

# Alexander A Balandin

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/7154739/alexander-a-balandin-publications-by-citations.pdf>

**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. 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.

293  
papers

39,610  
citations

81  
h-index

198  
g-index

328  
ext. papers

43,957  
ext. citations

6  
avg, IF

8.07  
L-index

#	Paper	IF	Citations
293	Superior thermal conductivity of single-layer graphene. <i>Nano Letters</i> , <b>2008</b> , 8, 902-7	11.5	9908
292	Thermal properties of graphene and nanostructured carbon materials. <i>Nature Materials</i> , <b>2011</b> , 10, 569-81	17	4185
291	Extremely high thermal conductivity of graphene: Prospects for thermal management applications in nanoelectronic circuits. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 151911	3.4	1469
290	Graphene-multilayer graphene nanocomposites as highly efficient thermal interface materials. <i>Nano Letters</i> , <b>2012</b> , 12, 861-7	11.5	1053
289	Dimensional crossover of thermal transport in few-layer graphene. <i>Nature Materials</i> , <b>2010</b> , 9, 555-8	27	1028
288	Temperature dependence of the Raman spectra of graphene and graphene multilayers. <i>Nano Letters</i> , <b>2007</b> , 7, 2645-9	11.5	909
287	Phonon thermal conduction in graphene: Role of Umklapp and edge roughness scattering. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	740
286	Thermal conductivity of isotopically modified graphene. <i>Nature Materials</i> , <b>2012</b> , 11, 203-7	27	698
285	Thermal properties of graphene and multilayer graphene: Applications in thermal interface materials. <i>Solid State Communications</i> , <b>2012</b> , 152, 1331-1340	1.6	578
284	Phonon heat conduction in a semiconductor nanowire. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 2932-2938	2.5	519
283	Significant decrease of the lattice thermal conductivity due to phonon confinement in a free-standing semiconductor quantum well. <i>Physical Review B</i> , <b>1998</b> , 58, 1544-1549	3.3	505
282	Micro-Raman investigation of optical phonons in ZnO nanocrystals. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 124313	2.5	490
281	Lattice thermal conductivity of graphene flakes: Comparison with bulk graphite. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 203103	3.4	404
280	Low-frequency 1/f noise in graphene devices. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 549-55	28.7	376
279	Exfoliation and characterization of bismuth telluride atomic quintuples and quasi-two-dimensional crystals. <i>Nano Letters</i> , <b>2010</b> , 10, 1209-18	11.5	371
278	Strongly Anisotropic Thermal Conductivity of Free-Standing Reduced Graphene Oxide Films Annealed at High Temperature. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 4664-4672	15.6	369
277	Graphene quilts for thermal management of high-power GaN transistors. <i>Nature Communications</i> , <b>2012</b> , 3, 827	17.4	369

276	Photoluminescence investigation of the carrier recombination processes in ZnO quantum dots and nanocrystals. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	362
275	Modification of graphene properties due to electron-beam irradiation. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 013101	3.4	359
274	Origin of the optical phonon frequency shifts in ZnO quantum dots. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 053103	3.4	314
273	Selective gas sensing with a single pristine graphene transistor. <i>Nano Letters</i> , <b>2012</b> , 12, 2294-8	11.5	310
272	Graphene-enhanced hybrid phase change materials for thermal management of Li-ion batteries. <i>Journal of Power Sources</i> , <b>2014</b> , 248, 37-43	8.9	305
271	Thermal properties of the hybrid graphene-metal nano-micro-composites: Applications in thermal interface materials. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 073113	3.4	297
270	Thermal conductivity of GaN films: Effects of impurities and dislocations. <i>Journal of Applied Physics</i> , <b>2002</b> , 92, 2534-2539	2.5	276
269	Two-dimensional phonon transport in graphene. <i>Journal of Physics Condensed Matter</i> , <b>2012</b> , 24, 233203	1.8	274
268	Origin of ultraviolet photoluminescence in ZnO quantum dots: Confined excitons versus surface-bound impurity exciton complexes. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5971-5973	3.4	250
267	Towards ultrathick battery electrodes: aligned carbon nanotube-enabled architecture. <i>Advanced Materials</i> , <b>2012</b> , 24, 5333-7	24	241
266	Anomalous size dependence of the thermal conductivity of graphene ribbons. <i>Nano Letters</i> , <b>2012</b> , 12, 3238-44	11.5	225
265	Thermal conductivity of graphene laminate. <i>Nano Letters</i> , <b>2014</b> , 14, 5155-61	11.5	219
264	Micro-Raman spectroscopy of mechanically exfoliated few-quintuple layers of Bi <sub>2</sub> Te <sub>3</sub> , Bi <sub>2</sub> Se <sub>3</sub> , and Sb <sub>2</sub> Te <sub>3</sub> materials. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 054305	2.5	218
263	Thermal properties of graphene-copper-graphene heterogeneous films. <i>Nano Letters</i> , <b>2014</b> , 14, 1497-503	11.5	210
262	Phononics in low-dimensional materials. <i>Materials Today</i> , <b>2012</b> , 15, 266-275	21.8	209
261	Graphene Thermal Properties: Applications in Thermal Management and Energy Storage. <i>Applied Sciences (Switzerland)</i> , <b>2014</b> , 4, 525-547	2.6	208
260	Phonons and thermal transport in graphene and graphene-based materials. <i>Reports on Progress in Physics</i> , <b>2017</b> , 80, 036502	14.4	197
259	The effect of substrates on the Raman spectrum of graphene: Graphene- on-sapphire and graphene-on-glass. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 201904	3.4	197

