Poster Session 3 — January 31 (Thu), 13:00-14:30, Symposion

P3001A **Investigation of Si etch reaction with F and O radicals using SF_6/O_2 plasma**

M. Sekine, S. Amasaki, T. Takeuchi, K. Ishikawa, K. Takeda, H. Kondo, M. Hori
Nagoya University, Japan

P3002A **Measurement of Br atom density in an inductively-coupled HBr plasma by appearance mass spectrometry**

[1]Y. Fujii, [1]T. Oike, [2]D. Iino, [2]K. Suzuki, [1,3]H. Toyoda
[1]Nagoya University, Japan
[2]Corporate Manufacturing Engineering Center, Toshiba, Japan
[3]Nagoya University, Japan

P3003A **Sequential exposure of N and H atoms for recovery of plasma-damaged GaN**

[1]Z. Liu, [1]S. Chen, [1]Y. Lu, [1]R. Kometani, [1]K. Ishikawa, [2]H. Kano, [1]K. Takeda, [1]H. Kondo, [1]M. Sekine, [3]T. Egawa, [1]H. Amano, [1]M. Hori
[1]Nagoya University, Japan
[2]NU Eco Engineering Co., Ltd., Japan
[3]Nagoya Institute of Technology, Japan

P3004A **Real-time variation of sputtering yield of Ar ion for ArF photoresist during Ar plasma exposure**

[1]T. Takeuchi, [2]C. Corbella, [2]S. Grosse-Kreul, [2]A. Keudell, [1]K. Ishikawa, [1]H. Kondo, [1]K. Takeda, [1]M. Sekine, [1]M. Hori
[1]Nagoya University, Japan
[2]Ruhr-University at Bochum, Germany

P3005A **The change in surface morphology of Si at elevated temperature during the plasmaless Si etching with NO/F_2 gas mixture**

S. Tajima, T. Hayashi, K. Ishikawa, M. Sekine, M. Hori
Nagoya University, Japan

P3006A **Subsequent temporal change of gaseous H and N radical density in H_2/N_2 plasma after air exposure and its control**

[1]T. Suzuki, [1,2]K. Takeda, [1]K. Ishikawa, [1]H. Kondo, [1,2]M. Sekine, [1,2]M. Hori
[1]Nagoya University, Japan
[2]JST-CREST, Japan

P3007A **Gas-phase reaction model of Ar-diluted CHxFy plasmas**

Y. Kondo, Y. Miyawaki, K. Takeda, H. Kondo, K. Ishikawa, T. Hayashi, M. Sekine, M. Hori
Nagoya University, Japan

P3008A **Mechanism for degradation of porous SiOCH low-*k* films by O_2 plasma**

K. Asano, K. Ishikawa, M. Sekine, K. Takeda, H. Kondo, M. Hori
Nagoya University, Japan

P3009A **Defects introduced in germanium substrate by reactive ion etching**

K. Ndari, W. Takeuchi, M. Sakashita, N. Taoka, O. Nakatsuka, S. Zaima
Nagoya University, Japan

P3010A **Investigation of sticking coefficent of hydrogen radical on ArF 193 nm chemically amplified resist**

[1,2]A. Malinowski, [1]T. Takeuchi, [1]T. Suzuki, [1]M. Hori, [1]M. Sekine, [1]H. Kondo, [1]K. Ishikawa, [2]L. Lukasiak, [2]A. Jakubowski
[1]Nagoya University, Japan
[2]Warsaw University of Technology, Poland

P3011A **Excitation dissociations of c-C_5F_8 and c-C_5HF_7 etching gases**

T. Hayashi, K. Ishikawa, M. Sekine, M. Hori
Nagoya University, Japan

P3012A **Low-damage, high-accuracy plasma etching of Ga-compound semiconductors**

J. Cao, R. Kometani, J. Park, K. Ishikawa, K. Takeda, H. Kondo, M. Sekine, M. Hori
Nagoya University, Japan

P3013A **Numerical analysis of damage formation in vertical-walls gate etching processes**

