

Poster Session

March 6th & 7th

ICYS Researcher

- PIR-1 Origin of in-plane component for L10-FePt granular films deposited on MgO single crystal substrate
 Jian Wang (ICYS, NIMS)
- PIR-2 In-situ experiments on 1D nanoscale objects inside the TEM
 Ovidiu Cretu (ICYS, NIMS)
- PIR-3 Facile Synthetic Methodology for Folding Polythiophene
 Kazuhiko Nagura (NIMS)
- PIR-4 Temporal Elasticity and Roughness Modulation with Temperature-Responsive Poly(ϵ -caprolactone) to Alter Dynamic Cellular Function
 Koichiro Uto (ICYS)
- PIR-5 Synthesis of bio-inspired hybrid materials with ceramic brick and metallic mortar
 Je In Lee (ICYS, NIMS)
- PIR-6 Imaging the displacement field of atomic-layer indium by using scanning tunneling microscopy and density functional theory
 Shunsuke Yoshizawa (NIMS)
- PIR-7 Degradation of Perovskite Solar Cells Driven by Deep Trap and Interfacial Deterioration
 Dhruba B. Khadka (ICYS, NIMS)
- PIR-8 Organic Electronic Devices Developed by Fully-Printing Techniques
 Xuying Liu (ICYS)
- PIR-9 Enhancement of Reinforcing Steel Corrosion in Mortar by Hyperbaric-oxygen Accelerated Corrosion Test
 Kotaro DOI (ICYS, NIMS)
- PIR-10 Heterostructures of ultrathin Fe films and 2D-materials for spintronic devices
 Nguyen Thanh Cuong (ICYS, NIMS)
- PIR-11 Mussel foot proteins inspired high-strength copolymer adhesive
 Debabrata Payra (ICYS)
- PIR-12 Nitrogen chemical state in N-doped Cu₂O thin films
 Yong Wang (State Key Laboratory Cultivation Base for Nonmetal Composites and Functional Materials, Southwest University of Science and Technology)
- PIR-13 Phospholipid micelle encapsulated Quantum dots for in vitro bioimaging
 Shanmugavel Chinnathambi (ICYS, NIMS)
- PIR-14 Self-Assembled Epitaxial Metal Nanopillars in SrTiO₃ Thin Film for Enhanced Photoelectrochemical Water Splitting
 Seiji Kawasaki (ICYS, NIMS)

- PIR-15 Realizing high efficiency in silicon nanostructure hybrid solar cells via energy transfer in nanocrystalline silicon dots
Subramani Thiyagu (ICYS, MANA, NIMS)
- PIR-16 First-principles prediction of thermophysical properties of solids assisted by machine learning
Terumasa Tadano (ICYS, NIMS)

Nano-Materials

- PM-1 Optomechanical Modes and Hot Electron Emission in Core-Shell Ag@TiO₂ Nanocubes
Joel Henzie (MANA)
- PM-2 Vortex-Induced Fabrication of Large-Scale Carbon Nanosheets from π -Conjugated Macrocyclic Carbon Sources
Taizo Mori (NIMS, MANA)
- PM-3 Surface-Plasmon-Enhanced Carbon Dioxide Activation and Conversion
Hui Song (WPI-MANA, NIMS)
- PM-4 One-Pot Synthesis of MOF-Derived Hollow Co₃S₄@MoS₂ Heterostructures as Efficient Bifunctional Water Splitting Catalysts
Yanna Guo (MANA, NIMS)
- PM-5 Constructing Colloidal Zinc Sulfide Photocatalysts for Carbon Dioxide Reduction
Hong Pang (MANA, NIMS, Graduate School of Chemical Science and Engineering, Hokkaido University)
- PM-6 Formation of Molecular Magnetic Thin Films of Ni-Co Cyano-Bridged Coordination Polymers on Silicon Wafers
Mohamed B. Zakaria (WPI-MANA, NIMS, Department of Chemistry, Faculty of Science, Tanta University)
- PM-7 Characterization of hole gas accumulation in p-Si/i-Ge core-shell nanowires by controlling boron doping concentration
Xiaolong Zhang (NIMS)
- PM-8 Isomeric Bis(dialkoxyphenyl)pyrenes: Multiple Phases and Versatile Photophysical Properties
Fengniu Lu (MANA, NIMS)
- PM-9 Solvent-free Liquid Metallo-porphyrins toward Gas Sensing
Avijit Ghosh (WPI-MANA, NIMS)
- PM-10 Development of nanoscale thermal transport measurement in TEM
Naoyuki Kawamoto (MANA, NIMS)
- PM-11 Multi-functional Al-catalyzed Si nanowires: self-assembled zero and one-dimensional hybrid nanostructure formations
Wipakorn Jevasuwan (MANA)