258	Ultraviolet Raman microscopy of single and multilayer graphene. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 043509	2.5	195
257	Excitonic properties of strained wurtzite and zinc-blende GaN/AlxGa1-xN quantum dots. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 7178-7186	2.5	189
256	Heat conduction in graphene: experimental study and theoretical interpretation. <i>New Journal of Physics</i> , <b>2009</b> , 11, 095012	2.9	187
255	Effect of phonon confinement on the thermoelectric figure of merit of quantum wells. <i>Journal of Applied Physics</i> , <b>1998</b> , 84, 6149-6153	2.5	187
254	Thermal conduction in AlxGa1-xN alloys and thin films. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 073710	2.5	185
253	Thermal conductivity of diamond-like carbon films. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 161921	3.4	178
252	Effects of functionalization on thermal properties of single-wall and multi-wall carbon nanotube-polymer nanocomposites. <i>ACS Nano</i> , <b>2013</b> , 7, 5114-21	16.7	176
251	High-temperature quenching of electrical resistance in graphene interconnects. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 202108	3.4	173
250	Thermal Percolation Threshold and Thermal Properties of Composites with High Loading of Graphene and Boron Nitride Fillers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 37555-37565	9.5	173
249	Miniband formation in a quantum dot crystal. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 5509-5515	2.5	154
248	Triple-mode single-transistor graphene amplifier and its applications. <i>ACS Nano</i> , <b>2010</b> , 4, 5532-8	16.7	148
247	Variable temperature Raman microscopy as a nanometrology tool for graphene layers and graphene-based devices. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 071913	3.4	145
246	Thermal conductivity of graphene with defects induced by electron beam irradiation. <i>Nanoscale</i> , <b>2016</b> , 8, 14608-16	7.7	144
245	Graphene-on-diamond devices with increased current-carrying capacity: carbon sp <sup>2</sup> -on-sp <sup>3</sup> technology. <i>Nano Letters</i> , <b>2012</b> , 12, 1603-8	11.5	143
244	Mechanically-exfoliated stacks of thin films of Bi <sub>2</sub> Te <sub>3</sub> topological insulators with enhanced thermoelectric performance. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 133117	3.4	142
243	Magnetically-functionalized self-aligning graphene fillers for high-efficiency thermal management applications. <i>Materials and Design</i> , <b>2015</b> , 88, 214-221	8.1	141
242	Crystal symmetry breaking in few-quintuple Bi <sub>2</sub> Te <sub>3</sub> films: Applications in nanometrology of topological insulators. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 153103	3.4	141
241	Interface and confined optical phonons in wurtzite nanocrystals. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	134

240	Nanophononics: phonon engineering in nanostructures and nanodevices. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2005</b> , 5, 1015-22	1.3	133
239	Dual-Functional Graphene Composites for Electromagnetic Shielding and Thermal Management. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1800558	6.4	133
238	Charge density waves in exfoliated films of van der Waals materials: evolution of Raman spectrum in TiSe <sub>2</sub> . <i>Nano Letters</i> , <b>2012</b> , 12, 5941-5	11.5	132
237	Mechanism for thermoelectric figure-of-merit enhancement in regimented quantum dot superlattices. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 415-417	3.4	131
236	A charge-density-wave oscillator based on an integrated tantalum disulfide-boron nitride-graphene device operating at room temperature. <i>Nature Nanotechnology</i> , <b>2016</b> , 11, 845-850	28.7	123
235	Phonons in twisted bilayer graphene. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	119
234	Atomically-thin crystalline films and ribbons of bismuth telluride. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 053107	3.4	117
233	Intermediate-band solar cells based on quantum dot supracrystals. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 163503	3.4	116
232	Low-frequency electronic noise in the double-gate single-layer graphene transistors. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 033103	3.4	115
231	Effect of dislocations on thermal conductivity of GaN layers. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 4316-4318	3.4	110
230	Thermal Properties of the Binary-Filler Hybrid Composites with Graphene and Copper Nanoparticles. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1904008	15.6	110
229	Growth of large-area graphene films from metal-carbon melts. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 094321	2.5	109
228	Radiative lifetime of excitons in ZnO nanocrystals: The dead-layer effect. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	108
227	ZnO Quantum Dots: Physical Properties and Optoelectronic Applications. <i>Journal of Nanoelectronics and Optoelectronics</i> , <b>2006</b> , 1, 19-38	1.3	106
226	Raman nanometrology of graphene: Temperature and substrate effects. <i>Solid State Communications</i> , <b>2009</b> , 149, 1132-1135	1.6	100
225	Thermal conductivity of twisted bilayer graphene. <i>Nanoscale</i> , <b>2014</b> , 6, 13402-8	7.7	99
224	Temperature dependence of thermal conductivity of Al <sub>x</sub> Ga <sub>1-x</sub> N thin films measured by the differential 3 $\omega$ technique. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 5230-5232	3.4	98
223	Selective chemical vapor sensing with few-layer MoS <sub>2</sub> thin-film transistors: Comparison with graphene devices. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 023115	3.4	97

