The 10th Asian-APC Program at a Glance

** Tentative version at 2025/11/8 **

December 6 (Sat.) and 7 (Sun.), 2025: Face-to-face meeting

Saturday, 6th	Venue A	Venue B	Venue C	Venue D	Venue E
9:00-10:30	**Opening Session (Venue A)** **Asian-APC Special Symposium & Panel Discussion** **"10 Years of The Asian-APC and Future Prospects of The Next 10 More Years"** Opening Address: Director of the JSAP Kyushu Chapter Prof. Horie (Kagoshima Univ.) 2 min. **(1) Introductory Talk: "History of the Asian-APC"** Prof. Takanobu Kiss (Kyushu Univ.) 8 min. **(2) Plenary Talk: "Applied Physics Studies at KPS Ulsan Chapter and Expectations for the Asian-APC in the Next 10 More Years"** Prof. Sunglae Cho (Univ. of Ulsan) 30 min including Q&A **(3) Plenary Talk: "Education and Research through Japan-Taiwan Collaboration and Expectations for Asian-APC"** Prof. Chien-Yie Tsay (Feng Chia Univ.) 30 min including Q&A **Panel Discussion: "The Direction the Asian-APC Should Take"** 20 min Panelist: Prof. Horie, Prof. Kiss, Prof. Cho, Prof. Jo, Prof. Kim Chair: Prof. T. Yoshitake (Kyushu Univ.)				
10:30-10:45	Break (15 minutes)				
10:45-11:55 AM (5 talks)	11:13 start Organic and Biotechnology [a1-a3] (3) (Japanese Session)	Applied Physics General, Properties [a1-a5] (5) (Japanese Session)	Optics and Photonics [a1-a4] (4 talks) 1 invited D. Nakamura (KU)	Nanocarbon Technology [a1-a3] (3 talks) 2 invited Chair: T. Yoshitake (KU)	Spintronics and Magnetics [a1-a3] (3 talks) 2 invited A. Kohno (FU)
11:55-12:50			Lunch Break, Student Planning Exchange Luncheon Meeting (Venue E) (*Lunch boxes will be provided for up to 60 registrants*) 11:55 – 14:20 Student Chairs: S. Shinya (JSAP-Kyushu), TBC (KPS-APD), TBC (KPS-UGP)		
12:50-13:10					
13:10-14:10					
14:10-14:20					
14:20-15:30 PM first half (5 talks)	Spintronics and Magnetics [p1-3] (3) Superconductivity [p4,5] (2) (Japanese Session)	Crystal Engineering, Amorphous and Microcrystalline Materials [p1-5] (5) (Japanese Session)	Optics and Photonics & Plasma [p1-p5] (5 talks) S. Janssens (OIST)	Nanocarbon Technology & Semiconductors [p1-p4] (4 talks) 1 invited S. Ohmagari (AIST)	Thin Films and Surfaces [p1-p5] (5 talks) Chair: W. Jo (EWU)
15:30-15:40	Break (10 minutes)				
15:40-17:32 Second half of PM (8 talks)	Thin Film, Surface [p6-13] (8) (Japanese Session)	Semiconductor [p6-p13] (8) (Japanese Session)	Optical and Photonics [p6-p12] (7) (Japanese Session) 17:18 end	Interdisciplinary Physics and Related Areas of Science and Technology & Applied Materials Science & Crystal Engineering [p5-p10] (6 talks) 2 invited Chair: Y. Lee (SU)	Spintronics and Magnetics & Superconductivity [p6-p12] (7 talks) 1 invited Chair: S. Cho (UU)
18:00-	**Banquet**				

