Poster Session A

MAR 8 (Mon), 13:00-14:30, 17:30-19:00

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

Poster session A, Odd numbers: March 8th, (Mon) 13:00-14:30
Poster session A, Even numbers: March 8th, (Mon) 17:30-19:00

PA001A **Film Depositions Using Pulsed Magnetron Systems of Several Types**
J. Vlcek
University of West Bohemia, Czech Republic

PA002A **Investigation on Plasma Parameters in Inductively Coupled Ar/H_2 Plasmas**
H. Kasugai and T. Kimura
Nagoya Institute of Technology, Japan

PA003A **Periodic Peak Formation in O^- Energy Distribution in RF Magnetron Plasma**
[1]K. Goto, [1]T. Ishijima, [2]T. Morita, [3]N. Ohshima, [3]K. Kinoshita and [1]H. Toyoda
[1]Nagoya University, Japan
[2]ULVAC, Inc., Japan
[3]NEC Corporation, Japan

PA004A **Volumetric Role of Acetic Acid in the Hydrolysis of TTIP Solution**
S. Parajulee, M. Hayakawa and S. Ikezawa
Chubu University, Japan

PA005A **Diagnostics of Inertial Plasma Parameters in a Plasma Array Using Metamaterial Effects**
[1]O. Sakai, [1]T. Naito, [1]T. Shimomura, [1]D-S. Lee and [2]K. Tachibana
[1]Kyoto University, Japan
[2]Ehime University, Japan

PA006A **Electrical Extraction of One Dimensional MOSFET Doping Profiles by Threshold Voltage Measurement**
[1,2]H. H. Park and [2]B.D. Choi
[1]Samsung Electronics Co., Korea
[2]Sungkyunkwan University, Korea

PA007A **Accurate Monitoring System for Silicon Wafer Temperature Using Super-Coninuum Light Source on Low-Coherence Interferometry**

[1]T. Hiraoka, [1]T. Kageyama, [1,2]C. Koshimizu, [1]T. Ohta, [3]M. Ito, [4]N. Nishizawa and [5]M. Hori

[1]Wakayama University, Japan

[2]Tokyo Electron AT Ltd., Japan

[3]Meijo University, Japan

[4]Osaka University, Japan

[5]Nagoya University, Japan

PA008A **Investigation of Formation Mechanism of Indium-Zinc-Oxide Film by RF Magnetron Sputtering**

[1]T. Kanae, [1]M. Inoue, [1]N. Takota, [1]T. Ohta, [2]M. Ito, [3]Y. Higashijima, [4]H. Kano, [5]S. Den and [6]M. Hori

[1]Wakayama University, Japan

[2]Meijo University, Japan

[3]NU System Co., Ltd., Japan

[4]NU Eco Engineering Co., Ltd., Japan

[5]Katagiri Engineering Co., Ltd., Japan

[6]Nagoya University, Japan

PA009A **Plasma Diagnostics of a Magnetron Sputtering Device with an Extraordinary Strong Magnetic Field**

K. Nakamura, M. Aoyama and H. Ikuta

Nagoya University, Japan

PA010A **Influence of High-Energy Secondary Electrons in Plasma Immersion Ion Implantation**

[1,2]Y. Guo, [1]K. Nakamura, [2]J. Shi, [2]J. Zhang, [1]Y. Nakano and [1]H. Sugai

[1]Chubu University, Japan

[2]Donghua University, China

PA011A **Spectroscopic Study of Plasma in Aqueous Solution: (1) Time-Resolved Emission Spectroscopy of Active Species**

Y. Someya, H. Kato, Y. Kusama and H. Yui

Tokyo University of Science, Japan

PA012A **Spectroscopic Study of Plasma in Aqueous Solution: (2) Optical Emission Spectroscopy with High Spatial Resolution**

Y. Kusama, H. Kato, Y. Someya and H. Yui

Tokyo University of Science, Japan

PA013A **Mixing-Process of Fine-Particles into the Plasma Produced in Microwave Heating of Powder Material**

[1]A. Matsubara, [1]K. Nakayama, [1]S. Okajima and [2]M. Sato

[1]Chubu University, Japan

[2]National Institute of Fusion Science, Japan

PA014A **Plasma Diagnostics for NH_3 Plasmas Using a Quartz Sensor at Various Pressures**

A. Suzuki and H. Nonaka
National Institute of Advanced Industrial Science and Technology (AIST), Japan

PA015A **Surface Loss Probabilities of H Atom on Various Silicon Thin Films**

[1]Y. Abe, [1]C. S. Moon, [1]S. Kawashima, [1]K. Takeda, [1]H. Kondo, [2]K. Ishikawa, [2,3]M. Sekine and [1,2,3]M. Hori
[1]Nagoya University, Japan
[2]Plasma Nanotechnology Research Center, Japan
[3]JST, CREST, Japan

