CINT 2015A Accepted Proposals

Active Transport by Molecular Motors; Steve Granick, University of Illinois at Urbana Champaign: George Bachand

Analysis of Detonation Soot for Carbon Composition Via Transmission Electron Microscopy; David Podlesak, Los Alamos National Laboratory: Millie Firestone

Assembly of Polydots, integration of soft nanoparticles: Molecular Dynamics Study; Dvora Perahia, Clemson University: Gary Grest

Biopolymer scaffolds for control and interrogation of angiogenesis signaling; Eva Rose Balog, University of New England: Jen Martinez

CdS nanobelt manipulations for optical refrigeration; Daniel Bender, Sandia National Laboratories: Brian Swartzentruber

Characterization of Porous Electrodes by SEM; Cynthia Welch, Los Alamos National Laboratory: Nate Mara

Characterization of Single Nanowire Based 3-D Li-ion Battery for Energy Storage; Jane Chang, University of California at Los Angeles: Katie Jungjohann

Characterization of solvent/monomer/surfactant self-assembly; Reza Foudazi, New Mexico State University: Millie Firestone

Characterization of Superparamagnetic Nanoparticles for Enhanced Drug Delivery to the Lung; Marek Osinski, University of New Mexico: Dale Huber

Characterization of the deformation mechanisms, and the grain formation and evolution in high rate compression of metal (Ag) microcubes; Edwin Thomas, Rice University: Nate Mara

Collective optical characterizations and structural correlation of semiconductor nanostructures; Hongyou Fan, Sandia National Laboratories: Han Htoon

Compact Si/SiGe quantum dots for multi-qubit gates; Mark Eriksson, University of Wisconsin, Madison: John Nogan

Complementary terahertz metasurfaces modified by focused ion beam for sensing; Xomalin Peralta, The University of Texas at San Antonio: Igal Brener

Coupled low-dimensional electron/hole systems in SiGe heterostructures; Tzu-Ming Lu, Sandia National Laboratories: Mike Lilly

Decoupling Superconducting Qubits from the Measurement Bus for Improved Gating and Coherence 2; Rupert Lewis, Sandia National Laboratories: John Nogan

Deformation and Damage in Multilayered Composite Coating under Concentrated Loading; Mehran Tehrani, University of New Mexico: Jon Kevin Baldwin

Development of quantum cascade lasers for active THz sensors; Sushil Kumar, Lehigh University: John Reno

Development of Si-based infrared metasurfaces with high spectral ivity and unusual optical functionalities; Gennady Shvets, The University of Texas at Austin: Igal Brener

Discovery and Tuning of Functional Mesoscale Skyrmion Lattices; Eric Bauer, Los Alamos National Laboratory: Darrick Williams

Donor-Dot Qubits in Silicon: A Stepping Stone Towards the Kane Architecture; Chloe Bureau-Oxton, University of Sherbrooke: Mike Lilly

Dynamic nonequillibrium states in cooperating autonomous systems; Henry Hess, Columbia University: George Bachand

Electrical and thermal control of magnetic properties in magnetic molecular complexes; Jonas Fransson, Uppsala University: Jian-Xin Zhu

Electrically controlled wideband terahertz modulators; Withawat Withayachumnankul, The University of Adelaide: Hou-Tong Chen

Electron/Phonon Transport at Carbon Nanotube-Polymer Interfaces; Mehran Tehrani, University of New Mexico: Stephen Doorn

Engineering Silicon Nanowire Surfaces for Manipulation and In Vitro Glycosylation; Julio Martinez, New Mexico State University: Wally Paxton

Excitation Energy and Charge Transfer in Organic Semiconductors: Combining High-Level ab initio with Density Functional Approaches; Hans Lishcka, Texas Tech University: Sergei Tretiak

Exciton Dynamics of Defect-Tailored Carbon Nanotubes; YuHuang Wang, University of Maryland: Stephen Doorn

Experimental Design for Using Continuous Measurement of Biomarkers Released from 'Artificial Skin' Cultures using Field Effect Transistor Nanowires; Spencer Farr, Vista Therapeutics: John Nogan

Exploring nano scale phenomena in two-dimensional electron gases at extreme magnetic fields with 2DFT spectroscopy; Denis Karaiskaj, University of South Florida: John Reno

Exploring the mechanical behavior and microstructure evolution of twin-twin junction in Mg alloy by in situ nanoindentation in a SEM; Yue Liu, Los Alamos National Laboratory: Nate Mara

