C-4 Environmental and Energy Materials

Representative Organizer
Katsuya TESHIMA (Shinshu University)
Co-organizers
Nobuyuki ZETTSU (Shinshu University)
Takahiro ISHIZAKI (Shibaura Institute of Technology)
Ayae SUGAWARA-NARUTAKI (Nagoya University)
Chiaki TERASHIMA (Tokyo University of Science)
Yuji MATSUMOTO (Tohoku University)
Tomoaki WATANABE (Meiji University)
Yoshitake MASUDA (National Institute of Advanced Industrial Science and Technology)
Shusaku NAGANO (Nagoya University)
Koji TOMITA (Tokai University)
Daisuke ISHII (Nagoya Institute of Technology)

Poster Session 1 March 28 (Sat.) 16:45 ～ 18:00

16:45 C4-P-01 **Simple NanoBiohybrid for Catalytic Disintegration of Toxic Water Pollutants**
Rasel Das, Sharifah Bee Abd Hamid, Md.Eaqub Ali
NANOTECHNOLOGY AND CATALYSIS RESEARCH CENTER (NANOCAT), UNIVERSITY OF MALAYA

16:45 C4-P-02 **Study of ZnO Nanorods Hybrid Cells by Intergrating Package**
[1]Liang-Wen Ji, [2]Yu-Jen Hsiao, [3]Te-Hua Fang, [1]Wan-Lin Zhou, [1]Zi-Jun Zhao
1 INSTITUTE OF ELECTRO-OPTICAL AND MATERIALS SCIENCE, NATIONAL FORMOSA UNIVERSITY
2 NATIONAL NANO DEVICE LABORATORIES, NATIONAL APPLIED RESEARCH LABORATORIES
3 DEPARTMENT OF MECHANICAL ENGINEERING, NATIONAL KAOHSIUNG UNIVERSITY OF APPLIED SCIENCES

16:45 C4-P-03 **Reactivity of Lithium Ion Conducting Garnet-Type Oxides at High Potential**
[1]Yasuyuki Morishita, [1,2]Randy Jalem, [1,2,3]Masanobu Nakayama, [1]Toshihiro Kasuga
1 DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING, NAGOYA INSTITUTE OF TECHNOLOGY
2 UNIT OF ELEMENTS STRATEGY INITIATIVE FOR CATALYSTS & BATTERIES (ESICB), KYOTO UNIVERSITY
3 JAPAN SCIENCE AND TECHNOLOGY AGENCY, PRESTO

16:45 C4-P-04 **Analysis of the Crystal Particle Morphology of Perovskite-Type Oxygen Permeable Ceramics by First-Principles Calculations**
[1]Katsuya Nishii, [1,2]Randy Jalem, [1,2,3]Masanobu Nakayama, [1]Toshihiro Kasuga
1 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, NAGOYA INSTITUTE OF TECHNOLOGY
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3 JAPAN SCIENCE AND TECHNOLOGY AGENCY, PRESTO

16:45 C4-P-05 **Entropy Measurement of Reaction for $LiMn_2O_4$ as a Cathode Material for Lithium Ion Batteries**
[1]Norimitsu Nishimura, [1]Satoshi Tokuda, [1,2,3]Masanobu Nakayama, Toshihiro Kasuga
1 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, NAGOYA INSTITUTE OF TECHNOLOGY
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16:45 C4-P-06 **Parameter Studies and Optimization for Microwave Plasma in Liquid**
[1,2]Ryota Hishinuma, [3]Yohei Harada, [2]Chiaki Terashina, [3]Hiroshi Uetsuka, [1,2]Kazuya Nakata, [1,2]Takeshi Kondo, [1,2]Makoto Yuasa, [2]Akira Fujishima,
1 FACULTY OF SCIENCE AND TECHNOLOGY, TOKYO UNIVERSITY OF SCIENCE, JAPAN
2 PHOTOCATALYSIS INTERNATIONAL RESEARCH CENTER, TOKYO UNIVERSITY OF SCIENCE, JAPAN
3 ASAHI DIAMOND INDUSTRIAL CO., LTD.

