

PROGRAM

Apr. 21/Room A

Plenary talk I

13:30 ~ 14:30

- 21PL-1 Invention of Nd-Fe-B sintered magnet and development of basic research
°M. Sagawa (Daido Steel)
- 21PL-2 Asian Magnetism Initiative
°K. Shin (DGIST)

Symposium "MRAM"

15:00 ~ 18:15

- 21pA-1 [Invited] Challenges toward voltage-controlled MRAM
°S. Yuasa, T. Nozaki, T. Yamamoto, T. Nozaki, H. Nakayama, T. Ichinose, J. Kim, S. Tsunegi, K. Yakushiji, H. Kubota (AIST)
- 21pA-2 [Invited] Low-Power SOT-MRAM using MTJs with Strain-Induced Magnetic Anisotropy
°H. Yoda, T. Yoda, Y. Ohsawa, Y. Yamazaki, T. Yoda (YODA-S, Inc.)
- 21pA-3 [Invited] Spin-orbit torque switching of magnetic tunnel junctions for memory and compute applications
°K. Garello (Spintec)
- 21pA-4 [Invited] Spin-Transfer-Torque MRAM: the Next Revolution in Memory
°D. C. Worledge (IBM Research)
- 21pA-5 [Invited] Key Technologies of Scaling Embedded MRAM and Various Applications
°S. Ko, T. Lee, H. Jung, S. Han, Y. Song (Samsung)
- 21pA-6 [Plenary: AUMS Awardee] STT-MRAM: From Technology Breakthroughs to Products and Applications
°Y. Huai (Avalanche Technology Inc.)

Apr. 21/Room B

Nuromorphic computing and related techniques

15:00 ~ 17:00

- 21pB-1 [Invited] 2D Spintornics: Skyrmion and beyond
°Y. Wu (UF)
- 21pB-2 [Invited] Probabilistic computing with stochastic magnetic tunnel junctions
°S. Fukami (Tohoku Univ.)
- 21pB-3 Study on Neuromorphic Characteristics and Functionalities of Mn₃Sn-based Devices
°E. Lim, S. Lee, E. Jun, S. Kim (University of Ulsan)
- 21pB-4 Tailored Exchange Bias and Multilevel Magnetization Control in CoPt/FeMn SOT Devices for Neuromorphic Computing
°S. Lee, Y. Lin, Z. Wu, Y. Tseng (NYCU)
- 21pB-5 Enhancing spin selectivity in a quantum dot spin qubit using reservoir spin accumulation
°R. Jansen, W. Klich, A. Spiesser, S. Yuasa (AIST)
- 21pB-6 Assessing Insertion Impacts on STT-MRAM for Energy-Efficient CIM
°Z. Wu¹, K. Chen², J. Wei², S. Sheu², T. Hou¹, Y. Tseng¹ (¹NYCU, ²ITRI)

Machine Learning for Magnetic Material Development 17:15 ~ 18:00

- 21pB-7 Dictionary Learning-Based Screening of Layered Materials via Interface Fermi Surface Matching
Y. Mizutori¹, K. Simalaotao^{1,2}, Y. Shimazaki¹, Y. Miura^{2,3}, Y. Sakuraba^{1,2}, Y. Iwasaki², °Y. Igarashi^{1,2}
(¹Univ. of Tsukuba, ²NIMS, ³Kyoto Inst. of Tech)
- 21pB-8 Comprehensive ab initio Stability Analysis of Heusler Compounds with Phonon Considerations for Enhanced Material Discovery
°E. Xiao, T. Tadano (NIMS)

21pB-9 Feature Extraction Using Audio Dataset for Electric Motor Performance Classification
°F. Mujaahid^{1,2}, M. F. Hsieh¹, T. Huda¹ (¹NCKU, ²UMY)

Apr. 21/Room C

Spin caloritronics I 15:00 ~ 16:30

- 21pC-1 [Invited] Electron orbital dynamics in solids
°H. Lee (POSTECH)
- 21pC-2 [Invited] Magnon-drag thermoelectric transport in non-uniform spin structures
°J. Ohe (Toho Univ.)
- 21pC-3 Figure of merit of transverse thermoelectric conversion for magnetic thin film measured by all-in-one evaluation method
°T. Yamazaki¹, N. L. Okamoto¹, T. Ichitsubo¹, T. Seki^{1,2} (¹IMR, Tohoku Univ., ²CSIS, Tohoku Univ.)
- 21pC-4 Enhancement of thermal conductivity change induced by magneto-thermal resistance effect in Cu/CoFe multilayers
°F. Makino^{1,2,3}, T. Hirai², T. Shiga⁴, H. Suto², H. Fujihisa⁴, K. Oyanagi³, S. Kobayashi³, T. Sasaki², T. Yagi⁴, K. Uchida^{1,2,5},
Y. Sakuraba^{1,2} (¹Univ. of Tsukuba, ²NIMS, ³Iwate Univ., ⁴AIIST, ⁵Univ. of Tokyo)

Spin caloritronics II 16:45 ~ 17:45

- 21pC-5 [Invited] Spin Seebeck effect in nanostructure embedded magnetic insulator
°J. Jeong¹, P. Cao Van¹, B. Park², S. Kim², S. Park³, H. Jin³ (¹Chungnam National University, ²KAIST, ³POSTECH)
- 21pC-6 Electric field control of anomalous Nernst effect in FePt thin films
°S. Yoshida, B. Qiang, T. Miyamachi, M. Mizuguchi (Nagoya Univ.)
- 21pC-7 Advancement of anomalous Nernst heat flux sensor : new sensor structures for higher performance
°Y. Sakuraba¹, W. Zhou¹, Y. Tabata², S. Inamura², K. Taguchi², M. Orito² (¹NIMS, ²SEMITEC)

Apr. 21/Room D

Hard magnetic materials I 15:00 ~ 16:15

- 21pD-1 [Invited] Coercivity Enhancement of Nd₂Fe₁₄B Magnets through Suppressing Pr-rich Shell Formation: Insights from Micromagnetic Simulations
G. Kim^{1,3}, T. Kim², °K. Lee³ (¹School of Materials Science and Engineering, Ulsan National Institute of Science and Technology (UNIST), Ulsan, Republic of Korea, ²Department of Magnetic Materials, Korea Institute of Materials Science (KIMS), Changwon, Republic of Korea, ³Graduate School of Semiconductor Materials and Devices Engineering, Ulsan National Institute of Science and Technology (UNIST), Ulsan, Republic of Korea)
- 21pD-2 [Invited] Microstructure and magnetic properties of 2:17-type Sm-Co permanent magnets according to heat treatment conditions
S. Park¹, G. Min¹, K. Bae², °T. Kim¹ (¹Chonnam National University, ²R&D Center of Star Group Co. Ltd)
- 21pD-3 A comparative study on shell formation and coercivity improvement of Pr-free and Pr-alloyed Nd-Fe-B sintered magnets during grain boundary diffusion process with low-melting Pr-Cu-Al-Ga alloy
°S. Lee¹, G. Kim², K. S. Lee², S. Kim¹, T. H. Kim¹, S. H. Lee³, D. H. Kim³, J. G. Lee¹
(¹Korea Institute of Materials Science, ²Ulsan National Institute of Science and Technology, ³Star Group Ind. Co., Ltd.)

Hard magnetic materials II 16:30 ~ 18:00

- 21pD-4 [Invited] Advancements in Compositional and Processing Methods for ThMn₁₂-Type Permanent Magnetic Materials
°J. Park (Korea Institute of Materials Science)
- 21pD-5 Constituent phases and microstructural characteristics of anisotropic hot-deformed magnets produced by (Nd_{1-x}Ce_x)-Fe-B Hydrogenation-Disproportionation-Desorption-Recombination treated precursors
°J. Yoo, T. Kim, H. Cha, S. Kim, J. Lee (Korea Institute of Materials Science)
- 21pD-6 Fe-rich Sm-Fe-N anisotropic nanopowder prepared by induction thermal plasma process
°Y. Hirayama, P. Kwangjae, Z. Liu (AIIST)
- 21pD-7 [Invited] Recent Progress and Future Prospects on Fe-based Magnetocaloric Compounds
°A. Fujita (AIIST)

Apr. 21/Poster Room

Poster session I

15:00 ~ 18:00

- 21pPS-1 Sensitive detection of non-linear spin wave using amplitude modulated RF magnetic field
°S. Yamaguchi¹, S. Yakata², T. Kimura¹ (¹Kyushu Univ., ²Fukuoka Inst. Tech.)
- 21pPS-2 Threshold Power Reduction for Parametric Pumping in Perpendicular Standing Spin Wave Modes
°S. Nezu, S. Kataoka, K. Kagawa, K. Sekiguchi (Yokohama National Univ.)
- 21pPS-3 Stability of Magnonic Soliton through Head-On Collision
°T. Iwata, S. Nezu, K. Sekiguchi (Yokohama National Univ.)
- 21pPS-4 Non-Adiabatic Magnon Pumping in Single-Crystal Iron
°S. Yokouchi, S. Nezu, K. Imamura, M. Ohtake, K. Sekiguchi (Yokohama National Univ.)
- 21pPS-5 Spin-Wave Channeling by Cubic Anisotropy
°R. Iwami, K. Kagawa, S. Nezu, K. Imamura, M. Ohtake, K. Sekiguchi (Yokohama National Univ.)
- 21pPS-6 Spoken Digit Classification using Micro Spin-Wave Reservoir Chips
°R. Yoshida, S. Nagase, S. Nezu, K. Sekiguchi (Yokohama National Univ.)
- 21pPS-7 Nonreciprocal spin wave excitation in Ni_xFe_{1-x} alloy induced by surface acoustic waves
°S. Sakai¹, K. Yamanoi¹, Y. Nozaki^{1,2} (¹Keio Univ., ²CSRN Keio)
- 21pPS-8 Ultrastrong to nearly deep-strong magnon-magnon coupling with a high degree of freedom in synthetic antiferromagnets
°Y. Wang¹, F. Ma², G. Yu¹ (¹Institute of Physics CAS, ²Nanjing Normal University)
- 21pPS-9 Nonreciprocal magnon polaritons in magneto-chiral metamolecule
°K. Mita¹, T. Kodama¹, T. Ueda², T. Nakanishi³, K. Sawada⁴, T. Chiba¹, S. Tomita¹
(¹Tohoku Univ., ²Kyoto Inst. of Tech., ³Kyoto Univ., ⁴RIKEN)
- 21pPS-10 Structural design of surface acoustic wave resonators for enhanced magnon-phonon coupling
°A. Nagao¹, K. Yamanoi¹, Y. Nozaki^{1,2} (¹Dept. of Phys., Keio Univ., ²CSRN, Keio Univ.)
- 21pPS-11 Magnon-phonon interaction mapping using high-overtone SAW devices in Co-based Heusler alloys
°K. Yamanoi¹, S. Yamada², K. Hamaya², Y. Nozaki¹ (¹Keio Univ., ²Osaka Univ.)
- 21pPS-12 Magnetization-Referenced Current Injection Patterns for Reservoir Computing Using Spin Torque Oscillators
°H. Kayama, S. J. Greaves (Tohoku Univ.)
- 21pPS-13 Phase recognition of topological spin-wave by machine learning
°S. Kamakura, J. Ohe (Toho Univ.)
- 21pPS-14 Magnetization dynamics in GdFeCo ferrimagnet induced by inner-shell excitation using X-ray Free-Electron Laser
°Y. Akiyama^{1,2}, R. Kobayashi^{1,2}, K. T. Yamada³, H. Yoshikawa⁴, K. Takemura^{1,2}, R. Obata⁵, A. Gocho^{2,5}, S. Sasakura^{2,5},
K. Kaneshima⁵, T. Togashi⁶, Y. Kubota², A. Tsukamoto⁴, Y. Tanaka^{2,5}, M. Suzuki^{1,2}
(¹Kwansei Gakuin Univ., ²RIKEN, ³Institute of Science Tokyo, ⁴Nihon Univ., ⁵Univ. Hyogo, ⁶JASRI)
- 21pPS-15 Néel Vector Rotation Driven by Spin-Orbit Torque in Amorphous Ferrimagnetic GdCo Thin Films
°T. Mandokoro¹, Y. Shiota^{1,2}, T. Ito¹, H. Matsumoto¹, H. Narita¹, R. Hisatomi^{1,2}, S. Karube^{1,2}, T. Ono^{1,2} (¹ICR, ²CSRN)
- 21pPS-16 Nonlinear linewidth behavior of the optic ferromagnetic resonance mode in Co/Ru/Co synthetic antiferromagnets
°Y. Hisada, S. Komori, T. Taniyama (Nagoya Univ.)
- 21pPS-17 Anomalous ferromagnetic resonance linewidth broadening in Fe thin films
°S. Baek¹, S. Komori¹, K. Imura², T. Taniyama¹ (¹Nagoya Univ., ²ILAS, Nagoya Univ.)
- 21pPS-18 Analysis of Substitutional Effects of Sn and Sb on Magnetocrystalline Anisotropy of MnBi at Finite Temperature
°Y. Harashima^{1,2}, A. Nishida¹, Y. Morishita³, M. Matsui³, N. Umezawa, R. Umetsu⁴, Y. Shigeta⁵, H. Lim⁶, N. Kim⁶, S. Bae⁶,
S. D. Roh⁶, S. Takasuka¹, T. Takayama^{1,2}, M. Fujii^{1,2,7} (¹NAIST, ²DSC, NAIST, ³LG Japan Lab inc., ⁴IMR, Tohoku Univ.,
⁵CCS, Univ. Tsukuba, ⁶LG Innotek Co., LTD, ⁷CMP, NAIST)
- 21pPS-19 Ferroaxial order-dependent circularly polarized Raman scattering in ilmenite NiTiO₃
°G. Kusuno¹, T. Hayashida², T. Nagai², H. Watanabe², T. Kimura², T. Satoh^{1,3} (¹Science Tokyo, ²Univ. of Tokyo, ³IMS)
- 21pPS-20 Probing magnetic anisotropy in Cr-intercalated CrTe₂ layered transition metal halides: Spin-orbit torque method
°Y. Tseng, B. Huang, Y. Tang (NCU)

