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**Cubic AgPb(m)SbTe(2+m): bulk thermoelectric materials with high figure of merit**

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2332	Materials science. Thermoelectricity in semiconductor nanostructures. <i>Science</i> , <b>2004</b> , 303, 777-8	33.3	795
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2327	Resonant states in the electronic structure of the high performance thermoelectrics AgPbmSbTe <sub>2+m</sub> : the role of Ag-Sb microstructures. <b>2004</b> , 93, 146403		134
2326	Perfect orientation ordered in-situ one-dimensional self-assembly of Mn-doped PbSe nanocrystals. <b>2004</b> , 126, 14816-21		128
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2314	The new semiconducting polychalcogenide Ba <sub>2</sub> SnSe <sub>5</sub> exhibiting units and distorted SnSe <sub>6</sub> octahedra. <b>2005</b> , 178, 1087-1093	32
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2299	Nanoscale clusters in the high performance thermoelectric AgPbmSbTem+2. <b>2005</b> , 72,	52
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2297	Thermoelectric properties of Si/Ge nano-composite. <b>2005</b> ,	
2296	High Efficiency Thermoelectric Power Conversion. <b>2005</b> , 886, 1	4
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2276	Effects of doping, electron irradiation, $\text{H}^+$ and $\text{He}^+$ implantation on the thermoelectric properties of $\text{Bi}_2\text{Se}_3$ single crystals. <b>2005</b> , 17, 2873-2888	19
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2274	Direct electrodeposition of highly dense $\text{Bi/Sb}$ superlattice nanowire arrays. <b>2005</b> , 127, 15348-9	81
2273	Beneficial effect of $\text{Ni}$ substitution on the thermoelectric properties in partially filled $\text{CaYCo}_4\text{Ni}_x\text{Sb}_{12}$ skutterudites. <b>2005</b> , 97, 083712	69
2272	Nanostructuring, compositional fluctuations, and atomic ordering in the thermoelectric materials $\text{AgPb}_m\text{SbTe}_{2+m}$ . The myth of solid solutions. <b>2005</b> , 127, 9177-90	311
2271	Charge ordering and self-assembled nanostructures in a fcc Coulomb lattice gas. <b>2005</b> , 72,	27
2270	Monte Carlo simulation of thermoelectric properties in nanocomposites. <b>2005</b> ,	1
2269	Thermoelectricity of Low-Dimensional Nanostructured Materials. <b>2006</b> , 291-307	
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2267	Weibull analysis of the biaxial fracture strength of a cast p-type LAST-T thermoelectric material. <b>2006</b> , 86, 673-682	29
2266	Nanoscale zinc antimonides: synthesis and phase stability. <b>2006</b> , 45, 1693-7	33
2265	Nanostructures versus solid solutions: low lattice thermal conductivity and enhanced thermoelectric figure of merit in $\text{Pb}_{9.6}\text{Sb}_{0.2}\text{Te}_{10-x}\text{S}_x$ bulk materials. <b>2006</b> , 128, 14347-55	173
2264	Thermoelectric Materials, Phenomena, and Applications: A Bird's Eye View. <b>2006</b> , 31, 188-198	1100

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2261	Nanoscale heat transfer and nanostructured thermoelectrics. <b>2006</b> , 29, 238-246	50
2260	Effect of the transition metal on the synthesis of quaternary sulfides MPb <sub>8</sub> In <sub>17</sub> S <sub>34</sub> (M = Cu, Ag, Au). <b>2006</b> , 45, 1415-7	13
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2252	Electron Transport and the Potential of Ultrananocrystalline Diamond as a Thermoelectric Material. <b>2006</b> , 157-184	3
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2173	Nature of the cubic to rhombohedral structural transformation in (AgSbTe <sub>2</sub> ) <sub>15</sub> (GeTe) <sub>85</sub> thermoelectric material. <b>2007</b> , 101, 053715	118
2172	Determination of transport properties in chromium disilicide nanowires via combined thermoelectric and structural characterizations. <b>2007</b> , 7, 1649-54	118
2171	Four-probe measurements of the in-plane thermoelectric properties of nanofilms. <b>2007</b> , 78, 034901	96
2170	The problem with determining atomic structure at the nanoscale. <i>Science</i> , <b>2007</b> , 316, 561-5	33-3 525
2169	Cooling rate dependence of microstructure and thermoelectric properties of AgPb <sub>18</sub> SbTe <sub>20</sub> compounds. <b>2007</b> ,	
2168	Thermal conductivity modeling of compacted nanowire composites. <b>2007</b> , 101, 054320	50
2167	Nanostructuring and thermoelectric properties of bulk skutterudite compound CoSb <sub>3</sub> . <b>2007</b> , 101, 054314	104
2166	Pressure-tuned colossal improvement of thermoelectric efficiency of PbTe. <b>2007</b> , 90, 122103	92
2165	Design impacts of stochastically-varying input parameters on advanced thermoelectric conversion systems. <b>2007</b> ,	2
2164	Energy Harvesting for Electronics with Thermoelectric Devices using Nanoscale Materials. <b>2007</b> ,	24
2163	The influence of defects on the transport properties of AgSbPb <sub>18</sub> Te <sub>20</sub> prepared at high pressure and high temperature. <b>2007</b> , 19, 425219	1
2162	Characterization of dry milled powders of LAST (lead-antimony-silver-tellurium) thermoelectric material. <b>2007</b> , 87, 4567-4591	25
2161	Tuning thermal transport in crystalline solids using embedded nanoparticles. <b>2007</b> , 92, 012085	3
2160	Metal-complex-decorated homochiral heterobimetallic telluride single-stranded helix. <b>2007</b> , 46, 7262-4	78
2159	Synthesis of a family of solids through the building-block approach: a case study with Ag(+) substitution in the ternary Na-Ge-Se system. <b>2007</b> , 46, 2017-27	8
2158	Diameter- and Length-Dependent Volume Plasmon Excitation of Bismuth Nanorods Investigated by Electron Energy Loss Spectroscopy. <b>2007</b> , 19, 3912-3916	17
2157	Effect of interface scattering on phonon thermal conductivity percolation in random nanowire composites. <b>2007</b> , 90, 263105	46
2156	Atomic ordering and gap formation in Ag-Sb-based ternary chalcogenides. <b>2007</b> , 99, 156403	101

2155	Bi <sub>2</sub> Te <sub>3</sub> hexagonal nanoplates and thermoelectric properties of n-type Bi <sub>2</sub> Te <sub>3</sub> nanocomposites. <b>2007</b> , 40, 5975-5979	60
2154	Bi <sub>2</sub> Te <sub>3</sub> /Te multiple heterostructure nanowire arrays formed by confined precipitation. <b>2007</b> , 129, 6702-3	71
2153	Structures and thermoelectric properties of the infinitely adaptive series (Bi <sub>2</sub> ) <sub>m</sub> (Bi <sub>2</sub> Te <sub>3</sub> ) <sub>n</sub> . <b>2007</b> , 75,	161
2152	Improved thermoelectric figure of merit in n-type CoSb <sub>3</sub> based nanocomposites. <b>2007</b> , 91, 172116	57
2151	New Directions for Low-Dimensional Thermoelectric Materials. <b>2007</b> , 19, 1043-1053	2967
2150	Laser-induced synthesis of nanostructured thin films. <b>2007</b> , 253, 8292-8299	5
2149	Modified laser ablation process for nanostructured thermoelectric nanomaterial fabrication. <b>2007</b> , 254, 1211-1214	4
2148	Deep defect states in narrow band-gap semiconductors. <b>2007</b> , 401-402, 291-295	22
2147	Thermoelectric properties of Cu-doped n-type (Bi <sub>2</sub> Te <sub>3</sub> ) <sub>0.9</sub> (Bi <sub>2</sub> Cu <sub>x</sub> Se <sub>3</sub> ) <sub>0.1</sub> (x=0.2) alloys. <b>2007</b> , 180, 3583-3587	46
2146	Thermoelectric performance of ternary Bi <sub>1.5</sub> Bi <sub>0.5</sub> Ag alloys prepared by mechanical alloying and subsequent pressureless sintering. <b>2007</b> , 68, 1400-1404	6
2145	Thermoelectrics based on strontium titanate. <b>2007</b> , 10, 44-49	128
2144	Quantitative EDX microanalysis of Bi <sub>2</sub> Te <sub>3</sub> in the TEM. <b>2007</b> , 204, 3243-3255	31
2143	Enhancement of thermoelectric performance in strongly correlated multilayered nanostructures. <b>2007</b> , 244, 2351-2356	4
2142	Giant thermoelectric Seebeck coefficient of a two-dimensional electron gas in SrTiO <sub>3</sub> . <b>2007</b> , 6, 129-34	794
2141	Synergism in binary nanocrystal superlattices leads to enhanced p-type conductivity in self-assembled PbTe/Ag <sub>2</sub> Te thin films. <b>2007</b> , 6, 115-21	460
2140	Critical Overview of Recent Approaches to Improved Thermoelectric Materials. <b>2007</b> , 4, 291-296	45
2139	Structure and thermoelectric properties of nanocomposite bismuth telluride prepared by melt spinning or by partially alloying with IV-VI compounds. <b>2007</b> , 1, 238-240	34
2138	Preparation and thermoelectric properties of bulk nanocomposites with amorphous/nanocrystal hybrid structure. <b>2007</b> , 40, 6094-6097	26

2137	Self-Assembled Nanometer Lamellae of Thermoelectric PbTe and Sb <sub>2</sub> Te <sub>3</sub> with Epitaxy-like Interfaces. <b>2007</b> , 19, 763-767	129
2136	Nanometer-Scale Thermoelectric Materials. <b>2007</b> , 345-374	10
2135	PbTe nanocomposites synthesized from PbTe nanocrystals. <b>2007</b> , 90, 222112	124
2134	Microstructures and thermoelectric properties of GeSbTe based layered compounds. <b>2007</b> , 88, 425-428	45
2133	In-situ elevated-temperature TEM study of (AgSbTe <sub>2</sub> ) <sub>15</sub> (GeTe) <sub>85</sub> . <b>2007</b> , 42, 7643-7646	36
2132	Nanostructured Thermoelectric Materials and High-Efficiency Power-Generation Modules. <b>2007</b> , 36, 704-710	47
2131	Fabrication and property of high-performance Ag-Pb-Sb-Te system semiconducting thermoelectric materials. <b>2007</b> , 52, 990-996	10
2130	Preparation and thermoelectric properties of AgPb SbSe <sub>2</sub> materials. <b>2008</b> , 181, 1434-1438	15
2129	Thermoelectric properties of Bi <sup>3+</sup> substituted Co-based misfit-layered oxides. <b>2008</b> , 21, 748-751	44
2128	Preparation of conventional thermoelectric nanopowders by pulsed laser fracture in water: application to the fabrication of a pn hetero-junction. <b>2008</b> , 93, 235-240	13
2127	Recent advances on thermoelectric materials. <b>2008</b> , 3, 269-279	128
2126	Thermoelectric properties of n-type Mg <sub>2</sub> Si <sub>0.6</sub> Sb <sub>y</sub> Sn <sub>0.4</sub> compounds. <b>2008</b> , 205, 1657-1661	30
2125	Two-dimensional thermoelectric Seebeck coefficient of SrTiO <sub>3</sub> -based superlattices. <b>2008</b> , 245, 2363-2368	14
2124	The Cluster Polymers $\text{[PtBi}_6\text{Cl}_{10}]_n$ and $\text{[PtBi}_6\text{Br}_{10}]_n$ : Synthesis, Thermochemistry, Crystal Structure and Chemical Bonding. <b>2008</b> , 634, 69-76	13
2123	Homologous Silver Bismuth Chalcogenide Halides (N, x)P. II. The (2, x)P and (3, x)P Structure Families of Modular Compounds with Tunable Composition and Structure. <b>2008</b> , 634, 475-481	15
2122	Unusual Solid Solutions in the System Ge-Sb-Te: The Crystal Structure of $\text{33R-Ge}_4\text{Sb}_2\text{Te}_7$ (x, y = 0.1) is Isostructural to that of Ge <sub>3</sub> Sb <sub>2</sub> Te <sub>6</sub> . <b>2008</b> , 634, 2557-2561	28
2121	Oriented nanostructures for energy conversion and storage. <b>2008</b> , 1, 676-97	333
2120	Unusual Sb-Sb bonding in high temperature thermoelectric materials. <b>2008</b> , 29, 2134-43	38

2119	Large enhancements in the thermoelectric power factor of bulk PbTe at high temperature by synergistic nanostructuring. <b>2008</b> , 47, 8618-22		203
2118	Hydrothermal Synthesis and Thermoelectric Transport Properties of Impurity-Free Antimony Telluride Hexagonal Nanoplates. <b>2008</b> , 20, 1892-1897		154
2117	Large Enhancements in the Thermoelectric Power Factor of Bulk PbTe at High Temperature by Synergistic Nanostructuring. <b>2008</b> , 120, 8746-8750		35
2116	Structure and physical properties of the new telluride BaAg <sub>2</sub> Te <sub>2</sub> and its quaternary variants BaCuAg <sub>2</sub> Te <sub>2</sub> . <b>2008</b> , 181, 2024-2030		28
2115	Enhanced thermoelectric properties of bismuth sulfide polycrystals prepared by mechanical alloying and spark plasma sintering. <b>2008</b> , 181, 3278-3282		84
2114	The high-temperature elastic moduli of polycrystalline PbTe measured by resonant ultrasound spectroscopy. <b>2008</b> , 56, 5954-5963		51
2113	:Ge, a promising n-type thermoelectric oxide composite. <b>2008</b> , 146, 97-101		148
2112	Giant Seebeck coefficient decrease in polycrystalline materials with highly anisotropic band structures: Implications in seeking high-quality thermoelectric materials. <b>2008</b> , 148, 10-13		7
2111	Ab initio phonon dispersions for PbTe. <b>2008</b> , 148, 417-419		88
2110	Transport and thermoelectric properties of CrSb <sub>2</sub> Te <sub>x</sub> at low temperatures. <b>2008</b> , 149, 53-57		7
2109	Enhancement of thermoelectric efficiency in PbTe by distortion of the electronic density of states. <i>Science</i> , <b>2008</b> , 321, 554-7	33.3	2900
2108	Recent progress in oxide thermoelectric materials: p-type Ca <sub>3</sub> Co <sub>4</sub> O <sub>9</sub> and n-type SrTiO <sub>3</sub> (-). <b>2008</b> , 47, 8429-36		278
2107	EVALUATION METHODS FOR PROPERTIES OF NANOSTRUCTURED BODY. <b>2008</b> , 317-383		2
2106	Role of material property gradient and anisotropy in thermoelectric materials. <b>2008</b> , 10, 083019		5
2105	Intrinsically minimal thermal conductivity in cubic I-V-VI <sub>2</sub> semiconductors. <b>2008</b> , 101, 035901		645
2104	High-thermoelectric performance of nanostructured bismuth antimony telluride bulk alloys. <i>Science</i> , <b>2008</b> , 320, 634-8	33.3	4220
2103	Cooling, heating, generating power, and recovering waste heat with thermoelectric systems. <i>Science</i> , <b>2008</b> , 321, 1457-61	33.3	3808
2102	Microstructural Phenomena Controlling Losses in NiCuZn-Ferrites as Studied by Transmission Electron Microscopy. <b>2008</b> , 91, 366-371		12

2101	High-Temperature Electrical Transport Behavior Observed in the La <sub>1.96</sub> M <sub>0.04</sub> CuO <sub>4</sub> (M: Mg, Ca, Sr) Polycrystalline Ceramics. <b>2008</b> , 91, 2055-2058	6
2100	Enhanced thermoelectric performance of rough silicon nanowires. <b>2008</b> , 451, 163-7	3293
2099	Silicon nanowires as efficient thermoelectric materials. <b>2008</b> , 451, 168-71	2199
2098	Complex thermoelectric materials. <b>2008</b> , 7, 105-14	7422
2097	Thermoelectrics: Nanostructuring and more. <b>2008</b> , 7, 616-7	46
2096	Avoided crossing of rattler modes in thermoelectric materials. <b>2008</b> , 7, 811-5	452
2095	Synthesis of PbTe thermoelectric materials by alkaline reducing chemical routes. <b>2008</b> , 43, 2850-2854	50
2094	Nanosized La filled CoSb <sub>3</sub> prepared by a solvothermal-annealing method. <b>2008</b> , 62, 2363-2365	28
2093	HPHT synthesis and electrical properties of AgSbTe <sub>2</sub> /Ag <sub>2</sub> Te thermoelectric alloys. <b>2008</b> , 62, 3269-3271	12
2092	Synthesis and characterization of a new quaternary selenide Sr <sub>3</sub> GeSb <sub>2</sub> Se <sub>8</sub> . <b>2008</b> , 10, 1145-1149	12
2091	Large-scale polyol synthesis of single-crystal bismuth nanowires and the role of NaOH in the synthesis process. <b>2008</b> , 19, 265303	25
2090	Photovoltaic-thermoelectric hybrid systems: A general optimization methodology. <b>2008</b> , 92, 243503	111
2089	Thermoelectric behavior of segregated-network polymer nanocomposites. <b>2008</b> , 8, 4428-32	350
2088	High figures of merit and natural nanostructures in Mg <sub>2</sub> Si <sub>0.4</sub> Sn <sub>0.6</sub> based thermoelectric materials. <b>2008</b> , 93, 102109	224
2087	Nanostructures in high-performance (GeTe) <sub>x</sub> (AgSbTe <sub>2</sub> ) <sub>(100-x)</sub> thermoelectric materials. <b>2008</b> , 19, 245707	177
2086	First-principles study of the electronic, optical, and lattice vibrational properties of AgSbTe <sub>2</sub> . <b>2008</b> , 77,	64
2085	Modeling the Thermal Conductivity and Phonon Transport in Nanoparticle Composites Using Monte Carlo Simulation. <b>2008</b> , 130, 042410	229
2084	Enhanced thermopower in PbSe nanocrystal quantum dot superlattices. <b>2008</b> , 8, 2283-8	230

2083	Ultralow thermal conductivity of isotope-doped silicon nanowires. <b>2008</b> , 8, 276-80	197
2082	Theory of enhancement of thermoelectric properties of materials with nanoinclusions. <b>2008</b> , 77,	516
2081	Structural Characterization and Thermoelectric Transport Properties of Uniform Single-Crystalline Lead Telluride Nanowires. <b>2008</b> , 112, 11314-11318	96
2080	Improvement of Thermoelectric Performance of CoSb <sub>3</sub> Te <sub>x</sub> Skutterudite Compounds by Additional Substitution of IVB-Group Elements for Sb. <b>2008</b> , 20, 7526-7531	137
2079	Substitution of Bi for Sb and its Role in the Thermoelectric Properties and Nanostructuring in Ag <sub>1-x</sub> Pb <sub>x</sub> Te <sub>2</sub> (M = Bi, Sb) (x = 0, 0.14, 0.3). <b>2008</b> , 20, 3512-3520	71
2078	Enhanced thermoelectric figure-of-merit in nanostructured p-type silicon germanium bulk alloys. <b>2008</b> , 8, 4670-4	861
2077	Micro-Coolers. <b>2008</b> , 499-550	5
2076	Facile and Efficient Electrochemical Synthesis of PbTe Dendritic Structures. <b>2008</b> , 20, 3306-3314	86
2075	Nanostructured AgPb <sub>m</sub> SbTe <sub>(m+2)</sub> system bulk materials with enhanced thermoelectric performance. <b>2008</b> , 130, 4527-32	296
2074	Simulation analysis on thermoelectric generator system performance. <b>2008</b> ,	3
2073	Thermoelectrics in an array of molecular junctions. <b>2008</b> , 129, 044708	18
2072	Highly Disordered Crystal Structure and Thermoelectric Properties of Sn <sub>3</sub> P <sub>4</sub> . <b>2008</b> , 20, 2476-2483	46
2071	Review Article: Thermoelectric Technology Assessment: Application to Air Conditioning and Refrigeration. <b>2008</b> , 14, 635-653	34
2070	Effect of grain size on thermoelectric properties of n-type nanocrystalline bismuth-telluride based thin films. <b>2008</b> , 104, 084302	117
2069	Synthesis and transport property of AgSbTe <sub>2</sub> as a promising thermoelectric compound. <b>2008</b> , 93, 202106	81
2068	Enhanced thermoelectric figure-of-merit in p-type nanostructured bismuth antimony tellurium alloys made from elemental chunks. <b>2008</b> , 8, 2580-4	476
2067	Atomic and electronic structures of thallium-based III-V-VI <sub>2</sub> ternary chalcogenides: Ab initio calculations. <b>2008</b> , 77,	27
2066	Measurements of the energy band gap and valence band structure of AgSbTe <sub>2</sub> . <b>2008</b> , 77,	100



2065	Unexpectedly low thermal conductivity in natural nanostructured bulk Ga <sub>2</sub> Te <sub>3</sub> . <b>2008</b> , 93, 012101	62
2064	Crystal/glass phase change in K <sub>1-x</sub> Rb <sub>x</sub> Sb <sub>5</sub> S <sub>8</sub> (x = 0.25, 0.50, 0.75) studied through thermal analysis techniques. <b>2008</b> , 354, 3643-3648	4
2063	Thermoelectric properties of Nb <sub>3</sub> Sb <sub>2</sub> Te <sub>5</sub> . <b>2008</b> , 448, 148-152	8
2062	Thermoelectric properties of p-type Te-doped (Bi,Sb) <sub>2</sub> Te <sub>3</sub> alloys by mechanical alloying and plasma activated sintering. <b>2008</b> , 448, 308-312	17
2061	Electrical and thermoelectric properties of PbSe doped with Sm. <b>2008</b> , 452, 200-204	37
2060	Preparation and transport properties of AgSbTe <sub>2</sub> by high-pressure and high-temperature. <b>2008</b> , 454, 415-418	35
2059	Hardness as a function of composition for n-type LAST thermoelectric material. <b>2008</b> , 455, 340-345	41
2058	Composition-dependent electrical transport properties of Pb <sub>50</sub> Te <sub>52</sub> doped with PbI <sub>2</sub> prepared by HPHT. <b>2008</b> , 458, 428-431	11
2057	Crystal structure analysis and thermoelectric properties of p-type pseudo-binary (Al <sub>2</sub> Te <sub>3</sub> ) <sub>x</sub> (Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> ) <sub>1-x</sub> (x=0~0.2) alloys prepared by spark plasma sintering. <b>2008</b> , 460, 426-431	18
2056	Report from the third workshop on future directions of solid-state chemistry: The status of solid-state chemistry and its impact in the physical sciences. <b>2008</b> , 36, 1-133	51
2055	Carrier concentration and temperature dependence of the electronic transport properties of epitaxial PbTe and PbTe/PbSe nanodot superlattices. <b>2008</b> , 77,	79
2054	An Investigation of the Thermal Stresses Induced in a Thin-Film Thermoelectric Cooler. <b>2008</b> , 31, 438-454	9
2053	Manipulating Growth of Thermoelectric Bi <sub>2</sub> Te <sub>3</sub> /Sb Multilayered Nanowire Arrays. <b>2008</b> , 112, 15190-15194	48
2052	Structural modulations in Bi <sub>2</sub> Te <sub>3</sub> . <b>2008</b> , 103, 024314	37
2051	Ion Pair Charge-Transfer Salts Based on Metal Chalcogenide Clusters and Methyl Viologen Cations. <b>2008</b> , 20, 4170-4172	78
2050	Thermoelectric Performance of Poly(3,4-ethylenedioxythiophene): Poly(styrenesulfonate). <b>2008</b> , 25, 2202-2205	151
2049	A Simple Chemical Approach for PbTe Nanowires with Enhanced Thermoelectric Properties. <b>2008</b> , 20, 6298-6300	91
2048	Hydrothermal Synthesis and Thermoelectric Transport Properties of Uniform Single-Crystalline Pearl-Necklace-Shaped PbTe Nanowires. <b>2008</b> , 8, 2906-2911	84

2047	Density functional study of Bi <sub>2</sub> Te <sub>3</sub> and Bi <sub>4</sub> Te <sub>6</sub> molecules. <b>2008</b> , 106, 2699-2708	
2046	Soft x-ray photoelectron spectroscopy study of type-I clathrates. <b>2008</b> , 9, 044207	5
2045	Robust Design of Advanced Thermoelectric Conversion Systems: Probabilistic Design Impacts on Specific Power and Power Flux Optimization. <b>2008</b> , 1102, 1	1
2044	Thermoelectric Transport in Silicon Germanium Nanocomposite. <b>2008</b> ,	
2043	Atomic-Scale Three-Dimensional Phononic Crystals With a Large Thermoelectric Figure of Merit. <b>2008</b> ,	
2042	Preparation and Thermoelectric Properties of AgPb <sub>18</sub> SbTe <sub>20</sub> Materials via Hydrothermal Synthesis Method. <b>2008</b> , 368-372, 550-552	7
2041	Ab initio calculation of the growth of Te nanorods and Bi <sub>2</sub> Te <sub>3</sub> nanoplatelets. <b>2008</b> , 17, 286-289	4
2040	Materials design and development of functional materials for industry. <b>2008</b> , 20, 064227	14
2039	Improved thermoelectric performance in polycrystalline p-type Bi <sub>2</sub> Te <sub>3</sub> via an alkali metal salt hydrothermal nanocoating treatment approach. <b>2008</b> , 104, 034907	53
2038	Phase-diagram-related problems in thermoelectric materials: Skutterudites as an example. <b>2008</b> , 99, 638-643	4
2037	First-principles theory of the coherency strain, defect energetics, and solvus boundaries in the PbTe-AgSbTe <sub>2</sub> system. <b>2008</b> , 78,	20
2036	Low temperature refrigeration by using thermal-field electron emission in a coaxial cylindrical diode. <b>2008</b> , 104, 084506	2
2035	Thermal conductivity reduction in oxygen-deficient strontium titanates. <b>2008</b> , 92, 191911	92
2034	Synthesis and transport properties of M <sub>3</sub> Ni <sub>3</sub> Sb <sub>4</sub> (M=Zr and Hf): An intermetallic semiconductor. <b>2008</b> , 77,	11
2033	Systematic investigation of the thermoelectric properties of TlMTe <sub>2</sub> (M=Ga, In, or Tl). <b>2008</b> , 104, 073705	16
2032	First-principles theory of competing order types, phase separation, and phonon spectra in thermoelectric AgPbmSbTe <sub>(m+2)</sub> alloys. <b>2008</b> , 101, 155704	73
2031	Thermoelectric Properties of Tl <sub>8</sub> GeTe <sub>5</sub> with Low Thermal Conductivity. <b>2008</b> , 49, 1728-1730	1
2030	Thermoelectrics as elements of hybrid-electric vehicle thermal energy systems. <b>2008</b> ,	1

2029	Energiewandler mit großem Zukunftspotenzial. <b>2008</b> , 56, 136-139	1
2028	Electronic structure and thermoelectric properties of layered PbSe-WSe <sub>2</sub> materials. <b>2009</b> , 80,	52
2027	Thermoelectric performance of Ni <sub>y</sub> Mo <sub>3</sub> Sb <sub>7-x</sub> Te <sub>x</sub> (y=0.1, 1.5-1.7). <b>2009</b> , 105, 053703	19
2026	Structural and thermoelectric properties of AgSbTe <sub>2</sub> -AgSbSe <sub>2</sub> pseudobinary system. <b>2009</b> , 79,	67
2025	Microstructure and a nucleation mechanism for nanoprecipitates in PbTe-AgSbTe <sub>2</sub> . <b>2009</b> , 103, 145502	53
2024	Thermoelectric properties of stoichiometric and hole-doped CrN. <b>2009</b> , 94, 152103	52
2023	Improvement of spatial resolution for local Seebeck coefficient measurements by deconvolution algorithm. <b>2009</b> , 80, 105104	16
2022	Phase separation and nanostructuring in the thermoelectric material PbTe <sub>1-x</sub> S <sub>x</sub> studied using the atomic pair distribution function technique. <b>2009</b> , 80,	18
2021	Electronic inhomogeneity and Ag:Sb imbalance of Ag <sub>1-x</sub> Pb <sub>18</sub> Sb <sub>1+z</sub> Te <sub>20</sub> high-performance thermoelectrics elucidated by T125e and P207b NMR. <b>2009</b> , 80,	35
2020	Antimony as an amphoteric dopant in lead telluride. <b>2009</b> , 80,	51
2019	Nanostructures and defects in thermoelectric AgPb <sub>18</sub> SbTe <sub>20</sub> single crystal. <b>2009</b> , 105, 094317	28
2018	Thermoelectric properties of granular metals. <b>2009</b> , 79,	15
2017	Thermoelectric properties in nanostructured homologous series alloys Ga <sub>m</sub> Sb <sub>n</sub> Te <sub>1.5(m+n)</sub> . <b>2009</b> , 105, 063703	12
2016	Thermoelectric and structural characterization of Ba <sub>2</sub> Ho(Cu <sub>3-x</sub> Co <sub>x</sub> )O <sub>6+y</sub> . <b>2009</b> , 105, 063706	4
2015	Advanced Soldier-Based Thermoelectric Power Systems Using Battlefield Heat Sources. <b>2009</b> , 1218, 1	5
2014	Transport Properties of Thermoelectric Nanocomposites. <b>2009</b> , 1166, 8	1
2013	Thermoelectric Properties of Multiple Quantum Dots Junction System. <b>2009</b> , 48, 125005	11
2012	Frequency-dependent Monte Carlo simulations of phonon transport in two-dimensional porous silicon with aligned pores. <b>2009</b> , 106, 114321	153

2011	Low thermal conductivity and improved figure of merit in fine-grained binary PbTe thermoelectric alloys. <b>2009</b> , 42, 015406	37
2010	Thermoelectric Generators Made with Novel Lead Telluride Based Materials. <b>2009</b> , 1218, 1	1
2009	Thermoelectrics Near the Mott Localization/Delocalization Transition. <b>2009</b> , 119-131	
2008	High Temperature Thermoelectric Properties of Nano-Bulk Silicon and Silicon Germanium. <b>2009</b> , 1166, 4	7
2007	Thermal Conductivity Reduction Paths in Thermoelectric Materials. <b>2009</b> , 1166, 1	2
2006	Design to Maximize Performance of a Thermoelectric Power Generator With a Dynamic Thermal Power Source. <b>2009</b> , 131,	34
2005	Atomic-Scale Three-Dimensional Phononic Crystals With a Very Low Thermal Conductivity to Design Crystalline Thermoelectric Devices. <b>2009</b> , 131,	55
2004	Dispenser Printed Microscale Thermoelectric Generators for Powering Wireless Sensor Networks. <b>2009</b> ,	
2003	Anomalous thermoelectric power in conducting amorphous carbon thin films incorporating a high concentration of nitrogen. <b>2009</b> , 42, 085407	3
2002	A High-Throughput Screening System for Thermoelectric Material Exploration Based on a Combinatorial Film Approach. <b>2009</b> , 48, 05EB02	7
2001	Thermoelectric properties of AgPbmSbTem+2 (12h26) at elevated temperature. <b>2009</b> , 105, 113703	28
2000	Diminished thermal conductivity of Si/SiGe multilayers established through heating current frequency. <b>2009</b> , 1172, 77	
1999	Understanding Electrical Transport and the Large Power Factor Enhancements in Co-Nanostructured PbTe. <b>2009</b> , 1166, 1	
1998	The Effect on Thermoelectric Properties of Cd Substitution in PbTe. <b>2009</b> , 1166, 9	
1997	Investigation of Solid-State Immiscibility and Thermoelectric Properties of the System PbTe/PbS. <b>2009</b> , 1166, 7	2
1996	Size Effects on the Thermal Properties of Self-assembled Ge Quantum Dots in Single-crystal Silicon. <b>2009</b> , 1172, 66	
1995	Thermoelectric properties and microstructure of large-grain Mg2Sn doped with Ag. <b>2009</b> , 1166, 26	6
1994	Complex thermoelectric materials. <b>2009</b> , 50-59	1

1993	Synthesis and characterization of quaternary selenides $\text{Sn}_2\text{Pb}_5\text{Bi}_4\text{Se}_{13}$ and $\text{Sn}_{8.65}\text{Pb}_{0.35}\text{Bi}_4\text{Se}_{15}$ . <b>2009</b> , 11, 1666-1672	7
1992	Agglomeration during wet milling of LAST (lead-antimony-silver-tellurium) powders. <b>2009</b> , 113, 497-502	10
1991	Effect of Sb doping on thermoelectric properties of chemically deposited bismuth selenide films. <b>2009</b> , 115, 47-51	30
1990	Thermoelectric property of PbTe coating on copper and nickel. <b>2009</b> , 118, 165-173	7
1989	Growth of PbTe nanorods controlled by polymerized tellurium anions and metal(II) amides via composite-hydroxide-mediated approach. <b>2009</b> , 44, 1846-1849	9
1988	Effect of linear and non-linear components in the temperature dependences of thermoelectric properties on the energy conversion efficiency. <b>2009</b> , 50, 1968-1975	26
1987	Resultant Seebeck coefficient formulated by combining the Thomson effect with the intrinsic Seebeck coefficient of a thermoelectric element. <b>2009</b> , 50, 2394-2399	18
1986	Analysis of Nanostructuring in High Figure-of-Merit $\text{Ag}_{1-x}\text{Pb}_x\text{SbTe}_{2+m}$ Thermoelectric Materials. <b>2009</b> , 19, 1254-1259	94
1985	Nanostructured Bulk Silicon as an Effective Thermoelectric Material. <b>2009</b> , 19, 2445-2452	419
1984	Binary-Phased Nanoparticles for Enhanced Thermoelectric Properties. <b>2009</b> , 21, 3196-3200	61
1983	Alte und neue Konzepte für thermoelektrische Materialien. <b>2009</b> , 121, 8768-8792	88
1982	Synthetic Control of Selenide Supertetrahedral Clusters and Three-Dimensional Co-assembly by Charge-Complementary Metal Cations. <b>2009</b> , 121, 7340-7343	24
1981	New and old concepts in thermoelectric materials. <b>2009</b> , 48, 8616-39	1634
1980	Synthetic control of selenide supertetrahedral clusters and three-dimensional co-assembly by charge-complementary metal cations. <b>2009</b> , 48, 7204-7	63
1979	Structure and low-temperature properties of $\text{Ba}_8\text{Ni}_6\text{Ge}_{40}$ . <b>2009</b> , 70, 312-315	17
1978	Transport properties and lithium insertion study in the p-type semi-conductors $\text{AgCuO}_2$ and $\text{AgCu}_{0.5}\text{Mn}_{0.5}\text{O}_2$ . <b>2009</b> , 182, 374-380	25
1977	Transport properties of undoped and Br-doped PbTe sintered at high-temperature and pressure 4.0GPa. <b>2009</b> , 182, 2602-2607	21
1976	Improved thermoelectric properties of La-doped $\text{Bi}_2\text{Sr}_2\text{Co}_2\text{O}_9$ -layered misfit oxides. <b>2009</b> , 44, 1889-1893	23

1975	Thermoelectric power generation materials: Technology and application opportunities. <b>2009</b> , 61, 79-85	82
1974	Preparation and thermoelectric properties of SiO <sub>2</sub> /Zn <sub>4</sub> Sb <sub>3</sub> nanocomposite materials. <b>2009</b> , 24, 694-697	1
1973	New Ternary Arsenides for High-Temperature Thermoelectric Applications. <b>2009</b> , 38, 1030-1036	4
1972	Thermoelectric Materials with Potential High Power Factors for Electricity Generation. <b>2009</b> , 38, 1268-1272	26
1971	Thermoelectric Characterization of (Ga,In) <sub>2</sub> Te <sub>3</sub> with Self-Assembled Two-Dimensional Vacancy Planes. <b>2009</b> , 38, 1392-1396	26
1970	Thermoelectric Properties of TlCu <sub>3</sub> Te <sub>2</sub> and TlCu <sub>2</sub> Te <sub>2</sub> . <b>2009</b> , 38, 1350-1353	4
1969	Preparation and Thermoelectric Properties of Ag <sub>0.5</sub> In <sub>0.5</sub> Pb <sub>5</sub> Sn <sub>4</sub> Te <sub>10</sub> . <b>2009</b> , 38, 1273-1277	
1968	Doping Effects on the Thermoelectric Properties of AgSbTe <sub>2</sub> . <b>2009</b> , 38, 1504-1509	40
1967	Modeling the Building Blocks of a 10% Efficient Segmented Thermoelectric Power Generator. <b>2009</b> , 38, 1382-1386	37
1966	Performance Results of a High-Power-Density Thermoelectric Generator: Beyond the Couple. <b>2009</b> , 38, 1375-1381	26
1965	p-Type PbTe Thermoelectric Bulk Materials with Nanograins Fabricated by Attrition Milling and Spark Plasma Sintering. <b>2009</b> , 38, 1956-1961	20
1964	X-Ray Characterization of Low-Thermal-Conductivity Thin-Film Materials. <b>2009</b> , 38, 1402-1406	6
1963	Automotive Applications of Thermoelectric Materials. <b>2009</b> , 38, 1245-1251	250
1962	Synthesis of Nanocomposites with Improved Thermoelectric Properties. <b>2009</b> , 38, 1017-1024	31
1961	Efficient Switched Thermoelectric Refrigerators for Cold Storage Applications. <b>2009</b> , 38, 1148-1153	13
1960	Microstructures and Thermoelectric Properties of an Annealed Ti <sub>0.5</sub> (Hf <sub>0.5</sub> Zr <sub>0.5</sub> ) <sub>0.5</sub> NiSn <sub>0.998</sub> Sb <sub>0.002</sub> Ribbon. <b>2009</b> , 38, 1154-1158	6
1959	Preparation of Conducting Polyaniline-Bismuth Nanoparticle Composites by Planetary Ball Milling. <b>2009</b> , 38, 1443-1449	25
1958	Thermoelectric properties of p-type PbSe nanowires. <b>2009</b> , 2, 394-399	67

1957	Influence of Thomson effect on the resultant local Seebeck coefficient in thermoelectric composite materials. <b>2009</b> , 94, 57-64	1
1956	Dependence of the resultant Seebeck coefficient on the thickness of Bi <sub>0.88</sub> Sb <sub>0.12</sub> alloy in welded M/BiSb/M (M = Cu and Ni) composites. <b>2009</b> , 97, 133-141	
1955	Cu <sub>9</sub> Bi <sub>9</sub> S <sub>16</sub> Cl <sub>8</sub> und Cu <sub>7.4</sub> Bi <sub>6</sub> Se <sub>12</sub> Cl <sub>7</sub> [Polyedernetzwerke mit Dichalkogenidbrücken und mobilen Kupfer(I)-Kationen. <b>2009</b> , 635, 2162-2169	8
1954	Nanoscale granular boundaries in polycrystalline Pb <sub>0.75</sub> Sn <sub>0.25</sub> Te: an innovative approach to enhance the thermoelectric figure of merit. <b>2009</b> , 206, 221-228	15
1953	Peierls distortion as a route to high thermoelectric performance in In(4)Se(3- $\delta$ ) crystals. <b>2009</b> , 459, 965-8	428
1952	An inconvenient truth about thermoelectrics. <b>2009</b> , 8, 83-5	616
1951	Thermoelectric devices: Helping chips to keep their cool. <b>2009</b> , 4, 214-5	113
1950	Synthesis and thermoelectric properties of PbTe nanorods and microcubes. <b>2009</b> , 163, 57-61	38
1949	XAFS studies of nickel-doped lead telluride. <b>2009</b> , 404, 5032-5034	8
1948	Characterization of size-quantized PbTe thin films synthesized by an electrochemical co-deposition method. <b>2009</b> , 517, 5419-5424	26
1947	A model for the heat of transport in ionic conductors. <b>2009</b> , 180, 467-470	12
1946	(H <sub>2</sub> NC <sub>4</sub> H <sub>8</sub> NCH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub> )(HNCH <sub>2</sub> CH <sub>2</sub> NH <sub>2</sub> ) <sub>3</sub> Zn <sub>2</sub> Ge <sub>2</sub> Se <sub>8</sub> : A new, templated one-dimensional ternary semiconductor stabilized by mixed organic cations. <b>2009</b> , 28, 3193-3198	6
1945	Functionalized ethylchalcogenolate complexes of lead(II): Synthesis, structures and their conversion into lead chalcogenide nanoparticles. <b>2009</b> , 28, 2749-2753	24
1944	Local structure of the high-temperature thermoelectric material PbTe using the maximum entropy method (MEM) and pair distribution function (PDF). <b>2009</b> , 70, 159-163	4
1943	The influence of co-doping Ag and Sb on microstructure and thermoelectric properties of PbTe prepared by combining hydrothermal synthesis and melting. <b>2009</b> , 182, 869-874	25
1942	Synthesis and characterization of quaternary chalcogenides InSn <sub>2</sub> Bi <sub>3</sub> Se <sub>8</sub> and In <sub>0.2</sub> Sn <sub>6</sub> Bi <sub>1.8</sub> Se <sub>9</sub> . <b>2009</b> , 182, 1450-1456	23
1941	Transport and mechanical property evaluation of (AgSbTe) <sub>1-x</sub> (GeTe) <sub>x</sub> (x=0.80, 0.82, 0.85, 0.87, 0.90). <b>2009</b> , 182, 2088-2095	64
1940	Facile synthesis of PbTe nanoparticles and thin films in alkaline aqueous solution at room temperature. <b>2009</b> , 182, 3383-3386	28