- PM-12 Synthesis and characterization of luminescent InP/GaP/ZnS core/shell/shell quantum dots nanocrystals
 Taoufik. Slimani Tlemcani (WPI-MANA, NIMS)
- PM-13 Fabrication of thermocouple probes for nanoscale thermal analysis
 Yohei Kakefuda (NIMS)
- PM-14 Mesoporous Macaroni carbon from fullerene (C60) macaroni nanostructure for high performance electrode material for advanced supercapacitors
 Subrata Maji (WPI-MANA, NIMS)
- PM-15 Investigation of Nanoscale Voids in Sb-doped p-Type ZnO Nanowires
 Ken C. Pradel (NIMS)
- PM-16 Multi-responsive Porphyrins for Sensing Applications
 Jan Labuta (WPI-MANA, NIMS)
- PM-17 Chemical Synthesis of Himalayan Honey Loaded Iron Oxide Nanoparticles as Potential Antioxidant and Antibacterial Agents
 Bishnu Prasad Neupane (School of Health Sciences, Pokhara University)
- PM-18 Design of thermo-responsive cationic comb-type copolymer that enhances the membrane disruption activity of an amphiphilic peptide
 Tsukuru Masuda (Tokyo Institute of Technology)
- PM-19 Rational design and assembly of 2D materials for environmental and energy applications
 Pengzhan Sun (School of Physics and Astronomy, The University of Manchester)
- PM-20 Application of Windowless Energy Dispersive Spectroscopy to Determine Li Distribution in Li-Si Alloys
 Huiwen Lin (NIMS)
- PM-21 Extended characterizations of the tantalum bromide clusters-functionalized SiO₂ nanoparticles
 Wanghui Chen (NIMS)
- PM-22 Triboelectric nanogenerators for energy harvesting, self-powered devices and sensors
 Wang AURELIA (Georgia Institute of Technology)
- PM-23 Control over Electronic Properties in Regioregular Poly(9,9-bifluorenylidene) with Chiral Side Chains
 Jinjia Xu (NIMS)
- PM-24 Nanotechnology for clean water: TiO₂-graphene nano composite based aerogel for efficient photodegradation of carbamazepine in aqueous solution
 Waheed MIRAN (GREEN, NIMS)
- PM-25 Two-Dimensional Coordination Framework for Rechargeable Energy Storage Device
 Keisuke Wada (The University of Tokyo)

- PM-26 Biosynthesized FeS Nanoparticles Enable Electrical Corrosion by Sulfate-Reducing Bacteria
Xiao Deng (The University of Tokyo)
- PM-27 Viscoelastic conjugated polymers through rational molecular design
Akira Shinohara (Shenzhen Key Laboratory of Polymer Science and Technology, College of Materials Science and Engineering, Shenzhen University)
- PM-28 Electrodeposition of FeSe Superconducting Thin Films
Derya Farisoğulları (Department of Physics, Faculty of Sciences and Letters, Cukurova University, NIMS)
- PM-29 Dendritic fullerene crystal growth at the interface formed by Self-assembly
Yuki Hyakuda (Tokyo University of Science (WPI-MANA SMG group))
- PM-30 Probing Interface and Designing Differentiator of a Single Heterojunction Quantum Dots
Somabrata Acharya (Centre for Advanced Materials, Indian Association for the Cultivation of Science)
- PM-31 Self-assembling Pyrazinacenes
Jonathan P. HILL (MANA, NIMS)
- PM-32 Self-Assembly of Chiral Perylene Diimides
Geraldine Echue (MANA, NIMS)
- PM-33 Oxidation-Induced Isomerisation of an Anti-Oxidant-Substituted Resorcinarene
Daniel T. Payne (NIMS)
- PM-34 Hydrophilic fullerene nanotubes for biomedical research
Cheng-Tien Hsieh (Institute of Polymer Science and Engineering, National Taiwan University)
- PM-35 Fabrication of 2D MOF Nanosheet at Liquid/Liquid Interface
Qingfu Zhang (WPI-Mana, NIMS)
- PM-36 Switching between Porphyrin, Porphodimethene and Porphyrinogen using CN⁻ and F⁻ ions Mimicking Volatile Molecular Memory and 'NOR' Logic Gate
Mandeep K. Chahal (NIMS)

