

The 9th Asian-APC Program at a Glance

** Tentative version 2024/11/18 **

December 7 (Sat.) and 8 (Sun.), 2024: Face-to-face meeting

Saturday, 7th	Venue A	Venue B	Venue C	Venue D	Venue E
9:30-10:30	Opening (Address by the Chairman of Kyushu Chapter (10 min)_& Plenary talk "Room temperature valley polarization of the B-exciton in monolayer MoS₂" Chair of Applied Physics Division of the Korean Physical Society: Prof. Maeng-Je SEONG (40 min talk and 10 min Q&A) Chair: T. Kiss (KU) and T. Yoshitake (KU)				
10:30-10:40	Break (10 minutes)				
10:40-12:04 AM (6 talks)	Optical and Photonics [a1 – a5] (5) (Japanese Session) 11:50 end	Semiconductor [a1 – a5] (5) (Japanese Session) 11:50 end	Optics and Photonics [a1-a3] (3) 3 invited	Semiconductors [a1-a5] (5) 1 invited	Spintronics and Magnetics [a1-a3] (3) 3 invited
12:04-12:50	Lunch Break 12:04 – 14:20				
12:50-13:10					
13:10-14:10					
14:10-14:20					
14:20-15:44 PM first half (6 talks)	Crystal Engineering [p1 – p5] (5) (Japanese Session) 15:30 end	Plasma [p1 – p6] (6) (Japanese Session)	Optics and Photonics [p1-p6] (6) Chair: T. T. Kim (UU)	Semiconductors [p1-p6] (6) Chair: H. Kang (PNU)	Spintronics and Magnetics & Plasma Electronics [p1-p5] (5) 1 invited
15:44-15:54	Break (10 minutes))				
15:54-17:46 Second half of PM (8 talks)	Thin Film, Surface and Nanocarbon [p6 – p11] (6) (Japanese Session) 17:18 end	Applied Physics General, Properties, Superconductivity [p7 – p14] (8) (Japanese Session)	Optics and Photonics [p7-p14] (8)	Thin Films and Surfaces & Organic Molecules and Bioelectronics [p7-p13] (7) 1 invited	Superconductivity & Applied Materials Science [p6-p12] (7) 1 invited Chair: T. Kiss (KU)
18:00-	Banquet				

Sunday, 8th	Venue A	Venue B	Venue C	Venue D	Venue E
9:30-10:26 AM first half (4 talks)	Crystal Engineering [a1 – a4] (4) (Japanese Session) 9:44-10:40	Plasma [a1 – a5] (5) (Japanese Session) 10:40 end	Organic and Biotechnology [a1 – a5] (5) (Japanese Session) 10:40 end	Amorphous and Microcrystalline Materials & Nanocarbon Technology [a1-a2] (2) 2 invited	Interdisciplinary Physics and Related Areas of Science and Technology & Crystal Engineering [a1-a4] (4)
10:26-10:35	Break (10 minutes)			Break (9 minutes)	
10:35-12:30 Second half of AM (7 talks)	Thin Film, Surface and Nanocarbon [a5 – a11] (7) (Japanese Session) 10:50-12:28	Semiconductor [a6 – a12] (7) (Japanese Session) 10:50-12:28		Asian-APC Short Presentation for Poster Chair: T. Kiss (KU) 10:35-11:10 & Poster Session (Venue PS) 11:20-12:30	

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 S 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 PS.

