

## Theory &amp; Modelling

I-P1	<b>Aminu YUSUF</b> , S. Ballikaya <i>Enhancing remote sensor power: Integrating a phase change material-thermoelectric generator system with a heat sink and radiative cooling</i>
I-P2	<b>Mei-Jiau HUANG</b> , H.-J. Hong <i>A Detailed-Energy-balanced Mixed Mismatch Model</i>
I-P3	<b>Supree PINITSOONTORN</b> , N. Parse, C. Pongkitivanichkul, J. Recatala-Gomez, R. Zhu, K. Yuan, A. Low, K. Hippalgaonkar <i>Utilizing Machine Learning Models to Predict Thermoelectric ZT Values Based on Three Diverse Dataset Sizes</i>
I-P4	<b>Victor POSLIGUA</b> , K. Landivar, E. R. Remesal, G. Rogl, P. F. Rogl, J. Fdez Sanz, J. J. Plata, A.M. Marquez <i>Thermoelectric property predictions in skutterudites combining experimental and deep learning approaches</i>
I-P5	<b>Shen HAN</b> , S. Dai, J. Ma, J. Yang, C. Fu, T. Zhu <i>Strong phonon softening and avoided crossing in aliovalence-doped heavy-band thermoelectrics</i>
I-P6	<b>Ruihuan CHENG</b> , Y. Chen <i>Strong Phonon Scattering and Suppressed Thermal Transport in <math>Cu_4TiSe_4</math></i>
I-P7	<b>Elena R. REMESAL</b> , V. Posligua, J. J. Plata, A. M. Márquez <i>Enhancing Thermoelectric Efficiency in Iron-Nickel Doped Skutterudites: Ab-initio and Machine Learning Approach</i>
I-P8	<b>Nikolaos KELAIDIS</b> , E. Klontzas, A. Kaltzoglou <i>A theoretical study on the type-I clathrate <math>(NH_4)_8Sn_{46-x}</math> (<math>x = 0</math> or <math>2</math>)</i>
I-P9	<b>Xue NAN</b> , Z. Huang, K. Hayashi, H. Konishi, Y. Miyazaki <i>First-Principles Study for High Thermoelectric Performance Iron-based Half-Heusler Compounds with Thermodynamic and Mechanical Stability</i>
I-P10	<b>Bharti AGRAWAL</b> , H. Sharma, B. Jayachandran, A. Alam, T. Dasgupta <i>Unravelling the Origin of High Thermoelectric Performance in <math>Mg_2Si_{0.3}Sn_{0.7}</math></i>
I-P11	<b>Hidetomo USUI</b> <i>Theoretical study on layered thermoelectric materials with axis-dependent conduction polarity</i>
I-P12	<b>Surabhi Suresh NAIR</b> , M. Sajjad, K. Biswas, N. Singh <i>Metavalent Bonding-Driven Phonon Transport Anomalies in 2D <math>\gamma</math>-GeX (<math>X = S, Se, Te</math>) Monolayers</i>
I-P13	<b>Kurian Elavunkel VIPIN</b> , Prahallad Padhan <i>Machine-Learning Guided Prediction of Thermoelectric Properties of Topological Insulators</i>
I-P14	<b>Benedick M. ANDRADE</b> , R. P. Gammag <i>Improvement in the modeling of the thermoelectric power factor due to induced dimensional effects of carrier mobility</i>
I-P15	<b>Parisa ROSHANINEJAD</b> , K. Habicht, O. M. Løvvik, E. Fertitta, E. Sagvolden, A.B. Kademane, D. Kojda, T. Fennell, A. Turrini, D. L. Quintero Castro <i>Phonon lifetime studies in thermoelectric materials by combining inelastic neutron scattering and ab-initio calculations</i>
I-P16	<b>Wataru SEKIMOTO</b> , S. Fujii, M. Yoshiya <i>Impact of dislocation core structures on nanoscale thermal conduction in oxides by perturbed molecular dynamics</i>
I-P17	<b>Bhawna SAHNI</b> , Z. Li, R. Dutt, P. Graziosi, N. Neophytou <i>Efficient ab initio electronic transport computations in half-Heuslers: the example of NbFeSb</i>
I-P18	<b>Naeimeh TAHRIRI</b> , J. Abouie, D. Vashaee <i>Thermoelectric Properties of Metallic Spin Glasses</i>
I-P19	<b>Pankaj PRIYADARSHI</b> , N. Neophytou <i>Advancing the thermoelectric power factor of hybrid solid/liquid porous material systems using advanced simulations</i>
I-P20	<b>Jan KOLODZIEJCZYK</b> , J. A. Majewski <i>Outstanding Thermoelectric Properties (<math>ZT \approx 5 - 6</math>) of Functionalized 2D Molybdenum Nitrides (MXenes)</i>
I-P21	<b>Ronald Edgar PIRELA LA CRUZ</b> <i>Theory of Complete Response of Thermoelectric Modules and Materials</i>

I-P22	<b>Espen SAGVOLDEN</b> , O.M. Løvvik, E. Fertitta, D. Kojda, P. Roshaninejad, K. Habicht, A.B. Kademane, D.L. Quintero Castro <i>Ab-initio calculations of anharmonicity in thermoelectric materials via the stochastic temperature-dependent effective potential (sTDEP) method</i>
I-P23	<b>Sana SALAMI</b> , S. Pailhès, C. Adessi, V. Giordano, N. Mahonisi, Z. Mthwesi, S. Vignoli, R. Debord, R. Fulcrand, N. Blanchard, A. Every, S.R. Naidoo <i>Phonon-drag in a graphite channel buried in diamond</i>

### Chemistry & Thermodynamics

I-P24	<b>Pu MIAO</b> , C. Yang, L.L. Xi, J. Yang, T.J. Zhu, C.G. Fu, <i>Simultaneous optimization of the electrical and thermal transport properties of LuNiSb via aliovalent doping</i>
I-P25	<b>Arige HODROJ</b> , I. Talbi, V. Bouquet, S. Ollivier, L. Joanny, R. Lebullenger, V. Demange, C. Prestipino, R. Bhardwaj, E. Alleno, M. Pasturel <i>Investigation of protective coatings against oxidation of skutterudites</i>
I-P26	<b>Arige HODROJ</b> , I. Talbi, V. Bouquet, S. Ollivier, R. Lebullenger, V. Demange, C. Prestipino, R. Bhardwaj, E. Alleno, M. Pasturel <i>Scalability of the magnesiothermic synthesis of skutterudites and their protective coatings against oxidation</i>
I-P27	<b>Yuyang ZHANG</b> , N. L. Okamoto, T. Ichitsubo <i>Crystal Structures and Thermoelectric Properties of Low-Temperature Phases of the <math>Cu_{2-\delta}Te</math> Compounds</i>
I-P28	<b>Helen CHAFFEE</b> , C. Gerber, C. Porter, R. Orenstein, A. Novick, M. Wróblewska, S. Altshuler, K. Ciesielski, E. Toberer <i>Analysis of Entropy-Driven Phase Transition in a High-Entropy Thermoelectric System</i>