PA016A **Measurement of H Radical Density in H_2/Ar Nonequilibrium Atmospheric Pressure Plasma**

[1]H. Inui, [1]Y. Matsudaira, [2]N. Yoshida, [2]N. Iwaki, [2]T. Kawasumi, [1]K. Takeda, [1]K. Ishikawa, [1]H. Kondo, [1]M. Sekine and [1]M. Hori
[1]Nagoya University, Japan
[2]Fuji Machine Mfg. Co., Ltd, Japan

PA017A **Modification of the Simulation Code ACAT to Treat Real Atomic Positions**

[1]A. Takayama, [1]A. Ito, [1,2]H. Nakamura, [2]S. Saito and [3]T. Kenmotsu
[1]National Institute for Fusion Science, Japan
[2]Nagoya University, Japan
[3]Doshisha University, Japan

PA018A **Simulation of High-Pressure Helium DC Glow Discharge Plasmas**

K. Yamada, A. Oda and T. Kimura
Nagoya Institute of Technology, Japan

PA019A **Molecular Dynamics Simulation of Hydrogen Injection onto Diamond and Diamond Like Carbon Surfaces**

[1,2]H. Nakamura, [1]A. Ito, [1]A. Takayama, [2]S. Saito, [2]N. Ohno and [2]S. Kajita
[1]National Institute for Fusion Science, Japan
[2]Nagoya University, Japan

PA020A **Modeling of Radical Transformation under 'PAPE' Structure and Method of Estimation for Surface Loss Probabilities of Radicals**

[1,2,3]A. Malinowski, [1]M. Hori, [1]M. Sekine, [1]T. Suzuki, [1]H. Yamamoto, [1]H. Kondo, [1]K. Ishikawa, [2]A. Jakubowski, [2]L. Lukasiak and [3]D. Tomaszewski
[1]Nagoya University, Japan
[2]Warsaw University of Technology, Poland
[3]Institute of Electron Technology, Poland

PA021A **Bias Annealing of Defects in Silicon pn Diodes Irradiated by Protons**

[1]H. Sakane, [1]J. Ito, [2]Y. Nagae, [2]M. Nakai, [2]K. Furuhashi and [2]Y. Tokuda
[1]S. H. I. Examination & Inspection, Ltd., Japan
[2]Aichi Institute of Technology, Japan

PA022A **Improvement of RIE Lag in High Aspect Ratio Si Etching**

J. M. Ji, W-S. Shin and C-K. Kim
Ajou University, Korea

PA023A **Behavior of Rotational Temperature in Dual Frequency Capacitively Coupled Plasma**

[1]T. Yamaguchi, [1]T. Kimura, [1]K. Takeda, [2]C. Koshimizu, [1]M. Sekine and [1]M. Hori
[1]Nagoya University, Japan
[2]Tokyo Electron AT Ltd., Japan

PA024A **Control and Diagnostics of Oxygen Microwave Plasma at High Pressure**

[1]S. Ohta, [1]S. Fujita, [1]I. Liang, [2]K. Kato, [1]K. Nakamura and [1]H. Sugai
[1]Chubu University, Japan
[2]Nagoya Industrial Research Institute, Japan

PA025A **Investigation into Body-Bias Dependence of Drain-Induced Barrier Lowering for Sphere-Shaped-Recess-Cell-Array Transistor**

[1,2]K. Kim, [1]K-H. Jung, [1]J-S. Moon and [2]Y. Roh
[1]Samsung Electronics, Korea
[2]Sungkyunkwan University, Korea

PA026A **Study for Damage in Porous SiOCH Film with Air Exposure After H_2 or N_2 Plasma Treatment**

[1]T. Suzuki, [1]H. Yamamoto , [1,2]K. Takeda, [1,2]M. Sekine and [1,2]M. Hori
[1]Nagoya University, Japan
[2]JST, CREST, Japan

PA027A **Porous SiOCH Low-*k* Film Etch Process and its Surface Reactions Employing an Alternative Fluorocarbon Gas $C_5F_{10}O$**

[1]E. Shibata, [1]M. Sekine, [1]K. Ishikawa, [1]H. Kondo, [2]H. Okamoto and [1]M. Hori
[1]Nagoya University, Japan
[2]Asahi Glass Co., Ltd., Japan

PA028A **SiO_2 Cotact Hole Etch Mechanism Using Environment-Friendly New Gas, C_5F_7H**

[1]Y. Miyawaki, [1]K. Takeda, [2]A. Ito, [2]M. Nakamura, [1]H. Kondo, [1]K. Ishikawa, [1]M. Sekine and [1]M. Hori
[1]Nagoya University, Japan
[2]Zeon Corporation, Japan

