

Ctirad Uher

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

496 papers	38,821 citations	92 h-index	184 g-index
511 ext. papers	43,383 ext. citations	8.8 avg, IF	7.28 L-index

#	Paper	IF	Citations
496	Ultralow thermal conductivity and high thermoelectric figure of merit in SnSe crystals. <i>Nature</i> , 2014 , 508, 373-7	50.4	3074
495	Cubic AgPb(m)SbTe(2+m): bulk thermoelectric materials with high figure of merit. <i>Science</i> , 2004 , 303, 818-21	33.3	2481
494	Copper ion liquid-like thermoelectrics. <i>Nature Materials</i> , 2012 , 11, 422-5	27	1339
493	Ultrahigh power factor and thermoelectric performance in hole-doped single-crystal SnSe. <i>Science</i> , 2016 , 351, 141-4	33.3	1237
492	Convergence of conduction bands as a means of enhancing thermoelectric performance of n-type Mg ₂ Si(1-x)Sn(x) solid solutions. <i>Physical Review Letters</i> , 2012 , 108, 166601	7.4	854
491	Strained endotaxial nanostructures with high thermoelectric figure of merit. <i>Nature Chemistry</i> , 2011 , 3, 160-6	17.6	794
490	CsBi(4)Te(6): A high-performance thermoelectric material for low-temperature applications. <i>Science</i> , 2000 , 287, 1024-7	33.3	751
489	Stretchable nanoparticle conductors with self-organized conductive pathways. <i>Nature</i> , 2013 , 500, 59-63	50.4	613
488	All-scale hierarchical thermoelectrics: MgTe in PbTe facilitates valence band convergence and suppresses bipolar thermal transport for high performance. <i>Energy and Environmental Science</i> , 2013 , 6, 3346	35.4	532
487	Transport properties of pure and doped MNiSn (M=Zr, Hf). <i>Physical Review B</i> , 1999 , 59, 8615-8621	3.3	507
486	High thermoelectric performance of p-type SnTe via a synergistic band engineering and nanostructuring approach. <i>Journal of the American Chemical Society</i> , 2014 , 136, 7006-17	16.4	425
485	High Performance Thermoelectricity in Earth-Abundant Compounds Based on Natural Mineral Tetrahedrites. <i>Advanced Energy Materials</i> , 2013 , 3, 342-348	21.8	395
484	Anomalous barium filling fraction and n-type thermoelectric performance of Ba ₂ Co ₄ Sb ₁₂ . <i>Journal of Applied Physics</i> , 2001 , 90, 1864-1868	2.5	390
483	Spinodal decomposition and nucleation and growth as a means to bulk nanostructured thermoelectrics: enhanced performance in Pb(1-x)Sn(x)Te-PbS. <i>Journal of the American Chemical Society</i> , 2007 , 129, 9780-8	16.4	385
482	Non-equilibrium processing leads to record high thermoelectric figure of merit in PbTe-SrTe. <i>Nature Communications</i> , 2016 , 7, 12167	17.4	377
481	Low thermal conductivity and high thermoelectric figure of merit in n-type Ba _x Y _{by} Co ₄ Sb ₁₂ double-filled skutterudites. <i>Applied Physics Letters</i> , 2008 , 92, 182101	3.4	334
480	Broad temperature plateau for high ZTs in heavily doped p-type SnSe single crystals. <i>Energy and Environmental Science</i> , 2016 , 9, 454-460	35.4	331

479	Cerium filling and doping of cobalt triantimonide. <i>Physical Review B</i> , 1997 , 56, 7376-7383	3.3	328
478	Ultrahigh thermoelectric performance by electron and phonon critical scattering in Cu ₂ Se _{1-x} I _x . <i>Advanced Materials</i> , 2013 , 25, 6607-12	24	319
477	Effects of partial substitution of Ni by Pd on the thermoelectric properties of ZrNiSn-based half-Heusler compounds. <i>Applied Physics Letters</i> , 2001 , 79, 4165-4167	3.4	316
476	Codoping in SnTe: Enhancement of Thermoelectric Performance through Synergy of Resonance Levels and Band Convergence. <i>Journal of the American Chemical Society</i> , 2015 , 137, 5100-12	16.4	310