1939	Interfaces in bulk thermoelectric materials. <b>2009</b> , 14, 226-235	320
1938	p- and n-Type Ba <sub>8</sub> Ga <sub>16</sub> Ge <sub>30</sub> studied by X-ray photoelectron spectroscopy. <b>2009</b> , 472, 60-64	16
1937	Effect of periodicity of the two-dimensional vacancy planes on the thermal conductivity of bulk Ga <sub>2</sub> Te <sub>3</sub> . <b>2009</b> , 3, 221-223	12
1936	Role of Structures on Thermal Conductivity in Thermoelectric Materials. <b>2009</b> , 19-49	7
1935	Bulk nanostructured thermoelectric materials: current research and future prospects. <b>2009</b> , 2, 466	1448
1934	Unique nanostructures and enhanced thermoelectric performance of melt-spun BiSbTe alloys. <b>2009</b> , 94, 102111	461
1933	Structure study of bulk nanograined thermoelectric bismuth antimony telluride. <b>2009</b> , 9, 1419-22	216
1932	EFFECT OF EMBEDDING NANOPARTICLES ON THERMAL CONDUCTIVITY OF CRYSTALLINE SEMICONDUCTORS: PHONON SCATTERING MECHANISM. <b>2009</b> , 08, 551-556	3
1931	Synthesis and phase width of quaternary selenides Pb <sub>4</sub> In(x)M(6-x)Se <sub>13</sub> (M = Bi, x = 2.1-2.8; Sb, x = 2). <b>2009</b> , 48, 6402-8	8
1930	Thermoelectric Properties and Nanostructuring in the p-Type Materials NaPb <sub>18</sub> Sn <sub>x</sub> MTe <sub>20</sub> (M = Sb, Bi). <b>2009</b> , 21, 1683-1694	50
1929	Syntheses, crystal and electronic structures, and physical properties of two quaternary chalcogenides: La(4)FeSb(2)Q(10) (Q = S, Se). <b>2009</b> , 48, 11518-24	45
1928	Two gallium antimony sulfides built on a novel heterometallic cluster. <b>2009</b> , 48, 3904-6	41
1927	Improvement in the Thermoelectric Figure of Merit by La/Ag Cosubstitution in PbTe. <b>2009</b> , 21, 1361-1367	66
1926	Origin of the High Thermoelectric Performance in Si Nanowires: A First-Principle Study. <b>2009</b> , 113, 14001-14005	3
1925	Field-effect modulation of Seebeck coefficient in single PbSe nanowires. <b>2009</b> , 9, 1689-93	97
1924	Broadband "infinite-speed" magic-angle spinning NMR spectroscopy. <b>2009</b> , 131, 8390-1	16
1923	Improved thermoelectric properties of Mg <sub>2</sub> SixGe <sub>y</sub> Sn <sub>1-x-y</sub> nanoparticle-in-alloy materials. <b>2009</b> , 94, 203109	36
1922	Transport and thermoelectric properties of Cr <sub>1-x</sub> MnxSb <sub>2</sub> at low temperatures. <b>2009</b> , 467, 299-304	7



1921	Preparation and thermoelectric properties of AgPbmSbTe <sub>2+m</sub> alloys. <b>2009</b> , 469, 499-503	22
1920	The effect of Sn substitution for Sb on transport and thermoelectric properties of CrSb <sub>2</sub> at low temperatures. <b>2009</b> , 472, 400-405	7
1919	Hydrothermal synthesis of nano-sized AgPb <sub>18</sub> SbTe <sub>20</sub> thermoelectric powders. <b>2009</b> , 475, L22-L24	15
1918	Synthesis and thermoelectric properties of BaMn <sub>2</sub> Sb <sub>2</sub> single crystals. <b>2009</b> , 477, 519-522	21
1917	Precipitation of Ag <sub>2</sub> Te in the thermoelectric material AgSbTe <sub>2</sub> . <b>2009</b> , 478, 75-82	76
1916	Effect of Nb substitution for V on the thermoelectric properties of Fe <sub>2</sub> VAl. <b>2009</b> , 486, 507-510	16
1915	Nanoengineered Materials for Thermoelectric Energy Conversion. <b>2009</b> , 225-299	28
1914	Increased phonon scattering by nanograins and point defects in nanostructured silicon with a low concentration of germanium. <b>2009</b> , 102, 196803	228
1913	Reference X-ray powder diffraction pattern of a high-pressure phase, CaCo <sub>2</sub> O <sub>4</sub> . <b>2009</b> , 24, 343-346	2
1912	Enhanced thermoelectric figure of merit in nanocrystalline Bi <sub>2</sub> Te <sub>3</sub> bulk. <b>2009</b> , 105, 094303	62
1911	Thermoelectric properties of CoTiSb based compounds. <b>2009</b> , 42, 185401	30
1910	Use of hydrazine in the hydrothermal synthesis of chalcogenides: the neutral framework material [Mn(2)SnS(4)(N(2)H(4))(2)]. <b>2009</b> , 48, 4658-60	42
1909	Enhancement of thermoelectric efficiency in oxygen-deficient Sr <sub>1-x</sub> LaxTiO <sub>3</sub> ceramics. <b>2009</b> , 95, 162110	78
1908	Thermoelectric Properties of the Thallium-Tellurium Binary Compounds. <b>2009</b> , 50, 1582-1585	7
1907	Thermopower of molecular junctions: an ab initio study. <b>2009</b> , 9, 1011-4	86
1906	Advances in total scattering analysis. <b>2009</b> , 19, 5078	50
1905	High thermoelectric figure of merit and improved mechanical properties in melt quenched PbTe <sub>1-x</sub> Te and PbTe <sub>1-x</sub> Si <sub>x</sub> eutectic and hypereutectic composites. <b>2009</b> , 105, 083718	45
1904	Role of self-organization, nanostructuring, and lattice strain on phonon transport in NaPb(18-x)Sn(x)BiTe(20) thermoelectric materials. <b>2009</b> , 131, 17828-35	34

1903	Room-temperature mechanical properties of LAST (Pb <sub>1-x</sub> Ag <sub>x</sub> Te) thermoelectric materials as a function of cooling rate during ingot casting. <b>2009</b> , 89, 267-275	4
1902	Nanoscale design to enable the revolution in renewable energy. <b>2009</b> , 2, 559	311
1901	Enhanced Seebeck coefficient through energy-barrier scattering in PbTe nanocomposites. <b>2009</b> , 79,	356
1900	Nanoscale inclusions in the phonon glass thermoelectric material Zn <sub>4</sub> Sb <sub>3</sub> . <b>2009</b> , 89, 362-369	27
1899	Thermal conductivity of carbon nanotubes. <b>2009</b> , 105, 074316	33
1898	Temperature-dependent elastic moduli of lead telluride-based thermoelectric materials. <b>2009</b> , 89, 143-167	31
1897	Thermoelectric transport properties of highly oriented FeSb <sub>2</sub> thin films. <b>2009</b> , 106, 033710	23
1896	High thermoelectric performance BiSbTe alloy with unique low-dimensional structure. <b>2009</b> , 105, 113713	166
1895	Thermodynamic properties of PbTe, PbSe, and PbS: First-principles study. <b>2009</b> , 80,	196
1894	Modeling study of thermoelectric SiGe nanocomposites. <b>2009</b> , 80,	160
1893	Thermoelectric and Seebeck coefficients of granular metals. <b>2009</b> , 79,	9
1892	Temperature-dependent thermal expansion of cast and hot-pressed LAST (Pb <sub>1-x</sub> Ag <sub>x</sub> Te) thermoelectric materials. <b>2009</b> , 89, 1439-1455	8
1891	Chalcogenide chemistry in ionic liquids: nonlinear optical wave-mixing properties of the double-cubane compound [Sb <sub>7</sub> S <sub>8</sub> Br <sub>2</sub> ](AlCl <sub>4</sub> ) <sub>3</sub> . <b>2009</b> , 131, 9896-7	221
1890	Thermal Conductivity of the Ternary Compounds: AgMTe <sub>2</sub> and AgM <sub>5</sub> Te <sub>8</sub> (M = Ga or In). <b>2009</b> , 50, 1603-1606	20
1889	Enhancement of Thermoelectric Figure-of-Merit by a Nanostructure Approach. <b>2009</b> , 1166, 3	4
1888	High Temperature Multi-Fuel Combustion-Powered Thermoelectric Auxiliary Power Unit. <b>2009</b> ,	
1887	Heat Conduction of a Porous Material. <b>2009</b> ,	
1886	Silver(I)-(poly)chalcogenide Halides Ion and Electron High Potentials. <b>2010</b> , 224, 1505-1531	3

1885	Silicon nanowires as efficient thermoelectric materials. <b>2010</b> , 116-119	10
1884	Thermoelectric Materials and Applications on the Recovery of Waste Heat Energy. <b>2010</b> ,	2
1883	Complex thermoelectric materials. <b>2010</b> , 101-110	86
1882	Recent Progress in the Development of Thermoelectric Materials with Complex Crystal Structures. <b>2010</b> , 365-384	1
1881	Temperature Measurements by Using MEMS(The 1st Symposium on Micro-Nano Engineering). <b>2010</b> , 76, 1890-1892	
1880	Thermoelectric transport through strongly correlated quantum dots. <b>2010</b> , 81,	147
1879	Electron transport properties of rapidly solidified (GeTe) <sub>x</sub> (AgSbTe <sub>2</sub> ) <sub>1-x</sub> pseudobinary thermoelectric compounds. <b>2010</b> , 6, 181-185	5
1878	Control of thermoelectric properties through the addition of Ag in the Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> Alloy. <b>2010</b> , 6, 201-207	38
1877	Semiconductor nanocrystals functionalized with antimony telluride zintl ions for nanostructured thermoelectrics. <b>2010</b> , 132, 6686-95	140
1876	Microstructure Engineering Design for Thermoelectric Materials: An Approach to Minimize Thermal Diffusivity. <b>2010</b> , 22, 988-993	55
1875	Recent developments in nanostructured materials for high-performance thermoelectrics. <b>2010</b> , 20, 9577	135
1874	Identifying the specific nanostructures responsible for the high thermoelectric performance of (Bi,Sb) <sub>2</sub> Te <sub>3</sub> nanocomposites. <b>2010</b> , 10, 3283-9	433
1873	Oxide Thermoelectric Materials: A Nanostructuring Approach. <b>2010</b> , 40, 363-394	350
1872	Prospects of colloidal nanocrystals for electronic and optoelectronic applications. <b>2010</b> , 110, 389-458	3354
1871	A series of novel organically templated germanium antimony sulfides. <b>2010</b> , 5, 1817-23	40
1870	Effective thermal conductivity of polycrystalline materials with randomly oriented superlattice grains. <b>2010</b> , 108, 034310	45
1869	Solution synthesis of a new thermoelectric Zn <sub>(1+x)</sub> Sb nanophase and its structure determination using automated electron diffraction tomography. <b>2010</b> , 132, 9881-9	87
1868	High temperature Seebeck coefficient metrology. <b>2010</b> , 108, 121101	156

- 1867 Thermoelectric properties of polycrystalline  $\text{In}_4\text{Se}_3$  and  $\text{In}_4\text{Te}_3$ . **2010**, 96, 162108 52
- 1866 Hydrothermal synthesis of  $\text{Bi}_2\text{Te}_3$  nanowires through the solid-state interdiffusion of Bi and Te atoms on the surface of Te nanowires. **2010**, 312, 3410-3415 12
- 1865 On the two-dimensional thermoelectric power in quantum wells of non-parabolic materials under magnetic quantization. **2010**, 48, 257-275 6
- 1864 Microstructure and thermoelectric properties of  $\text{Zn}_{1-x}\text{Al}_x\text{O}$  ceramics fabricated by spark plasma sintering. **2010**, 71, 1344-1349 54
- 1863 Microstructure Size Control through Cooling Rate in Thermoelectric  $\text{PbTe-Sb}_2\text{Te}_3$  Composites. **2010**, 41, 641-650 14
- 1862 Self-Assembled Germanium Quantum-Dot Supercrystals in Silicon with Extremely Low Thermal Conductivities for Thermoelectrics. **2010**, 39, 2154-2161 6
- 1861 Highly Dynamic Chalcogen Chains in Silver(I) (Poly)Chalcogenide Halides: a New Concept for Thermoelectrics?. **2010**, 39, 2096-2104 9
- 1860 Synthesis and Characterization of p-Type  $\text{Pb}_{0.5}\text{Sn}_{0.5}\text{Te}$  Thermoelectric Power Generation Elements by Mechanical Alloying. **2010**, 39, 8-14 16
- 1859 Natural Microstructure and Thermoelectric Performance of  $(\text{GeTe})_{80}(\text{Ag}_y\text{Sb}_{2-y}\text{Te}_{3-y})_{20}$ . **2010**, 39, 2127-2131 15
- 1858 Oscillatory Behavior of Thermoelectric Properties in p-PbTe Quantum Wells. **2010**, 39, 2085-2091 9
- 1857 Bulk Nanostructured Thermoelectric Materials: Preparation, Structure and Properties. **2010**, 39, 1990-1995 23
- 1856 Structural Phase Transitions and Thermoelectric Properties of  $\text{AgPb}_{18}\text{SbTe}_{20}$  Under Compression. **2010**, 39, 1828-1831 8
- 1855 Thermoelectric Properties of Nanocrystalline PbTe Synthesized by Mechanical Alloying. **2010**, 39, 1665-1668 12
- 1854 Ba-Cu-Si Clathrates: Phase Equilibria and Crystal Chemistry. **2010**, 39, 1634-1639 28
- 1853 Thermoelectric Properties of the Pseudobinary Alloy  $(\text{Ag}_{0.365}\text{Sb}_{0.558}\text{Te})_{0.975}(\text{GeTe})_{0.025}$  Prepared by Spark Plasma Sintering. **2010**, 39, 1493-1498 3
- 1852 High-resolution nanostructural investigation of  $\text{Zn}_4\text{Sb}_3$  alloys. **2010**, 63, 784-787 34
- 1851 Room-temperature synthesis and seebeck effect of lead chalcogenide nanocubes. **2010**, 12, 123-127 33
- 1850 Ordering Phenomena in Complex Chalcogenides [the Showcase of  $\text{A}_2\text{In}_{12}\text{Q}_{19}$  (A = K, Tl, NH<sub>4</sub>; Q = Se, Te) and Pseudobinary  $\text{In}_2\text{Q}_3$ ]. **2010**, 2010, 367-378 8

1849	Nanostructures of Metal Tellurides (PbTe, CdTe, CoTe <sub>2</sub> , Bi <sub>2</sub> Te <sub>3</sub> , and Cu <sub>7</sub> Te <sub>4</sub> ) with Various Morphologies: A General Solvothermal Synthesis and Optical Properties. <b>2010</b> , 2010, 3005-3011	40
1848	Solution Route to PbSe Films with Enhanced Thermoelectric Transport Properties. <b>2010</b> , 2010, 4321-4324	7
1847	Enhancement of Thermoelectric Figure-of-Merit by a Bulk Nanostructuring Approach. <b>2010</b> , 20, 357-376	706
1846	On the Design of High-Efficiency Thermoelectric Clathrates through a Systematic Cross-Substitution of Framework Elements. <b>2010</b> , 20, 755-763	181
1845	Microstructure-Lattice Thermal Conductivity Correlation in Nanostructured PbTe <sub>0.7</sub> S <sub>0.3</sub> Thermoelectric Materials. <b>2010</b> , 20, 764-772	268
1844	Nanostructured thermoelectrics: big efficiency gains from small features. <b>2010</b> , 22, 3970-80	1085
1843	Nanopartikel für Funktionsmaterialien. <b>2010</b> , 122, 1402-1437	95
1842	Nanoparticulate functional materials. <b>2010</b> , 49, 1362-95	567
1841	. <b>2010</b> , 15, 7-29	38
1840	Modeling, experimental study and optimization on low-temperature waste heat thermoelectric generator system. <b>2010</b> , 87, 3131-3136	331
1839	The effect of the precursor nanopowder size on the thermoelectric properties of nanostructured Bi <sub>2</sub> Sb <sub>2</sub> Te bulk materials. <b>2010</b> , 405, 4931-4936	11
1838	Thermoelectric properties of HPHT sintered In-doped Pb <sub>0.5</sub> Sn <sub>0.5</sub> Te. <b>2010</b> , 183, 1817-1822	7
1837	Cetyltrimethylammonium bromide assisted self-assembly of NiTe <sub>2</sub> nanoflakes: Nanoflake arrays and their photoluminescence properties. <b>2010</b> , 183, 2358-2364	11
1836	Synthesis and phase width of new quaternary selenides Pb <sub>x</sub> Sn <sub>6-<math>\chi</math></sub> Bi <sub>2</sub> Se <sub>9</sub> ( $\chi=0\bar{.}36$ ). <b>2010</b> , 183, 2616-2622	5
1835	Carrier control in Ba <sub>8</sub> Ga <sub>16</sub> Ge <sub>30</sub> single crystals. <b>2010</b> , 470, S616-S618	1
1834	Triple phase structure and electron density analysis of the thermoelectric material Bi <sub>80</sub> Sb <sub>20</sub> . <b>2010</b> , 197, 159-164	8
1833	Thermoelectric power in ultrathin films, quantum wires and carbon nanotubes under classically large magnetic field: Simplified theory and relative comparison. <b>2010</b> , 405, 472-498	6
1832	Room temperature Young's modulus, shear modulus, Poisson's ratio and hardness of PbTe <sub>1-x</sub> S <sub>x</sub> thermoelectric materials. <b>2010</b> , 170, 58-66	80

1831	Nanostructured thermoelectrics. <b>2010</b> , 67, 19-63	433
1830	Influence of Se on the electron mobility in thermal evaporated Bi <sub>2</sub> (Te <sub>1-x</sub> Sex) <sub>3</sub> thin films. <b>2010</b> , 85, 358-364	16
1829	Simultaneously optimizing the independent thermoelectric properties in (Ti,Zr,Hf)(Co,Ni)Sb alloy by in situ forming InSb nanoinclusions. <b>2010</b> , 58, 4705-4713	90
1828	Fundamentals of energy transport, energy conversion, and thermal properties in organic/inorganic heterojunctions. <b>2010</b> , 491, 109-122	139
1827	Thermoelectric Properties of Ternary Alloy Ag <sub>0.405</sub> Sb <sub>0.532</sub> Te Prepared by Spark Plasma Sintering. <b>2010</b> , 39, 570-573	1
1826	Thermoelectric properties of rapid hot pressed polycrystalline Ag <sub>1-x</sub> Pb <sub>18</sub> Sb <sub>Te<sub>20</sub></sub> synthesized from doping PbTe nanocrystals. <b>2010</b> , 207, 163-169	5
1825	Thermal conductivity reduction in fullerene-enriched p-type bismuth telluride composites. <b>2010</b> , 207, 157-162	22
1824	Electronic and thermal transport properties of Mg <sub>2</sub> Sn crystals containing finely dispersed eutectic structures. <b>2010</b> , 207, 2523-2531	36
1823	Simulation of Thermoelectric Performance of Bulk SrTiO <sub>3</sub> with Two-Dimensional Electron Gas Grain Boundaries. <b>2010</b> , 93, 1677	27
1822	High-Temperature Thermoelectric Behaviors of Fine-Grained Gd-Doped CaMnO <sub>3</sub> Ceramics. <b>2010</b> , 93, 2121-2124	58
1821	Reduction of thermal conductivity in phononic nanomesh structures. <b>2010</b> , 5, 718-21	538
1820	Thermoelectric materials: Silicon stops heat in its tracks. <b>2010</b> , 5, 701-2	15
1819	The Effect of (Ag, Ni, Zn)-Addition on the Thermoelectric Properties of Copper Aluminate. <b>2010</b> , 3, 318-328	49
1818	Nanostructure formation in bulk thermoelectric compounds in the pseudo binary PbTe-Sb <sub>2</sub> Te <sub>3</sub> system. <b>2010</b> , 1267, 1	4
1817	THERMOPOWER OF SnTe FROM BOLTZMANN TRANSPORT CALCULATIONS. <b>2010</b> , 03, 223-226	41
1816	Nanostructured Silicon-based Composites for High Temperature Thermoelectric Applications. <b>2010</b> , 1267, 1	
1815	Temperature and Size Effects on the Extremely Low Thermal Conductivity of Self-assembled Germanium Quantum-dot Supercrystals in Silicon. <b>2010</b> , 1267, 1	
1814	Electrodeposition of Group III Doped PbTe Nanowires. <b>2010</b> , 1258, 1	

1813	Investigation of the thermoelectric properties of the PbTe-SrTe system. <b>2010</b> , 1267, 1	2
1812	Reduction of the Lattice Thermal Conductivity in Immiscible PbS-PbTe Systems. <b>2010</b> , 1267, 1	
1811	Improvements of Thermoelectric Performances in AgSbTe <sub>2</sub> System With in-situ Ag <sub>2</sub> Te Nano-Precipitations. <b>2010</b> , 1267, 1	1
1810	Impact of Dopants on the PbTe Thermoelectric Efficiency. <b>2010</b> , 1267, 1	
1809	Thermoelectric Power in Quantum Dots Under Large Magnetic Field. <b>2010</b> , 3-94	
1808	Metal Nano-inclusions (Bi and Ag) in Bi <sub>2</sub> Te <sub>3</sub> for Enhanced Thermoelectric Applications. <b>2010</b> , 1267, 1	
1807	Current trends in the physics of thermoelectric materials. <b>2010</b> , 180, 821	21
1806	High thermoelectric efficiency in co-doped degenerate p-type PbTe. <b>2010</b> , 1267, 1	1
1805	Order, miscibility, and electronic structure of Ag(Bi,Sb)Te <sub>2</sub> alloys and (Ag,Bi,Sb)Te precipitates in rocksalt matrix: A first-principles study. <b>2010</b> , 81,	15
1804	Electronic structure and thermoelectric properties: PbBi <sub>2</sub> Te <sub>4</sub> and related intergrowth compounds. <b>2010</b> , 81,	45
1803	High efficiency semimetal/semiconductor nanocomposite thermoelectric materials. <b>2010</b> , 108, 123702	70
1802	Doping-dependent thermopower of PbTe from Boltzmann transport calculations. <b>2010</b> , 81,	230
1801	Thermophotonic heat pump— theoretical model and numerical simulations. <b>2010</b> , 107, 093106	37
1800	Thermoelectric enhancement in PbTe with K or Na codoping from tuning the interaction of the light- and heavy-hole valence bands. <b>2010</b> , 82,	122
1799	Phase compatibility and thermoelectric properties of compounds in the Sr <sub>1-x</sub> Al <sub>x</sub> Te system. <b>2010</b> , 107, 033508	30
1798	A New Microstructured DSC Photoelectrode for Potential High Power Conversion Efficiency. <b>2010</b> , 57, 1119-1126	1
1797	Pulsed thermoelectricity. <b>2010</b> , 108, 023702	5
1796	Enhanced thermoelectricity in composites by electronic structure modifications and nanostructuring. <b>2010</b> , 97, 052102	35

1795	Effect of growth base pressure on the thermoelectric properties of indium antimonide nanowires. <b>2010</b> , 43, 025406	44
1794	Thermoelectric property studies on thallium-doped lead telluride prepared by ball milling and hot pressing. <b>2010</b> , 108, 016104	45
1793	Large thermoelectric figure of merit in Si <sub>1-x</sub> Gex nanowires. <b>2010</b> , 96, 173108	58
1792	Structure formation and very low thermal conductivity in Pb:Te:Ag:Se mixtures. <b>2010</b> , 107, 033519	2
1791	Induction annealing and subsequent quenching: effect on the thermoelectric properties of boron-doped nanographite ensembles. <b>2010</b> , 81, 043909	2
1790	Controlling independently the electric and thermal properties by shrinking the particle size down to nanosize in quasi-one-dimensional Ca <sub>3</sub> Co <sub>2</sub> O <sub>6</sub> and Sr <sub>6</sub> Co <sub>5</sub> O <sub>15</sub> . <b>2010</b> , 82,	11
1789	Thermoelectric heating of Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub> in phase change memory devices. <b>2010</b> , 96, 123115	25
1788	Thermoelectric properties of Yb(x)Eu(1-x)Cd <sub>2</sub> Sb <sub>2</sub> . <b>2010</b> , 133, 194701	51
1787	Giant scattering parameter and enhanced thermoelectric properties originating from synergetic scattering of electrons in semiconductors with metal nanoinclusions. <b>2010</b> , 97, 192101	23
1786	Investigation of a thermoelectric power supply for the Artificial Accommodation System. <b>2010</b> ,	4
1785	Advances in Scattering Probes for Materials. <b>2010</b> , 35, 495-503	4
1784	Theoretical studies on the thermoelectric figure of merit of nanograined bulk silicon. <b>2010</b> , 97, 063109	48
1783	Thermoelectric properties of a weakly coupled quantum dot: enhanced thermoelectric efficiency. <b>2010</b> , 22, 355304	38
1782	Thermal and power generating performances of thermoelectric energy recovery modules. <b>2010</b> ,	1
1781	Thermoelectric Effects of Multiple Quantum Dot Junctions in the Nonlinear Response Regime. <b>2010</b> , 49, 064301	3
1780	Electronic structure of the thermoelectric materials PbTe and AgPb <sub>18</sub> SbTe <sub>20</sub> from first-principles calculations. <b>2010</b> , 25, 1030-1036	6
1779	Structural Characterization of Nano-Crystalline Mg <sub>2</sub> Si Prepared by Ball Milling. <b>2010</b> , 74, 48-53	
1778	Novel metal/semiconductor nanocomposite and superlattice materials and devices for thermoelectrics. <b>2010</b> ,	1



1777	Thermoelectric Coolers for Thermal Gradient Management on Chip. <b>2010</b> ,	6
1776	Thermal Conductivity Characterization and Modeling of P-Type Metal/Semiconductor Nanocomposites. <b>2010</b> ,	
1775	Thermal Rectification Effects of Multiple Semiconductor Quantum Dot Junctions. <b>2010</b> , 49, 105202	1
1774	Thermal and electrical transport properties of VA-element doped $Pb_{9.6}M_{0.2}Te_{10-x}Sex$ (M= Sb, Bi) thermoelectric materials. <b>2010</b> , 43, 035405	4
1773	Thermoelectric and thermal rectification properties of quantum dot junctions. <b>2010</b> , 81,	111
1772	Sb <sub>2</sub> Te <sub>3</sub> Nanoparticles with Enhanced Seebeck Coefficient and Low Thermal Conductivity. <b>2010</b> , 22, 3086-3092	77
1771	On Landauer versus Boltzmann and full band versus effective mass evaluation of thermoelectric transport coefficients. <b>2010</b> , 107, 023707	114
1770	Nanostructured materials for thermoelectric applications. <b>2010</b> , 46, 8311-24	171
1769	Zintl Chemistry for Designing High Efficiency Thermoelectric Materials <b>2010</b> , 22, 624-634	482
1768	Potential impact of ZT = 4 thermoelectric materials on solar thermal energy conversion technologies. <b>2010</b> , 114, 14339-42	22
1767	Reversible Property Switching, Thermoelectric Performance, and d <sub>10</sub> –d <sub>10</sub> Interactions in Ag <sub>5</sub> Te <sub>2</sub> Cl. <b>2010</b> , 22, 2946-2954	28
1766	Effect of surface roughness on thermal conductivity of silicon nanowires. <b>2010</b> , 107, 033501	69
1765	Fabrication of microdevices with integrated nanowires for investigating low-dimensional phonon transport. <b>2010</b> , 10, 4341-8	131
1764	On the origin of increased phonon scattering in nanostructured PbTe based thermoelectric materials. <b>2010</b> , 132, 8669-75	177
1763	Impurity clustering and impurity-induced bands in PbTe-, SnTe-, and GeTe-based bulk thermoelectrics. <b>2010</b> , 81,	77
1762	Influence of nanostructuring and heterogeneous nucleation on the thermoelectric figure of merit in AgSbTe <sub>2</sub> . <b>2010</b> , 107, 113716	24
1761	High Thermoelectric Figure of Merit and Nanostructuring in Bulk p-type $Gex(SnyPb_{1-x})_{1-x}Te$ Alloys Following a Spinodal Decomposition Reaction. <b>2010</b> , 22, 1054-1058	70
1760	Rational Synthesis and Characterization of a New Family of Low Thermal Conductivity Misfit Layer Compounds [(PbSe) <sub>0.99</sub> ] <sub>m</sub> (WSe <sub>2</sub> ) <sub>n</sub> <b>2010</b> , 22, 1002-1009	65

- 1759 Behaviour of group IIIA impurities in PbTe: implications to improve thermoelectric efficiency. **2010**, 43, 405403 26
- 1758 Thermoelectric Properties of the Compounds AgPbmLaTem+2 **2010**, 22, 876-882 21
- 1757 High Figure of Merit in Nanostructured n-Type KPbmSbTem+2 Thermoelectric Materials **2010**, 22, 1046-1053 84
- 1756 Reduced thermal conductivity in nanoengineered rough Ge and GaAs nanowires. **2010**, 10, 1120-4 102
- 1755 Understanding Nanostructures in Thermoelectric Materials: An Electron Microscopy Study of AgPb18SbSe20 Crystals. **2010**, 22, 5630-5635 22
- 1754 Shape-Controlled Synthesis and Electrical Conductivities of AgPb10SbTe12 Materials. **2010**, 114, 5827-5834 15
- 1753 Simple Route to Dots and Rods of PbTe Nanocrystals. **2010**, 22, 3817-3819 38
- 1752 Interface effects on thermal conductivity of Bi/Te core-shell nanowires. **2010**,
- 1751 Two novel thioindate-thioantimonate compounds [Ni(dien)2]2In2Sb4S11 and [Ni(dien)2]3(In3Sb2S9)2·2H2O with transition metal complexes. **2010**, 49, 9671-6 36
- 1750 High Thermoelectric Performance of Ge/Si Core/Shell Nanowires: First-Principles Prediction. **2010**, 114, 9096-9100 34
- 1749 From One-Dimensional Ribbon to Three-Dimensional Microporous Framework: The Syntheses, Crystal Structures, and Properties of a Series of Mercury Antimony Chalcogenides. **2010**, 10, 1364-1372 28
- 1748 In situ nanostructure generation and evolution within a bulk thermoelectric material to reduce lattice thermal conductivity. **2010**, 10, 2825-31 95
- 1747 Comparison of thermal conductivity in nanodot nanocomposites and nanograined nanocomposites. **2010**, 96, 2131-14 11
- 1746 Structural effects on the lattice thermal conductivity of ternary antimony- and bismuth-containing chalcogenide semiconductors. **2010**, 96, 181905 80
- 1745 Thermoelectric transport properties of PbTe under pressure. **2010**, 82, 82
- 1744 Biomolecule-assisted hydrothermal synthesis and self-assembly of Bi2Te3 nanostring-cluster hierarchical structure. **2010**, 4, 2523-30 86
- 1743 Nanostructured Thermoelectrics: The New Paradigm? **2010**, 22, 648-659 878
- 1742 Coherent Nanointerfaces in Thermoelectric Materials. **2010**, 114, 21003-21012 18

1741	Synthesis and characterization of Bi <sub>2</sub> Te <sub>3</sub> nanotubes by a hydrothermal method. <b>2010</b> , 492, L50-L53	16
1740	Different clusters within the Ba <sub>4</sub> M <sub>4</sub> A <sub>2</sub> Te <sub>9</sub> (M=Cu, Ag, Au; A=Si, Ge) series: Crystal structures and transport properties. <b>2010</b> , 493, 70-76	7
1739	Thermoelectric properties of gold telluride: AuTe <sub>2</sub> . <b>2010</b> , 496, 53-55	9
1738	Transport properties of Ag <sub>0.8</sub> Pb <sub>18</sub> SbTe <sub>20</sub> prepared by high pressure and high temperature. <b>2010</b> , 497, 432-435	6
1737	Improved thermoelectric properties of AgSbTe <sub>2</sub> based compounds with nanoscale Ag <sub>2</sub> Te in situ precipitates. <b>2010</b> , 499, 215-220	47
1736	XAFS studies of ytterbium doped lead-telluride. <b>2010</b> , 501, 159-163	13
1735	Morphological evolution of Ag <sub>2</sub> Te precipitates in thermoelectric PbTe. <b>2010</b> , 504, 37-44	37
1734	Thermoelectric properties of A <sub>0.05</sub> Mo <sub>3</sub> Sb <sub>5.4</sub> Te <sub>1.6</sub> (A=Mn, Fe, Co, Ni). <b>2010</b> , 504, 314-319	12
1733	Optimization of thermoelectric properties of type-VIII clathrate Ba <sub>8</sub> Ga <sub>16</sub> Sn <sub>30</sub> by carrier tuning. <b>2010</b> , 507, 1-5	60
1732	Fabrication of Ag <sub>5</sub> Sn <sub>5</sub> Te based thermoelectric materials by MA-PAS and their properties. <b>2010</b> , 507, 167-171	14
1731	New bulk Materials for Thermoelectric Power Generation: Clathrates and Complex Antimonides <b>2010</b> , 22, 604-611	252
1730	Single Dirac cone topological surface state and unusual thermoelectric property of compounds from a new topological insulator family. <b>2010</b> , 105, 266401	167
1729	Semiconductor nanowires for energy conversion. <b>2010</b> , 110, 527-46	1220
1728	Exploring resonance levels and nanostructuring in the PbTe-CdTe system and enhancement of the thermoelectric figure of merit. <b>2010</b> , 132, 5227-35	153
1727	Microstructure and Thermoelectric Properties of Mechanically Robust PbTe-Si Eutectic Composites. <b>2010</b> , 22, 869-875	45
1726	Interfacial defect structure at Sb <sub>2</sub> Te <sub>3</sub> precipitates in the thermoelectric compound AgSbTe <sub>2</sub> . <b>2010</b> , 62, 379-382	23
1725	Effects of nanoscale porosity on thermoelectric properties of SiGe. <b>2010</b> , 107, 094308	152
1724	Thermoelectric Properties Evolution of Spark Plasma Sintered (Ge <sub>0.6</sub> Pb <sub>0.3</sub> Sn <sub>0.1</sub> )Te Following a Spinodal Decomposition. <b>2010</b> , 114, 13126-13131	46

1723	Review of Thermoelectric Materials. <b>2010</b> , 139-166	4
1722	Fabrication of Bi <sub>2</sub> Te <sub>3</sub> /Sb <sub>2</sub> Te <sub>3</sub> and Bi <sub>2</sub> Te <sub>3</sub> /Bi <sub>2</sub> Te <sub>2</sub> Se multilayered thin film-based integrated cooling devices. <b>2010</b> , 28, 679-683	8
1721	High-temperature thermoelectric performance of heavily doped PbSe. <b>2010</b> , 82,	216
1720	Syntheses, crystal and electronic structures, and physical properties of quaternary semiconductors: Ln <sub>2</sub> Mn <sub>3</sub> Sb <sub>4</sub> S <sub>12</sub> (Ln = Pr, Nd, Sm, Gd). <b>2010</b> , 49, 5811-7	71
1719	Formation and Growth of Bi <sub>2</sub> Te <sub>3</sub> in Biomolecule-Assisted Near-Critical Water: In Situ Synchrotron Radiation Study. <b>2010</b> , 114, 12133-12138	24
1718	Effect of Ag or Sb addition on the thermoelectric properties of PbTe. <b>2010</b> , 108, 113709	68
1717	Structural order-disorder transitions and phonon conductivity of partially filled skutterudites. <b>2010</b> , 105, 265901	53
1716	High-performance nanostructured thermoelectric materials. <b>2010</b> , 2, 152-158	679
1715	Self-reorganization of CdTe nanoparticles into two-dimensional Bi <sub>2</sub> Te <sub>3</sub> /CdTe nanosheets and their thermoelectrical properties. <b>2010</b> , 12, 11900-4	12
1714	Microwave-assisted rapid synthesis of Sb <sub>2</sub> Te <sub>3</sub> nanosheets and thermoelectric properties of bulk samples prepared by spark plasma sintering. <b>2010</b> , 20, 1976	103
1713	High thermoelectric figure of merit and nanostructuring in bulk AgSbTe <sub>2</sub> . <b>2010</b> , 20, 6138	65
1712	High-Pressure Routes in the Thermoelectricity or How One Can Improve a Performance of Thermoelectrics $\square$ <b>2010</b> , 22, 635-647	109
1711	Thermoelectric properties of Eu(Zn(1-x)Cd(x)) <sub>2</sub> Sb <sub>2</sub> . <b>2010</b> , 39, 1101-4	93
1710	Improvement of the thermoelectric power factor through anisotropic growth of nanostructured PbSe thin films. <b>2010</b> , 39, 1095-100	13
1709	Universal and Solution-Processable Precursor to Bismuth Chalcogenide Thermoelectrics. <b>2010</b> , 22, 1943-1945	47
1708	Electronic transport properties of SrTiO <sub>3</sub> and its alloys: Sr <sub>1-x</sub> LaxTiO <sub>3</sub> and SrTi <sub>1-x</sub> MxO <sub>3</sub> (M=Nb,Ta). <b>2010</b> , 82,	41
1707	Effect of antisite defects on band structure and thermoelectric performance of ZrNiSn half-Heusler alloys. <b>2010</b> , 96, 152105	86
1706	On-chip Peltier cooling using current pulse. <b>2010</b> ,	6

1705	The role of straining and morphology in thermal conductivity of a set of SiTe superlattices and biomimetic SiTe nanocomposites. <b>2010</b> , 43, 135401	25
1704	Thermoelectric Effects of Molecular Quantum Dot Junctions with Strong Electron Phonon Interactions. <b>2010</b> , 49, 095205	2
1703	Syntheses, crystal structures and thermoelectric properties of two new thallium tellurides: Tl <sub>4</sub> ZrTe <sub>4</sub> and Tl <sub>4</sub> HfTe <sub>4</sub> . <b>2010</b> , 20, 7485	27
1702	Flux synthesis and thermoelectric properties of eco-friendly Sb doped Mg <sub>2</sub> Si <sub>0.5</sub> Sn <sub>0.5</sub> solid solutions for energy harvesting. <b>2011</b> , 21, 5933	86
1701	Effect of Nanopowders Addition on the Thermoelectric Properties of n-Type Bi <sub>2</sub> Te <sub>3</sub> Nanocomposites. <b>2011</b> , 128, 1-7	2
1700	Remarkable enhancement in thermoelectric performance of BiCuSeO by Cu deficiencies. <b>2011</b> , 133, 20112-5	242
1699	Direct tuning of electrical properties in nano-structured Bi <sub>2</sub> Se <sub>0.3</sub> Te <sub>2.7</sub> by reversible electrochemical lithium reactions. <b>2011</b> , 47, 12173-5	12
1698	Thicket-like PbTe microstructures built up of plentiful nanoflakes: a facile preparation, characterization and influencing factors. <b>2011</b> , 13, 1910-1915	12
1697	An in situ SEM experimental study of the thermal stability of a LAST thermoelectric material. <b>2011</b> , 91, 443-451	1
1696	Second harmonic generation and hyperpolarizabilities of the double-cubane compound [Sb <sub>7</sub> S <sub>8</sub> Br <sub>2</sub> ](AlCl <sub>4</sub> ) <sub>3</sub> : chalcogenide in ionic liquids. <b>2011</b> , 115, 11763-9	13
1695	Electrodeposition of Pb-Te-Tl Thermoelectric Materials. <b>2011</b> , 159-164	
1694	A nonequilibrium Green's function study of thermoelectric properties in single-walled carbon nanotubes. <b>2011</b> , 109, 014326	89
1693	A large indium sulfide supertetrahedral cluster built from integration of ZnS-like tetrahedral shell with NaCl-like octahedral core. <b>2011</b> , 133, 15886-9	32
1692	Light-weight flexible carbon nanotube based organic composites with large thermoelectric power factors. <b>2011</b> , 5, 7885-92	361
1691	Thermoelectric Properties of Molecular Nanowires. <b>2011</b> , 115, 24418-24428	54
1690	Zone Leveling Crystal Growth of Thermoelectric PbTe Alloys with Sb <sub>2</sub> Te <sub>3</sub> Widmanstätten Precipitates. <b>2011</b> , 11, 4183-4189	12
1689	Potentiostatic Electrodeposition Route for Quick Synthesis of Featherlike PbTe Dendrites: Influencing Factors and Shape Evolution. <b>2011</b> , 11, 2142-2148	29
1688	Phase selection and site-selective distribution by tin and sulfur in supertetrahedral zinc gallium selenides. <b>2011</b> , 133, 9616-25	52