Exploring the nucleation, growth and interaction of twins in Mg alloys by in situ nanoindentation in a TEM; Yue Liu, Los Alamos National Laboratory: Katie Jungjohann

Extracellular Matrix Mimicking Polymers for Hematopoietic Stem/Progenitor and Leukemic Cells; Larry Sklar, University of New Mexico: Jen Martinez

High temperature mechanical properties of thermally stable, radiation resistant coated nanoscale fold foams; Shraddha Vachhani, Los Alamos National Laboratory: Nate Mara

High-k/MoS2 Field Effect Transistors with LaGdO3 Novel Dielectric Material; Suprem Das, Iowa State University: Brian Swartzentruber

In situ imaging of fracture in shale; Anastasia Ilgen, Sandia National Laboratories: Katie Jungjohann

In Situ SAXS Studies of Polymeric Materials under Tensile Deformation; Cynthia Welch, Los Alamos National Laboratory: Millie Firestone

In-situ Electrochemical TEM on All Solid State Batters; Albert Alec Talin, Sandia National Laboratories: Tom Harris

In-situ Studies of 1D Metal/II-V Solid-State Reactions and Abrupt Interface Devices; Shadi Dayeh, University of California at San Diego: Katie Jungjohann

In-situ TEM Observation of Single Nanoparticle Collisions; Ronen Polsky, Sandia National Laboratories: Katie Jungjohann

In-situ TEM Study on Na Ion Intercalation in Reduced Graphene Oxide; Liangbing Hu, University of Maryland at College Park: Katie Jungjohann

Investigating Band Structure and Single Particle Photoluminescence in Methylammonium Lead Halide Pervskite Nanostructures as Function of Composition, Morphology, and Size; Javier Vela, Iowa State University: Katie Jungjohann

Ion Beam Analysis of Highly Mismatched Alloy Films; Rachel Goldman, University of Michigan: Yongqiang Wang

Light Funneling through Ultra-subwavelength Channels for Broadband Detection; Ganapathi Subramania, Sandia National Laboratories: Dale Huber

Lithography for Atomic Physics Applications in Space; Mayer Landau, Air Force Research Laboratory (AFRL): John Nogan

Magnetic Targeting of Nanoformulations for Atrial Fibrillation; Kenneth Dormer, Liberty University: Dale Huber

Mechanical Properties of Molecular Hydrates; Jennifer Swift, Georgetown University: Nate Mara

Mechanistic Study of Growth and Assembly of Ultrathin Single Crystalline Au Nanowires; Ravishankar Narayanan, Indian Institute of Science: Katie Jungjohann

Metamaterial-Based Infrared Photodetectors; Jason Valentine, Vanderbilt University: Igal Brener

Metamaterial-based terahertz equalizer; Withawat Withayachumnankul, The University of Adelaide: Hou-Tong Chen

Microfluidic Synthesis of Magnetic Nanoparticles; J. Ping Liu, University of Texas at Arlington: Dale Huber

Micromachined Thermal Platforms for Nanoscale Thermoelectric Materials and Thermal Spintronic Research; Barry Zink, University of Denver: John Nogan

Microtubule shuttles for Nanotransport and Delivery; Jessica Winter, Ohio State University: George Bachand

Modeling of highly conducting undoped conjugated polymers. Part 1: Modeling local intermolecular packing; Andriy Zhugayevych, Skolkovo Institute of Science and Technology: Sergei Tretiak

Nanolayered and nanotwinned metals with superior radiation tolerance; Xinghang Zhang, Texas A&M University: Nate Mara

Nanowire Diodes for Energy Conversion Applications; Stephen Goodnick, Arizona State University: Jinkyoung Yoo

Nonequillibrium transport in semiconductor nanostructures; Jonathan Bird, University at Buffalo: John Reno

Nonlinear Optical Properties of Complex Systems in Solution; Enrico Benassi, Scuola Normale Superiore: Sergei Tretiak

Nonlinear THz Spectroscopy in Strontium Titanate with Metamaterial Antireflection Coating; Keith Nelson, Massachusetts Institute of Technology: Hou-Tong Chen

Phase Transitions in Ge2Sb2Te5; Helena Silva, University of Connecticut: Katie Jungjohann

Photon-electron Conversion in Multiferroic Films with Controlled Cyrstal Structure and Domain Configuration; Jung-Kun Lee, University of Pittsburgh: Quanxi Jia