475	Nanostructuring and High Thermoelectric Efficiency in p-Type Ag(Pb _{1-y} Sn _y)mSbTe ₂ + m. <i>Advanced Materials</i> , 2006 , 18, 1170-1173	24	303
474	Recent advances in high-performance bulk thermoelectric materials. <i>International Materials Reviews</i> , 2016 , 61, 379-415	16.1	302
473	Structure and Lattice Thermal Conductivity of Fractionally Filled Skutterudites: Solid Solutions of Fully Filled and Unfilled End Members. <i>Physical Review Letters</i> , 1998 , 80, 3551-3554	7.4	301
472	Low-temperature transport properties of p-type CoSb ₃ . <i>Physical Review B</i> , 1995 , 51, 9622-9628	3.3	298
471	On the tuning of electrical and thermal transport in thermoelectrics: an integrated theory&Experiment perspective. <i>Npj Computational Materials</i> , 2016 , 2,	10.9	290
470	Valence Band Modification and High Thermoelectric Performance in SnTe Heavily Alloyed with MnTe. <i>Journal of the American Chemical Society</i> , 2015 , 137, 11507-16	16.4	289
469	High performance Na-doped PbTe-PbS thermoelectric materials: electronic density of states modification and shape-controlled nanostructures. <i>Journal of the American Chemical Society</i> , 2011 , 133, 16588-97	16.4	289
468	High performance In _x Ce _y Co ₄ Sb ₁₂ thermoelectric materials with in situ forming nanostructured InSb phase. <i>Applied Physics Letters</i> , 2009 , 94, 102114	3.4	285
467	High thermoelectric performance via hierarchical compositionally alloyed nanostructures. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7364-70	16.4	281
466	Extraordinary role of Hg in enhancing the thermoelectric performance of p-type SnTe. <i>Energy and Environmental Science</i> , 2015 , 8, 267-277	35.4	279
465	Chapter 5 Skutterudites: Prospective novel thermoelectrics. <i>Semiconductors and Semimetals</i> , 2001 , 69, 139-253	0.6	269
464	Origin of the high performance in GeTe-based thermoelectric materials upon Bi ₂ Te ₃ doping. <i>Journal of the American Chemical Society</i> , 2014 , 136, 11412-9	16.4	259
463	Self-propagating high-temperature synthesis for compound thermoelectrics and new criterion for combustion processing. <i>Nature Communications</i> , 2014 , 5, 4908	17.4	243
462	Mechanically Robust BiSbTe Alloys with Superior Thermoelectric Performance: A Case Study of Stable Hierarchical Nanostructured Thermoelectric Materials. <i>Advanced Energy Materials</i> , 2015 , 5, 1401391	21.8	232

461	Thermoelectric Devices for Power Generation: Recent Progress and Future Challenges . <i>Advanced Engineering Materials</i> , 2016 , 18, 194-213	3.5	218
460	A Facile Hydrothermal Synthesis of Iron Oxide Nanoparticles with Tunable Magnetic Properties. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 13593-13599	3.8	215
459	Enhanced Thermoelectric Properties in the Counter-Doped SnTe System with Strained Endotaxial SrTe. <i>Journal of the American Chemical Society</i> , 2016 , 138, 2366-73	16.4	213
458	High-performance pseudocubic thermoelectric materials from non-cubic chalcopyrite compounds. <i>Advanced Materials</i> , 2014 , 26, 3848-53	24	211
457	Low-temperature transport properties of the filled skutterudites CeFe ₄ □CoxSb12s. <i>Physical Review B</i> , 1997 , 55, 1476-1480	3.3	211
456	Thermoelectric properties of Ag-doped Cu ₂ Se and Cu ₂ Te. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 12478	3.3	210
455	Thermoelectric properties of the n-type filled skutterudite Ba _{0.3} Co ₄ Sb ₁₂ doped with Ni. <i>Journal of Applied Physics</i> , 2002 , 91, 3698-3705	2.5	208
