

<우수발표상 수상명단(구두발표부문)>

A2.03* [14:24 -14:36]

Power robust qubit preparation using a shaped Gaussian pulse / JO Hanlae, LEE Han-gyeol, AHN Jaewook*

(Department of Physics, KAIST)

A4.05* [15:00 -15:12]

Broadband and Strong Optical Absorption in Diameter-modulated Silicon Nanowire Arrays / KO Minjee¹, BAEK

Seong-Ho², SONG Bokyung¹, KANG Jang-Won¹, CHO Chang-Hee^{*1} (¹Department of Emerging Materials Science, DGIST,

²Division of Nano-Energy Convergence Research, DGIST)

A5.03* [14:24 -14:36]

Ultrafast control of plasmon-phonon coupling using topological phase transition in (Bi_{1-x}In_x)₂Se₃ / SIM

Sangwan¹, PARK Jun¹, KOIRALA Nikesh², LEE Seungmin¹, BRAHLEK Matthew², MOON Jisoo², SALEHI Maryam², KIM

Jaeseok¹, CHA Soonyoung¹, SUNG Ji Ho³, JO Moon-Ho³, OH Seongshik², CHOI Hyunyong^{*1} (¹School of Electrical and

Electronic Engineering Yonsei University, ²Department of Physics and Astronomy, Rutgers, The State University of New Jersey,

Piscataway, ³Department of Materials Science and Engineering, Pohang University of Science and Technology)

A5.06* [15:00 -15:12]

Efficiency enhancement of perovskite solar cells with nanostructured photoactive layers / 박태준, 여정환, 이순

일, 하나영* (아주대학교 에너지시스템학부 물리학전공)

A7.04* [14:48 -15:00]

Effects of Transcription-Translation coupling on stochastic gene expression / YANG Sora¹, KIM Seunghyeon¹,

YOO Gyeongji², LEE Nam Ki^{*1, 2} (¹Department of Physics POSTECH, ²School of Interdisciplinary Bioscience and Bioengineering

(IBIO) POSTECH)

A14.02* [14:12 -14:24]

Energy dependent disappearance of reactor antineutrinos with neutron capture on hydrogen at RENO / 신창

동¹, 주경광^{*1}, 김바로¹, 김승찬¹, 김재률¹, 문동호¹, 박령균¹, 여인성¹, 임인택¹, 김우영², 박성우², 박인곤³, 장지승⁴, 박

명렬⁵, 최준호⁵, 장한일⁶, 권은향⁷, 김상용⁷, 김수봉⁷, 서선희⁷, 서현관⁷, 양정열⁷, 이동하⁷, 이용창⁷, 이현기⁷, 김종건⁸, 김

종현⁸, 양장희⁸, 유인태⁸, 최영일⁸, Carsten Rott⁸, 김현수⁹ (¹전남대학교, ²경북대학교, ³경상대학교, ⁴광주과학기술원, ⁵동신대학교, ⁶

서영대학교, ⁷서울대학교, ⁸성균관대학교, ⁹세종대학교)

A15.05* [14:48 - 15:00]

EURICA Experiments at RIKEN: Shape Transitions of Neutron-rich Zr-Mo Isotopes / HA Jeongsu^{*1}, SUMIKAMA

Toshiyuki^{2, 3}, CHOI Seonho¹, EURICA Collaboration² (¹Department of Physics and Astronomy, Seoul National University,

Gwanak-ro 1, Seoul, Republic of Korea, ²RIKEN Nishina Center, 2-1 Hirosawa, Wako-shi, Saitama 351-0198, Japan, ³Department of

Physics, Tohoku University, Aoba, Sendai, Miyagi 980-8578, Japan)

B2.02* [16:12 -16:24]

Intensity properties of a coherently pumped cavity-QED microlaser / KIM Junki¹, YANG Daeho¹, OH Seung-