K. Mizotani, M. Isobe, S. Hamaguchi
Osaka University, Japan

P3014A **FIOG-purpose ultra-thin metal precision layered composite material technology for the manufacture of Fine Clad materials**

S. Lim, B. Jin, K. Heo, J. Ho, H. Kwon
Korea Institute of Industrial Technology, Korea

P3015A **H_2 plasma cleaning of poly-Si film by using pulse power supply**

[1]K. Hashimoto, [1]K. Tada, [1]S. Yasui, [2]T. Manabe, [2]K. Koike
[1]Nagoya Institute of Technology, Japan
[2]Iwatani Corp, Japan

P3016A **Model based anlysis of etching mechanism of HfO_2 and SiO_2 films in an inductively coupled $BCl_3/Cl_2/O_2$ plasma for dielectric mask**

[1]J. Son, [2]A. Efremov, [1]S. Kang, [1]Y. Ham, [1]H. Jang, [1]K. Kwon
[1]Korea University, Korea
[2]State University of Chemistry & Technology, Russia

P3017A **Dependence of exposure distance on inactivation of *P. digitatum* spores using low-temperature atmospheric pressure radical source**

[1]M. Ito, [1]H. Hashizume, [1]T. Ohta, [2]F. Jia, [2]K. Takeda, [2]K. Ishikawa, [2]M. Hori
[1]Meijo University, Japan
[2]Nagoya University, Japan

P3018A **SAKAKITA plasma treatment as a minimum invasive method for hemostasis**

[1,2]Y. Ikehara, [2]H. Sakakita, [1]S. Ikehara, [3]H. Nakanishi
[1]National Institute of Advanced Industrial Science and Technology (AIST), Japan
[2]National Institute of Advanced Industrial Science and Technology (AIST), Japan
[3]Aichi Cancer Center Research Institute, Japan

P3019A **Real-time *in-situ* monitoring of fluorescent images of *P. digitatum* spores during oxygen radical treatment using confocal laser microscopy**

[1]H. Hashizume, [1]T. Towatari, [1]H. Ohashi, [1]T. Ohta, [2]M. Hori, [1]M. Ito
[1]Meijo University, Japan
[2]Nagoya University, Japan

P3020A **Damages of biological components in bacteria and bacteriophages by plasma-exposure**

A. Mizuno, K. Takashima, H. Kurita, H. Yasuda
Toyohashi University of Technology, Japan

P3021A **Pulmonary diseases with inhalation of atmospheric pressure plasma flow**

[1,2]T. Hirata, [1,2]C. Tsutsui, [1,2]A. Mori
[1]Tokyo City University, Japan
[2]Tokyo City University, Japan

P3022A **Plasma-activated medium selectively killed glioblastoma brain tumor cells and indueced apoptosis**

[1,2]H. Tanaka, [2]M. Mizuno, [1]K. Ishikawa, [3]K. Nakamura, [3]H. Kajiyama, [4]H. Kano, [3]F. Kikkawa, [1]M. Hori
[1]Nagoya University, Japan
[2]Nagoya University, Japan
[3]Nagoya University, Japan
[4]NU Eco-Engineering Co., Ltd., Japan

P3023A **Gene transfer system using water mist plasma flow**

T. Kaneko, S. Sasaki, H. Konishi, M. Kanzaki
Tohoku University, Japan

P3024A **Possibility of plasma generation and sterilization in water using An Er:YAG laser**

[1]T. Shirafuji, [2]K. Takahashi, [3]H. Kambayashi, [4]T. Goto
[1]Osaka City University, Japan
[2]Kanazawa University, Japan
[3]Keyaki Doori Dental Clinic, Japan
[4]White Net, Japan

P3025A **Electron spin resonance study of plasma-biological surface interaction for food hygiene**

