

D-4 Biosurface

Representative Organizer

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Madoka TAKAI (Tokyo University)

Oral Session 1 March 29 (Sun.) Room 6

Chair : Yoshiyuki Suda (Toyohashi University of Technology)

- 9:05 D4-I-01 **Biosurface Formation on Ceramic Nanoparticles for Bioimaging** [Invited Lecture]
¹Kenta Sekiya, ¹Yuichi Seo, ¹Masao Kamimura, ¹Kohei Soga, ²Katsuhisa Kitano
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- 9:35 D4-O-01 **Influence of Gas Flow on the Physical Properties of the Plasma Jet**
^{1,2}Asma Begum, ¹Mohammad Rasel Pervez, ³Mounir Laroussi
1 FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING, KANAZAWA UNIVERSITY
2 INDEPENDENT UNIVERSITY
3 OLD DOMINION UNIVERSITY
- 9:50 D4-O-02 **Immobilization of Biomolecules onto Carbon Nanotubes Dot-Array Functionalized by Micro-Capillary Atmospheric Pressure Plasma Jet**
^{1,2}Tommy Abuzairi, ³Mitsuru Okada, ²Nji R. Poespawati, ²Retno Wigajatri, ^{1,3}Masaaki Nagatsu
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3 GRADUATE SCHOOL OF ENGINEERING, SHIZUOKA UNIVERSITY
- 10:05 D4-O-03 **Surface Functionalization of Metallic Implants by a Laser-Assisted Biomimetic Process**
¹Ayako Oyane, ¹Ikuko Sakamaki, ¹Yoshiki Shimizu, ¹Maki Nakamura, ¹Kenji Kawaguchi, ^{1,2}Naoto Koshizaki
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Oral Session 2 March 30 (Mon.) Room 2

Chair : Tatsuo Ishijima (Kanazawa University)

- 9:05 D4-I-02 **Electric Plasma Irradiation to Artificial Biological Plasma Membrane System at Solid-Liquid Interface** [Invited Lecture]
^{1,2}Ryugo Tero
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2 ELECTRONICS-INSPIRED INTERDISCIPLINARY RESEARCH INSTITUTE (EIIRIS), TOYOHASHI UNIV. TECH.

- 9:35 D4-O-04 **Effect of Atmospheric Microplasma Irradiation on Stratum Corneum Layer**
^{1,2}Kazuo Shimizu, ²Kentaro Hayashida, ¹Marius Blajan
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2 GRADUATE SCHOOL OF ENGINEERING, SHIZUOKA UNIVERSITY
- 9:50 D4-O-05 **Gas Species Influence on OH Radical Generation in Liquid Using Low Frequency Atmospheric Pressure Plasma Jet**
¹Yuko Imazawa, ¹Yohei Otaki, ¹Takanori Inomata, ²Tatsuo Ishijima, ^{1,2}Yasunori Tanaka, ^{1,2}Yoshihiko Uesugi
1 FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING, KANAZAWA UNIVERSITY
2 RESEARCH CENTER FOR SUSTAINABLE ENERGY AND TECHNOLOGY, KANAZAWA UNIVERSITY
- 10:05 D4-O-06 **ROS Detection and Cellular Responses Induced by Atmospheric Pressure Plasma Exposure**
¹Hirofumi Kurita, ¹Mika Shimizu, ¹Motoi Wada, ¹Kaori Sano, ²Ryo Ono, ¹Hachiro Yasuda, ¹Kazunori Takashima, ¹Akira Mizuno
1 TOYOHASHI UNIVERSITY OF TECHNOLOGY
2 THE UNIVERSITY OF TOKYO
- 10:20 D4-O-07 **Controlling the Effect of Cold Plasma Treatment on Mouse Skin Wound by Modifying Its Surface Using Water**
^{1,2}Nasruddin, ¹Yukari Nakajima, ¹Kanae Mukai, ¹Emi Komatsu, ²Heni Setyowati Esti Rahayu, ³Muhammad Nur, ⁴Tatsuo Ishijima, ^{4,5}Hiroshi Enomoto, ^{4,6}Yoshihiko Uesugi, ⁷Junko Sugama, ⁷Toshio Nakatani
1 GRADUATE COURSE OF NURSING SCIENCE, KANAZAWA UNIVERSITY
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5 FACULTY OF MECHANICAL ENGINEERING, KANAZAWA UNIVERSITY
6 FACULTY OF ELECTRICAL AND COMPUTER ENGINEERING, KANAZAWA UNIVERSITY
7 DIVISION OF NURSING, FACULTY OF HEALTH SCIENCES, KANAZAWA UNIVERSITY
- 10:35 D4-O-08 **Selective Biomolecular Recognition Efficiency of Plasma Functionalized Magnetic Nanoparticles**
¹Anchu Viswan, ²Han Chou, ^{1,2}Masaaki Nagatsu
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2 GRADUATE SCHOOL OF ENGINEERING, SHIZUOKA UNIVERSITY
- 10:50 D4-O-09 **Evaluation of Hard-Tissue Compatibility of Ti-Mg Alloys Fabricated by Magnetron Sputtering**
¹Junko Hieda, ²Mitsuo Niinomi, ²Masaaki Nakai, ²Ken Cho
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