

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>

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

<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>	