

Tentative schedule... updated July 14, 2008	
MONDAY AUGUST 4, 2008	
PLENARY SESSIONS	
PLENARY SESSION 1	
9:00 a.m.	A.1 Lon Bell, BSST LLC <i>Addressing the Challenges of Commercializing New Thermoelectric Materials</i>
9:30 a.m.	A.2 Antoine Maignon, CNRS/ENSICAEN <i>Thermoelectric Transition Metal Oxides: From the Search for New Materials to Thermoelectric Modules</i>
10:00 a.m.	A.3 Mercouri Kanatzidis, Northwestern University <i>Nanostructured lead chalcogenides for efficient thermoelectric power generation applications</i>
10:30 a.m.	Break
11:00 a.m.	A.4 David Cahill, University of Illinois at Urbana-Champaign <i>Thermoelectric Properties of nanoscale V2-VI2 "soft superlattices"</i>
11:30 a.m.	A.5 Sang Mock Lee, Samsung Advanced Institute of Technology <i>Highly efficient thermoelectric module designs for micro-cooling and green IT applications</i>
12:00 p.m.	A.6 R. Asahi, Toyota Central R&D Labs, Japan <i>Research and Development of Environmentally Amenable Thermoelectric Materials</i>
PLENARY SESSION 2	
2:00 p.m.	A.7 Gerald Mahan, Pennsylvania State University <i>Thermoelectric Metamaterials</i>
2:30 p.m.	A.8 Juri Grin, Max Planck Institute for Chemical Physics of Solids <i>New cage compounds and new ways of their preparation</i>
3:00 p.m.	A.9 Harold Böttner Fraunhofer-Institute for Physical Measurement Techniques <i>Thermoelectrics for high temperature differences may complement renewable energies: A survey about state-of-the-art of so-called high temperature thermoelectric materials</i>
3:30 p.m.	Break
4:00 p.m.	A.10 George Nolas, University of South Florida <i>Structure-Property Relationships in Skutterudites, Clathrates and Other Open-structured Materials</i>
4:30 p.m.	A.11 Giulio Casati Universita' dell'Insubria, Italy <i>Classical and quantum transport: from Fourier law to thermoelectric efficiency</i>



TUESDAY, AUGUST 5, 2008

Session 1	B.a. Oxides	B.b Fundamentals/Theory
8:00 a.m.	B.a.1 Ryoji Funahashi National Institute of Advanced Industrial Science and Technology, Japan <i>Durability of thermoelectric modules consisting of oxide materials</i>	B.b.1 Ravi Prasher Intel Corporation <i>Thermal Transport in Nanostructured Materials</i>
8:30 a.m.	B.a.2 D. Igarashi Tohoku University <i>Effects of Na atom ordering on the physical properties in $Na_{0.58}CoO_2$</i>	B.b.2 Tsunehiro Takeuchi Nagoya University <i>Unusual increase of electron thermal conductivity caused by pseudogap at the Fermi level</i>
8:50 a.m.	B.a.3 Michitaka Ohtaki Kyushu University <i>High Thermoelectric Performance of Dually Doped ZnO Ceramics</i>	B.b.3 Michael Freunek University of Freiburg <i>New Physical Model for Thermoelectric Generators</i>
9:10 a.m.	B.a.4 M. Isobe NIMS, Tsukuba, Ibaraki Japan <i>Thermoelectric Property of the One-Dimensional Metallic Cobalt Oxide $CaCo_2O_4$</i>	B.b.4 J. Tobola AGH University of Science and Technology <i>Calculations of thermopower in disordered thermoelectrics from electronic band structure with complex energy by the KKR-CPA method</i>
9:30 a.m.	B.a.5 S. Shibasaki Waseda University <i>Thermoelectric properties of B-site substituted $LaRhO_3$</i>	B.b.5 Natthapon Nakpathomkun University of Oregon <i>Optimal balance of thermoelectric efficiency and power based on dimensionality</i>
10:00 a.m.	Break	
Session 2	C.a Novel Materials	C.b Interfaces/Contacts/Modules
10:20 a.m.	C.a.1 Bo Iversen University of Aarhus <i>Structure based design of new thermoelectric materials</i>	C.b.1 Tim Hogan Michigan State University <i>Thermoelectric Generators Made with Novel Lead Telluride Based Materials</i>
10:50 a.m.	C.a.2 Eric Toberer California Institute of Technology <i>Carrier concentration control in $Yb_{14}MnSb_{11}$</i>	C.b.2 Douglas T. Crane BSST LLC <i>Performance Results of a High Power Density Thermoelectric Generator: Beyond the Couple</i>
11:10 a.m.	C.a.3 T. J. Zhu Zhejiang University <i>Thermoelectric properties of Zintl</i>	C.b.3 Mona Zebarjadi University of California, Santa Cruz <i>Effect of nano-particles on the electron and</i>

