bonding for sodium-ion capacitors. <i>Nano Energy</i> , 2018 , 47, 224-234	17.1	270
98	High thermoelectric performance of MgAgSb-based materials. <i>Nano Energy</i> , 2014 , 7, 97-103	17.1	197
97	Grain Boundary Engineering for Achieving High Thermoelectric Performance in n-Type Skutterudites. <i>Advanced Energy Materials</i> , 2017 , 7, 1602582	21.8	146
96	Thermoelectric properties of Mg doped p-type BiCuSeO oxyselenides. <i>Journal of Alloys and Compounds</i> , 2013 , 551, 649-653	5.7	131
95	Phase-transition temperature suppression to achieve cubic GeTe and high thermoelectric performance by Bi and Mn codoping. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 5332-5337	11.5	130
94	Lamellar MoSe nanosheets embedded with MoO nanoparticles: novel hybrid nanostructures promoted excellent performances for lithium ion batteries. <i>Nanoscale</i> , 2016 , 8, 17902-17910	7.7	129
93	Extraordinary thermoelectric performance in n-type manganese doped Mg ₃ Sb ₂ Zintl: High band degeneracy, tuned carrier scattering mechanism and hierarchical microstructure. <i>Nano Energy</i> , 2018 , 52, 246-255	17.1	117
92	The roles of Na doping in BiCuSeO oxyselenides as a thermoelectric material. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 4903	13	116
91	Design of coherent anode materials with 0D Ni ₃ S ₂ nanoparticles self-assembled on 3D interconnected carbon networks for fast and reversible sodium storage. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 7394-7402	13	112
90	Facile synthesis of MWCNT π -nFe ₂ O ₄ nanocomposites as anode materials for lithium ion batteries. <i>Journal of Materials Chemistry</i> , 2012 , 22, 13674		110
89	Higher thermoelectric performance of Zintl phases (Eu _{0.5} Yb _{0.5}) _{1-x} CaxMg ₂ Bi ₂ by band engineering and strain fluctuation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, E4125-32	11.5	109
88	Lithium Doping to Enhance Thermoelectric Performance of MgAgSb with Weak Electron-Phonon Coupling. <i>Advanced Energy Materials</i> , 2016 , 6, 1502269	21.8	96
87	Thermoelectric SnTe with Band Convergence, Dense Dislocations, and Interstitials through Sn Self-Compensation and Mn Alloying. <i>Small</i> , 2018 , 14, e1802615	11	96
86	High thermoelectric performance of δ -MgAgSb for power generation. <i>Energy and Environmental Science</i> , 2018 , 11, 23-44	35.4	94
85	Thermoelectric properties of Na-doped Zintl compound: Mg ₃ NaSb ₂ . <i>Acta Materialia</i> , 2015 , 93, 187-193	8.4	91

84	Thermoelectric properties of Bi-based Zintl compounds $\text{Ca}_{1-x}\text{Yb}_x\text{Mg}_2\text{Bi}_2$. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 4312-4320	13	69
83	Zintl-phase EuZnSb : A promising thermoelectric material with ultralow thermal conductivity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 2831-2836	11.5	59
82	High thermoelectric performance in n-type BiAgSeS due to intrinsically low thermal conductivity. <i>Energy and Environmental Science</i> , 2013 , 6, 1750	35.4	59
81	Tellurium doped n-type Zintl $\text{Zr}_3\text{Ni}_3\text{Sb}_4$ thermoelectric materials: Balance between carrier-scattering mechanism and bipolar effect. <i>Materials Today Physics</i> , 2017 , 2, 54-61	8	56
80	Improved thermoelectric performance of p-type $\text{Bi}_{0.5}\text{Sb}_{1.5}\text{Te}_3$ through Mn doping at elevated temperature. <i>Materials Today Physics</i> , 2018 , 6, 31-37	8	56
