

CITATION REPORT

List of articles citing

Effect of quantum-well structures on the thermoelectric figure of merit

DOI: 10.1103/physrevb.47.12727

Physical Review B, 1993, 47, 12727-12731.

Source: <https://exaly.com/paper-pdf/23961011/citation-report.pdf>

Version: 2024-04-20

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
2345	Thermoelectric figure of merit of a one-dimensional conductor. <i>Physical Review B</i> , 1993 , 47, 16631-16634	3.3	1976
2344	Use of Quantum-Well Superlattices to Obtain a High Figure of Merit from Nonconventional Thermoelectric Materials. 1993 , 326, 413		20
2343	Thermoelectric power in the balance equation theory. 1994 , 6, L305-L310		9
2342	Thermoelectric devices using semiconductor quantum wells. 1994 , 76, 1899-1901		50
2341	Use of Quantum-Well Superlattices to Increase the Thermoelectric Figure of Merit: Transport and Optical Studies. 1994 , 358, 1035		
2340	Superlattice applications to thermoelectricity. 1995 , 78, 5460-5466		65
2339	Thermoelectric power of hot carriers in the nonequilibrium-statistical-operator approach. <i>Physical Review B</i> , 1995 , 51, 2193-2198	3.3	7
2338	Thermoelectric figure of merit of composite superlattice systems. <i>Physical Review B</i> , 1995 , 51, 13244-13248	3.3	63
2337	Cryogenic cooling using tunneling structures with sharp energy features. <i>Physical Review B</i> , 1995 , 52, 5714-5736	3.3	82
2336	Bi-Sb alloys: an update.		11
2335	Robust thin film thermoelectric devices.		1
2334	Thermoelectrics Run Hot and Cold. 1996 , 272, 1276-1277		162
2333	Thermoelectric properties of rf-sputtered CoSb ₃ films.		1
2332	Thermoelectric figure of merit of Si-Ge multilayered thin films.		
2331	Thermoelectric performance of B ₄ C/B ₉ C heterostructures.		
2330	.		6
2329	Thermoelectric figure of merit of silicide two-dimensional quantum wells.		1

2328	Sputter Deposition of Semiconductor Superlattices for Thermoelectric Applications. 1996 , 450, 467		1
2327	Thermoelectric Properties of RhSb ₃ Crystals and Thin Films. 1996 , 452, 1037		6
2326	Effect of Quantum-Well Structures on the Thermoelectric Figure of Merit in the Si/Si _{1-x} Ge _x System. 1996 , 452, 261		6
2325	High thermoelectric figures of merit in PbTe quantum wells. 1996 , 25, 1121-1127		185
2324	Pulsed laser deposition of Bi ₂ Te ₃ thin films. 1996 , 280, 61-66		78
2323	Phonon-drag effects on thermoelectric power in linear and nonlinear transport conditions. 1996 , 196, 411-423		1
2322	Experimental study of the effect of quantum-well structures on the thermoelectric figure of merit.		4
2321	Low-temperature transport properties of the filled and unfilled IrSb ₃ skutterudite system. 1996 , 79, 8412-8418		74
2320	Phonon-drag effects on thermoelectric power. <i>Physical Review B</i> , 1996 , 54, 5438-5443	3.3	23
2319	Thermoelectric properties of R _x Ce _{1-x} Pd ₃ s (R=Y, La _{0.5} Y _{0.5} , Nd). <i>Physical Review B</i> , 1997 , 55, 1283-1287	3.3	15
2318	Thermoelectric properties of Bi and Bi/sub 2/Te/sub 3/ composites.		1
2317	Thermoelectric transport in low dimensional superlattice systems.		4
2316	Heterostructure integrated thermionic refrigeration.		6
2315	Measurement and Characterization Techniques for Thermoelectric Materials. 1997 , 478, 25		19
2314	Electrical Transport Properties of the Pentatelluride Materials HFTE ₅ and ZRTE ₅ . 1997 , 478, 249		6
2313	Potential of quasicrystals and quasicrystal approximants for new and improved thermoelectric materials.		
2312	Thermal conductivity measurement and microscopy of thin film structures.		1
2311	Thermoelectric Transport in Superlattices. 1997 , 478, 161		4

2310	Quantum Confinement Effects on the Thermoelectric Figure of Merit in Si/Si _{1-x} Ge _x System. 1997 , 478, 169	1
2309	Prospects for High Thermoelectric Figures of Merit in 2D Systems. 1997 , 478, 55	9
2308	Thermal Conductivity and Heat Transfer in Superlattices. 1997 , 478, 85	4
2307	Theoretical Modeling and Improved Thermoelectric Properties in (111) and (001) Oriented PbTe/Pb _{1-x} Eu _x Te MQWs. 1997 , 490, 263	3
2306	On the use of bismuth in quantum wells.	3
2305	Thermoelectrical properties of superlattices.	2
2304	Thermoelectric properties of multilayered p-type SiGe thin films.	0
2303	Effect of one dimensional quantum structures on the thermoelectric figure of merit.	2
2302	Low dimensional thermoelectrics.	17
2301	Thermoelectric Materials: New Approaches to an Old Problem. 1997 , 50, 42-47	687
2300	Transport properties of ZrNiSn-based intermetallics.	3
2299	Size and Interface Effects on Thermal Conductivity of Superlattices and Periodic Thin-Film Structures. 1997 , 119, 220-229	302
2298	Electronic structure and thermoelectric properties of bismuth telluride and bismuth selenide. 1997 , 9, 461-470	374
2297	Novel thermoelectric materials. 1997 , 2, 284-289	30
2296	Thermoelectric power of MBE grown Bi thin films and Bi/CdTe superlattices on CdTe substrates. 1997 , 102, 673-676	27
2295	Timeliness in the development of thermoelectric cooling.	1
2294	.	
2293	In-plane thermoelectric properties of freestanding Si/Ge superlattice structures.	7

- 2292 Design study of the injection and extraction systems for the RIKEN superconducting ring cyclotron.
- 2291 Thermal and electrical properties of Si/Si/sub 0.8/Ge/sub 0.2/ and B/sub 4/C/B/sub 9/C films.
- 2290 Careers in thermoelectricity. 1
- 2289 Good Thermoelectrics. **1998**, 81-157 487
- 2288 Heat conduction in low-dimensional structures.
- 2287 Effect of Ti substitution on the thermoelectric properties of the pentatelluride materials $M_{1-x}Ti_xTe_5$ (M=Hf, Zr). **1998**, 72, 2056-2058 42
- 2286 Carrier pocket engineering to design superior thermoelectric materials using GaAs/AlAs superlattices. **1998**, 73, 2950-2952 98
- 2285 Thermoelectric properties of Bi/sub 2/Te/sub 3//Sb/sub 2/Te/sub 3/ superlattice structure. 1
- 2284 Experimental Study of Phonon-Folding in Si/Ge and Si/Sige Structures Designed for Thermoelectric Applications. **1998**, 545, 111 3
- 2283 In Situ Synthesis of Single-Phase Skutterudite Thin Films (CoSb3 and IrSb3) by Pulsed Laser Deposition. **1998**, 526, 399 1
- 2282 Physical Properties Of Single-Phase Skutterudite Thin-Films (CoSb3 and IrSb3). **1998**, 545, 327 7
- 2281 Thermal Conductivity and Phonon Engineering in Low-Dimensional Structures. **1998**, 545, 357 5
- 2280 Experimental Study of the Effect of the Quantum Well Structures on the Thermoelectric Figure of Merit in Si/Si_{1-x}Gex System. **1998**, 545, 369 8
- 2279 Carrier Pocket Engineering to Design Superior Thermoelectric Materials Using GaAs/AlAs Superlattices. **1998**, 545, 375 4
- 2278 Substitutional Effects on the Thermoelectric Properties of Transition Metal Pentatellurides. **1998**, 545, 381 1
- 2277 Investigation of the Mechanism of the Enhanced Z3DT in PbTe Based Superlattices. **1998**, 545, 479 1
- 2276 Thermoelectric Transport in Superlattices. **1998**, 545, 485 1
- 2275 Thermoelectric Properties of PbTe/Pb_{1-x}Eux Te Quantum Wells. **1998**, 545, 99 2

2274	Potential of Quasicrystals and Quasicrystalline Approximants For Utilization in Small Scale Thermoelectric Refrigeration and Power Generation Applications. 1998 , 553, 489	5
2273	Thermoelectric Properties of and Dopant Distribution in SiC Thin Films. 1999 , 38, 4852-4856	2
2272	Thermoelectric and magnetotransport properties of Bi _{1-x} Sb _x thin films and Bi/CdTe superlattices. 1999 , 11, 5157-5167	7
2271	Thermoelectric properties of Ru-based oxides with a layered structure.	
2270	Thermoelectric characteristics of PbS/EuS superlattices.	
2269	Optimization of the thermoelectric properties of low-dimensional structures via phonon engineering.	2
2268	Multilayer thermoelectric refrigeration in Hg _{1-x} Cd _x Te superlattices. 1999 , 86, 3195-3198	33
2267	Carrier pocket engineering applied to strained Si/Ge superlattices to design useful thermoelectric materials. 1999 , 75, 2438-2440	85
2266	Thermoelectric figure of merit enhancement in Si and SiGe quantum wires due to spatial confinement of acoustic phonons.	
2265	A surfactant-mediated relaxed Si _{0.5} Ge _{0.5} graded layer with a very low threading dislocation density and smooth surface. 1999 , 75, 1586-1588	62
2264	Low-dimensional thermoelectric materials. 1999 , 41, 679-682	232
2263	Effect of electron-phonon interaction on the thermoelectric properties of superlattices. 1999 , 69, 317-323	1
2262	In situ reflection high-energy electron diffraction (RHEED) observation of Bi ₂ Te ₃ /Sb ₂ Te ₃ multilayer film growth. 1999 , 203, 125-130	21
2261	Optical Properties of Bismuth Telluride Thin Films, Bi ₂ Te ₃ /Si(100) and Bi ₂ Te ₃ /SiO ₂ /Si(100). 1999 , 176, 1071-1076	21
2260	Thermoelectric characterization of Si thin films in silicon-on-insulator wafers. 1999 , 86, 3204-3208	46
2259	HEAT CONDUCTION IN NOVEL ELECTRONIC FILMS. 1999 , 29, 261-293	129
2258	THERMOELECTRIC MATERIALS:Holey and Unholey Semiconductors. 1999 , 283, 804-805	638
2257	Thermal conductivity of Si/Ge superlattices.	

2256	Carrier pocket engineering to design superior thermoelectric materials using superlattice structures.	1
2255	Experimental study of the effect of the quantum well structures on the thermoelectric figure of merit in Si/Si/sub 1-x/Ge/sub x/ system.	3
2254	Growth and properties of multilayered skutterudite thin films.	1
2253	Thermoelectric properties of epitaxial PbSrTe and PbSrSe bulk and MQW thin films. 1999,	2
2252	Thermoelectric properties of layered Co-based oxides.	0
2251	PbTe-based quantum-dot thermoelectric materials with high ZT.	4
2250	Thermoelectric transport in multivalley PbTe/PbEuTe quantum wells.	
2249	Thermo-electro-mechanical refrigeration based on transient thermoelectric effects.	2
2248	.	3
2247	Development of quantum well thermoelectric device.	4
2246	Theoretical modeling of thermoelectricity in Bi nanowires.	1
2245	Modification of bismuth telluride for improving thermoelectric properties.	1
2244	Electrodeposition of CoSb/sub 3/ nanowires.	
2243	Phonon drag and inelastic electron scattering by acoustic phonons in semiconductor superlattice.	
2242	Possibilities for improvement in thermoelectric refrigeration.	1
2241	Enhancement of thermoelectric power factor in composite thermoelectrics. 1999, 85, 8205-8216	161
2240	Processing and Characterization of Single-Crystalline Ultrafine Bismuth Nanowires. 1999, 11, 1659-1665	216
2239	Artificially ordered BiSb alloys: growth and transport properties.	

2238	Epitaxial Growth and Thermoelectric Properties of Bi ₂ Te ₃ Based Low Dimensional Structures. 2000 , 626, 211	0
2237	Compositional And Structural Modifications In Ternary Bismuth Chalcogenides And Their Thermoelectric Properties. 2000 , 626, 741	1
2236	Electrodeposition of Bi ₂ Te ₃ Nanowire Composites. 2000 , 626, 1411	1
2235	Structure and Thermoelectric Properties of Me-Substituted In ₄ Sn ₃ O ₁₂ , Me=Y and Ti. 2000 , 153, 349-356	13
2234	Thermal conductivity of symmetrically strained Si/Ge superlattices. 2000 , 28, 199-206	209
2233	Physical vapor transport of lead telluride. 2000 , 216, 273-282	7
2232	Mechanisms of spiral growth in Bi ₂ Te ₃ thin films grown by the hot-wall-epitaxy technique. 2000 , 218, 250-258	30
2231	Effect of titanium carbide addition on the thermoelectric properties of B ₄ C ceramics. 2000 , 115, 523-526	25
2230	Structure and transport properties of polycrystalline Bi films. 2000 , 61, 1979-1983	16
2229	Experimental study of a surfactant-assisted SiGe graded layer and a symmetrically strained Si/Ge superlattice for thermoelectric applications. 2000 , 369, 121-125	8
2228	Enhancement of the thermoelectric figure of merit of Si _{1-x} Ge _x quantum wires due to spatial confinement of acoustic phonons. 2000 , 8, 13-18	24
2227	Polycrystalline LaFe ₃ CoSb ₁₂ material manufactured by melt-freeze-annealing method. 2000 , 40, 285-291	2
2226	Phonon engineering in nanostructures for solid-state energy conversion. 2000 , 292, 155-161	65
2225	Thermoelectric quantum-dot superlattices with high ZT. 2000 , 29, L1-L2	241
2224	Artificially Atomic-scale Ordered Superlattice Alloys for Thermoelectric Applications. 2000 , 626, 241	
2223	Carrier Pocket Engineering for the Design of Low Dimensional Thermoelectrics with High Z ₃ DT. 2000 , 626, 431	2
2222	The Study of the Origin of the Anomalously Large Thermoelectric Power of Si/Ge Superlattice Thin Film. 2000 , 39, 1675-1677	24
2221	An Oxide Single Crystal with High Thermoelectric Performance in Air. 2000 , 39, L1127-L1129	456

2220	Experimental proof-of-principle investigation of enhanced Z3DT in (001) oriented Si/Ge superlattices. 2000 , 77, 1490-1492	151
2219	Thermoelectric figure of merit enhancement in a quantum dot superlattice. 2000 , 11, 327-331	47
2218	Thermoelectric properties of Bi ₂ Sr ₂ Co ₂ O _x polycrystalline materials. 2000 , 76, 2385-2387	207
2217	Theoretical investigation of thermoelectric transport properties of cylindrical Bi nanowires. <i>Physical Review B</i> , 2000 , 62, 4610-4623	3-3 422
2216	Synthesis of Nanocrystalline Bismuth in Reverse Micelles. 2000 , 122, 7114-7115	74
2215	Phonon dispersion effects and the thermal conductivity reduction in GaAs/AlAs superlattices. 2000 , 88, 1498-1503	51
2214	Low-Dimensional Thermoelectric Materials. 2001 , 235-254	2
2213	Electrodeposition of ordered Bi ₂ Te ₃ nanowire arrays. 2001 , 123, 7160-1	271
2212	Multiscale approaches to thermoelectric materials and devices.	1
2211	Chapter 4 Phonon blocking electron transmitting superlattice structures as advanced thin film thermoelectric materials. 2001 , 175-201	35
2210	Phonon Transport in Low-Dimensional Structures. 2001 , 71, 203-259	80
2209	Chapter 8 Heat and electricity transport through interfaces. 2001 , 70, 245-271	16
2208	Experimental study of thermoelectric properties of InSb nanowires.	
2207	Integrated cooling for Si-based microelectronics.	9
2206	Chapter 2 Overview of measurement and characterization techniques for thermoelectric materials. 2001 , 69, 25-49	13
2205	A review of the new thermoelectric materials.	6
2204	Chapter 2 Thermoelectric transport in quantum well and quantum wire superlattices. 2001 , 123-155	2
2203	Chapter 1 Quantum wells and quantum wires for potential thermoelectric applications. 2001 , 71, 1-121	85

2202	Nanometer-sized Bismuth Crystallites Synthesized from a High-temperature Reducing System. 2001 , 676, 891	
2201	Classical Size Effect on In-plane Thermoelectric Transport at Low Dimension. 2001 , 691, 1	1
2200	Experimental Thermopower of Quantum Wires. 2001 , 691, 1	3
2199	Transport Properties of Bi-related Nanowire Systems. 2001 , 635, C4.30.1	5
2198	Studies of the Dielectric Constant of Thin Film Bismuth Nanowire Samples Using Optical Rectometry. 2001 , 635, C4.32.1	1
2197	Overview of Various Strategies and Promising New Bulk Materials for Potential Thermoelectric Applications. 2001 , 691, 1	2
2196	Synthesis and Properties of Lead Selenide Nanocrystal Solids. 2001 , 691, 1	3
2195	Cross-Plane Thermoelectric Properties in Si/Ge Superlattices. 2001 , 691, 1	1
2194	Thermoelectric Properties of PbSe Epitaxial Thin Films and PbSe/EuS Heterostructures. 2001 , 691, 1	
2193	Temperature and Thickness Dependences of Thermoelectric Properties of PbS/EuS Bilayers. 2001 , 691, 1	
2192	The Fabrication and Thermoelectric Properties of Amorphous Si-Ge-Au Bulk Samples. 2001 , 691, 1	1
2191	Thermal Characterization of Nanowire Array in α -Al ₂ O ₃ Matrix. 2001 , 703, 1	10
2190	Modeling the thermoelectric transport properties of nanowires embedded in oriented microporous and mesoporous films. 2001 , 47, 39-50	39
2189	Growth of Ge quantum dot superlattices for thermoelectric applications. 2001 , 227-228, 1111-1115	23
2188	Thermal characterization of Bi ₂ Te ₃ /Sb ₂ Te ₃ superlattices. 2001 , 90, 763-767	113
2187	Percolation transition of thermoelectric properties in PbTe thin films. 2001 , 78, 3238-3240	28
2186	High figure of merit ZT in PbTe and Bi/sub 2/Te/sub 3/ based superlattice structures by thermal conductivity reduction. 2001 ,	7
2185	Synthesis and Characterization of Nanocrystalline Bismuth Telluride. 2001 , 1, 693-695	59

2184	Large Improvement in Thermoelectric Properties in Pressure-Tuned p-Type Sb _{1.5} Bi _{0.5} Te ₃ . 2001 , 13, 2068-2071	163
2183	Thin-film thermoelectric devices with high room-temperature figures of merit. 2001 , 413, 597-602	4253
2182	Epitaxial growth of skutterudite (CoSb ₃) thin films on (001) InSb by pulsed laser deposition. 2001 , 16, 2467-2470	11
2181	Effect of the energy bands nonparabolicity on the electrical conductivity in PbTe/Pb/sub 1-x/Eu/sub x/Te quantum wells.	
2180	Chapter 3 The role of solid-state chemistry in the discovery of new thermoelectric materials. 2001 , 51-100	115
2179	Effects of substrate temperature on thermoelectric properties of amorphous Si/Ge thin films.	
2178	Chapter 6 Thermoelectric properties of the transition metal pentatellurides: Potential low-temperature thermoelectric materials. 2001 , 179-206	8
2177	Chapter 1 Introduction. 2001 , 1-24	8
2176	Pulsed laser deposition of skutterudite thin films. 2001 , 89, 3508-3513	36
2175	Electric-field-effect thermoelectrics. 2001 , 90, 2370-2379	22
2174	Thermoelectric figure of merit for parallel transport in superlattices. 2001 , 79, 3791-3793	3
2173	Effect of oxidation on the thermoelectric properties of PbTe and PbS epitaxial films. 2001 , 78, 1661-1663	54
2172	Threefold enhancement of the thermoelectric figure of merit for pressure tuned Sr ₈ Ga ₁₆ Ge ₃₀ . 2001 , 89, 1730	41
2171	SiGeC/Si superlattice microcoolers. 2001 , 78, 1580-1582	196
2170	Interplay between thermoelectric and thermionic effects in heterostructures. 2002 , 92, 3152-3161	9
2169	Thermoelectric micro devices: current state, recent developments and future aspects for technological progress and applications. 2002 ,	27
2168	A scanning probe microscopy based measurement tool for thermoelectric studies of nanostructures.	
2167	Insights into the Electrodeposition of Bi ₂ Te ₃ . 2002 , 149, C546	207

2166 A unified wave-particle treatment for phonon transport in superlattices.

2165 Micro- and Nanoscale Heat Transfer: Challenges and Opportunities. **2002**, 23, 1-2 1

2164 Transport Properties of Superlattice Nanowires and Their Potential for Thermoelectric Applications. **2002**, 737, 11 2

2163 Measurements of anisotropic thermoelectric properties in superlattices. **2002**, 81, 3588-3590 118

2162 Thermoelectric materials. Smaller is cooler. **2002**, 295, 1248-9 389

2161 Heat Transfer in Nanostructures for Solid-State Energy Conversion. **2002**, 124, 242-252 188

2160 Low temperature thermoelectric modules.

2159 Thermal and Electrical Energy Transport and Conversion in Nanoscale Electron Field Emission Processes. **2002**, 124, 954-962 35

2158 Thermoelectric properties of mixed layered compounds $\text{TiS}_{2-x}\text{Se}_x$ ($0 \leq x \leq 2$). 0

2157 PbTe based superlattice structures with high thermoelectric efficiency. **2002**, 80, 1216-1218 105

2156 Preparation and thermoelectric properties of ZnO-TiB_2 composites.

2155 Thermoelectric properties of $\text{Ca}_3\text{Co}_4\text{O}_9$ -based ceramics textured by templated grain growth method. 1

2154 Quantum and classical size effects on thermoelectric transport in Si/Ge superlattices.

2153 Thermoelectric characteristics of Si/Ge superlattice thin film at low temperature.

2152 Segmented nanowires: a theoretical study of thermoelectric properties.

2151 Thermal conductivity reduction in HgTe/CdTe superlattices. **2002**, 91, 2033-2036 8

2150 Effect of electron concentration on the thickness dependences of the thermoelectric properties of PbTe quantum wells.

2149 Thermoelectric properties of $\beta\text{-FeSi}_2\text{-TiB}_2$ composites.

2148	Thermoelectric Materials: Principles, Structure, Properties, and Applications. 2002 , 1-11	23
2147	High temperature thermoelectric properties of (Ca, Ce) ₄ Mn ₃ O ₁₀ . 2002 , 37, 1123-1131	10
2146	Effect of oxidation on the thermoelectric properties of PbSe thin films. 2002 , 31, 298-303	18
2145	Lead telluride as a thermoelectric material for thermoelectric power generation. 2002 , 322, 205-223	321
2144	Calculations of the charge-carrier mobility and the thermoelectric figure of merit for multiple-quantum-well structures. 2002 , 36, 908-915	7
2143	Self-assembled Ge quantum dots on Si and their applications. 2002 , 237-239, 1892-1897	43
2142	Quantum size effects in PbSe quantum wells. 2002 , 80, 2690-2692	60
2141	Organic-assisted growth of bismuth telluride nanocrystals. 2003 , 374, 410-415	78
2140	A route to fabricate single crystalline bismuth nanowire arrays with different diameters. 2003 , 378, 244-249	84
2139	Mesoscopic thermal and thermoelectric measurements of individual carbon nanotubes. 2003 , 127, 181-186	111
2138	Thermoelectric properties of bismuth telluride quantum wires. 2003 , 127, 649-654	22
2137	Giant electrical power factor in single-walled chiral carbon nanotube. 2003 , 33, 173-180	4
2136	Nonequilibrium electron and phonon transport and energy conversion in heterostructures. 2003 , 34, 201-206	8
2135	Effect of thickness on the thermoelectric properties of PbS thin films. 2003 , 423, 115-118	28
2134	Effect of non-stoichiometry on oxidation processes in n-type PbTe thin films. 2003 , 423, 257-261	14
2133	Oscillatory behaviour of the transport properties in PbTe quantum wells. 2003 , 14, 53-59	40
2132	Direct Electrodeposition of Highly Dense 50 nm Bi ₂ Te _{3-y} Se _y Nanowire Arrays. 2003 , 3, 973-977	140
2131	Electrodeposition of Bi _{1-x} Sb _x Films and 200-nm Wire Arrays from a Nonaqueous Solvent. 2003 , 15, 1676-1681	64

2130	Predicting the Thermal Conductivity of Si and Ge Nanowires. 2003 , 3, 1713-1716	233
2129	Thermoelectricity. 2003 , 681-698	1
2128	Transport properties of SnTeBi ₂ Te ₃ alloys. 2003 , 352, 328-332	10
2127	Cobalt oxides as potential thermoelectric elements: The influence of the dimensionality.	1
2126	Thermal and thermomechanical study of micro-refrigerators on a chip based on semiconductor heterostructures.	1
2125	Quantum well thermoelectric devices and applications.	3
2124	Investigation on the assessment of nano-block integration process for novel thermoelectric materials.	
2123	Cast nanowires and nanowire-based filamentary nanostructures.	
2122	Pulsed laser deposition of Bi ₂ Te ₃ -based thermoelectric thin films. 2003 , 94, 3907-3918	96
2121	Thermoelectric properties of semiconductor quantum wires.	
2120	Hall Effect Measurements on New Thermoelectric Materials. 2003 , 793, 344	1
2119	Influence of Doping Concentration and Ambient Temperature on the Cross-Plane Seebeck Coefficient of InGaAs/InAlAs superlattices. 2003 , 793, 140	5
2118	Superlattice Thin-film Thermoelectric Materials and Devices. 2003 , 793, 131	
2117	Anisotropy in Thermoelectric Properties of CsBi ₄ Te ₆ . 2003 , 793, 206	5
2116	Thermoelectric Properties of the cubic AgPb ₁₀ SbTe ₁₂ . 2003 , 793, 220	1
2115	New Directions for Low Dimensional Thermoelectricity. 2003 , 793, 62	3
2114	Cooling Power Density of SiGe/Si Superlattice Micro Refrigerators. 2003 , 793, 124	7
2113	Measurements of cooling by room-temperature thermionic emission across a nanometer gap. 2003 , 94, 4690-4696	42

2112	AlGaAs superlattice microcoolers. 2003 , 83, 374-376	24
2111	Improvement in the thermoelectric properties of pressure-tuned $\text{K}_2\text{Bi}_8\text{Se}_{13}$. 2003 , 94, 4485-4488	27
2110	Performance measurement system for thermoelectric nanowire arrays.	
2109	Constructal heat trees at micro and nanoscales. 2004 , 96, 5852-5859	48
2108	Template-assisted growth of nanowires using novel nanoporous films fabricated by inorganic nano phase separation. 2004 , 818, 66	1
2107	Calculation of the thermoelectric figure of merit for multilayer structures with quantum wells in the case of carrier scattering by polar optical phonons. 2004 , 38, 1212-1216	1
2106	SEMICONDUCTOR NANOWIRES AND NANOTUBES. 2004 , 34, 83-122	1210
2105	Materials science. Thermoelectricity in semiconductor nanostructures. 2004 , 303, 777-8	795
2104	Structure and properties of CrSi ₂ /Si multilayers. 2004 , 76, 331-335	4
2103	The effect of titanium diboride addition on the thermoelectric properties of FeSi_2 semiconductors. 2004 , 131, 325-329	19
2102	Characterization of nanocrystalline bismuth telluride (Bi_2Te_3) synthesized by a hydrothermal method. 2004 , 265, 558-562	57
2101	Size-controllable sonochemical synthesis of thermoelectric material of Bi_2Se_3 nanocrystals. 2004 , 7, 319-321	28
2100	Nanoscale devices for solid state refrigeration and power generation.	8
2099	Resonant states in the electronic structure of the high performance thermoelectrics $\text{AgPb}_m\text{SbTe}_{2+m}$: the role of Ag-Sb microstructures. 2004 , 93, 146403	134
2098	Perfect orientation ordered in-situ one-dimensional self-assembly of Mn-doped PbSe nanocrystals. 2004 , 126, 14816-21	128
2097	PbSe Nanocrystal Assemblies: Synthesis and Structural, Optical, and Electrical Characterization. 2004 , 4, 159-165	103
2096	Thermoelectric figure of merit of III-V semiconductor nanowires. 2004 , 85, 5986-5988	48
2095	Electronic structure of defects and defect clusters in narrow band-gap semiconductor PbTe. 2004 , 16, S5277-S5288	19

2094	Thermopower enhancement in lead telluride nanostructures. <i>Physical Review B</i> , 2004 , 70,	3-3	479
2093	Thermoelectric properties of layered oxyselenides $\text{La}_{1-x}\text{Sr}_x\text{CuOSe}$ ($x=0$ to 0.2). 2004 , 95, 3594-3597		30
2092	Profiling the thermoelectric power of semiconductor junctions with nanometer resolution. 2004 , 303, 816-8		143
2091	Nanowires. 2004 , 99-146		8
2090	Bismuth Telluride (Bi_2Te_3) Nanowires Synthesized by Cyclic Electrodeposition/Stripping Coupled with Step Edge Decoration. 2004 , 4, 2009-2014		102
2089	A new synthesis of ultrafine nanometre-sized bismuth particles. 2004 , 15, 940-944		38
2088	Thermoelectric figure of merit and maximum power factor in III-V semiconductor nanowires. 2004 , 84, 2652-2654		195
2087	A new thermoelectric material: CsBi_4Te_6 . 2004 , 126, 6414-28		157
2086	Nanoscale heat transfer and nanostructured thermoelectrics.		2
2085	Polymeric Nanocomposites Polyhedral Oligomeric Silsesquioxanes (POSS) as Hybrid Nanofiller. 2004 , 44, 389-410		151
2084	Thermoelectric Properties of Amorphous Ge/Au and Si/Au Thin Films. 2004 , 124, 307-311		5
2083	Progress on the Fabrication and Characterization of High Efficiency Thermoelectric Generators. 2005 , 886, 1		1
2082	The analysis of triangular cycles of cooling and heating. 2005 , 25, 21-30		3
2081	MeV Si ion bombardments of thermoelectric $\text{Bi}_2\text{Te}_3/\text{Sb}_2\text{Te}_3$ multilayer thin films for reducing thermal conductivity. 2005 , 241, 568-572		5
2080	The influence of the Thomson effect on the performance of a thermoelectric cooler. 2005 , 48, 413-418		103
2079	Preparation and thermoelectric properties of $\text{Cd}_3\text{AxTeO}_6$ ($A = \text{In, La, and Bi}$) ceramics. 2005 , 31, 129-133		9
2078	Thermoelectric properties and electrical characteristics of sputter-deposited p-CuAlO ₂ thin films. 2005 , 474, 261-266		106
2077	Growth mechanism and thermoelectric properties of $\text{PbTe}/\text{SnTe}/\text{PbTe}$ heterostructures. 2005 , 493, 41-48		22

2076	Quantum size effects in n-PbTe \bar{p} -SnTe \bar{p} -PbTe heterostructures. 2005 , 86, 063103	50
2075	Synthesis of PbTe Nanoboxes Using a Solvothermal Technique. 2005 , 17, 2110-2114	110
2074	Hydrothermally synthesized and hot-pressed Bi ₂ (Te,Se) ₃ thermoelectric alloys. 2005 , 364, 50-54	22
2073	Enhancement in thermoelectric power factor of M/T/N and M/Bi/M/Bi/M (M and N = Cu or Ni) composite devices welded with T = Bi or Bi _{0.88} Sb _{0.12} alloy. 2005 , 40, 1071-1077	6
2072	A Band Structure Phase Diagram Calculation of 2D BiSb Films. 2005 , 886, 1	1
2071	Bi ₂ Te ₃ : Structural Modulations in Epitaxially Grown Superlattices and Bulk Materials. 2005 , 886, 1	
2070	Energy-specific equilibrium in nanowires for efficient thermoelectric power generation. 2005 , 886, 1	0
2069	Thermoelectric and Thermomagnetic Transport in PbTe with Nanoscale Structures. 2005 , 886, 1	
2068	New Directions in Thermoelectric Materials Research: Synthesis of Nanoscale Precursors for Bulk-Composite Thermoelectric Materials. 2005 , 886, 1	11
2067	400 element ErAs:InGaAs/InGaAlAs superlattice power generator. 2005 , 886, 1	1
2066	Thermomagnetic effects of nondegenerate Kane semiconductors under the conditions of mutual electron-phonon drag in high electric and arbitrary magnetic fields. 2005 , 17, 3255-3267	
2065	Measurement of thermoelectric properties of individual bismuth telluride nanowires. 2005 ,	
2064	Influence of pulsed laser deposition growth conditions on the thermoelectric properties of Ca ₃ Co ₄ O ₉ thin films. 2005 , 97, 013706	41
2063	Enhancement of the thermoelectric figure of merit in M \bar{p} \bar{p} M (M=Cu or Ni and T=Bi _{0.88} Sb _{0.12}) composite materials. 2005 , 98, 073707	14
2062	Thermoelectric properties of delafossite-type layered oxides AgIn _{1-x} Sn _x O ₂ . 2005 , 98, 013706	12
2061	Thermoelectric properties and microstructure of c-axis-oriented Ca ₃ Co ₄ O ₉ thin films on glass substrates. 2005 , 87, 171912	49
2060	Scanning Thermal and Thermoelectric Microscopy. 2005 , 183-205	3
2059	The Chemistry and Physics of Semiconductor Nanowires. 2005 , 30, 85-91	196

2058	Thermoelectric, thermionic and thermophotovoltaic energy conversion. 2005,	4
2057	Thermoelectric Modeling of Si-Si _{1-x} Ge _x Ordered Nanowire Composites. 2005, 886, 1	
2056	Microstructure of Ca ₃ Co ₄ O ₉ Single Crystals and Thin Films. 2005, 886, 1	
2055	Thermal Transport in Nanostructured Solid-State Cooling Devices. 2005, 127, 108-114	37
2054	Reversible thermoelectric nanomaterials. 2005, 94, 096601	290
2053	High room-temperature figure of merit of thin layers prepared by laser ablation from Bi ₂ Te ₃ target. 2005, 87, 081902	33
2052	SiGe/Si superlattice power generators. 2005,	1
2051	Interplay of thermoelectric cooling and electroluminescence refrigeration in LEDs. 2005,	
2050	Role of nanostructures in reducing thermal conductivity below alloy limit in crystalline solids. 2005,	2
2049	The effect of the electron energy spectrum on electronic efficiency and power in thermionic and thermoelectric devices. 2005,	2
2048	Doping studies and thermoelectric properties of TiS/sub 2/. 2005,	
2047	Bismuth telluride hexagonal nanoplatelets and their two-step epitaxial growth. 2005, 127, 10112-6	213
2046	Thermal characterization and sensor applications of one-dimensional nanostructures employing microelectromechanical systems. 2005, 109, 22102-11	33
2045	Thermoelectric properties of fine-grained Bi ₂ Te ₃ alloys. 2005, 399, 14-19	80
2044	Increase of the thermoelectric power factor in Cu ₃ Bi ₂ Tl ₂ , Ni ₃ Bi ₂ Ni ₂ , and Cu ₃ Bi ₂ Ni ₂ composite materials. 2005, 97, 103722	19
2043	Theoretical studies on the thermopower of semiconductors and low-band-gap crystalline polymers. <i>Physical Review B</i> , 2005, 72,	3-3 111
2042	Thermoelectric power factor in semiconductors with buried epitaxial semimetallic nanoparticles. 2005, 87, 112102	117
2041	Lattice-dynamical calculation of phonon scattering at ideal SiTe interfaces. 2005, 97, 024903	79

2040	Reactive Solid-Phase Epitaxial Growth of Na_xCoO_2 ($x \sim 0.83$) via Lateral Diffusion of Na into a Cobalt Oxide Epitaxial Layer. 2005 , 5, 25-28		57
2039	High-yield synthesis of single-crystalline antimony telluride hexagonal nanoplates using a solvothermal approach. 2005 , 127, 13792-3		174
2038	Electronic efficiency in nanostructured thermionic and thermoelectric devices. <i>Physical Review B</i> , 2005 , 72,	3-3	76
2037	Electronic structure and optical properties of binary skutterudite antimonides. <i>Physical Review B</i> , 2005 , 71,	3-3	61
2036	Thermoelectricity of Low-Dimensional Nanostructured Materials. 2006 , 291-307		
2035	Properties of Nanostructured One-Dimensional and Composite Thermoelectric Materials. 2006 , 31, 218-223		78
2034	ErAs:InGaAsInGaAlAs superlattice thin-film power generator array. 2006 , 88, 113502		35
2033	. 2006 ,		
2032	Fabrication of Nanostructured Thermoelectric Bismuth Telluride Thick Films by Electrochemical Deposition. 2006 , 18, 3627-3633		115
2031	Thermoelectric transport perpendicular to thin-film heterostructures calculated using the Monte Carlo technique. <i>Physical Review B</i> , 2006 , 74,	3-3	39
2030	Predicted Performance of Quantum Well Thermoelectrics for Power Generation. 2006 ,		0
2029	Bismuth -- The Thermoelectric Material of the Future?. 2006 ,		5
2028	Thermoelectric properties on n-type $\text{Si}_{80}\text{Ge}_{20}$ with different Dopants. 2006 ,		
2027	Thermal and electrical characterization of nanocomposites for thermoelectrics.		4
2026	Mass anisotropy effects on the thermoelectric figure of merit and Seebeck coefficient. 2006 ,		
2025	A new chalcogenide homologous series $\text{A}_2[\text{M}(5+n)\text{Se}(9+n)]$ (A = Rb, Cs; M = Bi, Ag, Cd). 2006 , 1628-30		17
2024	Characterization of heat transfer along a silicon nanowire using thermoreflectance technique. 2006 , 5, 67-74		27
2023	Nanoscale zinc antimonides: synthesis and phase stability. 2006 , 45, 1693-7		33

