

Nanoscale Interface Devices and Materials for Organic Electronics (OE)

Oral Presentation

Nov. 10, 2011 (Thu.)

OE 1 (Nanoscale Interface Devices and Materials for Organic Electronics 1)

Udo

Chair: Prof. Takhee Lee (Seoul National University, Korea)

09:10-10:30

OEIS1 Colloidally Templated and Electro-Patterned Two-Dimensional Conducting Polymer Arrays and Brushes

09:10-09:40

Invited Speech

Rigoberto C. Advincula

University of Houston, USA

OEIS2 Detection of Filamentous Actin and the Binding Protein Interaction using an Atomic Force Microscopy

09:40-10:10

Invited Speech

Sung-Woong Han, Kyohei Morita, Taiji Adachi

Kyoto University, Japan

OE433 The Additive Effect of PVP Gate Dielectric in Organic Thin Film Transistor

10:10-10:30

Ho-Jin Yun¹, Kyu-Ha Baek², Lee-Mi Do², Kwang-Seok Jeong¹, Yu-Mi Kim¹, Seung-Dong Yang¹, Sang-Youl Lee¹, Hi-Deok Lee¹, Ga-Won Lee¹

¹Chungnam National University, Korea ²Electronics and Telecommunications Research Institute (ETRI), Korea

Nov. 10, 2011 (Thu.)

OE 2 (Nanoscale Interface Devices and Materials for Organic Electronics 2)

Udo

Chair: Prof. Regoberto Advincula (University of Houston, USA)

10:40-12:20

OEIS3 Organic Resistive Memory Devices: Performance Enhancement and Integrated Architectures

10:40-11:10

Invited Speech

Takhee Lee

Seoul National University, Korea

OEIS4 Carbon Nanotube based Chemical and Biosensors

11:10-11:40

Invited Speech

M. Meyyappan

NASA Ames Research Center, USA

OE1227 Synthesis and Binding Properties of Arylethyne-Linked Porphyrin-Zinc Complexes for Organic Electronics Applications

11:40-12:00

W. Bhanthumnavin, W. Reainthippayasakul, B. Paosawatyanong

Chulalongkorn University, Thailand

Nanoscale Interface Devices and Materials for Organic Electronics

OE1089 Electrochemical Surface Plasmon Resonance Characterization of Growth Mechanism and Electroactivity of Ultra Thin Hybrid PPy-NaPSS Film

12:00-12:20

Cristian Pirvu, Claudiu Constantin Manole, Ioana Demetrescu
University Polytechnic of Bucharest, Romania

Poster Presentation

Nov. 10, 2011 (Thu.)

OEP (Nanoscale Interface Devices and Materials for Organic Electronics) Poster Presentation

Lobby 2F

Chair: Dr. Hoon-Kyu Shin (Pohang University of Science and Technology, Korea)

13:30-15:00

OE1597 Synthesis and Structural Property of Bismuth Telluride Nanotubes by Type of Surfactant

Bin Kim^{1,2}, Sang-Hee Jung¹, Byung-Ki Park¹

¹Korea Research Institute of Chemical Technology, Korea, ²University of Science & Technology, Korea

OE1595 Hydrothermal Chemical Synthesis and Characterization of Bi₂Se₃

Sang-Hee Jung¹, Bin Kim^{1,2}, Byung-Ki Park¹

¹Korea Research Institute of Chemical Technology, Korea, ²University of Science & Technology, Korea

OE1493 Fabrication and Characterization of Graphene/poly (p-phenylenediamine) Hybrids

Lingappan Niranjnath¹, Yeong Soon Gal², Kwon Taek Lim¹

¹Pukyong National University, Korea, ²Kyungil University, Korea

OE1491 Preparation and Characterization of Graphene/poly (diphenyl amine) Composites