454	Partial indium solubility induces chemical stability and colossal thermoelectric figure of merit in Cu ₂ Se. <i>Energy and Environmental Science</i> , 2017 , 10, 1668-1676	35.4	207
453	Rhombohedral to Cubic Conversion of GeTe via MnTe Alloying Leads to Ultralow Thermal Conductivity, Electronic Band Convergence, and High Thermoelectric Performance. <i>Journal of the American Chemical Society</i> , 2018 , 140, 2673-2686	16.4	206
452	Simultaneous large enhancements in thermopower and electrical conductivity of bulk nanostructured half-Heusler alloys. <i>Journal of the American Chemical Society</i> , 2011 , 133, 18843-52	16.4	205
451	Large enhancements in the thermoelectric power factor of bulk PbTe at high temperature by synergistic nanostructuring. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 8618-22	16.4	203
450	Thermal transport properties of YBa ₂ Cu. <i>Physical Review B</i> , 1987 , 36, 5680-5683	3.3	202
449	Thermoelectrics with earth abundant elements: high performance p-type PbS nanostructured with SrS and CaS. <i>Journal of the American Chemical Society</i> , 2012 , 134, 7902-12	16.4	197
448	Magnetic anisotropy in epitaxial Co superlattices. <i>Physical Review B</i> , 1990 , 42, 1066-1069	3.3	191
447	Multi-Scale Microstructural Thermoelectric Materials: Transport Behavior, Non-Equilibrium Preparation, and Applications. <i>Advanced Materials</i> , 2017 , 29, 1602013	24	182
446	Realizing a thermoelectric conversion efficiency of 12% in bismuth telluride/skutterudite segmented modules through full-parameter optimization and energy-loss minimized integration. <i>Energy and Environmental Science</i> , 2017 , 10, 956-963	35.4	181
445	Transport Properties of Bi ₂ S ₃ and the Ternary Bismuth Sulfides KBi _{6.33} S ₁₀ and K ₂ Bi ₈ S ₁₃ . <i>Chemistry of Materials</i> , 1997 , 9, 1655-1658	9.6	181
444	Nanostructures versus solid solutions: low lattice thermal conductivity and enhanced thermoelectric figure of merit in Pb _{9.6} Sb _{0.2} Te _{10-x} Sex bulk materials. <i>Journal of the American Chemical Society</i> , 2006 , 128, 14347-55	16.4	173

443	High pressure properties of graphite and its intercalation compounds. <i>Advances in Physics</i> , 1984 , 33, 469-566	16.4	166
442	Strong Reduction of Thermal Conductivity in Nanostructured PbTe Prepared by Matrix Encapsulation. <i>Chemistry of Materials</i> , 2006 , 18, 4993-4995	9.6	164
441	Ultrahigh Thermoelectric Performance in Mosaic Crystals. <i>Advanced Materials</i> , 2015 , 27, 3639-44	24	163
440	A new thermoelectric material: CsBi ₄ Te ₆ . <i>Journal of the American Chemical Society</i> , 2004 , 126, 6414-28	16.4	157
439	High temperature Seebeck coefficient metrology. <i>Journal of Applied Physics</i> , 2010 , 108, 121101	2.5	156
438	High thermoelectric performance in Bi _{0.46} Sb _{1.54} Te ₃ nanostructured with ZnTe. <i>Energy and Environmental Science</i> , 2018 , 11, 1520-1535	35.4	155
437	Thermal conductivity of a metal-organic framework (MOF-5): Part II. Measurement. <i>International Journal of Heat and Mass Transfer</i> , 2007 , 50, 405-411	4.9	154
436	High thermoelectric figure of merit in nanostructured p-type PbTe-MTe (M = Ca, Ba). <i>Energy and Environmental Science</i> , 2011 , 4, 4675	35.4	153
435	Exploring resonance levels and nanostructuring in the PbTe-CdTe system and enhancement of the thermoelectric figure of merit. <i>Journal of the American Chemical Society</i> , 2010 , 132, 5227-35	16.4	153