- 21pPS-21 Contribution of lattice distortion and N addition to high uniaxial magnetic
°C. Murakami, T. Hasegawa (Akita Univ.)
- 21pPS-22 Enhanced Stress Stability in Flexible Co/Pt Multilayers with Strong Perpendicular Magnetic Anisotropy
M. Li, H. Yang, Y. Xie, °X. Bao, R. Li (NIMTE)
- 21pPS-23 Ab-initio study on correlation between magnetostriction and magnetic damping
I. Kurniawan¹, K. Ito², T. Seki^{2,3}, K. Masuda¹, °Y. Miura^{1,4}
(¹NIMS, ²IMR, Tohoku Univ., ³CSIS, Tohoku Univ., ⁴Kyoto Institute of Technology)
- 21pPS-24 Synthesis of the iron-based superconductor Sr₂Mg_{0.3}Ti_{0.7}FeAsO_{3-δ}
°Y. Ueno, N. Azuma, M. Matoba, Y. Kamihara (Keio Univ.)
- 21pPS-25 Electrical transport properties of Co₂MnGa and Co₂MnSi bulk single crystals
°G. Mimuro¹, T. Tanaka¹, T. Kubota¹, S. Kokado², R. Umetsu¹ (¹Tohoku Univ., ²Shizuoka Univ.)
- 21pPS-26 Phase control of the ground state parity in quantum dot Josephson junctions
°S. Kobayashi^{1,2}, S. Matsuo^{1,3}, M. Spethmann⁴, P. Stano¹, D. Loss^{1,4}, T. Lindemann⁵, S. Gronin⁵, G. Gardner⁵, M. Manfra⁵,
S. Tarucha¹ (¹RIKEN, ²Tokyo Univ. Sci., ³Tokyo Inst. Tech., ⁴Univ. of Basel, ⁵Purdue Univ.)
- 21pPS-27 Shapiro response of the Josephson diode derived from Andreev molecules
°S. Matsuo^{1,2}, R. S. Deacon¹, S. Kobayashi^{1,3}, Y. Sato¹, T. Yokoyama⁴, T. Lindemann⁵, S. Gronin⁵, G. C. Gardner⁵,
K. Ishibashi¹, M. J. Manfra⁵, S. Tarucha¹ (¹RIKEN, ²Tokyo Inst. Tech., ³Tokyo Univ. Sci., ⁴Osaka Univ., ⁵Purdue Univ.)
- 21pPS-28 Effect of Preparation Method on the Magnetic and Martensitic Transformation on Ferromagnetic MnCoGe
°T. Tsunematsu¹, M. Onoue¹, Y. Mitsui¹, R. Umetsu², K. Koyama¹ (¹Kagoshima Univ., ²Tohoku Univ.)
- 21pPS-29 Cooling rate dependence of magnetostriction on melt-spun ribbons of Fe-Ga alloy and the rare earth elements doping
°L. Chen, R. Y. Umetsu (Tohoku Univ.)
- 21pPS-30 Phase stability of Mn₃Ga with D0₂₂-type structure
°D. Nobayashi, Y. Mitsui, M. Onoue, K. Koyama (Kagoshima Univ.)
- 21pPS-31 Shielding Frequency Control of Conformal NiFeCuMo/Cu Multilayer EMI Shield
°A. Kikitsu, S. Shirotori (Toshiba)
- 21pPS-32 Directional-enhancement of magnetic resonance in soft magnetic CoNbZr films with uniaxial magnetic anisotropy
°H. Kijima-Aoki, L. Tonthat, S. Yabukami (Tohoku Univ.)
- 21pPS-33 Development of nT meter applied by GSR sensor
°M. Hikishima, S. Honkura, Y. Honkura (Magnedesign)
- 21pPS-34 Enhancement of anomalous Hall and Nernst effects in tetragonal distorted FeCo induced by the addition of V and N elements
°A. K. Patel¹, C. Murakami², T. Nakatani¹, T. Hasegawa², Y. Sakuraba¹ (¹NIMS, ²Akita Univ.)
- 21pPS-35 Theoretical study on anomalous Hall sensors with the second-order uniaxial anisotropy
°H. Arai, H. Imamura (AIST)
- 21pPS-36 Investigation of harmonic components in thin film magnetoimpedance elements
°R. Chida, H. Kikuchi (Iwate Univ.)
- 21pPS-37 Thermal distribution in Joule heating of thin-film element and its effect on adjacent element
°S. Kawasaki, H. Kikuchi (Iwate Univ.)
- 21pPS-38 Study of an Arbitrary Waveform Magnetic Scale Based on Magnet Width Modulation Method
°A. Hotta, T. Musha (MITSUBISHI ELECTRIC CORPORATION)
- 21pPS-39 Feedback Cooling of High-Q Magnetically-Levitated Resonator for Ultraprecise Accelerometer
S. Tian¹, D. Kim¹, A. Hodges¹, G. Hermosa³, C. Padilla¹, P. Romagnoli¹, R. Lecamwasam¹, J. Downes², °J. Twamley¹
(¹OIST, ²Macquarie U, ³YuanZe U)
- 21pPS-40 Impact of manganese and lanthanum substitution on the structural, morphological, and magnetic properties of cobalt ferrite synthesized via co-precipitation for microwave absorption applications
°N. Prasetya¹, R. Rahmawati¹, S. Suharno², Y. Taryana³, R. Riyatun¹, U. Utari¹, N. Nuryani¹, B. Purnama¹ (¹Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Sebelas Maret, Surakarta 57126, Indonesia, ²Department of Physics Education, Faculty of Teacher Training and Education, Universitas Sebelas Maret, Surakarta 57126, Indonesia, ³Center for Research of electronic and telecommunication, Indonesia Institute of Sciences, Bandung 40135, Indonesia)

Apr. 22/Room A

Symposium "AI driven magnetism"

9:30 ~ 12:00

- 22aA-1 [Invited] Representation of magnetic properties by a data-driven extended free energy model
°C. Mitumata¹, A. Lira Foggiano², M. Kotsugi² (¹Univ. of Tsukuba, ²Tokyo Univ. Sci.)
- 22aA-2 [Invited] Extended Free Energy Model: Automated Analysis of Magnetic Domain Structure
°M. Kotsugi (Tokyo Univ. Sci.)
- 22aA-3 [Invited] Autonomous materials search using simulation, robotics, and machine learning
°Y. Iwasaki (NIMS)
- 22aA-4 [Invited] Accelerating Magnetic Materials Discovery with Explainable AI Frameworks
°H. C. Dam^{1,2}, H. Kino³, T. Miyake⁴ (¹JAIST, ²Tohoku Univ., ³NIMS, ⁴AIST)

Symposium "Recent developments of spintronics in a variety of symmetries"

13:30 ~ 17:30

- 22pA-1 [Invited] Manipulation of the altermagnetic order via crystal symmetry
°C. Song¹, Z. Zhou¹, X. Chen², J. Liu², F. Pan¹ (¹Tsinghua University, ²The Hong Kong University of Science and Technology)
- 22pA-2 [Invited] Spin-orbit torque devices for AI and quantum-inspired applications
°C. Pai (National Taiwan University)
- 22pA-3 [Invited] Generation of Large Spin Current during Magnetic Phase Transition of FeRh
T. Lee¹, M. Park², H. Ko¹, J. Oh¹, S. Ko¹, S. Hwang¹, J. Jang¹, G. Baek¹, S. Kim¹, H. Lee³, M. Jung², °K. Kim¹, K. Lee¹
(¹KAIST, ²Sogang University, ³POSTECH)
- 22pA-4 [AUMS Young Researcher Awardee] Handedness manipulation and electrical readout of propagating antiferromagnetic magnons
°Y. Shiota (Kyoto Univ.)
- 22pA-5 [Invited] Molecular vibration-driven spin polarization as a source of chirality-induced spin selectivity
°S. Miwa (Univ. of Tokyo)
- 22pA-6 [Invited] Photonic generation of electron orbital in ferromagnetic film probed by laser-induced magnetization dynamics measurement
°S. Iihama¹, K. Nukui², K. Ishibashi², S. Mizukami² (¹Nagoya Univ., ²Tohoku Univ.)
- 22pA-7 [Plenary: AUMS Awardee] X-spintronics
°T. Ono (Kyoto Univ.)

Apr. 22/Room B

Unconventional magnetic phenomena I

9:00 ~ 10:30

- 22aB-1 [Invited] Topological Chiral Crystals for Orbitronics
°D. Go (Johannes Gutenberg University Mainz)
- 22aB-2 [Invited] Highly efficient spin-charge conversion in ferromagnetic metal Fe / topological Dirac semimetal α -Sn heterostructures
°L. D. Anh¹, M. Ishida¹, S. Fukuoka¹, T. Chiba², Y. Kota³ (¹Univ. of Tokyo, ²Tohoku Univ., ³NIT, Fukushima Coll.)
- 22aB-3 Growth of Highly Textured BiSb Topological Insulator on Si/SiO_x substrates for Spin-Orbit Torque Devices Using TiO_x/MgO Buffer Layers
°W. Li¹, H. Ho Hoang¹, S. Takahashi², Y. Hirayama², Y. Kato², P. N. Hai¹ (¹Institute of Science Tokyo, ²Samsung Japan)
- 22aB-4 Anisotropic spin polarization induced by Fermi surface manipulation
°S. Sugimoto¹, Y. Araki², J. Ieda², S. Kasai¹ (¹NIMS, ²JAEA)

Unconventional magnetic phenomena II**10:45 ~ 12:45**

- 22aB-5 [AUMS Young Researcher Awardee] Exploring Anomalous Hall Effect in Rare-Earth Transition-Metal (RE-TM) Ferrimagnets for Spintronics Applications
°R. Bhatt, L. Ye, T. Wu (YunTech Taiwan)
- 22aB-6 High-throughput material exploration system for the anomalous Hall effect using combinatorial experiments and machine learning
°R. Toyama, Y. Iwasaki, P. D. Kulkarni, H. Suto, T. Nakatani, Y. Sakuraba (NIMS)
- 22aB-7 Compensation-Level Dependent Probabilistic Behavior in Stochastic Magnetic Tunnel Junction with Synthetic Antiferromagnetic Free Layer
°T. Kinoshita, J. Yoon, N. Cacoilo, H. Kaneko, S. Kanai, H. Ohno, S. Fukami (Tohoku Univ.)
- 22aB-8 Altermagnetic RuO₂(101) thin films exhibiting a single variant
°Z. Wen¹, C. He¹, J. Okabayashi², Y. Miura^{1,3}, T. Ohkubo¹, T. Seki⁴, H. Sukegawa¹, S. Mitani¹
(¹NIMS, ²Univ. of Tokyo, ³KIT, ⁴Tohoku Univ.)
- 22aB-9 Polarized neutron reflectometry at CSNS and its application to the study of the magnetic thin films
°T. Zhu (IOPCAS)
- 22aB-10 [Invited] Searching of Spin-triplet Superconductivity at High-Tc- Superconductor/Ferromagnetic-Oxide Interfaces
°H. Chou^{1,2}, S. J. Sun^{1,2}, K. W. Hsueh¹, A. J. Grutter³, Z. Q. Su¹, L. T. Chen¹, D. Cortie⁴, T. Y. Huang⁵, S. C. Weng⁵, Y. Y. Chin⁶, H. J. Lin⁵, J. W. Chiou^{1,2}
(¹Sun Yat-sen Univ., ²Nat. Univ. Kaohsiung, ³NIST Center for Neutron Research, ⁴ANSTO, ⁵NSRRC, ⁶Chung Cheng Univ.)

SOT switching I**13:30 ~ 15:15**

- 22pB-1 [Invited] Dual SOT Switching Modes in a Single Device Geometry for Neuromorphic Computing
°C. Lai (National Tsing Hua Univ.)
- 22pB-2 Current-induced spin-orbit torque magnetization switching in electrochemically deposited CoPt thin film
°T. Huang¹, S. Isogami², T. Shirokura¹, M. M. Hasan³, M. Saito³, J. Uzuhashi², T. Ohkubo², S. Kasai², S. Nakagawa¹, Y. Takamura¹ (¹Science Tokyo, ²NIMS, ³Waseda Univ.)
- 22pB-3 Investigation of current induced magnetization switching in the SOT devices with low-Z elements
°G. K. Shukla, P. Kumar, S. Isogami (NIMS)
- 22pB-4 Multilayered MXenes for future two-dimensional nonvolatile magnetic memories with ultrahigh integration
P. Kumar¹, Y. Miura^{1,2}, Y. Kotani³, A. Sumiyoshiya³, T. Nakamura^{3,4}, G. Shukla¹, °S. Isogami¹
(¹NIMS, ²Kyoto Inst. of Tech, ³NanoTerasu, ⁴Tohoku Univ.)
- 22pB-5 Impact of Nitrogen on magnetization switching in non-collinear antiferromagnetic Mn₃PtN compared to Mn₃Pt
°N. Tripathi¹, S. K. Mishra¹, S. Isogami² (¹IIT (BHU), ²NIMS)
- 22pB-6 Field-free perpendicular magnetic memory driven by out-of-plane spin-orbit torques
°S. Liang¹, A. Chen^{2,3}, L. Han¹, X. Zhang², C. Song¹ (¹Tsinghua University, ²KAUST, ³UESTC)

SOT switching II**15:45 ~ 17:30**

- 22pB-7 Giant bulk spin-orbit torque driven spin Hall nano-oscillators using PtBi alloys
°U. Shashank¹, A. Kumar^{1,4}, T. Parvini², H. Heyen², M. Rajabali³, M. Munzenberg², J. Akerman^{1,4}
(¹University of Gothenburg, ²Universitat Grefswald, ³NanOsc AB, ⁴Tohoku Univ.)
- 22pB-8 Giant spin-orbit torque in a symmetry-enforced topological Dirac semimetal
X. Zheng¹, S. Peng¹, M. Radovic², R. Li¹, °Z. Wang¹ (¹NIMTE,CAS, ²PSI)
- 22pB-9 Role of Pt and Bi on the giant spin Hall effect in topological semimetal YPtBi
°S. Kagami¹, O. Fujie¹, D. Ito¹, Q. Le², B. York², C. Hwang², X. Liu², S. Le², M. Maeda³, T. Fan³, Y. Tao³, H. Takano³, P. N. Hai¹ (¹Department of Electrical and Electronic Engineering, Institute of Science Tokyo, ²Western Digital Inc., Great Oaks site, ³Western Digital Inc., Fujisawa site)
- 22pB-10 Doped BiSbX Topological Insulator For Spin-Orbit Torque Devices
°F. Tuo¹, Q. Le², B. R. York², C. Hwang², X. Liu², M. A. Gribelyuk², S. Le², L. Xu², J. James², J. Ortega², M. Maeda¹, Y. Tao¹, H. Takano¹, M. Liu³, R. Zhang³, S. Namba³, P. N. Hai³
(¹Western Digital Inc., Fujisawa Site, ²Western Digital Inc., Great Oaks Site, ³Tokyo Inst. Tech.)

- 22pB-11 Symmetry and conductivity modulation in SrRuO₃ for efficient orbital torque and field-free magnetization switching
°X. Zheng, S. Peng, R. Li, Z. Wang (NIMTE,CAS)
- 22pB-12 Spin Hall effect in Platinum deposited by atomic layer deposition for 3D spin-orbit torque devices
°P. N. Hai, K. Ishida, K. Sato (Ins. Sci. Tokyo)
- 22pB-13 Spin Orbit Torque in Gd/FeCo Multilayers with Layer Thickness Gradient
°R. Yabushita¹, D. Oshima¹, S. Takahashi², Y. Hirayama², Y. Kato², T. Kato¹ (¹Nagoya Univ., ²Samsung Japan)

Apr. 22/Room C

MR effect

10:45 ~ 12:30

- 22aC-1 [Invited] Improvement in tunnel magnetoresistance of CoFeB-based magnetic tunnel junctions by MgO barrier interface modification
°H. Sukegawa, T. Scheike, J. Uzuhashi, Z. Wen, S. Kasai, T. Ohkubo, S. Mitani (NIMS)
- 22aC-2 [Invited] Competing magnetic exchange effects in FeRh/NiFe bilayers
°M. Jung (Sogang University)
- 22aC-3 Scaling of the Two-Terminal Magnetoresistance in Lateral Spin-Valve Devices
°A. M. Spiesser, R. Jansen, S. Yuasa (AIST)
- 22aC-4 Shape-dependent magnetoresistance of singular electrodeposited one-dimensional magnetic nanostructures
°K. Rogachev, M. Sobirov, T. Rakhmatullaev, I. Sapovsky, M. Bazrov, A. Samardak (FEFU)
- 22aC-5 Novel magnetoelectric properties in topological materials containing magnetic atoms
°Z. Y. Ma^{1,2}, W. Sun^{1,2}, W. G. Li^{1,2} (¹CAS Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, ²University of Chinese Academy of Sciences)