	<i>compounds YbZn₂Sb₂ by Mn substitution in the anionic framework</i>	<i>thermoelectric transport</i>
11:30 a.m.	C.a.4 Dirk Ebling Freiburg University <i>Influence of group IV-Te-alloying on nanocomposite structure and thermoelectric properties of Bi₂Te₃ Compounds</i>	C.b.4 Hiroya Ikeda Shizuoka University <i>Thermoelectric Characteristics of 2D Si Slab Structure on SOI Wafer</i>
11:50 a.m.	C.a.5 J. L. Cui Ningbo University of Technology <i>Thermoelectric properties of Cu-added Zn-Sb based alloys with multi-phase equilibrium</i>	C.b.5 D. Ryabinin Moscow Institute of Steel and Alloys <i>The influence of cutting technology on damaged layers depth in large-grain ingots of thermoelectric materials with grown texture</i>
Session 3	D.a. Skutterudites/Clathrates	D.b Novel Applications
2:00 p.m.	D.a.1 Peter Rogl University of Vienna <i>{Sr,Ba}-based clathrates</i> <i>Ba₈M_{x-y}{Si,Ge}_{46-x-y}</i>	D.b.1 P. van der Sluis Philips Research Laboratories Eindhoven <i>Thermoelectricity applied in woodstoves for residential cooking</i>
2:30 p.m.	D.a.2 X. Shi General Motors R&D Center <i>Thermoelectric properties of n-type multiple-filled skutterudites</i>	D.b.2 V. Leonov IMEC, Leuven, Belgium <i>Wearable thermoelectric generators for man-powered devices</i>
2:50 p.m.	D.a.3 M. M. Koza ILL, France <i>Probing the rattling mode scenario in nano-cage based thermoelectric materials</i>	D.b.3 Zhang Qing-Jie Wuhan University <i>Thermoelectric-photovoltaic hybrid power generation technique for solar energy utilization: scientific idea and experimental system</i>
3:10 p.m.	D.a.4 Y. Z Pei Shanghai Institute of Ceramics <i>High Hall Mobility of alkali-metal filled Co₄Sb₁₂ thermoelectric skutterudites</i>	D.b.4 H. Böttner Micropelt GmbH, Frieberg <i>Thermoelectric Thin Film Power Generators – self-sustaining power supply for smart systems</i>
3:30 p.m.	D.a.5 V. Ravi Jet Propulsion Laboratory, California Institute of Technology <i>A comparative study of the mechanical behavior of some skutterudite compounds and silicon germanium alloys</i>	D.b.5 Tsuyoshi Kajitani Tohoku University, Japan <i>Discommensuration of doped Co-121</i>
Session 4	E.a Clathrates	E.b High Power

4:20 p.m	E.a.1 Terry Tritt Clemson University <i>Overview of Thermoelectric Properties of Bulk Nano-Composite Thermoelectric Materials</i>	E.b.1 Takenobu Kajikawa Shonan Institute of Technology, <i>Approach to the Practical use of Thermoelectric Power Generation</i>
4:50 p.m.	E.a.2 S. Stefanoski University of South Florida <i>Synthesis and transport properties of alkali-germanium open-framework materials</i>	E.b.2 Chris Caylor RTI International <i>High-Power Density, High Efficiency, Low-Profile Bulk Thermoelectric Power Generation based on PbTe, TAGS and SiGe</i>
5:10 p.m.	E.a.3 M. Beekman University of South Florida <i>Synthesis, structural, and physical properties of $NaxSi_{136}$ clathrates ($0 < x < 24$)</i>	E.b.3 Hiroshi Nagaoyoshi Tokyo National College of Technology <i>Development of High Efficiency MPPT Power Conditioner and Effect of Bypass Diode on TEG System Output</i>

WEDNESDAY, AUGUST 6, 2008		
Session 5	F.a Bismuth Tellurides	F.b Wires
8:00 a.m.	F.a.1 Joseph Heremans The Ohio State University <i>Resonant levels and Thermopower Enhancements in Lead-salt Semiconductors</i>	F.b.1 Li Shi The University of Texas at Austin <i>Thermoelectric Characterization of Nanowires and Thin Films</i>
8:30 a.m.	F.a.2 C. Andre École Polytechnique de Montréal <i>Extruded Bismuth Telluride Based N-type Alloys for Waste Heat Thermoelectric Recovery Applications</i>	F.b.2 T. W. Cornelius Gesellschaft für Schwerionenforschung (GSI) <i>Seebeck coefficient and electrical transport properties of single Bi nanowires</i>
8:50 a.m.	F.a.3 X. B. Zhao Zhejiang University <i>Simple Synthesis Routes for Promoting Properties of Bulk Thermoelectric Materials</i>	F.b.3 A. I. Persson University of Oregon <i>Fabrication and thermal conductance measurements of dense and uniform InAs nanowire arrays</i>
9:10 a.m.	F.a.4 Yanhua Zhang University of Science and Technology, Beijing <i>The microstructures and properties of nanostructured $Bi_{0.5}Sb_{1.5}Te_3$</i>	F.b.4 Kalapi G. Biswas Purdue University <i>Electrochemical synthesis and characterization of compositionally modulated $Bi_2Te_{3-x}Se_x$ multilayered nanowire arrays</i>
9:30 a.m.	F.a.5 Lie-Jie Wu National Tsing-Hua University <i>Effect of electric current assisted thermal treatment on thermoelectric properties of Bi-Sb-Te based materials prepared by powder metallurgy</i>	F.b.5 L. A. Konopko Institute of Electronic Engineering and Industrial Technologies, Rep. of Moldova <i>Influence of magnetic field and doping on thermoelectric properties of Bi nanowires</i>
Session 6	G.a Novel Materials	G.b Measurement
10:20 a.m.	G.a.1 Shinsuke Yamanaka Osaka University <i>New Class of Advanced Thermoelectric Materials with Extremely Low Thermal Conductivity</i>	G.b.1 Heiner Linke University of Oregon <i>Thermoelectric efficiency and thermovoltage of a quantum-dot based energy filter</i>
10:50 a.m.	G.a.2 Kuei-Chien Chang Industrial Technology Research Institute, Taiwan	G.b.2 M. Otani NIST <i>Development of high-throughput power-</i>

