

Poster Session B

MAR 9 (Tue), 13:00-14:30, MAR 10 (Wed), 13:00-14:30

Poster session is held based on the even/odd numbers of the posters.

Poster session B, Odd numbers: March 9th, (Tue) 13:00-14:30

Poster session B, Even numbers: March 10th, (Wed) 17:30-19:00

PB001A Glow Characterization of Atmospheric Pressure Methane Plasma Chemical Vapor Deposition

C. Huang and Y-C. Chang

Yuan Ze University, Taiwan

PB002A Fabrication of Hydrophobic and Oleophobic Fluorocarbon Films by CH₂F/Ar Plasma Chemical Vapor Deposition

C. Huang and C-H. Pan

Yuan Ze University, Taiwan

PB003A Synthesis of Aligned Carbon Nanotube by Direct Current Enhanced Chemical Vapor Deposition (PECVD) System

M. Vahidi, A. Afzali and F. A-Zadeh

Research Institute of Petroleum Industry (R.I.P.I.), Iran

PB004A Investigation of Improved Idoff Current by SiN Liner Skip at Shallow Trench Isolation Process

^{1,2}D-M. Seo, ²J-K. Lee, ²J-H. Sang, ²Y-S. Park and ²S-O. Choi

¹Samsung Institute of Technology (SSIT) University, Korea

²Samsung Electronics Co. Ltd., Korea

PB005A Synthesis of Amorphous Carbon Films by Pulsed Glow Discharge Plasma at Atmospheric Pressure

¹Y. Kikuchi, ¹Y. Matsuo, ²Y. Horiguchi, ²Y. Nishimura, ¹M. Nagata and ¹M. Yatsuzuka

¹University of Hyogo, Japan

²Kurita Seisakusho Co., Ltd., Japan

PB006A Synthesis of Tungsten Oxide Nanoslab Bundles by MPECVD

¹Y. T. Hsieh, ¹L. W. Chang, ¹C. C. Chang and ^{1,2}H. C. Shih

¹National Tsing Hua University, Taiwan

²Chinese Culture University, Taiwan

PB007A **Mechanical Property Control of the DLC Film by Using Adamantane as Precursor Material in Plasma-Enhanced CVD**

S. Moroto, H. Kousaka, T. Tokoroyama and N. Umehara
Nagoya University, Japan

PB008A **Threshold Voltage Difference According to the Trench Oxide Processes of NOR Flash Memory**

K-C. Kim, D-H. Kim and J-T. Song
Sungkyunkwan University, Korea

PB009A **Transformation of Optical Emission Spectra upon Nitrogen Doping of β -Ga₂O₃ Nanowires by Microwave Plasma CVD**

¹L-W. Chang, ¹J-W. Yeh, ¹T-Y. Lu, ²Y-L. Cheng and ^{1,2}H. C Shih
¹Nation Tsing Hua University, Taiwan
²Chinese Culture University, Taiwan

PB010A **Investigation of the SiO_x Films Deposited by Atmospheric-pressure Spin Plasma Jets**

¹W-T. Hsu, ²T-H. Chen, ¹C-H. Liu, ³Q-S. Yu, ¹C-H. Su and ²J-T. Teng
¹Industrial Technology Research Institute, Taiwan
²Chung Yuan Christian University, Taiwan
³University of Missouri, Columbia

PB011A **Study about the Boron Doping Concentration in Channel by Plasma Trench Oxidation**

^{1,2}Y. Jung, ^{1,2}B. Kim, ²W. Lee, ²H. Park, ¹J. Hong, ¹H. Kim, ¹Y. Oh and ²D. Kim
¹Samsung Electronics Co., Korea
²Sungkyunkwan University, Korea

PB012A **Improvement Adhesion of Hetero-materials Interface using Atmospheric Pressure Plasma-induced Grafting**

¹T-H. Chen, ²C-H. Liu, ³C. Huang, ²W-T. Hsieh, ²S. Lin and ¹J-T. Teng
¹Chung Yuan Christian University, Taiwan
²Industrial Technology Research Institute, Taiwan
³Yuan Ze University, Taiwan

