Program

13:00-13:10

Opening

Teruo Kanki , Osaka University (JP) Luca Pellegrino, CNR-SPIN (IT)

13:10-13:20

Introduction of ISIR

Akira Oiwa, Vice-director of ISIR, Osaka University

13:20-14:00 Keynote talk

The importance of scientific collaboration in the global research environment

Enrico Traversa, Science and Technology Counsellor, Embassy of Italy

14:00-14:30 <u>Invited talk</u>

Neuromorphic control system with stochastic resonance and its application to multi-degree-offreedom actuator array systems

> Yasushi Hotta, University of Hyogo

14:30-15:00 <u>Invited talk</u>

Nanoenginereed thermoelectric thin films

Paolo Mele, Shibaura Institute of Technology 15:00-15:30 Coffee Break

15:30-16:00 Invited talk

Capacitive MEMS Accelerometer Fabricated by Multi-Layer Metal Technology

Toshifumi Konishi, NTT-Advanced Technology Corporation

16:00-16:30 **Invited talk**

Flexible sheet sensors to monitor biosignals

Teppei Araki, Osaka University

16:30-17:00 Invited talk

Ongoing activities on functional materials at University of Genova and CNR-SPIN

Daniele Marré, University of Genoa

Group Photo

17:30-19:30

Special speech in Consulate-General of Italy in Osaka

Luigi Diodati, Consul General

Buffet-style discussion with Poster presentations

Poster

17:30-

- 1. Flexible sheet sensors to monitor biosignals

 Teppei Araki, Osaka University
- 2. Clarification of temperature dependence of strain effect in flexible single crystal VO₂ wires Fumiya Endo, Osaka University
- 3. Challenges for microactuators based on VO_2 Nicola Manca, CNR-SPIN
- 4. Epitaxial Ni-Mn-Ga Films: the impact of growth conditions and post-growth treatments on microstructure and magnetic configuration

 Milad Takhsha Ghahfarokhi, IMEM-CNR
- 5. Growth and characterization of VO₂ thin films on hexagonal boron nitride

Shingo Genchi, Osaka University

6. ASIC implementation of bistable unit summing network and its stochastic resonant behavior

Yuki Tomekawa, University of Hyogo

7. Mechanical Design and Optimization of Micro Positioning Systems

Phi Drive Srl

Scope of this international workshop is to promote discussions in the fields of microactuators, MEMS/NEMS, flexible devices and related materials. This event is organized in the framework of the Italy-Japan bilateral project sponsored by the Ministry of Foreign Affairs and International Cooperation of the Italian Republic, and the Japan Society for the Promotion of Science (JSPS).

Organizers

- ➤ Teruo Kanki ISIR, Osaka University (JP)
- Luca Pellegrino CNR-SPIN (IT)
- Daniele Marré University of Genoa(IT)
- Nicola Manca University of Genoa(IT)











MEMO







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Osaka, 4th October 2019



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