Functional magnetic devices I

13:30 ~ 15:15

- 22pC-1 [Invited] Observation of optical vortex generation in magnon-induced Brillouin light scattering
°R. Hisatomi^{1,2,3}, A. Osada⁴, K. Taga¹, H. Komiyama¹, H. Narita^{1,3}, S. Karube^{1,2,3}, Y. Shiota^{1,2}, T. Ono^{1,2}
(¹Kyoto Univ., ²CSRN, ³PRESTO, ⁴QIQB)
- 22pC-2 Exploring 3D Magnetic Sensing via Antiferromagnetic Order in Cox/Ptx Superlattices: Insights from Experiment and Simulation
°A. Fathy¹, Y. Huang¹, V. Bhukya¹, C. Hu¹, L. Chang², P. Lin³, M. Lai³, Y. Tseng¹ (¹NYCU, ²ITRI, ³iSenteck)
- 22pC-3 Spin Hall sensor using topological insulator
°M. Liu¹, R. Zhang¹, Q. Le², B. York², C. Hwang², X. Liu², M. Gribelyuk², X. Xu², S. Le², M. Maeda³, F. Tuo³, Y. Tao³, H. Takano³, P. N. Hai¹
(¹Institute of Science Tokyo, ²Western Digital Inc., Great Oaks site, ³Western Digital Inc., Fujisawa site)
- 22pC-4 Analysis of Output Signals in Domain Wall Displacement GMR Sensors with CoFeB Free layers
°K. Komuro, D. Oshima, T. Kato (Nagoya Univ.)
- 22pC-5 Detection of Green-Synthesized Magnetic Ferrofluid Nanotags Using Commercial Chip-based Giant Magnetoresistance Sensor
°H. Ajrina¹, H. Ardiyanti^{1,2}, P. E. Swastika^{1,3}, N. I. Istiqomah¹, Z. Zurnansyah¹, L. Shifa¹, E. Suharyadi¹
(¹Universitas Gadjah Mada, ²Institut Teknologi Sumatera, ³Universitas Negeri Yogyakarta)
- 22pC-6 Non-hysteretic tunnel magnetoresistive sensors using soft-pinning through noncollinear interlayer exchange coupling
P. D. Kulkarni, °T. Nakatani (NIMS)

Functional magnetic devices II

15:45 ~ 17:30

- 22pC-7 Shape-modification of soft magnetic particles for electromagnetic wave absorption and thermal management
°Y. Kwon, J. Jeong, B. Park, K. Kim, S. Yang (Korea Institute of Materials Science)
- 22pC-8 Giant Magneto-Impedance effect in soft magnetic microwires: challenges, advances and perspectives.
V. Zhukova¹, P. Corte-Leon², A. Gonzalez¹, °A. Zhukov³ (¹Univ. Basque Country, UPV/EHU, ²Univ. Cambridge and Basque Country, UPV/EHU, ³Univ. Basque Country, UPV/EHU and Ikerbasque)
- 22pC-9 High frequency magnetoelectric antenna excited by acoustic waves with large bandwidth
°Y. M. Ma, C. Song, F. Pan (Tsinghua University)

- 22pC-10 High-frequency drive type thin film sensor using coplanar line with slit
R. Suzuki, L. Tonthat, J. Honda, H. Kijima-Aoki, °S. Yabukami (Tohoku University)
- 22pC-11 Flexible Magnetic Pressure/Strain Sensors Based on GMI Effect
°Y. Wu, S. Li, Y. Liu, R. Li (NIMTE,CAS)

Apr. 22/Room D

Symposium "Recent trends in advanced molecular magnetism: bulk, nano to quantum nature"

9:00 ~ 12:30

- 22aD-1 [Invited] Spin Crossover System with Multifunction
°S. Hayami (Kumamoto University)
- 22aD-2 [Invited] Molecular Spin Qubits toward Quantum Computer and High-Density Memory Devices Based on Molecular Magnets
°M. Yamashita (Tohoku University)
- 22aD-3 [Invited] Quantum Computing with Molecules
°M. Ruben (KITANO)
- 22aD-4 [Invited] Organometallic Single-Molecule Magnets Containing Radicals and Bismuth
°S. Demir (Department of Chemistry, Michigan State University, East Lansing, Michigan 48824, USA)
- 22aD-5 [Invited] A molecular approach to 2D magnetic materials
°E. Coronado (Valencia University)
- 22aD-6 [Invited] Light-Induced Magnetic and Dielectric switching in Spin Transition Molecular Materials
°Y. Meng (Dalian University of Technology)

Symposium "Frontier research on soft magnetic materials and devices for power electronics applications"

13:30 ~ 17:00

- 22pD-1 [AUMS Young Researcher Awardee] Deep supercooling solidification for high-performance soft magnetic alloys
°C. Wu, Q. Chen, K. Wang, X. Zhang, G. Liu, M. Yan (Zhejiang Univ.)
- 22pD-2 [Invited] Magnetic Losses in Soft Magnetic Materials up to Radiofrequencies: Experimental and Theoretical Approaches
°S. Dobak¹, C. Beatrice², F. Fiorillo², C. Ragusa³, V. Tsakaloudi⁴, J. Fuzer¹, P. Kollar¹ (¹Inst. of Physics, Fac. of Science, P. J. Safarik University, Kosice, 04154, Slovakia, ²Advanced Materials Metrology & Life Sciences Div., INRIM, Torino, 10135, Italy, ³Energy Dpt. 'G. Ferraris', Politecnico di Torino, Torino, 10129, Italy, ⁴Lab. of Inorganic Materials, CPERI, CERTH, Thessaloniki, 54124, Greece)
- 22pD-3 [Invited] Effect of additives on soft magnetic properties of Fe-B-based nanocrystalline alloys prepared by ultra-rapid annealing
°Z. Tang, K. Suzuki (Monash University)
- 22pD-4 [Invited] Study of domain wall dynamics in soft magnetic materials using magnetic Barkhausen noise measurements
°S. Tamaru¹, T. Yamazaki² (¹AIST, ²TUS)
- 22pD-5 [Invited] How to use soft magnetic materials from the power electronics designer
°H. Matsumori (Nagoya Inst. Tech.)
- 22pD-6 [Invited] Sustainable SMC material developments for automotive electrification
°Z. Ye, T. Hiroki (Ube Material Industry)

Apr. 22/Room E

Magnetic nanoparticles for biomedical application I 9:30 ~ 10:30

- 22aE-1 Smart PNIPAM/FeRh composite activated by magnetocaloric effect for biomedical applications
°A. Amirov (MISIS)

- 22aE-2 Optimization of B₁-field homogeneity in transcranial MR-guided focused ultrasound system based AutoML: A simulation study
 °E. Lee¹, T. Nam¹, D. Hernandez², H. Kim², E. Ozhinsky³, K. Kim⁴, K. Kim^{1,2} (¹GAIHST, Gachon University, ²Neuroscience Research Institute, Gachon University, ³University of California, San Francisco, ⁴Kyung Hee University)
- 22aE-3 Advanced TMR Sensor-Based Magnetrodes for High-Sensitivity Biomagnetic Field Detection
 °J. Chen^{1,2,3}, J. Luo^{1,2}, Z. Xu^{1,2}, Y. Wang^{1,2}, Z. Jin^{1,2}, M. Wang^{1,2}, X. Cai^{1,2} (¹State Key Laboratory of Transducer Technology, Aerospace Information Research Institute, Chinese Academy of Sciences, ²School of Electronic, Electrical and Communication Engineering, University of Chinese Academy of Sciences, ³College of Materials Sciences and Opto-Electronic Technology, University of Chinese Academy of Sciences)
- 22aE-4 Estimating magnetometer position, orientation, and sensitivity at extended distance from the calibration coil array in a magnetically shielded room
 °T. Fukui^{1,3}, T. Shibuya², Y. Adachi¹ (¹Kanazawa Inst. Tech., ²TDK, ³LibreFields)

Magnetic nanoparticles for biomedical application II 11:00 ~ 12:15

- 22aE-5 Magnetic separation of lysosomes from cells with lysosome dysfunction using superparamagnetic-plasmonic hybrid nanoparticles
 °M. Takahashi, T. S. Le, Y. Hiratsuka, K. Matsumura, S. Maenosono (JAIST)
- 22aE-6 Green Synthesis of CoFe₂O₄/C-dots Nanocomposites Utilizing Moringa Oleifera and Watermelon Peels for Enhanced Magnetic Hyperthermia
 °S. F. Azzahro¹, A. Jiananda¹, D. A. Larasati¹, M. Y. Darmawan^{1,2}, E. K. Sari¹, N. I. Istiqomah¹, D. Oshima³, T. Kato^{3,4}, E. Suharyadi¹ (¹Department of Physics, Universitas Gadjah Mada, ²Department of Physics, Institut Teknologi Sumatera, ³Department of Electronics, Nagoya University, ⁴Institute of Materials and Systems for Sustainability, Nagoya University)
- 22aE-7 Estimation of 2-dimensional distribution of anisotropy energy and magnetization in easy-axes oriented magnetic nanoparticles
 °H. Goto¹, M. Futagawa¹, Y. Takemura², S. Ota¹ (¹Shizuoka Univ., ²Yokohama National Univ.)
- 22aE-8 Polyvinyl Alcohol-Based Ferrogel System for Sustained, Magnetic Field-Guided, Acid-Triggered Delivery of Omeprazole
 °L. Subbiah, S. Palanisamy, K. Nagarajan, M. Ramasamy Govindaraj (Anna University)
- 22aE-9 Synthesis of Magnetic-Biodegradable Periodic Mesoporous Organosilica Nanoparticles for Biomedical Applications
 °D. N. Mai^{1,2}, H. T. Nguyen^{1,2}, H. K. Ta^{1,2,3}, H. T. Lai^{1,2}, K. Matsumoto⁴, F. Tamanoi⁴, T. L. Doan^{1,2}, T. B. Phan^{1,2} (¹INOMAR, ²VNU-HCM, ³Univ. of Science, ⁴iCeMS, Kyoto Univ.)

Symposium "Recent developments in medical applications of magnetics"

13:30 ~ 17:00

- 22pE-1 [Invited] Selective destruction of cancer cells without affecting healthy cells by low frequency magneto-mechanical stimulation
 P. Obeid³, R. Morel², A. Visona^{1,2}, C. Naud², A. Nicolas¹, H. Joisten², X. Gidrol³, F. Berger⁴, °B. Dieny² (¹Univ. Grenoble Alpes, CNRS/LTM, Grenoble, France, ²Univ. Grenoble Alpes, CEA, CNRS, IRIG, SPINTEC, Grenoble, France, ³Univ. Grenoble Alpes, CEA, INSERM, IRIG, Biomics, Grenoble, France, ⁴Univ. Grenoble Alpes, INSERM/Brain Tech Lab, Grenoble, France)
- 22pE-2 [Invited] Magnetic Particle Imaging based Targeted Therapy of Brain Disorders
 °J. Yoon (Gwangju Institute of Science and Technology)
- 22pE-3 [Invited] Ultra-Fast and High-Power Nanoscale Heating Mechanism via Spin Precession in Magnetic Nanoparticles for Potential Biomedical Hyperthermia Applications
 °S. Kim (Seoul National University)
- 22pE-4 [Invited] Engineering Magnetic Nanoparticles for Targeted Brain Imaging : A Focus on Intranasal Administration of Tailored Nanoparticles
 °S. Seino, T. Nakagawa (Osaka Univ.)
- 22pE-5 [Invited] Design of human body sized magnetic particle imaging scanner
 °T. Yoshida, T. Sasayama (Kyushu Univ.)

- 22pE-6 [Invited] Magnetically Guided Effervescent Pantoprazole Tablets for Targeted Anti-Ulcer Therapy: Development and Optimization
 °S. Palanisamy¹, L. Subbiah¹, K. Nagarajan¹, Y. Takemura², S. Ota³ (¹Department of Pharmaceutical Technology, Centre for Excellence in Nanobio Translational Research, University College of Engineering, Bharathidasan Institute of Technology Campus, Anna University, Tiruchirappalli, Tamil Nadu, India. PIN-620024, ²Yokohama National University, Japan, ³Shizuoka University, Japan)

Apr. 22/Poster Room

Poster session II

9:00 ~ 12:00

- 22aPS-1 Strain regulation of skyrmions density on flexible substrates
 °R. Zou, H. Yang, Y. Xie, R. Li (NIMTE)
- 22aPS-2 Machine Learning Analysis of Temperature- and Frequency-Dependent Self-Organization Mechanisms in YIG Magnetic Domain Structures
 °R. Nagaoka¹, A. Lira Foggiatto¹, T. Yamazaki¹, C. Mitsumata², M. Kotsugi¹ (¹Tokyo Univ. Sci., ²Univ. of Tsukuba)
- 22aPS-3 Growth of Co Thin Films with Low Roughness by ALD for 3D Magnetic Memory
 °Y. Hu, K. Sato, R. Zhang, K. Ishida, P. N. Hai (Tokyo Inst. Tech.)
- 22aPS-4 Magnetic and magneto-transport properties of non-collinear antiferromagnet Mn₃Ge epitaxial films
 °Y. Takeuchi¹, H. Sepehri-Amin², S. Sugimoto², T. Hiroto³, S. Kasai² (¹ICYS, NIMS, ²CMSM, NIMS, ³RNFS, NIMS)
- 22aPS-5 Magnetic and crystallographic properties of pulsed electrochemically deposited CoPt thin films
 °Y. Takamura¹, T. Huang¹, Y. Tanaka¹, M. Tanaka², M. Saito², P. Allongue³, J. Uzuhashi⁴, T. Ohkubo⁴, S. Kasai⁴, S. Nakagawa¹
 (¹Science Tokyo, ²Waseda Univ., ³Ecole Polytechnique Palaiseau, ⁴NIMS)
- 22aPS-6 Enhanced Stress Stability in Flexible Co/Pt Multilayers with Strong Perpendicular Magnetic Anisotropy
 M. Li, H. Yang, Y. Xie, °R. Li (NIMTE)
- 22aPS-7 Evaluation of crystal structure and magnetic properties in Cobalt thin films deposited on LiTaO₃ substrates
 °T. Abe¹, S. Shikano¹, K. Shimamura², H. Sugiyama², S. Ono³, M. Shima¹, K. Yamada¹
 (¹Gifu Univ., ²Kanazawa Univ., ³Muroran Int. Univ.)
- 22aPS-8 Reduction of antiphase boundary density of spinel ferrite thin films by oxidation annealing
 °K. Takeo, H. Yanagihara (Univ. of Tsukuba)
- 22aPS-9 The transformation of the preferred orientation axis in ordered FePt alloy thin films on heat treatment
 °K. Daike, H. Yoshikawa, A. Tsukamoto (Nihon Univ.)
- 22aPS-10 Coherent harmonic generation of magnons in spin textures
 °G. Lan¹, K. Liu¹, Z. Wang², G. Liu¹, P. Yan², G. Yu¹ (¹IOP, CAS, ²UESTC)
- 22aPS-11 Asymmetry of domain walls motion in out of plane and in plane magnetic fields in Pd/Co/Pd epitaxial system
 °N. N. Chernousov, A. V. Davydenko, A. S. Pashenko, A. A. Turpak, A. G. Kozlov (Far Eastern Federal University)
- 22aPS-12 Anomalous increase of Gilbert damping in La_{0.5}Sr_{0.5}MnO₃ thin films induced by the emergence of antiferromagnetic phase
 °R. Arakawa, T. Onogi, S. Komori, T. Taniyama (Nagoya Univ.)
- 22aPS-13 Preparation of Al₂O₃ films applied to multi-layered magnetic films
 °F. Yamashita, R. Sankoda, A. Yamashita, T. Yanai, M. Nakano, H. Fukunaga (Nagasaki Univ.)
- 22aPS-14 Demonstration of non-collinear ferrimagnetism in (111)-oriented Mn₄N thin films by X-ray magnetic circular dichroism
 °A. Hatate¹, T. Yasuda¹, K. Amemiya², T. Suemasu¹ (¹Univ. of Tsukuba, ²KEK)
- 22aPS-15 Thinned Nd-Fe-B sintered magnets for donors in LIFT technique
 °R. Sankoda¹, K. Masuda¹, F. Yamashita¹, T. Motomura¹, A. Yamashita¹, T. Yanai¹, M. Nakano¹, T. Shinshi², H. Fukunaga¹
 (¹Nagasaki Univ., ²Institute of Science Tokyo)
- 22aPS-16 Crystal Growth and Phase Formation of Fe-N Epitaxial Thin Films on MgO(001) Substrates
 °K. Imamura¹, S. Isogami², M. Ohtake¹ (¹Yokohama National Univ., ²NIMS)
- 22aPS-17 Perpendicularly magnetized synthetic antiferromagnetic layers based on CoPd/Ru/CoPd(111) multilayers for magnetic tunnel junctions
 °K. B. Fathoni, T. Scheike, Z. Wen, S. Mitani, H. Sukegawa (NIMS)

