# Junichiro Shiomi

## List of Publications by Year in Descending Order



| | | | |
|---|---|---|---|
| 182 papers | 4,791 citations | 40 h-index | 62 g-index |
| 191 ext. papers | 5,705 ext. citations | 6.1 avg, IF | 6.08 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 182 | Negligible contribution of inter-dot coherent modes to heat conduction in quantum-dot superlattice. *Materials Today Physics*, **2022**, 22, 100601 | 8 | 0 |
| 181 | A novel strategy for GaN-on-diamond device with a high thermal boundary conductance. *Journal of Alloys and Compounds*, **2022**, 905, 164076 | 5.7 | 4 |
| 180 | Phase-transition-induced giant Thomson effect for thermoelectric cooling. *Applied Physics Reviews*, **2022**, 9, 011414 | 17.3 | 1 |
| 179 | Metal□rganic framework coated porous structures for enhanced thermoelectric performance. *Energy Conversion and Management*, **2022**, 255, 115289 | 10.6 | 0 |
| 178 | Revisiting thermal conductivity and interface conductance at the nanoscale. *International Journal of Heat and Mass Transfer*, **2022**, 183, 122056 | 4.9 | 2 |
| 177 | P-TRANS: A Monte Carlo ray-tracing software to simulate phonon transport in arbitrary nanostructures. *Computer Physics Communications*, **2022**, 276, 108361 | 4.2 | 1 |
| 176 | Ultrafast water permeation through nanochannels with a densely fluorous interior surface.. *Science*, **2022**, 376, 738-743 | 33.3 | 8 |
| 175 | Ultra-high-performance heat spreader based on a graphite architecture with three-dimensional thermal routing. *Cell Reports Physical Science*, **2021**, 100621 | 6.1 | 1 |
| 174 | Optimized Tamm-plasmon structure by Differential Evolution algorithm for single and dual peaks hot-electron photodetection. *Optical Materials*, **2021**, 113, 110857 | 3.3 | 0 |
| 173 | Scalable monolayer-functionalized nanointerface for thermal conductivity enhancement in copper/diamond composite. *Carbon*, **2021**, 175, 299-306 | 10.4 | 5 |
| 172 | Modulation of Interfacial Thermal Transport between Fumed Silica Nanoparticles by Surface Chemical Functionalization for Advanced Thermal Insulation. *ACS Applied Materials & Interfaces* , **2021**, 13, 17404-17411 | 9.5 | 1 |
| 171 | Nanoconfinement between Graphene Walls Suppresses the Near-Wall Diffusion of the Ionic Liquid [BMIM][PF]. *Journal of Physical Chemistry B*, **2021**, 125, 4527-4535 | 3.4 | 4 |
| 170 | Weaker bonding can give larger thermal conductance at highly mismatched interfaces. *Science Advances*, **2021**, 7, | 14.3 | 11 |
| 169 | Exploring diamondlike lattice thermal conductivity crystals via feature-based transfer learning. *Physical Review Materials*, **2021**, 5, | 3.2 | 7 |
| 168 | Heat conduction below diffusive limit in amorphous superlattice structures. *Nano Energy*, **2021**, 84, 105903 | 17.1 | 2 |
| 167 | Thermal properties of single-walled carbon nanotube forests with various volume fractions. *International Journal of Heat and Mass Transfer*, **2021**, 171, 121076 | 4.9 | 2 |
| 166 | Akhiezer mechanism dominates relaxation of propagons in amorphous material at room temperature. *Journal of Applied Physics*, **2021**, 130, 035101 | 2.5 | 2 |

| | | | |
|---|---|---|---|
| 165 | Humidity-Dependent Thermal Boundary Conductance Controls Heat Transport of Super-Insulating Nanofibrillar Foams. *Matter*, **2021**, 4, 276-289 | 12.7 | 8 |
| 164 | Ultimate impedance of coherent heat conduction in van der Waals graphene-MoS2 heterostructures. *Materials Today Physics*, **2021**, 16, 100324 | 8 | 6 |
| 163 | Electronic transport descriptors for the rapid screening of thermoelectric materials. *Materials Horizons*, **2021**, 8, 2463-2474 | 14.4 | 2 |
| 162 | Heat diffusion-related damping process in a highly precise coarse-grained model for nonlinear motion of SWCNT. *Scientific Reports*, **2021**, 11, 563 | 4.9 | |
