Poster session 3 March 19 (TUE) 10:00-11:45	
19P3-01	Synthesis and Optical Characteristics of In ₂ S ₃ and In ₂ Se ₃ Tsung-Yu Huang, Jeng-Yu Ke, Yu-Hsuan Shih and Kuei-Yi Lee National Taiwan University of Science and Technology
19P3-02	Study on Influence of Barrier Layer Thickness on Carrier Transport Efficiency in MOCVD-grown InGaN MQW Solar Cells Hiroki Harada, Shinya Kato, Makoto Miyoshi and Takashi Egawa Nagoya Institute of Technology
19P3-03	Growth of Hexagonal InN Nanocolums on Nitrided Si (111) by RF-MOMBE Wei-Chun Chen, Hung-Pin Chen and Yu-Wei Lin National Applied Research Laboratories
19P3-04	Growth of Ultrathin AlN on Si (111) Substrate by Radical Enhanced Metalorganic Chemical Vapor Deposition (REMOCVD) ¹ Frank Wilson Amalraj, ^{1,2} Arun Kumar Dhasiyan, ¹ Yi Lu, ¹ Naohiro Shimizu, ¹ Osamu Oda, ¹ Kenji Ishikawa and ¹ Masaru Hori ¹ Nagoya University ² Bannari Amman Institute of Technology
19P3-05	Junction Properties Fabricated by Mg-ion Implantation into N-polar GaN Hiroko Iguchi, Tetsuo Narita, Keita Kataoka, Taishi Kimura, Masakazu Kanechika and Tsutomu Uesugi Toyota Central R&D Labs., Inc.
19P3-06	Effects of p-GaN Gate Structures and Their Fabrication Process on Performances of Normally-off AlGaN/GaN HEMTs Takaaki Kondou, Yoshihiko Akazawa and Naotaka Iwata Toyota Technological Institute
19P3-07	Free-standing AlGaN/GaN High Electron Mobility Transistors Separted from Si Substrates Chung Wei Ting, Wu Han-Ming, Wang Sheng-Min, Wang Cheng-Jie and Lin Chia-Feng National Chung Hsing University
19P3-08	Study on MIS Interface States of ALD-Al ₂ O ₃ /AlGaInN/AlGaN Heterostructures Saki Saito, Daiki Hosomi, Keita Furuoka, Toshiharu Kubo, Takashi Egawa and Makoto Miyoshi Nagoya Institute of Technology
19P3-09	Reliability of Fast UV-curing Encapsulation for GaN-based LEDs ¹ Bing Yan, ² Yong Wang, ² Tao Wang, ¹ Zimin Chen, ¹ Bingfeng Fan, ¹ Xuejin Ma and ¹ Gang Wang ¹ Sun Yat-Sen University ² Beijing University of Chemical Technology
19P3-10	Watt Level 395 nm Light Emitting Diode with Dual Wavelength Distributed Bragg Reflector Hongtai Luo, Zimin Chen, Xuejin Ma, Yanfei Ma and Gang Wang Sun Yat-Sen University
19P3-11	Conductive Polymer-based Bioelectronic Interfaces with Electric Cell-substrate Impedance Sensing Integration for Personalized Anticancer-drug Screening Yu-Sheng Shiao and Wei-Ting Lins Ming Chi University of Technology

19P3-12 Modification of Expanded Poly(tetrafluoroethylene) Membranes with Layer by Layer Biomimetic Zwitterionic Materials by Dielectric Barrier Discharge Atmospheric Plasma

Cheng Ting Lin, Chen Yung Chih, Chung Yung and Wei Ta Chin Chung Yuan Christian University

19P3-13 Nonthermal Plasma Treated Solution Inhibits Adipocyte Differentiation and Lipogenesis in 3T3-L1 Preadipocytes via ER Stress Signal Suppression

Sung Un Kang, Haeng Jun Kim, Dae Ho Kim, Chang Hak Han and Yun Sang Lee

Ajou University, Suwon

19P3-14 Molecular Dynamics Study on DNA Damage by Tritium Disintegration

^{1,2}Hiroaki Nakamura, ²Hisanori Miyanishi, ³Takuo Yasunaga, ⁴Susumu Fujiwara,

⁴Tomoko Mizuguchi, ⁵Ayako Nakata, ⁵Tsuyoshi Miyazaki, ⁶Takao Otsuka, ⁷Takahiro Kenmotsu and ⁸Yuji Hatano

¹National Institute for Fusion Science

²Nagoya University

³Kyushu Institute of Technology

⁴Kyoto Institute of Technology

⁵National Institute for Materials Science

⁶RIKEN

⁷Doshisha University

⁸University of Toyama

⁹Institute for Molecular Science

19P3-15 Activation of Caspase in Melanoma Cells Treated with Nitrogen-oxide-radical-activated Medium

¹Kazuma Ogawa, ¹Tomiyasu Murata, ²Masaru Hori and ¹Masafumi Ito

¹Meijo University

²Nagoya University

19P3-16 Inactivation of Biofilm-forming Pseudomonas Aeruginosa using Deionized Distilled Water Treated with Oxygen Radicals