### Bulk Materials

I-P29	<b>Dong-Kil SHIN</b> , J. S. Kim, K. H. Park, I. H. Kim <i>Skutterudite: Reproducibility of Thermoelectric Performance of P-type <math>RyFe_{4-x}Co_xSb_{12}</math> Bulky Compacts</i>
I-P30	<b>Joon-Chul KWON</b> , S. H. Choi, G. E. Lee, I. H. Kim <i>Uniformity and Reproducibility of Thermoelectric Properties of N-type <math>Bi_2Te_{3-y}Se_y</math> Bulky Compacts</i>
I-P31	<b>Jong-Ki WON</b> , S.-I. Jeong, S.-R. Kim, I. H. Kim <i>Solid-State Synthesis and Thermoelectric Properties of Ge-Doped Tetrahedrites <math>Cu_{12}Sb_{4-y}Ge_yS_{13}</math></i>
I-P32	<b>Soo-Sun LEE</b> , M.-C. Kwon, S.H. Yi, I. H. Kim <i>Preparation and Thermoelectric Properties of Si-Doped Tetrahedrites <math>Cu_{12}Sb_{4-y}Si_yS_{13}</math></i>
I-P33	<b>Song SEOK</b> , H. J. Kim, T. W. Hong, I. H. Kim <i>Improved Thermoelectric Performance of <math>Cu_3Sb_{1-x-y}Sn_xIn_ySe_4</math> Permingeatites Double-Doped with Sn and In</i>
I-P34	<b>Sang Jun PARK</b> , B. K. Hong, I. H. Kim <i>Thermoelectric Properties of <math>Cu_3Sb_{1-x}Sn_xSe_{4-y}S_y</math> Permingeatites Double-Doped with Sn and S</i>
I-P35	<b>Yu-Chih TSENG</b> <i>An Accelerated Method to Synthesize Doped Magnesium Silicide Stannide Thermoelectric Material with Controllable Dendritic Morphology</i>
I-P36	<b>Jun CHENG</b> , J. Zhang, P. Qiu, X. Shi, L. Chen <i>Thermoelectric properties of heavily Co-doped <math>\beta</math>-<math>FeSi_2</math></i>
I-P37	<b>Dulyawich PALAPORN</b> , K. Kurosaki, S. Pinitsoontorn <i>Effect of sintering temperature on the thermoelectric properties of <math>Ag_2Se</math> fabricated by spark plasma sintering with high compression</i>
I-P38	<b>Irene GARCIA</b> , P. Ying, K. Nielsch <i>Improving the Thermoelectric Properties of <math>\alpha</math>-<math>MgAgSb</math> through powder Atomic Layer Deposition</i>
I-P39	<b>Dejwikom THEPRATTANAKORN</b> , S. Pinitsoontorn <i>Cold Sintering process of <math>Ag_2Se</math>: Tailoring Microstructure for Superior Thermoelectric Properties</i>
I-P40	<b>Vivek GUPTA</b> , A. Bugalia, A. Pandey <i>Improvement in thermoelectric properties of <math>SnTe</math> via band engineering and phonon scattering</i>
I-P41	<b>Ziming ZHANG</b> , Z. Gao, T. Deng, Q. Song, L. Chen, S. Bai <i>Mechanical properties of <math>Mg_3(Sb,Bi)_2</math>-based thermoelectric compounds</i>
I-P42	<b>Nouha DRAMÉ</b> , M. Depriester, G. Leroy, J. C. Carru <i>Synthesis and characterization of the thermoelectric properties of <math>Zn_{1-x}Al_xO</math> for application in the Internet of Things</i>

I-P43	<b>Qianhui LOU</b> , Z. Gao, Z. Li, S. Han, F. Liu, C. Fu, T. Zhu <i>Strong defect tolerance in heavy-band thermoelectrics</i>
I-P44	<b>Sang Jun PARK</b> , I. H. Kim <i>Zn-Hakite: Solid-State Synthesis and Thermoelectric Performance of <math>Zn_xCu_{12-x}Sb_4Se_{13}</math></i>
I-P45	<b>Xingyan Dong</b> , Z. Liu, J. Sui <i>Understanding of Isoelectronic Alloying Induced Energy Gap Variation Towards Large Enhancement of Thermoelectric Power Factor</i>
I-P46	<b>Mito NAGASE</b> , H. Miyazaki, Y. Nishino, W. Zhou, G. Xing, K. Masuda, Y. Sakuraba <i>Influence of Iron Doping on the Anomalous Nernst Effect in Heusler-type <math>Co_2MnGa</math> Compounds</i>
I-P47	<b>Shigeyuki NAKAMURA</b> , H. Araki, Y. Akaki <i>Simple and Low-cost Synthesis of <math>Cu_2SnS_3</math> for Thermoelectric Material</i>
I-P48	<b>Seunghyeok LEE</b> , G. M. Park, J. Y. Kim, H. Kim, S. H. Baek, T. J. Park, J. S. Kim, S. K. Kim <i>Unlocking the Potential of Porous <math>Bi_2Te_3</math>-based Thermoelectrics using Precise Interface Engineering through Atomic Layer Deposition</i>
I-P49	<b>Keigo ONO</b> , Y. Goto, C.H. Lee <i>Thermoelectric properties of 143-Zintl phase compound <math>RbCd_4As_3</math></i>
I-P50	<b>Kosuke YAMAZAKI</b> , H. Nakatsugawa, Y. Okamoto <i>P-type thermoelectric properties of half-Heusler alloys <math>TiNi_{1-x}Co_xSn</math> (<math>0 \leq x \leq 0.15</math>) at high temperature (<math>\leq 800</math> K)</i>
I-P51	<b>Ajay Kumar VERMA</b> , S.R. Dhakate, Sumeet Walia, and Bhasker Gahtori <i>Half-Heusler Thermoelectric Materials: Exceptional Properties, Challenges, and Future Scope</i>
I-P52	<b>Akira NAGAOKA</b> , K. Nakashima, Y. Hirai, S. Miura, K. Yoshino, K. Nishioka <i>Thermoelectric power generation from high-quality kesterite <math>(Cu_{1-x}Ag_x)_2ZnSnS_4</math> single crystals</i>
I-P53	<b>Bo-Ping ZHANG</b> , Z. Shan, H. Li, J. Pei <i>Significant performance enhancement in thermoelectric <math>Cu_{1.8}S</math>: cation/anion co-doping and multiphase coexistence effects</i>
I-P54	<b>Inder KUMAR</b> , G. Shankar, P. Pambannan, S. Suwas, R. C. Mallik <i>Thermoelectric Properties of Sn substituted Defective Half Heusler <math>Nb_{0.83}CoSb</math> at Sb site</i>
I-P55	<b>Ming LIU</b> , Muchun Guo, Yingda Lai, Haiyan Lyu, Yuke Zhu, Fengkai Guo, Kuai Yu, Xingyan Dong, Zihang Liu, Wei Cai, Matthias Wuttig, Yuan Yu, Jiehe Sui <i>Doping Strategy in Metavalently Bonded Materials for Advancing Thermoelectric Performance</i>
I-P56	<b>Cevriye KOZ</b> , H. Baker, K. Simpson, R. Tuley <i>Reliable n-type <math>Bi_2Te_3</math> production for large-scale applications</i>
I-P57	<b>Madi DONOHOE</b> , L. Menezes, B. Perez, T. Licskai, H. Kleinke <i>Optimization and Fabrication of Low-Temperature Bismuth Telluride (<math>Bi_2Te_3</math>) Thermoelectric Generators for Water Disinfection Application</i>
I-P58	<b>Deepa BHATT</b> , P. Vaqueiro, A. Powell <i>Effect of Te substitution and copper vacancies on the thermoelectric performance of <math>BiCuSeO</math></i>
I-P59	<b>Juliusz LESZCZYNSKI</b> , P. Nieroda, A. Kolezynski <i>Optimization of the thermoelectric properties of tetrahedrites using various co-doping strategies</i>
I-P60	<b>Frantisek MIHOK</b> , K. Saksl, M. Kruszewski, S. Michalik <i>Polarity switch and thermoelectric properties of polycrystalline <math>SnSe</math> doped with Bi</i>
I-P61	<b>Katsumichi HANZAWA</b> , K. Yamanaka, S. Kato, T. Doi, Y. Kurokawa, N. Usami, T. Itoh <i>Fabrication and Performance Evaluation of Thermoelectric <math>Mg_2Si</math> Compounds Synthesized Using Silicon Extracted from waste PV modules</i>
I-P62	<b>Ram AMUTHAN</b> , K. P. Mohamed Jibri, J. Archana, M. Navaneethan, M. Krishnamohan <i>Enhancement of power factor in ferromagnetic phase of <math>BiCuSeO</math></i>
I-P63	<b>Rajat SAINI</b> , S. Paul, S. K. Pati, R. C. Mallik <i>Enhanced thermoelectric performance in a Te-substituted and Cu-deficient Superionic Conductor</i>
I-P64	<b>T. S. NIVIN</b> , V. Vijay, E. Karvaanan, M. Navaneethan, A. Karthigeyan <i>Realizing the low thermal conductivity of <math>SnS</math> by utilizing the phonon liquid-like behavior of <math>Cu_2Se</math></i>
I-P65	<b>Gouri SANKAR</b> , S. Perumal, G. Arunachalam <i>Thermoelectric properties of aliovalent Zn doped <math>Cu_{1.8}S</math> polycrystalline materials</i>
I-P66	<b>Paweł NIERODA</b> , J. Leszczyński, M. J. Kruszewski, D. Kozień, A. Koleżyński <i>Improving the thermoelectric properties of <math>Cu_2Se</math> by adding <math>B_4C</math> inclusions and obtaining the material using the "SPS melting" method</i>
I-P67	<b>Norbert NEMES</b> , JM G. Amores, N. Biskup, J. Beltran, F.S. Sánchez, H. L. Andersen, J. Alonso, JL M. Peña, OJ Durá, MT F. Díaz, J. Gainza <i>Composition, structure and phonon softening in high entropy alloys based on <math>PbTe</math> thermoelectrics</i>
I-P68	<b>Yuting QIU</b> , L.-D. Zhao, Y. Jin, D. Ren