	<i>The organic thermoelectric performance of poly(3,4-ethylenedioxythiophene)/poly(4-styrenesulfonate)</i>	<i>factor and thermal conductivity screening tools for thermoelectric combinatorial library films</i>
11:10 a.m.	G.a.3 T. Mori National Institute for Materials Science, Tsukuba Japan <i>Doping effects of rare earth borides</i>	G.b.3 H. Iwasaki JAIST, Japan <i>Evaluation of Thermoelectric Properties in Mesoscopic Materials by Improved Harman Method</i>
11:30 a.m.	G.a.4 Takashi Itoh Nagoya University <i>Synthesis of Thermoelectric Manganese Silicide by Mechanical Alloying and Pulse Discharge Sintering</i>	G.b.4 Qing Hao Massachusetts Institute of Technology <i>Device Testing of Bi₂Te₃-based Thermoelectric Materials</i>
11:50 a.m.	G.a.5 D. L. Medlin Sandia National Laboratories <i>Twin boundary defects in Bismuth telluride</i>	G.b.5 Mikio Koyano Japan Advanced Institute of Science and Technology <i>Measurement of Local Peltier Constant at a Micro Contact</i>
Session 7	H.a Tags + LAST	H.b Modules
2:00 p.m.	H.a.1 Chris Vineis Massachusetts Institute of Technology <i>Nanostructured Thin-Film Thermoelectrics: n- and p-type PBTe/PbSe Nanodot Superlattices as a Study Case</i>	H.b.1 Todd Anderson General Electric Global Research <i>Manufacturability and System-Level Design of TE Modules for Automotive Waste Heat Recovery</i>
2.30 p.m.	H.a.2 Alan J. Thompson Marlow Industries <i>Microstructure and Crystal Structure in TAGS Compositions</i>	H.b.2 Israel Boniche University of Florida <i>Design and Optimization of a Miniaturized Thermoelectric Generator using Micromachined Silicon Substrates</i>
2:50 p.m.	H.a.3 Joshua D. Sugar Sandia National Laboratories <i>Crystallographically Aligned Ag₂Te Precipitates at Multiple Length Scales in AgSbTe₂</i>	H.b.3 Dirk Ebling Fraunhofer-Institute for Physical Measurement Techniques <i>Multiphysics simulation of thermoelectric systems for the comparison to experimental device performance</i>
3:10 p.m.	H.a.4 James R. Salavdor GM R&D and Planning <i>Synthesis, Thermoelectric and Mechanical Properties of</i>	H.b.4 Alex Gurevich TES <i>Design of High-Performance Thermoelectric Systems Based on Multiparameter</i>

	<i>AgSbTe₂, GeTe</i>	<i>Components Optimization</i>
3:30 p.m.	H.a.5 Vladimir Jovovic The Ohio State University <i>Doping optimization of the thermoelectric properties of AgSbTe₂</i>	H.b.5 Emil Sandoz-Rosado Rochester Institute of Technology <i>Experimental Characterization of Thermoelectric Modules and Comparison with Theoretical Models for Power Generation</i>
Session 8	I.a Skutterudites/Clathrates	I.b Peltier cooling
4:20 p.m.	I.a.1 Mas Subramanian Oregon State University <i>Thermoelectric Properties of Skutterudites Filled With Dual Rattlers</i>	I.b.1 Satarou Yamaguchi Chubu University <i>A New Proposal of Peltier Cooling for Microprocessor</i>
4:50 p.m.	I.a.2 S. N. Zhang Clemson University <i>Thermoelectric properties and the microstructure study of TAGS-x</i>	I.b.2 P. Y. Hou University of Washington <i>Optimization of Microscale Thermoelectric Cooling (TEC) Element Dimensions for Hot Spot Cooling Applications</i>
5:10 p.m.	I.a.3 K. Suekuni Hiroshima University <i>Structure and thermoelectric properties of n- and p-type β-Ba₈Ga₁₆Sn₃₀</i>	I.b.3 U. Ghoshal Sheetak, Inc. Austin, TX <i>Switched Thermoelectric coolers</i>

THURSDAY, AUGUST 7, 2008		
Session 9	J.a. TBA	J.b. Thin Films
8:00 a.m.	J.a.1 Jeff Sharp Marlow Industries <i>An Industry Perspective on Thermoelectric Power Generation Materials</i>	J.b.1 Rama Venkatasubramanian RTI International <i>Nanoscale Thermoelectric Materials and Devices</i>
8:30 a.m.	J.a.2 J. Martin University of South Florida <i>Enhanced thermoelectric properties in PbTe Nanocomposites</i>	J.b.2 N. Savvides CSIRO Materials Science and Engineering <i>Magnetron deposition of in-situ thermoelectric Mg₂Ge thin films</i>
8:50 a.m.	J.a.3 Y. Gelbstein Ben-Gurion University <i>Thermoelectric properties of (Pb,Sn,Ge)Te based Alloys</i>	J.b.3 David Stokes RTI International <i>Thin-film Superlattice Devices for Low-Temperature Energy Harvesting</i>
9:10 a.m.	J.a.4 Jong Soo Rhyee Samsung Advanced Institute of Technology, ROC <i>Low thermal conductivity and electron-hole compensation effect of the CeTe_{2-x}Sn_x (χCeTe_{2-x}Sn_x ($\chi < 0.1$) compounds</i>	J.b.4 T. S. Kamilov Tashkent State Aviation Institute, Uzbekistan <i>Growth Features of the Higher Manganese Silicide Films on Silicon</i>
9:30 a.m.	J.a.5 Andrew May California Institute of Technology <i>High Temperature Thermoelectric Performance of lanthanum Telluride via Mechanical Alloying</i>	J.b.5 H. Böttner Fraunhofer-Institute Physical Measurement Techniques, IPM, Germany <i>Thermoelectric Properties of nanoscale V₂-V₁₃ "soft superlattices"</i>
Session 10	K.a Advanced Materials	K.b Low-Dimensional Systems
10:20 a.m.	K.a.1 Thierry Caillat NASA JPL, California Institute of Technology <i>Development of some high-temperature thermoelectric materials and components for integration into advanced Radioisotope Thermoelectric Generators</i>	K.b.1 Ali Shakouri University of Southern California <i>Thermionic Energy Conversion Using Metal-Semiconductor Nanocomposites</i>
10:50 a.m.	K.a.2 Yoshisato Kimura Tokyo Institute of Technology <i>Thermoelectric Properties of</i>	K.b.2 O. N. Uryupin Ioffe Physical-Technical Institute, Russia <i>Thermoelectric Properties of InSb Nanowires</i>