16:45 C4-P-07 **Fabrication of Glutathione Sensor Based on the Photocatalytic Reaction**

[1,2]Asako Kuragano, [2]Anitha Devadoss, [2]Pitchaimuthus Sudhagar, [2]Chiaki Terashima, [1,2]Kazuya Nakata, [1,2]Takeshi Kondo, [1,2]Makoto Yuasa, [2]Akira Fujishima

1 DEPARTMENT OF SCIENCE AND TECHNOLOGY, TOKYO UNIVERSITY OF SCIENCE
2 PHOTOCATALYSIS INTERNATIONAL RESEARCH CENTER, TOKYO UNIVERSITY OF SCIENCE

16:45 C4-P-08 **Liquid Plasma Treatment under Nitrogen Stream**

[1,2]Kaede Honda, [2]Chiaki Terashima, [1,2]Kazuya Nakata, [1,2]Takeshi Kondo, [1,2]Makoto Yuasa, [2]Akira Fujishima

1 DEPARTMENT OF SCIENCE AND TECHNOLOGY, TOKYO UNIVERSITY OF SCIENCE
2 PHOTOCATALYSIS INTERNATIONAL RESEARCH CENTER, TOKYO UNIVERSITY OF SCIENCE

16:45 C4-P-09 **Hydrogen Production from Visible-Light Water Splitting Using Titanium Dioxide / Iron Sulfide Composites Photocatalysts**

Yuta Shibano, Pitchaimuthu Sudhagar, Chiaki Terashima, Kazuya Nakata, Takeshi Kondo, Makoto Yuasa, Akira Fujishima

TOKYO UNIVERSITY OF SCIENCE

16:45 C4-P-10 **Application of Pt/Boron-Doped Diamond Powder Prepared by the Nanocapsule Method to PEFC Cathode Catalyst Support**

[1]Mihoko Kikuchi, [1,2,3]Takeshi Kondo, [1,2]Tatsuo Aikawa, [1,2,3]Makoto Yuasa

1 DEPARTMENT OF PURE AND APPLIED CHEMISTRY, TOKYO UNIVERSITY OF SCIENCE
2 RIST, TOKYO UNIVERSITY OF SCIENCE
3 JST ACT-C

16:45 C4-P-11 **Photocatalytic Effect of Modified-Nanodiamond Particles**

[1]Narumi Okada, [1,2,3]Takeshi Kondo, [1,2]Tatsuo Aikawa, [4]Haruo Kuriyama, [2]Pitchaimuthu Sudhager, [1,2,3]Kazuya Nakata, [2,3]Chiaki Terashima, [2,3]Akira Fujishima, [1,2,3]Makoto Yuasa

1 DEPARTMENT OF PURE AND APPLIED CHEMISTRY, TOKYO UNIVERSITY OF SCIENCE
2 RIST, TOKYO UNIVERSITY OF SCIENCE
3 JST ACT-C
4 ORC MANUFACTURING CO., LTD

16:45 C4-P-12 **Facile Fabrication of Hierarchical Cu/ZnO Nanorod/Nanobranch Photoelectrode for Solar Hydrogen Generation**

Ulugbek Shaislamov, Jong-Keun Yang, Seung-Hyeon Kim, Min-Gyu Oh, Konstantin Lyakhov, Rai Suresh, Rahmman Md Shahinur, Muhamad Waqar Ahmed, Heon-Ju Lee

DEPARTMENT OF ENERGY ENGINEERING, JEJU NATIONAL UNIVERSITY

16:45 C4-P-13 **Synthesis of Ce^{3+} Doped $CaAlSiN_3$ Phosphor by Ammonothermal Method**

Yuki Maruyama, Tomoaki Watanabe

DEPARTMENT OF APPLIED CHEMISTRY, SCIENCE AND TECHNOLOGY, MEIJI UNIVERSITY

16:45 C4-P-15 **Strong Light Absorber of TiO_2-CMK-3/Ag for Photocatalytic Water Splitting Under Visible Light Irradiation**