<table>
<tr><th>Sunday, 7th</th><th>Venue A</th><th>Venue B</th><th>Venue C</th><th>Venue D</th><th>Venue E</th></tr>
<tr><td rowspan="2">9:00-10:38
AM first half
(7 talks)</td><td rowspan="2">Thin Film, Surface and Nanocarbon
[a1-a7] (7)
(Japanese Session)</td><td rowspan="2">9:28 start
Crystal Engineering
[a1-a5] (5)
(Japanese Session)</td><td rowspan="2">Plasma
[a1-a7] (7)
(Japanese Session)</td><td>Short Presentation for Poster
[a1-a30]
9:30-10:05
1 min/poster without discussion
Chair: T. Kiss (KU)</td><td></td></tr>
<tr><td colspan="2">Break (10 minutes)</td></tr>
<tr><td>10:38-10:48</td><td colspan="3">Break (10 minutes)</td><td rowspan="2">Poster Session
[a1-a30]
Odd number
10:15-11:15
&
Even number
11:15-12:15
Chair: T. Kiss (KU)</td><td rowspan="2"></td></tr>
<tr><td>10:48-12:26
Second half of AM
(7 talks)</td><td>Thin Film, Surface
[a8-a14] (7)
(Japanese Session)</td><td>Applied Physics General
[a6-a9] (4)
(Japanese Session)
11:44 end</td><td>Plasma
[a8-a14] (7)
(Japanese Session)</td></tr>
</table>

How to read each session: Session title, last three digits of presentation number, chairperson
Presentation time:
Invited Talk is allowed 28 minutes: 20 minutes talk followed by 8 minutes Q&A.
Contributed Talk is allowed 14 minutes: 10 minutes talk followed by 4 minutes Q&A.

Short presentation of the poster session at the Venue D is 1 minutes without Q&A. Poster presenters are requested to submit one summary slide and submit in advance. Immediately after the short presentation, the poster presentation will start at Venue D.
Poster setup after 14:00 Dec. 6 and tear down until 13:00, Dec. 7.

About the presentation number: For example, 6Da-1 means the first lecture in the morning of Venue D on the 6th, and ∆ mark in front of the lecture number indicates the lecture applied for the Presentation Award.

Instructions for the presentation (Asian-APC)

Oral Session (On-site presentation only)

1. Oral Session will be held with on-site in-person format.
2. Speakers should arrive at least 10 minutes prior to the start of the session, and then check their presentation files. If the speaker uses his/her own PC for the presentation, such PC should also be checked by connecting the projector before starting the session.
3. A PC Windows environment will be equipped at the presentation room. Presentation file should be in Microsoft PowerPoint 2024 (or compatible) to guarantee they will open successfully on the on-site PC before starting the session.
4. If the speaker would like to use a Macintosh computer, please prepare HDMI connector.
5. Invited Oral is permitted 28 minutes including discussion, whereas contributed Oral is permitted 14 minutes including discussion. You should prepare your talk so that you can leave 2-3 minutes for discussion. The presentation time will be strictly kept by the Session Chair.

Poster Session (On-site presentation only)

1. Poster session will be held at " Venue D" near the general reception desk.
2. Please note there is a short-presentation session at “Venue D” prior to the poster presentation. Each presenter can pitch 1-minute short presentation without discussion. Please prepare your talk to highlight the results of your poster presentation.
3. A PC Windows environment will be equipped at the presentation room (Venue D). Presentation file should be in Microsoft PowerPoint 2024 (or compatible) to guarantee they will open successfully on the on-site PC.
4. Poster presenters will be provided with a blank poster board and pushpins for mounting posters on it. Please prepare your poster in A0 size, *i.e.*, 84.1 cm horizontal and 118.9 cm vertical.
5. Presenters must dismantle their posters just after session termination. After that they will be discarded.
6. Presenters are requested to follow the schedule for setting up and taking down their posters as follows.

Poster Session, Dec. 7, Sun.

Poster Setup at Venue D:	after 14:00, Dec. 6
Short Presentation at Venue D:	9:30-10:05
Poster Session at Venue D:	10:15-12:15 (Odd number: 10:15-11:15, Even number: 11:15-12:15)
Poster Tear Down:	12:15-13:00

Scientific Program for Asian-APC

Tentative version 2025/11/6

Dec. 6th / Venue A
Opening Session: Asian-APC Special Symposium & Panel Discussion (9:00-10:30)
"10 Years of The Asian-APC and Future Prospects of The Next 10 More Years"
Chair: T. Yoshitake (Kyushu Univ.)

Opening Address: Director of the JSAP Kyushu Chapter Prof. Horie (Kagoshima Univ.)

(1) Introductory Talk: History of the Asian-APC
Prof. Takanobu Kiss (Kyushu Univ.)

