

Ali Shakouri

List of Publications by Year in Descending Order

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

186
papers

8,384
citations

41
h-index

89
g-index

202
ext. papers

9,218
ext. citations

5.3
avg, IF

6.4
L-index

#	Paper	IF	Citations
186	Enhancement of Thermal Transfer From β -Ga β Nano-Membrane Field-Effect Transistors to High Thermal Conductivity Substrate by Inserting an Interlayer. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-5	2.9	3
185	A biodegradable chipless sensor for wireless subsoil health monitoring.. <i>Scientific Reports</i> , 2022 , 12, 8011	4.9	3
184	Anisotropic thermal conductivity of the nanoparticles embedded GaSb thin film semiconductor. <i>Nanotechnology</i> , 2021 , 32, 035702	3.4	1
183	Heat Flux Based Optimization of Combined Heat and Power Thermoelectric Heat Exchanger. <i>Energies</i> , 2021 , 14, 7791	3.1	0
182	Battery-Less Wireless Chipless Sensor Tag for Subsoil Moisture Monitoring. <i>IEEE Sensors Journal</i> , 2021 , 21, 6071-6082	4	4
181	Hybrid Low-Power Wide-Area Mesh Network for IoT Applications. <i>IEEE Internet of Things Journal</i> , 2021 , 8, 901-915	10.7	21
180	Fuel-burning thermoelectric generators for the future of electric vehicles. <i>Energy Conversion and Management</i> , 2021 , 227, 113523	10.6	2
179	BEOL Compatible Indium-Tin-Oxide Transistors: Switching of Ultrahigh-Density 2-D Electron Gas Over $0.8 \times 10^{14}/\text{cm}^2$ at Oxide/Oxide Interface by the Change of Ferroelectric Polarization. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 3195-3199	2.9	5
178	Far-field thermal imaging below diffraction limit. <i>Optics Express</i> , 2020 , 28, 7036-7050	3.3	2
177	High Performance β -Ga β Nano-Membrane Field Effect Transistors on a High Thermal Conductivity Diamond Substrate. <i>IEEE Journal of the Electron Devices Society</i> , 2019 , 7, 914-918	2.3	24
176	Analytical Optimization of the Design of Film-Laminated Thermoelectric Power Generators. <i>Journal of Electronic Materials</i> , 2019 , 48, 7312-7319	1.9	4
175	Ultrafast chemical imaging by widefield photothermal sensing of infrared absorption. <i>Science Advances</i> , 2019 , 5, eaav7127	14.3	40
174	High Thermoelectric Power Factor and ZT in TbAs:InGaAs Epitaxial Nanocomposite Material. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900015	6.4	3
173	Transient Thermal Response of Hotspots in Graphene-Silver Nanowire Hybrid Transparent Conducting Electrodes. <i>IEEE Nanotechnology Magazine</i> , 2018 , 17, 276-284	2.6	6
172	Rocksalt nitride metal/semiconductor superlattices: A new class of artificially structured materials. <i>Applied Physics Reviews</i> , 2018 , 5, 021101	17.3	42
171	Temperature-dependent thermal and thermoelectric properties of n-type and p-type Sc β MgxN. <i>Physical Review B</i> , 2018 , 97,	3.3	26
170	Full-field thermal imaging of quasiballistic crosstalk reduction in nanoscale devices. <i>Nature Communications</i> , 2018 , 9, 255	17.4	37

