

AEPSE-2007 Program

Tuesday, September 25, 2007

10:30 **Opening (Room A&B, 10:30-11:00, Sep. 25)**

Plenary Lectures 1, 2 (Room A&B, 11:00-12:20, Sep. 25)

11:00 **Plenary 1** **Toward a New Era of Plasma Surface Engineering** **Toyonobu Yoshida**

11:40 **Plenary 2** **Optical Spectroscopy to Control a Plasma Reactor for Surface Treatment** **Andre Ricard**

12:20 Lunch Break (12:20-13:30)

13:30 **Poster Session 1 (13:30-15:00, Sep. 25)**

Session 01: Plasma and Ion-based Processes (Room A, 15:00-16:30, Sep. 25)

15:00 **KN0100** The Effect of Ion Energy Bombardment on Mechanical Properties of Chromium Nitride Coating Deposited at Different Pulse Frequency and Pulse-Off Time by DC Reactive Magnetron Sputter Deposition **Rahamathunnisa Muhammad Azam, Ram Prasad Gandhiraman, David C Cameron**

15:30 **OR0101** Effect of Pulse Mode and Anode Configuration on Substrate Bombardment and Layer Properties in Reactive Pulse Magnetron Sputtering **Daniel Gloess, Peter Frach, Hagen Bartzsch, Joern-Steffen Liebig, Olaf Zywitzki, Thomas Modes, Klaus Goedicke**

15:50 **OR0102** A Study On Characteristics Of SF6/O2 Capacitive Discharge With QMS And Langmuir Probe **HunSu Lee, Seung-Kyu Ahn, Shin-Jae You, Hong-Young Chang**

16:10 **OR0103** Deposition of ternary Cr-Al-Si Oxides and nitrides by High Ionization Pulsed Sputtering Technique (H.I.P.) **Rainer Cremer, Hans-Gerd Fuss, Jones Alami**

16:30 Break (16:30-16:40)

Session 02: Industrial Applications (Room B, 15:00-16:30, Sep. 25)

15:00 **KN0200** PLASMA BORIDING OF AUTOMOTIVE PARTS **Peter Kaestner, Klaus Stefan Klimek, Kyong Tschong Rie, Gunter Brauer**

15:30 **OR0201** Tailored Super-hard CVD diamond Coatings For Highly demanding Cutting Operations **Rainer Cremer, Wlater Reichert, Stephan Kyrsta, Oliver Lemmer**

15:50 **OR0202** Preliminary study on the characteristics of the thin films coated on a prototype punch die for a hydro-forming press **Bomsok Kim, SeungChun Oh, SangYul Lee**

16:10 **OR0203** OZONE COMPOSIG ON THE SURFACE OF A CATALYSIS ELECTRODE **Akira Murai**

16:30 Break (16:30-16:40)

Session 03: Adhesion and Wear (Room A, 16:40-18:10, Sep. 25)

16:40 **KN0300** INTERFACE ENGINEERING BY HIGH POWER IMPULSE MAGNETRON SPUTTERING FOR THE ENHANCEMENT OF ADHESION OF PVD COATINGS **Arutun P. EHIASARIAN**

17:10 **OR0301** GLIDING ARC DISCHARGE - APPLICATION FOR ADHESION IMPROVEMENT OF FIBRE REINFORCED POLYESTER COMPOSITES **Yukihiro Kusano, Tom Logstrup Andersen, Bent F Sorensen, Henrik Junge Mortensen, Poul Kerff Michelsen**

17:30 **OR0302** Improvement of Copper Plating Adhesion of PPE Printed Wiring Board by Plasma Treatment **Shohei Ikari, Hiroshi Kashiwade, Takashi Matsuoka, Tomoko Hirayama, Shuichi Ishida, Kiyotaka Kato**

17:50 **OR0303** ANTI-WEAR AND ANTI-BACTERIA BEHAVIORS OF TaN-Ag NANOCOMPOSITE THIN FILMS WITH AND WITHOUT ANNEALING **Jang-Hsing Hsieh, C. C. Tseng, Weite Wu, Y. G. Chang, S. Y. Chang**

Session 04: Modeling and Analysis of Thin Films (Room B, 16:40-18:10, Sep. 25)

16:40	KN0400	THE STABILIZATION OF COMPOSITE COATINGS: A DENSITY FUNCTIONAL THEORY BASED STUDY	Cecilia Charlotte AArhammar, C. Moyses Araujo, Rajeev Ahuja
17:10	OR0401	PHASE STABILITIES OF Ti-Al-N AND Cr-Al-N: COMPARISON BETWEEN EXPERIMENTS AND MODELING	Paul H. Mayrhofer
17:30	OR0402	SIMULATION OF MOLECULAR DYNAMICS ASSOCIATED WITH HARDNESS OF ALLOY THIN FILMS	Ya-Yun Cheng, Cheng-Chung Lee
17:50	OR0403	FUNCTIONAL MULTILAYER COATINGS OF TETRAVINYL SILANE	Vladimir Cech, Jan Studynka, Bozena Cechalova, Vladimir Perina

Wednesday, September 26, 2007**Session 05: Electronic Device Processes (Room A, 9:30-11:20, Sep. 26)**

9:30	KN0500	Amplitude modulated RF discharges for low-k film deposition	Shinya Iwashita, Kazunori Koga, Masaharu Shiratani
10:00	OR0501	Diffusion barrier performance of amorphous Ta-Zr films in Cu metallization	Chuan Li, Jang-Hsing Hsieh
10:20	OR0502	ELECTRICALLY INSULATING Al ₂ O ₃ AND SiO ₂ FILMS FOR SENSOR AND PHOTOVOLTAIC APPLICATIONS DEPOSITED BY REACTIVE PULSE MAGNETRON SPUTTERING AND MAGNETRON ACTIVATED CVD	Peter Frach, Hagen Bartzsch, Daniel Gloess, Matthias Fahland, Frank Haendel
10:40	OR0503	TWO-STEP REACTIVE SPUTTERING OF PIEZOELECTRIC ALUMINUM NITRIDE THIN FILMS ON MOLYBDENUM ELECTRODES FOR FBAR APPLICATIONS	Jyh-Shiam Cherng, T.Y. Chen, C.M. Lin
11:00	OR0504	Gas-Chopping Etching of Silicon Using SF ₆ /C ₄ F ₈ and SF ₆ /C ₄ F ₆ Plasmas	Chang-Koo Kim, Hyongmoo Rhee Kim, Hyeokkyu Kwon, Sang Ho Woo, Yil Wook Kim
11:20		Break (11:20-11:40)	

Session 06: Nano-carbon Materials (Room B, 9:30-11:20, Sep. 26)

9:30	KN0600	NANOSCALE SURFACE ENGINEERING: WHY PLASMA-AIDED?	Kostya Ostrikov, Shuyan Xu, Igor Levchenko
10:00	OR0601	SYNTHESIS OF CARBON NANOWALLS USING ELECTRON BEAM EXCITED PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION	Takateru Mori, Mineo Hiramatsu, Koji Yamakawa, Keigo Takeda, Masaru Hori
10:20	OR0602	CHARACTERISTICS OF CARBON DUST PARTICLES PRODUCED IN DEUTERIUM HELICON PLASMAS	Kazunori Koga, Shinya Iwashita, Masaharu Shiratani
10:40	OR0603	FABRICATION OF DIAMOND NANO-WHISKERS THROUGH METAL SPUTTERING AND OXYGEN ETCHING	Hirokazu Takaki, Chaoyang Li, Akimitsu Hatta
11:00	OR0604	EVOLUTION MECHANISM OF WRINKLED HARD SKIN ON POLYMERS CREATED BY FOCUSED ION BEAM	Myoung-Woon Moon, Sang Hoon Lee, Jeong-Yun Sun, Kyu Hwan Oh, Kwang-Ryeol Lee, Ashkan Vaziri, John W. Hutchinson
11:20		Break (11:20-11:40)	

Plenary Lecture 3 (Room A&B, 11:40-12:20, Sep. 26)

11:40	Plenary 3	Future Development in Silicon Nano-Electronics	Shigeaki Zaima
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12:20 Lunch Break (12:20-14:00)

14:00 Excursion (14:00- , Sep. 26)

Thursday, September 27, 2007

Session 07: Diamond-Like Carbon Films (Room A, 9:30-11:20, Sep. 27)

9:30	KN0700	TRIBOLOGICAL PROPERTIES AND HARDNESS OF DLC FILMS WITH VARIOUS HYDROGEN CONTENTS	Hiroataka Ito, Kenji Yamamoto, Masabumi Masuko
10:00	OR0701	The Effects of Deposition Parameters on the Structure and Properties of Titanium-containing DLC Films Synthesized by Cathodic Arc Plasma Evaporation	Pi Chuen Tsai, Jueh-Yu Chiang, Yen-Fei Hwang
10:20	OR0702	PREPARATION AND PROPERTIES OF DIAMOND-LIKE CARBON FILMS DEPOSITED BY PLASMA SOURCE ION IMPLANTATION WITH DC GLOW DISCHARGE	Koumei Baba, Ruriko Hatada
10:40	OR0703	TRIBOLOGICAL BEHAVIORS OF A DLC FILM IN AQUEOUS ENVIRONMENT	Jin Woo Yi, Se Jun Park, Seung-Hwan Lee, Myoung-Woon Moon, Kwang-Ryeol Lee, Jung-Gu Kim, Seock-Sam Kim
11:00	OR0704	The structure and electrical properties of ultra thin carbon film synthesized by unbalanced magnetron sputtering	Sung I Kim, Tae J Byun, Ho Y Lee, Kab S Kim, Jeon G Han
11:20	Break (11:20-11:40)		

Session 08: Biomedical Applications (Room B, 9:30-11:20, Sep. 27)

9:30	KN0800	Investigation on Biocompatibility of Zirconium-coated Polyurethane Surfaces	Frank Hollstein, Chr. Wetzel, Th. K. Monsees, R. H. W. Funk, N. Ozkucur
10:00	OR0801	FABRICATION OF THE TRANSPARENT CONDUCTING THIN FILM FOR BIOLOGICAL MICROREACTOR	Tin Duc Chanh Doan, Tin Duc Chanh Doan, Vinh Cao Tran, Chien Mau Dang
10:20	OR0802	SURFACE CHARACTERISTICS OF TOOTH ASH COATINGS ON Ti AND Ti-6Al-4V DEPOSITED BY PULSED LASER METHOD	Han Cheol Choe, Yeong Mu Ko, Sang Sub Kim, W. Brantley
10:40	OR0803	MODIFICATION OF DEGRATION BEHAVIOR OF MAGNESIUM ALLOY BY IBAD COATING OF HYDROXYAPATITE	Jingxin Yang, Yanpeng Jiao, Fuzhai Cui, In-Seop Lee, Qingshui Yin, Yu Zhang
11:00	OR0804	IN VITRO BEHAVIOUR OF OSTEOBLAST ON BIOACTIVE PLASMA MODIFIED NICKEL TITANIUM SHAPE MEMORY ALLOY	Kenneth MC Cheung, Roy YL Chan, Shuilin Wu, Xiangmei Liu, Paul K Chu, Kelvin WK Yeung, William W Lu, Alfonso HW Ngan, Keith DK Luk
11:20	Break (11:20-11:40)		

Plenary Lecture 4 (Room A&B, 11:40-12:20, Sep. 27)

11:40	Plenary 4	Application of scaling law in the analysis of growth and annealing behavior of ZnO films deposited Si substrates	Qing-Yu Zhang
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12:20 Lunch Break (12:20-13:30)

Poster Session 2 (13:30-15:00, Sep. 27)

Session 09: Nanocomposite Films (Room A, 15:00-16:10, Sep. 27)

15:00	KN0900	HARD NANOCOMPOSITE COATINGS. PRESENT STATUS AND TRENDS	Jindrich Musil
15:30	OR0901	NANOCOMPOSITE ALUMINA-ZIRCONIA THIN FILMS BY REACTIVE DUAL MAGNETRON SPUTTERING	David Huy Trinh, Tomas Kubart, Tomas Nyberg, Marianne Collin, Ingrid Reineck, Lars Hultman, Hans Hogberg
15:50	OR0902	Effect of Bilayer Period on CrN / Cu Superlattice Thin Films	Youn J. Kim, Ho Y. Lee, Tae J. Byun, Kab S. Kim, Jeon G. Han, Yun H. Shin, Young Z. Lee
16:10	Break (16:10-16:20)		