| 161 | Mechanically Strong, Scalable, Mesoporous Xerogels of Nanocellulose Featuring Light Permeability, Thermal Insulation, and Flame Self-Extinction. *ACS Nano*, **2021**, 15, 1436-1444 | 16.7 | 15 |
| 160 | Reduction of interface thermal resistance between TIM and metal surface by tuning wettability. *Transactions of the JSME (in Japanese)*, **2021**, 87, 21-00023-21-00023 | 0.2 | |
| 159 | Thermal Nanostructure Design by Materials Informatics. *Springer Series in Materials Science*, **2021**, 153-195 | 0.9 | |
| 158 | Above-room-temperature giant thermal conductivity switching in spintronic multilayers. *Applied Physics Letters*, **2021**, 118, 042409 | 3.4 | 8 |
| 157 | Phonon transport in multiphase nanostructured silicon fabricated by high-pressure torsion. *Journal of Applied Physics*, **2021**, 129, 085101 | 2.5 | 6 |
| 156 | Anisotropic thermal conductivity measurement of organic thin film with bidirectional 3ω method. *Review of Scientific Instruments*, **2021**, 92, 034902 | 1.7 | 3 |
| 155 | Synergistic phonon scattering in epitaxial silicon multilayers with germanium nanodot inclusions. *Physical Review B*, **2021**, 104, | 3.3 | 2 |
| 154 | Tailoring the surface morphology of carbon nanotube forests by plasma etching: A parametric study. *Carbon*, **2021**, 180, 204-214 | 10.4 | 2 |
| 153 | Thermal transport by phonons in thermoelectrics **2021**, 23-42 | | |
| 152 | Enhanced Reduction of Thermal Conductivity in Amorphous Silicon Nitride-Containing Phononic Crystals Fabricated Using Directed Self-Assembly of Block Copolymers. *ACS Nano*, **2020**, 14, 6980-6989 | 16.7 | 6 |
| 151 | Machine-Learning-Optimized Aperiodic Superlattice Minimizes Coherent Phonon Heat Conduction. *Physical Review X*, **2020**, 10, | 9.1 | 29 |
| 150 | Two-path phonon interference resonance induces a stop band in a silicon crystal matrix with a multilayer array of embedded nanoparticles. *Physical Review B*, **2020**, 102, | 3.3 | 5 |
| 149 | Elastic inhomogeneity and anomalous thermal transport in ultrafine Si phononic crystals. *Nano Energy*, **2020**, 71, 104581 | 17.1 | 10 |
| 148 | Contact-line behavior in boiling on a heterogeneous surface: Physical insights from diffuse-interface modeling. *Physical Review Fluids*, **2020**, 5, | 2.8 | 4 |

| | | | |
|---|---|---|---|
| 147 | Designing metamaterials with quantum annealing and factorization machines. *Physical Review Research*, **2020**, 2, | 3.9 | 25 |
| 146 | Machine learning analysis of tunnel magnetoresistance of magnetic tunnel junctions with disordered MgAl2O4. *Physical Review Research*, **2020**, 2, | 3.9 | 4 |
| 145 | Design of a highly selective radiative cooling structure accelerated by materials informatics. *Optics Letters*, **2020**, 45, 343 | 3 | 10 |
| 144 | Designing thermal functional materials by coupling thermal transport calculations and machine learning. *Journal of Applied Physics*, **2020**, 128, 161102 | 2.5 | 10 |
| 143 | Identifying Optimal Strain in Bismuth Telluride Thermoelectric Film by Combinatorial Gradient Thermal Annealing and Machine Learning. *ACS Combinatorial Science*, **2020**, 22, 782-790 | 3.9 | 2 |
| 142 | Quasiballistic phonon transport from first principles. *Physical Review B*, **2020**, 102, | 3.3 | 3 |
| 141 | Ultimate suppression of thermal transport in amorphous silicon nitride by phononic nanostructure. *Science Advances*, **2020**, 6, | 14.3 | 8 |
| 140 | Scalable Multi-nanostructured Silicon for Room-Temperature Thermoelectrics. *ACS Applied Energy Materials*, **2019**, 2, 7083-7091 | 6.1 | 5 |
| 139 | Enhancing Thermal Boundary Conductance of Graphite-Metal Interface by Triazine-Based Molecular Bonding. *ACS Applied Materials & Interfaces*, **2019**, 11, 37295-37301 | 9.5 | 11 |
| 138 | Predicting Materials Properties with Little Data Using Shotgun Transfer Learning. *ACS Central Science*, **2019**, 5, 1717-1730 | 16.8 | 89 |