[1]Wei Hsuan Hung, [2]Sz Nian Lai, [2]An Ya Lo

1 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING
2 DEPARTMENT OF CHEMICAL AND MATERIALS ENGINEERING, NATIONAL CHIN-YI UNIVERSITY OF TECHNOLOGY

16:45 C4-P-16 **Influence of Ammonothermal Treatment on Hydrogen Evolution Activity of Ta_3N_5 Photocatalyst**

Kazuhisa Kishida, Tomoaki Watanabe

DEPARTMENT OF APPLIED CHEMISTRY, SCHOOL AND TECHNOLOGY, MEIJI UNIVERSITY

16:45 C4-P-17 **Improvement of the Photoelectrochemical Performances of $LaTiO_2N$ Photoanodes for Photoelectrochemical Water Splitting under Visible-light Irradiation**

[1,2]Chihiro Izawa, [1]Tomoaki Watanabe

1 SCHOOL OF SCIENCE AND TECHNOLOGY, MEIJI UNIVERSITY
2 RESEARCH FELLOW OF THE JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE

16:45 C4-P-18 **Study on Silicon/Carbon Composite as an Anode Material for All Solid State Battery**

[1,2]Kang Soo Lee, [1,2]Sung Pil Woo, [2]Seung Hyun Jee, [2]Young Soo Yoon

1 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, YONSEI UNIVERSITY
2 DEPARTMENT OF ENVIRONMENT AND ENERGY ENGINEERING, GACHON UNIVERSITY

16:45 C4-P-20 **Synthesis of $SrNbO_2N$ Photocatalyst by Urea-Added Flux Assisted Nitridation**

Hiroyuki Ebato, Tomoaki Watanabe

DEPARTMENT OF APPLIED CHEMISTRY, SCHOOL OF SCIENCE AND TECHNOLOGY, MEIJI UNIVERSITY

16:45 C4-P-24 **Synthesis of a New Scheelite-type Eu^{3+} -Doped $Gd_2W_2O_9$ Red Light Emitting Phosphor by the Polymerized Complex Method**

Masayuki Inomata, Kazuhisa Kishida, Yuki Maruyama, Tomoaki Watanabe

DEPARTMENT OF APPLIED CHEMISTRY, SCHOOL OF SCIENCE AND TECHNOLOGY, MEIJI UNIVERSITY

16:45 C4-P-25 **Photocatalytic Activity of $LaTaON_2$ Powders Prepared Using an Oxide Precursor Derived from a Hydrothermal Reaction**

Mai Takasaki, Chihiro Izawa, Kazuhisa Kishida, Tomoaki Watanabe

DEPARTMENT OF APPLIED CHEMISTRY, SCHOOL OF SCIENCE AND TECHNOLOGY, MEIJI UNIVERSITY

16:45 C4-P-26 **The Effect of Ferroelectric $BaTiO_3$ Particles on Interfacial Resistance between the Li-Ni-Mn-(Cr) Oxide (LNM) Spinel Cathode and LiPON**

Masakazu Kaneko, Yosuke Ishii, William Clark West, Munekazu Motoyama, Yasutoshi Iriyama

DEPARTMENT OF MATERIALS, PHYSICS, AND ENERGY ENGINEERING, GRADUATE SCHOOL OF ENGINEERING, NAGOYA UNIVERSITY

16:45 C4-P-27 **Preparation and Electrochemical Characterization of Composite Cathodes Prepared by Aerosol Deposition for 5V Class All-Solid-State Lithium Rechargeable Batteries**

Masaki Wadaguchi, Yosuke Ishii, William Clark West, Munekazu Motoyama, Yasutoshi Iriyama

DEPARTMENT OF MATERIALS, PHYSICS AND ENERGY ENGINEERING, GRADUATE SCHOOL OF ENGINEERING, NAGOYA UNIVERSITY

16:45 C4-P-28 ***In-situ* FT-IR Study on Water Adsorption Behavior Confined in Mesoporous Silica, FSM-16, Having < 2 nm Pore Diameter**