1687	Real Structure and Thermoelectric Properties of GeTe-Rich Germanium Antimony Tellurides. <b>2011</b> , 23, 4349-4356	130
1686	Multiple-filled skutterudites: high thermoelectric figure of merit through separately optimizing electrical and thermal transports. <b>2011</b> , 133, 7837-46	1071
1685	Dramatic enhancement of thermoelectric power factor in PbTe:Cr co-doped with iodine. <b>2011</b> , 98, 262101	47
1684	Effects of nano-domains on thermoelectric properties in telluride system. <b>2011</b> ,	
1683	Plasma synthesis of nanostructures for improved thermoelectric properties. <b>2011</b> , 44, 174034	88
1682	Realization of high thermoelectric performance in n-type partially filled skutterudites. <b>2011</b> , 26, 1745-1754	95
1681	Thermoelectric and structural properties of high-performance In-based skutterudites for high-temperature energy recovery. <b>2011</b> , 26, 1827-1835	16
1680	Thermoelectric nanocomposite from the metastable void filling in caged skutterudite. <b>2011</b> , 26, 1848-1856	13
1679	Nanostructures and defects in nonequilibrium-synthesized filled skutterudite CeFe <sub>4</sub> Sb <sub>12</sub> . <b>2011</b> , 26, 1842-18478	
1678	Nanostructures boost the thermoelectric performance of PbS. <b>2011</b> , 133, 3460-70	254
1677	Thermoelectrics from abundant chemical elements: high-performance nanostructured PbSe-PbS. <b>2011</b> , 133, 10920-7	146
1676	Ultrathin Thermoelectric Devices for On-Chip Peltier Cooling. <b>2011</b> , 1, 1395-1405	49
1675	Bipolar Thermoelectric Effect in a Serially Coupled Quantum Dot System. <b>2011</b> , 50, 105003	1
1674	Combination of large nanostructures and complex band structure for high performance thermoelectric lead telluride. <b>2011</b> , 4, 3640	137
1673	Reevaluation of PbTe <sub>1-x</sub> as high performance n-type thermoelectric material. <b>2011</b> , 4, 2090	324
1672	Colloidal synthesis of Cu <sub>2</sub> CdSnSe <sub>4</sub> nanocrystals and hot-pressing to enhance the thermoelectric figure-of-merit. <b>2011</b> , 133, 15910-3	132
1671	Tl <sub>2</sub> Hg <sub>3</sub> Q <sub>4</sub> (Q = S, Se, and Te): High-Density, Wide-Band-Gap Semiconductors. <b>2011</b> , 23, 4375-4383	46
1670	Observation of size-dependent thermalization in CdSe nanocrystals using time-resolved photoluminescence spectroscopy. <b>2011</b> , 107, 177403	37

1669	Nanotechnology for Sustainability: Energy Conversion, Storage, and Conservation. <b>2011</b> , 261-303	12
1668	Templating synthesis of uniform Bi <sub>2</sub> Te <sub>3</sub> nanowires with high aspect ratio in triethylene glycol (TEG) and their thermoelectric performance. <b>2011</b> , 21, 15057	67
1667	Electronic structure, chemical bonding features, and electron charge density of the double-cubane single crystal [Sb <sub>7</sub> S <sub>8</sub> Br <sub>2</sub> ](AlCl <sub>4</sub> ) <sub>3</sub> . <b>2011</b> , 98, 201903	14
1666	Simultaneous large enhancements in thermopower and electrical conductivity of bulk nanostructured half-Heusler alloys. <b>2011</b> , 133, 18843-52	205
1665	Enhancement of Seebeck Coefficient in Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> with High-Density Tellurium Nano-inclusions. <b>2011</b> , 4, 091801	33
1664	Nanotechnology Research Directions for Societal Needs in 2020. <b>2011</b> ,	151
1663	Thermal transport in nanoporous silicon: interplay between disorder at mesoscopic and atomic scales. <b>2011</b> , 5, 1839-44	105
1662	Reduction of thermal conductivity in PbTe:Ti by alloying with TiSbTe <sub>2</sub> . <b>2011</b> , 83,	24
1661	Atomic-level control of the thermoelectric properties in polytypoid nanowires. <b>2011</b> , 2, 706	65
1660	Structure and Transport Properties of Double-Doped CoSb <sub>2.75</sub> Ge <sub>0.25</sub> Tex (x = 0.125-0.20) with in Situ Nanostructure. <b>2011</b> , 23, 2948-2955	102
1659	Dichloro organosilicon bismuthanes as precursors for rare compounds with a bismuth-pnictogen or bismuth-tellurium bond. <b>2011</b> , 40, 1365-71	27
1658	Enhanced thermoelectric performance in In <sub>1-x</sub> GaxSb originating from the scattering of point defects and nano-inclusion. <b>2011</b> , 21, 12398	32
1657	Thermoelectric properties of Zn-Sn-Sb based alloys. <b>2011</b> , 1314, 1	6
1656	Role of light and heavy embedded nanoparticles on the thermal conductivity of SiGe alloys. <b>2011</b> , 84,	98
1655	Anomalous electronic transport in dual-nanostructured lead telluride. <b>2011</b> , 133, 8786-9	43
1654	Facile fabrication and thermoelectric properties of PbTe-modified poly(3,4-ethylenedioxythiophene) nanotubes. <b>2011</b> , 3, 1163-6	129
1653	High performance thermoelectrics from earth-abundant materials: enhanced figure of merit in PbS by second phase nanostructures. <b>2011</b> , 133, 20476-87	377
1652	Thermal energy transport model for macro-to-nanograin polycrystalline semiconductors. <b>2011</b> , 110, 114310	35

1651	Figure of merit enhancement in bismuth telluride alloys via fullerene-assisted microstructural refinement. <b>2011</b> , 110, 023706	13
1650	Thermoelectric Phenomena, Materials, and Applications. <b>2011</b> , 41, 433-448	434
1649	Nanostructure-based thermoelectric conversion: an insight into the feasibility and sustainability for large-scale deployment. <b>2011</b> , 3, 3555-62	57
1648	Enhancement of the thermoelectric properties in nanoscale and nanostructured materials. <b>2011</b> , 21, 4037-4055	275
1647	Electrical behaviors for growth of LAST alloys using vapor phase deposition. <b>2011</b> , 509, 4089-4091	1
1646	Microstructures and liquidus projection of the ternary Ag <sub>3</sub> Sb <sub>2</sub> Te system. <b>2011</b> , 509, 656-668	19
1645	Fabrication of antimony telluride nanoparticles using a brief chemical synthetic process under atmospheric conditions. <b>2011</b> , 509, 609-613	9
1644	Enhanced thermoelectric performance in Na-doped p-type nonstoichiometric AgSbTe <sub>2</sub> compound. <b>2011</b> , 509, 2039-2043	24
1643	The effect of Ag concentration on the structural, electrical and thermal transport behavior of Pb:Te:Ag:Se mixtures and improvement of thermoelectric performance via Cu doping. <b>2011</b> , 509, 1544-1549	4
1642	Composition-dependent transport properties of Ag <sub>1-x</sub> Pb <sub>18</sub> SbTe <sub>20</sub> prepared by high pressure. <b>2011</b> , 509, 2430-2433	
1641	A study of the synthesis of bismuth tellurium selenide nanocompounds and procedures for improving their thermoelectric performance. <b>2011</b> , 509, 9472-9478	13
1640	High thermoelectric figure of merit in nanostructured p-type PbTe <sub>1-x</sub> Te (M = Ca, Ba). <b>2011</b> , 4, 4675	153
1639	Quantum confinement and spin-orbit interactions in PbSe and PbTe nanowires: First-principles calculation. <b>2011</b> , 84,	9
1638	Thermal Conductivity and Thermoelectric Power of Semiconductors. <b>2011</b> , 326-358	11
1637	Preparation and characterization of planetary ball milled Si-based clathrates and their spark plasma sintered materials. <b>2011</b> , 18, 142012	3
1636	Lattice dynamical origin of peak thermoelectric performance in AgPbmSbTe <sub>2+m</sub> observed by inelastic neutron scattering. <b>2011</b> , 109, 083722	6
1635	Thermal transport in individual thermoelectric nanowires: a review. <b>2011</b> , 15, 375-385	17
1634	Thermoelectric energy conversion using nanostructured materials. <b>2011</b> ,	2



1633	Electron-beam activated thermal sputtering of thermoelectric materials. <b>2011</b> , 110, 044325	1
1632	Bandgap reduction responsible for the improved thermoelectric performance of bulk polycrystalline $\text{In}_2\text{Cu}_x\text{Se}_3$ ( $x = 0.0-2$ ). <b>2011</b> , 110, 023708	23
1631	Thermoelectric Properties of Fine-Grained PbTe Bulk Materials Fabricated by Cryomilling and Spark Plasma Sintering. <b>2011</b> , 52, 795-801	20
1630	Strained endotaxial nanostructures with high thermoelectric figure of merit. <b>2011</b> , 3, 160-6	794
1629	High-performance flat-panel solar thermoelectric generators with high thermal concentration. <b>2011</b> , 10, 532-8	790
1628	Preparation and thermoelectric properties of $\text{AgPb}_{18}\text{Sn}_x\text{SbTe}_{20}$ ( $x=0.5, 1, 2, 4, 6$ ) materials. <b>2011</b> , 13, 306-309	1
1627	A conceptual approach to materials for resistivity switching and thermoelectrics. <b>2011</b> , 13, 944-947	15
1626	Characterization of thermoelectric generators by measuring the load-dependence behavior. <b>2011</b> , 44, 2194-2199	37
1625	Solubility and microstructure in the pseudo-binary $\text{PbTe}_{1-x}\text{Ag}_x\text{Te}$ system. <b>2011</b> , 184, 2543-2552	29
1624	Thermal and electronic charge transport in bulk nanostructured $\text{Zr}_{0.25}\text{Hf}_{0.75}\text{NiSn}$ composites with full-Heusler inclusions. <b>2011</b> , 184, 2948-2960	59
1623	Fabrication of bismuth telluride nanoparticles using a chemical synthetic process and their thermoelectric evaluations. <b>2011</b> , 214, 463-468	26
1622	Pulsed laser deposition growth of $\text{FeSb}_2$ films for thermoelectric applications. <b>2011</b> , 129, 105-108	5
1621	Thermoelectric properties of Ag-doped bismuth sulfide polycrystals prepared by mechanical alloying and spark plasma sintering. <b>2011</b> , 131, 216-222	51
1620	Development of bismuth tellurium selenide nanoparticles for thermoelectric applications via a chemical synthetic process. <b>2011</b> , 46, 407-412	16
1619	Analytical model of parallel thermoelectric generator. <b>2011</b> , 88, 5193-5199	83
1618	Thermoelectric energy-conversion characteristics of n-type $\text{Bi}_2(\text{Te,Se})_3$ nanocomposites processed with carbon nanotube dispersion. <b>2011</b> , 11, S41-S45	29
1617	High thermoelectric figure of merit in heavy hole dominated PbTe. <b>2011</b> , 4, 2085	528
1616	High performance Na-doped PbTe-PbS thermoelectric materials: electronic density of states modification and shape-controlled nanostructures. <b>2011</b> , 133, 16588-97	289

1615	Power factor enhancement by modulation doping in bulk nanocomposites. <b>2011</b> , 11, 2225-30	386
1614	Effect of cationic substitution on the thermoelectric properties of $\text{In}_{4-x}\text{M}_x\text{Se}_{2.95}$ compounds (M = Na, Ca, Zn, Ga, Sn, Pb; x = 0.1). <b>2011</b> , 99, 102110	31
1613	Crystal structures and thermoelectric properties of the series $\text{Tl}(10-x)\text{La}(x)\text{Te}_6$ with $0.2 \leq x \leq 1.15$ . <b>2011</b> , 40, 862-7	20
1612	Electrical transport and thermoelectric properties of $\text{AgPb}_{10}\text{SbTe}_{12}$ prepared by high pressure method. <b>2011</b> , 34, 1209-1212	
1611	$(\text{Bi}_2\text{Te}_3)_0.25(\text{Sb}_2\text{Te}_3)_0.75$ crystal structure improvements with excess Te as studied by AFM, SEM, EBSD and XRD. <b>2011</b> , 29, 143-151	2
1610	Investigation of the hot side contacts to nanostructured LASTt(T) material. Part I. <b>2011</b> , 47, 90-97	2
1609	Thermoelectric properties of lead chalcogenide core-shell nanostructures. <b>2011</b> , 5, 8541-51	96
1608	Phase equilibria of $\text{AgSbTe}$ thermoelectric materials. <b>2011</b> , 59, 6463-6472	27
1607	Interfacial disconnections at $\text{Sb}_2\text{Te}_3$ precipitates in $\text{PbTe}$ : Mechanisms of strain accommodation and phase transformation at a tetradymite/rocksalt telluride interface. <b>2011</b> , 59, 7724-7735	13
1606	Solid-state precipitation of stable and metastable layered compounds in thermoelectric $\text{AgSbTe}_2$ . <b>2011</b> , 46, 1668-1679	22
1605	Thermoelectric Properties of $x\text{PbTe}/\text{Yb}_{0.2}\text{Co}_4\text{Sb}_{12}$ Hot-Pressed Samples. <b>2011</b> , 21, 858-861	1
1604	In situ fabrication and thermoelectric properties of $\text{PbTe}/\text{polyaniline}$ composite nanostructures. <b>2011</b> , 13, 533-539	60
1603	Nano-scaled top-down of bismuth chalcogenides based on electrochemical lithium intercalation. <b>2011</b> , 13, 6569-6578	9
1602	Enhanced thermoelectric performance and novel nanopores in $\text{AgSbTe}_2$ prepared by melt spinning. <b>2011</b> , 184, 109-114	49
1601	Size control of $\text{Sb}_2\text{Te}_3$ Widmanstätten precipitates in thermoelectric $\text{PbTe}$ . <b>2011</b> , 59, 2679-2692	24
1600	Application of quantum well-like thermocouple to thermoelectric energy harvester by BiCMOS process. <b>2011</b> , 166, 117-124	18
1599	Spin coating-Co-reduction approach: A general strategy for preparation of oriented chalcogenide thin film on arbitrary substrates. <b>2011</b> , 30, 651-656	3
1598	Doping effect on thermoelectric properties of nonstoichiometric $\text{AgSbTe}_2$ compounds. <b>2011</b> , 18, 352-356	7

1597	High Power Factor of HPHT-Sintered GeTe-AgSbTe <sub>2</sub> Alloys. <b>2011</b> , 40, 17-24	5
1596	Simulation and Optimization for System Integration of a Solar Thermoelectric Device. <b>2011</b> , 40, 967-973	15
1595	Effect of Vacancy Distribution on the Thermal Conductivity of Ga <sub>2</sub> Te <sub>3</sub> and Ga <sub>2</sub> Se <sub>3</sub> . <b>2011</b> , 40, 999-1004	34
1594	Chalcogenide Glasses as Prospective Thermoelectric Materials. <b>2011</b> , 40, 1015-1017	22
1593	Thermomagnetic Effects in High-Mobility PbTe Films. <b>2011</b> , 40, 687-690	3
1592	Self-Contained Thermoelectric Generator for Cell Phones. <b>2011</b> , 40, 1119-1123	1
1591	Intercalation: Building a Natural Superlattice for Better Thermoelectric Performance in Layered Chalcogenides. <b>2011</b> , 40, 1271-1280	78
1590	Fabrication of Nanocomposite Thermoelectric Materials by a Pulsed Laser Deposition Method. <b>2011</b> , 40, 1176-1180	3
1589	Effect of Sb Doping on the Thermoelectric Properties of Mg <sub>2</sub> Si <sub>0.7</sub> Sn <sub>0.3</sub> Solid Solutions. <b>2011</b> , 40, 830-834	29
1588	Nanostructure and High Thermoelectric Performance in Nonstoichiometric AgPbSbTe Compounds: the Role of Ag. <b>2011</b> , 40, 862-866	10
1587	Synthesis and Transport Properties of In <sub>4</sub> (Se <sub>1-x</sub> Te <sub>x</sub> ) <sub>3</sub> . <b>2011</b> , 40, 1202-1205	6
1586	Impact of In Situ Generated Ag <sub>2</sub> Te Nanoparticles on the Microstructure and Thermoelectric Properties of AgSbTe <sub>2</sub> Compounds. <b>2011</b> , 40, 1249-1253	11
1585	Effect of Ce-Doping on Thermoelectric Properties in PbTe Alloys Prepared by Spark Plasma Sintering. <b>2011</b> , 40, 2063-2068	15
1584	Electrical, Thermal, and Mechanical Characterization of Novel Segmented-Leg Thermoelectric Modules. <b>2011</b> , 40, 2051-2062	58
1583	Increase in the Thermoelectric Efficiency of the Disordered Phase of Layered Antiferromagnetic CuCrS <sub>2</sub> . <b>2011</b> , 40, 2368-2373	19
1582	Developments in semiconductor thermoelectric materials. <b>2011</b> , 5, 125-136	16
1581	Crystal and electronic structure of PbTe/CdTe nanostructures. <b>2011</b> , 6, 126	11
1580	Effect of Y-filling on thermoelectric properties of CoSb <sub>3</sub> . <b>2011</b> , 29, 596-598	8

1579	High Thermoelectric Performance in PbTe Due to Large Nanoscale Ag <sub>2</sub> Te Precipitates and La Doping. <b>2011</b> , 21, 241-249	424
1578	Heavily doped p-type PbSe with high thermoelectric performance: an alternative for PbTe. <b>2011</b> , 23, 1366-70	392
1577	Stabilizing the optimal carrier concentration for high thermoelectric efficiency. <b>2011</b> , 23, 5674-8	323
1576	Enhancement in Thermoelectric Figure-Of-Merit of an N-Type Half-Heusler Compound by the Nanocomposite Approach. <b>2011</b> , 1, 643-647	256
1575	Thermoelectric Nanostructures: From Physical Model Systems towards Nanograined Composites. <b>2011</b> , 1, 713-731	193
1574	Enhancement in Thermoelectric Figure of Merit in Nanostructured Bi <sub>2</sub> Te <sub>3</sub> with Semimetal Nano-inclusions. <b>2011</b> , 1, 1141-1147	150
1573	Large-Scale Synthesis and Characterization of the Size-Dependent Thermoelectric Properties of Uniformly Sized Bismuth Nanocrystals. <b>2011</b> , 123, 1399-1402	18
1572	Large-scale synthesis and characterization of the size-dependent thermoelectric properties of uniformly sized bismuth nanocrystals. <b>2011</b> , 50, 1363-6	61
1571	Thermo-elektrische Verbindungen. Strom aus Abwume. <b>2011</b> , 45, 188-200	7
1570	Enhancement of the thermoelectric performance of HgZn <sub>4</sub> Sb <sub>3</sub> by in situ nanostructures and minute Cd-doping. <b>2011</b> , 59, 4805-4817	65
1569	Phase diagram, crystal chemistry and thermoelectric properties of compounds in the CaCoZnO system. <b>2011</b> , 184, 2159-2166	22
1568	Liquid metal based thermoelectric generation system for waste heat recovery. <b>2011</b> , 36, 3530-3536	100
1567	Thermoelectric properties of ZnO nanowires: A first principle research. <b>2011</b> , 375, 2878-2881	13
1566	Exfoliation Route to Nanostructured Cobalt Oxide with Enhanced Thermoelectric Performance. <b>2011</b> , 4, 065201	3
1565	Enhanced energy filtering and thermopower from synergetic scatterings of electrons at interface potential barriers (or wells) in semiconductor-based nanocomposites dispersed with metallic particles. <b>2011</b> , 110, 124308	9
1564	Nanodopant-induced band modulation in AgPb(m)SbTe(2+m)-type thermoelectrics. <b>2011</b> , 106, 206601	17
1563	Effect of selenium deficiency on the thermoelectric properties of n-type In <sub>4</sub> Se <sub>3</sub> compounds. <b>2011</b> , 83,	57
1562	The effect of chromium impurity on the thermoelectric properties of PbTe in the temperature range 100-300 K. <b>2011</b> , 109, 103710	24

1561	Thermoelectric properties of p-type CuInSe <sub>2</sub> chalcopyrites enhanced by introduction of manganese. <b>2011</b> , 84,	48
1560	Thermoelectric properties and investigations of low thermal conductivity in Ga-doped Cu <sub>2</sub> GeSe <sub>3</sub> . <b>2011</b> , 84,	71
1559	Field emission cooling of thermoelectric semiconductor PbTe. <b>2011</b> , 98, 243502	9
1558	Niobium substitution in Zr <sub>0.5</sub> Hf <sub>0.5</sub> NiSn based Heusler compounds for high power factors. <b>2011</b> , 98, 042106	37
1557	Development of a Seebeck coefficient Standard Reference Material□ <b>2011</b> , 26, 1983-1992	30
1556	Transmission electron microscopy study of Pb-depleted disks in PbTe-based alloys. <b>2011</b> , 26, 912-916	22
1555	Preparation and Thermoelectric Characteristics of SiO <sub>2</sub> /Mg <sub>2</sub> Si <sub>0.8</sub> Sn <sub>0.2</sub> Bulk Nanocomposite. <b>2011</b> , 415-417, 47-51	1
1554	Effect of nanocomposite structure on the thermoelectric properties of 0.7-at% Bi-doped Mg <sub>2</sub> Si nanocomposite. <b>2011</b> , 20, 106202	13
1553	Crystal Lattice Controlled SiGe Thermoelectric Materials with High Figure of Merit. <b>2011</b> , 1314, 1	1
1552	Novel Lead Telluride Based Thermoelectric Materials. <b>2011</b> , 1314, 1	
1551	Microstructures and nanostructures in long-term annealed AgPb <sub>18</sub> SbTe <sub>20</sub> (LAST-18) compounds and their influence on the thermoelectric properties. <b>2011</b> , 26, 1800-1812	16
1550	Improvement in the Thermoelectric Figure-of-Merit of TAGS-85 by Rare Earth Additions. <b>2011</b> , 1325, 15	2
1549	Thermoelectric Properties of CoSb <sub>3</sub> Nanoparticle Films. <b>2011</b> , 347-353, 3448-3455	
1548	Influence of surface modification on thermoelectric properties of Bi <sub>2</sub> Te <sub>3</sub> nanowires. <b>2011</b> ,	
1547	Peltier effect in doped silicon microchannel plates. <b>2011</b> , 32, 122003	
1546	Nanostructured Telluride Films on Macroporous Silicon for High Efficiency Thermoelectric Devices. <b>2011</b> , 1314, 1	2
1545	Effects of nano-void density, size and spatial population on thermal conductivity: a case study of GaN crystal. <b>2012</b> , 24, 325804, 1-15	4
1544	Figure-of-merit enhancement in nanostructured FeSb <sub>(2-x)</sub> Ag <sub>(x)</sub> with Ag <sub>(1-y)</sub> Sb <sub>(y)</sub> nano-inclusions. <b>2012</b> , 23, 505402	12

1543	Very heavily electron-doped CrSi <sub>2</sub> As as a high-performance high-temperature thermoelectric material. <b>2012</b> , 14, 033045	29
1542	Biomolecule-assisted hydrothermal synthesis of Bi <sub>2</sub> Te <sub>3</sub> nanostructures. <b>2012</b> ,	
1541	Thermoelectric properties of metastable Ge/Sb/Te and Ge/Bi/Te compounds. <b>2012</b> ,	0
1540	Enhanced room temperature electronic and thermoelectric properties of the dilute bismuthide InGaBiAs. <b>2012</b> , 112, 093710	30
1539	Morphological effects on the electronic transport properties of three-phase thermoelectric materials. <b>2012</b> , 112, 113721	8
1538	Nanostructured thermoelectric cobalt oxide by exfoliation/restacking route. <b>2012</b> , 112, 113705	10
1537	Significantly enhanced thermoelectric figure of merit through Cu, Sb co-substitutions for Te in Ga <sub>2</sub> Te <sub>3</sub> . <b>2012</b> , 101, 081908	6
1536	Thermoelectric properties of AgGaTe <sub>2</sub> and related chalcopyrite structure materials. <b>2012</b> , 85,	104
1535	High thermoelectric performance of solid solutions CuGa <sub>1-x</sub> In <sub>x</sub> Te <sub>2</sub> (x = 0-1.0). <b>2012</b> , 100, 231903	59
1534	High-temperature thermoelectric properties of AgPb <sub>18</sub> SbTe <sub>20</sub> prepared by high pressure. <b>2012</b> , 1-6	
1533	The microstructure network and thermoelectric properties of bulk (Bi,Sb) <sub>2</sub> Te <sub>3</sub> . <b>2012</b> , 101, 113902	12
1532	Thermoelectric properties of Cu doped ZnSb containing Zn <sub>3</sub> P <sub>2</sub> particles. <b>2012</b> , 111, 023703	44
1531	Thermal conductivity of semiconductor nanowires from micro to nano length scales. <b>2012</b> , 111, 024311	26
1530	On the best bandstructure for thermoelectric performance: A Landauer perspective. <b>2012</b> , 111, 113707	39
1529	Cooling effect of nanoscale Bi <sub>2</sub> Te <sub>3</sub> /Sb <sub>2</sub> Te <sub>3</sub> multilayered thermoelectric thin films. <b>2012</b> , 30, 041509	9
1528	Finite element analysis of scaling of silicon micro-thermoelectric generators to nanowire dimensions. <b>2012</b> , 4, 043110	2
1527	Synthesis and thermoelectric properties of Mn-doped AgSbTe <sub>2</sub> compounds. <b>2012</b> , 21, 106101	10
1526	Evaluation of Seebeck coefficients in n- and p-type silicon nanowires fabricated by complementary metal-oxide-semiconductor technology. <b>2012</b> , 23, 405707	13

1525	Ascertainment of the Figure of Merit for the State-of-the-Art Thermoelectric Materials via Temperature. <b>2012</b> , 535-537, 1346-1349	
1524	Heat Conduction of a Porous Material. <b>2012</b> , 134,	7
1523	Array of Thermoelectric Coolers for On-Chip Thermal Management. <b>2012</b> , 134,	17
1522	Thermoelectric Properties in a Parallel Double Quantum Dot Structure Modulated by the Fano Interferences. <b>2012</b> , 81, 104601	13
1521	Effect of Phase Transition on the Thermoelectric Properties of Ag <sub>2</sub> Te. <b>2012</b> , 53, 1216-1219	26
1520	Reduction in Lattice Thermal Conductivity of InSb by Formation of the ZnIn <sub>18</sub> GeSb <sub>20</sub> Alloy. <b>2012</b> , 53, 1976-1980	
1519	Low thermal conductivity for Sr <sub>1-x</sub> LaxTiO <sub>3</sub> . <b>2012</b> , 16, 438-441	1
1518	Effects of disordered structure on thermoelectric properties of LaCeFe <sub>3</sub> CoSb <sub>12</sub> nanocomposites. <b>2012</b> , 27, 1518-1521	2
1517	- Effect of Vacancy Distribution on the Thermoelectric Properties of Gallium and Indium Chalcogenides. <b>2012</b> , 173-182	1
1516	Design and Realization of Nanostructured Inorganic Intergrowths. <b>2012</b> , 1-20	3
1515	- Bulk Nanocomposites of Thermoelectric Materials. <b>2012</b> , 89-106	
1514	Sign changes of seebeck coefficients due to extrinsic-to-intrinsic transition for PbTe nanocrystals. <b>2012</b> , 9, 391-398	2
1513	Nanostructured Thermoelectric Materials. <b>2012</b> , 1-50	4
1512	Semiconductor nanowires for thermoelectrics. <b>2012</b> , 22, 22821	43
1511	Materials science: The matryoshka effect. <b>2012</b> , 489, 375-6	3
1510	Rational synthesis of ultrathin n-type Bi <sub>2</sub> Te <sub>3</sub> nanowires with enhanced thermoelectric properties. <b>2012</b> , 12, 56-60	245
1509	Enhancement of thermoelectric properties of CoSb <sub>3</sub> -based skutterudites by double filling of Tl and In. <b>2012</b> , 112, 043509	17
1508	CsHgInS <sub>3</sub> : a New Quaternary Semiconductor for $\mu$ ray Detection. <b>2012</b> , 24, 4434-4441	50

- 1507 Inelastic neutron scattering study of phonon density of states in nanostructured Si<sub>1-x</sub>Ge<sub>x</sub> thermoelectrics. **2012**, 86, 6
- 1506 n-Type nanostructured thermoelectric materials prepared from chemically synthesized ultrathin Bi<sub>2</sub>Te<sub>3</sub> nanoplates. **2012**, 12, 640-7 205
- 1505 Dopants effect on the band structure of PbTe thermoelectric material. **2012**, 101, 092102 64
- 1504 Coherent and incoherent phase stabilities of thermoelectric rocksalt IV-VI semiconductor alloys. **2012**, 86, 38
- 1503 Electrical and structural properties of Bi<sub>2</sub>Te<sub>3</sub> and Sb<sub>2</sub>Te<sub>3</sub> thin films grown by the nanoalloying method with different deposition patterns and compositions. **2012**, 22, 11323 42
- 1502 A combinatorial approach to microstructure and thermopower of bulk thermoelectric materials: the pseudo-ternary PbTe<sub>1-x</sub>Ag<sub>2x</sub>Te<sub>1-x</sub>Bi<sub>2x</sub>Te<sub>3</sub> system. **2012**, 22, 24335 16
- 1501 Encyclopedia of Nanotechnology. **2012**, 2741-2741
- 1500 Economical FeSi<sub>2</sub>-SiGe Composites for Thermoelectric Power Generation. **2012**,
- 1499 Nanostructured thermoelectric materials: Current research and future challenge. **2012**, 22, 535-549 485
- 1498 Effects of Bi<sub>2</sub>Se<sub>3</sub> Nanoparticle Inclusions on the Microstructure and Thermoelectric Properties of Bi<sub>2</sub>Te<sub>3</sub>-Based Nanocomposites. **2012**, 41, 3411-3416 14
- 1497 Thermoelectric properties of YbxCo<sub>4</sub>Sb<sub>12</sub> system. **2012**, 30, 456-459 9
- 1496 Controllable synthesis and thermoelectric transport properties of binary-phased PbTe/PbSe nanocrystals. **2012**, 14, 4461 12
- 1495 Band engineering of thermoelectric materials. **2012**, 24, 6125-35 998
- 1494 Nanobasierte Energiegewinnung in autarken Mikro-/Nanosystemen. **2012**, 124, 11868-11891 19
- 1493 Nanotechnology-enabled energy harvesting for self-powered micro-/nanosystems. **2012**, 51, 11700-21 747
- 1492 Current Status in Fabrication, Structural and Transport Property Characterization, and Theoretical Understanding of Bi<sub>2</sub>Te<sub>3</sub> / Sb<sub>2</sub>Te<sub>3</sub> Superlattice Systems. **2012**, 638, 2441-2454 21
- 1491 Structural and thermal properties of chemically synthesized Bi<sub>2</sub>Te<sub>3</sub> nanoparticles. **2012**, 110, 523-527 11
- 1490 Unique hierarchical structure and high thermoelectric properties of antimony telluride pillar arrays. **2012**, 14, 1 16



1489	Bottom-up processing of thermoelectric nanocomposites from colloidal nanocrystal building blocks: the case of Ag <sub>2</sub> TePbTe. <b>2012</b> , 14, 1	23
1488	Improvement of thermoelectric properties through controlling the carrier concentration of AgPb <sub>18</sub> SbTe <sub>20</sub> alloys by Sb addition. <b>2012</b> , 8, 659-663	10
1487	Cyclic and polycyclic tellurium-tin and tellurium-lead compounds--synthesis, structures and thermal decomposition. <b>2012</b> , 48, 6984-6	10
1486	Nanostructured Bi(2-x)Cu(x)S <sub>3</sub> bulk materials with enhanced thermoelectric performance. <b>2012</b> , 14, 4475-81	45
1485	Electrical resistivity properties of liquid PbTe alloy. <b>2012</b> , 50, 39-45	
1484	Room-temperature solution synthesis of Ag <sub>2</sub> Te hollow microspheres and dendritic nanostructures, and morphology dependent thermoelectric properties. <b>2012</b> , 14, 1805	18
1483	The role of Ga in Ba <sub>0.30</sub> Ga <sub>x</sub> Co <sub>4</sub> Sb <sub>12+x</sub> filled skutterudites. <b>2012</b> , 22, 15628	25
1482	Copper ion liquid-like thermoelectrics. <b>2012</b> , 11, 422-5	1339
1481	Facile hydrothermal synthesis of AgPb <sub>10</sub> LaTe <sub>12</sub> materials: controlled synthesis, growth mechanism and shape-dependent electrical transportation properties. <b>2012</b> , 14, 7771	6
1480	A simple synthesis and characterization of PbTe nano-particles. <b>2012</b> ,	1
1479	The Influence of RuO <sub>2</sub> Addition on the Thermoelectric Properties of BiSbTe Alloys. <b>2012</b> , 512-515, 1651-1654	2
1478	Enhanced Seebeck Coefficients of Thermoelectric Bi <sub>2</sub> Te <sub>3</sub> Nanowires as a Result of an Optimized Annealing Process. <b>2012</b> , 116, 19512-19516	24
1477	Colloidal nanocrystal quantum dot assemblies as artificial solids. <b>2012</b> , 30, 030802	101
1476	Quasicrystals and the Quest for Next Generation Thermoelectric Materials. <b>2012</b> , 37, 215-242	6
1475	Large thermoelectric figure-of-merits from SiGe nanowires by simultaneously measuring electrical and thermal transport properties. <b>2012</b> , 12, 2918-23	158
1474	Study on the effect of Pb partial substitution for Te on the thermoelectric properties of La <sub>3</sub> Te <sub>4</sub> Pb <sub>x</sub> materials. <b>2012</b> , 45, 185303	9
1473	Preparation and thermoelectric properties of sulfur doped Ag <sub>2</sub> Te nanoparticles via solvothermal methods. <b>2012</b> , 4, 3926-31	35
1472	Green energy conversion & storage for solving India's energy problem through innovation in ultra large scale manufacturing and advanced research of solid state devices and systems. <b>2012</b> ,	5

1471	Crystal structure and physical properties of the new one-dimensional metal Ba <sub>2</sub> Cu(7-x)Te <sub>6</sub> . <b>2012</b> , 51, 5299-304	6
1470	Ab initio study of the structural, electronic and elastic properties of AgSbTe <sub>2</sub> , AgSbSe <sub>2</sub> , Pr <sub>3</sub> AlC, Ce <sub>3</sub> AlC, Ce <sub>3</sub> AlN, La <sub>3</sub> AlC and La <sub>3</sub> AlN compounds. <b>2012</b> , 407, 3320-3327	11
1469	Simultaneous increase in conductivity and Seebeck coefficient in a polyaniline/graphene nanosheets thermoelectric nanocomposite. <b>2012</b> , 161, 2688-2692	135
1468	Preparation and characterization of multiwalled carbon nanotube/poly(3-hexylthiophene) thermoelectric composite materials. <b>2012</b> , 162, 375-380	51
1467	Design principle of telluride-based nanowire heterostructures for potential thermoelectric applications. <b>2012</b> , 12, 3627-33	99
1466	High-performance bulk thermoelectrics with all-scale hierarchical architectures. <b>2012</b> , 489, 414-8	3069
1465	Self-organization processes in PbTe-Bi <sub>2</sub> Te <sub>3</sub> semiconductor solid solutions and thermoelectric properties. <b>2012</b> ,	
1464	Evolutionary biology: Insects converge on resistance. <b>2012</b> , 489, 376-7	5
1463	Electrical and thermoelectric properties of single-wall carbon nanotube doped Bi <sub>2</sub> Te <sub>3</sub> . <b>2012</b> , 101, 031909	41
1462	Enhanced thermoelectric performance through energy-filtering effects in nanocomposites dispersed with metallic particles. <b>2012</b> , 101, 132103	44
1461	Significant enhancement in the thermoelectric performance of a bismuth telluride nanocompound through brief fabrication procedures. <b>2012</b> , 4, 2949-54	24
1460	Lattice thermal conductivity diminution and high thermoelectric power factor retention in nanoporous macroassemblies of sulfur-doped bismuth telluride nanocrystals. <b>2012</b> , 100, 193113	31
1459	Resonant carrier scattering by core-shell nanoparticles for thermoelectric power factor enhancement. <b>2012</b> , 100, 012102	26
1458	Computational study of energy filtering effects in one-dimensional composite nano-structures. <b>2012</b> , 111, 024508	39
1457	Flexible carbon nanotube papers with improved thermoelectric properties. <b>2012</b> , 5, 5364-5369	143
1456	Spark erosion: a high production rate method for producing Bi(0.5)Sb(1.5)Te <sub>3</sub> nanoparticles with enhanced thermoelectric performance. <b>2012</b> , 23, 415604	75
1455	Experimental evidence of enhancement of thermoelectric properties in tellurium nanoparticle-embedded bismuth antimony telluride. <b>2012</b> , 27, 2449-2456	18
1454	Largely enhanced thermoelectric properties of the binary-phased PbTe <sub>5</sub> Bi <sub>2</sub> Te <sub>3</sub> nanocomposites. <b>2012</b> , 27, 734-739	7

1453	Enhancement in thermoelectric performance of bismuth telluride based alloys by multi-scale microstructural effects. <b>2012</b> , 22, 16484	97
1452	Thermoelectric properties of armchair and zigzag silicene nanoribbons. <b>2012</b> , 14, 13588-93	102
1451	Current thermoelectric materials and an evaluation of thermoelectric materials contacting approaches. <b>2012</b> ,	2
1450	Silver-based intermetallic heterostructures in Sb <sub>2</sub> Te <sub>3</sub> thick films with enhanced thermoelectric power factors. <b>2012</b> , 12, 1075-80	89
1449	Raising the thermoelectric performance of p-type PbS with endotaxial nanostructuring and valence-band offset engineering using CdS and ZnS. <b>2012</b> , 134, 16327-36	264
1448	Microstructure analyses and thermoelectric properties of Ag <sub>1-x</sub> Pb <sub>18</sub> Sb <sub>1+y</sub> Te <sub>20</sub> . <b>2012</b> , 193, 58-63	15
1447	Influence of nano-inclusions on scattering of holes and phonons and transport coefficients in Bi <sub>x</sub> Sb <sub>1-x</sub> Te <sub>3</sub> bulk nanostructures. <b>2012</b> , 193, 122-126	9
1446	Recent advances in thermoelectric nanocomposites. <b>2012</b> , 1, 42-56	536
1445	Thermoelectric properties of copper selenide with ordered selenium layer and disordered copper layer. <b>2012</b> , 1, 472-478	217
1444	Thermoelectric properties of p-type Pb-doped Bi <sub>85</sub> Sb <sub>15-x</sub> Pb <sub>x</sub> alloys at cryogenic temperatures. <b>2012</b> , 511, 85-89	10
1443	Synthesis, crystal structures, and optical properties of NaCdPnS <sub>3</sub> (Pn = As, Sb). <b>2012</b> , 511, 35-40	35
1442	Electrical and thermal transport properties of Pb-based chalcogenides: PbTe, PbSe, and PbS. <b>2012</b> , 514, 40-44	173
1441	Synthesis and thermoelectric properties of In <sub>0.2+x</sub> Co <sub>4</sub> Sb <sub>12+x</sub> composite. <b>2012</b> , 521, 141-145	20
1440	Computational modeling and evaluation of the thermal behavior of randomly distributed single-walled carbon nanotube/polymer composites. <b>2012</b> , 63, 207-213	31
1439	Molecular dynamics simulations of lattice thermal conductivity and spectral phonon mean free path of PbTe: Bulk and nanostructures. <b>2012</b> , 53, 278-285	133
1438	Lattice dynamics of PbTe polymorphs from first principles. <b>2012</b> , 56, 18-24	9
1437	Large-scale colloidal synthesis of non-stoichiometric Cu <sub>2</sub> ZnSnSe <sub>4</sub> nanocrystals for thermoelectric applications. <b>2012</b> , 24, 6158-63	119
1436	Crystal Structure of FePb <sub>4</sub> Sb <sub>6</sub> Se <sub>14</sub> and its Structural Relationship with FePb <sub>3</sub> Sb <sub>4</sub> Se <sub>10</sub> . <b>2012</b> , 638, 2549-2554	5