| 137 | Unexpectedly high cross-plane thermoelectric performance of layered carbon nitrides. *Journal of Materials Chemistry A*, **2019**, 7, 2114-2121 | 13 | 34 |
| 136 | Quantifying phonon particle and wave transport in silicon nanophononic metamaterial with cross junction. *Materials Today Physics*, **2019**, 8, 56-61 | 8 | 35 |
| 135 | Ultranarrow-Band Wavelength-Selective Thermal Emission with Aperiodic Multilayered Metamaterials Designed by Bayesian Optimization. *ACS Central Science*, **2019**, 5, 319-326 | 16.8 | 64 |
| 134 | Revealing How Topography of Surface Microstructures Alters Capillary Spreading. *Scientific Reports* , **2019**, 9, 7787 | 4.9 | 5 |
| 133 | Disorder limits the coherent phonon transport in two-dimensional phononic crystal structures. *Nanoscale*, **2019**, 11, 11839-11846 | 7.7 | 40 |
| 132 | Porosity-tuned thermal conductivity in thermoelectric Al-doped ZnO thin films grown by mist-chemical vapor deposition. *Thin Solid Films*, **2019**, 685, 180-185 | 2.2 | 23 |
| 131 | Monte Carlo tree search for materials design and discovery. *MRS Communications*, **2019**, 9, 532-536 | 2.7 | 15 |
| 130 | Encrypted Thermal Printing with Regionalization Transformation. *Advanced Materials*, **2019**, 31, e1807849 | 24 | 70 |

| | | | |
|---|---|---|---|
| 129 | Semiconducting carbon nanotubes as crystal growth templates and grain bridges in perovskite solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 12987-12992 | 13 | 44 |
| 128 | Parametric Model to Analyze the Components of the Thermal Conductivity of a Cellulose-Nanofibril Aerogel. *Physical Review Applied*, **2019**, 11, | 4.3 | 15 |
| 127 | Materials Informatics for Heat Transfer: Recent Progresses and Perspectives. *Nanoscale and Microscale Thermophysical Engineering*, **2019**, 23, 157-172 | 3.7 | 24 |
| 126 | High Thermal Boundary Conductance across Bonded Heterogeneous GaN-SiC Interfaces. *ACS Applied Materials & Interfaces*, **2019**, 11, 33428-33434 | 9.5 | 41 |
| 125 | Machine-learning-assisted discovery of polymers with high thermal conductivity using a molecular design algorithm. *Npj Computational Materials*, **2019**, 5, | 10.9 | 112 |
| 124 | Hybrid Thermal Transport Characteristics of Doped Organic Semiconductor Poly(3,4-ethylenedioxythiophene):Tosylate. *Journal of Physical Chemistry C*, **2019**, 123, 26735-26741 | 3.8 | 20 |
| 123 | High-Working-Pressure Sputtering of ZnO for Stable and Efficient Perovskite Solar Cells. *ACS Applied Electronic Materials*, **2019**, 1, 389-396 | 4 | 13 |
| 122 | One-directional thermal transport in densely aligned single-wall carbon nanotube films. *Applied Physics Letters*, **2019**, 115, 223104 | 3.4 | 15 |
| 121 | Spectral Control of Thermal Boundary Conductance between Copper and Carbon Crystals by Self-Assembled Monolayers. *ACS Applied Electronic Materials*, **2019**, 1, 2594-2601 | 4 | 10 |
| 120 | Observation of anomalous Ettingshausen effect and large transverse thermoelectric conductivity in permanent magnets. *Applied Physics Letters*, **2019**, 115, 222403 | 3.4 | 22 |
| 119 | Towards ultimate impedance of phonon transport by nanostructure interface. *APL Materials*, **2019**, 7, 013102 | 5.7 | 17 |
| 118 | Tuning phonon transport spectrum for better thermoelectric materials. *Science and Technology of Advanced Materials*, **2019**, 20, 10-25 | 7.1 | 25 |
| 117 | Superlubrication by phonon confinement. *Physical Review B*, **2018**, 97, | 3.3 | 11 |
| 116 | Ultimate Confinement of Phonon Propagation in Silicon Nanocrystalline Structure. *Physical Review Letters*, **2018**, 120, 045901 | 7.4 | 38 |
| 115 | Dynamic Wetting of Nanodroplets on Smooth and Patterned Graphene-Coated Surface. *Journal of Physical Chemistry C*, **2018**, 122, 8423-8429 | 3.8 | 13 |
| 114 | Thermal conductivity reduction in silicon fishbone nanowires. *Scientific Reports*, **2018**, 8, 4452 | 4.9 | 39 |