PB013A **Conducting Poly(3-methylthiophene) by Microwave Plasma CVD**

W. Bhanthumnavin, P. Luyaphand and B. Paosawatyanyong
Chulalongkorn University, Thailand

PB014A **Effect of Hydrogen in Rf Plasma Nitriding on Aluminium Alloy**

J. Pongsopa, P. Visuttpitukul and B. Paosawatyanyong
Chulalongkorn University, Thailand

PB015A **The Dielectric Properties of Plasma Fluorinated-Silicate-Gass by Doping Nitrogon**

¹B. J. Wei, ²L. W. Chang, ²Y. T. Hsieh and ^{2,3}H. C. Shih

¹National Chung Hsing University, Taiwan

²National Tsing Hua University, Taiwan

³Chinese Culture University, Taiwan

PB016A **Effects of H₂ Dilution on Deposition of a-Si:H Films using Silane Multi-Hollow Discharge Plasma CVD**

K. Nakahara, H. Sato, W. M. Nakamura, K. Koga and M. Shiratani

Kyushu University, Japan

PB017A **High Deposition Rate of a-Si:H Films of Low Stabilized Defect Density**

W. M. Nakamura, H. Sato, K. Koga and M. Shiratani

Kyushu University, Japan

PB018A **Growth of IrSnO_x Films Grown by Reactive Sputtering Method**

S. Harada and K. Yoshino

University of Miyazaki, Japan

PB019A **Low-temperature Plasma Oxidation and Solid Phase Epitaxial Regrowth of Silicon for Stacked Static Random Access Memory Application**

^{1,2}C. Yeo, ^{1,2}K-S. Lee, ¹D-H. Yoo, ¹S-M. Jung, ¹H. Lim, ¹K. Kim and ²Y. Roh

¹Samsung Electronics Co., Korea

²Sungkyunkwan University, Korea

PB020A **Effect of Excitation Frequency on the Spatial Distributions of a Surface Wave Plasma**

¹H. Muta, ¹S. Nishida, ¹S. Kurabayashi, ²N. Yoshikawa, ²R. Komatsu, ²K. Uchino and ²Y. Kawai

¹Gifu University, Japan

²Kyushu University, Japan

PB021A **Study of Plasma Enhanced Chemical Vapor Deposition of Zinc Oxide Films by Atmospheric-Pressure Plasma Jet**

Y. Ito, O. Sakai and K. Tachibana

Kyoto University, Japan

PB022A **Growth of Eu-Doped ZnO by Sputtering-Assisted Metalorganic Chemical Vapor Deposition**

Y. Terai, K. Yoshida, M. H. Kamarudin and Y. Fujiwara

Osaka University, Japan

PB023A **Deposition Rate of Silicon Nitride Films Deposited at Room Temperature in SiH₄-NH₃-N₂ Pulsed Plasma**

H. Lee, S. J. Lee and B. Kim
Sejong University, Korea

PB024C **An Enhanced Photo-Catalytic Effect of Synthesized-ZnO Nanoparticles by O₂ Plasma Surface Treatment**

M-H. Kim, S-H. Nam, Y. D. Kim and J-H. Boo
Sungkyunkwan University, Korea

PB025A **Synthesis of Amorphous Carbon Films using Nonequilibrium Atmosperic-Pressure Plasma**

¹Y. Matsudaira, ¹H. Inui, ²H. Kano, ¹K. Takeda, ¹K. Ishikawa, ¹H. Kondo, ¹M. Sekine and ¹M. Hori
¹Nagoya University, Japan
²NU Eco Engineering Co., Ltd., Japan

PB026A **Growth and Characterization of Epitaxial 3C-SiC Films by Microwave Plasma-Enhanced Chemical Vapor Deposition**

A. S. M. Mohammad, A. Koga, K. Teii and Y. Kato
Kyushu University, Japan

PB027A **Synthesis of Wurtzite Type ZnMgS by the Pulsed Plasma in Liquid**

¹E. Omurzak, ¹W. Shimokawa, ¹K. Taniguchi, ¹L. Chen, ²M. Okamoto, ²H. Iwasaki, ¹M. Yamasaki, ¹Y. Kawamura, ³S. Sulaimankulova and ¹T. Mashimo
¹Kumamoto University, Japan
²Kuraray Luminas Co. Ltd., Japan
³National Academy of Sciences, Kyrgyzstan