	<i>Electrical and Thermal Transport Properties of GeTe-Pb-CuSbSe<sub>2</sub></i>
I-P69	<b>Hironori OHSHIMA</b> , Y. Takashima, Y. Goto, C. H. Lee <i>Synthesis of <math>\alpha</math>-MgAgSb using melting method</i>
I-P70	H. Kunioka, <b>Hiroya OISHI</b> , D. Shiojiri, N. Hirayama, Y. Imai and T. Iida <i>Investigation of the Group 13 elemental doping effect on the environmentally benign thermoelectric material <math>\alpha</math>-SrSi<sub>2</sub></i>
I-P71	<b>Dáša DRENČAKOVÁ</b> , M. Achimovičová, M. Baláž, J. Navrátil, V. Kucek, V. Puchý, J. Briančin <i>Characterization and transport properties of mechanochemically synthesized semiconductor CuAgSe</i>
I-P72	<b>Jiankang LI</b> , R. Chetty, T. Mori <i>Enhancing the thermoelectric performance of Mg<sub>3</sub>Sb<sub>2</sub>-based materials via Ag doping</i>
I-P73	<b>Ji Hee PI</b> , C. O. Park, J. Y. Hwang, K. H. Lee <i>Thermoelectric Properties of Oxide Material: single crystal of K<sub>0.8</sub>Ti<sub>1.73</sub>Li<sub>0.27</sub>O<sub>4</sub> (KTLO) with layered structure</i>
I-P74	<b>Christophe CANDOLFI</b> , A. Léon, K. Pryga, B. Wiendlocha, S. E. Oualid, B. Lenoir <i>Sn in Bi<sub>2</sub>Te<sub>2</sub>Se: Resonant or not resonant?</i>
I-P75	<b>Amin BAHRAMI</b> , S. He, C. Jung, R. He, Z. Ren, S. Zhang, K. Nielsch <i>Precision interface engineering of CuNi alloys by powder ALD toward better thermoelectric performance</i>
I-P76	<b>Jan ZICH</b> , A. Sojka, J. Navrátil, T. Plecháček, P. Ruleová, K. Knížek, Č. Drašar <i>General review of polycrystalline Bi<sub>2</sub>O<sub>2</sub>Se preparation</i>
I-P77	<b>Zhicheng HUANG</b> , K. Hayashi, X. Nan, H. Konishi, and Y. Miyazaki <i>Enhancement of Thermoelectric Properties in p-type Iron-based Half-Heusler VFeSb Alloys via Titanium Alloying</i>
I-P78	<b>Jiří NAVRÁTIL</b> , J. Zich, P. Ruleová, P. Levinský, Jan Mistrík, M. Míšek, S. Kamba, Č. Drašar <i>Transport and optical properties of the quasi 2D Bi<sub>2</sub>O<sub>2</sub>Se single crystals</i>
I-P79	<b>Vivek KUMAR</b> , T. Maiti <i>Ca<sub>3</sub>Co<sub>4</sub>O<sub>9</sub>-based high entropy oxide for high-temperature thermoelectric application</i>
I-P80	<b>Mun Hwi LEE</b> , G. H. Lee, J. Y. Cho, Y. S. Lim, W. H. Nam <i>Enhanced Thermoelectric Properties of CoSb<sub>3</sub> Skutterudites by Incorporating Ag Nanoparticles</i>
I-P81	<b>Ilhame ASSAHSANI</b> , B. Popescu, R. El Bouyadi, A. Galatanu <i>Thermoelectric properties of n-type Mg<sub>2</sub>Si<sub>0.4</sub>Sn<sub>0.6</sub> solid solutions co-doped with Y-Sb and V-Sb</i>
I-P82	<b>Chandrakant PRAJAPATI</b> , M. Saravanan, N. K. Upadhyay, R. Shyam, S. R. Dhakate <i>Synthesis and thermoelectric properties of (Nb, Ge) Doped Higher manganese Silicide</i>
I-P83	<b>Sahiba BANO</b> , T. Aizawa, S. Shaikh, and T. Mori <i>Significant Reduction of Thermal Conductivity and Enhancing Thermoelectric Performance in CrSb<sub>2</sub> via Fe-Bi Co-Alloying</i>
I-P84	<b>Michał SZOT</b> , J. Korczak, W. Wołkanowicz, S. Chusnutdinow, W. Zaleszczyk, L. Kowalczyk, R. Minikayev, M. Aleszkiewicz, G. Karczewski, T. Wojtowicz, T. Story <i>Single crystals of SnSe grown from the vapor for thermoelectricity</i>
I-P85	<b>Wenhao ZHANG</b> , J.-F. Halet, T. Mori <i>First Principles Tight-binding Analysis of Electronic Structure of n-type Mg<sub>3</sub>Sb<sub>2</sub> and Band Engineering Strategies</i>
I-P86	S. Acharya, <b>Woochul KIM</b> <i>Improving the thermoelectric performance of n-Type diamond-like AgInSe<sub>2</sub> through nanostructure inclusions</i>
I-P87	<b>Alberto CASTELLERO</b> , A. Difalco, M. Baricco, C. Fanciulli, A. Ferrario, S. Boldrini <i>Production of half-Heusler alloys for a thermoelectric generator prototype</i>
I-P88	<b>Kushal MEHROTRA</b> , A. Novitskii, T. Mori <i>Relationship Between Chemical Bonding Strength, Thermoelectric Performance, and Mechanical Properties Controlled By Anion Site in YbMg<sub>2</sub>(Bi,Sb)<sub>2</sub> Zintl Phase</i>
I-P89	<b>Maria WRÓBLEWSKA</b> , K. Ciesielski, E. Toberer <i>From half-Heusler to rocksalt: discovery and thermoelectric properties of a novel solid solution in ErNi<sub>x</sub>Sb-ErSb</i>
I-P90	<b>Shu-Qing LI</b> <i>Glassy ZIF-62 Compositing Induces Ultralow Lattice Thermal Conductivity in GeTe</i>
I-P91	<b>Manisha YADAV</b> , V. Singh <i>Zn doped SnSe material for potential thermoelectric application</i>
I-P92	<b>Peerapong YAMCHUMPORN</b> , K. Boonin, S. Jumpathip, T. Sareein, K. Singsoog, T. Seetawan, J. Kaewkhao <i>The investigation in thermoelectric properties of 30Li<sub>2</sub>O: 3Bi<sub>2</sub>O<sub>3</sub>: (60-X)B<sub>2</sub>O<sub>3</sub>: 7CuO: (X)TeO<sub>2</sub> oxide glass</i>
I-P93	<b>Nishath Jamal BEGUM</b> , P. Rajasekar <i>Thermoelectric Properties of Higher Manganese Silicide Synthesized by Molten Salt Shielded Synthesis Method</i>
I-P94	<b>Haiqi LI</b> , C. Chen, X. Wang, D. Shen, S. Duan, W. Wang, K. Liu, Q. Zhang, Y. Chen <i>Realizing High Average zT in GeTe through Band Modulation and Suppressing Ge Vacancies</i>
I-P95	<b>Alessandro DIFALCO</b> , M. Palumbo, S. Boldrini, A. Ferrario, C. Fanciulli, O. Rouleau, B. Villeroy, G. Barrera, P.M. Tiberto, P. Allia, M. Baricco, A. Castellero, and E. Alleno

	<i>The role of vacancies on structural, transport, magnetic and half-metallic properties of Co<sub>2</sub>ZrSn Heusler alloy</i>
I-P96	S. Majumder, P. Singha, C. V. Devan, B. Deb, <b>Vinayak KAMBLE</b> <i>Thermoelectric Transport Studies on GeTe, SnSe based alloys Mitigating Bipolar Conduction</i>
I-P97	<b>Elise DIRICAN</b> , A. Moll, C. Barreteau, M. H. Berger, F. Gaslain, E. Alleno <i>Solid State Synthesis and Thermoelectric Characterization of YbCuSb</i>
I-P98	<b>Molly MCVEA</b> , C. B. Nielsen, O. Fenwick, P. Á. Szilágyi <i>Metal-Organic Frameworks as Thermoelectric Materials: Design, Synthesis and Assessment</i>
I-P99	<b>Yuichi ASHIDA</b> , S. Fujieda, S. Ichikawa, Y. Ohishi, H. Muta <i>Thermoelectric properties of nanostructured bulk Si with heavily doped P</i>
I-P100	<b>Sagarika SHARMA</b> , T. Parashchuk, O. Cherniushok, J. Tobola, K. T. Wojciechowski <i>Effect of cation substitution on the thermoelectric properties of Cu-based argyrodites</i>
I-P101	<b>Remigiusz OSOWSKI</b> , O. Cherniushok, T. Parashchuk, J. Tobola, K. T. Wojciechowski <i>Effect of anion substitution on the structural and thermoelectric properties of Cu-based argyrodites</i>
I-P102	<b>Rizwan AKRAM</b> , J. A. Khan, J. S. Khan <i>Synthesis and thermoelectric properties of Barium doped Ca<sub>3</sub>Co<sub>4</sub>O<sub>9</sub></i>
I-P103	<b>Sung-Jin JUNG</b> , Y. Jung, H. Y. Kim, I. Lee, K. Kim, M. Kim, H. Wee, Y. Koh <i>Exploring the relationship between particle size and process parameters of hot extrusion on thermoelectric property of n-type Bi<sub>2</sub>Te<sub>3</sub>-based alloys</i>
I-P104	<b>Swati SWATI</b> , J. Prakash <i>Structural aspects of the Ag-substituted BaCu<sub>2</sub>Se<sub>2</sub> phases and their thermoelectric (TE) properties</i>
I-P105	<b>Varinder PAL</b> , M. Paliwal, C. S. Tiwary <i>Directional solidified Bi<sub>2</sub>Te<sub>3</sub>-Ga<sub>2</sub>Te<sub>3</sub> thermoelectric multiphase alloy</i>