- 22aPS-18 Indirect Exchange Interaction for Perpendicularly Magnetized CoFeB Layers through W Interlayer
^oX. Hou, K. Ito, V. K. Kushwaha, T. Yamazaki, T. Seki (Tohoku Univ.)
- 22aPS-19 Thermo-Magnetic Image of a Magnetic Wire Using a Laser Induced Electromotive Force
^oS. Sumi, M. Mohammadi, K. Tanabe, H. Awano (Toyota Tech. Inst.)
- 22aPS-20 Fabrication and analysis of Co-Pt multilayer nanowires prepared by dual-bath electrodeposition
^oR. Kawana¹, N. Ohguchi¹, M. Saito², T. Homma^{2,3}, T. Kato⁴, T. Ono⁵, M. Shima¹, K. Yamada¹ (¹Gifu Univ., ²Res. Org. for Nano and Life Innov. Waseda Univ., ³Dept. of Appl. Chem. Waseda Univ., ⁴Nagoya Univ., ⁵ICR Kyoto Univ.)
- 22aPS-21 Effect of smooth transition from crystalline to amorphous phase on magnetic behavior of gradient Co-CoW nanowires
^oT. Rakhmatullaev, I. Sapovskii, M. Sobirov, K. Rogachev, N. Ilin, A. Samardak (FEFU)
- 22aPS-22 Crystalline/amorphous three-segmented Co/CoW nanowires: synthesis and magnetic properties
^oI. Sapovskii, T. Rakhmatullaev, M. Sobirov, K. Rogachev, N. Ilin, A. Samardak (FEFU)
- 22aPS-23 Exchange bias in ultrathin epitaxial Pd/Co/CoO films
^oE. V. Tarasov^{1,2}, A. F. Shishelov¹, I. A. Tkachenko², A. G. Kozlov¹ (¹FEFU, ²ICH FEB RAS)
- 22aPS-24 Enhancement of Hydrogen Evolution Reaction in Water Splitting with the Gadolinium doped Molybdenum Disulfide Magnetic Catalyst
K. Tang, J. Wu, ^oC. Lee (NTHU)
- 22aPS-25 Non-linear Hall effect in graphene induced by strong orbital diamagnetism
M. Wang¹, Y. Fan², H. Wu², ^oC. Chang^{1,3} (¹Quantum information center, Chung Yuan Christian University, ²School of Physics, Beijing Institute of Technology, ³Department of Physics, National Taiwan University)
- 22aPS-26 Current-voltage characteristics in NiPS₃/Pt/Co multilayers
^oK. Tada, Y. Suzuki, T. Hattori, K. Hayashi, S. Iihama, T. Moriyama (Nagoya Univ.)
- 22aPS-27 Magnetic controlled spin qubit simulation in h-BN defect
^oC. Lee, Y. Tang (National Central University)
- 22aPS-28 Effect of stacked granular buffer layer with carbon on nanostructure and magnetic properties of FePt granular films for heat assisted magnetic recording media
^oD. Miyazaki¹, K. Tham¹, S. Saito² (¹TANAKA, ²Tohoku Univ.)
- 22aPS-29 Small grain size FePt granular films with co-addition of nitride and carbon as grain boundary materials for HAMR media
^oK. Tham¹, D. Miyazaki¹, S. Saito² (¹TANAKA, ²Tohoku Univ.)
- 22aPS-30 Oscillation stability vs. applied field to STO for MAMR
^oY. Kanai¹, K. Tatsuno¹, S. J. Greaves² (¹Niigata Inst. Tech., ²Tohoku Univ.)
- 22aPS-31 A Study on Error Correction for Domain Wall Motion Memory
^oY. Nakamura, M. Nishikawa, Y. Okamoto (Ehime Univ.)
- 22aPS-32 Perpendicular magnetic anisotropy and microstructure of FePt (x-N, Ag, C) (x=B, Al) films
^oJ. Tsai, Y. Lin, M. Lin, C. Tsai, H. Huang (NCHU)
- 22aPS-33 Design and properties of HDL multilayered media with diffusion barrier for magnetic hologram memory
^oY. Nakamura, M. Okamoto, S. B. Chauhan, P. Lim (Toyohashi Univ. Tech.)

Poster session III

14:00 ~ 17:00

- 22pPS-1 Spin current in superconductors with structural chirality
^oK. Hara, Y. Yanase (Kyoto Univ.)
- 22pPS-2 Superconducting lateral spin valve with Permalloy/Al transparent interface
S. Tsuboguchi, ^oR. Oshima, S. Kammoto, K. Yamada, T. Kimura (Kyushu Univ.)
- 22pPS-3 Signature of nonreciprocal magneto-transport in conventional superconducting films
^oY. Sawada¹, S. Obinata¹, R. Oshima¹, K. Ohnishi², T. Kimura¹ (¹Kyushu Univ., ²Kindai Univ.)
- 22pPS-4 High-T_c superconducting spin valves with multiple pair breaking effects
^oT. Kikuta, S. Komori, K. Imura, T. Taniyama (Nagoya Univ.)
- 22pPS-5 Effect of highly off-stoichiometric deposition in epitaxial YBa₂Cu₃O_{7-δ} film
^oY. Chen¹, D. Qu^{1,2}, S. Huang³, J. G. Lin^{1,2} (¹Center for Condensed Matter Sciences, National Taiwan University, ²Center for Atomic Initiatives for New Materials, National Taiwan University, ³Department of Physics, National Taiwan University)

- 22pPS-6 Pt thickness dependence of superconductivity in Nb/V/Pt/Fe/Pt/V/Ta superlattices
 °F. Tokoro¹, H. Narita¹, R. Kawarazaki¹, R. Iijima¹, R. Hisatomi^{1,2}, S. Karube^{1,2}, Y. Shiota^{1,2}, T. Ono^{1,2}
 (°ICR, Kyoto Univ., °CSRN, Kyoto Univ.)
- 22pPS-7 Device Width Dependence of Superconducting Diode Effect in Nb/V/Ta Artificial Superlattice
 °R. Iijima, R. Kawarazaki, F. Tokoro, R. Hisatomi, S. Karube, Y. Shiota, T. Ono (Kyoto Univ.)
- 22pPS-8 Effects of Quantum Geometry on Unconventional Superconductivity
 °Y. Hirobe, T. Kitamura, Y. Yanase (Kyoto Univ.)
- 22pPS-9 Detection and Modulation of Surface-Acoustic-Wave-Driven Magnetization Dynamics
 °C. Chen, F. Pan, C. Song (Tsinghua University)
- 22pPS-10 Understanding magnetoelectric coupling in type-II multiferroic Yb₂Cu₂O₅ by neutron diffraction
 °P. Kusuma¹, C. H. Lee¹, C. W. Wang² (°Department of Applied Physics, Tunghai University, Taichung 407224, Taiwan,
 °National Synchrotron Radiation Research Center, Hsinchu 300092, Taiwan)
- 22pPS-11 Crystallographic, magnetic, and magneto-optical properties of Ga substituted single crystal yttrium iron garnet
 °T. Satoh, Y. Miyazawa, S. Iwamoto, Y. Yang, S. Lee, X. Liu (Shinshu Univ.)
- 22pPS-12 Voltage controlled magnetic anisotropy effect in a magnetic tunnel junction with a crystalline MgO/ZrO₂/MgO tunnel barrier
 H. Onoda, °T. Nozaki, T. Nozaki, S. Yuasa (AIST)
- 22pPS-13 Voltage-controlled magnetization reversal of a 100-nm-thick magnetic layer characterized by micromagnetic simulation
 °M. Kawana, N. Funabashi, K. Aoshima, K. Machida (NHK)
- 22pPS-14 Dual engineering of Co/MgO interface using ultrathin heavy metal insertion and post-oxidation for voltage-controlled magnetic anisotropy effect
 °H. Nakayama, T. Nozaki, T. Nozaki, S. Yuasa (AIST)
- 22pPS-15 In-situ LTEM Observation and Kinetics of Magnetic Skyrmion Crystal Formation from the Conical Phase
 C. Seol, S. Park, G. Min, S. Lee, Y. Lee, °T. Kim (Chonnam National University)
- 22pPS-16 Magnetic Domain Observation on Curvature Surface by Polarization Angle Detection Using 16-bit Polarization Camera
 °S. Meguro¹, S. Saito² (°NEOARK, °Tohoku Univ.)
- 22pPS-17 Evaluation of spin torque efficiency in composition-graded materials
 °M. Kawai¹, S. Takagi¹, H. Nakayama¹, K. Yamanoi¹, Y. Nozaki^{1,2}
 (°Dept. of Phys., Keio University, °Center for Spintronics Research Network, Keio University)
- 22pPS-18 Analysis of Curvature Effect of Yoke and Specimen on Barkhausen Noise Measurement
 °H. Chiba¹, H. Kikuchi¹, K. Matsumura² (°Iwate Univ., °Infitech.M)
- 22pPS-19 Effect of Yoke Material on Barkhausen noise of Curved Surface Specimens
 °H. Saito, H. Chiba, H. Kikuchi (Iwate Univ.)
- 22pPS-20 Iron loss measurement in high-frequency Large amplitude magnetic field
 °H. Tanaka, T. Mannen, T. Isobe, E. Kita, H. Yanagihara (Univ. of Tsukuba)
- 22pPS-21 Estimating parameters from magnetic domain images with different imaging scales using machine learning
 °S. Hashimoto¹, Y. Nakatani², H. Awano¹, K. Tanabe¹ (°Toyota Tech. Inst., °UEC)
- 22pPS-22 Evaluation of physical reservoir based on vortex spin torque oscillator with modified free layer
 °K. Horizumi¹, T. Chiba^{2,3}, T. Komine¹ (°Ibaraki Univ., °FRIS, °Tohoku Univ.)
- 22pPS-23 Demonstration of image classification using 1-layer magneto-optical diffractive deep neural networks
 °H. Sakaguchi¹, T. Honma¹, S. Sumi², H. Awano², H. Nonaka³, F. Z. Chafi¹, T. Ishibashi¹
 (°Nagaoka Univ. Tech., °Toyota Tech. Inst., °Aichi Inst. Tech.)

Apr. 23/Room A

Symposium "Ultra-sensitive magnetic sensors operated at room temperature"

9:00 ~ 12:30

23aA-1 [Invited] Ultra-sensitive tunnel magneto-resistive sensors

°M. Oogane (Tohoku Univ.)

- 23aA-2 [Invited] Development of Ultrasensitive Spintronic Sensors and Their Applications °G. Xiao (Brown University)
- 23aA-3 [Invited] Fabrication and application of Flexible giant magnetoresistive elec-tronic skin °Z. Jin^{1,2}, C. Zhang¹, J. Chen^{1,2}
(¹Aerospace Information Research Institute, Chinese Academy of Sciences, ²University of Chinese Academy of Sciences.)
- 23aA-4 [Invited] Toward Quantum Imaging of Bio-medical Systems based on Diamond NV Centers °D. Lee (Korea Univ.)
- 23aA-5 [Invited] Quantum sensing at nanoscale enabled by diamond spin qubits °F. Jelezko (Ulm University)
- 23aA-6 [Invited] Diamond magnetometer and magnetic nanoparticles for biomedical applications °A. Kuwahata (Tohoku Univ.)

Plenary talk II

13:30 ~ 14:30

- 23PL-1 Magnetic Tunnel Junctions and Josephson junctions formed from 2D van der Waals layers °S. S. Parkin (Max Planck Institute of Microstructure Physics)
- 23PL-2 Using skyrmions for AI and using AI for skyrmion research °M. Klauui (Uni Mainz)

Symposium "Recent advances in spin-orbitronics"

15:00 ~ 18:15

- 23pA-1 [Invited] Spin-Charge Interconversion in Topology Materials and Chiral Perovskites °H. Yang (National University of Singapore)
- 23pA-2 [Invited] Giant Modulation of Longitudinal Magnetoresistance of the Fe_{5-x}GeTe₂ with In-Plane Bias °S. Kim (University of Ulsan)
- 23pA-3 [Invited] Low-Power Electronics: Advancing SOT-MRAM and Low-Voltage Magnetoelectric Devices °Y. Huang (National Yang Ming Chiao Tung University)
- 23pA-4 [Invited] Unconventional responses in non-collinear antiferromagnets °J. Han, S. Fukami (Tohoku Univ.)
- 23pA-5 [Invited] Spin-torque diode effect in a noncollinear antiferromagnet Mn₃Sn/W bilayer °S. Ssakamoto¹, T. Nomoto², T. Higo¹, Y. Hibino³, T. Yamamoto³, S. Tamaru³, Y. Kotani⁴, H. Kosaki¹, M. Shiga¹, D. Nishio-Hamane¹, T. Nakamura^{4,5}, T. Nozaki³, K. Yakushiji³, R. Arita^{1,6}, S. Nakatsuji¹, S. Miwa^{1,7}
(¹Univ. of Tokyo, ²Tokyo Metropolitan Univ., ³AIST, ⁴JASRI/SPring-8, ⁵Tohoku Univ., ⁶RIKEN, ⁷Johns Hopkins Univ.)
- 23pA-6 [Invited] Superparamagnetic Superparticles for Advanced Hyperthermia and Biodetection: Overcoming the Particle Size Limit °M. Phan (Univ. of South Florida)

Apr. 23/Room B

Skyrmion I

9:00 ~ 10:30

- 23aB-1 [AUMS Young Researcher Awardee] Emergence of Giant Magnetic Chirality during Dimensionality Crossover of Magnetic Materials °D. Kim (Korea Institute of Science and Technology)
- 23aB-2 [Invited] Classical and Quantum Skyrmionics °C. Hwang (KRISS)
- 23aB-3 [Invited] Metadynamics calculations of skyrmion stability °J. Barker, I. Charalampidis (University of Leeds)

Skyrmion II

11:00 ~ 12:30

- 23aB-4 Hardware Implementation of Homeostasis in Skyrmion-Based Neuron Devices °S. Yang, K. Moon, C. Hwang (KRISS)

- 23aB-5 Topological Data Analysis for Configurational Properties in Skyrmion Lattice System: Persistent Homology
 °M. Taniwaki¹, T. B. Winkler², J. Rothörl², R. Gruber², C. Mitsumata³, M. Kotsugi¹, M. Kläui²
 (1Tokyo Univ. Sci., 2JGU Mainz, 3Univ. of Tsukuba)
- 23aB-6 Colossal Topological Nernst effect by Skyrmions in the Filled β -Mn-type $\text{Fe}_{2-x}\text{Pd}_x\text{Mo}_3\text{N}$ Chiral Magnetic Epitaxial Thin Films
 °B. Qiang, K. Yamamoto, H. Asano, T. Miyamachi, M. Mizuguchi (Nagoya University)
- 23aB-7 Nonlinear collective dynamics excited for room-temperature skyrmions
 °S. Yadav¹, S. Chatterjee¹, S. Sugimoto², S. Kasai² (1IIT(BHU) Varanasi, 2NIMS)
- 23aB-8 Higher Order Nonlinear Hall Effects in the Presence of Chiral Spin Textures
 °T. Tasaki^{1,2}, T. Dohi¹, K. V. De Zoysa¹, K. Saijo^{1,2}, H. Ohno^{1,3,4,5}, S. Fukami^{1,2,3,4,5,6} (1RIEC, Tohoku Univ., 2Graduate School of Engineering, Tohoku Univ., 3WPI-AIMR, Tohoku Univ., 4CSIS, Tohoku Univ., 5CIES, Tohoku Univ., 6Inamori Research Institute for Science)
- 23aB-9 Giant topological Hall effect induced by bulk Dzyaloshinskii-Moriya interaction in van der Waals $\text{Cr}_{1+\delta}\text{Te}_2$
 °S. Rho¹, D. Jeong², H. Kim², J. Huh¹, H. Son¹, Y. Kwon², M. Cho¹ (1Yonsei University, 2Kyung Hee University)