79	Enhancement of thermoelectric performance of phase pure Zintl compounds $\text{Ca}_{1-x}\text{Bi}_x\text{Zn}_2\text{Sb}_2$, $\text{Ca}_{1-x}\text{Eu}_x\text{Zn}_2\text{Sb}_2$, and $\text{Eu}_{1-x}\text{Bi}_x\text{Zn}_2\text{Sb}_2$ by mechanical alloying and hot pressing. <i>Nano Energy</i> , 2016 , 25, 136-144	17.1	54
78	Understanding and manipulating the intrinsic point defect in MgAgSb for higher thermoelectric performance. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 16834-16840	13	39
77	Design of High-Performance Disordered Half-Heusler Thermoelectric Materials Using 18-Electron Rule. <i>Advanced Functional Materials</i> , 2019 , 29, 1905044	15.6	38
76	Effects of antimony content in $\text{MgAg}_{0.97}\text{Sb}_x$ on output power and energy conversion efficiency. <i>Acta Materialia</i> , 2016 , 102, 17-23	8.4	37
75	Towards tellurium-free thermoelectric modules for power generation from low-grade heat. <i>Nature Communications</i> , 2021 , 12, 1121	17.4	36
74	High-Performance N-type Mg_3Sb_2 towards Thermoelectric Application near Room Temperature. <i>Advanced Functional Materials</i> , 2020 , 30, 1906143	15.6	33
73	Enhanced shape memory effect of poly(L-lactide-co- ϵ -caprolactone) biodegradable copolymer reinforced with functionalized MWCNTs. <i>Journal of Polymer Research</i> , 2012 , 19, 1	2.7	30
72	Simultaneous Boost of Power Factor and Figure-of-Merit in In-Cu Codoped SnTe . <i>Small</i> , 2019 , 15, e1902493	11.3	29
71	Enhanced Thermoelectric and Mechanical Properties in $\text{Yb}_{0.3}\text{Co}_4\text{Sb}_{12}$ with In Situ Formed CoSi Nanoprecipitates. <i>Advanced Energy Materials</i> , 2019 , 9, 1902435	21.8	29
70	Preparation of multi-walled carbon nanotube-reinforced TiNi matrix composites from elemental powders by spark plasma sintering. <i>Rare Metals</i> , 2012 , 31, 48-50	5.5	28
69	Enhanced thermoelectric performance of p-type filled skutterudites via the coherency strain fields from spinodal decomposition. <i>Acta Materialia</i> , 2015 , 98, 405-415	8.4	26
68	Structure and Transport Properties of the BiCuSeO - BiCuSO Solid Solution. <i>Materials</i> , 2015 , 8, 1043-1058	3.5	25
67	Reliable N-type $\text{Mg}_{3.2}\text{Sb}_{1.5}\text{Bi}_{0.49}\text{Te}_{0.01}/304$ stainless steel junction for thermoelectric applications. <i>Acta Materialia</i> , 2020 , 198, 25-34	8.4	24

66	Thermoelectric properties of Zintl compound $\text{Ca}_{1-x}\text{Na}_x\text{Mg}_2\text{Bi}_{1.98}$. <i>Applied Physics Letters</i> , 2016 , 108, 183901	3.4	24
65	A Dual Role by Incorporation of Magnesium in YbZn_2Sb_2 Zintl Phase for Enhanced Thermoelectric Performance. <i>Advanced Energy Materials</i> , 2020 , 10, 2001229	21.8	21
64	Ultrahigh Thermoelectric Performance in Environmentally Friendly SnTe Achieved through Stress-Induced Lotus-Seedpod-Like Grain Boundaries. <i>Advanced Functional Materials</i> , 2021 , 31, 2101554	15.6	21
63	Contrasting the Role of Mg and Ba Doping on the Microstructure and Thermoelectric Properties of p-Type AgSbSe_2 . <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 23047-55	9.5	20
62	Thermoelectric properties of n-type transition metal-doped PbSe . <i>Materials Today Physics</i> , 2018 , 6, 45-52		20
61	Enhanced thermoelectric performance of p-type Mg_3Sb_2 by lithium doping and its tunability in an anionic framework. <i>Journal of Materials Science</i> , 2018 , 53, 16001-16009	4.3	20
