

<2017 봄 학술논문발표회 우수발표상 수상명단(구두발표부문)>

\* 총 74 건

**A1.02\*** [13:12 - 13:24]

**Performance Test of a small-size Time Projection Chamber (sTPC) for Low-Energy Nuclear Experiments** / KIM Shin Hyung, CHOI Won Ji, AHN Jung Keun\* (Department of Physics, Korea University)

**A2.02\*** [13:12 - 13:24]

**공간 분해 분석법을 통한 단일 GaN 마이크로 막대 내부 InGaN 양자 우물의 특성 연구** / 조승혜<sup>1</sup>, 최성한<sup>1</sup>, 송현규<sup>1</sup>, 김원호<sup>2</sup>, 이은형<sup>2</sup>, 노승원<sup>2</sup>, 조용훈<sup>\*1</sup> (<sup>1</sup> 한국과학기술원 물리학과, <sup>2</sup> LG 이노텍 R&D 센터 선행부품연구소)

**A2.06\*** [14:00 - 14:12]

**Optical Confinement of Exciton-Polariton Condensates in Semiconductor Microcavity** / CHOI Daegwang<sup>1</sup>, KWON Min-Sik<sup>1</sup>, OH Byoung Yong<sup>1</sup>, GONG Su-Hyun<sup>1</sup>, KANG Hang Kyu<sup>2</sup>, KANG Sooseok<sup>2</sup>, SONG Jin Dong<sup>2</sup>, CHOI Hyoungsoon<sup>1</sup>, CHO Yong-Hoon<sup>\*1</sup> (<sup>1</sup>Department of Physics and KI for the NanoCentury, Korea Advanced Institute of Science and Technology (KAIST), <sup>2</sup>Center for Opto-Electronic Convergence Systems, Korea Institute of Science and Technology (KIST),)

**A3.04\*** [13:36 - 13:48]

**Transparent p-CuI/n-BaSnO<sub>3-δ</sub> Perovskite Oxide-based Heterojunction Diodes** / LEE Jeong Hyuk<sup>1</sup>, LEE Woong-Jhae<sup>1</sup>, KIM Tai Hoon<sup>1</sup>, KIM Kee Hoon<sup>\*1, 2</sup> (<sup>1</sup>Center for Novel States of Complex Materials Research, Department of Physics and Astronomy, Seoul National University, <sup>2</sup>Institute of Applied Physics, Department of Physics and Astronomy, Seoul National University)

**A3.05\*** [13:48 - 14:00]

**Gamma-ray irradiation effect on electrical properties of bismuth layer-structure ferroelectric ceramics** / CHO Samyeon, CHOI Gippeum, BU Sangdon<sup>\*</sup> (Department of Physics, Chonbuk University)

**A4.01\*** [13:00 - 13:12]

**A fast and scalable silicon oxide resistive memory with tunable and well-defined single nanopore structure** / WANG Gunuk<sup>\*</sup>, KWON Soonbang (KU-KIST Graduate School of Converging Science and Technology, Korea University)

**A8.03\*** [13:24 - 13:36]

**Investigation of ferroelectric domain states of BiFeO<sub>3</sub> thin films by second harmonic**

**generation microscopy** / 노창재<sup>1</sup>, 함선영<sup>1</sup>, 이진홍<sup>2</sup>, 김광은<sup>2</sup>, 우창수<sup>2</sup>, 양찬호<sup>2</sup>, 이종석<sup>\*1</sup>  
(<sup>1</sup>Department of Physics and Photon Science, Gwangju Institute of Science and Technology (GIST),  
<sup>2</sup>Department of Physics Korea Advanced Institute of Science and Technology (KAIST))

**A8.08\*** [14:24 - 14:36]

**Enhanced ferroelectric properties of sulfur diffused layered  $\text{Pb}(\text{Zr}_{0.52}\text{Ti}_{0.48})\text{O}_3$  thin film** /  
SHEERAZ Muhammad, KIM Tea Heon, KIM Ill Won, AHN Chang Won\* (Department of Physics,  
University of Ulsan)

**A12.04\*** [13:48 - 14:00]

**Double resonance of Raman transitions in a two-electron degenerate Fermi gas** / LEE Moosong<sup>1, 2</sup>, HAN Jeong Ho<sup>2</sup>, KANG Jin Hyoun<sup>1, 2</sup>, KIM Min-Seok<sup>2</sup>, SHIN Y.<sup>\*1, 2</sup> (<sup>1</sup>Center for Correlated Electron Systems, Institute for Basic Science (IBS), <sup>2</sup>Department of Physics and Astronomy, Seoul National University (SNU))