434	High Thermopower and Low Thermal Conductivity in Semiconducting Ternary KBiSe Compounds. Synthesis and Properties of K ₂ Bi ₈ Se ₁₃ and K _{2.5} Bi _{8.5} Se ₁₄ and Their Sb Analogues. <i>Chemistry of Materials</i> , 1997 , 9, 3060-3071	9.6	138
433	Thermal conductivity of high-T _c superconductors. <i>Journal of Superconductivity and Novel Magnetism</i> , 1990 , 3, 337-389		137
432	Effect of Sn substituting for Sb on the low-temperature transport properties of ytterbium-filled skutterudites. <i>Physical Review B</i> , 2003 , 67,	3.3	135
431	Phase transitions of Dirac electrons in bismuth. <i>Science</i> , 2008 , 321, 547-50	33.3	134
430	Entropy as a Gene-Like Performance Indicator Promoting Thermoelectric Materials. <i>Advanced Materials</i> , 2017 , 29, 1702712	24	130
429	Optimized Thermoelectric Properties of Sb-Doped Mg ₂ (1+z)Si _{0.5} Sn _{0.5} Sb _y through Adjustment of the Mg Content. <i>Chemistry of Materials</i> , 2011 , 23, 5256-5263	9.6	127
428	Thermoelectric properties of Bi ₂ O ₂ Se. <i>Materials Chemistry and Physics</i> , 2010 , 119, 299-302	4.4	122
427	Fourier-transform inelastic X-ray scattering from time- and momentum-dependent phonon-phonon correlations. <i>Nature Physics</i> , 2013 , 9, 790-794	16.2	118
426	SnTe-AgBiTe ₂ as an efficient thermoelectric material with low thermal conductivity. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 20849-20854	13	117

425	Rapid preparation method of bulk nanostructured Yb _{0.3} Co ₄ Sb _{12+y} compounds and their improved thermoelectric performance. <i>Applied Physics Letters</i> , 2008 , 93, 252109	3.4	116
424	Epitaxial Co-Au superlattices. <i>Physical Review Letters</i> , 1989 , 62, 653-656	7.4	116
423	Rapid synthesis of high thermoelectric performance higher manganese silicide with in-situ formed nano-phase of MnSi. <i>Intermetallics</i> , 2011 , 19, 404-408	3.5	113
422	Diluted magnetic semiconductors based on Sb ₂ VxTe ₃ (0.01. <i>Physical Review B</i> , 2002 , 65,	3.3	113
421	Synthesis and Thermoelectric Properties of the New Ternary Bismuth Sulfides KBi _{6.33} Si ₁₀ and K ₂ Bi ₈ Si ₁₃ . <i>Chemistry of Materials</i> , 1996 , 8, 1465-1474	9.6	113
420	Enhanced thermoelectric properties of n-type Mg _{2.16} (Si _{0.4} Sn _{0.6}) _{1-x} Sby due to nano-sized Sn-rich precipitates and an optimized electron concentration. <i>Journal of Materials Chemistry</i> , 2012 , 22, 13653		112
419	High figure of merit and thermoelectric properties of Bi-doped Mg ₂ Si _{0.4} Sn _{0.6} solid solutions. <i>Journal of Solid State Chemistry</i> , 2013 , 203, 333-339	3.3	108
418	The Role of Zn in Chalcopyrite CuFeS ₂ : Enhanced Thermoelectric Properties of Cu _{1-x} ZnxFeS ₂ with In Situ Nanoprecipitates. <i>Advanced Energy Materials</i> , 2017 , 7, 1601299	21.8	107
417	Morphology transition and layer-by-layer growth of Rh(111). <i>Physical Review Letters</i> , 1996 , 76, 3164-3167.	7.4	105
416	Concerted Rattling in CsAg ₅ Te ₃ Leading to Ultralow Thermal Conductivity and High Thermoelectric Performance. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 11431-6	16.4	105
415	Conduction band splitting and transport properties of Bi ₂ Se ₃ . <i>Journal of Solid State Chemistry</i> , 2004 , 177, 1704-1712	3.3	103
414	Structure and Transport Properties of Double-Doped CoSb _{2.75} Ge _{0.25-x} Tex (x = 0.125-0.20) with in Situ Nanostructure. <i>Chemistry of Materials</i> , 2011 , 23, 2948-2955	9.6	102
413	Thermal conductivity in BiSbTe and the role of dense dislocation arrays at grain boundaries. <i>Science Advances</i> , 2018 , 4, eaar5606	14.3	102
