

- P2001A **Chemical kinetics simulation for atmospheric pressure air plasma**  
<sup>1,2</sup>J. Lee, <sup>1</sup>H. Kim, <sup>1</sup>H. Kwon, <sup>2</sup>H. Lee, <sup>1</sup>I. Won  
<sup>1</sup>Pohang University of Science and Technology, Korea  
<sup>2</sup>Medipl Corporation, Korea
- P2002A **Atomic core structures associated to the dislocation with the burgers vectors  $[\bar{1}100]$  and line direction  $[0001]$  in the wurtzite lattice**  
<sup>1</sup>A. Béré, <sup>2</sup>P. Ruterana, <sup>1</sup>J. Kouliadiati  
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<sup>2</sup>Centre de Recherche sur les Ions, les Matériaux et la Photonique UMR6252, ENSICAEN, France
- P2003A **Ab-initio calculation of electronic density of states of amorphous carbon**  
<sup>1</sup>A. Ito, <sup>1</sup>A. Takayama, <sup>2</sup>N. Ohno, <sup>1,2</sup>H. Nakamura  
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<sup>2</sup>Nagoya University, Japan
- P2004A **Simulation of effective production of VHF hydrogen plasma using a balanced power feeding method**  
<sup>1</sup>K. Ogiwara, <sup>2</sup>W. Chen, <sup>2</sup>K. Uchino, <sup>2</sup>Y. Kawai  
<sup>1</sup>Kyushu University, Japan  
<sup>2</sup>Kyushu University, Japan
- P2005A **Thermal flow characteristics of power law model in the hybrid type microchannel applied to electrokinetics**  
H. Seo, Y. Kim  
Sungkyunkwan University, Korea
- P2006A **Preparation and characterizations of a Ru(II) complex as nitrile hydration catalyst**  
**Withdrawn** H. Awano, T. Wada, T. Inomata, Y. Funahashi, T. Ozawa, H. Masuda  
Nagoya Institute of Technology, Japan
- P2007A **Time-dependent calculation for electron impact excitation of atomic hydrogen**  
K. Nakane, K. Sawada  
Shinshu University, Japan

- P2008A **First principles investigation on noble gas embedded materials for nuclear fusion device**  
A. Takayama, <sup>1</sup>A. Ito, <sup>1,2</sup>H. Nakamura  
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<sup>2</sup>Nagoya University, Japan
- P2009A **Structural characteristics of Si substrate treated in Ar/O<sub>2</sub> atmosphere using microwave plasma chemical vapor deposition system**  
C. Su, C. Huang  
National Taipei University of Technology, Taiwan
- P2010A **A simplified unified model for free-burning arcs in argon**  
J. Lee, H. Jeon  
Gangneung-Wonju National University, Korea
- P2011A **Development of parallel fluid modeling considering electromagnetic wave effect for plasma source driven by high-frequency power source**  
C. Hung, B. Gu, C. Chiou, K. Lin, S. Wang, J. Wu  
National Chiao Tung University, Taiwan
- P2012A **Study of plasma enhanced chemical-vapor deposition of SiO<sub>2</sub> in a SiH<sub>4</sub>/O<sub>2</sub> inductively coupled plasma**  
L. Tong  
Keisoku Engineering System Co. Ltd., Japan
- P2013A **FDTD simulation on transmission of millimeter wave through miter bend**  
<sup>1</sup>N. Kashima, <sup>1,2</sup>H. Nakamura, <sup>2</sup>A. Takayama, <sup>3</sup>Y. Tamura, <sup>1,2</sup>S. Kubo  
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<sup>3</sup>Konan University, Japan
- P2014A **Electromagnetic wave propagation analysis in corrugated waveguide using meshless time domain method**  
Y. Fujita, <sup>1</sup>S. Ikuno, <sup>2</sup>H. Nakamura  
<sup>1</sup>Tokyo University of Technology, Japan  
<sup>2</sup>National Institute for Fusion Science, Japan
- P2015A **Numerical evaluation of nonequilibrium plasma flow in 1kW class arc thruster**  
<sup>1</sup>M. Yu, <sup>2</sup>Y. Takahashi, <sup>1</sup>K. Abe, <sup>1</sup>H. Kihara  
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<sup>2</sup>Hokkaido University, Japan

