

Poster Session

3rd March, 2011

Nano-Materials

- PM-1 *Synthesis, Structure Characterization, and Photoluminescence of New Family of Layered Rare-earth Hydroxides Rigidly Pillared by Sulfate*
Jianbo Liang NIMS, JAPAN
- PM-2 *An alkali-metal ion extracted layered compound as a precursor for metastable phase synthesis: Low temperature conversion of $K_{0.8}Ti_{1.73}Li_{0.27}O_4$ into brookite*
Tadashi C. Ozawa NIMS, JAPAN
- PM-3 *Controlled Alignment of Fullerene Nanowhiskers through Self-Assembly at Air-Water Interface*
Venkata Krishnan NIMS, JAPAN
- PM-4 *Mechanical Tuning of Molecular Machines for Nucleoside Recognition at the Air-Water Interface by the Hand-Operating Nanotechnology*
Taizo Mori NIMS, JAPAN
- PM-5 *Self-assembly and Reassembly of Molecular Nanowires of Trigeminal Porphyrins*
Jonathan P. Hill NIMS, JAPAN
- PM-6 *Two-Dimensional Nanodots Formation through Interfacial Organization*
Keita Sakakibara NIMS, JAPAN
- PM-7 *Development of Stress-responsive Polymeric Drug Carrier*
Hironori Izawa NIMS, JAPAN
- PM-8 *Pyrazinacenes : Aza Analogues of Acenes*
Gary J. Richards NIMS, JAPAN
- PM-9 *BN nanospheres as CpG ODN carrier for activation of toll-like receptor 9*
Chunyi Zhi NIMS, JAPAN
- PM-10 *Single-Crystalline $In_2Ge_2O_7$ Nanobelts for High-Performance Deep-Ultraviolet Solar-Blind Photodetectors*
Liang Li NIMS, JAPAN
- PM-11 *Graphene-like BN nanoribbons: fabrication and improved conductivity*
Haibo Zeng NIMS, JAPAN
- PM-12 *Phonon-Assisted Electron Emission from Individual Carbon Nanotube Shell*
Xianlong Wei NIMS, JAPAN
- PM-13 *Mechanical properties of boron nitride nanobamboos by in situ TEM: the influence of nanointerface geometry*
Dai-Ming Tang NIMS, JAPAN
- PM-14 *Molecule Manipulation on Patterned-Polar Surface of Ferroelectric Crystals*

Kenji Kitamura NIMS, JAPAN

PM-15 *Artificial Design of Perovskite Superlattices using Perovskite Nanosheets.*

Bao-Wen Li NIMS, JAPAN

PM-16 *Ba₄XTa₁₀O₃₀, X = Co, Mg, Zn, and Ni: Novel Quantum Paraelectric Compounds*

Lin Wang NIMS, CHINA

PM-17 *Nanostructural Carbide-Derived Carbon (CDC) Synthesized in Solutions*

Chunfeng Hu NIMS, JAPAN

PM-18 *Photo-electrochemical reaction rate of dye-sensitized solar cells composed of textured photo-anode.*

Mamiko Kawakita NIMS, JAPAN

PM-19 *Fabrication and Analysis of Oriented LiCoO₂ Using Slip Casting in a Strong Magnet Field*

Hideto Yamada University of Tsukuba, JAPAN

PM-20 *Nano-particles Formed by Pulsed Discharge of Powders Sealed in Tubes*

Satoru Ishihara Nagaoka University of Technology, JAPAN

PM-21 *Synthesis, Characterization and Application of ZnO Nanoparticles Encapsulated in Ordered Mesoporous Carbon*

Ulka Suryavanshi Nagoya Institute of technology, JAPAN

PM-22 *Combination of organic and inorganic materials for novel nanocapsule design*

Elena Kozhunova Lomonosov Moscow State University, Russia

PM-23 *Self-assembly of porphyrin and PAMAM dendrimer into a narrow size distribution*

Oxana Vyshivannaya Moscow State University, Russia

Nano-System

PS-1 *Conductive Polymer Chain Wiring to a Functional Molecule via Chemical Soldering*

Yuji Okawa NIMS, JAPAN

PS-2 *Giant improvement of the performance of ZnO nanowire photodetectors by Au nanoparticles*

Kewei Liu NIMS, JAPAN

PS-3 *Synthesis and Characterization of Single Layer Graphene on Single Crystal Metal Surfaces*