2022	Optimization of Heat Sink-Limited Thermoelectric Generators. 2006 , 10, 143-155		89
2021	Effects of uniaxial and hydrostatic pressure on the valence band maximum in Sb ₂ Te ₃ : An electronic structure study. <i>Physical Review B</i> , 2006 , 74,	3-3	51
2020	Tight-binding modeling of thermoelectric properties of bismuth telluride. 2006 , 88, 022107		40
2019	Nanostructured Bi ₂ Se ₃ Films and Their Thermoelectric Transport Properties. 2006 , 118, 5784-5787		2
2018	First principles simulations of the structural and electronic properties of silicon nanowires. <i>Physical Review B</i> , 2006 , 74,	3-3	166
2017	Thermoelectric Materials, Phenomena, and Applications: A Bird's Eye View. 2006 , 31, 188-198		1100
2016	Size-selective high-yield growth of lead telluride (PbTe) nanocrystals using a chemical vapor deposition technique. 2006 , 88, 043119		37
2015	Opportunities for mesoscopics in thermometry and refrigeration: Physics and applications. 2006 , 78, 217-274		765
2014	Experimental and theoretical investigation on binary semiconductor clusters of Bi/Si, Bi/Ge, and Bi/Sn. 2006 , 110, 5004-9		14
2013	Thermoelectric Energy Conversion in Nanostructures. 2006 ,		0
2012	Bismuth telluride (Bi ₂ Te ₃) nanowires: synthesis by cyclic electrodeposition/stripping, thinning by electrooxidation, and electrical power generation. 2006 , 22, 10564-74		104
2011	Hydrothermal synthesis of single-crystalline antimony telluride nanobelts. 2006 , 128, 16490-1		114
2010	. 2006 , 94, 1613-1638		163
2009	High thermoelectric performance of poly(2,5-dimethoxyphenylenevinylene) and its derivatives. 2006 , 156, 1341-1347		91
2008	Coupled Quantum-Scattering Modeling of Thermoelectric Properties of Si/Ge/Si Quantum Well Structures. 2006 , 267		
2007	Electron Transport and the Potential of Ultrananocrystalline Diamond as a Thermoelectric Material. 2006 , 157-184		3
2006	Enhancement of Thermoelectric Figure of Merit through Nanostructural Control on Intermetallic Semiconductors toward High-Temperature Applications. 2006 , 383-418		12
2005	Thermopower in nearly compensated tunnel junctions. 2006 , 243, 2830-2838		1

2004	Characterization of Nanocrystalline Bismuth Telluride (Bi ₂ Te ₃) Synthesized by a Novel Approach Through Aqueous Precursor Method. 2006 , 89, 534-537	12
2003	Structure and electrical transport properties of bismuth thin films prepared by RF magnetron sputtering. 2006 , 252, 3525-3531	53
2002	Nanoscale Bi _x Te ₃ /Sb ₂ Te ₃ multilayer thin film materials for reduced thermal conductivity. 2006 , 242, 201-204	21
2001	Bi ₂ Te ₃ /Te nanocomposite formed by epitaxial growth of Bi ₂ Te ₃ sheets on Te rod. 2006 , 179, 1575-1580	12
2000	Thermal and thermal stress analysis of a thin-film thermoelectric cooler under the influence of the Thomson effect. 2006 , 126, 122-128	34
1999	Fabrication of bismuth telluride nanotubes via a simple solvothermal process. 2006 , 138, 111-113	36
1998	Thermoelectric properties of Bi and Cu co-doped Ca ₃ Co ₂ O ₆ single crystals. 2006 , 17, 95-98	7
1997	Influence of annealing on the distribution of thermoelectric figure of merit in bismuth-telluride ingots. 2006 , 41, 323-331	13
1996	Enhancement of the Seebeck coefficient in touching M/Bi ₂ Te ₃ /M (M = Cu and Ni) composites. 2006 , 41, 7437-7445	3
1995	Enhancement of the thermoelectric power factor in Ag/Bi-Te/Ag composite devices. 2006 , 41, 3089-3095	3
1994	Enhancement of the thermoelectric figure of merit in p- and n-type Cu/Bi-Te/Cu composites. 2006 , 41, 2795-2803	10
1993	Generating power of a thermoelectric generator under periodically alternating temperature gradients. 2006 , 85, 45-51	4
1992	Raman scattering from acoustic modes in Si/Ge superlattice waveguides. 2006 , 39, 501-516	2
1991	Thermal conductivity measurement of InGaAs/InGaAsP superlattice thin films. 2006 , 51, 2931-2936	10
1990	Microwave-assisted synthesis of nanocrystalline Bi ₂ Te ₃ . 2006 , 96, 192-196	48
1989	Nanostructured Bi ₂ Se ₃ films and their thermoelectric transport properties. 2006 , 45, 5656-9	56
1988	High thermoelectric figure of merit and nanostructuring in bulk p-type Na _{1-x} Pb _m Sb _y Te _{m+2} . 2006 , 45, 3835-9	319
1987	High Thermoelectric Figure of Merit and Nanostructuring in Bulk p-type Na _{1-x} Pb _m Sb _y Te _{m+2} . 2006 , 118, 3919-3923	47

- 1986 Low-Temperature, Template-Free Synthesis of Single-Crystal Bismuth Telluride Nanorods. **2006**, 18, 496-500 97
- 1985 Solid-state refrigeration for cooling microprocessors. **2006**, 29, 179-183 8
- 1984 Thickness and temperature dependence of electrical resistivity of p-type Bi_{0.5}Sb_{1.5}Te₃ thin films prepared by flash evaporation method. **2006**, 39, 5064-5068 10
- 1983 Structural and thermoelectric properties of epitaxially grown Bi₂Te₃ thin films and superlattices. **2006**, 100, 114306 120
- 1982 Concept study for a high-efficiency nanowire based thermoelectric. **2006**, 17, S338-S343 73
- 1981 Aspects of Thin-Film Superlattice Thermoelectric Materials, Devices, and Applications. **2006**, 31, 211-217 202
- 1980 Thermoelectric properties of a nanocontact made of two-capped single-wall carbon nanotubes calculated within the tight-binding approximation. *Physical Review B*, **2006**, 73, 3-3 99
- 1979 Assembly and measurement of a hybrid nanowire-bulk thermoelectric device. **2006**, 89, 233106 30
- 1978 First-principles calculations of Ag-Sb nanodot formation in thermoelectric AgPbmSbTe_{2+m} (m=6,14,30). *Physical Review B*, **2006**, 73, 3-3 34
- 1977 Laser-induced structural modifications in nanocrystalline silicon/amorphous silicon dioxide superlattices. **2006**, 88, 143117 15
- 1976 Nanostructures and enhanced thermoelectric properties in Ce-filled skutterudite bulk materials. **2006**, 89, 052111 47
- 1975 Phonon Knudsen flow in nanostructured semiconductor systems. **2006**, 99, 054303 18
- 1974 Demonstration of electron filtering to increase the Seebeck coefficient in In_{0.53}Ga_{0.47}As/In_{0.53}Ga_{0.28}Al_{0.19}As superlattices. *Physical Review B*, **2006**, 74, 3-3 279
- 1973 Electronic structure of the ternary Zintl-phase compounds Zr₃Ni₃Sb₄, Hf₃Ni₃Sb₄, and Zr₃Pt₃Sb₄ and their similarity to half-Heusler compounds such as ZrNiSn. *Physical Review B*, **2006**, 74, 3-3 6
- 1972 Theory of the thermoelectric power factor in nanowire-composite matrix structures. *Physical Review B*, **2006**, 74, 3-3 25
- 1971 Large external \bar{Q} and cooling power densities in thin-film Bi₂Te₃-superlattice thermoelectric cooling devices. **2006**, 89, 122117 42
- 1970 Controlled two-dimensional coated nanostructures for bulk thermoelectric composites. **2006**, 89, 163114 20
- 1969 Shape control of single crystalline bismuth nanostructures. **2006**, 110, 25702-6 83

1968	Growth of TiN/GaN metal/semiconductor multilayers by reactive pulsed laser deposition. 2006 , 100, 064901	22
1967	Distribution of local Seebeck coefficient in M_1M_2 and $M_1M_2M_3$ (M=Cu or Ni and T=Bi or Bi _{0.88} Sb _{0.12}) composite materials. 2006 , 99, 123721	4
1966	Electronic transport properties of PbTe and AgPbmSbTe _{2+m} systems. <i>Physical Review B</i> , 2006 , 74, 3-3	101
1965	Electrodeposition of Sb ₂ Te ₃ Films on Si(100) and Ag Substrates. 2006 , 9, C147	13
1964	The strong thermoelectric effect in nanocarbon generated by the ballistic phonon drag of electrons. 2007 , 19, 266210	19
1963	Thermoelectric power factor of nanoporous semiconductors. 2007 , 101, 014322	21
1962	Solar energy conversion. 2007 , 60, 37-42	380
1961	Modeling of Thermoelectric Properties of Semi-Conductor Thin Films With Quantum and Scattering Effects. 2007 , 129, 492-499	25
1960	The Compatibility of Thin Films and Nanostructures in Thermoelectric Cooling Systems. 2007 , 129, 805-812	11
1959	Direct Measurement of Optical Absorption for Si ₃ Te ₄ u Amorphous Thin Films by Using Photoacoustic Spectroscopy. 2007 , 46, 4622-4625	4
1958	Scattering Anisotropy Effect on Layered Thermoelectric Materials. 2007 , 46, 4184-4188	2
1957	Electro-transport studies of electrodeposited (Bi _{1-x} Sbx) ₂ Te ₃ nanowires. 2007 , 18, 335203	27
1956	Thermoelectric properties of rhodates: Layered SrRh_2O_4 and spinel ZnRh_2O_4 . <i>Physical Review B</i> , 2007 , 75, 3-3	38
1955	Quantum modeling of thermoelectric performance of strained Si ₃ Te ₄ Bi superlattices using the nonequilibrium Green's function method. 2007 , 102, 073713	19
1954	Optimization of Superlattice Thermoelectric Materials and Microcoolers. 2007 , 16, 1113-1119	15
1953	Quantum-dot thermometry. 2007 , 91, 252114	15
1952	Enhanced Seebeck coefficient of quantum-confined electrons in SrTiO ₃ /SrTi _{0.8} Nb _{0.2} O ₃ superlattices. 2007 , 91, 192105	75
1951	Nanoscale structural domains in the phonon-glass thermoelectric material In_4Sb_3 . <i>Physical Review B</i> , 2007 , 75, 3-3	28

1950	The effect of Eu substitution on thermoelectric properties of SrTi _{0.8} Nb _{0.2} O ₃ . 2007 , 102, 116107		36
1949	Preparation and thermoelectric properties of heavily Nb-doped SrO(SrTiO ₃) ₁ epitaxial films. 2007 , 102, 033702		16
1948	Thermoelectric characteristics of solvothermally prepared (Bi,Sb) ₂ Te ₃ mats containing nanosize of sheet-tubes. 2007 ,		
1947	Electronic thermal transport in strongly correlated multilayered nanostructures. <i>Physical Review B</i> , 2007 , 75,	3-3	19
1946	Lattice thermal conductivity of nanoporous Si: Molecular dynamics study. 2007 , 91, 223110		120
1945	Cross-plane Seebeck coefficient of ErAs:InGaAs/InGaAlAs superlattices. 2007 , 101, 034502		52
1944	Enhanced thermoelectric performance of PbTe within the orthorhombic Pnma phase. <i>Physical Review B</i> , 2007 , 76,	3-3	99
1943	Electrodeposition of Bismuth Telluride Nanowires for Thermoelectric Applications. 2007 , 1018, 1		2
1942	New Opportunities in Existing Thermoelectric Materials: Grain Boundary Engineering in Pulverized p-Bi ₂ Te ₃ System. 2007 , 1044, 1		
1941	Study on the Fabrication and Characterization of LAST and LASTT Based Thermoelectric Generators. 2007 , 1044, 1		
1940	Thermoelectric Properties and Mechanism on Porous Silicon Wafer. 2007 , 336-338, 900-904		3
1939	Electrochemical Fabrication of Bi _x Te _{1-x} (0.4 x 0.7) Nanowire Arrays. 2007 , 546-549, 2171-2174		1
1938	Evaluation of Thermoelectric Properties of Highly Dense Bi ₂ Te ₃ Nanowire Arrays by Macro-Integration Method. 2007 , 352, 239-244		
1937	Enhanced Seebeck Coefficient of Amorphous Oxide Semiconductor Superlattices. 2007 , 1044, 1		
1936	Properties of Nano-layers of Nanoclusters of Ag in SiO ₂ Host produced by MeV Si ion bombardment *. 2007 , 1020, 1		1
1935	Enhanced Phonon Scattering in Oxide Superlattices to Improve Laser Induced Thermoelectric Voltages. 2007 , 1053, 5		
1934	Nanocomposites to Enhance Zt in Thermoelectrics. 2007 , 1044, 1		14
1933	Origin of Giant Seebeck Coefficient for High Density 2DEGs Confined in the SrTiO ₃ /SrTi _{0.8} Nb _{0.2} O ₃ Superlattices. 2007 , 1044, 1		1

1932	Thermoelectric Properties on SixGe _{1-x} Containing Fullerite. 2007 , 280-283, 409-412	1
1931	Thermoelectric Properties of Mixed-Metal Tellurides. 2007 , 1044, 1	
1930	Quantum Size Effect of 2DEG Confined Within BaTiO ₃ /SrTiO ₃ :Nb Superlattices. 2007 , 1044, 1	
1929	Synthesis, crystal structure, and thermoelectric properties of a new layered carbide (ZrC) ₃ [Al _{3.56} Si _{0.44}]C ₃ . 2007 , 22, 2888-2894	34
1928	Fluence Dependence of Thermoelectric Properties Induced By Ion Bombardment of Zn ₄ Sb ₃ and CeFe ₂ Co ₂ Sb ₁₂ thin films. 2007 , 1020, 1	
1927	Simulation of electronic states in polycrystalline texture. 2007 ,	
1926	Thermoelectric properties of rare earth rhenium germanium compounds. 2007 , 102, 023702	7
1925	Spinodal decomposition and nucleation and growth as a means to bulk nanostructured thermoelectrics: enhanced performance in Pb(1-x)Sn(x)Te-PbS. 2007 , 129, 9780-8	385
1924	Impact of contact resistances on the low-dimensional scaling of thermoelectric energy conversion devices. 2007 ,	5
1923	Single-Crystal Semiconducting Chromium Disilicide Nanowires Synthesized via Chemical Vapor Transport. 2007 , 19, 3238-3243	69
1922	Preparation and thermoelectric transport properties of high-performance p-type Bi ₂ Te ₃ with layered nanostructure. 2007 , 90, 012102	310
1921	Energy conversion efficiency of a thermoelectric generator under the periodically alternating temperature gradients. 2007 , 101, 023704	18
1920	Four-probe measurements of the in-plane thermoelectric properties of nanofilms. 2007 , 78, 034901	96
1919	Fabrication of amorphous Si/Au/Ge/Au 4 layers interval superlattice thin film for thermoelectric materials. 2007 ,	
1918	Nanostructuring and thermoelectric properties of semiconductor tellurides. 2007 ,	0
1917	Wet etching of Bi ₂ Te ₃ thin films compatible with microelectronic fabrication processes. 2007 ,	
1916	Synthesis of Sb ₂ Se ₃ Nanowires via a Solvothermal Route from the Single Source Precursor Sb[Se ₂ P(OiPr) ₂] ₃ . 2007 , 7, 2691-2695	58
1915	Synthesis of Bi ₂ Te ₃ nanotubes by galvanic displacement. 2007 , 129, 10068-9	98

1914	ErAs:(InGaAs) _{1-x} (InAlAs) _x alloy power generator modules. 2007 , 91, 2635-10	26
1913	Diameter- and Length-Dependent Volume Plasmon Excitation of Bismuth Nanorods Investigated by Electron Energy Loss Spectroscopy. 2007 , 19, 3912-3916	17
1912	Ni ₃ Cr ₂ P ₂ Q ₉ (Q = S, Se): New Quaternary Transition Metal Chalcogenides with a Unique Layered Structure. 2007 , 19, 4600-4605	7
1911	Nanowires. 2007 , 113-160	9
1910	Bi ₂ Te ₃ hexagonal nanoplates and thermoelectric properties of n-type Bi ₂ Te ₃ nanocomposites. 2007 , 40, 5975-5979	60
1909	Electrodeposition of Thermoelectric Superlattice Nanowires. 2007 , 19, 296-299	104
1908	Synthesis and Thermoelectrical Characterization of Lead Chalcogenide Nanowires. 2007 , 19, 3047-3051	149
1907	Impact of electronic density of states on electroluminescence refrigeration. 2007 , 51, 1387-1390	9
1906	Ultrasonic-assisted size-controllable synthesis of Bi ₂ Te ₃ nanoflakes with electrogenerated chemiluminescence. 2007 , 14, 229-34	22
1905	Preparation of five-layered Si/Si _x Ge _{1-x} nano-films by RF helicon magnetron sputtering. 2007 , 254, 308-311	2
1904	A new lattice thermal conductivity model of a thin-film semiconductor. 2007 , 50, 67-74	24
1903	Synthesis, crystal structure and thermoelectric properties of a new carbide Zr ₂ [Al _{3.56} Si _{0.44}]C ₅ . 2007 , 180, 1809-1815	39
1902	Synthesis of Bi ₂ Te ₃ nanopowders by vacuum arc plasma evaporation. 2007 , 172, 63-66	16
1901	Bi ₂ Te ₃ nanostructures prepared by microwave heating. 2007 , 306, 351-355	27
1900	Thermoelectrics based on strontium titanate. 2007 , 10, 44-49	128
1899	The electronic structure of a Bi/Sb superlattice nanowire. 2007 , 4, 448-450	1
1898	Enhancement of thermoelectric performance in strongly correlated multilayered nanostructures. 2007 , 244, 2351-2356	4
1897	Materials science: synergy in a superlattice. 2007 , 445, 492-3	14

1896	Giant thermoelectric Seebeck coefficient of a two-dimensional electron gas in SrTiO ₃ . 2007 , 6, 129-34	794
1895	Crystal Structure and Thermoelectric Properties of YAl ₃ C ₃ . 2007 , 90, 3299-3302	20
1894	Critical Overview of Recent Approaches to Improved Thermoelectric Materials. 2007 , 4, 291-296	45
1893	Thermoelectric Performance of Epitaxial Thin Films of Layered Cobalt Oxides Grown by Reactive Solid-Phase Epitaxy with Topotactic Ion-Exchange Methods. 2007 , 4, 308-317	6
1892	Dependence of Seebeck coefficient on a load resistance and energy conversion efficiency in a thermoelectric composite. 2007 , 42, 1785-1803	3
1891	On the enhancement of the figure of merit in bulk nanocomposites. 2007 , 1, 256-258	17
1890	Focus on Thermoelectrics and Nanomaterials. 2007 , 1, A91-A92	2
1889	Preparation and thermoelectric properties of bulk nanocomposites with amorphous/nanocrystal hybrid structure. 2007 , 40, 6094-6097	26
1888	Nanometer-Scale Thermoelectric Materials. 2007 , 345-374	10
1887	Thermal and thermoelectric behavior of silicon-germanium quantum well structures. 2007 , 59, 503-508	5
1886	A novel method of centrifugal processing for the synthesis of lead-bismuth eutectic alloy nanospheres and nanowires. 2007 , 32, 468-472	6
1885	Local Seebeck coefficient near the boundary in touching Cu/Bi ₂ Te ₃ /Cu composites. 2007 , 87, 661-666	1
1884	General solution-based route to III-V semiconductors nanorods from hydrolysate. 2007 , 9, 269-274	18
1883	Effect of the thickness of Bi ₂ Te ₃ compound and Cu electrode on the resultant Seebeck coefficient in touching Cu/Bi ₂ Te ₃ /Cu composites. 2007 , 42, 5057-5067	3
1882	Thermoelectric properties of the welded Cu/Bi _{0.88} Sb _{0.12} /Cu composites in the temperature region from 193 K to 298 K. 2007 , 42, 6004-6010	
1881	Temperature dependence of the local Seebeck coefficient near the boundary in touching Cu/Bi ₂ Te ₃ /Cu composites. 2007 , 42, 6828-6836	
1880	Crystal microstructure suitable for high-performance thermoelectric bulk materials. 2007 , 42, 5867-5874	1
1879	Power generation of the touching Cu/Bi-Te/Cu composites under the periodically alternating temperature gradients. 2007 , 42, 7832-7842	5

1878	Nanostructured Thermoelectric Materials and High-Efficiency Power-Generation Modules. 2007 , 36, 704-710	47
1877	Evaluation of anisotropic thermoelectric power of ReSi _{1.75} . 2007 , 389, 367-371	8
1876	Mg ₂ Si nanocomposite converted from diatomaceous earth as a potential thermoelectric nanomaterial. 2008 , 181, 1565-1570	18
1875	Power factor of very thin thermoelectric layers of different thickness prepared by laser ablation. 2008 , 93, 663-667	4
1874	Recent advances on thermoelectric materials. 2008 , 3, 269-279	128
1873	Thermoelectric Characteristics in MBE-Grown HgCdTe-Based Superlattices. 2008 , 37, 1504-1508	3
1872	Thermoelectric power of nanoscale MnSi _{1.7} films. 2008 , 205, 2687-2694	9
1871	Two-dimensional thermoelectric Seebeck coefficient of SrTiO ₃ -based superlattices. 2008 , 245, 2363-2368	14
1870	Hydrothermal Synthesis and Thermoelectric Transport Properties of Impurity-Free Antimony Telluride Hexagonal Nanoplates. 2008 , 20, 1892-1897	154
1869	Surfactant-directed synthesis of branched bismuth telluride/sulfide core/shell nanorods. 2008 , 20, 2679-83	64
1868	Improving the performance of thermoelectric devices by doping Ag in LaPbMnO ₃ thin films. 2008 , 310, 2732-2737	24
1867	Electronic and crystal structures of nanolaminate yttrium aluminum carbide YAl ₃ C ₃ . 2008 , 451, 48-52	11
1866	Thermoelectric properties of pressed bismuth nanoparticles. 2008 , 43, 195-207	23
1865	Review of electronic transport models for thermoelectric materials. 2008 , 44, 1-36	118
1864	Synthesis and shape evolution of bismuth selenide hollow nanospheres. 2008 , 147, 36-40	23
1863	Giant Seebeck coefficient decrease in polycrystalline materials with highly anisotropic band structures: Implications in seeking high-quality thermoelectric materials. 2008 , 148, 10-13	7
1862	Critical thickness for giant thermoelectric Seebeck coefficient of 2DEG confined in SrTiO ₃ /SrTi _{0.8} Nb _{0.2} O ₃ superlattices. 2008 , 516, 5916-5920	30
1861	Semimetal-semiconductor transition in thin Bi films. 2008 , 516, 3411-3415	21

1860	Enhancement of thermoelectric efficiency in PbTe by distortion of the electronic density of states. 2008 , 321, 554-7	2900
1859	Recent progress in oxide thermoelectric materials: p-type Ca ₃ Co ₄ O ₉ and n-type SrTiO ₃ (-). 2008 , 47, 8429-36	278
1858	Large enhancement of the thermoelectric Seebeck coefficient for amorphous oxide semiconductor superlattices with extremely thin conductive layers. 2008 , 2, 105-107	26
1857	Complex thermoelectric materials. 2008 , 7, 105-14	7422
1856	Quantum Modeling of Thermoelectric Properties of Si/Ge/Si Superlattices. 2008 , 55, 423-429	18
1855	Synthesis of PbTe thermoelectric materials by alkaline reducing chemical routes. 2008 , 43, 2850-2854	50
1854	Small-scale energy harvesting through thermoelectric, vibration, and radiofrequency power conversion. 2008 , 103, 101301	248
1853	HgTe: a potential thermoelectric material in the cinnabar phase. 2008 , 128, 194713	29
1852	Higher manganese silicide nanowires of Nowotny chimney ladder phase. 2008 , 130, 16086-94	122
1851	Enhanced thermopower in PbSe nanocrystal quantum dot superlattices. 2008 , 8, 2283-8	230
1850	Thermoelectric properties of La _{0.9} CoFe ₃ Sb ₁₂ NiSb ₃ skutterudite nanocomposites. 2008 , 103, 113707	78
1849	Structural Characterization and Thermoelectric Transport Properties of Uniform Single-Crystalline Lead Telluride Nanowires. 2008 , 112, 11314-11318	96
1848	Enhanced thermoelectric figure of merit in nanostructured n-type silicon germanium bulk alloy. 2008 , 93, 193121	560
1847	Micro-Coolers. 2008 , 499-550	5
1846	Spin-orbit interaction effect in the electronic structure of Bi ₂ Te ₃ observed by angle-resolved photoemission spectroscopy. 2008 , 81, 57006	88
1845	Quantum interference of surface states in bismuth nanowires probed by the Aharonov-Bohm oscillatory behavior of the magnetoresistance. <i>Physical Review B</i> , 2008 , 77,	3-3 33
1844	CaMn(1-x)Nb(x)O ₃ (x 2008 , 47, 8077-85	180
1843	Thermoelectrics in an array of molecular junctions. 2008 , 129, 044708	18

1842	Enhanced thermoelectric figure-of-merit in p-type nanostructured bismuth antimony tellurium alloys made from elemental chunks. 2008 , 8, 2580-4	476
1841	Unexpectedly low thermal conductivity in natural nanostructured bulk Ga ₂ Te ₃ . 2008 , 93, 012101	62
1840	Thermoelectric Bi ₂ Te ₃ nanotubes synthesized by low-temperature aqueous chemical method. 2008 , 449, 109-112	59
1839	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. 2008 , 36, 1-133	51
1838	An Investigation of the Thermal Stresses Induced in a Thin-Film Thermoelectric Cooler. 2008 , 31, 438-454	9
1837	Efficient Power Management Circuit: From Thermal Energy Harvesting to Above-IC Microbattery Energy Storage. 2008 , 43, 246-255	114
1836	Thermoelectric properties of bismuth telluride nanowires in the constant relaxation-time approximation. <i>Physical Review B</i> , 2008 , 78,	3-3 53
1835	Manipulating Growth of Thermoelectric Bi ₂ Te ₃ /Sb Multilayered Nanowire Arrays. 2008 , 112, 15190-15194	48
1834	Structural modulations in Bi ₂ Te ₃ . 2008 , 103, 024314	37
1833	Thermoelectric Properties of Silicon Nanowires. 2008 ,	5
1832	Controllable Synthesis of Bi ₂ Te ₃ Intermetallic Compounds with Hierarchical Nanostructures via Electrochemical Deposition Route. 2008 , 8, 1226-1232	41
1831	Hydrothermal Synthesis and Thermoelectric Transport Properties of Uniform Single-Crystalline Pearl-Necklace-Shaped PbTe Nanowires. 2008 , 8, 2906-2911	84
1830	Rapid Microwave-Assisted Synthesis of Single-Crystalline Sb ₂ Te ₃ Hexagonal Nanoplates. 2008 , 8, 4394-4397	54
1829	Electrodeposition of Bi ₂ Te ₃ and Bi ₂ Te ₃ Derived Alloy Nanotube Arrays. 2008 , 8, 771-775	44
1828	Atomistic design of thermoelectric properties of silicon nanowires. 2008 , 8, 1111-4	116
1827	Atomic Layer Thermopile Materials: Physics and Application. 2008 , 2008, 1-12	8
1826	Reactive Sputtered Wide-Bandgap p-Type Semiconducting Spinel AB ₂ O ₄ and Delafossite ABO ₂ Thin Films for Transparent Electronics 2008 , 413-484	5
1825	Evaluation of Thermoelectric Properties in Bi-Microwires by the Harman Method. 2008 , 47, 3576-3580	20

1824	Specific heat and thermal conductivity measurements for anisotropic and random macroscopic composites of cobalt nanowires. 2008 , 19, 485712		9
1823	Thermoelectric Figure of Merit of Anisotropic Bulk Materials in the Presence of Polar Optical Phonon Scattering. 2008 , 47, 2189-2191		
1822	Photoacoustic Spectra and Thermoelectric Properties of Amorphous Si/Au/Ge/Au Superlattice. 2008 , 47, 3980-3984		8
1821	Negative Longitudinal Magneto-Thermoelectric Power in a Semiconductor Parabolic Quantum Well. 2008 , 47, 8200-8203		
1820	Development of A Seebeck Coefficient Prediction Simulator Using Tight-Binding Quantum Chemical Molecular Dynamics. 2008 , 47, 3134-3137		3
1819	Acoustic phonon scattering from particles embedded in an anisotropic medium: A molecular dynamics study. <i>Physical Review B</i> , 2008 , 77,	3-3	35
1818	Aspects of metallic low-temperature transport in Mott-insulator/band-insulator superlattices: Optical conductivity and thermoelectricity. <i>Physical Review B</i> , 2008 , 77,	3-3	16
1817	Role of boundary roughness in the electronic transport of Bi nanowires. 2008 , 104, 123704		7
1816	Enhanced Seebeck coefficient in EuTe/BbTe [100] short-period superlattices. 2008 , 92, 182105		23
1815	Diameter-dependent thermopower of bismuth nanowires. <i>Physical Review B</i> , 2008 , 77,	3-3	58
1814	Investigation of Thermoelectric Properties of Si/Ge Multilayer with Ultra-Heavily B Doping. 2008 , 49, 1723-1727		5
1813	Large Thermoelectric Power Factor in Iron-Pnictide Derivatives. 2008 , 77, 58-60		2
1812	Energiewandler mit großem Zukunftspotenzial. 2008 , 56, 136-139		1
1811	Review of Oxide Thermoelectric Materials and Devices Originated. 2008 , 128, 282-283		
1810	Nano-Enabled Power Sources. 2008 , 1		
1809	Phonon confinement effects in ultrathin epitaxial bismuth films on silicon studied by time-resolved electron diffraction. <i>Physical Review B</i> , 2009 , 80,	3-3	31
1808	Transport and noise in organic field-effect devices. <i>Physical Review B</i> , 2009 , 79,	3-3	6
1807	Electronic structure and thermoelectric properties of layered PbSe-WSe ₂ materials. <i>Physical Review B</i> , 2009 , 80,	3-3	52

1806	High thermoelectric power factor in alloys based on CoSi. 2009 , 94, 022115		32
1805	Reducing thermal conductivity of thermoelectric materials by using a narrow wire geometry. 2009 , 106, 063703		19
1804	Nanostructures and defects in thermoelectric AgPb ₁₈ SbTe ₂₀ single crystal. 2009 , 105, 094317		28
1803	Application of the thermal flash technique for low thermal diffusivity micro/nanofibers. 2009 , 80, 036103		16
1802	Tailoring interface roughness and superlattice period length in electron-filtering thermoelectric materials. <i>Physical Review B</i> , 2009 , 79,	3-3	22
1801	Size-dependent thermopower in nanocrystalline nickel. 2009 , 95, 013101		15
1800	Thermoelectric properties of bismuth nanowires in a quartz template. 2009 , 94, 192104		34
1799	Thermal and electronic transport properties of CeTe ₂ Sn _x compounds. 2009 , 105, 053712		14
1798	Study of surfactant bonding to lead telluride nanoparticles. 2009 ,		
1797	Low thermal conductivity and improved figure of merit in fine-grained binary PbTe thermoelectric alloys. 2009 , 42, 015406		37
1796	Thermoelectric Generators Made with Novel Lead Telluride Based Materials. 2009 , 1218, 1		1
1795	Template Epitaxial Growth of Thermoelectric Bi/BiSb Superlattice Nanowires by Charge-Controlled Pulse Electrodeposition. 2009 , 156, K149		15
1794	High Temperature Thermoelectric Properties of Nano-Bulk Silicon and Silicon Germanium. 2009 , 1166, 4		7
1793	Thermal Conductivity Reduction Paths in Thermoelectric Materials. 2009 , 1166, 1		2
1792	Crystallinity and Thermoelectric Properties of Si/GeB Multilayers Prepared with Si Buffer Layer and SiO ₂ Substrates. 2009 , 48, 061201		6
1791	Mobility estimation in micro-sized bismuth wire arrays. 2009 , 105, 103715		18
1790	Synthesis of polycrystalline nanotubular Bi ₂ Te ₃ . 2009 , 113, 664-669		21
1789	Effect of the cooling rate on the thermoelectric properties of p-type (Bi _{0.25} Sb _{0.75}) ₂ Te ₃ and n-type Bi ₂ (Te _{0.94} Se _{0.06}) ₃ after melting in the bismuth-telluride system. 2009 , 44, 1352-1359		16

1788	Synthesis and Thermoelectric Characterization of Bi ₂ Te ₃ Nanoparticles. 2009 , 19, 3476-3483	275
1787	Alte und neue Konzepte für thermoelektrische Materialien. 2009 , 121, 8768-8792	88
1786	New and old concepts in thermoelectric materials. 2009 , 48, 8616-39	1634
1785	MeV Si ions bombardment effects on the thermoelectric properties of nano-layers of nanoclusters of Ag in SiO ₂ host. 2009 , 203, 2479-2481	11
1784	Effects of MeV Si ions bombardment on the thermoelectric properties of Zn ₄ Sb ₃ and CeFe ₂ Co ₂ Sb ₁₂ thin films. 2009 , 203, 2664-2666	6
1783	Influence of NaOH on the synthesis of Bi ₂ Te ₃ via a low-temperature aqueous chemical method. 2009 , 44, 3528-3532	9
1782	Synthesis and thermoelectric characterisation of bismuth nanoparticles. 2009 , 11, 1729-1738	49
1781	Preparation and thermoelectric properties of SiO ₂ /Zn ₄ Sb ₃ nanocomposite materials. 2009 , 24, 694-697	1
1780	Thermoelectric Materials with Potential High Power Factors for Electricity Generation. 2009 , 38, 1268-1272	26
1779	Thermoelectric Characterization of (Ga,In) ₂ Te ₃ with Self-Assembled Two-Dimensional Vacancy Planes. 2009 , 38, 1392-1396	26
1778	Automotive Applications of Thermoelectric Materials. 2009 , 38, 1245-1251	250
1777	Improvement of Thermoelectric Power Factor of Hydrothermally Prepared Bi _{0.5} Sb _{1.5} Te ₃ Compared with its Solvothermally Prepared Counterpart. 2009 , 38, 1499-1503	12
1776	Transport Properties of Doped, Nanostructured IV-VI Epitaxial Films Grown by MBE. 2009 , 38, 1418-1422	4
1775	Large Thermoelectric Power of La _{2-x} Sr _x CuO ₄ Possessing Two-Dimensional Electronic Structure. 2009 , 38, 1365-1370	8
1774	Effects of Ball-Milling Atmosphere on the Thermoelectric Properties of TAGS-85 Compounds. 2009 , 38, 1142-1147	6
1773	Thermoelectric Properties of Bismuth Micro/Nanowire Array Elements Pressured into a Quartz Template Mold. 2009 , 38, 944-949	29
1772	Preparation of Conducting Polyaniline-Bismuth Nanoparticle Composites by Planetary Ball Milling. 2009 , 38, 1443-1449	25
1771	Fabrication and Evaluation of a Thermoelectric Microdevice on a Free-Standing Substrate. 2009 , 38, 1326-1330	17

1770	Thermoelectric properties of p-type PbSe nanowires. 2009 , 2, 394-399	67
1769	Nanoscale granular boundaries in polycrystalline Pb _{0.75} Sn _{0.25} Te: an innovative approach to enhance the thermoelectric figure of merit. 2009 , 206, 221-228	15
1768	Synthesis and characterization of Sb ₂ Te ₃ nanofilms via electrochemical co-deposition method. 2009 , 633, 253-258	42
1767	Synthesis and growth mechanism of rough PbTe polycrystalline thermoelectric nanorods. 2009 , 311, 3179-3183	24
1766	Influence of pulsed laser deposition rate on the microstructure and thermoelectric properties of Ca ₃ Co ₄ O ₉ thin films. 2009 , 311, 4123-4128	35
1765	From Te nanotubes to CoTe ₂ nanotubes: A general strategy for the formation of 1D metal telluride nanostructures. 2009 , 311, 4467-4472	21
1764	Facile synthesis of PbTe nanoparticles and thin films in alkaline aqueous solution at room temperature. 2009 , 182, 3383-3386	28
1763	Interfaces in bulk thermoelectric materials. 2009 , 14, 226-235	320
1762	Effect of periodicity of the two-dimensional vacancy planes on the thermal conductivity of bulk Ga ₂ Te ₃ . 2009 , 3, 221-223	12
1761	Thermoelectric Properties of Junctions Between Metal and Models of Strongly Correlated Semiconductors. 2009 , 193-211	
1760	Unique nanostructures and enhanced thermoelectric performance of melt-spun BiSbTe alloys. 2009 , 94, 102111	461
1759	Thermoelectric properties of symmetric and asymmetric double quantum well structures. 2009 , 43, 624-628	
1758	Thermoelectric Properties and Nanostructuring in the p-Type Materials NaPb ₁₈ Sn _x MTe ₂₀ (M = Sb, Bi). 2009 , 21, 1683-1694	50
1757	Origin of the High Thermoelectric Performance in Si Nanowires: A First-Principle Study. 2009 , 113, 14001-14005	3
1756	Controlled Solvothermal Synthesis and Structural Characterization of Antimony Telluride Nanoforks. 2009 , 9, 2057-2060	20
1755	Field-effect modulation of Seebeck coefficient in single PbSe nanowires. 2009 , 9, 1689-93	97
1754	Thermopower in highly reduced n-type ferroelectric and related perovskite oxides and the role of heterogeneous nonstoichiometry. <i>Physical Review B</i> , 2009 , 79,	3-3 57
1753	Microwave-assisted synthesis and characterization of Bi ₂ Te ₃ nanosheets and nanotubes. 2009 , 481, 91-95	45

1752	Nanoengineered Materials for Thermoelectric Energy Conversion. 2009 , 225-299		28
1751	Local structure of thermoelectric Ca ₃ Co ₄ O ₉ . <i>Physical Review B</i> , 2009 , 79,	3-3	21
1750	Wafer-scale patterning of lead telluride nanowires: structure, characterization, and electrical properties. 2009 , 3, 4144-54		36
1749	Enhanced thermoelectric figure of merit in nanocrystalline Bi ₂ Te ₃ bulk. 2009 , 105, 094303		62
1748	Thermal Expansion Behaviors of Bismuth Nanowires. 2009 , 113, 5422-5427		15
1747	Thermal conductivity suppression in bismuth nanowires. 2009 , 106, 034310		73
1746	Lithium intercalation and exfoliation of layered bismuth selenide and bismuth telluride. 2009 , 19, 2588		58
1745	Influence of dimensionality on thermoelectric device performance. 2009 , 105, 034506		162
1744	Advances in total scattering analysis. 2009 , 19, 5078		50
1743	Structures and Electronic Properties of the Bi ₂ Sb Superlattice Nanowires and Core/Shell Structural Bi/Sb Nanowires. 2009 , 113, 11358-11365		5
1742	Nanoscale design to enable the revolution in renewable energy. 2009 , 2, 559		311
1741	Mean free path limitation of thermoelectric properties of bismuth nanowire. 2009 , 105, 113706		42
1740	Atomistic simulations of heat transport in silicon nanowires. 2009 , 102, 195901		226
1739	Thermoelectric effects in magnetic nanostructures. <i>Physical Review B</i> , 2009 , 79,	3-3	151
1738	The optimal Seebeck coefficient for obtaining the maximum power factor in thermoelectrics. 2009 , 94, 223108		47
1737	Rectangular or square, tapered, and single-crystal PbTe nanotubes. 2009 , 19, 3063		12
1736	Electrodeposition and Thermoelectric Characterization of Bismuth Telluride Nanowires. 2009 , 156, B871		11
1735	Molecular-dynamics prediction of the thermal conductivity of thin InP nanowires: Similarities to Si. <i>Physical Review B</i> , 2009 , 80,	3-3	12