[1]K. Ishikawa, [1]H. Mizuno, [1]H. Tanaka, [2]H. Hashizume, [2]T. Ohta, [2]M. Ito, [1]K. Takeda, [1]H. Kondo, [1]M. Sekine, [1]M. Hori
[1]Nagoya University, Japan
[2]Meijo University, Japan

P3026A **Teeth whitening with pulsed microwave power atmospheric pressure plasma**

S. Kwon, H. Lee, S. Kang, H. Lee, J. Lee
Pohang University of Science and Technology, Korea

P3027A **Plasma-biological surface interaction investigated by electron spin resonance**

[1]H. Mizuno, [1]K. Ishikawa, [1]H. Tanaka, [2]H. Hashizume, [2]T. Ohta, [2]M. Ito, [1]K. Takeda, [1]H. Kondo, [1]M. Sekine, [1]M. Hori
[1]Nagoya University, Japan
[2]Meijo University, Japan

P3028A **Plasma-biomaterials interaction analysis as a basis of fundamental processes in plasma medicine**

[1]Y. Setsuhara, [1]K. Takenaka, [2]M. Shiratani, [3]M. Sekine, [3]M. Hori
[1]Osaka University, Japan
[2]Kyushu University, Japan
[3]Nagoya University, Japan

P3029A **Effect of pulsed discharge plasma irradiation on the elongation of alanine and alanylalanine under ambient aqueous and hydrothermal conditions**

[1]M. Sasaki, [1]A. Nagira, [1]K. Nagafuchi, [1]A. Quitain, [2]Wahyudiono, [2]M. Goto, [3]K. Kawamura
[1]Kumamoto University, Japan
[2]Nagoya University, Japan
[3]Hiroshima Shudo University, Japan

P3030A **Raman spectroscopy of penicillium digitatum spores treated by atmospheric-pressure oxygen-radical source**

[1]H. Kato, [1]H. Hashizume, [1]T. Ohta, [1]M. Hiramatsu, [1]M. Ito, [2]M. Hori
[1]Meijo University, Japan
[2]Nagoya University, Japan

P3031A **Quantitative evaluation of intensity of radical reaction by plasma exposure using the DNA combing method**

H. Kurita, T. Nakajima, H. Yasuda, K. Takashima, A. Mizuno
Toyohashi University of Technology, Japan

P3032A **Assessment of mutaton probability in yeast by plasma exposure using the stress reporting system**

H. Yasuda, T. Eki, H. Kurita, K. Takashima, A. Mizuno
Toyohashi University of Technology, Japan

P3033A **Estimation of incident radical and ion fluxes onto electrode in atmospheric pressure radio-frequency capacitive plasmas in helium with impurities**

Withdrawn

A. Oda, T. Imazeki, N. Saitoh, J. Sakashita
Chiba Institute of Technology, Japan

P3034A **Plasma-mediated modulation of element distribution in skin and skin cancer**

[1]I. Yajima, [1]M. Iida, [1]K. Nakagawa, [2]H. Kondo, [1]M. Kumasaka, [2]K. Takeda, [2]M. Hori, [3]H. Kano, [1]M. Kato
[1]Chubu University, Japan
[2]Nagoya University, Japan
[3]NU Eco Engineering Co., Ltd, Japan

P3035A **Nonequilibrium atmospheric pressure plasma selectively killed ovarian cancer cells and induced apoptosis.**

[1,2]H. Tanaka, [1]S. Iseki, [3]K. Nakamura, [3]M. Hayashi, [1]H. Kondo, [3]H. Kajiyama, [4]H. Kano, [3]F. Kikkawa, [1]M. Hori
[1]Nagoya University, Japan
[2]Nagoya University, Japan
[3]Nagoya University, Japan
[4]NU Eco-Engineering Co., Ltd., Japan

P3036A **Changes in the components of enveloped and non-enveloped viruses after treatment with N_2 gas plasma**