**A12.06\*** [14:12 - 14:24]

**Atom interferometer gyroscope using cold atom beam** / LEE Jehyun<sup>\*1</sup>, KIM Ji-Hyoun<sup>2</sup>, YOON Seokchan<sup>1</sup>, YOON Tai-Hyun<sup>1</sup>, CHO D.<sup>1</sup> (<sup>1</sup>Department of Physics, Korea University, <sup>2</sup>Department of Physics, Seoul University)

**B1.02\*** [15:12 - 15:24]

**Development of the Hyperon Spectrometer for H-Dibaryon Search Experiment at J-PARC** /  
KIM Shin Hyung, AHN Jung Keun\* (Department of Physics, Korea University)

**B1.07\*** [16:12 - 16:24]

**Daejeon Boltzmann-Uehling-Uhlenbeck (DJBUU) results comparison and box calculation** /  
김명국<sup>1</sup>, 이창환<sup>\*1</sup>, 김영만<sup>2</sup>, 전상용<sup>3</sup> (<sup>1</sup>부산대학교 물리학과, <sup>2</sup>기초과학연구원 중이온가속기구축사업단, <sup>3</sup>맥길대학교 물리학과)

**B6.06\*** [16:12 - 16:24]

**Ab initio study of polaron dynamics in transition metal oxides** / MIN Taewon, SONG Sehwan, PARK Sungkyun\*, LEE Jaekwang\* (부산대학교 물리학과)

**B6.08\*** [16:36 - 16:48]

**Theoretical Investigation of homogeneous van der Waals TMD p-n Junction** / KANG Sungwoo<sup>\*</sup>, LEE Joohee, HAN Seungwu (Department of Materials Science and Engineering, Seoul National University)

**B7.04\*** [15:36 - 15:48]

**Observation of Strong Josephson Coupling in Planar Graphene Junctions** / 박진호<sup>1</sup>, 이재형<sup>1</sup>, 이길호<sup>2</sup>, TAKANE Yositate<sup>3</sup>, IMURA Ken-Ichiro<sup>3</sup>, TANIGUCHI Takashi<sup>4</sup>, WATANABE Kenji<sup>4</sup>, 이후종<sup>\*1</sup>

(<sup>1</sup>Pohang University of Science and Technology, <sup>2</sup>Harvard University, Cambridge, <sup>3</sup>Hiroshima University, <sup>4</sup>National Institute for Materials Science)

**B8.02\*** [15:24 - 15:36]

**First-principles study on the enhanced electronic correlation in the potassium-doped surface layer of FeSe** / 최영우, 최형준\* (연세대학교 물리학과)

**B14.05\*** [15:48 - 16:00]

**RF matching simulation to reduce the systematic errors of the muon g-2 experiment at FNAL** / KIM On\*<sup>1, 2</sup>, SEMERTZIDIS Yannis K.<sup>1, 2</sup>, KIM YoungIm<sup>2</sup> (<sup>1</sup>Department of Phsics KAIST, <sup>2</sup>Center for Axion and Precision Physics, Institute of Basic Science)

**C2.05\*** [09:48 - 10:00]

**Development of P-N Diode using two dimensional nanomaterials** / PARK Chulho<sup>1</sup>, JEONG Mun Seok<sup>\*1, 2</sup> (<sup>1</sup>Department of Energy Science, Sungkyunkwan University, <sup>2</sup>Center for Integrated Nanostructure Physics (CINAP), Institute for Basic Science (IBS), Sungkyunkwan)

**C2.07\*** [10:12 - 10:24]

**Enhancement of Photocatalytic Properties of Mn-Adsorbed g-C<sub>3</sub>N<sub>4</sub>** / ZHANG Weibin, ZHANG Zhijun, KWON Sangwoo, YANG Woochul\* (Department of Physics, Dongguk University)

**C3.05\*** [10:00 - 10:12]

**Polarization dependent work function and transport characteristics of MoS<sub>2</sub> layers on PbTiO<sub>3</sub> epitaxial heterostructures** / JIN Hye-Jin, YOON Woo Young, JO William\* (Department of Physics, Ewha Womans University)

**C4.04\*** [09:48 - 10:00]

**그래핀 위에 AFM 국소양극산화법을 이용하여 제작한 그래핀 산화물의 결합 형태에 따른 자성 특성 연구** / 이덕현, 오광택, 전지훈, 오다예, 이민주, 박배호\* (건국대학교 물리학과)

**C4.05\*** [10:00 - 10:12]

**Excitation energy dependence of Raman spectra of few-layer WS<sub>2</sub>** / YANG Jinho, LEE Jae-Ung, CHEONG Hyeonsik\* (Department of Physics, Sogang University)