PB028A **Nitrogenated Amorphous Carbon Films Prepared at Various Substrate Temperature by Microwave Surface Wave Plasma CVD**

D. C. Ghimire, S. Adhikari, H. R. Aryal, H. Uchida and M. Umeno
Chubu University, Japan

PB029A **Substrate Temperature Control In Microwave Plasma CVD**

J. Sakai, T. Ishijima and H. Toyoda
Nagoya University, Japan

PB030A **Gas-Phase Diagnostics of SiH₄/H₂ Surface Wave Excited Plasma**

T. Kuroda, T. Ishijima and H. Toyoda
Nagoya University, Japan

PB031A **Characteristics of Semiconducting Amorphous Carbon Nitride Thin Films**

H. R. Aryal, S. Adhikari, H. Uchida and M. Umeno
Chubu University, Japan

PB032A **Fabrication of Carbon Nanomaterials Synthesized by Plasma Enhanced Chemical Vapor Deposition for Solar Cell Applications**

T. Kino, S. Kondo, W. Takeuchi, H. Kondo, K. Ishikawa, M. Sekine and M. Hori
Nagoya University, Japan

PB033A **Diagnostics in High Pressure SiH₄/H₂ Plasma for Deposition of Micrococrystalline Si**

¹S. Kawashima, ¹A. Yusuke, ¹K. Takeda, ¹K. Ishikawa, ¹H. Kondo, ^{1,2}M. Sekine and ^{1,2}M. Hori
¹Nagoya University, Japan
²Plasma Nanotechnology Research Center, Japan

PB034A **The Effect of Temperature and Pressure for Microwave-Excited Bubble Plasma Production**

R. Saito, K. Kanetake T. Ishijima and H. Toyoda
Nagoya University, Japan

PB035A **Formation of Atmospheric Pressure Plasma and Surface Modification of Polycarbonate Plate**

¹M. Kasuya, ¹S. Yasui and ²M. Noda
¹Nagoya Institute of Technology, Japan
²Chubu University, Japan

PB036A **Large Flow Atmospheric Microwave Plasma Source and Decomposition of CO₂**

S. Ikezawa, M. Hayakawa and S. Parajulee
Chubu University, Japan

PB037A **Magnetic Anisotropy of Mn₃CuN Thin Films Deposited by the Ultrahigh-Field Sputtering Method**

M. Aoyama, K. Nakamura, K.Takenaka and H. Ikuta
Nagoya University, Japan

PB038A **Epitaxial Growth of Semiconducting Iron Die-Silicide Thin Film on SiC**

K. Akiyama, T. Kadokami, S. Kaneko and Y. Hirabayashi
Kanagawa Industrial Technology Center, Japan

PB039A Surface Modification of PET Film by Microwave Plasma

¹I. Liang, ¹H. Ogawa, ¹Y. Sato, ²K. Kato, ³K. Iseki and ¹H. Sugai

¹Chubu University, Japan

²Nagoya Industrial Research Institute, Japan

³TOYOB0 Co. Ltd, Japan

PB040A Hard X-ray Photoelectron Spectroscopy for Analysis of Plasma-Exposed Polymer Surface

^{1,4}K. Cho, ^{1,4}K. Takenaka, ^{1,4}Y. Setsuhara, ^{2,4}M. Shiratani, ^{3,4}M. Sekine and ^{3,4}M. Hori

¹Osaka University, Japan

²Kyushu University, Japan

³Nagoya University, Japan

⁴JST, CREST, Japan

PB041A Combinatorial Analysis of Plasma Interactions with Soft Materials

^{1,4}Y. Setsuhara, ^{1,4}K. Cho, ^{1,4}K. Takenaka, ^{2,4}M. Shiratani, ^{3,4}M. Sekine and ^{3,4}M. Hori

¹Osaka University, Japan

²Kyushu University, Japan

³Nagoya University, Japan

⁴JST, CREST, Japan

PB042B Improvement in the Light Output Power of GaN-Based Light Emitting Diodes by One-Step Current Blocking Design

¹C-F. Tsaia, ¹Y-K. Su and ²C-L. Lin

¹National Cheng Kung University, Taiwan

²Kun-Shan University, Taiwan

PB043B $\text{Ga}_{0.89}\text{In}_{0.11}\text{N}/\text{GaN}$ Double Heterojunction *p-i-n* Solar Cells