Session 10: Protective Coatings (Room B, 15:00-16:10, Sep. 27)

15:00	KN1000	Transparent Scratch Protection Coatings with Nanocomposites	Wolfgang Diehl, Bernd Szyszka
15:30	OR1001	Development of Decorative and Corrosion Resistant Coatings for the Surface Refinement of Magnesium Alloys by Plasma-Based Methods	Holger Hoche, Frank Hollstein, Wolfgang Adamitzki, Juergen Schmidt
15:50	OR1002	SPUTTER DEPOSITION OF PULSE BIASED INSULATING CHROMIUM AND ALUMINIUM OXIDE THIN FILMS	Martynas Audronis, Allan Matthews, Adrian Leyland
16:10		Break (16:10-16:20)	

Session 11: Advanced Plasma Sources (Room A, 16:20-17:50, Sep. 27)

16:20	KN1100	Large-Area Low-Damage Plasma Sources Driven by Multiple Low-Inductance-Antenna Modules for Next-Generation Flat-Panel and Polymer Processes	Yuichi Setsuhara, Kosuke Takenaka, Kazuaki Nishisaka, Akinori Ebe
16:50	OR1101	Microplasma Produced by Carbon Nanotube Cathode	Qin Zou, Akimitsu Hatta
17:10	OR1102	Diagnostic of plasma in aqueous systems by time-resolved optical spectroscopy	Camelia Miron, Maria Antoaneta Bratescu, Takahiro Ishizaki, Nagahiro Saito, Osamu Takai
17:30	OR1103	MICROWAVE POWER ABSORPTION COEFFICIENT OF AN ECR XENON ION THRUSTER	Kazutaka Nishiyama, Hitoshi Kuninaka

Session 12: Quarternary-phase Nitrides (Room B, 16:20-17:50, Sep. 27)

16:20	KN1200	NOVEL CrAlYN/CrN SUPERLATTICE COATINGS DEPOSITED BY THE COMBINED HIGH POWER IMPULSE SPUTTERING/ UNBALANCED MAGNETRON SPUTTERING TECHNIQUE FOR ENVIRONMENTAL PROTECTION OF gamma-TiAl ALLOYS	Papken Eh. HOVSEPIAN, Arutiun P. Ehasarian, Christina Reinhard, Reinhold Braun, Hailiang Du, John Walker
16:50	OR1201	THE IMPACT OF YTTRIUM ON MAGNETRON SPUTTERED Cr-Al-N COATINGS: A COMPARATIVE STUDY OF EXPERIMENTAL AND THEORETICAL INVESTIGATIONS	Florian Rovere, Paul H. Mayrhofer, Denis Music, Jochen M. Schneider
17:10	OR1202	Deposition of Ti-A-CN (A=Si and Al) thin films by reactive sputtering of MAX-phase targets	Hans Hogberg, Jenny Frodelius, Per Eklund, Lars Hultman
17:30	OR1203	Deposition of superhard TiCrAlSiN thin films by cathodic arc plasma deposition	Sun Kyu Kim, Pham Van Vinh, Jae Wook Lee

18:10 **Conference Dinner (18:10- , Sep. 27)**

Friday, September 28, 2007

Session 13: Corrosion Resistance (Room A, 9:30-11:20, Sep. 28)

9:30	KN1300	MORPHOLOGY AND CRYSTAL ORIENTATION ON CORROSION RESISTANCE OF MG THIN FILMS FORMED BY PVD METHOD ONTO ZN ELECTROPLATED SUBSTRATE	M. H. Lee, J.S.Oh, K.J.Kim, I.Y.Bae, S.M.Baek
10:00	OR1301	Spatial and temporal variations of Ti, Ti ^M and Ti ⁺ densities in pulse-modulated rf magnetron sputtering plasmas	Nayan Nafarizal, Noriharu Takada, Keiji Nakamura, Masayoshi Ikeda, Yasumi Sago, Sasaki Koichi
10:20	OR1302	Corrosion Resistance of Plasma-Oxidized Stainless Steel	Jiro Okado, Ken Okada, Asahiko Ishiyama, Yuichi Setuhara
10:40	OR1303	Effect of the alloying elements in hot work tool steels on the near-surface zone during plasmanitriding	Mariann Lovonyak, Stefan Marsoner, Thomas Muller, Ingo Siller, Herbert Schweiger, Harald Leitner, Reinhold Ebner
11:00	OR1304	IMPROVEMENT IN CORROSION PROPERTIES OF PLASMA NITRIDED STEEL BY POST SPUTTERING	Subroto Mukherjee, Gajendra P. Singh, Joseph Alphonsa, S. K. Tiwari, Prakash M. Raole
11:20		Break (11:20-11:40)	

Session 14: Functionalization of Surfaces (Room B, 9:30-11:20, Sep. 28)

9:30	KN1400	Site-selectivity of Chemical Reaction on a Biomimetic Super-hydrophobic/Super-hydrophilic Micropatterned Template	Hiroshi Sakurai, Takahiro Ishizaki, Nagahiro Saito, Osamu Takai
10:00	OR1401	TEMPERATURE EFFECT ON CHARGE DENSITY OF SiN FILMS DEPOSITED BY PLASMA-ENHANCED CHEMICAL VAPOR DEPOSITION	Byungwhan Kim, Sang Hee Kwon
10:20	OR1402	SURFACE ANALYSIS ON HYDROPHOBICITY OF THAI SILK TREATED BY SF ₆ PLASMA	Pradoong Suanpoot, K Kueseng, S Ortmann, R Kaufmann, P Nimmanpipug, C Umongno, D Boonyawan, T Vilaithong
10:40	OR1403	THERMAL ANNEALING RESPONSE OF CRCN COATINGS: EFFECT OF C CONTENT	Cristina Louro, Angela Neves, Vinicius Severo, Ladislav Cvrcek, Tomas Polcar, Albano Cavaleiro
11:00	OR1404	INFLUENCE OF PULSE FREQUENCY AND DURATION ON MICROSTRUCTURE AND PROPERTIES OF PULSED DC MAGNETRON SPUTTERED Ti-Al-Y-N COATINGS	Martin Moser, Paul H Mayrhofer
11:20		Break (11:20-11:40)	

Plenary Lecture 5 (Room A&B, 11:40-12:20, Sep. 28)

11:40	Plenary 5	Industrial Development Trend of Flexible Display	James Y. Choe
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12:20 Lunch Break (12:20-13:30)

Poster Session 3 (13:30-15:00, Sep. 28)**Workshop on Flat-panel and Flexible Devices (Room A, 15:00-18:00, Sep. 28)****Session 15: Metallic Surface Treatments (Room B, 15:00-16:20, Sep. 28)**

15:00	OR1501	STUDIES OF STRUCTURE AND PROPERTIES OF COATINGS ON Co-Cr BASE AFTER DUPLEX TREATMENT	alexander dmitrievich pogrebnyak, Yuliya Kravchenko, Ol'ga Petrovna Kul_ment_eva, Dar'ya L'vovna Alontseva, Shamurat Mazaripovich Rusimov, Vladimir Ahmad R. Rastkar, Ali Reza Niknam, Babak Shokri
15:20	OR1502	Friction and indentation tests on the modified surface of titanium aluminides	Ahmad R. Rastkar, Ali Reza Niknam, Babak Shokri
15:40	OR1503	A Study on HVOF Coatings of Micron and Nano WC-Co Powders	Tong Y Cho, Jae H Yoon, Kil S Kim, Ki O Song, Yun K Joo, Wei Fang, Shihong Zhang, Suk J Youn, Hui G Chun, Soon Y Hwang
16:00	OR1504	Characterization of TiNi shape-memory alloy thin Films for MEMS applications	JOSEPH MAKANGA, SARAH NALWOGA
16:20		Break (16:20-16:40)	

Session 16: Tribological and Functional Coatings (Room B, 16:40-18:00, Sep. 28)

16:40	OR1601	Relationship of chemical and structural properties with the tribological behavior of sputtered SiCN films	Holger Hoche, Daniel Allebrandt, Ralf Hauser, Michael Bruns, Claudia Fasel
17:00	OR1602	Tribological Behaviour of ZrTiB(N) sputtered coatings	Omar Jimenez, Adrian Leyland, Martynas Audronis, Allan Matthews
17:20	OR1603	CORRELATION BETWEEN MECHANICAL, OPTICAL AND CHEMICAL PROPERTIES OF THIN FILMS DEPOSITED BY PECVD	Vladimir Cech, Jan Studynka, Bozena Cechalova
17:40	OR1604	ICP with magnetic sputtering plasma synthesis organic nanocomposite PEO/ silver	Qiang Chen, Qiang Chen, Lei Yue, Fenyan Xie, Jing Weng, Chunqing Hao, Yaobo Fu, Meili Zhou, Yuefei Zhang

Saturday, September 29, 2007

Session 17: Functional Oxides and Nitrides (Room A, 9:30-10:50, Sep. 29)

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| 9:30 | OR1701 | p-TYPE ZnO THIN FILMS PREPARED BY THE OXIDATION OF Zn ₃ N ₂ DEPOSITED WITH RF MAGNETRON SPUTTERING | Le-Xi Shao, Jun Zhang |
| 9:50 | OR1702 | PREPARATION AND MECHANICAL PROPERTIES OF ALUMINUM-DOPED ZINC OXIDE TRANSPARENT CONDUCTING FILMS | Shou-Yi Chang, Yen-Chih Hsiao, Yi-Chung Huang |
| 10:10 | OR1703 | Electron field emission in air at an atmospheric pressure from sp ³ -bonded 5H-BN films prepared by synergetic CVD using laser and plasma | Shojiro Komatsu, Eiichi Ohta, Yuhei Satoh, Takayuki Watanabe, Kiyomi Nakajima, Toyohiro Chikyo |
| 10:30 | OR1704 | PHASE AND MORPHOLOGY EVOLUTION OF CUBIC BORON NITRIDE FILMS GROWN IN A HIGH-DENSITY FLUORINE-CONTAINING PLASMA | KUNGEN TEII, Ryota Yamao, Seiichiro Matsumoto |
| 10:50 | | Break (10:50-11:10) | |

Session 18: Plasma Sources and Diagnostics (Room B, 9:30-10:50, Sep. 29)

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| 9:30 | OR1801 | ATMOSPHERIC DBD PLASMA SOURCE FOR SURFACE PROCESSING | Heon-Ju Lee, Chan Joo Yim, Sabg Bum Joa, Min Kook Ko |
| 9:50 | OR1802 | PLASMA TEMPERATURE DIAGNOSTICS IN A MAGNETRON SPUTTERING SYSTEM | Nikolay Britun, Mireille Gaillard, Soo Ghee Oh, Jeon Geon Han |
| 10:10 | OR1803 | PARAMETRIC SURVEY OF DROPLET-FREE HIGH-POWER SPUTTERING (HPPS) GLOW PLASMA CHARACTERISTICS | Ken Yukimura, Ryosuke Mieda, Hiroshi Tamagaki, Tadao Okimoto |
| 10:30 | OR1804 | ANALYSIS OF PLASMA EMISSION IN FEMTOSECOND LASER MACHINING | Hongyu - Zheng |
| 10:50 | | Break (10:50-11:10) | |

Plenary Lectures 6, 7 (Room A&B, 11:10-12:30, Sep. 29)

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| 11:10 | Plenary 6 | Large Area Coating - Development, Status and Trends | Eberhard Schultheiss |
| 11:50 | Plenary 7 | Nanoscale-Controlled Surface for Biochips and Bio-AFM | Joon Won Park |
| 12:30 | | Lunch Break (12:30-13:40) | |

13:40 Poster Session 4 (13:40-15:10, Sep. 29)

Session 19: Functional Oxide Films (Room A, 15:10-16:40, Sep. 29)

