



CALL FOR ABSTRACTS - CIMTEC 2016

Perugia, Italy, June 5-9, 2016

Symposium K

Non-volatile Memory Devices: materials, emerging concepts and applications

Submit your Abstract

Abstract Deadline - October 15, 2015

SESSION TOPICS

Resistance switching memories (ReRAM)

Electrochemical metallization (EMC) and valence change (VCM) memories
Polymer-based and hybrid organic & inorganic memory devices
Advanced characterization techniques, mechanisms and modelling
3D architectures, cross-bar arrays and selectors

Phase change memories (PCM)

New materials and concepts for PCM, including low dimensional cells
Theory and modelling
Interfacial phase change memories
Integration schemes and scaling

Magnetic, ferroelectric and multiferroic materials for memory devices

Tunnel junctions and spin transfer torque (STT)
Racetrack memory and emerging three terminal magnetic device materials
FeRAM and Ferroelectric FET
Novel materials including organic ferroelectric and magnetic

Memristive materials, devices and emerging applications

Novel memristive-based circuits
Non-volatile logics
Neuromorphic architectures, reconfigurable electronics and cognitive applications

List of confirmed invited speakers

Marco BERNASCONI, University of Milano-Bicocca, Italy
Olivier BICHLER, CEA-LIST, Saclay, France
Miryam BUCHBINDER, Towerjazz, Israel
Raffaella CALARCO, Paul-Drude-Institute, Germany
Damien DELERUYELLE, IM2NP – Polytech, France
Bernard DIENY, CEA/Spintec, France
Paolo FANTINI, Micron, Italy
Bin GAO, Peking University, China
Vincent GARCIA, CNRS/Thales, France
Daniele IELMINI, Politecnico di Milano, Italy
Antony KENYON, Univ. College London, UK
Alexander V. KOLOBOV, AIST, Japan

Ming LIU, Institute of Microelectronics, CAS, China
Massimo LONGO, CNR-IMM, Italy
Blanka MAGYARI-KÖPE, Stanford University, USA
Vladimir NIKITIN, Samsung Electronics, USA
Yu NISHITANI, Panasonic, Japan
Hideo OHNO, Tohoku University, Japan
Dorothee PETIT, University of Cambridge, UK
Dafinè RAVELOSONA, Université Paris Sud, France
Moonhwa REE, Pohang University, South Korea
Eilam YALON, Stanford University, USA
Jennifer RUPP, ETH Zurich, Switzerland

Martin SALINGA, RWTH Aachen University, Germany
Akihito SAWA, AIST, Japan
Uwe SCHROEDER, NaMLab GmbH, Germany
Abu SEBASTIAN, IBM Research, Switzerland
John Paul STRACHAN, HP Laboratories, USA
Ronald TETZLAFF, Dresden Univ. of Technology, Germany
Junjii TOMINAGA, AIST, Japan
Ilia VALOV, RWTH Aachen University, Germany
Jianhua Joshua YANG, University of Massachusetts

Symposium Chairs:

Programme Chair: Sabina SPIGA, CNR-IMM, Agrate Brianza, Italy ; *Co-Chairs:* Hideo OHNO, Tohoku University, Japan; Marco BERNASCONI, University of Milano-Bicocca, Italy; Blanka MAGYARI-KÖPE, Stanford University, USA