

*The Korean Physical Society*

# 포스터발표논문 시간표



2014년 10월 22일 수요일 15:00 - 16:45

장소 : 포스터발표장

## P1-B001\*

**The first law of thermodynamics in Lifshitz black holes revisited**  
/ KIM Wontae, GIM Yongwan, YI Sang-Heon<sup>1</sup>(Department of Physics, Sogang University. <sup>1</sup>Department of Physics, College of Science, Yonsei University.)

## P1-B002

**Deriving some physical quantities from supersymmetry quantum mechanics** / 남순건, 반홍주(경희대학교 물리학과.)

## P1-B003

**Physical properties of SUSY QM for special potential** / 남순건, 조하영(경희대학교 물리학과.)

## P1-B004

**Search for sterile neutrinos at RENO** / 여인성, 김바로, 김승찬, 박령균, 김재률, 소선행, 송숙형, 신창동, 임인택, 주경광, 김시연<sup>1</sup>, 고영주<sup>1</sup>, 김현수<sup>2</sup>, 김영덕<sup>3</sup>, 전은주<sup>3</sup>, 양장희<sup>4</sup>, 유인태<sup>4</sup>, 최영일<sup>4</sup>, 장한일<sup>5</sup>, 박명렬<sup>6</sup>, 최준호<sup>6</sup>, 장지승<sup>7</sup>, 박인곤<sup>8</sup>, 김우영<sup>9</sup>, 선용근<sup>9</sup>, 김상용<sup>10</sup>, 김수봉<sup>10</sup>, 박정식<sup>10</sup>, 서선희<sup>10</sup>, 서현관<sup>10</sup>, 이동하<sup>10</sup>, 이병훈<sup>10</sup>, 이순규<sup>10</sup>, 최선호<sup>10</sup>, 최원국<sup>10</sup>(전남대. <sup>1</sup>중앙대. <sup>2</sup>전북대. <sup>3</sup>BS/세종대. <sup>4</sup>성균관대. <sup>5</sup>서영대. <sup>6</sup>동신대. <sup>7</sup>광주과학기술원. <sup>8</sup>경상대. <sup>9</sup>경북대. <sup>10</sup>서울대.)

## P1-B005

**Cut Optimization Study in VBF Off-shell Higgs → WW → llnu Production** / NAM Soon-Kwon, KROPIVNITSKYAYA Anna, KIM JungMin, KIM TaeHoon, NAM YeonSeo(Kangwon National University.)

## P1-B006

**J/ψ Reconstruction And Analysis At 8 TeV** / KONG Byungyun, BAEK Yongwook<sup>1</sup>, DUPIEUX Pascal<sup>2</sup>, OH Sun Kun(Konkuk University. <sup>1</sup>Gangneung-Wonju National University, Konkuk University. <sup>2</sup>Univ. Blaise Pascal Clermont-Fe. II.)

## P1-B007

**Dark Matter Search associated with monotop production via leptonic decay of top quark in pp collisions** / 정남균, 김동희, 오영도(경북대학교 물리학과.)

## P1-B008

**Dark Matter Search associated with monotop production via hadronic decay of top quark in pp collisions** / 최재윤, 김동희, 오영도(경북대학교 물리학과.)

**P1-B009**

**Study of Low-mass tail effect from PDF at heavy mass of  $W_{\text{prime}}$**   
/ 이정은, 양유철, 김동희, 오영도(경북대학교 물리학과.)

**P1-B010\***

**Inclusive  $B \rightarrow X_s \gamma$  Study using Hadronic Tagging Method at Belle** / KIM Hanjin, KWON Youngjoon(Dep. of Physics, Yonsei Univ.)

**P1-B011\***

**A study of  $B_0$  to  $l^+ \tau^-$  using Hadronic Tagging Method** / 허준형, 박찬석, 육영민, 김한진(연세대학교 물리학과.)

**P1-B012**

**Study of a Reconstruction Method for observation of  $5\text{-}\gamma$  event from  $K_0 \rightarrow \pi^0 + \pi^0 + \gamma$**  / 고재우, 김용주, 우종관, LIU Dong, 김은주<sup>1</sup>, 이수경<sup>1</sup>, 안정근<sup>2</sup>, 백광윤<sup>3</sup>, NI Andrey<sup>4</sup>(제주대학교 물리학과. <sup>1</sup>전북대학교 사범대학 물리교육. <sup>2</sup>고려대학교 물리학과. <sup>3</sup>부산대학교 물리학과. <sup>4</sup>전북대학교 융합과학연구소.)

**P1-B013**

**New Particle Search in  $B_0 \rightarrow K^+(\pi^+)\pi^- X_0$**  / HYUN H.J., KANG K.H.<sup>1</sup>, KIM H.J.<sup>1</sup>, KIM M.J.<sup>1</sup>, PARK H.<sup>1</sup>, CHEON B.G.<sup>2</sup>, CHO K.H.<sup>3</sup>, CHOI S.K.<sup>4</sup>, CHOI Y.I.<sup>5</sup>, KIM J.H.<sup>3</sup>, KIM S.K.<sup>6</sup>, KO B.R.<sup>7</sup>, KWON Y.J.<sup>8</sup>, MASAYA I.<sup>8</sup>, OLSEN S.<sup>9</sup>, PARK C.W.<sup>5</sup>, UNNO Y.<sup>2</sup>, WON E.I.<sup>7</sup>(Pohang Accelerator Laboratory. <sup>1</sup>Kyungpook National University. <sup>2</sup>Hanyang University. <sup>3</sup>Korea Institute of Science and Technology Information. <sup>4</sup>Gyeongsang National University. <sup>5</sup>Sungkyunkwan University. <sup>6</sup>Seoul National University. <sup>7</sup>Korea University. <sup>8</sup>Yonsei University. <sup>9</sup>Institute of Basic Science.)

**P1-B014**

**Study on the background of SBL prototype detector** / KIM Jinyu, JEON Eun Ju<sup>1</sup>, KIM Yeong Duk<sup>1</sup>, LEE Jaison<sup>1</sup>, LEE Jeong-Yeon<sup>1</sup>, PARK Hyang Kyu<sup>1</sup>, PARK Kang Soon<sup>1</sup>, KHAN Nasir<sup>1</sup>, KIM Ba Ro<sup>2</sup>, JOO Kyung Kwang<sup>2</sup>, KIM Seung Chan<sup>2</sup>, YEO In Sung<sup>2</sup>, KIM Hong Joo<sup>3</sup>, LEE Joo Young<sup>3</sup>, MA Kyung Ju, HAN Bo Young<sup>4</sup>, SUN Gwang Min<sup>4</sup>, KIM Siyeon<sup>5</sup>, KO Young Ju<sup>5</sup>, KIM Hyun Soo<sup>6</sup>, SEO Kyung Min<sup>6</sup>, YEO Kang Mo<sup>6</sup>, KANG Jeong Su<sup>7</sup>, PARK Hyeon Seo<sup>7</sup>(Department of Physics, Sejong University. <sup>1</sup>Center for Underground Physics, Institute for Basic Science. <sup>2</sup>Department of Physics, Chonnam National University. <sup>3</sup>Department of Physics, Kyungpook National University. <sup>4</sup>Neutron Science Division, Korea Atomic Energy Research Institute. <sup>5</sup>Department of Physics, Chung Ang University. <sup>6</sup>Department of Physics, Chonbuk National University. <sup>7</sup>Korea Research Institute of Standards and Science.)

**P1-B015**

**Background Simulation for KIMS-Nal Experiment** / OH Seung-Yoon(Sejong University, Dept. of Physics.)

## P1-B016\*

**Study about top quark mass measurement using J/psi in-jet at LHC / 류건모, 김지현(서울시립대학교 물리학과.)**

## P1-B017

**Measurement of neutron capture time on hydrogen / 신창동, 김바로, 김승찬, 박령균, 김재률, 소선행, 송숙형, 여인성, 임인택, 주경광, 김우영<sup>1</sup>, 선용근<sup>1</sup>, 박인곤<sup>2</sup>, 장지승<sup>3</sup>, 박명렬<sup>4</sup>, 최준호<sup>4</sup>, 장한일<sup>5</sup>, 김상용<sup>6</sup>, 김수봉<sup>6</sup>, 박정식<sup>6</sup>, 서선희<sup>6</sup>, 서현관<sup>6</sup>, 이동하<sup>6</sup>, 이병훈<sup>6</sup>, 이순규<sup>6</sup>, 최선호<sup>6</sup>, 최원국<sup>6</sup>, 양장희<sup>7</sup>, 유인태<sup>7</sup>, 최영일<sup>7</sup>, 김영덕<sup>8</sup>, 전은주<sup>8</sup>, 김현수<sup>9</sup>, 김시연<sup>10</sup>, 고영주<sup>10</sup>(전남대학교, <sup>1</sup>경북대학교, <sup>2</sup>경상대학교, <sup>3</sup>광주과학기술원, <sup>4</sup>동신대학교, <sup>5</sup>서영대학교, <sup>6</sup>서울대학교, <sup>7</sup>성균관대학교, <sup>8</sup>BS/세종대학교, <sup>9</sup>전북대학교, <sup>10</sup>중앙대학교.)**

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진행위원: [표면/계면/나노물질, D001~D024] 강세종(고려대)

[바이오물질/무른물질/유기물, D025~D043] 이광록(GIST)

## P1-D001

**The study on Fe ionic state of perovskite-type  $Ba_2Ca_{0.67}Fe_{0.33}NbO_{6-\delta}$  using In-situ x-ray photoelectron spectroscopy (XPS) as a function of temperature.** / BAE Jong-Seong, KIM Jong Pil, JEONG Euh Duck, KAN Wang Hay<sup>1</sup>, CHEN Min<sup>1</sup>, THANGADURAI Venkataraman<sup>1</sup>(Division of High Technology Materials Research, Korea Basic Science Institute. <sup>1</sup>Department of Chemistry, University of Calgary.)

## P1-D002

**3-omega 방법을 이용한 온도에 따른 Gd<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> 박막의 열전도도 및 계면 열저항 연구 /**곽지혜, 강준구, 양호순, 홍경수<sup>1</sup>(부산대학교 물리학과. <sup>1</sup>한국기초과학지원연구원 부산센터.)

## P1-D003

**Study of London dispersion forces using DFT for bulk solids with BCC, FCC, and diamond structures /** PARK Jinwoo, YU Byung Deok<sup>1</sup>, HONG Suklyun(Graphene Research Institute and Department of Physics, Sejong University, Seoul 143-747, Korea. <sup>1</sup>Department of Physics, University of Seoul, Seoul 130-743, Korea.)

## P1-D004

**Fabrication of high-quality single-crystal Cu thin films using radio-frequency sputtering /** 정세영, 김지영<sup>1</sup>, 이승훈<sup>2</sup>, 이태우<sup>3</sup>, 김원경<sup>4</sup>, 조용찬<sup>5</sup>, 황철성<sup>6</sup>(부산대학교 인지메카트로닉스공학과. <sup>1</sup>울산과학기술대학교. <sup>2</sup>고려대학교 기초과학연구소. <sup>3</sup>KAIST 중앙분석센터. <sup>4</sup>부산대학교 인지메카트로닉스 공학과. <sup>5</sup>부산대학교 단결정은행 연구소. <sup>6</sup>서울대학교 재료공학부.)

## P1-D005

**Ca-induced quantum well states of graphene /** 박희민, 성시진, 이팽로, 김진걸, 류민태, 정진욱(포항공과대학교, 물리학과.)

## P1-D006

**Orbital Angular Momentum Study In Pt-based Catalyst Using ARPES /** 김창영, 정종근, 김범영, 진태원<sup>1</sup>, 심지훈<sup>1</sup>, MASASHI Arita<sup>2</sup>, KENYA Shimada<sup>2</sup>, 문봉진<sup>3</sup>(연세대학교 물리학과. <sup>1</sup>Postech 화학과. <sup>2</sup>HSRC. <sup>3</sup>GIST 물리학과.)

P1-D007

**RF Magnetron Sputtering법에 의한 금속기판에 증착한 (ZrO<sub>2</sub>)<sub>50</sub>(TiO<sub>2</sub>)<sub>50</sub>박막의 절연 특성연구 / 최명규, 배강, 김동영, 손선영<sup>1</sup>, 김화민(대구가톨릭대학교 전자디스플레이공학과, <sup>1</sup>포항공대 미래혁신연구소.)**

P1-D008

**Theory of Optical-Second-Harmonic Generation from Al Metal Surfaces / LEE Kyungmee(Sunmoon University, Kyungpook National University.)**

P1-D009

**Carbon (Graphite) – doped LaAlO<sub>3</sub> / SrTiO<sub>3</sub> (001) interface / 송종현, 황인웅, 곽용수, 김진희<sup>1</sup>, 장정원<sup>2</sup>(충남대학교, <sup>1</sup>한국표준과학연구원, <sup>2</sup>고려대학교.)**

P1-D010

**Controlling of the Graphene Electrical properties by doping K+ ions / 김진걸, 성시진, 이평로, 류민태, 박희민, 정진욱(포항공과대학교, 물리학과.)**

P1-D011

**Enhancement of Spin-Orbit Interaction by Au-اداتoms on Graphene / YOO Jung-Woo, PARK Jungmin, JIN Mi-Jin, MODEPALLI Vijayakumar, JO Junhyeon(UNIST, 신소재공학.)**

P1-D012

**Impurity-induced band-bending on Ge(001) surfaces / LYO In-Whan, KIM Min-Seong, KIM Ji-Ho(Physics Dept., Yonsei Univ.)**

P1-D013

**The Experimental Evidence of Orbital Angular Momentum via Photoemission Spectroscopy on Al(111) Surface / KIM ChangYoung, YOO HanYoung, KIM BeomYoung, HAN GaRam, JUNG Jonkeun, ARITA Masashi<sup>1</sup>, SHIMADA Kenya<sup>1</sup>(Yonsei University, Physics department. <sup>1</sup>Hiroshima Synchrotron Radiation Center.)**

P1-D014

**다양한 환경 (O<sub>2</sub>, Air, N<sub>2</sub>, Vacuum)에서의 후열처리에 따른 ZnO 박막의 물성 변화 / 김혜경, 이두용, 김지웅, 이지성, 민태원, 김혜진, 이원재<sup>1</sup>, 배종성<sup>2</sup>, 이상근<sup>3</sup>, 박성균(부산대학교, 물리학과, <sup>1</sup>동의대학교, 융합부품공학과, <sup>2</sup>한국기초과학지원연구원, 부산센터, <sup>3</sup>주필로스톤.)**

P1-D015\*

**Ultrafast carrier dynamics in the topological insulators Bi<sub>2</sub>Te<sub>3</sub> and Sb<sub>2</sub>Te<sub>3</sub> thin film / CHOI Hyejin, JUNG Seonghoon<sup>1</sup>, KIM Taehyeon, PARK Jaehun<sup>1</sup>, CHAE jimin, JEONG Kwang-Ho, CHO Mann-Ho(Yonsei univeristy,**

P1-D016\*

**In-situ oxidation kinetics of silver by intense hard x-ray induced active oxygen and ozone** / NOH Do Young, KIM Jae Myung<sup>1</sup>, SEO Okkyun<sup>1</sup>(Department of Physics and Photon Science, Gwangju Institute of Science and Technology. <sup>1</sup>School of Materials Science and Engineering, Gwangju Institute of Science and Technology.)

P1-D017\*

**A study on thin film growth mechanism by sputtering using single-crystal target** / PARK Ho-Yeol, LEE Seunghun<sup>1</sup>, KIM Won-Kyung, PARK Ji-Hun, RYU Hui-Je<sup>2</sup>, PARK Jun Han<sup>3</sup>, LEE Tae-Woo<sup>4</sup>, PARK Sang Eon<sup>5</sup>, LEE You-Sil<sup>6</sup>, CHO Yong Chan<sup>6</sup>, JEONG Se-Young(Department of Cogno-Mechatronics Engineering, Pusan National University. <sup>1</sup>The Institute of Basic Science, Korea University. <sup>2</sup>Department of Nanomaterials Engineering, Pusan National University. <sup>3</sup>Department of Nanofusion Engineering, Pusan National University. <sup>4</sup>KAIST Analysis center for Research Advancement. <sup>5</sup>MCLAB company Ltd., Pusan National University. <sup>6</sup>Crystal Bank Research Institute, Pusan National University.)

P1-D018\*

**Antiferromagnetic Order in  $\alpha$ -phase Si/SiC(0001)** / YI Seho, CHO Jun-Hyung(Department of Physics, Hanyang University.)

P1-D019\*

**ITO/AZO/ITO로 증착한 Index Matching 특성에 관한 연구** / 진익현, 김동영, 서성보, 손선영<sup>1</sup>, 김화민(대구가톨릭대학교 전자디스플레이공학과. <sup>1</sup>포항공대 미래IT혁신 연구소.)

P1-D020\*

**Roughening and Deroughening of a Plasma-Etched Polymer Interface** / BAE Junwan(전북대학교 물리학과.)

P1-D021\*

**Electronic Properties of Ferromagnetic Doping on Topological Insulator  $\text{Cr}_{0.08}(\text{Bi}_{0.1}\text{Sb}_{0.9})_{1.92}\text{Te}_3$**  / JUNG HOON Yoo, MIN-SEOK Park, GYOUNGSEOK Lee, SANG HYUN Joo, JAE-JOON Kim, JINHO Lee(Department of Physics and Astron., Seoul National University, Seoul.)

P1-D022\*

**Flexible 디스플레이 보호층 적용을 위한 무기 복합 박막 (SiO<sub>2</sub>)(100-X)(SnO<sub>2</sub>)X, (SiO<sub>2</sub>)(100-X)(TiO<sub>2</sub>)X의 passivation 특성 연구** / 이창현, 배강, 서성보, 손선영<sup>1</sup>, 김화민(대구가톨릭대학교, 전자디스플레이공학과. <sup>1</sup>포항공대, 미래IT혁신연구소.)



**P1-D023\***

**Optical Investigation of Bulk and Surface States of Topological Insulators  $\text{Bi}_{1.5}\text{Sb}_{0.5}\text{Te}_{1.7}\text{Se}_{1.3}$**  / PARK Soon-Hee, HAMH Sun Young, PARK Joonbum<sup>1</sup>, KIM Jun Sung<sup>1</sup>, LEE Jong Seok(Department of Physics and Photon Science, Gwangju Institute of Science and Technology (GIST), Gwangju 500-712, Korea. <sup>1</sup>Department of Physics, Pohang University of Science and Technology, Pohang 790-784, Korea.)

**P1-D024\***

**Surface and Interface States of  $\text{Bi}_2\text{Se}_3$  Thin Films Investigated by Second Harmonic Generation Techniques** / HAMH Sun Young, PARK Soon-Hee, PARK Joonbum<sup>1</sup>, KIM Jun Sung<sup>1</sup>, CHOI Eunjip<sup>2</sup>, KIM Sung<sup>2</sup>, CHOI Suk-Ho<sup>3</sup>, OH Seongshik<sup>4</sup>, JEON Jeong Heum<sup>5</sup>, LEE Jong Seok(Department of Physics and Photon Science, Gwangju Institute of Science and Technology (GIST), Gwangju 500-712, Korea. <sup>1</sup>Department of Physics, Pohang University of Science and Technology, Pohang 790-784, Korea. <sup>2</sup>Department of Physics, University of Seoul, Korea. <sup>3</sup>Department of Applied Physics, College of Applied Science, Kyung Hee University, Yongin 446-701, Korea. <sup>4</sup>Department of Physics & Astronomy, Rutgers, The State University of New Jersey, 136 Frelinghuysen Road, Piscataway, New Jersey 08854, USA. <sup>5</sup>Department of Physics, Korea University, Seoul, 136-713, Korea.)

**P1-D025**

**Nano-mechanical Interplay of Cancer Cells with Nano-scaffolds** / PARK Soyeun(College of Pharmacy, Keimyung University.)

**P1-D026**

**Extension of observation time in diffusing single-molecule and measurement of its FRET dynamics by liposome tethering** / 김재열, 김철희, 이남기(포항공과대학교, 물리학과. <sup>1</sup>포항공과대학교, 물리학과 & 시스템생명과학부.)

**P1-D027**

**Co-transcriptional effect on intrinsic dynamics of TPP riboswitch and its transitions induced by ligand binding** / UHM Heesoo, HOHNG Sungchul(Department of Physics and Astronomy, Seoul National University.)

**P1-D028**

**Optical Spectroscopy of DNA and DNA-CTMA Films** / KIM Jong Hyeon, KONG Byungjoo, PAUSON B., HA Taewoo, SIM Kyung Ik, JO young Chan, LEE Ho Won, OH K., KIM Jae Hoon(Department of Physics, Yonsei University, Seoul 120-749, Republic of Korea.)

**P1-D029**

**Single Molecule Studies on Nucleosome Sliding by CHD1** / HOHNG Sungchul, KIRK Jaewon, LEE Juyeon(Seoul National University.)

P1-D030

**Single Molecule Studies on T-phi terminator** / HOHNG Sungchul, KANG Wooyoung, UHM Heesoo(Department of Physics and Astronomy, Seoul National University.)

P1-D031

**Single Molecule Study on Oligomeric State of Werner Syndrome Protein** / SHIN Soochul, LEE Jinwoo, HYUN Kwang-Beom<sup>1</sup>, KIM Jaehoon<sup>1</sup>, HOHNG Sungchul(Department of Physics and Astronomy, Seoul National University. <sup>1</sup>Department of Biological Sciences, KAIST.)

P1-D032

**Removal Process of Mismatched Nucleotides during DNA Mismatch Repair** / JEON Yongmoon, MARTIN-LOPEZ JUANA<sup>1</sup>, HANNE Jeungphil<sup>1</sup>, FISHEL Richard<sup>1</sup>, LEE Jong-Bong<sup>2</sup>(POSTECH, Department of Physics. <sup>1</sup>The Ohio State University, Department of Molecular Virology Immunology and Medical Genetics. <sup>2</sup>POSTECH, Department of Physics, Interdisciplinary Bioscience and Bioengineering.)

P1-D033

**Super-resolution Imaging of Neuron in Caenorhabditis Elegans** / PARK Sangjun, KWON Yeongdae, CHOI Myunggyu<sup>1</sup>, LEE Junho<sup>1</sup>, HOHNG Sungchul(Department of Physics and Astronomy, Seoul National University. <sup>1</sup>School of Biological Science, Seoul National University.)

P1-D034

**Single-Molecule Studies on Helicase Activity of Werner Syndrome Protein** / LEE Mina, LEE Jinwoo, BAE Sangsu, KULIKOWICZ Tomasz<sup>1</sup>, HONG Heesun, JEONG Hyunseok<sup>2</sup>, KIM Byeang Hyeon<sup>2</sup>, BOHR Vilhelm A.<sup>1</sup>, AHN Byungchan<sup>3</sup>, HOHNG Sungchul(Department of Physics and Astronomy, Seoul National University. <sup>1</sup>National Institute on Aging, National Institutes of Health. <sup>2</sup>Department of Chemistry, Pohang University of Science and Technology. <sup>3</sup>Department of Life Sciences, University of Ulsan.)

P1-D035\*

**Observation of director fluctuation in nematic liquid crystal droplets** / 백상인, 김성조, 김종현(충남대학교 물리학과.)

P1-D036\*

**Phase Transition in Block Copolymer-Homopolymer Mixture** / KIM hyunjung, AN gukil, KIM ajeong, JEROME carnis, KANG jinback(서강대학교 물리학과.)

P1-D037\*

**Cisplatin effect on nucleosome DNA** / HONG Seok-Cheol, MOON Hyeon-Min, PARK Jin-Sung<sup>1</sup>, LEE Ilbuem, LEE Nam-Kyung<sup>2</sup>, SONG Ji-Joon<sup>3</sup>, LEE kyoung J.(Department of Physics, Korea Univ. <sup>1</sup>Department of Mechanical Engineering, KAIST. <sup>2</sup>Department of Physics, Sejong Univ. <sup>3</sup>Department of Biological Sciences, KAIST.)