(2) Plenary Talk: "Applied Physics Studies at KPS Ulsan Chapter and Expectations for the Asian-APC in the Next 10 More Years"
Prof. Sunglae Cho (Univ. of Ulsan)

(3) Plenary Talk: "Education and Research through Japan-Taiwan Collaboration and Expectations for Asian-APC"
Prof. Chien-Yie Tsay (Feng Chia Univ.)

Panel Discussion: "The Direction the Asain-APC Should Take"
Panelist: Prof. Horie, Prof. Kiss, Prof. Cho, Prof. Jo, Prof. Kim

Dec. 6th / Venue C
Optics and Photonics (10:45-11:55) (1 invited)
Chair: D. Nakamura (Kyshu Univ.)

6Ca-1 Invited 28 min — Strain engineering of two-dimensional materials for emerging quantum functionalities
Soongsil University *Jae-Pil So

6Ca-2 — Mosaic Baffles in Silicone Optical Technology for Anisotropic Light Trapping
Kyushu Univ. *Tomoya Mihara, Riku Matsuzaki, Hiroaki Yoshioka, Yuji Oki

6Ca-3 — Early Detection of Sweet Potato Stem-Rot Using UV Autofluorescence Imaging
Kyushu Univ.[1], Miyazaki Univ.[2], HaKal Co. Ltd.[3] *O. Uchiyama[1], Z. Wang[1], Y. Sato[1], R. Matsuzaki[1], Y. Oki[1], H. Yoshioka[1], R. Shimooki[2], M. Takeshita[2], M. Miyazaki[3]

6Ca-4 — Direct formation of high-aspect-ratio nanochannels by laser writing
OIST *Stoffel D. Janssens, Cathal Cassidy, Meissha Ayu Ardini, David Vázquez-Cortés, Eliot Fried

Dec. 6th / Venue C
Optics and Photonics (14:20-15:30)
Chair: S. Janssens (OIST)

6Cp-1 Relationship between the Shape of Au Nanoparticles and the Polarization Dependence in LSPR Sensors Integrated on Cladding-less Planar Waveguides
Kyushu Univ. *Y. Sakamoto, D. Haoze, G. Lingpu, H. Yoshioka, N. Tate, F. Sassa, Y. Oki, K. Hayashi

△6Cp-2 Electrically tunable QBIC control using graphene-based metasurfaces
University of Ulsan[1], Cardiff University[2] *Jae Yeong Lee[1], Sodam Jeong[1], Teun-Teun Kim[1], Kyle Netherwood[2], Sang Soon Oh[2]

△6Cp-3 Thin Film Analysis of CuS Conductance for Terahertz Shielding Applications
University of Ulsan[1], Hongik University[2] *Hyeongi Park[1], Sungsan Kang[2], Jaeyoung Lee[1], Sangyeon Pak[2], Teun-Teun Kim[1]

6Cp-4 Optimization of Electrode Pattern on InGaAsP Photovoltaic Devices for Laser Power Converter
Miyazaki Univ. *Kotona Tabata, Takaya Oshimo, Takeru Yamada, Meita Asami, Masakazu Arai

△6Cp-5 Evaluation of stress reduction effect by inserting carbon nanoparticles into hydrogenated amorphous carbon films
Kyushu Univ. *Ryosuke Kinnami, Shinjiro Ono, Manato Eri, Takamasa Okumura, Kunihiro Kamataki, Naho Itagaki, Kazunori Koga, Masaharu Shiratani

Dec. 6th / Venue D
Nanocarbon Technology (10:45-11:55) (2 invited)
Chair: T. Yoshitake (Kyushu Univ.)

6Da-1 Keynote Talk: “The Cutting Edge and Future of Lab-Grown Diamond”
Invited 28 min Prof. Seongwoo Kim (Orbray Co., Ltd.)

