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TUE-SM19-303 Stabilization of multiple magnetic structures on inverted interlayer coupling region of bilayer magnetic system
Chanki Lee*, Hee Young Kwon**, Nam Jun Kim*, Han Gyu Yoon*, Chiho Song*, Doo Bong Lee*, Jun Woo Choi**, Young-Woo Son***, Changyeon Won*
(*Kyung Hee University, **Korea Institute of Science and Technology, ***Korea Institute for Advanced Study)

TUE-SM19-306 Mössbauer studies of Zn0.05Fe2.95O4 nanoparticles
Sung Beak Kim*, Hyunkyung Choi**, Chul Sung Kim**
(*Konyang University, **Kookmin University)

TUE-SM19-316 Role of nanocrystalline FeB in AlFe2B2 on room temperature magnetocaloric effects
J.W. Lee, Changhee Nam
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TUE-SM19-322 Terahertz Spectroscopy of Spin Waves in HoFeO3 Single Crystals
Howon Lee, Kyung Ik Sim, Hyunjun Shin, Y. J. Choi, Jae Hoon Kim
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TUE-SM19-344 Magnetic structure and properties of Iron Sulfide compound by Mössbauer Spectroscopy
Jae Yeon Seo*, Hyunkyung Choi*, Young Rang Uhm**, Gwang Min Sun**, Chul Sung Kim*
(*Kookmin University, **Korea Atomic Energy Research Institute)

TUE-SM19-347 Magnetic property control and observation of Topological Hall effect on Cr1-xTe
(*University of Seoul, **Chung-Ang University, ***Ulsan National Institute of Science of Technology, ****Pohang Accelerator Laboratory, *****Korea Institute of Science and Technology)

TUE-SM19-368 ESR and FMR Studies of the van der Waals Ferromagnet CrSiTe3
Kwangyong Choi*, Jaena Park*, Yugo Oshima**
(*Chung-Ang University, **Rikagaku Kenkyusho)

TUE-SM19-383 Neuromorphic computing with multi-states anomalous Hall resistance due to DW motion in a single Hall cross
(*Korea Advanced Institute of Science and Technology, **Daegu Gyeongbuk Institute of Science and Technology)

TUE-SM19-385 Evidence of strong pd-d hybridization near valence band edge in V-doped WSe2 monolayer

Bumsub Song, Young Hee Lee, Dinh Loc Duong, Young-Min Kim, Wooseon Choi, Jinhoa Jiang, Seok Joon Yun, Young Jae Song
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TUE-SM19-387 Control of an Internal Structure of 180 Degree Magnetic Domain Wall
Sooseok Lee*, Hee-Sung Han*, Myeonghwan Kang*, Hye-Jin Ok*, Mi-Young Im**, Ki-Suk Lee*
(*Ulsan National Institute of Science and Technology, **Lawrence Berkeley National Laboratory)

TUE-SM19-398 Hexagonal Boron Nitride as a Substrate for High Quality Spintronic Devices
Thi Nga Do*, Hayoung Ko**, Soo Min Kim**, Tae Hee Kim*
(*Ewha Womans University, **Korea Institute of Science and Technology)

TUE-SM19-424 Element-Specific Spin Dynamics of Ferromagnetic Trylayers
(*Chonbuk National University, **Korea Research Institute of Standards and Science, ***Sookmyung Women's University, ****Pohang Accelerator Laboratory)

TUE-SM19-437 Stoner-Wohlfarth Model at Multi-Domain System
Changjin Yun*, Mingu Kim*, Jiho Kim*, Kungwon Rhie*, Byungchan Lee**
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TUE-SM19-440 Effect of graphite addition on the microwave absorption property of Z-type Sr-hexaferrite-epoxy composites
Eun-Soo Lim, Young-Min Kang
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TUE-SM19-464 Two intermediate states in exchange biased [Co/Pt]2/Co layers and its possible applications
Seungha Yoon
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TUE-SM19-472 Probing anisotropic thermal transport in graphite using time-resolved magneto-optical Kerr effect
Ly Pham Ngoc Luu, Gyung-Min Choi
(Sungkyunkwan University)

TUE-SM19-473 Optical way of determining spin diffusion length of ferromagnetic metal
Kyung-Hun Ko, Gyung-Min Choi
(Sungkyunkwan University)

TUE-SM19-480 Time-resolved observation of precessional motion of the magnetization vector driven by spin-orbit torque
Young-Gwan Choi, Gyung-Min Choi
(Sungkyunkwan University)
Magnetic structure and properties of Iron Sulfide compound by Mössbauer Spectroscopy

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The magnetic hyperfine structure and magnetic properties of FeS studied by X-ray diffractometer (XRD), vibrating sample magnetometer (VSM), and Mössbauer spectroscopy. The XRD pattern of FeS showed NiAs hexagonal structure with space group \textit{P}-62c, \textit{P}63/mmc, and \textit{P}63/mc. The hysteresis loop with the maximum applied field of 15 kOe was measured at room temperature using VSM, and the saturation magnetization ($M_s$) and coercivity ($H_c$) values were found to be 9.28 emu / g and 210.21 Oe. The temperature-dependence of the zero-field-cooled (ZFC) and field-cooled (FC) curves were examined at 100 Oe from 4.2 to 295 K. Below 280K, The ZFC Curve was observed Antiferromagnetic behavior. It was shown that $\alpha$-transition is started over 280 K in FeS compound. The Mössbauer spectra of FeS were taken at various temperatures ranging from 4.2 to 295 K, and the spectra were analyzed in 2-sets of sextets containing \textit{A}-site, \textit{B}-site, and \textit{C}-site at all temperature ranges. The charge state was determined to be ferrous(Fe$^{2+}$), ferric(Fe$^{3+}$) according to the isomer shift, and the Curie temperature ($T_C$) was found to be 630 K.