	<i>Directionally Solidified Single-Phase Half-Heusler (Ma_{0.5}Mb_{0.5})NiSn (Ma, Mb = Hf, Zr, Ti) Alloys</i>	<i>in Wide Temperature Range</i>
11:10 a.m.	K.a.3 D. T. Morelli Michigan State University <i>High Thermoelectric Power Factor Near Room Temperature in Full Heusler alloys</i>	K.b.3 Murray S. Daw Clemson University Quantifying properties of nano-composites
11:30 a.m.	K.a.4 Akihiro Ishida Shizuoka University, Japan <i>Seebeck effect in IV-VI semiconductor films and quantum wells</i>	K.b.4 Jason A. Michel The George Washington University <i>Synthesis of Bi₂Te₃ Nanocrystals by Alkalide Reduction</i>
Session 11	L.a Oxides	L.b Automotive and Other Applications
2:00 p.m.	L.a.1 Qiang Li Brookhaven National Laboratory <i>Thermoelectric Materials with Potential High Power Factors</i>	L.b.1 Jihui Yang GM R&D Center <i>Thermoelectric Materials for Automotive Applications</i>
2:30 p.m.	L.a.2 Jean-Pierre Doumerc ICMCB-CNRS, University of Bordeaux <i>Layered Transition Metal Oxides for Thermoelectric Generation</i>	L.b.2 Atsuko Kosuga National Institute of Advanced Industrial Science and Technology <i>Solid State Self-Assembly of Nanostructured-Oxide as a Candidate for High Performance Thermoelectric Materials</i>
2:50 p.m.	L.a.3 T. Nozaki Tohoku University <i>Electronic structure and transport property of delafossite-type oxide CuFeO₂ system</i>	L.b.3 Cronin B. Vining ZT Services <i>The Limited Role for Thermoelectronics in the Climate Crisis</i>
3:10 p.m.	L.a.4 J. E. Rodriguez Universidad Nacional de Columbia <i>Thermoelectric properties of Oxygen deficient LaSrCuO_{4-x} samples</i>	L.b.4 Nathan Crane University of South Florida <i>Self-assembly of Microscale Thermoelectric Coolers for Improved Thermal Management</i>
3:30 p.m.	L.a.5 Kunio Yubuta Tohoku University, Japan <i>Excess Oxygen in Rock-Salt-Type Layers of Misfit-layered Bi-based Oxides</i>	L.b.5 Paul Zschack Argonne National Laboratory <i>X-Ray Characterization of Low Thermal Conductivity Thin-Film Materials at the Advanced Photon Source</i>

POSTERS

B.a Oxides	B.b Fundamentals/Theory
<p>P1 Tsuyoshi Kajitani Tohoku University, Japan <i>Discommensuration of doped Co-121</i></p>	<p>P7</p>
<p>P2 Y. Cui University of Waterloo, Canada <i>Thermoelectric properties of heavily doped n-type SrTiO₃ bulk materials</i></p>	<p>P8 O. M. Løvvik University of Oslo <i>Novel Skutterudites for Thermoelectricity from First-Principles Calculations</i></p>
<p>P3 Yiang Yang Huang CREST Japan Science and Technology Agency <i>Crystal Structure and High Temperature Thermoelectric Properties of Ca_{0.96-x}Sr_xBi_{0.04}Mn_{0.96}V_{0.04}O₃ (x = 0, 0.1, 0.3 and 0.5)</i></p>	<p>P9 B. I. Min POSTECH, Korea <i>Thermoelectric power in the magnetic polaron system</i></p>
<p>P4 A. Hirahara Waseda University, Japan <i>Thermoelectric Properties of Zn Substituted Magnetite</i></p>	<p>P10</p>
<p>P5 Li Zhang Wuhan University of Technology <i>A novel and simple route to the synthesis of preferred-orientated preferred oriented γ-Na_xCo₂O₄ crystals</i></p>	
<p>P6 F. Kawshima Tohoku University, Japan <i>High temperature thermoelectric properties of layered oxide C_xBi_xMnO₄</i></p>	
<p>P7 Y. Klein Waseda University <i>Transport properties and cationic substitutions in Sr₂IrO₄</i></p>	
C.a Novel Materials	C.b Interfaces/Contacts/Modules
<p>P11 C.-K. Huang California Institute of Technology <i>A Study of P-type Yb₁₄MnSb₁₁ for High Temperature Thermoelectric Applications</i></p>	<p>P20 Martin Riggs Moscow State Technical University <i>Thermoelectric modules reliability improvement methods</i></p>
<p>P12 B.c.7</p>	<p>P21 Yen-Chun Huang</p>