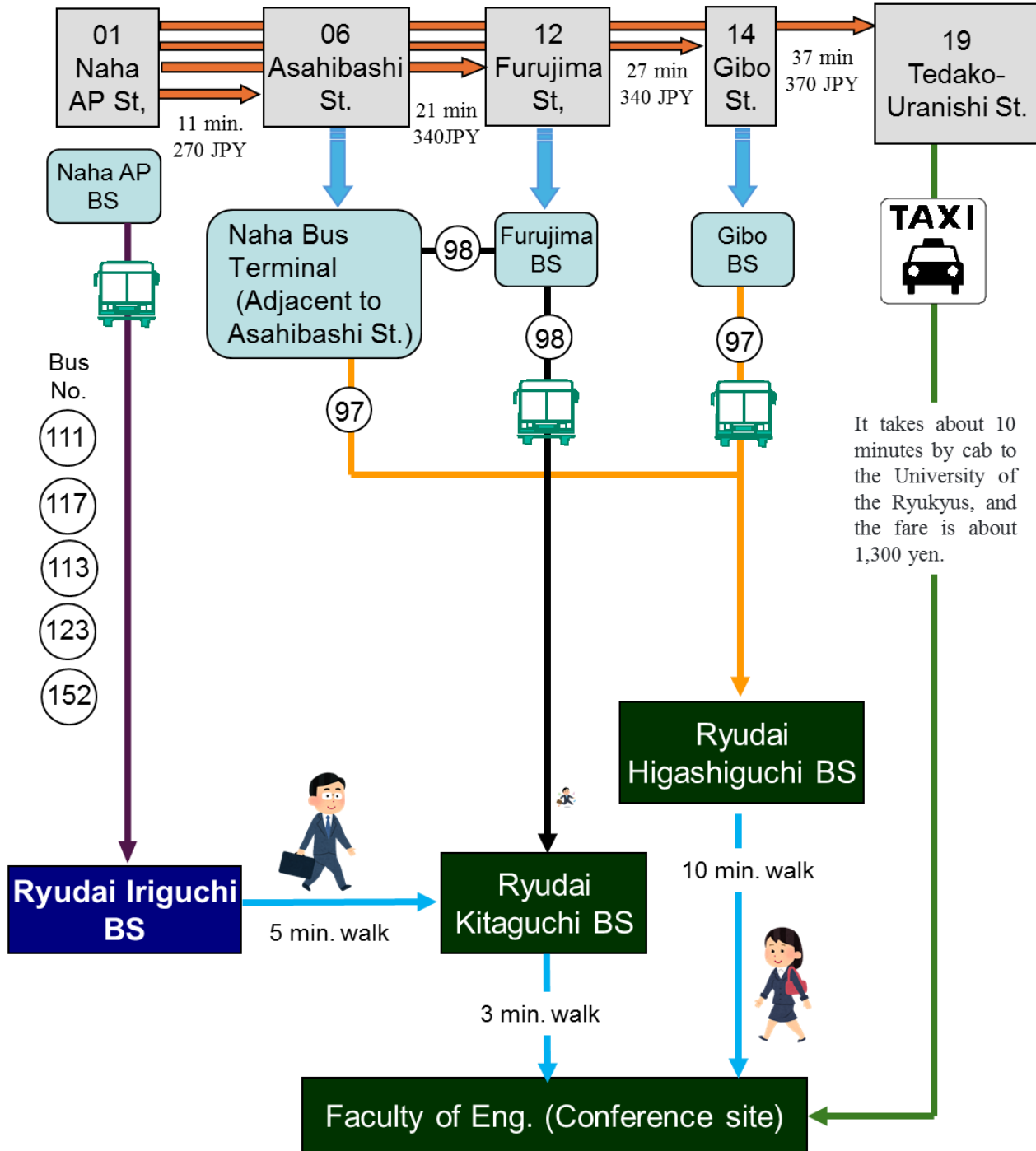
Poster setup at 9:00 Dec. 8 and tear down until 13:00, Dec. 8.

About the presentation number: For example, 7Aa-1 means the first lecture in the morning of Venue A on the 7th, and Δ mark in front of the lecture number indicates the lecture applied for the Presentation Award.

Access to the University of the Ryukyus

To access the university from Naha City, you can take a cab from Tedako-Urasai Station on the Yui Rail or take buses No. 97 or 98 and get off at the last stop, "Ryudai Kitaguchi BS." [The university website](#) lists bus numbers 294 and 297 from Tedako-Urasai Station and bus number 94 from Shuri Station, but please note that these buses are not available on weekends. For accommodation, the Kokusai-dori and Omoromachi areas are convenient for both monorail and bus transportation.