169	Steep-slope hysteresis-free negative capacitance MoS transistors. <i>Nature Nanotechnology</i> , 2018 , 13, 24-28	28.7	282
168	Transient Self-Heating at Nanowire Junctions in Silver Nanowire Network Conductors. <i>IEEE Nanotechnology Magazine</i> , 2018 , 17, 1171-1180	2.6	7
167	Valleytronics of IIIIV solid solutions for thermoelectric application. <i>RSC Advances</i> , 2017 , 7, 7310-7314	3.7	5
166	Phonon wave effects in the thermal transport of epitaxial TiN/(Al,Sc)N metal/semiconductor superlattices. <i>Journal of Applied Physics</i> , 2017 , 121, 015109	2.5	31
165	Thermoelectric heat recovery from glass melt processes. <i>Energy</i> , 2017 , 118, 1035-1043	7.9	24
164	EGa2O3 on insulator field-effect transistors with drain currents exceeding 1.5 A/mm and their self-heating effect. <i>Applied Physics Letters</i> , 2017 , 111, 092102	3.4	128
163	Thermodynamic Studies of EGaO Nanomembrane Field-Effect Transistors on a Sapphire Substrate. <i>ACS Omega</i> , 2017 , 2, 7723-7729	3.9	52
162	Calibrated sub-micron temperature mapping of an operating plasmonic HAMR device by thermoreflectance imaging. <i>MRS Advances</i> , 2017 , 2, 3613-3618	0.7	
161	Compensation of native donor doping in ScN: Carrier concentration control and p-type ScN. <i>Applied Physics Letters</i> , 2017 , 110, 252104	3.4	42
160	High exergetic modified Brayton cycle with thermoelectric energy conversion. <i>Applied Thermal Engineering</i> , 2017 , 114, 1366-1371	5.8	10
159	Thermoelectric topping cycles with scalable design and temperature dependent material properties. <i>Scripta Materialia</i> , 2016 , 111, 58-63	5.6	17
158	Minority carrier blocking to enhance the thermoelectric figure of merit in narrow-band-gap semiconductors. <i>Physical Review B</i> , 2016 , 93,	3.3	68
157	Cross-plane thermal conductivity of (Ti,W)N/(Al,Sc)N metal/semiconductor superlattices. <i>Physical Review B</i> , 2016 , 93,	3.3	55
156	Thermal optimization of embedded thermoelectric generators in refractory furnaces 2016 ,		2
155	Enhanced thermoelectric performance of P-type Bi ₂ Sb ₂ Te ₃ nanowires with pulsed laser assisted electrochemical deposition. <i>Extreme Mechanics Letters</i> , 2016 , 9, 386-396	3.9	5
154	Electroreflectance imaging of gold-H ₃ PO ₄ supercapacitors. Part II: microsupercapacitor ageing characterization. <i>Analyst, The</i> , 2016 , 141, 1462-71	5	3
153	Thermal Transport Driven by Extraneous Nanoparticles and Phase Segregation in Nanostructured Mg ₂ (Si,Sn) and Estimation of Optimum Thermoelectric Performance. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 7003-12	9.5	30
152	Computational simulations as virtual laboratories for online engineering education: A case study in the field of thermoelectricity. <i>Computer Applications in Engineering Education</i> , 2016 , 24, 428-442	1.6	16

151	Quasi-ballistic thermal transport in Al _{0.1} Ga _{0.9} N thin film semiconductors. <i>Applied Physics Letters</i> , 2016 , 109, 243107	3.4	18
150	Evidence of Universal Temperature Scaling in Self-Heated Percolating Networks. <i>Nano Letters</i> , 2016 , 16, 3130-6	11.5	9
149	Thermal imaging of nanometer features 2016 ,		2
148	Nanoscale solid-state cooling: a review. <i>Reports on Progress in Physics</i> , 2016 , 79, 095901	14.4	40
147	Enhanced thermoelectric properties in bulk nanowire heterostructure-based nanocomposites through minority carrier blocking. <i>Nano Letters</i> , 2015 , 15, 1349-55	11.5	106
146	Performance and mass optimization of thermoelectric microcoolers. <i>International Journal of Thermal Sciences</i> , 2015 , 97, 143-151	4.1	13
145	Flexible thermoelectric materials and device optimization for wearable energy harvesting. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 10362-10374	7.1	412
144	Experimental Characterization of Hybrid Solid-State and Fluidic Cooling for Thermal Management of Localized Hotspots. <i>IEEE Transactions on Components, Packaging and Manufacturing Technology</i> , 2015 , 5, 57-64	1.7	6
143	Effect of deposition pressure on the microstructure and thermoelectric properties of epitaxial ScN(001) thin films sputtered onto MgO(001) substrates. <i>Journal of Materials Research</i> , 2015 , 30, 626-634	2.5	28
142	. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 3516-3523	2.9	39
141	Evaluating Broader Impacts of Nanoscale Thermal Transport Research. <i>Nanoscale and Microscale Thermophysical Engineering</i> , 2015 , 19, 127-165	3.7	60
140	Numerical Model of Thermoelectric Topping Cycle of Coal-Fired Power Plant. <i>Journal of Heat Transfer</i> , 2015 , 137,	1.8	2
139	Fractal Like Heat Transport in Nanoparticle Embedded Semiconductor Alloys. <i>Nano Letters</i> , 2015 , 15, 4269-73	11.5	20
138	Hot carrier filtering in solution processed heterostructures: a paradigm for improving thermoelectric efficiency. <i>Advanced Materials</i> , 2014 , 26, 2755-61, 2618	24	51
137	. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2014 , 22, 2366-2379	2.6	26
136	Bulk-Like Laminated Nitride Metal/Semiconductor Superlattices for Thermoelectric Devices. <i>Journal of Microelectromechanical Systems</i> , 2014 , 23, 672-680	2.5	9
135	Enhancing the thermoelectric figure of merit through the reduction of bipolar thermal conductivity with heterostructure barriers. <i>Applied Physics Letters</i> , 2014 , 105, 052106	3.4	83
134	Right sizes of nano- and microstructures for high-performance and rigid bulk thermoelectrics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 10949-54	11.5	108