Lingappan Niranjnath¹, Yeong Soon Gal², Kwon Taek Lim¹

¹Pukyong National University, Korea, ²Kyungil University, Korea

OE1455 Fabrication of a Polymer-metal Combined AFM Probe for Nano-bio Imaging

Hyen-Wook Kang¹, Hiroshi Muramatsu², Young-Soo Kwon³, G.wyi-Sang Chung¹

¹University of Ulsan, Korea, ²Tokyo University of Technology, Japan, ³Dong-A University, Korea

OE1452 Fabrication of Two Type White OLED for Improvement of Emission Efficiency and Color Purity using Zn(HPB)₂ and (POB)₂Ir(pic)

Dong-Eun Kim¹, Ki-Hun Park¹, Byoung-Sang Kim¹, Hyen-Wook Kang², Hoon-Kyu Shin^{1,3}, Burm-Jong Lee⁴, Young-Soo Kwon¹

¹Dong-A University, Korea, ²University of Ulsan, Korea, ³Pohang University of Science and Technology, Korea, ⁴Inje University, Korea

- OE1440 Nano-patterning Complex Material Fabricated using Soft-lithography**
Sun-Young Woo¹, Kwan-Do Kim¹, Sang-Mok Chang¹, Jong-Min Kim¹, Woo-Sik Kim², Hoon-Kyu Shin³
¹Dong-A University, Korea, ²Kyung-Hee University, Korea, ³POSTECH, Korea
- OE1427 Wettability-based Patterning for Organic Functional Materials Applicable to Renewable Energy Devices**
Sung-Jin Kim
Chungbuk National University, Korea
- OE1426 Polymer Phosphorescent Light-emitting Diodes Doped with Iridium Complex Fabricated by Dip-coating**
Sung-Jin Kim
Chungbuk National University, Korea
- OE1415 Evaluation of Interaction between Ni²⁺ and Histidine by AFM**
Haeng-Ja Lee¹, Masato Sano², Hoon-Kyu Shin³, Sang-Mok Chang¹, JongMin Kim¹, Hiroshi Muramatsu²
¹Dong-A University, Korea, ²Tokyo Uni. of Tech., Japan, ³POSTECH, Korea
- OE1411 Evaluation of Affinity between Profilin and VASP by AFM Force-distance Curve**
Haeng-Ja Lee¹, Masato Sano, Hiroshi Muramatsu², Hoon-Kyu Shin³, Sang-Mok Chang¹, JongMin Kim¹
¹Dong-A University, Korea, ²Tokyo Uni. of Tech., Japan, ³POSTECH, Korea
- OE1403 Manufacture of Conductive Nano-Structure Material by Soft-Lithography**
Seong-Mo Kang¹, Jong-Min Kim¹, Hoon-Kyu Shin², Sang-Mok Chang¹, Woo-Sik Kim³
¹Dong-A University, Korea, ²Pohang University of Science and Technology, Korea, ³Kyung-Hee University, Korea
- OE1385 Effects of Vanadium Addition and Vacuum Heat Treatment on Band Gap of Coprecipitated Ti_{1-x}V_xO₂ Nanoscale Oxides**
Hye-Jin Kwon¹, Youl-Moon Sung¹, Joo-Sin Lee¹, Ju-Cheol Park², Min-Woo Park¹
¹Kyungsoo University, Korea, ²Seoul National University, Korea
- OE1379 Effects of Nanoscaled TiO₂ Blocking Layer on Photovoltaic Performance of Dye-sensitized Solar Cells**
Tae-Woo Kim, Min-Woo Park, Dong-Joo Kwak, Youl-Moon Sung
Kyungsoo University, Korea
- OE1366 Organic Thin Film Transistors using a Cinnamate Functional Polyhedral Oligomeric Silsesquioxane-based Photo-curable Dielectric Material**
Yuntae Kim¹, Jeongkyun Roh², Changhee Lee², Do-hoon Hwang¹
¹Pusan National University, Korea, ²Seoul National University, Korea
- OE1308 Synthesis and Photoluminescence Studies of the Iridium Complexes Chelated with a Coumarin-based Ancillary Ligand**
Hye Rim Park, Yunkyong Ha
Hong-ik University, Korea