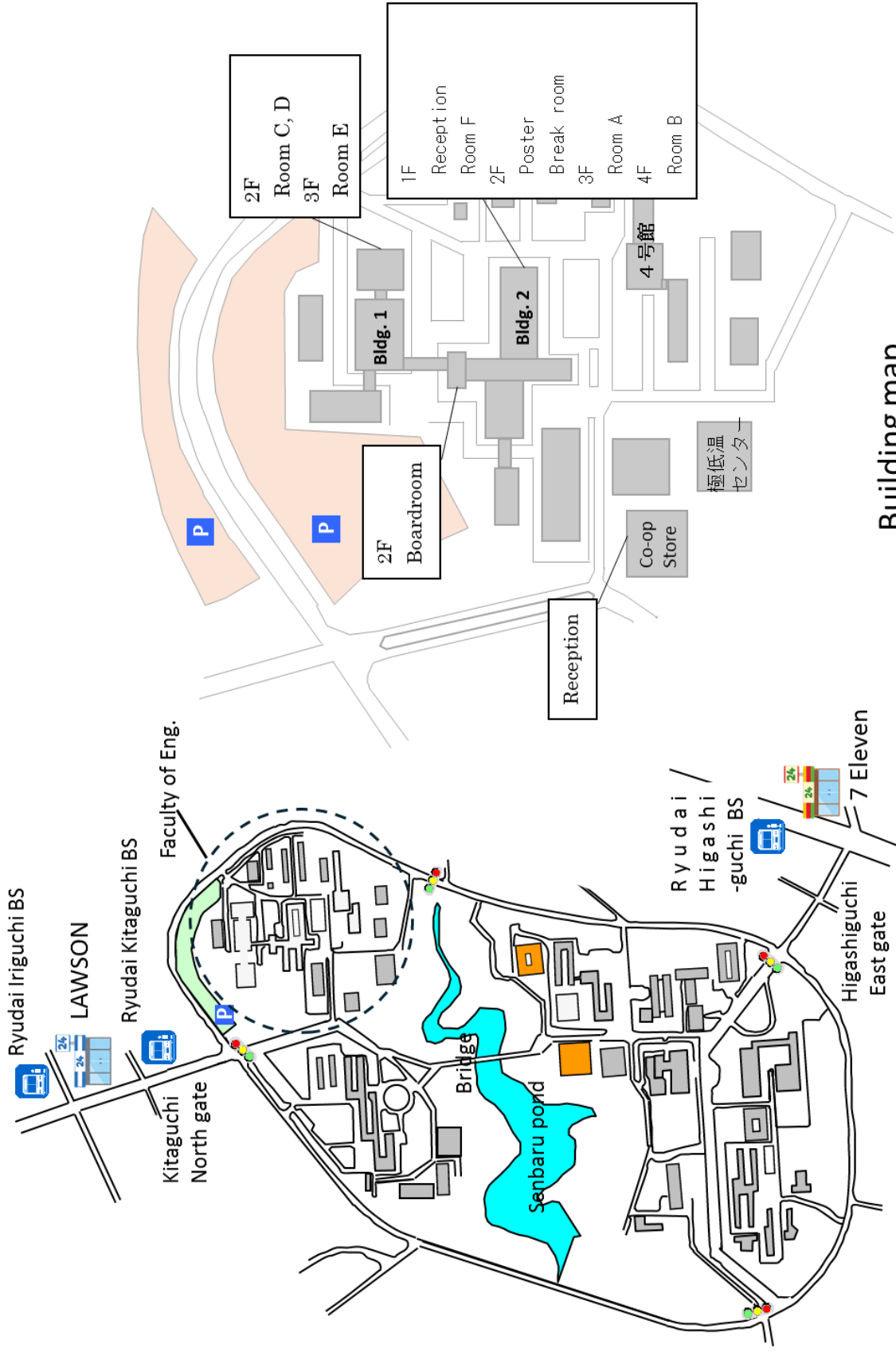
Okinawa Urban Monorail (Yui rail St.)