Nano-System

- PS-1 Enhancement of in-plane upper critical field in monatomic-layer superconductor with Rashba effect
Satoru Ichinokura (NIMS)
- PS-2 Fullerene/Cobalt Porphyrin Charge-Transfer Cocrystals with Excellent Thermal Stability and High Mobility
Shushu Zheng (JSPS)
- PS-3 Development of water absorptive nanofiber meshes for hemodialysis treatments
Mirei Tsuge (Tokyo University of Science)

- PS-4 Vertical resonant tunnel transistors with organic molecules as quantum dots
Ryoma Hayakawa (NIMS)
- PS-5 Development of Shape-memory Balloon for Bone Tumor Treatment
Sosuke Ouchi (Tokyo University of science)
- PS-6 Design of Apoptotic Cell Membrane Mimetic Anti-inflammatory Polymers for Treatment of Alzheimer's Disease
Yuto Yano (WPI-MANA)
- PS-7 Nanoarchitectonic network processor for brain-like computing
Rintaro Higuchi (MANA, NIMS)
- PS-8 Correlated Metal SrVO₃ Based All-Solid-State Redox Transistors Achieved by Li⁺ or H⁺ Transport
Makoto Takayanagi (MANA)
- PS-9 Nanoionics-Based Neuromorphic Device With Pt/TiO_{2-x}/Pt Multilayer Structure
Kinya Kawamura (MANA)
- PS-10 Transport Mechanism in a puckered graphene-on-lattice
Adrian DIAZ ALVAREZ (NIMS)
- PS-11 A Novel Condensing and Purifying Method for Tuberculosis Biomarkers Using Temperature-responsive Polymer and Click Chemistry
Naoto Nomura (MANA, NIMS)
- PS-12 A mechanism study of unique apoptosis-inducing activity of epidermal growth factor immobilized on gold nanoparticles
Shota Yamamoto (MANA, NIMS)
- PS-13 Quantized Electron Transport in hBN/Graphene/hBN through a Quantum Point Contact in the Quantum Hall Regime
Shu Nakaharai (MANA, NIMS)
- PS-14 Optical Control of Ambipolar Carrier Transports in Diarylethene Thin-Film Transistors
Yuka Kurokawa (NIMS, MANA, Meiji University)
- PS-15 Development of Cs⁺ ion sensor based on organic field-effect transistor
Tin Nguy Phan ()
- PS-16 Fabrication of highly metallic substrate-independent TiN thin films at room temperature for plasmonic device applications
Ramu Pasupathi Sugavaneshwar (MANA, NIMS)
- PS-17 Design of Immunomodulatory Nanomaterials Inspired by Apoptotic Cell Membrane
Yasuhiro Nakagawa (MANA, NIMS)
- PS-18 Design of Nanofiber Meshes Adsorbing a Target Molecule Selectively for Immunoabsorption Therapy
Rio Kurimoto (MANA, NIMS)
- PS-19 Robust Topological States in Honeycomb Lattice with Hopping Textures
Yongcheng Jiang (WPI-MANA, NIMS, University of Tsukuba)