THz spin dynamics

15:00 ~ 16:00

- 23pB-1 [Invited] Photoinduced THz Emission Dynamics in Ferromagnetic Multilayers
 Y. Zhao^{1,2}, Q. Mustaghfiroh¹, A. Gayen¹, L. Huang^{1,3}, J. Shim⁴, H. Piao⁴, J. Kim⁵, H. Shin⁶, K. Kim¹, °D. Kim¹ (1Chungbuk National University, 2Westlake University, 3Tsinghua University, 4Yanbian University, 5Kunsan National University, 6Pohang Accelerator Laboratory)
- 23pB-2 Antiferromagnetic spin pumping and spin transfer torque in $\alpha\text{-Fe}_2\text{O}_3/\text{Pt}$
 °T. Hattori¹, T. Moriyama¹, K. Kawagita², Y. Ishikawa², Y. Fujii², Y. Tatematsu², K. Hayashi¹, S. Iihama¹, K. Tada¹
 (1Nagoya Univ., 2Fukui Univ.)
- 23pB-3 Lattice-distortion effect on antiferromagnetic resonance frequency in NiO with Li substitution
 °K. Nawa^{1,2}, S. Rhim³, K. Nakamura¹ (1Mie Univ., 2NIMS, 3Univ. of Ulsan)

Molecular magnetism

16:15 ~ 18:30

- 23pB-4 [Invited] Towards deeper brain stimulation using magnetically induced electric fields
 °M. Sekino, A. Iino, Z. Xin, M. Fushimi (Univ. of Tokyo)
- 23pB-5 [Invited] Chemo-Switchable MOF Magnets
 °H. Miyasaka (Tohoku Univ.)
- 23pB-6 Magneto-structural correlation of stable nitroxyl radical derivatives with rigid cardo structure and substituent effect of ethynyl group
 °M. Takii, Y. Miura, N. Yoshioka (Keio Univ.)
- 23pB-7 Switching Diamagnetism and Paramagnetism in Naphthalene Bisnitroxides
 °R. Takano, R. Uesugi, D. Iida, T. Ishida (UEC)
- 23pB-8 Construction of indole nitronyl nitroxide self-assemblies exhibiting strong magnetic interactions and substituent effect
 °N. Yoshioka, M. Takii, M. Kunitomo, R. Ohtaka, H. Masuda, Y. Hisatomi, H. Memida, Y. Miura (Keio Univ.)
- 23pB-9 [Invited] Investigation of Spin State of Magnetic Molecule in Tunneling Junction Combined with RF Signal
 °T. Komeda (Tohoku Univ.)

Apr. 23/Room C

Magnetic characterizations

9:00 ~ 10:15

- 23aC-1 [Invited] Advanced structural and magnetic characterization of compositionally complex systems with synchrotron X-rays
 °A. Smekhova (HZB)
- 23aC-2 [Invited] Characterization of thin films and multilayers by Generalized Magneto-optical Ellipsometry
 °A. Berger (CIC nanoGUNE)
- 23aC-3 Correlations between Defect Density and Magnetic Properties in Heusler Alloy Films
 C. Leung¹, Y. Ling¹, H. Koizumi², E. Lesne³, C. Felser³, °A. Hirohata^{2,3}
 (1City University of Hong Kong, 2Tohoku Univ., 3Max Planck Inst.)

Fundamental properties of magnetic materials I 10:45 ~ 12:30

- 23aC-4 [Invited] The influence of ZnO nanoparticle addition on the magnetic properties of conductive polymers based on poly-alkylthiophene
°L. Safriani¹, S. J. Eda¹, G. K. Kwando¹, S. Winarsih², Y. Maryati¹, M. A. Syakuur^{3,6}, A. Aprilia¹, U. Widyaiswari⁴, D. P. Sari⁵,
°T. Saragi¹, R. Risdiana¹ (¹Dept. of Physics, Univ. Padjadjaran, ²BRIN, ³Dept. of Chemistry, Univ. Padjadjaran, ⁴Dept. of Physics, Univ. Pendidikan Indonesia, ⁵Shibaura Inst. Tech., ⁶RIKEN)
- 23aC-5 [Invited] Perpendicular magnetic anisotropy induced by antiferromagnetic layers through antiferromagnetic proximity effects and long-range exchange coupling
°B. Wang¹, T. Li¹, F. Lin¹, Y. Huang¹, T. Chuang², D. Wei²
(¹Department of Physics, National Changhua University of Education, ²National Synchrotron Radiation Research Center)
- 23aC-6 Magnetic and transport properties of ferrimagnetic chalcogenide compounds (Cr,Fe)Z (Z = S, Se)
°W. Yin^{1,2}, M. Miyakawa¹, R. Y. Umetsu^{1,3} (¹Institute for Material Research, Tohoku University, ²Graduate School of Engineering, Tohoku University, ³Center for Science and Innovation in Spintronics, Tohoku University)
- 23aC-7 Construction of magnetic models from non-perturbative calculations
°T. Tanaka, Y. Gohda (Science Tokyo)
- 23aC-8 Magneto-transport and magnetic property studies of rare-earth based intermetallic compound
°V. Chahar¹, K. Manna¹, R. Umetsu², R. Chatterjee¹ (¹IIT Delhi, ²Tohoku Univ.)

Fundamental properties of magnetic materials II 15:00 ~ 17:00

- 23pC-1 [Invited] Altermagnetism and its manifestation in MnTe
°D. Kriegner (Institute of Physics of ASCR)
- 23pC-2 [Invited] Novel superconducting properties in few-layer T_d -MoTe₂
°T. Wakamura¹, M. Hashisaka², Y. Nomura³, M. Bard¹, S. Okazaki⁴, T. Sasagawa⁴, T. Taniguchi⁵, K. Watanabe⁵, K. Muraki¹,
N. Kumada¹ (¹NTT, ²Univ. of Tokyo, ³Tohoku Univ., ⁴Tokyo Inst. Tech., ⁵NIMS)
- 23pC-3 [Invited] The crucial role of the spin state of cobalt in determining the magnetic properties of cobalt oxides
°Y. Y. Chin¹, Z. Hu², H. J. Lin³, S. Agrestini², J. Weinen², C. Martin⁴, S. Hebert⁴, A. Maignan⁴, A. Tanaka⁵, J. C. Cezar⁶, N. B. Brookes⁶, Y. F. Liao³, K. D. Tsuei³, C. T. Chen³, D. I. Khomskii⁷, J. J. Li^{8,9}, X. X. Wang^{8,9}, K. Yamaura^{8,9}, L. H. Tjeng²
(¹Department of Physics, National Chung Cheng University, ²Max Planck Institute for Chemical Physics of Solids, ³National Synchrotron Radiation Research Center, ⁴Laboratoire CRISMAT, Normandy University, ⁵Department of Quantum Matter, ADSM, Hiroshima University, ⁶European Synchrotron Radiation Facility, ⁷Institute of Physics II, University of Cologne, ⁸National Institute for Materials Science, ⁹Department of Chemistry, Hokkaido University)
- 23pC-4 [Invited] The Extraordinary Room Temperature Ferromagnetic Behavior in Gamma ray induced and Gd-Doped few-layered MoS₂ Thin Films Deposited via Magnetron Sputtering with Wafer Size
°C. Lee, F. Hu, M. Wu, A. K. Anbalagan, C. Wang, W. Chan, H. T. Chen (NTHU)

Fundamental properties of magnetic materials III 17:15 ~ 18:45

- 23pC-5 First-Principles Study of Orbital Hall Conductivity in Light Transition Metal Thin Films
°A. M. Pradipto¹, M. A. Hidayat¹, A. O. Latief¹, K. Nakamura² (¹Institut Teknologi Bandung, ²Mie Univ.)
- 23pC-6 Tc of a Copper-based high-Tc superconductor after heat treatments under hydrogen atmosphere
H. Namita¹, H. Sato¹, M. Matoba¹, S. Iwasaki³, M. Fujioka³, Y. Hara², T. Harada², M. Miura², °Y. Kamihara¹
(¹Keio Univ., ²Seikei Univ., ³Hokkaido Univ.)
- 23pC-7 Intrinsic planar Hall effect and x-ray magnetic linear dichroism by Yafet-Kittel Structure in NiCo₂O₄ film
°H. Koizumi¹, Y. Yamasaki², H. Yanagihara³ (¹Tohoku Univ., ²NIMS, ³Univ. of Tsukuba)
- 23pC-8 Magnetic and dielectric properties of β -NaFeO₂ single crystals
°A. Nugroho¹, M. P. Akbar¹, R. Loke², P. Puphal³, M. Isobe³, B. Prijamboedi¹, J. Hemberger²
(¹Institut Teknologi Bandung, ²University of Cologne, ³Max-Planck Inst. Stuttgart)
- 23pC-9 Neutron diffraction study of the Mn spin arrangement in Mn₂OBO₃
°C. Lee, C. Lin, G. Chen (Department of Applied Physics, Tunghai University, Taichung 407224, Taiwan)

- 23pC-10 Interplay between structure and phase transition parameters in FeRh alloy
 °N. S. Perov¹, A. S. Komlev¹, T. A. Taaev², D. G. Merkel³, G. Z. Radnoczi⁴, A. Chirkova⁵ (¹Lomonosov Moscow State University, ²Amirkhanov Institute of Physics of the Daghestan, ³Wigner Research Centre for Physics, ⁴Centre for Energy Research, ⁵Hochschule Bielefeld University)

Apr. 23/Room D

Symposium "Electric machines and their soft and hard magnetic materials"

9:00 ~ 12:30

- 23aD-1 [Invited] AI-Assisted Reliable Fault Diagnosis in Permanent Magnet Synchronous Motors
 °M. Hsieh (National Cheng Kung University)
- 23aD-2 [Invited] Development of a High-Torque IPMSM Using Sm-Fe-N Bonded Magnets
 °Y. Yoshida¹, R. Yoshida², T. Uwano¹, S. Sakurai¹, M. Abe², S. Tada², M. Yamamoto², K. Tajima¹ (¹Akita Univ., ²NICHIA)
- 23aD-3 [Invited] Synthesis of high-performance Sm₂Fe₁₇N₃ powder with reduction-diffusion process
 °S. Okada (AIST)
- 23aD-4 [Invited] The Status of SmFe₁₂-based Alloys: Employing Machine Learning for Optimization
 °A. Bolyachkin¹, T. Subagja^{1,2}, N. Kulesh¹, X. Tang¹, T. Ohkubo¹, H. Sepehri-Amin^{1,2} (¹NIMS, ²Univ. of Tsukuba)
- 23aD-5 [Invited] Nanocrystalline Magnetic Materials & Components: Applications Roadmap for Advanced Power Electronic Systems
 °B. R. Andapally (CBMM)
- 23aD-6 [Invited] Next-Generation Soft Magnetic Composites: Implications for Axial Flux Motors
 °D. Azuma, K. Izumiya, Y. Enokizono, T. Saito, T. Ueno (Sumitomo Electric)

Motors

14:45 ~ 16:15

- 23pD-1 [Invited] Application of Emerging Materials for Improved Electric Motor Performance
 °N. Kar (Univ. Windsor)
- 23pD-2 [Invited] Magnetic Material Characteristics for Improving Performance of Permanent Magnet Motors
 °J. Choi (Chungnam Nat'l Univ.)
- 23pD-3 Design and Analysis of Outer-Rotor PM Motor with Segmented rotor-shape for drone
 °S. Sakurai, Y. Yoshida, K. Tajima (Akita Univ.)
- 23pD-4 An investigation on estimation error in AC loss of toroidal dust cores based on machine learning
 °S. Matsumoto, S. Muroga, Y. Kodama, S. Ajia, Y. Endo (Tohoku Univ.)

Magnetic refrigeration

16:30 ~ 18:45

- 23pD-5 [Invited] Hydrogen liquefaction by active magnetic regenerative refrigeration
 °K. Kamiya¹, K. Natsume¹, A. Uchida¹, T. Shirai¹, A. T. Saito¹, T. Numazawa¹, K. Matsumoto² (¹NIMS, ²Kanazawa Univ.)
- 23pD-6 [Invited] Magnetic, thermal, and transport properties of magnetocaloric materials for hydrogen liquefaction magnetic refrigerator
 °K. Matsumoto¹, A. T. Saito², H. Kitazawa², T. Numazawa² (¹Kanazawa Univ., ²NIMS)
- 23pD-7 [Invited] Figure of Merit of Rare Earth Magnetocaloric Materials
 T. Cheng¹, J. Chen¹, S. Fang², °Y. Tseng¹ (¹NYCU, ²ITRI)
- 23pD-8 Magnetic Refrigerant Particles for Hydrogen Liquefaction by Active Magnetic Regenerative Refrigeration
 °A. T. Saito¹, H. Takeya¹, T. D. Yamamoto², K. Matsumoto³, H. Kitazawa¹, K. Kamiya¹, T. Numazawa¹
 (¹NIMS, ²Tokyo University of Science, ³Kanazawa University)
- 23pD-9 High-throughput Evaluation of Magnetic Refrigerants using Multi-sample Neutron Transmission Spectroscopy
 °H. Mamiya¹, N. Terada¹, S. R. Larsen¹, T. Shinohara², H. Sepehri-Amin¹ (¹NIMS, ²JAEA)
- 23pD-10 Caloric effect in Ni-Mn-Sn metamagnetic shape memory alloys
 °W. Sun¹, H. Y. Qian¹, X. Lu¹, J. Liu², Z. J. Mo³, G. W. Li¹ (¹Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, ²School of Materials Science and Engineering, Shanghai University, ³Ganjiang Innovation Academy, Chinese Academy of Sciences)

Apr. 23/Room E

Magnetic recording

9:00 ~ 10:30

- 23aE-1 [Invited] Microwave-assisted magnetic recording using a dual FGL STO with a soft magnetic layer
°S. Greaves¹, Y. Kanai² (¹Tohoku Univ., ²Niigata Inst. Tech.)
- 23aE-2 Double-Track PRML Detection for Two-Track Reading with a Wide-Track Reader in Shingled Magnetic Recording Systems
°A. Khametong¹, C. Warisarn¹, S. J. Greaves² (¹King Mongkut's Institute of Technology Ladkrabang, ²Tohoku Univ.)
- 23aE-3 Feasibility Study of Implementing Simple Dual-bit Detection in Dual-Layer Bit-Patterned Magnetic Recording Systems
R. Sriyapai¹, °N. Rueangnetr¹, C. Warisarn¹, S. J. Greaves²
(¹King Mongkut's Institute of Technology Ladkrabang, ²Tohoku Univ.)
- 23aE-4 Track Misregistration Prediction Scheme of Two-Track Reading with a Wide-Track Reader for Shingled Track Recording
°P. Kochcha, A. Khametong, K. Kankhunthod, C. Warisarn (King Mongkut's Institute of Technology Ladkrabang)
- 23aE-5 Proof-of-concept for selective magnetization switching by spin wave excitation
°V. K. Kushwaha, T. Yamazaki, T. Seki (Tohoku Univ.)

Interface-driven novel magnetic phenomena

10:45 ~ 12:30

- 23aE-6 [Invited] Anomalous Hall effect in magnetic proximity-induced topological insulator trilayers
°S. Lee¹, K. M. Chen², M. Hong³, R. J. Kwo² (¹Academia Sinica, Taiwan, ²NTHU, ³NTU)
- 23aE-7 Magnetic behavior of bisegmented Co/Ni jellyfish nanowires induced by different combinations of magnetocrystalline and shape anisotropy
°A. Samardak¹, M. Sobirov¹, K. Rogachev¹, N. Ognev¹, A. Ognev^{1,2}, A. Samardak^{1,2} (¹FEFU, ²SSU)
- 23aE-8 Comparative study of influence of shape and crystalline structure on magnetic properties and domain structure of Fe, Co and Ni nanowire arrays
°M. Sobirov, I. Sapovskii, T. Rakhmatullaev, K. Rogachev, N. Ilin, A. Samardak (Far Eastern Federal University)
- 23aE-9 Flexible Exchange-Biased Films with Superior Strain Stability
°H. Yang¹, X. Bao¹, Y. Xie¹, D. Makarov², R. Li¹ (¹NIMTE, CAS, ²HZDR)
- 23aE-10 [Invited] Observation of the crossover from quantum fluxoid to half-quantum fluxoid in a chiral superconducting device
°Y. Niimi (Osaka Univ.)

