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Optomechatronic Micro/Nano Devices and Components III

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Contents

vii	<i>Conference Committee</i>
ix	<i>Symposium Committee</i>
xi	<i>Introduction</i>

SESSION 1 MICRO/NANO DEVICES AND COMPONENTS

- 6717 02 **Improved performance of thin film broadband antireflective coatings (Invited Paper)** [6717-01]
M. Mishrikey, A. Fallahi, C. Hafner, R. Vahldieck, ETH Zurich (Switzerland)
- 6717 03 **Quantum information processing using nanoscale objects embedded in photonic crystals** [6717-02]
H. Nihei, Health Sciences Univ. of Hokkaido (Japan); A. Okamoto, Hokkaido Univ. (Japan)
- 6717 04 **Thermo-optical delay line for optical coherence tomography** [6717-04]
E. Margallo-Balbás, G. Pandraud, P. J. French, Technische Univ. Delft (Netherlands)
- 6717 05 **MEMS tunable silicon Fabry-Perot cavity** [6717-05]
J. Masson, F. B. Koné, Y.-A. Peter, École Polytechnique de Montréal (Canada)
- 6717 06 **Soft lithographic fabrication of microresonators** [6717-06]
A. M. Armani, K. J. Vahala, California Institute of Technology (USA)
- 6717 07 **Spectral boundary integral equation method for the characterization of novel photonic nanomaterials** [6717-25]
L. Illyashenko-Raguin, ETH Zurich (Switzerland)
- 6717 08 **Re-Ir coating effect of molding core (WC) surface for aspheric glass lens** [6717-07]
S.-S. Kim, Korea Photonics Technology Institute (South Korea); H.-U. Kim, Chosun Univ. (South Korea); H.-J. Kim, J.-H. Kim, Korea Photonics Technology Institute (South Korea);
- 6717 09 **Study on pressing conditions in the molding of aspheric glass lenses for phone camera module using design of experiments** [6717-08]
H.-J. Kim, Korea Photonics Technology Institute (South Korea); D.-H. Cha, Chonnam National Univ. (South Korea); S.-S. Kim, J.-H. Kim, Korea Photonics Technology Institute (South Korea)
- 6717 0A **Investigation of optical amplification in Si-Nanocrystal-Er doped optical fibers** [6717-09]
A. Rostami, A. Salmanogli, Univ. of Tabriz (Iran); F. Janabi Sharifi, Univ. of Tabriz (Iran) and Ryerson Univ. (Canada)
- 6717 0B **A proposal for high performance infrared photodetectors: effects of defect on optical absorption properties in GaN/AlGaIn spherical potential** [6717-10]
A. Rostami, Univ. of Tabriz (Iran); H. Rasooli, Islamic Azad Univ. of Tabriz (Iran); F. Janabi-Sharifi, Univ. of Tabriz (Iran) and Ryerson Univ. (Canada)

- 6717 0C **Mechanically tunable photonic crystal** [6717-12]
S. Schrader, S. Truxal, S. Gandhi, K. Kurabayashi, Univ. of Michigan (USA)
- 6717 0D **Label-free detection of chemical messenger proteins** [6717-13]
A. M. Armani, S. E. Fraser, K. J. Vahala, California Institute of Technology (USA)
- 6717 0E **Optical performance analysis of F-Theta lens for laser scanning unit** [6717-22]
D.-K. Lee, Korea Photonics Technology Institute (South Korea); J.-H. Ahn, Chonnam National Univ. (South Korea); S.-S. Kim, H.-J. Kim, J.-H. Kim, Korea Photonics Technology Institute (South Korea)
- 6717 0F **A miniaturized EDM device suitable to fixing on a robot** [6717-24]
Y. Tang, Z. Guo, Y. Zhang, Guangdong Univ. of Technology (China)