1734	Optimized Thermoelectric Refrigeration in the Presence of Thermal Boundary Resistance. 2009 , 32, 423-430	14
1733	Large scale highly crystalline Bi ₂ Te ₃ nanotubes through solution phase nanoscale Kirkendall effect fabrication. 2009 , 2317-9	55
1732	High density p-type Bi _{0.5} Sb _{1.5} Te ₃ nanowires by electrochemical templating through ion-track lithography. 2009 , 11, 3584-90	31
1731	Large-scale preparation of ternary BiSbTe films with enhanced thermoelectric properties using DC magnetron sputtering. 2009 ,	2
1730	High thermoelectric performance BiSbTe alloy with unique low-dimensional structure. 2009 , 105, 113713	166
1729	Multifunctional nanomaterials. 2009 , 78, 249-282	18
1728	Thermodynamic properties of PbTe, PbSe, and PbS: First-principles study. <i>Physical Review B</i> , 2009 , 80,	3-3 196
1727	Conditions of Electronic Structure to Obtain Large Dimensionless Figure of Merit for Developing Practical Thermoelectric Materials. 2009 , 50, 2359-2365	105
1726	Syntheses and crystal structures of Si-bearing layered carbides ZrAl ₈ C ₇ and ZrAl ₄ C ₄ . 2009 , 117, 37-41	6
1725	Seebeck Coefficient of Ultrathin Silicon-on-Insulator Layers. 2009 , 2, 071203	31
1724	New methods for enhancing ZT value of nanowires. 2009 , 193, 012110	1
1723	Reversible heat flow through the carbon tube junction. 2009 , 87, 57007	12
1722	Structural Properties of Heavily B-Doped SiGe Thin Films for High Thermoelectric Power. 2010 , 51, 878-881	20
1721	Room Temperature Thermoelectric Properties of Epitaxially Grown Si-Ge Thin Films on SOI Substrates. 2010 , 51, 767-770	
1720	Thermoelectric Property of Sr and Cu Substituted Ca ₃ Co ₄ O ₉ + δ 2010 , 57, 237-241	1
1719	Thermoelectric Properties of SrTiO ₃ : Bulks, Superlattices, and Transistors. 2010 , 57, 232-236	1
1718	Energy and temperature dependence of relaxation time and Wiedemann-Franz law on PbTe. <i>Physical Review B</i> , 2010 , 81,	3-3 84
1717	Semiconductor nanocrystals functionalized with antimony telluride zintl ions for nanostructured thermoelectrics. 2010 , 132, 6686-95	140

1716	Improving Thermoelectric Properties of Chemically Synthesized Bi ₂ Te ₃ -Based Nanocrystals by Annealing. 2010 , 114, 11607-11613	56
1715	Microstructure Engineering Design for Thermoelectric Materials: An Approach to Minimize Thermal Diffusivity. 2010 , 22, 988-993	55
1714	p-type Bi _{0.4} Sb _{1.6} Te ₃ nanocomposites with enhanced figure of merit. 2010 , 96, 182104	121
1713	Recent developments in nanostructured materials for high-performance thermoelectrics. 2010 , 20, 9577	135
1712	Identifying the specific nanostructures responsible for the high thermoelectric performance of (Bi,Sb) ₂ Te ₃ nanocomposites. 2010 , 10, 3283-9	433
1711	Oxide Thermoelectric Materials: A Nanostructuring Approach. 2010 , 40, 363-394	350
1710	Prospects of colloidal nanocrystals for electronic and optoelectronic applications. 2010 , 110, 389-458	3354
1709	Exfoliation and characterization of bismuth telluride atomic quintuples and quasi-two-dimensional crystals. 2010 , 10, 1209-18	371
1708	Alumina template-assisted electrodeposition of Bi ₂ Te _{2.7} Se _{0.3} nanowire arrays. 2010 , 47, 710-713	14
1707	Molecular Dynamics Simulation of Mechanical Properties of Single-Crystal Bismuth Telluride Nanowire. 2010 , 39, 1730-1734	14
1706	Effects of Pulsed Laser Deposition Conditions on the Microstructure of Ca ₃ Co ₄ O ₉ Thin Films. 2010 , 39, 1611-1615	14
1705	Numerical Analysis of Effective Thermal Conductivity of Microwire Array Element. 2010 , 39, 1606-1610	7
1704	The Role of Au in the Thermoelectric Properties of Amorphous Ge/Au and Si/Au Thin Films. 2010 , 39, 1627-1633	12
1703	Electrical Nanocontact Between Bismuth Nanowire Edges and Electrodes. 2010 , 39, 1536-1542	15
1702	Thermoelectric Measurements on Sputtered ZnO/ZnS Multilayers. 2010 , 39, 1504-1509	25
1701	Synthesis and Thermoelectric Properties of Bi ₂ Se ₃ Nanostructures. 2011 , 6, 57	111
1700	Direct synthesis of Te/Bi ₂ Te ₃ nanocomposite powders by a polyol process. 2010 , 36, 835-841	6
1699	Low temperature synthesis of Bi ₂ Te ₃ nanosheets and thermal conductivity of nanosheet-contained composites. 2010 , 121, 138-141	8

1698	Electrodeposition and morphology analysis of Bi ₂ Te thermoelectric alloy nanoparticles on copper substrate. 2010 , 64, 449-452	13
1697	White light generation and amplification using a soliton pulse within a nano-waveguide for the potential of solar energy conversion use. 2010 , 51, 2340-2344	6
1696	Electrical properties of Pb _x Sn _{1-x} S thin films prepared by hot wall deposition method. 2010 , 45, 1113-1116	5
1695	Functional materials for sustainable energy technologies: four case studies. 2010 , 3, 44-58	30
1694	Solution Route to PbSe Films with Enhanced Thermoelectric Transport Properties. 2010 , 2010, 4321-4324	7
1693	A promising approach to enhanced thermoelectric properties using carbon nanotube networks. 2010 , 22, 535-9	385
1692	Nanostructures for thermoelectric applications: synthesis, growth mechanism, and property studies. 2010 , 22, 1959-62	92
1691	Nanostructured thermoelectrics: big efficiency gains from small features. 2010 , 22, 3970-80	1085
1690	Thermoelectric Oxides. 2010 , 203-255	8
1689	Low-valent organometallics--synthesis, reactivity, and potential applications. 2010 , 16, 6416-28	45
1688	Nanopartikel als Funktionsmaterialien. 2010 , 122, 1402-1437	95
1687	Nanoparticulate functional materials. 2010 , 49, 1362-95	567
1686	Three-dimensional Bi ₂ Se ₃ nanopattern films self-assembled with ultrathin nanosheets on the surface of Se nanotubes. 2010 , 312, 3455-3460	2
1685	Two-step synthesis of Bi ₂ Te ₃ nanoarrays with sheet-like multiple heterostructure. 2010 , 183, 2631-2635	2
1684	Thermospin phenomena in a quantum dot attached to ferromagnetic leads: Role of asymmetry and alignment. 2010 , 374, 4269-4273	11
1683	Molecular dynamics study of mechanical properties of bismuth telluride nanofilm. 2010 , 405, 3190-3194	25
1682	Lorenz number in low-dimensional structures. 2010 , 405, 4818-4820	10
1681	Nanostructured thermoelectrics. 2010 , 67, 19-63	433

1680	Improved thermoelectric performance of highly-oriented nanocrystalline bismuth antimony telluride thin films. 2010 , 519, 619-624	50
1679	Thermal conductivity of semiconductor (bismuth telluride)/semimetal (antimony) superlattice nanostructures. 2010 , 58, 570-576	18
1678	Simultaneously optimizing the independent thermoelectric properties in (Ti,Zr,Hf)(Co,Ni)Sb alloy by in situ forming InSb nanoinclusions. 2010 , 58, 4705-4713	90
1677	Annealing effects on the structural and electrical transport properties of n-type Bi ₂ Te _{2.7} Se _{0.3} thin films deposited by flash evaporation. 2010 , 256, 7365-7370	62
1676	An investigation of the phonon properties of silicon nanowires. 2010 , 49, 1095-1102	16
1675	Carbon nanotube-guided thermopower waves. 2010 , 13, 22-33	59
1674	Thermal conductivity reduction in fullerene-enriched p-type bismuth telluride composites. 2010 , 207, 157-162	22
1673	Electrodeposition of Bi ₂ Te ₃ films and micro-pillar arrays on p-Si(100) wafers. 2010 , 207, 354-359	6
1672	One-dimensional heterostructures of single-walled carbon nanotubes and CdSe nanowires. 2010 , 6, 376-80	15
1671	Charge transfer and re-distribution in the TiO ₂ -SrTiO ₃ hetero-structure. 2010 , 8, 012031	1
1670	Properties of Nanostructured Materials. 2010 , 203-220	
1669	Electrodeposition of Group III Doped PbTe Nanowires. 2010 , 1258, 1	
1668	Field-induced water electrolysis switches an oxide semiconductor from an insulator to a metal. 2010 , 1, 118	65
1667	Current trends in the physics of thermoelectric materials. 2010 , 180, 821	21
1666	Thermoelectric properties of individual single-crystalline PbTe nanowires. 2010 ,	
1665	Advances in thermoelectric microcooling. 2010 ,	
1664	Bi _{1-x} Sr _x CuSeO oxyselenides as promising thermoelectric materials. 2010 , 97, 092118	301
1663	High efficiency semimetal/semiconductor nanocomposite thermoelectric materials. 2010 , 108, 123702	70

1662	Dimensional crossover of polaron dynamics in Nb:SrTiO ₃ /SrTiO ₃ superlattices: Possible mechanism of thermopower enhancement. <i>Physical Review B</i> , 2010 , 82,	3-3	29
1661	Pulsed thermoelectricity. 2010 , 108, 023702		5
1660	Enhanced high temperature thermoelectric properties of Bi-doped c-axis oriented Ca ₃ Co ₄ O ₉ thin films by pulsed laser deposition. 2010 , 108, 083709		39
1659	Thermal conductivity reduction in an individual single crystalline Bi nanowire by size effect. 2010 ,		0
1658	Controlling independently the electric and thermal properties by shrinking the particle size down to nanosize in quasi-one-dimensional Ca ₃ Co ₂ O ₆ and Sr ₆ Co ₅ O ₁₅ . <i>Physical Review B</i> , 2010 , 82,	3-3	11
1657	Engineering the figure of merit and thermopower in single-molecule devices connected to semiconducting electrodes. <i>Physical Review B</i> , 2010 , 81,	3-3	79
1656	Thermoelectric transport in perfectly conducting channels in quantum spin Hall systems. <i>Physical Review B</i> , 2010 , 81,	3-3	63
1655	Cluster expansion and optimization of thermal conductivity in SiGe nanowires. <i>Physical Review B</i> , 2010 , 81,	3-3	27
1654	Giant thermopower and figure of merit of semiconducting polaronic nanolayers. <i>Physical Review B</i> , 2010 , 81,	3-3	9
1653	Thermoelectric properties of a weakly coupled quantum dot: enhanced thermoelectric efficiency. 2010 , 22, 355304		38
1652	Electronic structure of the thermoelectric materials PbTe and AgPb ₁₈ SbTe ₂₀ from first-principles calculations. 2010 , 25, 1030-1036		6
1651	Design and Analysis of an In-Plane Thermoelectric Microcooler. 2010 , 14, 95-109		5
1650	Thermoelectricity and localized f-band control by dp-hybridization on the Ce _{1-x} Cu _x Se ₂ compounds. 2010 , 107, 053705		9
1649	Size-dependent thermal conductivity of individual single-crystalline PbTe nanowires. 2010 , 96, 103101		54
1648	Magneto-thermoelectric effects in two-dimensional quantum well: role of short-range potential. 2010 , 81, 015701		8
1647	Thermal and electrical transport properties of VA-element doped Pb _{9.6} M _{0.2} Te _{10-x} Se _x (M= Sb, Bi) thermoelectric materials. 2010 , 43, 035405		4
1646	Structural Effects on Thermal Conductivity of SiGeAu Superlattice Thin Films. 2010 , 49, 085801		3
1645	Annealing Temperature Dependence of Crystallization Process of SiGeAu Thin Film. 2010 , 49, 115602		9

1644	Charge build-up and re-distribution in SrTi _x Nb _{1-x} O ₃ quantum wells and TiO ₂ /SrTiO ₃ heterostructure. 2010 , 43, 415303			1
1643	Silicon nanowires thermoelectric devices. 2010 ,			2
1642	On Landauer versus Boltzmann and full band versus effective mass evaluation of thermoelectric transport coefficients. 2010 , 107, 023707			114
1641	Nanostructured materials for thermoelectric applications. 2010 , 46, 8311-24			171
1640	Seebeck effect in the conducting LaAlO ₃ /SrTiO ₃ interface. <i>Physical Review B</i> , 2010 , 81,	3-3		37
1639	Structural, Electronic, and Thermoelectric Properties of BiSb Nanotubes. 2010 , 114, 21234-21239			12
1638	Recrystallization induced in situ nanostructures in bulk bismuth antimony tellurides: a simple top down route and improved thermoelectric properties. 2010 , 3, 1519			153
1637	Composition Controlled Superlattice InGaO ₃ (ZnO) _m Thin Films by Thickness of ZnO Buffer Layers and Thermal Treatment. 2010 , 10, 4638-4641			12
1636	Thermoelectric properties of Bi ₂ Te ₃ atomic quintuple thin films. 2010 , 97, 212102			85
1635	Electronic Structure of Bi Nanoribbon: Greatly Influenced by Edge Chirality and Edge Reconstruction. 2010 , 114, 19289-19293			10
1634	Nanowires. 2010 , 119-167			10
1633	Study on Thermoelectric Properties of Graphene. 2010 , 49, 100207			10
1632	Origin of coexisting large Seebeck coefficient and metallic conductivity in the electron doped SrTiO ₃ and KTaO ₃ . <i>Physical Review B</i> , 2010 , 81,	3-3		32
1631	Quantitative determination of contributions to the thermoelectric power factor in Si nanostructures. 2010 , 105, 256601			38
1630	Quantum confinement, surface roughness, and the conduction band structure of ultrathin silicon membranes. 2010 , 4, 2466-74			32
1629	High-Throughput Measurement of the Seebeck Coefficient and the Electrical Conductivity of Lithographically Patterned Polycrystalline PbTe Nanowires. 2010 , 1, 3004-3011			20
1628	The fabrication of thermoelectric La _{0.95} Sr _{0.05} CoO ₃ nanofibers and Seebeck coefficient measurement. 2010 , 21, 395303			27
1627	High Thermoelectric Performance of Ge/Si Core-Shell Nanowires: First-Principles Prediction. 2010 , 114, 9096-9100			34

1626	In situ nanostructure generation and evolution within a bulk thermoelectric material to reduce lattice thermal conductivity. 2010 , 10, 2825-31	95
1625	Minimum length scales for enhancement of the power factor in thermoelectric nanostructures. 2010 , 107, 074304	20
1624	Cross-plane thermal conductivity of highly oriented nanocrystalline bismuth antimony telluride thin films. 2010 , 490, L44-L47	35
1623	Nanostructured PbTe compound synthesized by a simple chemical route. 2010 , 493, 423-426	11
1622	Morphological evolution of Ag ₂ Te precipitates in thermoelectric PbTe. 2010 , 504, 37-44	37
1621	High-temperature thermoelectric properties of Ti _{0.5} (ZrHf) _{0.5} Nb _x Ni _{0.9} Pd _{0.1} Sn _{0.98} Sb _{0.02} half-Heusler alloys. 2010 , 504, 192-196	15
1620	Composition dependence of thermoelectric properties of binary narrow-gap Ga ₆₇ Ru _{33+x} compound. 2010 , 507, 364-369	22
1619	Molecular dynamics study on thermo-mechanical properties of bismuth telluride bulk. 2010 , 48, 343-348	18
1618	In-plane transport and enhanced thermoelectric performance in thin films of the topological insulators Bi ₂ Te ₃ and Bi ₂ Se ₃ . 2010 , 105, 166603	193
1617	Semiconductor nanowires for energy conversion. 2010 , 110, 527-46	1220
1616	Atomically-thin crystalline films and ribbons of bismuth telluride. 2010 , 96, 053107	117
1615	Thermoelectric efficiency at maximum power in low-dimensional systems. <i>Physical Review B</i> , 2010 , 82, 3-3	170
1614	Holey silicon as an efficient thermoelectric material. 2010 , 10, 4279-83	559
1613	Thermoelectric Microconverter for Energy Harvesting Systems. 2010 , 57, 861-867	115
1612	Fabrication of Bi ₂ Te ₃ /Sb ₂ Te ₃ and Bi ₂ Te ₃ /Bi ₂ Te ₂ Se multilayered thin film-based integrated cooling devices. 2010 , 28, 679-683	8
1611	Facile Chemical Synthesis of Nanocrystalline Thermoelectric Alloys Based on Bi ₂ Sb ₂ Te ₅ . 2010 , 10, 3983-3989	49
1610	High-performance nanostructured thermoelectric materials. 2010 , 2, 152-158	679
1609	Synthesis and applications of metal silicide nanowires. 2010 , 20, 223-235	180

1608	Enhancing thermoelectric performance of bismuth selenide films by constructing a double-layer nanostructure. 2010 , 12, 2672		21
1607	Improvement of the thermoelectric power factor through anisotropic growth of nanostructured PbSe thin films. 2010 , 39, 1095-100		13
1606	Interlayer tuning of electronic and magnetic properties in honeycomb ordered Ag ₃ LiRu ₂ O ₆ . 2010 , 20, 8021		19
1605	Synthesis and characterization of nanostructured bismuth selenide thin films. 2010 , 39, 10883-7		37
1604	Polymer-assisted preparation of nanoscale films of thermoelectric PbSe and PbTe and of lead chalcogenide-polymer composite films. 2010 , 39, 11248-54		7
1603	Enhanced thermoelectric figure of merit in edge-disordered zigzag graphene nanoribbons. <i>Physical Review B</i> , 2010 , 81,	3-3	231
1602	Geometry effects on thermoelectric properties of silicon nanowires based on electronic band structures. 2010 , 107, 014317		37
1601	Ballistic conductance and thermoelectric power of lead-salt semiconductor nanowires. <i>Physical Review B</i> , 2010 , 82,	3-3	5
1600	Effect of antisite defects on band structure and thermoelectric performance of ZrNiSn half-Heusler alloys. 2010 , 96, 152105		86
1599	Large Seebeck coefficients and thermoelectric power factor of La-doped SrTiO ₃ thin films. 2010 , 97, 042106		78
1598	Effect of Nanopowders Addition on the Thermoelectric Properties of n-Type Bi ₂ Te ₃ Nanocomposites. 2011 , 128, 1-7		2
1597	Composition controlled synthesis of Bi rich Bi _{1-x} Sb _x alloy nanocrystals by a low temperature polyol process. 2011 , 13, 2753		18
1596	Recent advances in thermoelectrics. 2011 ,		2
1595	Self-assembled bismuth telluride films with well-aligned zero- to three-dimensional nanoblocks for thermoelectric applications. 2011 , 13, 5956		18
1594	Remarkable enhancement in thermoelectric performance of BiCuSeO by Cu deficiencies. 2011 , 133, 20112-5		242
1593	Syntheses, Structures, and Magnetic and Thermoelectric Properties of Double-Tunnel Tellurides: AxRE ₂ Cu ₆ Te ₆ (A = K ⁺ ; RE = La ³⁺). 2011 , 23, 4910-4919		34
1592	Acetic acid-confined synthesis of uniform three-dimensional (3D) bismuth telluride nanocrystals consisting of few-quintuple-layer nanoplatelets. 2011 , 47, 12131-3		10
1591	Effect of quantum effects on electrical transport in Si/Ge/Si sandwich structure. 2011 ,		

- 1590 Low-temperature thermoelectric properties of Zn/Sb thin films prepared by magnetron sputtering. **2011**,
- 1589 Surface roughness effects on seebeck coefficient in silicon ultra thin films. **2011**,
- 1588 A nonequilibrium Green's function study of thermoelectric properties in single-walled carbon nanotubes. **2011**, 109, 014326 89
- 1587 Superlattice-based Thermoelectric Materials Fabricated using Ion Beam Deposition. **2011**,
- 1586 High thermoelectric figure-of-merit in kondo insulator nanowires at low temperatures. **2011**, 11, 1166-70 29
- 1585 Atomistic Design of High Thermoelectricity on Si/Ge Superlattice Nanowires. **2011**, 115, 20696-20702 25
- 1584 Thermal conductivity in Si/Ge and Si/SiGe superlattices. **2011**, 1
- 1583 Low-temperature thermoelectric power factor enhancement by controlling nanoparticle size distribution. **2011**, 11, 225-30 48
- 1582 Reflections on My Career in Condensed Matter Physics. **2011**, 2, 1-9 2
- 1581 Tellurization: An Alternative Strategy to Construct Thermoelectric Bi₂Te₃ Films. **2011**, 115, 16167-16171 19
- 1580 The Evolution of Nanothermoelectricity. **2011**, 1329, 1 1
- 1579 Thermoelectric Properties of Ultrasmall Single-Wall Carbon Nanotubes. **2011**, 115, 21996-22001 21
- 1578 Thermoelectric properties of silicon carbide nanowires with nitride dopants and vacancies. *Physical Review B*, **2011**, 84, 3-3 3
- 1577 Oxide thermoelectrics: The challenges, progress, and outlook. **2011**, 26, 1762-1772 215
- 1576 Effects of nano-domains on thermoelectric properties in telluride system. **2011**,
- 1575 Flexible single-walled carbon nanotubes/polyaniline composite films and their enhanced thermoelectric properties. **2011**, 3, 3616-9 94
- 1574 Enhanced thermoelectric performance of compacted Bi_{0.5}Sb_{1.5}Te₃ nanoplatelets with low thermal conductivity. **2011**, 26, 1755-1761 20
- 1573 Thermoelectric properties of individual single-crystalline PbTe nanowires grown by a vapor transport method. **2011**, 22, 295707 21

1572	Electronic structure of bismuth telluride quasi-two-dimensional crystal: A first principles study. 2011 , 98, 083113	17
1571	Sb ₂ Te ₃ and Bi ₂ Te ₃ Thin Films Grown by Molecular Beam Epitaxy at Room Temperature. 2011 , 1329, 1	2
1570	Toward high-performance nanostructured thermoelectric materials: the progress of bottom-up solution chemistry approaches. 2011 , 21, 17049	57
1569	Femtosecond laser-induced nanostructure formation in Sb ₂ Te ₃ . 2011 , 99, 121903	12
1568	Simultaneous large enhancements in thermopower and electrical conductivity of bulk nanostructured half-Heusler alloys. 2011 , 133, 18843-52	205
1567	Conversion of hexagonal Sb ₂ Te ₃ nanoplates into nanorings driven by growth temperature. 2011 , 27, 815-9	21
1566	Ternary and higher pnictides; prospects for new materials and applications. 2011 , 40, 4099-118	42
1565	A general strategy to bismuth chalcogenide films by chemical vapor transport. 2011 , 21, 2351-2355	16
1564	Unexpected size effect in the thermopower of thin-film stripes. 2011 , 110, 083709	35
1563	Prediction of phonon thermal transport in thin GaAs, InAs and InP nanowires by molecular dynamics simulations: influence of the interatomic potential. 2011 , 22, 185704	10
1562	Structure and Transport Properties of Double-Doped CoSb _{2.75} Ge _{0.25} Te _x (x = 0.125-0.20) with in Situ Nanostructure. 2011 , 23, 2948-2955	102
1561	Sb ₂ Te ₃ nanostructures with various morphologies: rapid microwave solvothermal synthesis and Seebeck coefficients. 2011 , 13, 6811	31
1560	Wet chemical synthesis and a combined X-ray and Mössbauer study of the formation of FeSb ₂ nanoparticles. 2011 , 50, 11807-12	7
1559	Scalability of quantum simulations of thermoelectric superlattice devices. 2011 , 50, 3265-3269	4
1558	Low loss EELS and EFTEM study of Bi ₂ Te ₃ based bulk and nanomaterials. 2011 , 1329, 1	6
1557	Facile fabrication and thermoelectric properties of PbTe-modified poly(3,4-ethylenedioxythiophene) nanotubes. 2011 , 3, 1163-6	129
1556	Figure of merit enhancement in bismuth telluride alloys via fullerene-assisted microstructural refinement. 2011 , 110, 023706	13
1555	Thermoelectric Phenomena, Materials, and Applications. 2011 , 41, 433-448	434

1554	Quantum and classical thermoelectric transport in quantum dot nanocomposites. 2011 , 110, 084317		17
1553	Enhancement of the thermoelectric properties in nanoscale and nanostructured materials. 2011 , 21, 4037-4055		275
1552	Raman scattering investigation of Bi ₂ Te ₃ hexagonal nanoplates prepared by a solvothermal process in the absence of NaOH. 2011 , 509, 5147-5151		42
1551	Holey topological thermoelectrics. 2011 , 99, 113110		52
1550	Potential Thermoelectric Performance from Optimization of Hole-Doped Bi ₂ Se ₃ . 2011 , 1,		33
1549	Quantum confinement and spin-orbit interactions in PbSe and PbTe nanowires: First-principles calculation. <i>Physical Review B</i> , 2011 , 84,	3-3	9
1548	Phonons of single quintuple Bi ₂ Te ₃ and Bi ₂ Se ₃ films and bulk materials. <i>Physical Review B</i> , 2011 , 83,	3-3	55
1547	Thermal Conductivity and Thermoelectric Power of Semiconductors. 2011 , 326-358		11
1546	Recent Developments in Semiconductor Thermoelectric Physics and Materials. 2011 , 41, 399-431		529
1545	Solution synthesis of nanoparticulate binary transition metal antimonides. 2011 , 50, 6938-43		16
1544	First-principles analysis of ZrN/ScN metal/semiconductor superlattices for thermoelectric energy conversion. 2011 , 109, 083717		19
1543	Preparation and characterization of planetary ball milled Si-based clathrates and their spark plasma sintered materials. 2011 , 18, 142012		3
1542	Thermoelectric figure of merit in topological insulators. 2011 , 302, 012026		
1541	Thermal transport in individual thermoelectric nanowires: a review. 2011 , 15, 375-385		17
1540	Synthesis of Bi ₂ Te ₃ Nanosheets using Polyol Process. 2011 , 18, 142009		2
1539	X-ray powder diffraction data of layered cobaltites with the compositions Ca ₃ □ _x Sr _x Co ₄ O ₉ . 2011 , 26, 273-276		1
1538	Recent aspects of oxide thermoelectric materials for power generation from mid-to-high temperature heat source. 2011 , 119, 770-775		126
1537	Searching for the best thermoelectrics through the optimization of transport distribution function. 2011 , 109, 073713		29

- 1536 Enhancement of the Thermoelectric Performance by Controlling the Distribution of the Structural Vacancies. **2011**, 50, 146-148
- 1535 InFeZnO₄ as Promising Thermal Barrier Coatings. **2011**, 94, 1664-1666 21
- 1534 Synthesis and thermoelectric properties of the (GeTe)_{1-x}(PbTe)_x alloys. **2011**, 13, 399-403 41
- 1533 Electrodeposition and characterization of thermoelectric Bi₂Te₂Se/Te multilayer nanowire arrays. **2011**, 50, 557-562 20
- 1532 Epitaxial growth and thermoelectric properties of TiNiSn and Zr_{0.5}Hf_{0.5}NiSn thin films. **2011**, 520, 1010-1014 29
- 1531 Synthesis and evaluation of lead telluride/bismuth antimony telluride nanocomposites for thermoelectric applications. **2011**, 184, 3195-3201 28
- 1530 Sr_{1-x}La_xTiO₃ nanoparticles: Synthesis, characterization and enhanced thermoelectric response. **2011**, 65, 190-193 15
- 1529 Oriented growth of A₂Te₃ (A = Sb, Bi) films and their devices with enhanced thermoelectric performance. **2011**, 171, 252-259 33
- 1528 Influence of NaOH on the formation and morphology of Bi₂Te₃ nanostructures in a solvothermal process: From hexagonal nanoplates to nanorings. **2011**, 129, 90-98 20
- 1527 Determining factors of thermoelectric properties of semiconductor nanowires. **2011**, 6, 502 18
- 1526 A study of the impact of dislocations on the thermoelectric properties of quantum wells in the Si/SiGe materials system. **2011**, 110, 114508 36
- 1525 Power factor enhancement by modulation doping in bulk nanocomposites. **2011**, 11, 2225-30 386
- 1524 Optimal bandwidth for high efficiency thermoelectrics. **2011**, 107, 226601 63
- 1523 Progress in Nano-Engineered Anodic Aluminum Oxide Membrane Development. **2011**, 4, 487-526 258
- 1522 Observation of anisotropy in thermal conductivity of individual single-crystalline bismuth nanowires. **2011**, 5, 3954-60 61
- 1521 Investigation of the hot side contacts to nanostructured LASTt(T) material. Part I. **2011**, 47, 90-97 2
- 1520 Enhanced figure of merit of a porous thin film of bismuth antimony telluride. **2011**, 98, 023114 88
- 1519 Synthesis and Thermoelectric Properties of Thin Film Assemblies of Bismuth Telluride Nanopolyhedra. **2011**, 23, 3029-3031 18

1518	Drastic improvement of oxide thermoelectric performance using thermal and plasma treatments of the InGaZnO thin films grown by sputtering. 2011 , 59, 6743-6750	61
1517	In situ fabrication and thermoelectric properties of PbTe/polyaniline composite nanostructures. 2011 , 13, 533-539	60
1516	Enhanced thermoelectric performance and novel nanopores in AgSbTe ₂ prepared by melt spinning. 2011 , 184, 109-114	49
1515	Characterization of electrodeposited bismuth/tellurium nanowires and nanotubes. 2011 , 59, 2455-2461	28
1514	Application of quantum well-like thermocouple to thermoelectric energy harvester by BiCMOS process. 2011 , 166, 117-124	18
1513	Seebeck Coefficient of Heavily P-Doped Si Calculated from an Alteration in Electronic Density of States. 2011 , 40, 903-906	6
1512	Numerical Study of Effects of Scattering Processes on Transport Properties of Bi Nanowires. 2011 , 40, 523-528	5
1511	Effect of Vacancy Distribution on the Thermal Conductivity of Ga ₂ Te ₃ and Ga ₂ Se ₃ . 2011 , 40, 999-1004	34
1510	Crystal Orientation and Transport Properties of a 633-nm-Diameter Bismuth Nanowire. 2011 , 40, 1005-1009	15
1509	Influence of Nano-inclusions on Thermoelectric Properties of n-Type Bi ₂ Te ₃ Nanocomposites. 2011 , 40, 1018-1023	38
1508	Thermoelectric Properties of the Narrow-Gap Intermetallic Compound Ga ₂ Ru: Effect of Re Substitution for Ru Atoms. 2011 , 40, 1067-1072	11
1507	Improved Thermoelectric Performance of p-Type Bismuth Antimony Telluride Bulk Alloys Prepared by Hot Forging. 2011 , 40, 1095-1099	28
1506	Molecular Dynamics Study of the Mechanical Behavior of Zn ₄ Sb ₃ Nanofilms. 2011 , 40, 1158-1164	9
1505	Effects of Various Reductants and Surfactants on the Nanostructure of Bi ₂ Te ₃ Synthesized by a Hydrothermal Process. 2011 , 40, 835-839	11
1504	Antimony Telluride Thin Films Electrodeposited in an Alkaline Electrolyte. 2011 , 40, 1506-1511	6
1503	Increase in the Thermoelectric Efficiency of the Disordered Phase of Layered Antiferromagnetic CuCrS ₂ . 2011 , 40, 2368-2373	19
1502	Developments in semiconductor thermoelectric materials. 2011 , 5, 125-136	16
1501	Crystal and electronic structure of PbTe/CdTe nanostructures. 2011 , 6, 126	11

1500	Simultaneous Electrical and Thermoelectric Parameter Retrieval via Two Terminal Current/Voltage Measurements on Individual ZnO Nanowires. 2011 , 21, 3900-3906	16
1499	Semimetal/semiconductor nanocomposites for thermoelectrics. 2011 , 23, 2377-83	30
1498	Thermoelectric Nanostructures: From Physical Model Systems towards Nanograined Composites. 2011 , 1, 713-731	193
1497	Large-Scale Synthesis and Characterization of the Size-Dependent Thermoelectric Properties of Uniformly Sized Bismuth Nanocrystals. 2011 , 123, 1399-1402	18
1496	One-Step Synthesis of Bismuth Telluride Nanosheets of a Few Quintuple Layers in Thickness. 2011 , 123, 10581-10585	8
1495	Large-scale synthesis and characterization of the size-dependent thermoelectric properties of uniformly sized bismuth nanocrystals. 2011 , 50, 1363-6	61
1494	One-step synthesis of bismuth telluride nanosheets of a few quintuple layers in thickness. 2011 , 50, 10397-40159	59
1493	Orientation-controlled synthesis and characterization of Bi ₂ Te ₃ nanofilms, and nanowires via electrochemical co-deposition. 2011 , 56, 2385-2393	15
1492	Optimal design for micro-thermoelectric generators using finite element analysis. 2011 , 88, 775-778	69
1491	Enhancement of thermoelectric figure-of-merit in laterally-coupled nanowire arrays. 2011 , 375, 2728-2732	3
1490	The effect of the Bi source on optical properties of Bi ₂ Te ₃ nanostructures. 2011 , 151, 704-707	9
1489	Microstructure and thermoelectric properties of Sn-doped Bi ₂ Te _{2.7} Se _{0.3} thin films deposited by flash evaporation method. 2011 , 519, 3007-3010	15
1488	Effect of hot-press treatment on electrochemically deposited antimony telluride film. 2011 , 519, 6399-6402	2
1487	Modeling of interface roughness in thermoelectric composite materials. 2011 , 23, 335301	9
1486	Nano Structural and Thermoelectric Properties of SiGeAu Thin Films. 2011 , 50, 041301	9
1485	Thermoelectric transport of perfectly conducting channels in two- and three-dimensional topological insulators. 2011 , 334, 012013	18
1484	The thermoelectric power factor of a semiconductor superlattice with nanoparticle inclusions. 2011 , 23, 365802	5
1483	Strain engineering of silicon/germanium (SiGe) micro- and nanostructures. 2011 , 247-295	1

1482	Exfoliation Route to Nanostructured Cobalt Oxide with Enhanced Thermoelectric Performance. 2011 , 4, 065201		3
1481	Universal scaling relations for the thermoelectric power factor of semiconducting nanostructures. <i>Physical Review B</i> , 2011 , 84,	3-3	21
1480	Mechanism for large thermoelectric power in molecular quantum dots described by the negative-U Anderson model. <i>Physical Review B</i> , 2011 , 84,	3-3	57
1479	Tunable thermal conductivity in defect engineered nanowires at low temperatures. <i>Physical Review B</i> , 2011 , 84,	3-3	28
1478	Temperature distribution analysis of silicon nanowire for thermoelectric applications. 2011 ,		
1477	Integration of Nanowires in New Devices and Circuit Architectures: Recent Developments and Challenges. 2011 , 575-639		
1476	Ballistic thermoelectricity in double-bend nanowires. 2011 , 98, 173107		14
1475	Computational study of the Seebeck coefficient of one-dimensional composite nano-structures. 2011 , 110, 034511		50
1474	Thermoelectric figure of merit as a function of carrier propagation angle in semiconducting superlattices. 2011 , 99, 102101		1
1473	Thermoelectric figure of merit calculations for semiconducting nanowires. 2011 , 98, 182104		49
1472	Monolithic oxide-metal composite thermoelectric generators for energy harvesting. 2011 , 109, 124509		25
1471	Influence of Sputtering Power of Te and Annealing on Sb-Te Thin Films Fabricated by RF and DC Co-Sputtering. 2011 , 194-196, 2400-2403		3
1470	Annealing Effects on Microstructure and Thermoelectric Properties of Bi ₂ (Te _{0.95} Se _{0.05}) ₃ Thin Films Prepared by Flash Evaporation Method. 2011 , 287-290, 2434-2437		
1469	Thermoelectric Energy Conversion and Ceramic Thermoelectrics. 2011 , 671, 1-20		3
1468	Experimental Electronic Structure of the Thermoelectric Materials Bi ₂ Te ₃ and Sb ₂ Te ₃ . 2011 , 699, 103-121		
1467	Preparation and Thermoelectric Characteristics of SiO ₂ /Mg ₂ Si _{0.8} Sn _{0.2} Bulk Nanocomposite. 2011 , 415-417, 47-51		1
1466	Bi ₂ Te ₃ : implications of the rhombohedral k-space texture on the evaluation of the in-plane/out-of-plane conductivity anisotropy. 2011 , 23, 505504		11
1465	Computational Study of the Electronic Performance of Cross-Plane Superlattice Peltier Devices. 2011 , 1314, 1		

1464	Crystal Lattice Controlled SiGe Thermoelectric Materials with High Figure of Merit. 2011 , 1314, 1		1
1463	Graphene-Based Antidots for Thermoelectric Applications. 2011 , 158, K213		5
1462	Thermopower, figure of merit and spin-transfer torque induced by the temperature gradient in planar tunnel junctions. 2011 , 23, 456001		10
1461	Pseudo-Superlattices of Bi ₂ Te ₃ Topological Insulator Films with Enhanced Thermoelectric Performance. 2011 , 1344, 1		
1460	NONMONOTONIC BEHAVIOR OF ELECTRONIC TRANSPORT COEFFICIENTS IN SiTe QUANTUM WELLS. 2011 , 25, 813-822		1
1459	Bi ₂ Zn ₄ Sb ₃ Nanocantilevers and Their Thermoelectric Properties. 2011 , 15, 95-104		2
1458	Size-dependent thermoelectricity in nanowires. 2011 , 44, 125403		11
1457	ENHANCEMENT OF THERMOELECTRIC POWER FACTOR BY A SILICON SPACER IN MODULATION-DOPED Si-HMS-Si. 2011 , 06, 481-487		10
1456	Photo-Seebeck Effect in ZnO. 2012 , 81, 114722		29
1455	Electrodeposition of Bi-Sb alloy using Cu electrodes. 2012 , 03, 492-494		
1454	Seebeck coefficient of a quantum confined, high-electron-density electron gas in SrTiO ₃ . 2012 , 100, 161601		14
1453	Nanostructured thermoelectric cobalt oxide by exfoliation/restacking route. 2012 , 112, 113705		10
1452	New approach to an electron emission thermal-to-electrical energy conversion problem. 2012 ,		
1451	Effect of the energy dependence of the carrier scattering time on the thermoelectric power factor of quantum wells and nanowires. 2012 , 100, 242106		9
1450	Thermoelectric properties of AgGaTe ₂ and related chalcopyrite structure materials. <i>Physical Review B</i> , 2012 , 85,	3-3	104
1449	Thermoelectric properties of n-type Bi ₂ (Te _{0.85} Se _{0.15}) ₃ single crystals doped with CuBr and SbI ₃ . <i>Physical Review B</i> , 2012 , 85,	3-3	37
1448	Detailed calculation of the thermoelectric figure of merit in an n-doped SiGe alloy. <i>Physical Review B</i> , 2012 , 86,	3-3	13
1447	Disordered stoichiometric nanorods and ordered off-stoichiometric nanoparticles in n-type thermoelectric Bi ₂ Te _{2.7} Se _{0.3} . 2012 , 112, 093518		4

