

CINT 2015B Accepted Proposals

(n,m) dependence of the combination of phonon modes M-band properties in Double- and Triple-Walled Carbon Nanotubes; Tansel Karabacak, University of Arkansas at Little Rock: Yongqiang Wang

3D Molecular Tracking of Disordered Proteins; Tzu-Ming Lu, Sandia National Laboratories: Mike Lilly

A CMOS-compatible plenoptic detector array for LED lighting applications; Qiaoqiang Gan, University at Buffalo: Willie Luk

All-dielectric optical metasurfaces and metadevices; Chi Yang, Air Force Research Laboratory (AFRL): John Nogan

Aqueous two-phase chirality-sorting of carbon nanotubes for characterizing molecules confined in one dimension; Wei Pan, Sandia National Laboratories: Rohit Prasankumar

Atomic layer Deposition for High Performance Graphene Electronics; Corinne Packard, Colorado School of Mines: Nate Mara

Atomic-precision donor qubits in silicon; Matthew Doty, University of Delaware: Rohit Prasankumar

Bottom-up Fabricated 2-qubit Circuits in Silicon; Guillaume Gervais, McGill University: John Reno

Broad area quantum cascade lasers; CHUN-CHIEH CHANG, Los Alamos National Laboratory: Hou-Tong Chen

Building multiscale communication networks using biomolecular nanomachines; Stephan Goetzinger, Max Planck Institute for the Science of Light: Jennifer Hollingsworth

Carbon Nanotube Single Photon Source; Tina Jeoh, University of California at Davis: Peter Goodwin

Compact THz sources based on 2D materials on pre-patterned substrates; Karthik Ramasamy, CINT: Sergei Ivanov

Comparison of spectroscopic properties between 1-D and 2-D CdS; Peter Pauzauski, University of Washington: Han Htoon

Copy of Effects of geochemical alteration on nanomechanical properties of shale; Whilliam Weber, University of Tennessee: Yongqiang Wang

Coupling single nanocrystals to metallic and dielectric antennas; Michael Boyer, Clark Univeristy: Brian Swartzentruber

Demonstration of light trapping beyond the Yablonovitch limit; Samuel Myers, S.M. Myers Consulting: Normand Modine

Design and Engineering of Optical Nano-Materials Based on Organic Branched Structures; Mark Porter, Los Alamos National Laboratory: Quinn McCulloch

Determining the Stress-Strain Response of Ion-Irradiated Metallic Materials via Spherical Nanoindentation; Nikhilesh Chawla, Arizona State University: Nate Mara

Development of Si-based infrared metasurfaces with high spectral purity and unusual optical functionalities; Julia Greer, California Institute of Technology: Yongqiang Wang

Doping Pyrite FeS₂ by Ion Implantation; Francesca Cavallo, University of New Mexico: John Nogan

Dynamic and kinetic response of polymeric systems to external stimuli; Jian-Rong Gao, SRON Netherlands Institute for Space Research: John Reno

Dynamic Coupling in Active Nanoscale Systems; Michael Rubinstein, University of North Carolina: Gary Grest

Dynamics of localized excitations in quasi-one-dimensional systems; Zengfeng Di, Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences: Yongqiang Wang

Effects of Polymer Architecture on Dynamical Coupling between Nanoparticles and Polymers; Sofie Cambre, University of Antwerp: Stephen Doorn

Effects of spatial correlation of charge centers on electron mobility; Virginia Vandelinder, Sandia National Laboratories: George Bachand

Enhanced Reactivity Induced by Flow Through Nanopores: In-situ Dissolution of ZnO using Thermal-Liquid-Cell TEM; Alexey Akimov, University at Buffalo: Sergei Tretiak

Evolution of nanoporous metal structure under applied temperature and stress; Collin Delker, Sandia National Laboratories: Tom Harris

Excited state dynamics in core-substituted naphthalenediimides and their assemblies; Boris Maiorov, Los Alamos National Laboratory: Doug Pete