| 113 | Thermal phonon engineering by tailored nanostructures. *Japanese Journal of Applied Physics*, **2018**, 57, 080101 | 1.4 | 76 |
| 112 | Impact of metastable phases on electrical properties of Si with different doping concentrations after processing by high-pressure torsion. *Scripta Materialia*, **2018**, 157, 120-123 | 5.6 | 11 |

| | | | |
|---|---|---|---|
| 111 | Phonon Lifetime Observation in Epitaxial ScN Film with Inelastic X-Ray Scattering Spectroscopy. *Physical Review Letters*, **2018**, 120, 235901 | 7.4 | 16 |
| 110 | Multifunctional structural design of graphene thermoelectrics by Bayesian optimization. *Science Advances*, **2018**, 4, eaar4192 | 14.3 | 75 |
| 109 | Effect of dissolved gas on bubble growth on a biphilic surface: A diffuse-interface simulation approach. *International Journal of Heat and Mass Transfer*, **2018**, 126, 816-829 | 4.9 | 4 |
| 108 | Ultra-Narrowband Wavelength-Selective Thermal Emitter Designed by Bayesian Optimization. *The Proceedings of the Thermal Engineering Conference*, **2018**, 2018, 0135 | 0 | |
| 107 | Modulating temperature dependence of thermal conductivity by nanostructuring. *Japanese Journal of Applied Physics*, **2018**, 57, 120312 | 1.4 | 1 |
| 106 | Thermal Boundary Conductance Across Heteroepitaxial ZnO/GaN Interfaces: Assessment of the Phonon Gas Model. *Nano Letters*, **2018**, 18, 7469-7477 | 11.5 | 37 |
| 105 | Molecular dynamics study on heat conduction in poly(3,4-ethylenedioxythiophene). *Japanese Journal of Applied Physics*, **2018**, 57, 101601 | 1.4 | 6 |
| 104 | Modeling Heat Conduction in Nanoporous Silicon with Geometry Distributions. *Physical Review Applied*, **2018**, 10, | 4.3 | 10 |
| 103 | Fabrication of uniform vertically-aligned carbon nanotube–polymer composite thin films by capillary flow intrusion. *Japanese Journal of Applied Physics*, **2018**, 57, 115101 | 1.4 | 3 |
| 102 | Akhiezer mechanism limits coherent heat conduction in phononic crystals. *Physical Review B*, **2018**, 98, | 3.3 | 12 |
| 101 | Revisiting PbTe to identify how thermal conductivity is really limited. *Physical Review B*, **2018**, 97, | 3.3 | 21 |
| 100 | Electrostatic cloaking of surface structure for dynamic wetting. *Science Advances*, **2017**, 3, e1602202 | 14.3 | 7 |
| 99 | Thermal rectification in restructured graphene with locally modulated temperature dependence of thermal conductivity. *Physical Review B*, **2017**, 96, | 3.3 | 13 |
| 98 | Designing Nanostructures for Phonon Transport via Bayesian Optimization. *Physical Review X*, **2017**, 7, | 9.1 | 93 |
| 97 | MDTS: automatic complex materials design using Monte Carlo tree search. *Science and Technology of Advanced Materials*, **2017**, 18, 498-503 | 7.1 | 34 |
| 96 | Modulation of thermal and thermoelectric transport in individual carbon nanotubes by fullerene encapsulation. *Nature Materials*, **2017**, 16, 892-897 | 27 | 83 |
| 95 | Early Onset of Nucleate Boiling on Gas-covered Biphilic Surfaces. *Scientific Reports*, **2017**, 7, 2036 | 4.9 | 29 |
| 94 | Effects of defects on thermoelectric properties of carbon nanotubes. *Physical Review B*, **2017**, 95, | 3.3 | 45 |

| | | | |
|---|---|---|---|
| 93 | Understanding decoupling mechanisms of liquid-mixture transport properties through regression analysis with structural perturbation. *International Journal of Heat and Mass Transfer*, **2017**, 105, 12-17 | 4.9 | 1 |
| 92 | Phonon-interference resonance effects by nanoparticles embedded in a matrix. *Physical Review B*, **2017**, 96, | 3.3 | 18 |
| 91 | Probing length-scale separation of thermal and spin currents by nanostructuring YIG. *Physical Review Materials*, **2017**, 1, | 3.2 | 13 |
| 90 | Mechanism of Temperature Dependent Thermal Transport across the Interface between Self-Assembled Monolayer and Water. *Journal of Physical Chemistry C*, **2016**, 120, 26678-26685 | 3.8 | 28 |