<p>F. Gascoin Universite' Montpellier Complex Antimonides as thermoelectric Materials: Preparation and transport properties of Yb_4Sb_3</p>	<p>National Tsing-Hua University, Taiwan <i>A study of interfacial reaction between molten Sn-Ag solder and Te substrate</i></p>
<p>P13 Takashi Ueda Shimane University, Japan Influence of impurity element on β- Zn_4Sb_3 thermoelectric materials</p>	<p>P22</p>
<p>P14 J.E. Rodriguez Universidad Nacional de Columbia Solid-state synthesis of multi-phase Zn_4Sb_3 polycrystalline samples</p>	<p>P23 Minehiro Tonosaki Sony Corporation, Japan Effect of protective layer and etch process for silicon molded micro Peltier array</p>
<p>P15 Catherine Cox University of California, Davis High Temperature Heat Capacity Measurements and Thermoelectric Performance of $Yb_{14}Mn_{1-x}Al_xSb_{11}$</p>	<p>Patricia Gilbert Marlow Industries Metal Contacts for TAGS-85</p>
<p>P16 Japheth F. Rauscher University of California, Davis A Comparative Study of Synthetic Routes to Coped $Yb_{14}MnSb_{14}$</p>	
<p>P17 Su "Ike" Chi California Institute of Technology Synthesis of $Yb_{14}MnSb_{14}$ Zintl Compound by a Melt Process</p>	
<p>P18 Sabah K. Bux University of California, Los Angeles Thermal Conductivity of Nanostructured Bulk III-V Semiconductors</p>	
<p>P19 Krzysztof Gofryk Institute for Transuranium Elements Thermoelectric Perfomance of Strongly Correlated Compounds RPd_3 (R=Ce, U, Np, Pu)</p>	
<p>Tanghong Yi University of California, Davis Synthesis and investigation of $Yb_{11}InSb_9$ and $Yb_{11}GaSb_9$ for thermoelectric applications</p>	
<p>D.a Skutterudites/Clathrates</p>	<p>D.b Novel Applications</p>
<p>P24 J.-Y. Jung Chungju National University, Korea Synthesis and Thermoelectric Properties of</p>	<p>P38 Li Peng Wuhan University A solar hybrid generation system utilizing both concentrator solar cell and thermoelectric</p>

<i>In_zCo₄Sb₁₂Skutterudites</i>	<i>generator</i>
P25 J.-Y. Jung Chungju National University, Korea <i>Electronic Transport Properties of In-filled CoSb₃ Skutterudites</i>	P39 C. Lertsatitthanakorn Mahasarakham University, Thailand <i>Performance studies on a hybrid thermoelectric solar air collector</i>
P26 W. Y. Zhao Wuhan University of Technology, China <i>Effect of Ni on thermoelectric properties of barium and indium double-filled skutterudites</i>	P40 K. Shimizu Nagaoka University of Technology, Japan <i>Performance Improvement of flexible thermoelectric device: FEM-based simulation</i>
P27 Zhong-wei Ruan Wuhan University of Technology, China <i>Influence of inclusions on the Surface Mechanical Behavior of CoSb₃ based Skutterudite Compounds</i>	P41 V. Leonov IMEC, Leuven, Belgium <i>Thermal shunts in thermoelectric energy scavengers</i>
P28 Peng-Fei Wen Wuhan University of Technology, China <i>Effect of Cyclic Thermal Loading on the Microstructures and Thermoelectric Properties of CoSb₃</i>	
P29 Li Yao Wuhan University of Technology <i>Effect of high pressure sintering process on the microstructure and thermoelectric properties of CoSb₃</i>	
P30 Li-sheng Liu Wuhan University of Technology, China <i>Electronic structure of CoSb₃ filled with double-atoms (Ba and In)</i>	
P31 J. Y. Peng Clemson University <i>Synthesis and thermoelectric properties of In_xYb₀₁Co₄Sb₁₂ Skutterudites</i>	
P32 Ramesh Chandra Mallik German Aerospace Center <i>Thermoelectric Properties of Partially In Filled and Over-Filled Co₄Sb₁₂ Skutterudite Material</i>	
P33 Han Li Wuhan University of Technology, China <i>The effects of pre-annealing on microstructure of Yb filled CoSb₃ skutterudites prepared by rapid solidification</i>	

P34 J. Yang General Motors R&D Center <i>Electrical transport properties of filled CoSb₃ skutterudites: a theoretical study</i>	
P35 Qiyin Lin University of Oregon <i>Controlling Carrier Concentration in the Misfit Layered Compound [(PbSe)_{0.99}]₁(WSe₂)₁</i>	
P36 Qiyin Lin University of Oregon <i>Synthesis and thermoelectric properties of pseudo-binary skutterudite CoGe_{1.5-δ}Se_{1.5-δ} and CoSn_{1.5-δ}Te_{1.5-δ}</i>	
A. Grytsiv University of Vienna <i>Dynamical Response of NdFe₄Sb₁₂ and CoSb₃</i>	
P37 P. Poinas European Space Agency, ESTEC <i>Role of Ni in Indium Partially Filled Skutterudite Compounds</i>	
E.a Clathrates	E.b High Power
P42 X. Shi General Motors R&D Center <i>Thermoelectric properties of Ba₈TM₄Ge₄₂-based clathrates</i>	P49 Kevin Smith Rochester Institute of Technology <i>Experimental Validation of a Thermoelectric System Model for Stationary Power Generation Application Design</i>
P43 H. Anno Tokyo University of Science <i>Electronic Structure and Thermoelectric Properties of Si-based Clathrate Compounds</i>	P50
P44 Peng Li Wuhan University of Technology <i>Microstructure and thermoelectric transport properties of type-1 clathrates Ba₈Sb₂Ge₁₄Ge₃₀ prepared by ultra rapid solidification</i>	P51
P45 Andrew F. May California Institute of Technology <i>High Temperature Thermoelectric Properties of Polycrystalline Ba₈Ga₁₆Ge₃₀-type samples</i>	P52 G. Jeffrey Snyder California Institute of Technology <i>Thermoelectrics for Energy</i>
P46 K. Akai	P53 K. Qiu