222	Flicker Noise in Bilayer Graphene Transistors. <i>IEEE Electron Device Letters</i> , <b>2009</b> , 30, 288-290	4.4	97
221	Heat Removal in Silicon-on-Insulator Integrated Circuits With Graphene Lateral Heat Spreaders. <i>IEEE Electron Device Letters</i> , <b>2009</b> , 30, 1281-1283	4.4	92
220	Exciton states and optical transitions in colloidal CdS quantum dots: Shape and dielectric mismatch effects. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	92
219	Phononics of Graphene and Related Materials. <i>ACS Nano</i> , <b>2020</b> , 14, 5170-5178	16.7	91
218	Acoustic-phonon propagation in rectangular semiconductor nanowires with elastically dissimilar barriers. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	91
217	Electron and phonon energy spectra in a three-dimensional regimented quantum dot superlattice. <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	90
216	Low-frequency 1/f noise in MoS2 transistors: Relative contributions of the channel and contacts. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 153104	3.4	87
215	Phonon Engineering in Hetero- and Nanostructures. <i>Journal of Nanoelectronics and Optoelectronics</i> , <b>2007</b> , 2, 140-170	1.3	86
214	Electrical and noise characteristics of graphene field-effect transistors: ambient effects, noise sources and physical mechanisms. <i>Journal of Physics Condensed Matter</i> , <b>2010</b> , 22, 395302	1.8	83
213	Graphene related materials for thermal management. <i>2D Materials</i> , <b>2020</b> , 7, 012001	5.9	82
212	Electrothermal simulation of the self-heating effects in GaN-based field-effect transistors. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 054501	2.5	81
211	Origin of 1/f noise in graphene multilayers: Surface vs. volume. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 093113	3.4	80
210	The influence of chemical reactivity of surface defects on ambient-stable InSe-based nanodevices. <i>Nanoscale</i> , <b>2016</b> , 8, 8474-9	7.7	79
209	Thermal and electrical conductivity control in hybrid composites with graphene and boron nitride fillers. <i>Materials Research Express</i> , <b>2019</b> , 6, 085325	1.7	76
208	Raman-based technique for measuring thermal conductivity of graphene and related materials. <i>Journal of Raman Spectroscopy</i> , <b>2018</b> , 49, 106-120	2.3	74
207	Suppression of 1/f noise in near-ballistic h-BN-graphene-h-BN heterostructure field-effect transistors. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 023106	3.4	74
206	Zone-Folded Phonons and the Commensurate-Incommensurate Charge-Density-Wave Transition in 1T-TaSe2 Thin Films. <i>Nano Letters</i> , <b>2015</b> , 15, 2965-73	11.5	73
205	Thermal conduction in nanocrystalline diamond films: Effects of the grain boundary scattering and nitrogen doping. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 171915	3.4	71

204	Polar optical phonons in wurtzite spheroidal quantum dots: theory and application to ZnO and ZnO/MgZnO nanostructures. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, 1085-1097	1.8	71
203	Spin-phonon coupling in antiferromagnetic nickel oxide. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 252402	3.4	70
202	Suppression of phonon heat conduction in cross-section-modulated nanowires. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	68
201	Giant enhancement of the carrier mobility in silicon nanowires with diamond coating. <i>Nano Letters</i> , <b>2006</b> , 6, 2442-6	11.5	67
200	Thermal properties of graphene and few-layer graphene: applications in electronics. <i>IET Circuits, Devices and Systems</i> , <b>2015</b> , 9, 4-12	1.1	64
199	Phonon and thermal properties of exfoliated TaSe2 thin films. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 204301	3.1	63
198	Tuning of Graphene Properties via Controlled Exposure to Electron Beams. <i>IEEE Nanotechnology Magazine</i> , <b>2011</b> , 10, 865-870	2.6	63
197	Theoretical description of thermal transport in graphene: The issues of phonon cut-off frequencies and polarization branches. <i>Physica Status Solidi (B): Basic Research</i> , <b>2011</b> , 248, 2609-2614	1.3	63
196	Epitaxial graphene nanoribbon array fabrication using BCP-assisted nanolithography. <i>ACS Nano</i> , <b>2012</b> , 6, 6786-92	16.7	62
195	Low-frequency current fluctuations in "graphene-like" exfoliated thin-films of bismuth selenide topological insulators. <i>ACS Nano</i> , <b>2011</b> , 5, 2657-63	16.7	61
194	Thermal conductivity of ultrathin tetrahedral amorphous carbon films. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 043115	3.4	61
193	Phonon spectrum and group velocities in AlN/GaN/AlN and related heterostructures. <i>Superlattices and Microstructures</i> , <b>2003</b> , 33, 155-171	2.8	61
192	High-throughput large-area automated identification and quality control of graphene and few-layer graphene films. <i>ACS Nano</i> , <b>2011</b> , 5, 914-22	16.7	59
191	Thermal and magnetic properties of nanostructured densified ferrimagnetic composites with graphene - graphite fillers. <i>Materials and Design</i> , <b>2017</b> , 118, 75-80	8.1	58
190	Specific heat of twisted bilayer graphene: Engineering phonons by atomic plane rotations. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 031904	3.4	58
189	Reduction of lattice thermal conductivity in one-dimensional quantum-dot superlattices due to phonon filtering. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	56
188	Thermoelectric effects in wurtzite GaN and Al <sub>x</sub> Ga <sub>1-x</sub> N alloys. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 123705	2.5	56
187	Selective Gas Sensing With h-BN Capped MoS <sub>2</sub> Heterostructure Thin-Film Transistors. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 1202-1204	4.4	55