P1-D038\*

**Dynamic Allosteric control during DNA degradation by lambda exo-nuclease** / LEE GWANGROG, PARK SUYEON, YOO JUNGMIN(School of Life Science, Gwangju Institute of Science and Technology.)

P1-D039\*

**Dynamics of Saccharomyces cerevisiae Mph1 Helicase on DNA Fork Structure via FRET** / YONGJE Junge(Department of Physics and Astronomy, Seoul National University.)

P1-D040\*

**NSF disassembles a single SNARE complex in one round of ATP turnover** / RYU Je-Kyung, MIN Duyoung, RAH Sang-Hyun, KIM Soo Jin<sup>1</sup>, PARK Yongsoo<sup>2</sup>, KIM Ho Min<sup>1</sup>, JAHN Reinhard<sup>2</sup>, YOON Tae-Young(Dept. of Physics, KAIST. <sup>1</sup>Graduate School of Medical Science & Engineering, KAIST. <sup>2</sup>Department of Neurobiology, Max-Planck-Institute for Biophysical Chemistry.)

P1-D041\*

**Single-molecule studies on TPP riboswitch with optical tweezer combined with confocal microscope** / LEE Jongjin, HOHNG Sungchul<sup>1</sup>(Department of Physics and Astronomy, National Center of Creative Research Initiatives, Seoul National University. <sup>1</sup>Department of Physics and Astronomy, Department of Biophysics and Chemical Biology, National Center of Creative Research Initiatives, Seoul National University.)

P1-D042\*

**Single-Molecule Study on Gene Regulation Mechanism of Human Argonaute 2** / SUNGCHUL hohng, MYUNG HYUN Jo, SOOCHUL Shin, SEUNG-RYOUNG Jung, EUNJI Kim<sup>1</sup>, JI-JOON Song<sup>1</sup>(Seoul National University, Department of Physics and Astronomy. <sup>1</sup>KAIST, Department of Biological Sciences.)

P1-D043\*

**Solvent Additive Effect on the Morphology of Active Layer in Organic Solar Cell** / KIM Ajeong, NGOR SECK Mbaye, AHN Gukil, KANG Jinback, CARNIS Jerome, SHIN Taejoo<sup>1</sup>, KIM Jinwoo<sup>1</sup>, KIM Hyunjung<sup>1</sup>(서강대학교, 물리학과. <sup>1</sup>포항가속기연구소.)

2014년 10월 22일 수요일 15:00 - 16:45

장소: 포스터발표장

## P1-E001\*

**Angle-Resolved Photoemission Spectroscopy on the Embedded Two-Dimensional Free Electron Gas in a Layered Electride  $\text{Ca}_2\text{N}$  / OH Ji Seop, KIM Ye Ji<sup>1</sup>, KUO Cheng-Tai, KIM Sung Wng<sup>1</sup>, NOH Tae Won, KIM Hyeong-Do**(Center for Correlated Electron Systems, Institute for Basic Science, Seoul 151-747, Republic of Korea. <sup>1</sup>Department of Energy Science, Sungkyunkwan University, Suwon 440-746, Republic of Korea.)

## P1-E002\*

**Study on Electrical Properties of Thermal-Wetted Reduced Graphene Oxide / KIM Hyuk Joon, CHO Jang Yean, SHIN Min Kyoon, LIM Jaekwan<sup>1</sup>, PARK Sang Yoon**(Advanced Institutes of Convergence Technology, Seoul National University, Suwon. <sup>1</sup>Korea Artificial Organ Center, College of Medicine, Korea University.)

## P1-E003\*

**Carbonization of Graphene Oxide-Polymer Nanocomposite Film / CHO Jang Yean, KIM Hyuk Joon, YEO Chang Su, SHIN Min Kyoon, PARK Sang Yoon**(Advanced Institutes of Convergence Technology, Seoul National University, Suwon.)

## P1-E004\*

**Total internal reflection ellipsometry를 이용한 EGF R protein과 EGF R aptamer의 결합반응 연구 / 김영동, 강유리, 변준석, 김태중, 박한결, 박재찬, BARANGE Nilesh**(경희대학교 물리학과 나노광물성연구실.)

## P1-E005\*

**나노구조 광활성층을 적용한 역구조 유기 태양전지 제작 및 특성 연구 / 여정환, 김준태<sup>1</sup>, 조성윤, 이순일, 하나영**(아주대학교 에너지시스템학과 물리학전공. <sup>1</sup>아주대학교 나노정보융합연구소.)

## P1-E006\*

**질산 은이 도핑된 탄소 나노입자 용액의 발광 특성 연구 / 하나영, 김태근**(아주대학교 에너지시스템학과 물리학전공.)

## P1-E007\*

**나노임프린트된 실리카 솔-젤 박막을 이용한 유기 레이저 제작 및 특성 연구 / 하나영, 배수연**(아주대학교 에너지시스템학부 물리학전공.)

P1-E008\*

**Surface Effect Characterization of Highly Dispersive Three Dimensional Metamaterials /** CHANG Tae Yong, SHIN Jonghwa(KAIST.)

P1-E009\*

**Analysis of Wire-Grid Structures for the High Extraction Efficiency of Light Emitters Using Numerical Simulation /** 최민수, 신중화(한국과학기술원, 신소재공학과.)

P1-E010\*

**유기물-유기물 이중접합 구조 박막의 x-선 산란 및 AFM을 이용한 구조분석 /** 김종범, 김상돈, 최준휘, 이동렬(숭실대학교, 물리학과.)

P1-E011\*

**Nucleation Characteristics of (103)-oriented GaN Twins Grown on Patterned m-plane Sapphire Substrates /** 윤한섭, 주미연, 이혜미, 이상화, 김진교(경희대학교, 물리학과.)

P1-E012\*

**Strained VO2 박막의 상전이 특성 /** 김정환, 홍의균, 강만일, 김석원(울산대학교 물리학과, 에너지-하비스트-스토리지 연구센터.)

P1-E013\*

**Morphological Evolution of Silicon Surface by Laser Irradiation Underwater /** SON Joon-Gon, CHOI Jungwon<sup>1</sup>, SEO Okkyun<sup>1</sup>, KANG HyonChol<sup>2</sup>, NOH Do Young(Gwangju Institute of Science & Technology, Department of Physics and Photon Science. <sup>1</sup>Gwangju Institute of Science & Technology, School of Material Science & Engineering. <sup>2</sup>Chosun University, Department of Advanced Materials Engineering.)

P1-E014\*

**스퍼터링 증착 조건에 따른 텅스텐 박막의 grains size와 전하운송특성의 변화 /** 이정섭, 조재훈, 유천열(인하대학교 물리학과.)

P1-E015\*

**변수화 모델을 이용한 InGaSb 유전율 함수 연구 /** 박한결, 김태중, 강유리, 박재찬, 김영동, 신상훈, 송진동<sup>1</sup>(경희대학교, 물리학과. <sup>1</sup>한국과학기술연구원, 광전융합시스템 연구단.)

P1-E016\*

**Change of Morphology and Electrical Properties of (K<sub>0.5</sub>Na<sub>0.5</sub>)(Mn<sub>0.005</sub>Nb<sub>0.995</sub>)O<sub>3</sub> Thin Films Induced by Gamma-ray Irradiation /** YANG SUNA, BU SANGDON(Department of Physics and Research Institute of Physics and Chemistry, Chonbuk National University, Jeonju 561-756, Republic of Korea.)

P1-E017\*

**Experimental Realization of a Negative-Density Acoustic Superlens** / LEE Sam Hyeon, PARK Jong Jin, LEE K. J. B.<sup>1</sup>, PARK Choon Mahn, BOK Eun, LEE Sang Min(Department of Physics, Yonsei University. <sup>1</sup>Department of Physics, Ewha Womans University.)

P1-E018\*

**Relation between conductivity of individual reduced graphene oxide sheets and local electrical properties using electrostatic force microscopy** / JEONG Huiseong, LEE Kyung Moon<sup>1</sup>, AHN Yeonghwan, LEE Soonil, PARK Ji-Yong(아주대학교 에너지시스템학부 응용물리 전공. <sup>1</sup>아주대학교 자연과학부 물리학과.)

P1-E019\*

**Synthesis of large scale of ZnTe nanowire Through a novel one-pot hydrothermal Method and Its Photocatalytic property** / KANG Dae Joon, HE Wen(Department of Physics, Sungkyunkwan University, Suwon 440-746, Korea.)

P1-E020\*

**Tuning the transition temperature and hysteresis loop of VO2 thin film** / ABBAS Kaleem, KANG Dae Joon<sup>1</sup>(Department of Energy Science, Sungkyunkwan University, Suwon 440-746, Korea. <sup>1</sup>Department of Physics, Sungkyunkwan University, Suwon 440-746, Korea.)

P1-E021

**양자점 색변환을 사용한 백색 유기발광 소자 제작** / 김기현, 김태환, 최용훈<sup>1</sup>(한양대학교 전자컴퓨터통신공학과. <sup>1</sup>한양대학교 정보디스플레이공학과.)

P1-E022

**유기 도판트를 사용한 p-i-n 유기발광소자의 효율 향상** / 이준규, 방요한, 추동철, 김태환(한양대학교.)

P1-E023

**Diffusion Mechanics of the MutS and  $\beta$  clamp complex on Mismatched DNA** / KIM Daehyung, OH jungsic, LIU Jiaquan<sup>1</sup>, SLOBODAN Jergic<sup>2</sup>, DIXON Nicholas<sup>1</sup>, RICHARD Fishel<sup>1</sup>, JONG-BONG Lee(POSTECH. <sup>1</sup>The Ohio State University. <sup>2</sup>University of Wollongong.)

P1-E024

**Inertial Microfluidics in Non-rectangular Channels** / 이원희, 김정아, 남성민(한국과학기술원 나노과학기술대학원.)

P1-E025

**The Effect Of Tilted Posts Of Coordinate Frame In Dose Calculation for GKRS** / LIM SA HOE, KIM IN YOUNG, JUNG SHIN, MOON KYUNG SUB, JUNG TAE YOUNG, JANG WOO YOUL(Chonnam National University Hwasun Hospital, Department of Neurosurgery.)

P1-E026

**Study of the charge behavior and trapping mechanism in TIPS-pentacene organic device by optical second harmonic generation measurement** / BOK Moonjeong, TAGUCHI Dai<sup>1</sup>, IWAMOTO Mitsumasa<sup>1</sup>, LIM Eunju(Dankook University, Dept. of Applied Physics. <sup>1</sup>Tokyo Institute of Technology, Dept. of Physical Electronics.)

P1-E028

**Observation of a Exceptional Point in the Electric Circuit with Operational Amplifiers** / 노희소, 강성묵(국민대학교 나노전자물리학과.)

P1-E029

**Flexible metamaterial absorber for low frequency utilizing small-size unit cell based on the snake-shape structure** / 유영준, 김영주, 정해옥, 이주열, 김기원<sup>2</sup>, 강지훈<sup>3</sup>, 이영백(한양대학교, 물리학과. <sup>1</sup>성균관대학교, 물리학과. <sup>2</sup>선문대학교, 정보디스플레이학과. <sup>3</sup>국민대학교, 나노전자물리학과.)

2014년 10월 22일 수요일 15:00 - 16:45

장소: 포스터발표장

## P1-I001

Flat-type LED 조명시스템용 도광판의 초정밀 레이저 가공을 위한 전산모사 / 박소희, 신용진(조선대학교.)

## P1-I002

Pattern array에 따른 도광판의 휘도분포 특성 / 신용진, 박소희(조선대학교.)

## P1-I003

산란패턴의 각도에 의한 Edge-type BLU용 도광판의 휘도 및 균일도 분석 / 신용진, 박소희(조선대학교.)

## P1-I004

The Analysis of Light Extraction Efficiency in LED Bulb / LEE Kyungmee, LEE Jiyeon, PARK Myungjin, CHOI Seungsoo, KIM Kyungwook, KO Kukwon(Sunmoon University.)

## P1-I005

편향법을 이용한 렌즈의 굴절률 분포 측정 / 신상훈, 유영훈<sup>1</sup>, 정상원기<sup>2</sup>(KPS, <sup>1</sup>제주대학교 물리학과, <sup>2</sup>전주대학교 전기전자정보통신공학부.)

## P1-I006

고순도 (6,5) 단일벽 탄소 나노 튜브에서 관측된 2개의 방사형 호흡 격자 진동모드 / 신성일, 노민영, 주태하<sup>1</sup>, J kono<sup>2</sup>, 임용식(건국대학교 나노전자기계공학과, <sup>1</sup>포항공대 화학과, <sup>2</sup>라이스대학 컴퓨터공학과.)

## P1-I007

Luminescence property of solid-state reaction and high energy ball milling synthesized CaMoO<sub>4</sub> : Eu<sup>2+</sup> phosphor / 홍우태, 이주현, 장형일, 양현경, 정중현(부경대학교, 과학기술융합전문대학원, LED융합공학전공, <sup>1</sup>부경대학교, 물리학과.)

## P1-I008

Effect of changed host materials on photoluminescence properties of Eu<sup>2+</sup> doped MAI<sub>2</sub>Si<sub>2</sub>O<sub>8</sub> (M=Ca, Ba, Sr) / 이주현, 홍우태, 장형일, 양현경, 정중현(부경대학교, 과학기술융합전문대학원, LED융합공학전공, <sup>1</sup>부경대학교, 물리학과.)



## P1-I009\*

**Two-dimensional Analysis of Ar High-order Harmonic Generation**  
/ LEE Jisu, TOSA Valer<sup>1</sup>, YUN Hyeok<sup>2</sup>, SUNG Jae Hee<sup>3</sup>, KIM Hyung Taek<sup>3</sup>,  
NAM Chang Hee<sup>4</sup>(KAIST, Department of Physics and Institute for Basic Science,  
Center for Relativistic Laser Science. <sup>1</sup>National Institute for R&D Isotopic and  
Molecular Technologies. <sup>2</sup>Institute for Basic Science, Center for Relativistic Laser  
Science. <sup>3</sup>Institute for Basic Science, Center for Relativistic Laser Science and GIST,  
Advanced Photonics Research Institute. <sup>4</sup>Institute for Basic Science, Center for  
Relativistic Laser Science and GIST, Department of Physics and Photon Science.)

## P1-I010

**100-kHz High-power Ti:sapphire Laser with Programmable Spectral Control** / 성재희, 이성구, 이황운, 남창희<sup>2</sup>(기초과학연구원 초강력 레이저과학 연구단, 광주과학기술원 고등광기술연구소. <sup>1</sup>기초과학연구원 초강력 레이저과학 연구단. <sup>2</sup>기초과학연구원 초강력 레이저과학 연구단, 광주과학기술원 물리광과학과.)

## P1-I011

**Fermi resonance in quantum billiard as a mode interaction channel** / 이창환, 김지환, 유현혜, 김철민(서강대학교 물리학과.)

## P1-I012

**Polarization Holographic Grating in D03 Doped PMMA Thin Film**  
/ WU YANG, KIM SUN IL, SHIM Hyun Kwon<sup>1</sup>(Pukyong National University,  
Department of Physics. <sup>1</sup>Pukyong National University, Department of Chemistry.)

## P1-I014

**심장형 마이크로 공진기에서의 단방향 발진 가능성과 그에 따른 품위값 조사** / 고성민, 이인구, 김철민(서강대학교 물리학과.)

## P1-I015

**비선형 광섬유 굴절률 변화의 주파수 영역 광계측 기법** / 최은서, 이승석, 김주하, 김복현<sup>1</sup>(조선대학교 물리학과. <sup>1</sup>광주과학기술원 고등광기술연구소 분광학실험실.)

## P1-I016

**The Light Intensity Distribution and Interference from the Circular Pinhole Double-Slits** / LEE Kyungmee, CHOI Seungsoo<sup>1</sup>, KIM Kyungwook<sup>1</sup>, PARK Myungjin<sup>1</sup>(Sunmoon University, Kyungpook National University. <sup>1</sup>Sunmoon University.)

## P1-I017\*

**Optical Waveform Measurement Using The Interference Of Two Harmonic Beams** / 김경승, 남창희<sup>1</sup>, 김경택<sup>1</sup>(Dept. of Physics, KAIST and Center for Relativistic Laser Science, IBS. <sup>1</sup>Dept. of Physics and Photon Science, GIST and Center for Relativistic Laser Science, IBS.)

P1-I018

**Fiber Sensor Based On Fresnel Reflection For Measuring Refractive Indices Of Liquids** / 조재영, 김동욱, 김경현, 김예나<sup>1</sup>, 김혜주<sup>1</sup>, 임지혜<sup>1</sup>, 채유나<sup>1</sup>(인하대학교 물리학과. <sup>1</sup>해송고등학교.)

P1-I019

**MQ grating에 의한 지문모형의 Moire 간섭무늬 해석** / 이재복(충청남도과학교육원.)

P1-I020

**4 페타와트 펄스초 티타늄사파이어 레이저 개발을 위한 레이저 펄스 증폭 시뮬레이션 연구** / 유제윤, 이황운, 이성구<sup>1</sup>, 성재희<sup>1</sup>, 남창희<sup>2</sup>(Center for Relativistic Laser Science, Institute for Basic Science (IBS), Gwangju 500-712, Korea. <sup>1</sup>Center for Relativistic Laser Science, Institute for Basic Science (IBS), Gwangju 500-712, Korea, Advanced Photonics Research Institute, GIST, Gwangju 500-712, Korea. <sup>2</sup>Center for Relativistic Laser Science, Institute for Basic Science (IBS), Gwangju 500-712, Korea, Department of Physics and Photon Science, GIST, Gwangju 500-712, Korea.)

P1-I021

**경기장 형태 이차원 마이크로 공진기 품위값 변화** / 이지원, 김지환, 이창환, 박규원, 김철민(서강대학교 물리학과.)

P1-I022

**Multi-stage broadband optical parametric chirped pulse amplifier as a multi-petawatt laser front-end** / 이황운, 성재희<sup>1</sup>, 이성구<sup>1</sup>, 유제윤, 정지훈<sup>2</sup>, 남창희<sup>3</sup>(기초과학연구원 초강력 레이저과학 연구단. <sup>1</sup>기초과학연구원 초강력 레이저과학 연구단, 광주과학기술원 고등광기술연구소. <sup>2</sup>광주과학기술원 고등광기술연구소. <sup>3</sup>기초과학연구원 초강력 레이저과학 연구단, 광주과학기술원 물리광학과.)

P1-I023\*

**Avoided Crossing in Elliptic Billiards** / KIM Ji-Hwan, YI Chang-Hwan, LEE Ji-Won, PARK Gyu-Won(Department of Physics, Sogang University.)

P1-I024

**Terahertz Wave Transmission Through 10 nm Gap Array** / KIM Dai-Sik, JEONG Jeeyoon, RHIE Jiyeah, BAHK Young Mi(Center for Subwavelength Optics, Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Korea.)

P1-I025\*

**Self-limiting Dielectric Response in Nanogaps from High-field Terahertz** / KIM Joon-Yeon, KANG Bong Joo<sup>1</sup>, KIM Won Tae<sup>1</sup>, PARK Joohyun<sup>2</sup>, RHIE Jiyeah, BAHK Young Mi, KANG Taehee, JEON Hyeongtag<sup>2</sup>,

ROTERMUND Fabian<sup>1</sup>, KIM Dai-Sik(Center for Subwavelength Optics, Department of Physics and Astronomy, Seoul National University. <sup>1</sup>Department of Physics and Division of Energy Systems Research, Ajou University. <sup>2</sup>Division of Materials Science and Engineering, Hanyang University.)

#### P1-I026\*

반사형 LED조명의 연색지수향상을 위한 유전체 박막 코팅설계에 관한 연구 / 김훈, 김태영, 이상일, 설주환, 윤준호, 함원규, 황보창권, 박선정<sup>1</sup>, 조한규<sup>1</sup>, 이준원<sup>1</sup>(인하대학교, 물리학과. <sup>1</sup>LG전자(주), Lighting사업담당 선행개발팀.)

#### P1-I027\*

Design of Two-Channel Coherent Perfect Absorption Thin Films Using Negative Admittance Matching Method / 김태영, 함원규, 황보창권(인하대학교, 물리학과.)

#### P1-I028\*

Multiple 3-dimensional subwavelength confinement and high refractive index metamaterials by using metallic slot structure / LEE In-sung, YANG Jin-Kyu<sup>1</sup>, KEE Chul-sik<sup>2</sup>, LEE Joong wook(Department of physics, Chonnam National University, Gwangju 500-757. <sup>1</sup>Department of Optical Engineering, Kongju National University, Kongju, 314-701. <sup>2</sup>Center of Subwavelength Optics, Korea.)

#### P1-I029\*

유전체 다층박막을 이용한 반사형  $\lambda/4$  위상지연자 연구 / 이상일, 김태영, 김훈, 설주환, 윤준호, 함원규, 황보창권(인하대학교, 물리학과.)

#### P1-I030\*

패턴화된 유기물/반도체 복합 구조에서 나타나는 테라헤르츠파 변조 특성 / PARK Jung-Min, LEE Joong Wook(Chonnam National University, Department of Physics.)

#### P1-I031\*

적분구를 이용한 분광광원 조도 분포의 균일화 / 송치훈, 유재근<sup>1</sup>, 박성종<sup>2</sup>, 조재홍(한남대학교, 광센서공학과. <sup>1</sup>과학기술연합대학원대학교, 측정과학. <sup>2</sup>한국표준과학연구원, 광도센터.)

#### P1-I032\*

Study of human sclera tissues using THz time-domain spectroscopy / SHIN Dae Cheol, LEE Yong Soo<sup>1</sup>, PARK Jung Min, JUNG Gyeong Bok<sup>2</sup>, KIM So Eun<sup>1</sup>, KEE Chol Sik<sup>1</sup>, KANG Chul<sup>1</sup>, LEE Joong Wook(Department of Physics, Chonnam National University, Gwangju 500-757, Korea. <sup>1</sup>Advanced Photonics Research Institute, GIST, Gwangju, 500-712, Korea. <sup>2</sup>Department of Biomedical Engineering & Healthcare Industry Research Institute, College of Medicine, Kyung Hee University, Seoul 130-701, Korea.)

**P1-I033**

태양의 이동과 태양추적시스템의 운동 방정식 연구 / 김성현, 이민환, 박재식, 황인각(전남대학교 물리학과.)

**P1-I034**

초음파를 이용한 모세관에서의 입자 포획 및 시뮬레이션 / 박재식, 김성현, 이민환, 황인각(전남대학교 물리학과.)

**P1-I035\***

무인 감시체계를 위한 전방위 광학계 기초설계 / 강종구, 조재흥, 류재명(한남대학교 물리학과, \*금오공과대학교 광시스템공학과.)

2014년 10월 22일 수요일 15:00 - 16:45

장소: 포스터발표장

## P1-J001

**Entanglement of Four-Qubit Rank-2 Mixed States** / 정이리, 박대길(경남대학교 전자공학과.)

## P1-J002

**Magnetized Electron Beam을 이용한 Electron Scattering Cross Section 측정 : Progress Report** / 편해욱, 김대철<sup>1</sup>, 김용현<sup>1</sup>, 최영락<sup>1</sup>, 송미영<sup>1</sup>, 김영우<sup>1</sup>, 윤정식<sup>1</sup>, 조혁<sup>2</sup>, SULLIVAN J. P.<sup>3</sup>, BUCKMAN S. J.<sup>3</sup>(<sup>1</sup>군산대학교/국가핵융합연구소, <sup>2</sup>충남대학교, <sup>3</sup>Australian National University.)

## P1-J003

**빛의 비고전성과 얽힘성의 trade-off** / 김기식, 장석현, 신종화(인하대, 물리학과.)

## P1-J004\*

**2x25 km 광섬유 기반 간섭계의 위상 안정화** / 곽효민, 김현오, 문한섭(부산대학교, 물리학과.)

## P1-J005\*

**루비듐 원자 D1 전이선에 대한 Sub-Doppler DAVLL 신호 분석** / 최경원, 노흥렬(전남대학교 물리학과.)

## P1-J006

**Birefringence and Dichroism Spectroscopy for the Jg=0→Je=1 Transition : Analytical Solutions** / NOH Heung-Ryoul(Chonnam National University, Department of Physics.)