- P2016A **Highly-crystallized Ge:H film growth from GeH<sub>4</sub> very high frequency inductively-coupled plasma -Crystalline nucleation initiated by Ni-nanodots-**  
K. Makihara, <sup>1</sup>J. Gao, <sup>1</sup>D. Takeuchi, <sup>2</sup>K. Sakaike, <sup>2</sup>S. Hayashi, <sup>2</sup>M. Ikeda, <sup>2</sup>S. Higashi, <sup>1</sup>S. Miyazaki  
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<sup>2</sup>Hiroshima University, Japan
- P2017A **ICP-enhanced reactive sputtering with multiple inner type low-inductance antenna modules for large-area formation of thin film devices**  
Y. Setsuhara, <sup>1</sup>K. Takenaka, <sup>2</sup>A. Ebe  
<sup>1</sup>Osaka University, Japan  
<sup>2</sup>EMD Corporation, Japan
- P2018A **Development of compact microwave plasma source and its application to Si film deposition**  
S. Kondo, <sup>1</sup>S. Nakano, <sup>1,2</sup>H. Toyoda  
<sup>1</sup>Nagoya University, Japan  
<sup>2</sup>PLANT, Japan
- P2019A **Research for axial uniformity of diamond-like carbon film deposited along metal rod by using microwave-sheath voltage combination plasma (MVP)**  
X. Deng, <sup>1</sup>Y. Takaoka, <sup>1</sup>H. Kousaka, <sup>1</sup>N. Umehara, <sup>2</sup>K. Shinoda, <sup>2</sup>H. Kanada, <sup>2</sup>K. Taki  
<sup>1</sup>Nagoya University, Japan  
<sup>2</sup>Brother Industries, Ltd., Japan
- P2020A **Construction of atmospheric pressure mist chemical vapor deposition technology for the all-printed electronic technology**  
K. Sun, <sup>1</sup>K. Takeda, <sup>1</sup>S. Tajima, <sup>1</sup>H. Kondo, <sup>1</sup>K. Ishikawa, <sup>1</sup>M. Sekine, <sup>1</sup>M. Hori, <sup>2</sup>H. Itoh  
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- P2021A **High temperature characteristics of Schottky diodes using diamond semiconductors**  
K. Ueda, K. Kawamoto, T. Soumiya, M. Nishiwaki, H. Asano  
Nagoya University, Japan
- P2022A **The effect of plasma-on time on the axial uniformity of film thickness in internal DLC coating with microwaves**  
R. Matsui, H. Kousaka, N. Umehara  
Nagoya University, Japan

- P2023A **Improving a-Si/c-Si heterojunction using micro-hydrogenation**  
C. Lin, Y. Chen  
Tatung University, Taiwan
- P2024A **Plasma diagnostics and characterizations of Al-doped ZnO films deposited with low temperature sputtering process**  
Y. Choi, B. Shim, H. Kim, J. Han  
Sungkyunkwan University, Korea
- P2025A **Formation of reliable SiO<sub>2</sub> films by combination of thermal and plasma oxidation processes**  
<sup>1</sup>R. Hasunuma, <sup>2</sup>Y. Kabe, <sup>1</sup>K. Yamabe  
<sup>1</sup>University of Tsukuba, Japan  
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- P2026A **Relation between gaseous radicals and  $\mu$ c-Si film property in SiH<sub>4</sub>/H<sub>2</sub> plasma CVD**  
A. Fukushima, Y. Lu, Y. Abe, K. Takeda, H. Kondo, K. Ishikawa, M. Sekine, M. Hori  
Nagoya University, Japan
- P2027A **Effect of substrate cooling on the mechanical properties of Si-containing hydrogenated carbon nitride film**  
<sup>1</sup>K. Kitazume, <sup>1</sup>H. Kousaka, <sup>1</sup>T. Tokoroyama, <sup>1</sup>N. Umehara, <sup>2</sup>Y. Fuwa, <sup>2</sup>K. Manabe  
<sup>1</sup>Nagoya University, Japan  
<sup>2</sup>Toyota Motor Corporation, Japan
- P2028A **Atomic composition of DLC film coated at over 100 um/h by using microwave-excited high-density near plasma**  
<sup>1</sup>Y. Takaoka, <sup>1</sup>H. Kousaka, <sup>2</sup>M. Kawaguchi, <sup>1</sup>N. Umehara, <sup>3</sup>K. Shinoda, <sup>3</sup>H. Kanada, <sup>3</sup>K. Taki  
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<sup>2</sup>Tokyo Metropolitan Industrial Technology Research Institute, Japan  
<sup>3</sup>Brother Industries, Ltd., Japan
- P2029A **Polarization control of c-axis normal ScAlN film by ion beam irradiation**  
<sup>1</sup>M. Suzuki, <sup>1</sup>T. Yanagitani, <sup>2</sup>H. Odagawa  
<sup>1</sup>Nagoya Institute of Technology, Japan  
<sup>2</sup>Kumamoto National College of Technology, Japan
- P2030A **Relationship between coating density and mechanical properties of DLC coatings produced by different coating deposition processes**  
**Withdrawn** <sup>1</sup>T. Horiuchi, <sup>1</sup>S. Kaneko, <sup>1</sup>C. Kato, <sup>1</sup>M. Kano, <sup>2</sup>M. Kumagai, <sup>3</sup>T. Suzuki  
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<sup>2</sup>Fuji WPC Co., Ltd., Japan  
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P2031A **Onset of discharge instability at patterned conductive regions in pulsed-plasmas under near atmospheric pressures**