PA029A **Effect of CF Layer on Porous SiOCH Low-*k* Films During H_2 or N_2 Plasma Exposure**

H. Yamamoto, K. Takeda, M. Sekine and M. Hori
Nagoya University, Japan

PA030A **Analysis of ArF Photoresist Modified by Fluorocarbon Ion Bombardment**

[1]T. Takeuchi, [1]M. Sekine, [1]H. Toyoda, [1]H. Kondo, [1]K. Ishikawa, [1]K. Takeda, [2]S-Y. Kang, [2]I. Sawada and [1]M. Hori
[1]Nagoya University, Japan
[2]Tokyo Electron Ltd., Japan

PA031A **Deep-Level Defect Passivation by High Density Hydrogen Radical Exposures on Ion Irradiated Si**

[1]S. Chen, [2]Y. Nagae, [2]M. Nakai, [1]K. Ishikawa, [1]H. Kondo, [3]H. Kano, [1]K. Takeda, [2]T. Tokuda, [1]M. Sekine and [1]M. Hori
[1]Nagoya University, Japan
[2]Aichi Institute of Technology, Japan
[3]NU Eco-Engineering Co., Ltd, Japan

PA032A **Measurement of Si Wafer Temperature with Metal Thin Film during Plasma Process Using Low-Coherence Interferometer**

[1]H. Kuroda, [2]H. Sugiura, [1]H. Yamamoto, [2]M. Ito, [3]T. Ohta, [1]K. Takeda, [1]H. Kondo, [1]K. Ishikawa, [1,4]M. Sekine and [1,4]M. Hori
[1]Nagoya University, Japan
[2]Meijo University, Japan
[3]Wakayama University, Japan
[4]JST, CREST, Japan

PA033C **A Study on Surface Plasma Treatment of Polyimide Film for Cu Metallization**

T. Nguyen, S-J. Cho, J-W. Choi and J-H. Boo
Sungkyunkwan University, Korea

PA034B **High-Quality InAlN Lattice Matched to GaN Grown by Metal Organic Chemical Vapor Deposition**

Z. T. Chen, Y. Sakai and T. Egawa
Nagoya Institute of Technology, Japan

PA035B **Photoelectrochemical Evaluation of Bulk GaN Single Crystal Dependent on Growth Method**

K. Fujii, T. Kato, K. Sato, K. Koike, T. Yamada, H. Yamane and T. Yao
Tohoku University, Japan

PA036B **Low Pressure HVPE Growth of AlN on 6H-SiC**

[1]K. Okumura, [1]H. Miyake, [1]K. Hiramatsu and [2]O. Eryuu
[1]Mie University, Japan
[2]Nagoya Institute of Technology, Japan

PA037B **Infrared Reflectance Spectra of (1-101)GaN Grown on a (001)Si Substrate**

[1]N. Sawaki, [1]K. Otsuka, [1]S. Iwata, [1]A. Ogawa, [1]K. Kondo, [2]Y. Honda, [2]T. Tanikawa, [2]T. Hikosaka and [2]M. Yamaguchi
[1]Aichi Institute of Technology, Japan
[2]Nagoya University, Japan

PA038B **Growth of GaN Epilayer Using AlN Buffer on Patterned Sapphire Substrate by Metalorganic Chemical Vapor Deposion**

[1]N. H. Kim, [1]K-H. Lee, [1]S. H. Park, [1]J. H. Kim, [1]M. H. Kim, [2]H-K. Yuh, [2]Y. Moon, [2]S. K. Shee and [1]E. Yoon
[1]Seoul National University, Korea
[2]THELEDS Co., Ltd., Korea

PA039B **MOCVD Growth of GaN Layer Using InN Interlayer and its Influence on Residual Thermal Strain**

[1]K-H. Lee, [1]S. H. Park, [1]J. H. Kim, [1]N. H. Kim, [1]M. H. Kim, [2]H. Na, [1,3]Y. Nanishi and [1]E. Yoon
[1]Seoul National University, Korea
[2]Daejin University, Korea
[3]Ritsumeikan University, Japan

PA040B **Reduction of Threading Dislocation Density in GaN Using an GaN:C Interlayer**

[1]S. H. Park, [1]K-H. Lee, [1]N. H. Kim, [1]D. Moon, [1,2]Y. Nanishi and [1]E. Yoon
[1]Seoul National University, Korea
[2]Ritsumeikan University, Japan

PA041B **Deep-Level Optical Spectroscopy Study of Band-Gap States in *n*-GaN Epilayers Using Transparent Polyaniline Schottky Contacts**