186	Selective Sensing of Individual Gases Using Graphene Devices. <i>IEEE Sensors Journal</i> , <b>2013</b> , 13, 2818-28224		55
185	Reduction of 1/f noise in graphene after electron-beam irradiation. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 153512	3.4	54
184	Direct observation of confined acoustic phonon polarization branches in free-standing semiconductor nanowires. <i>Nature Communications</i> , <b>2016</b> , 7, 13400	17.4	51
183	Metal-induced rapid transformation of diamond into single and multilayer graphene on wafer scale. <i>Nature Communications</i> , <b>2016</b> , 7, 12099	17.4	51
182	Low-Frequency Electronic Noise in Quasi-1D TaSe van der Waals Nanowires. <i>Nano Letters</i> , <b>2017</b> , 17, 377-383	18.3	51
181	Thermal conductivity inhibition in phonon engineered core-shell cross-section modulated Si/Ge nanowires. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 213109	3.4	51
180	Phonon confinement effects in hybrid virus-inorganic nanotubes for nanoelectronic applications. <i>Nano Letters</i> , <b>2005</b> , 5, 1920-3	11.5	51
179	ZnO growth on Si with low-temperature ZnO buffer layers by ECR-assisted MBE. <i>Journal of Crystal Growth</i> , <b>2006</b> , 286, 61-65	1.6	51
178	Thermal Conduction in Suspended Graphene Layers. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , <b>2010</b> , 18, 474-486	1.8	50
177	Thermal conductivity of nitrogenated ultrananocrystalline diamond films on silicon. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 083538	2.5	50
176	Breakdown current density in h-BN-capped quasi-1D TaSe <sub>3</sub> metallic nanowires: prospects of interconnect applications. <i>Nanoscale</i> , <b>2016</b> , 8, 15774-82	7.7	49
175	Graphene thickness-graded transistors with reduced electronic noise. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 033103	3.4	49
174	Gating of single-layer graphene with single-stranded deoxyribonucleic acids. <i>Small</i> , <b>2010</b> , 6, 1150-5	11	48
173	Direct Low-Temperature Integration of Nanocrystalline Diamond with GaN Substrates for Improved Thermal Management of High-Power Electronics. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 1525-1530	15.6	47
172	Graphene-based non-Boolean logic circuits. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 154310	2.5	47
171	Graphene Ambipolar Multiplier Phase Detector. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 1328-1330	4.4	47
170	Noncuring Graphene Thermal Interface Materials for Advanced Electronics. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 1901303	6.4	46
169	Plasmonic and bolometric terahertz detection by graphene field-effect transistor. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 181114	3.4	46



168	Thermal Management of Concentrated Multi-Junction Solar Cells with Graphene-Enhanced Thermal Interface Materials. <i>Applied Sciences (Switzerland)</i> , <b>2017</b> , 7, 589	2.6	46
167	Anomalous electron transport in back-gated field-effect transistors with TiTe <sub>2</sub> semimetal thin-film channels. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 043109	3.4	46
166	Optical properties of wurtzite and zinc-blende GaN/AlN quantum dots. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 2190		45
165	Confined optical phonon modes in aligned nanorod arrays detected by resonant inelastic light scattering. <i>Nano Letters</i> , <b>2007</b> , 7, 476-9	11.5	44
164	A phonon depletion effect in ultrathin heterostructures with acoustically mismatched layers. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 825-827	3.4	44
163	Toward lithium ion batteries with enhanced thermal conductivity. <i>ACS Nano</i> , <b>2014</b> , 8, 7202-7	16.7	43
162	Thermoelectric properties of electrically gated bismuth telluride nanowires. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	43
161	Built-in field effect on the electron mobility in AlN/GaN/AlN quantum wells. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 113508	3.4	42
160	Engineering of the thermodynamic properties of bilayer graphene by atomic plane rotations: the role of the out-of-plane phonons. <i>Nanoscale</i> , <b>2015</b> , 7, 12851-9	7.7	41
159	Current Carrying Capacity of Quasi-1D ZrTe <sub>3</sub> Van Der Waals Nanoribbons. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 735-738	4.4	40
158	Thermal properties of the optically transparent pore-free nanostructured yttria-stabilized zirconia. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 113507	2.5	40
157	Electrical and Thermal Conductivity of GeBi Quantum Dot Superlattices. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, G432	3.9	40
156	Vibrational Modes of Nano-Template Viruses. <i>Journal of Biomedical Nanotechnology</i> , <b>2005</b> , 1, 90-95	4	40
155	Coexistence of Magnetic Orders in Two-Dimensional Magnet CrI. <i>Nano Letters</i> , <b>2020</b> , 20, 553-558	11.5	40
154	Bias-Voltage Driven Switching of the Charge-Density-Wave and Normal Metallic Phases in 1T-TaS Thin-Film Devices. <i>ACS Nano</i> , <b>2019</b> , 13, 7231-7240	16.7	38
153	Confined electron-confined phonon scattering rates in wurtzite AlN/GaN/AlN heterostructures. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 5626-5632	2.5	38
152	Phonon-hopping thermal conduction in quantum dot superlattices. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 202105	3.4	37
151	Thermal interface materials with graphene fillers: review of the state of the art and outlook for future applications. <i>Nanotechnology</i> , <b>2021</b> , 32, 142003	3.4	37