<sup>1</sup>Y. Inayoshi, <sup>1</sup>H. Fukidome, <sup>2</sup>S. Nakajima, <sup>2</sup>T. Uehara, <sup>3</sup>Y. Toyoshima, <sup>1</sup>M. Suemitsu

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P2032A **Surface structure control of ZnO films by plasma-assisted Mist-CVD**

K. Takenaka, Y. Setsuhara

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P2033A **Investigation of SiO<sub>2</sub>/SiO<sub>x</sub>/SiO<sub>x</sub>N<sub>y</sub> stack for charge storage application in nonvolatile memory**

**Withdrawn**

W. Choi, J. Choi, J. Kim, S. Bong, J. Yi

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P2034A **Synthesis of ZnO thin films with different gas flow rate ratio by plasma enhanced chemical vapor deposition**

D. Wei, C. Chao, M. Chen

National Taipei University of Technology, Taiwan

P2035A **Hardening of SACM645 steel using a pulsed discharge atmospheric pressure plasma nitriding**

<sup>1</sup>M. Hayakawa, <sup>1</sup>M. Ito, <sup>1</sup>S. Takashima, <sup>2</sup>H. Matsuo, <sup>2</sup>M. Goto

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P2036A **Hydrogen radical injection plasma deposition of (110)-preferentially oriented microcrystalline silicon films**

L. Ya, A. Fukushima, Y. Abe, Y. Kim, K. Takeda, K. Ishikawa, H. Kondo, M. Sekine, M. Hori

Nagoya University, Japan

P2037A **Tribological properties of gas tunnel type plasma sprayed TiN coatings**

<sup>1</sup>A. Kobayashi, <sup>1</sup>S. Yugeswaran, <sup>2</sup>Y. Ando

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P2038A **A Zn-In-Sn-O UV photodetectors with Au Schottky contacts**

**Withdrawn**

T. Chang, C. Chiu, S. Chang

National Cheng Kung University, Taiwan

- P2039A **Dependence of performance of p-i-n a-Si:H solar cells using stable a-Si:H films on distance between discharges and substrate**  
K. Hatozaki, <sup>1</sup>Y. Hashimoto, <sup>1</sup>D. Yamashita, <sup>1</sup>H. Seo, <sup>1</sup>G. Uchida, <sup>1,2</sup>N. Itagaki, <sup>1</sup>K. Koga, <sup>1</sup>M. Shiratani  
<sup>1</sup>Kyushu University, Japan  
<sup>2</sup>PRESTO, Japan
- P2040A **Study on properties of ZnO thin films deposited in low temperature facing targets magnetron sputtering (FTS) system with H<sub>2</sub> and O<sub>2</sub> flow rate changes**  
<sup>1,2</sup>H. Kim, <sup>1,2</sup>S. Jin, <sup>1,2</sup>L. Wen, <sup>1,2</sup>Y. Choi, <sup>1,2</sup>I. Choi, <sup>2,3</sup>M. Hori, <sup>1,2</sup>J. Han  
<sup>1</sup>Sungkyunkwan University, Korea  
<sup>2</sup>Sungkyunkwan University, Korea  
<sup>3</sup>Nagoya University, Japan
- P2041A **Plasma treatment of nanocrystalline diamond films for biocoating applications**  
J. Yang, K. Teii  
Kyushu University, Japan
- P2042A **Light scattering measurement for fabrication thin films by sputtering deposition method using powder target**  
H. Kawasaki, D. Taniyama, T. Ohshima, Y. Yagyū, T. Ihara, Y. Suda  
Sasebo National College of Technology, Japan
- P2043A **Synthesis of ultrananocrystalline diamond film by CVD using a chemical precursor**  
<sup>1</sup>R. Tiwari, <sup>2</sup>S. Sahoo, <sup>2</sup>L. Chang, <sup>1</sup>M. Yoshimura  
<sup>1</sup>Toyota Technological Institute, Japan  
<sup>2</sup>National Chiao Tung University, Taiwan
- P2044A **Effect of crystallinity by post heat treatment on TFT characteristics in nanocrystalline silicon TFT**  
W. Choi, J. Choi, J. Kim, S. Bong, J. Yi  
Sungkyunkwan University, Korea
- P2045A **Metal containing PTFE films by RF and DC sputtering simultaneously with rotation**  
<sup>1</sup>Y. Song, <sup>2</sup>J. Kim  
<sup>1</sup>Korea Institute of Industrial Technology (KITECH), Korea  
<sup>2</sup>Hanyang University, Korea
- P2046A **The effect of hydrogen on microstructure of Si thin films synthesized by ICP-assisted magnetron sputtering**  
K. Shin, I. Choi, Y. Choi, J. Han  
Sungkyunkwan University, Korea

