

## Korea-Japan Spin-Orbit Workshop

### Poster Session

- P-01 Pt thickness dependence of interfacial Dzyaloshinskii-Moriya interaction energy and role of Cu insertion layer at the Pt/Co and Co/AlOx interfaces**  
Nam-Hui Kim<sup>1</sup> *I. DGIST*
- P-02 Enhancement of Brillouin light scattering intensity by introducing an anti-reflection layer**  
Jinyong Jung<sup>1</sup> *I. DGIST*
- P-03 Non-equilibrium dynamic reversal mechanism of nanoscale ferromagnetic elements**  
Hee-Kyeong Hwang<sup>1</sup> *I. DGIST*
- P-04 Spin orbit torque and thermoelectric effect in harmonics measurement**  
Eun-Sang Park<sup>1</sup> *I. Korea Univ.*
- P-05 Spin torque ferromagnetic resonance of magnetic bilayers**  
Dongjoon Lee<sup>1</sup> *I. Korea Univ.*
- P-06 Domain wall reflection and transmission in DMI step**  
Iksun Hong<sup>1</sup> *I. Korea Univ.*
- P-07 Antiferromagnetic domain wall motion driven by spin-orbit torque**  
Se-Hyeok Oh<sup>1</sup> *I. Korea Univ.*
- P-08 Spin-transfer-torque in antiferromagnetic textures**  
Yunboo Jeong<sup>1</sup> *I. Korea Univ.*
- P-09 Laser-pulse-induced spin-wave propagation modified by spin-orbit torques**  
Donggyu Lee<sup>1</sup> *I. Korea Univ.*
- P-10 First principle study of Rashba effect in Co/Pt multilayers**  
Hyeon-Jong Park<sup>1</sup> *I. Korea Univ.*
- P-11 The spin-Hall angle measurement using by hysteresis loop**  
Dongseuk Kim<sup>1</sup> *I. Korea Univ.*
- P-12 The film properties change via sputtering energy manipulation**  
Jiho Kim<sup>1</sup> *I. Korea Univ.*
- P-13 Significant enhancement of domain wall speed in ferromagnetic Pt/Co/Ti film**  
Min-Ho Park<sup>1</sup> *I. Seoul National Univ.*
- P-14 Empirical correlation between Dzyaloshinskii-Moriya interaction and work function in Pt/Co/X trilayers**  
Yong-Keun Park<sup>1</sup> *I. Seoul National Univ.*
- P-15 Stochasticity of Domain-Wall Speed Driven by Current**  
Yune-Seok Nam<sup>1</sup> *I. Seoul National Univ.*
- P-16 Optical technique for spin-orbit torque measurement based on linear and circular polarizations**  
Joo-Sung Kim<sup>1</sup> *I. Seoul National Univ.*
- P-17 Intrinsic Asymmetry in Chiral Domain Walls due to Dzyaloshinskii-Moriya Interaction**  
Dae-Yun Kim<sup>1</sup> *I. Seoul National Univ.*
- P-18 Universality in domain-wall depinning by spin orbit torque**  
Hyun-Seok Whang<sup>1</sup> *I. Seoul National Univ.*
- P-19 Domain-wall locking by lateral modulation of spin orbit torque**  
Hyeok-Cheol Choi<sup>1</sup> *I. Seoul National Univ.*
- P-20 Coupled gyration modes in 1D skyrmion lattices as a new type of information carrier**  
Junhoe Kim<sup>1</sup> *I. Seoul National Univ.*
- P-21 Novel magnetic property in internal interface between ferromagnet and antiferromagnet**  
Min-Seung Jung<sup>1</sup> *I. DGIST*

- P-22 Control of exchange anisotropy in AFM/FM bilayers by piezoelectric strains**  
Hyun Joong Kim<sup>1</sup> *1. DGIST*

- P-23 Magnetic and electronic properties of Co-doped Mn<sub>3</sub>Ga Heusler thin films**  
Woosuk Yoo<sup>1</sup> *1. Sogang Univ.*

- P-24 Magnetic anisotropy properties of tetragonal and cubic Mn<sub>3</sub>Ga thin films**  
Hyun-Woo Bang<sup>1</sup> *1. Sogang Univ.*

- P-25 Mobility measurement of softmagnetic amorphous ribbons**  
Lin Huang<sup>1</sup> *1. Chungbuk National Univ.*

- P-26 Dynamics of virtual domain wall motion in discrete nanodot chains**  
Xiaoping Ma<sup>1</sup> *1. Chungbuk National Univ.*

- P-27 Micromagnetic simulation of hysteresis loop and first-order-reversal-curve (FORC) analysis**  
Seon Dae Kim<sup>1</sup> *1. Chungbuk National Univ.*

- P-28 Néel and ordinary order spin-orbit torques in 2D and 3D antiferromagnets**  
Suik Cheon<sup>1</sup> *1. POSTECH*

- P-29 Orbital Rashba effect in BiAg<sub>2</sub>**  
Dongwook Go<sup>1</sup>, Jan-Philipp Hanke<sup>1</sup>, Patrick M. Buhl<sup>1</sup>, Frank Freimuth<sup>1</sup>, Gustav Bihlmayer<sup>1</sup>, Hyun-Woo Lee<sup>1</sup>, and Stefan Blügel<sup>1</sup> *1. Pohang University of Science and Technology, Forschungszentrum Jülich*