Jianhua Gao NIMS, JAPAN

PS-4 *Fractal Atomic Switch Arrays: Functional Nanotechnology*

Adam Z. Stieg UCLA, USA

PS-5 *Switching Kinetics of a Cu-Ta₂O₅-based Gapless-type Atomic Switch*

Tohru Tsuruoka NIMS, JAPAN

PS-6 *Atomic switching behaviors based on ionic conductive metal oxides*

- Kazuya Terabe** NIMS, JAPAN
- PS-7 *Half-Metallic Antiferromagnet BaCrFeAs₂*
- Shu-Jun Hu** NIMS, JAPAN
- PS-8 *Nonlocal Entangled Electrons Manipulated by Josephson Current*
- Zhi Wang** NIMS, JAPAN
- PS-9 *Study on the Optimal Condition for Strong THz Radiation from High-T_c Superconductor BSCCO*
- Feng Liu** NIMS, JAPAN
- PS-10 *Synthesis and Physical Properties in Single Crystalline Iron Based Superconductor 122-systems*
- Hisato Yamaguchi** University of Tsukuba, JAPAN
- PS-11 *Radiation mode characteristics in single crystalline Bi2212 rectangular mesa structures*
- Takanari Kashiwagi** University of Tsukuba, JAPAN
- PS-12 *THz emission from a triangular mesa structure of Bi-2212 IJJs*
- Kaveh Delfanazari** University of Tsukuba, JAPAN
- PS-13 *THz Imaging System by Using the Intrinsic Josephson Junction Emitter*
- Manabu Tsujimoto** University of Tsukuba, JAPAN
- PS-14 *Observation of enhanced spin contrast by spin-polarized scanning tunneling microscopy/spectroscopy of antiferromagnetic Mn films on Fe(100)*
- Puneet Mishra** NIMS, JAPAN
- PS-15 *Irreversible and Reversible Structural Deformation and Electromechanical Behavior of Carbon Nanohorns Probed by Conductive AFM*
- Jianxun Xu** NIMS, JAPAN
- PS-16 *Development of nanoprobe sensor for single biomolecule detection with high spatial resolution*
- Yoshitaka Shingaya** NIMS, JAPAN
- PS-17 *Adsorption of oligothiophenes on Cu(111): Formation of 1D molecular chains and films*
- Toshiyuki Kakudate** NIMS, JAPAN
- PS-18 *Application of tuning fork probe for multiple-scanning-probe measurement in various environments*
- Osamu Kubo** NIMS, JAPAN
- PS-19 *Biosensing Chips for immunointeractions at a Liquid-Liquid Interface*
- Makoto Sawamura** NIMS, JAPAN
- PS-20 *Bioelectrical measurements by nanoscale probes*
- Hiroyuki Tomimoto** NIMS, JAPAN

- PS-21 *Synthesis and Characterization of Boron Nitride Nanosheets Coatings*
Amir Pakdel University of Tsukuba, JAPAN
- PS-22 *Transport properties of Andreev polarons in junction with superlattice structure*
Ryotaro Inoue Tokyo University of Science, JAPAN
- PS-23 *Self-assembled InAs Quantum Dot coupled to Superconducting Quantum interference device*
Sunmi Kim NIMS, JAPAN
- PS-24 *SQUID with Nb-Ru-Sr₂RuO₄ junctions*
Ryosuke Ishiguro Tokyo University of Science, JAPAN
- PS-25 *Development of graphene-based superconducting quantum interference device*
Kohei Tsumura NIMS, JAPAN
- PS-26 *Anisotropic transport in epitaxial graphene on 4H-SiC(0001)*
Hiroshi Kuramochi NIMS, JAPAN
- PS-27 *Device Configuration for High Mobility in Solution-processed Organic Single Crystals Field-effect Transistors*
Yun Li NIMS, JAPAN
- PS-28 *Solution-Processable Organic Single Crystals with Bandlike Transport in Field-Effect Transistors*
Chuan Liu NIMS, JAPAN
- PS-29 *Effect Of Ultrathin Oxide Interlayer On Organic Thin Film Semiconductor Transistor Device Performance.*
Peter Darmawan NIMS, JAPAN
- PS-30 *Surface selective growth of organic single crystals by solvent vapor annealing*
Akichika Kumatani NIMS, JAPAN
- PS-31 *Complementary-like logic inverts with semiconducting graphene channels*
Songlin Li NIMS, JAPAN
- PS-32 *Effect of ambient air exposure on metal/organic contact in organic semiconductor devices*
Takeo Minari NIMS, JAPAN
- PS-33 *Formation of Graphene on Insulator by Liquid Phase Epitaxy*
Hidefumi Hiura NEC, JAPAN
- PS-34 *Improving Graphene Quality Formed by Gallium Flux Liquid Phase Epitaxy*
Michael V. Lee NIMS, JAPAN
- PS-35 *Tunnel effect through gate-controlled p-i-n junction in semiconducting bilayer graphene*
Hisao Miyazaki NIMS, JAPAN
- PS-36 *Hole Doping Leads to Magnetism in Nanographene*

Sudipta Dutta NIMS, JAPAN

PS-37 *Nanomechanical Detection of Antibiotic-Mucopeptide Binding and Superbug Drug Resistance on Cantilever Arrays*