Y. Kuwahara, Y. Fujiyama, M. Iwaya, S. Kamiyama, H. Amano and I. Akasaki

Meijo University, Japan

PB044B Growth, Fabrication, and Characterization of InGaAsN Double Heterojunction Solar Cells

¹T-H. Wu, ^{1,2}Y-K. Su, ³L. Y. Chieh and ¹Y-J. Wang

¹National Cheng Kung University, Taiwan

²Kun Shan University, Taiwan

³Epistar, Taiwan

PB045B **Electrical- and Emission- Characteristics Dependence on Ion Implantation Conditions of Eu-Doped Light Emitting AlGaN/GaN HEMT**

¹T. Hata, ¹H. Okada ¹A. Wakahara ¹Y. Furukawa, ²S. Sato and ²T. Ohshima

¹Toyohashi Univ. of Technol., Japan

²Japan Atomic Energy Agency (JAEA), Japan

PB046B **Study of Electrical Response in Pt/GaN Schottky Diode to CO Gas for High Temperature Gas Sensor**

H. Okada, A. Naruse A. Wakahara and Y. Furukawa

Toyohashi University of Technology, Japan

PB047B **Fabrication of 247 nm Light-Source Using AlGaN on AlN/Sapphire**

¹Y. Shimahara, ¹H. Taketomi, ¹H. Miyake, ¹K. Hiramatsu, ²F. Fukuyo, ²T. Okada, ²H. Takaoka and ²H. Yoshida

¹Mie University, Japan

²Hamamatsu Photonics K.K., Japan

PB048B **In Situ Monitoring of InN grown by RF-MBE**

¹K. Wang, ¹T. Yamaguchi, ¹T. Araki and ^{1,2}Y. Nanishi

¹Ritsumeikan University, Japan

²Seoul National University, Korea

PB049B **Fabrication of Light-Emitting Device Using Eu-Doped GaN Active Layer by RF-MBE**

K. Yoshida, J-H. Park, H. Okada and A. Wakahara

Toyohashi University of Technology, Japan

PB050B **Metal Selection for Surface Plasmon Polaritons Excitation at Metal/Dielectric Interface in Mid-UV Wavelength Range**

M. Kumar, A. Tiwari, H. Okada, Y. Furukawa and A. Wakahara

Toyohashi University of Technology, Japan

PB051B **Photonic Crystal Nitride-Based LED Fabricated by Nanosphere Lithography Combined with ICP Dry Etching**

¹Y. K. Su, ¹J. J. Chen, ²C. L. Lin and ¹C. C. Kao

¹National Cheng Kung University, Taiwan

²Kun-Shan University, Taiwan

PB052B **Characterization of the InGaN/GaN MQWs LEDs with Wide EL Spectrum**

¹H. S. Jeon, ¹A. R. Lee, ¹K. S. Lee, ¹D. W. Cho, ¹J. E. Ok, ¹K. H. Kim, ¹H. Ha, ¹S. N. Yi, ¹M. Yang, ¹H. S. Ahn, ²C. R. Cho, ³S. W. Kim, ⁴J. H. Lee and ⁴S. K. Shee

¹Korea Maritime University, Korea

²Pusan National University, Korea

³Andong National University, Korea

⁴Theleds Co., Ltd, Korea

PB053B **Angular Color Homogeneity on Phosphor Conformally Coated White High-Power LEDs by Chip Structure**

¹K-C. Lee, ¹S-M. Kim, ¹J. P. Kim and ²J-H. Moon

¹Korea Photonics Technology Institute (KOPTI), Korea

²Chonnam National University, Korea

PB054B **Influence of Dislocation Density on the Optical Properites of AlGaN Deep Ultraviolet Light-Emitting Diodes**

J. C. Zhang, Y. Sakai and T. Egawa

Nagoya Institute of Technology, Japan

PB055B **Ta-etching of GaN by the Metalorganic Chemical Vapor Deposition-re-growth of GaN**

K. Hara, Y. Naoi and S. Sakai

The University of Tokushima, Japan

PB056B **AlGaN Growth on (100) QUOTE -Ga₂O₃ by Metal-Organic Vaper Pahse Epitaxy**