Hoon¹, SONG Younghoon¹, LEE Moonjoo², AN Kyungwon^{*1} (¹Department of Physics & Astronomy, Seoul National University,

Seoul 151-747, Korea, ²Institute for Experimental Physics, University of Innsbruck, A-6020 Innsbruck, Austria)

B5.04* [16:36 -16:48]

Acoustic metasurface for impedance matching between two media / BOK Eun, HAN Choong Kyu, CHOI Haejin, PAKR Jong Jin, LEE Sam Hyeon* (Institute of Physics and Applied Physics, Yonsei University)

B5.08* [17:24 -17:36]

Raman scattering studies of tin sulfide (SnS) and tin disulfide (SnS₂) films / KIM Jayeong¹, YOON Seokhyun^{*1}, JO William¹, KIM Juran¹, JEON Chan-Wook² (¹Department of Physics, Ewha Womans University, ²School of Chemical Engineering, Yeungnam University)

B9.02* [16:12 -16:24]

공간 분해 분석을 이용한 단일 질화갈륨 로드의 마그네슘 도핑 특성 연구 / 최성한¹, 송현규¹, 유양석¹, 김원호², 이은형², 노승원², 조용훈^{*1} (¹한국과학기술원 물리학과, ²LG이노텍 R&D센터 선행부품연구소)

B9.05* [16:48 -17:00]

Improvement of device performance and stability of homojunction structured tungsten doped IZO thin film transistor / PARK Hyun-Woo, SONG Aeran, CHUNG Kwun-Bum* (Division of Physics and Semiconductor Science, Dongguk University)

B13.08* [17:24 -17:36]

Analysis of optical conductivity for strongly correlated system with magnetization from holography / 송근호¹, 서윤석¹, 김근영², 신상진^{*1} (¹한양대학교 물리학과, ²광주과학기술원 물리학과)

B14.07* [17:12 - 17:24]

Status of the AMoRE Background Simulation / 하대훈¹, 김홍주^{*1}, On behalf of AMoRE Collaboration² (¹경북대학교 물리학과, ²AMoRE)

B15.03* [16:24 - 16:36]

New heavy-ion transport code: Daejeon Boltzmann-Uehling-Uhlenbeck (DJBUU) Comparison of DJBUU and RBUU under controlled condition. / 김명국¹, 김영민^{1,2}, 이창환^{*1}, 김영만³, 김경일³, 홍주희³, 전상용⁴ (¹부산대학교 물리학과, ²서울대학교 물리천문학부 천문전공, ³기초과학연구원 중이온가속기구조사업단, ⁴맥길대학교 물리학과)

C1.03* [09:36 - 09:48]

Critical behavior of k-core percolation / 이덕재, 조민재, 강병남* (서울대학교 물리학과)

C2.05* [10:00 -10:12]

Design and fabrication of a W-band quasi-optical mode generator / SAWANT Ashwini¹, CHOE Mun Seok², CHOI EunMi^{*2} (¹Department of Electrical Engineering, Ulsan National Institute of Science and Technology (UNIST), UI, ²Department of Physics, Ulsan National Institute of Science and Technology (U))

C4.05* [10:12 -10:24]

Investigation of a new approach for high-yield molecular tunneling junctions with direct metal transfer method / JEONG Hyunhak, KIM Dongku, HWANG Wang-Taek, JANG Yeonsik, KIM Jun-Woo, KOO Jeongmin, LEE Takhee* (Department of Physics and Astronomy, Seoul National University)

C4.06* [10:24 -10:36]

Hole Transport Enhancement Mechanism of CuSCN in Organic Devices / 김민주¹, 박수형¹, 정준경¹, 신동근¹, 김지민², 류세희², 김근수², 이현복^{*3}, 이연진^{*1} (¹연세대학교 물리학과, ²포항공과대학교 물리학과, ³강원대학교 물리학과)

C7.04* [09:36 -09:48]