## P1-J007

**High harmonic generation of molecule under an extremely short laser pulse** / LEE Min-Ho, CHOI NarkNyul, BYUN ChangWoo, KIM Dae-Soung<sup>1</sup>(<sup>1</sup>금오공과대학교 교양교직과정부, <sup>2</sup>경기과학기술대학교 기계자동화학과.)

## P1-J008

**시간의존 준고전적 터널링 이론의 재고** / 변창우, 이민호, 김대성<sup>1</sup>, 최낙렬(금오공과대학교, <sup>1</sup>경기과학기술대학교.)

## P1-J009

**Simulation of Sympathetic Cooling for High-Resolution Mass Measurement** / 임강빈, 박영호, 김재천, 윤진우, CHAUDHURI Ankur, 김기동, 김용균(기초과학연구원.)

**P1-J010\***

**Ultrafast manipulation of atomic ground hyperfine sublevel / KIM Hyosub, LEE Hangeol, AHN Jaewook(KAIST, physics.)**

**P1-J011\***

**펌프광과 조사광의 비율에 따른 포화흡수분광신호의 분석 / 이상민, 노흥렬<sup>1</sup>, 홍현규<sup>2</sup>, 이창복<sup>2</sup>, 임신혁<sup>3</sup>, 박상언(한국표준과학연구원, 과학기술연합대학원. <sup>1</sup>전남대학교, 물리학과. <sup>2</sup>한국표준과학연구원. <sup>3</sup>국방과학연구소.)**

**P1-J012**

**Microfabrication of Trap Chips as a Scalable Platform for Ion Trap Quantum Information Processing / 조동일, 홍석준, 이민재, 천홍진, 안준식, 김민형<sup>1</sup>, 김태현<sup>1</sup>(서울대학교 전기정보공학부. <sup>1</sup>SKT Quantum Technology Lab.)**

**P1-J013**

**Electromagnetically induced transparency in cold 87Rb atoms coupled by standing-wave / 김종복, 김민석, 김승진, 강석태(한국교원대학교.)**

**P1-J014**

**Experimental investigation of lasing threshold near an exceptional point in an asymmetric microjet cavity / SHIN Younghoon, MOON Songky, KIM Soyun, AN Kyungwon(Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Korea.)**

**P1-J015\***

**Fabrication of a microjet nozzle with nanometer-precision using a focused ion beam / KIM, Soyun, KIM Junki, SHIN Younghoon, MOON Songky, AN Kyungwon(Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Korea.)**

**P1-J016**

**Theoretical and experimental analysis of the coherent interaction between two polarized laser beams and a degenerate Zeeman multiplet of 85Rb atoms / REHMAN Hafeez Ur, QURESHI Muhammad Mohsin, NOH Heung-Ryoul<sup>1</sup>, KIM Jin-Tae(Department of Photonic Engineering, Chosun University, Korea. <sup>1</sup>Department of Physics, Chonnam National University, Korea.)**

**P1-J017**

**Rotating a Bose-Einstein condensate trapped in an anharmonic magnetic potential / KANG Seji, CHOI Jae-Yoon, SEO Sang Won, KWON Woo Jin, SHIN Yong-il(School of Physics and Astronomy, Seoul National University, Seoul 151-742, Korea.)**

P1-J018

**Analysis of Schrödinger-cat-like states in a phase-controlled cavity-QED microlaser** / YANG Daeho, KIM Junki, SONG Younghoon, AN Kyungwon(Department of Physics & Astronomy, Seoul National University, Seoul 151-747, Korea.)

P1-J019

**중적외선 영역에서의 고분해 분광용 mW급 중적외선 광원 개발** / 이림, 고광훈, 김용희, 김민호, 박현민, 임권, 차용호, 김택수, 정도영(한국원자력연구원.)

P1-J020

**Asymptotic conversion of the GHZ state into pure multipartite states under LOCC at a rate equal to quantum discord** / YANG Seunggho, JEONG Hyunseok(Department of Physics & Astronomy, Seoul National University, Seoul 151-747, Korea.)

2014년 10월 23일 목요일 11:00 - 12:45

장소: 포스터발표장

## P2-B018

**The CMS RPCs Condition Monitoring at Point5 / 김동현, 최영일(성균관대학교 물리학과.)**

## P2-B019

**Feasibility study on liquid scintillators using water for a neutrino detector / 소선행, 김봉건, 주경광(전남대학교, 물리학과.)**

## P2-B020\*

**Study on Preproduction of Silicon Vertex Detector for Belle II experiment / PARK Hwanbae, JEON Hyebin, HARA Koji<sup>1</sup>, HIGUCHI Takeo<sup>2</sup>, Horiguchi Tomohiro<sup>3</sup>, IWASHITA Tomoko<sup>2</sup>, KANG Kookhyun, KIM Hongjoo, NAKAMURA Katsuro<sup>1</sup>, ONUKI Yoshiyuki<sup>3</sup>, SASAKI Junya<sup>3</sup>, SATO Nobuhiko<sup>1</sup>, SEINO Yoshiaki<sup>4</sup>, SHIMIZU Nobuhiro<sup>3</sup>, TSUBOYAMA Toru<sup>1</sup>, UOZUMI Satoru, YOSHINOBU Toshiki<sup>1</sup>(Kyungpook National University. <sup>1</sup>KEK. <sup>2</sup>Kavli Institute for the Physics and Mathematics of the Universe. <sup>3</sup>The University of Tokyo. <sup>4</sup>Niigata University.)**

## P2-B021

**Muon Detector Installation at ALICE / KONG Byungyun, BAEK Yongwook<sup>1</sup>, DUPIEUX Pascal<sup>2</sup>, OH Sun Kun(Konkuk University. <sup>1</sup>Gangneung-Wonju National University, Konkuk University. <sup>2</sup>Univ. Blaise Pascal Clermont-Fe. II.)**

## P2-B022\*

**Study of PMT timing for vertex reconstruction at RENO / 김우영, 선용근, 박인곤<sup>1</sup>, 장지승<sup>2</sup>, 박명렬<sup>3</sup>, 최준호<sup>3</sup>, 장한일<sup>4</sup>, 김상용<sup>5</sup>, 김수봉<sup>5</sup>, 박정식<sup>5</sup>, 서선희<sup>5</sup>, 서현관<sup>5</sup>, 이동하<sup>5</sup>, 이병훈<sup>5</sup>, 이순규<sup>5</sup>, 최선호<sup>5</sup>, 최원국<sup>5</sup>, 양장희<sup>6</sup>, 유인태<sup>6</sup>, 최영일<sup>6</sup>, 김영덕<sup>7</sup>, 전은주<sup>7</sup>, 김바로<sup>8</sup>, 김승찬<sup>8</sup>, 박령균<sup>8</sup>, 김재률<sup>8</sup>, 소선행<sup>8</sup>, 송숙형<sup>8</sup>, 신창동<sup>8</sup>, 여인성<sup>8</sup>, 임인택<sup>8</sup>, 주경광<sup>8</sup>, 김현수<sup>9</sup>, 김시연<sup>10</sup>, 고영주<sup>10</sup>(경북대학교. <sup>1</sup>경상대학교. <sup>2</sup>광주과학기술원. <sup>3</sup>동신대학교. <sup>4</sup>서영대학교. <sup>5</sup>서울대학교. <sup>6</sup>성균관대학교. <sup>7</sup>BS/세종대학교. <sup>8</sup>전남대학교. <sup>9</sup>전북대학교. <sup>10</sup>중앙대학교.)**

## P2-B023

**Fabrication method for multi-detector operation in AMoRE experiment / 김소라(기초과학연구원.)**

## P2-B024

**A Fitting Method to Separate Slow Signal from Fast Signal for Applying Pulse Shape Discrimination (PSD) / 우종관, 김용주, 고재우.**



LIU Dong, 김은주<sup>1</sup>, 이수경<sup>1</sup>, ANDREY Ni<sup>2</sup>, 백광윤<sup>3</sup>, 안정근<sup>4</sup>(제주대학교, 물리학과, <sup>1</sup>전북대학교, 과학교육학부, 물리교육, <sup>2</sup>전북대학교, 융합과학연구소, <sup>3</sup>부산대학교, 물리학과, <sup>4</sup>고려대학교, 물리학과.)

P2-B025\*

**Design of a Shielding Room against High Energy Solar Cosmic Rays for Manned Long-term Spaceflights / LIU DONG, KO Jewou, WOO Jong-Kwan, LEE Se Byeong<sup>1</sup>**(Department of Physics, Jeju National University. <sup>1</sup>Proton Therapy Center, National Cancer Center.)

P2-B026\*

**Dual phonon sensors for a crystal absorber / 김인옥**(서울대학교 물리천문학부.)

P2-B027

**PSD in phonon and light sensors using CaMoO4 absorber / 최준호**(서울대학교.)

P2-B028

**AMoRE pilot detector and shields / 강찬석**(기초과학연구원.)

P2-B029

**Belle II Metadata / KIM Jyunghyun, CHO Kihyeon**(KISTI.)

P2-B030

**A Study of the electron avalanche simulation using the Geant4 for a GEM Detector / CHOI Kijin, RYU Minsang<sup>1</sup>, KIM Jihyun, LEE Jason, CHOI Minkyoo, RYU Geonmo, KIM Hyunyoung, JEON Dajeong, HEO Geonwoo, PARK Inkyu**(University of Seoul, Department of Physics. <sup>1</sup>Chonbuk National University, Department of Physics.)

P2-B031

**Development of metal-loaded liquid scintillators for a neutrino experiment / 김승찬, 주경광, 나상미, 허청**(전남대학교 물리학과.)

P2-B032

**PSD capability of large scale liquid scintillator detectors for a short baseline reactor experiment / 김바로, 김승찬, 소선행, 송숙형, 여인성, 주경광, 이주영<sup>1</sup>, 김홍주<sup>1</sup>, 서경민<sup>2</sup>, 여강모<sup>2</sup>, 김현수<sup>2</sup>, 고영주<sup>3</sup>, 김시연<sup>3</sup>, 김진유<sup>4</sup>, 마경주<sup>4</sup>, 한보영<sup>5</sup>, 선광민<sup>5</sup>, 강정수<sup>6</sup>, 박현서<sup>6</sup>, 김현옥<sup>7</sup>, 박강순<sup>7</sup>, 박향규<sup>7</sup>, 이재승<sup>7</sup>, 이정연<sup>7</sup>, 전은주<sup>7</sup>, 김영덕<sup>7</sup>, KHAN Nasir<sup>7</sup>**(전남대학교, <sup>1</sup>경북대학교, <sup>2</sup>전북대학교, <sup>3</sup>중앙대학교, <sup>4</sup>세종대학교, <sup>5</sup>한국원자력연구원, <sup>6</sup>한국표준연구원, <sup>7</sup>기초과학연구원.)

**P2-B033\***

**Heavy Ion Simulation on Geant4** / LEE ChanYoung, KIM KyungHo, CHO KiHyeon<sup>1</sup>, KWON YoungJoon(Yonsei Univ., Department of Physics. <sup>1</sup>KISTI.)

**P2-B034**

**An Research and Development for Evolving Architecture for the Beyond Standard Model** / CHO Kihyeon, KIM Jyunghyun, RYU Huiyoung(KISTI.)

2014년 10월 23일 목요일 11:00 - 12:45

장소: 포스터발표장

진행위원: [나노-중시계, D044~D073] 장성호(건국대)

[자성체, D074~D093] 김지훈(포스텍)

## P2-D044

**Quantum forces in free molecular magnets** / KIM Gwang-Hee(Sejong University, Dept. of Physics.)

## P2-D045

**2-D Solid State Hydrogen Molecules in Layered Structure Potassium Intercalated Graphene Oxide** / TAEHYUNG KIM, TAEHOON LEE<sup>1</sup>, YOUNGHEE LEE<sup>2</sup>(IBS Center for Integrated Nanostructure Physics, Institute for Basic Science, Sungkyunkwan University, Suwon 440-746. Korea. Department of Physics, Sungkyunkwan University, Suwon 440-746. Korea. <sup>1</sup>IBS Center for Integrated Nanostructure Physics, Institute for Basic Science, Sungkyunkwan University, Suwon 440-746. Korea. Department of Energy Science Sungkyunkwan University, Suwon 440-746. Korea. <sup>2</sup>IBS Center for Integrated Nanostructure Physics, Institute for Basic Science, Sungkyunkwan University, Suwon 440-746. Korea. Department of Energy science, Sungkyunkwan University, Suwon 440-746. Korea.)

## P2-D046

**Optical and Structural characterization of Semiconductor Zn<sub>x</sub>Cu<sub>1-x</sub>O nanoparticles** / KIM Jong Pil, JUNG-HA Kim, JONG-SEONG Bae, MYOUNG GYU Ha, KYONG-SOO Hong, TAE EUN Hong(한국기초과학지원연구원 부산센터.)

## P2-D047

**Impedance spectroscopy study of the superprotonic conduction in NaH<sub>2</sub>PO<sub>4</sub>** / JEON Gi Wan, LEE Kyu Won, LEE Cheol Eui, LEE Kwang-Sei<sup>1</sup>(Department of Physics, Korea University, Seoul 136-713. <sup>1</sup>Department of Nano Systems Engineering, Center for Nano Manufacturing, Inje University, Gimhae 621-749.)

## P2-D048

**Effect of pore size on SiNW deformation during lithium insertion** / 김도형, 정진주, 원하연, 정도영(경북대학교 물리학과.)

## P2-D049

**Theoretical investigations of CO capture in graphene-TM complex** / KANG Yura, PARK Jinwoo, JANG Byungryul<sup>1</sup>, LEE Hoonkyung<sup>1</sup>, HONG Suklyun(Department of Physics and Graphene Research Institute, Sejong University, Seoul 143-747, Korea. <sup>1</sup>Department of Physics, Konkuk University, Seoul, 143-701, Korea.)

P2-D050

**Angle-dependent magnetoresistance of  $\text{LaAlO}_3/\text{SrTiO}_3$  heterostructure** / 송종현, 곽용수, 황인웅, THACH D.N. Ngo<sup>1</sup>, 김진희<sup>2</sup>(충남대학교 물리학과. <sup>1</sup>과학기술연합대학교. <sup>2</sup>한국표준과학연구원.)

P2-D051

**Cs encapsulation and interacting noise sources in carbon nanotubes** / KIM Sung Won, UHM Tae Woo, YOU Young Gyu, JEONG Goo-Hwan<sup>1</sup>, PARK Yung Woo<sup>2</sup>, JHANG Sung Ho(Division of Quantum Phases and Devices, School of Physics, Konkuk University. <sup>1</sup>Department of Advanced Materials Science and Engineering, Kangwon National University. <sup>2</sup>Department of Physics and Astronomy, Seoul National University.)

P2-D052

**CVD synthesis of graphene with controlled domain sizes on copper substrates** / CHO Sangmo, NAM Jungtae, KIM Keun Soo, HONG Suklyun(Department of Physics and Graphene Research Institute, Sejong University.)

P2-D053

**Density functional study of  $\text{MoS}_2\text{-WSe}_2$  layered structure** / OH Sehoon, BAIK Seung Su<sup>1</sup>, CHOI Hyoung Joon(Department of Physics and IPAP, Yonsei University Center for Computational Studies of Advanced Electronic Material Properties, Yonsei University. <sup>1</sup>Department of Physics and IPAP, Center for Computational Studies of Advanced Electronic Material Properties, Yonsei University.)

P2-D054

**Electrical Transport and Thermopower of Iron Telluride( $\text{FeTe}$ )** / KIM Jung Ho, BAE Jung Jun, LEE Young Hee, LIM Seong Chu(IFS Center for Integrated Nanostructure Physics, Institute of Basic Science (IBS), Sungkyunkwan University.)

P2-D055

**Investigation of  $\text{Ni}(111)\text{-MoS}_2$  interface using first-principles calculations** / MIN Kyung-Ah, CHO Kyeongjae<sup>1</sup>, HONG Suklyun(Department of Physics and Graphene Research Institute, Sejong University. <sup>1</sup>Department of Materials Science and Engineering, The University of Texas at Dallas.)

P2-D056

**Photo-Thermoelectric Effect In Single-Layer  $\text{MoS}_2$**  / LIM Seong Chu, LEE Jinhee, LEE Young Hee(Department of energy science, Sungkyunkwan University.)

P2-D057

**Study on the quality of graphene depend on hydrogen pre-treatment in chemical vapor deposition proces** / 박상준, 남정태, 이 임복, 배동재, 김근수(세종대학교, 물리학과, 그래핀연구소.)

P2-D058

**Effect of non-uniform hybridization in topological Kondo insulator** / LEE KI HOON, TAKIMOTO TETSUYA<sup>1</sup>(POSTECH/APCTP. <sup>1</sup>Hanyang University.)

P2-D059

**Core-shell Silica-coated Iron Oxide Nanoparticles for Magnetic Hyperthermia** / RHEE IIsu, IQBAL Yousaf, BAE Hongsub, AHMAD Ashfaq, HONG Sungwook<sup>1</sup>, SOHN Derac<sup>2</sup>(경북대학교, <sup>1</sup>대구대학교, <sup>2</sup>한남대학교.)

P2-D060\*

**Andreev reflection in Pb-Bi<sub>2</sub>Se<sub>3</sub>-Pb junction** / PARK Sang-Il, KIM Hong-Seok, LEE Joon Sung, DOH Yong-Joo(Korea University Sejong Campus, Department of Applied Physics.)

P2-D061\*

**Transport Theory and the Dominant Source of Scattering in Multilayer Graphene** / MIN hongki, WOO Seungchan(Seoul National University, Department of Physics and Astronomy.)

P2-D062\*

**Observation of Low Energy Raman Modes in Rolled Graphene /** UHM Tae Woo, KIM Sung Won, YOU Yongg Gyu, KIM Hakseong, YUN Hoyeol, YOOU Ho Ang, LEE Sang Wook, JHANG Sung Ho(Division of Quantum Phases and Devices, School of Physics, Konkuk University.)

P2-D063\*

**Temperature dependence of Graphene's electrical resistance on various substrates** / YOU Young Gyu, KIM Sung Won<sup>1</sup>, UHM Tae Woo<sup>1</sup>, KIM Jin Hyeong<sup>1</sup>, KIM Hak Seong<sup>1</sup>, YUN Ho Yeol<sup>1</sup>, YOON Ho Ang<sup>1</sup>, LEE Sang Wook<sup>1</sup>, JHANG Sung Ho<sup>1</sup>(건국대학교 물리학부 양자상및 소자전공. <sup>1</sup>Division of Quantum Phase and Devices, School of Physics, Konkuk University.)

P2-D064\*

**A Comparison Of Graphene By Methane And Methanol Precursor In Chemical Vapor Deposition Grown Method** / KIM Keunsoo, LEE Imbok, PARK Sangjun, NAM Jungtae, BAE dongjae, HONG Suklyun(세종대학교, 물리학과, 그래핀연구소.)

P2-D065\*

**Aharonov-Bohm interferometry in high-mobility graphene** / KIM Minsoo, LEE Hu-Jong(POSTECH.)

P2-D066\*

**Development of a pulsed magnet system of a capacitor-discharge type** / YOO Kyongjun, KIM Sunghyun<sup>1</sup>, JANG Zeehoon<sup>1</sup>, KIM Keehoon(Center for Novel States of Complex Materials Research, Department of Physics and Astronomy, and Institute of Applied Physics, Seoul National University, Seoul 151-747, Korea. <sup>1</sup>Department of physics, Kookmin University, Seoul 136-702, Korea.)

P2-D067\*

**Electrical characterization of van Hove singularities in carbon nanotubes** / 최동환, 시미숙, 김주진, 이정오<sup>1</sup>, 배명호<sup>2</sup>(전북대학교, <sup>1</sup>한국화학연구원, <sup>2</sup>한국표준과학연구원.)

P2-D068\*

**Exciton Resonance Effects in Raman Scattering of Few-layer MoS<sub>2</sub>** / LEE Jae-Ung, PARK Jaesung, CHEONG Hyeonsik(Department of Physics, Sogang University.)

P2-D069\*

**Polarization Dependence of Raman Spectra in ABA- and ABC-Stacked Tri-layer Graphene** / KIM Minjung, CHEONG Hyeonsik (Department of Physics, Sogang University.)

P2-D070\*

**Quantum electrical transport properties of topological insulator Bi<sub>2</sub>Te<sub>3</sub> nanowires** / KIM Hong-Seok, LEE Joon Sung, DOH Yong-Joo, SHIN Ho Sun<sup>1</sup>, SONG Jae LYong<sup>1</sup>(Korea University Sejong Campus, Department of Applied Physics. <sup>1</sup>Korea Research Institute of Standards and Science.)

P2-D071\*

**The 2-Dimensional Hall Effect Measurement on ZnO Microwire** / YOON Ho Ang, KIM Hakseong, KIM Yeon Soo, PARK Bae Ho, LEE Sang Wook(Division of Quantum Phases & Devices, School of Physics, Konkuk University.)

P2-D072\*

**Structural, Electronic and Vibrational Properties of Two-Dimensional Phosphorene Oxides: Ab Initio Study** / PARK Jejune, KANG Seoung-Hun, KWON Young-Kyun(Department of Physics and Research Institute for Basic Sciences, Kyung Hee University.)

P2-D073\*

**Origin of Negative Thermal Expansion in sp-sp<sup>2</sup> Hybridized Carbon Systems** / KIM Cheol-Woon, KANG Seoung-Hun, LEE Hyeonsu, KWON Young-Kyun(Department of Physics and Research Institute for Basic Sciences, Kyung Hee University.)

P2-D074\*

**계면 변형 유도에 의한 Fe<sub>3</sub>O<sub>4</sub> 박막 형성과 그 자기적 특성에 대한 연구** / 국지현, 배유정, 이년중, 김태희(이화여자대학교 물리학과.)

P2-D075\*

**Formation of Fe<sub>3</sub>Si thin films on Si substrates by reactive deposition epitaxy** / PHAM Thi Kim Hang, BAE Yu Jeong, LEE Nyun Jong, KIM Tae Hee, ZHANG Hui<sup>1</sup>, MIAO Guoxing<sup>1</sup>(Department of Physics, Ewha Womans University. <sup>1</sup>Institute for Quantum Computing (IQC), Department of Electrical and Computer Engineering, University of Waterloo, Waterloo, ON, Canada.)

P2-D076\*

**Magnetic anisotropy of C and N doped bulk FeCo: First principles study** / KHAN Imran, SON Jicheol, HONG Jisang(부경대학교 물리학과.)

P2-D077

**The Study of Perpendicular Magnetic Anisotropy in Ta(Pt)/CoFeB/AIO<sub>x</sub> Layered Structure Using Brillouin Light Scattering** / CHO Jaehun, JUNG Jin-Yong, KIM Nam-Hui, KIM June-Seo<sup>1</sup>, VAN HOOFF Niels J. J.<sup>1</sup>, J. M. SWAGTEN Henk<sup>1</sup>, YOU Chun-Yeol(Department of Physics, Inha University. <sup>1</sup>Department of Applied Physics, Center for NanoMaterials, Eindhoven University of Technology.)

P2-D078

**얇은 자성 박막에서 단축 변형과 Dzyaloshinskii - Moriya 상호작용을 통해 나타나는 자기벽 유형에 관한 연구** / 강상표, 권희영, 원창연, CHEN Gong<sup>1</sup>, WU Yizheng<sup>2</sup>(경희대학교. <sup>1</sup>NCEM. <sup>2</sup>Fudan University.)

P2-D079\*

**Dzyaloshinskii-Moriya type orbital angular momentum based Hamiltonian** / KIM Changyoung, KWON Junyoung, JUNG Wonsig(Yonsei University Institute of Physics and Applied Physics.)