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| 15:10 | KN1900 | STUDY ON C12A7 EMBEDDED IN ITO THIN FILMS FOR TRANSPARENT CATHODE | Chulho Jung, Tai Huu Phan, Jiwook Moon, Seok Gyu Yoon, Dae Ho Yoon |
| 15:40 | OR1901 | Characterization of the layered films consisting of Al, Sc-codoped ZnO /Al-doped ZnO and Al-doped ZnO /Al,Sc-codoped ZnO | Kun-Cheng Peng, Jing-Chie Lin, C. A. Tseng, Sheng-Long Lee |
| 16:00 | OR1902 | Control of refractive index and composition of TiO _x thin film for optical waveguide deposited by RF reactive sputtering | Soon Woo kwon, Woo Seok Yang, Hyung Man Lee, Woo Kyung Kim, Han Young Lee, Woo Jin Jeong, Myung Keun Song, Dae Ho Yoon |
| 16:20 | OR1903 | THE GROWTH OF ORIENTED TITANATE NANOTUBE THIN FILM ON TITANIUM METAL FLAKE | Yupeng Guo, Nam-Hee Lee, Hyo-Jin Oh, Cho-Rong Yoon, Sun-Jae Kim |
| 16:40 | | Break (16:40-16:50) | |

Session 20: FPD and Sollar Cells (Room B, 15:10-16:40, Sep. 29)

15:10	KN2000	CHARGE STORAGE EFFECT OF NONVOLATILE MEMORY DEVICE ON GLASS FOR MEMORY IN PIXEL OF FLAT PANEL DISPLAY	Sungwook Jung, Sunghyun Hwang, Kyungsoo Jang, Jungin Lee, Kwangsoo Lee, Hyungjun Park, Kyunghae Kim, Suresh Kumar Dhungel, Junsin Yi
15:40	OR2001	EFFECTS OF ANNEALING ON THE ELECTRICAL AND OPTICAL BEHAVIORS OF Cu ₂ O-Ag-Cu ₂ O MULTILAYERS	Jang-Hsing Hsieh, P. W. Kuo, Weite Wu
16:00	OR2002	Deposition of a-Si:H films using multi-hollow discharge plasma CVD reactor with magnetic field	William Makoto Nakamura, Kazunori Koga, Masaharu Shiratani
16:20	OR2003	FORMATION OF TITANIA THIN FILMS FOR DYE SENSITIZED SOLAR CELLS BY INK JET PRINTING	Cho-Rong Yoon, Sang-Chul Jung, Hyo-Jin Oh, Nam-Hee Lee, Yupeng Guo, Sun-Jae Kim
16:40		Break (16:40-16:50)	

Session 21: Plasma Sources and Diagnostics (Room A, 16:50-18:00, Sep. 29)

16:50	KN2100	Plasma diagnostics by multiple probe array in ICP assisted magnetron sputtering	Junghoon Joo
17:20	OR2101	CHARACTERIZATION OF MASS-SEPARATED ION ENERGY DISTRIBUTIONS IN RF PLASMAS DRIVEN BY MULTIPLE INTERNAL-ANTENNA UNITS	Kosuke Takenaka, Yuichi Setsuhara, Kazuaki Nishisaka, Akinori Ebe, Yong-Mo Kim, Jeon G. Han
17:40	OR2102	CHARACTERISTICS OF IONIZED GAS METAL ARC PROCESSING	Manabu Tanaka, Takahiro Tamaki, Shinichi Tashiro, Kazuhiro Nakata, Toshio Ohnawa, Tomoyuki Ueyama

Session 22: Plasma Etching (Room B, 16:50-18:00, Sep. 29)

16:50	KN2200	ATOMIC LAYER ETCHING OF HfO ₂ USING A LOW ANGLE FORWARD REFLECTED Ar NEUTRAL BEAM	S. D. Park, W. S. Lim, J. W. Bae, and G. Y. Yeom
17:20	OR2201	ANGULAR DEPENDENCE OF Si ₃ N ₄ ETCH RATES AND SiO ₂ -TO-Si ₃ N ₄ ETCH SELECTIVITY IN A C ₄ F ₈ /Ar PLASMA	Jin-Kwan Lee, Il-Yong Jang, Seung-Haeng Lee, Sang Heup Moon, Chang-Koo Kim
17:40	OR2202	X-RAY PHOTOELECTRON SPECTROSCOPY OF Ge ₂ Sb ₂ Te ₅ AND ITS ETCH CHARACTERISTICS IN FLUORINE BASED PLASMAS	Se-Koo Kang, Byung-Jae Park, Sang-Duk Park, Sung-Woo Kim, Geun-Young Yeom

18:00 **Closing (18:00-18:10)**

Poster Sessions

Tuesday, September 25, 2007

13:30

Poster Session 1 (13:30-15:00, Sep. 25)

Poster - Carbon-based Coatings

- P1001** FORMATION OF CONVEX CARBON MICRO- AND NANO-DISK BY ATMOSPHERIC PLASMA SYSTEM
Takashi Meguro, Naoki Tsuji, Shota Saito, Yasuhiro Yamamoto, Takaya Mise, Kowashi Watanabe
- P1002** EFFECT OF RADIO FREQUENCY POWER ON THE PROPERTIES OF CARBON-COATED OPTICAL FIBER PREPARED BY PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION METHOD
Hung Chien Lin, Sham Tsong Shiue, Yi Ming Chou
- P1003** EFFECTS OF RADIO FREQUENCY POWER ON THE CHARACTERICS OF AMORPHOUS n-C:N/p-Si SOLAR CELLS PREPARED BY PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION
Rong Shian Chu, Sham Tsong Shiue
- P1004** PREPARATION OF WATER-REPELLENT THIN FILM BY RF PLASMA CVD USING C₂H₂F₂ GAS
Yasunori Ohtsu, Shinji Yazaki, Tatsuya Misawa, Hiroharu Fujita
- P1005** EFFECTS OF SUBSTRATE TEMPERATURE ON AMORPHOUS CARBON FILM GROWTH, INVESTIGATED INFRARED SPECTROSCOPY
Masanori Shinohara, Ken Cho, Yoshinobu Matsuda, Hiroshi Fujiyama, Tatsuyuki Nakatani
- P1006** EFFECTS OF SUBSTRATE TEMPERATURE ON HYDROGEN PLASMA ECHING OF AMORPHOUS CARBON FILMS
Takanori Inayoshi, Masanori Shinohara, Ken Cho, Yoshinobu Matsuda, Hiroshi Fujiyama, Tatsuyuki Nakatani
- P1007** DEFERENCE OF ETCHING OF AMORPHOUS CARBON FILMS BETWEEN BY HYDROGEN IONS AND BY HYDROGEN RADICALS
Masanori Shinohara, Ken Cho, Yoshinobu Matsuda, Hiroshi Fujiyama, Tatsuyuki Nakatani
- P1008** HYDROGENATED AMORPHOUS CARBON NITRIDE WITH CONTROLLED HYDROGEN DENSITY - STRUCTURAL ANALYSIS AND ELECTRIC FIELD EMISSION PROPERTY
Haruhiko Ito
- P1009** Comparison of Carbon Deposition on Tungsten between Molecular Dynamics and Dynamic Monte Carlo Simulation
Kensuke Inai, Kensuke Inai, Yasuyuki Kikuhara, Kaoru Ohya
- P1010** Low Temperature Synthesis of Diamond Films Using Non-Equilibrium Carbon Monoxide Plasma
Shinsuke Mori, Hiroto Hattori, Masaaki Suzuki
- P1011** Microstructure and mechanical properties of Si-C-N hard coatings deposited by arc ion enhanced magnetic sputtering hybrid system
SHENGLI MA, BIN XU, GUIZHI WU, DAYAN MA, KEWEI XU
- P1012** Ti₂AlC COATINGS SPRAYED WITH HIGH VELOCITY OXY-FUEL
Jenny Frodelius, Marie Sonestedt, Stefan Bjorklund, Jens-Petter Palmquist, Krystyna Stiller, Hans Hogberg, Lars Hultman

Poster - Oxides

- P1013** Lattice effects in ferromagnetic La_{1-x}Ba_xMnO₃ thin films
Yung-Ching Liang, Yuan-Chang Liang
- P1014** Effect of metal ion implantation on the structural and optical properties of nanocrystalline TiO₂ films
Yin-Yu Chang, Yaw-Nan Shieh, Chih-Jung Su, Da-Yung Wang
- P1015** Effects of Nitrogen Partial Pressure on Titanium Oxynitride Films Deposited by Reactive RF Magnetron Sputtering onto PET Substrates
Ming-Chih Lin, Li-Shin Change, Hsin-Chih Lin
- P1016** EFFECTS OF LASER IRRADIATION CONDITIONS AND TARGET CRYSTAL STRUCTURES ON FILM CHARACTERISTICS OF METALLIC OXIDE AT PULSED LASER DEPOSITION
Tomoyuki Fujishima, Takahiko Yamashita
- P1017** IMPROVEMENT OF WO₃ THIN FILM SENSOR BY DOPING WITH SnO₂ OR CARBON NANOTUBES FOR NOX GAS PREPARED BY PLD
Md. Mosharraf Hossain Bhuiyan, Fumiaki Mitsugi, Tomoaki Ikegami
- P1018** CHARACTERISTICS OF ALUMINUM OXIDE FILM ON DIE CASTING MAGNESIUM ALLOY COATED WITH ARGON-OXYGEN RF PLASMA
Masaya Sugimoto, Masuo Hitomi, Koichi Takeda
- P1019** Effect of RF bias on the characteristics of TiO₂ films prepared by DC sputtering
Hsiao Chiang Yao, Tu-Cheng Tsia, Wen-Tang Wu, Fuh-Sheng Shieu
- P1020** INFLUENCE OF PROCESS PARAMETERS ON GADOLINIUM DOPED CERIA ELECTROLYTE FILMS DEPOSITED BY ELECTROSTATIC SPRAY DEPOSITION
Bussarin Ksapabutr, Chaowat Waikru, Manop Panapoy

P1021	PREPARATION AND CHARACTERIZATION OF PHOTOCATALYTIC POROUS TITANIA FILMS BY ELECTROSTATIC SPRAY DEPOSITION METHOD	Panadda Anukoolwittaya, Manop Panapoy, Bussarin Ksapabutr
P1022	FABRICATION OF POROUS NICKEL OXIDE/SCANDIA STABILIZED ZIRCONIA COMPOSITE ANODE USING ELECTROSTATIC SPRAY DEPOSITION TECHNIQUE	Manop Panapoy, Khongrat Tragolrat, Bussarin Ksapabutr
P1023	ELECTROSTATIC SPRAY DEPOSITION OF TITANIUM DIOXIDE PHOTOCATALYST FILM ON PATTERNED SUBSTRATE	Pattakit Wannasut, Bussarin Ksapabutr, Manop Panapoy
P1024	Effect of substrate temperature on the electrically conductive stability of sputtered NiO films	Wei-Luen Jang, Weng-Sing Hwang, Yang-Ming Lu, Tung-Li Hsiung, H. Paul Wang
P1025	EFFECTS OF POST ANNEALING ON THE MATERIAL CHARACTERISTICS AND ELECTRICAL PROPERTIES OF La DOPED BaTiO ₃ SPUTTERED FILMS	Cheng-Hui Wu, J. P. Chu, S. F. Wang, C. H. Lin, W. Z. Chang, V. S. John
P1026	NANOMETRE-SCALE Al ₂ O ₃ AND TiO ₂ ADHESION LAYERS ON PMMA DEPOSITED BY ATOMIC LAYER DEPOSITION FOR IMPROVING THE ADHESION OF SPUTTERED FILMS	Tommi O. Kaariainen, Mari Tanttari, David C Cameron
P1027	The effect of heat treatments in sol-gel methods on Microstructures and Electrochemical properties of nano oxide cerium films on AA7020	Hosein Hasannejad, Tagi Shahrabi, Hamidreza Jafarian, Hsan Gasemi
P1028	Effect of bias voltage on the electrical properties of ZnO:Al film deposited on organic substrate	Youl-Moon Sung, Min-Woo Park, Dong-Joo Kwak
P1029	Preparation of Molybdenum Oxide Film for Surge Arrester Application by a Magnetic Null Discharge Sputter Method	D. J. Kwak, T. Yuji, Y. M. Sung