**C8.01\*** [09:00 - 09:12]

**Micromagnetic simulation study of 3D granular Nd-Fe-B permanent magnets using finite element method** / LEE Jae-Hyeok, CHOE Jinhyeok, HWANG Shinwon, KIM Sang-Koog\* (Nanospinics Laboratory, Research Institute of Advanced Materials, Department of Materials Science and Engineering, Seoul National University)

**C8.03\*** [09:24 - 09:36]

**Intrinsic spin-wave modes and domain-wall motions in soft magnetic nanotubes driven by resonant rotating magnetic fields** / YANG Jaehak, KIM Junhoe, KIM Bosung, CHO Young-Jun, LEE Jae-Hyeok, KIM Sang-Koog\* (Nanospinics Laboratory, Research Institute of Advanced Materials, Department of Materials Science and Engineering, Seoul National University)

**C8.07\*** [10:12 - 10:24]

**Restored topological surface state by post-processing in gadolinium substituted topological insulator  $\text{Bi}_2\text{Te}_3$**  / KIM Jinsu<sup>1</sup>, SHIN Eun-Ha<sup>2</sup>, SHARMA Manoj K.<sup>3</sup>, IHM Kyuwook<sup>3</sup>, OTGONBAYAR Dugerjav<sup>4</sup>, HWANG Chanyong<sup>4</sup>, LEE Hwangho<sup>5</sup>, PARK Jae-hoon<sup>5</sup>, KIM Miyoung<sup>2</sup>, KIM Hanchul<sup>2</sup>, JUNG Myung-Hwa<sup>\*1</sup> (<sup>1</sup>Department of Physics, Sogang University, <sup>2</sup>Department of Physics, Sookmyung University, <sup>3</sup>Pohang Accelerator Laboratory, <sup>4</sup>Center for Advanced Instrumentation, Korea Research Institute of Standards and Science, <sup>5</sup>Department of Physics, POSTECH)

**C9.02\*** [09:24 - 09:36]

**광자결정 합금계에서의 광자 띠꼬리 상태에 대한 연구** / 이명재, 전헌수\* (서울대학교 물리천문학부)

**C10.02\*** [09:12 - 09:24]

**Phase transition in nonequilibrium Ising model on fluctuating random q-neighbor networks** / 박종민<sup>1</sup>, 노재동<sup>\*1, 2</sup> (<sup>1</sup>서울시립대학교 물리학과, <sup>2</sup>고등과학원 물리학부)

**C11.05\*** [09:48 - 10:00]

**On the thermodynamic origin of the initial radiation energy density in warm inflation** / 김용완, 김원태\* (서강대학교 물리학과)

**C12.08\*** [10:24 - 10:36]

**Complete Measurement of Biphoton Temporal Wavefunction via Stimulated Emission** / PARK Kwang-Kyoon<sup>\*1</sup>, KIM Jin-Hun<sup>1</sup>, ZHAO Tian-Ming<sup>1</sup>, CHO Young-Wook<sup>2</sup>, KIM Yoon-Ho<sup>1</sup> (<sup>1</sup>Department of Physics, Pohang University of Science and Technology (POSTECH), <sup>2</sup>Center for Quantum Information, Korea Institute of Science and Technology (KIST))

**C14.04\*** [09:36 - 09:48]

**Search for heavy Majorana neutrino in trilepton channel at 13 TeV using the CMS detector** / 전시현<sup>\*</sup>, 김재성, 오성빈, 이한얼, John Almond, 유금봉, 서선희, 양운기 (서울대학교 물리학과)

**D1.02\*** [11:24 - 11:36]

**The Production of  $^{98}\text{Tc}$  through the neutrino process in supernova explosion** / 고혜민<sup>1</sup>, 천명기<sup>\*1</sup>, 김경식<sup>\*2</sup> (<sup>1</sup>숭실대학교 물리학과, <sup>2</sup>항공대학교 교양학과)

**D9.03\*** [11:36 - 11:48]

**Phase optical time domain reflectometer based on master oscillator power amplification** / LEE Seung-Min, HAN Young-Geun\* (Department of Physics, Hanyang University)

