

Virtual Conference on Thermoelectrics (VCT2021): US Program

All times listed in Pacific Standard Time (PST)		
DAY 1 July 20, 2021	US Session A1	US Session B1
10:00-10:10	Welcome	
10:10-10:40	US-O.A1.01 Keynote: Jeffrey G. Snyder (Room A1) Strategies for Engineering Complex Thermoelectric Materials	
10:40-10:45	5 minute break to switch Zoom rooms	
10:45-11:00	US-O.A1.02 Isovalent and aliovalent doping in $\text{Ca}_{14}\text{AlBi}_{11}$: Unexpected structural chemistry and enhanced transport properties Baranets, Sviatoslav (Bobev)	US-O.B1.02 Textured Bi_2Te_3 alloys: Grain orientation–transport property relationships Ojo, Oluwagbemiga (Nolas)
11:00-11:15	US-O.A1.03 Unlocking the True Thermoelectric Potential of $\text{Yb}_{14}\text{ZnSb}_{11}$ Justl, Andrew P. (Kauzlarich)	US-O.B1.03 Doping Optimization and Interface Modification with Bismuth Telluride Nanowires in Carbon Nanotubes-Polymer Composites for Thermoelectric Energy Conversion, Zhang, Yu (Je-Hyeong Bahk)
11:15-11:30	US-O.A1.04 Impact of Site Substitution and Disorder on the Structure and Thermoelectric Properties of $\text{Yb}_{21}\text{Mn}_4\text{Sb}_{18}$ He, Allan (Kauzlarich)	US-O.B1.04 Thermoelectric properties of nanostructured $\text{Bi}_2\text{Te}_3/\text{Sb}_2\text{Te}_3$ core-shell structure Ju, Zheng (Kauzlarich)
11:30-11:45	Break/Discussion	Break/Discussion
11:45-12:00	US-O.A1.05 Magnesium-rich CaMg_2Sb_2 with enhanced thermoelectric performance Shi, Xin (Ren)	US-O.B1.05 Improving thermoelectric cooler performance by segmented design Pan, Zhenyu (Wang)
12:00-12:15	US-O.A1.06 The Zintl phases Aln_2As_2 (A = Ca, Sr, Ba): New topological insulators and thermoelectric material candidates Ogunbunmi, Michael O. (Bobev)	US-O.B1.06 Parametric Modeling of Next-generation Thermoelectric Generators Considering Contact Resistances Riley, Shane (Barry)

12:15-12:30	US-O.A1.07 Defect Engineering in Layered Zintl Phase $\text{Yb}_{2-x}\text{Eu}_x\text{CdSb}_2$: A Thermoelectric Material for Low Temperature Power Generation Ashlee Hauble (Kauzlarich)	US-O.B1.07 Modeling of Next-generation Thermoelectric Generators Wielgosz, Sarah (Barry)
12:30-12:45	US-O.A1.08 Computational Design of Thermoelectric Alloys: Balancing Disorder, Band Convergence, and Dopability Jiaxing Qu (Gorai)	US-O.B1.08 Scalable Synthesis of n-type $\text{Mg}_3\text{Sb}_{2-x}\text{Bi}_x$ for Thermoelectric Applications Xu, Congcong (Ren)
12:45-13:00	US-O.A1.09 Exploring Opportunities to Enhance ZT Of Ternary Pnictides Gunatilleke, Wilarachchige (Nolas)	US-O.B1.09 Thermoelectric Transport in Bulk Ni Fabricated via Extrusion-based Additive Manufacturing Apel, Christian (Watzman)
13:00-13:15	Break/Discussion	Break/Discussion
13:15-14:00	Break	
14:00-14:15	US-O.A1.10 A Series of Complex Chalcogenides with the Makovickyite structure-type possessing Ultralow Thermal Conductivity Balijapelly, Srikanth (Choudhury)	US-O.B1.10 3D printing of the half-Heusler alloy $\text{Nb}_{1-x}\text{CoSb}$, a case for ternary thermoelectric materials AlMalki, Muath (Dunand)
14:15-14:30	US-O.A1.11 Amphoteric Doping and Transport Properties of CuInTe_2 Adamczyk, Jesse (Toberer)	US-O.B1.11 Soft Anharmonic Phonons and Ultralow Thermal Conductivity in $\text{Mg}_3(\text{Sb,Bi})_2$ Ding, Jingxuan (Delaire)
14:30-14:45	US-O.A1.12 Exploration of Defects in AgInTe_2 Meschke, Vanessa (Stevanovic)	US-O.B1.12 Origin of suppressed phonon transport in structurally intricate K-Zn-Sb materials Ciesielski, Kamil (Toberer)
14:45-15:00	Break/Discussion	Break/Discussion
15:00-16:00	Poster Session (on Twitter)	