1446	Performance analysis of an interacting quantum dot thermoelectric setup. <i>Physical Review B</i> , 2012 , 85,	3-3	67
1445	The microstructure network and thermoelectric properties of bulk (Bi,Sb) ₂ Te ₃ . 2012 , 101, 113902		12
1444	Cooling effect of nanoscale Bi ₂ Te ₃ /Sb ₂ Te ₃ multilayered thermoelectric thin films. 2012 , 30, 041509		9
1443	Evaluation of Seebeck coefficients in n- and p-type silicon nanowires fabricated by complementary metal-oxide-semiconductor technology. 2012 , 23, 405707		13
1442	The physics of epitaxial graphene on SiC(0001). 2012 , 24, 314215		21
1441	Thermoelectric Properties in a Parallel Double Quantum Dot Structure Modulated by the Fano Interferences. 2012 , 81, 104601		13
1440	Simultaneous measurements of thermal conductivity and electrical conductivity of micro-machined Silicon films. 2012 , 31, 012020		0
1439	Modeling and Characterization of Silicon Nanowire Networks for Thermoelectric Conversion. 2012 , 1456, 38		
1438	Thermoelectric transport in Bi ₂ Te ₃ /Sb ₂ Te ₃ superlattices. <i>Physical Review B</i> , 2012 , 86,	3-3	49
1437	Thermopower in oxide heterostructures: The importance of being multiple-band conductors. <i>Physical Review B</i> , 2012 , 86,	3-3	43
1436	Semiconductor nanowires for thermoelectrics. 2012 , 22, 22821		43
1435	Thin Films for Thermoelectric Applications. 2012 , 485-528		2
1434	Flexible nanocrystal-coated glass fibers for high-performance thermoelectric energy harvesting. 2012 , 12, 2140-5		72
1433	Optimizing the thermoelectric performance of zigzag and chiral carbon nanotubes. 2012 , 7, 116		15
1432	Thermal and Thermoelectric Transport in Nanostructures and Low-Dimensional Systems. 2012 , 16, 79-116		108
1431	Thermoelectric transport in topological insulators. 2012 , 27, 124005		54
1430	Rational synthesis of ultrathin n-type Bi ₂ Te ₃ nanowires with enhanced thermoelectric properties. 2012 , 12, 56-60		245
1429	High Seebeck effects from conducting polymer: Poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate) based thin-film device with hybrid metal/polymer/metal architecture. 2012 , 101, 173304		13

1428	Electrical and structural properties of Bi ₂ Te ₃ and Sb ₂ Te ₃ thin films grown by the nanoalloying method with different deposition patterns and compositions. 2012 , 22, 11323	42
1427	Ultrafast-laser Modification of Thermoelectric Sb ₂ Te ₃ Thin Films. 2012 , 1456, 1	
1426	Atomically thick bismuth selenide freestanding single layers achieving enhanced thermoelectric energy harvesting. 2012 , 134, 20294-7	244
1425	Nanostructured thermoelectric materials: Current research and future challenge. 2012 , 22, 535-549	485
1424	Effects of Bi ₂ Se ₃ Nanoparticle Inclusions on the Microstructure and Thermoelectric Properties of Bi ₂ Te ₃ -Based Nanocomposites. 2012 , 41, 3411-3416	14
1423	Thermoelectric three-terminal hopping transport through one-dimensional nanosystems. <i>Physical Review B</i> , 2012 , 85,	3-3 86
1422	Thermoelectric effects of a laterally coupled double-quantum-dot structure. 2012 , 85, 1	4
1421	Nanobasierte Energiegewinnung in autarken Mikro-/Nanosystemen. 2012 , 124, 11868-11891	19
1420	Nanotechnology-enabled energy harvesting for self-powered micro-/nanosystems. 2012 , 51, 11700-21	747
1419	Current Status in Fabrication, Structural and Transport Property Characterization, and Theoretical Understanding of Bi ₂ Te ₃ / Sb ₂ Te ₃ Superlattice Systems. 2012 , 638, 2441-2454	21
1418	Bottom-up processing of thermoelectric nanocomposites from colloidal nanocrystal building blocks: the case of Ag ₂ Te/PbTe. 2012 , 14, 1	23
1417	Tuning the Geometrical and Crystallographic Characteristics of Bi ₂ Te ₃ Nanowires by Electrodeposition in Ion-Track Membranes. 2012 , 116, 5367-5375	32
1416	Nanoscale stacking faults induced low thermal conductivity in thermoelectric layered metal sulfides. 2012 , 100, 101913	47
1415	The properties of BiSb nanoribbons from first-principles calculations. 2012 , 4, 511-7	8
1414	Growth and properties of coherent twinning superlattice nanowires. 2012 , 4, 5268-76	33
1413	Surface roughness plays a key role on power factor of sub-50 nm thermoelectric devices. 2012 ,	
1412	Mesoscopic description of boundary effects in nanoscale heat transport. 2012 , 1, 112-142	4
1411	Bi ₂ Te ₃ nanoplates and nanoflowers: Synthesized by hydrothermal process and their enhanced thermoelectric properties. 2012 , 14, 2159	98

1410	Achieving chemical stability in thermoelectric Na_xCoO_2 thin films. 2012 , 2, 6023			16
1409	Hybrid solution processed $\text{InGaO}_3(\text{ZnO})_m$ thin films with periodic layered structures and thermoelectric properties. 2012 , 22, 16312			15
1408	Thermoelectric properties of HfN/ScN metal/semiconductor superlattices: a first-principles study. 2012 , 24, 415303			18
1407	Formation of $\text{Mg}_2\text{Si}/\text{MgO}$ Nano-Composites Prepared by Dual Cathode Magnetron Sputtering. 2012 , 17, 175-183			
1406	Si/SiGe nanoscale engineered thermoelectric materials for energy harvesting. 2012 ,			
1405	Colloidal nanocrystal quantum dot assemblies as artificial solids. 2012 , 30, 030802			101
1404	Application of the wavelet transform to nanoscale thermal transport. <i>Physical Review B</i> , 2012 , 86,	3-3		23
1403	Thermoelectric efficiency of topological insulators in a magnetic field. 2012 , 111, 07E319			14
1402	Quasicrystals and the Quest for Next Generation Thermoelectric Materials. 2012 , 37, 215-242			6
1401	Thermoelectric internal current loops inside inhomogeneous systems. <i>Physical Review B</i> , 2012 , 85,	3-3		13
1400	Mesoporous Thin Films: Thermoelectric Application. 2012 , 260-261, 34-39			1
1399	Implications of nanostructuring on the thermoelectric properties in half-Heusler alloys. 2012 , 101, 133103			34
1398	Thermoelectric properties of one-dimensional graphene antidot arrays. 2012 , 376, 2425-2429			40
1397	Structural and electronic properties of $\text{Pb}_{1-x}\text{Cd}_x\text{Te}$ and $\text{Pb}_{1-x}\text{Mn}_x\text{Te}$ ternary alloys. <i>Physical Review B</i> , 2012 , 86,	3-3		17
1396	Resonant carrier scattering by core-shell nanoparticles for thermoelectric power factor enhancement. 2012 , 100, 012102			26
1395	Synthesis, processing, and thermoelectric properties of bulk nanostructured bismuth telluride (Bi_2Te_3). 2012 , 22, 725-730			140
1394	Computational study of energy filtering effects in one-dimensional composite nano-structures. 2012 , 111, 024508			39
1393	Thermoelectric properties of ultrathin silicon nanowires. <i>Physical Review B</i> , 2012 , 86,	3-3		67

1392	Composition Control and Thermoelectric Properties of Quaternary Chalcogenide Nanocrystals: The Case of Stannite $\text{Cu}_2\text{CdSnSe}_4$. 2012 , 24, 562-570	137
1391	Largely enhanced thermoelectric properties of the binary-phased $\text{PbTe}/\text{Bi}_2\text{Te}_3$ nanocomposites. 2012 , 27, 734-739	7
1390	Thermoelectric properties of armchair and zigzag silicene nanoribbons. 2012 , 14, 13588-93	102
1389	Determination of Electrical Contact Resistivity in Thermoelectric Modules (TEMs) From Module-Level Measurements. 2012 , 2, 668-676	11
1388	Metal sulfide nanostructures: synthesis, properties and applications in energy conversion and storage. 2012 , 22, 19-30	469
1387	Influence of nanosized inclusions on the room temperature thermoelectrical properties of a p-type bismuth/bellurium/antimony alloy. 2012 , 60, 4523-4530	6
1386	Synthesis and characterization of Bi-doped Mg_2Si thermoelectric materials. 2012 , 193, 142-146	52
1385	One-dimensional nanostructured oxides for thermoelectric applications and excitonic solar cells. 2012 , 1, 372-390	36
1384	Effect of Ag-doping on crystal structure and high temperature thermoelectric properties of c-axis oriented $\text{Ca}_3\text{Co}_4\text{O}_9$ thin films by pulsed laser deposition. 2012 , 511, 133-138	14
1383	Room-temperature MBE deposition, thermoelectric properties, and advanced structural characterization of binary Bi_2Te_3 and Sb_2Te_3 thin films. 2012 , 521, 163-173	44
1382	Thermoelectric power factor enhancement of AZO/In-AZO quantum well multilayer structures as compared to bulk films. 2012 , 539, 129-136	12
1381	Lattice dynamics of PbTe polymorphs from first principles. 2012 , 56, 18-24	9
1380	Ferroelectric-thermoelectricity and Mott transition of ferroelectric oxides with high electronic conductivity. 2012 , 32, 3971-3988	80
1379	Micro-/nanostructured mechanical metamaterials. 2012 , 24, 4782-810	344
1378	Large-scale colloidal synthesis of non-stoichiometric $\text{Cu}_2\text{ZnSnSe}_4$ nanocrystals for thermoelectric applications. 2012 , 24, 6158-63	119
1377	Tailoring of Seebeck coefficient with surface roughness effects in silicon sub-50-nm films. 2012 , 7, 169	2
1376	Preparation of bismuth nanowire encased in quartz template for Hall measurements using focused ion beam processing. 2012 , 7, 505	19
1375	Enhanced thermoelectric performance in three-dimensional superlattice of topological insulator thin films. 2012 , 7, 570	24

1374	Optical Properties of Nanoscale Transition Metal Oxides. 2012 , 87-126	1
1373	Enhanced thermoelectric performance of graphene nanoribbons. 2012 , 100, 093104	60
1372	Nontoxic and abundant copper zinc tin sulfide nanocrystals for potential high-temperature thermoelectric energy harvesting. 2012 , 12, 540-5	192
1371	Resonant levels in bulk thermoelectric semiconductors. 2012 , 5, 5510-5530	624
1370	Thermoelectric properties of Ba ₈ Ga ₁₆ Ge ₃₀ with TiO ₂ nano-inclusions. 2012 , 112, 044313	12
1369	Large reduction in thermal conductivity for Ge quantum dots embedded in SiO ₂ system. 2012 , 101, 251913	9
1368	Thermoelectric properties of a single quantum dot in mixed-valence regime. 2012 , 52, 1166-1170	1
1367	PbTe formation by swift heavy ion beam induced interface mixing of Te/PbO bilayer. 2012 , 289, 22-27	10
1366	Large thermoelectric effect in graphene superlattices. 2012 , 46, 189-192	17
1365	Preparation of nano-sized Bi ₂ Te ₃ thermoelectric material powders by cryogenic grinding. 2012 , 22, 201-206	30
1364	Synthesis of thermoelectric Ca ₃ Co ₄ O ₉ ceramics with high ZT values from a CoII/CoIII-Layered Double Hydroxide precursor. 2012 , 47, 3287-3291	18
1363	Monolithically integrated thermoelectric energy harvester based on silicon nanowire arrays for powering micro/nanodevices. 2012 , 1, 812-819	80
1362	Size effects on thermoelectricity in a strongly correlated oxide. <i>Physical Review B</i> , 2012 , 85,	3-3 12
1361	Preparation and thermoelectric properties of p-type Bi _{0.52} Sb _{1.48} Te ₃ + 3% Te thin films. 2012 , 57, 4220-4224	3
1360	Synthesis of Hexagonal Sb ₂ Te ₃ Nanoplates by Thermal Decomposition of the Single-Source Precursor (Et ₂ Sb) ₂ Te. 2012 , 24, 2228-2234	44
1359	First-principles modeling of the thermoelectric properties of SrTiO ₃ /SrRuO ₃ superlattices. <i>Physical Review B</i> , 2012 , 86,	3-3 24
1358	Sn-doped bismuth telluride nanowires with high conductivity. 2012 , 4, 6276-8	7
1357	A facile synthetic approach for copper iron sulfide nanocrystals with enhanced thermoelectric performance. 2012 , 4, 6265-8	77

1356	Fabrication of Highly (0 0 l)-Textured Sb ₂ Te ₃ Film and Corresponding Thermoelectric Device with Enhanced Performance. 2012 , 41, 3031-3038		15
1355	Raman scattering in the Bi ₂ (Te _{0.9} Se _{0.1}) ₃ solid solution films. 2012 , 46, 1140-1144		3
1354	Phase diagrams of Bi _{1-x} Sb _x thin films with different growth orientations. <i>Physical Review B</i> , 2012 , 86,	3-3	14
1353	Interface driven energy filtering of thermoelectric power in spark plasma sintered Bi ₂ Te _{2.7} Se _{0.3} nanoplatelet composites. 2012 , 12, 4305-10		127
1352	An investigation of the growth of bismuth whiskers and nanowires during physical vapour deposition. 2012 , 45, 435304		15
1351	Thermal and Thermoelectric Properties of Nanostructured versus Crystalline SiGe. 2012 ,		1
1350	Amine-assisted solution approach for the synthesis and growth mechanism of super-long rough-surfaced Cu ₇ Te ₄ nanobelts. 2012 , 14, 6962		20
1349	Nanowires for energy generation. 2012 , 23, 194002		35
1348	A high thermoelectric figure of merit ZT > 1 in Ba heavily doped BiCuSeO oxyselenides. 2012 , 5, 8543		292
1347	Single molecule electronics and devices. 2012 , 12, 7259-98		105
1346	Development of plasmonic semiconductor nanomaterials with copper chalcogenides for a future with sustainable energy materials. 2012 , 5, 5564-5576		296
1345	Characterization and properties of micro- and nanowires of controlled size, composition, and geometry fabricated by electrodeposition and ion-track technology. 2012 , 3, 860-83		132
1344	Synthesis of Mg ₂ Si/MgO Nanofibers Using SiO ₂ Nanofibers in Mg Vapor. 2012 , 10, 297-300		4
1343	Thermoelectric transport in heterogeneous medium: the role of thermal boundary resistance. 2012 , 58, 30901		9
1342	Room temperature MBE deposition of Bi ₂ Te ₃ and Sb ₂ Te ₃ thin films with low charge carrier densities. 2012 , 209, 289-293		45
1341	Enhancement in thermoelectric power factor of polycrystalline Bi _{0.5} Sb _{1.5} Te ₃ by crystallite alignment. 2012 , 209, 2131-2134		17
1340	Enhanced thermoelectric properties of solution grown Bi ₂ Te _{3-x} Se _x nanoplatelet composites. 2012 , 12, 1203-9		283
1339	In Situ TEM Investigations on Thermoelectric Bi ₂ Te ₃ /Sb ₂ Te ₃ Multilayers. 2012 , 14, 139-143		13

- 1338 The size-dependent thermoelectric response of tungsten-constantan thermocouple in the sub-micro scale. **2012**, 107, 455-458 2
- 1337 Structural, Electronic, and Thermoelectric Properties of InSe Nanotubes: First-Principles Calculations. **2012**, 116, 3956-3961 13
- 1336 Enhanced thermoelectric figure-of-merit ZT for hole-doped Bi₂Sr₂Co₂O_y through Pb substitution. **2012**, 111, 103709 34
- 1335 Relation between Seebeck Coefficient and Lattice Parameters of (Ca_{2-x}Sr_yCoO₃)_xCoO₂. **2012**, 41, 1513-1518 6
- 1334 Electrochemical deposition of Co₅B thin films on nanostructured gold. **2012**, 42, 333-339 13
- 1333 Thermoelectric performance of disordered and nanostructured graphene ribbons using Green's function method. **2012**, 11, 67-77 28
- 1332 One-pot fabrication and enhanced thermoelectric properties of poly(3,4-ethylenedioxythiophene)-Bi₂S₃ nanocomposites. **2012**, 14, 1 31
- 1331 Sb₂Te₃ and Bi₂Te₃ Thin Films Grown by Room-Temperature MBE. **2012**, 41, 1493-1497 23
- 1330 Inorganic Colloidal Solution-Based Approach to Nanocrystal Synthesis of (Bi,Sb)₂Te₃. **2012**, 41, 1573-1578 1
- 1329 Influence of Substrate Temperature on Structural and Thermoelectric Properties of Antimony Telluride Thin Films Fabricated by RF and DC Cosputtering. **2012**, 41, 679-683 16
- 1328 Top-Down Silicon Nanowire-Based Thermoelectric Generator: Design and Characterization. **2012**, 41, 989-992 24
- 1327 Seebeck Enhancement Through Miniband Conduction in III-V Semiconductor Superlattices at Low Temperatures. **2012**, 41, 1498-1503 9
- 1326 Thermoelectric Properties of Cold-Pressed Higher Manganese Silicides for Waste Heat Recovery. **2012**, 41, 1564-1572 21
- 1325 Nanostructure, Excitations, and Thermoelectric Properties of Bi₂Te₃-Based Nanomaterials. **2012**, 41, 1792-1798 19
- 1324 The Effects of Thermoelectric Film Thickness on Performance of In-Plane Thermoelectric Modules. **2012**, 41, 1799-1804 10
- 1323 Thermoelectric Performance of ZnO:Al/ZnO:(Al,In) Quantum Well Multilayer Structures as a Function of Indium Composition and Band-Gap Offset at High Operating Temperatures. **2012**, 41, 1831-1837 0
- 1322 Rattler-seeded InSb nanoinclusions from metastable indium-filled In_{0.1}Co₄Sb₁₂ skutterudites for high-performance thermoelectrics. **2012**, 60, 2178-2185 38
- 1321 One-step microwave-solvothermal rapid synthesis of Sb doped PbTe/Ag₂Te core/shell composite nanocubes. **2012**, 193-194, 227-233 22

1320	Facile synthesis of thermoelectric films via spin-coating metastable precursors. 2012 , 38, S535-S538	3
1319	Thermal transport within quantum-dot nanostructured semiconductors. 2012 , 55, 2800-2806	5
1318	Experimental study on synthesizing TiO ₂ nanotube/polyaniline (PANI) nanocomposites and their thermoelectric and photosensitive property characterization. 2012 , 43, 170-182	38
1317	Electrodeposition of bismuth telluride nanowires with controlled composition in polycarbonate membranes. 2012 , 69, 30-37	34
1316	High Thermoelectric Performance of Nanostructured In ₂ O ₃ -Based Ceramics. 2012 , 95, 2465-2469	34
1315	Solvothermal synthesis and growth mechanism of Ag and Sb co-doped PbTe heterogeneous thermoelectric nanorods and nanocubes. 2012 , 133, 33-37	8
1314	One-pot fabrication and thermoelectric properties of Ag ₂ Te/polyaniline core-shell nanostructures. 2012 , 133, 808-812	35
1313	Effect of precursors size on the thermoelectric properties of Ca ₃ Co ₄ O ₉ ceramics. 2012 , 47, 1169-1175	25
1312	Structural and thermoelectric characterizations of high pressure sintered nanocrystalline Bi ₂ Te ₃ bulks. 2012 , 47, 1432-1437	18
1311	Facile synthesis of ultra-small Bi ₂ Te ₃ nanoparticles, nanorods and nanoplates and their morphology-dependent Raman spectroscopy. 2012 , 82, 112-115	24
1310	Synthesis and high-performance thermoelectric properties of beta-Zn ₄ Sb ₃ nanowires. 2012 , 84, 116-119	12
1309	Characterization of hexagonal Bi ₂ Te ₃ nanosheets prepared by solvothermal method. 2012 , 152, 810-815	17
1308	Optimization in fabricating bismuth telluride thin films by ion beam sputtering deposition. 2012 , 520, 5245-5248	33
1307	Research progress on polymer/organic thermoelectric nanocomposite materials. 2012 , 37, 820-841	414
1306	Stoichiometry Controlled, Single-Crystalline Bi ₂ Te ₃ Nanowires for Transport in the Basal Plane. 2012 , 22, 151-156	46
1305	Unusually large enhancement of thermopower in an electric field induced two-dimensional electron gas. 2012 , 24, 740-4	71
1304	Thermoelectric Power and ZT in Conducting Organic Semiconductor. 2012 , 41, 476-479	8
1303	Spark plasma sintering of a p-type Si _{1-x} Ge _x alloy: identification of the densification mechanism by isothermal and anisothermal methods. 2012 , 47, 4313-4325	11

1302	Fano Effect on the Thermoelectric Efficiency in Parallel-Coupled Double Quantum Dots. 2012 , 166, 208-217	9
1301	Great enhancements in the thermoelectric power factor of BiSbTe nanostructured films with well-ordered interfaces. 2013 , 5, 7017-25	44
1300	Electron energy filtering by a nonplanar potential to enhance the thermoelectric power factor in bulk materials. <i>Physical Review B</i> , 2013 , 87,	3-3 130
1299	Crystallographic, Thermoelectric, and Mechanical Properties of Polycrystalline Ba ₈ Al _x Si ₄₆ Clathrates. 2013 , 42, 2326-2336	16
1298	Natural Superlattice Material: TiS(₂)-Based Misfit-Layer Compounds. 2013 , 157-173	2
1297	Review on measurement techniques of transport properties of nanowires. 2013 , 5, 11526-44	67
1296	Alternative Strategies for Thermoelectric Materials Development. 2013 , 1-24	3
1295	Introduction of Metal Oxides into Mg ₂ Si Thermoelectric Materials by Spark Plasma Sintering. 2013 , 42, 2062-2066	7
1294	Thermoelectric properties of p-type semiconductors copper chromium disulfide CuCrS _{2+x} . 2013 , 48, 4081-4087	17
1293	Nanostructuring of Conventional Thermoelectric Materials. 2013 , 303-320	
1292	Morphological evolution and structural characterization of bismuth telluride (Bi ₂ Te ₃) nanostructures. 2013 , 46, 285301	16
1291	Using crystallographic shear to reduce lattice thermal conductivity: high temperature thermoelectric characterization of the spark plasma sintered Magn ₂ phases WO _{2.90} and WO _{2.722} . 2013 , 15, 15399-403	17
1290	Structural modifications and non-monotonic carrier concentration in Bi ₂ Se _{0.3} Te _{2.7} by reversible electrochemical lithium reactions. 2013 , 61, 1508-1517	18
1289	The Peierls Distortion and Quasi-One-Dimensional Crystalline Materials of Indium Selenides. 2013 , 95-122	
1288	Doped Bi ₂ Te ₃ nano-structured semiconductors obtained by ultrasonically assisted hydrothermal method. 2013 , 11, 1599-1605	2
1287	Thermoelectric performance enhancement of (BiS) _{1.2} (TiS ₂) ₂ misfit layer sulfide by chromium doping. 2013 , 2, 42-48	22
1286	Transport in semiconductor nanowire superlattices described by coupled quantum mechanical and kinetic models. 2013 , 25, 335301	3
1285	Phonon thermal transport outside of local equilibrium in nanowires via molecular dynamics. 2013 , 138, 124704	3

1284	Effect of Annealing Temperature on the Thermoelectric Properties of the Bi _{0.5} Sb _{1.5} Te ₃ Thin Films Prepared by Radio-Frequency Sputtering. 2013 , 44, 2339-2345		10
1283	Nanostructuring and Thermoelectric Characterization of (GaSb) ₃ (1-x)(Ga ₂ Te ₃) _x . 2013 , 42, 1719-1724		2
1282	Synthesis and Characterization of Al-Doped Mg ₂ Si Thermoelectric Materials. 2013 , 42, 1956-1959		59
1281	Improved Thermoelectric Performance of Free-Standing PEDOT:PSS/Bi ₂ Te ₃ Films with Low Thermal Conductivity. 2013 , 42, 1268-1274		76
1280	Determination of nanoscale heat conductivity by time-resolved X-ray scattering. 2013 , 541, 28-31		6
1279	Thermoelectric misfit-layered cobalt oxides with interlayers of hydroxide and peroxide species. 2013 , 208, 109-115		0
1278	Phonon thermal conductivity of monolayer MoS ₂ sheet and nanoribbons. 2013 , 103, 133-113		145
1277	Enhanced thermoelectric properties and layered structure of Sb ₂ Te ₃ films induced by special (00l) crystal plane. 2013 , 584, 159-164		13
1276	Reflections on thermoelectrics. 2013 , 8, 469		2
1275	Thermoelectric effect of correlated metals: Band-structure effects and the breakdown of Mott's formula. <i>Physical Review B</i> , 2013 , 88,	3-3	16
1274	Giant Thermoelectric Effect in Graded Micro-Nanoporous Materials. 2013 , 1543, 29-38		1
1273	Thermoelectricity in semiconductor nanowires. 2013 , 7, 767-780		24
1272	Syntheses and structural characterizations of CrSi ₂ nanostructures using Si substrates under CrCl ₂ vapor. 2013 , 365, 11-18		9
1271	Enhanced Thermoelectric Properties and Superlattice Structure of a Bi ₂ Te ₃ /ZrB ₂ Film Prepared by Ion-Beam-Assisted Deposition. 2013 , 117, 20415-20420		17
1270	Improved performance of thermoelectric micro-device by integrating a layered Bi ₂ Te ₃ film. 2013 , 548, 526-532		8
1269	Sound and heat revolutions in phononics. 2013 , 503, 209-17		786
1268	Effects of surface band bending and scattering on thermoelectric transport in suspended bismuth telluride nanoplates. 2013 , 13, 5316-22		106
1267	Facile synthesis of preferential Bi _{0.5} Sb _{1.5} Te _{3.0} nanolayered thin films with high power factor by the controllable layer thickness. 2013 , 15, 1		12

1266	Environmentally benign enhanced H ₂ production from abundant copious waste H ₂ S using size tuneable cubic bismuth (BiO) quantum dots/GeO ₂ glass photocatalyst under solar light. 2013 , 15, 3459	17
1265	Morphological evolution in single-crystalline Bi ₂ Te ₃ nanoparticles, nanosheets and nanotubes with different synthesis temperatures. 2013 , 36, 765-770	11
1264	Power Factor Characterization of Ge/SiGe Thermoelectric Superlattices at 300 K. 2013 , 42, 1449-1453	6
1263	Properties of thermoelectric Ce _{0.09} Fe _{0.67} Co _{3.33} Sb ₁₂ /FeSb ₂ Te multi-layered structures prepared by laser ablation. 2013 , 548, 590-596	4
1262	Review of 3D topological insulator thin-film growth by molecular beam epitaxy and potential applications. 2013 , 7, 50-63	125
1261	Focused ion beam processing to fabricate ohmic contact electrodes on a bismuth nanowire for Hall measurements. 2013 , 8, 400	13
1260	Enhanced thermopower of gated silicene. 2013 , 86, 1	18
1259	Fabrication of a layered nanostructure PEDOT:PSS/SWCNTs composite and its thermoelectric performance. 2013 , 3, 22065	94
1258	Stress-induced growth of single-crystalline lead telluride nanowires and their thermoelectric transport properties. 2013 , 103, 023115	16
1257	Heat Transfer in Thermoelectric Materials and Devices. 2013 , 135,	101
1256	Large thermoelectric power factor enhancement observed in InAs nanowires. 2013 , 13, 4080-6	100
1255	Phonon spectroscopy in a Bi ₂ Te ₃ nanowire array. 2013 , 5, 10629-35	14
1254	Specific heat measurement of thin suspended SiN membrane from 8 K to 300 K using the 3EMKlein method. 2013 , 84, 094902	14
1253	Giant Seebeck coefficient of the graphene/h-BN superlattices. 2013 , 103, 113901	55
1252	Sintering and annealing effects on ZnO microstructure and thermoelectric properties. 2013 , 61, 3314-3323	34
1251	Prospects for SiGe thermoelectric generators. 2013 ,	1
1250	KFM evaluation of seebeck coefficient in thin SOI layers. 2013 ,	
1249	Bottom-up solution chemistry approaches for nanostructured thermoelectric materials. 2013 , 1, 14221	11

1248	SrTiO ₃ thin films as high efficient thermoelectric materials. 2013 ,	
1247	Thermal conductivity measurement of individual Bi ₂ Se ₃ nano-ribbon by self-heating three-□ method. 2013 , 102, 043104	28
1246	The cross-plane thermoelectric properties of p-Ge/Si _{0.5} Ge _{0.5} superlattices. 2013 , 103, 143507	39
1245	Prospects of Thin-Film Thermoelectric Devices for Hot-Spot Cooling and On-Chip Energy Harvesting. 2013 , 3, 2059-2067	29
1244	Aqueous solution synthesis of (Sb, Bi) ₂ (Te, Se) ₃ nanocrystals with controllable composition and morphology. 2013 , 1, 6271	15
1243	Co ₃ M ₂ S ₂ (M = Sn, In) shandites as tellurium-free thermoelectrics. 2013 , 1, 6553	24
1242	Sb ₂ Te ₃ nanobelts and nanosheets: Hydrothermal synthesis, morphology evolution and thermoelectric properties. 2013 , 550, 164-168	35
1241	Composite thermoelectric materials with embedded nanoparticles. 2013 , 48, 2767-2778	38
1240	High-aspect-ratio and highly ordered 15-nm porous alumina templates. 2013 , 5, 72-9	85
1239	Parallel thermoelectrics. <i>Physical Review B</i> , 2013 , 87,	3-3 7
1238	Design of a Compact, Portable Test System for Thermoelectric Power Generator Modules. 2013 , 42, 1535-1541	17
1237	Reducing the thermal conductivity of silicon by nanostructure patterning. 2013 , 110, 93-98	4
1236	Ge/SiGe superlattices for thermoelectric energy conversion devices. 2013 , 48, 2829-2835	21
1235	Thermoelectric measurements of PEDOT:PSS/expanded graphite composites. 2013 , 48, 2855-2860	32
1234	SrTiO ₃ glass/ceramics as oxide thermoelectrics. 2013 , 48, 2812-2816	10
1233	Electric-field thermopower modulation in SrTiO ₃ -based field-effect transistors. 2013 , 48, 2797-2805	14
1232	Reduction in lattice thermal conductivity of porous materials due to inhomogeneous porosity. 2013 , 67, 107-112	34
1231	Template-free solvothermal synthesis and enhanced thermoelectric performance of Sb ₂ Te ₃ nanosheets. 2013 , 558, 6-10	23

1230	Growth of single-crystalline bismuth antimony telluride nanoplates on the surface of nanoparticle thin films. 2013 , 372, 199-204	19
1229	Spin-bias-induced thermal rectification in a quantum dot structure. 2013 , 161, 29-33	1
1228	Influence of ZnO nano-inclusions on the transport properties of the CoSb ₃ skutterudite. 2013 , 554, 340-347	11
1227	Enhancing the thermoelectric power factor by using invisible dopants. 2013 , 25, 1577-82	46
1226	Temperature and size effects on electrical properties and thermoelectric power of Bismuth Telluride thin films deposited by co-sputtering. 2013 , 268, 472-476	41
1225	Thermoelectric and mechanical properties of the Bi _{0.5} Sb _{1.5} Te ₃ solid solution prepared by melt spinning. 2013 , 49, 120-126	25
1224	Thermal transport: Breaking through barriers. 2013 , 12, 382-4	20
1223	Thermoelectric properties of p-type (Bi ₂ Te ₃) _x (Sb ₂ Te ₃) _{1-x} single crystals doped with 3 wt. % Te. 2013 , 113, 073709	16
1222	Effect of synthesis technique on electrochemical performance of bismuth selenide. 2013 , 229, 216-222	47
1221	Improving the Power Factor and the Role of Impurity Bands. 2013 , 42, 1482-1489	11
1220	Progress, challenges, and opportunities in two-dimensional materials beyond graphene. 2013 , 7, 2898-926	3414
1219	Towards a dynamical approach to the calculation of the figure of merit of thermoelectric nanoscale devices. 2013 , 15, 1758-65	21
1218	Nanoengineering thermoelectrics for 21st century: Energy harvesting and other trends in the field. 2013 , 24, 288-305	208
1217	Core-shell nanoparticles as building blocks for the bottom-up production of functional nanocomposites: PbTe-PbS thermoelectric properties. 2013 , 7, 2573-86	121
1216	Isoporous micro/nanoengineered membranes. 2013 , 7, 1882-904	123
1215	Thermoelectric transport and Hall measurements of low defect Sb ₂ Te ₃ thin films grown by atomic layer deposition. 2013 , 28, 035010	62
1214	Thermoelectric properties of small diameter carbon nanowires. 2013 , 53, 286-291	6
1213	Nb-doped grain boundary induced thermoelectric power factor enhancement in La-doped SrTiO ₃ nanoceramics. 2013 , 241, 255-258	26

1212	Large thermal conductivity decrease in point defective Bi ₂ Te ₃ bulk materials and superlattices. 2013 , 113, 013506		48
1211	Metal nanoparticles for energy conversion. 2013 , 85, 437-451		17
1210	Data-Driven Review of Thermoelectric Materials: Performance and Resource Considerations. 2013 , 25, 2911-2920		285
1209	Apparatus for measuring Seebeck coefficient and electrical resistivity of small dimension samples using infrared microscope as temperature sensor. 2013 , 84, 054903		7
1208	T-Shaped Bi ₂ Te ₃ /Te Heteronanojunctions: Epitaxial Growth, Structural Modeling, and Thermoelectric Properties. 2013 , 117, 12458-12464		51
1207	Small-polaron transport and thermoelectric properties of the misfit-layer composite (BiSe) _{1.09} TaSe ₂ /TaSe ₂ . <i>Physical Review B</i> , 2013 , 87,	3-3	17
1206	First-principles study of transport properties in Os and OsSi. <i>Physical Review B</i> , 2013 , 87,	3-3	10
1205	Thermoelectric properties of mesoporous TiO ₂ thin films through annealing temperature and ratio of surfactant. 2013 , 231, 370-373		10
1204	The thermoelectric properties of Ge/SiGe modulation doped superlattices. 2013 , 113, 233704		52
1203	Thermal-Electrical Energy Conversion from the Nanotechnology Perspective. 2013 , 57-87		2
1202	When thermoelectrics reached the nanoscale. 2013 , 8, 471-3		450
1201	Effect of substrate on thermoelectric properties of Al-doped ZnO thin films. 2013 , 102, 253903		77
1200	Transition metal oxides Thermoelectric properties. 2013 , 58, 1443-1489		242
1199	Nanowire Heterostructures. 2013 , 43, 451-479		115
1198	Mesoscopic thermoelectric transport near zero transmission energies. <i>Physical Review B</i> , 2013 , 87,	3-3	9
1197	Vapor Phase Conversion Synthesis of Higher Manganese Silicide (MnSi _{1.75}) Nanowire Arrays for Thermoelectric Applications. 2013 , 25, 632-638		31
1196	Preparation and electrical transport properties of nanostructured Sb ₂ Se ₃ films fabricated by combining spin-coating and gas-induced reduction. 2013 , 15, 1		12
1195	Rational Design of Advanced Thermoelectric Materials. 2013 , 3, 549-565		225

- 1194 Thermoelectric Performance of a Single-Layer Graphene Sheet for Energy Harvesting. **2013**, 60, 2064-2070 15
- 1193 Preparation and Microstructure Control of One-Dimension Core-Shell Heterostructure of Te/Bi, Te/Bi₂Te₃ by Microwave Assisted Chemical Synthesis. **2013**, 743-744, 153-160
- 1192 Improved Thermal Behavior of Multiple Linked Arrays of Silicon Nanowires Integrated into Planar Thermoelectric Microgenerators. **2013**, 42, 1918-1925 15
- 1191 Enhanced thermoelectric performance in graphitic ZnO (0001) nanofilms. **2013**, 113, 083705 7
- 1190 Study of ion beam synthesized nanostructured PbTe surface. **2013**, 265, 124-129 2
- 1189 The influence of Bi doping in the thermoelectric properties of co-sputtering deposited bismuth antimony telluride thin films. **2013**, 48, 333-336 15
- 1188 A simple route to bismuth nanoparticles in the form of dots, branched nanorods and self assembled cubes. **2013**, 92, 220-223 4
- 1187 Enhanced Thermoelectric Properties of Antimony Telluride Thin Films with Preferred Orientation Prepared by Sputtering a Fan-Shaped Binary Composite Target. **2013**, 42, 3421-3425 9
- 1186 Giant corrugations in Bi₂Se₃ layers grown on high-index InP substrates. *Physical Review B*, **2013**, 87, 3-3 15
- 1185 Gate-modulated thermoelectric power factor of hole gas in Ge-Si core-shell nanowires. **2013**, 13, 1196-202 62
- 1184 Thermal conductivity of Si_{1-x}Gex/Si_{1-y}Gey superlattices: Competition between interfacial and internal scattering. *Physical Review B*, **2013**, 88, 3-3 72
- 1183 Thermopower Properties of Ferromagnetic/Insulator/Ferromagnetic Tunnel Junction. **2013**, 34, 1347-1352
- 1182 High performance Bi₂Te₃ nanocomposites prepared by single-element-melt-spinning spark-plasma sintering. **2013**, 48, 2745-2760 81
- 1181 Powerful energy harvester based on resonant-tunneling quantum wells. **2013**, 15, 095021 54
- 1180 Three-terminal semiconductor junction thermoelectric devices: improving performance. **2013**, 15, 075021 30
- 1179 Preparation and Characterization of Electrodeposited Bi₂Te₃-YSe_y Thermoelectric Films. **2013**, 743-744, 76-82
- 1178 Effect of Surfactant Concentration Variation on the Thermoelectric Properties of Mesoporous ZnO. **2013**, 2013, 1-6 3
- 1177 Thermoelectric Properties of Al-Doped Mesoporous ZnO Thin Films. **2013**, 2013, 1-6 8