P2-D080\*

**Optical properties of FeGe thin films** / CHO Min hyun, TUAN Duong Anh<sup>1</sup>, CHO Sung Lae<sup>1</sup>, LEE Yun Sang(숭실대학교, 물리학과. <sup>1</sup>울산대학교, 물리학과.)

P2-D081

원자수준으로 평탄한 강자성/반강자성 이층 박막의 교환바이어스와 보자력 측정 / 김병건, 기상훈, 도중회(경북대학교 물리학과.)

P2-D082\*

**Thickness and surface-termination dependent magnetism of FeRh(001) thin films: A first principle study** / JEKAL Soyoung, HONG Sooncheol, SHICK Alexander B.<sup>1</sup>(University of Ulsan, department of Physics. <sup>1</sup>ASCR, Institute of Physics.)

P2-D083

전이금속 치환에 따른  $\text{RMn}_2\text{O}_5$  다강체의 자성 및 유전성 변화연구 / 이현성, 조광희, 성기연, 허남정<sup>1</sup>, 박순용(중앙대학교, 물리학과. <sup>1</sup>인하대학교, 물리학과.)

P2-D084\*

다결정  $\text{Ba}_{1-x}\text{Bi}_x\text{Ti}_{0.9}\text{Fe}_{0.1}\text{O}_3$ 의 전기적 구조와 다강성 변화에 관한 연구 / 김덕현, 이민영, 조한열, 이보화(한국외국어대학교 물리학과.)

P2-D085

**Oxygen dependent structural and physical properties in epitaxial SrRuO<sub>3</sub> films** / LEE Sang A, HWANG Jae-Yeol<sup>1</sup>, JEONG Hoi-Dong<sup>2</sup>, WOO Seong-Min<sup>2</sup>, CHOI Woo-Seok<sup>2</sup>(Institute of Basic Science, Sungkyunkwan University. <sup>1</sup>Center for Integrated Nanostructure Physics, Institute for Basic Science (IBS). <sup>2</sup>Department of Physics, Sungkyunkwan University.)

P2-D086\*

**Magnetic ordering and excitations of frustrated tetragonal spinel  $\text{AMn}_2\text{O}_4$  studied by neutron scattering** / CHANG Hun, HWANG In-Yong, STEWART Ross<sup>1</sup>, CHUNG Jae-Ho(Department of Physics, Korea University. <sup>1</sup>ISIS Facility, Rutherford Appleton Laboratory.)

P2-D087\*

**Doping-induced Structural Distortion In Tetragonal Spinel  $\text{Mn}_3\text{O}_4$**  / LEE Kee-Hwan, CHUNG Jae-Ho, LEE S. S.<sup>1</sup>, KIM S. J.<sup>1</sup>(Department of Physics, Korea University. <sup>1</sup>Neutron Science Division, Korea Atomic Energy Research Institute.)

P2-D088

**MnF<sub>3</sub>의 외부 자기장에 따른 거시적 자화의 변화와 자기특성 조사** / 최백순, 이순철(KAIST.)

P2-D089

**2D Raman correlation analysis of the magnetic excitations in hexagonal  $\text{RMnO}_3$  (R=Lu, Ho, Er)** / NGUYEN Thi Minh Hien, CHEN Xiang Bai<sup>1</sup>, PARK Yeonju<sup>2</sup>, JUNG Young Mee<sup>2</sup>, CHEONG S. W<sup>3</sup>, LEE D<sup>4</sup>, NOH T.W<sup>4</sup>,



YANG In-Sang(Department of Physics, Ewha Womans University, Seoul, Korea. <sup>1</sup>Department of Applied Physics, Konkuk University, Chungju, Korea. <sup>2</sup>Department of Chemistry, Kangwon National University, Chuncheon 200-701, Korea. <sup>3</sup>Rutgers Center for Emergent Materials and Department of Physics & Astronomy, Rutgers University, New Jersey, USA. <sup>4</sup>ReCFI, Department of Physics and Astronomy, Seoul National University, Seoul, Korea.)

#### P2-D090\*

**A study on the formation of oxygen vacancy in Co-doped ZnO using maximum entropy** / LEE Yeong Ju, PARK Ji-Hun<sup>1</sup>, LEE Seunghun<sup>2</sup>, KIM Bum-Su<sup>3</sup>, BAE Jong-Seong<sup>4</sup>, KUROIWA Yoshihiro<sup>5</sup>, JEONG Se-Young(Department of Nanofusion Engineering, Pusan National University. <sup>1</sup>Department of Cogno-Mechatronics Engineering, Pusan National University. <sup>2</sup>Department of The Institute of Basic Science, Korea University. <sup>3</sup>Department of Cogno-Mechatronics Engineering, Pusan National University. <sup>4</sup>Korea Basic Science Institute, Busan Center. <sup>5</sup>Department of Physical Science, Hiroshima University.)

#### P2-D091

**Sr이 치환된 Z-type hexaferrite의 자기적 특성** / 김현규, 임정태, 이찬혁, 김철성(국민대학교, 물리학과.)

#### P2-D092

**Patterning Magnetic Alloy By Laser-Irradiated Micro-Powders** / MINYOUNG Lee, HANYEOL Jo, BOWHA Lee, JIHYUN Sung<sup>1</sup>, SANGYOON Park<sup>2</sup>(Hankuk University of Foreign Studies, Physics. <sup>1</sup>Korea Institute of Industrial Technology, Application Division Ultimate Manufacturing Technology Center. <sup>2</sup>Advanced Institutes of Convergence Technology, Nano-Bio Convergence Research Center.)

#### P2-D093

**Temperature-dependent Structural Properties of Diamagnetic Hgl<sub>2</sub>** / SON Jae Kuan, PARK Chang In, HWANG In Hui, JIN Zhenlan, YEO Soon Mok<sup>1</sup>, HAN Sang Wook(Department of Physics Education and Institute of Fusion Science, Chonbuk National University, Jeonju 561-756, Korea. <sup>1</sup>KAERI (Korea Atomic Energy Research Institute), P. O. Box 105, Yuseong, Daejeon 305-600, Korea.)

2014년 10월 23일 목요일 11:00 - 12:45

장 소 : 포스터발표장

## P2-E030\*

**Back Contact Interface of  $\text{Cu}_2\text{ZnSnS}_4$  Solar Cells Depending on Sulfurization Temperature** / NAM Dahyun, YANG Kee-Jeong<sup>1</sup>, KANG Jin-Kyu<sup>1</sup>, PARK Sang-Wook<sup>2</sup>, JEON Chan-Wook<sup>2</sup>, CHEONG Hyeonsik(Sogang University, Department of Physics. <sup>1</sup>DGIST, Green Energy Research Division. <sup>2</sup>Yeungnam University, School of Chemical Engineering.)

## P2-E031\*

**The Effects of Silicon Nitride Anchors in the Silicon Microbeam Resonator** / LEE Byeong-Jun, BAEK In-Bok<sup>1</sup>, KWON Yi-Seul<sup>1</sup>, LEE Bong-Kuk<sup>1</sup>, KIM Yarkyeon<sup>1</sup>, AHN Chang-Geun<sup>1</sup>, YOON Yong-Sun<sup>1</sup>, JANG Won-Ik<sup>1</sup>, KIM Jwa-Yeon, YU Han-Young<sup>1</sup>(Hoseo University, Materials Science & Engineering. <sup>1</sup>Electronics and Telecommunications Research Institute (ETRI).)

## P2-E032\*

**CZTSSe 태양전지의 CBD 조건에 따른 CdS 버퍼층 균일도 비교** / 조소연, 남다현, 손대호<sup>1</sup>, 김대환<sup>1</sup>, 강진규<sup>1</sup>, 정현식(서강대학교, 물리학과. <sup>1</sup>대구경북과학기술원, 차세대융복합연구센터.)

## P2-E033\*

**박막의 열전도도 측정을 위한 나노초 열반사율 측정 장치 구성** / 홍의균, 김정환, 강만일, 김석원(울산대학교 물리학과 에너지-하비스트-스토리지 연구센터.)

## P2-E034\*

**Polarization independent dual broadband metamaterial absorber** / 김영주, 유영준, 이주열<sup>1</sup>, 김기원<sup>2</sup>, 이영백(한양대학교 물리학과. <sup>1</sup>성균관대학교 물리학과. <sup>2</sup>선문대학교 정보디스플레이학과.)

## P2-E035\*

**Field-Emission Barristors: Gate-Controlled Switching between Direct Tunneling and Fowler-Nordheim Tunneling** / LEE Jun-Ho, LEE Han-Byeol, CHOI Doo-Hua, KIM Hyun-Cheol, YOON Ho-Ang, YUN Ho-Yeol, KIM Hack-Sung, LEE Sang-Wook, CHUNG Hyun- Jong(Division of Quantum Phases and Devices, Konkuk University.)

## P2-E036\*

**WS2 두께에 따른 Graphene-WS2 배리스터의 스케일링에 대한 연구** / 최두화, 김현철, 이준호, 이한별, 정내봉, 정현종(건국대학교 이과대학 물리학과 양자상 및 소자 전공.)

P2-E037\*

**The fabrication techniques of silicon microbeam resonators surrounded by silicon nitride anchors** / KWON Yi-Seul, BAEK In-Bok, LEE Byeong-Jun<sup>1</sup>, LEE Bong Kuk, KIM Yarkyeon, YOON Yong-Sun, JANG Won-Ik, YU Han-Young (Electronics and Telecommunications Research Institute (ETRI).<sup>1</sup>Hoseo University, Advanced Material Engineering.)

P2-E038\*

**A wide-angle metamaterial perfect absorber at low frequencies** / BUI XUAN KHUYEN, BUI SON TUNG, NGUYEN VAN DUNG, YOO Youngjoon, KIM Youngju, LEE Youngpak, VU DINH LAM<sup>1</sup>(Department of Physics, Quantum Photonic Science Research Center and RINS, Hanyang University, Seoul, South Korea. <sup>1</sup>Institute of Materials Science, Vietnam Academy of Science and Technology, Hanoi, Vietnam.)

P2-E039\*

**Dual-band metamaterial perfect absorber in infrared region based on the analogy of electromagnetically-induced-transparency effect** / BUI SON TUNG, BUI XUAN KHUYEN, NGUYEN VAN DUNG, LEE YOUNGPAK, JIN XING RI<sup>1</sup>, VU DINH LAM<sup>2</sup>(한양대학교, 물리학과.<sup>1</sup>Department of Physics, College of Science, Yanbian University, Yanji, Jilin, China. <sup>2</sup>Institute of Materials Science, Vietnam Academy of Science and Technology, Hanoi, Vietnam.)

P2-E040\*

**Electrohydrodynamic lithography using AC voltage with resonating frequency for sub-100nm regime pattern replication** / MOON Choongman, KANG Dae Joon (Department of Physics, Sungkyunkwan University, Suwon 440-746, Korea.)

P2-E041\*

**Synthesis of Layer-controlled Large scale Transition Metal Dichalcogenide Atomic Layer by Sulfurization** / HWANG Jaeseok, KANG Dae Joon (Department of Physics, Sungkyunkwan University, Suwon 440-746, Korea.)

P2-E042\*

**ZnO Microwires Shape Modulation based on Growth Rate Control** / OH Simgeon, KANG Dae Joon<sup>1</sup>(Department of Energy Science, Sungkyunkwan University, Suwon 440-746, Korea. <sup>1</sup>Department of Physics, Sungkyunkwan University, Suwon 440-746, Korea.)

P2-E043\*

**Internal Deformation Field Distribution of Zeolite Microcrystals in Gas Environments** / KANG Jinback, KIM Hyunjung, CHA Wonsuk,

CARNIS Jerome, AHN Gukil, YOON Kyung Byung<sup>1</sup>, PHAM Tung Cao Thanh<sup>1</sup>, ROBINSON Ian K.<sup>2</sup>, HARDER Ross<sup>3</sup>(Sogang University, Department of Physics. <sup>1</sup>Sogang University, Department of Chemistry. <sup>2</sup>University College, London, London Centre for Nanotechnology. <sup>3</sup>Argonne National Laboratory, Advanced Photon Source.)

**P2-E044\***

**A metamaterial with high scalability** / NGUYEN Van Dung, BUI Son Tung, BUI Xuan Khuyen, YOO Youngjoon, LEE Youngpak, VU Dinh Lam<sup>1</sup>(Department of Physics, Quantum Photonic Science Research Center and RINS, Hanyang University, Seoul, 133-791, Korea. <sup>1</sup>Institute of Material Science, Vietnam Academy of Science and Technology, Hanoi, Vietnam.)

**P2-E045\***

**Polarized Raman measurements of Few-layer Black Phosphorus** / KIM jungcheol, LEE Jae-Ung, CHEONG Hyeonsik(서강대학교 물리학과.)

**P2-E046\***

**Memory Characteristics controlled by Silicon and Cobalt Hybrid Nanostructures** / AHN Hanyeol, JOO Beom Soo, GU Minseon, JEONG Jiwoon, HAN Moonsup(서울시립대학교 물리학과.)

**P2-E047\***

**다공성실리콘내 산화철나노입자 주입량의 모니터링 방법** / 이주현, 김혁기, 함성길, 김경아, 정다운, 김나경, 이기원(공주대학교 물리학과.)

**P2-E048\***

**다양한 유기증기에 대한 정전식 센서의 감응 특성** / 김혁기, 함성길, 이주현, 김경아, 정다운, 김나경, 이기원(공주대학교 물리학과.)

**P2-E049**

**다중파장 측정이 가능한 실리콘 반도체 광센서 연구** / 이해영, 전진아, 이직, 박일홍(성균관대학교 기초과학연구소, <sup>1</sup>성균관대학교.)

**P2-E050**

**초소형 우주망원경(MTEL-3)을 위한 다채널 SiPM 소자 어레이의 개발** / 전진아, 이해영, 이직, 박일홍(성균관대학교, 기초과학연구소, <sup>1</sup>성균관대학교, 물리학과.)

**P2-E051**

**X-ray fluorescence imaging and x-ray absorption spectroscopy study of the Chrysochroa Fulgidissima wing** / SUNG Nark-Eon, LEE Ik-Jae, LEE Kuk-Sung, JUNG Sung-hoon, SHIN Yong-Bi<sup>1</sup>(Beamline division, Pohang Accelerator Laboratory, POSTECH. <sup>1</sup>Gyeongju National Museum.)

P2-E052

X-선원을 장착한 방사능발광과 광자극발광 통합 측정장치의 개발 / 박창영, 정기수, 장인수<sup>1</sup>, 이정일<sup>1</sup>, 김장렬<sup>1</sup>(경상대학교 물리학과, <sup>1</sup>한국원자력연구원.)

P2-E053

New method to overcome the hysteresis phenomenon of transmittance with applied voltages / 아철성, 송주희, 김태엽, 조성목, 추혜용, 류호준(한국전자통신연구원.)

P2-E054

Investigation of the Preparation Methods for Graphene Oxides as a Transparent Electrode Material / 강영호, 김용재<sup>1</sup>, 이광희(전남대학교, 물리교육과, <sup>1</sup>광주과학기술원, 차세대에너지연구소.)

P2-E055

MDPS 모터 결함 판단을 위한 진동 분석 시스템 개발 / 강준희, 이충석, 박한영<sup>1</sup>, 김진영<sup>2</sup>, 이지영, 이제곤(인천대학교, <sup>1</sup>에이아이시스템즈, <sup>2</sup>이도씨앤에스.)

P2-E056

Switchable Schottky diode induced by dominant interface in Pt/Mn-doped ZnO/Pt sandwiched structure / 남윤승, 윤찬수, 이상익, 전지훈, 이미정, 원은아, 오태준, 오광택, 김연수, 박배호(건국대학교.)

P2-E057

Electric field dependence of magnetotransport properties in molybdenum disulfide / BAEK SEUNGJAE, PARK MIN, HONG SUNG JU, KIM KYUNG HO, KANG HOJIN, PARK YUNG WOO(Seoul National University.)

P2-E058

The role of oxygen vacancies of two-dimensional electron gases at LaAlO<sub>3</sub>/SrTiO<sub>3</sub> interface / 오태준, 김연수, 황성문<sup>1</sup>, 전지훈, 남윤승, 이상익, 윤찬수, 최택집<sup>1</sup>, 박배호(건국대학교, 물리학과, <sup>1</sup>세종대학교, 나노신소재공학과.)

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P2-F001

**Dynamical behavior of multifractal strengths in games** / 김경식, 유철환(부경대학교, 물리학과, '부경대학교, 환경대기학과.)

P2-F002

**Statistical track prediction of typhoon using regression analysis** / 김경식, 유철환(부경대학교, 물리학과, '부경대학교, 환경대기학과.)

P2-F003

**Dynamical analyses in structures of group correlations** / 김경식, 임규성, 김수용(부경대학교, 물리학과, '한국과학기술원, 물리학과.)

P2-F004

**Specific Heat of the Self-Avoiding Polymer with Repulsive Interactions** / 이재환, 이주련, 김승연(송실대학교 의생명시스템학부, '한국교통대학교 교양학부.)

P2-F005

**All-Atom Simulations of Small Proteins by Using Wang-Landau Algorithm** / 김승연, 곽우섭(한국교통대학교 교양학부, '조선대학교 물리학과.)

P2-F006

**Phase Diagram and Critical Exponents of Blume-Capel Model** / 김승연, 곽우섭(한국교통대학교 교양학부, '조선대학교 물리학과.)

P2-F007

**Fractal Dimensions of Bridge Bonds in Directed Percolation Models** / 강병남, 최상민, 조영설(서울대학교, 물리학과.)

P2-F008

**Hydrophobic-Polar Protein Model on a Square Lattice** / 이재환, 이주련, 김승연(송실대학교 의생명시스템학부, '한국교통대학교 교양학부.)

P2-F009\*

**Election With Spreading Political Opinions Based On Human Migration** / JO Woo Seong, KIM Beom Jun(Sungkyunkwan University.)

P2-F010

**Evolutionary public goods game on the complete graph and dense complex networks** / KIM Jinho, CHAE Hwiseing, YOOK Soon-Hyung, KIM Yup(Kyung Hee University.)

P2-F011

**Three different patterns of jamming transition with heterogeneous node capacity** / 박현준, 최우식, 육순형, 김엽(경희대학교.)

P2-F012

**Centrality analysis in street networks of Korea: from classification to model** / JUNG Woo-Sung, LEE Byoung-Hwa(POSTECH.)

P2-F013\*

**Scaling Properties of Phase Transitions in Generalized Epidemics Process** / CHUNG Kihong, BAEK Yongjoo, HA Meesoon<sup>1</sup>, JEONG Hawoong(Department of Physics, KAIST. <sup>1</sup>Department of Physics Education, Chosun University.)

P2-F014

**Meanfield Model For EEG Rhythms And Its Dynamical Response To Time Varying Propofol Concentration** / 김승환, 주판규(POSTECH, 물리학과.)

P2-F015

**Impact of a Slow Bond on the Scaling Properties of Activity in 1D TASEP** / SOH Hyungjoon, BAEK Yongjoo, HA Meesoon<sup>1</sup>, JEONG Hawoong(Department of Physics, KAIST. <sup>1</sup>Department of Physics Education, Chosun University.)

P2-F016

**Particles in a box with a delta potential** / PARK Minho, YI Su Do, BAEK Seung Ki(Department of Physics, Pukyong National University.)

P2-F017\*

**Prediction of the performance of the similarity index with leave-one-out method: Model study and empirical application** / JUNG Woo-Sung, AHN Min-Woo(POSTECH.)

P2-F018\*

**Network Modeling of the Korean Bus System** / JUNG Woo-Sung, HONG Inho(Dept. of Physics, POSTECH.)

P2-F019\*

**Generalized Epidemic Process on Empirical Time-varying Networks** / KIM Hyewon, BAEK Yongjoo, CHUNG Kihong, HA Meesoon<sup>1</sup>, JEONG Hawoong (Department of Physics, KAIST. <sup>1</sup>Department of Physics Education, Chosun University.)

P2-F020\*

**Insight into the selectivity of  $\alpha$  Conotoxin BuIA on the nAChR  $\alpha 6$  subunit studied by molecular dynamics simulations** / PHAN Thi Hong Tham, JO Jiyun, PHAN Thi Tuong Vy, VO Trung Au, TRUONG Gia Khuong, YI Myunggi<sup>1</sup> (Interdisciplinary program of Biomedical engineering, Department of Biomedical engineering, Pukyong National University. <sup>1</sup>Assistant professor, Interdisciplinary program of Biomedical engineering, Department of Biomedical engineering, Center for Marine-Integrated Biomedical Technology (BK21+), College of Engineering, Pukyong National University.)

P2-F021\*

**Spontaneous conformational change of human angiotensin-I converting enzyme (ACE) studied by molecular dynamics simulation** / THI TUONG VY PHAN, THI HONG THAM PHAN, TRUNG AU VO, GIA KHUONG TRUONG, JIYUN JO, MYUNGGI YI<sup>1</sup> (Interdisciplinary Program of Biomedical Engineering, Pukyong National University, Busan 608-737. <sup>1</sup>Assistant Professor, Department of Biomedical Engineering Interdisciplinary Program of Biomedical Engineering, Center for Marine-Integrated Biomedical Technology (BK21+), College of Engineering Pukyong National University, Busan 608-737.)



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## P2-G001

해일(storm surge) 실험장치의 개발과 파형 특성에 관한 연구 / 박종호(진주교육대학교, 과학교육과.)

## P2-G002

학습자 중심 수업 운영의 관점에서 현행 과학 교과서의 문제점 분석 / YUN Eunjeong, PARK Yunebae(경북대학교, 물리교육과.)

## P2-G003

Experimental Consideration in Primary School Science / KIM Taekyu(Jeonju National University of Education, Department of Science Education.)

## P2-G004

물리교육에서 PEPCI 모델을 활용한 발명교육 프로그램 개발 / 이재복, 육근철(충청남도과학교육원, 1공주대학교.)

## P2-G005

문제풀이에서 조건 확인과 해석에서 나타나는 학생들의 어려움 분석 및 이의 개선 방향 -전자기학 영역 중심 / 정재훈, 윤성현(한국교원대학교, 물리교육과.)

## P2-G006\*

전류에 의한 자기장 관련실험과 Idealization에 따른 문제 / 강남화, 임정(한국교원대학교, 물리교육과.)

## P2-G007\*

절연체와 금속의 반사율 입사각 의존성 비교 및 반사광의 편광위상분석 / 김광석, 김민주<sup>1</sup>, 김찬형<sup>2</sup>, 박정섭<sup>2</sup>, 유화준<sup>2</sup>, 유동엽<sup>2</sup>, 이재호<sup>2</sup>, 이창현<sup>2</sup>(부산대학교 인지메카트로닉스공학과, 물리교육과, 유전체물성연구소, <sup>1</sup>부산대학교 인지메카트로닉스공학과, <sup>2</sup>부산과학고등학교.)

## P2-G008

Optical gain properties of CdSe/ZnS nanocrystal / 김광석, 장주영<sup>1</sup>, 변성철<sup>2</sup>(부산대학교 인지메카트로닉스공학과, 물리교육과, 유전체 물성연구소, <sup>1</sup>부산대학교 인지메카트로닉스공학과, <sup>2</sup>부산과학고등학교.)

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## P2-H001

**PAL-XFEL 건물과 지반의 수직변화 측정용 HLS 소개** / 최효진, 서광원, 길계환, 김승환, 강홍식(포항가속기연구소.)

## P2-H002

**라온 선형가속기의 가속격자 설계 현황** / 장효재, 김형진, 진현창, 장지호, 황지광<sup>1</sup>, 오봉훈<sup>2</sup>(기초과학연구원. <sup>1</sup>경북대학교. <sup>2</sup>포항공과대학교.)

## P2-H003

**Commissioning of a Miniature Material Testing System for X-Ray Micro-Experiments** / 길계환, 정맹효, 최효진, 류춘길, 임재홍(포항가속기연구소.)