[1]Y. Nakano, [2]N. Matsuki, [2]Y. Irokawa and [2]M. Sumiya
[1]Chubu University, Japan
[2]National Institute for Materials Science, Japan

PA042B **Novel Power Conversion Circuit Using GaN Switching Device**

[1]M. Saito, [2]M. Iwasaki, [2]T. Egawa and [2]N. Matsui
[1]Shibaura Institute of Technology, Japan
[2]Nagoya Institute of Technology, Japan

PA043B **Dependence of Epi-Layer Thickness on the Vertical Breakdown of AlGaN/GaN HEMTs Grown on Silicon**

I. B. Rowena, S. L. Selvaraj, T. Suzue and T. Egawa
Nagoya Institute of Technology, Japan

PA044B **Effect of Drain Disturb According to the Nitrogen Concentration in the Tunnel Oxide of NOR Flash Memory**

[1,2]W. Lee, [1]J. Jee, [1]J. Han, [1]Y. You, [1]S. Kim, [1]C-J. Kang, [1]J-T. Moon and [2]Y. Roh
[1]Samsung Electronics, Korea
[2]Sungkyunkwan University, Korea

PA045B **High Temperature Operation of Normally Off AlGaN /GaN Heterostructure Field-Effect Transistors with p-GaN Gate**

T. Sugiyama, D. Iida, M. Iwaya, S. Kamiyama, H. Amano and I. Akasaki
Meijo Uiversity, Japan

PA046B **AlN Growth on Trench-Patterned AlN/Sapphire by Low-Pressure HVPE**

[1]K. Fujita, [1]K. Okuura, [1]H. Miyake, [1]K. Hiramatsu, [2]J. Norimatsu and [2]H. Hirayama
[1]Mie University, Japan
[2]Riken, Japan

PA047B **Growth of High-Quality AlN on *a*-Plane Sapphire by HVPE**

Y. Takagi, J. Wu, H. Miyake and K. Hiramatsu
Mie University, Japan

PA048B **Dislocation Decrease of Semi-Polar GaN on Si Substrate by Selective MOVPE**

T. Murase, T. Tanikawa, Y. Honda, M. Yamaguchi and N. Sawaki
Nagoya University, Japan

PA049B **Near-Surface Trap Concentration Profiles in n-GaN Determined by Double Correlation Deep-Level Transeient Spectroscopy**

[1]Y. Tokuda, [1]T. Shibata, [1]Y. Yamada, [1]H. Tsuji, [1]T. Onishi, [1]K. Akiyama, [2]H. Ueda, [2]N. Soejima and [2]T. Kachi
[1]Aichi Institute of Technology, Japan
[2]Toyota Central R&D Labs. Inc., Japan

PA050B **Si_3N_4 Passivation Effects on AlGaN/GaN Heterostructures with *n*-GaN, *i*-GaN, *p*-GaN and $In_{0.04}$GaN Cap Layers**

S. Arulkumaran and G.I. Ng
Nanyang Technological University, Singapore

PA051C **Control of Fluorine Content for Hardness Increase of Amorphous Carbon Film Coated by Pulsed-Plasma Ablation**

[1]S. Kawara, [2]H. Koizumi, [1]H. Kousaka, [3]K. Yamada and [1]N. Umehara
[1]Nagoya University, Japan
[2]Japan Aerospace Exploration Agency, Japan
[3]ASAHI GLASS Co., Ltd, Japan

PA052C **Basic Study on Development of Ultra-High-Speed DLC Coating Process**
T. Okamoto, H. Kousaka and N. Umehara
Nagoya University, Japan

PA053C **Tribological Properties of DLC-Coated Inner Surface of Narrow Metal Tube by MVP Method**
K. Mori, H. Kousaka and N. Umehara
Nagoya University, Japan

PA054C **Magneto-Optical Properties of Monolayer and AB-Stacked Bilayer Graphenes**
[1,2]Y-H. Ho, [2]Y. H. Chiu, [2]J. Wang, [1]D. H. Lin and [2]M-F. Lin
[1]National Sun Yat-Sen University, Taiwan
[2]National Cheng Kung University, Taiwan

PA055C **The Effect of Superhydrophobicity on the Wear of a Double Roughening DLC Film**
Y-J. Jang, H. Kousaka and N. Umehara
Nagoya University, Japan

PA056C **Crystallite Size Control of Multilayer Graphene Thin Films Fabricated by DC Plasma-Enhanced CVD Method**
[1,2]A. Yoshimura, [1]H. Yoshimura and [1]M. Tachibana
[1]Yokohama City University, Japan
[2]IHI Corporation, Japan

PA057C **Formation of Porous Carbon Film for Electric Double Layer Capacitor by Pulsed DC Plasma CVD Using Ni Catalysis**
M. Matsushima, M. Noda, G. Kalita, H. Uchida and M. Umeno
Chubu University, Japan