## Nanomaterials

I-P106	<b>Younes Bourenane CHERIF</b> , Z. Mekhalif, S. Abdous, L. Nedjar, A. Mekki <i>Synergistic Enhancement of Thermoelectric Performance through One-Dimensional Hybrid Nanocomposites: Wrapped Nickel Oxide-Decorated Multi-Walled Carbon Nanotubes with Polypyrrole</i>
I-P107	<b>Da-hye KIM</b> , S. Shin, S. J. Jeon, S. Han <i>High-performance P-type hybrid thermoelectric fibers using co-sputtering for thermoelectric textiles</i>
I-P108	<b>Yong Jin JEONG</b> , I. H. Kim <i>Hydrothermal Synthesis and Characterization of Copper Selenides for Photothermal-Thermoelectric Applications: Investigating Material Properties and Synthesis Conditions</i>
I-P109	<b>Nouredine OUELDNA</b> , A. Portavoce, K. Hoummada <i>Crystalline Mg-Ag-Sb thermoelectric thin films for energy harvesting applications</i>
I-P110	<b>In Ho KIM</b> , Y. J. Jeong <i>Solution-Based Doping and Drying Strategies for Improving the Thermoelectric Performance of Tellurium Nano-needle film via Green Hydrothermal synthesis</i>
I-P111	<b>Jose María DOMÍNGUEZ-VÁZQUEZ</b> , O. Caballero-Calero, A. Cebollada, A. Conca, M. Martín-González <i>Thermoelectric efficiency of sputtered epitaxial Fe<sub>2</sub>VAl (100) and (110) thin films</i>
I-P112	<b>Yuan-Meng LIU</b> , X. L. Shi, Q. Liu, Z. G. Chen <i>Boosting Thermoelectric Performance and Stability of SWCNT-Based Flexible Films and Devices through Rational Triple Treatments</i>
I-P113	<b>Ichiro IMAE</b> , M. Morimoto, K. Imato, Y. Ooyama, D. Saito, R. Maeda, Y. Goto <i>Modulating Thermoelectric Properties of Single-Walled Carbon Nanotubes through Chemical Doping Methods</i>
I-P114	<b>Dominique MATTLAT</b> , R. Bueno Villoro, C. Jung, S. Zhang, R. He, R. Hatami Naderloo, D. Zavanelli, G. J. Snyder, C. Scheu <i>Effective doping of InSb at the grain boundaries in Nb<sub>1-x</sub>Ti<sub>x</sub>FeSb based Half-Heusler thermoelectrics for high electrical conductivity and Seebeck coefficient</i>
I-P115	<b>Charlotte POTERIE</b> , R. Burcea, H. Bouteiller, T. Cabioch, J.F. Barbot, P. Eklund, A. Le Febvrier <i>Effect of implantation-induced defects on the transport properties of Scandium Nitride (ScN) thin films</i>
I-P116	<b>Farjana J. SONIA</b> , N. B. Pulumati, K. Nielsch and H. Reith <i>Electrodeposited Near-Room-Temperature Micro-Thermoelectric Generators</i>
I-P117	<b>Katsuaki HASHIKUNI</b> , R. Inoue, H. Anno <i>Stable Carrier Control of Carbon Nanotubes Using Electric Double Layer Electrets</i>
I-P118	<b>Surabhi SURESH</b> , C. Hettiarachchige, G. Das, N. Singh <i>Ag Nanowires Decorated with Se Nanoparticles for Enhanced Thermoelectric Properties</i>
I-P119	<b>Chul Oh PARK</b> , J. H. Pi, M. Y. Kim, K. H. Lee

	<i>Enhanced thermoelectric transport properties of Al-doped Zinc Oxide via grain morphology control</i>
I-P120	<b>Niraj SINGH</b> , V. Hjort, D. Gambino, A. I. Febvrier, B. Alling and P. Eklund <i>Experimental and DFT study of doped CrN thin films for thermoelectric applications</i>
I-P121	<b>Tetiana TAVRINA</b> , S. Linden <i>Two-dimensional crystals of MoS<sub>2</sub> and MoSe<sub>2</sub> for thermoelectric applications</i>
I-P122	<b>Swathi Krishna SUBHASH</b> , H. Hillebrecht, P. Woias, U. Pelz <i>Tuning the thermoelectric properties of Bi<sub>2</sub>Te<sub>3</sub> by alloying and nanostructuring via high energy ball-milling</i>
I-P123	<b>Tommy HOFMANN</b> , H. Haseeb, D. Kojda, N. Gostkowska-Lekner, K. Habicht <i>Charge Transport in Mesoporous Silicon: Origin of the Meyer-Neldel Rule</i>
I-P124	<b>Alex Rodríguez-Iglesias</b> , I. Martín, F. Pérez, J. Santander, F. X. Álvarez, A. F. Lopeandia, L. Fonseca, L. Abad, M. Salleras, M. Fernández <i>In search of the thermoelectric enhancement of ultra-thin Si films: a block copolymer driven nanostructuring approach</i>
I-P125	<b>Suman ABBAS</b> , B. Jarwal, L. C. Chen and K. H. Chen <i>Exploring the Effect of Molybdenum (Mo) doping on Thermoelectric Properties of Cubic Ge-Sb-Te Thin Film</i>
I-P126	<b>Alapati J S A Veeranjanya VARA PRASAD</b> , K. Jayabal, P. Veluswamy <i>Fabrication of thin film thermoelectric generator using Magnetron Sputtering</i>
I-P127	<b>Ahmad GHARLEGI</b> , C. J. Liu <i>Enhanced zT of Hydrothermally Synthesized Cobalt Skutterudites by Partially Indium Filling through a Solid-Vapor Reaction Process</i>
I-P128	<b>Khalid MAHMOOD</b> , A. Ali, N. A. Khan <i>Optimizing Thermoelectric Efficiency: Hydrothermal Synthesis of Mn-Cd Co-doped SnO<sub>2</sub> Nanoparticles</i>
I-P129	<b>Shunya SAKANE</b> , A. Ayukawa, N. Kiridoshi, Y. Yamashita, H. Udono <i>Thermoelectric performance of epitaxially grown Mg<sub>3</sub>Sb<sub>2</sub> thin films on sapphire substrates</i>
I-P130	<b>Oskars BITMETS</b> , K. Pudzs, B. Hamawandi, M. S. Toprak <i>Tailoring Thermoelectric Properties: Bi<sub>2</sub>Te<sub>3</sub> and Sb<sub>2</sub>Te<sub>3</sub> Nanoparticles in a PEDOT:PSS:PEO Composite</i>
I-P131	<b>Cristiana Antonella MATROPIERRO</b> , G. Calabrese, R. Cecchini, G. Lorusso, D. Gentili, V. Morandi, F. Liscio <i>Electrochemical Exfoliation of MoS<sub>2</sub> for Thermoelectric Applications: A Novel Approach to Near-Room-Temperature Energy Conversion</i>
I-P132	<b>Seenidurai ATHITHYA</b> , M. Navaneethan, E. Senthil Kumar <i>Probing an enhanced thermoelectric by tuning multiscale phonon scattering and band engineering in ternary Al doped CuAgSe-based materials</i>
I-P133	<b>Chandrsekaran ARCHANA</b> , R. Abinaya, J. Archana, M. Navaneethan, S. Harish <i>Realization of low potential barrier in MoS<sub>2</sub>/rGO heterojunction with enhanced electrical conductivity for thin film thermoelectric applications</i>
I-P134	<b>Wei-Han TSAI</b> , C. L. Chen, R. K. Vankayala, Y. H. Lo, T. H. Wang, S. Y. Huang, Y. Y. Chen <i>Enhancement of ZT in Bi<sub>0.5</sub>Sb<sub>1.5</sub>Te<sub>3</sub> Thin Film through Lattice Orientation Management</i>
I-P135	<b>Rizwan AKRAM</b> , K. Ahsan, J. S. Khan <i>Impact of Polypyrrole on thermoelectric properties of Bismuth Telluride based composites</i>
I-P136	<b>Joseph MOREAU</b> , F. Tournus, O. Boisson, S. Pailhès <i>Toward embedded magnetic nano-clusters for thermoelectricity</i>