Yamaguchi University <i>First-Principles study of semiconducting clathrate $Ba_8Al_6Ge_{30}$</i>	CANMET Energy Technology Centre-Ottawa <i>A Gas-Fired Thermoelectric Power Generation System</i>
P47 K. Akai Yamaguchi University, Japan <i>Electronic structure and thermoelectric properties of Si-based clathrates with two modifications</i>	
P48	
F.a Bismuth Tellurides	F.b Wires
P54 Takashi Hamachiyo Shimane University <i>Thermal conductivity of $Bi_{0.5}Sb_{1.5}Te_3$ affected by grain size</i>	P66 Yasuhiro Hasegawa Saitama University <i>Thermoelectric properties of Bi micro/nano wire array elements pressured into mold made from quartz template</i>
P55 Yoshiaki Kinemuchi AIST <i>Deposition of thick film by centrifugally pressurized solidification</i>	P67 J. Sommerlatte Max Planck Institute of Microstructure Physics <i>Synthesis of thermoelectric nanowires by electrodeposition from organic solvents</i>
P56 Chia-Jyi Liu National Changhua University of Education, Taiwan <i>Improvement of thermoelectric power factor of the hydrothermally prepared $Bi_{0.5}Sb_{1.5}Te_3$ compared to the solvothermally prepared counterpart</i>	P68 J. E. Matthews University of Oregon <i>Measurement of Electron-Phonon Coupling in Nanowires</i>
P57 Po-Chih Chen National Tsing-Hua University, Taiwan POC <i>Effect of powder surface modification on thermoelectric properties of sintered $(Bi_{0.25}Sb_{0.75})_2Te_3$ compounds</i>	P69 A. A. Nikolaeva Institute of Electronic Engineering and Industrial Technologies, Rep. of Moldova <i>Influence of elastic deformation on thermoelectric properties of alloyed bismuth wires of various crystallographic orientations</i>
P58 Fei Han University of Science and Technology, Beijing <i>Thermoelectric properties of nanometer $BiTeSbTe$ bulk materials</i>	P70 Yang Xu-Qiu Wuhan University <i>Molecular dynamics simulation on mechanics of skutterudite $CoSb_3$ nanowire</i>
P59 W.-J. Li Industrial Technology Research Institute, ROC <i>Preparation of Bi_2Te_3 films by Supercritical CO_2 Electroplating Method</i>	P71 K. Nielsch Max Planck Institute of Microstructure Physics <i>Pulsed Chemical Vapor Deposition of single crystalline Bi_2Se_3 and Sb_2Se_3 Nanowires</i>

P60 Jan D. Koenig Fraunhofer IPM <i>Transport Properties of a Doped, Nanostructured IV-VI Epitaxial Films Grown by MBE</i>	
P61 Bed Poudel GMZ Energy, Inc. <i>High-Thermoelectric Performance of Nanostructured Bismuth Antimony Telluride Bulk Alloys</i>	
P62	
P63 Kyung-Won Park Hongik University <i>Electrodeposition and Thermoelectric Characteristics of Bi₂Te₃ and Sb₂Te₃ Films for Thermopile Sensor Applications</i>	
P64 Ngoc Nguyen University of Oregon <i>Solution Based Bismuth Tellurides for Thermoelectric Applications</i>	
G.a Novel Materials	G.b Measurement
P71 H.Y. Chen CSIRO Materials Science and Engineering, Sydney, Australia <i>Thermoelectric properties of Mg₂X (X=Si, Ge,Sn) compounds containing fine eutectic microstructures</i>	P85 Winnie Wong-Ng NIST <i>Development of a Standard Reference Material (SRMTM) for Low Temperature Seebeck Coefficient</i>
P72 H. Itahara Toyota Central R&D Labs, Japan <i>Thermoelectric Properties of Organic Charge-Transfer Compounds</i>	P86 Preeti Mani University of Oregon <i>A Quantum Standard for the Seebeck Coefficient</i>
P73 K. Iguchi Nagaoka University of Technology, Japan <i>Fabrication of p-n element couple by YbB₆</i>	P87 W. Shin AMRI, AIST, Japan <i>High-Temperature Measurement of Thermoelectric Thin Films</i>
P74 M. J. Yang Wuhan University of Technology <i>Preparation and thermoelectric properties of nanostructured Mg₂Si by spark plasma sintering</i>	P88 Aaron D. LaLonde Michigan Technological University <i>Design of a system for simultaneously measuring ZT, ρ K, and S for 5 cm diameter individual thermoelectric elements</i>
P75 Y. Miyazaki	P89 Satoaki Ikeuchi