[1,2]Yoshie Aoki, [3,4,5]Nobuyuki Zettsu, [1,3,6]Nagahiro Saito

1 GRADUATE SCHOOL OF ENGINEERING, NAGOYA UNIVERSITY
2 RESEARCH FELLOW OF JAPAN SOCIETY FOR THE PROMOTION OF SCIENCE
3 GREEN MOBILITY COLLABORATIVE RESEARCH CENTER, NAGOYA UNIVERSITY
4 CENTER FOR ENERGY AND ENVIRONMENTAL SCIENCE, SHINSHU UNIVERSITY
5 FACULTY OF ENGINEERING, SHINSHU UNIVERSITY
6 INSTITUTE OF INNOVATION FOR FUTURE SOCIETY, NAGOYA UNIVERSITY

16:45 C4-P-29 **The Origin of Plasma Light**

Byungwhan Kim

DEPARTMENT OF ELECTRIONICS ENGINEERING, SEJONG UNIVERSITY

16:45 C4-P-30 **The Synthesis of Metal Alloying DLC Coating for the Application on Bipolar Plates in Fuel Cell**

[1,2]N.R Lee, [2]Caroline S.Y.Lee, [1]K.I.Moon

1 KOREA INSTITUTE OF INDUSTRIAL TECHNOLOGY, HEAT & SURFACE TECHNOLOGY SERVICE CENTER
2 DIVISION OF METALLURGY & MATERIALS ENGINEERING, HANYANG UNIVERSITY

16:45 C4-P-31 **Application of ICP Assisted Magnetron Sputtered Nanocrystalline NbN Coatings in Corrosion Protective Die Casting Molds**

S.C.Kim, J.Y.Hwang, S.Y.Chun

DEPARTMENT OF ADVANCED MATERIALS ENGINEERING, MOKPO NATIONAL UNIVERSITY

16:45 C4-P-32 **Application of Pulsed DC Sputtered Nanocrystalline NbN Coatings for Proton Exchange Membrane Fuel Cell**

T.Y.Lee, S.W.Han, B.H.Oh, S.Y.Chun

DEPARTMENT OF ADVANCED MATERIALS ENGINEERING, MOKPO NATIONAL UNIVERSITY

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Koji TOMITA (Tokai University)
Daisuke ISHII (Nagoya Institute of Technology)

Poster Session 2 March 30 (Mon.) 11:15 ～ 12:30

11:15 C4-P-33 **Growth of Idiomorphic $Ba_5Nb_4O_{15}$ Crystals by the Cooling of Chloride Fluxes**

[1]Tetsuya Yamada, [2]Yukinori Murata, [2]Hajime Wagata, [2]Shuji Oishi, [1,2]Katsuya Teshima

1 CENTER FOR ENERGY AND ENVIRONMENTAL SCIENCE, SHINSHU UNIVERSITY
2 DEPARTMENT OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, SHINSHU UNIVERSITY

11:15 C4-P-34 **Corrosion Resistance Performance of $Mg(OH)_2$/Mg-Al LDH Composite Film Formed on Magnesium Alloy by Steam Coating**

[1]Naosumi Kamiyama, [2]Takahiro Ishizaki

1 MATERIALS SCIENCE AND ENGINEERING, SHIBAURA INSTITUTE OF TECHNOLOGY
2 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SHIBAURA INSTITUTE OF TECHNOLOGY

11:15 C4-P-35 **Synthesis of Li-Ion Battery Cathode Material $LiNi_{0.85}Co_{0.10}Al_{0.05}O_2$ Crystals by Flux Method**

Erina Yamamoto, Takahiro Ishizaki

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SHIBAURA INSTITUTE OF TECHNOLOGY

11:15 C4-P-36 **Flux Growth of Vertically Aligned Layered Double Hydroxide Plates on In-Situ Formed Alumina Particles**