Poster - Nanoparticles

P1030	MODIFICATION OF YTTRIUM-IRON-OXIDE NANOPARTICLE FILMS USING INDUCTIVELY-COUPLED PLASMA ANNEALING	Kosuke Takenaka, Yuichi Setsuhara, Hiroaki Nakayama, Hiroya Abe, Kiyoshi Nogi
P1031	Size effect of Ag and Au nanoparticles on surface plasmon resonance	Guang-Jhe Lee, Su-Jien Lin, Chih-Hong Lin, Chih-Song Tsai, Yu-Jen Lu
P1032	SIZE CONTROL OF GOLD NANOPARTICLES FABRICATED WITH DISCHARGE IN REVERSE MICELLE SOLUTIONS	Junko Hieda, Masatomo Oda, Nagahiro Saito, Osamu Takai
P1033	INVESTIGATION CORROSION BEHAVIOR OF TiO ₂ NANOPARTICLE COATING APPLIED WITH SOL-GEL METHOD ON MILD STEEL	Ali Shanaghi, Alireza Sabour Rouha, Taghi Shahrabi, Hamidreza Jafarian, Hassan Ghasemiarmaki
P1034	MECHANICAL MILLING OF NANOPARTICLES UNDER ELECTRIC DISCHARGE	Junichi Noma, Hiroya Abe, Makio Naito, Kosuke Takenaka, Yuichi Setsuhara
P1035	EFFECTS OF COLLECTION REGION ON SYNTHESIS OF IRON OXIDE PARTICLES DURING THERMAL PLASMA PROCESSING	K Suresh , V Selvarajan

Poster - Plasma and Ion Diffusion Treatments

P1036	CHARACTERISTICS OF AUSTENITIC STAINLESS STEEL NITRIDED IN A HYBRID GLOW DISCHARGE PLASMA	Rogério Moraes Oliveira, Mario Ueda, Leide Lili Goncalves Silva, Helfried Reuther, Carlos Mauricio Lepiensi
P1037	Plasma Nitriding of Austenitic Stainless Steel Containing Copper	Motoo Egawa, Nobuhiro Ueda, Takumi Sone, Masato Tsujikawa, Kazuhiro Nakata
P1038	PLASMA NITRIDING TO SELECTIVE LASER SINTERING PARTS WITH SCM430 POWDER	Takayuki Nakamoto, Nobuhiko Shirakawa, Nobuhiro Ueda, Takumi Sone
P1039	X-ray diffraction of a high nitrogen face-centered-cubic phase formed on nitrogen-modified austenitic stainless steel	M. K. Lei, J. Liang
P1040	LAYERED S PHASE STRUCTURE OF LOW TEMPERATURE NITRO-CARBURIZED AUSTENITIC STAINLESS STEEL IN VARIOUS METHAN PARTIAL PRESSURE	Masato Tsujikawa, Motoo egawa, Nobuhiro Ueda, Akira Okamoto, Takumi Sone, Kazuhiro Nakata
P1041	EFFECT OF MOLYBDENUM AND COPPER ON S PHASE LAYER THICKNESS OF LOW TEMPERATURE CARBURIZED AUSTENITIC STAINLESS STEEL	Takumi Sone, Masato Tsujikawa, Motoo Egawa, Akira Okamoto, Nobuhiro Ueda, Kazuhiro Nakata
P1042	CARBURIZING OF LOW MELTING POINT METALS BY PULSED PLASMA ELECTROLYTIC CARBURIZING	Mahmood Aliofkhazraei, Carlos Morillo, Reza Miresmaeili, Alireza Sabour-Rouhaghdam

Poster - Plasma Sources and Diagnostics

P1043	STATE OF ACTIVATED SPECIES IN REMOTE PLASMA	Hongxia Liu, Jierong Chen
P1044	Measurements of H density in H ₂ /Ar and CH ₄ /Ar Inductively Coupled Plasmas Using Conventional Actinometry	Takashi Shibasaki, Masanori Shinohara, Yoshinobu Matsuda
P1045	EFFECT OF ADMIXTURE OF METAL VAPOR ON CATHODE SURFACE TEMPERATURE OF PLASMA TORCH	Shinichi Tashiro, Manabu Tanaka
P1046	The radial electric field profiles of a symmetric surface wave in a coaxial plasma waveguide	Ali Reza Niknam, Ahmad Reza Rastkar, Babak Shokri
P1047	MEASUREMENT OF DROPLET TEMPERATURE OF CONSUMABLE ELECTRODE ARC BY A TWO-COLOUR PHOTOMETRY SYSTEM	Kenji Waki, Manabu Tanaka, Shinichi Tashiro, Kazuhiro Nakata, Keiichi Suzuki, Kei Yamazaki
P1048	Influence of Ar gas flow rate in organosilicon plasma for the fabrication of SiO ₂ :CH thin films by PECVD method	Yongsup Yun, Takanori Yoshida, Norifumi Shimazu, Naoki Nanba, Yasushi Inoue, Nagahiro Saito, Osamu Takai
P1049	MEASUREMENT SYSTEM FOR ARC DISCHARGE AT POWER RELAY CONTACT	Daisuke Haraguchi, Fumiaki Mitsugi, Tomoaki Ikegami
P1050	Application of Thin Films with High Crystal Orientation Using Magnetron Sputtering with Multipolar Magnetic Plasma Confinement Assisted by Inductively Coupled Plasma to Biochip	Atsunori Araki, Keishi Okamoto, Yuki Muraoka, Keishi Kawabata
P1051	ACOUSTIC SPECTRA ANALYSIS OF CREEPING DISCHARGE	Toshiyuki Nakamiya, Kenji Ebihara, Tomoaki Ikegami, Yoshito Sonoda, Ryoichi Tsuda
P1052	RETARDING FIELD ENERGY ANALYSER (RFEA) FOR ION ENERGY MEASUREMENT AT A RADIO-FREQUENCY BIASED SUBSTRATE	David Gahan, Borislav Dolinaj, Mike Brendan Hopkins
P1053	Development of a Collective Thomson Scattering System for Plasmas Produced for EUV Light Sources	Kentaro Tomita, Syunji Araki, Takao Yamada, Taisuke Kagawa, Kiichiro Uchino, Hideki Imamura, Sunao Katsuki, Hidenori Akiyama

Poster - Microplasmas

P1054	TiO ₂ thin film coating on a capillary inner surface by an atmospheric-pressure microplasma	Hiroyuki Yoshiki
P1055	Inner Wall Coating of Narrow Tubes by Scanning Second Harmonic ECR Micro Plasmas	Yuki Nitta, Keishi Okamoto, Tatsuyuki Nakatani, Hiroshi Fujiyama
P1056	SILICON SLICE USING ATMOSPHERIC PRESSURE MICROPLASMA	Hiroto Inui, Hiroto Inui, Takuya Ideno, Hiroyuki Fujiwara, Masuda Atsushi, Michio Kondo, Mineo Hiramatsu, Masaru Hori
P1057	EFFECTS OF GAS BUBBLING ON WATER-SOLUBILIZATION OF CARBON NANOTUBE USING MICROPLASMA GENERATED IN WATER	Kiminobu Imasaka, Yuki Kato, Junya Suehiro
P1058	Generation of Microplasma Jet at Atmospheric Pressure Using a Needle-Waveguide Microwave Plasma Applicator	Seiji Kanazawa, Ryota Daidai, Shuichi Akamine, Toshikazu Ohkubo
P1059	LOW-PRESSURE MICRO PLASMA GENERATION USING MICROWAVE IN A MIRROR MAGNETIC FIELD	Akihiro Yukishige, Hiroshi Fujiyama, Tathuyuki Nakatani, masanori Shinohara
P1060	INNER COATING OF LONG NARROW TUBE BY SCANNING 2 nd HARMONIC ECR MICRO PLASMAS	K. Yan, Y. Nitta, T. Nakatani and H. Fujiyama

Poster - Industrial Applications

P1061	GASOCHROMIC PROPERTY OF Mg-Ni SWITCHABLE MIRROR THIN FILMS ON FLEXIBLE SHEET	shanhu bao, Yasusei Yamada, Kazuki Tajima, Masahisa Okada, Kazuki Yoshimura
P1062	Tribological properties of Cr ₂ N ceramic films with W&C dopants	C S Wu, J S C Jang, Wen Chi Chu
P1063	CHEMICAL CHANGES OF HYDROCARBON COMPOUNDS BY OZONE INJECTION	Yoshihito Yagyu, Yoshihito Yagyu, Nobuya Hayashi, Hiroharu Kawasaki, Tamiko Ohshima, Yoshiaki Suda, Seiji Baba
P1064	SYNTHESIS OF SUPER HARD Ti-B-N NANO-STRUCTURE/NANO-COMPOSITE LAYER SYSTEMS FOR MAGNESIUM AND ALUMINUM DIE CASTING TOOLS MADE BY PLASMA ASSISTED CVD/DUPLEX PROCESS	Klaus S. Klimek, Andreas Gebauer-Teichmann, Kai Hock, Heiko Lange, Kyong-Tschong Rie

P1065	ENHANCEMENT OF WO ₃ THIN FILM SENSOR BY DOPING WITH Ti FOR NOX PREPARED BY PULSED LASER DEPOSITION AND DC SPUTTERING	Md. Mosharraf Hossain Bhuiyan, Fumiaki Mitsugi, Tomoaki Ikegami
P1066	EFFECTIVE ACETONE REMOVAL FROM AIR BY NON-THERMAL PLASMA SYSTEM	Yukako Koshio, Michiya Takahashi, Jin-wei Hu, Shuji Tanabe, Yoshiteru Mizukoshi, Osamu Nakagoe
P1067	PLASMA STEAM REFORMING OF PROPANE FOR PRODUCTION OF HYDROGEN UNDER ATMOSPHERIC PRESSURE	Michiya Takahashi, Yukako Koshio, Jin-wei Hu, Shuji Tanabe, Yoshiteru Mizukoshi, Osamu Nakagoe
P1068	INFLUENCE AND EFFECTS OF GAS FLOW ON THE DEPOSITION OF SIOCN FILMS IN AN INDUSTRIAL SCALE DC GLOW DISCHARGE PLASMA SYSTEM	Thomas Mueller, Andreas Gebeshuber, Christian Forsich, Daniel Heim
P1069	Microstructural and Electrochemical characteristics of cerium oxide coatings obtained by sol-gel on AA5083-H321	Hosein Hasannejad, Tagi Shahrabi, Hamidreza Jafarian, Hasan Gasemi
P1070	Comparing the Microstructural and Electrochemical characteristics of cerium oxide coatings obtained by conversion and sol-gel methods on AA5083-H321	Hosein Hasannejad, Tagi Shahrabi, Hamidreza Jafarian, Hasan Gasemi
P1071	Microstructural and Electrochemical characteristics of cerium oxide coatings obtained by conversion on AA5083-H321	Hosein Hasannejad, Tagi Shahrabi, Hamidreza Jafarian, Hasan Gasemi

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Poster Session 2 (13:30-15:00, Sep. 27)