| 89 | Nano-cross-junction effect on phonon transport in silicon nanowire cages. *Physical Review B*, **2016**, 94, | 3.3 | 84 |
| 88 | Heat conduction in nanostructured materials. *Journal of Thermal Science and Technology*, **2016**, 11, JTST0001-JTST0001 | 0.6 | 17 |
| 87 | Effects of phonon interference through long range interatomic bonds on thermal interface conductance. *Low Temperature Physics*, **2016**, 42, 711-716 | 0.7 | 8 |
| 86 | Research Update: Phonon engineering of nanocrystalline silicon thermoelectrics. *APL Materials*, **2016**, 4, 104504 | 5.7 | 21 |
| 85 | Harmonic phonon theory for calculating thermal conductivity spectrum from first-principles dispersion relations. *Applied Physics Letters*, **2016**, 108, 201903 | 3.4 | 7 |
| 84 | Long-range interatomic forces can minimize heat transfer: From slowdown of longitudinal optical phonons to thermal conductivity minimum. *Physical Review B*, **2016**, 94, | 3.3 | 4 |
| 83 | When and how surface structure determines the dynamics of partial wetting. *Europhysics Letters*, **2015**, 110, 46002 | 1.6 | 5 |
| 82 | Crystalline-Amorphous Silicon Nanocomposites with Reduced Thermal Conductivity for Bulk Thermoelectrics. *ACS Applied Materials & Interfaces*, **2015**, 7, 13484-9 | 9.5 | 45 |
| 81 | Tuning thermal conductance across sintered silicon interface by local nanostructures. *Nano Energy*, **2015**, 13, 601-608 | 17.1 | 21 |
| 80 | Thermal conductance of silicon interfaces directly bonded by room-temperature surface activation. *Applied Physics Letters*, **2015**, 106, 081603 | 3.4 | 17 |
| 79 | Effective phonon mean free path in polycrystalline nanostructures. *Applied Physics Letters*, **2015**, 106, 171901 | 3.4 | 67 |
| 78 | Impeded thermal transport in Si multiscale hierarchical architectures with phononic crystal nanostructures. *Physical Review B*, **2015**, 91, | 3.3 | 58 |
| 77 | Enhancement of anomalous Nernst effects in metallic multilayers free from proximity-induced magnetism. *Physical Review B*, **2015**, 92, | 3.3 | 68 |
| 76 | Unconventional scaling and significant enhancement of the spin Seebeck effect in multilayers. *Physical Review B*, **2015**, 92, | 3.3 | 62 |

| | | | |
|---|---|---|---|
| 75 | Thermally induced nonlinear vibration of single-walled carbon nanotubes. *Physical Review B*, **2015**, 92, | 3.3 | 11 |
| 74 | Surface structure determines dynamic wetting. *Scientific Reports*, **2015**, 5, 8474 | 4.9 | 46 |
| 73 | Alloy composition of half-Heusler compounds for high thermoelectric performance. *Transactions of the JSME (in Japanese)*, **2015**, 81, 14-00652-14-00652 | 0.2 | |
| 72 | Thermal Conductance Analysis of Sintered Nanostructures from the Viewpoint of Phonon Transport. *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, **2015**, 62, 169-174 | 0.2 | |
| 71 | Nanoscale thermal conductivity spectroscopy by using gold nano-islands heat absorbers. *Applied Physics Letters*, **2015**, 106, 073102 | 3.4 | 15 |
| 70 | Hot extrusion to manufacture the metal matrix composite of carbon nanotube and aluminum with excellent electrical conductivities and mechanical properties. *CIRP Annals - Manufacturing Technology*, **2015**, 64, 257-260 | 4.9 | 11 |
| 69 | Anomalous reduction of thermal conductivity in coherent nanocrystal architecture for silicon thermoelectric material. *Nano Energy*, **2015**, 12, 845-851 | 17.1 | 120 |
| 68 | Thermal Interface Conductance Between Aluminum and Silicon by Molecular Dynamics Simulations. *Journal of Computational and Theoretical Nanoscience*, **2015**, 12, 168-174 | 0.3 | 54 |
| 67 | Scaling laws of cumulative thermal conductivity for short and long phonon mean free paths. *Applied Physics Letters*, **2014**, 105, 131901 | 3.4 | 23 |
| 66 | Thermal conductivity of bulk nanostructured lead telluride. *Applied Physics Letters*, **2014**, 104, 021915 | 3.4 | 23 |