Film thickness variation mediated strain-state crossover in epitaxial VO₂ films / LEE Dooyong^{1, 2}, KIM Hyegyeong¹, KIM Ji Woong¹, KIM Yooseok², YUN Hyung-Joong², WON Jonghan², LEE Jouhahn², PARK Sungkyun^{*1}
(¹Department of Physics, Pusan National University, Busan 46241, Korea, ²Advanced Nano Surface Research Group, Korea Basic Science Institute, Daejeon 34133, Korea)

C7.06* [10:00 - 10:12]

Scanning tunneling microscopy / spectroscopy study on excitonic insulating phase in Ta₂NiSe₅ single crystals

C8.02* [09:12 - 09:24]

Part by part folding of DNA origami by single-molecule force annealing using magnetic tweezer / CHOI Hyunkyu^{1, 2}, BAE Wooli³, RYU Jekyung⁴, YOON Tae-young^{*2} (¹Department of physics, KAIST, ²Y-IBS (Yonsei-Institute for Basic Science), Yonsei university, ³Department of physics, Ludwig-Maximilians-Universität München (LMU), ⁴Department of bionanoscience, Delft University of Technology)

C9.02* [09:12 -09:24]

Layer dependent and photon-assisted tunneling effect in vertical Au/WS₂/Au devices / KHAN Muhammad Farooq^{1, 2}, JUNG Suyong², EOM Jonghwa^{*1} (¹Department of Physics & Astronomy Sejong University, ²Korea Research Institute of Standards and Science)

C15.02* [09:12 -09:24]

J/Ψ production in pp and pPb collisions from CMS / LEE Songkyo, HONG Byungsik^{*} (Department of Physics Korea University)

D1.06* [12:24 -12:36]

Auditory Transduction using Artificial Basilar Membrane with Its Machine Learning System / YOO Jaeyun, AHN Kang-Hun^{*} (Department of Physics Chungnam National University)

D2.04* [11:48 -12:00]

Displacement measurement using an optoelectronic oscillator with an intra-loop Michelson interferometer / PARK Sooyoung, LEE Jehyun, CHO D.^{*} (Department of Physics, Korea University)

D4.03* [11:24 -11:36]

Plasmon Activating Effective Optical Waveguide of Hybrid Crystals Based on Organic and Nanoscale metals / KIM Seokho, LEE Ho Jin, PARK Dong Hyuk^{*} (Department of Applied Organic Materials Engineering)

D4.05* [11:48 -12:00]

Study of carrier mechanism of ITO/PI/TIPS-Pentacene/Au diode by using electrical and optical measurements / 조성집, 임은주^{*} (단국대학교 창의융합제조공학과/과학교육과)

D5.02* [11:12 - 11:24]

Theoretical and experimental study: Enhancement of Thermoelectric performance in SnTe through the negative correlation effect between thermos-power and carrier density with Ag doping. / LEE Min Ho^{1, 2}, RHYEE

Jong-Soo^{*1}, RYU Byung Ki^{*2} (¹Department of Applied Physics Kyung Hee University, ²Korea Electrotechnology Research Center (KERI))

D5.04* [11:36 - 11:48]

Thickness-Dependent Lattice Thermal Conductivity of MoS₂ and Effect of Point Defects / PARK Minkyu^{1, 2}, KIM Yong-Sung^{*1, 2} (¹University of Science and Technology, ²Korea Research Institute of Standards and Science)

D7.08* [12:24 -12:36]