17:00-19:00

## POSTER SESSION II (Tuesday)

## Theory &amp; Modelling

II-P1	<b>Kacper PRYGA</b> , B. Wiendlocha <i>Influence of electron resonant scattering on thermoelectric performance of <math>Ni_xAu_{1-x}</math></i>
II-P2	<b>Warawut SA-ARDSIN</b> , S. Pantian <i>Elliptical Pores and Thermoelectric Thermal Conductivity: A Maxwell-Eucken Model Reveals Shape Dependence</i>
II-P3	<b>Prashant Kumar SAHU</b> , H. Kamila, J. de Boor, E. Mueller, T. Dasgupta <i>Sequential approach to multiband modelling of thermoelectric materials</i>
II-P4	<b>Iwan Ruiz Cózar</b> , A. Massaguer, E. Massaguer, A. Cabot, T. Pujol, J.J. Suñol <i>Analysis to identify the influence of the variables of an automotive thermoelectric generator on the power generation</i>
II-P5	<b>Gökçe VARDAR</b> , B. O. Gürses, G. Gürlek <i>Energy and Exergy Analysis of a Thermoelectric Generator for Subcutaneous Applications</i>
II-P6	<b>Lankun WANG</b> , J. Sui, Z. Liu <i>Investigating the Phonon Transport Mechanisms in Aliovalent-doped <math>TiCoSb</math> Half-Heusler Thermoelectrics</i>
II-P7	<b>Surbhi RAMAWAT</b> , A. Dixit <i><math>\beta</math>-<math>SrZrS_3</math>: A superior intermediate temperature thermoelectric through complex band geometry and ultralow lattice thermal conductivity</i>
II-P8	<b>Sumit KUKRETI</b> , A. Dixit <i>Strain-engineered thermophysical properties ranging from band-insulating to topological insulating phases in <math>\beta</math>-antimonene</i>
II-P9	<b>Sophie K. GUILLEMOT</b> , A. Suwardi, N. Kaltsoyannis, J.M. Skelton <i>Impact of crystal structure on the lattice thermal conductivity of the IV-VI chalcogenides</i>
II-P10	<b>Dariusz WIECZOREK</b> , Bartłomiej Wiendlocha <i>Theoretical studies of the electronic structure, transport properties and doping in <math>InTe</math></i>
II-P11	<b>Gabriel KUDEROWICZ</b> , B. Wiendlocha <i>Study of lattice dynamics and electron-phonon interaction in <math>SnTe:In</math> and <math>PbTe:Tl</math></i>
II-P12	<b>Wiebke LIEBSCHER</b> , A. G. Rösch, Md. M. Mallick, Q. Zhang, M. I. Khan, L. Franke, M. Kemerink, U. Lemmer <i>Exploring transport mechanisms of printed bismuth telluride based nanocomposite materials with COMSOL</i>
II-P13	<b>Minsu HEO</b> , H. S. Kim <i>Evaluation of thermoelectric parameters in <math>In</math> and <math>Sr</math> co-doped <math>SnTe</math> via the progressed single parabolic band model examination method</i>
II-P14	<b>Alveena KHAN</b> , J. Flitcroft, J. Skelton <i><math>ATiO_3</math> (<math>A=Ca, Sr</math> or <math>Ba</math>) oxide perovskites for high-performance thermoelectrics</i>
II-P15	<b>Joseph M. FLITCROFT</b> , A. Althubiani, J. M. Skelton <i>Bismuth Oxychalcogenides for Thermoelectric Material Applications</i>

## New Materials

II-P16	<b>Martin LEPROULT</b> , T. Barbier, E. Guilmeau <i>Harnessing the Lone Pair Effect for Enhanced Thermoelectric Performance in Chalcogenides</i>
II-P17	<b>Dongyi SHEN</b> , R. Cheng, C. Chen, Y. Chen <i>Enhanced thermoelectric performance of <math>p</math>-type <math>Bi_2Si_2Te_6</math> enabled via synergistically optimizing carrier concentration and suppressing bipolar effect</i>
II-P18	<b>Koki NAKASHIMA</b> , A. Nagaoka, Y. Hirai, K. Nishioka <i>Controlling the conduction type in <math>ZnSnAs_2</math> chalcopyrite thermoelectric materials with high power factor</i>
II-P19	<b>Joris More-CHEVALIERA</b> , U. D. Wdowik, Jiří Martan, S. Cichoň, Petr Levinský, D. Legut, E. de Prado, J. Pokorný, J. Bulíř, M. Novotný, L. I. Gregora, L. Fekete, L. Volfová, J. Lančok <i>Thermoelectric properties of <math>ScN</math> layers and doped <math>ScN</math> layers with <math>Nb</math></i>
II-P20	<b>Savvas HADJIPANTELI</b> , Th. Krasia-Christoforou, Th. Kyratsi



	<i>Thermoelectric performance of PEDOT:PSS composites with Bi<sub>0.4</sub>Sb<sub>1.6</sub>Te<sub>3</sub></i>
II-P21	<b>Taichi NAKAMURA</b> , M. Miyata, D. Takeda, T. Munemoto, A. Matoba, T. Toyoda and M. Koyano <i>Electron and phonon transport properties of Ag-P composite thermoelectric materials showing low lattice thermal conductivity</i>
II-P22	<b>Uzma HIRA</b> , J.-W.G. Boss, F. Sher <i>Substantially low thermal conductivity and high thermoelectric figure-of-merit in Bi-doped Sr<sub>2</sub>CoRuO<sub>6</sub> double perovskites</i>
II-P23	<b>Xuezheng DU</b> , B. Lin, H. Liu <i>Ultralow thermal conductivity of crystalline organic-inorganic 2D halid perovskites</i>
II-P24	<b>Kosuke Watanabe</b> , H. Kojima, K. K. Raut, C. Bourgès, T. Mori, K. Miyazaki <i>Development of Printed Thermoelectric Films Using CoSb<sub>3</sub>-based Materials</i>
II-P25	<b>Manoj SINGH</b> , A. K. Gautam, M. Faraz, N. Khare <i>Freestanding, Polyaniline/WS<sub>2</sub>/CNT Nanocomposite Flexible Film for Thermoelectric Application</i>
II-P26	<b>Shun-ichiro ITO</b> , K. Kanahashi, H. Tanaka, B. Chen, H. Ohta, T. Takenobu <i>Temperature Dependence of Thermoelectric Properties in Electrochemically-Doped Conducting Polymer PBTTT</i>
II-P27	<b>Kaspars PUDZS</b> , B. Hamawandi, O. Bitmets, A. Maurucaite, R. Grzibovskis, M. S. Toprak <i>Thermoelectric Hybrid Systems Utilizing Low Molecular Weight Compounds</i>
II-P28	<b>Rajan BISWAS</b> , J. W. G. Bos <i>Ionic Thermoelectric Properties of NASICON based Fast Ion Conductors</i>
II-P29	<b>Kristina ASHURBEKOVA</b> , M. Naumochkin, H. Reith, K. Nielsch, M. Knez <i>Organic-inorganic hybrid thermoelectric materials through vapor phase infiltration</i>
II-P30	<b>Md Mahmudur RAHMAN</b> , M. Solis-de la Fuente, L. Márquez-García, J. García-Cañadas <i>Remarkable power factor improvement in a nanostructured and porous thermoelectric material functionalised with viologen molecules</i>
II-P31	<b>Damian LEWOC</b> , T. Miruszewski, <i>Pyrochlore thermoelectric materials based on composite composition</i>
II-P32	<b>Sanjukta MUKHERJEE</b> , T. Maiti <i>Thermoelectric Properties of BaTiS<sub>3</sub> Chalcogenide perovskite exhibiting ultra-low thermal conductivity</i>
II-P33	<b>Martyna Maria CZUDEK</b> , T. Miruszewski, D. Jaworski, M. Gazda <i>Thermoelectric properties of multicomponent oxides</i>
II-P34	<b>Aichi YAMASHITA</b> , K. Prateek, P. Rani, A. Seshita, Y. Mizuguchi <i>Development of cubic structural high-entropy-type thermoelectric materials</i>
II-P35	<b>Hitoshi KOHRI</b> <i>Preparation and Thermoelectric Properties of Pseudo Binary Compounds of Molybdenum Disilicide and Tungsten Disilicide</i>
II-P36	<b>Trivedi VIKRANT</b> , N. Tsujii, T. Mori <i>The enhancement of the thermoelectric properties of nanostructured Sm-doped SrSi<sub>2</sub> low-cost p-type thermoelectric materials for waste-heat recovery applications</i>
II-P37	<b>Michael HALL</b> , P. Bhatnagar, R. C. Mudavath, A. Mejia-Pena, D. Vashaee <i>Engineering Spin-Driven Thermoelectricity in Manganese Mono-Chalcogenides</i>
II-P38	<b>Adnan ALI</b> , K. Mahmood, M. Yasir Ali, M. Shujaat Hussain <i>High power factor in room temperature thermoelectric range for thermally evaporated GeO<sub>2</sub> thin films by post growth annealing process</i>
II-P39	<b>Kejia LIU</b> , C. Chen, H. Li, Y. Chen <i>Advancing thermoelectric performance in NaCdSb-based Zintl phase via the synergistic effect of Na deficiency and dynamic doping</i>
II-P40	<b>Adrianna LIS</b> , K. Zazakowny, K. Wojciechowski <i>Thermoelectric polymer composites based on PEDOT:PSS with added Cu<sub>12+x</sub>Sb<sub>4</sub>S<sub>13</sub> nanoparticles</i>
II-P41	<b>Kimberly BEERS</b> , K. Najafi, A. Ravi, Q. Zhang, B. Chen <i>Investigation of Co-Evaporated Bi<sub>2</sub>Te<sub>3</sub> Thin Films on HD-4110 Polyimide for Thermoelectric Micro-Generators</i>
II-P42	<b>M.S. HEMALATHA</b> , P. Rajasekar <i>Synthesis and Thermoelectric performance of Co-doped β-FeSi<sub>2</sub>/Polyaniline composites</i>
II-P43	<b>Marcello FRANZINI</b> , S. Galliano, M. Bonomo, N. Barbero, K. Sasitharan, G.H. Morritt, M. Borri, G. Filiddani, M. Freitag, A. Reale, C. Barolo <i>Novel Cu-polymers for low-temperature thermal energy harvesting</i>
II-P44	<b>Silvia MILITA</b> , G. Calabrese, C. Pipitone, A. Martorana, F. Giannici A. Guagliardi, N. Masciocchi <i>1-D pseudoperovskite thin films: structure, morphology and long term stability</i>
II-P45	<b>Karolina ZAZAKOWNY</b> , A. Lis, K. Wolski, S. Zapotoczny, K. Wojciechowski <i>Flexible Composite Materials Based on PEDOT:PSS with Inorganic Additives</i>