[1]Katsuya Teshima, [1]Fumitaka Hayashi, [2]Akemi Shirasaki, [3]Hideya Kamikawa, [2]Shuji Oishi

1 CENTER FOR ENERGY AND ENVIRONMENTAL SCIENCE, SHINSHU UNIVERSITY
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3 TECHNOLOGY DEVELOPMENT CENTER, TOCLAS CORPORATION

11:15 C4-P-37 **Pathways toward the Photoinduced Switching Motions in Liquid Crystalline Azobenzene Block Copolymer Thin Films**

[1]Masami Sano, [2]Shusaku Nagano, [1]Mitsuo Hara, [3]Yuya Shinohara, [3]Yoshiyuki Amemiya, [1]Takahiro Seki

1 GLADUATE SCHOOL AND ENGINEERING, NAGOYA UNIVERSITY
2 VENTURE BUSINESS LABORATORY, NAGOYA UNIVERSITY
3 GRADUATE SCHOOL OF FRONTIER SCIENCES, THE UNIVERSITY OF TOKYO

11:15 C4-P-38 **Molecular Orientation of Semiconductive Polymer Blends in Phase Separated Film**

[1]Tasuku Mizuno, [1]Mitsuo Hara, [2]Shusaku Nagano, [1]Takahiro Seki

1 DEPARTMENT OF MOLECULAR DESIGN AND ENGINEERING, GRADUATE SCHOOL OF ENGINEERING, NAGOYA UNIVERSITY
2 VENTURE BUSINESS LABORATORY, NAGOYA UNIVERSITY

11:15 C4-P-39 **Spontaneous Liquid Crystalline Structure via Surface Segregation of Azobenzene Blockcopolymer**

[1]Koji Mukai, [1]Mitsuo Hara, [2]Shusaku Nagano, [1]Takahiro Seki

1 DEPARTMENT OF MOLECULAR DESIGN & ENGINEERING, GRADUATE SCHOOL OF ENGINEERING, NAGOYA UNIVERSITY
2 VENTURE BUSINESS LABORATORY, NAGOYA UNIVERSITY

11:15 C4-P-40 **Fabrication of Hybrid Scaffold Consisting of Gelatin and Elastin-Like Block Polypeptides**

[1]Duc H.T.Le, [1]Shintaro Oshiro, [1]Tatsuya Okubo, [2]Ayae Sugawara-Narutaki

1 DEPARTMENT OF CHEMICAL SYSTEM ENGINEERING, THE UNIVERSITY OF TOKYO
2 DEPARTMENT OF CRYSTALLINE MATERIALS SCIENCE, NAGOYA UNIVERSITY

11:15 C4-P-41 **Development of New Low-Molecular-Weight Gelators Containing Imidazolyl Moieties**

Shinji Hiramatsu, Junpei Suzuki, Kazuhiro Yabuuchi

COLLEGE OF ENGINEERING, CHUBU UNIVERSITY

11:15 C4-P-42 **Development of Two-Component Gelators Based on Hydrogen-Bonding Pyridine Derivatives**

Yoshihiro Fukao, Kazuhiro Yabuuchi

COLLEGE OF ENGINEERING, CHUBU UNIVERSITY

11:15 C4-P-43 **Dependence of Terahertz Characteristics of Split Ring Resonators on Incident Direction**

[1,2]Fumiaki Miyamaru, [1]Sakiko Suga, [2]Yosuke Nakata, [1]Mitsuo Wada Takeda

1 DEPARTMENT OF PHYSICS, FACULTY OF SCIENCE, SHINSHU UNIVERSITY
2 CENTER FOR ENERGY AND ENVIRONMENTAL SCIENCE, SHINSHU UNIVERISTY

11:15 C4-P-44 **Investigation of Intermolecular Structure of Water and Ethanol Binary Mixture in Slit-Like Pore by Diffraction Techniques and Hybrid Reverse Monte Carlo Method**