**D10.05\*** [12:00 - 12:12]

**Long-term Memory in Rank Dynamics of Popular Music** / SOH Hyungjoon<sup>1</sup>, JEONG Jaeseung<sup>2</sup>, JEONG Hawoong<sup>\*1, 3</sup> (<sup>1</sup>Department of Physics KAIST, <sup>2</sup>Department of Bio and Brain Engineering KAIST, <sup>3</sup>Institute for the BioCentury KAIST)

**D14.08\*** [12:24 - 12:36]

**Muon Identification for CMS phase2 upgrade** / JEON Dajeong, PARK Inkyu\*, LEE Jason Sang hun\* (University of Seoul)

**E6.06\*** [15:48 - 16:00]

**Studying Dynamics of Internal Strain of Chemically Active Zeolites with Coherent X-ray Diffraction Imaging and X-ray Cross-Correlation** / KANG Jinback<sup>1</sup>, CHUNG Myungwoo<sup>1</sup>, KIM Dongjin<sup>1</sup>, KIM Jaeseung<sup>1</sup>, YUN Kyuseok<sup>1</sup>, CHA Wonsuk<sup>2</sup>, HARDER Ross<sup>3</sup>, SONG Sanghoon<sup>4</sup>, AYMERIC Robert<sup>4</sup>, PHAM Tung Cao Thanh<sup>5</sup>, YOON Kyung Byung<sup>5</sup>, LEE Heeju<sup>1, 6</sup>, KIM Hyunjung<sup>\*1</sup> (<sup>1</sup>Department of Physics, Sogang University, <sup>2</sup>Materials Science Division, Argonne National Laboratory, USA, <sup>3</sup>Advanced Photon Source, Argonne National Laboratory, <sup>4</sup>Linac Coherent Light Source, SLAC National Accelerator Laboratory, <sup>5</sup>Department of Chemistry, Sogang University, Korea, <sup>6</sup>Korea Atomic Energy Research Institute)

**E9.02\*** [14:24 - 14:36]

**Quantum hacking on free-space QKD system** / 이민수<sup>1, 2</sup>, 우민기<sup>1, 3</sup>, 정지성<sup>1, 4</sup>, 김용수<sup>1, 2</sup>, 한상욱<sup>\*1</sup>, 문성욱<sup>1</sup> (<sup>1</sup>한국과학기술연구원 양자정보연구단, <sup>2</sup>과학기술연합대학원대학교 나노재료공학과, <sup>3</sup>아주대 전자공학과, <sup>4</sup>연세대학교 물리학과)

**E10.04\*** [14:48 - 15:00]

**A Novel Strategy to Enhance the Stability of Freestanding Lipid Bilayer** / JANG Hyunwoo<sup>1</sup>, JEONG Dae-Woong<sup>1</sup>, LEE Suho<sup>1</sup>, CHOI Siyoung Q.<sup>2</sup>, CHOI Myung Chul<sup>\*1</sup> (<sup>1</sup>Department of Bio and Brain Engineering, KAIST, <sup>2</sup>Department of Chemical and Biomolecular Engineering, KAIST)

**E11.07\*** [15:24 - 15:36]

**Single-molecule visualizaiton of MutS-β clamp Interactions on mismatched DNA** / OH Jungsic<sup>1</sup>, CHO Won-Ki<sup>1</sup>, LIU Jiaquan<sup>2</sup>, KIM Daehyung<sup>1</sup>, JERGIC Slobodan<sup>3</sup>, DIXON Nicholas E.<sup>\*3</sup>, FISHEL Richard<sup>\*2</sup>, LEE Jong-Bong<sup>\*1</sup> (<sup>1</sup>Department of Physics, Pohang University of Science & Technology (POSTECH), <sup>2</sup>Department of Molecular Virology, Immunology and Medical Genetics, The Ohio State University, <sup>3</sup>Centre for Medical and Molecular Bioscience and School of Chemistry, University of Wollongong)

**E14.02\*** [14:12 - 14:24]

**Electroweak Kaluza-Klein Dark Matter** / FLACKE Thomas<sup>1</sup>, KANG Dong Woo<sup>1, 2</sup>, KONG Kyoungchul<sup>3, 4</sup>, MOHLABENG Gopolang<sup>4, 5</sup>, PARK Seong Chan<sup>6, 7</sup> (<sup>1</sup>Center for Theoretical Physics of the Universe, Institute for Basic Science (IBS), <sup>2</sup>Department of Physics, Sungkyunkwan University, <sup>3</sup>Department of Physics and Astronomy, University of Kansas, <sup>4</sup>Pittsburgh Particle physics, Astrophysics, and Cosmology Center, <sup>5</sup>Fermi National Accelerator Laboratory, Theory Group, <sup>6</sup>Department of Physics and IPAP, Yonsei University, <sup>7</sup>Korea Institute for Advanced Study)