60	High thermoelectric performance from high carrier mobility and reduced lattice thermal conductivity in Ba, Yb double-filled Skutterudites. <i>Materials Today Physics</i> , 2019 , 8, 128-137	8	19
59	N-type Bi-doped SnSe Thermoelectric Nanomaterials Synthesized by a Facile Solution Method. <i>Inorganic Chemistry</i> , 2018 , 57, 13800-13808	5.1	19
58	Promising Zintl-Phase Thermoelectric Compound SrAgSb . <i>Chemistry of Materials</i> , 2020 , 32, 6983-6989	9.6	17
57	Manipulating the intrinsic vacancies for enhanced thermoelectric performance in Eu_2ZnSb_2 Zintl phase. <i>Nano Energy</i> , 2020 , 73, 104771	17.1	15
56	Synergistic boost of output power density and efficiency in In-Li-codoped SnTe . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 21998-22003	11.5	15
55	High thermoelectric performance of single phase p-type cerium-filled skutterudites by dislocation engineering. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20128-20137	13	15
54	Balancing the anionic framework polarity for enhanced thermoelectric performance in YbMg_2Sb_2 Zintl compounds. <i>Journal of Materiomics</i> , 2019 , 5, 583-589	6.7	13
53	Effects of Cerium Addition on Martensitic Transformation and Microstructure of $\text{Ti}_{49.3}\text{Ni}_{50.7}$ Alloy. <i>Materials Transactions</i> , 2006 , 47, 716-719	1.3	13
52	Enhanced mechanical and thermoelectric properties enabled by hierarchical structure in medium-temperature Sb_2Te_3 based alloys. <i>Nano Energy</i> , 2020 , 78, 105228	17.1	13
51	Enhanced Thermoelectric Performance of Zintl Phase CaZnSb by Beneficial Disorder on the Selective Cationic Site. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 37741-37747	9.5	12
50	Enhanced thermoelectric performance of SnTe alloy with Ce and Li co-doping. <i>Materials Today Physics</i> , 2019 , 11, 100156	8	12
49	Achieving a High Average Value in SbTe -Based Segmented Thermoelectric Materials. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 945-952	9.5	12

48	Tin Acceptor Doping Enhanced Thermoelectric Performance of n-Type Yb Single-Filled Skutterudites via Reduced Electronic Thermal Conductivity. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 25133-25139	9.5	11
47	Enhanced Thermoelectric Properties of p-Type CaMgBi via a Synergistic Effect Originated from Zn and Alkali-Metal Co-doping. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 6015-6021	9.5	11
46	Enhanced thermoelectric performance of P-type CaMg ₂ Bi _{1.98} and optimized CaAl ₂ Si ₂ -type Zintl phase module with equal cross-section area. <i>Materials Today Physics</i> , 2020 , 15, 100270	8	11
45	Restructured single parabolic band model for quick analysis in thermoelectricity. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	11
44	Excellent thermoelectric performance of boron-doped n-type Mg ₃ Sb ₂ -based materials via the manipulation of grain boundary scattering and control of Mg content. <i>Science China Materials</i> , 2021 , 64, 1761-1769	7.1	11
43	Enhanced thermoelectric performance in Ti(Fe, Co, Ni)Sb pseudo-ternary Half-Heusler alloys. <i>Journal of Materiomics</i> , 2021 , 7, 756-765	6.7	11
42	Graphene-enhanced thermoelectric properties of p-type skutterudites. <i>Chinese Physics B</i> , 2018 , 27, 048402	10	10
41	Facile synthesis of multifunctional ZnFe ₂ O ₄ nanoparticles in liquid polyols. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 3867-72	1.3	10
40	Phase Boundary Mapping in ZrNiSn Half-Heusler for Enhanced Thermoelectric Performance. <i>Research</i> , 2020 , 2020, 4630948	7.8	9