133	Composition modulation of Ag ₂ Te nanowires for tunable electrical and thermal properties. <i>Nano Letters</i> , 2014 , 14, 5398-404	11.5	68
132	Structure and thermoelectric properties of spark plasma sintered ultrathin PbTe nanowires. <i>Nano Letters</i> , 2014 , 14, 3466-73	11.5	41
131	Thermoelectric topping cycles for power plants to eliminate cooling water consumption. <i>Energy Conversion and Management</i> , 2014 , 84, 244-252	10.6	29
130	Energy Efficient Solid-State Cooling for Hot Spot Removal 2014 , 169-196		
129	Thermoreflectance CCD Imaging of Self-Heating in Power MOSFET Arrays. <i>IEEE Transactions on Electron Devices</i> , 2014 , 61, 3047-3053	2.9	18
128	ENERGY EFFICIENT SOLID-STATE COOLING FOR HOT SPOT REMOVAL. <i>WSPC Series in Advanced Integration and Packaging</i> , 2014 , 195-226		
127	Energy Efficient Solid-State Cooling for Hot Spot Removal 2014 , 169-196		
126	Electron transport modeling and energy filtering for efficient thermoelectric Mg ₂ Si _{1-x} Sn _x solid solutions. <i>Physical Review B</i> , 2014 , 89,	3.3	82
125	Electron Transport Engineering by Nanostructures for Efficient Thermoelectrics. <i>Lecture Notes in Nanoscale Science and Technology</i> , 2014 , 41-92	0.3	3
124	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
123	Large enhancement in the thermoelectric properties of Pb _{0.98} Na _{0.02} Te by optimizing the synthesis conditions. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 11269	13	35
122	Optimization of thermoelectric topping combined steam turbine cycles for energy economy. <i>Applied Energy</i> , 2013 , 109, 1-9	10.7	52
121	Synthesis and investigation of thermoelectric and electrochemical properties of porous Ca ₉ Co ₁₂ O ₂₈ nanowires. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 11901	13	28
120	Thermoelectric properties of epitaxial ScN films deposited by reactive magnetron sputtering onto MgO(001) substrates. <i>Journal of Applied Physics</i> , 2013 , 113, 153704	2.5	71
119	Reduced thermal conductivity in Er-doped epitaxial In _x Ga _{1-x} Sb alloys. <i>Applied Physics Letters</i> , 2013 , 103, 103102	3.4	9
118	Cross-plane thermoelectric transport in p-type La _{0.67} Sr _{0.33} MnO ₃ /LaMnO ₃ oxide metal/semiconductor superlattices. <i>Journal of Applied Physics</i> , 2013 , 113, 193702	2.5	13
117	Fast transient thermoreflectance CCD imaging of pulsed self heating in AlGa _N /Ga _N power transistors 2013 ,		12
116	Analytic Optimization of Cost Effective Thermoelectric Generation on Top of Rankine Cycle 2013 ,		1