- PS-20 Resistive Random Access Memory by using Electronic Functions of Oxygen Vacancy of Amorphous Aluminum Oxide
Seiichi Kato (NIMS)
- PS-21 MP-AFM measurement of conductive oxide nanowires and their junctions as basic components of neuromorphic network system
Yoshitaka Shingaya (MANA, NIMS)
- PS-22 Sub-bandgap Photodetection from Germanium/Titanium Nitride Heterostructure
Satish L. Shinde (NIMS)
- PS-23 A MEMS-based hybrid plasmonic-pyroelectric infrared detector
Doan Tung Anh (MANA, NIMS)
- PS-24 High Mobility Diamond Field-Effect Transistor
Yosuke Sasama (WPI-MANA, NIMS, University of Tsukuba)
- PS-25 Large-Area Perfect Absorbers for Infrared Spectroscopic Devices
Thang Duy Dao (MANA, NIMS)
- PS-26 High pressure synthesis and physical properties of thermoelectric material SnSe
Shintaro Adachi (NIMS)
- PS-27 NiCo₂O₄ Nanosheets Coated on Metal-Organic Framework (MOF) Derived Nanoporous Carbons for Supercapacitor Application
Christine Young (MANA, NIMS)
- PS-28 An integrated approach towards highly-efficient and long-term stable hybrid perovskite nanowires solar cells
Chih-Yu Chang (Graduate Institute of Nanomedicine and Medical Engineering, Taipei Medical University)
- PS-29 Currents in human mouth: Oral pathogen *Campylobacter jejuni* proceeds extracellular electron transportation
Shu ZHANG (GREEN, NIMS)
- PS-30 Magnetic Property of Organic Dirac Fermion System
Takako Konoike (MANA, NIMS)
- PS-31 An Investigation of Group V dopants in Silicon for Quantum Computing Implementations
Jack Poulton (University College London)
- PS-32 Single molecule logic gates according to Quantum Hamiltonian Computing design; Symmetric Short and Long, and Asymmetric Starphene Molecules
We-Hyo Soe (CEMES-CNRS)
- PS-33 Resistivity Control of VO₂ Based All-Solid-State Redox Transistors Achieved by Li⁺ Transport
Jun-ichiro Ishida (Tokyo University of Science)
- PS-34 Acid stress induced Extracellular Electron Transfer by an oral pathogen *Streptococcus Mutans* UA159
Divya Naradasu (GREEN)

- PS-35 Up and down conversion imaging of HeLa cell using ZnS:Mn/NaGdF₄:Yb:Er nanocomposite
Ibrahim Khaleelullah Mohamed Mathar Sahib (Shizuoka University)
- PS-36 Nanoparticles of Iron Sulphides for synergetic anodic current generation in bacterial cocultures
Murugan Muralidharan (GREEN, NIMS)
- PS-37 Whole-cell Circular Dichroism Spectroscopy Reveals Redox-Triggered Conformational Change of Multi-Hemes Conduit in Cytochromes c
Yoshihide TOKUNOU (School of Engineering, The University of Tokyo)
- PS-38 Design of Smart Nanofiber Meshes with Simultaneous Release of Heat and Drug for Combined Cancer Therapy
Eri Niiyama (Graduate School of Pure and Applied Sciences, University of Tsukuba)
- PS-39 Electrochemical ammonium oxidation with an electroactive microbe
Junki Saito (School of Engineering, The University of Tokyo)
- PS-40 EMF Generation in Memristive Switching Thin Film Stacks for Spike-Timing Dependent Plasticity Applications
Sam Lilak (UCLA Department of Chemistry & Biochemistry)
- PS-41 Connectivity memory in Ag@TiO₂ nanowire network
Li Qiao (MANA)

Nano-Theory

- PT-1 Estimation of effective model for magnetic materials by machine learning
Ryo TAMURA (NIMS)
- PT-2 Anisotropic Solvation Structure and Dynamics of Polyoxyanions in Aqueous Solutions from Car-Parrinello Molecular Dynamics Simulations
Yadav SUSHMA (MANA, NIMS)
- PT-3 Linear-scaling first-principles constant pressure molecular dynamics in Conquest
Zamaan RAZA (MANA, NIMS)
- PT-4 DFT Molecular Dynamic Calculations on Si/Ge core-shell NWs and Si/Ge Interface Systems
Jian-Bo Lin (MANA, NIMS)
- PT-5 Effect of silver nanoparticles on the Tumor necrosis factor cellular response.
Alaa Fehaid (MANA, NIMS)
- PT-6 Large scale abinitio calculations at SrTiO₃/PbTiO₃ superlattice surfaces
Jack S. Baker (London Centre for Nanotechnology, UCL)