1435	Crystal Structures of Photovoltaic Chalcogenides, an Intricate Puzzle to Solve: the Cases of CIGSe and CZTS Materials. <b>2012</b> , 638, 2571-2577	99
1434	Effects of interdot hopping and Coulomb blockade on the thermoelectric properties of serially coupled quantum dots. <b>2012</b> , 7, 257	11
1433	Theoretical analysis of field emission cooling of N-type PbTe. <b>2012</b> , 60, 1565-1569	1
1432	Crystal structure and powder diffraction reference pattern of type I clathrate Ba <sub>8</sub> Ni <sub>4</sub> Ge <sub>42</sub> . <b>2012</b> , 27, 25-31	2
1431	Nontoxic and abundant copper zinc tin sulfide nanocrystals for potential high-temperature thermoelectric energy harvesting. <b>2012</b> , 12, 540-5	192
1430	Influence of a nano phase segregation on the thermoelectric properties of the p-type doped stannite compound Cu <sub>(2+x)</sub> Zn <sub>(1-x)</sub> GeSe <sub>4</sub> . <b>2012</b> , 134, 7147-54	118
1429	First-principles description of anomalously low lattice thermal conductivity in thermoelectric Cu-Sb-Se ternary semiconductors. <b>2012</b> , 85,	161
1428	Resonant levels in bulk thermoelectric semiconductors. <b>2012</b> , 5, 5510-5530	624
1427	Structure of Complex Materials. <b>2012</b> , 1-25	8
1426	Defects in Crystals and Crystallographically Challenged Materials. <b>2012</b> , 371-405	0
1425	Energy harvesting: an integrated view of materials, devices and applications. <b>2012</b> , 23, 502001	110
1424	Reduced thermal conductivity in Pb-alloyed AgSbTe <sub>2</sub> thermoelectric materials. <b>2012</b> , 60, 6144-6151	32
1423	Phase separation and thermoelectric properties of Ag <sub>2</sub> Te-doped PbTe <sub>0.95</sub> S <sub>0.1</sub> . <b>2012</b> , 60, 7241-7248	14
1422	Preparation and thermoelectric properties of rare-earth-metal-doped SrO(SrTiO <sub>3</sub> ) <sub>n</sub> oxides. <b>2012</b> , 27, 103-108	1
1421	Thermoelectric performance of P-type Bi <sub>85</sub> Sb <sub>15-x</sub> Sn <sub>x</sub> alloys prepared by mechanical alloying and pressureless sintering at low temperatures. <b>2012</b> , 27, 128-136	
1420	Effect of Forming Process on Microstructure and Thermoelectric Properties of In <sub>4</sub> Se <sub>3</sub> Compound. <b>2012</b> , 27, 163-169	
1419	Strain dependence of the heat transport properties of graphene nanoribbons. <b>2012</b> , 23, 495702	18
1418	Hydrothermal synthesis and thermoelectric transport property of PbS@bTe core-shell heterostructures. <b>2012</b> , 36, 2574	16

1417	Thermopower enhancement in conducting polymer nanocomposites via carrier energy scattering at the organic/inorganic semiconductor interface. <b>2012</b> , 5, 8351	314
1416	Synthesis of Hexagonal Sb <sub>2</sub> Te <sub>3</sub> Nanoplates by Thermal Decomposition of the Single-Source Precursor (Et <sub>2</sub> Sb) <sub>2</sub> Te. <b>2012</b> , 24, 2228-2234	44
1415	The upper limit of thermoelectric figure of merit: importance of electronic thermoelectric efficiency. <b>2012</b> , 45, 085102	4
1414	Ionothermal synthesis of four new nickel thiophosphate anions: [Ni(P <sub>2</sub> S <sub>8</sub> ) <sub>2</sub> ] <sub>2</sub> [Ni(P <sub>3</sub> S <sub>9</sub> )(P <sub>2</sub> S <sub>8</sub> )] <sub>3</sub> [Ni(P <sub>3</sub> S <sub>9</sub> ) <sub>2</sub> ] <sub>4</sub> and [(NiP <sub>3</sub> S <sub>8</sub> ) <sub>4</sub> (PS <sub>4</sub> ) <sub>7</sub> ]. <b>2012</b> , 51, 13357-62	24
1413	Evaluation methods for properties of nanostructured body. <b>2012</b> , 317-383	
1412	Encyclopedia of Nanotechnology. <b>2012</b> , 2680-2697	1
1411	A facile synthetic approach for copper iron sulfide nanocrystals with enhanced thermoelectric performance. <b>2012</b> , 4, 6265-8	77
1410	Influence of electron scatterings on thermoelectric effect. <b>2012</b> , 112, 034306	3
1409	Thermoelectricity. <b>2012</b> ,	
1408	Probing the lower limit of lattice thermal conductivity in an ordered extended solid: Gd <sub>117</sub> Co <sub>56</sub> Sn <sub>112</sub> , a phonon glass-electron crystal system. <b>2012</b> , 134, 5965-73	46
1407	Seeing is believing: weak phonon scattering from nanostructures in alkali metal-doped lead telluride. <b>2012</b> , 12, 343-7	83
1406	Enhancement of thermoelectric figure-of-merit by resonant states of aluminium doping in lead selenide. <b>2012</b> , 5, 5246-5251	299
1405	Encyclopedia of Nanotechnology. <b>2012</b> , 2667-2667	
1404	A high thermoelectric figure of merit ZT > 1 in Ba heavily doped BiCuSeO oxyselenides. <b>2012</b> , 5, 8543	292
1403	Enhanced thermoelectric properties of n-type Mg <sub>2.16</sub> (Si <sub>0.4</sub> Sn <sub>0.6</sub> ) <sub>10</sub> S <sub>by</sub> due to nano-sized Sn-rich precipitates and an optimized electron concentration. <b>2012</b> , 22, 13653	112
1402	PbTe/BbSnS <sub>2</sub> thermoelectric composites: low lattice thermal conductivity from large microstructures. <b>2012</b> , 5, 8716	47
1401	Convergence of conduction bands as a means of enhancing thermoelectric performance of n-type Mg <sub>2</sub> Si(1-x)Sn(x) solid solutions. <b>2012</b> , 108, 166601	854
1400	Thermoelectric properties and microstructures of AgSbTe <sub>2</sub> -added p-type Pb <sub>0.16</sub> Ge <sub>0.84</sub> Te. <b>2012</b> , 209, 167-170	6

1399	Enhanced thermoelectric performance of Ag <sub>0.8</sub> Pb <sub>18</sub> SbTe <sub>20</sub> alloyed with Se. <b>2012</b> , 209, 1124-1127	2
1398	Nernst coefficient and scattering parameter in PbTe films. <b>2012</b> , 249, 1546-1549	1
1397	Nanostructuring of thermoelectric Mg(2) Si via a nonequilibrium intermediate state. <b>2012</b> , 8, 2350-5	30
1396	Ternary compound CuInTe <sub>2</sub> : a promising thermoelectric material with diamond-like structure. <b>2012</b> , 48, 3818-20	180
1395	Influence of sintering temperature on thermoelectric properties of Bi <sub>2</sub> Te <sub>3</sub> /Polythiophene composite materials. <b>2012</b> , 23, 870-876	23
1394	Advances in Thermal Conductivity. <b>2012</b> , 42, 179-209	183
1393	Very high thermoelectric power factor in a Fe <sub>3</sub> O <sub>4</sub> /SiO <sub>2</sub> /p-type Si(100) heterostructure. <b>2012</b> , 101, 033505	20
1392	Effect of silicon and sodium on thermoelectric properties of thallium-doped lead telluride-based materials. <b>2012</b> , 12, 2324-30	56
1391	Thermoelectrics with earth abundant elements: high performance p-type PbS nanostructured with SrS and CaS. <b>2012</b> , 134, 7902-12	197
1390	Perspectives on thermoelectrics: from fundamentals to device applications. <b>2012</b> , 5, 5147-5162	925
1389	Observation of phonon modes in PbTe nanocubes prepared by a solvothermal route. <b>2012</b> , 7, 621	5
1388	A mesoporous anisotropic n-type Bi <sub>2</sub> Te <sub>3</sub> monolith with low thermal conductivity as an efficient thermoelectric material. <b>2012</b> , 24, 5065-70	68
1387	Superionic phase transition in silver chalcogenide nanocrystals realizing optimized thermoelectric performance. <b>2012</b> , 134, 4287-93	154
1386	Thermomagnetic Properties Improved by Self-Organized Flower-Like Phase Separation of Ferromagnetic Co <sub>2</sub> Dy <sub>0.5</sub> Mn <sub>0.5</sub> Sn. <b>2012</b> , 22, 1822-1826	7
1385	Phonon Scattering and Thermal Conductivity in p-Type Nanostructured PbTe-BaTe Bulk Thermoelectric Materials. <b>2012</b> , 22, 5175-5184	95
1384	Chalcopyrite CuGaTe(2): a high-efficiency bulk thermoelectric material. <b>2012</b> , 24, 3622-6	245
1383	Switching of the natural nanostructure in Bi <sub>2</sub> Te <sub>3</sub> materials by ion irradiation. <b>2012</b> , 24, 4605-8	10
1382	Enhancement of Thermoelectric Figure of Merit by the Insertion of MgTe Nanostructures in p-type PbTe Doped with Na <sub>2</sub> Te. <b>2012</b> , 2, 1117-1123	104

1381	High Thermoelectric Figure of Merit in PbTe Alloys Demonstrated in PbTe $\delta$ Te. <b>2012</b> , 2, 670-675	208
1380	Tellurium-Free Thermoelectric: The Anisotropic n-Type Semiconductor Bi <sub>2</sub> S <sub>3</sub> . <b>2012</b> , 2, 634-638	157
1379	Increase in the Figure of Merit by Cd-Substitution in Sn <sub>1-x</sub> Pb <sub>x</sub> Te and Effect of Pb/Sn Ratio on Thermoelectric Properties. <b>2012</b> , 2, 1218-1225	19
1378	Preparation and Thermoelectric Properties of Polycrystalline In <sub>4</sub> Sn <sub>3</sub> $\delta$ by Mechanical Alloying and Hot Pressing. <b>2012</b> , 41, 1077-1080	16
1377	Polycrystalline BiCuSeO oxide as a potential thermoelectric material. <b>2012</b> , 5, 7188	203
1376	Improvement in the thermoelectric performance of the crystals of halogen-substituted In <sub>4</sub> Se <sub>3</sub> $\delta$ H <sub>0.03</sub> (H = F, Cl, Br, I): Effect of halogen-substitution on the thermoelectric properties in In <sub>4</sub> Se <sub>3</sub> $\delta$ . <b>2012</b> , 22, 5730	26
1375	Invited paper: Composition-dependent electrical properties of ternary Ag <sub>x</sub> Sb <sub>1-x</sub> Te <sub>y</sub> thin films synthesized by cationic exchange reaction. <b>2012</b> , 8, 219-224	1
1374	One-pot fabrication and enhanced thermoelectric properties of poly(3,4-ethylenedioxythiophene)-Bi <sub>2</sub> S <sub>3</sub> nanocomposites. <b>2012</b> , 14, 1	31
1373	Studies on the electronic structures of three-dimensional topological insulators by angle resolved photoemission spectroscopy. <b>2012</b> , 7, 175-192	29
1372	Trend for Thermoelectric Materials and Their Earth Abundance. <b>2012</b> , 41, 1011-1019	99
1371	Thermoelectric Properties of Pulsed Electric Current Sintered Samples of AgPb <sub>m</sub> SbSe <sub>17</sub> (m = 16 or 17). <b>2012</b> , 41, 1579-1582	
1370	Thermoelectric Performance of AgPb <sub>x</sub> SbTe <sub>20</sub> (x = 17 to 23) Bulk Materials Derived from Large-Particle Raw Materials. <b>2012</b> , 41, 1365-1369	8
1369	Effect of GaSb Addition on the Thermoelectric Properties of Mg <sub>2</sub> Si <sub>0.5</sub> Sn <sub>0.5</sub> Solid Solutions. <b>2012</b> , 41, 1222-1226	7
1368	Thermoelectric Properties of Sn-Substituted AgPb <sub>m</sub> SbTe <sub>m+2</sub> via the Route of Mechanical Alloying and Plasma-Activated Sintering. <b>2012</b> , 41, 1100-1104	7
1367	Enhancement of Thermoelectric Figure of Merit for Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> by Metal Nanoparticle Decoration. <b>2012</b> , 41, 1165-1169	54
1366	Effect of Nano-ZrW <sub>2</sub> O <sub>8</sub> on the Thermoelectric Properties of Bi <sub>85</sub> Sb <sub>15</sub> /ZrW <sub>2</sub> O <sub>8</sub> Composites. <b>2012</b> , 41, 1263-1266	4
1365	Seebeck Enhancement Through Miniband Conduction in III $\delta$ V Semiconductor Superlattices at Low Temperatures. <b>2012</b> , 41, 1498-1503	9
1364	Transport Properties of Ni and PbTe Under Pressure. <b>2012</b> , 41, 633-638	7

- 1363 Synthesis and Thermoelectric Properties of LAST System Bulk Materials: Substitution of Sulfur for Tellurium. **2012**, 41, 1337-1342 6
- 1362 Thermal Cycling Effects on the Thermoelectric Properties of n-Type In,Ce-Based Skutterudite Compounds. **2012**, 41, 1615-1621 6
- 1361 Thermoelectric Properties of Cold-Pressed Higher Manganese Silicides for Waste Heat Recovery. **2012**, 41, 1564-1572 21
- 1360 Thermoelectric Performance of p-Type (Bi<sub>85</sub>Sb<sub>15</sub>)<sub>1-x</sub>Sn<sub>x</sub> Materials Prepared by a Pressureless Sintering Technique. **2012**, 41, 1725-1729 4
- 1359 The Effects of Thermoelectric Film Thickness on Performance of In-Plane Thermoelectric Modules. **2012**, 41, 1799-1804 10
- 1358 Feasibility Study on the Use of a Solar Thermoelectric Cogenerator Comprising a Thermoelectric Module and Evacuated Tubular Collector with Parabolic Trough Concentrator. **2012**, 41, 1759-1765 18
- 1357 Electronic Properties as a Function of Ag/Sb Ratio in Ag<sub>1-x</sub>Pb<sub>18</sub>Sb<sub>1+z</sub>Te<sub>20</sub> Compounds. **2012**, 41, 2065-2072 6
- 1356 Formation of ordered nano-wire microstructures in thermoelectric Pb<sub>1-x</sub>Ag<sub>x</sub>Sb<sub>3</sub>Te. **2012**, 60, 1129-1138 23
- 1355 Thermoelectric properties of p-type skutterudites YbxFe<sub>3.5</sub>Ni<sub>0.5</sub>Sb<sub>12</sub> (0.8 ≤ x ≤ 1). **2012**, 60, 2104-2110 35
- 1354 Microstructure and thermoelectric properties of CoSb<sub>2.75</sub>Ge<sub>0.25</sub>Tex prepared by rapid solidification. **2012**, 60, 3536-3544 55
- 1353 Preparation and thermoelectric properties of AgPb<sub>18</sub>SbTe<sub>20</sub>Sex (x = 1, 2, 4) materials. **2012**, 12, 188-192 10
- 1352 Increasing the thermoelectric power factor of polymer composites using a semiconducting stabilizer for carbon nanotubes. **2012**, 50, 885-895 86
- 1351 One-step microwave-solvothermal rapid synthesis of Sb doped PbTe/Ag<sub>2</sub>Te core/shell composite nanocubes. **2012**, 193-194, 227-233 22
- 1350 Thermoelectric characteristics of the (Bi,Sb)<sub>2</sub>(Te,Se)<sub>3</sub> nanocomposites processed with nanoparticle dispersion. **2012**, 38, S529-S533 19
- 1349 Thermal transport within quantum-dot nanostructured semiconductors. **2012**, 55, 2800-2806 5
- 1348 Diameter and composition modulated bismuth telluride nanowires by galvanic displacement reaction of segmented NiFe nanowires. **2012**, 75, 201-207 9
- 1347 High Thermoelectric Performance of Nanostructured In<sub>2</sub>O<sub>3</sub>-Based Ceramics. **2012**, 95, 2465-2469 34
- 1346 Solvothermal synthesis and growth mechanism of Ag and Sb co-doped PbTe heterogeneous thermoelectric nanorods and nanocubes. **2012**, 133, 33-37 8



1345	One-pot fabrication and thermoelectric properties of Ag <sub>2</sub> Te/polyaniline core-shell nanostructures. <b>2012</b> , 133, 808-812	35
1344	Low temperature synthesized thermoelectric Sb <sub>2</sub> Te <sub>3</sub> irregular nanoflakes. <b>2012</b> , 75, 42-44	7
1343	Effects of surface structure and Ag <sub>3</sub> Bi nanodots on electronic properties of PbTe (100) facets from first-principles calculations. <b>2012</b> , 67, 17-20	2
1342	Thermoelectric properties of hydrothermally synthesized Bi <sub>2</sub> Te <sub>3</sub> /SiO <sub>2</sub> nanocrystals. <b>2012</b> , 67, 161-164	24
1341	The effects of different doping patterns on the lattice thermal conductivity of solid Ar. <b>2012</b> , 73, 204-208	2
1340	Microstructure and thermal conductivity of surfactant-free NiO nanostructures. <b>2012</b> , 190, 29-35	24
1339	Effect of solvents on morphologies of PbTe nanostructures: Controllable synthesis of hollow and solid PbTe nanocubes by a solvothermal method. <b>2012</b> , 188, 72-76	3
1338	Characterization of hexagonal Bi <sub>2</sub> Te <sub>3</sub> nanosheets prepared by solvothermal method. <b>2012</b> , 152, 810-815	17
1337	Glucose-assisted continuous flow synthesis of Bi <sub>2</sub> Te <sub>3</sub> nanoparticles in supercritical/near-critical water. <b>2012</b> , 67, 84-88	15
1336	Research progress on polymer/organic thermoelectric nanocomposite materials. <b>2012</b> , 37, 820-841	414
1335	Power output and efficiency of quantum dot attached to ferromagnetic electrodes with non-collinear magnetic moments. <b>2012</b> , 324, 1516-1522	9
1334	SnTe/AgSbTe <sub>2</sub> Thermoelectric Alloys. <b>2012</b> , 2, 58-62	65
1333	Lead-Free Thermoelectrics: High Figure of Merit in p-type AgSnmSbTem+2. <b>2012</b> , 2, 157-161	65
1332	Thermoelectric properties of non-stoichiometric MnTe compounds. <b>2013</b> , 9, 477-480	28
1331	Electrical transport properties of microwave-synthesized Bi <sub>2</sub> Se <sub>3</sub> /Te <sub>x</sub> nanosheet. <b>2013</b> , 15, 5626	30
1330	Ca(1-x)RE(x)Ag(1-y)Sb (RE = La, Ce, Pr, Nd, Sm; 0 ≤ x ≤ 1; 0 ≤ y ≤ 1): interesting structural transformation and enhanced high-temperature thermoelectric performance. <b>2013</b> , 135, 11840-8	37
1329	Electron energy filtering by a nonplanar potential to enhance the thermoelectric power factor in bulk materials. <b>2013</b> , 87,	130
1328	Crystallographic, Thermoelectric, and Mechanical Properties of Polycrystalline Ba <sub>8</sub> Al <sub>x</sub> Si <sub>46</sub> Clathrates. <b>2013</b> , 42, 2326-2336	16

1327	Thermoelectric Nanomaterials. <b>2013</b> ,	95
1326	BiSbTe-Based Nanocomposites with High ZT: The Effect of SiC Nanodispersion on Thermoelectric Properties. <b>2013</b> , 23, 4317-4323	325
1325	Alternative Strategies for Thermoelectric Materials Development. <b>2013</b> , 1-24	3
1324	In situ precipitation of Te nanoparticles in p-type BiSbTe and the effect on thermoelectric performance. <b>2013</b> , 5, 3071-4	30
1323	Thermoelectric properties of CuInTe <sub>2</sub> /graphene composites. <b>2013</b> , 15, 6648	51
1322	High thermoelectric performance in tellurium free p-type AgSbSe <sub>2</sub> . <b>2013</b> , 6, 2603	185
1321	High thermoelectric performance in n-type BiAgSeS due to intrinsically low thermal conductivity. <b>2013</b> , 6, 1750	59
1320	Lattice dynamics and structure of GeTe, SnTe and PbTe. <b>2013</b> , 250, 1300-1307	102
1319	Phonon-glass-like behavior of magnetic origin in single-crystal Tb <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> . <b>2013</b> , 87,	28
1318	First-principles study of the thermoelectric properties of strained graphene nanoribbons. <b>2013</b> , 1, 10762	20
1317	AgSbTe <sub>2</sub> nanoinclusion in Yb <sub>0.2</sub> Co <sub>4</sub> Sb <sub>12</sub> for high performance thermoelectrics. <b>2013</b> , 43, 79-84	15
1316	Improved thermoelectric performance of PEDOT:PSS films prepared by polar-solvent vapor annealing method. <b>2013</b> , 24, 4240-4246	45
1315	The thermoelectric performance of carbon black/poly(3,4-ethylenedioxythiophene):poly(4-styrenesulfonate) composite films. <b>2013</b> , 24, 1702-1706	23
1314	High performance bulk thermoelectrics via a panoscopic approach. <b>2013</b> , 16, 166-176	344
1313	Nanostructuring of Conventional Thermoelectric Materials. <b>2013</b> , 303-320	
1312	Hydrothermal synthesis and thermoelectric transport properties of Sb <sub>2</sub> Te <sub>3</sub> Te heterogeneous nanostructures. <b>2013</b> , 15, 2978	16
1311	Silicide Nanopowders as Low-Cost and High-Performance Thermoelectric Materials. <b>2013</b> , 65, 702-708	9
1310	Atomic-Scale Interfacial Structure in Rock Salt and Tetradymite Chalcogenide Thermoelectric Materials. <b>2013</b> , 65, 390-400	23

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1299	New Perspectives in Thermoelectric Energy Recovery System Design Optimization. <b>2013</b> , 42, 1725-1736	15
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1293	Thermal conductivity of nanocrystalline SiGe alloys using molecular dynamics simulations. <b>2013</b> , 114, 164310	10
1292	High thermoelectric performance of oxyselenides: intrinsically low thermal conductivity of Ca-doped BiCuSeO. <b>2013</b> , 5, e47-e47	286

1291	Ultrahigh thermoelectric performance by electron and phonon critical scattering in $\text{Cu}_2\text{Se}_{1-x}\text{Ix}$ . <b>2013</b> , 25, 6607-12	319
1290	Quaternary supertetrahedra-layered telluride $\text{CsMnInTe}_3$ : why does this type of chalcogenide tilt?. <b>2013</b> , 52, 10726-8	28
1289	Thermoelectricity in semiconductor nanowires. <b>2013</b> , 7, 767-780	24
1288	Optimized thermal coupling of micro thermoelectric generators for improved output performance. <b>2013</b> , 60, 746-753	19
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1283	Structural aspects of changes induced in $\text{PbTe}$ by doping with Mn, In and Ga. <b>2013</b> , 48, 8084-8100	8
1282	Electronic structure and thermoelectric properties of $\text{Bi}_2(\text{Te}_{1-x}\text{Sex})_3$ compound. <b>2013</b> , 155, 34-39	2
1281	Reduction in thermal conductivity of Bi thin films with high-density ordered nanoscopic pores. <b>2013</b> , 8, 371	11
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1279	First-principles investigation of dual substitutional impurity-induced electronic structural modulation of $\text{PbTe}$ on cationic and anionic sites. <b>2013</b> , 61, 6428-6442	2
1278	Thermoelectric properties of a quantum dot array connected to metallic electrodes. <b>2013</b> , 24, 175403	8
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1265	All-scale hierarchical thermoelectrics: MgTe in PbTe facilitates valence band convergence and suppresses bipolar thermal transport for high performance. <b>2013</b> , 6, 3346	532
1264	A promising mid-temperature thermoelectric material candidate: Pb/Sn-codoped In <sub>1-x</sub> Pb <sub>x</sub> Sn <sub>2</sub> Se <sub>4</sub> . <b>2013</b> , 25, 4800-6	49
1263	Improving the thermoelectric properties of half-Heusler TiNiSn through inclusion of a second full-Heusler phase: microwave preparation and spark plasma sintering of TiNi <sub>1-x</sub> Sn <sub>x</sub> . <b>2013</b> , 15, 6990-7	95
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1259	Syntheses, crystal and electronic structures, and characterizations of the mixed anions compounds Ba <sub>4</sub> In <sub>2</sub> Te <sub>2</sub> Q <sub>5</sub> (Q = S, Se). <b>2013</b> , 15, 4773	4
1258	AgPb <sub>10</sub> SbTe <sub>12</sub> microrods with a rough surface grown through an in situ template route and their electrical transport properties. <b>2013</b> , 3, 11658	1
1257	Polymeric supertetrahedral InS clusters assembled by new linkages. <b>2013</b> , 15, 6040	15
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1251	Synthesis and property evaluation of CuFeS <sub>2</sub> as earth-abundant and environmentally-friendly thermoelectric materials. <b>2013</b> , 551, 143-149	101
1250	A <sub>10</sub> LaCdSb <sub>9</sub> (A=Ca, Yb): a highly complex Zintl system and the thermoelectric properties. <b>2013</b> , 8, 251-7	15
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1171	Inkjet-printed flexible organic thin-film thermoelectric devices based on p- and n-type poly(metal 1,1,2,2-ethenetetrathiolate)s/polymer composites through ball-milling. <b>2014</b> , 372, 20130008	90
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1165	Natural nanostructure and superlattice nanodomains in AgSbTe <sub>2</sub> . <b>2014</b> , 115, 144903	11
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1147	Enhancement of the power factor of $\text{Pb}_{1-x}\text{Sn}_x\text{Te}$ (0.00 $\leq x \leq$ 0.08) alloys. <b>2014</b> , 94, 3183-3194	3
1146	Thermal conductivity of bulk nanostructured lead telluride. <b>2014</b> , 104, 021915	23
1145	Phonon scattering rates and atomic ordering in $\text{Ag}_{1-x}\text{Sb}_{1+x}\text{Te}_{2+x}$ ( $x=0,0.1,0.2$ ) investigated with inelastic neutron scattering and synchrotron diffraction. <b>2014</b> , 90,	12
1144	Evolution of phase segregation and eutectic structures in $\text{AgPb}_{18}\text{SbTe}_{20}$ . <b>2014</b> , 211, 1276-1281	4
1143	$\text{SnTe}_{1-x}\text{Ag}_x\text{BiTe}_2$ as an efficient thermoelectric material with low thermal conductivity. <b>2014</b> , 2, 20849-20854	117
1142	An Alternating-Current Voltage Modulated Thermal Probe Technique for Local Seebeck Coefficient Characterization. <b>2014</b> , 31, 127201	1
1141	All-Inorganic Nanocrystals as a Glue for $\text{BiSbTe}$ Grains: Design of Interfaces in Mesostructured Thermoelectric Materials. <b>2014</b> , 126, 7596-7600	6
1140	Electron Microscopy for Characterization of Thermoelectric Nanomaterials. <b>2014</b> , 427-536	
1139	Waste Thermal Energy Harvesting (I): Thermoelectric Effect. <b>2014</b> , 263-403	2
1138	Composites of zinc phosphate glass/metal: New materials for thermoelectricity and solar cell devices. <b>2014</b> ,	
1137	CHAPTER 6. Thermoelectric Materials and Devices. <b>2014</b> , 107-141	1
1136	Effect of $\text{ZnAl}_2\text{O}_4$ phase on thermoelectric properties of Al doped ZnO ceramics fabricated by spark plasma sintering. <b>2014</b> , 18, S4-110-S4-115	3
1135	Multiscale microstructures and improved thermoelectric performance of $\text{Mg}_2(\text{Si}_{0.4}\text{Sn}_{0.6})\text{Sb}_x$ solid solutions. <b>2014</b> , 07, 1450036	1
1134	Nano Bulk Thermoelectrics: Concepts, Techniques, and Modeling. <b>2014</b> , 141-183	15
1133	Development and Applications of Non-destructive Screening Tools for Thermoelectric Materials at NIST. <b>2014</b> , 470, 241-259	0
1132	Thermopower engineering of $\text{Bi}_2\text{Te}_3$ without alloying: the interplay between nanostructuring and defect activation. <b>2014</b> , 29, 064003	25
1131	Redox control of thermopower and figure of merit in phase-coherent molecular wires. <b>2014</b> , 25, 205402	26
1130	Experimental study of a domestic thermoelectric cogeneration system. <b>2014</b> , 62, 69-79	48

1129	Fine-Grained and Nanostructured AgPbmSbTem+2 Alloys with High Thermoelectric Figure of Merit at Medium Temperature. <b>2014</b> , 4, 1300937	34
1128	Study of reaction mechanisms and synthetic manipulations of bismuth tellurium selenide nanomaterials for enhanced thermoelectric performance. <b>2014</b> , 584, 108-113	4
1127	Heterostructured Approaches to Efficient Thermoelectric Materials. <b>2014</b> , 26, 837-848	74
1126	Thermoelectric properties of Ge-doped Bi85Sb15 alloys at low temperatures. <b>2014</b> , 75, 523-527	5
1125	Electronic and transport properties of Mg2Si under isotropic strains. <b>2014</b> , 50, 8-13	17
1124	Sonochemical approach for synthesis and characterization of PbTe nanostructure. <b>2014</b> , 65, 365-374	16
1123	Effect of Excess Na on the Morphology and Thermoelectric Properties of Na x Pb1-x Te0.85Se0.15. <b>2014</b> , 43, 353-358	7
1122	Thermopower Enhancement of Bi2Te3 Films by Doping I Ions. <b>2014</b> , 43, 2000-2005	9
1121	Ioffe-Regel limit and lattice thermal conductivity reduction of high performance (AgSbTe2)15(GeTe)85 thermoelectric materials. <b>2014</b> , 2, 3251-3256	52
1120	Current transport and thermoelectric properties of very high power factor Fe3O4/SiO2/p-type Si(001) devices. <b>2014</b> , 115, 033709	11
1119	A review of thermoelectric cooling: Materials, modeling and applications. <b>2014</b> , 66, 15-24	464
1118	Enhanced low-temperature thermoelectrical properties of BiTeCl grown by topotactic method. <b>2014</b> , 76, 69-72	27
1117	Material and manufacturing cost considerations for thermoelectrics. <b>2014</b> , 32, 313-327	305
1116	New device architecture of a thermoelectric energy conversion for recovering low-quality heat. <b>2014</b> , 114, 1201-1208	13
1115	New promising bulk thermoelectrics: intermetallics, pnictides and chalcogenides. <b>2014</b> , 87, 1	52
1114	Improved Thermoelectric Properties of p-Type Bismuth Antimony-Based Alloys Prepared by Spark Plasma Sintering. <b>2014</b> , 43, 1295-1301	5
1113	Thermoelectric properties of a Pb0.2Sn0.8Te solid solution prepared through thermal decomposition of salts. <b>2014</b> , 50, 124-129	2
1112	High thermoelectric performance in non-toxic earth-abundant copper sulfide. <b>2014</b> , 26, 3974-8	501

1111	Progress of thermoelectric power generation systems: Prospect for small to medium scale power generation. <b>2014</b> , 33, 371-381	73
1110	A review of thermoelectrics research [Recent developments and potentials for sustainable and renewable energy applications. <b>2014</b> , 32, 486-503	275
1109	Ultralow thermal conductivity and high thermoelectric figure of merit in SnSe crystals. <b>2014</b> , 508, 373-7	3074
1108	High-performance pseudocubic thermoelectric materials from non-cubic chalcopyrite compounds. <b>2014</b> , 26, 3848-53	211
1107	Silicon nanostructures for thermoelectric devices: A review of the current state of the art. <b>2014</b> , 211, 1235-1249	71
1106	Contrasting role of antimony and bismuth dopants on the thermoelectric performance of lead selenide. <b>2014</b> , 5, 3640	76
1105	Reducing Lattice Thermal Conductivity of the Thermoelectric Compound AgSbTe <sub>2</sub> (P4/mmm) by Lanthanum Substitution: Computational and Experimental Approaches. <b>2014</b> , 43, 3772-3779	16
1104	Enhancement of the Thermoelectric Performance of Polycrystalline In <sub>4</sub> Se <sub>2.5</sub> by Copper Intercalation and Bromine Substitution. <b>2014</b> , 4, 1300599	64
1103	Optimum Carrier Concentration in n-Type PbTe Thermoelectrics. <b>2014</b> , 4, 1400486	284
1102	Hot carrier filtering in solution processed heterostructures: a paradigm for improving thermoelectric efficiency. <b>2014</b> , 26, 2755-61, 2618	51
1101	Ba <sub>2</sub> HgS <sub>5</sub> --a molecular trisulfide salt with dumbbell-like (HgS <sub>2</sub> ) <sup>2-</sup> ions. <b>2014</b> , 53, 4698-704	21
1100	BiCuSeO oxyselenides: new promising thermoelectric materials. <b>2014</b> , 7, 2900-2924	416
1099	Decoupling interrelated parameters for designing high performance thermoelectric materials. <b>2014</b> , 47, 1287-95	86
1098	Prediction of New Stable Compounds and Promising Thermoelectrics in the Cu <sub>3</sub> Bi <sub>2</sub> Te <sub>4</sub> System. <b>2014</b> , 26, 3427-3435	52
1097	Improved Bulk Materials with Thermoelectric Figure-of-Merit Greater than 1: Tl <sub>10</sub> Sn <sub>x</sub> Te <sub>6</sub> and Tl <sub>10</sub> Pb <sub>x</sub> Te <sub>6</sub> . <b>2014</b> , 4, 1400348	36
1096	All-inorganic nanocrystals as a glue for BiSbTe grains: design of interfaces in mesostructured thermoelectric materials. <b>2014</b> , 53, 7466-70	45
1095	Thermoelectric performance of poly(3-hexylthiophene) films doped by iodine vapor with promising high seebeck coefficient. <b>2014</b> , 10, 427-431	16
1094	25th anniversary article: semiconductor nanowires--synthesis, characterization, and applications. <b>2014</b> , 26, 2137-84	649

1093	Coupled hydrothermal synthesis/hot pressing of PbSe/C@PbTe heterostructured composites with enhanced thermoelectric performance. <b>2014</b> , 117, 49-52	6
1092	Impurities-contributed abnormal thermoelectric effect in a parallel double quantum dot structure. <b>2014</b> , 14, 34-45	6
1091	Low Thermal Conductivity in High-Z Thermoelectric Materials with Controlled Nanodispersions. <b>2014</b> , 43, 1560-1566	2
1090	Bi <sub>2</sub> S <sub>3</sub> nanonetwork as precursor for improved thermoelectric performance. <b>2014</b> , 4, 113-122	48
1089	Crooked Ag <sub>2</sub> Te nanowires with rough surfaces: facile microwave-assisted solution synthesis, growth mechanism, and electrical performances. <b>2014</b> , 38, 59-62	17
1088	Transmission Electron Microscopy Characterization of Nanomaterials. <b>2014</b> ,	30
1087	Nanoscale Thermoelectrics. <b>2014</b> ,	15
1086	Theories of Phonon Transport in Bulk and Nanostructured Solids. <b>2014</b> , 81-114	
1085	Probing the growth mechanism of PbTe hopper-like crystal and ultra-long nanowires with rough surface synthesized through acetone-assisted solvothermal method. <b>2014</b> , 236, 131-138	12
1084	Resonant nature of intrinsic defect energy levels in PbTe revealed by infrared photoreflectance spectroscopy. <b>2014</b> , 105, 022109	10
1083	Structural characterization of Bi <sub>2</sub> Te <sub>3</sub> and Sb <sub>2</sub> Te <sub>3</sub> as a function of temperature using neutron powder diffraction and extended X-ray absorption fine structure techniques. <b>2014</b> , 116, 083513	23
1082	Improving the thermoelectric performance of TiNiSn half-Heusler via incorporating submicron lamellae eutectic phase of Ti <sub>70.5</sub> Fe <sub>29.5</sub> : a new strategy for enhancing the power factor and reducing the thermal conductivity. <b>2014</b> , 2, 20980-20989	28
1081	Enhancing thermoelectric properties of a p-type Mg <sub>3</sub> Sb <sub>2</sub> - based Zintl phase compound by Pb substitution in the anionic framework. <b>2014</b> , 4, 34552-34560	90
1080	Unexpected high-temperature stability of $\text{Pb}_{1-x}\text{Zn}_x\text{Sb}_3$ opens the door to enhanced thermoelectric performance. <b>2014</b> , 136, 1497-504	97
1079	Size- effect induced high thermoelectric figure of merit in PbSe and PbTe nanowires. <b>2014</b> , 16, 8114-8	11
1078	Telluride nanowire and nanowire heterostructure-based thermoelectric energy harvesting. <b>2014</b> , 2, 6004-6014	22
1077	Origin of enhanced thermoelectric properties of doped CrSi <sub>2</sub> . <b>2014</b> , 4, 3482-3486	6
1076	Influence of In doping on the thermoelectric properties of an AgSbTe <sub>2</sub> compound with enhanced figure of merit. <b>2014</b> , 2, 2839	20

- 1075 Optimization of thermoelectric efficiency in SnTe: the case for the light band. **2014**, 16, 20741-8 186
- 1074 Nanostructuring, carrier engineering and bond anharmonicity synergistically boost the thermoelectric performance of p-type AgSbSe<sub>2</sub>/nSe. **2014**, 2, 4324 62
- 1073 Strain-assisted, low-temperature synthesis of high-performance thermoelectric materials. **2014**, 16, 3529-33 9
- 1072 Enhanced thermoelectric performance of a new half-Heusler derivative Zr<sub>9</sub>Ni<sub>7</sub>Sn<sub>8</sub> bulk nanocomposite: enhanced electrical conductivity and low thermal conductivity. **2014**, 2, 11913-11921 33
- 1071 A study of Yb<sub>0.2</sub>Co<sub>4</sub>Sb<sub>12</sub>/AgSbTe<sub>2</sub> nanocomposites: simultaneous enhancement of all three thermoelectric properties. **2014**, 2, 73-79 40
- 1070 Enhanced thermoelectric efficiency via orthogonal electrical and thermal conductances in phosphorene. **2014**, 14, 6393-9 571
- 1069 High ZT in p-type (PbTe)<sub>1-2x</sub>(PbSe)<sub>x</sub>(PbS)<sub>x</sub> thermoelectric materials. **2014**, 136, 3225-37 198
- 1068 Recent advances in thermoelectric materials and solar thermoelectric generators – a critical review. **2014**, 4, 46860-46874 91
- 1067 Novel one-, two-, and three-dimensional selenidostannates templated by iron(II) complex cation. **2014**, 53, 9267-73 17
- 1066 Facile preparation and thermoelectric properties of Bi<sub>2</sub>Te<sub>3</sub>-based alloy nanosheet/PEDOT:PSS composite films. **2014**, 6, 5735-43 190
- 1065 Energy harvesting through gas dynamics in the free molecular flow regime between structured surfaces at different temperatures. **2014**, 89, 053003 3
- 1064 Nanostructures in Te/Sb/Ge/Ag (TAGS) thermoelectric materials induced by phase transitions associated with vacancy ordering. **2014**, 53, 7722-9 34
- 1063 Perovskites for Solar Thermoelectric Applications: A First Principle Study of CH<sub>3</sub>NH<sub>3</sub>Al<sub>3</sub> (A = Pb and Sn). **2014**, 26, 5394-5400 256
- 1062 Right sizes of nano- and microstructures for high-performance and rigid bulk thermoelectrics. **2014**, 111, 10949-54 108
- 1061 Investigation of reaction mechanisms of bismuth tellurium selenide nanomaterials for simple reaction manipulation causing effective adjustment of thermoelectric properties. **2014**, 6, 778-85 5
- 1060 A review on thermoelectric cooling parameters and performance. **2014**, 38, 903-916 121
- 1059 Renewable energy in focus: In<sub>5</sub>Se<sub>5</sub>Br, a solid material with promising thermoelectric properties for industrial applications. **2014**, 60, 88-96 4
- 1058 Crystal structure and thermoelectric properties of Cu<sub>2</sub>Cd<sub>1-x</sub>Zn<sub>x</sub>SnSe<sub>4</sub> solid solutions. **2014**, 55, 15-21 6