¹Tomoyuki Nagase, ¹Yumiko Komori, ²Masaru Hori and ¹Masafumi Ito

¹Meijo University

²Nagoya University

19P3-17 Discharge Characteristics of In-liquid Plasma in Microchannel Device

Yuya Kino, Shinya Kumagai and Takayuki Ohta

Meijo University

19P3-18 OH Radical Measurement using a Micro Through-hole Chip

¹Koichi Ishikawa, ¹Minoru Sasaki and ²Shinya Kumagai

¹Toyota Technological Institute

²Meijo University

19P3-19 Experimental Investigation of Wound Healing Enhancement of Rat Model using a Universal Atmospheric-Pressure Plasma Jet

Chih-Chia Lee, Mu-Chien Wu, Kuang-Yao Cheng, Shih-Sen Huang, Jong-Shinn Wu and Chun-

Ping Hsiao

National Chiao Tung University

19P3-20 Effect of Argon Plasma Jet Irradiation on Gene Expression of Yeast, S. cerevisiae

¹Yoshihito Yagyu, ¹Masatsugu Motomura, ²Nobuya Hayashi, ¹Takashi Yamasaki, ¹Masahiro Koshimura, ¹Masanori Shinohara, ¹Tamiko Ohshima, ¹Takeshi Ihara and ¹Hiroharu Kawasaki

¹National Institute of Technology, Sasebo College

²Kyushu University

19P3-21 Influence of Hypochlorous Acid on Molecular Diffusion of Supported Lipid Bilayer

¹Yutaka Kume, ²Ryugo Tero, ³Hiroki Kondo, ³Hiroshi Hashizume, ³Masaru Hori and ¹Masafumi

Ito

¹Meijo University

²Toyohashi University of Technology

³Nagova University

19P3-22 Intracellular Reactive Oxygen Species Responses of HeLa Cells Treated with Plasma-

Activated Organics

Shogo Maeda, Yugo Hosoi, Kenji Ishikawa, Hiroshi Hashizume, Hiromasa Tanaka,

Takayoshi Tsutsumi, Hiroki Kondo, Makoto Sekine and Masaru Hori

Nagoya University

19P3-23 Synergistic Effect of Cold Plasma and Anticancer Drug on Oral Squamous Cell

Cancer Theraphy

¹Chang-Min Lee, ¹Ho-Tae Kim, ¹Min-Ju Park, ²Min-Suk Kook and ¹Byung-Hoon Kim

¹Chosun University

²Chonnam National University

19P3-24 Promotion Effects of Nitric-oxide Radical Irradiation on Purple Photosynthetic

Bacteria

¹Masakazu Takeno, ¹Vladislav Gamaleev, ²Hiroshi Hashizume, ²Masaru Hori and ¹Masafumi Ito

¹Meijo University

²Nagoya University

19P3-25 Promotion of Reducing Sugar Production using Spores Treated with Oxygen Radicals

¹Takuya Goto, ¹Motoyuki Shimizu, ¹Masashi Kato, ²Hiroshi Hashizume, ²Masaru Hori and

¹Masafumi Ito

¹Meijo University

²Nagoya University

19P3-26 Oxidation Treatment of Simulated Soil Contaminated with Fusarium Oxysporum by

Pulsed Discharges

¹Takeru Konishi, ²Kohei Obase, ¹Katsuyuki Takahashi and ¹Koichi Takaki

¹Iwate University

²JFE Kankyo Co., Ltd

19P3-27 Inactivation of α -amylase using Pulsed Electric Field

Takahiro Fujiwara, Katsuyuki Takahashi and Koichi Takaki

Iwate University

19P3-28 Simultaneous Treatment of Fruits Surface Sterilization and Ethylene Removal using

Active Oxygen Species in Surface Discharge Plasma

Yi-Ci Yao and Nobuya Hayashi

Kyushu University

19P3-29 Oxygen-radical Treatment of Vanillin Alleviates the Inhibition of S. cerevisiae

Growth

Shou Ito, Kiyota Sakai, Yutaka Kume, Masafumi Ito, Motoyuki Shimizu and Masashi Kato ¹Meijo University

19P3-30 Time-revolution Monitoring of Long-lived Reactive Oxygen and Nitrogen Species in Radical-activated Water using Deep UV Absorption Spectroscopy

¹Suzuki Takaya, ¹Naoyuki Iwata, ¹Vladislav Gamaleeve, ²Jun-Seok Oh, ³Masaru Hori and

¹Masafumi Ito

¹Meijo University

²Osaka City University

³Nagoya University

19P3-31 Lipid Accumulation of Pseudochoricystis Ellipsoidea by Irradiation of Nonequilibrium Atmospheric Pressure Plasma to Nourishing Solution