Polymer Bottle-Brush Copolymers: A New Class of Surface Modifiers for Friction Reduction; Mesfin Tsige, The University of Akron: Gary Grest

Probe and Control Topological Spin Plasmons with Anti-symmetric Sub-lambda Photonic Modes; Xiaobo Yin, University of Colorado at Boulder: Hou-Tong Chen

Probing the Light-Matter Interaction of MoS2 and Nanocavity; Mildred Dresselhaus, Massachusetts Institute of Technology: Stephen Doorn

Proximity-induced superconductivity in atomically thin semiconductor/superconductor heterostructures; Albert Davydov, National Institute of Standards and Technology: Jinkyoung Yoo

Reinforcement of Interface by Nanoparticles; Andrey Dobrynin, University of Connecticut: Mark Stevens

Searching for Majorana fermions in InAs/GaSb quantum spin Hall insulators; Wei Pan, Sandia National Laboratories: John Nogan

Silicon nanowire durability in aqueous environments; Ron Salesky, Vista Therapeutics: John Nogan

Strain Engineering of Novel Nanostructured Materials; Shixiong Zhang, Indiana University: Quanxi Jia

Superconducting Nuclear Recoil Sensor for Directional Dark Matter Detection; Markus Hehlen, Los Alamos National Laboratory: John Nogan

Super-resolution optical and AFM studies of DNA-origami assemblies; Andy Shreve, University of New Mexico: Peter Goodwin

Surface waves on switchable metamaterials; Daniel Mittleman, Rice University: Hou-Tong Chen

Surface-Enhanced Coherent Antistokes Raman Scattering using Hybrid Graphene-Plasmonic Nanopyramid Platform; Ya Hong Xie, University of California, Los Angeles: Anatoly Efimov

Synthesis and Functionalization of Au Nanorods in a Microfluidic Chip; Richard Vaia, Air force Research Laboratory (AFRL): Dale Huber

Terahertz Quantum Cascade Lasers for Security and Military Applications; Quing Hu, Massachusetts Institute of Technology: John Reno

The effect of Surface Reconstructions on Nanostructure and Defect Formation in Compound Semiconductors; Joanna Millunchick, University of Michigan: Normand Modine

The Role of Irradiation on Structural and Electrical Properties of Nanostructured Boron Carbide Diodes; Michael Nastasi, University of Nebraska: Quanxi Jia

Theoretical study for topological superconducting material in mirror symmetry based nano devices; Yuan-Yen Tai, Los Alamos National Laboratory: Jian-Xin Zhu

Three color FRET in self-assembled biomimetic nanoscale systems; Agnes Zurek, University of New Mexico: Gabe Montano

THz Spectroscopy of Macromolecules in Arrays of Nano Basins: Novel Method for Detection and Storage of Biomolecules; Boian Alexandrov, Los Alamos National Laboratory: Jen Martinez

THz/Ir QCL frequency combs for threat detection; Qing Hu, Massachusetts Institute of Technology: John Reno

Time-domain terahertz conductivity studies of conjugated polymer nanofibers; John Grey, University of New Mexico: Rohit Prasankumar

Ultrafast Pump-probe Spectroscopy of Aluminum-catalyzed Silicon Nanowires; Joan Redwig, Penn State University: Rohit Prasankumar

Understanding Organometallic-Inorganic Optical-Electronic Interactions for Ultra-wide Solar Spectrum Cell; Julio Martinez, New Mexico State University: Brian Swartzentruber

Understanding Sodiation of SIB anodes through In-situ Transmission Electron Microscopy and Surface Science; David Mitlin, Clarkson University: Katie Jungjohann

Unraveling novel electronic states at the interface of Dirac materials; Elbert Chia, Nanyang Technological University: Jian-Xin Zhu

Visualizing allotropic reconstructions in phosphorene with in-situ TEM; Stanely Chou, Sandia National Laboratories: Katie Jungjohann

Visualizing exciton diffusion and localizations in sparsely doped carbon nanotubes using tip-enhanced photoluminescence miscroscopy; Achim Hartschuh, Ludwig Miximilian University of Munich: Stephen Doorn

Wideband Near-Perfect Solar Light Absorbers Using Thin Silicon and Germanium Layers on Nanoporous Substrate; Junpeng Guo, University of Alabama: Willie Luk