**F3.04\*** [16:36 - 16:48]

**Operation mechanism of energy cascade organic photovoltaics** / JUNG Kwanwook<sup>1</sup>, PARK Soohyung<sup>1</sup>, YOO Jisu<sup>1</sup>, JUNG Na Eun<sup>1</sup>, MOON Byung Joon<sup>2</sup>, LEE Sang Hyun<sup>2</sup>, LEE Hyunbok<sup>\*3</sup>, YI Yeonjin<sup>\*1</sup> (<sup>1</sup>Institute of Physics and Applied Physics Yonsei University, <sup>2</sup>Applied Quantum Composites Research Center Korea Institute of Science and Technology, <sup>3</sup>Department of Physics, Kangwon National University)

**F6.07\*** [17:12 - 17:24]

**Growth of electronically distinct manganite thin films by modulating cation stoichiometry** / RYU Sangkyun<sup>1</sup>, LEE Joonhyuk<sup>1</sup>, AHN Eunyong<sup>1</sup>, KIM Ji Woong<sup>1</sup>, HERKLOTZ Andreas<sup>2</sup>, BAE Jong-Seong<sup>3</sup>, LEE Ho Nyung<sup>2</sup>, KIM Young Hak<sup>4</sup>, JEON Jae-Young<sup>4</sup>, CHO Jinhyung<sup>5</sup>, PARK Sungkyun<sup>1</sup>, JEEN Hyoungjeen<sup>\*1</sup> (<sup>1</sup>Department of Physics, Pusan National University, <sup>2</sup>Materials Science and Technology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 3783, <sup>3</sup>Korea Basic Science Institute, <sup>4</sup>Pohang accelerator laboratory, Pohang University of Science and Technology, <sup>5</sup>Department of Physics Education, Pusan National University)

**F7.02\*** [16:12 - 16:24]

**2015 개정 과학과 교육과정의 핵심역량과 물리 교과 성취기준과의 관계성 분석** / 이상원, 임성민\* (대구대학교 과학교육학과)

**F11.06\*** [17:00 - 17:12]

**Mechanistic Studies of Intercellular Nanotubes** / 장민혁, 오재호, 이종봉\* (포항공과대학교 물리학과)

**F11.07\*** [17:12 - 17:24]

**Transcription-Translation coupling effects on transcriptional regulation** / YANG Sora<sup>1</sup>, KIM Seunghyeon<sup>1</sup>, LEE Nam Ki<sup>\*2</sup> (<sup>1</sup>Department of Physics POSTECH, <sup>2</sup>Department of Chemistry, Seoul National University)

**G1.05\*** [09:48 - 10:00]

**Simulation to calculate impact parameters of conversion electrons & D-meson decay electrons** / 방혜선, 권민정\* (인하대학교 물리학과)

**G1.08\*** [10:24 - 10:36]

**Charmonium modification in pPb and PbPb collisions at 5.02 TeV with CMS** / 박재범, 이송교, 김용선, 홍병식\*, 이기수 (Korea University)

**G2.02\*** [09:12 - 09:24]

**Temperature dependence of center-of-mass exciton confinement states in a single**

**CdTe/CdMnTe quantum well** / 이우진<sup>1</sup>, 김민우<sup>1</sup>, 김광석<sup>1, 2</sup> (<sup>1</sup>부산대학교

인지메카트로닉스공학과, <sup>2</sup>부산대학교 광메카트로닉스공학과, 물리교육과)

**G2.03\*** [09:24 - 09:36]

**Optical and surface electric properties of Sn doped (Zn,Yb)O transparent conducting films** /

OH Seol Hee<sup>1</sup>, DINIA Aziz<sup>2</sup>, SLAOUI Abdelilah<sup>2</sup>, FERBLANTIER Gerald<sup>2</sup>, STEVELER Emilie<sup>2</sup>, FIX

Thomas<sup>2</sup>, JO William<sup>\*1</sup> (<sup>1</sup>Department of Physics, Ewha Womans University, <sup>2</sup>Institut de Physique et de Chimie des Materiaux de Strasbourg)

**G3.04\*** [09:36 - 09:48]

**Oriental Epitaxy of AgCN Microwires on Various Hexagonal Two-Dimensional Crystals** / LEE

Yangjin<sup>1</sup>, KOO Jahyun<sup>2</sup>, YOON Jun-Yeong<sup>1</sup>, KIM Kangwon<sup>3</sup>, CHOE Jeongheon<sup>1</sup>, JANG Jeongsu<sup>1</sup>,