1057	Thermoelectric properties of CeAl <sub>3</sub> prepared by hot-press method. <b>2014</b> , 87, 584-588	7
1056	Broad temperature plateau for thermoelectric figure of merit ZT>2 in phase-separated PbTe <sub>0.7</sub> Sb <sub>0.3</sub> . <b>2014</b> , 5, 4515	373
1055	Aluminum silicide microparticles transformed from aluminum thin films by hypoeutectic interdiffusion. <b>2014</b> , 9, 312	6
1054	Half-Heusler thermoelectrics: a complex class of materials. <b>2014</b> , 26, 433201	100
1053	n-Type carbon nanotubes/silver telluride nanohybrid buckypaper with a high-thermoelectric figure of merit. <b>2014</b> , 6, 4940-6	50
1052	Thermoelectric performance of layered Sr <sub>x</sub> TiSe <sub>2</sub> above 300 K. <b>2014</b> , 26, 445002	3
1051	High superionic conduction arising from aligned large lamellae and large figure of merit in bulk Cu <sub>1.94</sub> Al <sub>0.02</sub> Se. <b>2014</b> , 105, 123902	74
1050	Enhanced thermoelectric performance via carrier energy filtering effect in Zn <sub>4</sub> Sb <sub>3</sub> alloy bulk embedded with (Bi <sub>2</sub> Te <sub>3</sub> ) <sub>0.2</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>0.8</sub> . <b>2014</b> , 115, 053710	33
1049	Self-propagating high-temperature synthesis for compound thermoelectrics and new criterion for combustion processing. <b>2014</b> , 5, 4908	243
1048	Anomalous transport and thermoelectric performances of CuAgSe compounds. <b>2014</b> , 261, 21-25	49
1047	Indium selenides: structural characteristics, synthesis and their thermoelectric performances. <b>2014</b> , 10, 2747-65	201
1046	Composition optimization of p-type Ag <sub>1-x</sub> Sn <sub>x</sub> SbTe <sub>2</sub> thermoelectric materials synthesized by mechanical alloying and spark plasma sintering. <b>2014</b> , 615, 451-455	13
1045	Recent progress in thermoelectric materials. <b>2014</b> , 59, 2073-2091	83
1044	Fabrication of a Flexible Bismuth Telluride Power Generation Module Using Microporous Polyimide Films as Substrates. <b>2014</b> , 43, 1733-1739	24
1043	Investigation of the Effect of Electrical Current Variance on Thermoelectric Energy Harvesting. <b>2014</b> , 43, 1744-1751	6
1042	Effect of Ce Substitution for Sb on the Thermoelectric Properties of AgSbTe <sub>2</sub> Compound. <b>2014</b> , 43, 2384-2389	4
1041	Processing and Thermal Conductivity of Lead Telluride Microwires. <b>2014</b> , 43, 2731-2737	2
1040	Lattice Thermal Conductivity in Nano- to Micro-scale Porous Materials. <b>2014</b> , 1, 145-152	

1039	Using anodic aluminum oxide templates and electrochemical method to deposit BiSbTe-based thermoelectric nanowires. <b>2014</b> , 9, 63	4
1038	Enhanced thermoelectric properties of the n-type Magn $\delta$ phase WO <sub>2.90</sub> : reduced thermal conductivity through microstructure engineering. <b>2014</b> , 2, 13492-13497	13
1037	Experimental studies on overall property of thermoelectric modules with sandwiched structures. <b>2014</b> , 59, 571-576	1
1036	Galvanically Displaced Ultralong Pb <sub>x</sub> SeyNi <sub>z</sub> Hollow Nanofibers with High Thermopower. <b>2014</b> , 26, 2557-2566	7
1035	Preferential growth transformation of Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> films induced by facile post-annealing process: Enhanced thermoelectric performance with layered structure. <b>2014</b> , 556, 270-276	27
1034	Enhanced thermoelectric performance of $\mu$ Zn <sub>4</sub> Sb <sub>3</sub> based composites incorporated with large proportion of nanophase Cu <sub>3</sub> SbSe <sub>4</sub> . <b>2014</b> , 588, 568-572	16
1033	Preparation and thermoelectric properties of p-type filled skutterudites Ce <sub>y</sub> Fe <sub>4-x</sub> Ni <sub>x</sub> Sb <sub>12</sub> . <b>2014</b> , 584, 216-221	22
1032	Thermoelectric properties of nanocomposite heavy fermion CeCu <sub>6</sub> . <b>2014</b> , 609, 228-232	3
1031	Enhanced thermoelectric performance of chloride doped bismuth sulfide prepared by mechanical alloying and spark plasma sintering. <b>2014</b> , 587, 6-9	31
1030	Effects of Oxygen-Reduction on Thermoelectric Properties of Sr <sub>0.61</sub> Ba <sub>0.39</sub> Nb <sub>2</sub> O <sub>6</sub> Ceramics. <b>2014</b> , 787, 210-214	1
1029	The panoscopic approach to high performance thermoelectrics. <b>2014</b> , 7, 251-268	718
1028	Colloidal synthesis and thermoelectric properties of La-doped SrTiO <sub>3</sub> nanoparticles. <b>2014</b> , 2, 4217	89
1027	Solution-based synthesis of anisotropic metal chalcogenide nanocrystals and their applications. <b>2014</b> , 2, 6222-6248	53
1026	Thermoelectric energy conversion in layered structures with strained Ge quantum dots grown on Si surfaces. <b>2014</b> , 87, 1	7
1025	Synthesis and characterization of bismuth telluride-based thermoelectric nanocomposites containing MoS <sub>2</sub> nano-inclusions. <b>2014</b> , 95, 44-49	18
1024	Uninterrupted thermoelectric energy harvesting using temperature-sensor-based maximum power point tracking system. <b>2014</b> , 86, 233-240	30
1023	High thermoelectric performance of p-type SnTe via a synergistic band engineering and nanostructuring approach. <b>2014</b> , 136, 7006-17	425
1022	Voltammetric study and electrodeposition of tellurium, lead, and lead telluride in room-temperature ionic liquid 1-ethyl-3-methylimidazolium tetrafluoroborate. <b>2014</b> , 137, 49-56	24

1021	Solvothermal synthesis of PbTe/SnTe hybrid nanocrystals. <b>2014</b> , 25, 849-853	8
1020	Nanostructured Bulk Thermoelectric Materials. <b>2014</b> , 53, 307-311	
1019	Effect of Ball-Milling Conditions on Thermoelectric Properties of Polycrystalline CuGaTe <sub>2</sub> . <b>2014</b> , 55, 1215-1218	10
1018	High-Temperature Electromechanical Actuators. <b>2014</b> , 313-346	
1017	Process, property and performance of chalcogenide-based thermoelectric materials. <b>2014</b> , 3, 68-81	7
1016	Characterization of nanoembedded alloyed thermoelectrics. <b>2014</b> , 522, 012040	2
1015	Advances in thermoelectrics: From single phases to hierarchical nanostructures and back. <b>2015</b> , 40, 687-695	32
1014	Nanocomposites for thermoelectrics and thermal engineering. <b>2015</b> , 40, 746-752	28
1013	Band and scattering tuning for high performance thermoelectric Sn <sub>1-x</sub> Mn <sub>x</sub> Te alloys. <b>2015</b> , 1, 307-315	167
1012	Thermoelectric properties of spark plasma sintered lead telluride nanocubes. <b>2015</b> , 30, 2638-2648	8
1011	Enhanced Thermoelectric Performance in Cu-Intercalated BiTeI by Compensation Weakening Induced Mobility Improvement. <b>2015</b> , 5, 14319	29
1010	Organic Semiconductors and Polymers. <b>2015</b> , 295-330	
1009	Exploring the origin of ultralow thermal conductivity in layered BiOCuSe. <b>2015</b> , 92,	56
1008	Resonant scattering induced thermopower in one-dimensional disordered systems. <b>2015</b> , 91,	
1007	Thermoelectric Signal Enhancement by Reconciling the Spin Seebeck and Anomalous Nernst Effects in Ferromagnet/Non-magnet Multilayers. <b>2015</b> , 5, 10249	57
1006	Enhanced thermoelectric performance of Zn <sub>4</sub> Sb <sub>3</sub> based nanocomposites through combined effects of density of states resonance and carrier energy filtering. <b>2015</b> , 5, 17803	48
1005	Ultra-low Thermal Conductivity in Si/Ge Hierarchical Superlattice Nanowire. <b>2015</b> , 5, 16697	48
1004	Design of a High Performance Polymer Thermoelectric Generator Using Radial Architecture. <b>2015</b> ,	

1003	Tuning the carrier concentration to improve the thermoelectric performance of CuInTe <sub>2</sub> compound. <b>2015</b> , 5, 107230	12
1002	Role of force-constant difference in phonon scattering by nano-precipitates in PbTe. <b>2015</b> , 118, 085701	12
1001	Strain effect on electronic structure and thermoelectric properties of orthorhombic SnSe: A first principles study. <b>2015</b> , 5, 117147	28
1000	Synthesis, Structure and Thermal Decomposition of the Bismuth Silyltelluroate Bi(TeSi <sub>2</sub> Bu <sub>2</sub> Ph) <sub>3</sub> . <b>2015</b> , 641, 1200-1202	2
999	Mercouri G. Kanatzidis. <b>2015</b> , 54, 8328-8329	
998	A layered antiferromagnetic semiconductor EuMTe <sub>3</sub> (M = Bi, Sb). <b>2015</b> , 9, 735-739	10
997	Synthesis, Crystal, and Electronic Structure of Ba <sub>3</sub> Sb <sub>2</sub> Q <sub>7</sub> (Q = S, Se). <b>2015</b> , 641, 1087-1092	10
996	Ultrahigh Thermoelectric Performance in Mosaic Crystals. <b>2015</b> , 27, 3639-44	163
995	Synthesis of Sb <sub>2</sub> Te <sub>3</sub> Hierarchical Nanostructures by Divalent Germanium Ion-assisted Solution Method. <b>2015</b> , 36, 2841-2845	
994	Synthesis and high temperature thermoelectric properties of Yb <sub>0.25</sub> Co <sub>4</sub> Sb <sub>12</sub> -(Ag <sub>2</sub> Te) <sub>x</sub> (Sb <sub>2</sub> Te <sub>3</sub> ) <sub>1-x</sub> nanocomposites. <b>2015</b> , 3, 53	5
993	Engineering Nanostructural Routes for Enhancing Thermoelectric Performance: Bulk to Nanoscale. <b>2015</b> , 3, 63	12
992	On-Chip Sensing of Thermoelectric Thin Film's Merit. <b>2015</b> , 15, 17232-40	3
991	Low-Concentration Solar-Power Systems Based on Organic Rankine Cycles for Distributed-Scale Applications: Overview and Further Developments. <b>2015</b> , 3,	53
990	Enhanced Thermoelectric Performance in PbTe/BiS Nanocomposites. <b>2015</b> , 2,	
989	Thermoelectric Properties of p-Type Clathrate Ba <sub>8.0</sub> Ga <sub>15.9</sub> Zn <sub>y</sub> Sn <sub>30.1</sub> Single Crystals with Various Carrier Concentrations. <b>2015</b> , 27, 1830-1836	15
988	Superior thermoelectric performance in PbTe/BiS pseudo-binary: extremely low thermal conductivity and modulated carrier concentration. <b>2015</b> , 8, 2056-2068	157
987	From crystal to glass-like thermal conductivity in crystalline minerals. <b>2015</b> , 17, 19751-8	77
986	Synthesis, Crystal and Electronic Structure, and Optical Property of the Quaternary Selenide: La <sub>3</sub> Sb <sub>0.33</sub> SiSe <sub>7</sub> . <b>2015</b> , 641, 917-921	2

985	High thermopower and ultra low thermal conductivity in Cd-based Zintl phase compounds. <b>2015</b> , 17, 16917-26	28
984	Thermoelectric Properties of Heavily Doped n-type $Pb_{1-x}Y_xTe$ Compounds. <b>2015</b> , 44, 3556-3562	6
983	Controlled growth of bismuth antimony telluride $Bi_2Sb_2Te_3$ nanoplatelets and their bulk thermoelectric nanocomposites. <b>2015</b> , 15, 688-696	67
982	Thermoelectric effects in graphene nanostructures. <b>2015</b> , 27, 133204	90
981	Electrodeposition of PbTe thin films: electrochemical behavior and effect of reverse pulse potential. <b>2015</b> , 173, 490-496	7
980	Concepts for medium-high to high temperature thermoelectric heat-to-electricity conversion: a review of selected materials and basic considerations of module design. <b>2015</b> , 2, 025001	77
979	Current state of thermoelectric material science and the search for new effective materials. <b>2015</b> , 10, 827-840	18
978	Improvement of the thermoelectric performance of InSe-based alloys doped with Sn. <b>2015</b> , 5, 102856-102862	18
977	Facile hydrothermal synthesis and formation mechanisms of $Bi_2Te_3$ , $Sb_2Te_3$ and $Bi_2Te_3/Bi_2Te_3$ nanowires. <b>2015</b> , 5, 100309-100315	14
976	Tuning thermoelectric properties of graphene/boron nitride heterostructures. <b>2015</b> , 26, 475401	18
975	Electrical Energy Generation from Hot/Cold Air Using Pyroelectric Ceramics. <b>2015</b> , 167, 90-97	16
974	Effect of Sintering Temperature on Thermoelectric Properties of PbTe/Ag Composites Fabricated by Chemical Plating and Spark Plasma Sintering. <b>2015</b> , 44, 1450-1455	6
973	$Cs_2Hg_3S_4$ : A Low-Dimensional Direct Bandgap Semiconductor. <b>2015</b> , 27, 370-378	15
972	High thermoelectric power in a $NaxCoO_2$ thin film prepared by sputtering with rapid thermal annealing. <b>2015</b> , 15, 412-416	7
971	Thermoelectric performance of $Si_{80}Ge_{20}Sbx$ based multiphase alloys with inhomogeneous dopant distribution. <b>2015</b> , 94, 331-336	7
970	Effect of Cu concentration on thermoelectric properties of nanostructured p-type $MgAg_{0.97}Cu_{0.03}Sb_{0.99}$ . <b>2015</b> , 87, 266-272	45
969	Solar fuels vis-à-vis electricity generation from sunlight: The current state-of-the-art (a review). <b>2015</b> , 44, 904-932	45
968	One-step chemical synthesis of ZnO/graphene oxide molecular hybrids for high-temperature thermoelectric applications. <b>2015</b> , 7, 3224-30	45

967	Current progress and future challenges in thermoelectric power generation: From materials to devices. <b>2015</b> , 87, 357-376	339
966	Thermal conductivity of ordered-disordered material: a case study of superionic Ag <sub>2</sub> Te. <b>2015</b> , 26, 025702	23
965	A review and selection of engine waste heat recovery technologies using analytic hierarchy process and grey relational analysis. <b>2015</b> , 39, 453-471	24
964	Enhancement of thermoelectric properties by Na doping in Te-free p-type AgSbSe <sub>2</sub> . <b>2015</b> , 44, 1046-51	25
963	Recent development and application of thermoelectric generator and cooler. <b>2015</b> , 143, 1-25	431
962	Quaternary rare-earth selenides with closed cavities: Cs[RE <sub>9</sub> Mn <sub>4</sub> Se <sub>18</sub> ] (RE = Ho, Lu). <b>2015</b> , 2, 298-305	18
961	Effects of fluorine doping on thermoelectric properties of Sr <sub>0.61</sub> Ba <sub>0.39</sub> Nb <sub>2</sub> O <sub>6</sub> ceramics. <b>2015</b> , 90, 025801	11
960	Prospects of nanoscience with nanocrystals. <b>2015</b> , 9, 1012-57	849
959	Enhanced thermoelectric properties in bulk nanowire heterostructure-based nanocomposites through minority carrier blocking. <b>2015</b> , 15, 1349-55	106
958	Preparation and Properties of Zn <sub>4</sub> Sb <sub>2.94</sub> In <sub>0.06</sub> /ZnO Composite Thermoelectric Materials. <b>2015</b> , 44, 1902-1908	4
957	n-type thermoelectric material Mg <sub>2</sub> Sn <sub>0.75</sub> Ge <sub>0.25</sub> for high power generation. <b>2015</b> , 112, 3269-74	152
956	An unconventional route to monodisperse and intimately contacted semiconducting organic-inorganic nanocomposites. <b>2015</b> , 54, 4636-40	50
955	Multi-localization transport behaviour in bulk thermoelectric materials. <b>2015</b> , 6, 6197	90
954	High Throughput Screening Tools for Thermoelectric Materials. <b>2015</b> , 44, 1688-1696	5
953	Targeted crystal growth of rare Earth intermetallics with synergistic magnetic and electrical properties: structural complexity to simplicity. <b>2015</b> , 48, 612-8	29
952	Inhomogenous doping induced the imperfect self-assembly of nanocrystals for the synthesis of porous AgPb <sub>10</sub> BiTe <sub>12</sub> nanosheets and their thermoelectric transport properties. <b>2015</b> , 51, 1594-6	10
951	Graphene boosts thermoelectric performance of a Zintl phase compound. <b>2015</b> , 5, 11058-11070	41
950	Thermoelectric properties of c-GeSb <sub>0.75</sub> Te <sub>0.5</sub> to h-GeSbTe <sub>0.5</sub> thin films through annealing treatment effects. <b>2015</b> , 649, 380-386	15

949	Effect of thermal conductivity on performance of thermoelectric systems based on Effective Medium Theory. <b>2015</b> , 91, 190-204	5
948	High-performance thermoelectric Cu <sub>2</sub> Se nanoplates through nanostructure engineering. <b>2015</b> , 16, 367-374	169
947	Tetragonal tungsten bronzes Nb <sub>8</sub> W <sub>9+x</sub> O <sub>47</sub> optimization strategies and transport properties of a new n-type thermoelectric oxide. <b>2015</b> , 2, 519-527	13
946	Low-dimensional transport and large thermoelectric power factors in bulk semiconductors by band engineering of highly directional electronic states. <b>2015</b> , 114, 136601	138
945	Phonon wave interference and thermal bandgap materials. <b>2015</b> , 14, 667-74	185
944	Thermal conductivity in PbTe from first principles. <b>2015</b> , 91,	77
943	Enhanced power factor and reduced thermal conductivity of a half-Heusler derivative Ti <sub>9</sub> Ni <sub>7</sub> Sn <sub>8</sub> : A bulk nanocomposite thermoelectric material. <b>2015</b> , 106, 103901	22
942	CuAlTe <sub>2</sub> : A promising bulk thermoelectric material. <b>2015</b> , 648, 958-965	9
941	Correlation between microstructure and drastically reduced lattice thermal conductivity in bismuth telluride/bismuth nanocomposites for high thermoelectric figure of merit. <b>2015</b> , 40, 453-462	11
940	Chemical Potential Tuning and Enhancement of Thermoelectric Properties in Indium Selenides. <b>2015</b> , 8, 1283-1324	20
939	Electronic band structures of binary skutterudites. <b>2015</b> , 647, 364-369	12
938	Enhanced thermoelectric performance through carrier scattering at heterojunction potentials in BiSbTe based composites with Cu <sub>3</sub> SbSe <sub>4</sub> nano-inclusions. <b>2015</b> , 3, 7045-7052	39
937	Sb deficiencies control hole transport and boost the thermoelectric performance of p-type AgSbSe <sub>2</sub> . <b>2015</b> , 3, 10415-10421	18
936	Relationship between thermoelectric figure of merit and energy conversion efficiency. <b>2015</b> , 112, 8205-10	300
935	The effect of nickel doping on electron and phonon transport in the n-type nanostructured thermoelectric material CoSbS. <b>2015</b> , 3, 10442-10450	40
934	Effects of ball milling on microstructures and thermoelectric properties of higher manganese silicides. <b>2015</b> , 641, 30-36	41
933	State of the art Ag <sub>50</sub> -Sb <sub>50</sub> -Se <sub>50</sub> -Te alloys: Their high zT values, microstructures and related phase equilibria. <b>2015</b> , 93, 38-45	20
932	Thermoelectric materials: Energy conversion between heat and electricity. <b>2015</b> , 1, 92-105	583

931	Prediction of giant thermoelectric power factor in type-VIII clathrate Si <sub>46</sub> . <b>2014</b> , 4, 7028	24
930	Enhanced thermoelectric performance of PbSe co-doped with Ag and Sb. <b>2015</b> , 639, 106-110	16
929	Twisting phonons in complex crystals with quasi-one-dimensional substructures. <b>2015</b> , 6, 6723	52
928	Skutterudites as thermoelectric materials: revisited. <b>2015</b> , 5, 41653-41667	211
927	Studies on Thermoelectric Properties of n-type Polycrystalline SnSe <sub>1-x</sub> S <sub>x</sub> by Iodine Doping. <b>2015</b> , 5, 1500360	242
926	Thermoelectric Properties of Sn-Doped Bi <sub>0.4</sub> Sb <sub>1.6</sub> Te <sub>3</sub> Thin Films. <b>2015</b> , 44, 1573-1578	2
925	Variable-Temperature In Situ X-ray Diffraction Study of the Thermodynamic Evolution of AgSbTe <sub>2</sub> Thermoelectric Compound. <b>2015</b> , 44, 2118-2123	6
924	Dielectric properties and ac conductivity of TlSbTe <sub>2</sub> thin films. <b>2015</b> , 38, 1-7	14
923	Enhancement of the thermoelectric efficiency of PbTe by selective site doping: Effect of group VA impurities. <b>2015</b> , 97, 159-164	5
922	Mercouri G. Kanatzidis. <b>2015</b> , 127, 8446-8447	
921	Thermoelectric fabrics: toward power generating clothing. <b>2015</b> , 5, 6411	193
920	An Unconventional Route to Monodisperse and Intimately Contacted Semiconducting Organic/Inorganic Nanocomposites. <b>2015</b> , 127, 4719-4723	12
919	Boundary Engineering for the Thermoelectric Performance of Bulk Alloys Based on Bismuth Telluride. <b>2015</b> , 8, 2312-26	52
918	Dual Vacancies: An Effective Strategy Realizing Synergistic Optimization of Thermoelectric Property in BiCuSeO. <b>2015</b> , 137, 6587-93	145
917	Robust scalable synthesis of surfactant-free thermoelectric metal chalcogenide nanostructures. <b>2015</b> , 15, 193-204	40
916	Tuning of the Thermoelectric Figure of Merit of CH <sub>3</sub> NH <sub>3</sub> MI <sub>3</sub> (M=Pb,Sn) Photovoltaic Perovskites. <b>2015</b> , 119, 11506-11510	121
915	Approaching the alloy limit of thermal conductivity in single-crystalline Si-based thermoelectric nanocomposites: A molecular dynamics investigation. <b>2015</b> , 5, 9579	8
914	Prediction of high thermoelectric potential in AMN <sub>2</sub> layered nitrides: electronic structure, phonons, and anharmonic effects. <b>2015</b> , 3, 9945-9954	24



913	Codoping in SnTe: Enhancement of Thermoelectric Performance through Synergy of Resonance Levels and Band Convergence. <b>2015</b> , 137, 5100-12	310
912	Advanced electron microscopy for thermoelectric materials. <b>2015</b> , 13, 626-650	67
911	Experimental Thermodynamic Study on the Ag-Sb System at Elevated Temperatures. <b>2015</b> , 305-312	
910	Optimizing thermoelectric property of antimony telluride nanowires by tailoring composition and crystallinity. <b>2015</b> , 2, 085006	4
909	High thermoelectric power factor in CuNi alloy originate from potential barrier scattering of twin boundaries. <b>2015</b> , 17, 279-289	56
908	In-situ fabrication and enhanced thermoelectric properties of carbon nanotubes filled poly(3,4-ethylenedioxythiophene) composites. <b>2015</b> , 209, 480-483	35
907	Thermoelectric power factor: Enhancement mechanisms and strategies for higher performance thermoelectric materials. <b>2015</b> , 97, 1-22	214
906	Thermoelectric properties of Te-doped ternary CuAgSe compounds. <b>2015</b> , 3, 22454-22461	28
905	Complex modeling: a strategy and software program for combining multiple information sources to solve ill posed structure and nanostructure inverse problems. <b>2015</b> , 71, 562-8	152
904	Increasing the thermopower of crown-ether-bridged anthraquinones. <b>2015</b> , 7, 17338-42	14
903	Tin Telluride-Based Nanocomposites of the Type AgSnmBiTe2+m (BTST-m) as Effective Lead-Free Thermoelectric Materials. <b>2015</b> , 27, 7296-7305	13
902	Concentrating Solar Power. <b>2015</b> , 115, 12797-838	298
901	Enhanced Thermoelectric Performance of Nanostructured Bi2Te3 through Significant Phonon Scattering. <b>2015</b> , 7, 23694-9	155
900	First-principles simulation of electron mean-free-path spectra and thermoelectric properties in silicon. <b>2015</b> , 109, 57006	114
899	Enhanced thermoelectric properties in Pb-doped BiCuSeO oxyselenides prepared by ultrafast synthesis. <b>2015</b> , 5, 69878-69885	54
898	Synthesis, crystal structure, and thermoelectric properties of two new barium antimony selenides: Ba2Sb2Se5 and Ba6Sb7Se16.11. <b>2015</b> , 3, 9811-9818	14
897	Thermal conductivity and thermoelectric performance of SrxBa1-xNb2O6 ceramics at high temperatures. <b>2015</b> , 109, 80-83	14
896	Atomic Disorders Induced by Silver and Magnesium Ion Migrations Favor High Thermoelectric Performance in pMgAgSb-Based Materials. <b>2015</b> , 25, 6478-6488	61

- 895 Panoscopically optimized thermoelectric performance of a half-Heusler/full-Heusler based in situ bulk composite  $Zr(0.7)Hf(0.3)Ni(1+x)Sn$ : an energy and time efficient way. **2015**, 17, 30090-101 29
- 894 Strong correlation between the crystal structure and the thermoelectric properties of pavonite homologue  $Cu_{x+y}Bi_5\text{Ch}_8$  (Ch = S or Se) compounds. **2015**, 3, 11271-11285 9
- 893 Contrasting the Role of Mg and Ba Doping on the Microstructure and Thermoelectric Properties of p-Type  $AgSbSe_2$ . **2015**, 7, 23047-55 20
- 892 Quantum interference and structure-dependent orbital-filling effects on the thermoelectric properties of quantum dot molecules. **2015**, 17, 19386-93 2
- 891 High performance n-type bismuth telluride based alloys for mid-temperature power generation. **2015**, 3, 10597-10603 48
- 890 Fine-grained lead-free p-type  $AgSn_4SbTe_6$  thermoelectric materials synthesized by mechanical alloying and spark plasma sintering. **2015**, 26, 9747-9752 2
- 889 Enhanced thermoelectric power factor of Re-substituted higher manganese silicides with small islands of MnSi secondary phase. **2015**, 3, 10500-10508 36
- 888 Strategies for engineering phonon transport in thermoelectrics. **2015**, 3, 10336-10348 135
- 887 Mechanical properties and microstructure of spark plasma sintered nanostructured p-type SiGe thermoelectric alloys. **2015**, 87, 414-420 22
- 886 Thermoelectric, thermodynamic, and structural properties in  $Cu_{1.94}A_{0.02}Se$  (A=Al, Ga, and In) polycrystalline compounds. **2015**, 100, 32-38 11
- 885 High thermoelectric performance in copper telluride. **2015**, 7, e210-e210 131
- 884 Valence Band Modification and High Thermoelectric Performance in SnTe Heavily Alloyed with MnTe. **2015**, 137, 11507-16 289
- 883 Defects responsible for abnormal n-type conductivity in Ag-excess doped PbTe thermoelectrics. **2015**, 118, 015705 10
- 882 Enhancement of the thermoelectric properties of n-type PbTe by Na and Cl co-doping. **2015**, 3, 9559-9564 73
- 881 The effect of light rare earth element substitution in  $Yb_{14}MnSb_{11}$  on thermoelectric properties. **2015**, 3, 10566-10573 38
- 880 Significantly enhanced thermoelectric figure of merit of p-type  $Mg_3Sb_2$ -based Zintl phase compounds via nanostructuring and employing high energy mechanical milling coupled with spark plasma sintering. **2015**, 3, 10777-10786 51
- 879 On the True Indium Content of In-Filled Skutterudites. **2015**, 54, 7818-27 32
- 878 Synthesis, crystal and electronic structure, and optical property of the pentanary chalcogenide  $Ba_3KSb_4S_9Cl$ . **2015**, 232, 37-41 12

877	Enhanced average thermoelectric figure of merit of n-type $\text{PbTe}_{1-x}\text{MgTe}$ . <b>2015</b> , 3, 10401-10408	57
876	Significant band engineering effect of YbTe for high performance thermoelectric PbTe. <b>2015</b> , 3, 12410-12417	57
875	Co-assembled T4-Cu <sub>4</sub> In <sub>16</sub> S <sub>35</sub> and Cubic Cu <sub>12</sub> S <sub>8</sub> Clusters: A Crystal Precursor for Near-Infrared Absorption Material. <b>2015</b> , 15, 5749-5753	13
874	High Thermoelectric Performance SnTe <sub>1-x</sub> Te <sub>3</sub> Solid Solutions Enabled by Resonant Levels and Strong Vacancy Phonon Scattering. <b>2015</b> , 27, 7801-7811	155
873	Promising thermoelectric performance in n-type AgBiSe <sub>2</sub> : effect of aliovalent anion doping. <b>2015</b> , 3, 648-655	93
872	Exploring the optoelectronic structure and thermoelectricity of recent photoconductive chalcogenides compounds, CsCdInQ <sub>3</sub> (Q = Se, Te). <b>2015</b> , 5, 9455-9461	23
871	Microstructure and thermoelectric properties of a ZrNi <sub>1.1</sub> Sn half-Heusler alloy. <b>2015</b> , 85, 290-300	36
870	High Performance Oxides-Based Thermoelectric Materials. <b>2015</b> , 67, 211-221	55
869	Ultrahigh resolution characterizing nanoscale Seebeck coefficient via the heated, conductive AFM probe. <b>2015</b> , 118, 57-61	4
868	Extraordinary role of Hg in enhancing the thermoelectric performance of p-type SnTe. <b>2015</b> , 8, 267-277	279
867	Theoretical and experimental estimation of limiting input heat flux for thermoelectric power generators with passive cooling. <b>2015</b> , 111, 201-217	37
866	Crystal cluster growth and physical properties of the EuSbSe <sub>3</sub> and EuBiSe <sub>3</sub> phases. <b>2015</b> , 54, 815-20	5
865	Main Group and Transition Metal Silicides for the Thermoelectric Energy Conversion. <b>2016</b> ,	
864	Defect Engineered 2D Materials for Energy Applications. <b>2016</b> ,	1
863	Exact Optimum Design of Segmented Thermoelectric Generators. <b>2016</b> , 2016, 1-11	5
862	Role of Nanoscale Precipitates for Enhancement of Thermoelectric Properties of Heavily P-Doped Si-Ge Alloys. <b>2016</b> , 57, 1070-1075	2
861	Silver-Antimony-Telluride: From First-Principles Calculations to Thermoelectric Applications. <b>2016</b> ,	
860	Boosting thermoelectric performance of p-type SiGe alloys through in-situ metallic YSi <sub>2</sub> nano-inclusions. <b>2016</b> , 27, 282-297	51

859	Recent advances in thermoelectric materials. <b>2016</b> , 83, 330-382	394
858	Significant Roles of Intrinsic Point Defects in Mg <sub>2</sub> X (X = Si, Ge, Sn) Thermoelectric Materials. <b>2016</b> , 2, 1500284	58
857	Thermoelectric Enhancement of Different Kinds of Metal Chalcogenides. <b>2016</b> , 6, 1600498	95
856	High temperature thermoelectric properties of skutterudite-Bi <sub>2</sub> Te <sub>3</sub> nanocomposites. <b>2016</b> , 76, 33-40	6
855	Thermoelectric performance enhancement of Mg <sub>2</sub> Sn based solid solutions by band convergence and phonon scattering via Pb and Si/Ge substitution for Sn. <b>2016</b> , 18, 20726-37	26
854	Synthesis of Crystalline Chalcogenides in Ionic Liquids. <b>2016</b> , 55, 876-93	101
853	Spinodally Decomposed PbSe-PbTe Nanoparticles for High-Performance Thermoelectrics: Enhanced Phonon Scattering and Unusual Transport Behavior. <b>2016</b> , 10, 7197-207	33
852	Enhanced Thermoelectric Properties of Cu <sub>2</sub> SnSe <sub>3</sub> by (Ag,In)-Co-Doping. <b>2016</b> , 26, 6025-6032	59
851	Pressure induced thermoelectric enhancement in SnSe crystals. <b>2016</b> , 4, 12073-12079	65
850	On the tuning of electrical and thermal transport in thermoelectrics: an integrated theoryExperiment perspective. <b>2016</b> , 2,	290
849	Multiple Converged Conduction Bands in KBiSe: A Promising Thermoelectric Material with Extremely Low Thermal Conductivity. <b>2016</b> , 138, 16364-16371	95
848	Designing high-performance layered thermoelectric materials through orbital engineering. <b>2016</b> , 7, 10892	165
847	Growth and Transport Properties of Tetradymite Thin Films. <b>2016</b> , 109-138	
846	Clathrate-Based Thermoelectrics. <b>2016</b> , 233-250	1
845	Boron-Based Materials. <b>2016</b> , 455-472	1
844	Chapter 4 All-Scale Hierarchical PbTe. <b>2016</b> , 125-158	4
843	Discovery and Design of New Thermoelectric Materials. <b>2016</b> , 15-52	
842	Inherent instability by antibonding coupling in AgSbTe <sub>2</sub> . <b>2016</b> , 55, 041801	9

841	Effect of preparation procedure and nanostructuring on the thermoelectric properties of the lead telluride-based material system AgPbmBiTe <sub>2+m</sub> (BLST-m). <b>2016</b> , 119, 214310	3
840	Thermal Conductivity and Thermoelectric Power of Semiconductors. <b>2016</b> ,	5
839	Electronic structure of some complex thermoelectrics [Role of dimensional confinement and nanostructuring]. <b>2016</b> ,	
838	In situ neutron scattering study of nanoscale phase evolution in PbTe-PbS thermoelectric material. <b>2016</b> , 109, 081903	8
837	Review of Recent Developments in Thermoelectric Materials. <b>2016</b> ,	0
836	X-ray diffraction and density functional theory studies of R(Fe <sub>0.5</sub> Co <sub>0.5</sub> )O <sub>3</sub> (R = Pr, Nd, Sm, Eu, Gd). <b>2016</b> , 31, 259-266	3
835	Thermoelectric properties of n-type Nb-doped Ag <sub>8</sub> SnSe <sub>6</sub> . <b>2016</b> , 119, 135101	15
834	Thermoelectric power factor of nanocomposite materials from two-dimensional quantum transport simulations. <b>2017</b> , 96,	14
833	X-ray diffraction study of distorted perovskites R(Co <sub>3/4</sub> Ti <sub>1/4</sub> )O <sub>3</sub> (R = La, Pr, Nd, Sm, Eu, Gd, Dy, Ho). <b>2017</b> , 32, 237-243	
832	High efficiency and non-Richardson thermionics in three dimensional Dirac materials. <b>2017</b> , 111, 183902	13
831	Enhancing the thermoelectric performance of CexBi <sub>2</sub> S <sub>3</sub> by optimizing the carrier concentration combined with band engineering. <b>2017</b> , 5, 12492-12499	21
830	Single parabolic band transport in p-type EuZn <sub>2</sub> Sb <sub>2</sub> thermoelectrics. <b>2017</b> , 5, 24185-24192	29
829	Hf/Sb co-doping induced a high thermoelectric performance of ZrNiSn: First-principles calculation. <b>2017</b> , 7, 14590	13
828	Enhancement of thermoelectrical performance in Au-ion implanted V <sub>2</sub> O <sub>5</sub> thin films. <b>2017</b> , 7, 50648-50656	8
827	Enhancement of thermoelectric properties in liquid-phase sintered Te-excess bismuth antimony tellurides prepared by hot-press sintering. <b>2017</b> , 135, 297-303	26
826	Optimizing the thermoelectric performance of In <sub>1-x</sub> Sn <sub>x</sub> codoped SnTe by introducing Sn vacancies. <b>2017</b> , 5, 7504-7509	29
825	Mechanical properties of thermoelectric lanthanum telluride from quantum mechanics. <b>2017</b> , 50, 274002	9
824	Decouple electronic and phononic transport in nanotwinned structures: a new strategy for enhancing the figure-of-merit of thermoelectrics. <b>2017</b> , 9, 9987-9996	23

- 823 Enhancing p-Type Thermoelectric Performances of Polycrystalline SnSe via Tuning Phase Transition Temperature. **2017**, 139, 10887-10896 79
- 822 Enhanced thermoelectric properties of AgSbTe obtained by controlling heterophases with Ce doping. **2017**, 7, 4496 18
- 821 Copper Hyper-Stoichiometry: The Key for the Optimization of Thermoelectric Properties in Stannoidite  $Cu_{8+x}Fe_3Sn_2S_{12}$ . **2017**, 121, 16454-16461 36
- 820 Investigations on the Electrochemical Reduction Behaviors of Cu-Se Compound in Sulfuric Acid Solutions. **2017**, 46, 3187-3199
- 819 Enhance the figure of merit for flexible thermoelectric materials by reducing the screening effect. **2017**, 7, 201-207 2
- 818 Synergistically optimizing thermoelectric transport properties of n-type PbTe via Se and Sn co-alloying. **2017**, 724, 208-221 41
- 817 Mercuri G. Kanatzidis: Excellence and Innovations in Inorganic and Solid-State Chemistry. **2017**, 56, 7582-7597 3
- 816 Thermoelectric stoves for poor deprived regions | A review. **2017**, 80, 597-602 15
- 815 Soluble Lead and Bismuth Chalcogenidometallates: Versatile Solders for Thermoelectric Materials. **2017**, 29, 6396-6404 12
- 814 Metallic Zn decorated  $\mu\text{-Zn}_4\text{Sb}_3$  with enhanced thermoelectric performance. **2017**, 203, 5-8 5
- 813 High-Performance Low-Cost n-Type Se-Doped  $\text{Mg}_3\text{Sb}_2$ -Based Zintl Compounds for Thermoelectric Application. **2017**, 29, 5371-5383 108
- 812 Estimating Energy Conversion Efficiency of Thermoelectric Materials: Constant Property Versus Average Property Models. **2017**, 46, 6-13 13
- 811 Thermoelectric characteristics of nanocomposites made of HgSe and Ag nanoparticles for flexible thermoelectric devices. **2017**, 10, 683-689 4
- 810 The bridge between the materials and devices of thermoelectric power generators. **2017**, 10, 69-85 115
- 809 Quaternary non-centrosymmetric sulfide  $\text{Y}_4\text{GaSb}_9$ : Syntheses, structures, optical properties and theoretical studies. **2017**, 245, 110-114 8
- 808 Hierarchical Chemical Bonds Contributing to the Intrinsically Low Thermal Conductivity in  $\text{EMgAgSb}$  Thermoelectric Materials. **2017**, 27, 1604145 154
- 807 In Situ Neutron Scattering Study of Nanostructured PbTe-PbS Bulk Thermoelectric Material. **2017**, 46, 2604-2610 4
- 806 Effect of crosslink density on thermal conductivity of epoxy/carbon nanotube nanocomposites. **2017**, 134, 14

805	Ag-Ni-Sb phase equilibria and Ag-Sb/Ni interfacial reactions. <b>2017</b> , 694, 93-102	5
804	Fabrication Routes for Nanostructured TE Material Architectures. <b>2017</b> , 336-353	
803	Thermoelectric Materials, Measurements, and Opportunities for Energy Harvesting. <b>2017</b> , 398-409	1
802	Magnetolectric interaction and transport behaviours in magnetic nanocomposite thermoelectric materials. <b>2017</b> , 12, 55-60	155
801	Effects of chemical potential on the thermoelectric performance of alkaline-earth based skutterudites (AFe <sub>4</sub> Sb <sub>12</sub> , A Ca, Sr and Ba). <b>2017</b> , 694, 253-260	9
800	Integrating Band Structure Engineering with All-Scale Hierarchical Structuring for High Thermoelectric Performance in PbTe System. <b>2017</b> , 7, 1601450	125
799	Enhanced thermoelectric properties in p-type Bi <sub>0.4</sub> Sb <sub>1.6</sub> Te <sub>3</sub> alloy by combining incorporation and doping using multi-scale CuAlO <sub>2</sub> particles. <b>2017</b> , 214, 1600451	5
798	Fabrication of Cu-Doped Bi <sub>2</sub> Te <sub>3</sub> Nanoplates and Their Thermoelectric Properties. <b>2017</b> , 46, 2697-2704	8
797	Thermoelectric Generation Of Current [Theoretical And Experimental Analysis]. <b>2017</b> , 38, 3-13	1
796	Mesenchymal Stem Cell Transition to Tumor-Associated Stromal Cells Contributes to Cancer Progression. <b>2017</b> , 253-273	2
795	Thermoelectric Properties of Highly-Crystallized Ge-Te-Se Glasses Doped with Cu/Bi. <b>2017</b> , 10,	22
794	Thermoelectric Transport in Nanocomposites. <b>2017</b> , 10,	24
793	Improvement of Power Factor of CoSb <sub>3</sub> Thermoelectric Thin Films via Microstructure Optimization. <b>2017</b> , 7, 205	5
792	Metal Pnictides: Structures and Thermoelectric Properties. <b>2017</b> , 455-476	1
791	Designing Thermoelectric Materials Using 2D Layers. <b>2017</b> , 93-122	1
790	High performance thermoelectrics for power generation using earth-abundant and low toxicity elements. <b>2017</b> , 10, 62-74	
789	Micro-Coolers. <b>2017</b> ,	2
788	High performance of n-type (PbS) <sub>1-x-y</sub> (PbSe) <sub>x</sub> (PbTe) <sub>y</sub> thermoelectric materials. <b>2018</b> , 744, 769-777	18