115	Ultrafast submicron thermal characterization of integrated circuits 2012 ,		4
114	Synthesis and characterization of Mg ₂ Si/Si nanocomposites prepared from MgH ₂ and silicon, and their thermoelectric properties. <i>Journal of Materials Chemistry</i> , 2012 , 22, 24805		48
113	Thermal challenges on solar concentrated thermoelectric CHP systems 2012 ,		4
112	2012 ,		10
111	Enabling power density and thermal-aware floorplanning 2012 ,		6
110	Resonant carrier scattering by core-shell nanoparticles for thermoelectric power factor enhancement. <i>Applied Physics Letters</i> , 2012 , 100, 012102	3.4	26
109	Cooling power optimization for hybrid solid-state and liquid cooling in integrated circuit chips with hotspots 2012 ,		10
108	Thermoelectric properties of epitaxial TbAs:InGaAs nanocomposites. <i>Journal of Applied Physics</i> , 2012 , 111, 094312	2.5	19
107	Calculation of Nonlinear Thermoelectric Coefficients of InAs _{1-x} Sb _x Using Monte Carlo Method. <i>Journal of Electronic Materials</i> , 2012 , 41, 1370-1375	1.9	5
106	Seebeck Enhancement Through Miniband Conduction in III-V Semiconductor Superlattices at Low Temperatures. <i>Journal of Electronic Materials</i> , 2012 , 41, 1498-1503	1.9	9
105	Scalable Cost/Performance Analysis for Thermoelectric Waste Heat Recovery Systems. <i>Journal of Electronic Materials</i> , 2012 , 41, 1845-1850	1.9	16
104	Controlling n-Type Carrier Density from Er Doping of InGaAs with MBE Growth Temperature. <i>Journal of Electronic Materials</i> , 2012 , 41, 948-953	1.9	2
103	MOCVD Growth of Erbium Monoantimonide Thin Film and Nanocomposites for Thermoelectrics. <i>Journal of Electronic Materials</i> , 2012 , 41, 971-976	1.9	5
102	Thermoelectric Transport in InGaAs with High Concentration of Rare-Earth TbAs Embedded Nanoparticles. <i>Journal of Electronic Materials</i> , 2012 , 41, 1820-1825	1.9	4
101	Simulation and Design of a Silicon Nanowire based Phase Change Memory Cell. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1431, 20		0
100	Cost performance trade-off in thermoelectric modules with low fractional area coverage. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1396,		4
99	Optimization of power and efficiency of thermoelectric devices with asymmetric thermal contacts. <i>Journal of Applied Physics</i> , 2012 , 111, 024509	2.5	111
98	Cross-plane electronic and thermal transport properties of p-type La _{0.67} Sr _{0.33} MnO ₃ /LaMnO ₃ perovskite oxide metal/semiconductor superlattices. <i>Journal of Applied Physics</i> , 2012 , 112, 063714	2.5	10

97	Cost-effective waste heat recovery using thermoelectric systems. <i>Journal of Materials Research</i> , 2012 , 27, 1211-1217	2.5	13
96	Low-temperature thermoelectric power factor enhancement by controlling nanoparticle size distribution. <i>Nano Letters</i> , 2011 , 11, 225-30	11.5	48
95	Thermal imaging of encapsulated LEDs 2011 ,		6
94	Recent Developments in Semiconductor Thermoelectric Physics and Materials. <i>Annual Review of Materials Research</i> , 2011 , 41, 399-431	12.8	529
93	Design and thermoreflectance imaging of high-speed SiGe superlattice microrefrigerators. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1329, 1		
92	Growth and characterization of TbAs:GaAs nanocomposites. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011 , 29, 03C114	1.3	16
91	Cost-efficiency trade-off and the design of thermoelectric power generators. <i>Environmental Science & Technology</i> , 2011 , 45, 7548-53	10.3	145
90	Thermoelectric power factor enhancement by ionized nanoparticle scattering. <i>Applied Physics Letters</i> , 2011 , 99, 072118	3.4	24
89	Nanosecond transient thermoreflectance imaging of snapback in semiconductor controlled rectifiers 2011 ,		6
88	Frequency-Dependent Thermal Conductivity in Time Domain Thermoreflectance Analysis of Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1347, 1		3
87	Power Generation Efficiency with Extremely Large Z factor Thermoelectric Material. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1325, 9		1
86	Thermoelectric power factor enhancement in metal/semiconductor nanocomposites by ionized nanoparticle scattering. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1329, 1		
85	Thermoelectric figure of merit of $(\text{In}_{0.53}\text{Ga}_{0.47}\text{As})_{0.8}(\text{In}_{0.52}\text{Al}_{0.48}\text{As})_{0.2}$ III-V semiconductor alloys. <i>Physical Review B</i> , 2010 , 81,	3.3	31
84	Novel metal/semiconductor nanocomposite and superlattice materials and devices for thermoelectrics 2010 ,		1
83	Application of thermoreflectance imaging to identify defects in photovoltaic solar cells 2010 ,		5
82	2010 ,		2
81	Experimental validation of the power blurring method 2010 ,		2
80	Picosecond Transient Thermal Imaging Using a CCD Based Thermoreflectance System 2010 ,		13