150	Plasmonic Core-shell Zirconium Nitride/Silicon Oxynitride Nanoparticles. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 2349-2356	20.1	36
149	Low-Frequency Current Fluctuations and Sliding of the Charge Density Waves in Two-Dimensional Materials. <i>Nano Letters</i> , <b>2018</b> , 18, 3630-3636	11.5	36
148	1/f Noise Characteristics of MoS <sub>2</sub> Thin-Film Transistors: Comparison of Single and Multilayer Structures. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 517-519	4.4	35
147	Raman spectra of twisted CVD bilayer graphene. <i>Carbon</i> , <b>2017</b> , 123, 302-306	10.4	35
146	All-metallic electrically gated 2H-TaSe <sub>2</sub> thin-film switches and logic circuits. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 034305	2.5	35
145	Capacitance-Voltage Spectroscopy of Trapping States in GaN/AlGaN Heterostructure Field-Effect Transistors. <i>Journal of Nanoelectronics and Optoelectronics</i> , <b>2006</b> , 1, 258-263	1.3	34
144	Growth of graphene and graphite nanocrystals from a molten phase. <i>Journal of Materials Science</i> , <b>2011</b> , 46, 6255-6263	4.3	33
143	Multifunctional Graphene Composites for Electromagnetic Shielding and Thermal Management at Elevated Temperatures. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 2000520	6.4	33
142	Low Resistivity and High Breakdown Current Density of 10 nm Diameter van der Waals TaSe Nanowires by Chemical Vapor Deposition. <i>Nano Letters</i> , <b>2019</b> , 19, 4355-4361	11.5	32
141	Acoustic phonon spectrum and thermal transport in nanoporous alumina arrays. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 171904	3.4	32
140	Increased thermal conductivity of free-standing low-dislocation-density GaN films. <i>Physica Status Solidi A</i> , <b>2005</b> , 202, R135-R137		32
139	. <i>IEEE Spectrum</i> , <b>2009</b> , 46, 34-39	1.7	31
138	Spectroscopic raman nanometrology of graphene and graphene multilayers on arbitrary substrates. <i>Journal of Physics: Conference Series</i> , <b>2008</b> , 109, 012008	0.3	30
137	Transport study of a single bismuth nanowire fabricated by the silver and silicon nanowire shadow masks. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 141503	3.4	30
136	Variable-temperature inelastic light scattering spectroscopy of nickel oxide: Disentangling phonons and magnons. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 202406	3.4	29
135	High-temperature performance of MoS <sub>2</sub> thin-film transistors: Direct current and pulse current-voltage characteristics. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 064301	2.5	29
134	Assembly and characterization of hybrid virus-inorganic nanotubes. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 253108	3.4	29
133	Response to Comment on Modification of graphene properties due to electron-beam irradiation [Appl. Phys. Lett. 95, 246101(2009)]. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 246102	3.4	28

132	Evidence for possible flexoelectricity in tobacco mosaic viruses used as nanotemplates. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 153902	3.4	28
131	Ultrastiff, Strong, and Highly Thermally Conductive Crystalline Graphitic Films with Mixed Stacking Order. <i>Advanced Materials</i> , <b>2019</b> , 31, e1903039	24	27
130	Graphene Epoxy-Based Composites as Efficient Electromagnetic Absorbers in the Extremely High-Frequency Band. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 28635-28644	9.5	27
129	Total-Ionizing-Dose Effects on Threshold Switching in $\text{TaS}_2$ Charge Density Wave Devices. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 1724-1727	4.4	27
128	Low-frequency vibrational modes of viruses used for nanoelectronic self-assemblies. <i>Physica Status Solidi (B): Basic Research</i> , <b>2004</b> , 241, R67-R69	1.3	27
127	Interface and confined polar optical phonons in spherical ZnO quantum dots with wurtzite crystal structure. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 2650-2653		27
126	Electron mobility enhancement in $\text{AlN}/\text{GaN}/\text{AlN}$ heterostructures with InGaN nanogrooves. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 112110	3.4	26
125	Magnonic interferometric switch for multi-valued logic circuits. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 024504	2.5	25
124	Two-Dimensional Oscillatory Neural Network Based on Room-Temperature Charge-Density-Wave Devices. <i>IEEE Nanotechnology Magazine</i> , <b>2017</b> , 16, 860-867	2.6	25
123	Transistor-Less Logic Circuits Implemented With 2-D Charge Density Wave Devices. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 1449-1452	4.4	25
122	. <i>Proceedings of the IEEE</i> , <b>2013</b> , 101, 1670-1688	14.3	25
121	Charge-carrier states and light absorption in ordered quantum dot superlattices. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	25
120	Phonon and Thermal Properties of Quasi-Two-Dimensional FePS and MnPS Antiferromagnetic Semiconductors. <i>ACS Nano</i> , <b>2020</b> , 14, 2424-2435	16.7	24
119	Phonon-engineered mobility enhancement in the acoustically mismatched silicon/diamond transistor channels. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 173111	3.4	24
118	Proton-irradiation-immune electronics implemented with two-dimensional charge-density-wave devices. <i>Nanoscale</i> , <b>2019</b> , 11, 8380-8386	7.7	22
117	Size-quantized oscillations of the electron mobility limited by the optical and confined acoustic phonons in the nanoscale heterostructures. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 054304	2.5	22
116	Electrically Insulating Flexible Films with Quasi-1D van der Waals Fillers as Efficient Electromagnetic Shields in the GHz and Sub-THz Frequency Bands. <i>Advanced Materials</i> , <b>2021</b> , 33, e2007286	24	22
115	Magnetic and thermal transport properties of $\text{SrFe}_{12}\text{O}_{19}$ permanent magnets with anisotropic grain structure. <i>Materials and Design</i> , <b>2017</b> , 125, 62-68	8.1	21