6Da-2 STEM observation of single layer graphene flake on a graphene “hot plate”
Invited 28 min Ewha Womans University *SangWook Lee

6Da-3 Fabrication and Electrical Performances of 2D Electronic Devices via the “Nano-LEGO” Method
Ewha Womans Univ. *Hyunjeong Jeong, Hyeonhui Jeong, Sang-Wook Lee

Dec. 6th / Venue D
Nanocarbon Technology & Semiconductors (14:20-15:30) (1 invited)
Chair: S. Ohmagari (AIST)

6Dp-1 Invited 28 min
Unconventional Domain Tessellations in Moiré-of-Moiré Lattices
Ewha Womans University *Changwon Park

6Dp-2
Persistent Photoconductivity in Semiconductors for Physical Reservoir Computing
Soongsil Univ. *Hongseok Oh

△6Dp-3
Improved Optical Gain via Interface Layer for Halide Perovskite Thin Films
Ewha Womans University *Hyeonji Lee, Kwangdong Roh

△6Dp-4
Material and Photonic Strategies for Amplified Spontaneous Emission Optimization in Mixed-Cation Halide Perovskites
Ewha Womans University *Yejin Jun, Kwangdong Roh

Dec. 6th / Venue D
Interdisciplinary Physics and Related Areas of Science and Technology & Applied Materials Science & Crystal Engineering (15:40-17:32) (2 invited)
Chair: Y. Lee (Soongsil Univ.)

6Dp-5 Invited 28 min
Misfit layered composite crystals: Growth and transport properties
University of Ulsan *Sunglae Cho

△6Dp-6
Interface Structure and Chemical State Analysis of Heteroepitaxial β-Ga_2O_3 Films on Diamond (111) Substrates
Kyushu Univ.[1], URC, Kyushu Univ.[2], Kyushu Institute of Tech.[3] *Itsuki Misono[1], Sho Nekita[1], Hongye Gao[2], Yuto Ikegami[1], Sreenath Mylo Valappil[1], Yuki Katamune[2], Hiroshi Naragino[1], Abdelrahman Zkria[1], Tsuyoshi Yoshitake[1]

6Dp-7 Invited 28 min
Quantum Sensing with an NV Center: Nanoscale Magnetometry
University of Ulsan *Young-Gwan Choi

6Dp-8
Development of Electron Filling Control for Two-dimensional Crossbar Quantum Dot Arrays
Kyushu Univ. *SHI JUNPENG, KIYAMA HARUKI

△6Dp-9
Synthesis and Characterization of Zn-Based Spinel Ferrite/PCA-PEG-PCA Core-Shell Nanocomposites for Hyperthermia Applications
Feng Chia Univ. *Chien-Yie Tsay, Min-Yen Lee

6Dp-10
Physical Implementation of Optical Neural Networks Enabled by Long-Persistent Luminescence
Soongsil University *Sangwon Wi, Yunsang Lee

Dec. 6th / Venue E
Spintronics and Magnetics (10:45-11:55) (2 invited)
Chair: A. Kohno (Fukuoka Univ.)

6Ea-1 Invited 28 min
Giant Modulation of Longitudinal Magnetoresistance of the $Fe_{5-x}GeTe_2$ with In-Plane Bias
University of Ulsan *Sanghoon Kim

6Ea-2 Invited 28 min
Phonon Thermal Hall Effect in Mott Insulators via Skew Scattering by the Scalar Spin Chirality
Soongsil University[1], RIKEN[2] *Taekoo Oh[1], Naoto Nagaosa[2]

6Ea-3
Tunable Colossal Anomalous Hall Conductivity in Half-Metallic CoS_2
Soongsil Univ.[1], Kyungpook National Univ.[2], Ajou Univ.[3], Seoul National Univ.[4], Yonsei Univ.[5], Pohang Univ. of Science and Tech.[6] Joonyoung Choi[2], Jin-Hong Park[3], Wonshik Kyung[4], Younsik Kim[4], Mi Kyung Kim[5], Junyoung Kwon[6], Changyoung Kim[4], Jun Won Rhim[3], *Se Young Park[1], Youn Jung Jo[2]

Dec. 6th / Venue E
Thin Films and Surfaces (14:20-15:30)
Chair: W. Jo (Ewha Womans Univ.)

