

| 3/20 (WED) | | |
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| Nanomaterials 6 | Plasma Science & Technologies 4 Surface and Thin Films | Nitride Semiconductors 5 Plasma and Surface Processing |
| Chair: Room C | Chair: Room E | Chair: Room F |
| 9:30-10:00 <20aC01> Invited Lecture Koji Morita National Institute for Materials Science (NIMS) "Fabrication of High Strength Transparent Ceramics through Spark-plasma-sintering (SPS) Method" | 9:30-10:00 <20aE01> Invited Lecture Yeon Ho Im Chonbuk National University "Simulation of Plasma-surface Interactions in Semiconductor Plasma Process" | 9:30-10:00 <20aF01> Invited Lecture Yasuhisa Sano Osaka University "Development of Array-type Plasma Generator for High-throughput Numerically Controlled Processes" |
| 10:00-10:30 <20aC02> Invited Lecture Yoshiaki Nakamura Osaka University "Design of Semiconductor Nanoarchitecture for Thermoelectric Property Control" | 10:00-10:15 1216 <20aE02> Hirotugu Sugiura "Control of sp ² -C Fraction and Hardness of Amorphous Carbon Films by Formation of Precursor Radicals Depending on a Residence Time" ¹ Hirotugu Sugiura, ¹ Yasuyuki Ohashi, ¹ Lingyun Jia, ¹ Hiroki Kondo, ¹ Kenji Ishikawa, ¹ Takayoshi Tsutsumi, ¹ Toshio Hayashi, ² Keigo Takeda, ¹ Makoto Sekine and ¹ Masaru Hori ¹ Nagoya University ² Meijo University | 10:00-10:30 <20aF02> Invited Lecture "T.B.A." |
| | 10:15-10:30 1160 <20aE03> Masayuki Nakamura "Plasma diagnostics on TiN Film Deposition using High Power Impulse Magnetron Sputtering" Masayuki Nakamura, Keigo Takeda and Takayuki Ohta Meijo University | |
| 10:30-10:45 1316 <20aC03> Ryo Nagai "Impact of Boron Doping into Si Quantum Dots with Ge Core on Their Photoluminescence Properties" Ryo Nagai, Shuntaro Fujimori, Takuya Maehara, Katsunori Makihara, Akio Ohta, Mitsuhisa Ikeda and Seiichi Miyazaki Nagoya University | 10:30-10:45 1100 <20aE04> Mong-Chin Kuo "Fabrication and Characterization of Microcrystalline SnS Thin Films Fabricated by HIPIMS Technique for Near Infrared Sensing Applications" Pi-Chun Juan and Mong-Chin Kuo Ming Chi University of Technology | 10:30-10:45 1121 <20aF03> Shun Suzuki "Resonant Raman Scattering Analyses of the Bi-axial Strain on the Surface of GaN and ZnO Generated by Mechanical Polish" Shun Suzuki, Shun Otake, Hiroyuki Iwata and Nobuhiko Sawaki Aichi Institute of Technology |