[1]A. Sakudo, [2]N. Shimizu, [2]Y. Imanishi
[1]University of the Ryukyus, Japan
[2]Ngk Insulators, Ltd., Japan

P3037A **Unravelment of complex plasma chemistry in atmospheric-pressure He-O_2 plasmas with humid air impurities**

[1]T. Murakami, [2]K. Niemi, [2]T. Gans, [2]D. O'Connell, [3]W. Graham
[1]Tokyo Institute of Technology, Japan
[2]University of York, UK
[3]Queen's University Belfast, UK

P3038A **Fabrication of polyacrylate brushes on plasma-irradiated polystyrene substrate for cell culture applications**

[1]Y. Sasai, [1]A. Komatsu, [1]S. Kondo, [2]Y. Yamauchi, [3]M. Kuzuya
[1]Gifu Pharmaceutical University, Japan
[2]Matsuyama University, Japan
[3]Chubu Gakuin University, Japan

P3039A **Electrochemical characteristics of TiN/ZrN multilayers on the Ti-35Ta-xHf alloy using magnetron sputtering**

B. Moon, H. Choe
Chosun University, Korea

P3040A **Measuremant of singlet oxygen molecule densities in the inactivation process of *P. digitatum* spores using low-temperature atmospheric pressure radical source**

[1]H. Hashizume, [1]T. Ohta, [1]M. Ito, [2]F. Jia, [2]K. Takeda, [2]K. Ishikawa, [2]M. Hori
[1]Meijo University, Japan
[2]Nagoya University, Japan

P3041A **Atmospheric-pressure non-equilibrium hybrid plasma for surface sterilization**

[1]A. Yonesu, [1]N. Yoneyama, [1]T. Sagara, [2]N. Hayashi
[1]University of the Ryukyus, Japan
[2]Kyushu University, Japan

P3042A **Growth enhancement of plants using atmospheric pressure dielectric barrier discharge plasmas**

[1]T. Sarinont, [1]S. Kitazaki, [1]G. Uchida, [1]K. Koga, [1]M. Shiratani, [2]N. Hayashi
[1]Kyushu University, Japan
[2]Kyushu University, Japan

P3043A **Antioxidative activity of plant and regulation of plant growth induced by oxygen radicals**

[1]N. Hayashi, [2]S. Kitazaki, [2]K. Koga, [2]M. Shiratani
[1]Kyushu University, Japan
[2]Kyushu University, Japan

P3044A **Sterilization device using air plasma under reduced-pressure environment**

[1]D. Yoshino, [2]K. Nakamuraya, [1]T. Nakajima, [1]T. Sato
[1]Tohoku University, Japan
[2]Tohoku University, Japan

P3045A **Radio frequency capacitive plasma surface treatment of titanium implant for initial adhesion and proliferation of preosteoblast cell**

[1]B. Kim, [1]S. Myung, [1]Y. Hwang, [1]Y. Hwang, [2]S. Jung
[1]Chosun University, Korea
[2]Sunchon National University, Korea

P3046A **Plasma sputtered hydroxyapatite(HA)/TiN film coating on the Ti-29Nb-5Zr alloy for biocompatibility**

H. Choe, E. Kim
Chosun University, Korea

P3047A **Fundamental study of dissolved OH radicals in the liquid produced by atmospheric pressure plasma jet**

[1]T. Yamahara, [2]T. Ishijima, [3]M. Imamura, [2,3]K. Ninomiya, [2,4]K. Takahashi, [1,2]Y. Tanaka, [1,2]Y. Uesugi
[1]Kanazawa University, Japan
[2]Kanazawa University, Japan
[3]Kanazawa University, Japan
[4]Kanazawa University, Japan

P3048A **Inhibition of *in vitro* prion replication by N_2 gas plasma**

[1]A. Sakudo, [2]N. Shimizu, [2]Y. Imanishi
[1]University of The Ryukyus, Japan
[2]Ngk Insulators, Ltd., Japan