Manuel Vögli University College London, UK

PS-38 *Nanoelectronics: Single strand DNA (ssDNA)- SET as a nano switch*

Vishal Sharma University of Jammu, INDIA

PS-39 *Metastable Phase Design for Nano-Functional or Structural Materials*

Choe Byung Hak Kangnung-Wonju National University, KOREA

Nano-Green

PG-1 *New hybrid materials containing cobalt particles and nitrogen-doped nanostructured carbon obtained by catalytic chemical vapour deposition route*

Aleksandra Pacula Polish Academy of Sciences, POLAND

PG-2 *Synthesis of metal nanostructures by electrochemical codeposition and dealloying*

Satoshi Tominaka NIMS, JAPAN

PG-3 *Effect of 4-tert-Butylpyridine on Quasi Fermi Level of Dye-Sensitized TiO₂ Films*

Shufang Zhang NIMS, JAPAN

PG-4 *Efficient Light Scattering of Rutile TiO₂ Nanorods for Dye-sensitized Solar Cell Application*

Masatoshi Yanagida NIMS, JAPAN

PG-5 *Effects of Al-introduction into LiCoO₂ on the electrode properties in solid-state lithium batteries*

Xiaoxiong Xu NIMS, JAPAN

PG-6 *Electro- and Photoelectrochemical Behaviors for Cesium Tungstate Nanosheet*

Kosho Akatsuka NIMS, JAPAN

PG-7 *Fabrication and ionic conducting properties of superlattices based on ceria and zirconia.*

Daniele Pergolesi NIMS, JAPAN

PG-8 *Tailored cathode materials for intermediate temperature SOFCs based on high temperature proton conductor electrolytes*

Emiliana Fabbri NIMS, JAPAN

PG-9 *A novel ionic diffusion strategy to fabricate high-performance anode-supported solid oxide fuel cells (SOFCs) with proton-conducting Y-doped BaZrO₃ films*

Lei Bi NIMS, JAPAN

PG-10 *Electrical Property of the Thin-film Co-doped Ceria*

Shobit Omar NIMS, JAPAN

- PG-11 *Novel PLGA-In situ Ceria-Hydroxyapatite Nanocomposite Scaffolds for Bone Tissue Engineering Applications*
Rohit Khanna NIMS, JAPAN
- PG-12 *Design of bio-organic/inorganic scaffolds with surface functionalization*
Tamaki Naganuma NIMS, JAPAN
- PG-13 *Assessment of cytotoxicity of functional nano-materials aimed to cancer treatment*
Claudia Carmignano NIMS, JAPAN
- PG-14 *Fine Tuning The Architecture Of 3D PLLA Scaffolds Made By Directional Thermally Induced Phase Separation (TIPS) Method*
Corrado Mandoli NIMS, JAPAN
- PG-15 *Visible Light Photoactivity from Electronic Coupling Assembly of TiO₂ Nanocrystals*
Hua Tong NIMS, JAPAN
- PG-16 *Facile Synthesis of Rhombic Dodecahedral AgX/Ag₃PO₄ (X=Cl, Br, I) Hetero-crystals with Enhanced Photocatalytic Properties and Stabilities*
Yingpu Bi NIMS, JAPAN
- PG-17 *A first principle investigation of ZrO₂-CeO₂ heterojunction properties*
Marco Fronzi NIMS, JAPAN
- PG-18 *Zinc Ions in Cell Culture Media and Serum form Insoluble Zinc Nanoparticles*
Martin B. Duriska Monash University, Austraria
- PG-19 **Jennifer Rupp** NIMS, JAPAN

Nano-Bio

- PB-1 *"Smart" immunoconjugates for purification and enrichment in a microfluidic immunoassay*
John M. Hoffman University of Washington, USA, NIMS, JAPAN
- PB-2 *Stepwise tissue development-mimicking matrices for the regulation of stem cell differentiation.*
Takashi Hoshiba NIMS, JAPAN
- PB-3 *Integration of Light-induced pH-jump Reaction Into Smart Hydrogels For Their Spatial Shrinking Control*
Prapatsorn Techawanitchai University of Tsukuba, JAPAN
- PB-4 *Immortalized cardiac stem cell lines: an invaluable tool to challenge scaffolds for cardiac tissue engineering*
Giancarlo Forte NIMS, JAPAN
- PB-5 *Effects of branch number and chain Length of star-shape poly(ϵ -caprolactone) on elastic properties of the cross-linked films*

Swapnan Kumar Saha NIMS, JAPAN

PB-6 *Corrosion Behavior of Hydroxyapatite-coated AZ31 Magnesium Alloy in Simulated Body Fluids*

Sachiko Hiromoto NIMS, JAPAN

PB-7 *Design of photo-crosslinkable and stimuli-responsive nanofiber mats for cell manipulation*