Exploration of the non-linear response of the terahertz conductivity and search for time-reversal symmetry breaking in terahertz pump- terahertz probes experiments in topological insulator thin films; Timothy Lambert, Sandia National Laboratories: Brian Swartzentruber

Exploring the role of Mg/Nb interfaces in improving strength and ductility in Mg through in situ pillar compression and three-point bending tests in SEM; Jan-Michael Gosau, Lotus Leaf Coating, Inc.: Dale Huber

Fabrication and Characterization of MOM Memristors for Neural Algorithm Accelerator; Todd Pittman, University of Maryland Baltimore County: Ryan Camacho

Fabrication and Spectroscopy of Atomic Defects in Diamond Nanomaterials; Victor Acosta, The University of New Mexico: Igal Brener

Fabrication of Atomically-Precise Vertical Qubits; Oleg Prezhdo, University of Southern California: Sergei Tretiak

Fabrication of In-situ Single Ion Diamond Detectors; Arunkumar Subramanian, Virginia Commonwealth University: Tom Harris

Fatigue and Fracture at the Nanoscale in Nanocrystalline Metals; GregThompson, University of Alabama: John Nogan

Flip-chip Quantum Electronics in GaAs/AlGaAs; Yuichiro Kato, University of Tokyo: Stephen Doorn

Graphene meta-surfaces for active THz and mid-Infrared devices; Young Chul Jun, Ulsan National Institued of Science and Technology: Igal Brener

Harvesting and Recycling Cellular Energy During Epilepsy Seizures to Self-Power Chemical and Electrical Treatment; Janez Bonca, Faculty of Mathematics and Physics, University of Ljubljana: Stuart Trugman

Heterogeneous three dimensional nanowire/nanoporous metal composites; Olivier Pierron, Georgia Institute of Technology: Katie Jungjohann

Hybrid nano-structured optical cavities for nanoscale terahertz detectors; Shadi Dayeh, University of California at San Diego: John Nogan

III-nitride LEDs with II-VI g-QD active layers; Gerold Willing, University of Louisville: Millie Firestone

Imaging the Nanoscale Onset of a Prototypical Charge-Density-Wave State: Zongfu Yu, University of Wisconsin, Madison: John Nogan

In situ observation of anomalous loading and unloading behavior in rare-earth orthophosphates using the SEM Picoindenter; Dragomir Neshev, The Australian National University: Igal Brener

Influence of Nanoscale Morphology on Electronic ad Magnetic Properties of Ultrathin Films for Superconducting Electronics; Paulo Araujo, University of Alabama: Stephen Doorn

In-situ TEM nanomechanical investigation of the role of Mg/Nb inerfaces in suppressing deformation twinning and basal slip in Magnesium; Ganapathi Subramania, Sandia National Laboratories: John Nogan

Integration of carbon nanotube dopant emitters with silicon micracavities; Ravishankar Narayanan, Indian Institute of Science: Katie Jungjohann

Interplay of co-polymer wrapping and sp³ functionalization in semiconducting carbon nantubes for applications in on-chip quantum light sources; Vladimir Chernyak, Wayne State University: Sergei Tretiak

Investigation of Broadband Field Enhancement in Epsilon-Near-Zero Multilayer Thin Films; Sahar Sharifzadeh, Boston University: Sergei Tretiak

Investigation of Radiation Damage Tolerance in Metallic Glass Nanlattices; Gennady Shvets, The University of Texas at Austin: Igal Brener

Ion Implantation of Nanostructure and Nanophase Materials; Jeff Petty, Furman University: Peter Goodwin

Large-scale Printed Multifunctional Hybridized 1D Ferroelectric Nanofiber Array; Henry Hess, Columbia University: George Bachand

Lead-Free Narrow Band Gap Semiconductor Nanocrystals; Christophe Voisin, Ecole Normale Supérieure de Cachan

Liquid in situ TEM studies of lanthanum oxide nanoparticle interactions with bacterial membranes; Cedric Cleyrat, University of New Mexico: Jim Werner