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| <p>10:45-11:00 1155 <20aC04O> Chia-Yu NMI Liu "Piezotronics Effect on Photoelectrochemical Water Splitting of Porous ZnO Nanorod Arrays" Chia-Yu Liu and Chuan-Pu Liu Cheng Kung University</p> | <p>10:45-11:00 1289 <20aE05O> Pavel Baroch "Advantages of Reactive HiPIMS for Preparation of Tunable Properties of IGZO Thin Films" Pavel Baroch, Jiri Rezek, Michal Prochazka and Jiri Houska University of West Bohemia</p> | <p>10:45-11:00 1037 <20aF04O> Yue Xu "Study of GaN (0001) Surface Cleaning Using HCl-based Solutions" ¹Yue Xu, ¹Akio Ohta, ¹Mitsuhsisa Ikeda, ¹Katsunori Makihara, ²Noriyuki Taoka, ³Tetsuo Narita, ³Daigo Kikuta, ¹Koji Shiozaki, ¹Tetsu Kachi and ¹Seiichi Miyazaki ¹Nagoya University ²AIST ³Toyota Central R&D Labs., Inc.</p> |
| <p>11:00-11:15 1282 <20aC05O> Yen-Sheng Lin "Enhanced Optoelectronic Properties of Al Doped ZnO Layers on Flexible Substrate by Optimizing the Distribution of CuO Nano-wire Structures" ¹Yen-Sheng Lin, ¹Jhe-Wei Lai, ²Fadli Rohman and ²Joachim Mayer ¹I-Shou University ²RWTH Aachen University</p> | <p>11:00-11:15 1021 <20aE06O> Yu Chao "Sputtering Synthesis of Dual Phase SnO₂-WO₃ Nanocomposite Films and Their Gas-sensing Behaviors" Yu Chao and Y. C. Liang National Taiwan Ocean University</p> | <p>11:00-11:15 1033 <20aF05O> Atsushi Tanide "The Effects of Hydrogen and Choline Gas onto Sputtering Growth of GaN Films" ^{1,3}Atsushi Tanide, ¹Shohei Nakamura, ^{1,3}Akira Horikoshi, ¹Shigeru Takatsuji, ^{1,3}Motohiro Kohno, ¹Kazuo Kinose, ¹Soichi Nadahara, ²Masazumi Nishikawa, ²Akinori Ebe and ³Kenji Ishikawa ¹Screen Holdings Co., Ltd. ²EMD Corp. ³Nagoya University</p> |
| <p>11:15-11:30 1020 <20aC06O> Liu Yen-Chen "Sputtering Sythesis of ZnFe₂O₄-TiO₂ Nanorods and Their Photodegradation Ability Toward Organic Dyes" Y.C Liu and Y.C Liang National Taiwan Ocean University</p> | <p>11:15-11:30 1246 <20aE07O> Hossain Md Amzad Bangladesh "Characteristics of Aluminum Doped Zinc Oxide (AZO) Film Prepared using RF Magnetized Plasma Sputtering Source with Square-shaped Magnet Setup" ¹Md Amzad Hossain, M. A. M. Patwary, Y. Nakamura and K. Sugawara ¹Jessore University of Science and Technology ²Saga University ³Comilla University</p> | <p>11:15-11:30 1054 <20aF06O> Yasuyuki Kobayashi "Plasma-assisted Molecular Beam Epitaxy Growth of GaN Thin Films on Sapphire Substrates Using h-BN/AlN Buffer Layers" ¹Yasuyuki Kobayashi, ¹Keiichi Nakata, ¹Hideki Nakazawa, ¹Hiroshi Okamoto, ²Masanobu Hiroki and ²Kazuhide Kumakura ¹Hirosaki University ²NTT Basic Research Laboratories</p> |

Plenary Lecture

Chair:
Room B

11:45-12:35

<20aB07P>

Plenary Lecture

Maki Kawai
Institute for Molecular Science
"T.B.A."

Lunch Break 12:20-14:00

Topical Session 2

Chair:
Room B

14:00-14:30

Invited Lecture

<20aB08l>

Jean-Michel Pouvesle

CNRS/Universite d'Orleans

"Non Thermal Atmospheric Pressure Plasma Jets for Therapeutic Applications"

14:30-15:00

Invited Lecture

<20aB09l>

Michael Keider

The George Washington University

"Adaptive Plasmas for Plasma Medicine"

15:00-15:30

Invited Lecture

<20aB10l>

Eun Ha Choi

Kwangwoon University

"T.B.A."

15:30-16:00

Invited Lecture

<20aB11l>

Emilio Martines

Consorzio RFX

"Interaction of Cold Atmospheric Plasmas with Cell Membranes"

Prof. Riccardo d'Agostino Memorial Session

Chair:
Room E

16:15-18:00

Invited Lecture

<20aE12l>

Masaru Hori

Nagoya University

<20aE13l>

Chair: Pietro Favia

University of Bari)

Jean-Michel Pouvesle

CNRS/Universite d'Orleans

<20aE14l>

Ta-chin Wei

Chung Yuan Christian University

<20aE15l>

Tatsuru Shirafuji

Osaka City University

**Nitride Semiconductors 6
Optical Devices**

Chair:
Room F

16:15-16:45

<20aF12l>

Invited Lecture

Satoshi Kamiyama

Meijo University

"T.B.A."

16:45-17:15

<20aF13I>

Invited Lecture

Stefano Sanguinetti

Universita' degli Studi di Milano-Bicocca

"T.B.A."

17:15-17:30 1131

<20aF13O>

Cheng-Jie Wang

"InGaN-Based Resonant-Cavity Light-Emitting Diode with Embedded Porous-GaN and Top Dielectric Reflectors"

Cheng-Jie Wang, Sheng-Min Wang, Ting-Wei Chung and Chia-Feng Lin

National Chung Hsing University

17:30-17:45 1199

<20aF14O>

Ryosuke Iida

"Embedded SiO₂ waveguide structures for GaInN VCSELs"

¹Ryosuke Iida, ¹Wataru Muranaga,

¹Syo Iwaya, ¹Tetsuya Takeuchi, ¹Satoshi Kamiyama,

¹Motoaki Iwaya and ^{1,2}Isamu Akasaki

¹Meijo University

²Nagoya University