Poster - Carbon-based Coatings

P2001	Thermal oxidation of Cu-doped diamond-like carbon films synthesized by cathodic arc evaporation	JAO JUI YUN, Han S., Chang L. S., Shih H. C.
P2002	Mechanical Properties and Atomic Structure of DLC Films	Shinji Fujimoto
P2003	THE PROPERTIES OF NANOSCALE DIAMOND-LIKE CARBON FILMS DEPOSITED BY DBD PLASMA GUN AT AN ATMOSPHERIC PRESSURE	Xinchao Bian, Yuefei Zhang, Yabo Fu, Qiang Chen
P2004	PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION OF DLC FILMS ON SI/PMMA	Zeng Lin, Dechun Ba, In-Seop Lee
P2005	CHARACTERIZATION OF DIAMOND-LIKE CARBON PREPARED BY PLASMA DEPOSITION	Somchai Thongtem, Suparut Narksitipan, Titipun Thongtem
P2006	WEAR AND SEIZURE RESISTANCE OF DLC COATINGS UNDER WATER LUBRICATION	Kenji Yamamoto, Hiroataka Ito, Maiko Tokoro, Masabumi Masuko
P2007	CORRELATION BETWEEN THE ELECTRICAL PROPERTIES AND THE XPS C 1s SPECTRA OF THE DIAMOND-LIKE CARBON(DLC) FILMS	Susumu Takabayashi, Keishi Okamoto, Kunihiko Motomitsu, Tatsuyuki Nakatani, Takayuki Takahagi
P2008	Effect of Ion Beam conditions and Interlayer on the Formation of Diamond-like Carbon Films	Jae-In Jeong, Ji-Hoon Yang, Young-Hee Park, Kyoung-Hwang Lee
P2009	HIGH-DENSITY PLASMA PRODUCTION BY CAPACITIVELY COUPLED DISCHARGE WITH MULTI-HOLLOW CATHODE AND SECONDARY ELECTRON EMISSION FOR DLC COATING	Yasunori Ohtsu, Chisa Nakamura, Tatsuya Misawa, Hiroharu Fujita, Morito Akiyama, Tatsuo Tabaru, Ken Yukimura
P2010	Effects of Deposition Conditions on Adhesion of DLC Films Prepared by UBM Sputtering	Morimasa Nakamura, Morimasa Nakamura, Ken-ichi Miura, Takashi Matsuoka, Tomoko Hirayama
P2011	DLC THIN FILMS COATING TO EXTRA FINE WIRE BY QUADRUPOLE MAGNETRON PLASMAS	Shoji Koga, Hiroshi Fujiyama, Tatsuyuki Nakatani, Keiji Okamoto, Yukinobu Tokunaga, Naohisa Iwamoto
P2012	The Synthesis of Conductive Ti-C:H Films on the Stainless Steel Plates by PECVD process	Yong Ki Cho, Woo Soon Jang, Se Hoon Yoo, Sang Gweon Kim, Sung Wan Kim
P2013	TRIBOLOGICAL PROPERTIES OF a-C:H:N THIN FILMS PREPARED USING C ₂ H ₂ AND N ₂ BY CFUBM SPUTTERING METHOD	Yong Seob Park, Hyung Jun Cho, Youn Jea Kim, Byungyou Hong
P2014	Tribological Behaviors of Phase Modulated Carbon Film Synthesized by Magnetron Sputtering	JONG JOO RHA, Yoon Chol Hwang, In Seop Lee, Kwang Ho Kim, Sik Chol Kwon

P2015 ARC JET PLASMA SYNTHESIS OF MICROCRYSTALLINE AND NANOCRYSTALLINE DIAMOND FILMS Chan Min Lee, Jun Seok Nam, Hyeon Seok Lee, Sang Hee Hong

Poster - Nitrides

P2016 Effect of nitrogen flow ratio on the structural and mechanical properties of multi-element nitride coatings by reactive magnetron sputtering Keng-Hao Cheng, Su-Jien Lin, Jien-Wei Yeh

P2017 Effect of cathode arc current and bias voltage on the mechanical properties of CrAlSiN thin films Sun Kyu Kim, Vinh Van Le, Pham Van Vinh, Jae Wook Lee

P2018 Synthesis and Characteristics of TiSi(C,N) Hard Coating by Cathodic Arc Plasma Evaporation Chi-Lung Chang, Tsung-Ju Hsieh, Pi-Chuen Tsai, Wei-Yu Ho, Da-Yung Wang

P2019 Tribological Properties of Cr₂N Ceramic Films with Tungsten Dopant Wen Chi Chu, Jason S C Jang, S M Chiu

P2020 Electronic states and mechanical properties in transition metal nitrides. JAMES KASUMBA

P2021 Electrochemical behavior of TiAlSiN coatings Synthesized by Cathodic Arc Evaporation Weite Wu, Yin-Yu Chang, Sheng-Min Yang, Da-Yung Wang, Dong-Yih Lin

P2022 Chromium nitride coatings produced by physical vapor deposition for anti-abrasive flat stainless steel Aurelia Douard, Magalie Pierre, Fabien Tenailleau, Marie-Helene Berger, Nicolas Maitre, Pascal Aubert, Sid Labdi, Francis Chassagne, Jean-Michel Damasse

P2023 Optimization of Convex Electrode Geometry for Surface Discharge Used for Fabrication of the Electrode Groove on Solar Cells Toshiyuki Hamada, Junichi Arakawa, Tatsuya Sakoda, Masahisa Otsubo, Kazuo Matsui, Kazuo Nagasawa

P2024 SURFACE PROPERTIES OF TiN AND ZrN THIN FILMS DEPOSITED ON ANODIZED TITANIUM Kang Lee, Kang Lee, Han Cheol Choe, Yeong Mu Ko, Sang Won Eun

P2025 Electrochromic Properties of In_{1-x}M_xN Films Deposited by Reactive Ion Plating Hiroki Takeuchi, Hidetaka Takaba, Yasushi Inoue, Osamu Takai

Poster - Nanocomposite and Multilayer Films

P2026 The size effect of oxygen impurities on the hardness of TiN/Si₃N₄ coatings Dayan MA, Shengli MA, Kewei XU

P2027 Mechanical and Corrosion Properties of (Ti,Si)N Coating Synthesized by Cathodic Arc Plasma Evaporation Chi-Lung Chang, Chi-Lung Chang, Chao-Te Lin, Pi-Chuen Tsai, Wei-Yu Ho, Da-Yung Wang

P2028 SYNTHESIS AND CHARACTERIZATION OF MULTILAYER CrN/ZrN THIN FILMS SangYul Lee, MyungGeun Kim, BoYoung Lee, JunHee Hahn

P2029 EFFECT OF Al TARGET POWER ON THE MECHANICAL AND OXIDATION RESISTANCE OF THE CrN/AlN SUPERLATTICE COATINGS SungMin Kim, SangYul Lee, GwangSok Kim, BoYoung Lee, JunHee Hahn

P2030 EFFECT OF SUPERLATTICE PERIODS ON THE MECHANICAL AND THERMAL STABILITIES OF THE AlN/CrN COATINGS BoYoung Lee, EunYoung Kim, SangYul Lee, JunHee Hahn

P2031 Mechanical behaviors of TaN-Cu nanocomposite thin films Jang-Hsing Hsieh, M. K. Cheng, Chuan Li, C. L. Chang, Po-Chun Liu

P2032 adhesion of aluminum oxide film on a polycarbonate : effect of single layer, buffer layer and multilayer. Hun Kim, Kyoung-Hee Nam, Hee-Yong Lee, Dong-Su Jang, Jung-Joong Lee

Poster - Functional Surface Treatments

P2033 ELECTROCHEMICAL PROPERTIES OF MODIFIED CARBON ELECTRODE FOR ELECTRIC DOUBLE LAYER CAPACITOR Daisuke Tashima, Akihiko Sakamoto, Mitsufumi Taniguchi, Tatsuya Sakoda, Masahisa Otsubo

P2034 Studies on the Thin Film Characteristics of A Zr-Based Metallic Glass Fabricated by Magnetron Sputtering Process Chi Wen Chu, J.S C Jang, G J Chen

P2035 SURFACE ACTIVATION OF OXIDE CERAMICS WITH HYDROGEN PLASMA IRRADIATION Tatsuo Ishijima, Yuuya Yamaguchi, Hideo Sugai

P2036 TiN/Cr/Al₂O₃ AND TiN/Al₂O₃ HYBRID COATINGS STRUCTURE FEATURES AND PROPERTIES RESULTING FROM COMBINED TREATMENT Alexander dmitrievich Pogrebnjak, Yuliya Kravchenko

P2037	EFFECT OF SURFACE MODIFICATION OF CARBON ELECTRODE FOR ELECTRIC DOUBLE LAYER CAPACITOR USING DIELECTRIC BARRIER DISCHARGE	Masatoshi Esaki, Masatoshi Esaki, Toshiyuki Hamada, Daisuke Tashima, Tatsuya Sakoda, Masahisa Otubo
P2038	MIGRATION AND PROLIFERATION OF CHONDROCYTES ON SILK FILM TREATED TO ARGON PLASMA	Soo Chang Jin, Hyun Sook Baek, Yeon I Woo, Mi Hee Lee, Young Hwan Park, Dong Kyun Rah, Jong Chul Park
P2039	OBSERVATION OF CHONDROGENIC EFFECT ON ELECTROSPUN THREE-DIMENSIONAL SILK FIBROIN SCAFFOLD TREATED MICROWAVE-INDUCED ARGON PLASMA	Hyun Sook Baek, Young Hwan Park, Shang Seok Ki, Jong- Chul Park, Dong Kyun Rah
P2040	SUPER HYDROPHOBIC BEHAVIOR ON THE NANO-SCALE DUAL ROUGH SURFACE ASSISTED WITH a-C:H:Si:O COATING	Tae-Young Kim, Myoung-Woon Moon, Bialuch Ingmar, Klaus Bewilogua, Kwang-Ryeol Lee
P2041	MODIFICATION OF DC PLASMA TORCH NOZZLE FOR REACTIVE SPRAY COATING	Subramaniam Yugeswaran, Venkatasamy selvarajan

Poster - Pulsed Plasma Processing

P2042	STRUCTURE, MECHANICAL AND THERMAL PROPERTIES OF Zr-Al-Y-N AND Zr-Al-Y-O-N THIN FILMS	Martin Moser, Nezameddin Fateh, Paul Heinz Mayrhofer
P2043	CATHODE SPOT CRATERS IN PULSE VACUUM ARC CLEANING OF METAL SURFACE OXIDE LAYER	Yusaku Arai, Koichi Ishizaka, Masaya Sugimoto, Shigeaki Sugiyama, Koichi Takeda
P2044	Doping of Silicon by Pulsed Inductively-coupled Plasma	Won-Jun Lee, Won-Jun Lee, Youn-Seoung Lee, Sa-Kyun Rha, Young-Jong Lee, Seunghee Han
P2045	INVESTIGATION OF MICROCRATERS FORMATION ON A SURFACE OF STEELS AT IRRADIATION BY PULSED HIGH CURRENT ELECTRON BEAM	Sergey V. Grigoryev, Yulia A. Kolubaeva, Anton D. Teresov
P2046	SURFACE TREATMENT OF CARBIDE ALLOYS BY PULSED LOW ENERGY HIGH CURRENT ELECTRON BEAM IRRADIATION	Sergey V. Grigoryev, Vladimir N. Devyatkov, Yury F. Ivanov, Nikolay N. Koval, Kensuke Uemura
P2047	ELECTRON-ION-PLASMA TREATMENT OF ARMCO IRON	Sergey V. Grigoryev, Yury F. Ivanov, Nikolay N. Koval, Yulia A. Kolubaeva, Anton D. Teresov
P2048	DISCHARGE CHARACTERISTICS OF TITANIUM ELECTRODE ECCENTRIC PULSED ARC ELECTROHYDRAULIC DISCHARGE REACTOR	Tomohiro Ikeda, H O Li, K Teii, J S Chang
P2049	Probe Measurement of Shunting Arc Discharge Plasma under the low gas pressure	Tatsuya Misawa, Youei Matsumoto, Yasunori Ohtsu, Hiroharu Fujita, Ken Yukimura
P2050	STUDY OF PULSED PLASMA ELECTROLYTIC CARBONITRIDING OF A NI-BASE SUPERALLOY	Saeed Behrouzghaemi, Mahmood Aliofkhaezrai, Alireza Sabour Rouhaghdam, Amir Abdollah-Zadeh
P2051	STUDY OF PULSED CURRENT EFFECTS ON WEAR RESISTANCE OF PULSED PLASMA ELECTROLYTIC CARBONITRIDED 316L AUSTENITIC STAINLESS STEEL	Mahmood Aliofkhaezrai, Carlos Morillo, Reza Miresmaeili, Alireza Sabour-Rouhaghdam
P2052	A NOVEL PULSING METHOD FOR THE ENHANCEMENT OF THE DEPOSITION RATE IN HIGH POWER PULSED MAGNETRON SPUTTERING	Sang-Hun Seo, Jung-Hwan In, Hong-Young Chang