## P2-H004

**Carbon dioxide Conversion using a Microwave Plasma Torch** / KWAK Hyoung Sin, KANG Min Ho, NA Young Ho, UHM Han Sup, HONG Yong Cheol<sup>1</sup>(Department of Electrical and Biological Physics, Kwangwoon University. <sup>1</sup>Plasma Technology Research Center, National Fusion Research Institute.)

## P2-H005

**중수소 RFQ 가속기를 기반으로 한 소형 중성자원 기초 개념 연구** / 조용섭, 권혁중, 김한성, 윤상필(한국원자력연구원, 양성자가속기연구센터.)

## P2-H006

**Status of PAL-XFEL Project** / 강홍식, 김광우, 고인수(포항가속기연구소.)

## P2-H007

**10 ns 양성자빔 펄스 발생을 위한 Multi-Harmonic Buncher 설계** / 김한성, 권혁중, 조용섭, 설경태(한국원자력연구원, 양성자가속기연구센터.)

## P2-H008\*

**Prototpe Test for Determining the Dimension of C-band Standing-wave Accelerating Sturcture** / SHIN Sung Gyun, YANG Haeryong<sup>1</sup>, YI Chan Ho, KYE Yong Uk, KIM Sang Hoon<sup>2</sup>, NAMKUNG Won<sup>1</sup>, CHO Moohyun(POSTECH. <sup>1</sup>Pohang Accelerator Laboratory. <sup>2</sup>Argonne National Laboratory.)

P2-H009

**Mode Converter for KSTAR LHCD System /** 성태식, 조무현<sup>1</sup>, 남공원<sup>2</sup>, 김지현<sup>3</sup>(Department of physics, POSTECH. <sup>1</sup>Department of physics and Division of Advanced Nuclear Engineering, POSTECH. <sup>2</sup>Pohang Accelerator Laboratory. <sup>3</sup>National Fusion Research Institute.)

P2-H010

**Electron Density Measurements of Laser Induced Plasma in Air Using Nomarski Interferometer /** 오승용, 임창환, 하성용, 김희진, 남성모, 한재민(한국원자력연구원 양자광학연구부.)

P2-H011\*

**Computational MHD Simulation Based on Hadoop Ecosystem and Heterogeneous Computing /** LEE Youngjun, KIM Milhan<sup>1</sup>, LEE Chan-Gun<sup>1</sup>, PARK Ho-Hyun<sup>2</sup>, HAHN Sang June(Department of Physics, Chung-Ang University, Seoul, Korea. <sup>1</sup>Department of Computer Science and Engineering, Chung-Ang University, Seoul, Korea. <sup>2</sup>Department of Electrical and Electronics Engineering, Chung-Ang University, Seoul, Korea.)

P2-H012\*

**Ultrafast Measurement of X-ray Absorption Spectra of Warm Dense Matter /** LEE Jong-won, BAE Leejin, CHO Byoung-ick(Department of Physics and Photon Science, Gwangju Institute of Science and Technology (GIST).)

P2-H013\*

**Development of Laser Induced Breakdown Spectroscopic (LIBS) Technique as an In-situ Diagnostic for Fusion Plasma Facing Materials /** KIM Minju, CHO byoung-ick(Department of Physics and Photon Science, Gwangju Institute of Science and Technology (GIST).)

P2-H014

**X-ray Tube에서 집속관의 형상에 따른 전자빔 궤적계산 및 초점크기의 분석 /** 박태영, 김용진, 하지드마, 이상석(상지대학교 한방의료공학과.)

P2-H015\*

**Development of Multi-energy Soft X-ray Array Diagnostics on KSTAR /** 장주혁, 이승현, 홍주환, 김정희<sup>1</sup>, 이현용, 장시원<sup>1</sup>, 전태민, 박재선, 최원호(KAIST. <sup>1</sup>NFRI.)

P2-H016\*

**핵융합 플라즈마 가열용 UHF 고속파 안테나의 새로운 구조 연구 /** 위현호, 김해진<sup>1</sup>, 왕선정<sup>1</sup>, 박병호<sup>1</sup>, 이병제(광운대학교, 전자공학과. <sup>1</sup>국가핵융합 연구소.)

P2-H017

**Simulation of improvement of klystron efficiency / 황지현, 박성주<sup>1</sup>, 남궁원<sup>1</sup>, 조무현<sup>2</sup>(POSTECH, Dept. of physics. <sup>1</sup>Pohang Accelerator Laboratory. <sup>2</sup>POSTECH, Dept. of physics and Division of Advanced Nuclear Engineering.)**

P2-H018

**Aluminum Film Deposition using ECR Plasma Source with Belt-type Magnet Assembly and Slit Antennas / LEE Huijea, KIM Seongbong<sup>1</sup>, YI Changho, PARK Seungil<sup>1</sup>, YOO Suk Jae<sup>1</sup>, CHO Moohyun<sup>2</sup>, NAMKUNG Won<sup>3</sup>(Dept. of Physics, POSTECH. <sup>1</sup>National Fusion Research Institute. <sup>2</sup>Dept of physics and division of advanced nuclear engineering, POSTECH. <sup>3</sup>Pohang Accelerator Laboratory.)**

P2-H019

**C-band형 가속관을 이용한 엑스선 발생선원을 위한 고주파전송로 및 진공 시스템 구축 / 노성진<sup>1</sup>, 강상구<sup>1</sup>, 이준규<sup>1</sup>, 강영록<sup>1</sup>, 이만우<sup>1</sup>, 이무진<sup>1</sup>, 정동혁<sup>1</sup>, 양광모<sup>1</sup>, 신성균<sup>1</sup>, 양해룡<sup>1</sup>, 조무현<sup>1</sup>, 남궁원<sup>1</sup>, 임희진<sup>1</sup>(동남권원자력의학원/인제대학교 의용공학과. <sup>1</sup>동남권자력의학원 연구센터.)**

P2-H020

**KOMAC 양성자가속기 방사성동위원소생산용 빔라인 기초설계 연구 / 권혁중, 김한성, 박성균, 조용섭(한국원자력연구원, 양성자가속기연구센터.)**

P2-H021

**Rear side ion shock acceleration from a destructed target / 허민섭, 김영국, 조명훈, 박형주<sup>1</sup>, 정문연<sup>1</sup>(UNIST. <sup>1</sup>ETRI.)**

P2-H022

**Simulation Study of Table-Top X-Ray Source Using Modulated Free-Electron-Laser with Capillary Laser-Plasma Accelerator in Water Window Regime / 김진주, 김민석, 남인혁, 석희용(광주과학기술원.)**

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## P2-K001\*

**Temperature-Dependent Photoluminescence and Raman Spectra of Single- and Multi-Layer MoS<sub>2</sub>** / 장찬욱, 김주환, 신동희, 김성, 최석호, 박준우, 이호선, 이창구(경희대 응용물리학과, <sup>1</sup>성균관대학교.)

## P2-K002\*

**Lamination** 방법에 의해 투명하고 유연한 기판 위에 전사된 그래핀의 전기적 및 광학적 특성 연구 / 이대훈, 김종민, 이경원, 김성, 최석호(경희대 응용물리학과.)

## P2-K003\*

**Nanosphere lithography** 방법을 이용한 그래핀 양자점의 제작 및 구조적, 광학적 특성 연구 / 오시덕, 김정길, 이대훈, 강수석, 김성, 최석호(경희대 응용물리학과.)

## P2-K004\*

**in-situ analysis of sputtered-deposited amorphous In-Ga-Zn-O thin-film surface with different oxygen contents** / 강세준, 백재윤<sup>1</sup>, 신현준<sup>1</sup>(포항공과대학교, 물리학과, <sup>1</sup>포항가속기연구소, 물리소재연구팀.)

## P2-K005\*

**Environmental Limitation to Electrical Characteristics of MoS<sub>2</sub> Transistor by Surface Adsorption** / DONGRI Qiu, DONG UK Lee, EUN KYU Kim(Hanyang University, Department of Physics.)

## P2-K006

**HRXRD**를 이용한 사파이어 웨이퍼의 휨 분석 / 김창수, 최민혁, 정인영<sup>1</sup>, 전현구<sup>1</sup>, 정양수<sup>2</sup>(한국표준과학연구원, <sup>1</sup>한국표준과학연구원, 충남대학교, <sup>2</sup>충남대학교.)

## P2-K007

**TEM Analysis for CuS, MoS<sub>2</sub> and GaSe Nanoparticles** / JANG youngrae(KAERI, Neutron Science Division.)

## P2-K008

공정 변화를 통한 탄소 나노튜브 기반의 센서 제작효율 향상 / 이제행, 변영태, 김재성, 김선호, 김신근(한국과학기술연구원, 센서시스템 연구센터.)

P2-K009

**Undoped 및 Er doped MgGa<sub>2</sub>O<sub>4</sub> 결정의 광학적 특성 / 최성휴, 방태환, 김찬빈<sup>1</sup>, 변상섭<sup>1</sup>, 임재홍<sup>1</sup>, 윤영식<sup>1</sup>(조선대, 물리학과. <sup>1</sup>해릉고등학교.)**

P2-K010

**High-k 물질을 절연층으로 사용한 MOSFET의 절연층 내부의 트랩 전하 분포의 변화에 따른 전기장과 전하밀도 / 이준규, 정현수<sup>1</sup>, 김태환<sup>1</sup>(한양대학교 융합전자공학부. <sup>1</sup>한양대학교 전자컴퓨터통신공학부.)**

P2-K011\*

**그래핀 코팅된 기판 위에 Drop-casting 방법을 이용하여 자가 형성된 폴리 아닐린/탄소나노튜브 나노복합 전극 / 임현식, 한재석, 손재상, INAMDAR akbar, 조상은, 조용철, 김종민, 우현석, 박우영, 김인호, 김기강<sup>1</sup>, 김형상<sup>1</sup>(동국대학교 물리반도체과학부. <sup>1</sup>동국대학교 융합에너지 신소재공학과.)**

P2-K012\*

**Resistive switching mode transformation in Cr-doped SrZrO<sub>3</sub>-based ReRAM device / IM hyunsik, JO yongcheol, JUNG Kyoocho, KIM jongmin, WOO hyeonseok, KIM inho, PARK wooyoung, LEE jongkyung, CHO hansol, CHO sangeun, HAN jaeseok, INAMDAR A. I., PAWAR S. M., KIM hyungsang(Dongguk University, Division of Physics and Semiconductor Science.)**

P2-K013\*

**Temperature dependent of carrier transport of WSe<sub>2</sub> with various metal contacts / LIM Seong Chu, LEE Young Hee, CHOI Homin, YUN SeoukJun(Department of energy science, Sungkyunkwan University.)**

P2-K014\*

**Optical Property Of Laser Annealed Indium Tin Oxide Thin Films / NOH Miru, LEE Yunsang, KIM Hunkjin<sup>1</sup>, JANG Youngjun<sup>1</sup>, PARK Jonghyouck<sup>2</sup>(Soongsil University, Department of Physics. <sup>1</sup>University of Seoul, Department of Physics. <sup>2</sup>Electronics and Telecommunications Research Institute.)**

P2-K015\*

**산소 열처리를 이용한 AlGaN/GaN 쇼트키 다이오드의 턴온전압 감소 및 누설전류 억제 / 우현석, 이종경<sup>1</sup>, 조용철<sup>1</sup>, 한재석<sup>1</sup>, 김종민<sup>1</sup>, 조한솔<sup>2</sup>, 노정현<sup>2</sup>, 이준호<sup>2</sup>, 한철구<sup>2</sup>, 임현식<sup>1</sup>(동국대학교/전자부품연구원. <sup>1</sup>동국대학교. <sup>2</sup>전자부품연구원.)**

P2-K016\*

**Stepwise Transition from the Bipolar Field Effect to the Unipolar Thermal Effect via Complementary Resistive Switching in a Pt/SiO<sub>x</sub>/TiN Stack / LIM Dong Hyeok, SONG Jin Ho, JEONG Kwannng Sik, CHOI Yoon Ho, CHO Mann-Ho(Department of Physics, Yonsei university.)**

## P2-K017\*

**InGaN/GaN 청색 발광다이오드에서 전류 과밀 현상이 운반자 넘침에 미치는 영향에 대한 연구** / 송정훈, 유혜정, 동염군, 김태수, 이진규, 오난초(공주대학교 물리학과.)

## P2-K018\*

**The Effect of Well-to-Well Non-uniformity and Saturated Radiative Recombination on Carrier Dynamics in InGaN-based Light Emitting diodes** / SONG Jung-Hoon, DONG Yanqun, KIM Tae-Soo, LEE Jin-Gyou, OH Nan-Cho, YU Hye-Jung(Department of Physics, Kongju National University.)

## P2-K019\*

**Experimental Determination of Carrier Injection Efficiency in InGaN/GaN Light Emitting Diodes** / 송정훈, 이진규, 동염군, 김태수, 오난초, 유혜정(공주대학교.)

## P2-K020\*

**InGaN/aN 발광 다이오드에서 전자 차단 층 삽입이 소자 내부의 효율에 미치는 영향 분석** / 송정훈, 오난초, 동염군, 김태수, 이진규, 유혜정(공주대학교, 물리학과.)

## P2-K021\*

**Annealing effect on electrical transport of Au/grapheme/n-type silicon Schottky diodes** / PARK Tae-Hyun, CHO Sang-Hyeok, KIM Dong-Joo, PARK No-Won, LEE Sang-Kwon(중앙대학교 물리학과.)

## P2-K022\*

**Correlation Analysis Between Filopodial Morphology And Capture Efficiency Of CD4<sup>+</sup> T-Cells On Nanohole Arrays** / CHOI Mun-Ki, JEONG Jin-Tak, LEE Won-Yong, KIM Dong-Joo, LEE Sang-Kwon(Department of physics, Chung-Ang University, Seoul, 156-756, Republic of Korea.)

## P2-K023\*

**유기태양전지에서 발광층구조에 따른 효율 비교** / 배은지, 정동근, 유세기(성균관대학교 물리학과. <sup>1</sup>한국외국어대학교 물리학과.)

## P2-K024\*

**Pressure-induced metallization in crystalline Ge<sub>2</sub>Sb<sub>2</sub>Te<sub>5</sub>** / 조만호, 박승중, 정광식, 안민, 한정화(연세대학교 물리학과.)

## P2-K026\*

**Analysis of memristive characteristics of TiO<sub>2</sub> Thin Film with respect to the different top electrodes** / SHIM Jae Hyuk, SHIM Ee Le<sup>1</sup>, ABBAS Yawar, SONG Woo Jin, CHOI Yong Jin, YOON Tae Sik<sup>2</sup>, KANG

Chi Jung(Myongji University, Physics. <sup>1</sup>Halla University, School of mechanical & Automotive Engineering. <sup>2</sup>Myongji University, Department of Materials Science and Engineering.)

**P2-K027\***

**Study On The Physical Properties Of II-VI Compound Thin Films Grown By MOCVD / YEON Jeong-mi(중앙대학교 나노바이오에너지공학과 CIGS 태양전지실험실.)**

**P2-K028\***

**Optical properties of multilayer CdTe/ZnTe quantum dots on si substrate / MAN Minh Tan, 이홍석(전북대학교, 물리학과.)**

**P2-K029\***

**레이저 다이오드 벽계면 고반사 코팅을 위한 비정질 실리콘 기반 분포브래그 반사기 제작 및 특성 연구 / GUAN Xiang-Yu, 임정우, 유재수(경희대학교, 전자전파공학과.)**

**P2-K030\***

**Silver-doped Indium Oxide Thin Films Deposited by Co-Sputtering Method / OH Gyujin, JEON Jia, KIM Eun Kyu(Department of Physics, Hanyang University.)**

**P2-K031\***

**Improved electrical properties of HfO<sub>2</sub> grown on InP via sulfur passivation / 강유선, 김대경, 강향규, 조만호(연세대학교, 물리학과.)**

**P2-K032\***

**Electrical carrier transport characteristics in Boron doped Si Nanowires using BF<sub>3</sub> Plasma gas as a function of annealing time / OH Seung Hoon, MA Jin Won, BAE Jung Min, KIM Jeong Hun, CHO Mann-Ho(연세대학교 물리학과.)**



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## P3-C001

**Analysis of thermoluminescence glow curve on quartz using computerized glow curve deconvolution / 홍덕균(강원대, 물리학과.)**

## P3-C002\*

**Studies of isomeric yield ratios for  $^{133m,g}\text{Ce}$  and  $^{137m,g}\text{Ce}$  with Bremsstrahlung / KIM HyoJin, NOH Sung Jin, LEE Man Woo, JEONG Dong-Hyeok, KIM Hyun, YANG Kwangmo, RO Tae-IK<sup>1</sup>, KIM Guinyun<sup>2</sup>, KANG Yeong-Rok(Research Center, Dongnam Inst. of Radiological & Medical Sciences. <sup>1</sup>Dong-A University, Department of Physics. <sup>2</sup>Kyungpook National University, Department of Physics.)**

## P3-C003

**Test of characteristic of pALPIDEfs in inha university / 박종한, 윤진희, 권민정(인하대학교.)**

## P3-C004

**중성자 스피너를 위한 소형 고균일 자기장 발생 장치 개발 / 이성만, 이준혁<sup>1</sup>, 이창희<sup>1</sup>, 문명국<sup>2</sup>, 조상진<sup>2</sup>(한국원자력연구원, 양자광학연구부. <sup>1</sup>한국원자력연구원, 중성자과학연구부. <sup>2</sup>한국원자력연구원, 중성자장치개발관리부.)**

## P3-C005

**Measurement of Isomeric Yield Ratios of  $^{197m,g}\text{Pt}$ ,  $^{190m2,g+m1}\text{Ir}$  in 50-, 55-, and 60-MeV bremsstrahlung induced reactions of natural platinum at Pohang Neutron Facility / KYE Yong Uk, SHIN Sung Gyun, CHO Moo Hyun, NAMKUNG Won<sup>1</sup>, KIM Gui Nyun<sup>2</sup>, KIM Kwang Soo<sup>2</sup>, ZAHMAN Muhammad<sup>2</sup>, KANG Young Rok<sup>3</sup>, YANG Sung Chul<sup>4</sup>, NGUYEN Van Do<sup>5</sup>, NAIK Haladhara<sup>6</sup>(Department of Advanced Nuclear Engineering, POSTECH. <sup>1</sup>Pohang Accelerator Laboratory. <sup>2</sup>Kyungpook National University. <sup>3</sup>Dongnam Inst. Of Radiological & Medical Science. <sup>4</sup>Korea Atomic Energy Research Institute. <sup>5</sup>Institute of Physics, P.O. Box 429 Boho, Hanoi 10000, Vietnam. <sup>6</sup>Radiochemistry Division, Bhabha Atomic Research Centre, Mumbai 400085, India.)**

## P3-C006

**고압 헬륨-3 셀 제작 및 NMR 신호특성 분석 / 이성만, 김흥우<sup>1</sup>, 이준혁<sup>2</sup>, 이창희<sup>2</sup>, 문명국<sup>3</sup>, 조상진<sup>3</sup>(한국원자력연구원, 양자광학연구부. <sup>1</sup>한국원자력연구원, 원자력화학연구부. <sup>2</sup>한국원자력연구원, 중성자과학연구부. <sup>3</sup>한국원자력연구원, 중성자장치개발관리부.)**

**P3-C007\***

방사선원에 따른 실리콘 검출기의 신호 획득 비율 / 박환배, 이승철, 김보배, 김태훈, 김홍주, 전혜빈, 현효정(경북대학교 물리학과, <sup>1</sup>포항가속기연구소 빔라인 장치부.)

**P3-C008\***

실리콘 검출기를 이용한 low gamma 검출 / 박환배, 김태훈, 강국현, 김보배, 김홍주, 이승철, 전혜빈, 현효정(경북대학교 물리학과, <sup>1</sup>포항가속기연구소 빔라인 장치부.)

**P3-C009**

**Phenomenological features of unitarity in EFT descriptions of low-energy NN scattering** / IN EunJin, PARK TaeSun<sup>1</sup>, HONG Seongwoo<sup>1</sup>(Sungkyunkawn university, Energy science department. <sup>1</sup>Sungkyunkawn university, Physics department.)

**P3-C010**

**Crystal growing facility at the Center of Underground Physics** / RA Se Jin, KIM Y.D., KIM H. J.<sup>1</sup>(Institute for Basic Science. <sup>1</sup>Kyungpook National University.)

**P3-C011**

**CWO 섬광체의 결합 면에 따른 섬광획득 효율 비교 및 최적화 된 센서 디자인** / 박환배, 김보배, 강국현, 김태훈, 김홍주, 문명국<sup>1</sup>, 우오즈미사토루, 이승철, 전혜빈, 현효정<sup>2</sup>(경북대학교 물리학과, <sup>1</sup>한국원자력연구원 중성자과학교연구부, <sup>2</sup>포항가속기연구소 빔라인장치부.)

**P3-C012**

**핵분열 핵종에 대한 중성자 광학 모델 연구** / 김형일, 김귀년<sup>1</sup>, 이영욱<sup>2</sup>(한국원자력연구원 원자력데이터개발검증센터; 경북대학교 물리학과, <sup>1</sup>경북대학교 물리학과, <sup>2</sup>한국원자력연구원 원자력데이터개발검증센터.)

**P3-C013\***

**Alignment of the PHENIX Silicon Vertex Tracker (VTX) in 2014** / MOON TAEBONG(for PHENIX collaboration.)

**P3-C014**

**Preparation of CLAS12 Central Time-of-Flight (CTOF) Counters** / TAN Joshua Artem, ASRYAN Gegham<sup>1</sup>, BATURIN Vitaly<sup>1</sup>, KIM Wooyoung(Kyungpook National University, Department of Physics. <sup>1</sup>Thomas Jefferson National Accelerator Facility.)

**P3-C015**

**New Design of Magnet of an Adiabatic Field Rotation System to Measure Spin Polarization of Unstable Nuclei** / SEON Yonggeun,

OHTOMO Yuichi<sup>1</sup>, UENO Hideki<sup>2</sup>, KIM Wooyoung(Kyungpook National University, Department of physics. <sup>1</sup>Tokyo Institute of Technology, Department of physics. <sup>2</sup>RIKEN Nishina Center.)

### P3-C016

픽셀형 반도체 CZT 검출기에서 컴프턴 영상을 획득하기 위한 펄스파형분석에 의한 반응위치의 깊이 결정 / 이종훈, 이일맥, 김진우, 이필수, 장택진, 조화연, 이춘식(중앙대 물리학과.)

### P3-C017

공기중의 초고온 폭발에서 지형 효과를 고려한 광자의 수송현상 몬테카를로 시뮬레이션 / 정희수, 김석철<sup>1</sup>, 심우섭(국방과학연구소. <sup>1</sup>볼트시뮬레이션.)

### P3-C018\*

Measurement of Relative Cross-Sections of Natural Pb Targets for the (p,xn) reactions by using 100 MeV proton Accelerator of Korea Multi-Purpose Accelerator Complex / LEE Jieun, KIM Ranyoung, KIM Seokhan, YOON Jungran, RO Tae-ik, LEE Samyol<sup>1</sup>(Dong-A University, Department of Physics. <sup>1</sup>Dongseo University, Department of Radiological Science.)

### P3-C019

유리 선량계를 이용한 저선량 조사시설의 선량평가 기법 확립 / 황진호, 노성진<sup>1</sup>, 김현<sup>2</sup>, 김효진, 정동혁<sup>2</sup>, 양광모<sup>2</sup>, 노태익<sup>3</sup>, 강영록<sup>2</sup>(동남권원자력의학원/동아대학교, 신소재물리학과. <sup>1</sup>동남권원자력의학원/인제대학교, 의용공학과. <sup>2</sup>동남권원자력의학원. <sup>3</sup>동아대학교, 신소재물리학과.)

### P3-C020

Study of the scalar meson  $f_0(980)$  as a bound state of two  $\eta$  mesons with the contributions from the instanton / LEE HEE-JUNG(Chungbuk National University, Department of Physics Education.)