HWANG Jun Yeon<sup>6</sup>, JEONG Hu Young<sup>4</sup>, KIM Yong Soo<sup>5</sup>, CHEONG Hyeonsik<sup>3</sup>, RUOFF Rodney S.<sup>7, 8</sup>,

LEE Hoonkyung<sup>2</sup>, KIM Kwanpyo<sup>\*1</sup> (<sup>1</sup>Department of Physics, Ulsan National Institute of Science and Technology (UNIST), <sup>2</sup>Department of Physics, Konkuk University, <sup>3</sup>Department of Physics, Sogang

University, <sup>4</sup>UNIST Central Research Facilities, Ulsan National Institute of Science and Technology (UNIST), <sup>5</sup>Department of Physics and Energy Harvest-Storage Center (EHSRC), University of Ulsan,

<sup>6</sup>Institute of Advanced Composite Materials, Korea Institute of Science and Technology (KIST), <sup>7</sup>Department of Chemistry, Ulsan National Institute of Science and Technology (UNIST), <sup>8</sup>Center for

Multidimensional Carbon Materials (CMCM), Institute for Basic Science (IBS))

**G3.08\*** [10:24 - 10:36]

**Structural and dielectric properties of epitaxial LaInO<sub>3</sub>(001) films grown on BaSnO<sub>3</sub>(001)**

**substrates by pulsed laser deposition** / LEE Woong-Jhae<sup>1</sup>, KANG Jeonghun<sup>1</sup>, LEE Hwangho<sup>2</sup>, KO

Kyung-Tae<sup>2</sup>, PARK Jae-Hoon<sup>2</sup>, KIM Kee Hoon<sup>\*1, 3</sup> (<sup>1</sup>Center for Novel States of Complex Materials

Research, Department of Physics and Astronomy, Seoul National University, <sup>2</sup>Max Planck POSTECH

Center for Complex Phase Materials, Pohang University of Science and Technology, <sup>3</sup>Institute of

Applied Physics, Department of Physics and Astronomy, Seoul National University)

**G4.01\*** [09:00 - 09:12]

**Selective area growth of GaN micro-rods on graphene layers for flexible light emitting**

**diodes** / YOO Dongha<sup>1, 2</sup>, LEE Keundong<sup>1, 2</sup>, TCHOE Youngbin<sup>1, 2</sup>, JO Janghyun<sup>2, 3</sup>, KIM Heehun<sup>1, 2</sup>,

PARK JunBeom<sup>1, 2</sup>, PARK Joon Young<sup>1, 2</sup>, KIM Miyoung<sup>2, 3</sup>, YI Gyu-Chul<sup>\*1, 2</sup> (<sup>1</sup>Department of Physics

and Astronomy and Institute of Applied Physics, Seoul National University, <sup>2</sup>Research Institute of

Advanced Materials, Seoul National University, <sup>3</sup>Department of Materials Science and Engineering, Seoul National University)

**G4.10\*** [10:48 - 11:00]

**광자결정 형광체를 이용한 색변환 효율 증가 및 효율적인 백색광 구현 / 이종호<sup>1</sup>, 민경택<sup>1</sup>, 박연상<sup>2</sup>, 조경상<sup>2</sup>, 전현수<sup>\*1</sup>** (<sup>1</sup>서울대학교 물리천문학부, <sup>2</sup>삼성종합기술원)

**G6.06\*** [10:00 - 10:12]

**Development of impurity solvers for the dynamical mean field theory: IPT, ED, and CTQMC / HAN Mancheon<sup>1, 2</sup>, OH Hyungju<sup>1, 2</sup>, LEE Choong-Ki<sup>2</sup>, CHOI Hyoung Joon<sup>\*1, 2</sup>** (<sup>1</sup>Department of Physics and IPAP, Yonsei University, <sup>2</sup>Center for Computational Studies of Advanced Electronic Material Properties, Yonsei University)

**G6.07\*** [10:12 - 10:24]

**Establishing the  $J_{\text{eff}} = 3/2$  ground state in a lacunar spinel  $\text{GaTa}_4\text{Se}_8$  / JEONG Min Yong<sup>1</sup>, CHANG Seo Hyoung<sup>2</sup>, SIM Jae-Hoon<sup>1</sup>, SAID Ayman<sup>3</sup>, CASA Diego<sup>3</sup>, GOG Thomas<sup>3</sup>, JANOD Etienne<sup>4</sup>, CARIO Laurent<sup>4</sup>, KIM Jungho<sup>\*4</sup>, HAN Myung Joon<sup>\*1</sup>** (<sup>1</sup>Department of Physics, Korea Advanced Institute of Science and Technology, <sup>2</sup>Department of Physics, Chung-Ang University, <sup>3</sup>Advanced Photon Source, Argonne National Laboratory, <sup>4</sup>Institut des Matériaux Jean Rouxel (IMN), Université de Nantes, CNRS)