P3049A **Immobilization of hyaluronic acid on amine plasma polymerized polycaprolactone scaffolds for MC3T3-E1 cell attachment and proliferation**

[1]D. Choi, [2]S. Yang, [3]S. Jung, [4]B. Kim
[1]Chosun University, Korea
[2]Chosun University, Korea
[3]Sunchon National University, Korea
[4]Chosun University, Korea

P3050A **Plasma surface modification for immobilization of bone morphogenic Protein-2 on polycaprolactone scaffolds**

S. Myung, Y. Hwang, Y. Hwang, Y. Ko, B. Kim
Chosun University, Korea

P3051A **Effect of biological solution on generation of radical species induced by nonequilibrium atmospheric pressure plasma**

[1]J. Jolibois, [2]K. Takeda, [2]H. Tanaka, [1]K. Ishikawa, [1,2]M. Hori
[1]Nagoya University, Japan
[2]Nagoya University, Japan

P3052A **Utilization of the solution plasma process for the production of low molecular weight alginate with narrow molecular weight distribution**

[1]A. Watthanaphanit, [1,2]N. Saito
[1]Nagoya University, Japan
[2]Nagoya University, Japan

P3053A **Effect of plasma treatment on BCP scaffolds for improving cellular activity**

Withdrawn

[1,2]Y. Choi, [2]D. Song, [3]J. Lee, [3]J. Han, [1,2]K. Kim, [1,2]K. Kim
[1]Department and Research Institute of Dental Biomaterials and Bioengineering, Korea
[2]Yonsei University, Korea
[3]Sungkyunkwan University, Korea

P3054A **Effect of nonthermal plasma on tooth surface**

[1]H. Choi, [1]K. Kim, [1]K. Kim, [2]E. Choi
[1]Younsei University College of Dentistry, Korea
[2]Kwangwoon University, Korea

P3055B **Luminescence properties of Eu-doped GaN grown by selective-area organometallic vapor phase epitaxy**

[1]R. Hasegawa, [1]R. Wakamatsu, [1]A. Koizumi, [2]H. Ofuchi, [3]M. Ichimiya, [1]D. Lee, [1]Y. Terai, [2]T. Honma, [3]M. Ashida, [1]Y. Fujiwara
[1]Osaka University, Japan
[2]Japan Synchrotron Radiation Reserch Institute/ SPring-8, Japan
[3]Osaka University, Japan

P3056B **TEM analyses of GaN grown with AlInN intermediate layer on Si substrate**

[1]S. Ito, [1]T. Nakagita, [1]H. Iwata, [1]N. Sawaki, [2]M. Irie, [2]Y. Honda, [2]M. Yamaguchi, [2]H. Amano
[1]Aichi Institute of Technology, Japan
[2]Nagoya University, Japan

P3057B **Comparison of growth behavior in thick InGaN on (000$\bar{1}$) and (0001) GaN/Sapphire by metalorganic vapor phase epitaxy**

[1,2]T. Tanikawa, [1]K. Shojiki, [1]J. Choi, [1,2]R. Katayama, [1,2]T. Matsuoka
[1]Tohoku University, Japan
[2]CREST, Japan Science and Technology Agency, Japan

P3058B **GaN growth on off-angle trench patterned GaN/sapphire templates by MOVPE**

Z. Cai, H. Miyake, K. Hiramatsu
Mie University, Japan

P3059B **Si doped AlN growth on trench patterned template by MOVPE**

G. Nishio, M. Narukawa, H. Miyake, K. Hiramatsu
Mie University, Japan

P3060B **Selective-area growth of GaN on nonpolar substrates**

[1]S. Okada, [1]D. Jinno, [1]H. Miyake, [1]K. Hiramatsu, [2]Y. Enatsu, [3]S. Nagao
[1]Mie University, Japan
[2]Mitsubishi Chemical Corporation, Japan
[3]Mitsubishi Chemical Group Science and Technology Research Center, Inc., Japan