- P2047A **Deposition of highly conducting Cu thin film on polyimide substrate using RF-driven atmospheric pressure plasma jet in nitrogen atmosphere**  
<sup>1,2</sup>P. Zhao, <sup>3</sup>W. Zheng, <sup>2</sup>Y. Meng, <sup>1</sup>M. Nagatsu  
<sup>1</sup>Shizuoka University, Japan  
<sup>2</sup>Chinese Academy of Science, China  
<sup>3</sup>Yazaki Corporation, Japan
- P2048A **The effect of duty cycle on depositing CrN thin films by high power impulse magnetron sputtering process**  
<sup>1,2</sup>W. Wu, <sup>1</sup>B. Wu, <sup>1</sup>P. Chen, <sup>1,2</sup>C. Chang, <sup>1,2</sup>D. Wang  
<sup>1</sup>MingDao University, Taiwan  
<sup>2</sup>MingDao University, Taiwan
- P2049A **Development of a facing-target sputtering device with an extraordinary strong magnetic field**  
T. Shimizu, K. Nakamura, H. Ikuta  
Nagoya University, Japan
- P2051A **Effect of hydrogen/argon annealing on the properties of Al-doped ZnO films prepared by low temperature magnetic controlled DC sputtering**  
<sup>1</sup>N. Shih, <sup>1</sup>C. Lin, <sup>2</sup>C. Kung  
<sup>1</sup>Hsiuping University of Science and Technology, Taiwan  
<sup>2</sup>National Chung-Hsing University, Taiwan
- P2052A **Formation of DLC films by pulsed plasma using atmospheric pressure surface discharge**  
H. Hamada, K. Oue, S. Yasui  
Nagoya Institute of Technology, Japan
- P2053A **Surface modification and degradation properties of anti-sticking layer using fluorocarbon-based plasma for NIL (nanoimprint lithography) process**  
<sup>1</sup>Y. Ham, <sup>2</sup>D. Shutov, <sup>1</sup>J. Son, <sup>1</sup>H. Jang, <sup>1</sup>K. Kwon  
<sup>1</sup>Korea University, Korea  
<sup>2</sup>Ivanovo State University of Chemistry and Technology, Russia
- P2054A **Improving mechanical propertis of carbon coatings onto injection mold steel**  
<sup>1</sup>K. Lee, <sup>1</sup>J. Jeong, <sup>2</sup>Y. Lee, <sup>2</sup>H. Lee, <sup>3</sup>D. Choi, <sup>3</sup>D. Son  
<sup>1</sup>Research Institute of Industrial Science & Technology, Korea  
<sup>2</sup>HanGuk Mold, Korea  
<sup>3</sup>Dongkook Ind. Co., Ltd, Korea