### P3-C021

Neutron capture and Resonance parameter Analysis of <sup>155</sup>Gd / KIM Seok-Han, KIM HyoJin, RO Tae-Ik, KANG Yeong-Rok<sup>1</sup>, LEE ManWoo<sup>2</sup>, KIM Guinyun<sup>3</sup>, WILLIAMS D<sup>4</sup>, DANON Y<sup>4</sup>(Donga University, Department of physics. <sup>1</sup>Dongnam Inst. of Radiological & Medical Sciences. <sup>2</sup>Dongnam Inst. of Radiological & Medical Sciences. <sup>3</sup>Kyungpook Nat. University, Department of physics. <sup>4</sup>RPI.)

### P3-C022

Current Status of RAON RFQs / CHOI Bong Hyuk, HAN Woo-Kyung, PARK Bum Sik(기초과학연구원.)

**P3-C023**

**Resonance Parameter Analysis of  $^{157}\text{Gd}$  ( $n, \gamma$ )  $^{158}\text{Gd}$  nuclear reaction /** KIM Ranyoung, RO Tae-ik, KANG Yeong-Rok<sup>1</sup>, KIM Guinyun<sup>2</sup>, KIM Hyo-Jin(Dong-A University, Department of Physics. <sup>1</sup>Research center, Dongnam Inst. of Radiological & Medical sciences. <sup>2</sup>Kyungpook Nat. University, Department of Physics.)

**P3-C024**

**Analysis of Resonance Parameter of  $^{157}\text{Gd}$  from 10 to 300 eV /** KIM Ranyoung, KIM Hyo-Jin, RO Tae-Ik, KANG Yeong-Rok<sup>1</sup>, LEE Manwoo<sup>1</sup>, KIM Guinyun<sup>2</sup>, WILLIAMS D<sup>3</sup>, DANON Y<sup>3</sup>(Dong-A University, Department of Physics. <sup>1</sup>Research center, Dongnam Inst. of Radiological & Medical sciences. <sup>2</sup>Kyungpook Nat. University, Department of Physics. <sup>3</sup>RPI.)

2014년 10월 23일 목요일 14:00 - 15:45

장소: 포스터발표장

진행위원: [강상관계, D094~D120] 최영재(연세대)

[초전도체, D121~D135] 최기영(서울대)

## P3-D094

**Anisotropic Magnetic Properties and Effects of Different Annealing Atmospheres in  $\text{La}_2\text{CoMnO}_6$  Single Crystals** / LEE Nara, KIM M. K., MOON J. Y., CHOI H. Y., OH S. H., CHOI Y. J. (Department of Physics and IPAP, Yonsei University, Seoul 120-749, Korea.)

## P3-D095

**Study on the optical response of the magnetoelectric excitation from the thin film interface** / KANG Tae Dong (Center for Correlated Electron Systems (CCES), Institute for Basic Science, Seoul National University.)

## P3-D096

**Angle Resolved Photoemission Spectroscopy Study of 2DEG at the Surface of Electron Doped  $\text{SrTiO}_3$**  / SHORESH Soltani, GARAM Han, CHENG-MAW Cheng<sup>1</sup>, BYEONG-GYU Park<sup>2</sup>, CHANGYOUNG Kim (Institute of Physics and Applied Physics, Yonsei University, Seoul, 120-749, Korea. <sup>1</sup>National Synchrotron Radiation Research Center(NSRRC), Taiwan. <sup>2</sup>Pohang Accelerator Laboratory, POSTECH.)

## P3-D097

**Characterization of Epitaxial  $\text{SrIrO}_3$  Thin Films Grown by Pulsed Laser Deposition Technique** / KIM Eunju, KUO Cheng-tai<sup>1</sup>, SOHN Woonbae, KIM Minu<sup>1</sup>, KIM Miyong, NOH Tae Won<sup>1</sup> (Department of Materials Engineering, Seoul National University, Seoul 151-747, Republic of Korea. <sup>1</sup>IBS-CCES, Seoul National University, Seoul 151-747, Republic of Korea.)

## P3-D098

**Doping-Dependent Study of Conduction Electrons in  $\text{Ba}_{1-x}\text{La}_x\text{SnO}_3$**  / HA TAEWOO, KIM Useong<sup>1</sup>, SIM Kyung Ik, CHAR Kookrin<sup>1</sup>, KIM Jae Hoon (Department of Physics, Yonsei University 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Republic of Korea. <sup>1</sup>Center for Strongly Correlated Materials Research, Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Republic of Korea.)

## P3-D099

**Growth of Large Single Crystals of  $\text{ErFeO}_3$  by Flux Method** / CHOI Y. J., CHOI H. Y., LEE N., OH D. G. (연세대학교 물리학과.)

### P3-D100

**Lead-free piezoelectric properties of 0.67BiFeO<sub>3</sub>-0.33BaTiO<sub>3</sub> thin films prepared by pulsed laser deposition** / PARK Jinsu, LEE Myang Hwan, KIM Sang Wook<sup>1</sup>, KIM Myong-Ho, KIM Won-Jeong<sup>1</sup>, KUMAR Shalendra<sup>2</sup>, SONG Tae Kwon(School of Materials Science and Eng., Changwon Nat'l Univ., Gyeongnam 641-773, Korea. <sup>1</sup>Department of Physics, Changwon Nat'l Univ., Gyeongnam 641-773, Korea. <sup>2</sup>Institute of Basic Sciences, Changwon Nat'l Univ., Gyeongnam 641-773, Korea.)

### P3-D101

**Magnetodielectric Effects in the Double-Perovskite Gd<sub>2</sub>NiMnO<sub>6</sub>** / S. H. Oh, H. Y. Choi, N. Lee, Y. H. Jo<sup>1</sup>, Y. J. Choi(Department of Physics and IPAP, Yonsei University, Seoul 120-749, Korea. <sup>1</sup>Division of Materials Science, Korea Basic Science Institute, Daejeon 305-806, Korea.)

### P3-D102

**Near-room Temperature Magnetic Transition and Magnetodielectric Effects in PbFe<sub>0.5</sub>Ti<sub>0.25</sub>W<sub>0.25</sub>O<sub>3</sub>** / CHOI Y.J, JO Y.H<sup>1</sup>, OH S.H, N Lee, CHOI H.Y, KIM M.K, MOON J.Y(연세대학교, 물리학과. <sup>1</sup>기초과학지원연구원.)

### P3-D103

**Optical Properties of Transparent Perovskite Tin Oxides** / SIM Kyung Ik, HA Taewoo, KIM Useong<sup>1</sup>, CHAR Kookrin<sup>1</sup>, KIM Jae Hoon(Department of Physics, Yonsei University 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Republic of Korea. <sup>1</sup>Center for Strongly Correlated Materials Research, Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Republic of Korea.)

### P3-D104

**Optical Study of mono and bilayer graphene** / JO youngchan, PARK Byung Cheol, SON Jangyup<sup>1</sup>, HONG Jongill<sup>1</sup>, KIM Sangjin<sup>2</sup>, HONG Byunghye<sup>2</sup>, KIM Jae Hoon(Department of Physics and Institute of Physics and Applied Physics, Yonsei University, Seoul 120-749, Republic of Korea. <sup>1</sup>Materials Science and Engineering, Yonsei University, Seoul 120-749, Republic of Korea. <sup>2</sup>Department of Chemistry, College of Natural Sciences, Seoul National University, Seoul 151-747, Republic of Korea.)

### P3-D105

**Two type of carrier dynamics in the Dirac material SrMnBi<sub>2</sub>** / PARK H. J., JEONG D. W., PARK Joonbum<sup>1</sup>, KIM Jun Sung<sup>1</sup>, JI Hyo Seok<sup>2</sup>, SHIM J. H.<sup>3</sup>, KIM K. W.<sup>4</sup>, MOON S. J.<sup>5</sup>, KIM Hyeong-Do, CHO Deok-Yong<sup>6</sup>, NOH T. W.(Center for Correlated Electron Systems, Institute for Basic Science (IBS), Seoul 151-747, Korea / Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Korea. <sup>1</sup>Department of Physics, Pohang University of Science and Technology, Pohang 790-784, Korea. <sup>2</sup>Department of Chemistry, Pohang University of Science and Technology, Pohang 790-784, Korea. <sup>3</sup>Department of Chemistry,

Pohang University of Science and Technology, Pohang 790-784, Korea/ Division of Advanced Nuclear Engineering, Pohang University of Science and Technology, Pohang 790-784, Korea. <sup>4</sup>Department of Physics, Chungbuk National University, Cheongju 361-763, Korea. <sup>5</sup>Department of Physics, Hanyang University, Seoul 133-791, Korea. <sup>6</sup>CCES, IBS, Seoul 151-747, Korea / Dep. of Physics and Astronomy, SNU, Seoul 151-747, Korea / Dep. of Physics, Chonbuk National University, Jeonju 561-756, Korea.)

### P3-D106\*

**Controllability of local magnetism in Co-based type double perovskite:  $\text{La}_2\text{CoIrO}_6$  and  $\text{La}_2\text{CoPtO}_6$**  / LEE Min-Cheol, SOHN Chang Hee, LEE Kyungdong, WON Choongjae, HUR Namjung, CHO Deok-yong<sup>1</sup>, NOH Tae Won(Center for Correlated Electron Systems (CCES), Institute for Basic Science, Seoul National University. <sup>1</sup>Department of Physics, Chonbuk National University, Jeonju.)

### P3-D107\*

**Role of Local Orbital Angular Momentum in Rashba and Dresselhaus effect with zinc blende crystal structure** / 김창영, 조수현, 정원식, 김범영, 김범서, 권준영(연세대학교, 물리학과.)

### P3-D108\*

**Cluster dynamical mean-field study of the bilayer Hubbard model** / 김아람, 전건상<sup>1</sup>, 최무영(서울대학교, 물리천문학부. <sup>1</sup>이화여자대학교, 물리학과.)

### P3-D109\*

**Dilute Magnetic Topological Semiconductors: What's New Beyond The Physics Of Dilute Magnetic Semiconductors?** / 경민김, 용수조, 기석김(POSTECH, Physics.)

### P3-D110\*

**Optical study of superlattice SLTO/STO** / ROH Seulki, CHOI Minsu<sup>1</sup>, LEE Seokbae, CHOI E.<sup>1</sup>, LEE jaichan<sup>1</sup>, HWANG jungseek(Department of physics, Sungkyunkwan University. <sup>1</sup>School of advanced materials science and engineering, Sungkyunkwan University.)

### P3-D111\*

**Phonon instability and the Mott-Peierls transition in  $\text{K}_2\text{Cr}_8\text{O}_{16}$**  / 김수란, 김규, 민병일(POSTECH, 물리학과.)

### P3-D112\*

**Reversible Electrical Writing of Spin Order Near a Multiferroic Triple Point** / JANG Byung-Kweon, LEE Jin Hong, KIM Kwang-Eun, JANG Hoyoung<sup>1</sup>, KO Kyung-Tae<sup>2</sup>, JUNG Min Hwa<sup>3</sup>, KOO Tae Yeong<sup>4</sup>, JEONG Yoon Hee<sup>3</sup>, OHL DAG Hendrik<sup>1</sup>, LEE Jun-Sik<sup>1</sup>, YANG Chan-Ho(Department of Physics, KAIST, Korea. <sup>1</sup>Stanford Synchrotron Radiation Lightsource, SLAC National

Accelerator Laboratory, USA. <sup>2</sup>Max Planck Institute for Chemical Physics of Solids, Germany. <sup>3</sup>Department of Physics, POSTECH, Korea. <sup>4</sup>Pohang Accelerator Laboratory, POSTECH, Korea.)

**P3-D113\***

**Anisotropic thermoelectric properties of mixed-layer compounds of (GeTe)<sub>m</sub>(Bi<sub>2</sub>Te<sub>3</sub>)<sub>n</sub>** / 김윤민, 김진희, 이종수(경희대학교, 물리학과.)

**P3-D114\***

**ARPES study on MoS<sub>2</sub> exposed to hydrogen gas** / 김창영, 김범서, 조수현, 김범영, 김병훈<sup>1</sup>, 서정진, 고윤영, 경원식, 박승룡<sup>1</sup>(연세대학교 물리학과, <sup>1</sup>인천대학교 물리학과.)

**P3-D115\***

**Helium Adsorption on C<sub>40</sub> Molecular Surfaces: Path-integral Monte Carlo Study** / KWON Yongkyung, PARK Sungjin(건국대학교 물리학부.)

**P3-D116\***

**Infrared Probe of Spin-Lattice Coupling in Li<sub>2</sub>MnO<sub>3</sub> with a Two-Dimensional Honeycomb Lattice** / SONG Seungjae, JEON S. Y.<sup>1</sup>, LEE S. I.<sup>1</sup>, PARK J.-G.<sup>1</sup>, MOON S. J.(Hanyang University, Department of Physics. <sup>1</sup>Institute of Basic Science, Center for Correlated Electron Systems & Seoul National University, Department of Physics & Astronomy.)

**P3-D117\***

**Interlayer correlation between two <sup>4</sup>He monolayers adsorbed on both sides of  $\alpha$  graphyne** / KWON Yongkyung, AHN Jeonghwan(건국대학교, 물리학과.)

**P3-D118\***

**Synthesis of Epitaxial LaMnO<sub>3</sub> Thin Films** / KIM Yong Jin, LEE Jin Hong, SONG Jong Hyeon, YANG Chang-Ho(Department of physics, KAIST, Daejeon 305-701, Korea.)

**P3-D119\***

**XAS and PES Study on Metal Insulator Transition in NiS<sub>2-x</sub>Se<sub>x</sub>** / 한가람, 정원식, 조수현, 서정진, SOLTANI Shores, 김범서, 권준영, 김창영(연세대학교, 물리학과.)

**P3-D120\***

**방사광 분광법을 이용한 희토류 전하밀도파 화합물의 전자 구조 연구** / 이은숙, 김대현, 김현우, 민병훈<sup>1</sup>, 권용성<sup>1</sup>, J.D. Denlinger<sup>2</sup>, 강정수(가톨릭대학교, 물리학과. <sup>1</sup>대구경북과학기술원. <sup>2</sup>Lawrence Berkeley National Laboratory.)



P3-D121

**Effect of PMMA Doping on MgB<sub>2</sub> Bulk Superconductor** / JANG Sehoon, SINHA Bhavesh Bharat<sup>1</sup>, CHUNG Kookchae(KIMS. <sup>1</sup>Mumbai University.)

P3-D122

**Effects of Pressure-induced Magnetism on Critical Current Density of FeSe Single Crystals** / JUNG Soon-Gil, KANG Ji-Hoon, PARK Eunsung, LEE Sangyun, LIU Jiunn-Yuan<sup>1</sup>, CHAREEV Dmitriy A.<sup>2</sup>, PARK Tuson(Department of Physics, Sungkyunkwan University, Suwon 440-746, Republic of Korea. <sup>1</sup>Institute of Physics, National Chiao Tung University, Hsinchu 30010, Taiwan. <sup>2</sup>Institute of Experimental Mineralogy, Chernogolovka, Moscow Region, 142432, Russia.)

P3-D123

**Ferro-orbital fluctuation of Mn doped LiFeAs** / 서정진, 고윤영, 이범성<sup>1</sup>, 김기훈<sup>1</sup>, 김창영(Yonsei University, Physics department. <sup>1</sup>Seoul National University, Department of Physics and Astronomy.)

P3-D124

**전자저울을 이용한 고온 초전도체의 자기 부상력 측정 방법 연구** / 엄주원, 이호근(강원대학교, 물리학과.)

P3-D125

**(B,Ga)(Ba,Sr)(Er,Ca)Cu<sub>2</sub>O<sub>2</sub> 계의 초전도 특성** / 김가원, 이호근(강원대학교, 물리학과.)

P3-D126

**Analysis of The Local Property in YBCO Coated Conductor with Striation Using Low Temperature Scanning Laser and Hall Probe Microscopy** / RI Hyeong-Cheol, KIM Muyong, PARK Sangkook, PARK Heeyeon(Kyungpook National University, Department of Physics.)

P3-D127\*

**Growths of Epitaxial Superconducting La<sub>1.85</sub>Sr<sub>0.15</sub>CuO<sub>4</sub> Thin Films** / JANG Han-byul, YANG Chan-ho(Department of Physics, KAIST.)

P3-D128\*

**Local lattice and time-reversal symmetry breaking in Fe<sub>x</sub>Bi<sub>2</sub>Te<sub>3</sub> (0 ≤ x ≤ 0.1) studied by μSR and Raman spectroscopy** / CHOI K.-Y., LEE S.-H., YOON S.-W.<sup>1</sup>, LEE W.-J.<sup>1</sup>, GLAMAZDA A, LEMMENS P.<sup>2</sup>, KIM H.-J.<sup>3</sup>, JANG Z.-H.<sup>4</sup>, SUH B.-J.<sup>1</sup>(Chung-Ang University, Dept. of Physics. <sup>1</sup>Catholic University of Korea, Dept. of Physics. <sup>2</sup>TU Braunschweig, IPKM. <sup>3</sup>Daegu University, Dept. of Physics. <sup>4</sup>Kookmin University, Dept. of Nano and Electronic Physics.)

P3-D129\*

**Quasiparticle self-consistent GW study of high-T<sub>c</sub> cuprate superconductors** / JANG Seung Woo, KOTANI Takao<sup>1</sup>, KUROKI Kazuhiko<sup>2</sup>, HAN Myung Joon(Department of Physics, KAIST, Korea. <sup>1</sup>Department of Applied Mathematics and Physics, Tottori University, Japan. <sup>2</sup>Department of Physics, Osaka University, Japan.)

P3-D130\*

**Development of Upper Critical Fields in FeSe Single Crystals under Pressure** / KANG Ji-Hoon, JUNG Soon-Gil, LEE Sangyun, PARK Eunsung, LIU Jiunn-Yuan<sup>1</sup>, PARK Tuson(Center for Quantum Materials and Superconductivity, Department of Physics, Sungyunkwan University, Suwon. <sup>1</sup>Institute of Physics, National Chiao Tung University, Hsinchu 30010, Taiwan.)

P3-D133\*

**Optical analysis of BaFe<sub>2-x</sub>Ni<sub>x</sub>As<sub>2</sub> (x=0.05 and 0.10)** / HWANG Jungseek, RHO Seulki, JUNG Eilho, CHOI Kiyoun<sup>1</sup>, LEE Seokbae(Department of Physics, Sungkyunkwan University. <sup>1</sup>Department of Physics, Seoul National University.)

P3-D134\*

**Strong Flux Pinning caused by Topographic Characteristics in (Ba,K)Fe<sub>2</sub>As<sub>2</sub> Thin Films** / OH Myeong Jun, LIM Hyeong Jun<sup>1</sup>, SEO M.S.<sup>2</sup>, PARK S.Y.<sup>2</sup>, KIM Ji Hye, HONG Y.J., KANG W.N.<sup>1</sup>, JO Youn Jung(Kyungpook National University. <sup>1</sup>Sungkyunkwan University. <sup>2</sup>Korea Basic Science Institute.)

P3-D135\*

**Superconducting property of Sn<sub>1-x</sub>In<sub>x</sub>Te compounds** / 김가령, 송유장, 윤재현, 이종수(경희대학교 응용물리학과.)

2014년 10월 23일 목요일 14:00 - 15:45

장소: 포스터발표장

## P3-E059\*

이온젤 게이팅을 통한 그래핀의 일함수 측정 / 이한별, 김현철, 이준호, 정내봉, 최두화, 정현중(건국대학교, 이과대학 물리학과 양자상 및 소자 전공.)

## P3-E060\*

이온성 액체를 이용한 상부 게이팅을 통해 그래핀과 이황화 텅스텐 접합 구조의 전기적 특성 연구 / 정내봉, 이한별, 김현철, 이준호, 최두화, 김학성, 윤호열, 윤호양, 유영규, 김성원, 엄태우, 장성호, 이상욱, 정현중(건국대학교, 이과대학 물리학과 양자 상 및 소자 전공.)

## P3-E061\*

Schottky Junction Engineering of 2-Dimensional Semiconductor with its thickness / KIM Hyun-Cheol, LEE Han-Byeol, LEE Jun-Ho, CHOI Doo-Hua, JEUNG Nae-Bong, KIM Hakseong, YOON Ho Ang, LEE Jae Ung<sup>1</sup>, CHUNG Hyeonsick<sup>1</sup>, LEE Sang Wook, CHUNG Hyun-Jong(Division of Quantum Phases & Devices, Department of Physics, Konkuk University. <sup>1</sup>Department of Physics, Sogang University.)

## P3-E062\*

탄소나노튜브를 이용한 나노구조물 제작 및 응용 / 임웅빈, 정희성, 박세준, 안영환, 이순일, 박지용(아주대학교 에너지시스템학부.)

## P3-E063\*

Characterization of X-ray Streak camera / KIM Young Hoon, CHO Byoung Ick<sup>1</sup>(Institute for Basic Science (IBS), Gwangju Institute of Science & Technology(GIST). <sup>1</sup>Institute for Basic Science (IBS), Gwangju Institute of Science and Technology (GIST).)

## P3-E064\*

Pd/Co/Pd 박막의 Pd 유도 자화에 대한 Pd L<sub>3</sub>-흡수단 X-선 공명 자기산란 연구 / 이동렬, 김동욱, 최용성<sup>1</sup>, 송경미<sup>2</sup>, 김재성<sup>2</sup>, 최준우<sup>3</sup>(숭실대학교, 물리학과. <sup>1</sup>Argonne National Laboratory, Advanced Photon Source. <sup>2</sup>숙명여자대학교, 나노물리학과. <sup>3</sup>KIST, 스핀 융합연구센터.)

## P3-E065\*

Angular dependence of spin-orbit spin transfer torques / LEE Ki-Seung, GO Dongwook<sup>1</sup>, LEE Hyun-Woo<sup>1</sup>, MANCHON Aurelien<sup>2</sup>, HANEY Paul. M<sup>3</sup>, STILES Mark D.<sup>3</sup>, LEE Kyung-Jin(Department of Materials Science and Engineering, Korea University. <sup>1</sup>Department of Physics, POSTECH. <sup>2</sup>Physical Science and Engineering Division, King Abdullah University of Science and Technology

(KAUST), Thuwal, Saudi Arabia. <sup>3</sup>Center for Nanoscale Science and Technology, National Institute of Standards and Technology, Gaithersburg, Maryland, USA.)

**P3-E066\***

**Pt/Co/Pt 박막에서 자기 비등방성 에너지 조절을 통한 자구벽 속력 최대화 / 김덕호, 유상철, 김대연, 문경웅<sup>1</sup>, 제송근, 조정규, 민병철<sup>2</sup>, 최석봉(서울대학교, 물리천문학부, <sup>1</sup>한국표준과학연구원, <sup>2</sup>한국과학기술연구원.)**

**P3-E067\***

**Spin-Orbit Coupling Induced Non-Local Signal in Qusi-2DEG of LAO/STO / YOO Jung-Woo, JIN Mi-Jin, MOON Seon Young<sup>1</sup>, JO Jun-Hyun, MODEPALLI Vijayakumar, PARK Jungmin, BAEK Seung-Hyub<sup>1</sup>(Ulsan National Institute of Science and Technology(UNIST), <sup>1</sup>Korea Institute of Science Technology (KIST).)**

**P3-E068\***

**XPS and electron transport study of paramagnetic dusting effect on MgO based magnetic tunnel junction / 이공원, 장영재, 김동석, 주성중<sup>1</sup>, 이병찬(고려대학교, 디스플레이반도체 물리학과, <sup>1</sup>한국표준과학연구원, 전기센터, <sup>2</sup>인하대학교, 물리학과.)**

**P3-E069\***

**Perpendicular Magnetization of very long ferromagnetically coupled FM/paramagnet/FM / 이공원, 김동석, 김지민, 장영재, 김범진, 주성중<sup>1</sup>, 이병찬<sup>2</sup>(고려대학교, 디스플레이 반도체 물리학과, <sup>1</sup>한국표준과학연구원, Center for Electricity & Magnetism, <sup>2</sup>인하대학교, 물리학과.)**

**P3-E070\***

**증착 에너지의 변화에 따른 수직자기이방성 연구 / 이공원, 김지민, 김범진, 장영재, 김동석, 이병찬(고려대학교, 디스플레이반도체물리학과, <sup>1</sup>인하대학교, 물리학과.)**

**P3-E071\***

**증착에너지의 변화에 따른 박막 특성변화 연구 / 이공원, 김범진, 김지민, 장영재, 김동석, 이병찬(고려대학교, 디스플레이반도체물리학과, <sup>1</sup>인하대학교, 물리학과.)**

**P3-E072\***

**Ferroelectric and magnetic properties of PVA/bismuth-ferrite nano-composite film / 황지섭, 조장연<sup>1</sup>, 유영준, 박상윤<sup>1</sup>, 유필선<sup>2</sup>, 이보화<sup>2</sup>, 이영백(한양대학교 물리학과, <sup>1</sup>차세대융합기술연구원 나노 바이오 융합연구 센터, <sup>2</sup>한국외국어대학교 전자물리학과.)**

**P3-E073\***

**양극 산화 알루미늄 막의 후면 처리를 통한 나노채널 구조의 균일도 향상 / 고태준, 김승환, 임수환, 김철성(국민대학교 물리학과.)**

## P3-E074\*

다공구조 미세 역학진동자의 동역학적 특성 연구 / 고태준, 이은중, 조명래, 김승환, 박윤<sup>1</sup>(국민대학교 물리학과, <sup>1</sup>서울대학교 물리천문학부.)