Poster - Plasma Sources and Diagnostics

P2053	PREDICTION OF WAFER CHUCK POSITION EFFECT ON HEMISPHERICAL INDUCTIVELY COUPLED PLASMA USING NEURAL NETWORK	Soo Youn Kim, Soo Youn Kim
P2054	Investigation of the Change of Electron Density and FTIR measurements by Photodissociation in the BTMSM/Ar Discharge	Won Bong Jung, Hyun Su Jun, Chi Kyu Choi, Hong Young Chang
P2055	Cluster-like mechanism of layers growth during Impulse Plasma Deposition (IPD)	Krzysztof Zdunek
P2056	VARIATION OF THE ELECTRICAL CHARACTERISTICS DURING ARCING AND THE DEVELOPMENT OF ARCING DETECTOR IN RF DISCHARGES	Yonghoon Kim, Sangwon Lee, Sanghun Seo, Hongyoung Chang

Poster - Modeling and Analysis

P2057	HEAT TRANSFER ANALYSIS IN PLASMA SPRAYING PROCESS BY MESHLESS LOCAL PETROV-GALERKIN METHOD	Wu Sheng-chuan, Zhang Hai-ou, Wang Gui-lan, Xia Wei-sheng
P2058	NUMERICAL INVESTIGATION OF GRADIENT COMPOSITION FORMATION DURING PLASMA DEPOSITION MANUFACTURING COMPOSITE MATERIAL PARTS	fan-rong kong, hai-ou zhang, gui-lan wang

P2059	SIMPLE MODEL FOR FRACTION ESTIMATE OF γ -Fe ₂ N ₃ AND ϵ -Fe ₃ N ₂ -IRON NITRIDE IN COMPOUND LAYER USING X-RAY DIFFRACTION	Yoon Kee Kim
P2060	EXPERIMENTS AND MODELLING OF REACTIVE SPUTTERING USING TWO REACTIVE GASES AND TWO TARGETS	Tomas Kubart, David Huy Trinh, Lina Liljeholm, Lars Hultman, Hans Hogberg, Tomas Nyberg, Soren Berg
P2061	NUMERICAL SUMIRATION OF METAL VAPOR BEHAVIOR IN ARC PLASMA	Kentaro Yamamoto, Manabu Tanaka, Sinichi Tashiro, Kazuhiro Nakata, Keiichi Suzuki, Kei Yamazaki
P2062	WAVE ANALYSIS AND FLUID MODELING OF MICROWAVE PLASMAS USING MSP ANTENNA	Akihiro Tsuji, Yasuyoshi Yasaka
P2063	ANALYSIS OF MICROSCOPIC COLLISION PROCESSES AT THE GAS-SOLID INTERFACE IN PLASMA OF SPUTTERING SYSTEM	Nariaki Imamura, Hailong Yu, Masakatsu Mabuchi, Mituomi Yamaguchi, Koza Obara
P2064	THE INFLUENCE OF ON-STAGE CONTROL PARAMETERS FOR THE FIB DEPOSITION PROCESS	Joon Hyun Kim, Youn-Jea Kim
P2065	FORMATION PROCESSES OF ZINC LATTICE DEFECTS WITH EXCITED 3d-STATES DUE TO SURFACE EXCITATION MECHANISM	Mitsuomi Yamaguchi, Yutaka Oiwane, Yuki Uchino, Chen Xing Kai, Mitsugu Hamasaki, Koza Obara
P2066	INCIDENT ELECTRON ENERGY DEPENDENCE OF ELECTRONIC AND CRYSTAL LATTICE STRUCTURES INDUCED BY THE ELECTRON EXCITATION OF THE INNER CORE ELECTRONS OF ZINC ATOMS	Koza Obara, Yutaka Oiwane, Mitsuomi Yamaguchi, Yuki Uchino, Chen Xing Kai, Masumi Obara
P2067	Mathematical models and preparation of composed high energy ion beam assisted deposition concentration profiles	Frantisek Cerny, Svatava Konvickova, Rudolf Stefec, Vladimir Hnatowicz
P2068	Dynamic Simulation of Secondary Electron Emission and Charging Up of an Insulating Material	Kaoru Ohya, Kaoru Ohya, Kensuke Inai, Hideaki Kuwada, Teruyuki Hayashi, Misako Saitoh

Friday, September 28, 2007

13:30

Poster Session 3 (13:30-15:00, Sep. 28)

Poster - Oxides

P3001	LOW TEMPERATURE PREPARATION OF PHOTOCATALYTIC ANATASE TiO ₂ FILMS BY INDUCTIVELY COUPLED PLASMA CHEMICAL VAPOR DEPOSITION	H. Y. Lee, D. S. Jang, Hun Kim, J. J. Lee
P3002	SURFACE REACTION OF Na _{0.5} K _{0.5} NbO ₃ THIN FILMS ETCHING IN INDUCTIVELY COUPLED PLASMA	Chang-Il Kim, Gwan-Ha Kim, Kyoung-Tae Kim, Jong-Gyu Kim
P3003	EFFECT OF OXYGEN ION BEAM CONDITIONS ON OXIDE COATINGS DEPOSITED ON MAGNESIUM ALLOY	Young-hee Park
P3004	MEASUREMENT OF PLASMA PLUME PROPERTIES DURING PULSED LASER DEPOSITION OF OXIDE THIN FILMS	Tamiko Ohshima, Shinpei Ikeda, Tsutomu Yoshida, Yoshihito Yagyū, Hiroharu Kawasaki, Yoshiaki Suda
P3005	Effect of Nozzle Shape on High Velocity Oxygen-Fuel (HVOF) Thermal Spray	Youn-Jea Kim, Jae-Sang Baik, B. Hong, J.-H. Boo

Poster - Oxide Electronics

P3006	Sputter-Deposition of Aluminum-Doped Zinc Oxide Thin Films by Inductively Coupled Plasma Assisted Magnetron Sputtering	Yoshinobu Matsuda, Shiro Iwai, Masanori Shinohara
P3007	Electrical and optical properties of undoped p-type ZnO films	Kyoung-Hee NAM, Hun Kim, Heeyong Lee, Jungjoong Lee, Donghoon Han
P3008	SPECTROSCOPIC MEASUREMENT OF PLASMA PLUME PRODUCED BY LASER ABLATION OF METAL OXIDE	Norihiro Sakai, Yoshihiro Umeda, Fumiaki Mitsugi, Tomoaki Ikegami
P3009	Synthesis of nano-sized tin oxide powder by argon plasma jet at atmosphere	Ji Hyoen Im, Ji Hyoen Im
P3010	Fabrication of the ZnO films using wet/dry chemical etching processes on application for organic light emitting diode (OLED) devices.	DONGGEUN YOO, S. H. Jeong, D.-Y. Kim, N.-E. Lee, B. Hong, Y. J. Kim, D. Jung, J.-H. Boo

P3011	Deposition of Al-doped and Al, Sc-codoped zinc oxide films from the targets of ZnO and Al-xSc (x=0, 0.4, 0.8 and 1.7 wt%) sputtered by RF and DC	Jing-Chie Lin, Kun-Cheng Peng, C. A. Tseng, Sheng-Long Lee
P3012	PROPERTIES OF GALLIUM DOPED ZINC OXIDE FILMS DEPOSITED USING VARIOUS GZO TARGETS BY RF OR DC MAGNETRON SPUTTERING	Sang Eun Park, Jin Ho Lee, Pung Keun Song
P3013	EFFECT OF ANNEALING ENVIRONMENT ON OPTICAL AND ELECTRICAL PROPERTIES OF SOL-GEL DEPOSITED ZnO:Al THIN FILMS	Viet Ngoc Nguyen, Viet Ngoc Nguyen, Binh Khac Le, Chien Mau Dang
P3014	The characteristics of ZnO film deposited by dc magnetron sputtering depending on the O ₂ partial pressure variation	Doohoon Song, Minjong Keum, Kyoungsik Shin, Kabseog Kim, Jeongeun Han
P3015	The electrical properties of ITO film with the change of thickness	Dong-Hoon Choi, Min J. Keum, Kyung S Shin, A R Jeon, Kyo Y Lee, Kab S Kim, Jeon G Han
P3016	A study of Sn content effect on electro-chemical properties of Ir-Sn-O coatings deposited by unbalanced magnetron sputtering	SungDae Kim, SangSik Kim, EunSil Lee, Jae-Hwan Choi

Poster - Functional Coatings for Electronics

P3017	ALL-SOLID-STATE SWITCHABLE MIRROR ON FLEXIBLE SHEET	Kazuki Tajima, Yasusei Yamada, Shanhu Bao, Masahisa Okada, Kazuki Yoshimura
P3018	CHARACTERIZATION OF MONOS NONVOLATILE MEMORY ON GLASS BY SOLID PHASE CRYSTALLIZATION FOR DISPLAY	Zhenghai Jin, Sungwook Jung, Sunghyun Hwang, Kyungsoo Jang, Jungin Lee, Kwangsoo Lee, Hyungjun Park, Jaehong Kim, Hyukjoo Son, Junsin Yi
P3019	OPERATION CHARACTERISTICS OF MONOS NONVOLATILE MEMORY USING SILICON NITRIDE OXIDE TUNELLING LAYER ON GLASS SUBSTRATE	Nguyen Thanh Nga, Sungwook Jung, Sunghyun Hwang, Kyungsoo Jang, Jungin Lee, Kwangsoo Lee, Hyungjun Park, Jaehong Kim, Hyukjoo Son, Junsin Yi
P3020	Quantifying strain effects in physical properties of colossal magnetoresistive La _{0.68} Ba _{0.32} MnO ₃ epilayers and heterostructures	Yuan-Chang Liang, Yung-Ching Liang
P3021	NANOHARDNESS AND RESISTIVITY OF Au AND Au-V SOLID SOLUTION THIN FILMS SPUTTERED ON Si WAFERS	Suparut Narksitipan, Thirumalesh Bannuru, Walter L Brown, Richard P Vinci, Somchai Thongtem
P3022	Reactive sputtering deposition of a-V ₂ O _{5-z} on flexible PET/ITO substrates for Electrochromic Devices	Yung-Sen Lin, Chung-Wei Tsai
P3023	EFFECT OF SP ² CARBON PHASE ON ELECTRICAL PROPERTIES OF NITROGEN-DOPED NANODIAMOND FILMS	Tomohiro Ikeda, Koji Takeguchi, Kungen Teii
P3024	EFFECT OF PRETREATMENT CONDITIONS ON THE PROPERTIES OF NANOCRYSTALLINE DIAMOND FILMS	C. M. Liu, T. L. Sung, K. Ting, S. Teii, K. Teii
P3025	TOP-EMITTING ORGANIC LIGHT-EMITTING DIODES BASED-ON SEMI-TRANSPARENT CONDUCTING CATHODE OF BA/AL	Jong Tae Lim, Geun Young Yeom
P3026	HYDROGEN BARRIERS FOR BLT THIN FILM USING ZnO ELECTRODE	Kyoung-Tae Kim, Jong-Chang Woo, Gwan-Ha Kim, Jong-Gyu Kim, Chang-Il Kim
P3027	THE OPTICAL, MECHANICAL, ELECTRONIC PROPERTIES OF ORGANIC-INORGANIC HYBRID LOW-K THIN FILMS BY PECVD	Sang Jin Cho, In-Seob Bae, H.J. Cho, B. Hong, Jin-Hyo Boo
P3028	Wet Chemical Etching Process of Silicon Carbide Thin Films for MEMS	Sang-Hun Nam, Jea-Sung Hyun, Jin-Hyo Boo
P3029	Discharge power dependence of generation rate H atom in H-assisted plasma CVD	Jun Umetsu, Kazunori Koga, Masaharu Shiratani
P3030	Effect of interfacial layer using LiF on the impedance characteristics of organic light emitting diodes	Hyungjun park, Jin Zheng Hai, Sungwook Jung, Nguyen Van Duy, Jeoungin Lee, Kwangsoo Lee, Keunhee Park, Eunkyoun Nam, Donggeun Jung, Junsin Yi
P3031	Characteristics of silicon nanoparticles prepared by the pulsed ion beam evaporation (IBE)	Chul-Hong Lee, Sang-Min Yun, Byoung-Jung Choi, Sung-Chae Yang
P3032	Application of PVD coatings for developing an environmentally compatible DSA-type electrode	SangSik Kim, SungDae Kim, Jae-Hwan Choi
P3033	ANISOTROPIC Nd-Fe-B THICK FILM MAGNETS PREPARED ON VARIOUS SUBSTRATES	Masaki Nakano, H. Takeda, F. Yamashita, J. Fidler, T. Yanai, H. Fukunaga