<p>Tohoku University (3+1)-Dimensional Superspace Group Approach to the Crystal Structure of Chimney-Ladder Compound $MnSi_\gamma$ ($\gamma \sim 1.74$)</p>	<p>ULVAC-RIKO Comparison Between Bulk Evaluations and Distribution Evaluation of Thermal Property in Thermoelectric Materials</p>
<p>P76 Wenjie Xie Wuhan University of Technology, China Nanostructure and thermal conductivity of $Bi_{1-x}Sb_x$ alloys prepared by melt spinning technique</p>	<p>P90 Satoaki Ikeuchi ULVAC-RIKO Evaluation of Thermal Conductivity in SiGe Thin Films</p>
<p>P77 Michihiro Ohta National Institute of Advanced Industrial Science and Technology, Japan Thermoelectric Properties of $LnGd_{1+x}S_3$ (Ln: La, Ce, Nd, Sm) Prepared by CS_2 Sulfurization</p>	<p>P91 Go Nakamoto Japan Advanced Institute of Science and Technology Spatial Distribution of Seebeck Coefficient in $An_{12}Sb_{10}$ Determined by Seebeck Micro-Probe Measurement System</p>
<p>P78 Anastassios Mavrokefalos The University of Texas, Austin In-Plane Thermoelectric Properties of Polycrystalline Highly Preferred Orientation $PbSeWSe_2$ Superlattice Thin Films</p>	<p>P92 S. Firdosy Jet Propulsion Laboratory, California Institute of Technology Thermal expansion studies of thermoelectric materials</p>
<p>P79 Hubert Scherrer Laboratoire de Physique des Matériaux Ecole des Mines, France Thermoelectric properties and electronic structure of Bi- and Ag-doped $Mg_2Si_{1-x}Ge_x$ ternary compounds</p>	<p>P93</p>
<p>P80</p>	
<p>P81 Christopher M. Jaworski The Ohio State University Transport and Magnetic Properties of Dilute $Pb_{1-x}Fe_xTe$ Alloys</p>	
<p>P82 Robert Wortman Purdue University (Zr,W)N/ScN/Metal/Semiconductor Superlattices for Thermionic Energy Conversion</p>	
<p>P83 Colby Heideman University of Oregon Control of Carrier Properties in $[(PbSe)_{1.00}]_m[MoSe_2]_a$ Misfit Layered Compounds</p>	
<p>P84 M. W. Oh AMARI, Korea Electrotechnology Research</p>	

Institute <i>Prediction of Thermoelectric properties by Analyzing the Electronic Structure of AgTlTe</i>	
H.a Tags + LAST	H.b Modules
P94 Xing Gao Clemson University <i>First-principles investigation of structural stability of AgSbTe₂</i>	P103 Jun-ihiro Kurosaki Kyushu Institute of Technology, Japan <i>The fabrication and evaluation of the thermoelectric micro-generator on a free-standing substrate</i>
P95 Yonggao Yan Wuhan University of Technology <i>Preparation and thermoelectric properties of AgInPbSnTe alloy</i>	P104 S. Manneewan Naresuan University <i>Thermoelectric Power Generation System By Using Waste Heat From Combustion of Biomass Drying</i>
P96 Tae-Sung Oh Hongik University, Korea <i>Thermoelectric Characteristics of the P-Type BiSbPbSnTe Functional Gradient Materials with Variation of the Segment Ratio</i>	P105 M. Mikami National Institute of Advanced Industrial Science and Technology, Japan <i>Development of a thermoelectric module using Heusler Fe₂ VAl alloy</i>
P97 H.S. Dow KAIST, Daejeon, Rep. of Korea <i>Effect of heat treatment and cooling rates on the formation of Ag-Sb nano phases in AgPbSbTe</i>	P106 D. Ryabinin I-Crystal Ltd., Russia <i>The influence of Molybdenum magnetron layer on cooling modules thermal stability</i>
P98 Teruyuki Ikeda California Institute of Technology <i>Formation of Widmanstätten structure in PbTe due to precipitation of Sb₂Te₃</i>	P107 W. Shin AMRI, AIST, Japan <i>Planar Thermoelectric Devices with Ceramic Catalyst combustor</i>
P99 Joseph Sootsman Northwestern University <i>Co-Nanostructured PbTe – Opportunities for Enhanced Thermoelectric Figure of Merit Through Changes in Carrier Scattering</i>	P108 B. S. Kim AMARL, Rep. of Korea <i>Lead-free Filler Materials for Bi-Ti Based Thermoelectric Module</i>
P100 Kyunghan Ahn Northwestern University <i>Properties of the Bulk Thermoelectric Materials AgPb_mLaT_{em+2}</i>	P109 M. Mikami National Institute of Advanced Industrial Science and Technology, Japan <i>Development of a thermoelectric module using Heusler Fe₂ VAl alloy</i>
P101 S. N Girard Northwestern University <i>The Effect and Control of Micro- and Nanoscale Precipitation Phenomena for the High ZT Thermoelectric Materials PbTe_{1-x}S_x and</i>	

$(Pb_{1-m}Sn_mTe)_{1-x}(PbS)_x$	
P102 D. T. Crane BSST LLC <i>Modeling the Building Blocks of a 10% Efficient Segmented Thermoelectric Power Generator</i>	
I.a Skutterudites/Clathrates	I.b Peltier Cooling
	P110 S. Turenne École Polytechnique de Montréal <i>Numerical Simulations of the Thermomechanical Behaviour of Extruded Bismuth Telluride Alloys Peltier Modules</i>
	P111 Y. Ezzahri University of California, Santa Cruz <i>Characterization of Single Barrier Microrefrigerators at Cryogenic Temperatures</i>
J.a. TBA	J.b. Thin Films
P113 Hong Xu University of Waterloo <i>New Arsenides for High Temperature Thermoelectric Applications</i>	P122 S. Witanachchi University of South Florida <i>Growth and characterization of dual-laser deposited films of $Ba_8Ga_{16}Ge_{30}$ for thermoelectric applications</i>
P114 Hideaki Matsumoto Osaka University <i>Thermoelectric properties of $TlMTe_2$ ($M = Ga, In, Tl$)</i>	P123 Gary E. Bulman RTI International <i>Three-Stage Thin-Film Superlattice Thermoelectric Multistage Microcoolers with a ΔT_{max} of 102K</i>
P115 Anek Charoenphakdee Osaka University <i>Thermoelectric Properties of Ag_8GeTe_6 and Ag_8SiTe_6 with Low Thermal Conductivity</i>	P124 A. Boulouz University IbnZohr of Agadir <i>Physical properties of N and P-type thin film materials based on $BiTeSb$ and $CoSb_3$ semiconductors and their applications on small-scale thermoelectric refrigerators and sensors</i>
P116 M. B. Babanly Baku State University, France <i>New variable composition phases on the base of thermoelectric Tl_9BiTe_6 in systems $Tl-Pb(Nd)-Bi-Te$</i>	P125 Jin-Sang Kim Korea Institute of Science and Technology <i>Fabrications of bismuth-telluride-based alloy thin film thermoelectric devices by metal organic chemical vapor deposition</i>
P117 M. B. Babanly Baku State University, France <i>Phase diagram and thermodynamic properties of</i>	P126 Ren-Jye Wu Industrial Technology Research Institute, Taiwan, ROC