II-P46	<b>Kaja BILIŃSKA</b> , M. J. Winiarski <i>Machine Learning for half-Heusler Phases: From Lattice Parameter to Thermoelectric Performance</i>
II-P47	S. Gogoc, K. Wojciechowski, <b>Przemysław DATA</b> <i>Flexible thermoelectric pellets based on poly(3-hexylthiophene) with dodecylbenzenesulphonic acid</i>

### Measurements

II-P48	<b>Ruian LIU</b> , M. Miyata, M. Koyano <i>Investigation of lattice anharmonicity in Se-doped <math>\text{Bi}_2\text{Te}_3</math> based on temperature-dependent Raman spectroscopy</i>
II-P49	<b>Jeongsoo KANG</b> , S. Seong, Y. S. Kwon, B. I. Min <i>Synchrotron-radiation Spectroscopy Study of <math>\text{RTe}_2</math> and <math>\text{RTe}_3</math> Charge Density Wave Compounds (R=Pr, Er)</i>
II-P50	<b>Anustoop DAS</b> , K. Pal, P. Acharyya, S. Das, K. Maji, K. Biswas <i>Strong Antibonding p-d States Lead to Intrinsically Low Thermal Conductivity in a Cubic Metal Halide <math>\text{CuBi}_4</math></i>
II-P51	<b>Karl-Heinz GRESSLEHNER</b> , M. Krenn, P. Kerepesi, L. Gupfinger, Ch. Beisteiner, B. Plank, B. Sonderegger <i>Non-Destructive Inspection of Thermoelectric Modules by Scanning Acoustic Microscopy</i>
II-P52	<b>Maksim NAUMOCHKIN</b> , K. Nielsch, H. Reith <i>Post annealing and doping with Sb and Cu for precise and wide range tuning of thermoelectric properties of physically vapor deposited <math>\text{Sb}_2\text{Te}_3</math> thin films by</i>
II-P53	Tony <b>MATHEW</b> , V. Vijay, R. Santhosh, J. Archana, M. Navaneethan <i>Investigation of thermoelectric properties of <math>\text{Ag}_{2-x}\text{Al}_x\text{Se}</math> for waste heat recovery</i>
II-P54	<b>Satoaki IKEUCHI</b> <i>Development of instrument to evaluate Peltier performance of thermoelectric modules</i>
II-P55	<b>Kazuo NAGASE</b> , A. Yamamoto, C.-H. Lee <i>Accelerated deterioration test of thermoelectric modules under current load</i>
II-P56	<b>Kenjiro OKAWA</b> , Y. Amagai, N. Sakamoto, N.-H. Kaneko <i>Comparison of measurement techniques for investigating thermoelectric conversion efficiency from a radiative heat loss perspective</i>
II-P57	<b>Anil PANDYA</b> , D. Anadkat, A. Jaiswal, A. V. Sanchela <i>Improved thermoelectric power factor by using different grades graphite paint on paper</i>
II-P58	S. Shin, D. Kim, <b>Seongjae JEON</b> , S. Han <i>Thermal fatigue and shear tests for bond joints of thermoelectric devices</i>
II-P59	<b>Takahiro BABA</b> , T. Baba, T. Mori <i>Determination of thermal diffusivity of thin film by Fourier transform reflectance method under convenient front-heat front-detect configuration</i>
II-P60	<b>Chloé ANDRADE</b> , S. Hawila, A. Abdallah, J-L. Rukemampunzi, A. Mesbah, N. Guillou, F. Perret, S. Wuttke, T. Niehaus, R. Debord, O. Boisron, S. Pailhès and A. Demessence <i>A p-type Semi-Conducting Copper(I)-1,3-Benzenedithiolate 2D Coordination Polymer with High Seebeck Coefficient</i>
II-P61	<b>Maja SAJDAK</b> , J. Tobola, T. Parashchuk, M. Krzywiecki, P. Powroźnik, K. T. Wojciechowski <i>Probing hydrogen content in steel using the thermoelectric effect</i>

### Devices

II-P62	<b>Devang ANADKAT</b> , A. Pandya, S. Dungani, C. Badampudi, A. Jaiswal, N. Patel, A. V. Sanchela <i>The cost-effective approach to fabricate oxide-based bulk thermoelectric generator for low-grade waste heat harvesting</i>
II-P63	<b>Devi Bala Saraswathi SETHURAMAN</b> , C.-J. Liu <i>Enhanced Thermoelectric Performance of <math>\text{Ni}_{1-x}\text{Cr}_x</math>: Energy-Efficient Synthesis and TEG Utilizing <math>\text{Ni}_{0.90}\text{Cr}_{0.10}</math> (p-leg) and Nitric Acid-Treated <math>\text{Cu}_{0.60}\text{Ni}_{0.40}</math>/PEDOT Composites (n-leg)</i>
II-P64	<b>Yuichi HIRAI</b> , A. Nagaoka, K. Nakashima, Y. Ota, K. Nishioka <i>Development of <math>\text{Bi}_2\text{Te}_3</math>-based thermoelectric device by compositional optimization</i>
II-P65	<b>Guillaume SAVELLI</b> , P. Faucherand <i>Chips thermal management by micro-thermoelectric sensors</i>
II-P66	<b>Sushantika CHOUDHARY</b> , B. Agrawal, S. Desale, A. Singh, T. Dasgupta <i>Dopant Optimization for High Efficiency <math>\text{Mg}_3\text{Sb}_{0.6}\text{Bi}_{1.4}</math> Single Leg Thermoelectric Device</i>