P3061B **AlN/Al_2O_3 formed by Al_2O_3 substrate nitridation and GaN single crystal growth on AlN/Al_2O_3 substrate**

Withdrawn

[1]T. Ozawa, [1]Y. Katsumata, [1]M. Dohi, [2]Y. Hayakawa
[1]Shizuoka Institute of Science and Technology, Japan
[2]Shizuoka University, Japan

P3062B **Growth and characterization of InGaN GaN multi-quantum well on regular nanoporous template**

C. Miao, Y. Honda, M. Yamaguchi, H. Amano
Nagoya University, Japan

P3063B **Influence of substrate temperature on $In_xGa_{1-x}N$ films deposited by reactive RF-Sputtering**

[2]T. Suzuki, [1]S. Hibino, [1]R. Katayama, [1]Y. Kato, [1]F. Ohashi, [2]T. Itoh, [2]S. Nonomura
[1]Gifu University, Japan
[2]Gifu University, Japan

P3064B **Characteristics of nonpolar *a*-plane GaN grown on *r*-plane sapphire substrate using two microscale SiO_2 masks**

[1]J. Son, [1]Y. Honda, [1]M. Yamaguchi, [1]H. Amano, [2]K. Baik, [3]Y. Seo, [3]S. Hwang
[1]Nagoya University, Japan
[2]Hongik University, Korea
[3]Korea Electronics Technology Institute, Korea

P3065B **Characterization of electron traps in MOCVD p-GaN by minority carrier transient spectroscopy**

[1]U. Honda, [1]T. Matsumura, [1]H. Naito, [1]Y. Tokuda, [2]K. Shiojima
[1]Aichi Institute of Technology, Japan
[2]Fukui University, Japan

P3066B **Selective growth of InGaN/GaN MQW on the apex of GaN pyramids**

J. Lee, Y. Yu, W. Yun, H. Ahn, M. Yang
Korea Maritime University, Korea

P3067B **Growth of GaN on metallic compound graphite substrate using HVPE**

[1]J. Kim, [1]G. Lee, [1]S. Jung, [1]S. Bae, [1]M. Park, [1]M. Shin, [1]S. Yi, [1]M. Yang, [1]H. Ahn, [2]Y. Yu, [2]S. Kim, [3]H. Lee, [5]H. Kang, [6]N. Sawaki
[1]Korea Maritime University, Korea
[2]Pukyong National University, Korea
[3]Andong National University, Korea
[4]L&L. Co., Ltd., Korea
[5]CSsol. Co., Ltd., Korea
[6]AIT, Japan

P3068B **Improvement in the optical properties of a-plane InGaN/GaN MQW-based light emitting diodes using indium predeposition**

[1]S. Yeon, [1]T. Son, [1]Y. Kim, [1,2]J. Park
[1]Hanyang University, Korea
[2]Hanyang University, Korea

P3069B **In-situ observation of emission peak transition from GaN to $Al_{0.34}Ga_{0.66}N$ by introducing in-situ cathode luminescence in plasma-assisted molecular beam epitaxy using high-density nitrogen radical source**

[1]Y. Kawai, [1,2]Y. Honda, [1,2]M. Yamaguchi, [1,2]H. Amano, [1]H. Kondo, [3]M. Hiramatsu, [4]H. Kano, [5]K. Yamakawa, [5]S. Den, [1,6]M. Hori
[1]Nagoya University, Japan
[2]Nagoya University, Japan
[3]Meijo University, Japan
[4]NU Eco-Engineering Co., Ltd., Japan
[5]Katagiri Engineering Co., Ltd., Japan
[6]Nagoya University, Japan

P3070B **Activity modulation MEE growth of group III nitrides on Si(111) using PA-MBE**

[1,2]T. Ohachi, [2]Y. Sato, [2]S. Yoshikado, [2]M. Wada, [3]O. Ariyada
[1]Doshisha University, Japan
[2]Doshisha University, Japan
[3]ARIOS Inc., Japan