Magnetic anisotropy control in advanced thin films

15:00 ~ 17:00

- 23pE-1 Strain induced reversible sign change of the anomalous Hall effect in multilayers
°T. Morita¹, T. Koyama^{1,2,3,4}, D. Chiba^{1,2,3,5}
(¹SANKEN, Osaka Univ., ²CSRN, Osaka Univ., ³OTRI, Osaka Univ., ⁴PRESTO, JST, ⁵SRIS, Tohoku Univ.)
- 23pE-2 Tuning Robotic Motion of Molecular Magnet Array
°T. Yamada¹, P. Krueger¹, M. Horie² (¹Chiba Univ., ²Nat. Tsing Hua Univ.)
- 23pE-3 Effect of TMDs underlayer on spin-orbit effects in Pt/Co films
°A. G. Kozlov¹, F. Meng², Y. Feng², W. B. Li², T. Zhang², Z. Z. Namsaraev¹, M. A. Kuznetsova¹, A. F. Shishelov¹,
A. V. Prikhodchenko¹, M. A. Bazrov¹, M. E. Letushev¹, A. V. Davydenko¹, A. V. Ognev^{1,3}, L. I. Davydenko¹, Y. Wang²
(¹FEFU, ²DUT, ³SSU)
- 23pE-4 Spin-dependent transport properties in sputter-deposited ferromagnetic high-entropy alloy thin films.
°K. Z. Suzuki¹, K. Takanashi^{1,2} (¹JAEA, ²Tohoku Univ.)
- 23pE-5 Ultra-low damping in GdOx inserted magnetic stacks with large perpendicular magnetic anisotropy
°J. Kim¹, T. Nozaki¹, J. Uzuhashi², S. Tamaru¹, T. Ichinose¹, T. Ochiai¹, T. Yamamoto¹, T. Ohkubo², K. Yakushiji¹, S. Yuasa¹
(¹AIST, ²NIMS)
- 23pE-6 Growth temperature dependence of ferrimagnetic epitaxial Mn₄N on Pt/Fe/SrTiO₃(001)
°S. Akita¹, T. Yasuda¹, K. Amemiya², D. Ogawa³, T. Suemasu¹ (¹Univ. of Tsukuba, ²KEK, ³NIMS)
- 23pE-7 Magnetic compensation in Mn_{4-x}Ag_xN epitaxial films at room temperature
°Y. Sobukawa¹, T. Yasuda¹, K. Toko¹, K. Amemiya², T. Suemasu¹ (¹Univ. of Tsukuba, ²KEK)
- 23pE-8 Stretchable spin-valve sensor array with stable giant magnetoresistance performance
°Y. L. Xie, H. L. Yang, R. W. Li (Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences)

Apr. 23/Poster Room

Poster session IV

10:30 ~ 13:30

- 23aPS-1 Interface engineering of topological BiSb/CoFeB heterostructures for efficient spin-charge conversion.
°R. Mondal^{1,2}, Z. Wen¹, C. Murapaka², H. Sukegawa¹, Q. Le³, X. Liu³, B. York³, M. Maeda³, S. Mitani¹ (¹NIMS, ²IITH, ³WD)
- 23aPS-2 Current-induced magnetization switching using Si/Al compositional graded materials
°S. Takagi, K. Yamanoi, Y. Nozaki (Keio Univ.)
- 23aPS-3 Spin-orbit torque engineering by Ti alloying in beta W-based heterostructures
°D. Kim¹, J. Lee¹, Q. T. Nguyen², J. Lee¹, S. H. Rhim², Y. Kim¹ (¹korea university, ²University of Ulsan)
- 23aPS-4 Perpendicular magnetic tunnel junctions with β -W spin-orbit torque channels
°S. Yoon¹, Z. Wen², S. Kasai², S. Mitani², H. Sukegawa², Y. Kim¹ (¹Korea Univ., ²NIMS)
- 23aPS-5 Precise quantification of spin-orbit torques in highly resistive Pt/Co multilayers
°Y. Jo, C. Yun, M. Kim, S. Yu, J. Park, J. Lee, W. Lee, A. Nam, K. Rhie, K. Lee (Korea University)
- 23aPS-6 Modulation of spin-orbit torque in Cu based heterostructures with oxide gating
°M. Kim, C. Yun, J. Lee, S. Yu, Y. Jo, K. Lee, K. Rhie (Korea University)
- 23aPS-7 Current-induced domain wall motion in Gd-Fe wires with vertical composition gradient
°J. Mizuno, H. Awano, K. Tanabe (Toyota Tech. Inst.)
- 23aPS-8 Inductance and capacitance emerged from topological electromagnetism
°Y. Araki, J. Ieda (Japan Atomic Energy Agency)
- 23aPS-9 Current direction dependence of spin-orbit field in a crystalline ferromagnetic layer with perpendicular anisotropy
°S. Park¹, K. Lee¹, S. Lee¹, X. Liu², M. Dobrowolska², J. K. Furdyna² (¹Korea University, ²University of Notre Dame)
- 23aPS-10 Fabrication of perpendicular magnetic anisotropic films on the side of uneven structures toward 3D devices
°Y. Yasuda¹, Y. Kurokawa², S. Sumi¹, H. Awano¹, K. Tanabe¹ (¹Toyota Tech. Inst., ²Kyushu Univ.)
- 23aPS-11 Unconventional scaling law of spin-orbital Hall effect in SrRuO₃ and efficient magnetization switching
°S. Peng, X. Zheng, Z. Wang (Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences)
- 23aPS-12 Observation of writing and driving using spin-orbit torque writing for racetrack memory application
°H. Hasegawa, Y. Kurokawa, H. Yuasa (Kyushu Univ.)
- 23aPS-13 Circularly polarized light-induced magnetic torque in Co alloy films
°K. Nukui¹, S. Iihama², K. Ishibashi¹, S. Mizukami¹ (¹Tohoku Univ., ²Nagoya Univ.)
- 23aPS-14 Generation and detection of orbital current using Ni/heavy metal system
°Y. Furukawa, S. Obinata, T. Kimura (Kyushu Univ.)
- 23aPS-15 Magnetoresistance of (001), (110), and (111) textured RuO₂/Pt bilayer
°S. Yoon¹, S. Ko², K. Kim², J. Jeong³, B. Park⁴, K. Eom¹, S. Lee¹ (¹Department of Semiconductor Engineering, Gachon University, Seongnam 13120, Korea, ²Department of Physics, KAIST, Daejeon 34141, Korea, ³Department of Materials Science and Engineering, Chungnam National University, Daejeon 34134, Korea, ⁴Department of Materials Science and Engineering, KAIST 34141, Daejeon, Korea)
- 23aPS-16 Magnetic tunnel junctions with metastable cubic GaN barriers
°H. Kwon^{1,2}, K. Suzuki^{1,2}, K. Deepak², M. Tsujikawa³, R. Tufan^{3,4}, M. Shirai^{3,4}, S. Mizukami^{2,4} (¹Graduate School of Engineering, Tohoku University, ²WPI-Advanced Institute for Materials Research, Tohoku University, ³Research Institute of Electrical Communication, Tohoku University, ⁴Center for Science and Innovation in Spintronics, Tohoku University)
- 23aPS-17 Temperature-dependence of Anomalous Hall Effect in Al and Ta-seeded TbCo Gradient Structures
R. C. Bhatt, °L. Ye, M. Tsai, T. Wu (YunTech Taiwan)
- 23aPS-18 Accurate evaluation of spin relaxation in Bi-based Rashba interface using weak anti-localization effect
S. Kammoto, °M. Nakamoto, S. Tsuboguchi, K. Yamada, T. Kimura (Kyushu Univ.)
- 23aPS-19 Exploring Magnetization Switching and Extraordinary Hall Effect in Compositionally Graded GdFeCo Device
°R. C. Bhatt¹, L. Ye¹, J. Lin¹, N. T. Hai², J. Wu², T. Wu¹ (¹YunTech Taiwan, ²NCUE Taiwan)
- 23aPS-20 Omnidirectionally stretchable spin-valve sensor array with stable giant magnetoresistance performance
°L. Pan, Y. Xie, H. Yang, X. Bao, J. Chen, M. Zou, R. Li (Chinese Academy of Sciences)

- 23aPS-21 Simulating the spin dynamics of antiferromagnetic materials under electromagnetic waves
 °T. Mukita, S. Kishimoto, K. Nakagawa, S. Ohnuki (Nihon Univ.)
- 23aPS-22 Dependence of ferrimagnetic GdFe thickness on current induced domain wall velocity for Pt/GdFe wires
 °T. Tokuyama¹, T. Sakamoto¹, H. Tozuka¹, M. Tanaka¹, S. Honda², H. Awano³, K. Mibu¹
 (1Nagoya Inst. Tech., 2Kansai Univ., 3Toyota Tech. Inst.)
- 23aPS-23 Magnetotransport in Ru_{1-x}Cr_xO₂ film as a candidate of altermagnet
 °Y. Inaoka¹, S. Karube^{1,2,3}, H. Narita^{1,3}, R. Hisatomi^{1,2,3}, Y. Shiota^{1,2}, T. Ono^{1,2}
 (1ICR, Kyoto Univ., 2CSRN, Kyoto Univ., 3JST-PRESTO)
- 23aPS-24 CoTb alloy for ultrafast-demagnetization-driven spin current and orbital current
 °H. Lee, S. Kim (skku)
- 23aPS-25 Spin-to-Charge Convention via Inverse Altermagnetic Spin-Splitting Effect in RuO₂
 C. Liao¹, °Y. Wang¹, Y. Tien¹, S. Huang¹, D. Qu² (1Department of Physics, National Taiwan University, Taipei, Taiwan,
 2Center for Condensed Matter Sciences, National Taiwan University, Taipei, Taiwan)
- 23aPS-26 Characterization of spin transport through NiO in the vicinity of the Néel temperature
 °I. Sugiura¹, Y. Shiota^{1,2}, R. Hisatomi^{1,2}, S. Karube^{1,2}, T. Ono^{1,2}, T. Moriyama^{3,4}
 (1ICR, Kyoto Univ., 2CSRN, Kyoto Univ., 3Dept. of Materials Physics, Nagoya Univ., 4PRESTO, JST)
- 23aPS-27 Rashba effect and band structure change by metastable structuring of heavy metals at the interface
 °T. Yamazaki, Y. Kodani, R. Iimori, K. Yamada, T. Kimura (Kyushu Univ.)
- 23aPS-28 Spin-current excitation using ultrafast laser pulses in a heavy-metal/rare-earth iron garnet heterojunction
 °S. Takahashi¹, Y. You², K. Yamanoi², Y. Nozaki², T. Satoh¹, K. T. Yamada¹ (1Science Tokyo, 2Keio Univ.)
- 23aPS-29 Thermal transport of angular momentum at the interface of insulative orbital ferrimagnet/non-magnet
 °T. Onuma, H. Yanagihara (Univ. of Tsukuba)
- 23aPS-30 Large Spin Nernst Effect in Ni₇₀Cu₃₀ Alloy
 °W. Li^{1,2}, C. Lin¹, G. Guo^{1,3}, S. Huang^{1,4}, D. Qu^{2,4} (1Department of Physics, National Taiwan University, Taipei 10617,
 Taiwan, 2Center for Condensed Matter Sciences, National Taiwan University, Taipei 10617, Taiwan, 3Physics Division,
 National Center for Theoretical Sciences, Taipei 10617, Taiwan, 4Center of Atomic Initiatives for New Materials, National
 Taiwan University, Taipei 10617, Taiwan)
- 23aPS-31 Method for measuring thermal conductivity in thin films using anomalous Nernst effect
 °K. Tanabe, H. Awano (Toyota Tech. Inst.)
- 23aPS-32 Influence of impurity doping on anomalous Nernst effect in amorphous GdCo alloys toward heat flux sensing
 °T. Koizumi, H. Imaeda, H. Awano, K. Tanabe (Toyota Tech. Inst.)
- 23aPS-33 Visualization of in-plane magnetization in a Co thin film via the laser-induced anomalous Nernst effect
 °S. Mochizuki¹, I. Sugiura², T. Ono², T. Satoh¹, K. T. Yamada¹ (1Science Tokyo, 2Kyoto Univ.)
- 23aPS-34 Enhanced anomalous Nernst effect in Fe₄N films substituted by Pt and Pd atoms
 °K. Ito¹, H. Yu^{1,2}, T. Yamazaki¹, R. Y. Umetsu^{1,3}, T. Seki^{1,3}
 (1IMR, Tohoku Univ., 2Grad. Sch. Eng., Tohoku Univ., 3CSIS, Tohoku Univ.)
- 23aPS-35 Enhancement of anomalous Nernst coefficient in CoFe thin film by Cu-Ir addition
 °A. Ray^{1,2}, S. Biswas¹, P. Alagarsamy¹, R. Modak³, N. K. Gupta², T. Hirai², K. Uchida^{2,3}, Y. Sakuraba² (1Indian Institute of
 Technology Guwahati, Guwahati 781-039, India, 2National Institute for Materials Science, Tsukuba 305-0047, Japan, 3The
 University of Tokyo, Kashiwa, Chiba 277-8561, Japan)
- 23aPS-36 3D heat flux sensor based on anomalous Nernst effect
 °H. Imaeda, R. Toida, T. Takeuchi, H. Awano, K. Tanabe (Toyota Tech. Inst.)
- 23aPS-37 The voltage-controlled magnetic anisotropy at the interface of Fe and NiO
 °S. Jung, H. Yanagihara (Univ. of Tsukuba)
- 23aPS-38 Topological Hall Transport and Skyrmion Nucleation in Co/Pd Multilayers
 °C. Chen¹, T. Huang¹, W. Tang¹, Y. Tang¹, S. Lamichhane², S. Liou², G. Chen³, S. Huang³, X. Fan⁴, J. Hong⁵
 (1National Central Univ., 2Univ. of Nebraska-Lincoln, 3National Taiwan Univ., 4Univ. of Denver, 5Tamkang Univ.)
- 23aPS-39 Impact of Interlayer Exchange Coupling on Skyrmion Formation in Co/Pd Multilayers: A Micromagnetic Simulation
 °T. Huang, C. Chen, Y. Tang (National Central University)
- 23aPS-40 The Cu thickness dependence of orbital torques in Co/Cu/oxide multilayers
 °J. Lee, M. Kim, Y. Jo, S. Yu, J. Park, A. Nam, W. Lee, K. Rhie, K. Lee (Korea University)

- 23aPS-41 Quantum Geometry Induced Nonlinear Transport in Altermagnets RuO₂
 °R. Chu¹, L. Han¹, X. Fu², J. Liu², C. Song¹ (¹Tsinghua University, ²HKUST)
- 23aPS-42 Numerical analysis of dispersion relation and fabrication of magnetic dots in honeycomb Phononic crystals
 °Y. You, K. Yamanoi, Y. Nozaki (Keio Univ.)