II-P67	<b>Shengduo XU</b> , M. Ibanez 3D printing for miniature thermoelectric cooler
II-P68	R. Mohanraman, R. Lydiard, <b>Richard S. TULEY</b> <i>Device substrates: high performance with low thermal conductivity</i>
II-P69	<b>Matteo D'ANGELO</b> , Y. Kim, H. Han, N. Lecis, J. S. Son <i>Bi<sub>2</sub>Te<sub>3</sub>-based Thermoelectric Films Deposited by Aerosol Jet Printing: Chemically Synthesized and Ball Milling-derived Inks Compared</i>
II-P70	<b>Zeyu LIU</b> , R. Huang, L. Chu, L. Shen <i>The general strategy for designing and selecting of thermoelectric cooler based on surrogate model</i>
II-P71	<b>Manikandan SUBRAMANI</b> , S. Mohandos, P. Veluswamy <i>Synergizing and Comparison of [1,3]oxazine Molecule for Efficient Organic Thermoelectric Energy Harvesting</i>
II-P72	<b>Tomohiro KUSUMOTO</b> , Y. Kurokawa, N. Usami, T. Itoh <i>Fabrication of tilted Mg<sub>2</sub>Si/Ni multilayer composite thermoelectric elements using PLA molds and power generation evaluation</i>
II-P73	<b>Yuto MATSUZAKI</b> , R. Tadenuma, Y. Aoshima, M. Yamamoto, L. Takai, Y. Kawano, K. Li <i>Hybrid integration of high Seebeck coefficient materials with carbon nanotube film photo-thermoelectric broadband image sensors</i>
II-P74	<b>Nithin Bharadwaj PULUMATI</b> , A. Dutt, D. Berger, N. Sherkat, U. Pelz, P. Woias, K. Nielsch, H. Reith <i>Height Optimized Micro Thermoelectric Devices</i>
II-P75	<b>Qi ZHANG</b> , H. Li, R. Koshimizu, A. Sano, N. Takahashi, Y. Kawano, K. Li <i>Microwave-based non-destructive monitoring by photo-thermoelectric sensors with carbon nanotube films beyond the diffraction limit</i>
II-P76	<b>Leo TAKAI</b> , M. Yamamoto, D. Sakai, Y. Matsuzaki, Y. Kawano, K. Li <i>All printable carbon nanotube film type photo-thermoelectric broadband 2D camera sheets</i>
II-P77	<b>Chongyang ZENG</b> , E. Bilotti <i>New architectures for heat sink less organic and inorganic thin film thermoelectric (TE) devices inspired by Kirigami</i>
II-P78	<b>Daiki SHIKICHI</b> , R. Ota, R. Odawara, M. Kubota, Y. Kawano, K. Li <i>Multi-wavelength computer vision imaging for 3D composite materials structure restoration with a photo-thermoelectric detector</i>
II-P79	<b>Ryoga ODAWARA</b> , M. Yamamoto, N. Takahashi, Y. Kawano, K. Li <i>Faster operation and integration of photo-thermoelectric sensor in carbon nanotube film camera</i>
II-P80	<b>Miki KUBOTA</b> , Y. Kinoshita, Y. Matsuzaki, M. Yamamoto, L. Takai, Y. Kawano, K. Li <i>Ultrabroadband photo-thermoelectric imager for in-line multi-wavelength pharma inspection in a non-destructive manner</i>
II-P81	<b>Santosh KUMAR</b> , M. Battabyal, D. K. Satapathy <i>Flexible Printed Thermoelectric Films for Energy Harvesting Applications</i>
II-P82	<b>Jongho PARK</b> , J. Jang, B. Ryu, S.D. Park <i>Fabricating Durable Silicide-Telluride Thermoelectric Modules through Chemically-Thermally-Designed Joining Process for Multiple Usability</i>
II-P83	<b>Şeyma ÖZKAN</b> , M. Şener, G. Gürlek, B.O. Gürses, Y. Seki <i>Investigation of Thermoelectric Properties of Layered 3D Modules from PEDOT:PSS-Based Inks</i>
II-P84	<b>Soufiane EL OUALID</b> , I.Kogut, M.Benyahia, E. Geczi, U.Kruck, F. Kosior, P. Masschelein, C. Candolfi, A.Dauscher, J. D. Koenig, A. Jacquot, T. Caillat, E. Alleno, B. Lenoir <i>Enhancing Power Density in Thermoelectric Generators: A Novel Approach Using Thick Metallic Layers Layers</i>
II-P85	<b>Fushan LI</b> , S. Li, Z. Liu, J. Sui <i>High performance Hf-free Half-Heusler power generation via material optimization and barrier design</i>
II-P86	<b>Babu JAYACHANDRAN</b> , R. Chetty, and T. Mori <i>Development of p-type Counterparts for the Medium Temperature Mg<sub>3</sub>Sb<sub>1.5</sub>Bi<sub>0.5</sub> Thermoelectric Devices</i>
II-P87	<b>Aamir M. FASIH</b> , R. Chetty, B. Jayachandran, T. Mori <i>Contact material optimization for the Mg<sub>3</sub>(Sb,Bi)<sub>2</sub>-based thermoelectric compounds</i>
II-P88	S. Masoumi, <b>Amir PAKDEL</b> <i>Flexible thermoelectric generators fabricated by spray printing of PEDOT:PSS/Bi<sub>0.5</sub>Sb<sub>1.5</sub>Te<sub>3</sub> composites</i>
II-P89	<b>Saba SEPAHBAN SHAHGOLI</b> , M. Ozen, U. Aydemir <i>Improving the efficiency of thermoelectric cooler modules prior to manufacturing using COMSOL Multiphysics</i>
II-P90	<b>Tarek MAKANSI</b> , E. T. Enikov <i>Novel Super-Efficient Thermoelectric Device where a Junction Alternates between Hot and Cold by Storing Charge</i>
II-P91	<b>Marco S. NATALI</b> , A. Ferrario, A. Miozzo, S. Barison, L. Armelao, S. Boldrini <i>Semi-automated assembly of thermoelectric couples for medium to high temperature thermoelectric devices</i>
II-P92	<b>Leonard FRANKE</b> , M. Mallick, A. G. Rösch, M. I. Khan, Q. Zhang, I. Brunetti, U. Lemmer

	<i>Advancing Scalable Manufacturing of printed BiTe Thermoelectric Modules via Screen Printing on flexible Printed Circuit Boards</i>
II-P93	S. Majumder, G. Bolegave, P. Singha, <b>Vinayak KAMBLE</b> <i>Thermoelectric Energy Harvesting using Photothermoelectric Response Of Bismuth Selenide Thin Films</i>
II-P94	<b>Michał MUSIAŁ</b> , M. Borcuch, K. Wojciechowski <i>The influence of structural parametes of thermoelectric modules on the efficiency of thermoelectric generator</i>
II-P95	<b>Michihiro OHTA</b> , P. Sauerschnig, T. Ishida, A. Yamamoto <i>Highly efficient and stable thermoelectric modules based on nanostructured PbTe: from materials development to module architecturing</i>
II-P96	<b>Anilkumar BOHRA</b> , A. Singh, S. Bhattacharya, R. Bhatt, P.G. Abichandani, S.K. Sahu, D.K. Aswal <i>Bismuth Telluride-Based TEG Integration with DC-DC Voltage Booster Circuit: Advancing Towards Practical Applications</i>