6Ep-1
Physical Properties of Amorphous Gallium Oxide Semiconductor Thin Films and Their Application in Solar-Blind Ultraviolet Photodetectors
W.Y. Zhang, C.Y. Tsay

6Ep-2
Wear-Resistant and Low-Friction Quenched Produced Diamond Coatings on Pure Titanium for Biomedical Applications
Kyushu Univ.[1], Fukuoka Industrial Technology Center[2] *Mahmoud Talaat Youssef[1], Mohamed Ragab Diab[1], Ahmed Hamed Oraby[1], Tomohiro Yoshida[2], Tsuyoshi Yoshitake[1], Abdelrahman Zkria[1]

△6Ep-3
Effect of silicon incorporation on the optical properties of phosphorus-doped polycrystalline diamond films grown by hot-filament CVD
Kyushu Institute of Tech. *Yuka Horita, Satoshi Inoshita, Sora Okuno, Yuki Katamune, Akira Izumi

6Ep-4
Optical quality of diamond thin films studied by spectroscopic ellipsometry
Okinawa Institute of Science and Technology[1], Optical Communication Research Institute, University of San Luis Potosi[2] *David Vazquez-Cortes[1], Osvaldo Del Pozo-Zamudio[2], Raul Balderas-Navarro[2], Eliot Fried[1]

△6Ep-5
Fabrication and Applications of Conductive Diamond Powder with Nitrogen-doped Nanodiamond Coating by Coaxial Arc Plasma Deposition
Kyushu Univ.[1], NIT, Tokyo Coll.[2] *Akinao Watanabe[1], Itsuki Misono[1], Hiroshi Naragino[1], Hidenobu Shiroishi[2], Tsuyoshi Yoshitake[1]

Dec. 6th / Venue E

Spintronics and Magnetics & Superconductivity (15:40-17:32) (1 invited)

Chair: S. Cho (University of Ulsan)

6Ep-6 Invited 28 min
Hybridization exchange - a mechanism to achieve high TC in two-dimensional magnets
University of Ulsan *Sonny H. Rhim

6Ep-7
Spin-orbit torque switching of thulium iron garnet grown by magnetron sputtering in on-axis geometry
Kyushu Univ.[1], Chalmers University of Technology[2], DGIST[3], Shinshu Univ.[4], Sultan Ageng Tirtayasa University[5] *Naoto Yamashita[1,2], Roselle Ngaloy[2], Bing Zhao[2], Soojung Kim[3], Kohei Yamashita[1], Ivo P. C. Cools[2], Marlis N. Agusutrisno[5], Soobeom Lee[4], Yuichiro Kurokawa[1], Chun-Yeol You[3], Hiromi Yuasa[1], Saroj P. Dash[2]

△6Ep-8
Reliable Measurement of Inductance in Cr/Py Bilayer Samples
University of Ulsan *Eungyu Jeon, Nguyen Thi Thanh Huong, Eunji Im, Jaewon An, Sanghoon Kim

△6Ep-9
Spin-Orbit Coupling effect on RKKY interaction in Pt/Co based Synthetic Antiferromagent (SAF)
University of Ulsan *Wonyeong Choi, Eungyu Jun, Sanghoon Kim

6Ep-10
Thermal Analysis of Sonic Welding Process for REBCO Coated Conductors
Kyushu University *S. Sera, T. Kiss, Z. Wu, K. Higashikawa

△6Ep-11
High Throughput Evaluation Method for Composition-Dependent Superconducting Properties in REBCO Combinatorial Samples
Kyushu University[1], ICMAB-CSIC[2] *S.Shiotani[1], Z.Wu[1], K.Higashikawa[1], T.Kiss[1], E. Ghiara[2], C.Pop[2], A.Queralto[2], K.Gupta[2], X.Obradors[2], T.Puig[2]

△6Ep-12
Stochastic Analysis on Critical Current Deterioration Due to Bending of REBCO Coated Conductors
Kyushu Univ. *Ryota Nagayama, Kohei Higashikawa, Takanobu Kiss

Dec. 7th / Venue D

Short Presentation for Poster (Venue D, 9:30-10:05)

Chair: T. Kiss (Kyushu Univ.)