39	Realizing Excellent Thermoelectric Performance of Sb ₂ Te ₃ Based Segmented Leg with a Wide Temperature Range Using One-Step Sintering. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901178	6.4	9
38	New insights into the role of dislocation engineering in N-type filled skutterudite CoSb ₃ . <i>Journal of Materials Chemistry C</i> , 2019 , 7, 13622-13631	7.1	9
37	Enhanced Thermoelectric Performance in N-Type Mg _{3.2} Sb _{1.5} Bi _{0.5} by La or Ce Doping into Mg. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901391	6.4	8
36	Enhanced Thermoelectric Properties in p-Type Double Half-Heusler Ti ₂ WHfyFeNiSb ₂ Sn _x Compounds. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020 , 217, 2000096	1.6	7
35	Enhanced thermoelectric properties of Zintl phase YbMg ₂ Bi _{1.98} through Bi site substitution with Sb. <i>Journal of Materials Science and Technology</i> , 2020 , 59, 189-194	9.1	7
34	Solubility study of Y in n-type YxCe _{0.15} Co ₄ Sb ₁₂ skutterudites and its effect on thermoelectric properties. <i>Materials Today Physics</i> , 2020 , 13, 100206	8	7
33	Critical role of tellurium self-compensation in enhancing the thermoelectric performance of p-Type Bi _{0.4} Sb _{1.6} Te ₃ alloy. <i>Chemical Engineering Journal</i> , 2021 , 425, 130670	14.7	7
32	Rare earth ytterbium enhanced thermoelectric properties of p-type Bi _{0.5} Sb _{1.5} Te ₃ . <i>Applied Physics Letters</i> , 2019 , 114, 123901	3.4	6
31	Titanium Doping to Enhance Thermoelectric Performance of 19-Electron VCoSb Half-Heusler Compounds with Vanadium Vacancies. <i>Annalen Der Physik</i> , 2020 , 532, 1900440	2.6	6

30	Promoted application potential of p-type Mg ₃ Sb _{1.5} Bi _{0.5} for the matched thermal expansion with its n-type counterpart. <i>Journal of Materiomics</i> , 2020 , 6, 729-735	6.7	6
29	The critical role of boron doping in the thermoelectric and mechanical properties of nanostructured δ -MgAgSb. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 9821-9827	7.1	6
28	Achieving High Thermoelectric Performance in Rare-Earth Element-Free CaMgBi with High Carrier Mobility and Ultralow Lattice Thermal Conductivity. <i>Research</i> , 2020 , 2020, 5016564	7.8	6
27	Simultaneously Improved Thermoelectric and Mechanical Properties Driven by MgB ₂ Doping in Bi _{0.4} Sb _{1.6} Te ₃ Based Alloys. <i>Advanced Electronic Materials</i> , 2021 , 7, 2100173	6.4	6
26	Stabilizing the Optimal Carrier Concentration in Al/Sb-Codoped GeTe for High Thermoelectric Performance. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 45717-45725	9.5	6
25	Enhanced Thermoelectric and Mechanical Performance in n-Type Yb-Filled Skutterudites through Aluminum Alloying. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 12930-12937	9.5	5
24	Passive Radiative Cooling Enables Improved Performance in Wearable Thermoelectric Generators.. <i>Small</i> , 2022 , e2106875	11	5
23	Simultaneous Regulation of Electrical and Thermal Transport Properties of N-Type Bi ₂ Te ₃ via Adding Excessive Te Followed by Se Doping. <i>ACS Applied Energy Materials</i> , 2021 , 4, 4986-4992	6.1	5
22	One-step deposition of antibacterial Ag@Pdop hybrid films on an NiTi alloy.. <i>RSC Advances</i> , 2019 , 9, 29263-29272	6.3	4
21	Zintl Phase Yb _{1-x} BaxMg ₂ Bi _{1.98} Compounds with Enhanced Thermoelectric Performance Caused by Cation Substitution. <i>ACS Applied Energy Materials</i> , 2020 , 3, 11036-11041	6.1	3
