JSAP Tokai New Frontier Research International Workshop

March 2 (Sun.), 2025

FUJI Hall, EI Building, Nagoya University, Japan

Poster Session (13:00-14:30)

Fields	Program No.	Title	Author	Affiliation
Plasma	Sun-B1	Mechanisms of Cancer Cell Inactivation by Radical-Activated Lactated Ringer's Solution	*Kazane Oguri 1, Kodai Yamamoto 1, Kazunori Hashimoto 2, Tomiyasu Murata 2, Hiromasa Tanaka 3, Masaru Hori 3, Masafumi Ito 1	1 Graduate School of Engineering, Meijo University, Japan 2 Faculty of Pharmacy, Meijo University, Japan 3 Faculty of Engineering, Nagoya University, Japan
	Sun-B2	Comparison of bactericidal effect of indole and tryptophan solutions irradiated with oxygen radicals	*Daiji Kitagawa 1, Takuya Watanabe 1, Motoyuki Shimizu 1, Masashi Kato 1, Kenji Ishikawa 2, Hiromasa Tanaka 2, Masaru Hori 2, Masafumi Ito 1	1 Meijo University, Japan 2 Nagoya University, Japan
	Sun-B3	Dependence of treatment time using ambient-air glow plasma on decomposition of lignin	*Yui Ishikawa 1, Hiroyuki Kato 2, Motoyuki Shimizu 2, Masashi Kato 2, Masafumi Ito 1	1 Graduate School of Science and Engineering, Meijo University, Japan 2 Graduate School of Agriculture, Meijo University, Japan
	Sun-B4	Bactericidal effect of surfactant solutions irradiated with oxygen radicals on Escherichia coli	*Daichi Michiyama 1, Hiroshi Hashizume 2, Hiromasa Tanaka 2, Masaru Hori 2, Masafumi Ito 1	1 Meijo University, Japan 2 Nagoya University, Japan
	Sun-B5	Reconstruction of Three-Dimensional Structure of Non-Uniform Plasma Based on Multi-View Images	*Ryota Izumi 1, Hayato Yoshikawa 1, Haruka Suzuki 1,2, Hirotaka Toyoda 1,2,3	1 Graduate School of Engineering, Nagoya University, Japan 2 Center for Low-temperature Plasma Sciences, Nagoya University, Japan 3 National Institute for Fusion Science, Japan
	Sun-B6	Analysis of nitric oxide within plasma activated Ringer's lactate solution	*Taishi Yamakawa 1, Kenichi Inoue 2, Kenji Ishikawa 2, Masaru Hori 2, Hiromasa Tanaka 2	1. Graduate School of Engineering, Nagoya University, Japan 2. Center for Low-temperature Plasma Science, Nagoya University, Japan
	Sun-B7	Nucleic acid damage in mammalian cells exposed to cold atmospheric plasma	*Hirofumi Kurita 1, Khulan Bidbayasakh 1, Sumire Arai 1	1 Graduate School of Engineering, Toyohashi University of Technology, Japan
	Sun-B8	In-plane distribution and high wall-plug efficiency of GaN-based vertical-cavity surface-emitting lasers	*Naoki Shibahara 1, Mitsuki Yanagawa 1, Taichi Nishikawa 1, Shoki Arakawa 1, Tetsuya Takeuchi 1, Satoshi Kamiyama 1, Motoaki Iwaya 1	1 Graduate School of Engineering, Meijo University, Japan

