

Agenda of Workshops

The 6th International Workshop on Advanced Plasma Processing and Diagnostics & The 3rd Plasma Application Monodzukuri (PLAM)

Organized by

Plasma-Nano Technology Center (PLANT), Nagoya University, Japan
Center for Advanced Plasma Surface Technology (CAPST), SKKU, Korea
Plasma Application Monodukuri (PLAM)
Brain Korea 21 Human Resource Center for Next Generation IT materials and Components, SKKU, Korea
The Japan Society of Applied Physics, Tokai Chapter, Japan
Ministry of Education, Culture, Sports, Science and Technology,
Nagoya nano-Technology Cluster of Innovative Production System, Japan

Place: Venture Hall, Venture Business Laboratory (VBL), Nagoya University

13:00 Opening Dr. M. Kume and Prof. J.G Han

Plenary Lecture

13:15 Advanced Sputtering Technology for New Functional Film Coating
Prof. J. G. Han (CAPST, SKKU)

Plenary Lecture

14:00 Frontier of Film Coating in ULSI
Prof. S. Zaima (Nagoya University)

Invited

14:45 Functional thin film materials for smart organic electronics”
Prof. N. E. Lee (CAPST, SKKU)

Invited

15:15 Advanced Plasma Application for Bio Processing
Prof. M. Nagatsu (Shizuoka University)

15:45 Break

Invited

16:00 New DLC Coating Technology
Profs. H. Kousaka and T. Umehara (Nagoya Univ.)

Invited

16:30 Process Analysis Using Sputtering Parameters during FIB Micromilling”
Prof. Y. J. Kim (CAPST, SKKU)

17:00 Closing Prof. M. Hori (PLANT)

17:30-19:00 Banquet (Nagoya University, Restaurant “Hananoki”)

Jan 9th (Wed)

9:00 Opening

Keynote Talk

9:05 A Study on the Improvement of the Electrical Properties of Pentacene- and

ZnO-based TFTs
Prof. H. S. Kim (CAPST, SKKU)

Keynote Talk

9:45 **Advanced Plasma Processing for New Carbon Materials**
Prof. M. Hiramatsu (Meijo University)

Student Session

Student Short Presentations (5min+5min:question)

- 10:25 **Electrical and Optical Properties of ITO Thin Films on Polymer Using Facing Target Sputtering**
St. Youn J. Kim, Min J. Keum, Jeon G. Han (CAPST, SKKU)
- 10:35 **Low-temperature SiN Film Formation on Si and OLEDs by VHF-CCP System**
M. Li, K. Takeda, T. Mori, M. Sekine, M. Hori (Nagoya University)
- 10:45 **Polymer Surface Modification by Inductively Coupled Plasma**
St. Kyung S. Shin, Tae J. Byun, Youn J. Kim, Jeon G. Han (CAPST, SKKU)
- 10:55 **Surface Modification of PTFE Film by High Density Microwave Plasma**
K. Ishikawa, T. Ishijima, H. Toyoda (Nagoya Univ.)
- 11:05 **Synthesis of Ultra Thin Carbon Barrier Film Using Pulsed Magnetron Sputtering**
St. Sung I. Kim, Su B. Jin, Jeon G. Han (CAPST, SKKU)
- 11:15 **High Rate Deposition of Nano Crystalline Si Particles at Room Temperature**
E. Takahashi, M. Sekine, M. Hori (Nagoya University)
- 11:25 **Preparation of SiO_x Thin Film with Various Oxygen Gas Flow Rate by Pulsed DC Magnetron Sputtering System**
St. A R. Jeon, Min J. Kim, Jeon G. Han (CAPST, SKKU)
- 11:35 **Efficient Solute Decomposition in Liquid with Bubble Plasma Production by Microwaves**
H. Sugiura, T. Ishijima, H. Toyoda (Nagoya Univ.)
- 11:45 **Barrier Characteristic of Carbon Synthesized Films**
St. Su B. Jin, Sung I. Kim, Jeon G. Han (CAPST, SKKU)
- 11:55 **Synthesis of Graphen Sheet by Radical Controlled Plasma**
S. Kondo, T. Wakana, M. Hiramatsu, K. Yamakawa*, H. Kano**, M. Sekine, M. Hori (Nagoya University, KKE*, NUEE**)

12:05-13:30 Lunch

Topical Arranged Session (All speakers invited, Titles are tentative)

“ How to Synthesize High-quality Films around Room Temperature? ”

(30min Presentation +15min Questions)

13:30 **High-quality Amorphous Si Formation by Novel Plasma Technology**
Prof. M. Shiratani (Kyushu University)

- 14:15 Synthesis of New Functional Materials by Advanced Plasma Processing
Prof. J. H. Boo (CAPST, SKKU)**
- 15:00 Break**
- 15:15 Low-Temperature and Nano-Surface Materials Modification with Low-Damage
Plasma and Laser-Induced Phonon Excitation Processes
Prof. Y. Setsuhara (JWRI, Osaka University, JST, CREST)**
- 16:00 High Rate Deposition of Silicon Films at Low Temperature
Employing Surface Wave Excited Plasma
Prof. H. Toyoda (Nagoya University)**
- 16:45 Summary and discussions
Consideration of High Quality Silicon Film Deposition
on the Basis of Plasma Science
Prof. Horii (Nagoya University, JST, CREST)**
- 17:30 Closing**