### Thermoelectric Systems and Applications

II-P97	<b>Abdelakader ALLEG</b> , A. Benamara, N. Moulay, M. Berrahal, A. Zoukel, O. Mansour, D. Bensaid, Y. Azzaz, Y. Al-Douri <i>Theoretical investigations of electronic, thermodynamic and thermoelectric properties of filled skutterudites <math>\text{ThFe}_4\text{P}_{12}</math> and <math>\text{CeFe}_4\text{P}_{12}</math> using DFT calculations</i>
II-P98	<b>Aniruddha RAY</b> , M. D. Heijer <i>Thermoelectric Modules and Applications: An Industrial Perspective</i>
II-P99	<b>Laura CARLOSENA</b> , L. Catalán, N. Pascual, P. Alegría, M. Araiz, D. Astrain <i>Improving autonomous remote sensing based on thermoelectricity with radiative cooling</i>
II-P100	<b>Shoma MIURA</b> , A. Nagaoka, K. Nakashima, Y. Hirai, K. Nishioka <i>Measurement and simulation of thermoelectric performance for p-type chalcopyrite <math>\text{ZnSnAs}_2</math></i>
II-P101	<b>Iñaki ALZUGUREN</b> , P. Aranguren, Á. Casi, I. Erro, N. Pascual, A. Rodríguez, D. Astrain <i>Hybridisation of thermoelectric technology with vapour compression refrigeration systems to improve the performance of a R290 cycle</i>
II-P102	<b>Riddhimoy PATHAK</b> , L. Xie, S. Das, T. Ghosh, A. Bhui, K. Dolui, D. Sanyal, J.He, K. Biswas <i>Vacancy Controlled Nanoscale Cation Ordering Leads to High Thermoelectric Performance</i>
II-P103	W. Gulbiński, <b>Ariel LEWANDOWSKI</b> , M. Alichniewicz, P. Gertner <i>Elastic, thin film thermoelectric generator (TEG) produced by multisource magnetron sputtering for energy harvesting from heat exchanger waste heat</i>
II-P104	<b>Vaishali TANEJA</b> , S. Das, K. Dolui, T. Ghosh, A. Bhui, U. Bhat, D. K. Kedia, K. Pal, R. Datta, K. Biswas <i>High Thermoelectric Performance in Phonon-Glass Electron-Crystal Like <math>\text{AgSbTe}_2</math></i>
II-P105	<b>Nerea PASCUAL</b> , P. Alegría, M. Araiz, L. Carlosena, L. Catalan, Á. Martínez, D. Astrain <i>Characterisation and optimisation of thermoelectric generators for powering volcanic monitoring stations under extreme climatic conditions</i>
II-P106	<b>Matevž CIMERMANČIČ</b> , K. Klinar, A. Kitanovski <i>Additively manufactured thermoelectric devices for cooling, heating, and energy harvesting applications – a review</i>
II-P107	<b>Uttam GHOSHAL</b> , D. Grimm, M. Koelzer, J. Palomino, J. Jamison <i>Multistage Conjoint Couples for Deep Cooling Applications</i>
II-P108	<b>Suchandra MUKHERJEE</b> , N. Rana, S. Goswami, A. Banerjee <i>Investigating thermoelectric performance of Ni doped <math>\text{Sb}_2\text{Te}_3</math></i>
II-P109	<b>Shanmugasundaram PRIYADHARSHINI</b> , V. Vijay, S. Kamalakannan, J. Archana, M. Navaneethan <i>Realizing an ultralow thermal conductivity via interfacial scattering and rational-electronic band reformation in p-type <math>\text{Mg}_3\text{Sb}_2</math> by Zn incorporation</i>
II-P110	<b>Sivakumar NANTHINI</b> , H. Shankar, P. Veluswamy <i>Fabrication and Characterization of Stibnite-Modified Cotton fabric for Thermoelectric Energy Harvesting</i>
II-P111	<b>Sajid MUHAMMAD</b> , M. Franzini, S. Galliano, C. Barolo, A. Reale <i>Printable thermoelectric devices based on organic semiconductor composites for low-temperature grade energy harvesting</i>
II-P112	<b>Mirostaw MROZEK</b> , A. Majcher, M. Neska, A. Gospodarczyk <i>Waste heat recovery using thermoelectric generators with a specialized DC-AC power electronic converter</i>
II-P113	<b>Charles BARRAH</b> , A. Kiyabala Lopez, J. Siviter, A. Knox <i>Design of a multi-kW Thermoelectric Heat Pump</i>
II-P114	A. Attar, <b>Mohammed ALSUBHI</b> , A. Alkuhayli, A. Alharbi, A. Alsubhi <i>Designing Zonal Automotive Thermoelectric Air-Conditioning System for Electric Vehicles</i>
II-P115	<b>Irantzu ERRO</b> , P. Aranguren, I. Alzuguren, N. Pascual, A. Martinez, D. Astrain

	<i>A Computational Model for Two-Stage Thermoelectric Heat Pump Validated through Experimentation in Heating</i>
II-P116	<b>Rana GHANNAM</b> , S. Misra, B. Lenoir, C. Candolfi <i>Influence of the In-induced resonant level on the thermoelectric properties of SnTe</i>
II-P117	<b>Alaa ATTAR</b> , A. Alharbi <i>A New Design of a Geothermal Thermoelectric Generator System (GTEG) for Geothermal Heat Recovery</i>
II-P118	<b>Dona JOSEPH</b> , C. Fanara <i>PHOTOVOLTAIC THERMOELECTRIC GENERATORS: STATUS AND ASPECTS</i>
II-P119	<b>Florian LIEBETRAU</b> , J. Schwab, M. Kober, C. Weber, F. Rinderknecht <i>Microinverter for thermoelectric generators for combined feed-in to AC grids and low-voltage battery storage systems</i>
II-P120	<b>Priyanka SANGWAN</b> , M. Saravanan, N.K. Upadhyay, Radhey Shyam, S. R. Dhakate <i>Structural and Thermal Conductivity Investigations on Particulates Added FeSi<sub>2</sub>-based Thermoelectric Material</i>
II-P121	<b>Farheen ANJUM</b> , P. Dixit, T. Maiti <i>Enhanced thermoelectric performance with improved mechanical strength in Bi<sub>2</sub>S<sub>3</sub> via fabrication of composite with graphite</i>
II-P122	<b>Carlo FANCIULLI</b> , A. Nespoli, R. Donde, C. La Terra, F. Migliorini, F. Passaretti, S. De Iuliiis <i>Critical issues associated to thermal power density in the development of thermoelectric systems</i>
II-P123	<b>Poonam RANI</b> , A. Yamashita, A. Seshita and Y. Mizuguchi <i>Synthesis and thermoelectric properties of high-entropy-type CoSb<sub>3</sub> skutterudite</i>
II-P124	<b>Seong-jae JEON</b> , H. Park, S. Shin, D.-H. Kim, S. Han, J.J. Han <i>Evaluation of Automotive Thermoelectric Power Generation System</i>
II-P125	<b>Matthias HELMICH</b> , T. Knobelspies, C. Fritscher, J. Schwab, J. Schnüll, M. Kober, F. Rinderknecht, T. Siefkes <i>Development of a test bench for cryogenic TEG applications</i>
II-P126	<b>Atsushi YAMAMOTO</b> , K. Imasato, S. Baba, P. Sauerschnig, T. Ishida, M. Ohta <i>Thermoelectric Application to Carbon Capture System</i>
II-P127	<b>Muhammad Irfan KHAN</b> , L. Franke, A. G. Rösch, M. M. Mallick, Q. Zhang, U. Lemmer <i>Design optimization of printed thermoelectric generators tailored for plate heat exchangers in waste heat recovery applications</i>
II-P128	<b>Hyukjun YOUN</b> , J. Heo, H. Jeong, K. Lee, Y. Kim, H. Jo, S.-M. Choi <i>Design of Paste for Transient Liquid-Phase Sintered Electrodes in High-Temperature Thermoelectric Module</i>
II-P129	<b>Joon HEO</b> , H.-J. Youn, H. S. Jeong, K. H. Lee, H. Jo, Y. S. Kim, S.-M. Choi <i>Control of Particle Size Distribution in Metallic Glass Powder for High-Temperature Electrode Applications in Thermoelectric Modules</i>
II-P130	<b>Pawel ZIOLKOWSKI</b> , N. Rink, A. Fey, P. Schmidt, B. Singh, C. Kinias, E. Müller <i>Thermoelectric Generator Integration for Autonomous Heating Systems on Maritime Vessels</i>
II-P131	<b>Pawel PACZKOWSKI</b> , K. Wojciechowski, D. Kopyciński <i>Control of casting structure and production of electricity by means of a chill with thermoelectric modules</i>
II-P132	<b>Mohammad O. YOUSOF</b> , M. Ouzzane, K J. Hughes <i>Study of Earth to Air Heat Exchanger Combined with Thermo-Electric Cooling Device for Air Cooling in Saudi Arabia</i>
II-P133	<b>Anil KUMAR</b> , S. Thoravat, P. Rawat, H. Jin, J. S. Rhyee <i>Hierarchical phonon scattering from nano to macro scale in Bismuth Telluride bulk composites and cost effective module structure</i>
II-P134	<b>Himanshu SHARMA</b> , B. Sahni, T. Saha-Dasgupta, A. Alam <i>Cu-based quaternary chalcogenide with promising electronic transport</i>
II-P135	<b>Adriana MAURUCAITE</b> , B. Hamawandi, R. Grzibovskis, K. Pudzs <i>Investigations of electrical properties of p-type low molecular weight compounds for applications of thermoelectric hybrid systems with Sb<sub>2</sub>Te<sub>3</sub> nanoparticles</i>
II-P136	A.Gurevich, <b>Isaac STEINER</b> <i>Design of high performance thermoelectric systems based on components optimization</i>
II-P137	<b>Daniel SÁNCHEZ GARCÍA-VACAS</b> , P. Aranguren, R. Larrondo-Sancho, A. Casi, I. Alzuguren, A. Rodríguez, R. Llopis, R. Cabello, D. Astrain <i>Improving a transcritical refrigerating plant by using a thermoelectric subcooler and a low-GWP CO<sub>2</sub>/R32 mixture</i>
II-P138	<b>Kinga ZAWADZKA</b> , Urszula Stachewicz <i>Electrospun Thermoelectric Polymer Fibers and Composite Materials for Energy Harvesting Applications: Technological Challenges</i>