

ISIF² 2009 Session Chairs and Invited Speakers

TUTORIALS SESSION

Chair: Fred Walker, Yale University

- Speaker 1:** Daniel Worledge, IBM
Topic: "Magnetic Memory Applications"
- Speaker 2:** M. L. Lee from Yale, Topic:
Topic: "Solar Cell Materials"
- Speaker 3:** Prof. Robert Wallace, University of Texas
Topic: "Challenges for High-K Dielectrics on High Mobility Channels"
- Speaker 4:** Dr. Ted Moise, Texas Instruments
Ferroelectrics and Ferroelectric Devices

KEYNOTE SPEAKER: Arunava Majumdar, UC Berkeley
Topic: "Materials in Energy"

Plenary Speaker 1: C. Araujo, Symetrix Corporation and University of Colorado at Colorado Springs
Title: "The Role of Non-Volatile Memory in Ubiquitous Computing"

Plenary Speaker 2: To be announced

PARALLEL SESSIONS

Session 1: Non-Volatile Memories (FeRAMs, RRAMs, MRAMs, PCMs)

Chairs:

T. Moise, Texas Instrument, Dallas, TX, USA
C. Muller, Polytechnique Universitaire de Marseille, France

Invited Speakers:

J. P. Nozieres, Crocus Technology, France and USA
D. Ielmini, Politecnico di Milano, Italy
J. Eliason, Ramtron, USA

Session 2: Inorganic Materials for Biomedical Devices and Biosensors

Chairs:

O. Auciello, Argonne National Laboratory, USA
S.K. Dey, Arizona State University, USA

Invited Speakers:

Leo Ocola, Argonne National Lab

Session 3: Multiferroics and Magnetoelectrics: Theory, Experiments, and Devices

Chairs:

N.D. Mathur, University of Cambridge, UK
R. Katiyar, University of Puerto Rico

Invited Speakers:

V. Garcia, Unité Mixte de Physique CNRS/Thales, France
A. Kumar, University of Puerto Rico

Session 4: Nanoscale Ferroelectrics and Interfaces: Size Effects

Chairs:

S. Kalinin, Oak Ridge National Laboratory, USA
M. Alexe, Max Planck Institute, Germany

Invited Speakers:

A. Baddorf, Oak Ridge National Laboratory, USA

W. Lee, Korea Research Institute of Standards and Science (KRISS), Korea

Session 5: Synthesis and Characterization of Ferroelectric Materials: Theory and Experiment

Chairs:

S. Nakhmanson, Argonne National Laboratory, USA

M. Dawber, Stony Brook University, USA

Invited Speakers:

X. Hong, Penn State, USA

B. Huey, University of Connecticut, USA

Session 6: Synthesis and Characterization of High-K Dielectrics for Nanoscale CMOS Devices

Chairs:

P. Majhi, Sematech, USA

J.Y. Kim, University of Texas, Dallas, USA

Invited Speakers:

J. Lee, University of Texas, USA

Session 7: Piezoelectrics and Opto-Electronics and Photovoltaics for Sensors, Actuators, and Energy Conversion

Chairs:

H. Funakubo, Tokyo Institute of Technology, Japan

Invited Speakers:

T. Kobayashi, AIST, Japan

Session 8: Synthesis and Characterization of High-K Dielectrics for RF Applications, and Devices

Chairs:

F. A. Miranda, NASA, USA

G. Subramanyam, University of Dayton, OH, USA

Invited Speakers:

J. Baniecki, Fujitsu, Japan

M. Cole, Army Research Lab, USA

G. Velu, University Littoral, France

Session 9: Ferroelectric Polymers, Composites and Liquid Crystals

Chairs:

D. Chu, Cambridge Research Laboratory of Epson, UK

S. Ducharme, University of Nebraska

Invited Speakers:

Q.M. Zhang, Penn State

Igor Stolichnov, EPFL Lausanne

Alain Jonas, Catholic University of Belgium in Louvain

Session 10: Transport Properties in Nanoscale Resistive Memories

Chairs:

C. Araujo, Symetrix Corp. and University of Colorado at Colorado Springs, USA

Invited Speakers: TBD