79	High-Temperature Thermoelectric Characterization of III-V Semiconductor Thin Films by Oxide Bonding. <i>Journal of Electronic Materials</i> , 2010 , 39, 1125-1132	1.9	8
78	Nanostructured thermoelectrics: big efficiency gains from small features. <i>Advanced Materials</i> , 2010 , 22, 3970-80	24	1085
77	Thermoelectric power generator module of 16 μ m Bi ₂ Te ₃ and 0.6% ErAs:(InGaAs) _{1-x} (InAlAs) _x segmented elements. <i>Applied Physics Letters</i> , 2009 , 95, 083503	3-4	33
76	Direct measurement of thin-film thermoelectric figure of merit. <i>Applied Physics Letters</i> , 2009 , 94, 212508	3,4	23
75	Short Time Transient Behavior of SiGe-based Microrefrigerators. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1166, 6		3
74	Investigating coherent zone-folded acoustic phonons in Si/SiGe superlattice by transient thermoreflectance technique. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1221, 8031		
73	Transient thermal imaging of Si/SiGe superlattice and bulk Si microrefrigerators. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1218, 1		
72	Thermoelectric Transport in a ZrN/ScN Superlattice. <i>Journal of Electronic Materials</i> , 2009 , 38, 960-963	1.9	58
71	Effect of Nanoparticles on Electron and Thermoelectric Transport. <i>Journal of Electronic Materials</i> , 2009 , 38, 954-959	1.9	28
70	Nanoengineered Materials for Thermoelectric Energy Conversion. <i>Topics in Applied Physics</i> , 2009 , 225-299	5	28
69	Effect of nanoparticle scattering on thermoelectric power factor. <i>Applied Physics Letters</i> , 2009 , 94, 202105	4	117
68	Power Trace: An Efficient Method for Extracting the Power Dissipation Profile in an IC Chip From Its Temperature Map. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2009 , 32, 309-316		9
67	Thermal characterization of high power transistor arrays 2009 ,		2
66	Temperature Profile Inside Microscale Thermoelectric Module Acquired Using Near-Infrared Thermoreflectance. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2009 , 32, 447-452		4
65	6 Watt Segmented Power Generator Modules using Bi ₂ Te ₃ and (InGaAs) _{1-x} (InAlAs) _x Elements Embedded with ErAs Nanoparticles.. <i>Materials Research Society Symposia Proceedings</i> , 2008 , 1129, 1		
64	Temperature nonuniformity and bias-dependent thermal resistance in multi-finger MOS transistors 2008 ,		1
63	Enhanced Hot Spot Cooling Using Bonded Superlattice Microcoolers With a Trench Structure. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2008 , 31, 552-558		3
62	Power Generator Modules of Segmented Bi ₂ Te ₃ and ErAs:(InGaAs) _{1-x} (InAlAs) _x . <i>Journal of Electronic Materials</i> , 2008 , 37, 1786-1792	1.9	15