787	Nanostructural thermoelectric materials and their performance. <b>2018</b> , 12, 97-108	15
786	Effective thermoelectric conversion properties of thermoelectric composites containing a crack/hole. <b>2018</b> , 191, 180-189	13
785	Screw-Dislocated Nanostructures. <b>2018</b> , 27-40	1
784	Robustness in spin polarization and thermoelectricity in newly tailored Mn <sub>2</sub> -based Heusler alloys. <b>2018</b> , 92, 855-864	2
783	Low Thermal Conductivity of Bulk Amorphous Si <sub>1-x</sub> Ge <sub>x</sub> Containing Nano-Sized Crystalline Particles Synthesized by Ball-Milling Process. <b>2018</b> , 47, 3260-3266	5
782	High-Performance PbTe Thermoelectric Films by Scalable and Low-Cost Printing. <b>2018</b> , 3, 818-822	38
781	Is SrZn <sub>2</sub> Sb <sub>2</sub> a Realistic Candidate for High-Temperature Thermoelectric Applications?. <b>2018</b> , 122, 5317-5324	6
780	Nano-microstructural control of phonon engineering for thermoelectric energy harvesting. <b>2018</b> , 43, 181-186	80
779	Study on anisotropy of n-type Mg <sub>3</sub> Sb <sub>2</sub> -based thermoelectric materials. <b>2018</b> , 112, 092103	22
778	Enhancement of thermoelectric performance via weak disordering of topological crystalline insulators and band convergence by Se alloying in Pb <sub>0.5</sub> Sn <sub>0.5</sub> Te <sub>1-x</sub> Sex. <b>2018</b> , 6, 5870-5879	9
777	Effects of Pressure on the Microstructure and Simultaneous Optimization of the Electrical and Thermal Transport Properties of YbBaGaGe. <b>2018</b> , 57, 3323-3328	16
776	Synthesis and transport properties of p -type lead-free AgSn <sub>m</sub> SbSe <sub>2</sub> Te <sub>m</sub> thermoelectric systems. <b>2018</b> , 211, 321-328	2
775	An overview of thermoelectric films: Fabrication techniques, classification, and regulation methods. <b>2018</b> , 27, 047210	8
774	Electronic structure and thermoelectric properties of PbS <sub>1-x</sub> Tex (x=0, 0.25, 0.50, 0.75, 1.0) alloys: Ab initio study. <b>2018</b> , 124, 248-256	3
773	Synergetic optimization of electronic and thermal transport for high-performance thermoelectric GeSe <sub>1-x</sub> AgSbTe <sub>2</sub> alloy. <b>2018</b> , 6, 8215-8220	26
772	Thermally Sensitive N-Type Thermoelectric Aniline Oligomer-Block-Polyethylene Glycol-Block-Aniline Oligomer ABA Triblock Copolymers. <b>2018</b> , 219, 1700635	4
771	An enhanced power factor via multilayer growth of Ag-doped skutterudite CoSb <sub>3</sub> thin films. <b>2018</b> , 5, 1409-1414	8
770	MnTe <sub>2</sub> as a novel promising thermoelectric material. <b>2018</b> , 4, 215-220	9



769	A comparative study of thermoelectric properties of CuGaTe <sub>2</sub> by using PBE and MBJ potentials. <b>2018,</b>	2
768	Design of segmented high-performance thermoelectric generators with cost in consideration. <b>2018</b> , 221, 112-121	22
767	Crystal Structure Induced Ultralow Lattice Thermal Conductivity in Thermoelectric Ag <sub>9</sub> AlSe <sub>6</sub> . <b>2018,</b> 8, 1800030	64
766	Microscopic study of thermoelectric In-doped SnTe. <b>2018,</b> 29, 26LT01	8
765	Eco-Friendly Higher Manganese Silicide Thermoelectric Materials: Progress and Future Challenges. <b>2018,</b> 8, 1800056	90
764	Sodium-Doped Tin Sulfide Single Crystal: A Nontoxic Earth-Abundant Material with High Thermoelectric Performance. <b>2018,</b> 8, 1800087	54
763	Solution-Grown Sodium Bismuth Dichalcogenides: Toward Earth-Abundant, Biocompatible Semiconductors. <b>2018,</b> 140, 3736-3742	23
762	Solution-processable flexible thermoelectric composite films based on conductive polymer/SnSe <sub>0.8</sub> S <sub>0.2</sub> nanosheets/carbon nanotubes for wearable electronic applications. <b>2018,</b> 6, 5627-5634	34
761	Comparing the role of annealing on the transport properties of polymorphous AgBiSe and monophase AgSbSe. <b>2018,</b> 8, 7055-7061	12
760	Extremely low thermal conductivity and enhanced thermoelectric performance of polycrystalline SnSe by Cu doping. <b>2018,</b> 147, 74-78	44
759	Thermoelectric properties and performance of flexible reduced graphene oxide films up to 3,000 K. <b>2018,</b> 3, 148-156	69
758	High Thermoelectric Performance in SnTeAgSbTe <sub>2</sub> Alloys from Lattice Softening, Giant Phonon Vacancy Scattering, and Valence Band Convergence. <b>2018,</b> 3, 705-712	90
757	Monolayer PdSe: A promising two-dimensional thermoelectric material. <b>2018,</b> 8, 2764	94
756	Thermoelectric Nanocomposite for Energy Harvesting. <b>2018,</b> 173-202	1
755	Thermoelectric Nanogenerator Based on the Electrokinetic Effect in Porous Carbon Film. <b>2018,</b> 8, 1702481	76
754	Thermoelectric transport properties of Pb <sub>5</sub> Sn <sub>1-x</sub> Te <sub>5+x</sub> system. <b>2018,</b> 37, 343-350	40
753	Antimony-induced heterogeneous microstructure of Mg <sub>2</sub> Si <sub>0.6</sub> Sn <sub>0.4</sub> thermoelectric materials and their thermoelectric properties. <b>2018,</b> 739, 129-138	9
752	Thermal microscope measurement of thermal effusivity distribution in compositionally graded PbTe <sub>1-x</sub> Bi <sub>2x</sub> Te <sub>3-2x</sub> Ag <sub>2</sub> Te alloy system. <b>2018,</b> 659, 39-43	3

751	Enhanced thermoelectric performance of CoSb <sub>0.85</sub> Se <sub>0.15</sub> by point defect. <b>2018</b> , 37, 326-332	16
750	Application of High-Throughput Seebeck Microprobe Measurements on Thermoelectric Half-Heusler Thin Film Combinatorial Material Libraries. <b>2018</b> , 20, 1-18	3
749	High-Performance Thermoelectric Bulk Colusite by Process Controlled Structural Disorder. <b>2018</b> , 140, 2186-2195	70
748	Vanadium-Doping-Induced Resonant Energy Levels for the Enhancement of Thermoelectric Performance in HF-Free ZrNiSn Half-Heusler Alloys. <b>2018</b> , 1, 757-764	40
747	Crystal orientation, crystallinity, and thermoelectric properties of Bi <sub>0.9</sub> Sr <sub>0.1</sub> CuSeO epitaxial films grown by pulsed laser deposition. <b>2018</b> , 57, 025502	3
746	Enhancing Thermoelectric Performances of Bismuth Antimony Telluride via Synergistic Combination of Multiscale Structuring and Band Alignment by FeTe Incorporation. <b>2018</b> , 10, 3689-3698	37
745	Ultrahigh Power Factor in Thermoelectric System NbMFeSb (M = Hf, Zr, and Ti). <b>2018</b> , 5, 1800278	31
744	Single parabolic band behavior of thermoelectric p-type Cu <sub>4</sub> Mn <sub>2</sub> Te <sub>4</sub> . <b>2018</b> , 753, 93-99	3
743	Large enhancement of thermoelectric performance in CuInTe <sub>2</sub> upon compression. <b>2018</b> , 5, 1-6	24
742	Kinetically controlled assembly of cadmium chalcogenide nanorods and nanorod heterostructures. <b>2018</b> , 2, 1296-1305	8
741	Cornucopia of Structures in the Pseudobinary System (SnSe) BiSe: A Crystal-Chemical Copycat. <b>2018</b> , 57, 4427-4440	6
740	Low-Symmetry Rhombohedral GeTe Thermoelectrics. <b>2018</b> , 2, 976-987	275
739	Solar Thermoelectric Generators. <b>2018</b> , 45-61	2
738	Magnetic-field enhanced high-thermoelectric performance in topological Dirac semimetal Cd <sub>3</sub> As <sub>2</sub> crystal. <b>2018</b> , 63, 411-418	40
737	Fabrication of Polyaniline-Coated SnSeS Nanosheet/Polyvinylidene Difluoride Composites by a Solution-Based Process and Optimization for Flexible Thermoelectrics. <b>2018</b> , 10, 11920-11925	15
736	Thermoelectrics based on metal oxide thin films. <b>2018</b> , 441-464	5
735	Field-effect-dependent thermoelectric power in highly resistive Sb <sub>2</sub> Se <sub>3</sub> single nanowire. <b>2018</b> , 124, 1	3
734	Anharmonicity and low thermal conductivity in thermoelectrics. <b>2018</b> , 4, 50-57	141

733	High-Power-Density Skutterudite-Based Thermoelectric Modules with Ultralow Contact Resistivity Using FeNi Metallization Layers. <b>2018</b> , 1, 1603-1611	33
732	Enhancement of Thermoelectric Performances in a Topological Crystal Insulator PbSnSe via Weak Perturbation of the Topological State and Chemical Potential Tuning by Chlorine Doping. <b>2018</b> , 10, 10927-10934 <sup>11</sup>	
731	A comprehensive review of solar thermoelectric cooling systems. <b>2018</b> , 42, 395-415	45
730	Selective generation of Ag interstitial defects in Te-rich Bi <sub>2</sub> (Te,Se) <sub>3</sub> using Ag nanoparticles causing significant improvement in thermoelectric performance. <b>2018</b> , 144, 36-39	1
729	High thermoelectric performance of $\beta$ -MgAgSb for power generation. <b>2018</b> , 11, 23-44	94
728	Tuning of Catalytic Activity by Thermoelectric Materials for Carbon Dioxide Hydrogenation. <b>2018</b> , 8, 1701430	8
727	Enhanced thermoelectric properties of Cu <sub>1.8</sub> S by Ti-doping induced secondary phase. <b>2018</b> , 731, 577-583	18
726	Significantly enhanced thermoelectric properties of p-type Mg <sub>3</sub> Sb <sub>2</sub> via co-doping of Na and Zn. <b>2018</b> , 143, 265-271	49
725	Energy materials based on metal Schiff base complexes. <b>2018</b> , 355, 180-198	180
724	Enhancement in specific heat by nanocrystallization: Softening of phonon frequencies mechanism. <b>2018</b> , 32, 1850027	2
723	Variation of the ZT factor of SnSe with doping: A first-principles study. <b>2018</b> , 732, 536-546	9
722	Comparison of Predicted Thermoelectric Energy Conversion Efficiency by Cumulative Properties and Reduced Variables Approaches. <b>2018</b> , 47, 3085-3090	2
721	Excellent thermoelectricity performance of p-type SnSe along b axis. <b>2018</b> , 530, 264-269	17
720	Simple and effective fabrication of Sb <sub>2</sub> Te <sub>3</sub> films embedded with Ag <sub>2</sub> Te nanoprecipitates for enhanced thermoelectric performance. <b>2018</b> , 6, 349-356	19
719	Achieving High Thermoelectric Figure of Merit in Polycrystalline SnSe via Introducing Sn Vacancies. <b>2018</b> , 140, 499-505	111
718	High Thermoelectric Power Factor of High-Mobility 2D Electron Gas. <b>2018</b> , 5, 1700696	35
717	High Performance Thermoelectric Materials: Progress and Their Applications. <b>2018</b> , 8, 1701797	371
716	Spontaneously promoted carrier mobility and strengthened phonon scattering in p-type YbZn <sub>2</sub> Sb <sub>2</sub> via a nanocompositing approach. <b>2018</b> , 43, 159-167	15

715	First-principles study of high spin-polarization and thermoelectric efficiency of ferromagnetic CoFeCrAs quaternary Heusler alloy. <b>2018</b> , 449, 493-499	19
714	Investigation of microstructure and thermoelectric properties of p-type BiSbTe/ZnO composites. <b>2018</b> , 15, 125-131	11
713	Performance assessment of multi-stage thermoelectric generators on hypersonic vehicles at a large temperature difference. <b>2018</b> , 130, 1598-1609	24
712	Realizing high thermoelectric performance in Te nanocomposite through Sb <sub>2</sub> Te <sub>3</sub> incorporation. <b>2018</b> , 20, 7729-7738	15
711	Transparent Amorphous Oxide Semiconductor as Excellent Thermoelectric Materials. <b>2018</b> , 8, 462	5
710	Combinatory Finite Element and Artificial Neural Network Model for Predicting Performance of Thermoelectric Generator. <b>2018</b> , 11, 2216	14
709	Multi-scale study of the deformation mechanisms of thermoelectric p-type half-Heusler Hf <sub>0.44</sub> Zr <sub>0.44</sub> Ti <sub>0.12</sub> CoSb <sub>0.8</sub> Sn <sub>0.2</sub> . <b>2018</b> , 124, 175104	
708	Probing of Thermal Transport in 50 nm Thick PbTe Nanocrystal Films by Time-Domain Thermoreflectance. <b>2018</b> , 122, 27127-27134	10
707	Laser-based setup for simultaneous measurement of the Seebeck coefficient and electrical conductivity for bulk and thin film thermoelectrics. <b>2018</b> , 89, 113901	1
706	Nanowires for energy: A review. <b>2018</b> , 5, 041305	53
705	Crystal Structure and Optical Property of Quaternary Sulfide Ba <sub>2.77</sub> SnSb <sub>2.16</sub> S <sub>8</sub> . <b>2018</b> , 59, 955-960	
704	Internal combustion engine waste heat recovery by a thermoelectric generator inserted at combustion chamber walls. <b>2018</b> , 42, 4853-4865	13
703	Dual Alloying Strategy to Achieve a High Thermoelectric Figure of Merit and Lattice Hardening in p-Type Nanostructured PbTe. <b>2018</b> , 3, 2593-2601	30
702	Vacancy Manipulation for Thermoelectric Enhancements in GeTe Alloys. <b>2018</b> , 140, 15883-15888	132
701	Rationalizing phonon dispersion for lattice thermal conductivity of solids. <b>2018</b> , 5, 888-894	95
700	Effect of the Processing Route on the Thermoelectric Performance of Nanostructured CuPbSbTe. <b>2018</b> , 57, 12976-12986	23
699	High-Performance Thermoelectric Materials for Solar Energy Application. <b>2018</b> , 3-38	2
698	Thermoelectric properties of Ag <sub>9</sub> Ga <sub>6</sub> S <sub>6</sub> with ultralow lattice thermal conductivity. <b>2018</b> , 6, 60-67	28

697	Influence of Sputtering Parameters on Structural, Electrical and Thermoelectric Properties of MgBi Coatings. <b>2018</b> , 8, 380	3
696	Direct Electricity Generation Mediated by Molecular Interactions with Low Dimensional Carbon Materials: A Mechanistic Perspective. <b>2018</b> , 8, 1802212	26
695	Charge and phonon transport in PbTe-based thermoelectric materials. <b>2018</b> , 3,	131
694	Thermoelectric Devices: Influence of the Legs Geometry and Parasitic Contact Resistances on ZT. <b>2018</b> ,	3
693	High-Performance GeTe Thermoelectrics in Both Rhombohedral and Cubic Phases. <b>2018</b> , 140, 16190-16197	76
692	Thermoelectricity for IoT: A review. <b>2018</b> , 54, 461-476	125
691	Increased Seebeck Coefficient and Decreased Lattice Thermal Conductivity in Grain-Size-Controlled p-Type PbTe/MgTe System. <b>2018</b> , 1, 6586-6592	8
690	Morphological evolution and failure of LZC/YSZ DCL TBCs by electron beam-physical vapor deposition. <b>2018</b> , 4, 340-347	31
689	Interfacial energy band and phonon scattering effect in Bi <sub>2</sub> Te <sub>3</sub> -polypyrrole hybrid thermoelectric material. <b>2018</b> , 113, 153901	9
688	Contributed Review: Instruments for measuring Seebeck coefficient of thin film thermoelectric materials: A mini-review. <b>2018</b> , 89, 101501	14
687	Review of Exhaust Gas Heat Recovery Mechanism for Internal Combustion Engine Using Thermoelectric Principle. <b>2018</b> ,	1
686	High-Performance n-Type PbSe-CuSe Thermoelectrics through Conduction Band Engineering and Phonon Softening. <b>2018</b> , 140, 15535-15545	64
685	Achieving high thermoelectric performance with Pb and Zn codoped polycrystalline SnSe via phase separation and nanostructuring strategies. <b>2018</b> , 53, 683-689	68
684	Cause for the Orbital Ordering of CsAgF and Its Effect on Thermoelectric Properties. <b>2018</b> , 57, 11895-11900	3
683	Modeling and Experimentation of New Thermoelectric Cooler/Thermoelectric Generator Module. <b>2018</b> , 11, 576	27
682	Thermoelectric Cooling. <b>2018</b> ,	2
681	Oxygen vacancy induced strong anisotropy of the thermoelectric properties of strontium barium niobate. <b>2018</b> , 155, 393-399	3
680	Approaching Topological Insulating States Leads to High Thermoelectric Performance in n-Type PbTe. <b>2018</b> , 140, 13097-13102	49

679	Enormous suppression of phonon transport in silicon nanowires with five-fold twin boundary. <b>2018</b> , 6, 18533-18542	9
678	A new design of solar thermoelectric generator with combination of segmented materials and asymmetrical legs. <b>2018</b> , 175, 11-20	44
677	Nitride layers on uranium surfaces. <b>2018</b> , 93, 47-84	12
676	Enhanced thermoelectric performance realized in AgBiS <sub>2</sub> composited AgBiSe <sub>2</sub> through indium doping and mechanical alloying. <b>2018</b> , 112, 213905	7
675	3D charge and 2D phonon transports leading to high out-of-plane in n-type SnSe crystals. <i>Science</i> , <b>2018</b> , 360, 778-783	33-3 569
674	Performance evaluation and comparison of electricity generation systems based on single- and two-stage thermoelectric generator for hypersonic vehicles. <b>2018</b> , 151, 15-21	7
673	Hierarchically Structured Thermoelectric Materials in Quaternary System Cu <sub>2</sub> ZnSnS <sub>3</sub> Featuring a Mosaic-type Nanostructure. <b>2018</b> , 1, 2579-2588	10
672	Absence of Nanostructuring in NaPb SbTe : Solid Solutions with High Thermoelectric Performance in the Intermediate Temperature Regime. <b>2018</b> , 140, 7021-7031	19
671	The fabrication of nanoscale Bi <sub>2</sub> Te <sub>3</sub> /Sb <sub>2</sub> Te <sub>3</sub> multilayer thin film-based thermoelectric power chips. <b>2018</b> , 197, 8-14	6
670	Performance comparison of single- and multi-stage onboard thermoelectric generators and stage number optimization at a large temperature difference. <b>2018</b> , 141, 456-466	12
669	Extraordinary Thermoelectric Performance Realized in Hierarchically Structured AgSbSe with Ultralow Thermal Conductivity. <b>2018</b> , 10, 18685-18692	30
668	Electrical Properties of Nanometer Materials. <b>2018</b> , 337-385	2
667	Thermoelectric Performance of IV-VI Compounds with Octahedral-Like Coordination: A Chemical-Bonding Perspective. <b>2018</b> , 30, e1801787	54
666	Synergistically optimizing electrical and thermal transport properties of n -type PbSe. <b>2018</b> , 28, 275-280	5
665	Semiconductor Nanomembrane Materials for High-Performance Soft Electronic Devices. <b>2018</b> , 140, 9001-9019	22
664	Complex alloying effect on thermoelectric transport properties of Cu <sub>2</sub> Ge(Se <sub>1-x</sub> Te <sub>x</sub> ) <sub>3</sub> . <b>2018</b> , 27, 067201	2
663	Creating Zipper-Like van der Waals Gap Discontinuity in Low-Temperature-Processed Nanostructured PbBi Te : Enhanced Phonon Scattering and Improved Thermoelectric Performance. <b>2018</b> , 57, 10938-10943	8
662	Recent progress and futuristic development of PbSe thermoelectric materials and devices. <b>2018</b> , 9, 359-376	35

661	Surfactant-Induced Structural Phase Transitions and Enhanced Room Temperature Thermoelectric Performance in n-Type Bi <sub>2</sub> Te <sub>3</sub> Nanostructures Synthesized via Chemical Route. <b>2018</b> , 1, 3236-3250	10
660	Manipulation of Band Structure and Interstitial Defects for Improving Thermoelectric SnTe. <b>2018</b> , 28, 1803586	121
659	Defect Engineering for High-Performance n-Type PbSe Thermoelectrics. <b>2018</b> , 140, 9282-9290	88
658	Thermoelectric properties of SnSe (Pnma) under hydrostatic pressure. <b>2018</b> , 152, 243-247	4
657	Recent advances in inorganic material thermoelectrics. <b>2018</b> , 5, 2380-2398	42
656	Origin of efficient thermoelectric performance in half-Heusler FeNb <sub>0.8</sub> Ti <sub>0.2</sub> Sb. <b>2018</b> , 123, 235106	5
655	Evaluation Methods for Properties of Nanostructured Body. <b>2018</b> , 301-363	1
654	Creating Zipper-Like van der Waals Gap Discontinuity in Low-Temperature-Processed Nanostructured PbBi <sub>2</sub> nTe <sub>1+3n</sub> : Enhanced Phonon Scattering and Improved Thermoelectric Performance. <b>2018</b> , 130, 11104-11109	1
653	Kinetic study of solid-state interfacial reactions of p-type (Bi,Sb) <sub>2</sub> Te <sub>3</sub> thermoelectric materials with Sn and SnAgCu solders. <b>2018</b> , 767, 1133-1140	10
652	Anisotropy of Transport Properties Correlated to Grain Boundary Density and Quantified Texture in Thick Oriented Ca <sub>10</sub> Mo <sub>6</sub> Ceramics. <b>2018</b> , 11,	8
651	Flexible Thermoelectric Materials and Devices. <b>2018</b> , 425-457	1
650	MnS Incorporation into Higher Manganese Silicide Yields a Green Thermoelectric Composite with High Performance/Price Ratio. <b>2018</b> , 5, 1800626	10
649	High thermoelectric performance of CuSbSe nanocrystals with CuSe in situ inclusions synthesized by a microwave-assisted solvothermal method. <b>2018</b> , 10, 14546-14553	19
648	Enhancing Thermoelectric Properties through Control of Nickel Interstitials and Phase Separation in Heusler/Half-Heusler TiNiSn Composites. <b>2018</b> , 11,	4
647	Development of Perovskite-Type Materials for Thermoelectric Application. <b>2018</b> , 11,	45
646	Effects of Electroless Plating with Cu Content on Thermoelectric and Mechanical Properties of p-type Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> Bulk Alloys. <b>2018</b> , 33, 797-801	3
645	In <sub>2</sub> O <sub>3</sub> -Based Thermoelectric Materials: The State of the Art and the Role of Surface State in the Improvement of the Efficiency of Thermoelectric Conversion. <b>2018</b> , 8, 14	18
644	Advances in Thermoelectric Mg <sub>3</sub> Sb <sub>2</sub> and Its Derivatives. <b>2018</b> , 2, 1800022	34

643	Impact of Thermal Interface Materials for Thermoelectric Generator Systems. <b>2018</b> , 47, 5763-5772	14
642	Orbital Alignment for High Performance Thermoelectric YbCd <sub>2</sub> Sb <sub>2</sub> Alloys. <b>2018</b> , 30, 5339-5345	37
641	Thermodynamic, Structural and Thermoelectric Properties of AgSbTe Thick Films Developed by Melt Spinning. <b>2018</b> , 8,	7
640	Flexible n-type thermoelectric composite films with enhanced performance through interface engineering and post-treatment. <b>2018</b> , 29, 275403	11
639	Fabrication and thermoelectric properties of Ga <sub>1-x</sub> In <sub>x</sub> Sb compounds by solid reaction. <b>2018</b> , 44, 22023-22026	1
638	Low lattice thermal conductivity in arc-melted GeTe with Ge-deficient crystal structure. <b>2018</b> , 113, 083902	8
637	Soft phonon modes from off-center Ge atoms lead to ultralow thermal conductivity and superior thermoelectric performance in n-type PbSe <sub>1-x</sub> Ge <sub>x</sub> Se. <b>2018</b> , 11, 3220-3230	75
636	Enhancement of Thermoelectric Performance of Sr <sub>0.9-x</sub> Nd <sub>0.1</sub> Ti <sub>0.9</sub> Nb <sub>0.1</sub> O <sub>3</sub> Ceramics by Introducing Sr Vacancies. <b>2018</b> , 215, 1800459	2
635	Realizing High Thermoelectric Performance below Phase Transition Temperature in Polycrystalline SnSe via Lattice Anharmonicity Strengthening and Strain Engineering. <b>2018</b> , 10, 30558-30565	25
634	Thermoelectric stability of Eu- and Na-substituted PbTe. <b>2018</b> , 6, 9482-9493	12
633	A Review on Low-Grade Thermal Energy Harvesting: Materials, Methods and Devices. <b>2018</b> , 11,	93
632	Large-Scale, Solution-Synthesized Nanostructured Composites for Thermoelectric Applications. <b>2018</b> , 30, e1801904	12
631	Improvement of thermoelectric performance of copper-deficient compounds Cu <sub>1-x</sub> In <sub>x</sub> Te ( $x = 0-0.15$ ) due to a degenerate impurity band and ultralow lattice thermal conductivity.. <b>2018</b> , 8, 27163-27170	4
630	Increased effective mass and carrier concentration responsible for the improved thermoelectric performance of the nominal compound CuGaTe with Sb substitution for Cu.. <b>2018</b> , 8, 21637-21643	1
629	Realizing high performance n-type PbTe by synergistically optimizing effective mass and carrier mobility and suppressing bipolar thermal conductivity. <b>2018</b> , 11, 2486-2495	129
628	Significantly improved thermal stability and thermoelectric performance of Cu-deficient Cu <sub>4-x</sub> Te <sub>8</sub> ( $x = 1.12$ ) chalcogenides through addition of Sb. <b>2018</b> , 6, 12672-12681	4
627	Experimental determination of lattice thermal conductivity and Lorenz number as functions of temperature for n-type PbTe. <b>2018</b> , 5, 58-63	7
626	Double thermoelectric power factor of a 2D electron system. <b>2018</b> , 9, 2224	35



625	Thermoelectric Nanomaterials. <b>2019</b> , 349-358	3
624	Promising cubic MnGeTe <sub>2</sub> thermoelectrics. <b>2019</b> , 62, 379-388	7
623	Copper-Rich Thermoelectric Sulfides: Size-Mismatch Effect and Chemical Disorder in the [TS <sub>4</sub> ]Cu <sub>6</sub> Complexes of Cu <sub>2</sub> T <sub>2</sub> Ge <sub>6</sub> S <sub>32</sub> (T=Cr, Mo, W) Colusites. <b>2019</b> , 131, 15601-15609	3
622	Band and Phonon Engineering for Thermoelectric Enhancements of Rhombohedral GeTe. <b>2019</b> , 11, 30756-30763	3
621	Ultrahigh Power Factor and Electron Mobility in n-Type BiTe-%Cu Stabilized under Excess Te Condition. <b>2019</b> , 11, 30999-31008	21
620	Fabrication of bulk nanostructured silver by spark plasma sintering from nanostructured silver powders. <b>2019</b> , 6, 105009	0
619	Copper-Rich Thermoelectric Sulfides: Size-Mismatch Effect and Chemical Disorder in the [TS ]Cu Complexes of Cu T Ge S (T=Cr, Mo, W) Colusites. <b>2019</b> , 58, 15455-15463	24
618	Effect of phonon frequencies on specific heat of ZnO nanostructures. <b>2019</b> ,	
617	Thermoelectric cooler and thermoelectric generator devices: A review of present and potential applications, modeling and materials. <b>2019</b> , 186, 115849	155
616	Influence of Phase Separation and Spinodal Decomposition on Microstructure of Mg <sub>2</sub> Si <sub>1-x</sub> Sn <sub>x</sub> Alloys. <b>2019</b> , 19, 4927-4933	6
615	Thermoelectric enhancement in multilayer thin-films of tin chalcogenide nanosheets/conductive polymers. <b>2019</b> , 11, 16114-16121	9
614	A d-Band Electron Correlated Thermoelectric Thermistor Established in Metastable Perovskite Family of Rare-Earth Nickelates. <b>2019</b> , 11, 34128-34134	15
613	The excellent TE performance of photoelectric material CdSe along with a study of Zn(Cd)Se and Zn(Cd)Te based on first-principles.. <b>2019</b> , 9, 25471-25479	6
612	Influence of semiconductor crystallinity on a $\mu$ -FeSi <sub>2</sub> sensitized thermal cell. <b>2019</b> , 158, 70-74	2
611	Ultrahigh Thermoelectric Performance Realized in Black Phosphorus System by Favorable Band Engineering through Group VA Doping. <b>2019</b> , 29, 1904346	32
610	Thermoelectric properties of Mn, Bi, and Sb co-doped SnTe with a low lattice thermal conductivity. <b>2019</b> , 806, 361-369	27
609	Synergistically improving the thermoelectric performance of In <sub>2</sub> O <sub>3</sub> via a dual-doping and nanostructuring approach. <b>2019</b> , 6, 105507	3
608	Influence of Ni and Cu electrodeposits on the interfacial reaction between SAC305 solder and the Bi <sub>2</sub> (Te,Se) <sub>3</sub> thermoelectric material. <b>2019</b> , 30, 14791-14804	5

607	Ultralow Thermal Conductivity and High-Temperature Thermoelectric Performance in n-Type K <sub>2.5</sub> Bi <sub>8.5</sub> Se <sub>14</sub> . <b>2019</b> , 31, 5943-5952	15
606	Local nanostructures enhanced the thermoelectric performance of n-type PbTe. <b>2019</b> , 7, 18458-18467	30
605	Revelation of Inherently High Mobility Enables MgSb as a Sustainable Alternative to n-BiTe Thermoelectrics. <b>2019</b> , 6, 1802286	40
604	Thermoelectric properties and stability of Ba <sub>3</sub> Cu <sub>16</sub> Te <sub>11</sub> Sb <sub>2</sub> Te <sub>7</sub> . <b>2019</b> , 126, 025109	3
603	Promising materials for thermoelectric applications. <b>2019</b> , 806, 471-486	38
602	Thermoelectric Thin Films. <b>2019</b> ,	5
601	Insights from Te and Fe nuclear resonance vibrational spectroscopy: a [4Fe-4Te] cluster from two points of view. <b>2019</b> , 10, 7535-7541	2
600	Transport Properties of CdSb Alloys with a Promising Thermoelectric Performance. <b>2019</b> , 11, 27098-27103	6
599	A nonlinear finite element model for the performance of thermoelectric bulk and nanostructured materials. <b>2019</b> , 185, 262-273	1
598	Enhancement of Thermoelectric Properties of Bismuth Telluride Composite with Gold Nano-Particles Inclusions Using Electrochemical Co-Deposition. <b>2019</b> , 166, D508-D513	15
597	Electric Field Thermopower Modulation of 2D Electron Systems. <b>2019</b> , 97-120	2
596	Thermoelectric Properties of Metal Chalcogenides Nanosheets and Nanofilms Grown by Chemical and Physical Routes. <b>2019</b> , 157-184	1
595	Density, distribution and nature of planar faults in silver antimony telluride for thermoelectric applications. <b>2019</b> , 178, 135-145	4
594	Hole-doped M <sub>4</sub> SiTe <sub>4</sub> (M = Ta, Nb) as an efficient p-type thermoelectric material for low-temperature applications. <b>2019</b> , 115, 043901	6
593	Hybrid-Functional and Quasi-Particle Calculations of Band Structures of Mg <sub>2</sub> Si, Mg <sub>2</sub> Ge, and Mg <sub>2</sub> Sn. <b>2019</b> , 75, 144-152	12
592	Improved Thermoelectric Power Factor in Completely Organic Nanocomposite Enabled by l-Ascorbic Acid. <b>2019</b> , 1, 1942-1947	10
591	Gigantic Phonon-Scattering Cross Section To Enhance Thermoelectric Performance in Bulk Crystals. <b>2019</b> , 13, 8347-8355	38
590	High Thermoelectric Performance in PbSe <sub>1-x</sub> Sn <sub>x</sub> SbSe <sub>2</sub> Alloys from Valence Band Convergence and Low Thermal Conductivity. <b>2019</b> , 9, 1901377	42

589	Extraordinary n-Type Mg SbBi Thermoelectrics Enabled by Yttrium Doping. <b>2019</b> , 31, e1903387	74
588	Development of integrated two-stage thermoelectric generators for large temperature difference. <b>2019</b> , 62, 1596-1604	18
587	Thermoelectric Performance of Ge <sub>0.99-x</sub> Na <sub>0.01</sub> Ag <sub>x</sub> Se. <b>2019</b> , 1245, 012094	1
586	A short review on recent trends and applications of thermoelectric generators. <b>2019</b> , 312, 012013	4
585	Cisplatin given at three divided doses for three consecutive days in metastatic breast cancer: An alternative schedule for one full dose with comparable efficacy but less CINV and hypomagnesaemia. <b>2019</b> , 30, v131	
584	Collective Effect of Fe and Se To Improve the Thermoelectric Performance of Unfilled p-Type CoSb <sub>3</sub> Skutterudites. <b>2019</b> , 2, 1067-1076	22
583	Efficient Sc-Doped Mg <sub>3.05</sub> Sc <sub>x</sub> SbBi Thermoelectrics Near Room Temperature. <b>2019</b> , 31, 8987-8994	30
582	An analytic study of the Wiedemann-Franz law and the thermoelectric figure of merit. <b>2019</b> , 3, 105001	10
581	Vibration uncoupling of germanium with different valence states lowers thermal conductivity of Cs <sub>2</sub> Ge <sub>3</sub> Ga <sub>6</sub> Se <sub>14</sub> . <b>2019</b> , 62, 1788-1797	6
580	Phase Stability and Ordering in Rock Salt-Based Thermoelectrics: NaSbX <sub>2</sub> , AgSbX <sub>2</sub> , and Their Alloys with PbX and SnX (X = S, Se, Te). <b>2019</b> , 31, 9445-9452	6
579	Thermoelectric Properties of Minerals with the Mawsonite Structure. <b>2019</b> , 2, 8068-8078	4
578	Au and B co-doped p-type Si-Ge nanocomposites possessing ZT = 1.63 synthesized by ball milling and low-temperature sintering. <b>2019</b> , 58, 125501	5
577	Comprehensive Investigation on the Thermoelectric Properties of p-Type PbTe-PbSe-PbS Alloys. <b>2019</b> , 5, 1900609	20
576	Transparent and Hybrid Multilayer Films with Improved Thermoelectric Performance by Chalcogenide-Interlayer-Induced Transport Enhancement. <b>2019</b> , 11, 35354-35361	3
575	On-chip micro/nano devices for energy conversion and storage. <b>2019</b> , 28, 100764	13
574	Cobalt germanide precipitates indirectly improve the properties of thermoelectric germanium antimony tellurides. <b>2019</b> , 7, 11419-11430	3
573	Enhanced thermoelectric properties through minority carriers blocking in nanocomposites. <b>2019</b> , 126, 095107	3
572	TiO-SrTiO Biphase Nanoceramics as Advanced Thermoelectric Materials. <b>2019</b> , 12,	5

571	High Figure of Merit in Gallium-Doped Nanostructured n-Type PbTe-GeTe with Midgap States. <b>2019</b> , 141, 16169-16177	44
570	Synergistically Optimizing Carrier Concentration and Decreasing Sound Velocity in n-type AgInSe <sub>2</sub> Thermoelectrics. <b>2019</b> , 31, 8182-8190	13
569	Band engineering, carrier density control, and enhanced thermoelectric performance in multi-doped SnTe. <b>2019</b> , 7, 091107	9
568	Electrophysical properties of hydroxylated endohedral metallofullerene with gadolinium. <b>2019</b> , 135, 109094	2
567	High thermoelectric performance in low-cost SnSSe crystals. <i>Science</i> , <b>2019</b> , 365, 1418-1424	33.3 233
566	Synthesis, Crystal Structure, and Optical Property of Ce <sub>4</sub> InSbS <sub>9</sub> . <b>2019</b> , 60, 1456-1462	1
565	Dual defect system of tellurium antisites and silver interstitials in off-stoichiometric Bi <sub>2</sub> (Te,Se) <sub>3+y</sub> causing enhanced thermoelectric performance. <b>2019</b> , 7, 791-800	12
564	Cross-plane thermoelectric Seebeck coefficients in nanoscale Al <sub>2</sub> O <sub>3</sub> /ZnO superlattice films. <b>2019</b> , 7, 1670-1680	6
563	High Thermoelectric Power Factor and Efficiency from a Highly Dispersive Band in Ba <sub>2</sub> BiAu. <b>2019</b> , 11,	30
562	Possible Routes for Efficient Thermo-Electric Energy Conversion in a Molecular Junction. <b>2019</b> , 20, 848-860	6
561	Roles of AgSbTe <sub>2</sub> nanostructures in PbTe: controlling thermal properties of chalcogenides. <b>2019</b> , 7, 3787-3794	5
560	The remarkable crystal chemistry of the Ca <sub>14</sub> AlSb <sub>11</sub> structure type, magnetic and thermoelectric properties. <b>2019</b> , 271, 88-102	44
559	Enhanced thermoelectric performance of higher manganese silicides by shock-induced high-density dislocations. <b>2019</b> , 7, 3384-3390	13
558	Fabrication of one-dimensional Cu <sub>2</sub> Te/Te nanorod composites and their enhanced thermoelectric properties. <b>2019</b> , 21, 1555-1563	7
557	Thermoelectric Performance of Single-Phase Tellurium-Reduced Quaternary (PbTe)(PbS)(PbSe). <b>2019</b> , 4, 9235-9240	2
556	Silicon carbide particles induced thermoelectric enhancement in SnSeS crystal. <b>2019</b> , 1, 015001	2
555	A strategy for low thermal conductivity and enhanced thermoelectric power factor in one-dimensional Bi <sub>2</sub> Te <sub>3</sub> /Cu <sub>2</sub> Te nanowire composites. <b>2019</b> , 30, 13297-13304	1
554	Thermoelectric transport properties of n-type tin sulfide. <b>2019</b> , 170, 99-105	17

553	Realizing High-Ranged Out-of-Plane ZTs in N-Type SnSe Crystals through Promoting Continuous Phase Transition. <b>2019</b> , 9, 1901334	51
552	Human Body Micro-power plant. <b>2019</b> , 183, 16-24	5
551	Theoretical Investigation of Metal-Shrouded Tl <sub>2</sub> O Monolayers: Pudding-Mold-Type Band Structure and Thermoelectric Performance. <b>2019</b> , 2, 4061-4066	15
550	Comprehensive calculations and prominent thermoelectric properties of Li <sub>3</sub> P and Li <sub>3</sub> As. <b>2019</b> , 383, 2802-2808	3
549	Ultralow thermal conductivity of Tl <sub>4</sub> Ag <sub>18</sub> Te <sub>11</sub> . <b>2019</b> , 7, 8029-8036	8
548	Synthesis and Processing of Thermoelectric Nanomaterials, Nanocomposites, and Devices. <b>2019</b> , 295-336	4
547	Flexible thermoelectric cells fabricated by rubbing-in technology with rubber-carbon nanotubes/graphene composites. <b>2019</b> , 2, 551-555	1
546	Ultralow Lattice Thermal Conductivity in SnTe by Manipulating the Electron-Phonon Coupling. <b>2019</b> , 123, 15996-16002	22
545	High Thermoelectric Performance in n-Type Polycrystalline SnSe via Dual Incorporation of Cl and PbSe and Dense Nanostructures. <b>2019</b> , 11, 21645-21654	27
544	Dilute Cu <sub>2</sub> Te-alloying enables extraordinary performance of r-GeTe thermoelectrics. <b>2019</b> , 9, 100096	52
543	Nanostructured SnSe integrated with Se quantum dots with ultrahigh power factor and thermoelectric performance from magnetic field-assisted hydrothermal synthesis. <b>2019</b> , 7, 15757-15765	24
542	Enhanced thermoelectric performance of a simple method prepared polycrystalline SnSe optimized by spark plasma sintering. <b>2019</b> , 125, 225109	7
541	Fracture structure and thermoelectric enhancement of CuSe with substitution of nanostructured AgSe. <b>2019</b> , 21, 13569-13577	12
540	Novel n-type thermoelectric material of ZnIn <sub>2</sub> Se <sub>4</sub> . <b>2019</b> , 797, 940-944	18
539	Ultra-low thermal conductivity via interfacial phonon scattering in PbTe hoppercubes/PbTeO <sub>3</sub> microrods for thermoelectric applications. <b>2019</b> , 799, 26-35	3
538	Synergistically optimizing interdependent thermoelectric parameters of n-type PbSe through alloying CdSe. <b>2019</b> , 12, 1969-1978	63
537	New horizons in thermoelectric materials: Correlated electrons, organic transport, machine learning, and more. <b>2019</b> , 125, 180902	31
536	Thermoelectric interface materials: A perspective to the challenge of thermoelectric power generation module. <b>2019</b> , 5, 321-336	48