412	In situ synthesis and thermoelectric properties of PbTe-graphene nanocomposites by utilizing a facile and novel wet chemical method. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 12503	13	101
411	Highly anisotropic P3HT films with enhanced thermoelectric performance via organic small molecule epitaxy. <i>NPG Asia Materials</i> , 2016 , 8, e292-e292	10.3	101
410	Suppression of atom motion and metal deposition in mixed ionic electronic conductors. <i>Nature Communications</i> , 2018 , 9, 2910	17.4	97
409	High thermoelectric performance of mechanically robust n-type Bi ₂ Te _{3-x} Sex prepared by combustion synthesis. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 6603-6613	13	97
408	Enhanced Figure-of-Merit in Se-Doped p-Type AgSbTe ₂ Thermoelectric Compound. <i>Chemistry of Materials</i> , 2010 , 22, 5521-5527	9.6	97

407	In situ nanostructure generation and evolution within a bulk thermoelectric material to reduce lattice thermal conductivity. <i>Nano Letters</i> , 2010 , 10, 2825-31	11.5	95
406	Advanced thermoelectrics governed by a single parabolic band: Mg ₂ Si(0.3)Sn(0.7), a canonical example. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 6893-7	3.6	93
405	Large enhancements of thermopower and carrier mobility in quantum dot engineered bulk semiconductors. <i>Journal of the American Chemical Society</i> , 2013 , 135, 7486-95	16.4	93
404	Thermoelectric performance of films in the bismuth-tellurium and antimony-tellurium systems. <i>Journal of Applied Physics</i> , 2005 , 97, 114903	2.5	92
403	Femtosecond optical absorption studies of nonequilibrium electronic processes in high T _c superconductors. <i>Applied Physics Letters</i> , 1990 , 57, 1696-1698	3.4	92
402	High Thermoelectric Performance in SnTe–AgSbTe ₂ Alloys from Lattice Softening, Giant Phonon–Vacancy Scattering, and Valence Band Convergence. <i>ACS Energy Letters</i> , 2018 , 3, 705-712	20.1	90
401	High thermoelectric performance of p-BiSbTe compounds prepared by ultra-fast thermally induced reaction. <i>Energy and Environmental Science</i> , 2017 , 10, 2638-2652	35.4	90
400	Iron valence in skutterudites: Transport and magnetic properties of Co _{1-x} Fe _x Sb ₃ . <i>Physical Review B</i> , 2000 , 63,	3.3	90
399	High Strength Conductive Composites with Plasmonic Nanoparticles Aligned on Aramid Nanofibers. <i>Advanced Functional Materials</i> , 2016 , 26, 8435-8445	15.6	89
398	Subtle Roles of Sb and S in Regulating the Thermoelectric Properties of N-Type PbTe to High Performance. <i>Advanced Energy Materials</i> , 2017 , 7, 1700099	21.8	88
397	Structure and Thermoelectric Properties of Ba ₆ Ge ₂₅ , Ba ₆ Ge ₂₃ Sn ₂ , and Ba ₆ Ge ₂₂ In ₃ : Zintl Phases with a Chiral Clathrate Structure. <i>Journal of Solid State Chemistry</i> , 2000 , 153, 321-329	3.3	87
396	Low-temperature ferromagnetic properties of the diluted magnetic semiconductor Sb _{2-x} Cr _x Te ₃ . <i>Physical Review B</i> , 2005 , 71,	3.3	86
395	Rapid preparation of CeFe ₄ Sb ₁₂ skutterudite by melt spinning: rich nanostructures and high thermoelectric performance. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 12657	13	85
394	p-Type skutterudites R _x MyFe ₃ CoSb ₁₂ (R, M = Ba, Ce, Nd, and Yb): Effectiveness of double-filling for the lattice thermal conductivity reduction. <i>Intermetallics</i> , 2011 , 19, 1747-1751	3.5	84
393	Electronic transport in highly-doped La _{2-x} Sr _x CuO ₄ superconductors. <i>Physical Review B</i> , 1987 , 36, 5676-5679	5.3	84