61	ErAs:(InGaAs) _{1-x} (InAlAs) _x alloy power generator modules. <i>Applied Physics Letters</i> , 2007 , 91, 263510	3.4	26
60	Monte Carlo simulation of electron transport in degenerate and inhomogeneous semiconductors. <i>Applied Physics Letters</i> , 2007 , 90, 092111	3.4	16
59	Ring Resonator Lasers using Passive Waveguides and Integrated Semiconductor Optical Amplifiers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2007 , 13, 1249-1256	3.8	15
58	Cross-plane Seebeck coefficient of ErAs:InGaAs/InGaAlAs superlattices. <i>Journal of Applied Physics</i> , 2007 , 101, 034502	2.5	52
57	Thermionic power generation at high temperatures using SiGeBi superlattices. <i>Journal of Applied Physics</i> , 2007 , 101, 053719	2.5	36
56	Enhanced Cooling in Doped Semiconductors Due to Nonlinear Peltier Effect. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1044, 1		2
55	Characterization of Thin-film Thermoelectric Micro-modules using Transient Harman ZT Measurement and Near-IR Thermoreflectance. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1044, 1		2
54	Segmented Power Generator Modules of Bi ₂ Te ₃ and ErAs: InGaAlAs Embedded with ErAs Nanoparticles. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1044, 1		
53	Characterization of Heat Propagation along Single Tin Dioxide Nanobelt using the Thermoreflectance Method. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1022, 1		1
52	Nonlinear Peltier effect in semiconductors. <i>Applied Physics Letters</i> , 2007 , 91, 122104	3.4	38
51	Extraction of Power Dissipation Profile in an IC Chip from Temperature Map. <i>IEEE Semiconductor Thermal Measurement and Management Symposium</i> , 2007 ,		5
50	Method of images for the fast calculation of temperature distributions in packaged VLSI chips 2007 ,		13
49	Phonon Confinement in Germanium Nanowires 2006 ,		1
48	Enhanced solid-state thermionic emission in nonplanar heterostructures. <i>Applied Physics Letters</i> , 2006 , 88, 012102	3.4	30
47	Cross-plane lattice and electronic thermal conductivities of ErAs:InGaAs/InGaAlAs superlattices. <i>Applied Physics Letters</i> , 2006 , 88, 242107	3.4	74
46	HgCdTe superlattices for solid-state cryogenic refrigeration. <i>Applied Physics Letters</i> , 2006 , 88, 132110	3.4	14
45	Design of Bulk Thermoelectric Modules for Integrated Circuit Thermal Management. <i>IEEE Transactions on Components and Packaging Technologies</i> , 2006 , 29, 750-757		27
44	Analytical modeling of silicon thermoelectric microcooler. <i>Journal of Applied Physics</i> , 2006 , 100, 014501	2.5	47

43	ErAs:InGaAs/InGaAlAs superlattice thin-film power generator array. <i>Applied Physics Letters</i> , 2006 , 88, 113502	3-4	35
42	Thermoelectric transport perpendicular to thin-film heterostructures calculated using the Monte Carlo technique. <i>Physical Review B</i> , 2006 , 74,	3-3	39
41	Cross-plane Seebeck coefficient in superlattice structures in the miniband conduction regime. <i>Physical Review B</i> , 2006 , 74,	3-3	31
40	Cooling Enhancement Using Inhomogeneous Thermoelectric Materials 2006 ,		3
39	Thermal conductivity reduction and thermoelectric figure of merit increase by embedding nanoparticles in crystalline semiconductors. <i>Physical Review Letters</i> , 2006 , 96, 045901	7-4	680
38	Thermoelectric Micro-Cooler for Hot-Spot Thermal Management 2005 , 2161		14
37	MODELING AND OPTIMIZATION OF SINGLE-ELEMENT BULK SiGe THIN-FILM COOLERS. <i>Microscale Thermophysical Engineering</i> , 2005 , 9, 99-118		29
36	Transient Harman Measurement of the Cross-plane ZT of InGaAs/InGaAlAs Superlattices with Embedded ErAs Nanoparticles. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 886, 1		6
35	Design of Heterostructures for High Efficiency Thermionic Emission. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 886, 1		
34	400 element ErAs:InGaAs/InGaAlAs superlattice power generator. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 886, 1		1
33	Thermoreflectance based thermal microscope. <i>Review of Scientific Instruments</i> , 2005 , 76, 024903	1-7	89
32	Three-dimensional modeling of nanoscale Seebeck measurements by scanning thermoelectric microscopy. <i>Applied Physics Letters</i> , 2005 , 87, 053115	3-4	20
31	Solid-State and Vacuum Thermionic Energy Conversion. <i>Materials Research Society Symposia Proceedings</i> , 2005 , 886, 1		2
30	High-power limitation of passive ring-resonator-coupled lasers in the presence of material nonlinearity. <i>Journal of Applied Physics</i> , 2004 , 95, 3816-3818	2-5	2
29	NONEQUILIBRIUM ELECTRONS AND PHONONS IN THIN FILM THERMIONIC COOLERS. <i>Microscale Thermophysical Engineering</i> , 2004 , 8, 91-100		18
28	Thermal Conductivity Reduction in Nanostructured Semiconductor Using Broad-Band-Phonon Scattering 2004 , 55		
27	Thermal measurements of active semiconductor micro-structures acquired through the substrate using near IR thermoreflectance. <i>Microelectronics Journal</i> , 2004 , 35, 791-796	1-8	23
26	Improved thermoelectric power factor in metal-based superlattices. <i>Physical Review Letters</i> , 2004 , 92, 106103	7-4	370