**All the poster presenters are invited to deliver their 1-minute oral presentation without Q&A at Short Presentation Session prior to the poster session*

Poster Session (Venue D, 10:15-12:15)

Odd number: 10:15-11:15

Even number: 11:15-12:15

△7Pa-1 Feasibility Study of Stacking Photovoltaic Layers on a TiO_2/Polyaniline Composite Pellet
Kagoshima Univ. *Taku Matsumoto, Naoki Osako, Kohei Kikukawa, Shunsuke Maeda , Naoki Kitayama, Teruaki Nomiyama, Yuji Horie

7Pa-2 Voltage unbalance compensation of induction motor based on symmetrical components using an all-pass filter
Kyushu Institute of Tech. *Akihiro Imakiire, Kanata Shibayama, Masayuki Watanabe

7Pa-3 Exploring the Potential of Solution Processeed 2T0C DRAM for Low-cost and High-speed Fabrication
Soongsil University[1], Kyung Hee University[2] *Hyosang Kim[1], Yubin Kim[2], Seoung Jun Kang[2], Hongseok Oh[1]

7Pa-4 Plasma Deposition Rate Prediction Based on Optical Emission Spectroscopy and Machine Learning
Kyushu Univ. *Liu Tong , Kazuki Nagamine, Sukma Wahyu Fitriani, Kamataki Kunihiro, Shiratani Masaharu

7Pa-5 Development of an instrument for femtosecond broadband magneto-optical spectroscopy
Kunsan National University *Gi-Joon Jo, Yooleemi Shin, Ji-Wan Kim

7Pa-6 Flexoelectric control of local polarization in wrinkled ferroelectric perovskite oxide
Soongsil University *Nam-Hoon Jung, Jae-Pil So

7Pa-7 Strain-Induced Symmetry Breaking and Plasmonic Amplification of Optical Nonlinear Responses in a Monolayer Semiconductor
Soongsil University *Gon-Young Bae, Jae-Pil So

△7Pa-8 Sputter epitaxy of ZnO films on c-sapphire substrates using wurtzite MgO buffers: effects of buffer growth temperatures
Kyushu Univ. *Masanobu Narazaki, Katsuyuki Harada, Takafumi Yunoue, Naoto Yamashita, Takamasa Okumura, Kunihiro Kamataki, Kazunori Koga, Masaharu Shiratani, Naho Itagaki

△7Pa-9 Application of Nb: SnO_2 conductive nanofibers on collector electrode of battery
Kagoshima Univ. *Kentaro Matsuda, Kento Uchida, Masafumi Obara, Yuta Sasaki, Teruaki Nomiyama, Yuji Horie

△7Pa-10 Sputter epitaxy of InN-rich $(ZnO)_x(InN)_{1-x}$ films on sapphire substrates using 3D ZnO buffers
Kyushu Univ. *Takuya Takahashi, Shotaro Hata, Satoshi Kumamoto, Naoto Yamashita, Kunihiro Kamataki, Takamasa Okumura, Kazunori Koga, Masaharu Shiratani, Haruki Kiyama, Naho Itagaki

△7Pa-11 Investigation of Levitation Behavior of PMMA and Ni-P Microparticles in a Plasma Sheath
Kyushu Univ. *M. Lou, K.Iguchi, T.Sugita,K. Kamataki, D.Yamashita, T.Okumura, N.Itagaki, K.Koga, M.Shiratani

7Pa-12 Terahertz Absorption-Resolved Circular Dichroism for Enantiomeric Discrimination
University of Ulsan *Hyeji Son

7Pa-13 Study of High Temperature Dielectric Stability of $BaTiO_3$-Based Relaxor Ceramics
National Taipei University of Technology Institute of Materials Science and Engineering[1], Prosperity Dielectrics Co., Ltd[2] *Yi-Cheng Chou[1], Yu-Chuan Wu[1], Chun-Ming Huang[2]

7Pa-14 Crystal Structure Evolution and the Relaxor Behavior of Nb- and Mn-Doped BT-BZT Solid Solutions
Institute of Material Science and Engineering, National Taipei University of Technology[1], Prosperity Dielectrics Co., Ltd[2] *Guan-Xuan Wu[1], Yu-Chuan Wu[1], Chun-Ming Huang[2]