114	Unique features of the generation-recombination noise in quasi-one-dimensional van der Waals nanoribbons. <i>Nanoscale</i> , <b>2018</b> , 10, 19749-19756	7.7	21
113	Design of lithium cobalt oxide electrodes with high thermal conductivity and electrochemical performance using carbon nanotubes and diamond particles. <i>Carbon</i> , <b>2018</b> , 129, 702-710	10.4	20
112	Phonon engineering in graphene and van der Waals materials. <i>MRS Bulletin</i> , <b>2014</b> , 39, 817-823	3.2	20
111	Comment on Giant exciton-light coupling in ZnO quantum dots [Appl. Phys. Lett. 81, 748 (2002)]. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 226101	3.4	20
110	Low-frequency noise spectroscopy of charge-density-wave phase transitions in vertical quasi-2D 1T-TaS <sub>2</sub> devices. <i>Applied Physics Express</i> , <b>2019</b> , 12, 037001	2.4	19
109	Monoclinic structures of niobium trisulfide. <i>APL Materials</i> , <b>2018</b> , 6, 026602	5.7	19
108	A Magnetometer Based on a Spin Wave Interferometer. <i>Scientific Reports</i> , <b>2017</b> , 7, 11539	4.9	19
107	Micro-Raman spectroscopic characterization of ZnO quantum dots, nanocrystals and nanowires <b>2007</b> ,		19
106	Power Cycling and Reliability Testing of Epoxy-Based Graphene Thermal Interface Materials. <i>Journal of Carbon Research</i> , <b>2020</b> , 6, 26	3.3	15
105	The effect of a transverse magnetic field on 1/f noise in graphene. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 173114	3.4	15
104	1/f noise in conducting channels of topological insulator materials. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2011</b> , 208, 144-146	1.6	15
103	Reduced thermal resistance of the silicon-synthetic diamond composite substrates at elevated temperatures. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 031904	3.4	15
102	Interplay of confinement, strain, and piezoelectric effects in the optical spectrum of GaN quantum dots. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2003</b> , 3, 253-6	1.3	15
101	Observation of the memory steps in graphene at elevated temperatures. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 222107	3.4	14
100	The Heat Is On: Graphene Applications. <i>IEEE Nanotechnology Magazine</i> , <b>2011</b> , 5, 15-19	1.7	13
99	Experimental investigation of Hall mobility in Ge/Si quantum dot superlattices. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3355-3357	3.4	13
98	Non-Curing Thermal Interface Materials with Graphene Fillers for Thermal Management of Concentrated Photovoltaic Solar Cells. <i>Journal of Carbon Research</i> , <b>2020</b> , 6, 2	3.3	13
97	Advances in Brillouin-Mandelstam light-scattering spectroscopy. <i>Nature Photonics</i> , <b>2021</b> , 15, 720-731	33.9	13

96	Acoustic phonon spectrum engineering in bulk crystals via incorporation of dopant atoms. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 191902	3.4	13
95	Issues of practical realization of a quantum dot register for quantum computing. <i>Journal of Electronic Materials</i> , <b>2000</b> , 29, 549-553	1.9	12
94	Near-Field Optical Transducer for Heat-Assisted Magnetic Recording for Beyond-10-Tbit/in <sup>2</sup> Densities. <i>Journal of Nanoelectronics and Optoelectronics</i> , <b>2008</b> , 3, 44-54	1.3	12
93	Extraordinary Thermal Conductivity of Graphene: Possible Applications in Thermal Management. <i>ECS Transactions</i> , <b>2010</b> , 28, 63-71	1	11
92	Thermal Properties of Graphene: Applications in Thermal Interface Materials. <i>ECS Transactions</i> , <b>2011</b> , 35, 193-199	1	11
91	Raman scattering from three-dimensionally regimented quantum dot superlattices. <i>Superlattices and Microstructures</i> , <b>2003</b> , 33, 95-101	2.8	11
90	The discrete noise of magnons. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 090601	3.4	10
89	High-frequency current oscillations in charge-density-wave 1T-TaS <sub>2</sub> devices: Revisiting the narrow band noise concept. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 163101	3.4	10
88	Grain-to-Grain Compositional Variations and Phase Segregation in Copper-Zinc-Tin-Sulfide Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 22971-6	9.5	10
87	Acoustic phonon engineering of thermal properties of silicon-based nanostructures. <i>Journal of Physics: Conference Series</i> , <b>2007</b> , 92, 012086	0.3	10
86	A comparative analysis of Ag and Cu heat sink layers in L10-FePt films for heat-assisted magnetic recording. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 07B763	2.5	9
85	Specifics of Thermal Transport in Graphene Composites: Effect of Lateral Dimensions of Graphene Fillers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	9
84	Thermal Transport in Graphene, Few-Layer Graphene and Graphene Nanoribbons. <i>Lecture Notes in Physics</i> , <b>2016</b> , 339-363	0.8	9
83	Low-Frequency Electronic Noise in Quasi-2D van der Waals Antiferromagnetic Semiconductor FePS <sub>3</sub> Signatures of Phase Transitions. <i>Advanced Electronic Materials</i> , 2100408	6.4	9
82	Strong Hot Carrier Effects in Single Nanowire Heterostructures. <i>Nano Letters</i> , <b>2019</b> , 19, 5062-5069	11.5	8
81	ZnO growth on Si with low-temperature CdO and ZnO buffer layers by molecular-beam epitaxy. <i>Journal of Electronic Materials</i> , <b>2006</b> , 35, 691-694	1.9	8
80	Graphene-based thermal interface materials <b>2011</b> ,		7
79	Noncured Graphene Thermal Interface Materials for High-Power Electronics: Minimizing the Thermal Contact Resistance. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	7