<i>the systems Sb(Bi)-Te-I</i>	<i>Structural and Thermoelectric Properties of HfNiSn Half-Heusler Thin Films</i>
P118 Xiao-Hai Liao University of Science and Technology, Beijing <i>Influence of Sintering pressure on thermoelectric properties of SiGe alloy by hot pressing method</i>	P127 O. N. Uryupin Herzen State Pedagogical University, Russia <i>New Photothermoelectric Phenomena in Semiconductor Layers</i>
P119 Xiao-Hai Liao University of Science and Technology, Beijing Influence of Ge Te or GeTe dopants on thermoelectric properties of SiGe alloys	
P120 Sabah K. Bux University of California, Los Angeles <i>Synthesis and Characterization of High Temperature Nano-bulk Silicon</i>	
P121 Hiroshi Nakatsugawa Yokohama National University <i>The Effects of PSS and Au addition on thermoelectric properties in β-SiC/Si composites</i>	
K.a Advanced Materials	K.b Low-Dimensional Systems
P128 Kenta Kawano Osaka University, Japan Thermoelectric properties of p-type half-Heusler compound: Er(Ni,Pd)Sb	P133 B. N. Pantha Kansas State University <i>III-nitride alloys and nanostructures for thermoelectric applications</i>
P129 H. Itahara Toyota Central R&D Labs, Aichi, Japan <i>The Design and Preparation of Fe-V-Al Based Heusler-type Compounds with Reduced Thermal Conductivity</i>	P134 A. J. Zhou Zhejiang University, China <i>Composites of Higher Manganese Silicides and nano-structured second phases</i>
P130 Masauki Hasaka Nagasaki University, Japan <i>Thermoelectric Properties of $Ti_x(Hf_yZr_{1-y})_{1-x}NiSn_{0.998}Sb_{0.002}$ Half-Heusler Ribbons</i>	P135 L. P. Bulat St. Petersburg State University of Refrigeration, Russia <i>Percolation Nanostructure as Thermoelectric</i>
P131 Takao Morimura Nagasaki University <i>Microstructures and Thermoelectric Properties of the Annealed $Ti_{0.5}(Hf_{0.5}Zr_{0.5})_{0.5}NiSn_{0.998}Sb_{0.002}$ Ribbon</i>	P136 H. Anno Tokyo University of Science <i>Preparation of Conducting Polyaniline-Bismuth Nanoparticle Composites by Planetary Ball Milling</i>
P132 Chang-Chung Yang Industrial Technology Research Institute, Taiwan <i>Organic-Inorganic Nanocomposites as Novel</i>	P137 Sarah Witanachchi University of South Florida <i>Growth of nanoparticle coatings of $Ca_3Co_4O_9$ by</i>

<i>Thermoelectric Materials</i>	<i>a microwave plasma process</i>
	P138 E. A. Hoffman University of Oregon Nonlinear Thermoelectric Properties of Quantum Dots
	Mona Zebarjadi University of California, Santa Cruz Thermoelectric transport in a ZrN/ScN Superlattice
	Mona Zebarjadi University of California, Santa Cruz Effect of nano-particles on the electron and thermoelectric transport
L.a Oxides	L.b Automotive and Other Applications
P139 W. Kobayashi Waseda University, Japan <i>Thermal conductivity and dimensionless figure-of-merit of thermoelectric rhodium oxides measured by a modified Harman method</i>	P144 C. S. Junior Technische Universität Braunschweig <i>Thermoelectrics for Automobile Applications</i>
P140 Krishnendu Biswas Indian Institute of Technology <i>"High temperature thermoelectric and resistivity studies on the perovskite phases NdCo_{1-x}Ni_xO₃"</i>	P145 T. J. Hendricks Pacific Northwest National Laboratory <i>Micro- & Nano-Technology: A Critical Design Key in Advanced Thermoelectric Cooling Systems</i>
P141 Y. F. Wang Nagoya University <i>Effects of Ti- and Sr-site doping on the crystal structure and thermoelectric properties of SrO(SrTiO₃)_n (n = 1, 2) ceramics</i>	P146 Charonporn Lertsatitthanakorn Mahasarakham University, Thailand <i>Evaluation of thermal comfort of a thermoelectric ceiling cooling panel (TE-CCP) system</i>
P142 J. Liu Shandong University, Japan <i>Annealing effect and doping effect on thermoelectric performance of Sr_{1-x}La_xTiO₃ ceramics</i>	
P143 J.-S. Kang The Catholic University of Korea <i>Soft x-ray adsorption and photoemission spectroscopy study of cobalt-based thermoelectric oxides: Ca₃Co₄Ca₃Co₂O₆ and Bi_{2-x}Pb_xSr_{2}Co₂O_{y}</i>	