Poster Number	Faculty Member	Presenters	Poster Title
1	Dale	Leonardo da Costa Sousa	Centralized low-severity EA treatment can be integrated with the AFEXTM-based depots to significantly reduce enzyme requirements
2	Boehlert	Uchechi Okeke	Microstructure and Mechanical Behavior of High Pressure Torsion Al 2139-T8 Alloy
3	Crimp	Bret Dunlap	Comparison of Dislocation Mapping using Electron Channeling Contrast Imaging and Cross-Correlation Electron Backscattered Diffraction
4	Lai	Matthew Klenk	Atomistic Simulation of the Structure and Dynamics of Lithium ion Conduction in the Lithium Garnet Series Li5+xLa3Ta2-xZrxO12
5	Eisenlohr	Zhuowen Zhao	Study of Beta-tin Plasticity by Instrumented-indentation Testing
6	Morelli	Daniel Weller	Tetrahedrite Thermoelectrics: Mechanical alloying versus SPS solid-state synthesis
7	Hodge	Joe Phongpreecha	Simultaneous Biomass Pretreatment and Lignin Valorization with High Yield and Selectivities
8	Qi	Jialin Liu	Investigation of Aluminum oxides Mechanical Properties at Elevated Temperature using ReaxFF
9	Jayaraman	Xinting Lin	Thinner and Stronger Microporous Membranes for Batteries by Die Drawing
10	Hodge	Jacob Crowe	Investigation of cell wall properties of xylan deficient Arabidopsis IRX mutants in relation to enzymatic digestibility
11	Walton	Phillip Angart	Predictors of siRNA Functional Asymmetry
12	Lee, A.	Yang Lu	High Performance Cast Aluminium-Silicon Structural Alloys
13	Qi	Hong-Kang Tian	Finite element analysis of Lithium-ion solid state battery
14	Swain	Kirti Bhardwaj	Diamond for Biosensing: Electrochemical Detection of Nitric Oxide
15	Morelli	Spencer Waldrop	Enhanced Thermoelectric Efficiency of Ball Milled PtSb2 by Sn Doping
16	Nicholas	Yubo Zhang	The Performance and Long-term Stability of SOFC Cathodes under Different Infiltration Conditions
17	Whitehead	Carolyn Haarmeyer	Evaluating the Relationship between Protein Surface Potential and Protein-Lignin Binding
18	Calabrese Barton	Yuanchao Liu	Molecular Dynamics Simulation on Substrate Transport on Alpha-helix Peptide for Multistep Catalysis
19	Bieler	Harsha Phukan	Characterization of Deformation Behavior in Hexagonal Titanium
20	Drzal	Mariana Batista	Carbon Fiber Polymer Matrix Composites Modified with Cellulose Nanowhiskers
21	Qi	Yuxiao Lin	Computational investigation on the improved performance of CNT/S cathode materials in lithium−sulfur Batteries
22	Morelli	Jared Williams	Understanding the Superior Thermoelectric Performance of Sb-precipitated Ge17Sb2Te20
23	Jayaraman	Christopher Hershey	Structural Transitions in Polymer Morphology from Nonlinear Rheology (LAOS)
24	Crimp	Yang Su	Quantification and simulation of grain boundary resistance in alpha-titanium using nanoindentation and crystal plasticity model

Poster Number	Faculty Member	Presenters	Poster Title
25	Narayan	Preetam Giri	Polylactide-Polydimethylsiloxane Block Copolymer as an Impact Modifier for PLA
26	Bieler	Quan Zhou	New Braze Materials for Planar Solid Oxide Fuel Cell (SOFC) Applications
27	Jayaraman	Weijie Ren	Structure and Properties of Blown Films from Polypropylene- Clay Nanocomposites with Silane Coupling
28	Whitehead	Caitlin Kowalsky	Rapid Fine Conformational Epitope Mapping Using Comprehensive Mutagenesis and Deep Sequencing
29	Drzal	Keith Honaker	Investigating High Density Polyethylene – Graphene Nanoplatelet Composites for the Production of Fuel Lines and Fuel Tanks
30	Morelli	Winston Carr	The effects of vacancy substitution on CuGaTe2 for thermoelectric applications
31	Bieler	Mingmin Wang	Introduction of Precisely Controlled Microstructural Defects into SRF Cavity Niobium Sheet and Their Impact on Local Superconducting Properties
32	Drzal	Markus Downey	Toughening of Carbon Fiber-Reinforced Epoxy Polymer Composites Utilizing Fiber Surface Treatment and Sizing For Aerospace and Automotive Applications
33	Lee, A.	Yuelin Wu	Galvanic Corrosion of Cu-Cu9Al4 Interface in Cu-wire Bonding Packages
34	Boehlert	Vahid Khademi	Tensile Deformation Behavior of Beta Titanium Alloys
35	Qi	Yunsong Li	Parameterization of SCC-DFTB for Li-containing compounds for Li-ion batteries applications
36	Lunt	Padmanaban Sasthan Kuttipillai	Phosphorescent Inorganic Nanoclusters – A New Paradigm for Light Emitting Diode Emitters
37	Calabrese Barton	Kanchan Chavan	Nano-scaled reaction assembly for multistep reaction cascade
38	Ofoli	Hao Yuan	Synthesis, characterization and assessment of a fibrous MnOx catalytic film formed on FTO by dual-session cyclic voltammetry
39	Whitehead	Emily Wrenbeck	Nicking Saturation Mutagenesis
40	Walton	Daniel Vocelle	Role of Dextran in Silica Nanoparticle-Mediated Silencing
41	Nicholas	Eric Straley	Analyzing Bond Strength in Single Crystal Yttria Stabilized Zirconia-Sapphire Bilayers
42	Narayan	Sayli Bote	Synthesis of Biobased Polyols from Soymeal and its Application in Polyurethane Rigid
43	Drzal	Zeyang Yu	Graphene nanoplatelet films as an electrostatic actuator
44	Lunt	Lili Wang	Additives to Fabricate Highly Efficient and Hysteresis-Free Hybrid Perovskite Photovoltaics
45	Calabrese Barton	Alex Mirabel	Square Wave Voltammetry for Platinum-free Catalyst Active Site Density
46	Lee, I.	Anna Song	Preparation of poly(lactic acid)-montmorillorite composite micro/nanoparticles
47	Narayan	Hugh MacDowell	Design And Synthesis of Polydimethylsiloxane Polyester Polyol with Biobased Components for Polyurethane Foam Applications
48	Calabrese Barton	Erica Earl	Quantitative Assessment of Channeling Mechanisms in Nanoscale Catalytic Architectures
49	Eisenlohr	Aritra Chakraborty	Identification of Constitutive Parameters by Inverse Analysis of Single Crystal Nanoindnetation