PA058C **White Light Photoluminescence from Mesoporous Carbon-Silica Nanocomposite**
[1]Y. Ishii, [1]A. Matsumura, [1,2]Y. Ishikawa and [1]S. Kawasaki
[1]Nagoya Institute of Technology, Japan
[2]Japan Fine Ceramics Center, Japan

PA059C **Electric Double Layer Capacitance of the Graphene-Like Materials Derived from Single-Walled Carbon Nanotubes**
T. Inoue, S. Mori and S. Kawasaki
Nagoya Institute of Technology, Japan

PA060C **Electronic Property Modification of Single-Walled Carbon Nanotubes by Wrapping ssDNA in Electrolyte Plasma**
Y. Li, T. Kaneko and R. Hatakeyama
Tohoku University, Japan

PA061C **Fabrication of Calcium Atoms Encapsulated Single-Walled Carbon Nanotubes Using Calcium Plasma**

[1]Y. Osanai, [1]T. Shimizu, [1]T. Kato, [2]W. Oohara and [1]R. Hatakeyama

[1]Tohoku University, Japan

[2]Yamaguchi University, Japan

PA062C **Novel Carbon Composite Modified with Atmospheric Pressure Plasma for Improvement of Electric Double-Layer Capacitance and High Rate Capability**

H. C-Te and W-Y. Chen

Yuan Ze University, Taiwan

PA063C **Ar-Diluted CH_4 Concentration Dependence of the Crystallinity of Multilayer Graphene Grown by Photoemission-Assisted Plasma-Enhanced CVD**

[1]H. Sumi, [1,2]S. Ogawa, [2,3]M. Sato, [2,3]M. Nihei and [1,2]Y. Takakuwa

[1]Tohoku University, Japan

[2]JST, CREST, Japan

[3]Fujitsu Limited, Japan

PA064C **Hydrogen Ething Effect of CNW Prepared in Microwave Plasma Enhanced Chemical Vapor Deposition**

S. Suzuki and M. Yoshimura

Toyota Technological Institute, Japan

PA065C **Improvement of Field Electron Emission Performance of Natural Precursor Grown Carbon Nanofibers by Thermal Annealing in an Argon Atmosphere**

P. Ghosh, T. Soga, T. Jimbo, M. Zamri, S. Hashimoto, H. Ohashi and M. Tanemura

Nagoya Institute of Technology, Japan

PA066C **Control in Morphology and Size of Room-Temperature Grown Carbon Nanofibers**

M. Z. Yusop, K. Yamaguchi, T. Suzuki, P. Ghosh, A. Hayashi, Y. Hayashi and M. Tanemura

Nagoya Institute of Technology, Japan

PA067C **Correlation of Mass Density on Tribological Parameters in Diamon-Like Carbon Prepared by Variety of Methods**

[1]S. Kaneko, [1]T. Horiuchi, [1]K. Yoshida, [1]S. Tanaka, [1]C. Kato, [1]M. Kano, [1]M. Kumagai, [2]H. Tanoue, [2]M. Kamiya and [2]H. Takikawa

[1]Kanagawa Prefectural Government, Japan

[2]Toyohashi University of Technology, Japan

PA068C **DLC Coating on Alumina by MW-PECVD Technique**

C. Rattanasatien, N. Tonanon and B. Paosawatyanyong

Chulalongkorn University, Thailand

PA069C **Effect of Sulfur Doped Diamond-Like Carbon Films on the Electrical Properties by DC Magnetron Sputtering**

A. Saeheng, N. Tonanon and B. Paosawatyanyong
Chulalongkorn University, Thailand

PA070C **Control of Hydrophilic and Hydrophobic Properties of Carbon Nanowall by Plasma Surface Treatment**

[1]H. Watanabe, [1]M. Hiramatsu and [2]M. Hori
[1]Meijo University, Japan
[2]Nagoya University, Japan

PA071C **Gas Flow Rate Ratio Dependence of Deposition Profile of H-Assisted Plasma CVD Carbon Films on Trench Substrates**

[1]T. Nomura, [1]Y. Korenaga, [1]J. Umetsu, [1,4]K. Koga, [1,4]M. Shiratani, [2,4]Y. Setsuhara, [3,4]M. Sekine and [3,4]M. Hori
[1]Kyushu University, Japan
[2]Osaka University, Japan
[3]Nagoya University, Japan
[4]JST, CREST, Japan

PA072C **Ultraviolet Ray Irradiation Effect on Frictional Behavior of Carbon Nitride Coating**

[1]T. Tokoroyama, [1]M. Kamiya, [2]Y. Fuwa and [1]N. Umehara
[1]Nagoya University, Japan
[2]Toyota Motors Co., Ltd., Japan

