

JIHUI YANG, Ph. D.

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EDUCATION

1989 B. S., physics, Fudan University, Shanghai, P. R. China
1991 M. S., physics, University of Oregon, Eugene, Oregon
2000 Ph. D., physics, University of Michigan, Ann Arbor, Michigan: “Low Thermal Conductivity Materials for Advanced Thermoelectric Applications” (advisor: Professor Ctirad Uher)

POSITIONS

1997-2000 Research Scientist, Materials and Processes Lab, GM R&D Center
2000-2003 Senior Research Scientist, Materials and Processes Lab, GM R&D Center
2003-present Staff Research Scientist, Materials and Processes Lab, GM R&D Center
2003 Lecturer, Mechanical Engineering Department, Oakland University, Rochester Hills, MI

AWARDS AND HONORS

1991 Master’s Final Award, Physics Department, University of Oregon
1997 GM DEGS Fellowship
2001 Kent M. Terwilliger Prize (Best Doctoral Thesis), Physics Department, University of Michigan
2004 Principle Investigator, “Develop Thermoelectric Technology for Automotive Waste Heat Recovery” funded by the US Department of Energy, DE-FC26-04NT42278.
2007 The John M. Campbell Award (outstanding contributions to pure or applied science), GM R&D Center
2008 US Department of Energy Innovative and Novel Computational Impact on Theory and Experiment (INCITE) award
2008 Participant – Frontiers of Engineering, National Academy of Engineering

PROFESSIONAL MEMBERSHIP AND SERVICE

1991-present Member, American Physical Society
1997-present Member, Materials Research Society
2003-present Member, Sigma Xi
2003-2004 Member, George E. Pake Prize Committee of American Physical Society
2003 Symposium Organizer, Thermoelectric Materials 2003-Research and Applications, Materials Research Society Fall Meeting
2003 Co-organizer, International Thermal Conductivity Conference
2005 Symposium Organizer, Materials and Technologies for Direct Thermal-to-Electric Energy Conversion, 2005 Materials Research Society Fall Meeting
2005- 2008 Board of Directors, International Thermoelectric Society
2005-2006 Proceedings and Books Subcommittee, Materials Research Society

- 2006 Panelist for the Energy Nanotechnology International Conference – MIT
- 2006 Panelist for DOE Initiative for a Science-Based Approach to Development of Thermoelectric Materials for Transportation Applications
- 2006 External Advisory Board, US Department of Energy EPSCoR Implementation Program
- 2007 Organizer, 2007 American Physical Society March Meeting Focus Topic Session: Physics of Thermoelectric Materials and Phenomena (FIAP/DMP)
- 2007 Symposium Organizer, Thermoelectric Power Generation, Materials Research Society Fall Meeting

PATENT

Three patent issued, 20 patent applications on thermoelectric materials and devices

REFEREED PUBLICATIONS

44 journal and conference proceedings articles

EDITORIAL

1. Proceedings of the 2003 Materials Research Society Volume 793, *Thermoelectric Materials 2003 - Research and Applications*, edited by Nolas, G. S., **Yang, J.**, Hogan, T., and Johnson, D. C.
2. Proceedings of the 2005 Materials Research Society Volume 886, *Materials and Technologies for Direct Thermal-to-Electric Energy Conversion*, edited by **Yang, J.**, Hogan, T., Funahashi, R., and Nolas, G. S.
3. Proceedings of the 2007 Materials Research Society Volume 1044, *Thermoelectric Power Generation*, edited by, Hogan, T., **Yang, J.**, Funahashi, R., and Tritt, T. M.

INVITED BOOK CHAPTERS

1. **Yang, J.**, “Thermal Conduction in CoSb₃-based Skutterudites”, in *Chemistry, Physics, and Materials Science of Thermoelectric Materials: Beyond Bismuth Telluride (Fundamental Materials Research)* (Plenum, New York, 2003).
2. **Yang, J.**, “Theory of Thermal Conductivity in Solids”, in *Thermal Conductivity* (Kluwer, New York, 2004).
3. Nolas, G. S., **Yang, J.**, and Goldsmid, H. J., “Thermal Conductivity of Semiconductors and Thermoelectric Materials”, in *Thermal Conductivity* (Kluwer, New York, 2004).

INVITED TALKS

32 invited conference talks, seminars, and colloquia