Morning timetable for local buses 97 and 98

Bus line No. 98 (to the Univ., approx. 50 min.)				
Bus Stop	Time table (weekend)			Fare (JPY)
	Naha Bus Terminal (No.9 BS)	7:18	7:49	
Kencho Kitaguchi	7:21	7:52	8:27	9:02
	Hotel collective	7:24	7:55	8:30
Makishi	7:27	7:58	8:33	9:08
	Asato	7:28	7:59	8:34
Asato-Ikku	7:29	8:00	8:35	9:10
Omoro-machi	7:31	8:02	8:37	9:12
	Makabi	7:34	8:05	8:40
19 bus stops passed				
Ryudai Kitaguchi	8:00	8:32	9:07	9:46
				660円

Bus line No.97 (to the Univ., approx. 60 min.)							
Bus Stop	Time table (Saturday Sunday)			Fare (JPY)			
	Naha Bus Terminal (No.9 BS)	6:30	6:43		7:30	7:38	8:30
Kencho Kitaguchi	6:32	6:45	7:32	7:40	8:33	8:36	260
	Hotel collective	6:34	6:47	7:34	7:42	8:37	
Makishi	6:37	6:50	7:37	7:45	8:41	8:44	
Asato	6:38	6:51	7:38	7:46	8:43	8:46	
22 bus stops passed							
Ryudai Higashiguchi	7:11	7:24	8:12	8:19	9:20	9:17	600
8 bus stops passed							
Ryudai Kitaguchi	7:27	7:37	8:28	8:32	9:38	9:32	660



Senbaru Campus

Building map
Faculty of Engineering

Scientific Program for Asian-APC

****Tentative version 2024/11/18****

Dec. 7th

Opening Session and Plenary Talk (9:30-10:30)

Chairs: T. Kiss (Kyushu Univ.) and T. Yoshitake (Kyushu Univ.)

7Ca-PL1 Room temperature valley polarization of the B-exciton in monolayer MoS₂
Chung-Ang University, Korea *Maeng-Je SEONG

Dec. 7th / Venue C

Optics and Photonics (10:40-12:04) (3 invited)

7Ca-1 Non-Hermitian Metasurfaces for Sensitive Optical Systems
Invited University of Ulsan Teun-Teun Kim
28 min

7Ca-2 Towards Photonic Interconnects between Ion Traps
Invited OIST Hiroki Takahashi
28 min

7Ca-3 Time-resolved Photoemission Spectroscopy: Visualizing electrons in Time, Space, Energy and
Invited Momentum
28 min OIST Julien Madeo

Optics and Photonics (14:20-15:44)

Chair: T. T. Kim (Univ. Ulsan)

7Cp-1 Optical sensors for temperature and time by using luminescent properties in rare-earth ion doped oxides
Soongsil Univresity *Y. S. Lee, S. Wi, D. Lee, J. H. Han, C. Y. Lee, S. H. Choi, J. W. Seo

7Cp-2 Demonstration of Physical Layer High Security Terahertz Wave Wireless Communications Using XOR Operations
Kyushu Univ. *Shinji Iwamoto, Takuya Yano, Naoto Masutomi, Yoshiki Kamiura, Ryo Doi, Yuya Mikmami, Kazutoshi Kato

7Cp-3 300-GHz beam steering wireless communication using an array photomixer
Kyushu Univ.¹, Kyushu Univ.², Kyushu Univ.³, Kyushu Univ.⁴ *Ryo Doi¹, Yoshiki Kamiura¹, Yuya Mikami¹, Kazutoshi Kato¹