Nanoscale Interface Devices and Materials for Organic Electronics

- OE1289 Electric Field Induced Photoluminescence in Organic Photovoltaic Device**
Hyo-min Kim, K. Kim, S. H Lee, Y. B Lee, Hak-sup Noh, J. Joo
Korea University, Korea
- OE1224 Preparation and Characterization of Silica/Polypyrrole Conductive Hybrid**
W. Bhanthumnavin, I. Chaiprasit, A. Intasiri, B. Paosawatyanong
Chulalongkorn University, Thailand
- OE1183 Electrochromism of the Multi-viologen Cells for a New Color Electronic Display**
Pin-Yi Chen¹, Tsung-Her Yeh², Ghao-Yi Wang², Wen-Chih Lo², Su-Ying Chen², Yu-Chou Yeh²
¹Ming-Chi University of Technology, Taiwan, ²JTOUCH Corporation, Taiwan
- OE1092 Comparison between Electrochemical Elaboration and Characterization of Various Type of Titania Nanotubes**
Cristian Pirvu, Mihaela Mindroiu, Cristina Dumitriu, Ioana Demetrescu
University Polytechnic of Bucharest, Romania
- OE802 Unusual S-shape Caused by Injection Limited in Planar Heterojunction Organic Photovoltaic Device**
Shun-Wei Liu¹, Chi-Feng Lin², Chih-Chien Lee³, Chih-Hsien Yuan³
¹Mingchi University of Technology, China, ²National Taiwan University, China, ³National Taiwan University of Science and Technology, China
- OE789 Effect of SiO₂-Acryl Nanohybrid Coating Layers on TCO-PET Superstrate**
Young Taec Kang, Dong Pil Kang, Dong Jun Kang
Koera Electrotechnology Research Institute, Korea
- OE783 Synthesis of Poly(p-phenylene- vinylene) Derivatives Containing an Oxadiazole Pendant Group and Application to Organic Electronic Devices**
Hyemi Lee¹, Yong-Young Noh¹, Dong-Yu Kim², Yoon-Chae Nah³
¹Hanbat National University, Korea, ²Gwangju Institute of Science of Technology (GIST), Korea, ³Korea University of Technology and Education, Korea
- OE581 The Effect of Post-annealing Process in Polymer Solar Cell based on P3HT: PCBM**
Jun Young Kim, Seunguk Noh, Donggu Lee, Jason J. Amsden, Changhee Lee
Seoul National University, Korea
- OE496 Characteristics of Thin Film Passivation of OLED Grown by Plasma Enhanced CVD**
Kwan-Do Kim^{1,2}, Hoon-Kyu Shin³, Young-Soo Kwon¹, Sang-Mok Chang¹
¹Dong-A University, Korea, ²Kumoh National Institute of Technology, Korea, ³POSTECH, Korea

OE406 Encapsulation of TiO₂ Nanoparticles with Poly(4-vinylpyridine) using Surface Functionalized Thiol-lactam Initiated Radical Polymerization Approach for Electrophoretic Display Materials

Long Giang Bach, Md. Rafiqul Islam, Kwon Taek Lim

Pukyong National University, Korea

OE281 Solution Processed Single Layer Orange-red Electrophosphorescent Organic Light-emitting Diodes using SimCP2 and OXD-7 as the Mixed Host

Shun-Wei Liu¹, Chih-Chien Lee², Chih-Hsien Yuan², Li-An Liu², Yu-San Chen²

¹Mingchi University of Technology, China, ²National Taiwan University of Science and Technology, China

OE1459 Electrical Behavior of Structure and Orientation of Merocyanine Dye LB Films on Heat Treatment by CS-AFM

Chang-Heon Yang¹, Gwon Je Kim¹, Young-Soo Kwon^{1,2}, Hoon-Kyu Shin^{1,2}

¹Dong-A University, Korea, ²Pohang University of Science and Technology, Korea