P3071B **Molecular dynamics simulation of molecular beam epitaxy growth of GaN with gallium layers on GaN substrate**

H. Hayashi, T. Miki, T. Kawamura, Y. Suzuki
Mie University, Japan

P3072B **FTIR analyses of carbon doped (1-101) GaN grown on a patterned Si substrate**

[1]K. Hagiwara, [1]N. Sawaki, [2]K. Yamashita, [2]T. Tanikawa, [2]Y. Honda, [2]M. Yamaguchi, [2]H. Amano
[1]Aichi Institute of Technology, Japan
[2]Nagoya University, Japan

P3073B **Defect structure in a (1-101) GaN grown on a patterned (001) Si substrate**

[1]T. Nakagita, [1]S. Ito, [1]H. Iwata, [1]N. Sawaki, [2]T. Tanikawa, [2]Y. Honda, [2]M. Yamaguchi, [2]H. Amano
[1]Aichi Institute of Technology, Japan
[2]Nagoya University, Japan

P3074B **Influence of InAlN Spacer on Electrical Properties of AlGaN/GaN Heterostructure**

A. Watanabe, K. Mori, T. Ito, T. Egawa
Nagoya Institute of Technology, Japan

P3075B **Synthesis and enhanced optical property of Eu^{2+}-doped GaN/SiO_2 nanocomposites**

B. Kang, M. Kim, D. Yoon
Sungkyunkwan University, Korea

P3076B **High-temperature ICTS study on ICP etching damages for p-GaN surfaces**

[1]T. Aoki, [1]H. Wakayama, [2]N. Kaneda, [2]T. Mishima, [3]K. Nomoto, [1]K. Shiojima
[1]University of Fukui, Japan
[2]Hitachi Cable Ltd., Japan
[3]University of Notre Dame, USA

P3077B **Effect of UV irradiation on Ar-Plasma etching characteristics of GaN**

[1]Y. Nakano, [1]K. Nakamura, [2]M. Niibe, [3]R. Kawakami, [1]N. Ito, [2]T. Kotaka, [3]K. Tominaga
[1]Chubu University, Japan
[2]University of Hyogo, Japan
[3]University of Tokushima, Japan

P3078B **Deep level investigation of thick InGaN films**

[1]Y. Nakano, [2]M. Niibe, [3]M. Lozac'H, [3]L. Sang, [3]M. Sumiya
[1]Chubu University, Japan
[2]University of Hyogo, Japan
[3]National Institute for Materials Science, Japan

P3079B **The correlation between the morphology of threading dislocations and the origin of high-resistivity GaN**

Withdrawn

[1,2]L. Lu, [1,2]S. Ma, [1,2]B. Xu
[1]Taiyuan University of Technology, China
[2]Shanxi Research Center of Advanced Materials Science and Technology, China

P3080B **Characteristic analysis of hybrid photovoltaic devices with different surface structures of GaN**

[1]D. Gwon, [1]M. Shin, [1]M. Kim, [1]G. Lee, [1]H. Ahn, [1]S. Yi, [2]S. Yoon, [2]C. Lee, [3]D. Ha, [4]N. Sawaki
[1]Korea Maritime University, Korea
[2]Korea Research Institute of Chemical Technology, Korea
[3]Korea Research Institute of Standards and Science, Korea
[4]Aichi Institute of Technology, Japan

P3081B **Synthesis of hybrid heterojunction based on GaN nanostructures with optimized thickness of organic layer**

[1]M. Shin, [1]M. Kim, [1]D. Gwon, [1]G. Lee, [1]H. Ahn, [1]S. Yi, [2]D. Ha, [3]N. Sawaki
[1]Korea Maritime University, Korea
[2]Korea Research Institute of Standards and Science, Korea
[3]Aichi Institute of Technology, Japan