PA073C **Ashing Removal of DLC Film by Oxygen-Dominated Plasma Beam Converted from Filtered Carbon-Cathodic Arc Plasma**

[1]H. Tanoue, [1,2]M. Kamiya, [1]Y. Suda, [1]H. Takikawa, [3]S. Oke, [4]Y. Hasegawa, [4]M. Taki, [4]N. Tsuji, [5]T. Ishikawa and [6]H. Yasui
[1]Toyohashi University of Technology, Japan
[2]Itoh Optical Industrial Co., Ltd., Japan
[3]Tsuyama National College of Technology, Japan
[4]Onward Ceramic Coating Co., Ltd., Japan
[5]Hitachi Tool Engineering Ltd., Japan
[6]Inductrial Research Institute of Ishikawa, Japan

PA074C **Growth of Graphite Thin Films During DC Plasma-Enhanced Chemical Vapor Deposition**

[1]H. Yoshimura, [1,2]A. Yoshimura and [1]M. Tachibana
[1]Yokohama City University, Japan
[2]IHI Corporation, Japan

PA075C **Effect of Filament Discharge on Stand-Up of Carbon Nanotwists Tightly-Adhered to Substrate**

[1]M. Yokota, [1]Y. Sugioka, [1]Y. Suda, [1]H. Takikawa, [2]H. Ue, [3]Y. Umeda and [4]K. Shimizu

[1]Toyohashi University of Technology, Japan

[2]Tokai Carbon Co., Ltd., Japan

[3]Toho Gas Co., Ltd., Japan

[4]Shonan Plastic Mfg. Co., Ltd., Japan

PA076C **Synthesis of B-Doped Single-Walled Carbon Nanotube Films by Arc Discharge**

H. Wang, T. Maruyama, S. Inoue and Y. Ando

Meijo University, Japan

PA077C **Nitrogen-Modulated Wet-Chemical Decoration of Carbon Nitride/ZnO Hetero-Junction Film Results Enhanced Field-Emission Performance**

K. Ghosh, M. Kumar , T. Maruyama and Y. Ando

Meijo University, Japan

PA078C **Preparation of Arc Black and Carbon Nano-Balloon by Arc Discharge and Their Application to Fuel Cell**

[1]T. Ikeda, [1]S. Kaida, [1]Y. Suda, [1]H. Takikawa, [2]S. Oke, [3]H. Ue, [4]T. Okawa, [4]N. Aoyagi and [5]K. Shimizu

[1]Toyohashi University of Technology, Japan

[2]Tsuyama National College of Technology, Japan

[3]Tokai Carbon Co., Ltd., Japan

[4]Daiken Chemical Co., Ltd., Japan

[5]Shonan Plastic Mfg Co., Ltd., Japan

PA079C **Magneto-Optical Properties of Armchair Nanographene Ribbons Under the Modulated Electric Field**

S. C. Chen, C. W. Chiu and M. F. Lin

National Cheng Kung University, Taiwan

PA080C **Characterization of Nano-polygonal Carbons Synthesized by Arc Discharge Method**

[1]J-H. Lin, [1]B-H. Li and [2]C-S. Chen

[1]National University of Tainan, Taiwan

[2]Chang Gung University, Taiwan

PA081C **Encapsulation of Fullerenes and Helicity Induction in Syndiotactic PMMA**

A. Kitaura, H. Iida and E. Yashima

Nagoya University, Japan

PA082C **Effects of Oxygen Etching on the Morphologies of Carbon Nanowalls**

[1]H. Shimoeda, [1]Y. Miyawaki, [1]K. Takeda, [1]K. Ishikawa, [1]H. Kondo, [2]M. Hiramatsu, [1,3]M. Sekine and [1]M. Hori

[1]Nagoya University, Japan

[2]Meijo University, Japan

[3]JST, CREST, Japan

PA083C **Synthesis of SWNTs by Arc Plasma Reactor with Twelve-Phase Alternating Discharge System and Raman Spectroscopic Study**

[1]B. Chen, [2]T. Matsuura, [1]S. Inoue and [1]Y. Ando

[1]Meijo University, Japan

[2]Industrial Technology Center of Fukui Prefecture, Japan

PA084C **Initial Nucleation in Carbon Nanowalls Growth on Si and SiO_2 Surfaces**

[1]H. Mikuni, [1]T. Kanda, [1]S. Kondo, [1]W. Takeuchi, [2]K. Yamakawa, [1]K. Takeda, [1]K. Ishikawa, [1]H. Kondo, [3]M. Hiramatsu, [1]M. Sekine and [1]M. Hori

