

November 5, 2009 (Thursday)

08:30 ~ 09:00

Poster Awards Ceremony

Tamna Hall A

[Plenary 7]

Chair: J. Michael Ramsey, Univ. of North Carolina at Chapel Hill, USA

09:00~09:40

MICRO-MANIPULATION OF LIQUIDS USING ELECTROWETTING-ON-DIELECTRIC (EWOD): LAB-ON-A-CHIP AND BEYOND

Chang-Jin "CJ" Kim¹

¹University of California, Los Angeles, USA

Tamna Hall A

[Session 4A1]

Innovative Microfluidics Applications I

Chair: Sabeth Verpoorte, University of Groningen, The Netherlands

Halla

[Session 4B1]

Photonics

Chair: Ai Qun Liu, Nanyang Technological University, Singapore

09:50 ~ 10:10

DIGITAL IONIC CIRCUITS ON A MICROFLUIDIC CHIP

J.-H. Han¹, K. B. Kim¹, H. C. Kim¹, T. D. Chung¹

¹Seoul National University, Korea

HIGH RESOLUTION PATTERNING OF FULL COLOR PHOTONIC CRYSTAL BY MAGNETICALLY TUNABLE SELF-ASSEMBLY AND LITHOGRAPHIC FIXATION OF NANOPARTICLES

H. Kim¹, J. Ge², J. Kim¹, S.-e. Choi¹, H. Lee¹, H. Lee¹, W. Park¹, Y. Yin², S. Kwon¹

¹Seoul National University, Korea, ²University of California Riverside, USA

10:10 ~ 10:30

FLOW-BASED ORGANIZATION OF SOFT MATERIAL IN THREE DIMENSIONS

L. Leng¹, S. Aslanbeigi¹, A. Günther¹

¹University of Toronto, Canada

A PACKAGED OPTICAL SLOT-WAVEGUIDE RING RESONATOR SENSOR ARRAY FOR MULTIPLEX ASSAYS IN LABS-ON-CHIP

K. B. Gylfason¹, C. F. Carlborg¹, A. Kaźmierczak², F. Dortu², H. Sohlström¹, L. Vivien³, G. Ronan⁴, C. A. Barrios⁵, W. van der Wijngaart¹, G. Stemme¹

¹KTH-Royal Institute of Technology, Sweden, ²Multitel a. s. b. l., Belgium, ³Université Paris-Sud 11, France, ⁴Farfield Group Limited, UK, ⁵Universidad Plitécnica de Madrid, Spain

10:30 ~ 10:50

MICROFLUIDIC SCORES: TWINKLING STARS ON A CHIP

W. S. Lee¹, J. W. Hong¹

¹Auburn University, USA

INTEGRATED LIQUID MICROLENSES IN OPTOFLUIDIC FABRY-PÉROT RESONATOR

L. K. Chin¹, C. S. Lim¹, T. C. Ayi², S. H. Ng², P. H. Yap², and A. Q. Liu¹

¹Nanyang Technological University, Singapore, ²DSO National Laboratories, Singapore

10:50 ~ 11:10

Coffee Break

Technical Program

Tamna Hall A	Halla
<p>[Session 4A2] Innovative Microfluidics Applications II Chair: Taek Dong Chung, Seoul National University, Korea</p>	<p>[Session 4B2] Innovative Detection Technology Chair: Peng-Yuan Yang, Fudan University, China</p>
11:10 ~ 11:30	
<p>MICROBIAL ACTIVITY ASSAY IN DEEP-SEA ENVIRONMENT USING A MICROFLUIDIC DEVICE T. Fukuba¹, Y. Aoki¹, T. Fujii¹ ¹The University of Tokyo, Japan</p>	<p>MEASUREMENTS OF MICROCHANNEL FLOW TEMPERATURE USING THERMORESPONSIVE FLUOROGENIC CONJUGATED POLYMER I. Yoo¹, B. Yoon¹, J.-M. Kim¹, S. Song¹ ¹Hanyang University, Korea</p>
11:30 ~ 11:50	
<p>FACILITATING RAW MILK QUALITY CONTROL USING ACOUSTOPHORESIS C. Grenvall¹, P. Augustsson¹, J. Riis², T. Laurell¹ ¹Lund University, Sweden, ²FOSS Analytical A/S, Denmark</p>	<p>MEASUREMENT METHOD OF CELL-SURFACE RECEPTOR CONCENTRATION USING ANTIBODY CONJUGATED PIEZORESISTIVE CANTILEVER K. Kuwana¹, Y. J. Heo¹, K. Matsumoto¹, I. Shimoyama¹ ¹The University of Tokyo, Japan</p>
11:50 ~ 12:10	
<p>INTEGRATED LIQUID MICROLENSSES IN OPTOFLUIDIC FABRY-PÉROT RESONATOR J. Shao^{1,2}, J. Wu^{1,2}, Y. Zheng^{1,2}, Q. Jin¹, J. Zhao¹ ¹Shanghai Institute of Microsystem and Information Technology, China, ²Chinese Academy of Sciences, China</p>	<p>A TWO-COLOR MOLECULAR BEACON FOR MICROCHIP THERMAL MAPPING T. Le Saux¹, T. Barilero¹, O. Jouannot¹, L. Jullien¹, C. Gosse² ¹École Normale Supérieure, France, ²CNRS, France</p>
<p>12:10</p>	<p>Conference Adjourn</p>