535	Study of thermopower in a 1D lattice: Role of aperiodicity. <b>2019</b> ,	
534	Enhanced thermoelectric performance through crystal field engineering in transition metal doped GeTe. <b>2019</b> , 9, 100094	66
533	Design, growth and characterization of PbTe-based thermoelectric materials. <b>2019</b> , 65, 47-94	11
532	Enhanced Photoenergy Harvesting and Extreme Thomson Effect in Hydrodynamic Electronic Systems. <b>2019</b> , 122, 166802	1
531	Fabrication of Nanostructured Skutterudite-Based Thermoelectric Module and Design of a Maximum Power Point Tracking System for the Thermoelectric Pile. <b>2019</b> , 19, 5885-5894	5
530	Potential-current co-adjusted pulse electrodeposition for highly (110)-oriented Bi <sub>2</sub> Te <sub>3-x</sub> Sex films. <b>2019</b> , 787, 767-771	7
529	Charge Transfer in Thermoelectric Nanocomposites: Power Factor Enhancements and Model Systems. <b>2019</b> , 1-34	1
528	Thermoelectric and thermal stability improvements in Nano-Cu <sub>2</sub> Se included Ag <sub>2</sub> Se. <b>2019</b> , 273, 122-127	18
527	Amphoteric Indium Enables Carrier Engineering to Enhance the Power Factor and Thermoelectric Performance in n-Type Ag <sub>n</sub> Pb <sub>100</sub> InnTe <sub>100+2n</sub> (LIST). <b>2019</b> , 9, 1900414	34
526	Effect of S and Se replacement on electronic and thermoelectric features of BaCu <sub>2</sub> GeQ <sub>4</sub> (Q = S, Se) chalcogenide crystals. <b>2019</b> , 790, 666-674	10
525	Enhancement of Thermoelectric Performance for n-Type PbS through Synergy of Gap State and Fermi Level Pinning. <b>2019</b> , 141, 6403-6412	48
524	First-principles assessment of thermoelectric properties of CuFeS <sub>2</sub> . <b>2019</b> , 125, 125102	12
523	Lattice Strain Advances Thermoelectrics. <b>2019</b> , 3, 1276-1288	204
522	Stacked double-walled carbon nanotube sheet electrodes for electrochemically harvesting thermal energy. <b>2019</b> , 147, 559-565	12
521	Effect of polymer nanolayers on tin-chalcogenide nanosheet/conductive polymer flexible composite films and their enhanced thermoelectric performance. <b>2019</b> , 11, 8502-8509	7
520	Stretchable and dynamically stable promising two-dimensional thermoelectric materials: ScP and ScAs. <b>2019</b> , 7, 12604-12615	19
519	From thermoelectricity to phonoelectricity. <b>2019</b> , 6, 021305	9
518	Bonding heterogeneity and lone pair induced anharmonicity resulted in ultralow thermal conductivity and promising thermoelectric properties in n-type AgPbBiSe. <b>2019</b> , 10, 4905-4913	44

517	Performance assessment of an integrated power generation and refrigeration system on hypersonic vehicles. <b>2019</b> , 89, 192-203	10
516	Experimental revelation of multiband transport in heavily doped BaCd <sub>2</sub> Sb <sub>2</sub> with promising thermoelectric performance. <b>2019</b> , 8, 123-127	18
515	Phonon Collapse and Second-Order Phase Transition in Thermoelectric SnSe. <b>2019</b> , 122, 075901	42
514	Synergetic Enhancement of Thermoelectric Performance by Selective Charge Anderson Localization-Delocalization Transition in n-Type Bi-Doped PbTe/AgTe Nanocomposite. <b>2019</b> , 13, 3806-3815	48
513	The effect of reduced graphene oxide on microstructure and thermoelectric properties of Nb-doped A-site-deficient SrTiO <sub>3</sub> ceramics. <b>2019</b> , 786, 884-893	35
512	Emerging Theory, Materials, and Screening Methods: New Opportunities for Promoting Thermoelectric Performance. <b>2019</b> , 531, 1800437	39
511	Passive and Active Thermal Technologies: Modeling and Evaluation. <b>2019</b> , 375-412	3
510	Electron Sandwich Doubles the Thermoelectric Power Factor of SrTiO <sub>3</sub> . <b>2019</b> , 216, 1800832	3
509	Origin of Ultralow Thermal Conductivity in n-Type Cubic Bulk AgBiS <sub>2</sub> : Soft Ag Vibrations and Local Structural Distortion Induced by the Bi 6s <sub>2</sub> Lone Pair. <b>2019</b> , 31, 2106-2113	44
508	High Thermoelectric Performance in Mg <sub>2</sub> (Si <sub>0.3</sub> Sn <sub>0.7</sub> ) by Enhanced Phonon Scattering. <b>2019</b> , 2, 2129-2137	25
507	Promising thermoelectric properties and anisotropic electrical and thermal transport of monolayer SnTe. <b>2019</b> , 114, 083901	19
506	Hybrid Organic-Inorganic Thermoelectric Materials and Devices. <b>2019</b> , 58, 15206-15226	87
505	Self-compensating defects in AgSbTe <sub>2</sub> from first principles studies. <b>2019</b> , 787, 1136-1142	1
504	Hybride organisch-anorganische thermoelektrische Materialien und Baueinheiten. <b>2019</b> , 131, 15348-15370	7
503	All-Scale Hierarchically Structured p-Type PbSe Alloys with High Thermoelectric Performance Enabled by Improved Band Degeneracy. <b>2019</b> , 141, 4480-4486	62
502	Low-Temperature-Processed Colloidal Quantum Dots as Building Blocks for Thermoelectrics. <b>2019</b> , 9, 1803049	11
501	High-performance electron-doped GeMnTe <sub>2</sub> : hierarchical structure and low thermal conductivity. <b>2019</b> , 7, 27361-27366	10
500	High-efficiency half-Heusler thermoelectric modules enabled by self-propagating synthesis and topologic structure optimization. <b>2019</b> , 12, 3390-3399	77

499	The origin of glass-like phonon dynamics in binary Si and Ge clathrates-I. <b>2019</b> , 7, 13986-13992	5
498	Tuning of Mg content to enhance the thermoelectric properties in binary Mg <sub>2-x</sub> Si (x= 0, 0.1, 0.15, 0.2). <b>2019</b> , 6, 125519	2
497	10. Recent advances in the self-assembly of polynuclear metalSelenium and Tellurium compounds from 14 <sup>16</sup> reagents. <b>2019</b> , 331-382	
496	Nanostructured potential well/barrier engineering for realizing unprecedentedly large thermoelectric power factors. <b>2019</b> , 11, 100159	12
495	Influence of Nanostructuring on PbTe Alloys Synthesized by Arc-Melting. <b>2019</b> , 12,	5
494	Strong anharmonicity and high thermoelectric efficiency in high-temperature SnS from first principles. <b>2019</b> , 100,	21
493	Novel Thermoelectric Materials and Device Design Concepts. <b>2019</b> ,	4
492	Enhancement of thermoelectric performance across the topological phase transition in dense lead selenide. <b>2019</b> , 18, 1321-1326	47
491	Thermoelectrics. <b>2019</b> ,	6
490	Experimental investigation of solar reversible power generation in Thermoelectric Generator (TEG) using thermal energy storage. <b>2019</b> , 48, 107-114	33
489	Thermoelectric Material SnPbBiS: The L Member of Lillianite Homologous Series with Low Lattice Thermal Conductivity. <b>2019</b> , 58, 1339-1348	4
488	Introduction. <b>2019</b> , 1-6	
487	High Thermoelectric Performance in the Wide Band-Gap AgGa <sub>1-x</sub> Te <sub>2</sub> Compounds: Directional Negative Thermal Expansion and Intrinsically Low Thermal Conductivity. <b>2019</b> , 29, 1806534	32
486	Thermoelectric Properties of Zn <sub>4</sub> Sb <sub>3</sub> Composites with Incomplete Reaction. <b>2019</b> , 48, 1159-1163	2
485	LZC/YSZ DCL TBCs by EB-PVD: Microstructure, low thermal conductivity and high thermal cycling life. <b>2019</b> , 39, 1443-1450	32
484	Band manipulation for high thermoelectric performance in SnTe through heavy CdSe-alloying. <b>2019</b> , 5, 111-117	11
483	Recent progresses on thermoelectric Zintl phases: Structures, materials and optimization. <b>2019</b> , 270, 252-264	38
482	Multiple-valley effect on modulation of thermoelectric properties of n-type ZrCuSiAs-structure oxyantimonides LnTSbO (Ln= lanthanides and T=Zn, Mn). <b>2019</b> , 5, 51-55	2



481	Effect of Sn doping on thermoelectric properties of p-type manganese telluride. <b>2019</b> , 777, 968-973	8
480	Elevated Temperature Behavior of CuPb <sub>18</sub> SbTe <sub>20</sub> /Nano-Ag/Cu Joints for Thermoelectric Devices. <b>2019</b> , 48, 1276-1285	4
479	Chalcogenides as thermoelectric materials. <b>2019</b> , 270, 273-279	70
478	Hierarchical nanostructuring approaches for thermoelectric materials with high power factors. <b>2019</b> , 99,	20
477	Tuning phonon transport spectrum for better thermoelectric materials. <b>2019</b> , 20, 10-25	25
476	Low-dimensional systems on the base of PbSnAgTe (LATT) compounds for thermoelectric application. <b>2019</b> , 106, 10-18	5
475	Thermoelectric properties and EPR analysis of Fe doped Cu <sub>12</sub> Sb <sub>4</sub> S <sub>13</sub> . <b>2019</b> , 269, 547-552	4
474	Thermoelectrics: From history, a window to the future. <b>2019</b> , 138, 100501	190
473	Copper Sulfides: Earth-Abundant and Low-Cost Thermoelectric Materials. <b>2019</b> , 7, 1800850	25
472	Unusual n-type thermoelectric properties of Bi <sub>2</sub> Te <sub>3</sub> doped with divalent alkali earth metals. <b>2019</b> , 269, 396-400	9
471	State-of-the-Art Reviews and Analyses of Emerging Research Findings and Achievements of Thermoelectric Materials over the Past Years. <b>2019</b> , 48, 745-777	25
470	Realizing High Thermoelectric Performance in p-Type SnSe through Crystal Structure Modification. <b>2019</b> , 141, 1141-1149	91
469	Temperature Dependence of a Perovskite-Sensitized Solar Cell: A Sensitized Thermal Cell. <b>2019</b> , 2, 13-18	9
468	Thermoelectric properties of nano-bulk bismuth telluride prepared with spark plasma sintered nano-plates. <b>2019</b> , 19, 97-101	4
467	Experimental study of molten tin sulfide thermal conduction. <b>2019</b> , 131, 691-697	1
466	Thickness-Dependent In-Plane Thermal Conductivity and Enhanced Thermoelectric Performance in p-Type ZrTe <sub>5</sub> Nanoribbons. <b>2019</b> , 13, 1800529	11
465	Effects of doping IIIB elements (Al, Ga, In) on thermoelectric properties of nanostructured n-type filled skutterudite compounds. <b>2019</b> , 774, 731-738	8
464	Recent advances in the self-assembly of polynuclear metal-bismuth and tellurium compounds from 14-6 reagents. <b>2019</b> , 4,	2

463	In-situ synthesis of flexible hybrid composite films for improved thermoelectric performance. <b>2019</b> , 357, 547-558	19
462	Modulated Magneto-Thermal Response of La <sub>0.85</sub> Sr <sub>0.15</sub> MnO <sub>3</sub> and (Ni <sub>0.6</sub> Cu <sub>0.2</sub> Zn <sub>0.2</sub> )Fe <sub>2</sub> O <sub>4</sub> Composites for Thermal Energy Harvesters. <b>2019</b> , 4, 57-65	8
461	Fiber-Based Energy Conversion Devices for Human-Body Energy Harvesting. <b>2020</b> , 32, e1902034	120
460	Energy Filtering of Charge Carriers: Current Trends, Challenges, and Prospects for Thermoelectric Materials. <b>2020</b> , 30, 1901789	129
459	An ab-initio investigation of the electronic structure, chemical bonding and optical properties of Ba <sub>2</sub> HgS <sub>5</sub> semiconductor. <b>2020</b> , 118, e1587026	4
458	Synergistically optimizing charge and phonon transport properties in n-type PbTe via introducing ternary compound AgSb(Se, Te) <sub>2</sub> . <b>2020</b> , 815, 152463	8
457	Electrical and Thermal Transport Properties of n-type Bi <sub>6</sub> Cu <sub>2</sub> Se <sub>4</sub> O <sub>6</sub> (2BiCuSeO + 2Bi <sub>2</sub> O <sub>2</sub> Se). <b>2020</b> , 532, 1900340	5
456	High thermoelectric performance in Cu <sub>2</sub> Se/CDs hybrid materials. <b>2020</b> , 813, 152204	22
455	High-temperature power factor of half-Heusler phases RENiSb (RE = Sc, Dy, Ho, Er, Tm, Lu). <b>2020</b> , 816, 152596	14
454	Glass-like electronic and thermal transport in crystalline cubic germanium selenide. <b>2020</b> , 45, 83-90	12
453	Chalcogenide Thermoelectrics Empowered by an Unconventional Bonding Mechanism. <b>2020</b> , 30, 1904862	88
452	Recent Advances in Liquid-Like Thermoelectric Materials. <b>2020</b> , 30, 1903867	67
451	Phonon thermal transport in Janus single layer M <sub>2</sub> XY (M = Ga; X, Y = S, Se, Te): A study based on first-principles. <b>2020</b> , 115, 113683	15
450	Growth and Thermal Characterization of TbAs Nanoparticles Grown by Inert Gas Condensation. <b>2020</b> , 49, 566-571	1
449	Innovative semitransparent photo-thermoelectric cells based on bismuth antimony telluride alloy. <b>2020</b> , 816, 152593	5
448	Controlled thermoelectric performance in a nanojunction: A theoretical approach. <b>2020</b> , 127, 024302	1
447	Enhanced thermoelectric performance actuated by inelastic processes in the channel region. <b>2020</b> , 117, 113832	3
446	Ternary thermoelectric AB <sub>2</sub> C <sub>2</sub> Zintl. <b>2020</b> , 821, 153497	11

445	Revealing nano-chemistry at lattice defects in thermoelectric materials using atom probe tomography. <b>2020</b> , 32, 260-274	31
444	Strain and Doping in Two-Dimensional SnTe Nanosheets: Implications for Thermoelectric Conversion. <b>2020</b> , 3, 114-119	6
443	Polycrystalline SnSe <sub>1-x</sub> S solid solutions: Vacancy engineering and nanostructuring leading to high thermoelectric performance. <b>2020</b> , 69, 104393	15
442	Electronic structure and thermoelectric properties of PbTe <sub>1-x</sub> Sex from first-principles calculations. <b>2020</b> , 173, 109404	3
441	High thermoelectric figure of merit ZT > 1 in SnS polycrystals. <b>2020</b> , 6, 77-85	26
440	Nanoparticles in Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> : A prerequisite defect structure to scatter the mid-wavelength phonons between Rayleigh and geometry scatterings. <b>2020</b> , 185, 271-278	10
439	High-Performance Thermoelectrics from Cellular Nanostructured Sb <sub>2</sub> Si <sub>2</sub> Te <sub>6</sub> . <b>2020</b> , 4, 159-175	55
438	Cu Intercalation and Br Doping to Thermoelectric SnSe <sub>2</sub> Lead to Ultrahigh Electron Mobility and Temperature-Independent Power Factor. <b>2020</b> , 30, 1908405	27
437	Near-room-temperature thermoelectric materials and their application prospects in geothermal power generation. <b>2020</b> , 6, 1	14
436	Effect of substrates on thermoelectric properties of Ag <sub>3</sub> Bi <sub>2</sub> Te thin films within the temperature annealing. <b>2020</b> , 582, 411977	4
435	Anomalous electronic and thermoelectric transport properties in cubic Rb <sub>3</sub> AuO antiperovskite. <b>2020</b> , 102,	2
434	A Facile Chemical Synthesis of PbTe Nanostructures at Room Temperature. <b>2020</b> , 10,	
433	LSPR-mediated improved upconversion emission on randomly distributed gold nanoparticles array. <b>2020</b> , 44, 19672-19682	6
432	Device modeling and performance optimization of thermoelectric generators under isothermal and isoflux heat source condition. <b>2020</b> , 480, 228867	12
431	Near-room-temperature rhombohedral Ge <sub>1</sub> -Pb Te thermoelectrics. <b>2020</b> , 15, 100260	14
430	Achieving High Thermoelectric Performance in p-Type BST/PbSe Nanocomposites through the Scattering Engineering Strategy. <b>2020</b> , 12, 46181-46189	6
429	Bi <sub>2</sub> Sn <sub>2</sub> O <sub>7</sub> : a potential room temperature n-type oxide thermoelectric. <b>2020</b> , 8, 16405-16420	10
428	High thermoelectric performance of half-Heusler compound BiBaK with intrinsically low lattice thermal conductivity. <b>2020</b> , 32, 425704	6

427	Design of Graphene Phononic Crystals for Heat Phonon Engineering. <b>2020</b> , 11,	3
426	Size-Controlled Au-CuSe Core-Shell Nanoparticles and Their Thermoelectric Properties. <b>2020</b> , 12, 36589-36599	4
425	A realistic non-local heat engine based on Coulomb-coupled systems. <b>2020</b> , 127, 234903	3
424	Enhancement of Thermoelectric Performance of SrLaTiO-Based Ceramics Regulated by Nanostructures. <b>2020</b> ,	6
423	Hierarchically nanostructured thermoelectric materials: challenges and opportunities for improved power factors. <b>2020</b> , 93, 1	3
422	Enhanced thermoelectric properties of Zn-doped GaSb nanocomposites.. <b>2020</b> , 10, 28415-28421	0
421	Improved thermoelectric performance in PbSeAgSbSe <sub>2</sub> by manipulating the spin-orbit coupling effects. <b>2020</b> , 78, 105232	9
420	Fractal lattice as an efficient thermoelectric device. <b>2020</b> , 1579, 012004	1
419	Rational structural design and manipulation advance SnSe thermoelectrics. <b>2020</b> , 7, 3065-3096	37
418	Coexistence of High Electron Conduction and Low Heat Conduction in Tungsten Oxide Epitaxial Films with 1D Atomic Defect Tunnels. <b>2020</b> , 2, 2507-2513	3
417	Exceptionally High Average Power Factor and Thermoelectric Figure of Merit in n-type PbSe by the Dual Incorporation of Cu and Te. <b>2020</b> , 142, 15172-15186	26
416	Bismuth Telluride/Half-Heusler Segmented Thermoelectric Unicouple Modules Provide 12% Conversion Efficiency. <b>2020</b> , 10, 2001924	12
415	Low thermal conductivity and enhanced Seebeck coefficient in Antimony and Selenium co-doped PbTe Nanopowders. <b>2020</b> , 95, 2035	
414	Optimized Strategies for Advancing n-Type PbTe Thermoelectrics: A Review. <b>2020</b> , 12, 49323-49334	17
413	Preparation of polyaniline/graphene coated wearable thermoelectric fabric using ultrasonic-assisted dip-coating method. <b>2020</b> , 9, 1	6
412	Transport properties of AgPb <sub>16</sub> SbTe <sub>18</sub> prepared by the inclusion of nano AgSbTe <sub>2</sub> into PbTe matrix. <b>2020</b> , 31, 17381-17385	
411	Enhanced thermoelectric performance of SWNT/organic small molecule (OSM) hybrid materials by tuning of the energy level of OSMs. <b>2020</b> , 8, 12795-12799	3
410	Compositional modulation is driven by aliovalent doping in n-type TiCoSb based half-Heuslers for tuning thermoelectric transport. <b>2020</b> , 125, 106914	3

409	A novel and stable way for energy harvesting from BiTeSe alloy based semitransparent photo-thermoelectric module. <b>2020</b> , 849, 156702	8
408	Revealing the origin of dislocations in PbSbSe (0 2020, 12, 19165-19169	3
407	Power Conversion and Its Efficiency in Thermoelectric Materials. <b>2020</b> , 22,	11
406	Nanosize La-filled CoSb <sub>3</sub> skutterudite fabricated by electrospinning. <b>2020</b> , 2, 1	0
405	Thermosensitive crystallization-boosted liquid thermocells for low-grade heat harvesting. <i>Science</i> , <b>2020</b> , 370, 342-346	33-3 109
404	Cu <sub>2</sub> Se-Based liquid-like thermoelectric materials: looking back and stepping forward. <b>2020</b> , 13, 3307-3329	33
403	High Thermoelectric Performance and Defect Energetics of Multipocketed Full Heusler Compounds. <b>2020</b> , 14,	6
402	High Thermoelectric Performance of AgSbPbSe Prepared by Fast Nonequilibrium Synthesis. <b>2020</b> , 12, 41333-41341	4
401	Power electronics for Waste Heat Recovery Unit with MPPT and Without Current Sensing. <b>2020</b> ,	
400	Theoretical Investigations of the BaRh <sub>2</sub> Ge <sub>4</sub> X <sub>6</sub> (X = S, Se, Te) Compounds. <b>2020</b> , 13, 6434	
399	Electronic, elastic and thermoelectric performance in n-type Sr-filled brittle skutterudite. <b>2020</b> , 592, 412209	4
398	Improvement of Thermoelectric Properties of Evaporated ZnO:Al Films by CNT and Au Nanocomposites. <b>2020</b> , 124, 12713-12722	3
397	Enhanced Thermoelectric Performance in Li Doped SnS via Carrier Concentration Optimization. <b>2020</b> , 738, 012016	1
396	Thermal Conductivity of High-Temperature Phases of Cu <sub>2</sub> S from Ab Initio Molecular Dynamics: Advent of Lattice-Site Hopping. <b>2020</b> , 124, 12318-12323	
395	Investigation on carrier mobility when comparing nanostructures and bands manipulation. <b>2020</b> , 12, 12741-12747	9
394	Room temperature thermoelectric performance of Methyl Ammonium Lead Iodide Perovskite and their MWCNT-PANI composites. <b>2020</b> , 17, 100275	6
393	Enhanced performance nanostructured thermoelectric converter for self-powering health sensors. <b>2020</b> , 74, 104854	10
392	Rapid thermal annealing induced the c-axis (00 l) preferred orientation and the p-type thermoelectric properties of Bi-Sb-Te thin films. <b>2020</b> , 706, 138094	4

391	Thermoelectric Enhancements in PbTe Alloys Due to Dislocation-Induced Strains and Converged Bands. <b>2020</b> , 7, 1902628	39
390	Enhanced thermoelectric performance of nanostructured manganese telluride via antimony doping. <b>2020</b> , 836, 155374	5
389	Phonon Engineering for Thermoelectric Enhancement of p-Type Bismuth Telluride by a Hot-Pressing Texture Method. <b>2020</b> , 12, 31612-31618	19
388	A comprehensive study of phonon thermal transport in 2D IV-VI semiconductors MX (M = Ge, Sn; X = S, Se). <b>2020</b> , 384, 126676	2
387	Transport Properties. <b>2020</b> , 249-324	
386	Advances in Atomic Layer Deposition (ALD) Nanolaminate Synthesis of Thermoelectric Films in Porous Templates for Improved Seebeck Coefficient. <b>2020</b> , 13,	8
385	Sb <sub>2</sub> Si <sub>2</sub> Te <sub>6</sub> : A Robust New Thermoelectric Material. <b>2020</b> , 2, 89-91	12
384	Identifying the Origins of High Thermoelectric Performance in Group IIIA Element Doped PbS. <b>2020</b> , 12, 14203-14212	8
383	Nanostructure Engineering and Performance Enhancement in FeO-Dispersed CuSbS Thermoelectric Composites with Earth-Abundant Elements. <b>2020</b> , 12, 17852-17860	10
382	Ultralow Thermal Conductivity and Thermoelectric Properties of Rb <sub>2</sub> Bi <sub>8</sub> Se <sub>13</sub> . <b>2020</b> , 32, 3561-3569	14
381	Chalcogenides by Design: Functionality through Metavalent Bonding and Confinement. <b>2020</b> , 32, e1908302	91
380	Titanium nitride halides monolayers: promising 2D anisotropic thermoelectric materials. <b>2020</b> , 32, 205503	7
379	Study on thermoelectric properties of CrI <sub>3</sub> monolayer. <b>2020</b> , 13, 045001	3
378	Thermoelectric applications of chalcogenides. <b>2020</b> , 31-56	1
377	Ultrahigh Average Realized in p-Type SnSe Crystalline Thermoelectrics through Producing Extrinsic Vacancies. <b>2020</b> , 142, 5901-5909	51
376	First non-centrosymmetric antimony chalcogenides containing mixed cations of alkali and alkaline-Earth: Ba <sub>14</sub> Na <sub>4</sub> Sb <sub>11</sub> S <sub>31</sub> Cl <sub>3</sub> featuring unique disordered 43 helical chains of [Sb <sub>5</sub> S <sub>18</sub> ] <sub>21</sub> . <b>2020</b> , 289, 121538	3
375	Atomic disordering advances thermoelectric group IV telluride alloys with a multiband transport. <b>2020</b> , 15, 100247	17
374	In-Plane Thermoelectric Properties of Flexible and Room-Temperature-Doped Carbon Nanotube Films. <b>2020</b> , 3, 6929-6936	13

373	Thermoelectric properties of $\text{Pb}_{0.833}\text{Na}_{0.017}(\text{Zn}_{0.85}\text{Al}_{0.15})_{0.15}\text{Te}$ -Te composite. <b>2020</b> , 46, 18683-18689	4
372	Transport and Thermoelectric Properties of $\text{SnX}$ (X = S or Se) Bilayers and Heterostructures. <b>2020</b> , 3, 6946-6955	6
371	Effects of isovalent doping on the thermoelectric properties of environmentally-friendly phosphide $\text{Ag}_6\text{Ge}_{10}\text{P}_{12}$ . <b>2020</b> , 59, 075508	1
370	Nanoscale defect structures advancing high performance n-type PbSe thermoelectrics. <b>2020</b> , 421, 213437	19
369	Manipulating the Ge Vacancies and Ge Precipitates through Cr Doping for Realizing the High-Performance GeTe Thermoelectric Material. <b>2020</b> , 16, e1906921	80
368	Effect of sintering pressure on electrical transport and thermoelectric properties of polycrystalline SnSe. <b>2020</b> , 43, 1	4
367	Anomalously Large Seebeck Coefficient of $\text{CuFeS}_2$ Derives from Large Asymmetry in the Energy Dependence of Carrier Relaxation Time. <b>2020</b> , 32, 2639-2646	16
366	Cu Interstitials Enable Carriers and Dislocations for Thermoelectric Enhancements in $\text{n-PbTe}_{0.75}\text{Se}_{0.25}$ . <b>2020</b> , 6, 523-537	33
365	Evaluation of Thermoelectric Properties of $\text{Ag}_{0.366}\text{Sb}_{0.558}\text{Te}$ . <b>2020</b> , 532, 1900561	1
364	Photon treatment effect on the surface and figure of merit of thermoelectric material $\text{Bi}_2\text{Te}_3/\text{SnSe}$ . <b>2020</b> , 9, 1	2
363	Thickness-dependent thermoelectric properties of evaporated ZnO:Al films assisted by RF atomic source. <b>2020</b> , 127, 055301	2
362	Development and investigation of the effective thermoelectric materials for the multisectional generator thermoelements. <b>2020</b> , 20, 295-304	3
361	Structural and thermoelectric properties of Zr-doped $\text{TiPdSn}$ half-Heusler compound by first-principles calculations. <b>2020</b> , 741, 137055	10
360	Achieving high-performance p-type $\text{SmMg}_2\text{Bi}_2$ thermoelectric materials through band engineering and alloying effects. <b>2020</b> , 8, 15760-15766	9
359	Theoretical and experimental evaluation of thermoelectric performance of alkaline earth filled skutterudite compounds. <b>2020</b> , 284, 121201	4
358	Toward Accelerated Thermoelectric Materials and Process Discovery. <b>2020</b> , 3, 2240-2257	42
357	Realizing both n- and p-types of high thermoelectric performance in $\text{Fe}_{1-x}\text{Ni}_x\text{TiSb}$ half-Heusler compounds. <b>2020</b> , 8, 3156-3164	6
356	Achieving high room-temperature thermoelectric performance in cubic $\text{AgCuTe}$ . <b>2020</b> , 8, 4790-4799	28

- 355 Solution synthesis ultrathin PbTe<sub>0.5</sub>Se<sub>0.5</sub> nanowires and the low lattice thermal conductivity. **2020**, 141, 109370 1
- 354 Thermoelectric properties of Cu<sub>4</sub>Ge<sub>3</sub>Se<sub>5</sub> with an intrinsic disordered zinc blende structure. **2020**, 8, 3431-34376
- 353 Assessing the limitations of transparent conducting oxides as thermoelectrics. **2020**, 8, 11948-11957 9
- 352 Responsive Nanomaterials for Sustainable Applications. **2020**, 1 1
- 351 Enhancing thermoelectric properties of monolayer GeSe via strain-engineering: A first principles study. **2020**, 521, 146256 14
- 350 Structure, microstructure and thermoelectric properties of germanite-type Cu<sub>22</sub>Fe<sub>8</sub>Ge<sub>4</sub>S<sub>32</sub> compounds. **2020**, 831, 154767 6
- 349 Exploring electronic, optoelectronic, and thermoelectric properties of ternary compound MgSrSe<sub>2</sub> from first-principles study. **2020**, 10, 045010 1
- 348 High thermoelectric figure of merit and thermopower of HfTe at room temperature. **2020**, 32, 345501 1
- 347 Organic thermoelectricity based on DNA molecules. **2020**, 95, 065004 1
- 346 Thermogalvanic Hydrogel for Synchronous Evaporative Cooling and Low-Grade Heat Energy Harvesting. **2020**, 20, 3791-3797 83
- 345 Thermionic and thermoelectric energy conversion. **2021**, 253-284 2
- 344 Effect of plastic deformation on microstructure and thermoelectric properties of Mg<sub>2</sub>Sn alloys. **2021**, 9, 123-129 1
- 343 Effect of surfactant concentration on the morphology and thermoelectric power factor of PbTe nanostructures prepared by a hydrothermal route. **2021**, 125, 114396 2
- 342 Optical and thermoelectric properties of graphenylene and octagraphene nanotubes from first-principles calculations. **2021**, 186, 109999 5
- 341 Influence of the spin-orbit coupling effect on the electronic and thermoelectric properties of Cs<sub>2</sub>M<sub>16</sub> (M = Zr, Hf) variant perovskites. **2021**, 134, 111112 4
- 340 Band flattening and phonon-defect scattering in cubic SnSe<sub>1-x</sub>AgSbTe<sub>2</sub> alloy for thermoelectric enhancement. **2021**, 16, 100298 8
- 339 Ba<sub>3</sub>[LiSbS<sub>2</sub>(S<sub>2</sub>)<sub>2</sub>Cl<sub>2</sub>]: The first zero-dimensional (0D) lithium metal thioantimonate featuring molecular anions of [LiSbS<sub>2</sub>(S<sub>2</sub>)<sub>2</sub>Cl<sub>2</sub>]<sub>6</sub>. **2021**, 294, 121873 1
- 338 Preparing bulk Cu-Ni-Mn based thermoelectric alloys and synergistically improving their thermoelectric and mechanical properties using nanotwins and nanoprecipitates. **2021**, 17, 100332 8



- 337 Layered cobalt oxide epitaxial films exhibiting thermoelectric  $ZT = 0.11$  at room temperature. **2021**, 9, 274-280 7
- 336 The Effect of Crystal Mismatch on the Thermoelectric Performance Enhancement of Nano  $\text{Cu}_2\text{Se}$ . **2021**, 7, 2
- 335 Organic thermoelectric thin films with large p-type and n-type power factor. **2021**, 56, 4291-4304 5
- 334 Grain size mediated electrical and thermoelectric performances of mechanically alloyed  $\text{Sb}_2\text{Te}_3$  nanoparticles. **2021**, 858, 157732 2
- 333 The reduction of thermal conductivity in Cd and Sn co-doped  $\text{Cu}_3\text{SbSe}_4$ -based composites with a secondary-phase CdSe. **2021**, 56, 4727-4740 4
- 332 High thermoelectric performance by chemical potential tuning and lattice anharmonicity in  $\text{GeTe}_{1-x}\text{Sb}_x$  compounds. **2021**, 8, 1205-1214 0
- 331 Enhanced thermoelectric performance of p-type sintered BiSbTe-based composites with  $\text{AgSbTe}_2$  addition. **2021**, 47, 725-731 9
- 330 Low intrinsic thermal conductivity of Spark Plasma Sintered dense  $\text{KNbO}_3$  and  $\text{NaNbO}_3$  perovskite ceramics. **2021**, 695, 178807 2
- 329 Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. **2021**, 133, 272-277 6
- 328 Strong Valence Band Convergence to Enhance Thermoelectric Performance in PbSe with Two Chemically Independent Controls. **2021**, 60, 268-273 11
- 327 Measurement techniques of thermoelectric devices and modules. **2021**, 521-537
- 326 Boosting the performance of printed thermoelectric materials by inducing morphological anisotropy. **2021**, 13, 5202-5215 3
- 325 Thermoelectric Transport Performance of Nickel-doped  $\text{CuGaTe}_2$ . **2021**, 0-0
- 324 Cation disorder and bond anharmonicity synergistically boosts the thermoelectric performance of p-type  $\text{AgSbSe}_2$ . **2021**, 23, 5522-5530 3
- 323 SnSe, the rising star thermoelectric material: a new paradigm in atomic blocks, building intriguing physical properties. **2021**, 8, 1847-1865 9
- 322 Nanostructured thermoelectric materials. **2021**, 261-311
- 321 Crystal Structure and Physical Properties of the Lanthanum Chalcoantimonate  $\text{TlLa}_2\text{Sb}_3\text{Se}_9$ . **2021**, 647, 81-85
- 320 Traditional thermoelectric materials and challenges. **2021**, 139-161

319	NalnX2 (X = S, Se) layered materials for energy harvesting applications: first-principles insights into optoelectronic and thermoelectric properties. <b>2021</b> , 32, 3878-3893	4
318	High-performance thermoelectrics based on metal selenides. <b>2021</b> , 217-246	1
317	Ultralow Thermal Conductivity and High Thermoelectric Performance in AgCuTeSe through Isoelectronic Substitution. <b>2021</b> , 13, 868-877	6
316	Thermal analysis in studying the phase problem. <b>2021</b> , 217-246	
315	Advances in the applications of thermoelectric materials. <b>2021</b> , 313-337	
314	Progress of hybrid nanocomposite materials for thermoelectric applications. <b>2021</b> , 2, 1927-1956	10
313	Advances in thermal conductivity for energy applications: a review. <b>2021</b> , 3, 012002	6
312	Materials development and module fabrication in highly efficient lead tellurides. <b>2021</b> , 247-267	
311	Strategies for Manipulating Phonon Transport in Solids. <b>2021</b> , 15, 2182-2196	3
310	CaSbO and CaBiO: two promising mixed-anion thermoelectrics. <b>2021</b> , 9, 20417-20435	3
309	Vacancy defect control of colossal thermopower in FeSb2. <b>2021</b> , 6,	5
308	Enhanced atomic ordering leads to high thermoelectric performance in AgSbTe. <i>Science</i> , <b>2021</b> , 371, 722-723	110
307	Exploring a Superlattice of SnO-PbO: A New Material for Thermoelectric Applications. <b>2021</b> , 4, 2081-2090	2
306	Ultra-high Seebeck coefficient of nanostructured Sb-substituted PbTe and fabrication of a thermoelectric generator module. <b>2021</b> , 44, 1	0
305	Thermally insulative thermoelectric argyrodites. <b>2021</b> , 48, 198-198	10
304	Boosting the thermoelectric performance of Fe2VAl type Heusler compounds by band engineering. <b>2021</b> , 103,	10
303	Thermoelectric Performance Enhancement in BiSbTe Alloy by Microstructure Modulation via Cyclic Spark Plasma Sintering with Liquid Phase. <b>2021</b> , 31, 2009681	28
302	Composition-segmented BiSbTe thermoelectric generator fabricated by multimaterial 3D printing. <b>2021</b> , 81, 105638	15

301	Discordant Gd and Electronic Band Flattening Synergistically Induce High Thermoelectric Performance in n-type PbTe. 1625-1632	14
300	Enhanced thermoelectric performance of Bi <sub>0.5</sub> Sb <sub>1.5</sub> Te <sub>3</sub> via Ni-doping: A Shift of peak ZT at elevated temperature via suppressing intrinsic excitation. <b>2021</b> ,	3
299	Improved Thermoelectric Properties of BiSbTe-AgBiSe <sub>2</sub> Alloys by Suppressing Bipolar Excitation. <b>2021</b> , 4, 2944-2950	9
298	Chemical Composition Engineering Leading to the Significant Improvement in the Thermoelectric Performance of AgBiSe <sub>2</sub> -Based n-Type Solid Solutions. <b>2021</b> , 4, 2899-2907	2
297	Liquid-Phase Synthesis, Sintering, and Transport Properties of Nanoparticle-Based Boron-Rich Composites. <b>2021</b> , 33, 2099-2109	1
296	Parallel Dislocation Networks and Cottrell Atmospheres Reduce Thermal Conductivity of PbTe Thermoelectrics. <b>2021</b> , 31, 2101214	15
295	Ultra-high thermoelectric performance in SnTe by the integration of several optimization strategies. <b>2021</b> , 17, 100350	13
294	Possible negative correlation between electrical and thermal conductivity in p-doped WSe <sub>2</sub> single crystal. <b>2021</b> , 8, 045902	0
293	Relationship Between Tensile Strength and Durability of Oxide Thermoelectric Modules. <b>2021</b> , 50, 3996-4005	
292	Study of electronic structure, elastic properties and thermodynamic properties of three PbTe phases: First-principles calculations. <b>2021</b> , 232, 166533	0
291	Superior Conversion Efficiency Achieved in GeP/h-BN Heterostructures as Novel Flexible and Ultralight Thermoelectrics. <b>2021</b> , 13, 18800-18808	4
290	Thermoelectric Films for Electricity Generation. 299-337	
289	Influence of Mg loss on the phase stability in Mg <sub>2</sub> X (X = Si, Sn) and its correlation with coherency strain. <b>2021</b> , 208, 116737	5
288	Structural features and thermoelectric performance of Sb- and Bi-doped Cu <sub>2</sub> SnSe <sub>3</sub> compounds. <b>2021</b> , 40, 2474-2485	2
287	Manipulation of Defects for High-Performance Thermoelectric PbTe-Based Alloys. <b>2021</b> , 2, 2100016	4
286	The multi-dimensional approach to synergistically improve the performance of inorganic thermoelectric materials: A critical review. <b>2021</b> , 14, 103103	2
285	Low thermal conductivity of SrTiO <sub>3</sub> □LaTiO <sub>3</sub> and SrTiO <sub>3</sub> □rNbO <sub>3</sub> thermoelectric oxide solid solutions. <b>2021</b> , 104, 4075-4085	1
284	Enhanced thermoelectric performance in MnTe due to doping and in-situ nanocompositing effects by Ag <sub>2</sub> S addition. <b>2021</b> , 7, 577-584	4