Poster session V

15:00 ~ 18:00

- 23pPS-1 Higher permeability of nanogranular films using CoFe alloys by annealing
 °M. Naoe¹, M. Sato¹, M. Sonehara², K. Miyaji², T. Sato², N. Kobayashi¹ (¹DENJIKEN, ²Shinshu Univ.)
- 23pPS-2 Relationship between structural and magnetostrictive properties in flat Fe-Co single-crystal thin films
 °Y. Nakamura, M. Ohtake (Yokohama National Univ.)
- 23pPS-3 Phase-field simulation of liquid-phase sintering for investigating microstructural evolution of Nd-Fe-B sintered magnets
 °A. Ishii¹, T. Koyama^{1,2}, T. Abe¹, M. Ode¹ (¹NIMS, ²Nagoya Univ.)
- 23pPS-4 Fe and Mn substitution effects on structural and magnetic properties of FCC-type Fe₅₀Mn₂₅Ga₂₅
 °S. Kitahara¹, H. Okada¹, S. Awaji² (¹Tohoku Gakuin Univ., ²Tohoku Univ.)
- 23pPS-5 Influence of deposition rate on the structural and magnetic properties of anisotropic Nd-Fe-B film magnets by PLD method
 °A. Yamashita, M. Yamamoto, Y. Yamada, T. Yanai, M. Nakano, H. Fukunaga (Nagasaki Univ.)
- 23pPS-6 Effect of Two-Step Annealing on Hard Magnetic Properties of Fe-Pt Films prepared by Electroplating Method
 °A. Hamakawa, Y. Yamaguchi, A. Yamashita, T. Yanai, M. Nakano, H. Fukunaga (Nagasaki Univ.)
- 23pPS-7 Improving the thermal stability of Sm(Fe-Co)₁₂-B thin films by diffusion of Nb element
 °Y. Mori, S. Nakatsuka, M. Doi, T. Shima (Tohoku Gakuin Univ.)
- 23pPS-8 Magnetic properties and applications of glass-coated ferromagnetic microwires
 °V. Zhukova¹, P. Corte-Leon², M. Ipatov¹, J. Blanco⁴, A. Zhukov³ (¹Dept. Polym. Adv. Mater, Univ. Basque Country, UPV/EHU, ²Dept. Mater. Science & Metallurgy, Univ. Cambridge and Dept. Polym. Adv. Mater, Univ. Basque Country, UPV/EHU, ³Dept. Polym. Adv. Mater, Univ. Basque Country, UPV/EHU and Ikerbasque, ⁴Dept. Appl. Phys. I, EIG, Univ. Basque Country, UPV/EHU)
- 23pPS-9 High Frequency Magnetic Properties of Submicron-sized Fe-Co-B particles by Aqueous Solution Reduction Method
 °K. Sato, K. Wakabayashi, C. Masumoto, T. Miyazaki, S. Ajia, S. Muroga, Y. Endo (Tohoku Univ.)
- 23pPS-10 Accuracy Evaluation of AC Magnetization Process Measurements for Soft Magnetic Materials
 °R. Onodera¹, E. Kita², H. Yanagihara² (¹NIT, Ibaraki college, ²Univ. of Tsukuba)
- 23pPS-11 Annealing Experiments to Set the Optimal Heat Treatment Conditions for As-spun Fe-Co Ribbons
 °H. Choi-Yim, Y. Choi, H. Lee (Sookmyung Women's University)
- 23pPS-12 Principal component analysis of first-order reversal curve diagrams for neutron-irradiated Fe-Cu alloys
 °S. Kobayashi, K. Ono, K. Yomogida (Iwate Univ.)
- 23pPS-13 The effect of annealing temperature on the structure and magnetic properties of Fe-Si ribbons
 °T. Takasu¹, R. Umetsu¹, S. Mikami², T. Hiraki², S. Muroga¹, Y. Endo¹ (¹Tohoku Univ., ²Toho Zinc Co., Ltd)
- 23pPS-14 Preparation of Soft Magnetic Films using Solid/Liquid Hybrid Electroplating Method
 °M. Tashiro, K. Shiraki, A. Yamashita, T. Yanai, M. Nakano, H. Fukunaga (Nagasaki Univ.)
- 23pPS-15 A simulation method of magnetic properties of Fe-Ni bilayer ribbons under bending stress
 °S. Nakashima, R. Hirose, T. Yanai, A. Yamashita, M. Nakano, H. Fukunaga (Nagasaki Univ.)
- 23pPS-16 Improvement in magnetic properties of soft magnetic Ni and Co films electroplated in gel electrolytes
 °K. Shiraki, M. Tashiro, A. Yamashita, T. Yanai, M. Nakano, H. Fukunaga (Nagasaki Univ.)
- 23pPS-17 Enhancing Resistivity of Fe-(Cr, Si, B, Nb) Soft Magnetic Micron Particles by Surface Oxidation under Dry Air Atmosphere
 °A. Nishikura, S. Ohnishi, H. Nakashinden, M. Tobise, S. Saito (Tohoku Univ.)
- 23pPS-18 Micromagnetic simulation of the microstructure parameters influence on the realization of high coercivity state in hard-magnetic MnAl alloys
 °E. A. Smirnov, M. V. Gorshenkov (NUST MISIS)

- 23pPS-19 Effect of Cu content on the magnetic properties for SmCo₅ thin films fabricated on polyimide substrates
 °K. Murakata, S. Kudo, T. Shima, M. Doi (Tohoku Gakuin Univ.)
- 23pPS-20 Study of the magnetic field effect on the density of dysprosium ions
 °E. Ushijima^{1,3}, I. Yamamoto², M. Yamato¹ (¹Tokyo Metropolitan Univ., ²Yokohama National Univ., ³IMRA Japan Co., Ltd.)
- 23pPS-21 Coercivity of LIFT-made Nd-Fe-B micromagnets
 °G. Tahara, T. Amiya, H. Todoroki, K. Higashi, A. Yamashita, T. Yanai, M. Nakano, H. Fukunaga (Nagasaki Univ.)
- 23pPS-22 Effect of Short-Time Nd-Al Grain Boundary Diffusion on Coercivity of Isotropic Nd-Fe-B Magnet Films
 °S. Hattori, Y. Iwayama, A. Yamashita, M. Nakano, T. Yanai, H. Fukunaga (Nagasaki Univ.)
- 23pPS-23 Fe-Pt dotted film magnets prepared via LIFT technique
 °H. Todoroki¹, G. Tahara¹, K. Higashi¹, A. Yamashita¹, T. Yanai¹, M. Nakano¹, T. Shinshi², H. Fukunaga¹
 (¹Nagasaki Univ., ²Institute of Science Tokyo)
- 23pPS-24 Preparation of Fe-Pt/Pr-Fe-B/Fe-Pt three-layered thin sheet magnets
 °K. Okamura¹, K. Fujii¹, A. Yamashita¹, T. Yanai¹, M. Nakano¹, T. Shinshi², H. Fukunaga¹
 (¹Nagasaki Univ., ²Institute of Science Tokyo)
- 23pPS-25 Synthesis of high-purity Nd₂Fe₁₄B submicron particles via reduction-diffusion process for fabricating fine-grained sintered magnets
 °J. Kim¹, K. Yoon¹, H. Jeon¹, T. Kim², Y. Lee¹
 (¹Seoul National University of Science and Technology, ²Korea Institute of Materials Science)
- 23pPS-26 Fundamental investigation on LIFT-made Nd-Fe-B micromagnets
 °T. Amiya¹, G. Tahara¹, H. Todoroki¹, A. Yamashita¹, T. Yanai¹, M. Nakano¹, K. Koike², H. Fukunaga¹
 (¹Nagasaki Univ., ²Yamagata Univ.)
- 23pPS-27 Magneto-optical and magnetic properties of rapidly quenched amorphous NiCoSiFeB ribbons
 °N. N. Perova, S. V. Samchenko, T. B. Shapaeva, N. S. Perov, E. A. Ganshina (MSU)
- 23pPS-28 Investigation of the glass forming ability and thermal stability of the alloy Co₅₈Fe₅Ni₁₀Si₁₁B₁₆ depending on the spinning parameters
 °K. E. Pinchuk, V. S. Plotnikov, G. S. Kraynova, V. V. Tkachev, A. M. Frolov (Far Eastern Federal University)
- 23pPS-29 Magnetic parameters of amorphous alloys composed of transition metals (Fe, Co, Mn) and metalloids (Si, B) with varying compositions
 °I. Sapovskii, N. Ilin, T. Rakhmatullaev, G. Kraynova, V. Plotnikov, V. Tkachev (FEFU)
- 23pPS-30 Perpendicular magnetic field assisted electromagnetic vibration powered generators using amorphous Fe-B alloy ribbons
 °N. Isogai, S. Kamiya, Y. Nakamura, T. Kawai, M. Ohtake (Yokohama National Univ.)
- 23pPS-31 Synthesis of hexagonal W-type ferrite particles with SrZn_xFe_{18-x}O₂₇ composition using KBr flux
 °A. Hirata¹, K. Horie¹, M. Kishimoto¹, H. Yanagihara^{1,2} (¹Univ. of Tsukuba, ²TREMS)
- 23pPS-32 La-Co substituted strontium ferrite particles synthesized by heat treatment in molten potassium bromide flux
 °K. Horie, A. Hirata, M. Kishimoto, H. Yanagihara (Univ. of Tsukuba)

Apr. 24/Room A

Symposium "Spin entropy and transport in magnetic materials and devices"

9:00 ~ 12:30

- 24aA-1 [Invited] Skyrmion Hall effect in altermagnets
 Z. Jin, Z. Zeng, Y. Cao, °P. Yan (UESTC)
- 24aA-2 [Invited] Magnetic domain lithography and its applications in spintronic devices
 °G. Yu (Institute of Physics, Chinese Academy of Sciences)
- 24aA-3 [Invited] Modulation of Thermal Spin Pumping by Angular Momentum of Rare Earth
 °A. B. Cahaya (Univ. Indonesia)
- 24aA-4 [Invited] Hybrid transverse magneto-thermoelectric conversion in artificially tilted multilayers
 °T. Hirai (NIMS)
- 24aA-5 [Invited] Effective generation of probabilistic bits by exploiting spin-orbit torques in magnetic trilayers
 °B. Park¹, S. Kim¹, M. Kohda², J. Nitta², K. Lee¹ (¹Korea Advanced Institute of Science and Technology, ²Tohoku University)

24aA-6 [Invited] Entropy transport in magnets and ferroelectrics

°G. Bauer (UCAS, Tohoku Univ.)

Spin dynamics related phenomena

13:30 ~ 15:00

24pA-1 [Invited] ULTRA-FAST ALL OPTICAL SWITCHING IN SPINTRONIC DEVICES

J. Gorchon, T. Hauet, M. Hehn, J. Hohlfeld, J. Lin, G. Malinowski, °S. Mangin (Univ. de Lorraine)

24pA-2 Nonlinear microwave scattering by permeability time-varying metamaterials

°T. Kodama¹, T. Chiba¹, N. Kikuchi², S. Okamoto¹, S. Ohno¹, S. Tomita¹ (¹Tohoku Univ., ²Akita Univ.)

24pA-3 All-optical helicity-dependent switching in magneto-plasmonic nanostructures

°Y. Le Guen^{1,2}, J. Hohlfeld¹, M. Hehn¹, S. Mangin¹, S. Van Dijken² (¹IJL, ²Aalto)

24pA-4 Ultrafast excitation of standing and propagating exchange spin waves in nanophotonic structures

°V. I. Belotelov, D. M. Krichevsky, S. I. Lutsenko, A. E. Bezmenova (Moscow State Univ.)

24pA-5 Ultrafast spin dynamics induced by circularly polarized hard x-ray pulses in a Pt/Co/Pt multilayer

°K. T. Yamada¹, R. Kobayashi², I. Sugiura³, Y. Kubota^{4,5}, Y. Akiyama^{2,4}, S. Sasakura⁶, A. Gocho⁶, K. Takemura^{2,4}, S. Mochizuki¹, S. Takahashi¹, T. Ohkochi^{4,5,6}, I. Matsuda⁷, T. Ono^{3,8}, T. Togashi^{4,5}, Y. Tanaka⁶, M. Suzuki^{2,4} (¹Science Tokyo, ²Kwansei Gakuin, ³ICR, Kyoto Univ., ⁴RIKEN, ⁵JASRI/SPring-8, ⁶Univ. Hyogo, ⁷ISSP, Univ. of Tokyo, ⁸CSRN, Kyoto Univ.)

Apr. 24/Room B

Unique magnetic phenomena in 2D magnetic layers 9:00 ~ 10:30

24aB-1 [Invited] Phonons and magnon-polarons in 2D magnetic layers

°W. Wulfhekel (KIT)

24aB-2 [Invited] Why Fe₃GaTe₂ has higher TC than Fe₃GeTe₂?

°S. H. Rhim¹, B. Kim¹, T. Ochirkhuyag², D. Odkhuu² (¹Univ. Ulsan, ²Incheon Natl Univ)

24aB-3 Modulation of the size of magnetic skyrmions in a van der Waals ferromagnet Fe₃GaTe₂ via proton irradiation

°Y. Ji¹, S. Yang², H. Ahn³, K. Moon², M. Im⁴, J. Lee⁵, S. Park⁵, C. Lee³, K. Kim¹, C. Hwang² (¹Korea Advanced Institute of Science and Technology, ²Korea Research Institute of Standards and Science, ³Sungkyunkwan University, ⁴Lawrence Berkeley National Laboratory, ⁵Korea Basic Science Institute)

24aB-4 Hall voltage distributions in two-dimensional materials

°K. Kim^{1,2}, T. Park², K. Kim³, S. Kim¹ (¹University of Ulsan, ²KIST, ³Yonsei University)

Novel magnetic materials

11:00 ~ 12:45

24aB-5 [Invited] Nonlinear optical responses in symmetry-controlled two-dimensional van der Waals magnets

°T. Ideue (Univ. of Tokyo)

24aB-6 [Invited] Magnetism in biomass - derived graphenic carbon

°D. Darminto¹, R. Asih¹, F. Astuti¹, M. A. Baqiya¹, D. Ristiyani¹, A. J. Nenohai¹, D. P. Sari², H. Nakajima³, Y. Koike⁴, I. Watanabe⁵ (¹Institut Teknologi Sepuluh Nopember, ²Shibaura Institute of Technology, ³Synchrotron Light Research Institute, ⁴Tohoku University, ⁵RIKEN Nishina Center)

24aB-7 Enhanced field-free current-induced magnetization switching by two-dimensional metastable MXene

°P. Kumar¹, H. Abe², S. Isogami¹ (¹NIMS, ²KEK)

2D magnetic materials and altermagnetism

13:30 ~ 15:00

24pB-1 Effect of thermal magnetization fluctuation on geometrically constrained magnetic domain wall at the ferromagnetic nanowire

°S. Ahn (POSTECH)

24pB-2 Large MCD and strong spin polarization in nanoscale Cr₂Te₃

T. Huang¹, °J. A. Huang¹, H. Hsu², H. Wu¹, T. Chang¹ (¹NCKU, ²NPTU)

24pB-3 Atomic-scale magnetic doping of monolayer stanene by revealing Kondo effect from self-assembled spin entities

°N. Kumar¹, Y. Lan¹, Y. Lin¹, C. Chen¹, T. Lin¹, H. Jeng^{1,2,3,4}, P. Chang¹, P. Hsu^{1,2} (¹Department of Physics, National Tsing Hua University, Hsinchu 300044, Taiwan, ²Center for Quantum Technology, National Tsing Hua University, Hsinchu 300044, Taiwan, ³Physics Division, National Center for Theoretical Sciences, Taipei 10617, Taiwan, ⁴Institute of Physics, Academia Sinica, Taipei 11529, Taiwan)

- 24pB-4 giant spin seebeck and piezoelectricity of 2D V₂SeTeO altermagnet
D. Besserga, A. Ullah, °J. Hong (Pukyong National University)
- 24pB-5 Visualizing Strain-Induced Noncollinear Spin Textures in Mn Atomic Bilayer on Ag(111)
°C. Chen¹, T. Drevelow², Y. Lin¹, Y. Chen¹, T. Cheng¹, Y. Lin¹, S. Heinze², P. Hsu¹
(¹Natioanl Tsing Hua University, ²University of Kiel)
- 24pB-6 Detecting Altermagnetism in RuO₂ by Angular-Dependent X-ray Magnetic Linear Dichroism
°J. Okabayashi¹, Z. Wen², Y. Miura³, H. Sukegawa², S. Mitani² (¹Univ. Tokyo, ²NIMS, ³Kyoto Tech.)