Interface control of ferroelectricity in a SrRuO₃/BaTiO₃/SrRuO₃ capacitor in ultrathin limit / SHIN Yeong Jae^{1, 2}, KIM Yoonkoo³, KANG Sung-Jin^{1, 2}, NAHM Ho-Hyun^{1, 2}, MURUGAVEL Pattukkannu⁴, KIM Jeong Rae^{1, 2}, CHO Myung Rae^{1, 2}, WANG Lingfei^{1, 2}, YANG Sang Mo⁵, YOON Jong-Gul⁶, CHUNG Jin-Seok⁷, KIM Miyoung³, ZHOU Hua⁸, CHANG Seo Hyoung^{*9}, NOH Tae Won^{*1, 2} (¹Center for Correlated Electron Systems, Institute for Basic Science (IBS), ²Department of Physics and Astronomy, Seoul National University (SNU), ³Electronic Materials Research Center, Korea Institute of Science and Technology, ⁴Department of Physics, Indian Institute of Technology Madras, ⁵Center for Nanophase Materials Sciences, Oak Ridge National Laboratory, ⁶Department of Physics, University of Suwon, ⁷Department of Physics, Soongsil University, ⁸Advanced Photon Source, Argonne National Laboratory, ⁹Department of Physics, Pukyong National University)

D8.05* [12:24 - 12:36]

Comparison of AuNi alloy nanoparitics fabricated by different heat supply method by x-ray imaging / Yoonhee Kim¹, Chan Kim^{1, 2}, Junhyeong Kim¹, Kang Woo Ahn¹, Do Young Noh^{*1} (¹School of Materials Science and Engineering & Department of Physics and Photon Science, GIST, 123 C, ²Materials Imaging and Dynamics, European XFEL, Schenefeld 22869, Germany)

D13.02* [11:12 -11:24]

Testing 5d-6d dualities with fractional D-branes / 윤영빈^{*} (서울대학교 물리천문학부)

E2.04* [14:36 -14:48]

시간역행 거울을 이용한 미세 광집속 / 박종찬, 박용근^{*} (한국과학기술원 물리학과)

F1.04* [16:36 -16:48]

Knowledge structure of nuclear fusion research / HONG Inho¹, KIM Hyunuk², JUNG Woo-Sung^{*1, 2} (¹Department of Physics, POSTECH, Korea, ²Department of Industrial and Management Engineering, POSTECH, Korea)

F2.01* [16:00 -16:12]

고등학생들의 협력적 문제 해결 과정에서 나타나는 모형구성의 특징 / 이일, 유준희^{*} (서울대학교 물리교육과)

F13.04* [16:36 -16:48]

Collider and astrophysical probes of dark matter with mediators / KANG Yoo-Jin, CHOI Soo-Min, LEE Hyun Min^{*} (Chung-Ang University)

F14.01* [16:00 -16:12]

Drell-Yan Differential Cross Section Measurement in Dimuon Channel at 13TeV with the CMS Detector / LEE Kyeongpil, NAM Kyungwook, YOO Hwidong^{*} (Seoul National University)

F14.02* [16:12 -16:24]

Search for High-mass Resonances in Z(l)gamma Final State at CMS / NAM Kyungwook^{*}, LEE Kyeongpil, YOO Hwidong (Seoul National University)

G2.07* [10:12 -10:24]

공간 세기 분포 조절 고출력 MOPA 레이저 시스템 / 노승현, 김동준, 김지원* (한양대학교 응용물리학과)

G3.03* [09:36 -09:48]

Laser-exfoliation of Few-layer Transition Metal Dichalcogenides by High Power Femtosecond Laser / 안성진^{1,2},

김용환^{1,2}, 김지희^{*2}, 정문석^{*1,2} (¹Department of Energy Science, Sungkyunkwan University, Suwon 16419, Korea, ²Center for Integrated Nanostructure Physics (CINAP), Institute for basic Science (IBS), Suwon 16419,)

G3.07* [10:24 -10:36]

Raman scattering study of cation effect on vibration modes in CH₃NH₃PbBr₃ single crystals / NGUYEN Trang

Thi Thu¹, JUNG Hye Ri¹, JO William¹, WOO Won Seok², AHN Chang Won², CHO Shinuk², KIM Ill Won², YOON Seokhyun Yoon^{*1} (¹Department of Physics, Ewha Womans University, ²Department of Physics and Energy Harvest-Storage Research Center, University of Ulsan)