7Pa-15 Study of the Structural and Dielectric Properties of $BaTiO_3$ - $Bi_{0.5}Na_{0.5}TiO_3$ Ceramics System
Chinese Culture University[1], National Taipei University of Technology[2] *Cheng-Han Tai[1], Chien-Ming Lei[1], Yu-Chuan Wu[2]

7Pa-16 Valence-state controlled by B-site substitution in Mn-doped $Zn_2Sn_{1-x}Ti_xO_4$ for Color-tunable Luminescence Property
Soongsil University *Yu June Kim, Sang Won Wi, Ji Woo Seo, Yun Sang Lee

7Pa-17 Optical Thermometric and Anti-counterfeiting Properties of Er^{3+}/Yb^{3+} co-doped $Ca_3Al_2Ge_3O_{12}$ Garnet Ceramics
Soongsil University *JaeYeop Oh, Jaeho Han, Sangwon Wi, Dongjae Lee, Sunghoon Choi, Yunsang Lee

7Pa-18 Effect of Gd^{3+} Co-doping on the Emission Properties of $SrY_2O_4:Tb^{3+}$
Soongsil University[1], Kyungpook national University[2] *Wisung Shin[1], Seonghun Choi[1], Yunsang Lee[1], Hongjoo Kim[2], Nguyun Duc Ton[2]

7Pa-19 Identification of the Shift Current Photovoltaic Materials Based on Materials Database: First-Principles Study
Soongsil Univ. *Jae Seong Lee, Jiwon Sun, Kyoungmin Min, Se Young Park

△7Pa-20 First-Principles Study of Electronic and Magnetic Properties of Half-Metallic Co_2MnAl
University of Ulsan *Jonghyeon Noh, Minjae Yoo, Guihyun Han, Seonghyeon Rhim

△7Pa-21 Three-Dimensional Magnetization Reconstruction of FePt/Ru/CoFeB Using NV Center Magnetometry
University of Ulsan[1], Max Planck Institute for Chemical Physics of Solids[2] *Haneul Kim[1], Eunji Im[1], Young-Gwan Choi[1], Uri Vool[2], Sanghoon Kim[1]

△7Pa-22 Spin Torque Efficiency in Mn_3Pt/FM bilayers
University of Ulsan *Jaewon An, Siha Kim, Haneul Kim, Sanghoon Kim

△7Pa-23 Identification of Obstacles Caused by Sound Welding Process in FFDS Conductors Based on Object Detection
Kyushu University *S. Shinoda, Z. Wu, K. Higashikawa, and T. Kiss

7Pa-24 Development of Image Classification Model for Improvement of Reliability of REBCO Coated Conductor Mass-Production
Kyushu Univ.[1], Faraday Factory Japan LLC[2] *HUA YICHENG[1], Z. Wu [1], K. Imamura[1], T. Kiss[1], A. Li[2], T. Yamamoto[2], V. Petrikyn[2], S. Lee [2]

7Pa-25 Dual-Mode Electrical-Optical Oxygen Sensor Based on MoS_2 Quantum Dot-Decorated Bridging GaN Nanowire Heterostructure
Chinese Culture University An-Ting Hsiao, *Meng-Jer Wu

7Pa-26 1k active-matrix thermal sensor array using IGZO thin film transistors
Soongsil University *Hyunsoo Kim, Hongseok Oh

7Pa-27 Investigation of gate dependent photoresponse characteristics of IGZO TFTs
Soongsil University *Jeong Sehyeon, Oh Hongseok

7Pa-28 Investigation of Double-Gate In_2O_3 Semiconductor TFTs
Soongsil Univ. *Kyusun Han, Hongseok Oh, Jaegoo Lee

7Pa-29 Molecular Beam Epitaxial Growth of P-doped $Zn_{1-x}Cd_xTe$ thin films on GaAs(100) substrate using a cracked Zn_3P_2 dopant source material
Saga Univ. *Alexander Freeman, Muhamad Mustofa, Katsuhiko Saito, Qixin Guo, Tooru Tanaka

7Pa-30 Fabrication and Mechanical Resonance Performances of Graphene-Based Nano/Micro-mechanical Resonators
Ewha Womans Univ. *Subin Yang, Yugyeong Je, Hyunjeong Jeong, Sang Wook Lee