[1]Masatsugu Yoshimoto, [1]Taku Iiyama, [1]Hiroyuki Makino, [2]Takaaki Takagi, [2]Kazuyuki Nakai, [1]Sumio Ozeki, [3]Toshiya Otomo

1 FACULTY OF SCIENCE, SHINSHU UNIVERSITY
2 BEL JAPAN, INC.
3 KEK

11:15 C4-P-45 **New Route for Growth and Design of $LiCoO_2$ Crystal Assemblies on the Substrate through the Conversion of Electroplate Co Layers**

[1,2,3]Toshihisa Yoda, [1,2]Nobuyuki Zettsu, [1]Hitoshi Onodera, [2,3]Hitoshi Kondo, [1]Shuji Oishi, [1,2]Katsuya Teshima

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2 CREST, JAPAN SCIENCE AND TECHNOLOGY AGENCY
3 SHINKO ELECTRIC INDUSTRIES CO. LTD

11:15 C4-P-46 **Formation of Corrosion-Resistant Film on Combustion-Resistant Magnesium Alloy AZX612 by Steam Coating**

Ryota Shiratori, Takahiro Ishizaki

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SHIBAURA INSTITUTE OF TECHNOLOGY

11:15 C4-P-47 **Resonant Frequency Shift of Double-gap Split Ring Resonators in Terahertz Region**

[1]Masaki Gomi, [1]Hiroki Morita, [1]Tsubasa Nishida, [2]Yosuke Nakata, [3]Toshihiro Nakanishi, [1,2]Fumiaki Miyamaru, [1]Mitsuo W. Takeda

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2 CENTER FOR ENERGY AND ENVIRONMENTAL SCIENCE, SHINSHU UNIVERSITY
3 DEPARTMENT OF ELECTRONIC SCIENCE AND ENGINEERING, KYOTO UNIVERSITY

11:15 C4-P-48 **Synthesis of $Li[Ni_{0.8}Mn_{0.15}Al_{0.05}]O_2$ Crystals for Cathode Material of Lithium-Ion Battery by Flux Method**

Ryota Yasuda, Takahiro Ishizaki, Ai Serizawa

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SHIBAURA INSTITUTE OF TECHNOLOGY

11:15 C4-P-49 **Preparation of $Mg(OH)_2$/Mg-Al Layered Double Hydroxide Composite Film on Mmagnesium Alloy by Hydrothermal Synthesis Method**

Keisuke Sasagawa, Takahiro Ishizaki

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SHIBAURA INSTITUTE OF TECHNOLOGY

11:15 C4-P-50 **Formation of $Mg(OH)_2$/Carbon Conposite Film on Magnesium Alloy by Hydrothermal Synthesis Method**

So Kumagai, Takahiro Ishizaki

DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SHIBAURA INSTITUTE OF TECHNOLOGY

11:15 C4-P-51 **Preparation of Dye-Adsorbing ZnO Thin Films by Electroless Deposition and Their Photoelectric Conversion Properties**

[1]Satoshi Nagaya, [2]Hiromasa Nishikiori

1 NAGANO PREFECTURE GENERAL INDUSTRIAL TECHNOLOGY CENTER
2 DEPARTMENT OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, FACULTY OF ENGINEERING, SHINSHU UNIVERSITY

11:15 C4-P-52 **Fabrication of Wide Gap Si Added a-C Semiconductor with p-Type Conduction by Plasma Enhanced Chemical Vapor Deposition**

Yoshiya Nagata, Yohsuke Shimai, Masahiro Yamada, Kensuke Honda

GRADUATE SCHOOL OF SCIENCE AND ENGINEERING, YAMAGUCHI UNIVERSITY

11:15 C4-P-53 **The Synthesis of Carbon-Based Material with High Reactivity toward Oxygen Reduction Reaction Activity by Plasma Enhanced Chemical Vapor Deposition (CVD)**