**G7.05\*** [09:48 - 10:00]

**Enhanced Piezoelectric Characteristics of Monoclinic  $\text{KNbO}_3$  Nanorods / OH Seol Hee<sup>1</sup>, YUN Byung Kil<sup>2</sup>, JUNG Jong Hoon<sup>2</sup>, JO William<sup>\*1</sup>** (<sup>1</sup>Department of Physics, Ewha Womans University, <sup>2</sup>Department of Physics, Inha University)

**G7.07\*** [10:12 - 10:24]

**STM study on the solid solution alloy of  $\text{SnSe}_{1-x}\text{S}_x$  / TRINH Thi Ly<sup>1</sup>, MIN Taewon<sup>2</sup>, DUVJIR Ganbat<sup>1</sup>, KIM Sanghwa<sup>1</sup>, M. SAAD Mahmoud<sup>1</sup>, NGUYEN Thi Minh Hai<sup>1</sup>, CHO Sunglae<sup>1</sup>, LEE Jaekwang<sup>2</sup>, KIM Jungdae<sup>\*1</sup>** (<sup>1</sup>Department of physics, BRL, and EHSRC, University of Ulsan, <sup>2</sup>Department of physics, Pusan National University)

**G8.02\*** [09:12 - 09:24]

**Stabilization of the transverse conical state and optimized magnetoelectric coupling in chemically tuned  $\text{Co}_2\text{Y}$ -type hexaferrites / PARK Chang Bae<sup>1</sup>, SHIN Kwang Woo<sup>1</sup>, CHUN Sae Hwan<sup>1</sup>, PARK Ju Young<sup>3</sup>, KIM Kee Hoon<sup>\*1, 2</sup>** (<sup>1</sup>Center for Novel States of Complex Materials Research, Department of Physics and Astronomy, Seoul National University, <sup>2</sup>Institute of Applied Physics, Department of Physics and Astronomy, Seoul National University, <sup>3</sup>New Energy Industry Intergrated Center, Green Energy Institute)

**G8.04\*** [09:36 - 09:48]

**Optical-Field-Induced Spin Switching in a Ferromagnetic Semiconductor** / 김영재, 이재동\*  
(Dept. of emerging materials science, DGIST (대구경북과학기술원))

**G8.08\*** [10:24 - 10:36]

**Magnetically-induced ferroelectricity in the  $S=1/2$  staircase kagome compound  $PbCu_3TeO_7$**  / YOO Kyongjun<sup>1</sup>, KOTESWARARAO Bommiseti Rao<sup>1</sup>, KANG Jeonghun<sup>1</sup>, NAM Woohyun<sup>1</sup>, BALAKIREV Fedor<sup>2</sup>, ZAPF Vivien<sup>2</sup>, HATTISON Neil<sup>2</sup>, KIM Kee Hoon<sup>\*1</sup> (<sup>1</sup>Center for Novel States of Complex Materials Research and Institute of Applied Physics, Department of Physics and Astronomy, Seoul National University, <sup>2</sup>National High Magnetic Field Laboratory, Los Alamos National Laboratory)

**G9.05\*** [10:00 - 10:12]

**고출력 TEM<sub>00</sub> 모드 Q-스위칭 Nd:YVO<sub>4</sub> 레이저 시스템** / 김동준, 노승현, 김지원\* (한양대학교 응용물리학과)

**G11.03\*** [09:24 - 09:36]

**Optical conductivity of multi-Weyl semimetals** / AHN Seongjin<sup>1</sup>, MELE Eugene<sup>\*2</sup>, MIN Hongki<sup>\*1, 2</sup>  
(<sup>1</sup>Department of Physics and Astronomy, Seoul National University, <sup>2</sup>Department of Physics and Astronomy, University of Pennsylvania)

**G11.04\*** [09:36 - 09:48]

**Unconventional current-phase relation in Al-Bi<sub>1.5</sub>Sb<sub>0.5</sub>Te<sub>1.7</sub>Se<sub>1.3</sub>-Al junctions** / LEE Jae Hyeong<sup>1</sup>, LEE Gil-Ho<sup>2</sup>, KHO Byung Woo<sup>1</sup>, KIM Jun Sung<sup>1</sup>, LEE Hu-Jong<sup>\*1</sup> (<sup>1</sup>Department of Physics, Pohang University of Science and Technology, <sup>2</sup>Department of Physics, Harvard University)