| 65 | Probing and tuning inelastic phonon conductance across finite-thickness interface. *Applied Physics Express*, **2014**, 7, 121801 | 2.4 | 36 |
| 64 | NONEQUILIRIUM MOLECULAR DYNAMICS METHODS FOR LATTICE HEAT CONDUCTION CALCULATIONS. *Annual Review of Heat Transfer*, **2014**, 17, 177-203 | 2.7 | 35 |
| 63 | 22pm1-E2 Numerical simulation of effective phonon mean free path in polycrystalline nanostructures. *The Proceedings of the Symposium on Micro-Nano Science and Technology*, **2014**, 2014.6, _22pm1-E2--_22pm1-E2- | 0 | |
| 62 | Anomalous Thermal Conduction Characteristics of Phase Change Composites with Single-Walled Carbon Nanotube Inclusions. *Journal of Physical Chemistry C*, **2013**, 117, 15409-15413 | 3.8 | 65 |
| 61 | Thermal resistance and phonon scattering at the interface between carbon nanotube and amorphous polyethylene. *International Journal of Heat and Mass Transfer*, **2013**, 67, 1024-1029 | 4.9 | 62 |
| 60 | Gallium arsenide thermal conductivity and optical phonon relaxation times from first-principles calculations. *Europhysics Letters*, **2013**, 101, 16001 | 1.6 | 82 |
| 59 | Tunable electrical and thermal transport in ice-templated multilayer graphene nanocomposites through freezing rate control. *ACS Nano*, **2013**, 7, 11183-9 | 16.7 | 62 |
| 58 | Enhancement of thermoelectric figure-of-merit at low temperatures by titanium substitution for hafnium in n-type half-Heuslers Hf0.75TixZr0.25NiSn0.99Sb0.01. *Nano Energy*, **2013**, 2, 82-87 | 17.1 | 86 |

| | | | |
|---|---|---|---|
| 57 | Dynamic wetting at the nanoscale. *Physical Review E*, **2013**, 88, 033010 | 2.4 | 29 |
| 56 | Phonon transport analysis of silicon germanium alloys using molecular dynamics simulations. *Journal of Applied Physics*, **2013**, 113, 203514 | 2.5 | 23 |
| 55 | Gas□Surface Energy Exchange in Collisions of Helium Atoms with Aligned Single-Walled Carbon Nanotube Arrays. *Journal of Physical Chemistry C*, **2013**, 117, 14254-14260 | 3.8 | 5 |
| 54 | Importance of local force fields on lattice thermal conductivity reduction in PbTe 1□ Se x alloys. *Europhysics Letters*, **2013**, 102, 46002 | 1.6 | 34 |
| 53 | Molecular Dynamics of Highly Efficient Flow at the Nanoscale. *Journal of the Visualization Society of Japan*, **2013**, 33, 14-18 | 0 | |
| 52 | 7PM1-C-4 Influence of interface structure on phonon transport in bulk nanostructured thermoelectric materials. *The Proceedings of the Symposium on Micro-Nano Science and Technology*, **2013**, 2013.5, 283-284 | 0 | |
| 51 | Microscopic mechanism of low thermal conductivity in lead telluride. *Physical Review B*, **2012**, 85, | 3.3 | 101 |
| 50 | Simulation study on the adsorption properties of linear alkanes on closed nanotube bundles. *Journal of Physical Chemistry B*, **2012**, 116, 9812-9 | 3.4 | 15 |
| 49 | Diameter modulation of vertically aligned single-walled carbon nanotubes. *ACS Nano*, **2012**, 6, 7472-9 | 16.7 | 48 |
| 48 | Influence of ion size and charge on osmosis. *Journal of Physical Chemistry B*, **2012**, 116, 4206-11 | 3.4 | 21 |
| 47 | Diameter controlled chemical vapor deposition synthesis of single-walled carbon nanotubes. *Journal of Nanoscience and Nanotechnology*, **2012**, 12, 370-6 | 1.3 | 17 |
| 46 | Effect of bending buckling of carbon nanotubes on thermal conductivity of carbon nanotube materials. *Journal of Applied Physics*, **2012**, 111, 053501 | 2.5 | 34 |
| 45 | Stronger phonon scattering by larger differences in atomic mass and size in p-type half-Heuslers Hf1□TixCoSb0.8Sn0.2. *Energy and Environmental Science*, **2012**, 5, 7543 | 35.4 | 205 |
| 44 | Growth of Horizontally Aligned Single-Walled Carbon Nanotubes on the Singular R-Plane (10□1) of Quartz. *Journal of Physical Chemistry C*, **2012**, 116, 6805-6808 | 3.8 | 10 |