Takumi Kato, Yugo Hosoi, Sotaro Yamaoka, Kenji Ishikawa, Hiroshi Hashizume,

Hiromasa Tanaka, Takayoshi Tsutsumi, Hiroki Kondo, Makoto Sekine and Masaru Hori

Nagoya University

19P3-32 Surface Reaction Analysis of Plasma-treated Bio-molecules using Sum Frequency Generation Spectroscopy

¹Ryoya Katsuya, ¹Takayuki Ohta, ²Kenji Ishikawa and ²Masaru Hori

¹Meijo University

²Nagoya University

19P3-33 MCTS Studies of Hole Traps in n-GaN Induced by He Ion Implantation

¹Yutaka Tokuda, ¹Ken Iyoda, ²Joji Ito, ²Takahide Yagi and ³Kenji Shiojima

¹Aichi Institute of Technology, Japan

²SHI-ATEX Co., Ltd., Japan

³University of Fukui, Japan

19P3-34 InGaN-Based MSM Visible Light Photodiodes with Recessed Anode

Bin Li, Xiaohan Zhang, Hailong Wang, Zhenhua Zhang, Hongxia Wang, Zhisheng Wu and

Hao Jiang

Sun Yat-Sen University

19P3-35 Excitation and Relaxation Processes of Narrow-Band Blue Emission in Tm-Doped

AlGaN Revealed by Time-Resolved Photoluminescence Spectroscopy

Shuhei Ichikawa, Junichi Takatsu, Ryoken Fuji, Dolf Timmerman, Jun Tatebayashi and

Yasufumi Fujiwara

Osaka University

19P3-36 0.27nW Fully-Integrated Supply-Modulated OOK Transmitter in 65nm CMOS for Self-

Powered and Low-Cost Continuous Glucose Monitoring Contact Lens

¹Kenya Hayashi, ¹Shigeki Arata, ¹Ge Xu, ¹Shunya Murakami, ¹Cong Dang Bui, ¹Atsuki Kobayashi

and 1,2 Kiichi Niitsu

¹Nagoya University

²PRESTO/JST

19P3-37 Growth Promotion of Mouse Fibroblasts in DPBS Irradiated with Nitrogen-Oxide

Radicals

¹Yuki Hori, ¹Wataru Sato, ¹Tomiyasu Murata, ²Masaru Hori and ¹Masafumi Ito

¹Meijo University

²Nagoya University

19P3-38 Degradation of Powdered Cellulose using Direct Exposure to Oxygen Radicals

¹Ginji Ito, ¹Vladislav Gamaleeve, ¹Motoyuki Shimizu, ¹Masashi Kato, ²Masaru Hori and

¹Masafumi Ito

¹Meijo University

²Nagoya University

19P3-39 Characterization of the Extended Plume with Variable Lengths from an Atmospheric

Pressure Plasma Jet

J. H. Hsieh, Y. J. Wei and Y. S. Chen

Ming Chi University of Technology

19P3-40 Growth Effects of Oxygen-radical Treatment on Trichoderma Reesei-Spores

¹Takahiro Deguchi, ¹Motoyuki Shimizu, ¹Masashi Kato, ²Masaru Hori and ¹Masahumi Ito

¹Meijo University

²Nagoya University

19P3-41 Growth Effects of Ultraviolet Exposure on Saccharomyces Cerevisiae

¹Shoma Ito, ²Hiroshi Hashizume, ¹Motoyuki Shimizu, ¹Masashi Kato, ²Masaru Hori and

¹Masafumi Ito

¹Meijo University

²Nagoya University

19P3-42 Cytotoxicity of Plasma-Activated Glucose and Amino Acids

¹Maho Yamada, ²Nanami Ito, ³Yugo Hosoi, ³Hiromasa Tanaka, ³Kenii Ishikawa and ³Masaru Hori

¹Hamamatsukita High school

²Shizuoka High school

³Nagoya University

19P3-43 Morphological Dynamics of Dying Cells Incubated in Plasma-Activated Medium

¹Nanami Ito, ²Maho Yamada, ³Yugo Hosoi, ³Hiromasa Tanaka, ³Kenji Ishikawa and ³Masaru Hori

¹Shizuoka High school

²Hamamatsukita High school

³Nagoya University

19P3-44 Stimulation Effects of Cold Atmospheric Plasma Irradiation on Plants

¹Mime Kobayashi, ¹Yukun Wang, ²Shinya Kumagai, ¹Yukiharu Uraoka and ¹Toshiro Ito

¹Nara Institute of Science and Technology

²Meijo University

19P3-45 Various Type of CNT Dispersion Applied to Bio-Fuel Cell for High Yield of

Production

¹Md. Zahidul Islam, ¹Shigeki Arata, ¹Kenya Hayashi, ¹Atsuki Kobayashi and ^{1,2}Kiichi Niitsu

¹Nagoya University

²PRESTO, IST

19P3-46 The Application of Plasma Surface Modification Technology for Grafting Calcium

Phosphate Composites onto Quartz Crystal Sensor

¹Wei-Ting Ting, ¹Meng-Jiy Wang and ²Ko-Shao Chen

¹National Taiwan University of Science and Technology

²Tatung University