78	Low-frequency electronic noise in superlattice and random-packed thin films of colloidal quantum dots. <i>Nanoscale</i> , <b>2019</b> , 11, 20171-20178	7.7	7
77	Reliability characterization of SiON and MGHK MOSFETs using flicker noise and its correlation with the bias temperature instability. <i>Solid-State Electronics</i> , <b>2017</b> , 135, 37-42	1.7	6
76	Magnonic holographic imaging of magnetic microstructures. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2017</b> , 428, 348-356	2.8	6
75	Phononic and photonic properties of shape-engineered silicon nanoscale pillar arrays. <i>Nanotechnology</i> , <b>2020</b> , 31, 30LT01	3.4	6
74	Phonon Spectrum Engineering in Rolled-up Micro- and Nano-Architectures. <i>Applied Sciences (Switzerland)</i> , <b>2015</b> , 5, 728-746	2.6	6
73	Investigation of Thermal Crosstalk Between SOI FETs by the Subthreshold Sensing Technique. <i>IEEE Transactions on Electron Devices</i> , <b>2008</b> , 55, 1733-1740	2.9	6
72	Extremely high thermal conductivity of graphene: Prospects for thermal management applications in silicon nanoelectronics <b>2008</b> ,		6
71	Phonon spectrum and group velocities in wurtzite hetero-structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2004</b> , 1, 2658-2661		6
70	A comparative study of the thermal interface materials with graphene and boron nitride fillers <b>2014</b> ,		5
69	In-plane and cross-plane thermal conductivity of graphene: applications in thermal interface materials <b>2011</b> ,		5
68	Heat conduction properties of graphene: Prospects of thermal management applications <b>2011</b> ,		5
67	Properties of Quasi-Two-Dimensional Crystals of Titanium Ditelluride. <i>ECS Transactions</i> , <b>2010</b> , 33, 211-217		5
66	"Graphene-Like" Exfoliation of Atomically-Thin Films of Bi <sub>2</sub> Te <sub>3</sub> and Related Materials: Applications in Thermoelectrics and Topological Insulators. <i>ECS Transactions</i> , <b>2010</b> , 33, 103-117	1	5
65	Carrier-Density Fluctuation Noise and the Interface Trap Density in GaN/AlGaN HFETs. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 680, 1		5
64	Excess noise in high-current diamond diodes. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 062103	3.4	5
63	Evidence for a thermally driven charge-density-wave transition in 1T-TaS <sub>2</sub> thin-film devices: Prospects for GHz switching speed. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 093102	3.4	5
62	Room temperature depinning of the charge-density waves in quasi-two-dimensional 1T-TaS <sub>2</sub> devices. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 223101	3.4	5
61	High-Vacuum Particulate-Free Deposition of Wafer-Scale Mono-, Bi-, and Trilayer Molybdenum Disulfide with Superior Transport Properties. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 33457-33463	3.5	5

60	Low-frequency noise in graphene field-effect transistors <b>2011</b> ,		4
59	Investigation and modeling of space radiation effects in quantum dot solar cells <b>2010</b> ,		4
58	Raman nanometrology of graphene on arbitrary substrates and at variable temperature <b>2008</b> ,		4
57	Development of an Ab-initio Model of the Lattice Thermal Conductivity in Semiconductor Thin Films and Nanowires. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 677, 671		4
56	Modeling of Thermal Conductivity of Polycrystalline GaN Films. <i>Materials Research Society Symposia Proceedings</i> , <b>2003</b> , 764, 1		4
55	Electromagnetic-Polarization-Selective Composites with Quasi-1D Van der Waals Fillers: Nanoscale Material Functionality That Mimics Macroscopic Systems. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 21527-21533	9.5	4
54	Brillouin-Mandelstam spectroscopy of standing spin waves in a ferrite waveguide. <i>AIP Advances</i> , <b>2018</b> , 8, 056017	1.5	3
53	Selective gas sensing with MoS2 thin film transistors <b>2014</b> ,		3
52	Electrical and noise characteristics of graphene field-effect transistors <b>2011</b> ,		3
51	Large-Scale Automated Identification and Quality Control of Exfoliated and CVD Graphene via Image Processing Technique. <i>ECS Transactions</i> , <b>2010</b> , 33, 201-209	1	3
50	Thermal management with graphene lateral heat spreaders: A feasibility study <b>2010</b> ,		3
49	Space radiation effects modeling and analysis of quantum dot based photovoltaic cells <b>2009</b> ,		3
48	LOW-FREQUENCY ELECTRONIC NOISE IN GRAPHENE TRANSISTORS: COMPARISON WITH CARBON NANOTUBES. <i>International Journal of High Speed Electronics and Systems</i> , <b>2011</b> , 20, 161-170	0.5	3
47	Theoretical Investigation of Thermal Conductivity in Wurtzite GaN. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 731, 5111		3
46	Efficient terahertz radiation absorption by dilute graphene composites. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 063104	3.4	3
45	Low-frequency noise characteristics of GaN vertical PIN diodes Effects of design, current, and temperature. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 243505	3.4	3
44	Printed Electronic Devices with Inks of TiS Quasi-One-Dimensional van der Waals Material. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 47033-47042	9.5	3
43	Brillouin-Mandelstam spectroscopy of stress-modulated spatially confined spin waves in Ni thin films on piezoelectric substrates. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2020</b> , 501, 166440	2.8	2