P3082B **Electrical properties of AlGaN/GaN MIS-HEMTs with Al_2O_3 deposited by ozone-based atomic layer deposition**

T. Kubo, Y. Iwata, T. Egawa
Nagoya Institute of Technology, Japan

P3083B **Fabrication of subwavelength grating with high aspect ratio on GaN LED**

Y. Takashima, R. Shimizu, Y. Naoi
The Univerisity of Tokushima, Japan

P3084B **InGaN-based solar cells with a tapered GaN structure**

Withdrawn

K. Chen, C. Lin, R. Jiang, C. Yang, W. Huang
National Chung Hsing University, Taiwan

P3085B **Site-selective charactrization of Eu ion in gallium nitride**

R. Wakamatsu, D. Lee, A. Koizumi, Y. Fujiwara
Osaka University, Japan

P3086B **Characterization of SAG-GaN LED grown by HVPE method**

[1]S. Jung, [1]G. Lee, [1]S. Bae, [1]H. Jeon, [1]M. Shin, [1]S. Yi, [1]M. Yang, [1]H. Ahn, [2]Y. Yu, [3]S. Kim, [4]H. Kang, [5]N. Sawaki
[1]Korea Maritime University, Korea
[2]Pukyoung National University, Korea
[3]Andong National University, Korea
[4]CSsol. Co., Ltd., Korea
[5]AIT, Japan

P3087B **A high efficiency InGaN solar cell with graded composition p-InGaN top layer**

T. Fujisawa, N. Sawaki
Aichi Institute of Technology, Japan

P3088B **Ohmic contact method of vertical GaN LED using pocket-type shadow mask**

[1]G. Lee, [1]S. Jung, [1]S. Bae, [1]H. Jeon, [1]M. Shin, [1]S. Yi, [1]M. Yang, [1]H. Ahn, [2]Y. Yu, [3]S. Kim, [4]H. Kang, [3]N. Sawaki
[1]Korea Maritime University, Korea
[2]Pukyong National University, Korea
[3]AIT, Japan

P3089B **Fabrication and characterization of single chip with Multi-GaN LED**

[1]M. Park, [1]S. Bae, [1]G. Lee, [1]S. Jung, [1]J. Kim, [1]M. Shin, [1]S. Yi, [1]M. Yang, [1]H. Ahn, [2]Y. Yu, [3]S. Kim, [4]H. Kang, [5]N. Sawaki
[1]Korea Maritime University, Korea
[2]Pukyong National University, Korea
[3]Andong National University, Korea
[4]CSsol. Co., Ltd, Korea
[5]AIT, Japan

P3090B **Comparison of optical and electrical properties of InGaN-based LED with different wavelength grown on Al_2O_3 with Co-doped ZnO film**

Withdrawn

[1]Y. Fang, [1,2]R. Xuan, [1]C. Tsai, [3]J. Huang
[1]Industrial Technology Research Institute, Taiwan
[2]National Chiao Tung University, Taiwan
[3]National Cheng Kung University, Taiwan

P3091B **Large improved of n-GaN thickness by Mg-Si co-doped grown on Si (111) substrate**

Withdrawn

Y. Fang, C. Liao, R. Xuan, C. Lu
Industrial Technology Research Institute, Taiwan

P3092B **Countermeasures for EMI noises in power circuit using GaN switching device**

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

P3093B **High rate growth of AlN and AlGaN on large diameter silicon substrate**

[1]H. Tokunaga, [1]Y. Yamaoka, [1]A. Ubukata, [1]Y. Yano, [1]T. Tabuchi, [2]K. Uchiyama, [2]K. Matsumoto
[1]Taiyo Nippon Sanso Corporation, Japan
[2]Taiyo Nippon Sanso EMC Ltd., Japan

P3094B **Evaluation of a Gate-First process for AlGaN/GaN HFETs**

L. Li, T. Shiraishi, A. Kishi, J. Ao, Y. Ohno
The University of Tokushima, Japan