- P2055A **Surface passivation of SiN<sub>(Si-rich)</sub>/SiN<sub>(N-rich)</sub> stacks with the firing stability properties for n-type crystalline silicon solar cells**  
J. Choi, <sup>1</sup>V. Dao, <sup>1</sup>W. Choi, <sup>2</sup>N. Balaji, <sup>1</sup>J. Kim, <sup>1</sup>S. Bong, <sup>1</sup>J. Yi  
<sup>1</sup>Sungkyunkwan University, Korea  
<sup>2</sup>Sungkyunkwan University, Korea
- P2056A **Production of carbon stripper foils by magnetron-sputter plasma-deposition**  
<sup>1</sup>S. Kato, <sup>2</sup>M. Yoshimoto, <sup>3</sup>H. Yamaoka, <sup>1</sup>M. Wada  
<sup>1</sup>Doshisha University, Japan  
<sup>2</sup>J-PARC Center, Japan Atomic Energy Agency, Japan  
<sup>3</sup>Harima Institute, RIKEN, Japan
- P2057A **Influence of annealing treatment on optical properties of Rf-Magnetron sputtered Nd(Co<sub>1/2</sub>Ti<sub>1/2</sub>)O<sub>3</sub> thin films on ITO/Glass Substrate**  
C. Hsu, Y. He  
National United University, Taiwan
- P2058A **Properties of titanium nitride films prepared by oblique angle deposition**  
J. Jeong, J. Yang, H. Park, J. Jung, M. Song  
Research Institute of Industrial Science and Technology, Korea
- P2059A **A study on the characteristic of polymerized thin films by PECVD method**  
S. Cho, H. Seo, J. Boo  
Sungkyunkwan University, Korea
- P2060A **Deposition of amorphous carbon films by inductively coupled discharges containing hydrocarbon gases**  
T. Kimura, R. Nishimura, Y. Sugino  
Nagoya Institute of Technology, Japan
- P2061A **Ion bombardment effects on internal stress of sputtered thin films**  
<sup>1</sup>A. Nii, <sup>1</sup>M. Amano, <sup>2</sup>A. Kohri, <sup>2</sup>Y. Shinohara, <sup>2</sup>Y. Matsumura  
<sup>1</sup>Tokai University, Japan  
<sup>2</sup>Tokai University, Japan
- P2062A **Plasma enhanced atomic layer deposition of AlN thin films: A comparison between remote and direct plasma processes for obtaining crystalline films**  
A. Perros, S. Ali, J. Mäkinen, H. Lipsanen  
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P2063A **Growth of carbon nanoflakes by sputtering on stainless steel for field emission application**

**Withdrawn**

W. Shih, S. Chang  
Tatung University, Taiwan

P2064A **The role of system pressure in the fluorocarbon plasma polymerization using  $C_4F_8$  in capacitively couple mode discharge**

Y. Wang, C. Tsai, C. Huang  
Yuan Ze University, Taiwan

P2065A **Properties of aluminum films prepared by oblique angle deposition**

H. Park, J. Yang, J. Jung, M. Song, J. Jeong  
Research Institute of Industrial Science and Technology, Korea

P2066A **High-k gate dielectric layer deposited on silicon wafer to improve permittivity**

H. Seo, S. Cho, S. Nam, K. Hwang, W. Jung, J. Boo  
Sungkyunkwan University, Korea

P2067A **Synthesis and characterization of  $InTaO_4$  films by alternative- and co-deposition of  $In_2O_3$  and  $Ta_2O_5$**

**Withdrawn**

J. Hsieh, H. Liang, S. Liu, H. Wu  
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P2068A **Properties of diamond like carbon (DLC) on Ti buffer layer prepared on Si(001) substrate**

<sup>1</sup>S. Kaneko, <sup>1</sup>T. Ito, <sup>2</sup>K. Ikenaga, <sup>3</sup>S. Yasuhara, <sup>3</sup>K. Mihirogi, <sup>4</sup>M. Kobayashi, <sup>5</sup>M. Kumagai, <sup>5</sup>E. Shimodaira, <sup>1</sup>T. Horiuchi, <sup>1</sup>S. Takagi, <sup>6</sup>R. Sudo  
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<sup>6</sup>Sagamihara Surface Lab., Sagamihara Incubation Center, Japan

P2069A **Annealing effect on the microstructure and optical characteristics of Mn, Si co-doped ZnO thin film sputtered on quartz glass**

<sup>1</sup>K. Peng, <sup>1</sup>H. Kao, <sup>2</sup>S. Liu, <sup>1</sup>J. Chen, <sup>3</sup>C. Lee  
<sup>1</sup>Ming Chi University of Technology, Taiwan  
<sup>2</sup>National Taiwan Normal University, Taiwan  
<sup>3</sup>National Taipei University of Technology, Taiwan