Apr. 24/Room C

Magnetic tunneling phenomena

9:00 ~ 9:45

- 24aC-1 Spin transfer torque switching in double magnetic tunnel junctions based on dual MgO layers
°G. Mihajlovic, W. Jung, R. Chopdekar, J. Lille, M. K. Gorbis (Western Digital Corporation)
- 24aC-2 Structural stability and perpendicular magnetocrystalline anisotropy in Co layers on buckled and planar h-BN structures
°D. P. Hastuti, Y. Kitaoka, H. Imamura (AIST)
- 24aC-3 Theoretical study on the effect of shape anisotropy on switching voltage of voltage-controlled MRAM
°S. Miyazaki^{1,2}, H. Arai², H. Imamura^{1,2}, Y. Yasukawa¹ (¹Chiba Inst Tech, ²AIST)

Soft magnetic materials

10:15 ~ 12:00

- 24aC-4 [Invited] Effect of co-added transition metal elements on the glass forming ability and soft magnetic properties of high-M_s nanocrystalline alloys
°J. Jeong, H. Im, S. An, K. Kim, S. Yang (Korea Institute of Materials Science)
- 24aC-5 [Invited] Rapidly annealed high-Bs FeCo-based nanocrystalline soft magnetic alloys for high-temperature applications
°I. Skorvanek¹, B. Kunca¹, J. Marcin¹, P. Svec² (¹IEP SAS, Kosice, ²IP SAS, Bratislava)
- 24aC-6 Analysis of complex permeability for Permalloy foil
°Y. Tomita¹, T. Ogasawara², H. Takabayashi¹, T. Iriyama¹ (¹Daido Steel, ²National Inst. Tech.)
- 24aC-7 Effect of Yttrium addition on magnetic softness and dynamic magnetic properties of (Fe₇₁Ga₂₉)_{1-x}Y_x films
°S. Ajia, R. Nishina, T. Miyazaki, S. Muroga, Y. Endo (Tohoku Univ.)
- 24aC-8 Sweep Rate Dependency of Permeability and Coercivity in DC B-H Measurements
°S. Hashimoto, T. Morita, H. Takabayashi (Daido Steel)

Hard magnetic materials III

13:00 ~ 14:00

- 24pC-1 Sm₂Fe₁₇N₃ powder for heat-resistant bonded magnets
°W. Yamaguchi, A. Hosokawa, K. Takagi, Y. Hirayama (AIST)
- 24pC-2 Evaluation of magnetic properties of mechanically ground SmCo₅ fine powder
°K. Park, Y. Hirayama, J. Wang (AIST)
- 24pC-3 Evaluation of equilibrium oxygen partial pressure of W-type ferrite solid-solution state SrCo_xFe_{18-x}O₂₇ (0 < x < 2)
°S. Nakai, T. Waki, Y. Tabata, H. Nakamura (Kyoto Univ.)
- 24pC-4 Phase diagrams and magnetic properties of Fe-Co-X and Fe-Co-V-X (X = B, C, N, O) films
°T. Hasegawa, C. Shirai, T. Nishikawa, T. Osanai (Akita Univ.)

Ferrites: from fundamental to applications

14:15 ~ 15:15

- 24pC-5 [Invited] Influence of Partial Substitution of Mn on Magnetostrictive Properties of Cu_{0.5}Co_{0.5}Fe₂O₄
°M. Hisamatsu¹, S. Kosugi¹, K. Suzuki¹, Y. Ohishi¹, S. Seino¹, H. Muta¹, T. Nakagawa¹, S. Fujieda²
(¹Osaka Univ., ²Shimane Univ.)
- 24pC-6 [Invited] Oxygen potential controlled hexagonal ferrites
°H. Nakamura, T. Waki, S. Nakai, M. Ade, Y. Tabata (Kyoto University)
- 24pC-7 Photocatalytic Degradation Enhancement of Rhodamin B using Magnetically Separable and Reusable MnFe₂O₄/rGO Nanocomposites Green-Synthesized Utilizing Plant Leaf Extract
°K. Kurnia¹, N. P. Rini¹, D. L. Puspitarum¹, E. K. Sari¹, N. I. Istiqomah¹, L. J. Mahardhika¹, T. Kato^{2,3}, D. Oshima³, A. D. Nugraheni¹, E. Suharyadi¹ (¹Department of Physics, Universitas Gadjah Mada, ²Institute of Materials and Systems for Sustainability, ³Department of Electronics, Nagoya University)

- 24pC-8 Photodegradation of doxycycline antibiotic using magnetically separable and reusable Fe₃O₄/Chitosan nanocomposites green-synthesized utilizing moringa oleifera extract
 °S. Sudarmono^{1,2}, E. Suharyadi¹, N. I. Istiqomah¹, L. J. Mahardhika¹, C. Chotimah¹
 (¹Universitas Gadjah Mada, ²Universitas Cenderawasih)

Apr. 24/Room D

Advances in interplay between superconductivity and magnetism

9:00 ~ 10:45

- 24aD-1 [Invited] Zero-field polarity-reversible Josephson supercurrent non-reciprocity and non-volatile anomalous phase-shift
 °K. Jeon (Department of Physics, Chung-Ang University (CAU), Seoul 06974, Republic of Korea)
- 24aD-2 [Invited] Pure spin current transport and spin-triplet superconductors: Insights and Advances
 °S. Huang (National Taiwan University)
- 24aD-3 Nb/GdN/Nb Josephson junction for future superconducting spintronics and quantum computing
 °F. Li¹, W. F. Holmes-Hewett², J. Miller², S. Granville², B. Ruck², M. Tanaka¹, A. Fujimaki¹
 (¹Nagoya University, ²Victoria University of Wellington)
- 24aD-4 [Invited] Superconducting spintronics for scalable superconducting flux qubits
 °T. Yamashita (Tohoku Univ.)

Spin related phenomena in functional materials I 11:00 ~ 12:30

- 24aD-5 [Invited] Symmetry manipulation and spin conversion
 °J. Yoo (Unsan National Institute of Science and Technology)
- 24aD-6 [Invited] Topological Surface States in Alpha-Sn
 °M. Wu (Northeastern University)
- 24aD-7 Spin current enhancement by a WSe₂ spin sink
 °Y. Chu¹, K. Chiu¹, M. Lin^{1,2,3} (¹National Taiwan University, ²Institute of Atomic and Molecular Sciences, Academia Sinica, ³Research Center for Applied Sciences, Academia Sinica)
- 24aD-8 Observation of unconventional spin current in altermagnetic CrSb
 °C. Tseng, S. Karube, H. Narita, R. Hisatomi, Y. Shiota, D. Kan, Y. Shimakawa, T. Ono (Kyoto Univ.)

Spin related phenomena in functional materials II 13:30 ~ 15:15

- 24pD-1 [Invited] Tailoring Spin-Orbit Torque Efficiency via Facilitating Global Néel Order in W/NiO/CoFeB Trilayer
 H. Chang¹, K. Chi², Y. Lin¹, Y. Lai¹, Y. Huang¹, C. Pai², °C. Yang¹
 (¹National Yang Ming Chiao Tung University, ²National Taiwan University)
- 24pD-2 Observation of anisotropy of orbital Hall effect in an epitaxial titanium
 °S. Karube¹, Y. Yahagi², H. Narita¹, R. Hisatomi¹, Y. Shiota¹, T. Ono¹ (¹Kyoto Univ., ²NEC)
- 24pD-3 Spin-torque efficiency of Si-Al alloy films with varying compositional ratios and deposition methods
 °H. Nakayama¹, T. Horaguchi², K. Yamanoi¹, Y. Nozaki¹ (¹Keio Univ., ²Fukuoka Univ.)
- 24pD-4 Reciprocity of charge-spin conversion in a quantum well channel
 °H. Koo^{1,2}, S. Kim^{1,2}, J. Lee^{1,2}, W. Choi^{1,2} (¹KIST, ²Korea University)
- 24pD-5 [Invited] Multiferroic heterostructured devices for energy efficient electronics and biomedical applications
 °J. Hong (Hubei Univ. Tech.)

Apr. 24/Room E

Strain-induced related phenomena

9:45 ~ 10:30

- 24aE-1 Elastic anomaly and strain-induced pseudo-gap modulation in semimetallic antiferromagnet Cr_{0.8}Al_{0.2} thin film
 °K. Toyoki, Y. Tsujimoto, Y. Shiratsuchi, R. Nakatani (Osaka Univ.)
- 24aE-2 Elastic anomaly and pseudo-gap formation in antiferromagnetic semimetal (Cr_{1-y}Fe_y)_{1-x}Al_x thin films
 °F. Kamimura¹, T. Matsumura¹, Y. Tsujimoto¹, K. Toyoki^{1,2,3}, Y. Shiratsuchi^{1,2,3}, R. Nakatani^{1,2,3}
 (¹Osaka Univ., ²CSRN, ³OTRI)

- 24aE-3 Microscopic origin of magnetostriction in Fe₃Ga studied by operando XMCD and Mössbauer spectroscopies
 °J. Okabayashi¹, T. Usami², S. Sakai³, K. Fujiwara³, Y. Kobayashi⁴, T. Mitsui³, K. Hamaya²
 (°Univ. of Tokyo, °Osaka Univ., °QST, °Kyoto Univ.)

Novel magnetic phenomena

11:00 ~ 12:30

- 24aE-4 [Invited] Observation of spin-triplet superconductivity in CoSi₂/TiSi₂ heterojunctions
 S. Chiu², S. Yeh¹, V. Mishra³, F. Zhang³, S. Kirchner¹, °J. Lin¹
 (°National Yang Ming Chiao Tung University, °Fu Jen Catholic University, °University of Chinese Academy of Sciences)
- 24aE-5 [Invited] Identification of Many-body Entanglement in Quantum Magnetism
 °E. Moon (KAIST)

Electrical manipulation of magnetic properties

13:00 ~ 14:30

- 24pE-1 [Invited] Large voltage-controlled magnetic anisotropy effect in magnetic tunnel junctions prepared by cryogenic temperature deposition
 °T. Nozaki¹, T. Ichinose¹, T. Yamamoto¹, J. Uzuhashi², T. Nozaki¹, H. Nakayama¹, A. Sugihara¹, M. Konoto¹, K. Yakushiji¹,
 T. Ohkubo², S. Yuasa¹ (°AIST, °NIMS)
- 24pE-2 Electric field control of magnetic anisotropy for oriented Co/graphene and application as an inductor with field tunability
 C. Chang², P. Jiang², Y. Chow², T. Yang², °J. Tsay¹
 (°National Taiwan Normal University, °Minghsin University of Science and Technology)
- 24pE-3 Voltage Control of Perpendicular Anisotropy with High-Endurance Ferroelectric Hf1-xZrxO2 Gate Oxide
 °J. Chen, Y. Lin, K. Yeh, T. Yang, Y. Tseng (NYCU)
- 24pE-4 Voltage induced bi-polar AFM spin reversal using magnetoelectric effect in Pt/Cr₂O₃/V₂O₃/Pt epitaxial films
 °N. Murayama¹, H. Sameshima¹, K. Ujimoto¹, Y. Matsumoto¹, K. Toyoki^{1,2,3}, R. Nakatani^{1,2,3}, Y. Shiratsuchi^{1,2,3}
 (°Osaka Univ., °CSRN, °OTRI)
- 24pE-5 Low-voltage AFM spin reversal in Pt/Cr₂O₃/Ru/Pt epitaxial thin layer
 °Y. Matsumoto¹, H. Sameshima¹, N. Murayama¹, K. Toyoki^{1,2,3}, R. Nakatani^{1,2,3}, Y. Shiratsuchi^{1,2,3}
 (°Osaka Univ., °CSRN, °OTRI)

Apr. 24/Poster Room

Poster session VI

10:30 ~ 13:30

- 24aPS-1 Study on a Low Iron Loss Motor Using Amorphous Ribbon Cut Cores
 °T. Saito, Y. Yoshida, S. Sakurai, K. Tajima (Akita Univ.)
- 24aPS-2 A Study on LSPM high efficiency design considering initial operation characteristics
 °J. Lee¹, D. Jung², K. Lee¹ (°Korea Electronics Technology Institute, °Andong National University)
- 24aPS-3 A Study on Ac Loss Analysis According to Stator Winding Method and High-Speed Design
 °J. Lee¹, D. Jung², K. Lee¹ (°Korea Electronics Technology Institute, °Andong National University)
- 24aPS-4 Characteristic Analysis of an Outer Rotor Type Permanent Magnet Synchronous Motor using Subdomain Method
 °M. Koo¹, H. Shine² (°Purpose Built Mobility Group, KITECH, °Specialized Machinery and Robotics Group, KITECH)
- 24aPS-5 Prediction of annealing temperature influence for magnetic alloy ribbon using random forest regression trained with process information
 °S. Muroga¹, T. Takasu¹, S. Matsumoto¹, S. Ajia¹, R. Umetsu¹, S. Mikami², T. Hiraki², Y. Endo¹ (°Tohoku Univ., °Toho Zinc)
- 24aPS-6 Influence of annealing temperature and compaction pressure on magnetic properties of dust cores composed of iron powders
 °Y. Kodama, S. Ajia, T. Miyazaki, S. Muroga, Y. Endo (Tohoku Univ.)
- 24aPS-7 Numerical analysis of magnetization characteristics in curved chain magnetic nanoparticles
 °H. Zhang, Y. Sun, H. Wang, T. Sasayama, T. Yoshida (Kyushu Univ.)
- 24aPS-8 Synthesis and Evaluation of Smart Magnetic Nanocarriers Incorporating Polyphenols for Targeted Breast Cancer Intervention
 °M. Mohammed Mustafa, K. Natarajan, S. Palanisamy, L. Subbiah (Anna University)

- 24aPS-9 Highly sensitive detection of sub pT magnetic field in nondestructive inspection using magnetoresistive sensor
 °Y. Kono¹, H. Ahn¹, A. Tanaka¹, S. B. Trisnanto¹, T. Kasajima², T. Shibuya², Y. Takemura¹
 (1Yokohama National Univ., 2TDK)
- 24aPS-10 Detection of magnetic nanoparticles by using magnetoresistive sensor coupled with induction coil
 °K. Suzaki¹, S. Nabeta¹, S. B. Trisnanto¹, T. Kasajima², T. Shibuya², Y. Takemura¹ (1Yokohama National Univ., 2TDK)
- 24aPS-11 Development of a Drying Method for Magnetic Nanoparticle Dispersions with Enhanced Re-dispersibility
 °S. Seino¹, K. Nishigaki¹, A. Tanaka², T. Sakane², T. Kiwa³, M. Washino⁴, T. Nakagawa¹
 (1Osaka Univ., 2Kobe Pharm. Univ., 3Okayama Univ., 4Mitsubishi Electric Corp.)
- 24aPS-12 Effect of preparation method and size on magnetic properties of Mn_{0.6}Zn_{0.4}Fe₂O₄ ferrite
 °E. Bekhbaatar, S. Kobayashi, H. Li (Iwate Univ.)
- 24aPS-13 Design and optimization of magnetically activated letrozole nanoliposomes for targeted breast cancer therapy
 °K. N, M. R G, A. R, L. S, S. P (Anna University - BIT Campus)
- 24aPS-14 Magnetic Lipidome-Infused Sirolimus: A Targeted Ferroptosis-Driven Approach for Breast Cancer Therapy
 °M. Ramasamy Govindaraj, K. Natarajan, K. Ganesan, S. Palanisamy, L. Subbiah (Anna University)
- 24aPS-15 Blue Light-induced Radical Pairs in Flavin-Tryptophan Dyads in the Solid States
 °Y. Oka, K. Inoue (Hiroshima Univ.)
- 24aPS-16 Development of superparamagnetic nanocluster probes for the realization of a multiplex immunoassay using magnetic particle spectroscopy
 °S. Shimizu¹, A. Sakai¹, M. Takahashi¹, T. Yoshida², S. Maenosono¹ (1JAIST, 2Dept. Electrical Eng., Kyusyu Univ.)
- 24aPS-17 Improvement of absorption force of magnetic attachment by utilizing stainless steel magnets
 °C. Mishima, T. Mitsunaga, Y. Honkura (Magnedesign)