Magnetomechanics of Ferromagnetic Materials at the Nanoscale; Anastasia Ilgen, Sandia National Laboratories: Nate Mara

Materials Engineering to Mitigate Superconducting Qubits Decoherence; Adrienne Green, Sandia National Laboratories: George Bachand

Mechanisms of Efficient Utilization of Lithium and Sulfur in Li-S Batteries; Yaomin Dai, Los Alamos National Laboratory: Rohit Prasankumar

Microbridges for high mobility and current density measurements; William Mook, CINT: Nate Mara

Microfluidic devices for biomolecular motor experiments; Pulak Nath, Los Alamos National Laboratory: Quinn McCulloch

Micotensile Behavior of Nanolaminates; zhongbo yan, University of California at Los Angeles: Anatoly Efimov

Modelling of hybrid perovskites for photovoltaics; Plamen Atanassov, University of New Mexico: Jen Martinez

Monitoring the integrated SERS substrate-biological system using surface-enhanced coherent anti-Stokes Raman spectroscopy; Rolando Valdes Aguilar, Ohio State University: Rohit Prasankumar

Multiphysics, on-chip diagnostics of nanostructured intercalation cathodes; Nancy Missert, Sandia National Laboratories: Brian Swartzentruber

Nano/micro-porous polymeric membranes for organ-on-a-chips and nano-toxicology; Susan Dexheimer, Washington State University: Stuart Trugman

Nanocluster-enzyme assemblies: a path to hybrid bio-nano catalytic systems; Eray Aydil, University of Minnesota: Yongqiang Wang

Nanocomposite Microcalorimeter Absorbers, Energy Thermalization, and Nuclear Decay Energy Spectroscopy; Edward Stokes, University of North Carolina at Charlotte: Jennifer Hollingsworth

Nanoporous metal organic framework catalysts for lignin degradation; Antonia Antoniou, Georgia Institute of Technology: Nate Mara

Optical properties of Dirac and Weyl semimetals; Ann Junghans, Los Alamos National Laboratory: Darrick Williams

Patterned based substrates for grain size-stress controlled experiments; Brittany Muntifering, Northwestern University: Katie Jungjohann

Photocatalytic Surface Properties of Reduced TiO₂ Surfaces; Daniel Bufford, Sandia National Laboratories: Katie Jungjohann

Plasmon-Phonon Interaction on Graphene-Substrate Hetero-Nanostructures; Oleg Mitrofanov, University College London: Igal Brener

Quantification of Electron Tunneling Barrier Height in Polymers Relevant for Self-sensing Nano-Composites; Antonia Antoniou, Georgia Institute of Technology: Jinkyoungh Yoo

Quantitative in situ TEM investigation of reverse plasticity in ultrafine-grained Au thin films; Alexander Neumann, University of New Mexico: Anatoly Efimov

Quantum Efficiency Enhancement in III-Nitride Emitter Systems Through Quasi-Aperiodic Nanophotonic Design; Veronika Mocko, Los Alamos National Laboratory: Jon Kevin Baldwin

Quantum Mechanical Tunneling in Heterojunction Devices; Marian (Molly) Kennedy, Clemson University: Nate Mara

Radiation Damage-Tolerant Materials by Density Modulation; Youxing Chen, Los Alamos National Laboratory: Nate Mara

Radiation Tolerance of Nanostructured Iron Alloys for Nuclear Reactor Applications; Siddhartha Pathak, Los Alamos National Laboratory: Nate Mara

Real-time tunable metasurfaces; David Fullwood, Brigham Young University: Nate Mara

Resistance of Grain Boundaries in Nanoscale Metal Thin Films; Daniel Ward, Sandia National Laboratories: Mike Lilly

Role of Film Composition and Architecture on Deformation Due to Sliding Contact; Rolando Valdes Aguilar, Ohio State University: Rohit Prasankumar

Smart Sensor Technologies; Rong Zhong, Wenzhou University: John Nogan

Solutions vs solids properties for hybrid nanocoatings; Michelle Povinelli, University of Southern California: John Nogan