[1]Nagoya University, Japan

[2]Katagiri Engineering Co., Ltd., Japan

[3]Meijo University, Japan

PA085C **Effects of Ion Irradiation on Carbon Nanowalls Growth**

[1]S. Kondo, [1]K. Yasuda, [1]H. Kondo, [1]K. Ishikawa, [2]M. Hiramatsu, [1]M. Sekine and [1]M. Hori

[1]Nagoya University, Japan

[2]Meijo University, Japan

PA086C **Effects of Plasma Surface Treatments on Supporting of Platinum Nanoparticles to Graphite Materials in Supercritical Carbon Dioxide**

[1]K. Mase, [2]S. Mitsuguchi, [1]S. Kondo, [3]H. Kano, [1]K. Ishikawa, [1]H. Kondo,[2]M. Hiramatsu, [1]M. Sekine and [1]M. Hori

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PA087C **Transport of Graphite Cathodic Vacuum Arc Plasma through T-Shape Filter**

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PA088C **Properties of Tetrahedral Amorphous Carbon Film Prepared by a T-Shape Filter Vacuum Arc Source**

S. Lee, D-G. Kim, J-Y. Lee, S-H. Yun and J-K. Kim

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PA089C **Effect of Nitrogen Content on Friction Coefficient of Si-Containing Hydrogenated Carbon Nitride Film Deposited by Plasma-Enhanced Chemical Vapor Deposition**

[1]H. Sakakibara, [1]H. Kousaka, [1]T. Tokoroyama, [1]N. Umehara and [2]Y. Fuwa
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PA090C **Optimized Distribution and Morphology of Carbon Nanofibers for a Field Emitter Grown by Plasma-Enhanced CVD Process**

N. Shimoi and S-I. Tanaka
Tohoku University, Japan

PA091C **Low Temperature Growth of ZnO Nanorods on Flexible Polymeric Substrates**

C-T. Hsieh and C-Y. Lin
Yuan Ze University, Taiwan

PA092C **Ruthenium (II) Complexes with Triarylamine and Triarylmethane Derivatives for Efficient Dye-Sensitized Solar Cells**

[1]Y. Li, [2]Z. Jin, [1]T. Inomata, [1]H. Masuda, [2]N. Yamanaka and [2]M. Minami
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PA093C **Fabrication of the CIGS Pellet and Characterization of the Thin Film**

[1]A. R. Lee, [1]H. S. Jeon, [1]G. S. Lee, [1]D. W. Cho, [1]J. E. Ok, [1]K. H. Kim, [1]M. Yang, [1]H. S. Ahn, [2]C. R. Cho and [3]H. Ha
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PA094C **Optimization of ZnO/Eosin Y Hybrid Film Based Solar Cells Using Ruthenium Complex as Dye Sensitizers**

[1]X-F. Wang, [1]T. Yoshida, [2]T. Inomata and [2]H. Masuda
[1]Gifu University, Japan
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PA095C **Control of Nanostructure and Crystallographic Orientation in Electrodeposition of ZnO Hybrid Thin Films Using Templates**

[1]K. Ichinose, [1]T. Mizuno, [2]S. Morishta, [2]J. Yamasaki, [2]N. Tanaka and [1]T. Yoshida
[1]Gifu University, Japan
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PA096C **A New Hetrojunction Solar Cell Base on (n) Pentance/(i) a-Si:H/(p) a-Si:H**

C-H. Chao, C-H. Chan and P-Y. Chen
Mingdao University, Taiwan

PA097C **Fabrication of F-Doped Tin Oxide Film for Dye Sensitized Solar Cells**

M. Oshima and K. Yoshino
University of Miyazaki, Japan

PA098C **Preparation and Characterization of Nanocrystalline ITO Thin Films on Glass and Clay Substrates by Ion-Beam Sputter Method**

S. Venkatachalam, H. Nanjo, F. M. B. Hassan, N. Teshima, K. Kawasaki, M. Kanakubo, T. Aizawa, T. Aida and T. Ebina
National Institute of Advanced Industrial Science & Technology (AIST), Japan

PA099C **Activation of Dioxygen by Copper Complexes with *N*-Alkylated *cis,cis*-1,3,5-Triaminocyclohexane Ligands**

J. Matsumoto, Y. Kajita, Y. Funahashi, T. Ozawa and H. Masuda
Nagoya Institute of Technology, Japan

PA100C **Development of Sulfur Containing Copper(II) Complex Activating O-O Bond**

[1]Y. Kajita, [1]T. Tozuka, [1]Y. W-Tsutsui, [2]M. Kubo, [2]T. Ogura and [1]H. Masuda
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PA101C **Development of Copper Complex Catalysts that Hydroxylate Benzene**