Y. Kawai, S. Itoh, K.Takeda, M. Iwaya, S. Kamiyama, H. Amano and I. Akasaki

Meijo University, Japan

PB057C **Surface Modification and Characterization of H₂-O₂ Plasma Treated Polypropylene Membrane**

C. Huang, C-Y. Tsai and R-S. Juang

Yuan Ze University, Taiwan

PB058C **Quantification of Bias-Sputtering Cleaninng Effects for Contaminated Si Substrate**

¹Y. Tsukamoto and ²M. Saito

¹Ashikaga Institute of Technology, Japan

²Waseda University, Japan

PB059C **Enhancing the Gas-Sensing Properties of SnO₂-MWCNTs Nanocomposites Using CF₄ Plasma Treatment**

Y-H. Lin, P-S. Lee and H. C. Shih

National Tsing Hua University, Taiwan

PB060C **Formation of Metallic Nanostructure Array by Helium Plasma Irradiation**

S. Kajita, T. Saeki, Y. Hirahata and N. Ohno
Nagoya University, Japan

PB061C **Influence of Water Vapor on Plasma Sterilization by Dielectric Barrier Discharges in Atmospheric Air**

Y. Kikuchi, N. Fukumoto and M. Nagata
University of Hyogo, Japan

PB062C **Fabrication of (Cr:Cu)-DLC Films by Cathodic Arc Plasma Deposition**

¹J. J-Yan, ²H. S. ¹L-S. Chang, ³C-L. Chang and ^{1,4}H-C. Shinh
¹National Chung Hsing University, Taiwan
²National Taichung Institute of Technology, Taiwan
³Mingdao University, Taiwan
⁴Chinese Culture University, Taiwan

PB063C **Construction of a NO Sensor with High Selectivity: Syntheses of Metal Complexes with N₂S₂ Coordination Environment as a Modifier on an Electrode.**

Z. Zhang, T. Yano, T. Inomata, Y. Funahashi, T. Ozawa and H. Masuda
Nagoya Institute of Technology, Japan

PB064C **Front and Back Side Illumination of a Nano-Structured AlGaInN Photodetector**

¹J. Zhang, ¹T. Taoka, ¹Y. Naoi, ¹S. Sakai, ²A. Fukano and ²S. Tanaka
¹The University of Tokushima, Japan
²SCIVAX Corporation, Japan

PB065C **Atmospheric Pressure Plasma for Localized Material Deposition on IR Sensor**

¹K. Masuno, ¹K. Tashiro, ²M. Hori, ¹S. Kumagai and ¹M. Sasaki
¹Toyota Technological Institute, Japan
²Nagoya University, Japan

PB066C **Evaluation of Double-Layer Calcium Phosphate Coating Film Fabricated by RF Magnetron Sputtering on Titanium Substrate**

K. Ueda, T. Narushima, Y. Kawasaki, T. Goto, J. Kurihara and H. Kawamura
Tohoku University, Japan

PB067C **Influence of Oxidation Treatment on Electric Double-layer Capacitance of Carbon Nanotube-based Electrodes**

C-T. Hsieh, C. Pan and Y-S. Cheng
Yuan Ze University, Taiwan

PB068C **Surface Activation of Polysulfone Membrane by Cyclonic Atmospheric Pressure Plasma Processing**

H. C-Te, Y-Y. Liu, R-S. Juang, S-Y. Jeng, C-Y. Tsai and C. Huang
Yuan Ze University, Taiwan

PB069C **Tailoring Surface Properties of Carbon Paper by Low Temperature Plasma Processing**

H. C-Te, C. Huang, C-H. Pan and W-Y. Chen
Yuan Ze University, Taiwan

PB070C **The Artificial Siderophores-Modified Au Substrates for a Sensing Device of Microbes**

J. Itoh, H. Tanabashi, T. Inomata, H. Eguchi, Y. Funahashi, T. Ozawa and H. Masuda
Nagoya Institute of Technology, Japan

PB071C **Construction of a Bioavailable NO Sensing Material Using an Modified Electrode with Fe(III) Complex with an N₂O₂ Donor Sets**

T. Suwabe, T. Inomata, Y. Funahashi, T. Ozawa and H. Masuda
Nagoya Institute of Technology, Japan

PB072C **Surface Modification of Titanium by Impulse Discharge Plasma Irradiation**

