

International Symposium on Advanced Magnetic Materials and Applications

ISAMMA 2010

July 12-16, Sendai, Japan

Abstract dead line : February 28, 2010

The ISAMMA conference is a consolidation of the former international conferences under three different organizations :

ISPMM (Int'l Sympo. on Physics of Magnetic Materials) of Japan

SOMMA (Int'l Sympo. on Magnetic Materials and Applications) of Korea

ISAMT (Int'l Sympo. on Spintronics and Advanced Magnetic Technologies) of Taiwan

All members of the international scientific and engineering community interested in new developments in magnetic materials and associated technologies are invited to attend and submit their latest findings to ISAMMA 2010. Proceedings will be published in Journal of Physics: D and Conference series.

<http://www.ecei.tohoku.ac.jp/isamma2010/>



Program Categories

1. Fundamental Properties of Magnetic Materials :

Electronic Structure, Itinerant Magnetism, Critical Phenomena, Strongly Correlated Systems, Superconductivity, Magnetic anisotropy, Magnetostriction, Domains, Magnetization Process

2. Hard/Soft Magnetic Materials and Applications :

Rare-Earth Transition Metal Borides, Intermetallic and Other Hard Magnetic Materials, Nanostructured Hard Magnetic Materials, Hard Magnet Processing and Applications, Ferrites, Garnets and Other Microwave Materials, Crystalline Alloys, Amorphous/Nanocrystalline Materials

3. Spintronics Materials and Devices :

Magnetoresistive Materials (TMR, GMR, AMR), Magnetic Semiconductors, MRAM, Magnetic Logic Devices, Spin Polarization, Spin Injection, Spin Transfer, Spin Current and Spin Hall Effect

4. Structured Materials :

Ultra-Thin Films and Surface Effects, Multi-Layer Films and Superlattices, Exchange Bias, Patterned Films, Nanoparticles, Self-Assembly

5. Multi Functional Magnetic Materials :

Magneto-Optic Materials, Magneto-Elastic Materials, Magneto-Caloric Materials, Molecular Magnets, Multiferroic Materials, New Magnetic Materials

6. Spin Dynamics and Micromagnetics :

Magnetization Dynamics and Damping, Ultrafast Switching, Domain Wall and Vortex Dynamics, Numerical Methods, Micromagnetic Modeling

7. Magnetic Storage :

Continuous Recording Media, Energy Assisted Recording, Discrete Track and Patterned Media Recording, Magnetoresistive Heads (CPP, CCP, TMR), Inductive Heads, Recording Head Materials, Alternative Magnetic Storage

8. Materials for Applications (Sensors, High Frequency, Power, and Bio/Medical devices) :

Magnetic Sensors (not magnetic recording), Magnetic Shielding, Microwave and Millimeter Wave Devices, MEMS, Transformers and Inductors, Motors and Actuators, Levitation and Propulsion, Bio/Chemical Magnetism, Biomagnetic Applications, Magnetic Fluids and Separations, New Applications

9. Magnetic Imaging and Characterization :

Electron Microscopy, X-ray Imaging Techniques, Magneto-Optical Imaging, Magnetic Microscopy and Imaging, Other Imaging Techniques, Instrumentation and Measurement Techniques