Graduate Awards

Materials Science

Grand Prize
Farah Alvi, USF
“Controlling the Aspect Ratio of ZnO Nanowires through Modulating Erosion Rate of ZnO Nanorods”

Second Prize
Farzad Behafarid, UCF

Third Prize
Jeffery Hawkins, UF
“A Density Functional Theory Study of the Initial Oxidation of the Pt(111) Surface”

Honorable Mention
Luis Ono, UCF
“Formation and Thermal Stability of Gold and Platinum Oxide Shells on Nanoparticles: Size and Support Effects”
Chan-Woo Lee, UF
“Surface Stoichiometry of the LaFeO3 (010) Surface using Density Functional Theory and Thermodynamics”
Cecil Coutinho, USF
“Photocatalytic Degradation using Polymer-Titania Microcomposites”
Dong Hyun Kim, UF
“Molecular Dynamic Simulation about a Tensile Test of a Nano-Crystalline Mg with a Columnar Structure”
Materials Processing

Grand Prize
Ying Zheng, UF
“Achieving Efficient Organic Photovoltaic Devices with Aligned Crystalline Organic Nanorods”

Second Prize
OH Hyun Kim, UF
“Effect of Air Exposure on Cu Diffusion Barrier Properties of TaN Thin Films Grown by Atomic Layer Deposition”

Third Prize
Justin Cleary, UCF
“Optimization of Long-Wave Ir Surface Plasmon Grating Couplers”

Honorable Mention
Dongjo OH, UF
“A Degradation Study of SOFC Cathode”
Jung Hun Janga, UF
“Strain Relaxation Of Strained-Sige Layers after Post Processes”
Jaewon Lee, UF
“Surface Stoichiometry of the LaFeO3 (010) Surface using Density Functional Theory and Thermodynamics”
Materials Characterization

Grand Prize
Jose Hinojosa, UCF
"STM Study of High-Coverage Structures of Atomic Oxygen on Pt (111)"

Second Prize
Biao Yuan, UCF
"Atomic Number Contrast Quantitative Scanning Transmission Electron Microscopy in Nanoparticles and Nanomultilayers"

Third Prize
Simon Mostafa, UCF
"Bimetallic Pt/Metal Catalysts for the Decomposition of Methanol: Effect of Secondary Metal on Oxidation State, Activity, and Selectivity"

Honorable Mention
Jason Croy, UCF
"Pt Nanoparticles Synthesized Via Micelle Encapsulation: Effect of Pretreatment on the Oxidation State and Activity for Methanol Decomposition and Oxidation"
Biddut Sarker, UCF
"Photoresponse Study in Multi-Walled Carbon Nanotube Film with Different Electrode Spacing"
Jooyoung Lee, UF
"Triethylgallium Thermal Decomposition Kinetics in CVD Reactor Using In Situ Raman Spectroscopy and DFT Calculation"
Jihun Choi, UF
"Photoluminescence from Gd2O3:Eu3+ Nanoparticles Synthesized by Hot Solution Method"
DoJun Kim, UF
"Chemical Vapor Deposition of WNxCy Using Diphenylhydrazido Cl4(CH3CN)W(NNph2): Effect of NH3 on Film Properties"
Undergraduate Awards

Grand Prize
Christopher Grabill, UCF
“Chemical System for Fundamental Study of Electroless Metallization”

Second Prize
Logan Byrne, UCF
“Synthesis and Characterization of Fluorescent Chitosan Nanoparticles”

Third Prize
Thomas Hartsfield, NCF
“Characterizing and Modeling Silicon Migration Induced Shape Transformations”

Honorable Mention
Doug Maukonen, UCF
“Fabrication and Characterization of Innovative Multi-Layer Thin Film Optics for Far-Infrared/Submillimeter-Wave Applications”

Ulka Patel, UCF
“Composite Nanoparticles for Solar Energy Conversion”