25	Electronic and thermoelectric transport in semiconductor and metallic superlattices. <i>Journal of Applied Physics</i> , 2004 , 95, 1233-1245	2.5	123
24	Profiling the thermoelectric power of semiconductor junctions with nanometer resolution. <i>Science</i> , 2004 , 303, 816-8	33.3	143
23	High-power-density spot cooling using bulk thermoelectrics. <i>Applied Physics Letters</i> , 2004 , 85, 2977-2979	3.4	33
22	3D Electrothermal Simulation of Heterostructure Thin Film Micro-Coolers 2003 , 39		3
21	SiGeC Cantilever Micro Cooler. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 793, 80		
20	Influence of Doping Concentration and Ambient Temperature on the Cross-Plane Seebeck Coefficient of InGaAs/InAlAs superlattices. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 793, 140		5
19	Experimental Characterization and Modeling of InP-based Microcoolers. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 793, 87		6
18	Cooling Power Density of SiGe/Si Superlattice Micro Refrigerators. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 793, 124		7
17	Thermal conductivity of Si/SiGe and SiGe/SiGe superlattices. <i>Applied Physics Letters</i> , 2002 , 80, 1737-1739	3.4	276
16	The Effects of Defects and Acoustic Impedance Mismatch on Heat Conduction in SiGe Based Superlattices 2002 , 19		1
15	High-resolution noncontact thermal characterization of semiconductor devices 2001 ,		4
14	Design and characterization of thin film microcoolers. <i>Journal of Applied Physics</i> , 2001 , 89, 4059-4064	2.5	70
13	SiGeC/Si superlattice microcoolers. <i>Applied Physics Letters</i> , 2001 , 78, 1580-1582	3.4	196
12	Passive microring-resonator-coupled lasers. <i>Applied Physics Letters</i> , 2001 , 79, 3561-3563	3.4	84
11	Conservation of Lateral Momentum in Heterostructure Integrated Thermionic Coolers. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 691, 1		9
10	High Cooling Power Density of SiGe/Si Superlattice Microcoolers. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 691, 1		3
9	Integrated cooling for optoelectronic devices 2000 ,		3
8	Experimental Investigation of Thin Film InGaAsP Coolers. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 1441		3

7	Monolithic integration of thin-film coolers with optoelectronic devices. <i>Optical Engineering</i> , 2000 , 39, 2847	1.1	20
6	P-type SiGe/Si Superlattice Cooler. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 1151		
5	Characteristic equations for different ARROW structures. <i>Optical and Quantum Electronics</i> , 1999 , 31, 1267-1276	2.4	2
4	Thermionic emission cooling in single barrier heterostructures. <i>Applied Physics Letters</i> , 1999 , 74, 88-89	3.4	84
3	Fused vertical couplers. <i>Applied Physics Letters</i> , 1998 , 72, 2637-2638	3.4	24
2	Enhanced Thermionic Emission Cooling in High Barrier Superlattice Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 545, 449		62
1	Heterostructure integrated thermionic coolers. <i>Applied Physics Letters</i> , 1997 , 71, 1234-1236	3.4	280