Poster - Electronics Device Processing

P3034	ELECTRICAL CHARACTERISTICS OF ULTRATHIN SILICON OXYNITRIDE FILMS DEPOSITED BY PLASMA-ASSISTED OXYNITRIDATION	Sungwook Jung, Sunghyun Hwang, Kyungsoo Jang, Kwangsoo Lee, Jungin Lee, Hyungjun Park, Jaehong Kim, Hyukjoo Son, Suresh Kumar Dhungel, Junsin Yi
P3035	Comparison of BF_2^+ with B^+ Low Energy Ion Implantation into Si (100)	Sa-Kyun Rha, Sa-Kyun Rha, Kee-Man Kim, Youn-Seoung Lee, Young-Jong Lee
P3036	Barrier properties of TaN films synthesized by CFUBMS for electronic device applications	Tae joon Byun, Ho young Lee, Sung il Kim, Kab seog Kim, Jeon geon Han
P3037	ELECTRICAL CHARACTERIZATION OF LOW-k FILMS WITH NANO-PORE STRUCTURE PREPARED WITH HMDSO/ O_2 PRECURSORS	Chang Young Kim, R Navamathavan, Heon Ju Lee, Chi Kyu Choi
P3038	Dielectric properties of post-annealed low-k $\text{SiOC}(-\text{H})$ films prepared by using plasma enhanced chemical vapor deposition from DMDMS/ O_2 precursors	An Soo Jung, R Navamathavan, Kwang Man Lee, Chi Kyu Choi
P3039	Surface Morphology of Silicon Oxide Barrier Thin Films on PET	A R, Jeon
P3040	RADICAL OXIDATION EFFECTS ON THRESHOLD-VOLTAGE DISTRIBUTION CHARACTERISTICS IN NOR FLASH FINFET CELLS	Dong Hwan Kim, Eung Kwon Kim, Jin Hong Kim, Joon Tae Song
P3041	REDUCTION OF OXIDE LEAKAGE CURRENTS AT SHALLOW TRENCH ISOLATION CORNERS USING SACRIFICIAL OXIDE/LINER SIN/LPCVD MTO	Min Sung Kim
P3042	Selective copper electroless plating and adhesion improvement for micro-scale metallization on plasma-pretreated polyimide substrate	J. H. Kim, H. W. Kim, Y. G. Seol, N.-E. Lee
P3043	FORMATION AND COMPARISON OF VARIOUS METAL-SILICIDE AND -GERMANIDE FILMS FOR HIGH PERFORMANCE TRANSISTER APPLICATIONS	K. Park, C. H. Ahn, M. S. Lee, E. J. Jung, D.-H. Ko and H. KIM

Poster - Polymer Processes

P3044	Preparation of composite membranes by plasma deposited polymerization and membranes separation characteristics	Dung Thi Tran, Shinsuke Mori, Daisuke Tsuboi, Masaaki Suzuki
P3045	EFFECTS OF $\text{He}/\text{O}_2/\text{NF}_3$ ATMOSPHERIC PRESSURE PLASMA ON THE ADHESION OF Cu/Cr FILMS ON POLYIMIDE	Yoon Kee Kim, Su Bin Lee
P3046	PLASMA POLYMER COATING IN A TRIODE GLOW DISCHARGE	Minoru Kusabiraki, Atsushi Tamura
P3047	EFFECT OF ELECTRON BEAM IRRADIATED WITH ALTERATION OF AMOUNT OF IRRADIATION ON THE MECHANICAL CHARACTERISTICS OF THE UHMWPE	Jung-sung Kim, Dohyun Lim, Mi Hee Lee, Yong Sik Kim, Kwon-Young Lee, Jong-Chul Park
P3048	SURFACE MODIFICATION OF POROUS POLY(LACTIDE-CO-GLYCOLIDE) SCAFFOLD BY TREATMENT WITH NITROGEN ION BEAM	Insup Noh, Yoon Jeong Choi, Mi-Sook Kim, Hyunju Lee, Hyun Ki Kang
P3049	HYDROPHILIC SURFACE FORMATION OF ION IMPLANTED POLYETHYLENE TEREPHTHALATE	Jae S. Lee, Bom Som. Kim, Chan Y. Lee
P3050	STUDY ON IN-ZN-SN-O AND IN-SN-ZN-O FILMS DEPOSITED ON PET SUBSTRATE BY MAGNETRON CO-SPUTTERING SYSTEM	Dong Yeop Lee, Sang Chul Lee, Gun Hwan Lee, Pung Keun Song
P3051	Surface Modification of Polyimide Using Ion Beam	Sung H. Kim, Youn J. Kim, Su B. Jin, Yong M. Kim, Kab S. Kim, Jeon G Han
P3052	INTRODUCTION OF CARBOXYL GROUP ONTO POLYSTYRENE SURFACE USING PLASMA TECHNIQUES	Yasushi Sasai, Natsuko Matsuzaki, Shin-ichi Kondo, Masayuki Kuzuya
P3053	Improvement in adhesion properties of low density polyethylene with low-temperature plasma treatment	Siamak Moradian, Maryam Ataefard, Mojtaba Mirabedini, Morteza Ebrahimi, Said Asiaban
P3054	Surface Morphology and Wettability of Poly(ethelene terephthlate) Films Modified by Oxygen Capacitively Coupled RF Plasma	Y. Liu, M. K. Lei

Poster - Large-area Plasmas

P3055	EFFECTS OF ANTENNA SHAPES ON DISCHARGE PROFILES OF INTERNAL-ANTENNA-DRIVEN INDUCTIVELY-COUPLED PLASMAS	Kosuke Takenaka, Takashi Sera, Yuichi Setsuhara, Akinori Ebe
P3056	UNIFORMITY OF 500-MM CYLINDRICAL PLASMA SOURCE SUSTAINED WITH MULTIPLE LOW-INDUCTANCE ANTENNA UNITS	Kosuke Takenaka, Daisuke Tsukiyama, Yuichi Setsuhara, Kazuaki Nishisaka, Akinori Ebe
P3057	PRODUCTION OF ONE-METER-SQUARE LARGE-AREA SURFACE WAVE PLASMA WITH PARALLEL LINEAR ANTENNAS	Yudai Takanishi, Hirotaka Endo, Tatsuo Ishijima, Hirotaka Toyoda, Hideo Sugai
P3058	INTERNAL LINEAR INDUCTIVELY COUPLED PLASMA SOURCE USING PARALLEL TYPE ANTENNA FOR THE FLAT PANEL DISPLAY PROCESSING	JongHyeuk Lim, JungGuen Park, KyongNam Kim, GeunYoung Yeom

Poster - Wear and Corrosion Resistance

P3059	Engineering and Design of Wear and Corrosion Resistant PVD coatings for Magnesium Alloys	Holger Hoche, Christina Berger
P3060	EFFECT OF DOUBLE Mo-W, W ₀ -Zr ION IMPLANTATION ON PHYSICAL, CHEMICAL AND MECHANICAL PROPERTIES OF TITANIUM ALLOYS VT-6 and VT-22	Alexander Dmitrievich Pogrebnjak, Vyacheslav Serafimovich Rusakov, Vladimir Vladimirovich Uglov, Ol'ga Petrovna Kul'ment'eva, Nazgul Erdybaeva, Boris Petrovich Gritsenko
P3061	Investigation of Corrosion Properties of Magnesium Alloys Treated by Plasma Electrolytic Oxidation Process with DC/Pulse Plating	Jae-Ho Lee, Min-Woo Kang
P3062	PROTECTIVE SURFACE OF Mg-Li ALLOY BY LOW PRESSURE THERMAL SPRAYING OF ALUMINUM	Taiki Morishige, Masato Tsujikawa, Sachio Oki, Shin-ichiro Adachi, Takumi Sone, Kazuhiro Nakata
P3063	ELECTROCHEMICAL PROPERTIES OF THE TIN COATINGS ON PREVIOUSLY ANODIZED Ti-xNb ALLOY SUBSTRATE	Seung Hyeon Jang, Seung Hyeon Jang, Yeong Mu Ko, Han Cheol Choe, Gwon Seung Yang
P3064	MICROSTRUCTURE AND ELECTROCHEMICAL PROPERTIES OF TiN THIN FILMS DEPOSITION ON ANODIZED Ti-30Ta-xZr ALLOYS.	Yeong Mu Ko, Yeong Mu Ko, Kang Lee, Han Cheol Choe, Su Jung Park
P3065	TITANIUM ALLOY -BASED COMPOSITE COATINGS BY HVOF AND PLASMA SPRAY TECHNIQUES	Jenny Hung, Yu Lung Chiu, Jing Liang
P3066	CORROSION RESISTANCE AND ADHESION PROPERTIES OF ZN-MG THIN FILMS PREPARED BY PVD METHOD	M.H.Lee, I.Y.Bae, J.I.Jung, T. Y. Kim, Y. J. Kwak
P3067	INFLUENCE OF INTERLAYERS ON CORROSION RESISTANCE OF ION-PLATED MG THIN FILMS	M. H. Lee, J.D.Kim, K.M.Moon, J.H.Yang, S.M.Back

Saturday, September 29, 2007

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Poster Session 4 (13:40-15:10, Sep. 29)

Poster - Atmospheric-pressure Plasmas and Processing

P4001	CHARACTERIZATION OF ATMOSPHERIC PRESSURE AIR BUNDLE MICROPLASMA GENERATED BETWEEN NANOPOROUS ALUMINA DIELECTRIC	Myeong Yeol Choi, Jin Hoon Cho, Il Gyo Koo, Myeong Yeol Choi, Young Dong Park, Woong Moo Lee
P4002	SURFACE TREATMENT BY SLOT MICROPLASMA IN ATMOSPHERIC PRESSURE AIR	Myeong Yeol Choi, Jin Hoon Cho, Il Gyo Koo, Myeong Yeol Choi, Jong Hoon Kim, Young Dong Park, Woong Moo Lee
P4003	Decomposition of PFCs by steam plasma at atmosphere pressure	Dong-yun Kim, Dong Wha Park
P4004	Surface Functionalization of PTFE Sheet through Atmospheric Pressure Plasma Liquid Deposition Approach	Nobuyuki Zettsu, Hiroto Itoh, Kazuya Yamamura
P4005	DEPOSITION OF SiO ₂ THIN FILM BY ATMOSPHERIC PRESSURE PLASMA FOR THE DIFFUSION BARRIER COATINGS OF FLEXIBLE DISPLAYS	J. H. Lee, Thuy T. T. Pham, I. K. Kim, J. T. Lim, S. J. Kyung, G. Y. Yeom
P4006	STUDY OF THE AMORPHOUS SILICON TO SILICON NITRIDE ETCH SELECTIVITY MECHANISM USING PIN TO PLATE DIELECTRIC BARRIER DISCHARGE IN ATMOSPHERIC PRESSURE PLASMA	SeJin Kyung, JaeBeom Park, JuneHee Lee, GeunYoung Yeom