K. Shibagaki, M. Ishida and M. Ibayashi
Suzuka National College of Technology, Japan

PB073C **Non-Heme Diiron Complex-Modified Electrode for Dioxygen Activation**

T. Kitagawa, T. Inomata, Y. Hayashi, K. Shinozaki, Y. Funahashi, T. Ozawa and H. Masuda
Nagoya Institute of Technology, Japan

PB074C **Surface Modification of Cotton with Flame Retardant Using RF Plasma**

B. Paosawatyanyong, P. Jermsutjarit and W. Bhanthumnavin
Chulalongkorn University, Thailand

PB075C **Characterization of NO High Selective Complex and The Self-Assembled Modification on Electode**

D. Tsurudome, T. Yano, T. Inomata, Y. Funahashi, T. Ozawa and H. Masuda
Nagoya Institute of Technology, Japan

PB076C **Preparation of Heterogenous Catalyst of Pd(II) Complex with a Bidentate N-Heterocyclic Carbene Ligand and its Application to Allylic Alkylation**

T. Yagyu, M. Kato and T. Narita
Nagoya Institute of Technology, Japan

PB077C **Growth of Single-crystalline Nanorods at Atmospheric Plasma Discharge**

¹Y. Guo, ¹K. Ding, ¹J. Shi, ²K. Nakamura and ¹J. Zhang

¹Donghua University, China

²Chubu University, Japan

PB078C **Aqueous Alumina Sol Modified by Solution Plasma**

Y. Ohya, H. Yoshizawa and T. Ban

Gifu University, Japan

PB079C **The Fabrication and Characterization of Fluorinated SnO₂ Nanowires**

G-S. Chen, Y-H. Lin and H. C. Shih

National Tsing Hua University, Taiwan

PB080C **Contact Angle Analysis of Cyclonic Atmospheric Pressure Plasma Activated Polycarbonate**

C. Huang, S-Y. Wu, Y. C. Liu and Y-C. Chang

Yuan Ze University, Taiwan

PB081C **Surface Modification of Stainless Steel by Atmospheric-Pressure Meso-plasma Jet**

J. Minamoto, K. Tsujii, D. Shikamata, Y. Suda and H. Takikawa

Toyohashi University of Technology, Japan

PB082C **Control of the Work Function on the Surfaces of Metal Oxide Films Using Atmospheric-Pressure Remote Plasma**

Y. Ueda and O. Sakai

Kyoto University, Japan

PB083C **Concurrent Surface- Block-Tearing by FIB Assisted Hydrogen Implantation**

H. Iwata, M. Takagi and Y. Tokuda

Aichi Institute of Technology, Japan

PB084C **Selective Crystallization and Etching of a-Ge:H Thin Films by Exposing to Remote H₂ Plasma**

Y. Miyazaki, K. Makihara, M. Ikeda, S. Higashi and S. Miyazaki

Hiroshima University, Japan

PB085C **Effects of Pulse Frequencies on the Characteristics of Nanocrystalline TiN Coatings by Pulsed DC Magnetron Sputtering**

S-Y. Chun and W-G. Park

Mokpo National University, Korea

PB086C **Oil Film Removal from Metal Surface by Using Twin PEN-Jets with Flat Nozzles**

¹K. Tsujii, ¹J. Minamoto, ¹D. Shikamata, ¹Y. Suda, ¹H. Takikawa and ²H. Shiki

¹Toyohashi University of Technology, Japan

²Daiken Chemical Co., Ltd, Japan

PB087C **Siloxane Polymer Surface Modifications by Exposure of Plasma-Beams: A Vibrational Sum-Frequency Generation Spectroscopy (SFG) Study**

K. Ishikawa, K. Takeda, H. Kondo, M. Sekine and M. Hori

Nagoya University, Japan

PB088C **Development of Atmospheric Plasma Jet with Slit Type Nozzle**

N. Oshima, R. Takada, Y. Kubota and T. Hara

Toyota Technological Institute, Japan

PB089C **Improved Nucleation and Transition in Optically-Compensated-Bend Displays by Plasma Beam Treatments**