1176	Annealing Effect on the Thermoelectric Properties of Bi ₂ Te ₃ Thin Films Prepared by Thermal Evaporation Method. 2013 , 2013, 1-6		13
1175	Nonlinear thermovoltage and thermocurrent in quantum dots. 2013 , 15, 105011		89
1174	Thermoelectric Properties of Al Doped ZnO Thin Films. 2013 , 743-744, 138-143		2
1173	Influence of Ti-Doping on the Thermoelectric Properties of ZnO:Al Thin Films. 2013 , 734-737, 2391-2394		2
1172	Electronic Structure, Lattice Dynamics and Thermoelectric Properties of PbTe from First-Principles Calculation. 2013 , 30, 017101		6
1171	Theoretical and experimental advances in Bi ₂ Te ₃ / Sb ₂ Te ₃ - based and related superlattice systems. 2013 , 1490, 205-222		1
1170	Shubnikov-De Haas Oscillations in Single-Crystal Bismuth Nanowires Encased in Quartz Template. 2013 , 6, 045002		7
1169	Electrical contact resistances of thermoelectric thin films measured by Kelvin probe microscopy. 2013 , 103, 183905		9
1168	Thermoelectric properties of Ca ₃ Co ₄ O ₉ and Ca _{2.8} Bi _{0.2} Co ₄ O ₉ thin films in their island formation mode. 2013 , 28, 1932-1939		9
1167	A Novel Approach to Synthesize Lanthanum Telluride Thermoelectric Thin Films in Ambient Conditions. 2013 , 1543, 113-118		1
1166	SYNTHESES OF NANOSTRUCTURE BUNDLES BASED ON SEMICONDUCTING METAL SILICIDES. 2013 , 06, 1340011		1
1165	Preliminary Output Power Performances Analyses and Optimization of a Thermoelectric Module. 2013 , 631-632, 1201-1206		
1164	Quantum confinement in perovskite oxide heterostructures: Tight binding instead of a nearly free electron picture. <i>Physical Review B</i> , 2013 , 88,	3-3	26
1163	Optimized thermoelectric performance of Bi ₂ Te ₃ nanowires. 2013 , 1, 6831		30
1162	Carrier concentration modulation by hot pressing pressure in n-type nanostructured Bi(Se)Te alloy. 2013 , 103, 144106		10
1161	A computational study of the thermoelectric performance of ultrathin Bi ₂ Te ₃ films. 2013 , 102, 093103		61
1160	Hopping thermoelectric transport in finite systems: Boundary effects. <i>Physical Review B</i> , 2013 , 87,	3-3	28
1159	Quantifying the local Seebeck coefficient with scanning thermoelectric microscopy. 2013 , 103, 212101		3

- 1158 Integrating micro and nano: A route for all-silicon thermoelectricity?. **2013**,
- 1157 Thermoelectric properties of molten Bi₂Te₃, CuI, and AgI. **2013**, 102, 033903 14
- 1156 Design of quantum well thermoelectric energy harvester by CMOS process. **2013**,
- 1155 Thermopower in quantum confined La-doped SrTiO₃ epitaxial heterostructures. **2013**, 103, 173904 6
- 1154 Optimization of the thermoelectric properties of nanostructured silicon. **2013**, 114, 214507 16
- 1153 Potential thermoelectric performance of hole-doped Cu₂O. **2013**, 15, 043029 43
- 1152 Strain effects to optimize thermoelectric properties of hole-doped La₂NiO₄+ δ via ab initio calculations. *Physical Review B*, **2013**, 87, 3-3 21
- 1151 Doping-induced dimensional crossover and thermopower burst in Nb-doped SrTiO₃ superlattices. *Physical Review B*, **2013**, 88, 3-3 34
- 1150 Proton irradiation effects on thermal transport in individual single-crystalline Bi nanowires. **2013**, 210, 1438-1441 9
- 1149 A solution synthetic route toward Bi₂Se₃ layered nanostructures with tunable thickness via weakening precursor reactivity. **2013**, 210, 1909-1913 5
- 1148 Preparation and study of thermoelectric properties of fine grains Gd_xZn_{1-x}O. **2013**, 210, 2693-2698 3
- 1147 Multilayered structure and enhanced thermoelectric properties of Bi_{1.5}Sb_{0.5}Te₃ film with preferential growth. **2013**, 210, 2611-2616 9
- 1146 A review on the fabrication of polymer-based thermoelectric materials and fabrication methods. **2013**, 2013, 713640 33
- 1145 Contribution of Berry Curvature to Thermoelectric Effects. **2014**, 2 2
- 1144 Optimization of thermoelectric performance of SrSi₂-based alloys via the modification in band structure and phonon-point-defect scattering. **2014**, 2, 106 24
- 1143 Improvement of Thermoelectric Properties Via Combination of Nanostructuring and Elemental Doping. **2014**, 66, 2298-2308 4
- 1142 Ultrahigh thermoelectricity of atomically thick Bi₂Se₃ single layers: A computational study. **2014**, 321, 525-530 10
- 1141 Peltier Effect in Semiconductors. **2014**, 1-21 9

1140	Preparation of poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate)/Fe ₃ O ₄ nanocomposite film and its thermoelectric performance. 2014 , 48, 2793-2801	5
1139	Solid-state resonant tunneling thermoelectric refrigeration in the cylindrical double-barrier nanostructure. 2014 , 23, 080502	3
1138	Reduce thermal conductivity by forming a nano-phononic crystal on a Si slab. 2014 , 106, 56002	4
1137	Effect of hydrostatic pressure on the thermoelectric properties of Bi ₂ Te ₃ . <i>Physical Review B</i> , 2014 , 90, 3-3	25
1136	Electron interaction effects on the thermoelectric power of a quantum dot at T > TK. 2014 , 87, 1	7
1135	Lagging Behavior in other Transport Processes. 2014 , 327-357	
1134	Focus on thermoelectric effects in nanostructures. 2014 , 16, 110201	17
1133	Band structure engineering through orbital interaction for enhanced thermoelectric power factor. 2014 , 104, 082107	55
1132	Control of thermoelectric properties of ZnO using electric double-layer transistor structure. 2014 , 53, 111101	11
1131	Growth of Nanolaminates of Thermoelectric Bi ₂ Te ₃ /Sb ₂ Te ₃ by Atomic Layer Deposition. 2014 , 3, P95-P100	12
1130	New approach to thermal-to-electrical energy conversion problem on the bases of the thermal field electron emission phenomenon. 2014 ,	1
1129	Fabrication of Bi ₂ Te ₃ Nanowires Applied in Thermoelectric Generators. 2014 , 609-610, 306-310	1
1128	Bi ₂ Se ₃ /Bi multiple heterostructure nanowire arrays formed by pulsed electrodeposition. 2014 , 74, 273-278	3
1127	Towards Self-Powered Systems: Using Nanostructures to Harvest Ambient Energy. 2014 , 223-240	
1126	Ballistic thermoelectric transport in structured nanowires. 2014 , 16, 065018	16
1125	Review on Polymers for Thermoelectric Applications. 2014 , 7, 6701-6732	176
1124	Growth of Anodic Aluminum Oxide Templates and the Application in Fabrication of the BiSbTe-Based Thermoelectric Nanowires. 2014 , 2014, 1-7	5
1123	Bismuth Telluride and Its Alloys as Materials for Thermoelectric Generation. 2014 , 7, 2577-2592	336

1122	Thermoelectric power factor enhancement with gate-all-around silicon nanowires. 2014 , 115, 143704		11
1121	Thermopower enhancement in quantum wells with the Rashba effect. 2014 , 105, 202115		14
1120	Gate-modulated thermopower of disordered nanowires: II. Variable-range hopping regime. 2014 , 16, 095005		18
1119	Enhancing efficiency and power of quantum-dots resonant tunneling thermoelectrics in three-terminal geometry by cooperative effects. 2014 , 116, 194303		34
1118	Enhanced thermoelectric performance of a quintuple layer of Bi ₂ Te ₃ . 2014 , 116, 023706		28
1117	Bilayer Excitons in Two-Dimensional Nanostructures for Greatly Enhanced Thermoelectric Efficiency. 2014 , 2,		16
1116	Thermoelectric properties of p-type Bi ₂ Sr ₂ Co ₂ O ₉ glass-ceramics. 2014 , 29, 124011		4
1115	Thermal transport through short-period SiGe nanodot superlattices. 2014 , 115, 044312		20
1114	Thermoelectric properties of topological insulator Bi ₂ Te ₃ , Sb ₂ Te ₃ , and Bi ₂ Se ₃ thin film quantum wells. 2014 , 105, 123117		62
1113	Boron- and phosphorus-doped silicon germanium alloy nanocrystals Nonthermal plasma synthesis and gas-phase thin film deposition. 2014 , 2, 022104		16
1112	Large theoretical thermoelectric power factor of suspended single-layer MoS ₂ . 2014 , 105, 193901		57
1111	Quantum size effect on Shubnikov-de Haas oscillations in 100 nm diameter single-crystalline bismuth nanowire. 2014 , 105, 123107		19
1110	Thermoelectric properties of an N-type silicon germanium alloy related to the presence of silica nodules dispersed in the microstructure. 2014 , 93, 40-43		5
1109	Full thermoelectric characterization of InAs nanowires using MEMS heater/sensors. 2014 , 25, 305702		23
1108	Experimental verification of reciprocity relations in quantum thermoelectric transport. <i>Physical Review B</i> , 2014 , 90,	3-3	29
1107	Electron-vibration effects on the thermoelectric efficiency of molecular junctions. <i>Physical Review B</i> , 2014 , 90,	3-3	21
1106	Anisotropic transport for parabolic, non-parabolic, and linear bands of different dimensions. 2014 , 105, 033907		5
1105	Two-dimensional thermoelectrics with Rashba spin-split bands in bulk BiTeI. <i>Physical Review B</i> , 2014 , 90,	3-3	59

1104	Phonon transport on two-dimensional graphene/boron nitride superlattices. <i>Physical Review B</i> , 2014 , 90,	3-3	140
1103	Spin and charge thermopower of resonant tunneling diodes. 2014 , 104, 112402		6
1102	Thermoelektrisches Zinnselenid: die Schönheit des Einfachen. 2014 , 126, 9276-9278		
1101	Chapter 9:Phononic and Electronic Engineering in Nanowires for Enhanced Thermoelectric Performance. 2014 , 400-437		1
1100	Chapter 7:Growth of Metal Silicide Nanowires and Their Spintronic and Renewable Energy Applications. 2014 , 312-362		2
1099	Thermoelectric tin selenide: the beauty of simplicity. 2014 , 53, 9126-7		38
1098	Induced electronic anisotropy in bismuth thin films. 2014 , 105, 063114		6
1097	Ultrathin GaN nanowires: Electronic, thermal, and thermoelectric properties. <i>Physical Review B</i> , 2014 , 89,	3-3	16
1096	Investigation on the electrical transport properties of highly (00l)-textured Sb ₂ Te ₃ films deposited by molecular beam epitaxy. 2014 , 115, 024307		20
1095	Thermoelectric transport properties of a T-shaped double quantum dot system in the Coulomb blockade regime. 2014 , 87, 1		13
1094	Exciton Seebeck effect in molecular systems. 2014 , 141, 054105		6
1093	Fully tunable, non-invasive thermal biasing of gated nanostructures suitable for low-temperature studies. 2014 , 25, 385704		9
1092	Waste Thermal Energy Harvesting (I): Thermoelectric Effect. 2014 , 263-403		2
1091	Mechanically reliable thermoelectric (TE) nanocomposites by dispersing and embedding TE-nanostructures inside a tetragonal ZrO matrix: the concept and experimental demonstration in graphene oxide-3YSZ system. 2014 , 15, 014201		14
1090	Preparation of thermoelectric Si:B/SiGe multilayer structures on quartz glasses by RF-magnetron sputtering with layer-by-layer annealing methods. 2014 , 53, 087102		
1089	CHAPTER 6. Thermoelectric Materials and Devices. 2014 , 107-141		1
1088	Layered oxychalcogenide in the Bi ₂ Cu ₂ O ₅ Be system as good thermoelectric materials. 2014 , 29, 064001		33
1087	Nano Bulk Thermoelectrics: Concepts, Techniques, and Modeling. 2014 , 141-183		15

1086	Thermoelectric Properties of Carbon Nanotubes and Related One-Dimensional Structures. 2014 , 363-391	
1085	Reduced thermal conductivities of Si one-dimensional periodic structure and nanowire. 2014 , 53, 06JE09	24
1084	Thermoelectric Device Based on Vertical Silicon Nanowires for On-Chip Integration. 2014 , 609-610, 789-795	1
1083	Thermal conductivity of half-Heusler superlattices. 2014 , 29, 124003	11
1082	The influence of a Te-depleted surface on the thermoelectric transport properties of Bi ₂ Te ₃ nanowires. 2014 , 25, 365401	10
1081	A model for vibrational properties of the atomic interface in A/B fcc metals. 2014 , 75, 732-738	4
1080	Improvement of thermoelectric properties induced by uniquely ordered lattice field in Bi ₂ Se _{0.5} Te _{2.5} pillar array. 2014 , 215, 219-224	12
1079	Influence of in situ formed MoSi ₂ inclusions on the thermoelectrical properties of an N-type silicon-germanium alloy. 2014 , 64, 429-442	33
1078	Layer-by-layer deposition of MnSi _{1.7} film with high Seebeck coefficient and low electrical resistivity. 2014 , 146, 346-353	4
1077	Enhancement of thermoelectric properties induced by oriented nanolayer in Bi ₂ Te _{2.7} Se _{0.3} columnar films. 2014 , 146, 153-158	13
1076	Thermoelectric properties of P-type Sb ₂ Te ₃ thick film processed by a screen-printing technique and a subsequent annealing process. 2014 , 582, 177-180	47
1075	Electric Properties of Semiconductor Nanopillars. 2014 , 43, 1972-1975	4
1074	Fabrication of High-Temperature-Stable Thermoelectric Generator Modules Based on Nanocrystalline Silicon. 2014 , 43, 1389-1396	13
1073	Thermal and thermoelectric properties of graphene. 2014 , 10, 2182-99	183
1072	Nanoscale FeS ₂ (Pyrite) as a Sustainable Thermoelectric Material. 2014 , 43, 2362-2370	24
1071	New promising bulk thermoelectrics: intermetallics, pnictides and chalcogenides. 2014 , 87, 1	52
1070	Thermoelectric properties of a Pb _{0.2} Sn _{0.8} Te solid solution prepared through thermal decomposition of salts. 2014 , 50, 124-129	2
1069	Low-Temperature, Solution-Based, Scalable Synthesis of Sb ₂ Te ₃ Nanoparticles with an Enhanced Power Factor. 2014 , 43, 2165-2173	7

1068	News and Views: Perspectives on Graphene and Other 2D Materials Research and Technology Investments. 2014 , 44, 278-282		5
1067	High thermoelectric performance in non-toxic earth-abundant copper sulfide. 2014 , 26, 3974-8		501
1066	Thermoelectric properties of atomically thin silicene and germanene nanostructures. <i>Physical Review B</i> , 2014 , 89,	3-3	138
1065	The effects of the size and the doping concentration on the power factor of n-type lead telluride nanocrystals for thermoelectric energy conversion. 2014 , 14, 1153-7		29
1064	Enhanced thermoelectric and mechanical performance of polycrystalline p-type Bi _{0.5} Sb _{1.5} Te ₃ by a traditional physical metallurgical strategy. 2014 , 50, 20-27		22
1063	A review of thermoelectrics research [Recent developments and potentials for sustainable and renewable energy applications. 2014 , 32, 486-503		275
1062	Ultralow thermal conductivity and high thermoelectric figure of merit in SnSe crystals. 2014 , 508, 373-7		3074
1061	Silicon nanostructures for thermoelectric devices: A review of the current state of the art. 2014 , 211, 1235-1249		71
1060	Thermoelectric properties of Bi ₂ Se ₃ /Bi ₂ Te ₃ /Bi ₂ Se ₃ and Sb ₂ Te ₃ /Bi ₂ Te ₃ /Sb ₂ Te ₃ quantum well systems. 2014 , 94, 2072-2099		7
1059	Electronic properties of nano-structured bismuth-antimony materials. 2014 , 2, 4710-4726		23
1058	Decoupling interrelated parameters for designing high performance thermoelectric materials. 2014 , 47, 1287-95		86
1057	Elemental tellurium as a chiral p-type thermoelectric material. <i>Physical Review B</i> , 2014 , 89,	3-3	126
1056	25th anniversary article: semiconductor nanowires--synthesis, characterization, and applications. 2014 , 26, 2137-84		649
1055	Impurities-contributed abnormal thermoelectric effect in a parallel double quantum dot structure. 2014 , 14, 34-45		6
1054	Spin-dependent thermoelectric effect in polaronic Kondo transport through a Rashba quantum dot coupled with ferromagnetic leads. 2014 , 378, 1854-1866		8
1053	Size and temperature dependent ultrasonic properties of thermoelectric nanowires. 2014 , 114, 15-18		7
1052	Ordered structure and high thermoelectric properties of Bi ₂ (Te,Se) ₃ nanowire array. 2014 , 3, 144-151		46
1051	Evaluation of the Structure and Transport Properties of Nanostructured Antimony Telluride (Sb ₂ Te ₃). 2014 , 43, 1927-1932		9

1050	Thermoelectric Properties of a Monolayer Bismuth. 2014 , 118, 904-910		105
1049	Low temperature reduction route to synthesise bismuth telluride (Bi ₂ Te ₃) nanoparticles: structural and optical studies. 2014 , 9, 1064-1074		13
1048	Size-controlled synthesis and transport properties of Sb ₂ Te ₃ nanoplates. 2014 , 4, 2427-2432		12
1047	Theories of Phonon Transport in Bulk and Nanostructured Solids. 2014 , 81-114		
1046	MoS ₂ nanoribbons as promising thermoelectric materials. 2014 , 105, 133113		95
1045	Single-molecule junctions: thermoelectricity at the gate. 2014 , 9, 876-7		11
1044	Improving the thermoelectric performance of TiNiSn half-Heusler via incorporating submicron lamellae eutectic phase of Ti _{70.5} Fe _{29.5} : a new strategy for enhancing the power factor and reducing the thermal conductivity. 2014 , 2, 20980-20989		28
1043	Laser deposition and direct-writing of thermoelectric misfit cobaltite thin films. 2014 , 104, 231907		14
1042	Thermal field emission converter of an environmental thermal (T ~300k) energy \rightarrow electrical energy. 2014 ,		
1041	Strain-induced electronic phase transition and strong enhancement of thermopower of TiS ₂ . <i>Physical Review B</i> , 2014 , 90,	3-3	22
1040	Carbon Nanotube-Based Polymer Composite Thermoelectric Generators. 2014 , 191-211		1
1039	Enhanced thermoelectric performance of PEDOT with different counter-ions optimized by chemical reduction. 2014 , 2, 10109-10115		171
1038	Thermoelectric properties of spark-plasma sintered nanoparticulate FeSb ₂ prepared via a solution chemistry approach. 2014 , 43, 558-62		6
1037	Co-precipitation synthesis of nanostructured Cu ₃ SbSe ₄ and its Sn-doped sample with high thermoelectric performance. 2014 , 43, 1888-96		43
1036	Size- effect induced high thermoelectric figure of merit in PbSe and PbTe nanowires. 2014 , 16, 8114-8		11
1035	Tuning of the thermoelectric properties of one-dimensional material networks by electric double layer techniques using ionic liquids. 2014 , 14, 6437-42		109
1034	Inkjet Printing as a Flexible Technology for the Deposition of Thermoelectric Composite Structures. 2014 , 15, 99-106		25
1033	Single-crystalline Bi ₂ Te ₃ nanosheets with uniform morphology via a simple, efficient, and high-yield microwave-assisted synthesis. 2014 , 406, 104-110		15

1032	Telluride nanowire and nanowire heterostructure-based thermoelectric energy harvesting. 2014 , 2, 6004-6014	22
1031	Optimization of the carrier concentration in phase-separated half-Heusler compounds. 2014 , 2, 13513-13518	39
1030	Thermoelectric properties of Cu ₃ SbSe ₃ with intrinsically ultralow lattice thermal conductivity. 2014 , 2, 15829-15835	39
1029	Synthesis of highly crystalline Bi ₂ Te ₃ nanotubes and their enhanced thermoelectric properties. 2014 , 2, 12821	37
1028	Recent advances in thermoelectric materials and solar thermoelectric generators – a critical review. 2014 , 4, 46860-46874	91
1027	Thermoelectric Energy Conversion and Materials. 2014 , 303-322	0
1026	Enhanced thermoelectric performance of Al-doped ZnO thin films on amorphous substrate. 2014 , 53, 060306	41
1025	Facile preparation and thermoelectric properties of Bi ₂ Te ₃ -based alloy nanosheet/PEDOT:PSS composite films. 2014 , 6, 5735-43	190
1024	Investigations on structural, optical and thermoelectric parameters of spray deposited bismuth selenide thin films with different substrate temperature. 2014 , 148, 230-235	11
1023	Thermopower enhancement by fractional layer control in 2D oxide superlattices. 2014 , 26, 6701-5	24
1022	Single-molecule electronics: from chemical design to functional devices. 2014 , 43, 7378-411	343
1021	Enhanced thermoelectric performance of phosphorene by strain-induced band convergence. <i>Physical Review B</i> , 2014 , 90,	3-3 213
1020	The thermoelectric figure of merit for the single electron transistor. 2014 , 86, 387-393	2
1019	Microstructural effects on thermoelectric efficiency: A case study on magnesium silicide. 2014 , 77, 68-75	73
1018	Enhanced thermoelectric properties of germanium powder/poly(3,4-ethylenedioxythiophene):poly(4-styrenesulfonate) composites. 2014 , 566, 14-18	25
1017	Microwave activated hot pressing: A new consolidation technique and its application to fine crystal bismuth telluride based compounds. 2014 , 267, 119-125	14
1016	Power and efficiency analysis of a realistic resonant tunneling diode thermoelectric. 2014 , 105, 013104	22
1015	Thermoelectric properties of CeAl ₃ prepared by hot-press method. 2014 , 87, 584-588	7

1014	Phosphorene nanoribbon as a promising candidate for thermoelectric applications. 2014 , 4, 6452	244
1013	La $1-x$ Ca x MnO ₃ semiconducting nanostructures: morphology and thermoelectric properties. 2014 , 9, 415	6
1012	Self-propagating high-temperature synthesis for compound thermoelectrics and new criterion for combustion processing. 2014 , 5, 4908	243
1011	Electrodeposition of antimony from chloride-free ethylene glycol solutions and fabrication of thermoelectric Bi ₂ Te ₃ /(Bi _{1-x} Sb _x) ₂ Te ₃ multilayers using pulsed potential electrodeposition. 2014 , 147, 451-459	12
1010	Performance analysis of a tunneling thermoelectric heat engine with nano-scaled quantum well. 2014 , 117, 1031-1039	5
1009	Microstructure of thermoelectric (Bi _{0.15} Sb _{0.85}) ₂ Te ₃ film. 2014 , 117, 1387-1392	
1008	Two-dimensional molybdenum carbides: potential thermoelectric materials of the MXene family. 2014 , 16, 7841-9	290
1007	Recent progress in thermoelectric materials. 2014 , 59, 2073-2091	83
1006	Multilayered Ge/SiGe Material in Microfabricated Thermoelectric Modules. 2014 , 43, 3838-3843	5
1005	Improvement of Thermoelectric Properties in (Bi _{0.5} Sb _{0.5}) ₂ Te ₃ Films of Nanolayered Pillar Arrays. 2014 , 43, 3098-3104	5
1004	Development of thermoelectric module based on dense Ca ₃ Co ₄ O ₉ and Zn _{0.98} Al _{0.02} O legs. 2014 , 20, 389-397	25
1003	Synthesis and structure of undoped and indium-doped thermoelectric lead telluride nanoparticles. 2014 , 9, 227	12
1002	Using anodic aluminum oxide templates and electrochemical method to deposit BiSbTe-based thermoelectric nanowires. 2014 , 9, 63	4
1001	One-step interfacial synthesis and thermoelectric properties of Ag/Cu-poly(3,4-ethylenedioxythiophene) nanostructured composites. 2014 , 16, 1	17
1000	A theoretical study on the performances of thermoelectric heat engine and refrigerator with two-dimensional electron reservoirs. 2014 , 115, 244306	9
999	Improved thermoelectric performance of hot pressed nanostructured n-type SiGe bulk alloys. 2014 , 2, 6922	110
998	Thermal conductivity of a single Bi ₂ Te ₃ single-crystalline nanowire. 2014 , 25, 415704	9
997	Electronic and Optoelectronic Materials and Device Innovations. 2014 , 1-37	

996	Thermoelectric properties of layered antiferromagnetic CuCrSe ₂ . 2014 , 145, 156-161	16
995	Thermal transport and thermoelectric properties of beta-graphyne nanostructures. 2014 , 25, 245401	45
994	Enhanced thermoelectric properties of mixed zinc antimonide thin films via phase optimization. 2014 , 292, 823-827	15
993	A simple route to Bi ₂ Se ₃ and Bi ₂ Te ₃ nanocrystals. 2014 , 69, 226-230	14
992	Prospects for SiGe thermoelectric generators. 2014 , 98, 70-74	17
991	Zinc antimonide thin films prepared by ion beam sputtering deposition using ternary layers annealing method. 2014 , 594, 122-126	6
990	Thermoelectric properties of nanocomposite heavy fermion CeCu ₆ . 2014 , 609, 228-232	3
989	Preparation and Characterization of Electrodeposited Cu _x Bi ₂ Te ₃ Thermoelectric Films. 2014 , 787, 205-209	1
988	Anharmonic force constants extracted from first-principles molecular dynamics: applications to heat transfer simulations. 2014 , 26, 225402	186
987	Electronic phases, band gaps, and band overlaps of bismuth antimony nanowires. <i>Physical Review B</i> , 2014 , 89, 3-3	11
986	Thermoelectric Materials: A Brief Historical Survey from Metal Junctions and Inorganic Semiconductors to Organic Polymers. 2014 , 54, 534-552	30
985	Enhanced thermoelectric performance and anomalous seebeck effects in topological insulators. 2014 , 112, 226801	249
984	Thermal Energy Harvesting. 2014 , 135-219	2
983	Recent advances on Mg ₂ Si _{1-x} Sn _x materials for thermoelectric generation. 2014 , 37, 569-584	56
982	Solvothermal synthesis of PbTe/SnTe hybrid nanocrystals. 2014 , 25, 849-853	8
981	Thermoelectric Properties of a T-Shaped Quantum Dot with Relatively Strong On-Site Coulomb Interaction. 2014 , 55, 861-865	
980	Analytical evaluation of thermal conductance and heat capacities of one-dimensional material systems. 2014 , 4, 027102	1
979	Review of nanostructured devices for thermoelectric applications. 2014 , 5, 1268-84	69

978	Thermochemically evolved nanoplatelets of bismuth selenide with enhanced thermoelectric figure of merit. 2014 , 4, 117129	11
977	High-Temperature Electromechanical Actuators. 2014 , 313-346	
976	Synthesis of Bi ₂ Te ₃ Urchin-like Nanorods by a Microwave Solvothermal Method. 2014 , 43, 111-112	2
975	Thermal Conductivity of Nano-porous Bi _{0.4} Te _{3.0} Sb _{1.6} . 2014 , 24, 94-100	1
974	Properties of thermoelectric Ce _{0.09} Fe _{0.67} Co _{3.33} Sb ₁₂ /FeSb ₂ Te multi-layered structures prepared by laser ablation. 2014 , 497, 012038	
973	Growth and characterization of QDSL (Quantum Dots Superlattices) of metal silicides in an n-doped SiGe matrix for thermoelectric applications. 2014 ,	2
972	Advances in thermoelectrics: From single phases to hierarchical nanostructures and back. 2015 , 40, 687-695	32
971	Engineering thermal transport in SiGe-based nanostructures for thermoelectric applications. 2015 , 30, 2649-2662	14
970	Nanocomposites for thermoelectrics and thermal engineering. 2015 , 40, 746-752	28
969	Electronic Transport through Conical Nanosized GaAs Pillars. 2015 , 1735, 117	
968	Synthesis of alloyed Bi ₂ TexSe(3-x) nanoparticles and thermoelectric characterization of bulk nanostructured materials obtained by their assembly. 2015 , 1804, 1-6	0
967	Study of Yb-Doped CoSb ₃ Thermoelectric Thin Films Prepared by Laser. 2015 , 749, 46-50	3
966	Thermoelectric properties of spark plasma sintered lead telluride nanocubes. 2015 , 30, 2638-2648	8
965	Anisotropic thermoelectric behavior in armchair and zigzag mono- and fewlayer MoS ₂ in thermoelectric generator applications. 2015 , 5, 13706	44
964	Enhanced Thermoelectric Performance in Cu-Intercalated BiTeI by Compensation Weakening Induced Mobility Improvement. 2015 , 5, 14319	29
963	Development of Inexpensive SiGeBeSi ₂ Thermoelectric Nanocomposites. 2015 , 2,	1
962	Organic Semiconductors and Polymers. 2015 , 295-330	
961	Benefits of Carrier-Pocket Anisotropy to Thermoelectric Performance: The Case of p-Type AgBiSe ₂ . 2015 , 3,	66

960	Quantum heat engines based on electronic Mach-Zehnder interferometers. <i>Physical Review B</i> , 2015 , 91,	3-3	43
959	Electronic structure, transport, and phonons of SrAgChF (Ch = S, Se, Te): Bulk superlattice thermoelectrics. <i>Physical Review B</i> , 2015 , 92,	3-3	29
958	Resonant scattering induced thermopower in one-dimensional disordered systems. <i>Physical Review B</i> , 2015 , 91,	3-3	
957	Simple view of the Mg ₂ Si _{1-x} Sn _x phonon spectrum: Sn resonances and mean field. <i>Physical Review B</i> , 2015 , 91,	3-3	9
956	Ab initio study of electron-phonon interaction in phosphorene. <i>Physical Review B</i> , 2015 , 91,	3-3	137
955	Impact of strain-induced electronic topological transition on the thermoelectric properties of PtCoO ₂ and PdCoO ₂ . <i>Physical Review B</i> , 2015 , 92,	3-3	15
954	A Revisit to High Thermoelectric Performance of Single-layer MoS ₂ . 2015 , 5, 18342		108
953	Three-terminal heat engine and refrigerator based on superlattices. 2015 , 74, 465-474		21
952	Structure and Transport Properties of Bi ₂ Te ₃ Films. 2015 , 73-98		1
951	Ab Initio Description of Thermoelectric Properties Based on the Boltzmann Theory. 2015 , 187-221		
950	Ultra-low Thermal Conductivity in Si/Ge Hierarchical Superlattice Nanowire. 2015 , 5, 16697		48
949	Electrical Properties of Mesoporous TiO ₂ Nanocomposite Thin Films Incorporated with Au Nanoparticles by Simple One-pot Synthesis. 2015 , 44, 1485-1487		2
948	Thermoelectric transport coefficients in mono-layer MoS ₂ and WSe ₂ : Role of substrate, interface phonons, plasmon, and dynamic screening. 2015 , 118, 135711		32
947	Enhancement of thermospin effect in germanene based normal/ferromagnetic stub/normal junction. 2015 , 118, 195101		0
946	The effect of Coulomb interactions on nonlinear thermovoltage and thermocurrent in quantum dots. 2015 , 142, 244310		19
945	Material Dependence of Maximum Possible Thermoelectric Figures of Merit. 2015 , 79, 633-637		1
944	Exploration of novel inorganic compounds using diffractometry and microscopy toward innovative functions. 2015 , 123, 623-629		1
943	Proton irradiation effects on the thermoelectric properties in single-crystalline Bi nanowires. 2015 , 5, 057101		3

942	Bulk-Nanostructured Bi ₂ Te ₃ -Based Materials: Processing, Thermoelectric Properties, and Challenges. 2015 , 99-117	1
941	Strain effect on electronic structure and thermoelectric properties of orthorhombic SnSe: A first principles study. 2015 , 5, 117147	28
940	Kapitza resistance at segregated boundaries in Bi ₂ C. 2015 , 118, 115101	15
939	Bi ₂ Te ₃ Nanowires by Electrodeposition in Polymeric Etched Ion Track Membranes: Synthesis and Characterization. 2015 , 33-53	
938	Old and New Things in Thermoelectricity. 2015 , 1-10	
937	Advanced Structural Characterization of Bi ₂ Te ₃ Nanomaterials. 2015 , 141-163	
936	Fabrication and Comprehensive Structural and Transport Property Characterization of Nanoalloyed Nanostructured V ₂ VI ₃ Thin Film Materials. 2015 , 55-72	
935	Effects of Temperature-Dependent Material Properties on Temperature Variation in a Thermolement. 2015 , 44, 3612-3620	12
934	Metallic and ferromagnetic MoS ₂ nanobelts with vertically aligned edges. 2015 , 8, 2946-2953	26
933	Epitaxial growth and improved electronic properties of (Bi _{1-x} Sb _x) ₂ Te ₃ thin films grown on sapphire (0001) substrates: The influence of Sb content and the annealing. 2015 , 647, 50-56	9
932	Cost Effective MEMS Fabrication of a Thermoelectric Nanowire Characterization Platform (TNCP). 2015 , 120, 210-214	4
931	Electrodeposition of Ni and Te-doped Cobalt Triantimonide in Citrate Solutions. 2015 , 27, 2845-2856	8
930	Enhancement of Thermoelectric Properties in Bi _{1-x} Sb _x Te Alloy Nanowires by Pulsed Electrodeposition. 2015 , 3, 825-829	13
929	Phonon Trapping in Pearl-Necklace-Shaped Silicon Nanowires. 2015 , 11, 6411-5	3
928	Exploring packaging strategies of nano-embedded thermoelectric generators. 2015 , 5, 107210	11
927	Preparation and study of the thermoelectric properties of nanocrystalline Sn _{1-x} TaxO ₂ (0 ≤ x ≤ 0.04). 2015 , 212, 2776-2784	10
926	Microwave plasma synthesis of Si/Ge and Si/WSi ₂ nanoparticles for thermoelectric applications. 2015 , 48, 314010	8
925	Ultrahigh Thermoelectric Performance in Mosaic Crystals. 2015 , 27, 3639-44	163

924	Thermoelectric Properties of Band Structure Engineered Topological Insulator (Bi _{1-x} Sb _x) ₂ Te ₃ Nanowires. 2015 , 5, 1500280	20
923	Exploring Two-Dimensional Transport Phenomena in Metal Oxide Heterointerfaces for Next-Generation, High-Performance, Thin-Film Transistor Technologies. 2015 , 11, 5472-82	44
922	Thermopower of Doped Quantum Anomalous Hall Insulators: The case of Dirac Hamiltonian. 2015 ,	
921	Effect of Substrate Temperature on the Thermoelectric Properties of the Sb ₂ Te ₃ Thin Films Deposition by Using Thermal Evaporation Method. 2015 , 2015, 1-6	2
920	Influence of Deposition Rate on the Thermoelectric Properties of Sb ₂ Te ₃ Thin Films by Thermal Evaporation Method. 2015 , 2015, 1-5	2
919	Enhanced thermoelectric coupling near electronic phase transition: The role of fluctuation Cooper pairs. <i>Physical Review B</i> , 2015 , 91,	3-3 13
918	Low-cost flexible thin film thermoelectric generator on zinc based thermoelectric materials. 2015 , 106, 073901	75
917	Impact of the Topological Surface State on the Thermoelectric Transport in Sb ₂ Te ₃ Thin Films. 2015 , 9, 4406-11	44
916	Three-terminal quantum-dot refrigerators. 2015 , 91, 052118	45
915	Nonlinear Thermoelectricity in Disordered Nanowires. 2015 , 3,	8
914	Electron Microscopy Study of Thermoelectric (Bi _x Sb _{1-x}) ₂ Te ₃ Thin Film. 2015 , 3-7	
913	A model for predicting the thermal conductivity of SiO ₂ -Ge nanoparticle composites. 2015 , 17, 13429-41	18
912	Optimum energy conversion strategies of a nano-scaled three-terminal quantum dot thermoelectric device. 2015 , 85, 200-207	19
911	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. 2015 , 19, 127-165	60
910	Anomalous reduction of thermal conductivity in coherent nanocrystal architecture for silicon thermoelectric material. 2015 , 12, 845-851	120
909	Effect of Doping with Substituent Bi Atoms on the Electrical Transport Properties of a Bi _{0.4} Sb _{1.6} Te ₃ Film Fabricated by Molecular Beam Epitaxy. 2015 , 44, 3334-3340	3
908	Individual thermoelectric properties of electrodeposited bismuth telluride nanowires in polycarbonate membranes. 2015 , 161, 403-407	13
907	Structural properties of thermoelectric CoSb ₃ skutterudite thin films prepared by molecular beam deposition. 2015 , 624, 216-225	17

906	Simple apparatus to measure Seebeck coefficient up to 900K. 2015 , 68, 295-301	12
905	High thermoelectric performance of all-oxide heterostructures with carrier double-barrier filtering effect. 2015 , 7, e182-e182	29
904	Controlled growth of bismuth antimony telluride Bi ₂ Sb ₂ Te ₃ nanoplatelets and their bulk thermoelectric nanocomposites. 2015 , 15, 688-696	67
903	Thermoelectric effects in graphene nanostructures. 2015 , 27, 133204	90
902	One-dimensional behavior and high thermoelectric power factor in thin indium arsenide nanowires. 2015 , 106, 093101	14
901	Thermal transport in one-dimensional superlattice and quasicrystal chains: Fullerene phononic crystal. 2015 , 112, 24006	2
900	Enhanced thermoelectric performance of carbon nanotubes at elevated temperature. 2015 , 17, 27558-64	13
899	Concepts for medium-high to high temperature thermoelectric heat-to-electricity conversion: a review of selected materials and basic considerations of module design. 2015 , 2, 025001	77
898	Prospects for thermoelectricity in quantum dot hybrid arrays. 2015 , 10, 997-1001	51
897	Improvement of the thermoelectric performance of InSe-based alloys doped with Sn. 2015 , 5, 102856-102862	18
896	Complete thermoelectric benchmarking of individual InSb nanowires using combined micro-Raman and electric transport analysis. 2015 , 8, 4048-4060	22
895	Melt-spun materials based on an n-type Bi ₂ Te _{2.7} Se _{0.3} solid solution. 2015 , 51, 741-745	15
894	Power factor enhancement via simultaneous improvement of electrical conductivity and Seebeck coefficient in tellurium nanowires/reduced graphene oxide flexible thermoelectric films. 2015 , 210, 342-351	12
893	Effects of nanostructure on clean energy: big solutions gained from small features. 2015 , 60, 2083-2090	29
892	High thermoelectric performance in graphene nanoribbons by graphene/BN interface engineering. 2015 , 26, 495202	26
891	Diameter dependence of the thermal conductivity of InAs nanowires. 2015 , 26, 385401	34
890	Effect of different surfactants and thicknesses on electrodeposited films of bismuth telluride and its thermoelectric performance. 2015 , 2, 106403	9
889	Ab initio study of thermoelectric properties of doped SnO ₂ superlattices. 2015 , 231, 123-131	5