G5.02* [09:12 -09:24]

Graphene-silver nanowire transparent electrode for high performance ultra-violet light emitting diodes / 민경

현^{1,2}, 서태훈², 이건희¹, 여동규^{1,2}, 김희수^{1,2}, 김명중^{*2}, 서은경^{*1} (¹전북대학교 반도체 화학공학부, ²한국과학기술연구원)

G5.08* [10:24 - 10:36]

Raman study of stacking order in 2-dimensional GaSe / LIM Soo Yeon¹, LEE Jae-Ung¹, CHEONG Hyeonsik^{*1}, KIM

Jung Hwa², LEE Zonghoon², NGUYEN Thi Thanh Huong³, CHO Sunglae³ (¹Department of Physics, Sogang University, ²Department of Materials science and engineering, UNIST, ³Department of Physics and Energy Harvest Storage Research Center, University of Ulsan)

G6.01* [09:00 - 09:12]

Study of extraordinary optical transmission in Ag nano-hole array through surface plasmon dispersion /

SONG Bokyoung, HAN Seung-Hoon, CHO Chang-Hee* (Department of Emerging Materials Science, DGIST)

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

Temperature dependent negative differential resistance behavior at Pt/Nb:SrTiO₃ interface / KIM Yeon Soo¹,

HWANG Sung Moon², YALISHEV Vadim Sh.³, JEON Jihoon¹, LEE Mi Jung¹, YULDASHEV Shavkat U.³, CHOI Taekjip², PARK Bae Ho^{*1} (¹Division of Quantum Phases & Devices, Department of Physics, Konkuk University, ²HMC, Department of Nanotechnology and Advanced materials engineering, Sejong University, ³Quantum-Functional Semiconductor Research Center, Dongguk University)

G9.03* [09:36 -09:48]

STM study on p-type characteristics of SnSe / TRINH Thi Ly¹, GANBAT Duvjir¹, LEE Jaekwang², MIN taewon², KIM

Taehoon¹, DUONG Anh Tuan¹, CHO Sunglae¹, RHIM S.H.¹, KIM Jungdae^{*1} (¹Department of Physics, BRL, and EHSRC, university of Ulsan, Ulsan, 44610, ²Department of Physics, Pusan National University, Busan, 46269)

G10.03* [10:12 - 10:24]

Finding position and FOV of UFFO-p(Ultra-fast Flash Observatory pathfinder) / JEONG Hyomin, JEONG Soomin,

KIM Minbin, GAIKOV Deorgii, LEE Jik, PARK Il H* (Department of Physics Sungkyunkwan University)

G14.05* [10:00 -10:12]

The Test of Low-Energy Muon Beam Profile Monitoring (BPM) System in the J-PARC Muon g-2/EDM

Experiment / 배 성한^{*1}, 고 호산¹, 최 현석¹, RAZUVAEV Georgiy^{2,3}, 김 봉호¹, 최 선호¹, MIBE Tsutomu⁴, OTANI Masashi⁴, KITAMURA Ryo⁵, 원 은일⁶ (¹Department of Physics and Astronomy, Seoul National University, ²Budker Institute of Nuclear Physics, ³Novosibirsk State University, ⁴KEK, High Energy Accelerator Research Organization, ⁵University of Tokyo, ⁶Korea University)

G15.04* [09:36 -09:48]

Metallic Magnetic Calorimeter optimization for small light detectors for rare event search experiments / OH

Seung-Yoon^{1,2,3}, LEE Minkyu³, KIM Sora², KIM Yong-Hamb^{*2,3} (¹Department of Physics, Sejong University, ²Center for Underground Physics, Institute for Basic Science, ³Korea Research Institute of Standards and Science (KRISS))

H2.04* [11:36 -11:48]