¹G. M. Wu, ¹H. W. Chien, ¹C. C. Huang, ¹C. W. Chueh, ¹C. C. Yen and ²C. N. Chen

¹Chang Gung University, Taiwan

²Asia University, Taiwan

PB090C **Plasma Induced Nitridation and Reaction of Metal Nanoparticle and Substate**

T. Kitajima, R. Kage and T. Nakano

National Defense Academy, Japan

PB091C **Thixocasting of AC4CH Alloy Billets Prepared by Ultrasonic Treatment**

^{1,2}W. Khalifa, ¹Y. Tsunekawa and ¹M. Okumiya

¹Toyota Technological Institute, Japan

²Cairo University, Egypt

PB092C **Effect of Alumina or Yttria on the AlN Combustion Synthesis Reaction**

Y. Komiya and Y. Seimiya

Meisei University, Japan

PB093C **The Optimal Decomposition Conditions for FRP Recycling by Overheated Vapor**

J. Shi and L. Bao

Shinshu University, Japan

PB094C **Effect of Centrifugal Casting Processing Temperature on Intermetallics Characteristics in Al/Al₃Ti Functionally Graded Materials**

^{1,2}S. El-Hadad, ¹H. Sato, ¹E. Miura and ¹Y. Watanabe

¹Nagoya Institute of Technology, Japan

²Central Metallurgical Research & Development Institute, Egypt

PB095C **Fabrication of Three-Dimensional ZrO₂-Based Composite by Micro-stereolithography**

M. Hotta and S. Kirihsara

Osaka University, Japan

PB096C **Influence of RF Power on the Physical and Dielectric Characteristics of ZnO-doped Nd(Co_{1/2}Ti_{1/2})O₃ Thin Films**

S-F. Yan, Y-D. He and C-H. Hsu

National United University, Taiwan

PB097C **Effect of Annealing Treatments on the Physical and Optical Characteristics of ZnO-doped Nd(Co_{1/2}Ti_{1/2})O₃ Thin Films**

Y-D. He, S-F. Yan and C-H. Hsu

National United University, Taiwan

PB098C **Visible Light-Induced Catalytic Oxidation by Using the Two Distinct Metal Complexes-Encapsulated Zeolites**

Y. Nagai, N. Ohata, T. Inomata, Y. Funahashi, T. Ozawa and H. Masuda

Nagoya Institute of Technology, Japan

PB099C **Nitrile Hydration by Co(III) Complex with Oxygenated S Atoms Inserted into Meso Porous Silica**

T. Ozawa, T. Shibayama, T. Yano, Y. Funahashi and H. Masuda

Nagoya Institute of Technology, Japan

PB100C **Mechanical Properties of Metallized Nanofibers Prepared by Electrospinning**

H-R. Kim, N. Kimura, B-S. Kim and I-S. Kim

Shinshu University, Japan

PB101C **VOC Detection by Co Phthalocyanine-Modified QCM Sensor**

T. Inomata, T. Sawaki, N. Ohata, Y. Funahashi, T. Ozawa and H. Masuda

Nagoya Institute of Technology, Japan

PB102C **A Novel Fabrication of P-N Diode Based on ZnO Nanowire/p-NiO Heterojunction**

S-P. Chang, P-Y. Su, S-J. Chang and H-M. Chang

National Cheng Kung University, Taiwan

PB103C **Electrical and Optical Characteristics of Ultraviolet Photodetector with Interlaced ZnO Nanowires**

S-P. Chang, H-M. Chang, P-Y. Su and S-J. Chang
National Cheng Kung University, Taiwan

PB104C **Multilayered and Functionally Gradient Thin Films of Plasma Polymers**

L. Hoferek and V. Cech
Brno University Of Technology, Czech Republic

PB105C **The Structure and Optical Properties of Thermal Evaporated ZnS/ZnO Core-Shell Nanowires**

¹Y-W. Cheng, ²M-W. Huang, ³L-W. Chang, ³Y. H. Lin and ¹H. C. Shih
¹Chinese Culture University, Taiwan
²National Chung Hsing University, Taiwan
³National Tsing Hua University, Taiwan

PB106C **Cold Model for Fabrication of Ni-aluminides/Steel Clad Pipe by the Reactive Centrifugal Casting Method**