| 43 | Generalized model of thermal boundary conductance between SWNT and surrounding supercritical Lennard-Jones fluid □derivation from molecular dynamics simulations. *International Journal of Heat and Mass Transfer*, **2012**, 55, 2008-2013 | 4.9 | 5 |
| 42 | Enhanced thermal conductivity of ethylene glycol with single-walled carbon nanotube inclusions. *International Journal of Heat and Mass Transfer*, **2012**, 55, 3885-3890 | 4.9 | 105 |
| 41 | Graphene-diamond hybrid structure as spin-polarized conducting wire with thermally efficient heat sinks. *Applied Physics Letters*, **2012**, 100, 233101 | 3.4 | 12 |
| 40 | Temperature Dependent Thermal Conductivity Increase of Aqueous Nanofluid with Single Walled Carbon Nanotube Inclusion. *Materials Express*, **2012**, 2, 213-223 | 1.3 | 48 |

| | | | |
|---|---|---|---|
| 39 | P-OS5-3 Lattice thermal conductivity calculations of nanostructured thermoelectric materials using Monte Carlo method. *The Proceedings of the Symposium on Micro-Nano Science and Technology*, **2012**, 2012.4, 285-286 | 0 | |
| 38 | Facile fabrication of all-SWNT field-effect transistors. *Nano Research*, **2011**, 4, 580-588 | 10 | 10 |
| 37 | Tunable separation of single-walled carbon nanotubes by dual-surfactant density gradient ultracentrifugation. *Nano Research*, **2011**, 4, 623-634 | 10 | 24 |
| 36 | Anisotropic electrical conduction of vertically-aligned single-walled carbon nanotube films. *Carbon*, **2011**, 49, 1446-1452 | 10.4 | 27 |
| 35 | Thermal conductivity of half-Heusler compounds from first-principles calculations. *Physical Review B*, **2011**, 84, | 3.3 | 163 |
| 34 | Isotope-induced elastic scattering of optical phonons in individual suspended single-walled carbon nanotubes. *Applied Physics Letters*, **2011**, 99, 093104 | 3.4 | 4 |
| 33 | Reduction of phonon lifetimes and thermal conductivity of a carbon nanotube on amorphous silica. *Physical Review B*, **2011**, 84, | 3.3 | 62 |
| 32 | MP-3 Phonon transport analysis of silicon crystal by molecular dynamics method. *The Proceedings of the Symposium on Micro-Nano Science and Technology*, **2011**, 2011.3, 73-74 | 0 | |
| 31 | Evaluation of adsorption capacity of single-walled carbon nanotubes for application to micro gas preconcentrators **2010**, | | 1 |
| 30 | Parametric study of alcohol catalytic chemical vapor deposition for controlled synthesis of vertically aligned single-walled carbon nanotubes. *Journal of Nanoscience and Nanotechnology*, **2010**, 10, 3901-6 | 1.3 | 11 |
| 29 | Ion Desorption from Single-Walled Carbon Nanotubes Induced by Soft X-ray Illumination. *Japanese Journal of Applied Physics*, **2010**, 49, 105104 | 1.4 | 2 |
| 28 | Temperature-dependent phonon conduction and nanotube engagement in metalized single wall carbon nanotube films. *Nano Letters*, **2010**, 10, 2395-400 | 11.5 | 60 |
| 27 | Growth mechanism of single-walled carbon nanotube from catalytic reaction inside carbon nanotube template. *ACS Nano*, **2010**, 4, 4769-75 | 16.7 | 7 |
| 26 | Thermal Boundary Conduction between a Single-Walled Carbon Nanotube and Surrounding Material(Thermal Engineering). *880-02 Nihon Kikai Gakkai Ronbunsh Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2010**, 76, 642-649 | | 1 |
| 25 | Scattering Process of Transmitted Gas Molecules Through Vertically Aligned Single-Walled Carbon Nanotube Arrays(The 1st Symposium on Micro-Nano Engineering). *Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C*, **2010**, 76, 1933-1935 | | |
| 24 | Magneto-Absorption Spectra from Selected Chirality of Single-Walled Carbon Nanotubes. *Journal of Low Temperature Physics*, **2010**, 159, 267-271 | 1.3 | |
| 23 | Diffusive-Ballistic Heat Conduction of Carbon Nanotubes and Nanographene Ribbons. *International Journal of Thermophysics*, **2010**, 31, 1945-1951 | 2.1 | 24 |