Material	**Sun-B9**	Photon Enhanced Thermionic Emission Characteristics of undoped and Mg doped InGaN Surface	*Jotaro Tashiro 1, Shigeya Kimura 2, Hisao Miyazaki 2, Akihisa Ogino 1	1 Shizuoka University, Japan 2 Corporate Research & Development Center, Toshiba Corp., Japan
	Sun-B10	The effect of electrical stimulation on the multipotency of mesenchymal stem cells on SiC-coated CNW scaffolds	*Koki Ono 1, Ayoko Tanaka 2, Kenji Ishikawa 2, Wakana Takeuchi 3, Kenichi Uehara 4, Shigeo Yasuhara 4, Masaru Hori 2, Hiromasa Tanaka 2	1 Depertment of electronics, Graduate school of engineering, Nagoya University, Japan 2 Center for Low-temperature Plasma Science, Nagoya University, Japan 3 Depertment of electronics, Aichi Institute of Technology, Japan 4 Japan Advanced Chemicals CO. Ltd., Japan
	Sun-B11	Effect of Electron Density of Low-temperature Plasma for Functionalization of Multi-walled Carbon Nanotube	*Kakuto Watanabe 1, Keiji Nakamura 1, Daisuke Ogawa 1	1 Graduate School of Engineering, Chubu University, Japan
	Sun-B12	Insulator film coating on top of walls in carbon nanowalls	*Hiroaki Ishikawa 1, Takuya Hara 1, Shigeru Yamada 1, Takashi Itoh 1	1 Department of Electrical, Electronic and Computer Engineering, Gifu University, Japan
	Sun-B13	Formation of ultra-thin GeSn layer by segregation method through Al/GeSn(111) structure	*Taiga Matsumoto 1, Akio Ohta 2, Ryo Yokogawa 3,4,5 Mitsuo Sakashita 1, Masashi Kurosawa 1, Osamu Nakatsuka 1, Shigehisa Shibayama 1	1 Graduate School of Engineering, Nagoya University, Japan 2 Faculty of Science, Fukuoka University, Japan 3 Research Institute for Semiconductor Engineering, Hiroshima University, Japan 4 Graduate School of Advanced Science and Engineering, Hiroshima University, Japan 5 Meiji Renewable Energy Laboratory, Meiji University, Japan
	Sun-B14	Plasma Treatment for Fluorine Termination on Si Surface to Decrease Nucleation in MoS2 Synthesis	*Ryotaro Kito 1, Akihisa Ogino 1	1 Graduate School of Integrated Science and Technology, Shizuoka University, Japan
	Sun-B15	Hydrogenation of Magnesium-Based Materials by Air-mixed Hydrogen Plasma Treatment	*Keitatsu Ishikawa 1, Akihisa Ogino 1	1 Shizuoka University, Japan
	Sun-B16	Direct Detection of High Energy Rays by Hybrid Detectors based on Ce:YAP Scintillator and TiO_2 Thin Film	*Yuki Maruyama 1, Marilou Cadatal-Raduban 2,3, Kota Hibino 1, Michal Kohout 4, Kohei Yamanoi 3, Carlito S. Ponseca, Jr. 5, Zdenek Hubička 4, Jiri Olejníček 4, Shingo Ono 1	1 Nagoya Institute of Technology, Japan 2 Unitec Institute of Technology, New Zealand 3 Institute of Laser Engineering, Osaka University, Japan 4 Institute of Physics of the Czech Academy of Sciences, Czech Republic 5 Gulf University for Science and Technology, Kuwait
	Sun-B17	Defect Reduction in ZnO Thin Films for UV Photoconductive detectors by Electron Cyclotron Wave Resonance Plasma	*Kota Hibino 1, Jiří Olejníček 2, KoheiYamanoi 3, Carlito S. Ponseca Jr. 4, Ali Shuaib 5, Yuki Maruyama 1, Aneta Písaříková 2,6, Michal Kohout 2, Martin Čada 2, Anna Kapran 2, YugoAkabe 3, Nobuhiko Sarukura 3,7, Zdeněk Hubička 2, Marilou Cadatal-Raduban 3,8, Shingo Ono 1	1 Nagoya Institute of Technology, Japan 2 Institute of Physics of the Czech Academy of Sciences, Czech Republic 3 Institute of Laser Engineering, Osaka University, Japan 4 Gulf University for Science and Technology, Kuwait 5 Kuwait University, Kuwait. 6 Palacký University Olomouc, Czech Republic 7 Tohoku University, Japan 8 Unitec Institute of Technology, New Zealand