7Cp-4 Investigation of Photoemission in InGaN-Based Vacuum-Travelling-Carrier Photodiodes for THz-wave Generation
Kyushu Univ.¹, AIST², Nagoya Univ.³, Photoelectron Soul Inc.⁴ *Chengyuan Qian¹, Zhihui Chen¹, Yuanhao Li¹, Kevin Manuel Ali¹, Yoshimasa Sugimoto², Hiroyuki Ishii², Tatsuro Maeda², Yoshio Honda³, Daiki Sato⁴, Tomohiro Nishitani⁴, Yuya Mikami¹, Kazutoshi Kato¹

7Cp-5 Multilevel FSK Terahertz-Wave Transmission by Photomixing Using Two High-Speed Wavelength Tunable Lasers
Kyushu Univ.¹, NTT Corporation² *Ryota Kaide¹, Naoto Masutomi¹, Shenghong Ye¹, Yuya Mikami¹, Yuta Ueda², Kazutoshi Kato¹

7Cp-6 Terahertz Wave Beam Scanning using Optical Phased Array
Kyushu Univ. *Masato Kawano, Ryo Doi, Yoshiki Kamiura, Yuya Mikami, Kazutoshi Kato

Optics and Photonics (15:54-17:46)

- 7Cp-7 High Sensitive Detection of Conductive Bio-Molecules Using Exceptional points on Non-Hermitian Metasurfaces
Univ. of Ulsan¹, KAIST² *Hyunwoo Park¹, Hyeji Son¹, Sodam Jeong¹, Soojeong Baek², Teun-Teun Kim¹
- △7Cp-8 Controllable Transition from QBIC to BIC in Tunable Graphene-Based Metasurfaces
University of Ulsan¹, Cardiff University² *Jae Yeong Lee¹, Sodam Jeong¹, Teun-Teun Kim¹, Kyle Netherwood², Sang Soon Oh²
- 7Cp-9 Bandwidth extension of photonic terahertz wave generation with a waveguide combiner for Beyond 5G/6G
Kyushu Univ.¹, Kyushu Univ.², Kyushu Univ.³, Kyushu Univ.⁴ *Ryo Doi¹, Yoshiki Kamiura¹, Yuya Mikami¹, Kazutoshi Kato¹
- △7Cp-10 Metamaterial Polarizers with High Extinction Ratio
University of Ulsan¹, University of California² *Hyeonggi Park¹, Hyunwoo Park¹, Jaeyoung Lee¹, Jae-Eon Shim¹, Hyeji Son¹, Soojeong Baek², Teun-Teun Kim¹
- 7Cp-11 Generation and manipulation of quantum emitters in a van der Waals semiconductor
Soongsil University *Jae-Pil So
- △7Cp-12 Control of Lasing Wavelength and Polarization Mode from Halide Perovskite Thin Films
Ewha Womans University *Gayoung Lee, Kwangdong Roh
- 7Cp-13 High performance micro-ring modulator based on PLZT
Kyushu Univ. *Yuexin Yin
- 7Cp-14 High-speed modulation using highly oriented PLZT fabricated by sol-gel process
Kyushu Univ. *Sahar Alasvand Yazdani, Yuexin Yin, Shiyoshi Yokoyama

Dec. 7th / Venue D

Semiconductors (10:40-12:04) (1 invited)

- 7Da-1 Improvement of optoelectronic properties in a-IGZO phototransistors using additional food dye
Invited layer
28 min Pusan National University¹, Samsung Display² Youngchun Jo¹, Kanghyun Kim², *Haeyong Kang¹
- △7Da-2 Nitrogen gas fraction dependence on physical properties of Cu₃N thin film grown on α -Al₂O₃ (0001) substrates by radio frequency magnetron sputtering
Saga University, Saga, Japan¹, Comilla University, Cumilla, Bangladesh² ○Shanta Majumder¹, Katsuhiko Saito¹, Qixin Guo¹, Tooru Tanaka¹, Md Abdul Majed Patwary²
- 7Da-3 Comparative Study of the Photoelectronic Performance Between a-GaO_x and a-GaSnO_x MSM Structured Deep UV Photodetectors
Feng Chia Univ., Taiwan¹, Kyushu Univ.² *Kai Hsiang, Liao¹, Chien Yie, Tsay¹, Yajun, Feng², Dong, Wang²
- △7Da-4 Enhancement of Stability and Performance in FAPbI₃ Perovskite Solar Cells Through Mixed Cs Deposited via Sequential Thermal Evaporation
Ewha Womans University *Yeonsoo Gim, Ha Kyung Park, William Jo
- △7Da-5 Tailoring Interlayer Chiral Exchange by Azimuthal Symmetry Engineering
Taiwan University *Jui-Hsu Han

