



WPI-AIMR and Fraunhofer ENAS Joint Workshop on Micro Integrated Devices

Date: 2013/02/22 Friday

Place: Aoba Memorial Hall 4th floor (Aobayama Campus, Tohoku University)

(<http://www.eng.tohoku.ac.jp/map/?menu=campus&area=c&build=03>)

10:00 – 10:10	Opening Remarks Director Prof. Motoko Kotani (WPI-AIMR)
NEMS/MEMS and nanomaterial-enhanced passive components (JST-DFG Cooperative Program)	
10:10 – 10:30	Heterogeneous integration of MEMS and LSI using adhesive bonding Prof. Masayoshi Esashi (WPI-AIMR) and Prof. Shuji Tanaka (Graduate School of Engineering, Tohoku University)
10:30 – 11:00	Smart Systems Integration by using Micro- and Nanotechnologies Prof. Thomas Gessner (Fraunhofer ENAS, Chemnitz University of Technology, WPI-AIMR)
11:00 – 11:25	Nanomaterial integrated three dimensional inductors Dr. Yu-Ching Lin (WPI-AIMR)
11:25 – 11:50	Functional liquids within NEMS/MEMS fabrication Mr. Felix Gabler (Fraunhofer ENAS, Chemnitz University of Technology)
11:50 – 12:15	Wafer level bonding of heterogeneous substrates at low temperature Mr. Jörg Frömel (Fraunhofer ENAS, Chemnitz University of Technology, Fraunhofer Project Center at Tohoku University)
Lunch break	
Functional material integration	
13:30 – 14:00	[Special Speech] Dealloyed nanoporous metals for device applications Prof. Mingwei Chen (WPI-AIMR)
14:00 – 14:30	[Guest Speech] Piezoelectric MEMS mirror with wide scan angle actuated by Nb doped PZT film Mr. Takayuki Naono (Fujifilm Corporation)
14:30 – 14:50	MEMS switch using metallic glass thin film Mr. Yu-Lang Chu (Fraunhofer ENAS, now G13 Lab of WPI-AIMR)
14:50 – 15:10	Integration and fabrication of magnetic metallic glass for MEMS mirco-mirror system Dr. Yao-Chuan Tsai (WPI-AIMR)
15:10 – 15:30	Fabrication of L10FePt based patterned recording media Dr. Neelam Kaushik (WPI-AIMR)
Coffee break	
Micro devices and fabrication	
15:45 – 16:15	[Guest Speech] MEMS Technology challenges for RF-MEMS devices Dr. Koichi Ikeda (Sony Corporation)
16:15 – 16:35	Integrated Tactile Sensor Device Dr. Masanori Muroyama (WPI-AIMR)
16:35 – 16:55	Local redox cycling-based electrochemical chip device for high-throughput cell analysis Dr. Kosuke Ino (Graduate School of Environmental Studies, Tohoku University)
16:55 – 17:15	Microscale technologies to fabricate muscle tissues Dr. Samad Ahadian (WPI-AIMR)
17:15	Closing Address Prof. Masayoshi Esashi
Closing	
18:00 – 20:00	Reception

Language: English | Admission Free | Registration Required for Reception (5000 Yen) by 2013.2.13

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