- P2070A **Properties of WO<sub>3,x</sub> electrochromic thin film prepared by reactive sputtering with various post annealing temperature**  
M. Kim, H. Choi, K. Kim  
Gachon University, Korea
- P2071A **Annealing effect on the microstructure and optical characterization of Zn<sub>2</sub>SiO<sub>4</sub> thin film sputtered on quartz glass**  
K. Peng, <sup>1</sup>H. Kao, <sup>2</sup>S. Liu, <sup>3</sup>K. Tsai, <sup>4</sup>J. Lin  
<sup>1</sup>Ming chi University of Technology, Taiwan  
<sup>2</sup>National Taiwan Normal University, Taiwan  
<sup>3</sup>St. Mary's Nursing and Management College, Taiwan  
<sup>4</sup>National Central University, Taiwan
- P2072A **An AZO thin film transparent antenna for ISM bands applications**  
**Withdrawn** S. Li, I. Tang, <sup>3</sup>C. Li, <sup>1</sup>C. Yao  
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<sup>2</sup>National University of Tainan, Taiwan  
<sup>3</sup>Nation Taiwan Ocean University, Taiwan
- P2073A **A ITO transparent Antennas for WLAN 2.4/5.2/5.8 GHz bands applications**  
**Withdrawn** S. Li, I. Tang, S. Shei, S. Wang  
National University of Tainan, Taiwan
- P2074A **Effects of excess energy in ion-plating process on characteristics of Fe-III B alloy thin films**  
M. Amano, <sup>1</sup>Y. Ito, <sup>2</sup>Y. Ezaki, <sup>2</sup>K. Sutrisna, <sup>2</sup>Y. Matsumura  
<sup>1</sup>Tokai University, Japan  
<sup>2</sup>Tokai University, Japan
- P2075A **Study on precursor adsorption and reaction within SiO<sub>2</sub> growth cycle of low temperature plasma-enhanced atomic layer deposition using in-situ ATR-FTIR**  
<sup>1</sup>Y. Lu, <sup>2</sup>A. Kobayashi, <sup>1</sup>Y. Kim, <sup>1</sup>H. Kondo, <sup>1</sup>K. Ishikawa, <sup>1</sup>M. Sekine, <sup>1</sup>M. Hori  
<sup>1</sup>Nagoya University, Japan  
<sup>2</sup>ASM, Japan
- P2076A **Spatio-temporal structure of growth of nano-particles with/without amplitude modulation in reactive plasmas**  
K. Kamataki, <sup>2</sup>Y. Morita, <sup>2</sup>K. Koga, <sup>2</sup>G. Uchida, <sup>2,3</sup>N. Itagaki, <sup>2</sup>H. Seo, <sup>2</sup>M. Shiratani  
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<sup>2</sup>Kyushu University, Japan  
<sup>3</sup>Presto, Japan Science and Technology Agency, Japan

- P4026A **Impact of control gate depth on program efficiency in advanced NAND flash device**  
<sup>1</sup>C. Yan, <sup>1</sup>J. Chen, <sup>2</sup>Y. Lee, <sup>2</sup>W. Huang, <sup>2</sup>M. Huang, <sup>2</sup>C. Chen, <sup>2</sup>Y. Lin, <sup>2</sup>H. Chen  
<sup>1</sup>National Cheng Kung University, Taiwan  
<sup>2</sup>Powerchip Technology Corp., Taiwan
- P2077C **Effect of boron doping on crystalline structures and electrical properties of amorphous carbon films grown by radical-injection plasma-enhanced chemical vapor deposition**  
<sup>1</sup>J. Kuki, <sup>1</sup>L. Yu, <sup>1</sup>H. Kondo, <sup>2</sup>K. Ishikawa, <sup>1,2</sup>M. Sekine, <sup>1,2</sup>M. Hori  
<sup>1</sup>Nagoya University, Japan  
<sup>2</sup>Nagoya University, Japan
- P2078C **New approach for nano fabrication on locally distorted Si with hydrogen implantation**  
H. Iwata, M. Takagi, Y. Tokuda  
Aichi Institute of Technology, Japan
- P2079C **Development of a high sensitive microbe sensor using artificial siderophore-modified Au substrate and nanoparticle**  
T. Murase, T. Inomata, Y. Funahashi, T. Ozawa, H. Masuda  
Nagoya Institute of Technology, Japan
- P2080C **Property of Ni-W mold after multiple thermal imprint**  
<sup>1</sup>M. Yasui, <sup>1</sup>S. Kaneko, <sup>2</sup>M. Takahashi, <sup>3</sup>H. Ito, <sup>3</sup>M. Arai, <sup>1</sup>Y. Hirabayashi, <sup>1</sup>T. Ozawa, <sup>2</sup>R. Maeda  
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<sup>2</sup>National Institute of Advanced Industrial Science and Technology, Japan  
<sup>3</sup>Shinshu University, Japan
- P2081C **Nanostructurization of titanium exposed to helium plasmas and its photo-catalytic property**  
<sup>1</sup>D. Kitaoka, <sup>2</sup>S. Kajita, <sup>2</sup>T. Yoshida, <sup>1</sup>N. Ohno, <sup>3</sup>N. Yoshida  
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<sup>3</sup>Kyushu University, Japan
- P2082C **The role of plasma processing of ZnO for amino groups functionalization**  
<sup>1,2</sup>M. Ciolan, <sup>3</sup>I. Motrescu, <sup>2</sup>D. Luca, <sup>1</sup>M. Nagatsu  
<sup>1</sup>Shizuoka University, Japan  
<sup>2</sup>Alexandru Ioan Cuza University, Romania  
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P2083C **Sputtering and surface re-organization of fine-grain graphite under high flux nitrogen plasma bombardment**

