

A-1 Plasma Engineering

Representative Organizer

Toshiro KANEKO (Tohoku University)

Co-organizers

Koichi SASAKI (Hokkaido University)

Giichiro UCHIDA (Osaka University)

Oral Session March 27 (Fri.) Room 1

Chair : Giichiro Uchida (Osaka University)

- 13:00 A1-I-01 **Plasma Technologies for Engineering of the Direct Energy Band Gap of Silicon at Quantum Confinement Size** [Invited Lecture]
¹Vladimir Švrček, ¹Mickael Lozac'h, ²Davide Mariotti, ¹Koji Matsubara
¹ RESEARCH CENTER FOR PHOTOVOLTAIC TECHNOLOGIES, NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY
² UNIVERSITY OF ULSTER
- 13:30 A1-I-02 **Plasma-Surface Interactions Analyzed by Vibrational Sum-Frequency Generation (SFG)** [Invited Lecture]
Kenji Ishikawa, Keigo Takeda, Hiroki Kondo, Makoto Sekine, Masaru Hori
GRADUATE SCHOOL OF ENGINEERING, NAGOYA UNIVERSITY
- 14:00 A1-O-01 **Chemical Non-Equilibrium Modelling of Induction Thermal Plasmas with CH₄/H₂ Gas Injection for Carbon Film Deposition**
^{1,2}Yasunori Tanaka, ¹Sosuke Horita, ¹Miyu Fukuzawa, ²Tatsuo Ishijima, ^{1,2}Yoshihiko Uesugi
¹ FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING, KANAZAWA UNIVERSITY
² RESEARCH CENTER FOR SUSTAINABLE ENERGY AND TECHNOLOGY, KANAZAWA UNIVERSITY
- 14:15 A1-O-02 **Continuous CNTs Synthesis on Steel Strip in Microwave Plasma Reactor**
Lukasz Szymanski, Zbigniew Kolacinski, Grzegorz Raniszewski
INSTITUTE OF MECHATRONICS AND INFORMATION SYSTEMS, LODZ UNIVERSITY OF TECHNOLOGY
- 14:30 A1-O-03 **Electrochemical Characteristics and Durability of Pt Nanoparticles Supported Carbon Nanowalls**
¹Shun Imai, ¹Hiroki Kondo, ²Hiroyuki Kano, ¹Kenji Ishikawa, ¹Makoto Sekine, ³Mineo Hiramatsu, ¹Masaru Hori
¹ DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE, NAGOYA UNIVERSITY
² NU ECO ENGINEERING, CO., LTD.
³ DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING, MEIJO UNIVERSITY
- 14:45 A1-O-04 **Detection of Etch Endpoint Using a Laser Hologram**
Byungwhan Kim, Jinsoo Jung, Junhyun Seo, Donghwa Jung
DEPARTMENT OF ELECTRONICS ENGINEERING, SEJONG UNIVERSITY
- 15:00 A1-O-05 **Etching Process with System of Control of Wafer Temperatures Measured by Non-Contact Fourier Domain Low Coherence Interferometry**
Yusuke Fukunaga, Takayoshi Tsutsumi, Keigo Takeda, Kenji Ishikawa, Hiroki Kondo, Makoto Sekine, Masaru Hori
GRADUATE SCHOOL OF ENGINEERING, NAGOYA UNIVERSITY