

Songting Cai

List of Publications by Year in descending order

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29
papers

1,310
citations

331538

21
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501076

28
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all docs

29
docs citations

29
times ranked

975
citing authors

#	ARTICLE	IF	CITATIONS
1	Thermoelectric Performance of the 2D Bi ₂ Si ₂ Te ₆ Semiconductor. Journal of the American Chemical Society, 2022, 144, 1445-1454.	6.6	37
2	Extraordinary role of Zn in enhancing thermoelectric performance of Ga-doped n-type PbTe. Energy and Environmental Science, 2022, 15, 368-375.	15.6	107
3	Low Thermal Conductivity in Heteroanionic Materials with Layers of Homoleptic Polyhedra. Journal of the American Chemical Society, 2022, 144, 2569-2579.	6.6	13
4	Valence Disproportionation of GeS in the PbS Matrix Forms Pb ₅ Ge ₅ S ₁₂ Inclusions with Conduction Band Alignment Leading to High n-Type Thermoelectric Performance. Journal of the American Chemical Society, 2022, 144, 7402-7413.	6.6	24
5	High Thermoelectric Performance in Chalcopyrite Cu _{1-x} Ag _x GaTe ₂ ZnTe: Nontrivial Band Structure and Dynamic Doping Effect. Journal of the American Chemical Society, 2022, 144, 9113-9125.	6.6	29
6	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie, 2021, 133, 272-277.	1.6	7
7	Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. Angewandte Chemie - International Edition, 2021, 60, 268-273.	7.2	28
8	Raspberry-like mesoporous Co-doped TiO ₂ nanospheres for a high-performance formaldehyde gas sensor. Journal of Materials Chemistry A, 2021, 9, 6529-6537.	5.2	33
9	Quasi-Two-Dimensional Heterostructures (K _{1-x} Te)(LaTe ₃) (x = Mn and Zn) with Charge Density Waves. Chemistry of Materials, 2021, 33, 2155-2164.	3.2	2
10	Ultralow Thermal Conductivity in Diamondoid Structures and High Thermoelectric Performance in (Cu _{1-x} Ag _x)(In _{1-y} Ga _y)Te ₂ . Journal of the American Chemical Society, 2021, 143, 5978-5989.	6.2	49
11	Restructured single parabolic band model for quick analysis in thermoelectricity. Npj Computational Materials, 2021, 7, .	3.5	53
12	Enhancing Thermoelectric Performance of Yb _{0.3} Co ₄ Sb ₁₂ by Synergistically Optimized Carrier Concentration and Ionized Impurity Scattering. ACS Applied Materials & Interfaces, 2021, 13, 39533-39540.	4.0	8
13	Critical role of tellurium self-compensation in enhancing the thermoelectric performance of p-Type Bi _{0.4} Sb _{1.6} Te ₃ alloy. Chemical Engineering Journal, 2021, 425, 130670.	6.6	19
14	Discordant nature of Cd in PbSe: off-centering and core-shell nanoscale CdSe precipitates lead to high thermoelectric performance. Energy and Environmental Science, 2020, 13, 200-211.	15.6	57
15	High-Performance Thermoelectrics from Cellular Nanostructured Sb ₂ Si ₂ Te ₆ . Joule, 2020, 4, 159-175.	11.7	103
16	Novel Core-shell Nanoscale Precipitates in High Performance PbSe-CdSe Thermoelectric Materials. Microscopy and Microanalysis, 2020, 26, 34-36.	0.2	1
17	High Thermoelectric Performance in the New Cubic Semiconductor AgSnSbSe ₃ by High-Entropy Engineering. Journal of the American Chemical Society, 2020, 142, 15187-15198.	6.6	108
18	Role of Advanced Electron Microscopy in Unraveling Complex Microstructure in Nanostructured Thermoelectric Materials. Microscopy and Microanalysis, 2020, 26, 266-268.	0.2	0

#	ARTICLE	IF	CITATIONS
19	Ultralow thermal conductivity in diamondoid lattices: high thermoelectric performance in chalcopyrite $\text{Cu}_{0.8+y}\text{Ag}_{0.2}\text{In}_{1+y}\text{Te}_2$. Energy and Environmental Science, 2020, 13, 3693-3705.	15.6	52
20	Ultralow Thermal Conductivity and Thermoelectric Properties of $\text{Rb}_2\text{Bi}_8\text{Se}_{13}$. Chemistry of Materials, 2020, 32, 3561-3569.	3.2	23
21	All-scale Architecturing of Microstructure in Chalcogenide Thermoelectric Materials. Microscopy and Microanalysis, 2019, 25, 2236-2237.	0.2	1
22	Ultralow Thermal Conductivity and High-Temperature Thermoelectric Performance in n-Type $\text{K}_{2.5}\text{Bi}_{8.5}\text{Se}_{14}$. Chemistry of Materials, 2019, 31, 5943-5952.	3.2	25
23	Enhanced Thermoelectric and Mechanical Properties in $\text{Yb}_{0.3}\text{Co}_4\text{Sb}_{12}$ with In Situ Formed CoSi Nanoprecipitates. Advanced Energy Materials, 2019, 9, 1902435.	10.2	53
24	High Figure of Merit in Gallium-Doped Nanostructured n-Type PbTe-xGeTe with Midgap States. Journal of the American Chemical Society, 2019, 141, 16169-16177.	6.6	76
25	Enhancement of Thermoelectric Performance for n-Type PbS through Synergy of Gap State and Fermi Level Pinning. Journal of the American Chemical Society, 2019, 141, 6403-6412.	6.6	67
26	All-Scale Hierarchically Structured p-Type PbSe Alloys with High Thermoelectric Performance Enabled by Improved Band Degeneracy. Journal of the American Chemical Society, 2019, 141, 4480-4486.	6.6	87
27	High Thermoelectric Performance in Polycrystalline SnSe Via Dual Doping with Ag/Na and Nanostructuring With Ag_8SnSe_6 . Advanced Energy Materials, 2019, 9, 1803072.	10.2	98
28	Soft phonon modes from off-center Ge atoms lead to ultralow thermal conductivity and superior thermoelectric performance in n-type PbSe-GeSe . Energy and Environmental Science, 2018, 11, 3220-3230.	15.6	115
29	Enhancement of thermoelectric properties by Na doping in Te-free p-type AgSbSe_2 . Dalton Transactions, 2015, 44, 1046-1051.	1.6	35