Spectroscopic Studies of DNA-Bound Silver Clusters; Ezra Bussmann, Sandia National Laboratories: Mike Lilly

Spin in Few Hole Quantum Dots; Marek Osinski, University of New Mexico: John Nogan

Structure Development in a Nanoparticle Halving System; Leonardo Civale, Los Alamos National Laboratory: Quanxi Jia

Synthesis of graphene with controllable layer number on the insulating substrate; Abul Azad, Los Alamos National Laboratory: Hou-Tong Chen

Terahertz time-domain spectroscopy in novel 2D materials; Wei Zhang, Brookhaven National Laboratory: Katie Jungjohann

The dynamics of cellulose on cellulose surfaces; Youxing Chen, CINT: Nate Mara

Thermalization after photoexcitation from the perspective of optical spectroscopy; Shashank Misra, Sandia National Laboratories: Brian Swartzentruber

Three-Dimensional Molecular Tracking of EGFR in Live Renal Epithelial Cells; Nan Li, Los Alamos National Laboratory: Katie Jungjohann

THz quantum cascade lasers as local oscillators for a heterodyne receiver array for NASA balloon borne observations; Alexander Neumann, University of New Mexico: John Nogan

Time-Domain Atomistics Simulation of the Relaxation dynamics of Photogenerated Carriers in Nanoscale Systems; Shraddha Vachhani, Los Alamos National Laboratory: Nate Mara

Topological Photonics for Ultimate Photon Control; Kevin Zavadil, Sandia National Laboratories: Katie Jungjohann

Toward Direct Band Gap Group IV Nanoalloys: Synthesis and Mechanistic Investigations; Darren Dunphy, University of New Mexico: Katie Jungjohann

Toward the ultimate performance of optoelectronics by metamaterial integration; Anna Tauke-Pedretti, Sandia National Labs: Igal Brener

Toward Nanoscale Geo-material Microfluidics for Subsurface Resource Energy Applications; Mike Lilly, CINT: Mike Lilly

Tracking Lithium Transport and Reactions in Individual Nanoparticles in a Liquid Electrochemical Cell; Thomas Beechem, Sandia National Laboratories: John Nogan

Two electrons donor-quantum dot qubit in silicon; Lisa Tracy, Sandia National Laboratories: John Reno

Understanding and Tailoring Ultrafast Carrier Dynamics in Nanostructured Semiconductor Composites; Cladine Katan, CNRS Institut des sciences chimiques de Rennes: Sergei Tretiak

Understanding the effect of grain boundaries and triple junctions on the local mechanical property evolution during high strain-rate deformation of cubic metals; Jeff Blackburn, National Renewable Energy Laboratory (NREL): Stephen Doorn

Understanding the effect of metal ion dopants on α -MnO₂ nanowire electrocatalysts; Karthik Ramasamy, CINT: Sergei Ivanov

Understanding the motor-driven active self-assembly of multiscale, hybrid materials; Krishna Kanti Dey, Pennsylvania State University: Jim Werner

Understanding the phase transformation mechanism of AlN in Al/AlN multilayers by in situ high-resolution TEM indentation test; Dung Vu, Los Alamos National Laboratory: Jim Werner

Understanding the Relationship Between Inter-Molecular Interactions and Energy Flow in Molecular Nanowires; Patricia McGuiggan, Johns Hopkins University: Dale Huber

Weyl semimetal signatures in the THz frequency range; Tae-Woo Lee, Pohang University of Science and Technology (POSTECH): Quanxi Jia

Wideband International System of Units (SI) Traceable Resistor; Michael Kent, Sandia National Laboratories: Wally Paxton

Wide-field Photoluminescence and Site Selective Photoluminescence Lifetime Analysis for Organic/Inorganic Hybrid Perovskite Films; Tae-Woo Lee, Pohang University of Science and Technology (POSTECH): Han Htoon

Xenon-clad microring resonators for ultralow-power nonlinear optics and quantum optics applications; Edward Bielejec, Sandia National Laboratories: John Nogan