P4007	ATMOSPHERIC LINE REMOTE PLASMA SOURCE FOR SURFACE TREATMENT	Wataru Kumagai, Hidekazu Miyahara, Eiki Hotta, Akitoshi Okino
P4008	Temperature behavior of Atmospheric-Pressure Non-equilibrium Microwave Discharge Plasma Jets for PEN-Surface Processing	Toshifumi Yuji, Toshifumi Yuji, Shuitsu Fujii, Raju Ramasamy, Hiroshi Akatsuka, Youl-Moon Sung
P4009	MULTI-GAS HIGH PURITY PLASMA SOURCE FOR REDUCE TO ATMOSPHERIC PLASMA PROCESSING	Hidekazu Miyahara, Taichi Kageyasu, Wataru Kumagai, Kazuyasu Takimoto, Eiki Hotta, Ryuichi Shimada, Akitoshi Okino
P4010	PCB De-smear by H ₂ O Plasma	TALUN SUNG, Chung-Ming Liu, Kuen Ting, Shinriki TEII

Poster - Nanocarbon Materials

P4011	EFFECT OF LASER IRRADIATION ON CARBON NANOTUBE FILMS FOR NO _x GAS SENSOR	Tsuyoshi Ueda, Sadayuki Katsuki, Fumiaki Mitsugi, Tomoaki Ikegami, Toshiyuki Nakamiya
P4012	INFLUENCE OF CATALYST MORPHOLOGY ON GROWTH OF VERTICALLY ALIGNED MULTI-WALLED CARBON NANOTUBES	Fumiaki Mitsugi, Narges Heidari, Tsuyoshi Ueda, Tomoaki Ikegami
P4013	Radical Density Measurements in VHF C ₂ F ₆ /H ₂ Plasma with Radical Injection CVD Used for Carbon Nanowall Fabrication	Satoru Kato, Hajime Sasaki, Sego Takasima, Koji Yamakawa, Mineo Hiramatsu, Masaru Hori
P4014	Continuous Synthesis of Carbon Nanoclusters Using Well-Controlled Thermal Plasmas	Tsuyoshi Ohishi, Yuichi Yoshihara, Osamu Fukumasa
P4015	Effects of plasma surface conditions on the growth of single-walled carbon nanotubes with diffusion plasma CVD	Toshiaki Kato, Rikizo Hatakeyama
P4016	SYNTHESIS OF CARBON NANOTUBES ON DIAMOND-LIKE CARBON BY MICROWAVE PLASMA ENHANCED CHEMICAL VAPOR DEPOSITION	Won Seok Choi, Eun Chang Choi, Jae-Hyeoung Lee, Byungyou Hong
P4017	FABRICATION OF SINGLE-WALLED CARBON NANOTUBE FILM WITH SELF-ASSEMBLED CONICAL TIPS USING MICROWAVE PLASMA-ENHANCED CVD	Takahiro Deguchi, Mineo Hiramatsu, Masaru Hori
P4018	PATTERN TRANSFER OF CARBON NANOWALL INTO SiO ₂ FILM	Akio Noda, Mineo Hiramatsu, Masaru Hori
P4019	Preparation of Oxygenated Fullerene Film and its Photoelectrical Properties	Wook Cho, Sung-Chae Yang
P4020	PREPARATION AND CHARACTERIZATION OF CNT BASED GAS SENSOR BY USING PLD ASSISTED ORGAN-METAL CATALYTIC SOURCE METHOD	S. Aouki, T. Ueda and T. Ohshima, T. Sakai

Poster - Amorphous and microcrystalline Si

P4021	LARGE AREA SiH ₄ /H ₂ VHF PLASMA PRODUCED AT HIGH PRESSURE USING MULTI-ROD ELECTRODE	Yasuhiro Yamauchi, Yasuhiro Yamauchi, Yoshiaki Takeuchi, Hiromu Takatsuka, Yuichi Kai, Hiroshi Muta, Yoshinobu Kawai
P4022	EFFECT OF HYDROGEN RADICALS ON SILICON CHEMICAL SPUTTERING WITH ARGON-HYDROGEN MIXTURE GAS	Kota Fukaya, Koichi Sasaki, Akimori Tabata, Hirotaka Toyoda, Hideo Sugai
P4023	Effect of biasing on the properties of silicon thin films during the deposition by plasma enhanced chemical vapor deposition	Hyoung-Cheol Lee, Hong-Bum Kim, Geun-Young Yeom
P4024	CONTROL OF CLUSTER AMOUNT IN A-SI:H FILMS USING MULTI-HOLLOW DISCHARGE PLASMA CVD	Hiroomi Miyahara, William Makoto Nakamura, Kazunori Koga, Masaharu Shiratani
P4025	Interface structures of microcrystalline silicon films deposited with inductively coupled plasmas using internal low-inductance antenna units	Hirokazu Kaki, Eiji Takahashi, Tsukasa Hayashi, Kiyoshi Ogata, Akinori Ebe, Yuichi Setsuhara

Poster - Barrier and Protective Coatings

P4026	OXIDATION TUNING OF Cr-Al-N COATINGS BY INCORPORATION OF YTTRIUM	Florian Rovere, Paul H. Mayrhofer, Reinhold Braun
P4027	THERMAL STABILITY OF REFRACTORY CERAMIC-COATED INCONEL 617	Byeong Woo Lee, D.W. Kim, J.W. Choi, H.J. Jeong, G.H. Lee, H. Cho
P4028	INTERACTION BETWEEN TOOL COATINGS AND RICH COPPER MATERIALS	Mingdong Bao, Xuebo Xu, Jinfu Xu, Jiawen He, Hailin Sun, D.G. Teer

P4029	A Study on Laser Surface Modification of CoNiCrAlY/ZrO ₂ -8wt%Y ₂ O ₃ Thermal Barrier Coating by Plasma Spray Method	Jin Hyo Park, Jeong Suk Kim, Koo Hyun Lee, Yo Seung Song
P4030	A STUDY ON MICROSTRUCTURE AND OXIDATION BEHAVIOR OF ALUMINIDE COATING MODIFIED BY PRELIMINARY NI-COATING ON IN738LC	Hamidreza Jafarian, Alireza Sabourrouhghdam, Hasan Ghasemiarmaki
P4031	A STUDY ON MICROSTRUCTURE AND CYCLIC OXIDATION BEHAVIOR OF ALUMINIDE COATING ON TI-47AL-2CR	Hamidreza Jafarian, Alireza Sabourrouhghdam, Hasan Ghasemiarmaki
P4032	Microstructure and Thermal Cyclic Performance of Laser-glazed Plasma-sprayed Ceria-yttria Stabilized Zirconia Thermal Barrier Coatings	Pi Chuen Tsai, Jiing-Herng Lee, Chi-Lung Chang
P4033	Comparative Studies on Mechanical Properties and Cutting Performance of CrN and Cr-Si-N Coated Micro End-Mill Tool by a Hybrid Coating Method	Myung Chang Kang, Dong Hee Kwon, Jeong Suk Kim, Kwang Ho Kim, Kwang Ryul Kim, Young Keun Jeong
P4034	SiOxNy AS DIFFUSION-BARRIER THIN FILMS DEPOSITED AT LOW TEMPERATURE BY PECVD	Thuy Thi Thu Pham, J. H. Lee, I. K. Kim, G. Y. Yeom
P4035	High temperature oxidation of CrAlSiN thin film	Dong Bok Lee, Chan Woo Kim, Sun Kyu Kim
P4036	Effect of Coolant Strategy on Tool Performance in High-Speed End-Milling of AISI D2 Cold-Worked Die Steel (62 HRC) by Coated Carbide Tools	Suk Hoon Shin, Myung Chang Kang, Jeong Suk Kim, Bo Sung Shin, Ji Hwan Yun, Kwang Ho Kim
P4037	THERMAL OXIDATION BEHAVIOR OF CERAMIC COATED Ni-Cr-BASE SUPERALLOYS	Hyun Cho, Dong Myung Lee, Jun Hee Lee, Kwang Hyun Bang, Byeong Woo Lee
P4038	A Comparative Study on Mechanical Properties and Cutting Performance of CrN-based Multi-Component Coated Micro Drill by Hybrid Coating Method	Soon kyu Je, Myung Chang Kang, Young Keun Jeong, Kwang Ho Kim, Sung Hak Cho
P4039	CHARACTERIZATION OF THE REACTIVE SPUTTERING PROCESS USING A TUNGSTEN TARGET AND TWO REACTIVE GASES	Nuno M.G. Parreira, Tomas Polcar, Nuno J.M. Carvalho, Albano Cavaleiro

Poster - Biomedical Applications

P4040	EFFECT OF SURFACE PROPERTIES OF MEDICAL PTFE BY REMOTE ARGON PLASMA	Hongxia Liu, Jierong Chen
P4041	ION-BEAM ASSISTED DEPOSITED C-N COATING ON MAGNESIUM ALLOYS	Jingxin Yang, Yanpeng Jiao, Fuzhai Cui, In-Seop Lee, Qingshui Yin, Yu Zhang
P4042	Preparation and characterization of biocompatible polymer grafted on DLC(Diamond-Like-Carbon)-coated substrates by low temperature plasma irradiation-post polymerization technique	Ryouji Hamawaki, Maki Nishioka, Kohei Shiraishi, Kazuo Sugiyama, Tatsuyuki Nakatani, Keishi Okamoto
P4043	Apatite formation on thin calcium phosphate film formed by e-beam evaporation	In-Seop Lee, Yan Li, Fu-Zhai Cui, Zeng Lin, Jong-Chul Park, Sung-Min Chung
P4044	Evaluation of bioactive calcium silicate thin film formed on micro-arc oxidized titanium by e-beam evaporation	Inho Han, In-Seop Lee, Hong Koo Paik
P4045	ENHANCED CELL AFFINITY OF α -GLUCAN/ PLGA COMPOSITE NANOFIBROUS MEMBRANES BY PLASMA TREATMENT	yeon i woo, Jeong Koo kim, Kazufumi Tsubaki, Jong-Chul Park
P4046	DEVELOPMENT OF SURFACE-FUNCTIONALIZED DRUG-ELUTING STENT WITH DIAMOND-LIKE CARBON NANOCOATED BY USING PECVD METHOD	Keishi Okamoto, Tatsuyuki Nakatani, Ikuo Omura, Shuzo Yamashita
P4047	Application of a Plasmatron to Inactivation of Micro-organism	Chan Ju Yim, Sang Bum Joa, Vadim Yu. Plaksin, Heon-ju Lee
P4048	Sterilization mechanism of bacteria by a pulsed discharge in water	Tomoyuki Takeda, Pavel Baroch, Takahiro Ishizaki, Nagahiro Saito, Michio Ohta, Osamu Takai
P4049	Production of fine hydroxyapatite films using the well-controlled thermal plasma	Masahiro Kou, Takafumi Toda, Osamu Fukumasa
P4050	FABRICATION PLGA SCAFFOLD INCORPORATED WITH HYDROXYAPATITE FOR CARTILAGE TISSUE ENGINEERING	Jung Bok Lee, Sun Ho Lee, Jae Bong Choi, Jeong Koo Kim
P4051	THE FABRICATION OF NANO-FIBER COATED PLGA FILM FOR VASCULAR GRAFT	Seong-mi Yu, Joo Hee Choi, Duck Jei Park, Jeong Koo Kim
P4052	APPLICATION FOR TISSUE ENGINEERING ON POROUS PLGA SCAFFOLD STERILIZED BY LOW TEMPERATURE HYDROGEN PEROXIDE GAS PLASMA STERILIZER	Mi Hee Lee, Jeong Koo Kim, Jong ?Chul Park

P4053	GROWTH OF ENDOTHELIAL CELL ONTO PU FILM BY MICROWAVE-INDUCED PLASMA	Hye Reon Lim, Hyun-sook Baek, Mi Hee Lee, Yeon I Woo, Won sup Choi, Ki Dong Park, Jong-Chul Park
P4054	EFFECTS OF STERILIZATION FOR THE PROTECTION OF SILK FABRIC CULTURAL ASSETS THROUGH MICROWAVE-INDUCED ARGON PLASMA TREATMENT AT ATMOSPHERIC PRESSURE	Dongjeong Park, Mi Hee Lee, Yeon I Woo, Soon O. Hyun, Kie-Hyung Chung, Jong-chul Park
P4055	BIOCOMPATIBILITY OF Ti-8Ta-3Nb ALLOYS BY SURFACE MODIFICATION	Kyung-Ku Lee, Kyung-Ku Lee, Doh-Jae Lee, Hoon Ahn
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