| 22 | Micro Gas Preconcentrator Made of a Film of Single-Walled Carbon Nanotubes. *IEEJ Transactions on Sensors and Micromachines*, **2010**, 130, 207-211 | 0.2 | 12 |

| | | | |
|---|---|---|---|
| 21 | MNM-4A-2 Diameter controlled CVD synthesis of single-walled carbon nanotubes. *The Proceedings of the Symposium on Micro-Nano Science and Technology*, **2010**, 2010.2, 173-174 | 0 | |
| 20 | Dielectric relaxation of water inside a single-walled carbon nanotube. *Physical Review B*, **2009**, 80, | 3.3 | 18 |
| 19 | Carbon Nanotube Stationary Phase in a Microfabricated Column for High-Performance Gas Chromatography **2009**, | | 8 |
| 18 | Numerical calculation of the dielectrophoretic force on a slender body. *Electrophoresis*, **2009**, 30, 831-8 | 3.6 | 2 |
| 17 | Mechanism and Optimization of Metal Deposition onto Vertically Aligned Single-Walled Carbon Nanotube Arrays. *Journal of Physical Chemistry C*, **2009**, 113, 14230-14235 | 3.8 | 8 |
| 16 | Water transport inside a single-walled carbon nanotube driven by a temperature gradient. *Nanotechnology*, **2009**, 20, 055708 | 3.4 | 70 |
| 15 | High-precision selective deposition of catalyst for facile localized growth of single-walled carbon nanotubes. *Journal of the American Chemical Society*, **2009**, 131, 10344-5 | 16.4 | 27 |
| 14 | Molecular Dynamics Simulation of a Single-Walled Carbon Nanotube Nucleation from a Catalytic Metal Cluster under Confinement(Thermal Engineering). *880-02 Nihon Kikai Gakkai Ronbunsh Transactions of the Japan Society of Mechanical Engineers Series B B-hen*, **2009**, 75, 2060-2067 | | |
| 13 | M1-5 Optimization of catalyst deposition by spin-coating for synthesis of vertically-aligned single-walled carbon nanotube arrays (M1 Fabrication Technology and NEMS/MEMS Material). *The Proceedings of the Symposium on Micro-Nano Science and Technology*, **2009**, 2009.1, 23-24 | 0 | |
| 12 | Report on 6th U.S. Japan Joint Seminar on Nanoscale Transport Phenomena Science and Engineering. *Nanoscale and Microscale Thermophysical Engineering*, **2008**, 12, 273-293 | 3.7 | 1 |
| 11 | Vertically Aligned13C Single-Walled Carbon Nanotubes Synthesized by No-Flow Alcohol Chemical Vapor Deposition and their Root Growth Mechanism. *Japanese Journal of Applied Physics*, **2008**, 47, 1971-1974 | 1.4 | 24 |
| 10 | Thermal boundary resistance between single-walled carbon nanotubes and surrounding matrices. *Physical Review B*, **2008**, 78, | 3.3 | 109 |
| 9 | Molecular Dynamics of Diffusive-Ballistic Heat Conduction in Single-Walled Carbon Nanotubes. *Japanese Journal of Applied Physics*, **2008**, 47, 2005-2009 | 1.4 | 105 |
| 8 | Molecular Dynamics of Ice-Nanotube Formation Inside Carbon Nanotubes. *Journal of Physical Chemistry C*, **2007**, 111, 12188-12193 | 3.8 | 51 |
| 7 | Molecular Dynamics Simulations of Diffusive-Ballistic Heat Conduction in Carbon Nanotubes. *Materials Research Society Symposia Proceedings*, **2007**, 1022, 1 | | 1 |
| 6 | Electrothermal flow in dielectrophoresis of single-walled carbon nanotubes. *Physical Review B*, **2007**, 76, | 3.3 | 10 |
| 5 | Non-Fourier heat conduction in a single-walled carbon nanotube: Classical molecular dynamics simulations. *Physical Review B*, **2006**, 73, | 3.3 | 194 |
| 4 | Anisotropic Heat Transfer of Single-Walled Carbon Nanotubes. *Journal of Thermal Science and Technology*, **2006**, 1, 138-148 | 0.6 | 84 |

| | | | |
|---|---|---|---|
| 3 | Control of oscillatory thermocapillary convection with local heating. *Journal of Crystal Growth*, **2006** , 286, 502-511 | 1.6 | 1 |
| 2 | Experiment on multimode feedback control of non-linear thermocapillary convection in a half-zone liquid bridge. *Advances in Space Research*, **2005**, 36, 57-63 | 2.4 | |
| 1 | Feedback control of oscillatory thermocapillary convection in a half-zone liquid bridge. *Journal of Fluid Mechanics*, **2003**, 496, 193-211 | 3.7 | 17 |