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The 26th IEEE International Conference on Micro Electro Mechanical Systems
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TECHNICAL PROGRAM

Monday 21 January 2013

08:30-09:00

Welcome Address

Toshiyuki Tsuchiya, Kyoto University, JAPAN
Gwo-Bin Vincent Lee, National Tsing Hua University, TAIWAN

Plenary 1

Session Chairs:

Toshiyuki Tsuchiya, Kyoto University, JAPAN
Gwo-Bin Vincent Lee, National Tsing Hua University, TAIWAN

09:00-9:40

PLENARY TALK 1 PHOTOSYNTHETIC AND NON-PHOTOSYNTHETIC PRODUCTION OF FUEL AND CHEMICALS (This paper is not included in this Technical Digest.)

James Liao
University of California, Los Angeles, USA

Session 1 - Bio MEMS

Session Chairs:

Jürgen Brugger, Ecole Polytechnique Fédérale de Lausanne (EPFL), SWITZERLAND
Hanseup Kim, University of Utah, USA

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¹Berkeley Sensor and Actuator Center, University of California, USA

²University of British Columbia, CANADA

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Deepak Uttamchandani, University of Strathclyde, UK

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K. Higashi¹, T. Kano¹, and N. Miki^{1, 2}

¹Keio University, Kanagawa, JAPAN

²JST PRESTO, Tokyo, JAPAN

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Y. Morimoto¹, H. Onoe^{1,2}, and S. Takeuchi^{1,2}

¹Institute of Industrial Science, the University of Tokyo, JAPAN

²Takeuchi Biohybrid Innovation Project, ERATO, JST, JAPAN

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¹Nanyang Technological University, SINGAPORE

²Massachusetts Institute of Technology, USA

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Session Chairs:

Hidekuni Takao, Kagawa University, JAPAN

Amit Lal, Cornell University, USA

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¹Georgia Institute of Technology, USA

²Qualtré Inc., USA

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²Samsung Advanced Institute of Technology, KOREA

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²Robert Bosch RTC, USA

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¹Kanagawa Academy of Science and Technology, ²The University of Tokyo

³Keio University

⁴Riken

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²ERATO Takeuchi Biohybrid Innovation Project, Japan Science and Technology Agency, JAPAN

³Shumei University, JAPAN

⁴Nihon University School of Medicine, JAPAN

Tuesday 22 January 2013

Plenary 2

Session Chairs:

Toshiyuki Tsuchiya, Kyoto University, JAPAN

Gwo-Bin Vincent Lee, National Tsing Hua University, TAIWAN

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¹National Tsing Hua University, TAIWAN

²Institute of NanoEngineering and MicroSystems, National Tsing Hua University, TAIWAN

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University of California, USA

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¹Institute of Industrial Science, The University of Tokyo, JAPAN

²Berkeley Sensor and Actuator Center, University of California, Berkeley, USA

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Chih-Hung Wang¹, Chia-Jung Chang¹, Jiunn-Jong Wu² and Gwo-Bin Lee¹

¹National Tsing Hua University, TAIWAN

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¹Johns Hopkins University, USA

²Industrial Technology Research Institute, TAIWAN

³Sidney Kimmel Comprehensive Cancer Center, USA

⁴Institute of NanoBioTechnology, USA

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Session Chairs:

David Horsley, University of California at Davis, USA

Ruud Vullers, Holst Center/IMEC, NETHERLANDS

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David Horsley, University of California at Davis, USA

Ruud Vullers, Holst Center/IMEC, NETHERLANDS

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Session Chairs:

Andreu Llobera, Centre Nacional de Microelectronica, SPAIN
Man Wong, Hong Kong University of Science and Technology, CHINA

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¹Institute of Industrial Science, The University of Tokyo, JAPAN,

²Takeuchi Biohybrid Innovation Project, ERATO, JST, JAPAN

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Andreu Llobera, Centre Nacional de Microelectronica, SPAIN
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¹The University of British Columbia, CANADA

²British Columbia Cancer Agency Research Centre, CANADA

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¹Institute of Industrial Science, The University of Tokyo, JAPAN

²The Jikei University School of Medicine, JAPAN

³Takeuchi Biohybrid Innovation Project, ERATO, JAPAN Science and Technology Agency (JST), JAPAN

Wednesday 23 January 2013

Plenary 3

Session Chairs:

Toshiyuki Tsuchiya, Kyoto University, JAPAN

Gwo-Bin Vincent Lee, National Tsing Hua University, TAIWAN

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University of Twente, THE NETHERLANDS

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Chang-Jin “CJ” Kim, University of California, Los Angeles, USA

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¹Kanagawa Academy of Science and Technology, JAPAN

²Institute of Industrial Science, The University of Tokyo, JAPAN

³Keio University, JAPAN

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Session Chairs:

Hans Zappe, University of Freiburg - IMTEK, GERMANY

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Renyuan Wang¹, Sunil A. Bhawe¹, and Kushal Bhattacharjee²

¹Cornell University, USA

²RF Micro Devices, Inc., USA

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Ai Qun Liu, Nanyang Tehnological University, SINGAPORE
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Hamdi Torun³, and Hakan Urey¹

¹Koç University, TURKEY

²Ecole Polytechnique Fédérale de Lausanne, SWITZERLAND

³Boğaziçi University, TURKEY

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¹Institute of NanoEngineering and MicroSystems, National Tsing Hua University, TAIWAN

²PixArt Imaging Inc, TAIWAN

³National Tsing Hua University, TAIWAN

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¹Tohoku University, JAPAN

²WPI-AIMR, Tohoku University, JAPAN

³Micro System Integration Center (μSIC), Tohoku University, JAPAN

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¹University of California at San Francisco, USA

²Berkeley Sensor and Actuator Center, University of California at Berkeley, USA

³University of California at Berkeley, USA

⁴Korea University, Korea

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Session Chairs:

Shoji Takeuchi, University of Tokyo, JAPAN
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¹Nagoya University, JAPAN

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¹Nanyang Technological University, SINGAPORE

²Institute of High Performance Computing, A*STAR, SINGAPORE

Session 9B2 - Bio Probes

Session Chairs:

Shoji Takeuchi, University of Tokyo, JAPAN
Liwei Lin, University of California, Berkeley, USA

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¹Institute of Industrial Science, The University of Tokyo, JAPAN

²Takeuchi Biohybrid Innovation Project, ERATO, JAPAN Science and Technology (JST), JAPAN

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Session Chairs:

Junseok Chae, Arizona State University, USA

Michel Despont, IBM Zurich Laboratory, SWITZERLAND

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²CEA-Leti, FRANCE

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²Illinois Institute of Technology, USA

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¹University of Illinois at Urbana-Champaign, USA,

²Advanced Diamond Technologies Inc., USA,

³University of Pennsylvania, USA

Session 10B – Microfluidics II

Session Chairs:

Yoko Yamanishi, Nagoya University, JAPAN

Xiaohong Wang, Tsing-Hua University, CHINA

10:30-10:50

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¹Univ. Paris-Sud, Institut d'Electronique Fondamentale, CNRS, UMR 8622, FRANCE

²Sorin Group, FRANCE

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