- P-30 Scattering model for large damping-like torque at TI/FM bilayer interface**  
Seungju Shin<sup>1</sup> *1. POSTECH*

- P-31 The extended droplet model for determination of the Dzyaloshinskii-Moriya interaction energy**  
Sanghoon Kim<sup>1</sup>, *1. Institute for Chemical Research, Kyoto University*

- P-32 The spin wave eigen modes in the 120-nm-radius FeB disk shaped nano-magnet**  
Jaehun Cho<sup>1</sup>, Shinji Miwa<sup>1</sup>, Kay Yakushiji<sup>2</sup>, Shingo Tamaru<sup>2</sup>, Hitoshi Kubota<sup>2</sup>, Akio Fukushima<sup>2</sup>, Chun-Yeol You<sup>3</sup>, Shinji Yuasa<sup>2</sup>, Yoshishige Suzuki<sup>1</sup> *1. Graduate School of Engineering Science, Osaka Univ.; 2. AIST, Spintronics Research Center; 3. Department of Emerging Materials Science, DGIST*

- P-33 Magnetoresistance induced by Edelstein effect in CoFe/Cu/Bi<sub>2</sub>O<sub>3</sub>**  
Junyeon Kim<sup>1</sup>, Yan-Ting Chen<sup>1</sup>, Shutaro Karube<sup>1</sup>, Saburo Takahashi<sup>1</sup>, Kouta Kondou<sup>1</sup>, Gen Tatara<sup>1</sup>, YoshiChika Otani<sup>1</sup> *1. Center for Emergent Matter Science, RIKEN*

- P-34 Amplification of microwave by a dc biased magnetic tunnel junction**  
Y. Wakatake<sup>1</sup>, M. Goto<sup>1</sup>, U. Oji<sup>1</sup>, S. Miwa<sup>1</sup>, H. Kubota<sup>1</sup>, K. Yakushiji<sup>1</sup>, A. Fukushima<sup>1</sup>, S. Yuasa<sup>1</sup>, and Y. Suzuki<sup>1</sup> *1. Osaka University*

- P-35 Micromagnetic simulation of Magnetostatic wave in ferromagnetic material with anti-ferromagnetic reflector**  
Naoto Terachi<sup>1</sup>, Satoshi Yakata<sup>1</sup> *1. Fukuoka Institute of Technology*

- P-36 Indirect evaluation of magnetization direction using thermal spin injection**  
T. Nomura<sup>1</sup>, G. Uematsu<sup>1</sup>, N. Asam<sup>1</sup>, and T. Kimura<sup>1,2</sup> *1. Department of Physics, Kyushu University; 2. Research Center for Quantum Nano-Spin Sciences*

- P-37 Frequency dependence of heating effect and thermal spin injection due to ferromagnetic resonance in ferromagnetic thin metal**  
K. Yamanoi<sup>1</sup>, Y. Yokotani<sup>1</sup>, and T. Kimura<sup>1,2</sup> *1. Department of Physics, Kyushu University; 2. Research Center for Quantum Nano-Spin Sciences*

- P-38 Efficient thermal spin injection using CoFe-based alloy**  
G. Uematsu<sup>1</sup>, T. Nomura<sup>1</sup>, T. Ogawa<sup>1</sup>, K. Ohnishi<sup>1,2</sup>, and T. Kimura<sup>1,2</sup> *1. Department of Physics, Kyushu University; 2. Research Center for Quantum Nano-Spin Sciences*

**P-39 Spin transport in a nonmagnet/ferromagnet bilayer channel**

T. Ogawa<sup>1</sup>, G. Uematsu<sup>1</sup>, T. Nomura<sup>1</sup>, K. Ohnishi<sup>1,2</sup>, and T. Kimura<sup>1,2</sup> 1. *Department of Physics, Kyushu University*; 2. *Research Center for Quantum Nano-Spin Sciences*

**P-40 Possibility to control the Cooper-pair formation dynamics using multi-terminal spin injection**

M. Sakamoto<sup>1</sup>, Y. Ono<sup>1</sup>, K. Ohnishi<sup>1,2</sup>, and T. Kimura<sup>1,2</sup> 1. *Department of Physics, Kyushu University*; 2. *Research Center for Quantum Nano-Spin Sciences*

**P-41 Voltage control of dynamical magnetization property in CoFeB/Oxide bilayer system**

K. Okabe<sup>1</sup>, Y. Nakano<sup>1</sup>, K. Yamanoi<sup>1</sup>, S. Yakata<sup>3</sup>, T. Kimura<sup>1,2</sup> 1. *Department of Physics, Kyushu University*; 2. *Research Center for Quantum Nano-Spin Sciences*; 3. *Fukuoka Institute of Technology*

**P-42 Excitations of nonlinear ferromagnetic resonance and standing spin-wave using inhomogeneous high-power RF magnetic field**

Y. Yokotani<sup>1</sup>, K. Yamanoi<sup>1</sup>, S. Yakata<sup>3</sup>, and T. Kimura<sup>1,2</sup> 1. *Department of Physics, Kyushu University*; 2. *Research Center for Quantum Nano-Spin Sciences*; 3. *Fukuoka Institute of Technology*