888	Annealing effects on the thermoelectric properties of silver-doped bismuth telluride thin films. 2015 , 148, 51-54	4
887	Thermoelectric characterization of nanostructured selenium doped bismuth telluride obtained by a solution route. 2015 ,	
886	Reversible electron-hole separation in a hot carrier solar cell. 2015 , 17, 095004	26
885	Bottom-up silicon nanowire-based thermoelectric microgenerators. 2015 , 660, 012101	3
884	Thermoelectric energy harvesting with quantum dots. 2015 , 26, 032001	204
883	Thickness dependent quantum oscillations of transport properties in topological insulator Bi ₂ Te ₃ thin films. 2015 , 106, 053103	14
882	Signatures of Quantized Energy States in Solution-Processed Ultrathin Layers of Metal-Oxide Semiconductors and Their Devices. 2015 , 25, 1727-1736	29
881	Effect of Cu concentration on thermoelectric properties of nanostructured p-type MgAg _{0.97} CuSb _{0.99} . 2015 , 87, 266-272	45
880	A tubing shaped, flexible thermal energy harvester based on a carbon nanotube sheet electrode. 2015 , 86, 118-123	18
879	Atomic layer deposition and characterization of Bi ₂ Te ₃ thin films. 2015 , 119, 2298-306	23
878	Solar fuels vis-à-vis electricity generation from sunlight: The current state-of-the-art (a review). 2015 , 44, 904-932	45
877	Thermal conductivity of ordered-disordered material: a case study of superionic Ag ₂ Te. 2015 , 26, 025702	23
876	Electronic structure and transport properties of Cu-deficient kuramite Cu _{3-x} SnS ₄ . 2015 , 54, 021801	9
875	Enhanced performance of joint cooling and energy production. <i>Physical Review B</i> , 2015 , 91, 3-3	42
874	Tuning optical properties of transparent conducting barium stannate by dimensional reduction. 2015 , 3, 011102	27
873	Tuning phonon properties in thermoelectric materials. 2015 , 78, 026501	13
872	Diameter-dependent thermoelectric figure of merit in single-crystalline Bi nanowires. 2015 , 7, 5053-9	50
871	High Thermoelectric Performance of a Heterogeneous PbTe Nanocomposite. 2015 , 27, 944-949	90

- 870 Disentangling the magnetoelectric and thermoelectric transport in topological insulator thin films. *Physical Review B*, **2015**, 91, 3-3 28
- 869 Thin Film Thermoelectric Materials for Sensor Applications: An Overview. **2015**, 215-241
- 868 The influence of the transformation of electronic structure and micro-structure on improving the thermoelectric properties of zinc antimonide thin films. **2015**, 64, 18-22 7
- 867 TEM study of the $(\text{SbS})_{1+n}(\text{NbS}_2)_n$, ($n=1, 2, 3$; $\square 1.14, 1.20$) misfit layer phases. **2015**, 230, 357-368 1
- 866 Thermal properties of multiple quantum wells used in vertical-external-cavity surface-emitting lasers. **2015**, 54, 076102 1
- 865 Fabrication and thermoelectric properties of $\text{CuMn}_{1+x}\text{O}_2$ ($x=0\sim 0.2$) ceramics. **2015**, 41, 12303-12309 3
- 864 Thermal stability of thermoelectric CoSb_3 skutterudite thin films. **2015**, 589, 203-208 12
- 863 Enhanced Seebeck effect in graphene devices by strain and doping engineering. **2015**, 73, 207-212 16
- 862 Charge Carriers Scattering in Nanocrystalline Cr-Si Composite Films. **2015**, 2, 519-522
- 861 High thermoelectric performance in two-dimensional graphyne sheets predicted by first-principles calculations. **2015**, 17, 22872-81 53
- 860 Low-dimensional transport and large thermoelectric power factors in bulk semiconductors by band engineering of highly directional electronic states. **2015**, 114, 136601 138
- 859 Misfit Layer Compounds and Ferecystals: Model Systems for Thermoelectric Nanocomposites. **2015**, 8, 2000-2029 43
- 858 Observation of Thermoelectric Voltages from the Two-Dimensional Electron Gas of a HgTe Quantum Well Due to Resonant THz Laser Heating. **2015**, 44, 3598-3602
- 857 Enhancing the Thermoelectric Figure of Merit by Low-Dimensional Electrical Transport in Phonon-Glass Crystals. **2015**, 15, 5229-34 45
- 856 Enhanced power factor and reduced thermal conductivity of a half-Heusler derivative $\text{Ti}_9\text{Ni}_7\text{Sn}_8$: A bulk nanocomposite thermoelectric material. **2015**, 106, 103901 22
- 855 Thermoelectric oxides. **2015**, 397-441 2
- 854 Thin-film 'Thermal Well' Emitters and Absorbers for High-Efficiency Thermophotovoltaics. **2015**, 5, 10661 98
- 853 Size effect on the colossal thermoelectric power in charge ordered small band width manganites based on Gd-Sr. **2015**, 2, 055504 7

852	Optimal thermoelectric figure of merit of Si/Ge core-shell nanowires. 2015 , 8, 2611-2619	18
851	Chemical Potential Tuning and Enhancement of Thermoelectric Properties in Indium Selenides. 2015 , 8, 1283-1324	20
850	Sb deficiencies control hole transport and boost the thermoelectric performance of p-type AgSbSe ₂ . 2015 , 3, 10415-10421	18
849	Maximizing thermoelectric properties by nanoinclusion of SbTe in Sb ₂ Te ₃ film via solid-state phase transition from amorphous SbTe electrodeposits. 2015 , 13, 727-734	32
848	Thermoelectric properties of IV-VI-based heterostructures and superlattices. 2015 , 227, 123-131	7
847	Graphdiyne: A two-dimensional thermoelectric material with high figure of merit. 2015 , 90, 255-259	91
846	Thermoelectric materials: Energy conversion between heat and electricity. 2015 , 1, 92-105	583
845	Thermoelectric Switching of Single-Walled Carbon Nanotubes due to Encapsulation of Iodine Atomic Chain. 2019 , 123, 3996-4001	4
844	Enhanced Cross-Plane Thermoelectric Figure of Merit Observed in an Al ₂ O ₃ /ZnO Superlattice Film by Hole Carrier Blocking and Phonon Scattering. 2019 , 123, 14187-14194	8
843	Role of graphite on the thermoelectric performance of Sb ₂ Te ₃ /graphite nanocomposite. 2019 , 125, 195105	8
842	An alternative approach to predict Seebeck coefficients: Application to La ₃ Te ₄ . 2019 , 169, 87-91	7
841	Decoupling thermal and electrical transport in MgAgSb with synergic pressure and doping strategy. 2019 , 125, 205105	4
840	Can a helical molecule be an efficient functional element to meet the present requirement of thermoelectric efficiency?. 2019 , 126, 27003	6
839	Disparate strain response of the thermal transport properties of bilayer penta-graphene as compared to that of monolayer penta-graphene. 2019 , 21, 15647-15655	12
838	Electronic Transport and Thermopower in 2D and 3D Heterostructures: A Theory Perspective. 2019 , 531, 1800510	6
837	Synthesis and Processing of Thermoelectric Nanomaterials, Nanocomposites, and Devices. 2019 , 295-336	4
836	Thermionic emission laws for general electron dispersion relations and band structure data. 2019 , 125, 215105	2
835	A comparative study of the thermoelectric performance of graphene-like BX (X = P, As, Sb) monolayers. 2019 , 31, 385701	8

834	First-principles calculation study of Mg ₂ XH ₆ (X=Fe, Ru) on thermoelectric properties. 2019 , 6, 085536	0
833	The thermoelectric properties of Au nanoparticle-incorporated Al-doped mesoporous ZnO thin films. 2019 , 6, 181799	5
832	Thermoelectric transport properties of borophane. <i>Physical Review B</i> , 2019 , 99,	3-3 9
831	Large enhancement of the thermoelectric power factor in disordered materials through resonant scattering. <i>Physical Review B</i> , 2019 , 99,	3-3 3
830	Optical Properties of Polyethylene Filled with Bi ₂ Te ₃ Nanocrystallites. 2019 , 53, 224-228	5
829	Optical and transport properties of few quintuple-layers of Bi _{2-x} SbxSe ₃ nanoflakes synthesized by hydrothermal method. 2019 , 804, 272-280	6
828	Porosity-tuned thermal conductivity in thermoelectric Al-doped ZnO thin films grown by mist-chemical vapor deposition. 2019 , 685, 180-185	23
827	Structural and Thermal Characterisation of Nanofilms by Time-Resolved X-ray Scattering. 2019 , 9,	1
826	Heterostructures in two-dimensional colloidal metal chalcogenides: Synthetic fundamentals and applications. 2019 , 12, 1750-1769	19
825	Shashlik-like TeBi ₂ Te ₃ hetero-nanostructures: one-pot synthesis, growth mechanism and their thermoelectric properties. 2019 , 21, 3694-3701	2
824	Incongruent pulsed laser deposition strategy for thin film growth of Ca ₃ Co ₄ O ₉ thermoelectric compound. 2019 , 45, 13138-13143	2
823	Ultra-low thermal conductivity via interfacial phonon scattering in PbTe hoppercubes/PbTeO ₃ microrods for thermoelectric applications. 2019 , 799, 26-35	3
822	Enhancement in thermoelectric performance of electrochemically deposited platinum-bismuth telluride nanocomposite. 2019 , 312, 62-71	16
821	New horizons in thermoelectric materials: Correlated electrons, organic transport, machine learning, and more. 2019 , 125, 180902	31
820	Production of polycrystalline Bi ₂ Te ₃ nanostructures and the effect of annealing on their electrical conductivity. 2019 , 214, 44-49	2
819	Electronic band structure of TiN/MgO-4 [4] and 5 [5] nanostructures. 2019 , 58, SBBH06	1
818	Survey of energy scavenging for wearable and implantable devices. 2019 , 178, 33-49	58
817	High-Performance Flexible Thermoelectric Devices Based on All-Inorganic Hybrid Films for Harvesting Low-Grade Heat. 2019 , 29, 1900304	66

816	Recent Advances on Mg ₂ XIV Based Thermoelectric Materials: A Theoretical Approach. 2019 , 229-266	
815	Study of thermopower in a 1D lattice: Role of aperiodicity. 2019 ,	
814	Thermoelectric transport properties of Ni-, Pd-, and Pt- doped skutterudites with S-filling as charge compensation. 2019 , 9, 045325	8
813	Non-linear enhancement of thermoelectric performance of a TiSe ₂ monolayer due to tensile strain, from first-principles calculations. 2019 , 7, 7308-7317	16
812	Nanowires: A route to efficient thermoelectric devices. 2019 , 113, 213-225	25
811	Ultralow lattice thermal conductivity induced high thermoelectric performance in the $\sqrt{3}\times\sqrt{3}$ CuS monolayer. 2019 , 11, 10306-10313	19
810	Dimensionality reduction of germanium selenide for high-efficiency thermoelectric applications. 2019 , 45, 15122-15127	15
809	Photon-Mediated Thermoelectric and Heat Currents through a Resonant Quantum Wire-Cavity System. 2019 , 12, 1082	7
808	Impact of device geometry on electron and phonon transport in graphene nanorings. <i>Physical Review B</i> , 2019 , 99,	3-3 4
807	Ultralow Lattice Thermal Conductivity and Thermoelectric Properties of Monolayer Ti ₂ O. 2019 , 2, 3004-3008	29
806	The Queen of Carbon!. 2019 , 24, 263-272	
805	Inducing n- and p-Type Thermoelectricity in Oxide Superlattices by Strain Tuning of Orbital-Selective Transport Resonances. 2019 , 11,	10
804	First-principles calculations of thermal transport properties in MoS/MoSe bilayer heterostructure. 2019 , 21, 10442-10448	21
803	Complex Band Structures and Lattice Dynamics of Bi ₂ Te ₃ -Based Compounds and Solid Solutions. 2019 , 29, 1900677	74
802	Thermoelectric Figure-of-Merit of Fully Dense Single-Crystalline SnSe. 2019 , 4, 5442-5450	28
801	Achieving band convergence by tuning the bonding ionicity in n-type Mg Sb. 2019 , 40, 1693-1700	41
800	Thermoelectrics of Nanowires. 2019 , 119, 9260-9302	64
799	The Effect of In-Plane Thermocouple Dimension on the Performance of CMOS and BiCMOS Thermoelectric Generators. 2019 , 19, 4829-4836	7

798	Charge Transfer in Thermoelectric Nanocomposites: Power Factor Enhancements and Model Systems. 2019 , 1-34	1
797	Enhanced thermoelectric properties of graphene-based ferromagnetic-superconductor junctions, Andreev reflection effect. 2019 , 6, 065021	
796	Dramatically reduced lattice thermal conductivity of Mg ₂ Si thermoelectric material from nanotwinning. 2019 , 169, 9-14	17
795	Low Lattice Thermal Conductivity of a Two-Dimensional Phosphorene Oxide. 2019 , 9, 5149	10
794	ZnO/Silicon-Rich Oxide Superlattices with High Thermoelectric Figure of Merit: A Comprehensive Study by Experiment and Molecular Dynamic Simulation. 2019 , 11, 13507-13513	4
793	Enhancement in thermoelectric properties due to Ag nanoparticles incorporated in BiTe matrix. 2019 , 10, 634-643	5
792	Conductive nanofilm/melamine foam hybrid thermoelectric as a thermal insulator generating electricity: theoretical analysis and development. 2019 , 54, 8187-8201	5
791	Effect of annealing on the structural and thermoelectric properties of nanostructured Sb ₂ Te ₃ /Au semiconductor/metal multilayer films. 2019 , 790, 723-731	6
790	Enhancing thermoelectric properties by using a surface polarization effect based on PEDOT:PSS thin films. 2019 , 7, 6120-6128	9
789	Effect of Surface Roughness and Electroless NiB Plating on the Bonding Strength of BiTe-based Thermoelectric Modules. 2019 , 9, 213	4
788	Thermoelectric Conversion at 30 K in InAs/InP Nanowire Quantum Dots. 2019 , 19, 3033-3039	34
787	Effect of M elements (M = Ti, Zr, and Hf) on thermoelectric performance of the half-Heusler compounds MCoBi. 2019 , 52, 255501	15
786	Progress and Perspective: Soft Thermoelectric Materials for Wearable and Internet-of-Things Applications. 2019 , 5, 1800823	38
785	High Thermoelectric Power Factor in Intermetallic CoSi Arising from Energy Filtering of Electrons by Phonon Scattering. 2019 , 11,	23
784	Thermoelectric properties of Al-doped ZnO composite films with polymer nanoparticles prepared by pulsed laser deposition. 2019 , 167, 406-410	16
783	Extraordinary thermoelectric performance in MgAgSb alloy with ultralow thermal conductivity. 2019 , 59, 311-320	35
782	Emerging Theory, Materials, and Screening Methods: New Opportunities for Promoting Thermoelectric Performance. 2019 , 531, 1800437	39
781	Advances in the optimization of silicon-based thermoelectrics: a theory perspective. 2019 , 17, 35-41	5

780	Designing high-performance thermoelectrics in two-dimensional tetradymites. 2019 , 58, 743-749	15
779	Electron Sandwich Doubles the Thermoelectric Power Factor of SrTiO ₃ . 2019 , 216, 1800832	3
778	Promising thermoelectric properties and anisotropic electrical and thermal transport of monolayer SnTe. 2019 , 114, 083901	19
777	Hybrid Organic-Inorganic Thermoelectric Materials and Devices. 2019 , 58, 15206-15226	87
776	Composition change-driven texturing and doping in solution-processed SnSe thermoelectric thin films. 2019 , 10, 864	39
775	Hybride organisch-anorganische thermoelektrische Materialien und Baueinheiten. 2019 , 131, 15348-15370	7
774	Giant thermoelectric power factor in ultrathin FeSe superconductor. 2019 , 10, 825	35
773	Phonon transport and thermoelectric properties of semiconducting BiTeX (X = S, Se, Te) monolayers. 2019 , 21, 5679-5688	34
772	Rapid Prediction of Anisotropic Lattice Thermal Conductivity: Application to Layered Materials. 2019 , 31, 2048-2057	13
771	Keynote Speech: Nanostructure thermoelectrics. 2019 ,	
770	Topological current for transverse electrical and thermal conductivity in thermoelectric effect. 2019 , 3, 115020	
769	Optimization of Seebeck coefficients of strain-symmetrized semiconductor heterostructures. 2019 , 115, 211602	4
768	Organic Thermoelectrics and Thermoelectric Generators (TEGs). 2019 ,	3
767	The thermoelectric properties of monolayer SiP and GeP from first-principles calculations. 2019 , 126, 185106	8
766	A theoretical study of 2D AlN on 3D C ₄ H ₆ N ₆ Ni ₂ clathrate thermoelectric material composites. 2019 , 1, 1	
765	Ultrahigh electron mobility induced by strain engineering in direct semiconductor monolayer BiTeSe. 2019 , 11, 20620-20629	13
764	Thermoelectric Properties of Carbon Nanotubes. 2019 , 12, 4561	22
763	Electronic Structure and Thermoelectric Properties of Highly Oriented Ba ₂ NaNb ₅ O ₁₅ Reduced Ceramics. 2019 , 1, 2476-2482	

762	Steady-state density functional theory for thermoelectric effects. <i>Physical Review B</i> , 2019 , 100,	3-3	2
761	Limitations of zT as a figure of merit for nanostructured thermoelectric materials. 2019 , 126, 195703		4
760	Achieving an Ultrahigh Power Factor in SbTeSe Monolayers via Valence Band Convergence. 2019 , 11, 46688-46695		8
759	Physics-Guided Neural Modeling for Low-Dimensional Thermoelectric Module. 2019 , 40, 1812-1815		2
758	Effects of low dimensionality on electronic structure and thermoelectric properties of bismuth.. 2019 , 9, 40670-40680		6
757	Thermoelectric properties in monolayer (hbox {MoS}_2) nanoribbons with Rashba spin-orbit interaction. 2019 , 54, 467-482		5
756	Effects of oblique angle deposition on structural, electrical and wettability properties of Bi thin films grown by thermal evaporation. 2019 , 463, 45-51		18
755	Thermoelectrics: Physical Mechanisms. 2019 , 21-47		2
754	A comparative study on the thermoelectric properties of CoSb ₃ prepared by hydrothermal and solvothermal route. 2019 , 772, 770-774		8
753	Raman Characterization on Two-Dimensional Materials-Based Thermoelectricity. 2018 , 24,		10
752	Simultaneous transport coefficient measurements for an individual bismuth wire embedded in a quartz template applying nano-fabrication. 2019 , 12, 011008		3
751	Coherent Thermoelectric Power from Graphene Quantum Dots. 2019 , 19, 61-68		14
750	Thermoelectric properties of silicon and recycled silicon sawing waste. 2019 , 5, 15-33		15
749	Electronic structure and transport properties of TlInSe ₂ and Tl _{0.5} Li _{0.5} InSe ₂ . 2019 , 12, 95-106		4
748	Structural, electrical, optical and thermoelectric properties of e-beam evaporated Bi-rich Bi ₂ Te ₃ thin films. 2019 , 672, 165-175		5
747	Tuning phonon transport spectrum for better thermoelectric materials. 2019 , 20, 10-25		25
746	Low-dimensional systems on the base of PbSnAgTe (LATT) compounds for thermoelectric application. 2019 , 106, 10-18		5
745	Enhanced thermoelectric performance of Bi ₂ Te ₃ based graphene nanocomposites. 2019 , 474, 2-8		39

744	The effects of two-dimensional TiSe on the thermoelectric, electronic and optical response of YbMnSb/AlSbYb heterostructures - A theoretical study. 2019 , 86, 179-191	2
743	Thermally Enhanced n-Type Thermoelectric Behavior in Completely Organic Graphene Oxide-Based Thin Films. 2019 , 5, 1800465	18
742	Copper Sulfides: Earth-Abundant and Low-Cost Thermoelectric Materials. 2019 , 7, 1800850	25
741	From sol-gel prepared porous silica to monolithic porous Mg ₂ Si/MgO composite materials. 2019 , 89, 295-302	2
740	Design of a simple apparatus for the measurement of the Seebeck coefficient. 2019 , 133, 433-438	4
739	State-of-the-Art Reviews and Analyses of Emerging Research Findings and Achievements of Thermoelectric Materials over the Past Years. 2019 , 48, 745-777	25
738	Thermoelectric performance of monolayer InSe improved by convergence of multivalley bands. 2019 , 125, 082502	23
737	Mode confinement, interface mass-smudging, and sample length effects on phonon transport in thin nanocomposite superlattices. 2019 , 31, 055303	2
736	Nanoarchitected titanium complexes for thermal mitigation in thermoelectric materials. 2019 , 101, 346-360	11
735	Thermoelectric transport properties of Pb doped SnSe alloys (PbxSn _{1-x} Se): DFT-BTE simulations. 2019 , 270, 413-418	3
734	Simulating stress-tunable phonon and thermal properties in heterostructured AlN/GaN/AlN-nanofilms. 2019 , 6, 015018	4
733	An Integrated Approach to Thermoelectrics: Combining Phonon Dynamics, Nanoengineering, Novel Materials Development, Module Fabrication, and Metrology. 2019 , 9, 1801304	20
732	In-situ synthesis of flexible hybrid composite films for improved thermoelectric performance. 2019 , 357, 547-558	19
731	Modulated Magneto-Thermal Response of La _{0.85} Sr _{0.15} MnO ₃ and (Ni _{0.6} Cu _{0.2} Zn _{0.2})Fe ₂ O ₄ Composites for Thermal Energy Harvesters. 2019 , 4, 57-65	8
730	Energy Filtering of Charge Carriers: Current Trends, Challenges, and Prospects for Thermoelectric Materials. 2020 , 30, 1901789	129
729	Effect of annealing and potassium substitution on the thermoelectric and magnetic properties of directionally grown Bi ₂ Sr ₂ Co ₂ O _y ceramics. 2020 , 59, 121-128	2
728	Overview on thermoactive materials, simulations and applications. 2020 , 55, 925-946	6
727	Thermal Transport in 2D Semiconductors—Considerations for Device Applications. 2020 , 30, 1903929	41

726	Materials selection rules for optimum power factor in two-dimensional thermoelectrics. 2020 , 3, 015005	3
725	Radial heterostructure and interface effects on thermoelectric transport properties of Bi/Sn and Bi/Sb core/shell nanowires. 2020 , 20, 43-48	2
724	Ab initio investigation of the role of vanadium impurity states in SrTiO ₃ for thermoelectricity. 2020 , 138, 109180	5
723	Recent development and application of thin-film thermoelectric cooler. 2020 , 14, 492-503	12
722	Power Generation Using Solid-State Heat Engines. 2020 , 71-83	
721	Emerging Applications of Elemental 2D Materials. 2020 , 32, e1904302	159
720	Excellent Thermoelectric Performance Realized in p-Type Pseudolayered Sb ₂ Te ₃ (GeTe) ₁₂ via Rhenium Doping. 2020 , 3, 2063-2069	10
719	Nanoscale Organic Thermoelectric Materials: Measurement, Theoretical Models, and Optimization Strategies. 2020 , 30, 1903873	62
718	Green Biocomposites for Thermoelectric Wearable Applications. 2020 , 30, 1907301	43
717	Remarkably High Thermoelectric Efficiencies of the Half-Heusler Compounds BXGa (X = Be, Mg, and Ca). 2020 , 12, 5838-5846	18
716	Controlled thermoelectric performance in a nanojunction: A theoretical approach. 2020 , 127, 024302	1
715	Microstructure and Thermoelectric Properties of Zn _{1-x} Ag _x Sb Thin Films Grown by Single-Target Magnetron Sputtering. 2020 , 3, 2055-2062	9
714	Influence of the reducing agent on the formation and morphology of the bismuth telluride nanostructures by using template assisted chemical process: From nanowires to ultrathin nanotubes. 2020 , 533, 125474	2
713	Multifunctional inorganic nanomaterials for energy applications. 2020 , 12, 14-42	43
712	Core-shell nanostructures introduce multiple potential barriers to enhance energy filtering for the improvement of the thermoelectric properties of SnTe. 2020 , 12, 1904-1911	23
711	Thermoelectric properties of InN graphene-like nanosheet: A first principle study. 2020 , 138, 106367	11
710	Thermoelectric properties of BiSbTe alloy nanofilms produced by DC sputtering: experiments and modeling. 2020 , 55, 2429-2438	5
709	Preparation and thermoelectric properties of Al and Ti co-doped non-stoichiometric TiAl _{0.02} O _{1.78} under different synthesis pressures. 2020 , 46, 6878-6881	2

708	Improved thermoelectric properties of solvothermally synthesized Bi ₂ Te ₃ nanoplate films with homogeneous interconnections using Bi ₂ Te ₃ electrodeposited layers. 2020 , 818, 152901		13
707	First-principles investigation of low-dimension MSe ₂ (M = Ti, Hf, Zr) configurations as promising thermoelectric materials. 2020 , 139, 109322		3
706	Quantum-Confinement-Enhanced Thermoelectric Properties in Modulation-Doped GaAs-AlGaAs Core-Shell Nanowires. 2020 , 32, e1905458		10
705	Thermoelectric behaviors of fly ash and metakaolin based geopolymer. 2020 , 237, 117757		11
704	Thermal transport properties of boron nitride based materials: A review. 2020 , 120, 109622		37
703	Enhanced thermoelectric power factor in wet chemical synthesized Sb ₂ Te ₃ by the incorporation of (GO/r-GO). 2020 , 577, 411795		2
702	2D Materials for Large-Area Flexible Thermoelectric Devices. 2020 , 10, 1902842		72
701	New group V graphyne: two-dimensional direct semiconductors with remarkable carrier mobilities, thermoelectric performance, and thermal stability. 2020 , 12, 100164		7
700	Anomalous electronic and thermoelectric transport properties in cubic Rb ₃ AuO antiperovskite. <i>Physical Review B</i> , 2020 , 102,	3-3	2
699	Low-Symmetry PdSe ₂ for High Performance Thermoelectric Applications. 2020 , 30, 2004896		23
698	A Facile Chemical Synthesis of PbTe Nanostructures at Room Temperature. 2020 , 10,		
697	Unique Thermoelectric Properties Induced by Intrinsic Nanostructuring in a Polycrystalline Thin-Film Two-Dimensional MetalOrganic Framework, Copper Benzenehexathiol. 2020 , 217, 2000437		7
696	High power factor due to multi-scale engineering in ultra-thin bismuth telluride films. 2020 , 128, 125107		3
695	Thermoelectric properties of elemental metals from first-principles electron-phonon coupling. <i>Physical Review B</i> , 2020 , 102,	3-3	4
694	Thermoelectric Energy Harvesters: A Review of Recent Developments in Materials and Devices for Different Potential Applications. 2020 , 378, 48		22
693	Thermoelectric properties of WS ₂ monolayer. 2020 ,		
692	Thermoelectric and Half-Metallic Behavior of the Novel Heusler Alloy RbCrC: Ab initio DFT Study. 2020 , 10, 2050029		4
691	Monolayer Ag ₂ S: Ultralow Lattice Thermal Conductivity and Excellent Thermoelectric Performance. 2020 , 3, 10147-10153		3

690	Even-odd effect of spin-dependent transport and thermoelectric properties for ferromagnetic zigzag phosphorene nanoribbons under an electric field. 2020 , 32, 435502	1
689	Sensitively tuning the thermal conductivity of diamane via engineering the mass of functional groups. 2020 , 31, 435409	5
688	Top-down approach using supercritical carbon dioxide ball milling for producing sub-10 nm Bi ₂ Te ₃ grains. 2020 , 13, 067002	
687	Quenching Thermal Transport in Aperiodic Superlattices: A Molecular Dynamics and Machine Learning Study. 2020 , 12, 8795-8804	23
686	Magnetic field effects on the thermoelectric properties of monolayer graphene. 2020 , 124, 114361	3
685	Effect of phonon-boundary scattering on phonon-drag factor in Seebeck coefficient of Si wire. 2020 , 10, 075015	4
684	Valley caloritronics in a photodriven heterojunction of Dirac materials. <i>Physical Review B</i> , 2020 , 102, 3-3	4
683	Nanostructured planar-type uni-leg Si thermoelectric generators. 2020 , 13, 095001	7
682	Carbon and carbon composites for thermoelectric applications. 2020 , 2, 408-436	65
681	A Filament Supply System Capable of Remote Monitoring and Automatic Humidity Control for 3D Printer. 2020 , 2020, 1-10	3
680	Strain induced enhancement in thermoelectric power factor of ZrTe ₂ . 2020 ,	1
679	Hierarchically nanostructured thermoelectric materials: challenges and opportunities for improved power factors. 2020 , 93, 1	3
678	Thermoelectric properties of two-dimensional Dirac materials. 2020 ,	
677	Enhanced thermoelectric properties of Zn-doped GaSb nanocomposites.. 2020 , 10, 28415-28421	0
676	SrTiO ₃ -based thermoelectrics: Progress and challenges. 2020 , 78, 105195	52
675	Electron-Transparent Thermoelectric Coolers Demonstrated with Nanoparticle and Condensation Thermometry. 2020 , 14, 11510-11517	4
674	Realization of p-type ZnAgO:N thin films on flexible polyimide substrates through co-sputtering for wearable thermoelectric applications. 2020 , 10, 075201	2
673	Thermoelectric properties of bulk multi-walled carbon nanotube - poly(vinylidene fluoride) nanocomposites: Study of the structure/property relationships. 2020 , 269, 116525	2

672	A Review on Thermoelectric Generators: Progress and Applications. 2020 , 13, 3606		61
671	A DFT study of two-dimensional CdS/TiS ₂ on isotropic chalcogenide AgSbTe ₂ thermoelectric material: Electronic charge transfer and optical properties. 2020 ,		1
670	Fractal lattice as an efficient thermoelectric device. 2020 , 1579, 012004		1
669	Theoretical model for predicting thermoelectric properties of tin chalcogenides. 2020 , 22, 18989-19008		13
668	Enhanced Thermoelectric Performance of Novel Reaction Condition-Induced BiS-Bi Nanocomposites. 2020 , 12, 37248-37257		5
667	Four-fold multifunctional properties in self-organized layered ferrite. 2020 , 46, 28621-28630		
666	Scalable colloidal synthesis of Bi ₂ Te _{2.7} Se _{0.3} plate-like particles give access to a high-performing n-type thermoelectric material for low temperature application. 2020 , 2, 5699-5709		6
665	Detailed study of nonlinear cooling with two-terminal configurations of topological edge states. <i>Physical Review B</i> , 2020 , 102,	3-3	2
664	Focused ion beam deposited carbon-platinum nanowires for cryogenic resistive thermometry. 2020 , 169, 482-487		1
663	Flexible thermoelectric films formed using integrated nanocomposites with single-wall carbon nanotubes and BiTe nanoplates via solvothermal synthesis. 2020 , 10, 17031		8
662	Enhancement of thermoelectric figure of merit by using nonequilibrium state between electrons and phonons. 2020 , 117, 083901		
661	Physical vapor deposited 2D bismuth for CMOS technology. 2020 , 41, 081001		2
660	Enhanced thermoelectricity at the ultra-thin film limit. 2020 , 117, 083104		5
659	Anomalous strain effect on the thermal conductivity of low-buckled two-dimensional silicene. 2021 , 8, nwaa220		4
658	A Comparative Study on the Thermoelectric Properties of Bismuth Chalcogenide Alloys Synthesized through Mechanochemical Alloying and Microwave-Assisted Solution Synthesis Routes. 2020 , 7,		6
657	Dimensional Crossover and Enhanced Thermoelectric Efficiency Due to Broken Symmetry in Graphene Antidot Lattices. 2020 , 14,		0
656	Two-Dimensional SnSe Compositing with One-Dimensional Mn Nanowires: A Promising Thermoelectric with Ultrahigh Power Factor. 2020 , 3, 9234-9245		6
655	Ultralow Thermal Conductivity and High Thermoelectric Figure of Merit in Two-Dimensional Thallium Selenide. 2020 , 3, 9315-9325		7

- 654 Anisotropic Thermoelectric Power Factor of Two-Dimensional Materials with Periodic Potential Barriers: The Wigner-Rode Formalism. **2020**, 14, 1
- 653 Screening of transition (Y, Zr, Hf, V, Nb, Mo, and Ru) and rare-earth (La and Pr) elements as potential effective dopants for thermoelectric GeTe. An experimental and theoretical appraisal. **2020**, 8, 19805-19821 33
- 652 Doping Effect on CuSe Thermoelectric Performance: A Review. **2020**, 13, 11
- 651 First Principles Study on the Thermoelectric Performance of CaAl₂Si₂-type Zintl Phase Compounds. **2020**, 89, 124707 1
- 650 The impact of Fe atom on the spin-filter and spin thermoelectric properties of Au-Fe@C-Au monomer and dimer systems. **2020**, 10, 21134 1
- 649 Enhancement of the Seebeck coefficient and power factor in gated silicene superlattices induced by aperiodicity. **2020**, 128, 224302 1
- 648 High-Performance n-type SnSe Thermoelectric Polycrystal Prepared by Arc-Melting. **2020**, 1, 100263 10
- 647 Three-terminal vibron-coupled hybrid quantum dot thermoelectric refrigeration. **2020**, 128, 234303 2
- 646 Thermoelectric Generator Based on CuSO₄ and Na₂SiO₃. **2020**, 63, 35
- 645 Near room temperature thermoelectrics: Ag₂Se. **2020**,
- 644 Large Power Factors in Wide Band Gap Semiconducting RFeO₃ Materials for High-Temperature Thermoelectric Applications. **2020**, 3, 11193-11205 7
- 643 World's First Thermoelectric Generator Made of Tailored Carbon Allotropes. **2020**, 22, 2000108 2
- 642 Synergetic enhancement of thermoelectric performance in a Bi_{0.5}Sb_{1.5}Te₃/SrTiO₃ heterostructure. **2020**, 8, 10839-10844 5
- 641 Facile preparation of air-stable n-type thermoelectric single-wall carbon nanotube films with anionic surfactants. **2020**, 10, 8104 10
- 640 Thermal Conductivity of High-Temperature Phases of Cu₂S from Ab Initio Molecular Dynamics: Advent of Lattice-Site Hopping. **2020**, 124, 12318-12323
- 639 Thermoelectric power generation efficiency of zigzag monolayer nanoribbon of bismuth. **2020**, 31, 375403 7
- 638 Ultrathin MEMS thermoelectric generator with BiTe/(Pt, Au) multilayers and SbTe legs. **2020**, 7, 8 8
- 637 Effects of thickness on thermoelectric properties of Bi_{0.5}Sb_{1.5}Te₃ thin films. **2020**, 10, 2375-2381 3

636	Thermoelectric properties of polycrystalline Bi ₂ Se ₃ by powder compaction sintering. 2020 , 34, 2050206	0
635	First-principles calculations of phonon transport in two-dimensional penta-X ₂ C family. 2020 , 127, 205106	5
634	Enhanced thermoelectric efficiency in nanocrystalline bismuth telluride nanotubes. 2020 , 31, 365703	4
633	Enhanced performance nanostructured thermoelectric converter for self-powering health sensors. 2020 , 74, 104854	10
632	High Power Thermoelectric Generator Based on Vertical Silicon Nanowires. 2020 , 20, 4748-4753	35
631	Giant spin Seebeck effect in two-dimensional ferromagnetic CrI monolayer. 2020 , 31, 455404	5
630	Two-dimensional halide perovskites featuring semiconducting organic building blocks. 2020 , 4, 3400-3418	25
629	Tuning the electronic transport properties of p-type GaS monolayer by the application of biaxial strain. 2020 , 28, 1673-1678	
628	Material considerations for thermoelectric enhancement via modulation doping. 2020 , 126, 1	1
627	Ultra-low thermal conductivity and super-slow hot-carrier thermalization induced by a huge phononic gap in multifunctional nanoscale boron pnictides. 2020 , 124, 114222	13
626	Engineering electronic thermal conductivity of hydrogenated bilayer boronitrene via impurity infection: Tight-binding theory. 2020 , 700, 121677	1
625	Review of current high-ZT thermoelectric materials. 2020 , 55, 12642-12704	56
624	Thermoelectric properties of monolayer GeAsSe and SnSbTe. 2020 , 8, 9763-9774	12
623	Thermovoltage in quantum dots with attractive interaction. 2020 , 116, 243103	2
622	Thermoshape effect for energy harvesting with nanostructures. 2020 , 53, 375501	0
621	Improved thermoelectric performance of ternary Cu/Ni/Bi ₂ Te _{2.7} Se _{0.3} nanocomposite prepared by pulsed laser deposition. 2020 , 253, 123321	5
620	Thermal transport of carbon nanomaterials. 2020 , 32, 153002	50
619	Conversion efficiency and effective properties of particulate-reinforced thermoelectric composites. 2020 , 71, 1	1

618	2D thermoelectrics. 2020 , 209-225		0
617	Quantum control of nonlinear thermoelectricity at the nanoscale. <i>Physical Review B</i> , 2020 , 101, 3-3	3-3	3
616	Excellent thermoelectric performance induced by interface effect in MoS/MoSe van der Waals heterostructure. 2020 , 32, 055302		19
615	Effects of disorder on the transport and thermoelectric properties of silicene superlattices. 2020 , 120, 114100		4
614	Organic-based thermoelectrics. 2020 , 8, 7495-7507		40
613	Nanostructured calcium cobalt oxide Ca ₃ Co ₄ O ₉ as thermoelectric material. Effect of nanostructure on local coordination, Co charge state and thermoelectric properties. 2020 , 143, 109474		2
612	Chalcogenides by Design: Functionality through Metavalent Bonding and Confinement. 2020 , 32, e1908302		91
611	Phase-coherent caloritronics with ordinary and topological Josephson junctions. 2020 , 229, 683-705		9
610	Thermoelectric Properties of NiCl Monolayer: A First-Principles-Based Transport Study. 2020 , 10,		2
609	Recent advances, design guidelines, and prospects of flexible organic/inorganic thermoelectric composites. 2020 , 1, 1038-1054		14
608	Quantum confinement of coherent acoustic phonons in transferred single-crystalline bismuth nanofilms. 2020 , 116, 263101		4
607	1D semiconductor nanowires for energy conversion, harvesting and storage applications. 2020 , 76, 104991		35
606	Improved thermoelectric properties of layered Ti _{1-x} NbxS ₂ Se _y solid solutions. 2020 , 103, 6289-6297		2
605	A Comprehensive Review of Strategies and Approaches for Enhancing the Performance of Thermoelectric Module. 2020 , 13, 3142		16
604	Large thermoelectric figure of merit in hexagonal phase of 2D selenium and tellurium. 2020 , 120, e26267		8
603	Decreasing of the thermal conductivity of Si nanopillar/SiGe composite films investigated by using a piezoelectric photothermal spectroscopy. 2020 , 59, SKKA08		3
602	Thermoelectric thin films: Promising strategies and related mechanism on boosting energy conversion performance. 2020 , 6, 494-512		13
601	Thermoelectric properties of Mexican-hat band structures. 2020 , 11, 015012		3