Semiconductors (14:20-15:44)

Chair: H. Kang (Pusan National Univ.)

- △7Dp-1 Formation of Diamond Low-leakage Schottky Barrier Diodes for Photodetector Applications
Kyushu Univ.¹, AIST² *Junya Shiraga¹, Ali Abdelrahman¹, Shinya Ohmagari²,
Tsuyoshi Yoshitake¹
- △7Dp-2 Low resistance pseud-vertical Schottky barrier diodes fabricated on heteroepitaxial diamond
Kyushu Univ.¹, AIST² *Ali Abdelrahman^{1,2}, Shinya Ohmagari², Tsuyoshi Yoshitake¹
- △7Dp-3 Factors that affect amplified spontaneous emission properties of halide perovskite thin films
Ewha womans university *Hyeonji Lee, Gayoung Lee, Kwangdong Roh
- △7Dp-4 Amplified Spontaneous Emission towards Blue via Halide Exchange Method of Perovskite Thin
Films
Ewha Womans University *Yejin Jun, Kwangdong Roh
- 7Dp-5 Growth of high-quality P-doped ZnTe layers by molecular beam epitaxy using a cracked Zn₃P₂
dopant source and its integration into ZnTe-based solar cells
Saga Univ. *Muhamad Mustofa, Katsuhiko Saito, Qixin Guo, Tooru Tanaka
- △7Dp-6 Enhanced photovoltaic properties via adjusting charge-transport layers in Sb₂Se₃ solar cells
Ewha W. Univ.¹, Daegu Gyeongbuk Inst. Sci. Tech. (DGIST)² *Geumha Lim¹, Hoang Van Quy²,
Jae-Baek Lee², Shi-Joon Sung², Dae-Hwan Kim², William Jo¹

Thin Films and Surfaces & Organic Molecules and Bioelectronics (15:54-17:46) (1 invited)

- 7Dp-7 Anisotropic Coulomb Interaction in a Topological Nodal Line Semimetal
Invited Chung-Ang Univ. *Sangjun Jeon
28 min
- 7Dp-8 Cathodoluminescence of nitrogen-doped polycrystalline diamond films by HFCVD method
Kyushu Institute of Tech.¹, NIMS² *Satoshi Inoshita^{1,2}, Yuki Katamune^{1,2}, Akira Izumi¹,
Tokuyuki Teraji², Kenji Watanebe², Satoshi Koizumi²
- 7Dp-9 Flow Rate Optimization: Improving Methane-to-Diamond Transformation Efficiency
OIST *David Vazquez Cortes, Stoffel D. Janssens, Eliot Fried
- 7Dp-10 Sustainable Nanodiamond Composite (NDC) Coatings Fabricated on Cemented Carbide
Substrates for Dry Machining
Kyushu Univ.¹, Kafrelshiekh Univ. Egypt², School of Engineering, Robert Gordon University,
Aberdeen AB10 7GJ, UK³, OSG Corporation, 3-22 Honnogahara, Toyokawa, Aichi 442-8543,
Japan⁴ *Mohamed Ragab Diab^{1,2}, Mohamed Egiza^{2,3}, Koki Murasawa^{1,4}, Hiroshi Naragino¹,
Tsuyoshi Yoshitake¹
- 7Dp-11 Enhancing Corrosion Resistance and Biocompatibility of Mg-Ca Alloys through Atomic Layer
Deposition of Multi-Layer Al₂O₃/ZrO₂ Films
National Taiwan University¹, Kyushu Univ.² ○Hou-Jen Chen¹, Abdelrahman Zkria²,
Tsuyoshi Yoshitake², Hsin-Chih Lin¹
- 7Dp-12 Low-temperature oxidation of Si using H₂O decomposed species by heated catalyst in medium
vacuum region
Kyushu Institute of Tech. *Chihori Kamo, Yuki Katamune, Akira Izumi
- 7Dp-13 A Dual-Mode SERS-LSPR Sensor for Muti Gas Detection
Kyushu Univ. *Yao Wang, Cong Wang, Hao Guo, Fumihiko Sassa, Kenshi Hayashi