- 283 Compromise between band structure and phonon scattering in efficient n-Mg<sub>3</sub>Sb<sub>2-x</sub>Bi<sub>x</sub> thermoelectrics. **2021**, 18, 100362 15
- 282 Dimensionality effects in high-performance thermoelectric materials: Computational and experimental progress in energy harvesting applications. e1547 3
- 281 Constructing of highly porous thermoelectric structures with improved thermoelectric performance. **2021**, 14, 3608-3615 2
- 280 Enhanced thermoelectric performance of Bi<sub>0.3</sub>Sb<sub>1.7</sub>Te<sub>3</sub> based alloys by dispersing TiC ceramic nanoparticles. **2021**, 863, 158376 3
- 279 Alloying Cr<sub>2/3</sub>Te in AgCrSe<sub>2</sub> compound for improving thermoelectrics. **2021**, 118, 193902 1
- 278 Progress in the Research on Promising High-Performance Thermoelectric Materials. **2021**, 16, 268-281 2
- 277 Mechanisms of Heat Transfer in Thermoelectric Materials. **2021**, 16, 308-315 1
- 276 Systematic Access of Ternary Organotetrel-Copper Chalcogenide Clusters by [PhTE] Anions (T=Si, Sn; E=S, Se). **2021**, 27, 11167-11174 2
- 275 Contrasting Thermoelectric Transport Properties of n-Type PbS Induced by Adding Ni and Zn. **2021**, 4, 6284-6289 0
- 274 Effects of the Interface between Inorganic and Organic Components in a BiTe-Polypyrrole Bulk Composite on Its Thermoelectric Performance. **2021**, 14, 1 1
- 273 Using highly reactive tellurium precursors to synthesize organic hybrid indium-tellurides. **2021**, 298, 122109 3
- 272 Low carrier concentration leads to high in-plane thermoelectric performance in n-type SnS crystals. 1 3
- 271 Grain size-induced enhancement of thermoelectric performance of Cu<sub>3</sub>Sb<sub>1-x</sub>In<sub>x</sub>Se<sub>4</sub> materials. **2021**, 14, 2151026 1
- 270 AgSn[Bi<sub>1-x</sub>Sb<sub>x</sub>]Se<sub>3</sub>: Synthesis, Structural Characterization, and Electrical Behavior. **2021**, 11, 864 1
- 269 Structural and thermoelectric properties of Pb<sub>4</sub>In<sub>2.6</sub>Bi<sub>3.4</sub>Se<sub>13</sub>. **2021**, 36, 151-158 1
- 268 PbmBi<sub>2</sub>S<sub>3+m</sub> Homologous Series with Low Thermal Conductivity Prepared by the Solution-Based Method as Promising Thermoelectric Materials. **2021**, 33, 6003-6011 1
- 267 Tuned Fermi Level and Improved Thermoelectric Performance in Bi<sub>2</sub>Te<sub>3</sub> Nanocomposites Reinforced with g-C<sub>3</sub>N<sub>4</sub> Nanosheets. **2021**, 10, 071017 0
- 266 Suppression of secondary phase in CrN matrix to boost the high-temperature thermoelectric performance. **2021**, 19, 100420 2

265	Interface effect and band engineering in Bi <sub>2</sub> Te <sub>3</sub> :C and Bi <sub>2</sub> Te <sub>3</sub> :Ni-Cu with enhanced thermopower for self-powered wearable thermoelectric generator. <b>2021</b> , 868, 158905	3
264	Thermoelectric Transport Properties of TmAg <sub>1-x</sub> Cu <sub>x</sub> Te <sub>2</sub> solid solutions. <b>2021</b> , 7, 886-893	0
263	Ultra-low lattice thermal conductivity and high thermoelectric efficiency of K <sub>3</sub> AuO. <b>2021</b> , 130, 045101	1
262	A novel mechanical-thermal-electrical thermal protection system concept and its multi-scale performance evaluation for hypersonic launch vehicles. <b>2021</b> , 268, 113962	0
261	High-Performance Thermoelectric Energy Conversion: A Tale of Atomic Ordering in AgSbTe <sub>2</sub> . <b>2021</b> , 6, 2825-2837	11
260	Nanostructuring Bi <sub>2</sub> Te <sub>3</sub> -Based Thermoelectric Thin-Films Grown Using Pulsed Laser Deposition.	
259	Thermoelectric power properties of Ge doped PbTe alloys. <b>2021</b> , 872, 159630	9
258	Regulating Te Vacancies through Dopant Balancing via Excess Ag Enables Rebounding Power Factor and High Thermoelectric Performance in p-Type PbTe. <b>2021</b> , 8, e2100895	9
257	Research status and performance optimization of medium-temperature thermoelectric material SnTe.	0
256	Achievement of Excellent Thermoelectric Properties in Cu-Se-S Compounds via In Situ Phase Separation. <b>2021</b> , 60, 13269-13277	1
255	Thermoelectric degrees of freedom determining thermoelectric efficiency. <b>2021</b> , 24, 102934	4
254	Ab initio calculations of structural, electronic, magnetic and thermoelectric properties of Cr <sub>1-x</sub> Al <sub>x</sub> P. 1-11	2
253	Optimizing thermocouple's ZT through design innovation. <b>2021</b> , 11, 19338	1
252	Self-powered skin electronics for energy harvesting and healthcare monitoring. <b>2021</b> , 21, 100786	13
251	Thermoelectric effect and a thermoelectric generator based on carbon nanostructures: achievements and prospects. <b>2021</b> , 64, 535-557	1
250	Anisotropic thermoelectric transport properties in polycrystalline SnSe <sub>2</sub> *. <b>2021</b> , 30, 067101	1
249	BaBi <sub>2</sub> O <sub>6</sub> : A Promising n-Type Thermoelectric Oxide with the PbSb <sub>2</sub> O <sub>6</sub> Crystal Structure. <b>2021</b> , 33, 7441-7456	2
248	Effect of ball-milling on the phase formation and enhanced thermoelectric properties in zinc antimonides. <b>2021</b> , 271, 115274	3

247	Effect of exchange-correlation functional type and spin-orbit coupling on thermoelectric properties of ZrTe <sub>2</sub> . <b>2021</b> , 302, 122414	1
246	In-situ formed nano-pore induced by Ultrasonication boosts the thermoelectric performance of Cu <sub>2</sub> Se compounds. <b>2021</b> , 881, 160639	4
245	Nearly isotropic transport properties in anisotropically structured n-type single-crystalline Mg <sub>3</sub> Sb <sub>2</sub> . <b>2021</b> , 21, 100508	4
244	Band convergence and nanostructure modulations lead to high thermoelectric performance in SnPb <sub>0.04</sub> Te-y% AgSbTe <sub>2</sub> . <b>2021</b> , 21, 100505	7
243	Synthesis and characterization of G/TiO <sub>1.80</sub> bulk composite thermoelectric material under high temperature and high pressure. <b>2021</b> , 47, 31852-31859	0
242	Bridging the miscibility gap towards higher thermoelectric performance of PbS. <b>2021</b> , 220, 117337	4
241	Optimising the thermoelectric properties of Bi <sub>2</sub> Sr <sub>2</sub> Co <sub>2</sub> O <sub>y</sub> using Ag substitution and Nano-SiC doping. <b>2021</b> , 47, 30657-30664	1
240	Multi-Principal-Element Approach to High-Performance Thermoelectric Materials. <b>2022</b> , 491-499	1
239	Optimization of thermoelectric power factor of (013)-oriented Ag <sub>2</sub> Se films via thermal annealing. <b>2022</b> , 145, 111525	3
238	Solar Heating and Cooling Systems. <b>2021</b> , 329-445	
237	Rationally optimized carrier effective mass and carrier density leads to high average ZT value in n-type PbSe.	5
236	Environmentally friendly thermoelectric sulphide Cu <sub>2</sub> ZnSnS <sub>4</sub> single crystals achieving a 1.6 dimensionless figure of merit ZT. <b>2021</b> , 9, 15595-15604	5
235	Low-dimensional and nanocomposite thermoelectric materials. <b>2021</b> , 147-182	
234	La <sub>12</sub> Sb <sub>9</sub> S <sub>38</sub> : a new semiconducting lanthanum antimony polysulfide with a mixed La/Sb site. <b>2021</b> , 9, 6553-6559	0
233	Effect of iodine doping on the electrical, thermal and mechanical properties of SnSe for thermoelectric applications. <b>2021</b> , 23, 4230-4239	4
232	Tin Sulfide: A New Nontoxic Earth-Abundant Thermoelectric Material. <b>2019</b> , 47-61	1
231	Nanoscale Self-assembled Oxide Bulk Thermoelectrics. <b>2014</b> , 327-361	2
230	Thermoelectric Properties of p-Type Skutterudite Nanocomposites. <b>2014</b> , 271-299	0

229	Enhanced thermoelectric performance of Se-doped PbTe bulk materials via nanostructuring and multi-scale hierarchical architecture. <b>2017</b> , 725, 563-572	29
228	Investigation of thermal radiation effects on thermoelectric module performance by an improved model. <b>2020</b> , 477, 228713	1
227	Phase structure, phase transition and thermoelectric properties of pristine and Br doped SnSe <sub>2</sub> . <b>2020</b> , 289, 121468	6
226	Discovery of ZrCoBi based half Heuslers with high thermoelectric conversion efficiency. <b>2018</b> , 9, 2497	154
225	Chapter 2:Chalcogenide Thermoelectric Materials. <b>2016</b> , 27-59	4
224	Enhancement of the anisotropic thermoelectric power factor of topological crystalline insulator SnTe and related alloys via external perturbations. <b>2019</b> , 7, 25573-25585	18
223	First-principles investigation on the thermoelectric performance of half-Heusler compound CuLiX(X = Se, Te). <b>2021</b> , 33, 095501	5
222	First-principles study of vibrational entropy effects on the PbTe-SrTe phase diagram. <b>2018</b> , 2,	3
221	Controlling phonon lifetimes via sublattice disordering in AgBiSe <sub>2</sub> . <b>2020</b> , 4,	3
220	Thermoelectric Properties of Graphene Like Nanotube Structure Due to Next-to-nearest Neighbor Hopping Amplitude. <b>2020</b> , 9, 051009	1
219	Thermal Conductivity of Nanostructured Thermoelectric Materials. <b>2005</b> , 42-1-42-16	13
218	Recent Trends for the Design and Optimization of Thermoelectric Materials [A Theoretical Perspective. <b>2005</b> , 8-1-8-27	2
217	Low-Dimensional Thermoelectricity. <b>2005</b> , 108, 609-634	111
216	Manipulation of Band Degeneracy and Lattice Strain for Extraordinary PbTe Thermoelectrics. <b>2020</b> , 2020, 8151059	13
215	Thermoelectric Properties of n-type CoSb <sub>3</sub> Nanocomposite Prepared by in-situ Solvothermal Synthesis and Hot Pressing. <b>2008</b> , 23, 715-718	6
214	Recent Progress of Thermoelectric Nano-composites. <b>2010</b> , 25, 561-568	34
213	Enhanced Thermoelectric Performance in Na/Se Doped p-type AgS-bTe <sub>2</sub> Compound. <b>2011</b> , 26, 680-684	3
212	Effects of Co Doping on the Thermoelectric Properties of Cu <sub>3</sub> SbSe <sub>4</sub> at Moderate Temperature. 993, 899-905	1

211	Computational Simulations of Thermoelectric Transport Properties. <b>2016</b> , 53, 273-281	32
210	Morphology Controlled Synthesis of Nanostructured Bi <sub>2</sub> Te <sub>3</sub> . <b>2012</b> , 33, 3977-3980	14
209	Investigation of Low-Cost, Simple Recycling Process of Waste Thermoelectric Modules Using Chemical Reduction. <b>2013</b> , 34, 2167-2170	2
208	Statistical Analysis of a Round-Robin Measurement Survey of Two Candidate Materials for a Seebeck Coefficient Standard Reference Material. <b>2009</b> , 114, 37-55	17
207	Phase stability, crystal structure and thermoelectric properties of Cu doped AgSbTe <sub>2</sub> . <b>2012</b> , 61, 086101	8
206	Effect of Ga doping on the thermoelectric performance of Cu <sub>3</sub> SbSe <sub>4</sub> . <b>2017</b> , 66, 167201	2
205	Bipolar Thermoelectric Effect in a Serially Coupled Quantum Dot System. <b>2011</b> , 50, 105003	2
204	High Thermoelectric Properties in the Sodalite Compounds BaGe <sub>8</sub> As <sub>14</sub> and AGe <sub>7</sub> As <sub>15</sub> (A = Rb, Cs).	
203	A first-principles prediction of thermophysical and thermoelectric performances of SrCeO <sub>3</sub> perovskite.	0
202	First-principles study of the structural, optoelectronic and thermophysical properties of the E <sub>n</sub> SnSe for thermoelectric applications. <b>2021</b> , 12, 1101-1114	3
201	Recent Progress in Multiphase Thermoelectric Materials. <b>2021</b> , 14,	3
200	Multiple Effects Promoting the Thermoelectric Performance of SnTe by Alloying with CuSbTe and CuBiTe. <b>2021</b> ,	1
199	Nanostructured Thermoelectric Materials. <b>2022</b> , 35-45	
198	Growth and thermoelectric characterization of chalcopyrite ZnSnSb <sub>2</sub> with pseudocubic structure. <b>2021</b> , 110417	
197	Bismuth induced Cu <sub>7</sub> Te <sub>4</sub> /Sb <sub>2</sub> Te <sub>3</sub> nanocomposites for higher thermoelectric power factor and carrier properties. 1	0
196	Inorganic semiconducting nanowires for green energy solutions. <b>2021</b> , 34, 100753	5
195	Superlattice Thin-Film Thermoelectric Material and Device Technologies. <b>2005</b> , 49-1-49-16	2
194	Low-Dimensional Thermoelectricity. <b>2006</b> ,	0



193 Silicon Nanowire Thermoelectrics. **2008**,

192 Synthesis and Characterization of AgPb<sub>18</sub>SbTe<sub>20</sub> doped with PbI<sub>2</sub>. **2008**, 33, 311-313

191 Fundamentals of Photoemission from Quantum Dots of Various Nonparabolic Materials. **2009**, 107-172

190 Recent Investigations of Sr-Ca-Co-O Thermoelectric Materials. 47-58

189 Thermal Property of 2D-Disordered Tungsten Chalcogenides. **2010**, 47, 132-135

188 Synthesis of PbTe Nanowires with Enhanced Seebeck Coefficient. 147-153

187 Recent Developments in Thermoelectric Metrology at NIST. 253-264

186 Synthesis and thermoelectric properties of nonstoichiometric AgSbTe<sub>2+x</sub> compounds. **2011**, 60, 018403

3

185 Hydrothermal Synthesis of Nanostructured Bi<sub>2</sub>Te<sub>3</sub> Powder. 231-235

184 Applications of High-Throughput Screening Tools for Thermoelectric Materials. 107-116

183 Field Emission from Quantum Wires of Nonparabolic Semiconductors. **2012**, 3-70

182 Generation Efficiency and Thermal Performance of a Thermoelectric Generator with a High Power Electronic Component. **2012**, 36, 51-56

1

181 The EEM in Ultrathin Films (UFs) of Nonparabolic Semiconductors. **2012**, 3-72

180 Pellet Geometric Effects on a Thermoelectric Generator with a High Power Electronic Component. **2012**, 16, 36-42

179 Thermal Energy Harvesting. 153-184

178 Study on Electrochemical Preparation and Thermo-Electronic Performance of n-Type PbTe Nanoplates. **2013**, 03, 222-229

177 Crystal Chemistry and Phase Diagrams of Three Thermoelectric Alkaline-Earth Cobaltate (Ca-M-Co-O, M=Sr, Zn and La) Systems. 349-361

176 The DSL in Quantum Wells of Non-Parabolic Semiconductors. **2014**, 3-61

- 175 Thermoelectric properties of chalcopyrite  $\text{Cu}_3\text{Ga}_5\text{Te}_9$  with Sb non-isoelectronic substitution for Cu and Te. **2014**, 63, 057201 5
- 174 The ER in Quantum Wells of HD Non-parabolic Semiconductors. **2015**, 1-116
- 173 The EP from Quantum Wells (QWs) of Heavily Doped (HD) Non-parabolic Semiconductors. **2015**, 3-137
- 172 Experimental Thermodynamic Study on the Ag-Sb System at Elevated Temperatures. **2015**, 305-312
- 171 The DRs in Ultrathin Films (UFs) of Heavily Doped (HD) Non-parabolic Materials. **2016**, 117-208
- 170 Defects and thermoelectric performance of ternary chalcopyrite  $\text{CuInTe}_2$ -based semiconductors doped with Mn. **2016**, 65, 067201
- 169 Microstructures and thermoelectric transports in  $\text{PbSe-MnSe}$  nano-composites. **2016**, 65, 107201 2
- 168 Correlation between a Structural Change and a Thermoelectric Performance of a Glassy Carbon Thin Film Induced by Electron Beam Irradiation. **2016**, 29, 156-160
- 167 Investigation of Spark Plasma Sintering Temperature on Microstructure and Thermoelectric Properties of p-type Bi-Sb-Te alloys. **2017**, 24, 115-121 1
- 166 Bottom-up nanostructured silicon for thermoelectrics. **2017**, 539-554
- 165 The Electronic and Thermoelectric Properties of  $\text{Si}_{1-x}\text{V}_x$  Alloys from First Principles. **2017**, 47, 105-109 3
- 164 Enhancement of Phonon Scattering in Epitaxial Hierarchical Nanodot Structures for Thermoelectric Application. **2018**, 61, 296-301
- 163 Thermoelectrics: Material Candidates and Structures I Chalcogenides and Silicon-Germanium Alloys. **2019**, 69-89
- 162 Thermoelectric Properties of  $\text{PbTe}$  Prepared by Spark Plasma Sintering of Nano Powders. **2018**, 25, 384-389
- 161 Polymer-Derived Ceramics: A Novel Inorganic Thermoelectric Material System. **2019**, 229-252
- 160 CHAPTER 6: Organic Hierarchical Thermoelectric Materials. **2019**, 170-212
- 159 Effect of microstructure on thermoelectric conversion efficiency in metastable  $\beta$ -phase  $\text{AgSbTe}_2$ . **2021**, 222, 117443 1
- 158 Contrasting Thermoelectric Transport Behaviors of  $n$ -Type  $\text{PbS}$  Caused by Doping Alkali Metals (Li and Na). **2020**, 2020, 4084532 0

- 157 Significant Improvement in Thermoelectric Performance of AgInSe<sub>2</sub>-Based Composites through In Situ Formation of Ag<sub>2</sub>Se. **2020**, 3, 12468-12474 4
- 156 Thermo-Responsive Nanomaterials for Thermoelectric Generation. **2020**, 269-293
- 155 Introduction. **2020**, 1-28
- 154 Cation vacancy related crystal structure and bandgap and their effects on the thermoelectric performance of Cu-ternary systems CuInTe ( $x=0-0.175$ ). **2020**, 22, 7004-7011
- 153 Thermal conductivity of two-dimensional group IV-element thermocrystals. **2021**, 28, 101626
- 152 Enhanced thermoelectric properties in Sb/Ge core/shell nanowires through vacancy modulation. **2021**, 11, 21921
- 151 An enhancement of thermoelectric performance in Na/Cd co-doped  $\text{Zn}_4\text{Sb}_3$  prepared by NaCl flux. **2022**, 306, 122754 1
- 150 Giant Enhancement of Seebeck Coefficient by Deformation of Silicene Buckled Structure in Calcium-Intercalated Layered Silicene Film. 2101752 5
- 149 Influence of Ag<sub>2</sub>Te on Transport Properties of (AgSbTe)<sub>0.9</sub>(PbTe)<sub>0.1</sub>. **2021**, 66, 983 1
- 148 Advances in thermoelectric (GeTe)<sub>x</sub>(AgSbTe<sub>2</sub>)<sub>100-x</sub>.
- 147 Strategies for boosting thermoelectric performance of PbSe: A review. **2021**, 133699 4
- 146 Enhanced Thermoelectric Performance by Strong Phonon Scattering at the Heterogeneous Interfaces of the MgSn/MgSb High-Content Nanocomposite. **2021**, 13, 56164-56170 1
- 145 Simultaneous enhancements of thermopower and electrical conductivity in quasi-one-dimensional  $\text{YbAlB}_4$  single crystal. **2021**, 119, 223905 1
- 144 Zn-alloyed MAPbBr<sub>3</sub> crystals with improved thermoelectric and photocatalytic properties. **2021**, 5, 8319-8332 1
- 143 Exceptionally low thermal conductivity realized in the chalcopyrite CuFeS<sub>2</sub> via atomic-level lattice engineering. **2022**, 94, 106941 2
- 142 Ultralow lattice thermal conductivity enables high thermoelectric performance in BaAg<sub>2</sub>Te<sub>2</sub> alloys. **2022**, 22, 100591 3
- 141 Synthesis and characterization of new multinary selenides Sn<sub>4</sub>In<sub>5</sub>Sb<sub>9</sub>Se<sub>25</sub> and Sn<sub>6.13</sub>Pb<sub>1.87</sub>In<sub>5.00</sub>Sb<sub>10.12</sub>Bi<sub>2.88</sub>Se<sub>35</sub>. **2022**, 307, 122855 1
- 140 Advanced thermal regulating materials and systems for energy saving and thermal comfort in buildings. **2022**, 24, 100925 3

139	A Review of Lamellar Eutectic Morphologies for Enhancing Thermoelectric and Mechanical Performance of Thermoelectric Materials. 1	1
138	Characterizing thermoelectric stability.. 2022,	1
137	Nanostructured Bulk Thermoelectric Materials for Energy Harvesting. 2022, 199-231	1
136	Ionic liquids and deep eutectics as a transformative platform for the synthesis of nanomaterials.. 2022,	9
135	Minimization of Thermal Conductivity in Nanostructures and Geometric Self-Similar Structures for Thermoelectric Applications. 2022, 71-93	
134	Extraordinary role of Zn in enhancing thermoelectric performance of Ga-doped n-type PbTe. 2022, 15, 368-375	12
133	Boosting thermoelectric performance in Cu <sub>3</sub> SbS <sub>4</sub> -based compounds through incorporating SiC nanoparticles. 2022, 33, 5214	1
132	Low-intermediate-temperature, high-pressure thermoelastic and crystallographic properties of thermoelectric clausthalite (PbSe-I).	
131	Enhanced thermoelectric performance at elevated temperature via suppression of intrinsic excitation in p-type Bi <sub>0.5</sub> Sn <sub>x</sub> Sb <sub>1.5</sub> Te <sub>3</sub> thermoelectric material. 2022, 33, 6018	1
130	Thermodynamic Guidelines for Maximum Solubility.	1
129	Improved thermoelectric performance of nanostructured Bi <sub>2</sub> Te <sub>3</sub> fabricated by solvent-free mechanical alloying. 2022, 279, 125736	0
128	An optimum thermoelectric figure of merit using Ge <sub>2</sub> Se <sub>2</sub> monolayer: An ab-initio approach. 2022, 138, 115060	0
127	Promoted thermoelectric performance of (Ag, Na) co-doped polycrystalline BiSe by optimizing the thermal and electrical transports simultaneously. 2022, 901, 163652	0
126	High Thermoelectric Performance SnTe with a Segregated and Percolated Structure.. 2022,	4
125	Thin films of topological nodal line semimetals as a candidate for efficient thermoelectric converters. 2022, 105,	0
124	Off-Centered Pb Interstitials in PbTe.. 2022, 15,	
123	Bulk and Nanocomposite Thermoelectrics: Synthesis, Properties, and Applications. 2022, 959-1016	
122	Excellent Thermoelectric Properties and Stability Realized in Copper Sulfides Based Composites Via Complex Nanostructuring.	

- 121 The HUP and the ES in Quantum Wells (QWs) of HD Non-parabolic Materials. **2022**, 87-108
- 120 Thermoelectric Transport Properties of N-Type Layered Homologous (Bi<sub>2</sub>)M(Bi<sub>2</sub>Se<sub>3</sub>)N Compounds.
- 119 General strategies to improve thermoelectric performance with an emphasis on tin and germanium chalcogenides as thermoelectric materials. **2022**, 10, 6872-6926 7
- 118 Remarkable electron and phonon transports in low-cost SnS: A new promising thermoelectric material. **2022**, 65, 1143-1155 2
- 117 Thermoelectric investigation of transition metal oxide NiO 2 : A first principles study. 2
- 116 Intrinsic Ultralow Lattice Thermal Conductivity in the Full-Heusler Compound Ba<sub>2</sub>AgSb. **2022**, 17, 2
- 115 Investigations on the Thermoelectric Transport Properties in the Hole-doped La<sub>2</sub>CuO<sub>4</sub>.
- 114 Synergistically optimizing carrier and phonon transport properties in n-type PbTe through I doping and SnSe alloying. **2022**, 100983 0
- 113 Opto-electro-structural properties of Ge-doped Sb<sub>65</sub>Se<sub>35</sub> alloys. **2022**, 16, 280-287
- 112 SiH monolayer : A promising two-dimensional thermoelectric material. 2
- 111 Prediction of thermoelectric performance for monolayer HfNI. **2022**, 45, 1
- 110 Enhancement of the lattice thermal conductivity of two-dimensional functionalized MXenes by inversion symmetry breaking. **2022**, 105, 3
- 109 Non-intrusive movable energy harvesting devices: Materials, designs, and their prospective uses on transportation infrastructures. **2022**, 160, 112340 2
- 108 Mobility-enhanced thermoelectric performance in textured nanograin Bi<sub>2</sub>Se<sub>3</sub>, effect on scattering and surface-like transport. **2022**, 24, 100669 1
- 107 High thermoelectric performance of ZrTe<sub>2</sub>/SrTiO<sub>3</sub> heterostructure. **2021**, 1
- 106 Achieving High Thermoelectric Performance by NaSbTe<sub>2</sub> Alloying in GeTe for Simultaneous Suppression of Ge Vacancies and Band Tailoring. **2022**, 12, 2103385 3
- 105 Comprehensive Review on Thermoelectric Electrodeposits: Enhancing Thermoelectric Performance Through Nanoengineering.. **2021**, 9, 762896 3
- 104 Synergetic Enhancement of the Power Factor and Suppression of Lattice Thermal Conductivity via Electronic Structure Modification and Nanostructuring on a Ni- and B-Codoped p-Type SiTe Alloy for Thermoelectric Application. **2021**, 3, 5621-5631 3

103	Phase Transition Behaviors and Thermoelectric Properties of CuAgTeSe near 400 K.. <b>2021</b> ,	1
102	Accelerated Discovery and Design of Ultralow Lattice Thermal Conductivity Materials Using Chemical Bonding Principles. <b>2022</b> , 32, 2108532	6
101	Homo-composition and hetero-structure nanocomposite Pnma BiSeS - Pnnm BiSeS with high thermoelectric performance. <b>2021</b> , 12, 7192	1
100	SnSe/SnS: Multifunctions Beyond Thermoelectricity. 1, 1-20	4
99	PbTe/PbSe Thermoelectric Nanocomposites: The Impact of Length Modulations on Lowering Thermal Conductivity.	0
98	Valence Disproportionation of GeS in the PbS Matrix Forms PbGeS Inclusions with Conduction Band Alignment Leading to High n-Type Thermoelectric Performance.. <b>2022</b> ,	4
97	Routes to High-Ranged Thermoelectric Performance. 1,	0
96	Theoretical and Experimental Study of CaMgSi Thermoelectric Properties.. <b>2022</b> , 7, 15451-15458	1
95	Enhancements of thermoelectric performance in n-type Bi <sub>2</sub> Te <sub>3</sub> -based nanocomposites through incorporating 2D Mxenes. <b>2022</b> ,	0
94	Excellent thermoelectric properties and stability realized in copper sulfides based composites via complex nanostructuring. <b>2022</b> , 233, 117972	0
93	Recent Advances in Energy Harvesting from Waste Heat Using Emergent Thermoelectric Materials. <b>2022</b> , 155-184	0
92	First-principles investigations of metal chalcogenides Tl <sub>2</sub> Hg <sub>3</sub> X <sub>4</sub> (X=S,Se,Te) for advanced optoelectronic and thermoelectric applications. <b>2022</b> , 123199	0
91	Roles of Defects and Sb-Doping in the Thermoelectric Properties of Full-Heusler Fe <sub>2</sub> TiSn.	
90	Strategies to Improve the Thermoelectric Figure of Merit in Thermoelectric Functional Materials. <b>2022</b> , 10,	1
89	Insights into Low Thermal Conductivity in Inorganic Materials for Thermoelectrics.	6
88	Synthesis, characterization and thermoelectric properties of new non-conjugated nitroxide radical-containing metallopolymer. <b>2022</b> , 253, 125000	1
87	Enhanced thermoelectric composite performance from graphene nanosheets additives in AgSbTe <sub>2</sub> matrix. <b>2022</b> ,	0
86	Large thermoelectric power factors by opening the band gap in semimetallic Heusler alloys. <b>2022</b> , 100742	0

85	Performance evaluation for a combined power generation system of closed-Brayton-cycle and thermoelectric generator with finite cold source at room temperature on hypersonic vehicles. <b>2022</b> , 254, 124444	0
84	Effects of sintering temperature on thermoelectric figure of merit of trace Al <sub>2</sub> O <sub>3</sub> doped n-type ZnO nanocomposites.	0
83	Anomalous Thermoelectric Transport Phenomena from First-Principles Computations of Interband Electron-Phonon Scattering. 2111354	2
82	Strong anharmonicity induced low lattice thermal conductivity and high thermoelectric performance in (CuInTe <sub>2</sub> ) <sub>1-x</sub> (AgSbTe <sub>2</sub> ) <sub>x</sub> system. <b>2022</b> , 121, 013903	
81	Thin film growth and thermoelectric properties of electron conducting oxides. <b>2022</b> , 130, 471-476	0
80	Thermoelectric Zintl Compound In <sub>1-x</sub> Ga <sub>x</sub> Te: Pure Acoustic Phonon Scattering and Dopant-Induced Deformation Potential Reduction and Lattice Shrink.	
79	Thermoelectric Zintl Compound In <sub>1-x</sub> Ga <sub>x</sub> Te: Pure Acoustic Phonon Scattering and Dopant-Induced Deformation Potential Reduction and Lattice Shrink.	1
78	Solid-State Janus Nanoprecipitation Enables Amorphous-Like Heat Conduction in Crystalline Mg <sub>3</sub> Sb <sub>2</sub> -Based Thermoelectric Materials. 2202594	2
77	Dynamic doping and Cottrell atmosphere optimize the thermoelectric performance of n-type PbTe over a broad temperature interval. <b>2022</b> , 101, 107576	1
76	Calculations of the structural, electronic, optical, and elastic parameters of CdSiX <sub>2</sub> (X = P, As) compounds based on first-principles theory.	
75	Thermoelectric performance of multiphase GeSe-CuSe composites prepared by hydrogen decrepitation method.	1
74	Multiple valence bands convergence and strong phonon scattering lead to high thermoelectric performance in p-type PbSe. <b>2022</b> , 13,	6
73	Solution-Grown Ternary Semiconductors: Nanostructuring and Stereoelectronic Lone Pair Distortions in $AB_2X_4$ Materials. <b>2022</b> , 34, 7357-7368	1
72	Advances and Challenges of AgSbSe <sub>2</sub> -based Thermoelectric Materials.	
71	THERMOELECTRIC WASTE HEAT RECOVERY IN AN OXYFUEL MELTER. <b>2022</b> , 93-107	
70	Giant phonon anharmonicity driven by the asymmetric lone pairs in Mg <sub>3</sub> Bi <sub>2</sub> . <b>2022</b> , 27, 100791	0
69	Characterization of polycrystalline SnSe <sub>2</sub> thin films for thermoelectric applications grown by single-stage horizontal tube furnace (SSHTF). <b>2022</b> , 133, 112797	
68	Synthesis and Characterization of New Multinary Selenides A <sub>10</sub> B <sub>18</sub> Se <sub>37</sub> (A=Sn/Pb; B=In/Sb/Bi).	0

- 67 Incompletely Decomposed In 4 SnSe 4 Leads to High-Ranged Thermoelectric Performance in n-Type PbTe. **2202539** ○
- 66 Identifying polymorphic lattice positioning of copper and the effects on the thermoelectric performance of  $\text{PbTe}$ . **2022**, 27, 100833 ○
- 65 Review of polysilicon thermoelectric energy generators. **2022**, 346, 113890 ○
- 64 Thermoelectric transport properties of n-type layered homologous  $(\text{Bi}_2\text{m}(\text{Bi}_2\text{Se}_3)_n)$  compounds. **2022**, 928, 167206 ○
- 63 Breaking the sodium solubility limit for extraordinary thermoelectric performance in p-type PbTe. **2022**, 15, 3958-3967 2
- 62 Fabrication and thermoelectric properties of  $\text{SrTiO}_3/\text{TiO}_2$  composite ceramics. **2022**, ○
- 61 Phase-Boundary Mapping to Engineer Defects in Thermoelectric Materials. **2022**, 1, ○
- 60 Observation of Anomalously High Seebeck Coefficients in the Family of Zintl Phase Semiconductors  $\text{Ca}_{10}\text{RECdSb}_9$  (RE = Rare-Earth Metal). ○
- 59 High Thermoelectric Performance and Low Lattice Thermal Conductivity in Lattice-Distorted High-Entropy Semiconductors  $\text{AgMnSn}_{1-x}\text{PbxSbTe}_4$ . ○
- 58 High-throughput screening of room temperature active Peltier cooling materials in Heusler compounds. **2022**, 8, ○
- 57 Role of inter-electrode coupling on thermoelectricity in an interferometric geometry: A new proposition. ○
- 56 Phonon Scattering Mechanism for Size-Dependent Thermoelectric Properties of  $\text{Bi}_2\text{Te}_3$  Nanoparticles. **2022**, 7, ○
- 55 Vacancy-induced heterogeneity for regulating thermoelectrics in n-type PbTe. **2022**, 121, 122101 ○
- 54 Kerker scattering of electrons: Towards futuristic thermoelectric materials. **2022**, 106, ○
- 53 Sustainable Thermoelectric Materials Predicted by Machine Learning. 2200351 ○
- 52 Transport properties of  $(\text{AgSb}_{1-x}\text{Bi}_x)_2(\text{PbTe})_{0.3}$  thermoelectric compound. **2022**, 48, 787-790 ○
- 51 Phase decomposition of  $\text{Ni}_5\text{Pb}_2\text{Te}_3$  in diffusion bonded PbTe-Ni interfaces: A TEM and thermodynamic study. **2022**, 241, 118385 ○
- 50 Research Progress on Crystal Growth and the Thermoelectric Properties of Zintl Phase  $\text{Mg}_3\text{X}_2$  (X = Sb, Bi) Based Materials. **2022**, 356 ○



- 49 Understanding the influence of Bi/Sb substitution on carrier concentration in Mg<sub>3</sub>Sb<sub>2</sub>-based materials: Decreasing bandgap enhances the degree of impurity ionization. 0
- 48 Enhanced Thermoelectric Performance of Ni<sub>x</sub>Bi<sub>0.5</sub>Sb<sub>1.5</sub>Te<sub>3</sub> via In Situ Formation of NiTe<sub>2</sub> Channels. 0
- 47 Neutron scattering studies on ionic diffusion behaviors of superionic  $\beta$ -Cu<sub>2</sub>Se. **2022**, 121, 151901 0
- 46 When IV-VI meets I-V-VI<sub>2</sub>: a reinvigorating thermoelectric strategy for tin monochalcogenides. 0
- 45 Thermoelectric Silver-Based Chalcogenides. 2204624 1
- 44 High-pressure and high-temperature synthesis of stable S Co<sub>3.6</sub>Ni<sub>0.4</sub>Sb<sub>12</sub> skutterudite compounds. **2022**, 0
- 43 Keynote Review of Latest Advances in Thermoelectric Generation Materials, Devices, and Technologies 2022. **2022**, 15, 7307 2
- 42 Effect of non-uniform heat flux on solar thermoelectric generator. **2022**, 8, 296-301 0
- 41 Fast preparation of Ag<sub>x</sub>Pb<sub>20</sub>SbTe<sub>20</sub> ( $x \approx 0.5$ ) component with high thermoelectric performance. **2022**, 104, 107911 0
- 40 Anharmonic phonon renormalization assisted acoustic branch scattering induces ultralow thermal conductivity and high thermoelectric performance of 2D SnSe. **2023**, 932, 167525 0
- 39 Boost thermoelectric properties of n-type PbSe:Ag<sub>2</sub>Se:Ag in the vicinity of the percolation threshold. **2023**, 224, 115139 0
- 38 Reduced Thermal Conductivity in Nanostructured AgSbTe<sub>2</sub> Thermoelectric Material, Obtained by Arc-Melting. **2022**, 12, 3910 0
- 37 Enhanced thermoelectric figure of merit at near room temperature in n-type binary silver telluride nanoparticles. **2022**, 0
- 36 Thermoelectric field for a coated hole of arbitrary shape in a nonlinearly coupled thermoelectric material. **2022**, 43, 1691-1700 0
- 35 Weak Electron-Phonon Coupling and Enhanced Thermoelectric Performance in n-type PbTe<sub>0.9</sub>Cu<sub>0.1</sub>Se via Dynamic Phase Conversion. 2203325 2
- 34 Realizing high thermoelectric performance of Cu and Ce co-doped p-type polycrystalline SnSe via inducing nanoprecipitation arrays. **2022**, 11, 1671-1686 1
- 33 Thermoelectric Energy Harvesters and Applications. **2023**, 127-154 0
- 32 Recent advances of electrodeposition of Bi<sub>2</sub>Te<sub>3</sub> and its thermoelectric applications in miniaturized power generation and cooling. 1-35 0

- 31 Platonic and Archimedean solids in discrete metal-containing clusters. ○
- 30 Defect Engineering Stabilized AgSbTe<sub>2</sub> with High Thermoelectric Performance. 2208994 ○
- 29 Ultrahigh power factor in thermally evaporated Bi/Ag<sub>2</sub>Se bi-layer obtained using thermal inter-diffusion. **2022**, 132, 235303 ○
- 28 Achieving glass-like lattice thermal conductivity in PbTe by AgBiTe<sub>2</sub> alloying. **2022**, 121, 241903 1
- 27 Investigation of the impact of the thermoelectric geometry on the cooling performance and thermal/mechanic characteristics in a thermoelectric cooler. **2022**, 126471 ○
- 26 TI-based TlAgX (X = S, Se) monolayers with ultra-low lattice thermal conductivity and high ZT: a first-principles study. **2022**, 57, 21607-21619 ○
- 25 Thermoelectric Response Enhanced by Surface/Edge States in Physical Nanogaps. **2023**, 16, 660 ○
- 24 Enhanced thermoelectric performance of p-type PbTe thin films deposited by magnetron sputtering via incorporating SnS. ○
- 23 All Cubic-Phase TAGS Thermoelectrics Over the Entire Mid-Temperature Range. 2206439 ○
- 22 NaBeAs and NaBeSb: Novel Ternary Pnictides with Enhanced Thermoelectric Performance. **2023**, 127, 1733-1743 ○
- 21 Occupational disorder as the origin of flattening of the acoustic phonon branches in the clathrate Ba<sub>8</sub>Ga<sub>16</sub>Ge<sub>30</sub>. **2023**, 107, ○
- 20 Ni<sub>3</sub>W layer-induced strength improvement of solder joint in Bi<sub>2</sub>Te<sub>3</sub> thermoelectric module. 1-8 ○
- 19 Phonon transport in Janus monolayer siblings: a comparison of 1T and 2H-ISbTe. **2023**, 13, 4202-4210 ○
- 18 Space nuclear power. **2023**, 443-488 ○
- 17 Growth and thermal properties of InSe crystal by using the ground simulation apparatus of China space station. **2023**, 337, 133970 ○
- 16 Research Progress of Interfacial Design between Thermoelectric Materials and Electrode Materials. **2023**, 15, 12611-12621 ○
- 15 Strategies to advance earth-abundant PbS thermoelectric. **2023**, 465, 142785 ○
- 14 The impact of sintering temperature on the thermoelectric performance of Cu<sub>2</sub>Se synthesized by solid state reaction method. **2023**, 322, 123998 ○

- 13 Significant enhancement of the thermoelectric properties for MnSb<sub>2</sub>Se<sub>4</sub> through Ag doping. **2023**, 35, 105881 ○
- 12 Thermal conductivity in metallic nanoparticle-packed beds. **2023**, 659, 414841 ○
- 11 Half-Heusler phase TmNiSb under pressure: intrinsic phase separation, thermoelectric performance and structural transition. **2023**, 13, ○
- 10 Powering internet-of-things from ambient energy: a review. **2023**, 5, 022001 ○
- 9 Modulation Doping Leads to Optimized Thermoelectric Properties in n-Type Bi<sub>6</sub>Cu<sub>2</sub>Se<sub>4</sub>O<sub>6</sub> due to Interface Effects. 2300447 ○
- 8 Investigation of the dynamical stability, electronic and thermoelectric properties of RhMnTiZ (Z=Si, Ge, Sn) Heusler compounds. **2023**, 364, 115122 ○
- 7 Advances in Ag<sub>2</sub>Se-based thermoelectrics from materials to applications. ○
- 6 Fine electron and phonon transports manipulation by Mn compensation for high thermoelectric performance of Sb<sub>2</sub>Te<sub>3</sub>(SnTe)<sub>n</sub> materials. **2023**, 33, 101055 ○
- 5 Best thermoelectric efficiency of ever-explored materials. **2023**, 26, 106494 ○
- 4 Enhanced Thermoelectric Properties of Mg<sub>2</sub>Sn-Mg<sub>3</sub>Sb<sub>2</sub> Nanocomposites by Tailoring Matrix/Inclusion Interface toward Energy Harvesting Applications. **2023**, 6, 6133-6140 ○
- 3 Lone Pair Rotation and Bond Heterogeneity Leading to Ultralow Thermal Conductivity in Aikinite. ○
- 2 Controlling the carrier and phonon transport behavior of SnSe via stoichiometric adjustment. **2023**, 51, 13-21 ○
- 1 Low-Dimensionalization Enhancing the Thermoelectric Performance of Higher Manganese Silicide. 2, ○