Yohsuke Shimai, Yoshiya Nagata, Masahiro Yamada, Kensuke Honda

GRADUATE SCHOOL OF SCIENCE AND ENGINEERING, YAMAGUCHI UNIVERSITY

11:15 C4-P-54 **The Fabrication of Amorphous Wide Gap Semiconductor by Introducing Hetero Atoms**

Masahiro Yamada, Yohsuke Shimai, Yoshiya Nagata, Kensuke Honda

GRADUATE SCHOOL OF SCIENCE AND ENGINEERING, YAMAGUCHI UNIVERSITY

11:15 C4-P-55 **Preparation of ZnO Particles Using Photocatalytic Reaction**

[1]Naoya Harata, [1]Takumi Takikawa, [2]Satoshi Nagaya, [1]Hiromasa Nishikiori

1 DEPARTMENT OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, FACULTY OF ENGINEERING, SHINSHU UNIVERSITY
2 NAGANO PREFECTURE GENERAL INDUSTRIAL TECHNOLOGY CENTER

11:15 C4-P-56 **Damage-Free Graphene Doping Method for High Transparency, Conductivity, Thermal Stability**

[1]Viet Phuong Pham, [1]Kyong Nam Kim, [2]Min Hwan Jeon, [1]Ki Seok Kim, [1,2]Geun Young Yeom

1 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SUNGKYUNKWAN UNIVERSITY
2 SKKU ADVANCED INSTITUTE OF NANO TECHNOLOGY(SAINT), SUNGKYUNKWAN UNIVERSITY

11:15 C4-P-57 **Polyimide Surface Modifying Using Near-Atmospheric Pressure Plasma for Inkjet Patterning**

[1]Mu Kyeom Mun, [1,2]Geun Young Yeom

1 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SUNGKYUNKWAN UNIVERSITY
2 SKKU ADVANCED INSTITUTE OF NANO TECHNOLOGY(SAINT), SUNGKYUNKWAN UNIVERSITY

11:15 C4-P-58 **Study of Graphene Surface Treatment Using a Mild Ion Beam**

[1]Ki Seok Kim, [1]Kyong Nam Kim, [1,2]Geun Young Yeom

1 DEPARTMENT OF MATERIALS SCIENCE AND ENGINEERING, SUNGKYUNKWAN UNIVERSITY
2 SKKU ADVANCED INSTITUTE OF NANO TECHNOLOGY(SAINT), SUNGKYUNKWAN UNIVERSITY

11:15 C4-P-59L **A Carbon Nanotube Gas Sensor with Au Nanoparticles for NH_3 Detection**

[1]Sheng-Joue Young, [2]Jheng-Dong Lin

1 DEPARTMENT OF ELECTRONIC ENGINEERING, NATIONAL FORMOSA UNIVERSITY
2 INSTITUTE OF MICROELECTRONICS & DEPARTMENT OF ELECTRICAL ENGINEERING, ADVANCED OPTOELECTRONIC TECHNOLOGY CENTER, CENTER FOR MICRO/NANO SCIENCE AND TECHNOLOGY, NATIONAL CHENG KUNG UNIVERSITY

11:15 C4-P-60L **Different Prediction Method for the Electric Properties of the Nanocomposites**

[1]Chia-Ching Wu, [2]Jian-Chiun Liou, [1]Chien-Chen Diao, [3]Chih-Chin Yang, [1]Wei-Chen Shih

1 DEPARTMENT OF ELECTRONIC ENGINEERING, KAO YUAN UNIVERSITY
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3 DEPARTMENT OF MICROELECTRONICS ENGINEERING, NATIONAL KAOHSIUNG MARINE UNIVERSITY

11:15 C4-P-61L **Fabrication of Microfluidic Inkjet Chip with High Voltage ESD Protection System**

[1]Jian-Chiun Liou, [2]Chia-Ching Wu, [1]Wei-Jie Wen, [2]Wen-Chieh Lin

1 DEPARTMENT OF ELECTRONIC ENGINEERING, NATIONAL KAOHSIUNG UNIVERSITY OF APPLIED SCIENCES (KUAS)
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