All times listed in Pacific Standard Time (PST), UTC		
DAY 2 July 21, 2021	Session A2	Session B2
10:00-10:10	Welcome	
10:10-10:40	US-O.A2.01 Keynote: Susan Kauzlarich (Room A2) When three is better than one: evolution of thermoelectric properties in the triple cation Zintl phase $\text{Yb}_{13-x}\text{Ca}_x\text{BaMgSb}_{11}$ ($x = 1 - 6$)	
10:40-10:45	Break to switch rooms	
10:45-11:00	US-O.A2.02 Investigating the thermoelectric stability of poly(3-hexyl)thiophene (P3HT) bars doped with 2,3,5,6-tetrafluoro-7,7,8,8-tetracyanoquinodimethane (F4TCNQ) Akhanda, Md Sabbir (Zebarjadi)	US-O.B2.02 Anharmonic phonons, superionic diffusion, and ultralow thermal conductivity in argyrodite Cu_7PSe_6 Gupta, Mayank (Delaire)
11:00-11:15	US-O.A2.03 Defect Chemistry and Doping of BiCuSeO Toriyama, Michael (Gorai)	US-O.B2.03 Using neutrons to probe the influence of processing on temperature-dependent strain in PbTe Male, James (Hermann)
11:15-11:30	US-O.A2.04 Introduction of Ga in the $\text{Ba}_8\text{Cu}_{16}\text{P}_{30}$ Clathrate Thermoelectric Sarkar, Arka (Kovnir)	US-O.B2.04 Two-dimensional overdamped fluctuations of the soft perovskite lattice in CsPbBr_3 He, Xing (Delaire)
11:30-11:45	US-O.A2.05 Phase Boundary Mapping of Tin-Doped ZnSb Reveals Thermodynamic Route to High Thermoelectric Efficiency Wood, Maxwell (Fleurial)	US-O.B2.05 Modelling Thermoelectric Properties in a Multicomponent Alloy Space Gurunathan, Ramya (Mehta)
11:45-12:00	Break/Discussion	Break/Discussion
12:00-12:15	US-O.A2.06 Dopability, carrier concentrations and transport in diamond-like semiconductors $\text{Cu}_2\text{HgGeTe}_4$ and Hg_2GeTe_4 for thermoelectrics Qu, Jiaying (Ertekin)	US-O.B2.06 In-Plane Thermoelectric Transport of Mixed-Phase Few-Layer NbSe_2 Zhu, Tianhui (Zebarjadi)

12:15-12:30	US-O.A2.07 Dopability Study of n-Type Hg ₂ GeTe ₄ Porter, Claire (Toberer)	US-O.B2.07 Thermoelectric and Thermomagnetic Transport in the triple point topological metal MoP Saini, Abhishek (Watzman)
12:30-12:45	US-O.A2.08 Optimal band structure for thermoelectrics with realistic scattering and bands Park, Junsoo, (Jain)	
12:45-13:00	Break/Discussion	Break/Discussion
13:00-14:00	Break	
14:00-14:15	US-O.B2.09 Orbital Chemistry of High Valence Band Convergence and Low-Dimensional Topology in PbTe Brod, Madison (Snyder)	US-O.B2.09 Grain size dependence of thermoelectric and thermomagnetic transport in the Weyl semimetal NbP Scott, Eleanor (Watzman)
14:15-14:30	US-O.A2.10 A Landauer Approach to Magneto-Transport Crawford, Caitlin (Toberer)	US-O.B2.10 Giant Spin-Driven zT Enhancement in Magnetic Mn _{1-x-y} Gd _x Li _y Te Hall, Michael (Vashaee)
14:30-14:45	US-O.A2.11 Electrical characteristics of a bipolar semiconductor taking into account heat from recombination of non-equilibrium charge carriers and the existence of two different Fermi quasi-levels for electrons and holes Siewe Kamegni, André (Lashkevych)	US-O.B2.11 Spin and Quantum Driven Magneto-Thermoelectric Effects in Gadolinium Polash, Md Mobarak Hossain (Vashaee)
14:45-15:00	Discussion and closing remarks	Discussion and closing remarks