600	Confinement Effect in Thermoelectric Properties of TwoDimensional Materials. 2020 , 5, 469-479	2
599	Enhanced Peltier Effect in Wrinkled Graphene Constriction by Nano-Bubble Engineering. 2020 , 16, e1907170	14
598	Two-dimensional boron monochalcogenide monolayer for thermoelectric material. 2020 , 4, 2363-2369	37
597	Study of heat conduction in three-layered structure sandwich model. 2020 , 95, 045222	0
596	High Seebeck coefficient in thermally evaporated Sb-In co-alloyed bismuth telluride thin film. 2020 , 127, 055103	8
595	Bipolar Thermoelectrical Transport of SnSe Nanoplate in Low Temperature*. 2020 , 37, 017301	4
594	Boron-Doped Single-Walled Carbon Nanotubes with Enhanced Thermoelectric Power Factor for Flexible Thermoelectric Devices. 2020 , 3, 2556-2564	12
593	Manufacturing routes toward flexible and smart energy harvesters and sensors based on functional nanomaterials. 2020 , 381-437	1
592	A thin film efficient pn-junction thermoelectric device fabricated by self-align shadow mask. 2020 , 10, 1067	13
591	Exploration of the strain and thermoelectric properties of hexagonal SiX (X = N, P, As, Sb, and Bi) monolayers. 2020 , 22, 3990-3998	18
590	First-principles Study of LaOPbBiS ₃ and Its Analogous Compounds as Thermoelectric Materials. 2020 , 89, 024702	5
589	Theoretical and experimental evaluation of thermoelectric performance of alkaline earth filled skutterudite compounds. 2020 , 284, 121201	4
588	Toward Accelerated Thermoelectric Materials and Process Discovery. 2020 , 3, 2240-2257	42
587	Effect of interface density, quality and period on the lattice thermal conductivity of nanocomposite materials. 2020 , 127, 024304	2
586	Interplay Among Thermoelectric Properties, Atmospheric Stability, and Electronic Structures in Solution-Deposited Thin Films of P(NaX[Ni ₂ Te ₂]). 2020 , 6, 1901172	1
585	First-principles study of thermoelectric properties of mixed iodide perovskite Cs(B,B')I ₃ (B, B' = Ge, Sn, and Pb). 2020 , 140, 109372	4
584	Investigations on morphology and thermoelectric transport properties of Cu ⁺ ion implanted bismuth telluride thin film. 2020 , 697, 137834	3
583	A Novel Way to Enhance the Thermoelectric Efficiency of Carbon Nanotube through Cobaltocene-decamethyl Cobaltocene Encapsulation. 2020 , 5, 1539-1546	

582	Optimizing the Structural, Electrical and Thermoelectric Properties of Antimony Telluride Thin Films Deposited on Aluminum Nitride-coated Stainless Steel Foil. 2020 , 10, 6978	2
581	Controlled synthesis of two-dimensional (2-D) ultra-thin bismuth selenide (Bi ₂ Se ₃) nanosheets by bottom-up solution-phase chemistry and its electrical transport properties for thermoelectric application. 2020 , 21, 100165	5
580	Polymer Thermoelectrics: Opportunities and Challenges. 2020 , 53, 3632-3642	36
579	High thermoelectric figure of merit and thermopower of HfTe at room temperature. 2020 , 32, 345501	1
578	Distinct anisotropy and a high power factor in highly textured TiS ceramics via mechanical exfoliation. 2020 , 56, 5961-5964	2
577	First-principles study of anomalous Nernst effect in half-metallic iron dichloride monolayer. 2020 , 8, 041105	4
576	Organic thermoelectricity based on DNA molecules. 2020 , 95, 065004	1
575	Thermoelectric properties of two-dimensional magnet CrI. 2020 , 31, 315713	5
574	Solvothermal synthesis of n-type Bi(SeTe) nanoplates for high-performance thermoelectric thin films on flexible substrates. 2020 , 10, 6315	6
573	Effect of annealing temperature on thermoelectric properties of bismuth telluride thick film deposited by DC magnetron sputtering. 2020 , 393, 125808	6
572	Gas-Phase Carbonylation of Dimethyl Ether on the Stable Seed-Derived Ferrierite. 2020 , 10, 5135-5146	16
571	Low-dimensional thermoelectricity in aperiodic gated graphene superlattices. 2020 , 127, 154302	1
570	Electronic structure modulation strategies in high-performance thermoelectrics. 2020 , 8, 040910	28
569	Topological thermoelectrics. 2020 , 8, 040913	34
568	Strain engineering of the electronic and thermoelectric properties of titanium trisulphide monolayers. 2020 , 1, 010026	5
567	Tunable Thermal Transport Characteristics of Nanocomposites. 2020 , 10,	0
566	Efficient interlayer charge release for high-performance layered thermoelectrics. 2021 , 8, nwa085	9
565	Composite Metamaterials: Types and Synthesis. 2021 , 390-401	2

564	Thermoelectric properties of nanostructured porous-polysilicon thin films. 2021 , 80, 105553	5
563	Topological Quantum Materials from the Viewpoint of Chemistry. 2021 , 121, 2780-2815	19
562	Highly (1 0 0)-orientated SnSe thin films deposited by pulsed-laser deposition. 2021 , 535, 147694	7
561	Exploring the potential of lead-chalcogenide monolayers for room-temperature thermoelectric applications. 2021 , 47, 3380-3388	12
560	First-principles investigations of ZnO monolayers derived from zinc-blende and 5-5 phases for advanced thermoelectric applications. 2021 , 149, 109780	10
559	Investigations of thermoelectric properties of ZnO monolayers from the first-principles approach. 2021 , 126, 114444	17
558	Environmental profile of thermoelectrics for applications with continuous waste heat generation via life cycle assessment. 2021 , 752, 141674	3
557	Thermoelectric and lattice dynamics properties of layered MX (M = Sn, Pb; X = S, Te) compounds. 2021 , 538, 147911	10
556	First Principles Investigations of Structural, Electronic and Transport Properties of $\text{hbox}\{Bi\}_3/\text{hbox}\{ZrS\}_2$ van der Waals Heterostructure: A Thermoelectric Perspective. 2021 , 50, 1644-1654	5
555	Favorable thermoelectric performance in a Rashba spin-orbit coupled ac-driven graphene nanoribbon. 2021 , 172, 302-307	2
554	A Review of the $\text{Mg}_2(\text{Si},\text{Sn})$ Alloy System as Emerging Thermoelectric Material: Experimental and Modeling Aspects. 2021 , 50, 25-51	4
553	Potential thermoelectric candidate monolayer silicon diphosphide (SiP_2) from a first-principles calculation. 2021 , 188, 110154	3
552	State of the art in composition, fabrication, characterization, and modeling methods of cement-based thermoelectric materials for low-temperature applications. 2021 , 137, 110361	11
551	The Effect of Crystal Mismatch on the Thermoelectric Performance Enhancement of Nano Cu_2Se . 2021 , 7,	2
550	Strategies to optimize thermoelectric performance. 2021 , 19-50	1
549	The Origin of Quantum Effects in Low-Dimensional Thermoelectric Materials. 2021 , 4, 2000115	1
548	Thermoelectric Properties of Poly(3-hexylthiophene) Nanofiber Aerogels with a Giant Seebeck Coefficient. 2021 , 3, 455-463	7
547	Interfacial advances yielding high efficiencies for thermoelectric devices. 2021 , 9, 3209-3230	6

546	Relationships between crystallite size and thermoelectric properties of nano-structured CrSi ₂ prepared by the reduction-diffusion and spark plasma sintering methods. 2021 , 861, 157967	1
545	Spin Seebeck effect in the 2D ferromagnetic CrPbTe ₃ . 2021 , 126, 114443	3
544	The first-principles and BTE investigation of phonon transport in 1T-TiSe. 2021 , 23, 1627-1638	5
543	Pulsed current effect on the performance of conical inhomogeneous thermoelectrics. 2021 , 22, 100747	3
542	Thickness-dependent properties of ultrathin bismuth and antimony chalcogenide films formed by physical vapor deposition and their application in thermoelectric generators. 2021 , 19, 100587	9
541	A sandwich structure assisted by defect engineering for higher thermoelectric performance in ZnO-based films. 2021 , 104, 1370-1378	4
540	Colossal seebeck coefficient in Aurivillius phase-perovskite oxide composite. 2021 , 853, 157001	3
539	Strategies for improving efficiency of thermoelectric materials. 2021 , 117-138	
538	Drastic Modification of Lattice Thermal Conductivity in Thermoelectrics Induced by Electron-Hole Pairs. 2021 , 13, 3911-3918	0
537	Measurement techniques of thermoelectric devices and modules. 2021 , 521-537	
536	Effects of the thickness and laser irradiation on the electrical properties of e-beam evaporated 2D bismuth. 2021 , 13, 2648-2657	4
535	Research Progress of Cu ₂ Se Thin Film Thermoelectric Properties. 2021 , 0-0	2
534	A nanophysical approach to thermal transport. 2021 ,	
533	Circularly-polarized light Controlled Thermal Spin Transport in Stanene Nanoribbon. 2021 , 70, 1-7	
532	SnSe, the rising star thermoelectric material: a new paradigm in atomic blocks, building intriguing physical properties. 2021 , 8, 1847-1865	9
531	Nanostructured thermoelectric materials. 2021 , 261-311	
530	Achievements and Prospects of Thermoelectric and Hybrid Energy Harvesters for Wearable Electronic Applications. 2021 , 3-40	1
529	Role of substrate strain to tune energy bandsSeebeck relationship in semiconductor heterostructures. 2021 , 129, 025301	3

528	Thermoelectric properties of Hn_2Se_3 monolayer. 2021 , 118, 033103			5
527	Traditional thermoelectric materials and challenges. 2021 , 139-161			
526	Ultra-low thermal conductivity and high thermoelectric performance of monolayer BiP: a first principles study. 2021 , 23, 19834-19840			1
525	Bridging Structural Inhomogeneity to Functionality: Pair Distribution Function Methods for Functional Materials Development. 2021 , 8, 2003534			14
524	A novel enhanced performance thermal rectifier based on NPG functionalized carbon fibers. 2021 , 2, 5942-5954			
523	Thermoelectric effect and devices on IVA and VA Xenos. 2021 , 3, 271-292			4
522	Thermoelectric Cu β -Based Materials Synthesized via a Scalable Mechanochemical Process. 2021 , 9, 2003-2016			14
521	Orbital chemistry of high valence band convergence and low-dimensional topology in PbTe. 2021 , 9, 12119-12139			7
520	Giant Nernst effect and field-enhanced transversal zNT in ZrTe $_5$. <i>Physical Review B</i> , 2021 , 103,	3-3		3
519	Fermi level tuning in modified BiTe system for thermoelectric applications.. 2021 , 11, 4539-4546			6
518	Enhancement of thermoelectric efficiency of T β IFSe $_2$ via nanostructuring. <i>Physical Review B</i> , 2021 , 103,	3-3		5
517	Advances in the applications of thermoelectric materials. 2021 , 313-337			
516	Progress of hybrid nanocomposite materials for thermoelectric applications. 2021 , 2, 1927-1956			10
515	Effect of electron-phonon coupling on the transport properties of monolayers of ZrS, BiI and PbI: a thermoelectric perspective. 2021 , 23, 11663-11671			1
514	In Situ Observation of Electron-Beam-Induced Formation of Nano-Structures in PbTe. 2021 , 11,			
513	Effects of Size Reduction on the Electrical Transport Properties of 3D Bi Nanowire Networks. 2021 , 7, 2001069			5
512	Pure thermal spin current and perfect spin-filtering with negative differential thermoelectric resistance induced by proximity effect in graphene/silicene junctions. 2021 , 11, 104			4
511	Ionic thermoelectric materials for near ambient temperature energy harvesting. 2021 , 118, 020501			13

510	A gill-mimicking thermoelectric generator (TEG) for waste heat recovery and self-powering wearable devices. 2021 , 9, 8514-8526		8
509	1-dodecanthiol-assisted aqueous synthesis and characterization of Bi ₂ Te ₃ nanotubes. 2021 , 25, 100629		
508	Thermoelectric Performance Enhancement of n-type Chitosan-Bi ₂ Te _{2.7} Se _{0.3} Composite Films Using Heterogeneous Grains and Mechanical Pressure. 2021 , 50, 2840-2851		2
507	Fabrication, micro-structure characteristics and transport properties of co-evaporated thin films of BiTe on AlN coated stainless steel foils. 2021 , 11, 4041		3
506	Unconventional four-terminal thermoelectric transport due to inelastic transport: Cooling by transverse heat current, transverse thermoelectric effect, and Maxwell demon. <i>Physical Review B</i> , 2021 , 103,	3-3	4
505	Tuning Thermal Conductivity in Si Nanowires with Patterned Structures. 2021 , 38, 024401		2
504	Emerging Thermal Technology Enabled Augmented Reality. 2021 , 31, 2007952		13
503	Evidence of improvement in thermoelectric parameters of n-type Bi ₂ Te ₃ /graphite nanocomposite. 2021 , 129, 055108		1
502	Stochastic thermodynamic cycles of a mesoscopic thermoelectric engine. <i>Physical Review B</i> , 2021 , 103,	3-3	4
501	Thermoelectric properties of BiSbTe-type alloys prepared by chill-casting and cryo-milling. 2021 , 260, 124116		3
500	Thermoelectric Properties of Fine-Grained Germanium Telluride. 2021 , 12, 347-353		0
499	First-principles analysis of phonon thermal transport properties of two-dimensional WS ₂ /WSe ₂ heterostructures*. 2021 , 30, 034401		5
498	Thermoelectric Characteristics of A Single-Crystalline Topological Insulator BiSe Nanowire. 2021 , 11,		6
497	Spin Transport and Spin Thermoelectric Transport in 2D Mn-Doped Blue Phosphorene with High Curie Temperature and Half-Metallicity. 2021 , 125, 6341-6350		2
496	Buckled hexagonal carbon selenium nanosheet for thermoelectric performance. 2021 , 127, 1		1
495	Si and SiGe Nanowire for Micro-Thermoelectric Generator: A Review of the Current State of the Art. 2021 , 8,		6
494	Lead-Free Organic-Perovskite Hybrid Quantum Wells for Highly Stable Light-Emitting Diodes. 2021 , 15, 6316-6325		28
493	Even-odd effect of the thermoelectric information for zigzag phosphorene nanoribbons under an electric field. 2021 , 605, 412774		

492	Thermoelectric cooling properties of a quantum Hall Corbino device. <i>Physical Review B</i> , 2021 , 103,	3-3	2
491	Origins of Minimized Lattice Thermal Conductivity and Enhanced Thermoelectric Performance in WS/ WSe Lateral Superlattice. 2021 , 6, 7879-7886		9
490	Superior thermoelectric performance of Hg ₂ Te monolayer. 2021 , 8, 045507		1
489	Phonons and Thermal Transport in Si/SiO ₂ Multishell Nanotubes: Atomistic Study. 2021 , 11, 3419		1
488	Density Functional Theory Investigation of Thermal Conductivity in hBN and hCP Monolayers: Implications for Thermal Management of Electronic Devices. 2021 , 4, 4474-4483		4
487	Electronic and lattice properties of nanostructured TiN/MgO and ScN/MgO superlattices. 2021 , 60, SE1006		1
486	Acoustic-Pressure-Assisted Engineering of Aluminum Foams. 2021 , 23, 2100306		
485	Thermoelectric Films for Electricity Generation. 299-337		
484	Spin Seebeck effect of correlated magnetic molecules. 2021 , 11, 9192		1
483	CoSb ₃ -Based Thin-Film Thermoelectric Devices with High Performance Via Electrode Optimization. 2021 , 4, 5265-5273		2
482	Ab initio thermoelectric calculations of ring-shaped bands in two-dimensional Bi ₂ Te ₃ , Bi ₂ Se ₃ , and Sb ₂ Te ₃ : Comparison of scattering approximations. <i>Physical Review B</i> , 2021 , 103,	3-3	1
481	Improving the thermoelectric figure of merit. 2021 , 22, 280-284		5
480	Thermoelectric Metamaterials: Nano-Waveguides for Thermoelectric Energy Conversion and Heat Management at the Nanoscale. 2021 , 7, 2100176		2
479	First-principles study of thermoelectric transport properties in low-buckled monolayer silicene. 2021 , 606, 412715		3
478	Unprecedentedly low thermal conductivity of unique tellurium nanoribbons. 1		1
477	Amorphous Framework in Electrodeposited CuBiTe Thermoelectric Thin Films with High Room-Temperature Performance.. 2021 , 3, 1794-1803		3
476	Using materials quality factor B ₀ for design of thermoelectric materials with multiple bands. 2021 , 18, 100371		1
475	Thermoelectric transports in pristine and functionalized boron phosphide monolayers. 2021 , 11, 10030		2

- 474 Dimensionality effects in high-performance thermoelectric materials: Computational and experimental progress in energy harvesting applications. e1547 3
- 473 Thermoelectric Properties of Amorphous and Nanocrystalline Cr_{0.33}Si_{0.67} Films at Different Annealing Stages in the Range 100-300 K. **2021**, 16, 346-350
- 472 Anomalous thermopower oscillations in graphene-nanowire vertical heterostructures. **2021**, 32, 1
- 471 Tuning transport coefficients of monolayer MoSi₂N₄ with biaxial strain*. **2021**, 30, 067102 13
- 470 Bottom-Up Engineering Strategies for High-Performance Thermoelectric Materials. **2021**, 13, 119 15
- 469 Structuring of Si into Multiple Scales by Metal-Assisted Chemical Etching. **2021**, 33, e2005932 12
- 468 Surprisingly high in-plane thermoelectric performance in a-axis-oriented epitaxial SnSe thin films. **2021**, 18, 100399 6
- 467 Potential error from using ZT to optimize thermoelectric performance. **2021**, 11, 055207 2
- 466 High Positive Seebeck Coefficient of Aqueous Zn²⁺ Thermocells Based on Host-Guest Interactions and LCST Behavior of PEGylated β -Cyclodextrin. **2021**, 4, 5326-5331 7
- 465 Thermoelectric Power of Thin Bismuth Films on Mica. **2021**, 15, 467-470 0
- 464 Bismuth Doping in Nanostructured Tetrahedrite: Scalable Synthesis and Thermoelectric Performance. **2021**, 11, 2 2
- 463 High Thermopower and Optical Properties of A₂MoS₄ (A = K, Rb, Cs) and Cs₂MoSe₄. **2021**, 258, 2000587 0
- 462 Progress in the Research on Promising High-Performance Thermoelectric Materials. **2021**, 16, 268-281 2
- 461 Decoupling electron and phonon transport in single-nanowire hybrid materials for high-performance thermoelectrics. **2021**, 7, 6 6
- 460 Mechanisms of Heat Transfer in Thermoelectric Materials. **2021**, 16, 308-315 1
- 459 Environmentally Friendly Thermoelectric Materials: High Performance from Inorganic Components with Low Toxicity and Abundance in the Earth. 2100095 17
- 458 Tuning thermoelectric efficiency of monolayer indium nitride by mechanical strain. **2021**, 129, 234302 0
- 457 Review of Thermoelectric Generators at Low Operating Temperatures: Working Principles and Materials. **2021**, 12, 2 2

456	Thermoelectric properties of armchair phosphorene nanoribbons in the presence of vacancy-induced impurity band. 2021 , 32,	1
455	Biaxial Strain Improving the Thermoelectric Performance of a Two-Dimensional MoS ₂ /WS ₂ Heterostructure. 2021 , 3, 2995-3004	3
454	Exceptionally high open circuit thermoelectric figure of merit in two-dimensional tin sulphide. 2021 , 33,	2
453	Flexible thermoelectric materials and devices: From materials to applications. 2021 , 46, 62-108	49
452	An Atomistic Study of the Thermoelectric Signatures of CNT Peapods. 2021 , 125, 13721-13731	2
451	Thermoelectric Characteristics of Two-Dimensional Structures for Three Different Lattice Compounds of B ₂ X ₃ and Graphene Counterpart BX (X = P, As, and Sb) Systems. 2021 , 125, 14525-14537	4
450	Thermoelectric Properties of Arsenic Triphosphide (AsP ₃) Monolayer: A First-Principles Study. 2021 , 7,	0
449	Editorial: Recent Advances in Waste-Heat Harvesting via Thermoelectrics: From Theory to Materials and Devices. 2021 , 8,	
448	Synthesis and characterization of non-stoichiometric SrTiO _{2.8} thermoelectric materials at high temperature and high pressure. 2021 , 47, 17627-17632	3
447	Parametric study for optimal performance of Coulomb-coupled quantum dots. 2021 , 33,	1
446	Vacancy tuned thermoelectric properties and high spin filtering performance in graphene/silicene heterostructures. 2021 , 11, 15320	2
445	Thermoelectric properties and phase transition of doped single crystals and polycrystals of Bi ₂ Te ₃ . 2021 , 104, 6242	2
444	Thermoelectric properties of the hexagonal- and square-shaped monolayers of ZnO. 2021 , 136, 1	0
443	Optimization of Thermoelectric Properties Based on Rashba Spin Splitting.	
442	Ultra-low lattice thermal conductivity and high thermoelectric efficiency of K ₃ AuO. 2021 , 130, 045101	1
441	The Verification of Thermoelectric Performance Obtained by High-Throughput Calculations: The Case of GeS ₂ Monolayer From First-Principles Calculations. 2021 , 8,	2
440	Thermoelectric Properties of Pristine Graphyne and the BN-Doped Graphyne Family. 2021 , 6, 20149-20157	4
439	Two-dimensional square-Au ₂ S monolayer: A promising thermoelectric material with ultralow lattice thermal conductivity and high power factor*. 2021 , 30, 077405	0

- 438 Geometry-modulated metamaterials for enhanced thermoelectric effects and decreased thermal conduction. **2021**, 6, 707
- 437 Thermoelectric properties of geopolymers with the addition of nano-silicon carbide (SiC) powder. **2021**, 47, 19752-19759 4
- 436 Electron Transport in Single Molecular Devices. **2021**, 25-56
- 435 Geometry and Greatly Enhanced Thermoelectric Performance of Monolayer MXY Transition-Metal Dichalcogenide: MoSTe as an Example. **2021**, 15, 2100166 1
- 434 Optoelectronic and thermoelectric properties of A3AsN (A = Mg, Ca, Sr and Ba) in cubic and orthorhombic phase. **2021**, 13, 1485-1495 6
- 433 High-Performance Thermoelectric Energy Conversion: A Tale of Atomic Ordering in AgSbTe₂. **2021**, 6, 2825-2837 11
- 432 The lattice thermal conductivity in monolayers group-VA: from elements to binary compounds. **2021**, 8, 075007 1
- 431 Non-Linear Thermoelectric Devices with Surface-Disordered Nanowires. **2021**, 2, 162-183
- 430 First-principles calculations to investigate thermoelectric properties of new monolayers of ZnO. **2021**, 238, 166782 3
- 429 Nanostructuring Bi₂Te₃-Based Thermoelectric Thin-Films Grown Using Pulsed Laser Deposition.
- 428 Investigation of Phase Transition from Critical Nucleus to Bi₂Te₃ Nanoplate Based on Screw Dislocation-Driven Spiral Growth by Solvothermal Synthesis. 2100153 1
- 427 Progress of microscopic thermoelectric effects studied by micro- and nano-thermometric techniques. **2022**, 17, 1 1
- 426 Mechanochemistry for Energy Materials: Impact of High-Energy Milling on Chemical, Electric and Thermal Transport Properties of Chalcopyrite CuFeS Nanoparticles. **2021**, 10, 806-814 2
- 425 Research progress of p-type Fe-based skutterudite thermoelectric materials. **2021**, 15, 317-333 3
- 424 Low lattice thermal conductivity and high figure of merit in n-type doped full-Heusler compounds X₂YA_u (X = Sr, Ba; Y = As, Sb). 0
- 423 First-principles investigations of electronic and thermoelectric properties of Janus Al₂SSe monolayer. **2021**, 615, 413057 3
- 422 First-principles investigations on a two-dimensional SN/black phosphorene van der Waals heterostructure: mechanical, carrier transport and thermoelectric anisotropy. **2021**, 33, 2
- 421 G₄N₃graphene-g-C₄N₃: A useful spin thermoelectric material. **2021**, 156, 110186 0

420	General Bounds on Electronic Shot Noise in the Absence of Currents. 2021 , 127, 136801	1
419	Oxidation-enhanced thermoelectric efficiency in a two-dimensional phosphorene oxide. 2021 , 11, 18525	0
418	A Review on Fundamentals, Design and Optimization to High ZT of Thermoelectric Materials for Application to Thermoelectric Technology. 2021 , 50, 6037-6059	2
417	Quantum Heat Engines with Complex Working Media, Complete Otto Cycles and Heuristics. 2021 , 23,	1
416	Thermoelectric Performance Enhanced by Destructive Quantum Interference in Nanoporous Carbon Nanotube Based Junctions. 2021 , 15, 2100400	1
415	Enhanced thermoelectric performance of solution-grown Bi ₂ Te ₃ nanorods. 2021 , 21, 100700	5
414	Silicon Nanowires: A Breakthrough for Thermoelectric Applications. 2021 , 14,	4
413	Two-dimensional Al ₂ I ₂ Se ₂ : A promising anisotropic thermoelectric material. 2021 , 876, 160191	7
412	Optimizing thermocouple's ZT through design innovation. 2021 , 11, 19338	1
411	Thermoelectric properties of different polymorphs of gallium phosphide; A first-principles study. 2021 ,	4
410	Thermoelectric effect and a thermoelectric generator based on carbon nanostructures: achievements and prospects. 2021 , 64, 535-557	1
409	Low thermal conductivity: fundamentals and theoretical aspects in thermoelectric applications. 2021 , 21, 100744	13
408	Tuning the Thermoelectric Properties of Transition Metal Oxide Thin Films and Superlattices on the Quantum Scale. 2100270	1
407	Thermoelectric Performance of Lead-Free Two-Dimensional Halide Perovskites Featuring Conjugated Ligands. 2021 , 21, 7839-7844	8
406	Drastic reduction of thermal conductivity in hexagonal AX (A = Ga, In & Tl, X = S, Se & Te) monolayers due to alternative atomic configuration. 2021 , 88, 106248	3
405	Investigation into thermoelectric properties of M (M=Hf, Zr) X ₂ (X=S, Se, Te) nanotubes using first-principles calculation. 2021 , 336, 114289	1
404	Hybrid thermo-electrochemical energy harvesters for conversion of low-grade thermal energy into electricity via tungsten electrodes. 2021 , 299, 117334	5
403	High electrical transport performance and ultralow thermal conductivity realized in Ga doped single-layer octagon-square nitrogene. 2021 , 563, 150244	

402	Optimization of Thermoelectric Power Factor of Bilayer Graphene by Vertical Electric Field. 2021 , 90, 104711	2
401	Expand band gap and suppress bipolar excitation to optimize thermoelectric performance of Bi _{0.35} Sb _{1.65} Te ₃ sintered materials. 2021 , 21, 100544	5
400	Enhanced thermoelectric property of cement-based materials with the synthesized MnO ₂ /carbon fiber composite. 2021 , 43, 103190	1
399	Optimising the thermoelectric properties of Bi ₂ Sr ₂ Co ₂ O _y using Ag substitution and Nano-SiC doping. 2021 , 47, 30657-30664	1
398	Effect of heterostructure engineering on electronic structure and transport properties of two-dimensional halide perovskites. 2021 , 200, 110823	0
397	Two-dimensional (2D) thermoelectric materials. 2021 , 233-260	1
396	Synthesis and characterization of polypyrrole-Ce _{0.05} CoSb ₃ nanocomposites. 2021 , 46, 2934-2939	
395	Dramatically enhanced Seebeck coefficient in GeMnTe-NaBiTe alloys by tuning the Spin's thermodynamic entropy. 2021 , 23, 17866-17872	0
394	Fiber-based thermoelectrics for solid, portable, and wearable electronics. 2021 , 14, 729-764	65
393	Introduction and brief history of thermoelectric materials. 2021 , 1-19	1
392	Eindimensionale Elektronensysteme. 2021 , 73-125	
391	Environmentally friendly thermoelectric sulphide Cu ₂ ZnSnS ₄ single crystals achieving a 1.6 dimensionless figure of merit ZT. 2021 , 9, 15595-15604	5
390	Oxidation-induced thermopower inversion in nanocrystalline SnSe thin film. 2021 , 11, 1637	4
389	When thermoelectric materials come across with magnetism. 2021 , 40, 752-766	5
388	Effect of Halogen Ions on the Low Thermal Conductivity of Cesium Halide Perovskite. 2021 , 125, 91-97	5
387	Demonstration of a thermoelectric device using electric double-layer gating: Simultaneous control of the thermoelectric properties of p-type and n-type carbon nanotubes. 2021 , 129, 045101	1
386	Low-dimensional and nanocomposite thermoelectric materials. 2021 , 147-182	
385	Effect of iodine doping on the electrical, thermal and mechanical properties of SnSe for thermoelectric applications. 2021 , 23, 4230-4239	4

384	High In-Plane Seebeck Coefficients of BiSbTe Alloy Thin Films with Growth Texture and Their Field-Controlled Seebeck Coefficients. 2021 , 125, 2373-2381	0
383	Enhanced thermoelectric properties exhibited by unreduced freestanding graphene oxide/carbon nanotube membranes. 2021 , 2, 5645-5649	2
382	Endeavor of Iontronics: From Fundamentals to Applications of Ion-Controlled Electronics. 2017 , 29, 1607054	254
381	Evidence for Itinerant Carriers in an Anisotropic Narrow-Gap Semiconductor by Angle-Resolved Photoemission Spectroscopy. 2018 , 30, 1704733	5
380	Sensor Characteristics and Physical Effects. 2008 , 13-62	5
379	Electronic Structure of Complex Bismuth Chalcogenide Systems. 2003 , 227-247	5
378	Boron Carbides: Unconventional High-Temperature Thermoelectrics. 2003 , 55-70	4
377	Structure-Property Relations in Skutterudites. 2003 , 121-146	11
376	Investigating the Performance of Bismuth-Antimony Telluride. 2019 , 3-21	4
375	Nanoscale Self-assembled Oxide Bulk Thermoelectrics. 2014 , 327-361	2
374	One-Dimensional Bi-Based Nanostructures for Thermoelectrics. 2014 , 237-254	2
373	Self-Assembly Structures in ZnFexMn(2-x)O4 Ceramics and Effect on Thermal Properties. 2017 , 423-432	1
372	Thermoelectric Heusler Compounds. 2016 , 249-267	2
371	Defects Engineering for Performing SrTiO3-Based Thermoelectric Thin Films: Principles and Selected Approaches. 2018 , 91-120	1
370	Thermoelectric Properties of Silicon-Germanium Alloys. 2019 , 49-67	3
369	Micro-Nano Scale Thermal Imaging Using Scanning Probe Microscopy. 2004 , 327-362	9
368	Nanostructuring and Porosity in Anisotropic Thermoelectric Materials Prepared by Bottom-Up Processing. 2013 , 177-191	1
367	Fabrication, Characterization, and Modulation of Functional Nanolayers. 2018 , 207-235	1

366	Monolayer enhanced thermoelectric properties compared with bulk for BiTeBr. 2017 , 139, 361-367	10
365	Phase structure, phase transition and thermoelectric properties of pristine and Br doped SnSe ₂ . 2020 , 289, 121468	6
364	Chapter 8: Quest for New Thermoelectric Materials. 2018 , 240-292	1
363	Enhancement of the anisotropic thermoelectric power factor of topological crystalline insulator SnTe and related alloys via external perturbations. 2019 , 7, 25573-25585	18
362	Significant enhancement of the thermoelectric properties of CaP ₃ through reducing the dimensionality. 2020 , 1, 3322-3332	6
361	Electronic structure and thermoelectric properties of Mo-based dichalcogenide monolayers locally and randomly modified by substitutional atoms.. 2020 , 10, 43035-43044	2
360	La recherche de nouveaux matériaux thermoelectriques. 2014 , 18-22	2
359	Modelling thermoelectric transport in III-V nanowires using a Boltzmann transport approach: a review. 2021 , 32, 042001	3
358	Anisotropic thermoelectric effect and field-effect devices in epitaxial bismuthene on Si (111). 2020 , 31, 475202	6
357	Thermoelectric properties of antimony films: roles of oxidation and topological quantum state. 2020 , 31, 485704	2
356	Characterization of ZnO/AlO _x /benzene thin-film heterostructures grown through atomic layer deposition/molecular layer deposition. 2020 , 36, 025012	3
355	Optimal performance of three-terminal nanowire heat engine based on one-dimensional ballistic conductors. 2020 , 95, 095001	5
354	Thermoelectric properties of 3D topological insulator: Direct observation of topological surface and its gap opened states. 2017 , 1,	18
353	Low lattice thermal conductivity and good thermoelectric performance of cinnabar. 2017 , 1,	10
352	Confinement- and strain-induced enhancement of thermoelectric properties in LaNiO ₃ /LaAlO ₃ (001) superlattices. 2018 , 2,	11
351	Thermoelectric performance of materials with CuCh ₄ (Ch= S, Se) tetrahedra: Similarities and differences among their low-dimensional electronic structure from first principles. 2018 , 2,	5
350	Optimization of the figure of merit in Bi _{100-x} Sbx/Al ₂ O ₃ nanocomposites. 2018 , 2,	6
349	New two-dimensional phase of tin chalcogenides: Candidates for high-performance thermoelectric materials. 2019 , 3,	26

- 348 Remarkable thermoelectric performance in BaPdS₂ via pudding-mold band structure, band convergence, and ultralow lattice thermal conductivity. **2019**, 3, 7
- 347 Role of metallic leads and electronic degeneracies in thermoelectric power generation in quantum dots. **2020**, 2, 9
- 346 Thermoelectric Properties of Graphene Like Nanotube Structure Due to Next-to-nearest Neighbor Hopping Amplitude. **2020**, 9, 051009 1
- 345 Electrical and Thermal Transport Measurement Techniques for Evaluation of the Figure-of-Merit of Bulk Thermoelectric Materials. **2005**, 23-1-23-20 11
- 344 Recent Developments in Low-Dimensional Thermoelectric Materials. **2005**, 39-1-39-24 1
- 343 Recent Trends for the Design and Optimization of Thermoelectric Materials [A Theoretical Perspective]. **2005**, 8-1-8-27 2
- 342 Low-Dimensional Thermoelectricity. **2005**, 108, 609-634 111
- 341 Design and analysis of photonic crystal fiber plasmonic refractive Index sensor for condition monitoring of transformer oil. **2020**, 3, 2253 15
- 340 Decreasing the Effective Thermal Conductivity in Glass Supported Thermoelectric Layers. **2016**, 11, e0151708 10
- 339 Quantum Confinement and Piezoresistivity Simulation in 3C-SiC Nanosheet. **2016**, 136, 465-472 1
- 338 The Synthesis of Metastable Skutterudites and Crystalline Superlattices. **2000**, 626, 111 2
- 337 Thermoelectric Properties of PbSr(Se,Te)-Based Low Dimensional Structures. **2000**, 626, 251 2
- 336 Thermoelectric Conversion and Its Application for Nuclear Fusion. **2002**, 78, 19-35 2
- 335 New materials from non-intuitive composite effects. **2003**, 94, 1148-1152 5
- 334 Facile Solution Synthesis, Processing and Characterization of n- and p-Type Binary and Ternary Bi₂Bb Tellurides. **2020**, 10, 1178 17
- 333 Recent Progress of Thermoelectric Nano-composites. **2010**, 25, 561-568 34
- 332 In-situ Fabrication of Bi₂Te₃-Te Sheet-rods Us-ing Te Nanowires as Template. **2010**, 25, 664-668 2
- 331 Growth and Transport Properties of Layered Bismuth Telluride Thin Films via Radio Frequency Magnetron Sputtering. **2011**, 26, 555-560 12

330	A Theory of Thermoelectric Energy Harvesting Systems. 2015 , 254-270	2
329	Thermoelectric Properties of Ce _{0.09} Fe _{0.67} Co _{3.33} Sb ₁₂ /FeSb ₂ Te Multi-Layered Structures. 2013 , 01, 1-4	1
328	Nanowires in Thermoelectric Devices. 2011 , 12, 227-233	8
327	The Potential of Solar Thermoelectric Generator STEG for Implantation in the Adrar Region. 2020 , 2, 17-27	2
326	Morphology Controlled Synthesis of Nanostructured Bi ₂ Te ₃ . 2012 , 33, 3977-3980	14
325	???????????????????? -????????????????????-. 2008 , 1, 94-100	3
324	Quantum thermal transport and spin thermoelectrics in low-dimensional nano systems: application of nonequilibrium Green's function method. 2015 , 64, 186302	11
323	Nano Structural and Thermoelectric Properties of SiGeAu Thin Films. 2011 , 50, 041301	14
322	Thermoelectric properties of a quantum dot. 2021 , 20, 67-100	1
321	Electronic, Optical, and Thermoelectric Properties of Bulk and Monolayer Germanium Tellurides. 2021 , 11, 1290	1
320	Effect of Co-Doping on Thermoelectric Properties of -Type BiTe Nanostructures Fabricated Using a Low-Temperature Sol-Gel Method. 2021 , 11,	0
319	First-principles study of the structural, optoelectronic and thermophysical properties of the E _n Se for thermoelectric applications. 2021 , 12, 1101-1114	3
318	Surprisingly good thermoelectric performance of monolayer CN. 2021 , 33,	1
317	Preparation of antimonene nanosheets and their thermoelectric nanocomposites. 2021 , 28, 100968	0
316	Enhancement of monolayer HfSe ₂ thermoelectric performance by strain engineering: A DFT calculation. 2021 , 139109	2
315	Nanostructured Thermoelectric Materials. 2022 , 35-45	
314	Growth and thermoelectric characterization of chalcopyrite ZnSnSb ₂ with pseudocubic structure. 2021 , 110417	
313	First-principles investigations of thermoelectric properties of novel polytypes of Indium phosphide. 2021 , 248, 168099	3

- 312 P-type SiGe/Si Superlattice Cooler. **2000**, 626, 1151
- 311 Thermal Diffusivity Measurements of Superlattice Films by an AC Calorimetric Method.. **2000**, 14, 67-72
- 310 Solution Chemical Routes to Two-Dimensional Bismuth Tellurides for Thermoelectric Applications. **2002**, 157-169
- 309 Thermoelectric Transport in Bismuth Nanowires: Experimental Results. **2003**, 185-201
- 308 Nanowires. **2004**, 99-145 2
- 307 Nanoscale and Microsystem-Technology: New Approaches for Thermoelectric Devices. **2004**, 55-66
- 306 Innovative Development of Thermoelectric Materials for Power Generation. **2004**, 124, 303-306
- 305 Superlattice Thin-Film Thermoelectric Material and Device Technologies. **2005**, 49-1-49-16 2
- 304 Nanoscale Thermoelectrics. **2005**, 48-1-48-23
- 303 Thermoelectric Properties of n-type $\text{Sm}_{2-x}\text{Ce}_x\text{CuO}_4$ Thin Films Prepared by Pulsed Laser Deposition. **2006**, 126, 369-373
- 302 Low-Dimensional Thermoelectricity. **2006**, 0
- 301 Oxide Superlattices. **2008**, 128, 290-292
- 300 Development of a small-size cogeneration system using thermoelectric power generation. **2008**, 1, 85-92 1
- 299 Configurations for Heat Conduction. 171-213 1
- 298 Synthesis and characterization of Sb_2Te_3 nanostructures. **2010**, 59, 7232 3
- 297 Thermoelectric refrigerator of a double-barrier InAs/InP nanowire heterostructure. **2010**, 59, 3846 10
- 296 Thermal Property of 2D-Disordered Tungsten Chalcogenides. **2010**, 47, 132-135
- 295 Fundamentals and Functionality of Inorganic Wires, Rods and Tubes.