**G12.05\*** [09:48 - 10:00]

**남극에서 7 번째 CREAM 실험인 BACCUS 미션에 관한 보고** / 최광호, 이해영, 흥기한, 이직, 박일흥\* (Department of Physics, Sungkyunkwan University)

**G14.03\*** [09:24 - 09:36]

**Measurement of a muon flux at the Yangyang Underground Laboratory** / PRIHTIADI Hafizh\*  
(Department of Physics, Bandung Institute of Technology)

**H2.05\*** [11:48 - 12:00]

**Polymer Passivation of Methylammonium Lead Trihalide Perovskites** / 김효정<sup>1, 2</sup>, 변혜령<sup>1, 2</sup>, 김보라<sup>1</sup>, 김성혁<sup>1</sup>, 오혜민<sup>1</sup>, 정문석<sup>\*1, 2</sup> (<sup>1</sup>성균관대학교 에너지과학과, <sup>2</sup>기초과학연구원 나노구조물리연구단)

**H2.06\*** [12:00 - 12:12]

**Fast crystallization of bandgap modulated organic lead halide perovskite single crystals /**

박대영, 정문석\* (성균관대학교 에너지과학과)

**H3.05\*** [11:48 - 12:00]

**Single-mode distributed feedback lasers using a 25 nm thick discretized TiO<sub>2</sub> film for arbitrary gain morphology /**

UMAR Muhammad<sup>1</sup>, MIN Kyungtaek<sup>1</sup>, JEON Heonsu<sup>3</sup>, KIM Sunghwan<sup>\*1, 2</sup> (<sup>1</sup>Department of Energy Systems Research, Ajou University, <sup>2</sup>Department of Physics, Ajou University, <sup>3</sup>Department of Physics and Astronomy, Seoul National University)

**H3.07\*** [12:12 - 12:24]

**Tunable inertial focusing and separation in co-flow systems /**

LEE Dongwoo, LEE Wonhee\* (Graduate school of Nanoscience and Technology, Korea Advanced Institute of Science and Technology (KAIST))

**H4.05\*** [12:00 - 12:12]

**Characteristics of temperature sensitivities of few-mode microfiber knot resonators near dispersion turning point /**

ANH DUY Duong Le, HAN Young-Geun\* (Department of Physics, Hanyang University)

**H5.07\*** [12:36 - 12:48]

**Fast rise and fall of electron temperature in pulsed microwave atmospheric micro-plasma /**

LEE Min Uk, LEE Jae Koo\*, YUN Gunsu S\* (Division of Advanced Nuclear Engineering, Pohang University of Science and Technology)

**H7.05\*** [11:48 - 12:00]

**Origin of Tunable Band Gap in Potassium Doped Few-Layer Black Phosphorous /**

KIM Sun-Woo<sup>1</sup>, JUNG Hyun<sup>1</sup>, KIM Hyun-Jung<sup>2</sup>, CHOI Jin-Ho<sup>3</sup>, CHO Jun-Hyung<sup>\*1</sup> (<sup>1</sup>Department of Physics, Hanyang University, <sup>2</sup>Korea Institute for Advanced Study, <sup>3</sup>Research Institute of Mechanical Technology, Pusan National University)

**H8.02\*** [11:24 - 11:36]

**Pressure-induced transition pathway from  $\alpha$ -B to  $\gamma$ -B /**

HAN Woohyun<sup>\*1</sup>, KIM Sunghyun<sup>1</sup>, LEE In-Ho<sup>2</sup>, CHANG Keejoo<sup>1</sup> (<sup>1</sup>Department of Physics, Korea Advanced Institute of Science and Technology, <sup>2</sup>Korea Research Institute of Standards and Science)

**H8.08\*** [12:36 - 12:48]

**Design of high-coercivity Fe<sub>16-x</sub>Al<sub>x</sub>N<sub>2</sub> alloy /**

BYUN Jinho, MIN Taewon, PARK Sungkyun, LEE Jaekwang\* (부산대학교 물리학과)

**H12.01\*** [11:00 - 11:12]

**The performance of ISS-CREAM SCD sensors In charge measurement with high energy ion beam** / HONG GiHan, CHOI GwangHo, LEE Hye Young, LEE Jik, PARK Il Hung\* (Department of Physics, SungKyunKwan University)