



Ronggui Yang

Professor of Mechanical Engineering, University of Colorado, Boulder
[Heat Transfer](#), [Nanoscale Heat Transfer](#), [Thermal Management](#),
[Electronics Cooling](#), [Thermal Sciences](#)

Google Scholar

Citation indices

	All	Since 2012
Citations	7730	5819
h-index	39	36
i10-index	92	84

Title 1–20

[New Directions for Low-Dimensional Thermoelectric Materials](#)

MS Dresselhaus, G Chen, MY Tang, RG Yang, H Lee, DZ Wang, ZF Ren, ...
 Advanced Materials 19 (8), 1043-1053

2294 2007

[Thermal conductivity modeling of periodic two-dimensional nanocomposites](#)

R Yang, G Chen
 Physical Review B 69 (19), 195316

395 2004

[Thermal conductivity of simple and tubular nanowire composites in the longitudinal direction](#)

R Yang, G Chen, MS Dresselhaus
 Physical Review B 72 (12), 125418

311 2005

[Strain effects on the thermal conductivity of nanostructures](#)

X Li, K Maute, ML Dunn, R Yang
 Physical Review B 81 (24), 245318

281 2010

[The nature of strength enhancement and weakening by pentagon–heptagon defects in graphene](#)

Y Wei, J Wu, H Yin, X Shi, R Yang, M Dresselhaus
 Nature Materials 11 (9), 759-763

251 2012

[Modeling the thermal conductivity and phonon transport in nanoparticle composites using Monte Carlo simulation](#)

MS Jeng, R Yang, D Song, G Chen
 Journal of Heat Transfer 130 (4), 042410

247 2008

[Quasi-ballistic thermal transport from nanoscale interfaces observed using ultrafast coherent soft X-ray beams](#)

ME Siemens, Q Li, R Yang, KA Nelson, EH Anderson, MM Murnane, ...
 Nature materials 9 (1), 26-30

243 2010

[Three-Dimensional Ni/TiO₂ Nanowire Network for High Areal Capacity Lithium-Ion Microbattery Applications](#)

W Wang, M Tian, A Abdulagatov, SM George, YC Lee, R Yang
 Nano Letters

168 2012

Title 1–20	Cited by	Year
Thermal conductivity modeling of core-shell and tubular nanowires R Yang, G Chen, MS Dresselhaus Nano letters 5 (6), 1111-1115	163	2005
Simulation of nanoscale multidimensional transient heat conduction problems using ballistic-diffusive equations and phonon boltzmann equation R Yang, G Chen, M Laroche, Y Taur Journal of heat transfer 127, 298	124	2005
Al₂O₃ and TiO₂ atomic layer deposition on copper for water corrosion resistance AI Abdulagatov, Y Yan, JR Cooper, Y Zhang, ZM Gibbs, AS Cavanagh, ... ACS Applied Materials & Interfaces 3 (12), 4593-4601	121	2011
Supercooling of Peltier cooler using a current pulse GJ Snyder, JP Fleurial, T Caillat, R Yang, G Chen Journal of applied physics 92 (3), 1564-1569	108	2002
Bending rigidity and Gaussian bending stiffness of single-layered graphene Y Wei, B Wang, J Wu, R Yang, M Dunn Nano Letters	99	2013
Flexible n-type thermoelectric materials by organic intercalation of layered transition metal dichalcogenide TiS₂ C Wan, X Gu, F Dang, T Itoh, Y Wang, H Sasaki, M Kondo, K Koga, ... Nature materials 14 (6), 622-627	95	2015
Nanoscale heat transfer G Chen, D Borca-Tasciuc, RG Yang Encyclopedia of Nanoscience and Nanotechnology 7, 429-459	94	2004
The mechanical robustness of atomic-layer-and molecular-layer-deposited coatings on polymer substrates DC Miller, RR Foster, Y Zhang, SH Jen, JA Bertrand, Z Lu, D Seghete, ... Journal of Applied Physics 105 (9), 093527	92	2009
Transient cooling of thermoelectric coolers and its applications for microdevices R Yang, G Chen, AR Kumar, GJ Snyder, JP Fleurial Energy Conversion and Management 46 (9), 1407-1421	90	2005

Title	1–20	Cited by	Year
Semiclassical model for thermoelectric transport in nanocomposites	J Zhou, X Li, G Chen, R Yang Physical Review B 82 (11), 115308	76	2010
Thermal conductivity modeling of compacted nanowire composites	W Tian, R Yang Journal of Applied Physics 101 (5), 054320	68	2007
Multiscale thermal analysis for nanometer-scale integrated circuits	Z Hassan, N Allec, L Shang, RP Dick, V Venkatraman, R Yang Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions ...	65 *	2009

Dates and citation counts are estimated and are determined automatically by a computer program.