CMOS 이미지 센서를 사용한 레이저-플라즈마 가속 양성자빔의 실시간 에너지 측정 / 김하나¹, 이기태^{*2}, 김경남², 류우제², 김정태², 이신영², 박성희², Manoj Kumar², 전민용¹, 정영욱² (¹충남대학교 물리학과, ²한국원자력연구원 양자빔기반 방사선연구센터)

H3.03* [11:36 -11:48]

Increased Quantum Yield of Atomically Thin Semiconductors by Silver Nanowires / 방승호^{1,2}, 이주복^{1,2}, 조유현^{3,4}, Thanh Ngoc Duong^{1,2}, Anh Duc Nguyen^{1,2}, 박철호¹, 김현^{1,2}, 윤석준^{1,2}, 한강희², 권민기³, 김자연⁴, 김정용^{1,2}, 정문석^{*1,2} (¹성균관대학교 에너지과학학과, ²나노구조물리연구단, ³조선대 광기술공학과, ⁴한국광기술원 LED연구실)

H5.01* [11:00 - 11:12]

Layer-number-dependent atomic scale imaging of black phosphorus and its structural transformation / LEE

Yangjin¹, YOON Jun-Yeong¹, SCULLION Declan³, JANG Jeongsu¹, SANTOS Elton J. G.^{3,4}, JEONG Hu Young², KIM Kwanpyo^{*1} (¹Department of Physics, Ulsan National Institute of Science and Technology (UNIST), ²UNIST Central Research Facilities (UCRF), Ulsan National Institute of Science and Technology (UNIST), ³School of Mathematics and Physics, Queens University Belfast, ⁴School of Chemistry and Chemical Engineering, Queens University Belfast)

H5.05* [11:48 - 12:00]

Tunneling transport of mono- and few-layers magnetic van der Waals MnPS3 / LEE Sungmin^{1,2}, CHOI Ki-Young¹,

LEE Sangik³, PARK Bae Ho³, PARK Je-Geun^{*1,2} (¹Center for Correlated Electron Systems IBS, ²Department of Physics and Astronomy Seoul National University, ³Department of Physics Konkuk University)

H7.01* [11:00 -11:12]

Peierls distortion in carbynes and carbon rings: quantum Monte Carlo study / HONG Iue Gyun, AHN

Jeonghwan, BEA Hyeonhu, SHIN Hyeondeok, PARK Sungjin, LEE Hoonkyung, KWON Yongkyung^{*} (Dept. of Physics, Konkuk University)

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

Multiferroic coupling between magnetism, in-plane structural order, and out-of-plane polarization in heterogeneous bilayer of transition-metal dichalcogenides / 신동빈, 박노정^{*} (울산과학기술원 물리학과)

H9.02* [11:12 -11:24]

Circular photon drag effect in a Bi₂Se₃ thin film investigated by terahertz emission spectroscopy / 함선영¹, 박

순희¹, 정상균², 전재호², 천승현², 이종석^{*1} (¹광주과학기술원 물리광학과, ²세종대학교 물리학과)

H9.04* [11:36 -11:48]

Raman scattering studies of strain effect of suspended molybdenum disulfide (MoS₂) on periodic structured substrate / 문한결, 김자영, 손아름, 김동욱, 윤석현* (Ewha womans university)

H14.06* [12:00 -12:12]

Constraint of the spin assignments to the excited states in ²³Mg through a ²⁴Mg(p,d)²³Mg reaction / LEE Eunji, CHAE Kyungyuk* (Sungkyunkwan University)

H15.03* [11:24 - 11:36]

Development of HypTPC Software for the J-PARC E42 Experiment / KIM Shin Hyung^{*1}, SAKO Hiroyuki², SUGIMURA Hitoshi², AHN Jung Keun¹, HONG Byungsik¹ (¹Department of Physics, Korea University, ²Advanced Science Research Center, Japan Atomic Energy Agency)