Y. Inaguma, H. Sato and Y. Watanabe
Nagoya Institute of Technology, Japan

PB107C **Finite Element Analysis of Severe Plastic Deformation of Difficult-to-work Material by ECAP at Ambient Temperature**

^{1,2}S. Jamian, ²H. Sato, ²E. Miura-Fujiwara and ²Y. Watanabe
¹Universiti Tun Hussein Onn Malaysia, Malaysia
²Nagoya Institute of Technology, Japan

PB108C **Fabrication of Ti/bio-degradable Material Composite for Biomedical Use by Spark Plasma Sintering Method**

¹T. Teramoto, ¹E. M-Fujiwara, ¹H. Sato, ¹Y. Watanabe and ²E. Kobayashi
¹Nagoya Institute of Technology, Japan
²Tokyo Institute of Technology, Japan

PB109C **A New Dielectric Material System of $x\text{MgTiO}_3-(1-x)\text{Ca}_{0.6}\text{La}_{0.8/3}\text{TiO}_3$ at Microwave Frequency**

C-L. Huang and Y-H. Chien
National Cheng Kung University, Taiwan

PB110C **Water Permeability into Nano-void of Crazed Polymer**

T. Hirama, S. Okubo, T. Yokoi, A. Takeno and M. Miwa
Gifu University, Japan

PB111C **Synthesis and Raman Characteristics of Single CuO Nanowire**

A. C. Gandhi, P-H. Shih and S. Y. Wu

National Dong Hwa University, Taiwan

PB112C **Theoretical Study of Bound Ligand Effects on Ligand-Substitution Reactions for a Fe(III) Ion**

¹Y. Wasada-Tsutsui, ²H. Wasada, ¹H. Masuda and ³S. Funahashi

¹Nagoya Institute of Technology, Japan

²Gifu University, Japan

³Nagoya University, Japan

PB113C **Progressing Studies of Dioxygen-Uptake, Activation and Evolution on a Dimetal Center**

T. Toyama, K. Yoshii, T. Nishikawa, Y. Wasada-Tsutsui, Y. Kajita, T. Inomata, T. Ozawa, H. Masuda and Y. Funahashi

Nagoya Institute of Technology, Japan

PB114C **Enclathration of Nitrile Compounds in a Bicyclic Cage-type Molecule**

Y. Funahashi, T. Higa, M. Fukui, K. Fukui, Y. Naganuma, Y. Kajita, T. Inomata, T. Ozawa and H. Masuda

Nagoya Institute of Technology, Japan

PB115C **Syntheses of Silver Nanoparticles Melted into ZnO Nanorod and its Photocatalytic Activity**

C-H. Chao and C-H. Chan

Mingdao University, Taiwan

PB116C **Structures and Properties of Tricopper Core Formed in the Cage-Type Ligand**

K. Nagata, M. Seko, M. Fukui, K. Fukui, Y. Kajita, Y. Wasada-Tsutsui, T. Inomata, T. Ozawa, H. Masuda and Y. Funahashi

Nagoya Institute of Technology, Japan

PB117C **Thermal Properties of Diamond Particle Dispersed Al Matrix Composites Fabricated in Continuous Solid-Liquid Co-Existent State by SPS**

¹K. Mizuuchi, ²K. Inoue, ¹Y. Agari, ¹Y. Morisada, ¹M. Sugioka, ¹M. Tanaka, ¹T. Takeuchi, ¹J. Tani, ³M. Kahara and ⁴Y. Makino

¹Osaka Municipal Technical Research Institute, Japan

²University of Washington, USA

³SPS Syntex Inc., Japan

⁴Osaka University, Japan

PB118B **Urbach Tail Studies of $\text{In}_{0.01}\text{Al}_{0.11}\text{Ga}_{0.88}\text{N}/\text{GaN}$ Film**

¹S. Y. Hu, ²Y. C. Lee, ³Z. C. Feng and ⁴S. H. Yang

¹Tung Fang Institute of Technology, Taiwan

²Tungnan University, Taiwan

³National Taiwan University, Taiwan

⁴National Taiwan Ocean University, Taiwan

PB119A **The Measurement of SU-8 Coating Thickness using Neutral Mechanical Plane in ZnO based Thin Film Transistors**

D-K. Lee, J-H. Boo and Y-J. Kim

Sungkyunkwan University, Korea