	Sun-B18	Physical Origin of Temperature and Frequency Dependences Observed in Electrical Properties of Metal/HfZrOx/Metal capacitor	*Aoi Teshima 1, Eiji Yama 1, Mikio Yamada 1, Yusuke Ichino 1, Yoshiyuki Seike 1, Tatsuo Mori 1, Katsunori Makihara 2, Noriyuki Taoka 1	1 Aichi Institute of Technology, Japan 2 Nagoya University, Japan
Group-IV	**Sun-B19**	Impact of growth conditions in UHV-CVD on the Ge composition in SiGe layers on Si substrate	*Yuki Imai 1, Kohei Ito 2, Satoru Miyamoto 2, Ryoji Katsube 2, Shota Suzuki 3, Hideaki Minamiyama 3, Marwan Dhamrin 3,4, Noritaka Usami 1,2,5	1. Institues of Innovation for Future Society, Nagoya University, Japan 2. Graduate School of Engineering, Nagoya University, Japan 3. Toyo Aluminium K. K., Japan 4. Graduate School of Engineering, Osaka University, Japan 5. Institute of Materials and Systems for Sustainability, Nagoya University, Japan
	Sun-B20	Self–Assembling Formation of One–Dimensional Si Quantum Dot Arrays on SiO_2 Line Patterns	*Jongeun Baek1, Ryoya Tsuji1, Yuki Imai1, Seiichi Miyazaki2, Katsunori Makihara1	1. Graduate School of Engineering, Nagoya University, Japan 2. Hiroshima University, Japan
	Sun-B21	Epitaxial growth of Si and Ge on sapphire	Pengshu Chen 1, Junji Yamanaka 1, Kosuke O. Hara 1, *Keisuke Arimoto 1	1 University of Yamanashi, Japan
	Sun-B22	Evaluation of interface trap density of strained Si/SiGe/Si(110) MOS structures	Yuki Aonuma 1, Junji Yamanaka 1, Kosuke O. Hara 1, *Keisuke Arimoto 1	1 University of Yamanashi, Japan
	Sun-B23	Phosphorus ion implantation and activation in GeSn epitaxial layers grown on Si(111) substrate	*Yoshiki Kato 1, Masahiro Fukuda 1, Shigehisa Shibayama 1, Mitsuo Sakashita 1, Masashi Kurosawa 1, Osamu Nakatsuka 1,2	1 Graduate School of Engineering, Nagoya University, Japan 2 Institute of Materials and Systems for Sustainability, Nagoya University, Japan
	Sun-B24	Influence of H2 Dilution on CF4 Plasma Etching of Epitaxial Grown Si0.7Ge0.3 and Si	*Kotaro Ozaki 1, Yusuke Imai 1, Takayoshi Tsutsumi 2, Noriharu Takada 2, Kenji Ishikawa 2, Yuji Yamamoto 3, Wei-Chen Wen 3, Katsunori Makihara 1	1 Graduate School of Engineering, Nagoya University, Japan 2 Center for Low-Temperature Plasma Sciences, Nagoya University, Japan 3 IHP - Leibniz-Institut für innovative Mikroelektronik, Germany
	Sun-B25	Room-Temperature PL Properties of Si-Quantum-Dots with Ge-Core and Their Application to Microdisks	*Koki Hosoi 1, Yuji Yamamoto 2, Wei-Chen Wen 2, Katsunori Makihara 1	1 Graduate School of Engineering, Nagoya University, Japan 2 Leibniz-Institut für innovative Mikroelektronik, Germany
	Sun-B26	Low-temperature thermoelectric properties of n-type $Ge_{1-x-y}Si_xSn_y$ thin films	*Itsuki Sugimura 1, Masaya Nakata 1, Shigehisa Shibayama 1, Mitsuo Sakashita 1, Osamu Nakatsuka 1,2, Takayoshi Katase 3, Masashi Kurosawa 1	1 Graduate School of Engineering, Nagoya University, Japan 2 Institute of Materials and Systems for Sustainability, Nagoya University, Japan 3 MDX Research Center for Element Strategy, Institute of Science Tokyo, Japan