20	Lattice Mismatch in Ni ₃ Se ₄ MoSe ₂ Nanoheterostructures with an Abundant Interface for Catalytic Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2021 , 4, 3493-3499	5.6	3
19	Organic/Inorganic Hybrid Design as a Route for Promoting the Bi _{0.5} Sb _{1.5} Te ₃ for High-Performance Thermoelectric Power Generation. <i>Advanced Functional Materials</i> , 2200307	15.6	3
18	Achieving High Thermoelectric Performance by NaSbTe ₂ Alloying in GeTe for Simultaneous Suppression of Ge Vacancies and Band Tailoring. <i>Advanced Energy Materials</i> , 2022 , 12, 2103385	21.8	3
17	Mediating Point Defects Endows n-Type Bi ₂ Te ₃ with High Thermoelectric Performance and Superior Mechanical Robustness for Power Generation Application.. <i>Small</i> , 2022 , e2201352	11	3
16	Band Modulation and Strain Fluctuation for Realizing High Average zT in GeTe. <i>Advanced Energy Materials</i> , 2201043	21.8	3
15	FIRST PRINCIPLE STUDY ON THE EFFECT OF Fe CONTENT ON THE PHASE STABILITY OF THE Ni-Mn-Ga ALLOY. <i>International Journal of Modern Physics B</i> , 2010 , 24, 2369-2373	1.1	2
14	High thermoelectric performance bismuth telluride prepared by cold pressing and annealing facilitating large scale application. <i>Materials Today Physics</i> , 2021 , 21, 100522	8	2
13	Compromise of Thermoelectric and Mechanical Properties in LiSbTe ₂ and LiBiTe ₂ Alloyed SnTe. <i>Acta Materialia</i> , 2022 , 117922	8.4	2

12	Damping Capacity of NiMnCoPd High-Temperature Shape Memory Thin Film. <i>Shape Memory and Superelasticity</i> , 2018 , 4, 369-376	2.8	1
11	Cooperative regulation of electrical and thermal transport behavior enhancing the thermoelectric performance of SnTe. <i>Materials Today Physics</i> , 2021 , 21, 100556	8	1
10	Enhancing Thermoelectric Performance of YbCoSb by Synergistically Optimized Carrier Concentration and Ionized Impurity Scattering. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 39533-39540	9.5	1
9	Constructing multi-type defects in In _{0.1} Sb _{1.9} Te ₃ -(MgB ₂) composites: Simultaneously enhancing the thermoelectric and mechanical properties. <i>Nano Energy</i> , 2021 , 90, 106530	17.1	1
8	Nanotwins Strengthening High Thermoelectric Performance Bismuth Antimony Telluride Alloys.. <i>Advanced Science</i> , 2022 , e2200432	13.6	1
7	Enhanced Absorption in the Wide Wavelength Range: Black Silicon Decorated with Few-Layer PtS ₂ . <i>Journal of Physical Chemistry C</i> , 2021 , 125, 27335-27343	3.8	1
6	High-performance lead-free cubic GeTe-based thermoelectric alloy. <i>Cell Reports Physical Science</i> , 2022 , 100902	6.1	1
5	MICROSTRUCTURE AND OPTICAL PROPERTIES OF ERBIUM DOPED SILICA-BASED FILMS VIA FLAME HYDROLYSIS DEPOSITION AND AEROSOL DOPING. <i>International Journal of Modern Physics B</i> , 2009 , 23, 1873-1878	1.1	0
4	High Thermoelectric Performance of CaMg ₂ Bi ₂ Enabled by Dynamic Doping and Orbital Alignment. <i>Advanced Functional Materials</i> , 2020 , 2200407	15.6	0
3	Electronic Orbital Alignment and Hierarchical Phonon Scattering Enabling High Thermoelectric Performance p-Type MgSb Zintl Compounds.. <i>Research</i> , 2022 , 2022, 9842949	7.8	0
2	Improved thermoelectric and mechanical performance of Sb ₂ Te ₃ based materials towards the segmented operation. <i>Materials Today Energy</i> , 2022 , 101045	7	0
1	BiSbTe alloy with high thermoelectric and mechanical performance for power generation. <i>Scripta Materialia</i> , 2022 , 218, 114801	5.6	0