**Withdrawn**

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P2084C **Formation of nanostructures on DLC surface by O<sub>2</sub> plasma etching after depositing small amount of metal**

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P2085C **Surface wettability of polymer film with hydrophilic and hydrophobic phases**

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P2086C **Hybrid RF-DC plasma process for low temperature nitriding of metal and alloy**

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P2087C **Homogeneous alignment of twisted nematic liquid crystals on molybdenum trioxide thin films for liquid crystal devices**

**Withdrawn**

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P2088C **Plasma-initiated graft copolymerization of phosphorus flame retardant onto silk**

<sup>1</sup>P. Jermsutjarit, <sup>2</sup>B. Paosawatyanong, <sup>3</sup>W. Bhanthumnavin

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P2089C **GaN surface modification by atmospheric pressure non-thermal microplasma**

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- P2090C **The SiO<sub>x</sub>CyHz hydrophobic film with chemical and mechanical properties using PECVD by controlling the plasma process**  
J. Lee, S. Jin, Y. Choi, I. Choi, J. Han  
Sungkyunkwan University, Korea
- P2091C **A self-assembled monolayer of an ionic liquid with terminal olefins encapsulating diiron complexes for O<sub>2</sub>-activation**  
J. Nishino, T. Kitagawa, T. Inomata, Y. Funahashi, T. Ozawa, H. Masuda  
Nagoya Institute of Technology, Japan
- P2092C **Rapid and low-temperature nitridation of austenitic stainless steel using electron beam excited plasma (EBEP)**  
<sup>1</sup>K. Yamakawa, <sup>1</sup>H. Yamamoto, <sup>1</sup>S. Takahashi, <sup>1</sup>S. Den, <sup>2</sup>S. Takashima, <sup>3</sup>M. Hori  
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- P2093C **Comparative study on the plasma surface nanotexturing of polypropylene, polystyrene, polycarbonate, PMMA, and PET films**  
T. Wei, P. Chen, P. Chung  
Chung-Yuan University, Taiwan
- P2094C **Ion-beam alignment of amorphous Al<sub>2</sub>O<sub>3</sub> materials for liquid crystal alignment**  
**Withdrawn** H. Jeong, H. Lee, H. Park, D. Seo  
Yonsei University, Korea
- P2095C **Tailoring surface properties of polymeric separators for lithium-ion batteries by 13.56 MHz RF plasma glow discharge**  
C. Liang, R. Juang, C. Tsai, C. Huang  
Yuan Ze University, Taiwan
- P2096C **Magnesium oxide coating on magnesium alloy using anodizing in silicate solution and its corrosion characteristics**  
K. Nishinaka, M. Okido  
Nagoya University, Japan
- P2097C **Synthesis of a Fe(III)-N<sub>2</sub>O<sub>2</sub> type complex with high NO selectivity and its modification on Au electrode**  
M. Ishikawa, T. Suwabe, T. Inomata, Y. Funahashi, T. Ozawa, H. Masuda  
Nagoya Institute of technology, Japan