Dec. 7th / Venue E

Spintronics and Magnetism (10:40-12:04) (3 invited)

- 7Ea-1 Non-collinear magnets for spintronic applications
Invited University of Ulsan Sanghoon Kim
28 min
- 7Ea-2 A newcomer of one-dimensional $S = 1$ chain, NiTe_2O_5
Invited Ulsan National Institute of Science and Technology (UNIST) Yoon Seok Oh
28 min
- 7Ea-3 Magnetic space group analysis of RuO_2 : three possible Neel vectors and associated magneto-optical Kerr effect
Invited University of Ulsan Sonny H. Rhim
28 min

Spintronics and Magnetism & Plasma Electronics (14:20-15:44) (1 invited)

- 7Ep-1 Ultrafast magnon dynamics induced by femtosecond laser pulses
Invited Kunsan National University Jiwan Kim
28 min
- △7Ep-2 Effect of Mn Deficiency on Interfacial Structure and SOT-Driven Switching Behavior of Magnetic Octupole in Sputtered $\text{W}/\text{Mn}_3\text{Sn}$ Epitaxial Thin Films
University of Ulsan, Ulsan¹, Sungkyunkwan University², Korea Institute of Science and Technology (KIST)³ *Siha Lee¹, Subin Im^{1,2,3}, Eunji Im¹, Donghyeon Lee¹, Siyul Lee¹, Wonyeong Choi¹, Asif Ullah¹, Jinju Pi¹, Jongdo Kim¹, Changgu Lee², Thanh-Huong Thi Nguyen¹, Sanghoon Kim¹
- △7Ep-3 Crystallographic Dependence of Anomalous Nernst Effect in Mn_3Sn Thin Films
University of Ulsan *Asif Ullah, Siha Lee, Dongchan Jeong, Eunji Im, Wonyeong Choi, Nyun Jong Lee, Thanh Huong Thi Nguyen, Sanghoon Kim
- △7Ep-4 Neuromorphic device Characteristics of L1_0 -FePt Based Granular Film
University of Ulsan *Eunji Im, Dongchan Jeong, Wonyoung Choi, Sanghoon Kim
- 7Ep-5 Evaluation of Growth Characteristics of Sugarcane Using Plasma-Irradiated Leaf Mold
Kyushu Univ.¹, Mizukamo-Noen² *Genki Ono¹, Takamasa Okumura¹, Takumi Nakao¹, Naoya Hidaka¹, Hibiki Otake¹, Pankaj Attri¹, Kunihiro Kamataki¹, Naho Itagaki¹, Masaharu Shiratani¹, Yuki Mizuno², Kazunori Koga¹

Superconductivity & Applied Materials Science (15:54-17:46) (1 invited)

Chair: T. Kiss (Kyushu Univ.)