M. Goto, Y. Kajita, Y. Funahashi, T. Ozawa and H. Masuda
Nagoya Institute of Technology, Japan

PA102C **Dinitrogen Activation Using Mononuclear Mo Complexes with P-N-P Bond**

T. Ogawa, Y. Kajita and H. Masuda
Nagoya Institute of Technology, Japan

PA103C **Photoluminescence of Tetragonal and Monoclinic ZrO_2:Eu Nanocrystals Synthesized by Sol-Gel Route**

L. Li, H. K. Yang, B. K. Moon, B. C. Choi and J. H. Jeong
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PA104C **Luminescence Properties of $LiYO_2:Eu^{3+}$ Nanophosphors by Solvothermal Method**

[1]J. W. Chung, [1]B. K. Moon, [1]B. C. Choi, [1]J. H. Jeong, [2]K. Jang, H. S. Lee and [3]S. S. Yi
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[2]Changwon University, Korea
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PA105C **Synthesis and Photoluminescence Properties $BaY_2ZnO_5:Eu^{2+}$ Thin Film White Phosphors by PLD**

[1]H. K. Yang, [1]B. K. Moon, [1]B. C. Choi, [1]J. H. Jeong and [2]J. H. Kim

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PA106C **Shape Transitions of Ag Precipitates During Aging in Cu-Ag Single Crystals**

T. Miyazawa, T. Fujii, S. Onaka and M. Kato

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PA107C **Magnetic Properties of FePd Nanoparticles Synthesized by Microwave Applied Heatings**

[1]K. Honda, [1]T. Wakabayashi, [1]T. Matsuse, [1]M. Kimura and [2]M. Taya

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PA108C **Microwave-assisted Deposition of Pt Catalysts on Carbon Nanotube/Carbon Paper Electrodes**

C-T. Hsieh, W-M. Hung, J-M. Wei and S-M. Hsu

Yuan Ze University, Taiwan

PA109C **Structural Change of InGaN Nano-Structures Grown by Mixed Source HVPE**

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

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PA110C **Synthesis and Luminescence Properties of Ce^{3+} Doped Aluminum Garnet Crystalline Powders**

[1]H. C. Jung, [1]J. Y. Park, [1]G. S. R. Raju, [1]J. H. Jeong, [1]B. K. Moon, [2]J. H. Kim and [2]H. Y. Cho

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PA111C **Three-Dimensionally Ordered Macroporous ZrO_2: Tb^{3+} Films: Synthesis, Characterization and Photoluminescence Properties**

X. Qu, H. K. Yang and J. H. Jeong

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PA112C **Thermal Fluid-Flow Behaviour of Aqueous Suspensions of Nanoparticles Flowing in Constant Heat Flux Heating Circular Pipe**

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Kumamoto University, Japan

PA113C **Growth of $AgInSe_2$ Nano Crystal Grown by Non-Vacuum Process**

A. Nagaoka and K. Yoshino
University of Miyazaki, Japan

PA114C **Magnetic Properties of Fe-Co Cluster and Fe-Pt Thin Film Composites Prepared by Plasma-Gas-Condensation and Helicon-Wave-Assisted Magnetron Sputtering**

[1]K. Sumiyama, [1]S. Sawa, [1]Y. Kurokawa, [2]D. L. Peng and [1]T. Hihara
[1]Nagoya Institute of Technology, Japan
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PA115C **Ni-Based Alloy Clusters Produced by Plasma-Gas-Condensation for Catalysts in Electrode of Polymer Electrolyte Fuel Cell**

T. Hihara, S. Inoue, T. Morita and K. Sumiyama
Nagoya Institute of Technology, Japan

PA116C **Low-Temperature Treatment Using High-Density Non-Equilibrium Atmospheric Pressure Plasma**

[1]S. Iseki, [2]S. Uchida, [2]S. Takashima, [3]T. Ohta, [4]M. Ito, [5]Y. Higashijima, [6]H. Kano, [1]K. Takeda, [1]H. Kondo, [1]K. Ishikawa, [1]M. Sekine and [1]M. Hori
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[3]Wakayama University, Japan
[4]Meijo University, Japan
[5]NU System Co., Ltd., Japan
[6]NU Eco Engineering Co., Ltd., Japan

PA117A **Aligning and Immobilizing DNA-Templated Gold Nanoparticle Chains on Si Chip for the Application to Nanodevices**

[1]H. J. Kim, [2]S. Cha, [1]Y. Roh and [1]B. Hong
[1]Sungkyunkwan University, Korea
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PA118A **Structural, Electrical and Optical Properties of SnO_2:Sb Films Prepared on Flexible Substrate at Room Temperature**

S. U. Lee, J-H. Boo and B. Hong
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PA119A **Low Temperature GaN Epitaxial Growing Assisted by Hyperthermal Neutral Beams**

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