42	Effects of the magnetic field variation on the spin wave interference in a magnetic cross junction. <i>AIP Advances</i> , <b>2018</b> , 8, 056619	1.5	2
41	Plasmonic and bolometric terahertz graphene sensors <b>2013</b> ,		2
40	<b>2017</b> ,		2
39	(Invited) Graphene Heat Spreaders and Interconnects for Advanced Electronic Applications. <i>ECS Transactions</i> , <b>2015</b> , 67, 167-172	1	2
38	Experimental Demonstration of Thermal Management of High-Power GaN Transistors with Graphene Lateral Heat Spreaders. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		2
37	The size-quantized oscillations of the optical-phonon-limited electron mobility in AlN/GaN/AlN nanoscale heterostructures. <i>Journal of Physics: Conference Series</i> , <b>2007</b> , 92, 012022	0.3	2
36	Simulation of Self-Heating and Temperature Effect in GaN-based Metal-Semiconductor Field-Effect Transistor. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 892, 258		2
35	Flicker Noise Reduction in GaN Field-Effect Transistors 159-188		2
34	Strain-Controlled Superconductivity in Few-Layer NbSe. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 38744-38750	9.5	2
33	Graphene-enhanced phase change materials for thermal management of battery packs <b>2014</b> ,		1
32	Graphene fillers for ultra-efficient thermal interface materials <b>2012</b> ,		1
31	Surface and volume 1/f noise in multi-layer graphene <b>2013</b> ,		1
30	Extraordinary Thermal Conductivity of Graphene: Prospects of Thermal Management Applications <b>2010</b> ,		1
29	Graphene nanoribbon crossbar nanomesh <b>2011</b> ,		1
28	Thermal Properties of Graphene and Carbon Based Materials: Prospects of Thermal Management Applications. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		1
27	Gating of single layer graphene using DNA <b>2009</b> ,		1
26	Electron-polar optical phonon scattering suppression and mobility enhancement in wurtzite heterostructures. <i>Journal of Physics: Conference Series</i> , <b>2007</b> , 92, 012050	0.3	1
25	Optical Properties of Wurtzite GaN and ZnO Quantum Dots. <i>Materials Research Society Symposia Proceedings</i> , <b>2004</b> , 818, 353		1



24	High speed nanotechnology-based photodetector <b>2005</b> ,		1
23	Oligonucleotide Metallization for Conductive Bio-Inorganic Interfaces in Self Assembled Nanoelectronics and Nanosystems. <i>Materials Research Society Symposia Proceedings</i> , <b>2005</b> , 872, 1		1
22	The Effect of Defects and Dopants on Thermal Conduction in GaN Films. <i>Materials Research Society Symposia Proceedings</i> , <b>2002</b> , 719, 8251		1
21	Investigation of the Electron Energy Spectrum in a Three Dimensional Regimented Tetragonal Quantum Dot Superlattice. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 677, 441		1
20	Low-Frequency Electronic Noise in the Back-Gated and Top-Gated Graphene Devices. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , <b>2010</b> , 205-214	0.2	1
19	Multiscale Models of Quantum Dot Based Nanomaterials and Nanodevices for Solar Cells. <i>Lecture Notes in Computer Science</i> , <b>2008</b> , 242-250	0.9	0
18	Extraction of Trap Characteristics from Excess Noise in GaN Devices. <i>Materials Research Society Symposia Proceedings</i> , <b>2001</b> , 680, 1		0
17	Thermal Conductivity of Segmented Nanowires. <i>Nanoscience and Technology</i> , <b>2016</b> , 507-531	0.6	
16	Thermal Properties of Graphene: From Physics to Applications90-103		
15	Two-Dimensional Thermal Transport in Graphene <b>2017</b> , 57-84		
14	Reversible Tuning of the Electronic Properties of Graphene via Controlled Exposure to Electron Beam Irradiation and Annealing. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		
13	Large-Area Industrial-Scale Identification and Quality Control of Graphene. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		
12	Enhancement of the Thermoelectric Figure of Merit in Gated Bismuth Telluride Nanowires. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1166, 9		
11	Top-Gate Graphene-on-UNCD Transistors with Enhanced Performance. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		
10	Graphene-Like Exfoliation of Quasi-2D Crystals of Titanium Ditelluride: A New Route to Charge Density Wave Materials. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		
9	Low-Frequency Noise in Graphene-Like Exfoliated Thin Films of Topological Insulators. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		
8	"Graphene-Like" Exfoliation and Characterization of the Atomically-Thin Films of Titanium Ditelluride. <i>ECS Transactions</i> , <b>2011</b> , 35, 205-210		1
7	DNA Gating effect from single layer graphene. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		

- 6 1/f Noise in Graphene Field-Effect Transistors: Dependence on the Device Channel Area. *Materials Research Society Symposia Proceedings*, **2011**, 1344, 1
- 5 Pseudo-Superlattices of Bi<sub>2</sub>Te<sub>3</sub> Topological Insulator Films with Enhanced Thermoelectric Performance. *Materials Research Society Symposia Proceedings*, **2011**, 1344, 1
- 4 Interpretation of the Phonon Frequency Shifts in ZnO Quantum Dots. *Materials Research Society Symposia Proceedings*, **2005**, 872, 1
- 3 Modeling of Phonon Dispersion in a Semiconductor Quantum Dot Crystal. *Materials Research Society Symposia Proceedings*, **2002**, 731, 1041
- 2 Theory and Modeling in Nanostructured Thermoelectrics **2005**, 16-1-16-10
- 1 Graphene Applications in Advanced Thermal Management **2018**, 823-865