

Lecture program

November 27 Opening, Oral & Poster Scientific Sessions

10:00-10:40 Opening Ceremony of GIMRT

Chair: G. E. W. Bauer

Welcome Address

K. Takanashi (Director, IMR)

Greeting from President

H. Ohno (President, Tohoku University)

Greeting from MEXT

T. Nishii (Director, Scientific Research Institutes Division, RPB, MEXT)

Introduction of GIMRT Program

T. Furuhashi, IMR

11:00-12:45 Scientific Session I : Spintronics and Electronics

Chair: R. Umetsu

K1 Ferrimagnetic Spintronics

T. Ono, Kyoto University 11

K2 The Crystal Hall Effect and Topological Spintronics in Antiferromagnets

J. Sinova, SPICE, Johannes Gutenberg University Mainz 12

I3 Electric Control of Magnetism in a Two-Dimensional van der Waals Ferromagnet $\text{Cr}_2\text{Ge}_2\text{Te}_6$

H. Kurebayashi, University College London 13

I4 Spin Superfluidity Materials

W. Han, Peking University 14

Technical Announcement

H. Kato, IMR

12:45-15:00 Poster Scientific Session 5-10, 33-100

15:00-16:00 Recent Activities in Research Divisions and Centers

Chair: T. Sasaki

Collaborative Research with IMR Research Divisions and Groups

K. Fujiwara, IMR

Introduction and Recent Activities of IRCNMS (Oarai Center)

Y. Nagai, IMR

Recent Activities of HFLSM

H. Nojiri, IMR

- K5 Interaction of Hydrogen Isotopes and Radiation-Induced Defects in Tungsten and its Impact on Performance as Plasma-Facing Material of Fusion Reactor
Y. Hatano, University of Toyama 15
- I6 Dynamical Ag⁺-Intercalation with AgSnSe₂ Nano-Precipitates in Cl-Doped Polycrystalline SnSe₂ toward Ultra-High Thermoelectric Performance
L. Miao, Guilin University of Electronic Technology 16
- I7 Metamagnetism and Superconductivity in UTe₂ under Intense Magnetic Field
W. Knafo, LNCMI–Toulouse 17

November 28 Oral Scientific Sessions

- K8 New Era of Metallurgy through High Entropy Alloys
H. S. Kim, Pohang University of Science and Technology 19
- K9 Unique Mechanical Properties by Nano–Macro Synergy Effects in Harmonic Structure Designed Metallic Materials
K. Ameyama, Ritsumeikan University 20
- I10 The Effect of Crystalline Defects on Transformation Crystallography in Mg Alloys
X. Gu, University of Science and Technology Beijing 21

- K11 Dealloyed Porous Materials for Advanced Batteries
M. Chen, Johns Hopkins University 22
- I12 Thermoelectric Performance and Defect Studies of Compositionally Homogeneous Si_{1-x}Ge_x
M. Arivanandhan, Anna University 23
- I13 Diffusionless Isothermal Omega Transformation in Titanium Alloys: Thermodynamics and Kinetics of Displacive Phase Transition Driven by Quenched–In Compositional Fluctuations
M. Tane, Osaka University 24

K14	Competition and Collaboration are Key to Understanding High-Temperature Superconductors J. M. Tranquada, Brookhaven National Laboratory	25
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I19	Structural Investigations on the Rejuvenation Effect by Thermal Strain in Metallic Glasses J. Stellhorn, Hiroshima University	30
I20	Computation of Phonon Related Transport Properties in Semiconducting Materials E. Minamitani, Institute for Molecular Science	31

Poster Scientific Session Contents (November 27 Day1 12:45-15:00)

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P-A3	Probing the Néel temperature in antiferromagnetic MnTiO ₃ ultrathin films by spin Hall magnetoresistance K. Miura, IMR	35
P-A4	Research and development of high-pressure apparatus for neutron diffraction experiments on 4f-electron magnetic materials Y. Ikeda, IMR	36

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