SESSION 2 MANIPULATION AND ASSEMBLY OF MICRO/NANO DEVICES AND COMPONENTS

- 6717 0G **Mechanical instabilities and piezoresistivity of SiGe/Si microtubes** [6717-30]
L. Zhang, L. Dong, B. J. Nelson, ETH Zürich (Switzerland)
- 6717 0H **InGaAs/GaAs helical nanobelts as building blocks for nanoscale optoelectronic devices** [6717-31]
G. Hwang, ETH Zurich (Switzerland) and The Univ. of Tokyo (Japan); C. Dockendorf, D. J. Bell, L. Dong, ETH Zurich (Switzerland); H. Hashimoto, The Univ. of Tokyo (Japan); D. Poulidakos, B. J. Nelson, ETH Zurich (Switzerland)
- 6717 0I **Improved design of large 3D micromirrors for microassembly into an optical MEMS cross-connect** [6717-32]
M. A. Basha, Univ. of Waterloo (Canada); N. Dechev, Univ. of Victoria (Canada); S. Safavi-Naeini, S. K. Chaudhuri, Univ. of Waterloo (Canada)
- 6717 0J **NanoHand: micro/nano system for automatic handling of nano-objects (Invited Paper)** [6717-33]
S. Fatikow, V. Eichhorn, A. Sill, OFFIS (Germany); A. Steinecker, C. Meyer, CSEM (Italy); L. Occhipinti, STMicroelectronics (Italy); S. Fahlbusch, I. Utke, EMPA (Switzerland); P. Bøggild, MIC, DTU (Denmark); J.-M. Breguet, EPFL (Switzerland); R. Kaufmann, Klocke Nanotechnik (Germany); M. Zadrazil, TESCAN (Czech Republic); W. Barth, Nascatec (Germany)
- 6717 0K **Micro-electro-fluidic module to control magnetotactic bacteria for micromanipulation tasks under an optical microscope** [6717-23]
W. André, Z. Lu, B. Moufarrej, S. Martel, École Polytechnique de Montréal (Canada)
- 6717 0L **Room temperature GaN-GaAs direct bonding by argon-beam surface activation** [6717-34]
E. Higurashi, Y. Tokuda, M. Akaike, T. Suga, The Univ. of Tokyo (Japan)

SESSION 3 INVITED SESSION: COMPOSITE DOPED METAMATERIALS

- 6717 OM **Optimization of metallic bi-periodic photonic crystals application to compact directive antennas (Invited Paper)** [6717-14]
N. Guérin, C. Hafner, R. Vahldieck, ETH Zürich (Switzerland)
- 6717 ON **Analysis and optimization of frequency selective surfaces with inhomogeneous periodic substrates (Invited Paper)** [6717-15]
A. Fallahi, M. Mishrikey, C. Hafner, R. Vahldieck, Swiss Federal Institute of Technology, Zurich (Switzerland)
- 6717 OO **Study of metallic nanoshelled structures with rigorous electromagnetic analysis (Invited Paper)** [6717-16]
X. Cui, D. Erni, Univ. of Duisburg-Essen (Germany); C. Hafner, K. Tavzarashvili, R. Vahldieck, ETH Zurich (Switzerland)
- 6717 OP **Plasmonic nanostructures made from aluminum fabricated by EUV interference lithography (Invited Paper)** [6717-17]
Y. Ekinici, ETH Zurich (Switzerland); H. H. Solak, C. David, Paul Scherrer Institute (Switzerland); J. F. Löffler, ETH Zurich (Switzerland)
- 6717 OQ **On the role of the losses in metamaterials (Invited Paper)** [6717-03]
N. Guérin, C. Hafner, R. Vahldieck, ETH Zentrum (Switzerland)
- 6717 OR **Engineering gold nano-antennae to enhance the emission of quantum emitters (Invited Paper)** [6717-19]
M. Agio, G. Mori, F. Kaminski, L. Rogobete, S. Kühn, ETH Zurich (Switzerland); V. Callegari, P. M. Nellen, EMPA (Switzerland); F. Robin, ETH Zurich (Switzerland); Y. Ekinici, Paul Scherrer Institute (Switzerland); U. Sennhauser, EMPA (Switzerland); H. Jäckel, ETH Zurich (Switzerland); H. H. Solak, Paul Scherrer Institute (Switzerland); V. Sandoghdar, ETH Zurich (Switzerland)