- P2098C **Development of a DSSC based on a the Cu(I) complex dye with a triallylamine derivative**  
Y. Kawai, T. Inomata, Y. Wasada, Y. Funahashi, T. Ozawa, H. Masuda  
Nagoya Institute of Technology, Japan
- P2099C **Wettability of plasma polymerized membranes prepared from moisture states**  
R. Kawamura, <sup>1,4</sup>D. Ishii, <sup>2,4</sup>T. Hariyama, <sup>3,4</sup>M. Shimomura  
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- P2100C **Surface modification of stainless steel with Ti-Si-C thin films by magnetron sputtering using elemental targets at lower preparation temperatures**  
T. Sonoda, S. Nakao, M. Ikeyama  
National Institute of AIST, Japan
- P2101C **Oxidation of CrAlCuN thin films between 800 and 1000 °C in air**  
**Withdrawn** S. Won, Y. Hwang, D. Lee  
Sungkyunkwan University, Korea
- P2102C **Enhancement of efficiency for organic light-emitting devices utilizing self-assembled monolayers**  
K. Kim, <sup>2</sup>Y. Jeon, <sup>2</sup>K. Lee, <sup>3</sup>H. Seo, <sup>3</sup>J. Noh, <sup>1,2</sup>T. Kim  
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<sup>3</sup>Hanyang University, Korea
- P2103C **Novel fabrication of self-assembled phospholipid layer on hydrophobic polymer surface by plasma-assisted method**  
<sup>1</sup>S. Kondo, <sup>1</sup>M. Suzuki, <sup>1</sup>Y. Sasai, <sup>2</sup>Y. Yamauchi, <sup>3</sup>M. Kuzuya  
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<sup>2</sup>Matsuyama University, Japan  
<sup>3</sup>Chubu Gakuin University, Japan
- P2104C **Mn-doped Zn<sub>2</sub>SiO<sub>4</sub>/Ag nano-islands for green fluorescence thin film enhanced by surface plasmon effect**  
K. Peng, <sup>1</sup>Y. Lin, <sup>2</sup>S. Liu, <sup>1</sup>T. Chen, <sup>3</sup>C. Lee  
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<sup>2</sup>National Taiwan Normal University, Taiwan  
<sup>3</sup>National Taipei University of Technology, Taiwan

- P2105C **Enhancement of plastic deformation resistance and tribological behavior in nanocomposite CrAlSiN coatings by Si addition**  
H. Chen, <sup>1</sup>Y. Chan, <sup>1</sup>J. Duh, <sup>2,3</sup>J. Lee  
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<sup>2</sup>Ming Chi University of Technology, Taiwan  
<sup>3</sup>Mingchi University of Technology, Taiwan
- P2106C **A study of surface properties on lithium manganese oxide applying inductively coupled plasma spectrometry**  
M. Kong, <sup>1</sup>H. Yoon, <sup>2</sup>K. Chung, <sup>2</sup>J. Ryu  
<sup>1</sup>Korea Basic Science Institute, Korea  
<sup>2</sup>Korea Institute of Geoscience and Mineral Resources, Korea
- P2107C **Surface hardening of TWIP steel by shot peening process**  
<sup>1,2</sup>K. Cho, <sup>3</sup>K. Song, <sup>3</sup>S. Oh, <sup>2</sup>Y. Lee, <sup>1</sup>W. Lee  
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<sup>2</sup>Yonsei University, Korea  
<sup>3</sup>Pohang University of Science and Technology, Korea
- P2108C **The electrochemical and cavitation characteristics of materials coated with Al<sub>2</sub>O<sub>3</sub>-3%TiO<sub>2</sub> by atmospheric pressure plasma**  
S. Kim, Y. Woo  
Mokpo National Maritime University, Korea
- P2109C **Surface modification study of lithium manganese oxide by SEM and inductively coupled plasma spectrometry**  
B. Yoon, <sup>1</sup>M. Kong, <sup>2</sup>K. Chung, <sup>1</sup>H. Yoon  
<sup>1</sup>Korea Basic Science Institute, Korea  
<sup>2</sup>Korea Institute of Geoscience and Mineral Resources, Korea
- P2110C **Cavitation behavior of MCrAlY and Ceramic materials after atmospheric pressure plasma coating**  
Y. Woo, M. Han, S. Jang, S. Kim  
Mokpo National Maritime University, Korea
- P2111C **The characteristics of CoNiCrAlY and ZrO<sub>2</sub>-Y<sub>2</sub>O<sub>3</sub> coating layers using microcapillary electrochemical dropletcell**  
M. Han, J. Lee, Y. Woo, S. Jang, S. Kim  
Mokpo National Maritime University, Korea

P2112C **Investigation on the durability enhancement in seawater of ALBC3 alloy by atmospheric pressure plasma coating technology**

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P2113C **Non-thermal atmospheric pressure nitrogen plasma treatment of epoxy resin-based fiber post for improvement of adhesion of core resin**

**Withdrawn**

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