- 294 Microstructure Studies of $\text{Ca}_3\text{Co}_4\text{O}_9$ Thin Films on Glass Substrates. 267-273
- 293 Hydrothermal Synthesis of Nanostructured Bi_2Te_3 Powder. 231-235
- 292 Charge Kondo Effect in Thermoelectric Properties of Lead Telluride Doped with Thallium Impurities. **2013**, 67-80
- 291 9.9 Thermoelectric devices. **2013**, 558-561
- 290 3D Superlattice Ceramics of $(\text{SrTiO})_3$. **2013**, 287-301
- 289 Silicon-Based Optical Resonators. **2014**, 543-570
- 288 Thickness Dependences of Kinetic Properties of Quantum Wires of Pure and Doped Bismuth. **1999**, 637-642
- 287 Silicon Thermoelectric Device Technology. **2014**, 1, 21-24
- 286 Nanostructured Oxide Thermoelectric Materials with Enhanced Phonon Scattering. **2015**, 109-122
- 285 Topological Invariant and Topological Phases. **2015**, 5-34 0
- 284 Prospects for thermoelectric power generation based on carbon materials. **2015**, 2015, 264-272
- 283 Thermoelectric Composites Based on Carbon Nanotubes and Micro Glass Bubbles. **2015**, 28, 70-74 1
- 282 Chapter 5: Review of the Methods for Thermal Conductivity Measurements Most Appropriate for Thermoelectric Materials. **2016**, 109-132
- 281 Encyclopedia of Nanotechnology. **2016**, 3781-3798
- 280 Defects and thermoelectric performance of ternary chalcopyrite CuInTe_2 -based semiconductors doped with Mn. **2016**, 65, 067201
- 279 Chapter 4: Nano- and Micro-fabrication Techniques for Improving Thermoelectric Materials and Generators. **2016**, 83-108 1
- 278 Encyclopedia of Nanotechnology. **2016**, 1-19
- 277 Heat Transport with Phonons and Electrons and Efficiency of Thermoelectric Generators. **2016**, 133-166

276 Electronic and Optoelectronic Materials and Device Innovations. **2016**, 1-38

275 Continuum modeling of thermal transport in superlattices and layered materials for new energy materlas. **2016**, 65, 116802

274 1.?????????????????????. **2017**, 85, 94-99

273 Thermal Transport in Micro- and Nanoscale Systems. **2017**, 1-51

1

272 Nanosilicon and thermoelectricity. **2017**, 555-574

271 Inorganic nanocomposite films with polymer nanofillers made by the concurrent multi-beam multi-target pulsed laser deposition. **2017**,

270 Phonon Drag Thermopower in Quantum Wire with Parabolic Confinement Potential. **2017**, 39, 1165-1171

269 The inflence of carrier mobility and electrical conductivity of thermoelectricity device for organic/PbTe matrix. **2018**,

268 Thermoelectric Properties of an Array of Carbon Nanotubes under Uniaxial Compression after Annealing. **2018**, 40, 169-182

1

267 Polymer-Derived Ceramics: A Novel Inorganic Thermoelectric Material System. **2019**, 229-252

266 CHAPTER 5:Carbon Based Thermoelectric Materials. **2019**, 133-169

265 CHAPTER 6:Organic Hierarchical Thermoelectric Materials. **2019**, 170-212

264 Chapter 5:Properties and Applications of Layered Thermoelectric Materials. **2019**, 129-164

263 Glass for Thermoelectric Applications. **2019**, 1677-1696

262 A REVIEW ON RECENT ENHANCEMENT IN THERMOELECTRIC PROPERTIES IN TELLURIDE COMPOUNDS. **2019**, 7, 12

261 Electron Irradiation of Carbon Nanotubes. **2019**, 547-551

260 CHAPTER 1:Introduction. **2019**, 1-20

259 Une femme de science exceptionnelle : Mildred S. Dresselhaus. **2019**, 36-39

- 258 Nonoxide Materials. **2019**, 53-76
- 257 High Dimensionless Figure of Merit $ZT = 1.38$ Achieved in p-Type SiTe/AuB Thin Film. **2020**, 61, 1014-1019 3
- 256 Topology Optimization of Multimaterial Thermoelectric Structures. **2021**, 143, 3
- 255 Room-temperature power factor of CuAlO_2 composite tablets enhanced by MWCNTs. **2021**, 0
- 254 Giant thermoelectric power factor in charged ferroelectric domain walls of GeTe with Van Hove singularities. **2020**, 6, 4
- 253 Three-Terminal Thermionic Heat Engine Based on Semiconductor Heterostructures. **2020**, 37, 120502 2
- 252 Tunable power factor in fluorine-doped single-walled carbon nanotubes. **2020**, 128, 244301 2
- 251 Tuning thermal transport via phonon localization in nanostructures. **2020**, 29, 126502 0
- 250 Designing Complex Radial Heterostructures of Te/BiTe and Te/BiPbTe Nanowires: Fundamental Mechanistic Insights into Nanowire Growth and Evolution. **2020**,
- 249 First-principles prediction of enhanced thermoelectric properties of double transition metal MXenes: $\text{Ti}_3\text{MoxC}_2\text{T}_2$; ($x=0.5, 1, 1.5, 2, 2.5, T=DH/D/B$). **2020**, 4, 1
- 248 CHAPTER 10: Functionalization and Useful Properties and Potential Applications of Nanowires. **2021**, 541-584
- 247 The thermoelectric properties of XP ($X = \text{Sb}$ and Bi) monolayers from first-principles calculations. **2021**, 23, 24598-24606 1
- 246 Thermal Conductivity of Nanostructured Semiconductor Alloys. **2020**, 917-951 0
- 245 Molecular Beam Epitaxial Growth of Bi_2Te_3 Thin Films. **2020**, 221-243
- 244 Thermal Transport: Overview. **2020**, 723-733
- 243 Effect of capping agent for synthesis of ZnO nanostructures on carbon fabrics for thermopower production. 1
- 242 New route to enhanced figure of merit at nano scale: effect of AAH modulation. 0
- 241 Ultralow lattice thermal conductivity and high thermoelectric performance of penta-Sb₂C monolayer: A first principles study. **2021**, 130, 185104 2

240	Role of metal contacts on the electric and thermoelectric response of hBN/WSe ₂ based transistors. 2021 , 130, 185102	0
239	Ultrahigh Power Factor and Ultralow Thermal Conductivity at Room Temperature in PbSe/SnSe Superlattice: Role of Quantum-Well Effect. 2021 , e2104916	2
238	The Quest for High-Efficiency Thermoelectric Generators for Extracting Electricity from Waste Heat. 2021 , 73, 4070	
237	Excellent thermoelectric performances of the SiSe ₂ monolayer and layered bulk. 2021 , 151799	2
236	Thermoelectric converter: Strategies from materials to device application. 2021 , 91, 106692	14
235	Thermal conductivity of free-standing silicon nanowire using Raman spectroscopy. 2020 , 31, 505701	2
234	Co-firing Behavior, Electric Power, and Application of Monolithic Thermoelectric Generator. 2020 , 67, 464-470	
233	An ordered-disordered separated graphene nanoribbon: high thermoelectric performance. 2021 , 54, 025301	1
232	Recent progress in thermoelectric materials based on single-wall carbon nanotubes. 2020 , 2020, 175-184	
231	Strong interlayer coupling in two-dimensional PbSe with high thermoelectric performance. 2021 , 33,	3
230	Janus Al ₂ STe monolayer: A prospective thermoelectric material. 2022 , 341, 114579	2
229	Organic-based flexible thermoelectric generators: From materials to devices. 2022 , 92, 106774	11
228	Novel Properties of Semiconductor Nanowires. 2021 , 345-354	
227	Physical Intuition to Improve Electronic Properties of Thermoelectrics. 2021 , 9,	1
226	Review of the thermoelectric properties of layered oxides and chalcogenides.	3
225	In-plane Cr ₂ NiCrN metal-semiconductor heterostructure with improved thermoelectric properties. 2021 , 5,	1
224	Induced 2H-Phase Formation and Low Thermal Conductivity by Reactive Spark Plasma Sintering of 1T-Phase Pristine and Co-Doped MoS Nanosheets.. 2021 , 6, 32783-32790	1
223	Achieving synergistic performance through highly compacted microcrystalline rods induced in Mo doped GeTe based compounds. 2021 , 100571	0

222	Honeycomb-like puckered PbSe with wide bandgap as promising thermoelectric material: a first-principles prediction. 2021 , 23, 100914	4
221	Synthesis and Characterization of Al- and SnO-Doped ZnO Thermoelectric Thin Films. 2021 , 14,	2
220	Ultrafast dynamics of photoexcited carriers and coherent phonons in ultrathin Bi ₂ Te ₃ thermoelectric films. 2022 , 65, 1	
219	Two-Dimensional Organic Semiconductor-Incorporated Perovskite (OSiP) Electronics.	1
218	Synthesis of Highly Ordered Nanoporous Anodic Aluminium Oxide Templates and Template-Based Nanomaterials. 2022 , 229-276	1
217	Controlling thermoelectric, heat, and energy currents through a quantum dot in sequential and cotunneling Coulomb-blockade regimes. 2022 , 628, 413607	0
216	Regimes and quantum bounds of nanoscale thermoelectrics with peaked transmission function. 2022 , 138, 115105	
215	Layered thermoelectric materials: Structure, bonding, and performance mechanisms. 2022 , 9, 011303	4
214	Nanophotonics for Energy Applications. 2021 ,	
213	A Review of Lamellar Eutectic Morphologies for Enhancing Thermoelectric and Mechanical Performance of Thermoelectric Materials. 1	1
212	Non-equilibrium thermoelectric transport across normal metal-Quantum dot-Superconductor hybrid system within the Coulomb blockade regime.. 2022 ,	0
211	Emerging 2D Nanomaterial Composites for Efficient Energy Conversion: Insight into the Evolutionary Perspective of Devices. 2022 , 25-46	
210	Nanostructured Bulk Thermoelectric Materials for Energy Harvesting. 2022 , 199-231	1
209	Minimization of Thermal Conductivity in Nanostructures and Geometric Self-Similar Structures for Thermoelectric Applications. 2022 , 71-93	
208	Low-cost pentagonal NiX (X = S, Se, and Te) monolayers with strong anisotropy as potential thermoelectric materials.. 2022 ,	4
207	Outstanding CdSe with Multiple Functions Leads to High Performance of GeTe Thermoelectrics. 2103779	3
206	Performance optimization of three-terminal nanowire refrigerator based on one-dimensional ballistic conductor. 2022 , 71, 020501	0
205	Thermoelectric properties of organic charge transfer salts from first-principles investigations: role of molecular packing and triiodide anions.	0

204	Electronic structure and thermal conductance of the MASnI/BiTe interface: a first-principles study.. 2022 , 12, 217		0
203	Use of anti-solvent to enhance thermoelectric response of hybrid-halide perovskite thin films.		0
202	Optimization of LPCVD phosphorous-doped SiGe thin films for CMOS-compatible thermoelectric applications. 2022 , 120, 031903		3
201	Experimental verification of semi-metallic band structure in PtSe ₂ via thermoelectric power measurements. 2022 , 120, 043103		1
200	A comprehensive review on Bi ₂ Te ₃ -based thin films: Thermoelectrics and beyond. 2022 , 1, 88-115		17
199	Alloying of monolayer Zirconium Nitride with Magnesium and investigating its thermoelectric properties using DFT calculations. 2022 , 343, 114642		0
198	Flexible thermoelectric films based on interconnected magnetic nanowire networks. 2022 , 55, 223001		1
197	Improved thermoelectric performance of nanostructured Bi ₂ Te ₃ fabricated by solvent-free mechanical alloying. 2022 , 279, 125736		0
196	New materials from non-intuitive composite effects. 2022 , 94, 1148-1152		
195	Thermoelectric effects in self-similar multibarrier structure based on monolayer graphene.		
194	Thermoelectric performance of In and Ga single/dual-doped ZnO ceramics fabricated by spark plasma sintering. 2022 ,		1
193	Thermoelectric performance in the binary semiconductor compound A ₂ Se ₂ (A = K, Rb) with host-guest structure. <i>Physical Review B</i> , 2022 , 105,	3-3	1
192	Thin films of topological nodal line semimetals as a candidate for efficient thermoelectric converters. <i>Physical Review B</i> , 2022 , 105,	3-3	0
191	The Importance of Avoided Crossings in Understanding High Valley Degeneracy in Half-Heusler Thermoelectric Semiconductors. 2101367		3
190	First-Principles Investigation on the Significant Anisotropic Thermoelectric Transport Performance of a Hf ₂ Cl ₄ Monolayer. 2022 , 126, 525-533		2
189	Tuning Coherent-Phonon Heat Transport in LaCoO/SrTiO Superlattices. 2021 , 11878-11885		1
188	Bulk and Nanocomposite Thermoelectrics: Synthesis, Properties, and Applications. 2022 , 959-1016		
187	Exploring the enhancement of the thermoelectric properties of bilayer graphyne nanoribbons.. 2022 ,		

- 186 Synergetic Optimization of Thermoelectric Properties in SnSe Film Via Manipulating Se Vacancies.
- 185 General strategies to improve thermoelectric performance with an emphasis on tin and germanium chalcogenides as thermoelectric materials. **2022**, 10, 6872-6926 7
- 184 ~~Bi_{1-x}Gex~~ ~~Bi_{1-x}Gex~~ **2022**, 56, 254
- 183 Toward Reduced Interface Contact Resistance: Controllable Surface Energy of SbTe Films via Tuning the Crystallization and Orientation.. **2022**, 1
- 182 Screen-printed bismuth telluride nanostructured composites for flexible thermoelectric applications. **2022**, 4, 024003 2
- 181 Theoretical Assessment of Impacts of Energy Band Valley Occupation on Diffusion Coefficient of Nano-Scale Ge Wires. **2022**, 11, 033005 0
- 180 2D Materials for Wearable Energy Harvesting. 2101623 1
- 179 Enhancing Thermoelectric Properties of (CuTe)-(BiCuTeO) Composites by Optimizing Carrier Concentration.. **2022**, 15,
- 178 Thermodefect voltage in graphene nanoribbon junctions.. **2022**, 0
- 177 Enhanced thermoelectric performance by van Hove singularities in the density of states of type-II nodal-line semimetals. *Physical Review B*, **2022**, 105, 3-3 1
- 176 Anomalous Thermoelectric Performance in Asymmetric Dirac Semimetal BaAgBi.. **2022**, 2291-2298 3
- 175 Stability, optoelectronic and thermal properties of two-dimensional janus FeS .. **2022**, 4
- 174 Temperature dependence of resistivity and temperature coefficient of a single-crystal bismuth nanowire based on the varying scattering mechanism. 1
- 173 First-principles investigation of the significant anisotropy and ultrahigh thermoelectric efficiency of a novel two-dimensional $\text{Ga}_2\text{I}_2\text{S}_2$ at room temperature. **2022**, 4, 025001 2
- 172 Thermoelectric films and periodic structures and spin Seebeck effect systems: facets of performance optimization. **2022**, 25, 100965 4
- 171 Computational prediction of thermoelectric properties of 2D materials. 1
- 170 Boosting of Surface Anion Density on Porous Anodic Alumina Surface: A Key Factor to Enhance Moisture Sensor Operation to Critical Sub-RH Level. **2022**, 22, 6321-6328
- 169 Mobility-enhanced thermoelectric performance in textured nanograin Bi_2Se_3 , effect on scattering and surface-like transport. **2022**, 24, 100669 1

168	Boundary-scattering induced Seebeck coefficient enhancement in thin films within relaxation time approximation. 2022 , 635, 413800	
167	High thermoelectric performance of PNP abrupt heterostructures by independent regulation of the electrical conductivity and Seebeck coefficient. 2022 , 31, 103343	
166	Stability, tunneling characteristics and thermoelectric properties of TeSe ₂ allotropes. 2022 , 280, 115692	1
165	The spin-dependent properties of silicon carbide/graphene nanoribbons junctions with vacancy defects.. 2021 , 11, 23879	
164	Enhanced thermoelectric properties of polycrystalline CuCrS _{2-x} Se _x (x = 0, 0.5, 1.0, 1.5, 2) samples by replacing chalcogens and sintering. 2022 , 55, 135302	1
163	Thermoelectric performance of XI ₂ (X = Ge, Sn, Pb) bilayers.	0
162	Recent Advances in Sustainable Wearable Energy Devices with Nanoscale Materials and Macroscale Structures. 2110535	5
161	Preparation and In-Situ High-Throughput Screening of Bi Thixotropic Ink. 2022 , 9, 2101691	
160	High thermoelectric performance of ZrTe ₂ /SrTiO ₃ heterostructure. 2021 ,	1
159	Micrometer Sized Hexagonal Chromium Selenide Flakes for Cryogenic Temperature Sensors. 2021 , 21,	0
158	From nanowires to super heat conductors. 2021 , 130, 220901	1
157	Electronic and Thermoelectric Properties of Transition-Metal Dichalcogenides. 2021 , 125, 27084-27097	4
156	Thermoelectric characteristics of X[Formula: see text]YH[Formula: see text] monolayers (X=Si, Ge; Y=P, As, Sb, Bi): a first-principles study.. 2021 , 11, 23840	0
155	Two-dimensional quantum confinement effects on thermoelectric properties of MgO monolayers: A first principle study. 2021 , 107134	0
154	Experimental Study on Zinc Oxide Thin Film-Based Thermoelectric Energy Harvester Under Plane-Vertical Temperature Gradients. 2021 , 21, 27298-27307	
153	Anisotropic thermal and electrical transport properties induced high thermoelectric performance in an IrClO monolayer.. 2022 ,	1
152	Optimization and Fabrication of MEMS suspended structures for nanoscale thermoelectric devices.. 2022 ,	1
151	Theory of cross phenomena and their coefficients beyond Onsager theorem. 2022 , 10, 393-439	2

- 150 Thermal Conductivity of GaAs Nanowire Arrays Measured by the 3[Method.. **2022**, 12, 1
- 149 Silicon[Germanium: The Legacy Lives On. **2022**, 15, 2957 0
- 148 Dephasing-enhanced performance in quasiperiodic thermal machines. *Physical Review B*, **2022**, 105, 3.3 0
- 147 Facile and Low-Cost Fabrication of Cu/Zn/Sn-Based Ternary and Quaternary Chalcogenides Thermoelectric Generators. 2
- 146 First principle design of new thermoelectrics from TiNiSn based pentanary alloys based on 18 valence electron rule. **2022**, 209, 111396 1
- 145 2D GeP₃ and blue P: promising thermoelectric materials for room- and high-temperature applications. 1
- 144 Investigations on the thermoelectric and thermodynamic properties of Y₂CT₂ (T = O, F, OH). **2022**, 12, 14377-14383
- 143 A review on single crystal and thin film Si-Ge alloy: growth and applications. 1
- 142 First-principles investigations of structural, electronic and thermoelectric properties of [Sb/Ge]₂ van der Waals heterostructures. 1
- 141 Zintl Phase Compounds Mg₃Sb_{2-x}Bi_x (x = 0, 1, and 2) Monolayers: Electronic, Phonon and Thermoelectric Properties From ab Initio Calculations. **2022**, 8, 0
- 140 The Abnormally Excellent Figure of Merit of 14,14,18-Graphyne at Room Temperature: A Study on the Thermoelectric Characteristic of Graphyne. 0
- 139 Concept of an efficient self-startup voltage converter with dynamic maximum power point tracking for microscale thermoelectric generators. **2022**, 4,
- 138 Effect of the Metal[nsulator Transition on the Thermoelectric Properties of Composites Based on $\text{Bi}_{0.5}\text{Sb}_{1.5}\text{Te}_3$ with VO_2 Nanoparticles. **2022**, 43, 1
- 137 Structural, microstructural, magnetic, and thermoelectric properties of bulk and nanostructured n-type CuFeS₂ Chalcopyrite. **2022**, 0
- 136 Recent Advances in Energy Harvesting from Waste Heat Using Emergent Thermoelectric Materials. **2022**, 155-184 0
- 135 Thermoelectric Materials. **2022**, 509-665
- 134 Enhanced thermoelectric properties of Bi_{0.5}Sb_{1.5}Te₃/PbTe@C nanocomposites. **2022**, 110799
- 133 Towards Low Cost and Sustainable Thin Film Thermoelectric Devices Based on Quaternary Chalcogenides. 2202157 2

132	Possibility of N-type Doping in CaAl ₂ Si ₂ -type Zintl Phase Compound CaZn ₂ X ₂ (X = As, P). 2022 , 91,	1
131	Robust spin-dependent Seebeck effect and remarkable spin thermoelectric performance in graphether nanoribbons.	0
130	Thermoelectric Properties of an Individual Suspended Single-Crystalline Sb ₂ Se ₃ Nanowire.	0
129	300 nm CMOS-compatible fabrication of Ru ₂ Si ₃ sub-50 nm thin films and characterization. 2022 , 120, 222102	0
128	Monolayer Sc ₂ Te ₂ : An Excellent n-Type Thermoelectric Material with Significant Anisotropy.	2
127	Mass Production of Pt Single-Atom-Decorated Bismuth Sulfide for n-Type Environmentally Friendly Thermoelectrics.	0
126	Insights into Low Thermal Conductivity in Inorganic Materials for Thermoelectrics.	6
125	Thermoelectric properties of monolayer and bilayer buckled XTe (X = Ge, Sn, and Pb). 2022 , 13, 025008	
124	Analysis of temperature dependencies of transport coefficients for a single-crystal bismuth wire with a 1.90- μ m diameter. 2022 , 131, 214302	1
123	Isovalent Bi substitution induced low thermal conductivity and high thermoelectric performance in n-type InSb. 2022 ,	0
122	Giant thermoelectric figure of merit in fluorine-doped single walled-carbon nanotubes. 2022 , 142, 115292	0
121	Thermoelectric transport properties of armchair graphene nanoribbon heterostructures. 2022 , 34, 335302	
120	Enhanced thermoelectric composite performance from graphene nanosheets additives in AgSbTe ₂ matrix. 2022 ,	0
119	Thermoelectric properties of semiconducting materials with parabolic and pudding-mold band structures. 2022 , 31, 103737	0
118	Monolayer SnX (X = O, S, Se): Two-Dimensional Materials with Low Lattice Thermal Conductivities and High Thermoelectric Figures of Merit.	1
117	Inelastic thermoelectric transport and fluctuations in mesoscopic systems. 2022 , 7,	1
116	Direct mapping of edge states in bilayer zigzag phosphorene nanoribbons into a SSH ladder model and optimizing their thermoelectric performance via edge state engineering. 2022 , 137,	0
115	Large thermoelectric power factors by opening the band gap in semimetallic Heusler alloys. 2022 , 100742	0

- 114 Solid-Liquid Equilibria in the Bi-Ca-Co-O System. **2022**,
- 113 Enhancement of thermoelectric power factor by modulation doping of bulk polycrystalline SnS / thin film PEDOT:PSS bilayer. **2022**, 60, 531-536
- 112 Thermal transport driven by Coulomb interactions in quantum dots: Enhancement of thermoelectric and heat currents. **2022**, 641, 414108
- 111 XTLO (X = K, Rb, Cs): Novel 2D semiconductors with high electron mobilities, ultra-low lattice thermal conductivities and high thermoelectric figures of merit at room temperature. **2022**, 599, 153924 2
- 110 Preparation and Performance Optimization of Nanoscale Thermoelectric Energy Conversion Materials. **2022**, 12, 615-623
- 109 Enhanced thermoelectric performance by resonant vibrational mode-selective density-of-states distortions.
- 108 Lateral transition-metal dichalcogenide heterostructures for high efficiency thermoelectric devices. 2
- 107 Bismuthene. **2022**, 173-196
- 106 Spin-tunable thermoelectric performance in monolayer chromium pnictides. **2022**, 6,
- 105 Quasi-2D Carrier Transport in KMgBi for Promising Thermoelectric Performance. 1
- 104 Thin film growth and thermoelectric properties of electron conducting oxides. **2022**, 130, 471-476 0
- 103 Energy-Saving Pathways for Thermoelectric Nanomaterial Synthesis: Hydrothermal/Solvothermal, Microwave-Assisted, Solution-Based, and Powder Processing. 2106052 10
- 102 High-performance magnesium-based thermoelectric materials: Progress and challenges. **2022**, 4
- 101 Effect of Bi Nanoprecipitates on the Thermoelectric Properties of Bi-Sb-Te/Sb₂O₃ Nanocomposites. **2022**, 9, 2200785 1
- 100 Designing Inorganic Semiconductors with Cold-Rolling Processability. 2203776 0
- 99 Ultralow Thermal Conductivity and High Thermoelectric Performance of Bi₂Te₃: Effects of Dimensionality and Thickness. **2022**, 5, 9914-9928 0
- 98 THERMOELECTRIC WASTE HEAT RECOVERY IN AN OXYFUEL MELTER. **2022**, 93-107
- 97 Review of polysilicon thermoelectric energy generators. **2022**, 346, 113890 0

- 96 Review on recent development on thermoelectric functions of PEDOT:PSS based systems. **2022**, 152, 107041 1
- 95 Thermoelectric, spin-dependent optical and quantum transport properties of 2D half-metallic Co₂Se₃. **2022**, 24, 22016-22027 0
- 94 Anisotropic Correlations in Higher Manganese Silicides. 0
- 93 Organic/Inorganic Nanohybrids as Thermoelectric Materials. **2022**, 419-443 0
- 92 Strain-induced thermoelectricity in pentacene. **2022**, 24, 23679-23689 0
- 91 Theoretical Prediction on Temperature Dependence of Diffusion Coefficient of Various SiC Nanowires. **2022**, 0
- 90 Effect of electron-phonon coupling on transport properties of monolayer germanene: A thermoelectric perspective. **2023**, 153, 107115 0
- 89 Thermoelectric properties of PbTe based single-walled carbon nanotube (SWCNT) composites. **2022**, 1074, 012004 0
- 88 Thermoelectric Nanostructured Perovskite Materials. 0
- 87 Thermoelectric Performance of XXYIn (X = Fe, Ru; Y = Nb, V) Heusler Alloys: A DFT Study. 0
- 86 Magneto-Seebeck coefficient of the Fermi liquid in three-dimensional Dirac and Weyl semimetals. **2022**, 106, 0
- 85 Thermal Management in Neuromorphic Materials, Devices, and Networks. 2205098 0
- 84 Enhanced Thermoelectric Performance of ZnO-Based Thin Films via Interface Engineering. **2022**, 12, 1351 0
- 83 Valley Degeneracy-Enhanced Thermoelectric Performance in In-Based FeOCl-Type Monolayers. 0
- 82 Thermoelectric transport properties of single quantum dot systems in the presence of Majorana states. **2022**, 115503 0
- 81 Role of inter-electrode coupling on thermoelectricity in an interferometric geometry: A new proposition. 0
- 80 Skin-Deep Aspect of Thermopower in Bi₂Q₃, PbQ, and BiCuQO (Q = Se, Te): Hidden One-Dimensional Character of Their Band Edges Leading to High Thermopower. **2022**, 55, 2811-2820 0
- 79 Functional-Unit-Based Material Design: Ultralow Thermal Conductivity in Thermoelectrics with Linear Triatomic Resonant Bonds. 0

- 78 Thermoelectrics: From Thermoelectric Figure of Merit to Device Design. 1-25 ○
- 77 Contact Effects on Thermoelectric Properties of Textured Graphene Nanoribbons. **2022**, 12, 3357 ○
- 76 Thermoelectric properties of Rashba compounds $KSnX$ ($X = Sb, Bi$). **2022**, 132, 135112 ○
- 75 Bulk to Low Dimensional 2D Thermoelectric Materials: Latest Theoretical Research and Future View. **2022**, 571-588 ○
- 74 Prediction of stable silver selenide-based energy materials sustained by rubidium selenide alloying. ○
- 73 Thermoelectric properties of a vertically aligned carbon nanotube array with embedded bismuth telluride. ○
- 72 Thermoelectric properties of solution-prepared n-type and p-type CZTSSe thin films. **2022**, ○
- 71 Optical/Acoustic Phonon Hybridization Enhanced Thermoelectric Performance in a 1T \prime Phase $OsTe_2$ Monolayer. ○
- 70 Anomalous scaling law for thermoelectric transport of two-dimension-confined electrons in an organic molecular system. **2022**, 4, ○
- 69 n-Type to p-Type Transition of Electrical Conduction in Silver (Ag)-Modified Bi_2Te_3 Nanosheets. **2022**, 51, 7275-7282 ○
- 68 Characterization of ZnO thermoelectric ceramics and their microstructures consolidated by two-step spark plasma sintering. **2022**, 130, 889-894 ○
- 67 Thermal conductivity in fluorine-doped single-walled carbon nanotubes. **2022**, 26, 101613 ○
- 66 Thermoelectric properties of two-dimensional materials with combination of linear and nonlinear band structures. **2022**, 33, 104596 ○
- 65 Ab initio study of two-dimensional $MgAl_2Se_4$ and $MgIn_2Se_4$ with high stability, high electron mobility, and high thermoelectric figure of merit. **2023**, 931, 167586 2
- 64 Anharmonic phonon renormalization assisted acoustic branch scattering induces ultralow thermal conductivity and high thermoelectric performance of 2D SnSe. **2023**, 932, 167525 ○
- 63 Tuning of Thermoelectric performance of $CrSe_2$ material using dimension engineering. **2023**, 172, 111083 ○
- 62 One-dimensional semiconducting hierarchical nanostructures. **2022**, ○
- 61 Highly Thermoelectric Efficient Armchair Silicene Nanoribbons With Silicon Adatom Defects. **2022**, 1-7 ○

- 60 Hydrogel-based printing strategy for high-performance flexible thermoelectric generators. 0
- 59 Improving the thermoelectric performance of Cu-doped MoS₂ film by band structure modification and microstructural regulation. **2023**, 611, 155611 0
- 58 DFT analogue of prospecting the spin-polarised properties of layered perovskites Ba₂ErNbO₆ and Ba₂TmNbO₆ influenced by electronic structure. **2022**, 12, 0
- 57 Tailoring Interfacial Charge Transfer for Optimizing Thermoelectric Performances of MnTe-Sb₂Te₃ Superlattice-Like Films. 2210213 1
- 56 Hybrid/Composite Organic Thermoelectric Materials. **2022**, 123-159 0
- 55 Anisotropic correlations in higher manganese silicides. **2022**, 167983 1
- 54 Multidirectional strain-induced thermoelectric figure of merit enhancement of zigzag bilayer phosphorene nanoribbons. 0
- 53 Emerging Homogeneous Superlattices in CaTiO₃ Bulk Thermoelectric Materials. 0
- 52 Metal-based folded-thermopile for 2.5D micro-thermoelectric generators. **2023**, 349, 114090 1
- 51 Optimization method and performance study of Bi₂Te₃ nanosheets preparation based on solvothermal method. **2022**, 0
- 50 HfSe₂/GaSe Heterostructure as a Promising Near-Room-Temperature Thermoelectric Material. **2022**, 126, 20326-20331 0
- 49 High Seebeck Coefficient from Screen-Printed Colloidal PbSe Nanocrystals Thin Film. **2022**, 15, 8805 1
- 48 Optimized weighted mobility induced high thermoelectric performance of ZnO-based multilayered thin films. 0
- 47 Recent progress of two-dimensional heterostructures for thermoelectric applications. **2023**, 35, 073001 1
- 46 Nonstoichiometric Salt Intercalation as a Means to Stabilize Alkali Doping of 2D Materials. **2022**, 129, 0
- 45 Thermoelectricity in a Quasiperiodic Lattice Beyond Nearest-Neighbor Electron Hopping. 2200326 0
- 44 TI-based TlAgX (X = S, Se) monolayers with ultra-low lattice thermal conductivity and high ZT: a first-principles study. **2022**, 57, 21607-21619 0
- 43 Comprehensive Model for the Thermoelectric Properties of Two-Dimensional Carbon Nanotube Networks. **2022**, 18, 0

- 42 Electronic properties of topological rough nanowires for thermoelectrical performance. 10,
- 41 Tellurium/Polymers for Flexible Thermoelectrics: Status and Challenges.
- 40 Measuring temperature dependence of dimensionless figure of merit of a thermoelectric module using time-domain impedance spectroscopy. **2023**, 94, 014902
- 39 Thermoelectric properties of C2P4 monolayer: A first principle study. **2023**, 133, 015102
- 38 Effect of Polyaniline/manganese Dioxide Composite on the Thermoelectric Effect of Cement-based Materials. **2023**, 38, 109-116
- 37 Thermoelectric properties of two-dimensional double transition metal MXenes: ScYCT2 (T=F, OH). **2023**, 176, 111210
- 36 Applications in thermoelectric thin films. **2023**, 459-473
- 35 Strain-enhanced thermoelectric properties of Nb-doped SrTiO₃ thin films. **2023**, 0
- 34 Perylene-based molecular device: Multifunctional spintronic and spin caloritronic applications.
- 33 Layer-Structured Anisotropic Metal Chalcogenides: Recent Advances in Synthesis, Modulation, and Applications.
- 32 Synergetic optimization of thermoelectric properties in SnSe film via manipulating Se vacancies. **2023**, 943, 169115
- 31 Transport and thermoelectric properties of penta-Sb₂X monolayers. **2023**, 11, 5156-5166
- 30 A Primer on the Underlying Physics in Thermoelectrics. **2023**, 133-149
- 29 Metal Complex Molecular Junctions as Thermoelectric Devices.
- 28 Electrodeposition of Bi₂Te₃ thin films for thermoelectric applications: effect of electrolyte pH. **2023**, 34,
- 27 Thermodynamic Performance of Hot-Carrier Solar Cells: A Quantum Transport Model. **2023**, 19,
- 26 Performance analysis of thermoelectric energy generator with stacked polysilicon germanium thermocouples. **2023**, 355, 114304
- 25 Boosting thermoelectric performance of HfSe₂ monolayer by selectivity chemical adsorption. **2023**, 639, 14-23

- 24 Grain boundary engineering strategy for simultaneously reducing the electron concentration and lattice thermal conductivity in n-type Bi₂Te_{2.7}Se_{0.3}-based thermoelectric materials. **2023**, 43, 3376-3382 ○
- 23 Enhancement of thermoelectric performances in n-type RbCrZ (Z = S, Se, Te) half-metallic ferromagnetic alloys via charge carrier concentration or chemical potential. **2023**, 653, 414678 ○
- 22 Intrinsic thermoelectric properties in biphenylene nanoribbons and effect of lattice defects. **2023**, 220, 112041 ○
- 21 In-plane thermoelectric properties of graphene/xBN/graphene van der Waals heterostructures. **2023**, 35, 155701 ○
- 20 Strong quartic anharmonicity, ultralow thermal conductivity, high band degeneracy and good thermoelectric performance in Na₂TlSb. **2023**, 9, ○
- 19 Theoretical study on spin-dependent zigzag-direction thermoelectric transport properties of Mn-doped blue phosphorene. **2023**, 133, 055109 ○
- 18 Investigations of thermoelectric properties of different gallium nitride polytypes through first-principles approach. **2023**, 49, 6-11 ○
- 17 Surface and Constriction Engineering of Nanoparticle Based Structures Towards Ultra-Low Thermal Conductivity as Prospective Thermoelectric Materials. **2023**, 27, 25-41 ○
- 16 High thermoelectric performance of flexible nanocomposite films based on Bi₂Te₃ nanoplates and carbon nanotubes selected using ultracentrifugation. **2023**, 13, ○
- 15 Enhanced longitudinal and transverse thermopowers at low temperature in quasi-one-dimensional antiferromagnet KMn₆Bi₅. **2023**, 122, 094104 ○
- 14 Development of Nanostructured Bi₂Te₃ with High Thermoelectric Performance by Scalable Synthesis and Microstructure Manipulations. **2023**, 15, 13012-13024 ○
- 13 Investigation of the dynamical stability, electronic and thermoelectric properties of RhMnTiZ (Z=Si, Ge, Sn) Heusler compounds. **2023**, 364, 115122 ○
- 12 A Strongly Correlated Quantum Dot Heat Engine with Optimal Performance: A Nonequilibrium Green's Function Approach. 2200608 ○
- 11 Large-area 2D bismuth antimonide with enhanced thermoelectric properties via multiscale electron-phonon decoupling. ○
- 10 Spin dependent molecular junction with graphene electrodes as a thermoelectric nanodevice. **2023**, 133, 104301 ○
- 9 High mobility and excellent thermoelectric performance monolayer ZnX₂Z₄ (X = In, Al, Ga; Z = S, Se, Te) materials. **2023**, 25, 10335-10342 ○
- 8 Superior Thermoelectric Properties of Twist-Angle Superlattice Borophene Induced by Interlayer Electrons Transport. 2301348 ○
- 7 Energy Harvesting Through Thermoelectric Generators. **2023**, 32-66 ○

- 6 Enhancement in Power Factor of Al-Doped Cu₂Se Thermoelectric Compound Prepared by Combustion Synthesis via Spark Plasma Sintering Technique. ○
- 5 Enhanced Thermoelectric Properties of Mg₂Sn-Mg₃Sb₂ Nanocomposites by Tailoring Matrix/Inclusion Interface toward Energy Harvesting Applications. **2023**, 6, 6133-6140 ○
- 4 The Tortuosity Effect on the Thermal Conductivity of Si Nanowires. **2023**, 27, 110-124 ○
- 3 Evolving Strategies Toward Seebeck Coefficient Enhancement. ○
- 2 A quasi-one-dimensional bulk thermoelectrics with high performance near room temperature. **2023**, , ○
- 1 Conductance of a One and Double-Level Quantum Dot. **2022**, 67, 35-41 ○