Young-Jin Kim NIMS, JAPAN

PB-8 *Manipulation of Stem Cell Function by Geometric Micropatterns*

Wei Song NIMS, JAPAN

PB-9 *Porous scaffolds with open surface pore structure for tissue engineering*

Hongxu Lu NIMS, JAPAN

PB-10 *Monitoring the Titanium Dioxide induced Inflammation by Modified Sensing Cells using NF- κ B activation pathway*

Peng Chen NIMS, JAPAN

PB-11 *Development of a novel oligonucleotide carrier possessing reactive oxygen species scavenging ability*

Yutaka Ikeda University of Tsukuba, JAPAN

PB-12 *Scavenging in reactive oxygen species improves gene expression in polyplex supported gene delivery*

Kazuko Toh University of Tsukuba, JAPAN

PB-13 *Combination Nanotherapy –Drug Delivery by Antioxidative Nanocarrier*

Pennapa Chonpathompikunlert University of Tsukuba, JAPAN

MANA Independent Scientist

PIS-1 *Quantum Transport in Graphene Nanostructures*

Satoshi Moriyama NIMS, JAPAN

PIS-2 *Electronic and magnetic properties of graphene nanoribbons with edge modification*

Katsunori Wakabayashi NIMS, JAPAN

PIS-3 *A Novel Shortened Electrospun Nanofiber with "Concentrated" Polymer Brush*

Chiaki Yoshikawa NIMS, JAPAN

PIS-4 *Inelastic photoemission spectroscopy for surface vibrational analysis*

Ryuichi Arafune NIMS, JAPAN

PIS-5 *First-principles calculation study on redox reactivity of diamond(111)/water interface*

Yoshitaka Tateyama NIMS, JAPAN

PIS-6 *Strategical Design of Functional Mesoporous Materials toward Practical Applications*

Yusuke Yamauchi NIMS, JAPAN

PIS-7 *Spectroscopic study on NaOsO₃*

Tsuda Shunsuke NIMS, JAPAN

ICYS Researcher

- PIR-1 *Recent Progresses on One-Dimensional CdS Nanostructures*
Zhai Tianyou NIMS, JAPAN
- PIR-2 *Phosphorus-Doped Polymeric Carbon Nitride Solids*
Yuanjian Zhang NIMS, JAPAN
- PIR-3 *Smart Magnetic Materials with non-Volatile Memory Effect*
Fatin Hajjaj NIMS, JAPAN
- PIR-4 *Metal-Metal Interaction Induced Drastic Color Change by Simply Mixing of Pt- and Rh-Complexes*
Hisanori Ueki NIMS, JAPAN
- PIR-5 *Single-Electron Tunneling via Molecular Dots Embedded in a Metal-Insulator-Semiconductor Structure*
Ryoma Hayakawa NIMS, JAPAN
- PIR-6 *Physical Synthesis of Rationally Designed Plasmonic Nanoparticles*
Jung-Sub Wi NIMS, JAPAN
- PIR-7 *Low temperature synthesis of a layered oxyfluoride $Sr_3Fe_2O_6F$*
Yoshihiro Tsujimoto NIMS, JAPAN
- PIR-8 *Synthesis and characterization of C_{60} microcrystals at liquid-liquid interface: Effects of solvents and antisolvents*
Lok Kumar Shrestha NIMS, JAPAN
- PIR-9 *Recent developments in linear-scaling DFT convergence methods using Conquest: Applications to biomolecules in aqueous solution*
Antonio S. Torralba NIMS, JAPAN
- PIR-10 *Production of Extended Single-Layer Graphene*
Mingsheng Xu NIMS, JAPAN
- PIR-11 *Photoelectron diffraction study on polar ZnO surface*
Jesse Williams NIMS, JAPAN
- PIR-12 *An Ubiquitous Element Strategy to Reduce the Use of Precious Metals in Thermal Barrier Coatings*
Rudder Wu NIMS, JAPAN
- PIR-13 *Ultrabroad Near Infrared Photoluminescence from Bismuth Embedded Zeolites*
Hong-Tao Sun NIMS, JAPAN
- PIR-14 *LaB_6 Single Nanowire Field Emitter: The Ideal Cold Electron Point Source*
Han Zhang NIMS, JAPAN
- PIR-15 *Unipolar Assembly of ZnO Rods: Polarity Driven Collective Luminescence*

Ujjal K. Gautam NIMS, JAPAN

PIR-16 *Quantum dot sensitized solar cells*

Vaishali R. Shinde NIMS, JAPAN

PIR-17 *Demonstration of AlN/Diamond Heterostructure Field Effect Transistors*

Masataka Imura NIMS, JAPAN

PIR-18 **Zoe Schnepf** NIMS, JAPAN