## P3-E075\*

**Electromechanical Resonators Toward Highly Sensitive Mass Detection** / KIM Hakseong, MCALLISTER Kirstie, CHEUNG Christina, LEE Sang Wook(Division of Quantum Phases & Devices, School of Physics, Konkuk University, Seoul 143-701, Korea.)

## P3-E076\*

**Junction properties of MoS<sub>2</sub> between 1T and 2H phases** / KIM Junsuk, KIM Jeasu, KIM Jungho, VU Quoc An, LEE Young Hee, LIM Seong Chu(Center for Integrated Nanostructure Physics, Institute for Basic Science, Sungkyunkwan University, Department of Energy Science, Sungkyunkwan University, Suwon 440-746, Korea.)

## P3-E077\*

**Piezoelectric Nanogenerator based on the PZT particles interconnected with multi-walled carbon nanotubes for mechanical energy harvesting from tapping motion** / 한진규, 전도현, 광진호, 최기영<sup>1</sup>, 라은주<sup>2</sup>, 임종선<sup>2</sup>, 부상돈(전북대학교, 물리학과, <sup>1</sup>서울대학교, 물리천문학과, <sup>2</sup>화학연구원, 박막재료그룹.)

## P3-E078\*

**Photocurrent Generation by Illuminating Whole Photodevice with Both Single- and Bi-layer Graphene** / HAN Songhee, KIM Minjung, CHEONG Hyeonsik(Department of Physics, Sogang University.)

## P3-E079

BaO-B2O3-TeO2 계의 유리화 범위 및 열 특성 / 김현규, 차유정, 최세용, 배종성, 양호순<sup>1</sup>, 홍경수(한국기초과학지원연구원 부산센터, <sup>1</sup>부산대학교 물리학과.)

## P3-E080

BaO-B2O3-TeO2 계 유리에서 B-BaB2O4 결정의 생성과 SHG / 김현규, 차유정, 최세용, 양호순<sup>1</sup>, 홍경수(한국기초과학지원연구원 부산센터, <sup>1</sup>부산대학교 물리학과.)

## P3-E081

**Effects of Graphene Oxide coating on the ZnO nanorods** / 이지은, 최수민, 윤종원, 김순옥, 권민철<sup>1</sup>, 유대향, 한성홍(울산대학교, 물리학과, <sup>1</sup>(주)유니백.)

## P3-E082

**The effect of sodium citrate concentration on the growth of ZnO nanostructure** / 김순옥, 김태훈, KHOA Nguyen Tri, 유대향, 한성홍(울산대학교, 물리학과.)

P3-E083

**Photoluminescence properties of the experimental methods in CaMoO<sub>4</sub> /Eu<sup>3+</sup>, Bi<sup>3+</sup> phosphor** / KIM Eun Ock, MOON Byung Kee, CHOI Byung Chun, JEONG Jung Hyun, KIM Jung Hwan<sup>1</sup>(Department of Physics, Pukyong National University. <sup>1</sup>Department of Physics, Dong-eui University.)

P3-E084

**Effect of synthesis conditions of morphology and upconversion luminescence properties of NaYF<sub>4</sub> /Yb<sup>3+</sup>, Er<sup>3+</sup> prepared by hydrothermal method** / OH Ju Hyun, MOON Byung Kee, JEONG Jung Hyun, KIM Jung Hwan<sup>1</sup>(Department of Physics, Pukyong National University. <sup>1</sup>Department of Physics, Dong-eui University.)

P3-E085

**Polarization Pinning Assists Bipolar Resistive Switching In BiFeO<sub>3</sub> Nano-Island Sandwiched Between Pt Electrode And Nb-doped SrTiO<sub>3</sub> Substrate** / 전지훈, 최택집<sup>1</sup>, 주호용<sup>1</sup>, 이덕현, 박배호(Division of Quantum Phases & Devices, Department of Physics, Konkuk University. <sup>1</sup>Department of Nano Science & Technology, Sejong University.)

P3-E086

**Observation of Quantum Hall Effect in Dual-gate Graphene Device** / PARK Jeongmin, KANG Haeyong<sup>1</sup>, KIM JoongGyu, YOON Yoojoo, PARK Nahee, KIM Jeong-gyun, LEE YouRack, CHUNG Dongsu<sup>2</sup>, KIM Donggyun<sup>3</sup>, YUN Hoyeol<sup>4</sup>, LEE SangWook<sup>4</sup>, SUH Dongseok(성균관대학교 CINAP, 에너지과학과. <sup>1</sup>성균관대학교, 에너지과학과. <sup>2</sup>성균관대학교 CINAP, 전자전기공학과. <sup>3</sup>성균관대학교 CINAP, 공학계열. <sup>4</sup>건국대학교, 물리학과.)

P3-E087

**The Robustness of Quantum Hall Effect in Graphene Field-Effect Transistor** / YOON Yoojoo, KANG Haeyong<sup>1</sup>, PARK Nahee, PARK Jeongmin, LEE YouRack, KIM Jeong-Gyun, KIM JoongGyu, KIM Donggyun<sup>2</sup>, YUN Hoyeol<sup>3</sup>, LEE Sang Wook<sup>3</sup>, SUH Dongseok(성균관대학교 CINAP, 에너지과학과. <sup>1</sup>성균관대학교, 에너지과학과. <sup>2</sup>성균관대학교 CINAP, 공학계열. <sup>3</sup>건국대학교, 물리학과.)

P3-E088

**PMMA 매개층의 농도에 따른 나노 입자 전사 연구** / 김리향, 신종화(카이스트, 신소재공학과.)

2014년 10월 23일 목요일 14:00 - 15:45

장소 / 포스터발표장

## P3-K033

SnO<sub>2</sub> 박막의 비정형적인 입자 특성이 광학적인 영향에 미치는 연구 / 정진, 박지환(조선대학교 물리학과.)

## P3-K034

산화주석 박막의 전기적인 성질과 광학적 연관성에 관한 연구 / 김영석, 정진(조선대학교 물리학과.)

## P3-K035

cvd법으로 성장한 산화주석의 구조적인 특성 / 양소명, 정진(조선대학교 물리학과.)

## P3-K036

산화주석의 성장시간변화에 따른 이차성장 / 김영석, 정진(조선대학교 물리학과.)

## P3-K037

Investigation of properties in InGaN-based vertical type solar cell with emission wavelengths in ultraviolet-blue-green regions / YANG gyemo, PARK hyunho(전북대학교 반도체화학공학부.)

## P3-K038

280nm UV LED를 이용한 살균모듈 제작 및 특성 연구 / 서용곤, 윤형도, 박재현(전자부품연구원, 에너지나노소재연구센터.)

## P3-K039

CdIn<sub>2</sub>O<sub>4</sub> 및 CdIn<sub>2</sub>O<sub>4</sub>: Er 결정의 광학적 특성 / 방태환, 최성휴(조선대, 물리학과.)

## P3-K040

화학기상증착법을 이용한 몰리브덴 박막의 전기적 특성 / 석동수, 임민혁, 권해용, 이규현(메카로닉스.)

## P3-K041

알루미늄 전구체 온도에 따른 ZnO: Al(AZO) 박막의 광학적 특성 / 이규현, 천성학, 이호건, 정주환(메카로닉스.)

## P3-K042

Drop-casting 방법을 이용한 PANI의 함유량에 따른 Flexible

**Supercapacitor** / 김종민, 조용철, 우현석, 손재상, 한재석, 박우영, 김인호, 조상은, 이종경, A. I. Inamdar, 김형상, 임현식(Division of Physics and Semiconductor Science, Dongguk University.)

P3-K043

**High Reflectivity Distributed Bragg Reflector based on Undoped/Porous Si-doped GaN Layer made by Selective Electrochemical Etching** / LEE Seung-Min, MOHAMED Ebaid, KANG Jin-Ho, PARK Jong-Oh, RYU Sang-Wan(Department of Physics, Chonnam National University.)

P3-K044

**이방적인 결정성을 가지는 a-plane GaN의 광학적 특성 분석** / 서용곤, 윤형도, 박재현, 황성민<sup>1</sup>(전자부품연구원, 에너지나노소재연구센터. <sup>1</sup>(주)소프트에피.)

P3-K045

**Structural and Optical Properties of SnO<sub>2</sub> thin films** / 소현섭, 박준우, 정대호, 고건희, 이호선(경희대학교 물리학과.)

P3-K046

**Undoped GaN 사이 삽입된 Nanoporous GaN의 전기전도도 연구** / 박종오, 류상원(전남대학교, 물리학과.)

P3-K047

**Zn<sub>x</sub>Cd<sub>1-x</sub>Se 박막의 성장과 물리적 특성** / 이정주, 한동헌, 윤은정, 강광용<sup>1</sup>(경상대학교, 물리학과. <sup>1</sup>동의대학교, 부산IT융합부품연구소.)

P3-K048

**TeCl<sub>4</sub>를 이용한 CdSe/ZnTe core-shell 구조 나노선의 성장** / 송만석, 김용(동아대학교, 신소재물리학과.)

P3-K049

**InAs/GaSb 제2형 응력초격자 적외선 검출기의 표면 보호막에 따른 암전류(Dark Current) 특성 연구** / HWANG Je Hwan, HWANG Je Hwan<sup>1</sup>, LEE Hun, LEE Hun<sup>1</sup>, JUNG Jae Chul, KIM Jun Oh<sup>1</sup>, LEE Sang Jun<sup>1</sup>, KIM Ha Sul(Physics, Chonnam National University, Kwangju, 500-757, South Korea. <sup>1</sup>Division of Industrial Metrology, Korea Research Institute of Standards and Science, Daejeon 305-340, Korea.)

P3-K050

**Kronig-Penney 모델을 이용한 밴드갭 에너지 계산과 InAs/GaSb 초격자 적외선 검출소자의 특성평가** / 이훈, 황제환, 정재철, 김하술, 김준오<sup>1</sup>, 이상준<sup>1</sup>(전남대학교, 물리학과. <sup>1</sup>한국표준과학연구원.)

P3-K051

**Synthesis of Large-Area And High-Quality MoTe<sub>2</sub> Film By**



**Chemical Vapor Deposition** / PARK Jin Cheol, KIM Ki Kang<sup>1</sup>(성균관대학교 IBS 나노구조 물리 연구단, <sup>1</sup>동국대학교 융합에너지신소재공학과.)

P3-K052

**Extracting electrical parameters of InGaAs Schottky barrier diode from temperature dependence of current-voltage characteristics** / SHIN Jun-Hwan, HAN SANG-PIL<sup>1</sup>, PARK Jeong-Woo<sup>1</sup>, PARK Kyung Hyun (ETRI, THz photonics creative research center. UST, school of advanced device technology. <sup>1</sup>ETRI, THz photonics creative research center.)

P3-K053

**Analog Resistive Switching Characteristics of Maghemite Nanoparticles with Different Top Electrodes** / SONG Woo Jin, SHIM Ee Le<sup>1</sup>, ABBAS Yawar, SHIM Jae Hyuk, YOON-JAE Beak<sup>2</sup>, TAE SIK Yoon<sup>2</sup>, CHOI Young Jin, KANG Chi Jung(Myongji University, Department of Physics. <sup>1</sup>Halla University, School of mechanical&Automotive Engineering. <sup>2</sup>Myongji University, Department of Materials Science and Engineering.)

P3-K054

**Nanoporous GaN의 Oxidation을 통한 Gallium Oxide 생성과 특성 분석** / 김신재, 류상완(전남대학교 물리학과.)

P3-K055

**Phase lithography of MoS2 using scanning thermal atomic force microscopy** / KIM Jaesu, KIM Junsuk, KIM Hyun, HAN Kanghee<sup>1</sup>, LEE Young Hee, LIM Seong Chu(성균관대학교 에너지과학과 CINAP. <sup>1</sup>성균관대학교 CINAP.)

P3-K056

**Indium oxide와 Molybdenum이 co-sputtering 된 박막의 전기적 및 광학적 특성변화 연구** / 전지아, 오규진, 김은규(한양대학교, 물리학과.)

P3-K057

**나노 크기 게이트 크기의 변화에 따른 낸드 플래시 메모리의 셀 간섭에 의한 메모리 성능** / 정현수, 유주태, 김태환(한양대학교 전자통신컴퓨터공학부.)

P3-K058

**솔루션 공정을 이용하여 제작한 SnO<sub>2</sub> 나노 입자와 polystyrene 복합물질을 기반으로 제작한 비휘발성 메모리 소자의 동작 메커니즘에 관한 연구** / 류준장, 김유나, 김태환(한양대학교, 전자컴퓨터통신공학과. <sup>1</sup>한양대학교, 나노반도체공학과.)

P3-K059

**절연층 구조 변화를 통한 플래시 메모리의 전기적 특성 향상** / 고경욱, 김태환(한양대학교 전자컴퓨터공학과.)

**P3-K060**

광반사 분광법을 이용한 InAs/GaAs 양자점 태양전지의 내부 전기장 연구 / 조현준, 소모근, 한임식, 권용재, 배진호<sup>1</sup>, 최근도<sup>1</sup>, 최진<sup>1</sup>, 노삼규<sup>2</sup>, 김종수(영남대학교, 물리학과. <sup>1</sup>경우고등학교, <sup>2</sup>한국표준과학연구원.)

**P3-K061**

Poly(methylmethacrylate)/Poly(3-hexylthiophene) 복합층으로 이루어진 유기 메모리 소자의 안정성 / LEE Namhyun(한양대학교 전자컴퓨터통신공학과.)

**P3-K062**

MOSFET에서의 High-k 절연층의 이동도 변화 메커니즘 / 박재현, 고경욱<sup>1</sup>, 김태환(한양대학교 융합전자공학부, <sup>1</sup>한양대학교 전자컴퓨터통신공학과.)

**P3-K063**

Spin pumping using inhomogeneous magnetic field RTD / KIM Nammee, KIM Heesang(Department of Physics, Soongsil University, Seoul 156-743, South Korea.)

2014년 10월 24일 금요일 11:00 - 12:45

장소: 포스터발표장

진행위원: [유전체, D136~D163] 박종호(진주교대)

[응집물질 계산과학, D164~D174] 홍지상(부경대)

## P4-D136\*

**Deterministic Control and Enhanced Electronic Properties of Long-range Stripe Phase Boundaries in La-doped BiFeO<sub>3</sub>** / KIM Kwang-Eun, JANG Byung-Kweon, HEO Youn<sup>1</sup>, JEONG Myoung<sup>2</sup>, LEE Jin Hong, LEE Jeong Yong, JAN Seidel<sup>1</sup>, YANG Chan-Ho(Department of Physics, KAIST. <sup>1</sup>School of Materials Science and Engineering, University of New South Wales. <sup>2</sup>Center for Nanomaterials and Chemical Reactions, Institute for Basic Science.)

## P4-D137\*

**BiFeO<sub>3</sub> 나노 구조물의 제작과 전기적 특성 연구** / CHOI GIPPEUM, YANG SUNA, KIM BYUNGHOON, BU SANGDON(Department of Physics, Chonbuk National University, Jeonju 561-756, Korea.)

## P4-D138

**Structural and Electrical Properties of Pulsed Laser Deposited BiFeO<sub>3</sub> and BiFe<sub>0.95</sub>Mn<sub>0.05</sub>O<sub>3</sub> Thin Films with Ge-doped ZnO Electrodes** / 김상수, 김진원, RAGHAVAN Chinnamedu Murugesan, 최지아, 김원정(창원대학교, 물리학과.)

## P4-D139

**Effects of W-doping on Structural and Electrical Properties of Bi<sub>7</sub>Fe<sub>3</sub>Ti<sub>3</sub>O<sub>21</sub> Thin Films Prepared by Chemical Solution Deposition** / 김상수, RAGHAVAN Chinnamedu Murugesan, 김진원, 최지아(창원대학교, 물리학과.)

## P4-D140

**Annealing Temperature Dependence on Structural and Electrical Properties of Nd-doped Bi<sub>7</sub>Fe<sub>3</sub>Ti<sub>3</sub>O<sub>21</sub> Thin Films** / 김상수, 최지아, RAGHAVAN Chinnamedu Murugesan, 김진원(창원대학교, 물리학과.)

## P4-D141

**Fabrication and Piezoelectric property of Vertically Oriented and Highly ordered Pb(Zr<sub>0.52</sub>Ti<sub>0.48</sub>)O<sub>3</sub> Nanotube Arrays** / KIM BYUNGHOON, YANG SUNA, CHOI GIPPEUM, BU SANGDON(Department of Physics, Chonbuk National University, Jeonju 561-756, Korea.)

P4-D142\*

**Effect of Pr doping on electrical and piezoelectric properties of  $\text{Bi}_{4-x}\text{Pr}_x\text{Ti}_3\text{O}_{12}$  ceramics** / KANG SINWOOK, JEON DOHYUN, CHO SAMYEON, YANG SUNA, BU SANGDON(Department of Physics, Chonbuk National University, Jeonju 561-756, Korea.)

P4-D143\*

**Effect of Nd Doping on Electrical Properties of  $\text{Bi}_{4-x}\text{Nd}_x\text{Ti}_3\text{O}_{12}$  Ceramics** / JEON DOHYUN, CHO SAMYEON, KANG SHINWOOK, YANG SUNA, BU SANGDON(Department of Physics, Chonbuk National University, Jeonju 561-756, Korea.)

P4-D144\*

**Fabrication and Thermal stability Characterization of  $\text{Bi}_4\text{Ti}_3\text{O}_{12}$  Ceramics for High Temperature applications** / CHO SAMYEON, JEON DOHYUN, KANG SHINWOOK, YANG SUNA, BU SANGDON(Department of Physics, Chonbuk National University, Jeonju 561-756, Korea.)

P4-D145

**Anisotropic thermoelectric property of polycrystalline  $(\text{Bi}_{0.2}\text{Sb}_{0.8})_2\text{Te}_{3+x}$  compounds** / 김진희, 김정영<sup>1</sup>, 송보경<sup>1</sup>, 정주연<sup>1</sup>, 정혜현<sup>1</sup>, 김윤민, 이종수, 안경한<sup>2</sup>(경희대학교 응용물리학과. <sup>1</sup>부흥고등학교. <sup>2</sup>삼성전기.)

P4-D146\*

**Epitaxial Sodium Doped  $\text{WO}_3$  Thin Films** / WOO Chang-Su, YUN Shin Hee, YANG Chan-Ho(KAIST, Department of Physics.)

P4-D147

**2D correlation analysis of the Raman spectra of  $\text{Smb}_6$**  / NGUYEN Thi Huyen, NGUYEN Thi Minh Hien, KANG Boyoun<sup>1</sup>, CHO Beongki<sup>2</sup>, YANG In-Sang(Department of Physics, Ewha Womans University, Seoul 120-750, Korea. <sup>1</sup>School of Materials Science and Engineering, Gwangju Institute of Science and Technology (GIST), Gwangju 500-712, Korea. <sup>2</sup>Department of Photonics and Applied Physics, Gwangju Institute of Science and Technology (GIST), Gwangju 500-712, Korea.)

P4-D148

**Nondestructive Analysis Of Cultural Heritage By Raman Spectroscopy - Estimation Of Pigment Grain Size** / YANG In-Sang, KANG Dai-III<sup>1</sup>, LEE Han-Hyoung<sup>1</sup>, JI Jeong-Eun, HAN Ki-Ok(Department of Physics, Ewha womans University. <sup>1</sup>Department of Heritage conservation & Restoration, Korea National University of Cultural Heritage.)

P4-D149

**Terahertz Spectroscopy of Traditional Korean Pigments** / LEE Howon, KIM Jong Hyeon, JO Young Chan, HA Taewoo, SIM Kyung Ik, KIM Jae Hoon(Department of Physics, Yonsei University 50 Yonsei-ro, Seodaemun-gu, Seoul 120-749, Korea.)

P4-D150

**Polymorphic phase transitions in an organic-inorganic layered hybrid  $(C_6H_5CH_2CH_2NH_3)_2CuCl_4$  (Cu-PEA) using an optical microscope and thermal analysis** / PARK Garam, KIM Min-Tae<sup>1</sup>, OH In-Hwan, PARK J. M. Sungil, LEE Kwang-Sei<sup>2</sup>(한국원자력연구원, <sup>1</sup>충남대학교, <sup>2</sup>인제대학교.)

P4-D151

**Superionic Phase Transitions in  $CsHSO_4$  by Static NMR and MAS NMR** / 최재현, 김남희, 임애란(전주대학교 탄소융합대학원, <sup>1</sup>전주대학교 탄소융합대학원, 전주대학교 과학교육과.)

P4-D152

**Tumbling Motions of  $NH_2(CH_3)_2$  Ions in  $[NH_2(CH_3)_2]_2ZnCl_4$  Studied using <sup>1</sup>H MAS NMR and <sup>13</sup>C CP/MAS NMR** / 김남희, 최재현, 임애란(전주대학교 탄소융합대학원, 전주대학교 과학교육과, 탄소융합대학원.)

P4-D153

**Non-Debye relaxation behavior of BLTN ferroelectric ceramics** / 박종호(진주교육대학교, 과학교육과.)

P4-D154

**The AC conductivity of Pb-Free Glasses  $(13-x)(Li_2O-B_2O_3-BaO) \cdot xTb(x=0.3, 0.4, 0.5)$**  / 박종호(진주교육대학교, 과학교육과.)

P4-D155

**PMN-PT 단결정의 초전 효과를 이용한 에너지 하베스팅 연구** / 고영준, 정종훈(인하대학교 물리학과.)

P4-D156\*

**$ASnO_3(A=Ba, Sr, Ca)$ 에서 Hybrid functional을 이용한 전자구조 계산** / 이해원, 김복기(부산대학교 물리학과.)

P4-D157\*

**Angle-Resolved Photoemission Spectroscopy Study of the  $BaSnO_3$  Thin Films on  $SrTiO_3$  Substrates Grown by Pulsed Laser Deposition** / JOO Beom Soo, CHANG Young Jun, SEO Dongmin, CHOI E. J., HAN Moonsup(Department of Physics, University of Seoul.)

P4-D158

**Temperature-dependent local structural properties of Ti<sub>2</sub>O<sub>3</sub>** / HWANG In hui, JIN Zhenlan, PARK Chang In, JIANG Bingzhi<sup>1</sup>, HAN Sang Wook(Department of Physics Education and Institute of Fusion Science, Chonbuk National University, Jeonju 561-756, Korea. <sup>1</sup>Department of Physics, Yanbian University, Yanji 133002, China.)