392	Subpicosecond time-resolved studies of coherent phonon oscillations in thin-film YBa ₂ Cu ₃ O _{6+x} (x. <i>Applied Physics Letters</i> , 1991 , 58, 980-982	3.4	83
391	Multiscale calculations of thermoelectric properties of n-type Mg ₂ Si _{1-x} Sn _x solid solutions. <i>Physical Review B</i> , 2012 , 85,	3.3	82
390	Theoretical analysis of the thermal conductivity of YBa ₂ Cu ₃ O _{7-δ} single crystals. <i>Physical Review B</i> , 1991 , 44, 9508-9513	3.3	82

389	Apparatus for Seebeck coefficient and electrical resistivity measurements of bulk thermoelectric materials at high temperature. <i>Review of Scientific Instruments</i> , 2005 , 76, 023901	1.7	81
388	Ultra-fast synthesis and thermoelectric properties of Te doped skutterudites. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 17914-17918	13	78
387	Influence of electron-phonon interaction on the lattice thermal conductivity of $\text{Co}_{1-x}\text{Ni}_x\text{Sb}_3$. <i>Physical Review B</i> , 2002 , 65,	3.3	77
386	High-efficiency half-Heusler thermoelectric modules enabled by self-propagating synthesis and topologic structure optimization. <i>Energy and Environmental Science</i> , 2019 , 12, 3390-3399	35.4	77
385	Contrasting role of antimony and bismuth dopants on the thermoelectric performance of lead selenide. <i>Nature Communications</i> , 2014 , 5, 3640	17.4	76
384	Enhanced thermoelectric properties of Ba-filled skutterudites by grain size reduction and Ag nanoparticle inclusion. <i>Journal of Materials Chemistry</i> , 2012 , 22, 2958-2964		76
383	Soft phonon modes from off-center Ge atoms lead to ultralow thermal conductivity and superior thermoelectric performance in n-type $\text{PbSe}_{1-x}\text{Ge}_x\text{Se}$. <i>Energy and Environmental Science</i> , 2018 , 11, 3220-3230	35.4	75
382	Effect of Ni on the transport and magnetic properties of $\text{Co}_{1-x}\text{Ni}_x\text{Sb}_3$. <i>Physical Review B</i> , 2002 , 65,	3.3	75
381	Weak Electron Phonon Coupling and Deep Level Impurity for High Thermoelectric Performance $\text{Pb}_{1-x}\text{Ga}_x\text{Te}$. <i>Advanced Energy Materials</i> , 2018 , 8, 1800659	21.8	75
380	Manipulating the Combustion Wave during Self-Propagating Synthesis for High Thermoelectric Performance of Layered Oxychalcogenide $\text{Bi}_{1-x}\text{Pb}_x\text{CuSeO}$. <i>Chemistry of Materials</i> , 2016 , 28, 4628-4640	9.6	71
379	Substitution of Bi for Sb and its Role in the Thermoelectric Properties and Nanostructuring in $\text{Ag}_{1-x}\text{Pb}_x\text{MTe}_{20}$ (M = Bi, Sb) (x = 0, 0.14, 0.3). <i>Chemistry of Materials</i> , 2008 , 20, 3512-3520	9.6	71
378	Thin film dilute ferromagnetic semiconductors $\text{Sb}_2\text{Cr}_x\text{Te}_3$ with a Curie temperature up to 190K. <i>Physical Review B</i> , 2006 , 74,	3.3	70
377	High Thermoelectric Performance in Supersaturated Solid Solutions and Nanostructured n-Type $\text{PbTe}_{1-x}\text{Ge}_x$. <i>Advanced Functional Materials</i> , 2018 , 28, 1801617	15.6	69
376	Transport and mechanical properties of Yb-filled skutterudites. <i>Philosophical Magazine</i> , 2009 , 89, 1517-1534	15.4	69
375	Ultralow thermal conductivity of $\text{Pb}_{1-x}\text{Cu}_x\text{Se}$ by atomic fluidity and structure distortion. <i>Acta Materialia</i> , 2015 , 86, 247-253	8.4	67
374	Improvement in the Thermoelectric Figure of Merit by La/Ag Cosubstitution in PbTe. <i>Chemistry of Materials</i> , 2009 , 21, 1361-1367	9.6	66
373	Structure-transformation-induced abnormal thermoelectric properties in semiconductor copper selenide. <i>Materials Letters</i> , 2013 , 93, 121-124	3.3	65