SESSION 4 INKJETING AND OPTICAL DEVICES

- 6717 OS **Effects of substrate treatments on silver ink-jet printing (Invited Paper)** [6717-26]
S.-H. Lee, K.-Y. Shin, J. Y. Hwang, K. Kang, H. Kang, Y. J. Cho, Korea Institute of Industrial Technology (South Korea)
- 6717 OT **A study on driving waveform of a piezoelectric inkjet print head (Invited Paper)** [6717-27]
J. Y. Hwang, M. K. Kim, S. H. Lee, K. Kang, H. Kang, Y. J. Cho, Korea Institute of Industrial Technology (South Korea)
- 6717 OU **A new SPR sensing technique using a chip with a fabricated microstructure** [6717-21]
H. Okuno, F. Oohira, N. Miyanishi, S. Shimamoto, M. Hosogi, Kagawa Univ. (Japan)

Author Index

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- 2 Manipulation and Assembly of Micro/Nano Devices and Components
Yves-Alain Peter, École Polytechnique de Montréal (Canada)
- 3 Invited Session: Composite Doped Metamaterials
Mario Agio, ETH Zurich (Switzerland)
- 4 Inkjetting and Optical Devices
Heuseok Kang, Korea Institute of Industrial Technology (South Korea)

International Symposium on Optomechatronic Technologies ISOT 2007

In recent years, most engineered products, processes, and systems have been evolving towards higher functionality, flexibility, intelligence, and miniaturization. This trend is stimulated by the ongoing fusion between optical and mechatronic technologies leading not only to enhanced performance but also to the creation of new, innovative functionalities. Because of its synergistic effect, the integration of these engineering fields, labeled optomechatronic technology, is becoming a major driving force to future enabling technologies.

The objective of this symposium is to gather researchers and engineers working in the field of optomechatronics and to provide them with a forum for discussion for exchanging their points of view and experience and sharing their research results through high quality peer reviewed papers.

The symposium consists of five conferences:

- 1) **Optomechatronic Actuators and Manipulation**
- 2) **Optomechatronic Sensors and Instrumentation**
- 3) **Optomechatronic Micro / Nano Devices and Components**
- 4) **Optomechatronic Computer-Vision Systems**
- 5) **Optomechatronic Systems Control**

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Introduction

At this very young stage of the 21st century, the emergence of a novel stream is expected to be seen in micro-nanoscale technologies dealing with small objects, including atoms and molecules to establish a sophisticated, information-oriented society with some epoch-making innovations, which may include novel computers equivalent to human brains. Although the expectation is supported by many technological sprouts in a wide variety of fields including telecommunications, information processing, and sensing, we are still faced with some critical issues that include how the diffraction limit is overcome, or how optical signals are stored against the theory of relativity. In the continuing mission of improving science and technologies for the society of the future, it is due time to move on to discussing ways of overcoming such issues. Researchers and engineers will have an opportunity to exchange their opinions in this interdisciplinary conference.

There were 38 submissions to this conference, among them 34 have been accepted according to peer reviews. The acceptance rate was about 89.5%. The conference consists of two poster sessions (13 papers) and four oral sessions (21 papers) including two invited sessions:

- P1 (6 papers): Micro/Nano Devices and Components (Chair: Albert Sill)
- P6 (6 papers): Invited Session 1: Composite Doped Metamaterials (Chair: Mario Agio)
- P7 (4 papers): Invited Session 2: Inkjet (Chair: Heuseok Kang)
- P8 (5 papers): Manipulation and Assembly of Micro/Nano Devices and Components (Chair: Yves-Alain Peter)

Lixin Dong