P4-D159\*

**Unstable Nature Of Reset Parameters in Unipolar Resistance Switching Since Width Distribution of Singly Connected Conducting Filaments** / NA Sang-Chul, LEE Keundong<sup>1</sup>, CHUN Min Chul, IM Ji Seok, KIM Jae-Jun, LEE Sangik, PARK Bae Ho<sup>1</sup>, KANG Bo Soo(Hanyang University. <sup>1</sup>Konkuk University.)

P4-D160\*

**Correlation between luminescence properties and formation of nanocrystalline silicon with substrate temperature variation** / JEONG Jiwoon, GU Minseon, AHN Hanyeol, JOO Beom Soo, HAN Moonsup(Department of physics, University of Seoul.)

P4-D161\*

**결함 조절된 SiO<sub>2</sub>/SiO<sub>x</sub> 다층 구조에서 열처리 온도와 가스 종류에 따른 PL 특성 분석** / GU Minseon, AHN Hanyeol, JEONG Jiwoon, JOO Beom Soo, HAN Moonsup(Department of Physics, University of Seoul.)

P4-D162

**Optical Properties of Eu<sup>2+</sup>-activated Silicate Phosphors on Blue LED Chips** / KWON Bong-Joon, GANDHI Sakthivel, WOO Hyun-Joo<sup>1</sup>, SHIN Dong-Soo<sup>2</sup>, JANG Kiwan<sup>1</sup>(Changwon National University, Research Institute of Basic Sciences. <sup>1</sup>Changwon National University, Department of Physics. <sup>2</sup>Changwon National University, Department of Chemistry.)

P4-D163

**Development of an Efficient Yellow Emitting Silicate Phosphor Through Sol-gel Strategy Using a Water Friendly Silicate Source** / WOO Hyun-Joo, GANDHI Sakthivel<sup>1</sup>, KWON Bong-Joon<sup>1</sup>, SHIN Dong-Soo<sup>2</sup>(Changwon National University, Department of Physics. <sup>1</sup>Changwon National University, Research Institute of Basic Sciences. <sup>2</sup>Changwon National University, Department of Chemistry.)

P4-D164

**Pressure induced new metallic crystalline structure of GeTe** / 조만호, 정광식, 박승중(연세대학교 물리학과.)

P4-D165

**Electric field effect on magnetocrystalline anisotropy of Fe/MgO and Pt/Fe/MgO: A first principles study** / TAIVANSAIKHAN Purev, RHIM S. H.<sup>1</sup>, ODKHUU Dorj, KWON Oryong, HONG Soon Cheol(University of Ulsan, Department of Physics. <sup>1</sup>University of Ulsan, Energy Harvest Storage Research Center.)

P4-D166

**Atomic and Electronic Properties for Bulk and Stacked Structures of PbVO<sub>3</sub> using Density Functional Theory Calculations** / CHA Janghwan, OH Seol Hee<sup>1</sup>, JO William<sup>1</sup>, HONG Suklyun(Department of Physics and Graphene Research Institute, Sejong University. <sup>1</sup>Department of Physics, Ewha Womans University.)

P4-D167

**Band symmetries of mixed-valence topological insulator: SmB<sub>6</sub>** / KANG Chang-Jong, KIM Junwon, KIM Kyoo, KANG J.-S.<sup>1</sup>, DENLINGER J. D.<sup>2</sup>, MIN B. I.(POSTECH, Dept. of Physics. <sup>1</sup>The Catholic University of Korea, Dept. of Physics. <sup>2</sup>Advanced Light Source, Lawrence Berkeley Laboratory.)

P4-D168

**Electronic structures of silicon and germanium nanowires in the GW approximation** / KIM Han-Gyu, CHOI Hyoung Joon(Department of Physics and IPAP, Yonsei University.)

P4-D169

**Synthesis of Double Perovskite Single Crystals of R<sub>2</sub>CoMnO<sub>6</sub> Family (R=rare earths)** / 최환영, 오상협, 김미경, 이나라, 최영재(연세대학교 물리학과.)

P4-D170\*

**Enhancement of ZT by Mixing two Thermoelectric Materials: Bi<sub>2</sub>Te<sub>3</sub> & GeTe** / KIM Jae Nyeong, SHIM Ji-Hoon(Department of Chemistry, Pohang University of Science and Technology.)

P4-D171\*

**The electronic structure of RE<sub>2</sub>O<sub>2</sub>Sb for the charge density wave instability** / 김희정, 강창종, 심지훈<sup>1</sup>, 민병일(포항공대 물리학과. <sup>1</sup>포항공대 화학과.)

P4-D172\*

**Ab initio study of the heterostructures composed of graphene and porous graphene** / LEE Junsu, KIM Gunn(Department of Physics, Sejong University.)

P4-D173\*

**Carbyne Bundles and Carbon Allotropes for a Lithium-ion-battery Anode** / 박민우, 이훈경(건국대학교 물리학과.)

P4-D174\*

**Many body effects on optical spectra of armchair MoS<sub>2</sub> nanoribbon / GW+BSE study** / KIM Jongmin, YUN Won Seok, LEE J.D.(Dept. of Emerging Materials Science, DGIST.)



2014년 10월 24일 금요일 11:00 - 12:45

장소: 포스터발표장

P4-E089

**CaxSr1-xTiO3 형광체 분말의 합성 및 광특성 연구 / 김영경, 안병철, 양호순, 홍경수<sup>1</sup>(부산대학교 물리학과. <sup>1</sup>한국기초과학지원연구원 부산센터.)**

P4-E090

**성장온도에 따른 ZnO particle의 구조적, 광학적 특성 / 서덕민, 김순옥, 윤종원, 김도희, 권민철<sup>1</sup>, 유대황, 한성홍(울산대학교, 물리학과. <sup>1</sup>(주)유니백.)**

P4-E091

**Photocatalytic Activity of Au/TiO2 nanorod prepared by Hydrothermal Method / 윤종원, 류기연, 김순옥, 유대황, 권민철<sup>1</sup>, 한성홍(울산대학교, 물리학과. <sup>1</sup>(주)유니백.)**

P4-E092

**Photocatalytic Activity of Au Sputtered TiO<sub>2</sub> Nanorod by Annealing Temperature / 류기연, 윤종원, 권민철<sup>1</sup>, 유대황, 한성홍(Physics, University of Ulsan, Ulsan. <sup>1</sup>Univac, Gimhae.)**

P4-E093

**Upconversion properties of Sr<sub>2</sub>CeO<sub>4</sub>: Er<sup>3+</sup> phosphors prepared by high-energy ball milling method / SEO Yeon Woo, MOON Byung Kee, CHOI Byung Chun, JEONG Jung Hyun, KIM Jung Hwan<sup>1</sup>(Department of Physics, Pukyong National University. <sup>1</sup>Department of Physics, Dong-eui University.)**

P4-E094

**Electronic Structure and luminescence properties of Sm<sup>3+</sup> doped Ba<sub>2</sub>CaMoO<sub>6</sub> phosphors / WANG Lili, NOH Hyeon Mi, MOON Byung Kee, JEONG Jung Hyun, KIM Jung Hwan<sup>1</sup>(Department of Physics, Pukyong National University. <sup>1</sup>Department of Physics, Dong-eui University.)**

P4-E095

**Synthesis and luminescent properties of Ca<sub>9</sub>LiGd<sub>2</sub>(1-x)/<sub>3</sub>(PO<sub>4</sub>)<sub>7</sub>: 2x/3Sm<sup>3+</sup> phosphor / GUO Yue, WANG LiLi, MOON Byung Kee, JEONG Jung Hyun, KIM Jung Hwan<sup>1</sup>(Department of Physics, Pukyong National University. <sup>1</sup>Department of Physics, Dong-eui University.)**

P4-E096

**Effective catalytic performance from hybrid graphene oxide and controllable gold nanoparticle size / KHOA Nguyen Tri, THUAN Doan Van, KIM Soon Wook, YOO Dae-Hwang, HAHN Sung Hong(Ulsan university.)**

P4-E097

**Radio-frequency characteristics of graphene monolayer via nitric acid doping** / LEE Hee-Jo, KIM Eunho<sup>1</sup>, PARK Jaehyun<sup>1</sup>, SONG Wooseok<sup>2</sup>, AN Ki-Seok<sup>2</sup>, KIM Yong Seung<sup>3</sup>, YOOK Jong-Gwan<sup>4</sup>, JUNG Jongwan<sup>5</sup>(Daegu University, Physics Education. <sup>1</sup>Sejong University, Institute of Nano and Advanced Materials Engineering. <sup>2</sup>Korea Research Institute of Chemical Technology, Thin Film Materials Research Group. <sup>3</sup>Sejong University, Graphene Research Institute. <sup>4</sup>Yonsei University, School of Electrical and Electronic Engineering. <sup>5</sup>Sejong University, Graphene Research Institute & Institute of Nano and Advanced Materials Engineering.)

P4-E098

**Fabrication of Wet-Spun Graphene and Graphene-CNT Nanocomposite Fiber** / YEO Chang Su, CHO Jang Yean, SHIN Min Kyoan, HAN June Beom<sup>1</sup>, JU Sang Hyun<sup>1</sup>, PARK Sang Yoon(Advanced Institutes of Convergence Technology, Seoul National University, Suwon. <sup>1</sup>Department of Physics, Kyonggi University, Suwon, Gyeonggi-Do 443-760, South Korea.)

P4-E099

**Analysis on the Quantum Hall effect in two-terminal Graphene device** / KIM Joong Gyu, KANG Haeyong<sup>1</sup>, PARK Jeongmin, YOON Yoojoo, PARK Nahee, LEE Yourack, KIM Jeong-gyun, KIM Donggyun<sup>2</sup>, YUN Hoyeol<sup>3</sup>, LEE Sang Wook<sup>3</sup>, SUH Dongseok(성균관대학교 CINAP, 에너지과학과. <sup>1</sup>성균관대학교, 에너지과학과. <sup>2</sup>성균관대학교, 공학계열. <sup>3</sup>건국대학교, 물리학과.)

P4-E100

**그래핀 와이어 제작 및 특성 분석** / 김호종, 정수용, 장수경<sup>1</sup>, 윤용주<sup>2</sup>, 이삼녕<sup>3</sup>, 하동한(한국표준과학연구원 양자측정센터. <sup>1</sup>연세대학교 물리학과. <sup>2</sup>건국대학교 신소재융합공학과. <sup>3</sup>한국해양대학교 나노반도체공학과.)

P4-E101

**Graphene field-effect transistor with ferroelectric substrate** / PARK Nahee, KANG Haeyong<sup>1</sup>, YOON Yoojoo, LEE YouRack, PARK Jeongmin, KIM Jeong-gyun, KIM Joong Gyu, YUN Hoyeol<sup>2</sup>, LEE Sang Wook<sup>2</sup>, SUH Dongseok(성균관대학교 CINAP, 에너지과학과. <sup>1</sup>성균관대학교, 에너지과학과. <sup>2</sup>건국대학교, 물리학과.)

P4-E102

**Si nanowires on graphene for improving interface in lithium ion battery** / XIA Fan, KIM Su Han, LEE Won Woo, PAIK Ungyu, PARK Won Il(한양대학교 신소재공학과.)

P4-E103

**Thermal conductivity measurement of CVD grown mono- and bilayer MoS<sub>2</sub> by Raman spectroscopy** / 배정준, 정혜윤, 한강희, 김현, 김재수, 김성태, 김기범, 임성주, 이영희(IBS 나노구조물리연구단 성균관대학교.)

P4-E104

**Exceptionally High Power Output Nanogenerators Originated From Surface Piezoelectricity Effects of Ultrathin ZnO Nanoflakes**

/ NGOC Huynh Van, KANG Dae Joon(Department of Physics, Sungkyunkwan University, Suwon 440-746, Korea.)

P4-E105

**Engineering of domain dynamics in strained VO<sub>2</sub> nanowires /**

YANG Hyoung Woo, KANG Dae Joon<sup>1</sup>(Department of Physics, Sungkyunkwan University, Suwon 400-746, Korea. <sup>1</sup>Department of Physics, Sungkyunkwan University, Suwon 440-746, Korea.)

P4-E106

**Quantum Hall Effect in Hexagonal Boron Nitride – Graphene – h-BN Sandwich Structure with Edge Contacts /**

TRUONG Thuy-Kieu, KANG haeyong<sup>1</sup>, PARK Jeongmin<sup>2</sup>, KIM Joong Gyu<sup>2</sup>, YOON Yoojoo<sup>2</sup>, PARK Nahee<sup>2</sup>, KIM Jeong-Gyun<sup>2</sup>, LEE Yourack<sup>2</sup>, YUN hoyeol<sup>3</sup>, LEE Sang Wook<sup>3</sup>, SUH Dongseok(성균관대학교 CINAP, 에너지과학과. <sup>1</sup>성균관대학교, 에너지과학과. <sup>2</sup>성균관대학교 CINAP, 에너지과학과. <sup>3</sup>건국대학교, 물리학과.)

P4-E107

**Effect of rapid thermal anneal on the magnetic tunnel junctions with MgO barrier /**

민길준(표준과학연구원.)

P4-E108

**Tungsten Doping Effect On Electrical, Structural Properties Of**

**V<sub>1-x</sub>W<sub>x</sub>O<sub>2</sub>(0≤x≤4.0) Thin Films By Sol-gel Method /** 조진철, 신준환, 김현택(UST 차세대소자공학과. <sup>1</sup>ETRI MIT창의연구센터.)

P4-E109

**Modification Of Metal-Insulator Transition In VO<sub>2</sub> Films Grown On TiO<sub>2</sub> Substrates /**

KIM Hyun-Tak, SLUSAR Tetiana, CHO Jin-cheol<sup>1</sup>(ETRI, MIT Creative Research Center. <sup>1</sup>UST, Advanced Device Technology.)

P4-E110

**Influence of Patterned-Hole size on Preferred Orientation of GaN Grown on m-plane Sapphire Substrates /**

주미연, 윤한섭, 이혜미, 장동수, 이상화, 김진교(경희대학교, 물리학과.)

P4-E111

**Control of Spontaneous Polarity Inversion of m-oriented GaN Twins Grown on Patterned m-plane Sapphire Substrates /**

장동수, 윤한섭, 주미연, 이혜미, 이상화, 김진교(경희대학교, 물리학과.)

P4-E112

**Calcium chlorapatite: RE3+ (RE = Dy, Eu, Pr, 및 Sm) 분말의 합성 온도 조건과 물성 연구 /** 하명규, 양호순<sup>1</sup>, 홍경수(한국기초과학지원연구원 부산센터, <sup>1</sup>부산대학교 물리학과.)

P4-E113

**열처리한 이성분계 텔레늄 유리 결정에서의 구조 및 광특성 연구 /** 하명규, 김현규, 양호순<sup>1</sup>, 홍경수(한국기초과학지원연구원 부산센터, <sup>1</sup>부산대학교 물리학과.)

P4-E114

**A novel acoustic lens built with a low dispersive metamaterial /** 이상훈, 김문수, 이승현, 박춘만(서남대학교 보건의료공학과, <sup>1</sup>(주)삼진.)

P4-E115

**Sm3+, Eu3+, 및 Pr3+를 첨가한 Ca5(P04)3Cl의 합성 및 광학적 특성 연구 /** 김영경, 양호순, 홍경수(부산대학교 물리학과, <sup>1</sup>한국기초과학지원연구원 부산센터.)

P4-E116

**희토류 이온을 첨가한 K2O-Na2O5-TeO2 유리의 합성과 물성연구 /** 김현규, 하명규, 양호순<sup>1</sup>, 홍경수(한국기초과학지원연구원 부산센터, <sup>1</sup>부산대학교 물리학과.)

2014년 10월 24일 금요일 11:00 - 12:45

장소: 포스터발표장

## P4-H023

**Ion Energy Distribution in Ballistic-mode Plasma Immersion Ion Implantation for Surface Modification of Insulating Material / 이창호, 이희재, 남궁원<sup>1</sup>, 조무현(포항공과대학교, 물리학과, <sup>1</sup>포항가속기연구소.)**

## P4-H024

**Generation of quasi-monoenergetic electron beams by laser wakefield acceleration in a tapered gas cell / 남인혁(광주과학기술원, 물리광학과.)**

## P4-H025

**Comparison of the beam dynamics for RAON LEBTRACK between TRACK and DYNAC / JANG Ji-Ho, JIN Hyun-Chang, HONG In-Seok, JEON DongO(IBS.)**

## P4-H026

**14 MeV 중성자와 17 MeV 양성자에 의한 Fe, Cr, Ni 에서의 변위원자수 전산모사 / LEE Bo-Young, OH Joo-Hee, KIM Dong-Woo, KO Seung-Kook, KIM HeeSoo<sup>1</sup>, NOH Seung-Jeong<sup>1</sup>(울산대학교 물리학과, <sup>1</sup>단국대학교.)**

## P4-H027

**A study of multi-harmonic buncher at RAON heavy ion accelerator / JIN Hyunchang, JANG Ji-Ho, HONG In-Seok(IBS.)**

## P4-H028

**Thermo-hydraulic behavior trend by flow imbalance during the magnet quench / LEE HyunJung, PARK D. S., JOO J. J., MOON K. M., KIM N. W., LEE Y. J.(National Fusion Research Institute.)**

## P4-H029

**Implementation of the Radiation Safety System for the Medical LINAC / LEE Mujin, LIM Heuijin, LEE Manwoo, KANG Sang Koo, JEONG Dong Hyeok, YANG Kwangmo(Dongnam Institute of Radiological & Medical Sciences, Research Center.)**

## P4-H030

**핵융합로 구축재료의 수소동위원소 효과 연구(Study of hydrogen-isotope effect ratios for nuclear fusion materials) / 이석관, 변우준, 서희정, 신해원, 김희수, 노승정(단국대학교 죽전캠퍼스 응용물리학과, 나노센서바이오텍 연구소, 용인 448-701.)**

**P4-H031\***

홀 추력기 시스템을 위한 전자빔 방출기의 플라즈마 특성 연구 / 한응희, 김호락, 임유봉, 선종호<sup>1</sup>, 최원호(KAIST, 물리학과. <sup>1</sup>경희대학교, 우주과학과.)

**P4-H032\***

**Enhancement of the Betatron Radiations of a Laser-plasma Accelerated Electron by Off-centroid Laser Injection** / LEE Tae-hee, UHM Han-sup<sup>1</sup>, NAM In-hyuk, JANG Do-geun, SUK Hyyong(Department of Physics and Photon Science, Gwang-ju Institute of Science and Technology (GIST). <sup>1</sup>Department of Electrophysics, Kwangwoon University.)

**P4-H033\***

**F82H의 수소투과 특성실험(Hydrogen permeation property experiments in F82H)** / 변우준, 이석관, 신해원, 서희정, 김희수, 노승정(단국대학교 죽전 센트로캠퍼스 응용물리학과, 용인 448-701.)

**P4-H034\***

**Characterisation of a gas cell for laser wakefield acceleration studies** / PHUNG VANESSA LING JEN, NAM INHYUK, KIM MINSEOK, SUK HYYONG(GWANGJU INSTITUTE OF SCIENCE AND TECHNOLOGY.)

**P4-H035**

**Optical Emission Spectroscopy를 이용한 중수소 플라즈마의 물성 진단** / 오차환, 박경득, 이원욱, 심성용(한양대학교.)

**P4-H036**

**Low Loss Transmission Line Study For KSTAR LHCD System** / 김지현, 남궁원<sup>1</sup>, 조무현<sup>1</sup>(NFRI. <sup>1</sup>PAL, POSTECH.)

**P4-H037\***

**Coherent Transition Radiation from the Interaction of Ultraintense Laser and Ultrathin Foil Target** / BAE Leejin, CHO Byoung-ick(Gwangju Institute of Science and Technology, Department of Physics and Photon Science.)

**P4-H038**

**Surface treatment on vacuum feedthrough for high-power, long-pulse ICRF operation at KSTAR** / 김해진, 왕선정, 김지현, 홍석호, 이유호<sup>1</sup>, 박병호(국가핵융합연구소, <sup>1</sup>카이스트, 원자력 및 양자공학과.)

**P4-H039\***

**PIC code and Envelope code Combination** / 허민섭, 강태연(UNIST.)

**P4-H040**

**RAON 28GHz ECR Ion Source 개발 및 운영시스템 개념설계** / 허정일, 최석진, 김용환, 홍인석, 전동오(기초과학연구원.)

**P4-H041**

중수소 플라즈마의 흡수 스펙트럼 측정 / 오차환, 심성용, 박경득, 이원욱(한양대 물리학과.)

**P4-H042**

**D2 플라즈마 조사된 흑연시료의 열탈착거동(Thermal desorption behavior of D2 plasma irradiated graphite / 김희수, 이석관, 변재덕, 서희정, 변우준, 신해원, 현준원, 노승정, 김도완<sup>1</sup>, 한준희<sup>1</sup>, 이철의<sup>1</sup>(단국대학교 죽전 센트로 캠퍼스 응용물리학과, 용인 448-701. <sup>1</sup>고려대학교 안암캠퍼스 물리학과, 서울 136-701.)**

**P4-H043**

**Spectroscopy study of D<sub>2</sub> plasma and He ion irradiation effects on graphite tile / 이철의, 김도완, 이규원(고려대학교, 물리학과.)**

**P4-H044\***

**Ion acceleration in the radiation pressure regime with ultra-thin foils / SHIN Sang Yun, HAHN Sang June(Department of Physics, Chung-Ang University, Seoul 156-756, Republic of Korea.)**

**P4-H045**

**Study of RF Power Water Load for S-band. / KIM KWANGHOON, KWON SEIJIN, KIM SANGHEE, PARK SOUNGSOO, HU JINYUL, HEO HOON, PARK YONGJUNG, LEE HEUNGSOO(Pohang Accelerator Laboratory.)**

**P4-H046\***

**KSTAR 전자온도 분포 재구성을 위한 연X-선 및 인공신경망 진단계 연구 / 박재선, 장주혁, 이현용, 이승현, 홍주환, 전태민, 송인우, 최원호(카이스트 물리학과.)**

2014년 10월 24일 금요일 11:00 - 12:45

장소: 포스터발표장

## P4-L001\*

X선 우주망원경 트리거 시스템 동작 및 유효성 확인 / 이용훈, JAKUB Ripa, 박일홍, 이직, 박휘우, 송인웅(성균관대학교 물리학과.)

## P4-L002\*

자외선/가시광 추적망원경의 프로그래밍 현황 / 송인웅, 김지은, 정수민, RIPA Jakub, 김민빈, 이경구, 이용훈, 김용욱, 김한욱, 이직, 박일홍(성균관대 물리학과.)

## P4-L003

Application of Artificial Neural Network to Search for Gravitational-Wave Signals Associated with Short Gamma-Ray Bursts / 이현규, 김경민, 김영민<sup>1</sup>, 손재주<sup>2</sup>, 오상훈<sup>2</sup>, 오정근<sup>2</sup>, 이창환<sup>1</sup>, HARRY Ian<sup>3</sup>, HODGE Kari<sup>4</sup>(한양대학교, <sup>1</sup>부산대학교, <sup>2</sup>국가수리과학연구소, <sup>3</sup>AEI-Golm, Germany, <sup>4</sup>Caltech, USA.)

## P4-L004\*

Thermal-Vacuum test of SCD for ISS-CREAM Experiment / LEE Gyung Goo, LEE Jik, PARK Il Hung, PARK Hwi Woo, JEON JinA<sup>1</sup>, LEE Hye Young<sup>1</sup>, CHOI Hyun Suk<sup>2</sup>(Department of physics, Sungkyunkwan Univ. <sup>1</sup>Basic Science Institute, Sungkyunkwan Univ. <sup>2</sup>Korea Institute of Industrial Technology.)

## P4-L005

Linear and Nonlinear Correlation Analysis for Auxiliary Channels of LIGO Gravitational-Wave Detector / 오정근, 오상훈, 손재주, 김영민<sup>1</sup>, 김경민<sup>2</sup>(국가수리과학연구소, <sup>1</sup>부산대학교, <sup>2</sup>한양대학교.)