372	High thermoelectric figure of merit and nanostructuring in bulk AgSbTe_2 . <i>Journal of Materials Chemistry</i> , 2010 , 20, 6138		65

371	Cr ₂ Ge ₂ Te ₆ : High Thermoelectric Performance from Layered Structure with High Symmetry. <i>Chemistry of Materials</i> , 2016 , 28, 1611-1615	9.6	64
370	3D Printing of highly textured bulk thermoelectric materials: mechanically robust BiSbTe alloys with superior performance. <i>Energy and Environmental Science</i> , 2019 , 12, 3106-3117	35.4	64
369	Ba ₄ In ₈ Sb ₁₆ : Thermoelectric Properties of a New Layered Zintl Phase with Infinite Zigzag Sb Chains and Pentagonal Tubes. <i>Chemistry of Materials</i> , 1999 , 11, 3154-3159	9.6	63
368	Enhanced ZT and attempts to chemically stabilize Cu ₂ Se via Sn doping. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17225-17235	13	62
367	All-Scale Hierarchically Structured p-Type PbSe Alloys with High Thermoelectric Performance Enabled by Improved Band Degeneracy. <i>Journal of the American Chemical Society</i> , 2019 , 141, 4480-4486	16.4	62
366	Influence of point-defect scattering on the lattice thermal conductivity of solid solution Co(Sb _{1-x} As _x) ₃ . <i>Physical Review B</i> , 2005 , 71,	3.3	61
365	Large magnetothermopower in La _{0.67} Ca _{0.33} MnO ₃ films. <i>Physical Review B</i> , 1996 , 53, 5094-5097	3.3	60
364	Separation of the Electronic and Lattice Thermal Conductivities in Bismuth Crystals. <i>Physica Status Solidi (B): Basic Research</i> , 1974 , 65, 765-772	1.3	60
363	Chemical Insights into PbSe- x%HgSe: High Power Factor and Improved Thermoelectric Performance by Alloying with Discordant Atoms. <i>Journal of the American Chemical Society</i> , 2018 , 140, 18115-18123	16.4	60
362	Low effective mass and carrier concentration optimization for high performance p-type Mg ₂ (1-x)Li ₂ xSi _{0.3} Sn _{0.7} solid solutions. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 23576-83	3.6	59
361	Thermal and electronic charge transport in bulk nanostructured Zr _{0.25} Hf _{0.75} NiSn composites with full-Heusler inclusions. <i>Journal of Solid State Chemistry</i> , 2011 , 184, 2948-2960	3.3	59
360	Low-temperature characterization and micropatterning of coevaporated Bi ₂ Te ₃ and Sb ₂ Te ₃ films. <i>Journal of Applied Physics</i> , 2008 , 104, 113710	2.5	57
359	Langevin-like giant magnetoresistance in Co-Cu superlattices. <i>Physical Review B</i> , 1994 , 49, 1521-1523	3.3	57
358	Pressure dependence of the c-axis resistivity of graphite. <i>Physical Review B</i> , 1987 , 35, 4483-4488	3.3	57
357	Influence of fullerene dispersion on high temperature thermoelectric properties of BaCo ₄ Sb ₁₂ -based composites. <i>Journal of Applied Physics</i> , 2007 , 102, 103709	2.5	56
356	Phase separation of full-Heusler nanostructures in half-Heusler thermoelectrics and vibrational properties from first-principles calculations. <i>Physical Review B</i> , 2015 , 92,	3.3	55
355	Microstructure and thermoelectric properties of CoSb _{2.75} Ge _{0.25} -Tex prepared by rapid solidification. <i>Acta Materialia</i> , 2012 , 60, 3536-3544	8.4	55
354	Theoretical study of the filling fraction limits for impurities in CoSb ₃ . <i>Physical Review B</i> , 2007 , 75,	3.3	55

353	Ultra-high average figure of merit in synergistic band engineered $\text{Sn}_x\text{Na}_{1-x}\text{Se}_{0.9}\text{S}_{0.1}$ single crystals. <i>Materials Today</i> , 2018 , 21, 501-507	21.8	55
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