- 7Ep-6 Charge Density Wave and Electron-Phonon Coupling in a Kagome Metal ScV_6Sn_6
Invited Hanyang University¹, University of California, Santa Barbara² D. W. Kim¹, Shuyuan Liu¹,
28 min Chongze Wang¹, H. W. Nam¹, G. Pokharel², Stephen D. Wilson², Jun-Hyung Cho¹, *Soonjae Moon¹
- 7Ep-7 FeTe/FeSe Superlattices: Epitaxial Growth and Superconductivity
Univ of Ulsan *Sunglae Cho, Thi Hoa Vu, Anh Tuan Pham, Taegi Kim, Hwa Jun Lee
- △7Ep-8 Solder-Free Sonic-Welding Process for Metal-Stabilized REBCO Coated Conductors
Kyushu Univ.¹, Railway Technical Research Institute² *Shinya Sera¹, Takanobu Kiss¹, Zeyu Wu¹,
Kenji Suzuki², Kohei Higashikawa¹
- △7Ep-9 Development of a novel technique for the detection of local inhomogeneity in REBCO coated
conductors based on machine learning analysis
Kyushu Univ. *KIKUCHI Sakutaro, Wu Zeyu, KISS Takanobu
- △7Ep-10 Development of a novel continuous bending test method applicable to REBCO high-temperature
superconducting wires for small bending diameter region less than 10 mm
Kyushu Univ. *IBUSUKI Kouyou, KISS Takanobu, WU Zeyu
- 7Ep-11 Multifunctional ZnO nanostructures on graphene films: applications to bio sensors and photonic
synapses
Soongsil Univ.¹, Seoul Nat'l Univ.² *Hongseok Oh¹, Gyu-Chul Yi², Asad Ali², Hyerin Jo¹
- 7Ep-12 Efficient H₂ Generation from Methanol Steam Reforming Using a CuFeO₂-ZnFe₂O₄ Catalyst
Synthesized by Glycine Nitrate Process
Taipei Tech.¹, Tohoku Univ.² Chung-Lun Yu¹, Subramanian Sakthnathan¹, *Te-Wei Chiu¹,
Satoshi Kameoka²

Dec. 8th / Venue D

Amorphous and Microcrystalline Materials & Nanocarbon Technology (9:30-10:26)

(2 invited)

- 8Da-1 Floating gate memory studies base on 2D materials heterostructures
Invited Chungnam National University *Young-Jun Yu
28 min
- 8Da-2 Spinel Nanoferrites as Magnetically Separable and Recyclable Photocatalysts for Visible-Light
Invited Degradation of Organic Dye Solution
28 min Feng Chia University *Chien-Yie Tsay, Tai-Ting Ho

Dec. 8th / Venue E

Interdisciplinary Physics and Related Areas of Science and Technology & Crystal Engineering (9:30-10:26)

- 8Ea-1 The mechanical behavior of paper
Okinawa Institute of Science and Technology *Geoffrey Garcia, Eliot Fried
- 8Ea-2 Direct laser writing of nanochannels
OIST *Stoffel D. Janssens, David Vázquez-Cortés, Eliot Fried
- 8Ea-3 Post-Heat Treatment of Eco-Membranes for Water Desalination
Egypt-Japan University of Science and Technology, Egypt¹, Kyushu Univ.², South Valley University, Egypt³ *Mostafa M. Sayed^{1,2}, Abdelrahman Zkria², Tsuyoshi Yoshitak², Hamouda M. Mousy³, Ahmed H. El-Shazly¹, Marwa ElKady¹
- 8Ea-4 Impact of P doping on properties of ZnCdTe thin films grown by molecular beam epitaxy on GaAs(100) substrates for photovoltaic applications.
Saga University *Enejo Victor Sule, Muhamad Mustofa, Katsuhiko Saito, Qixin Guo, Toru Tanaka

Dec. 8th / Venue PS

Short Presentation for Poster (10:35-11:10)

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 PS, 11:20-12:30)

- 8Pa-1 DFT Study of Urea Oxidation on Modified Ni(OH)₂ Surfaces
Chinese Culture University *Chen-Cheng Liao
- 8Pa-2 Total flow rate in the heat treatment of Ag₈SnS₆ thin films
NIT, Miyakonojo College¹, NIT, Nagaoka College² *Kentarō Mori¹, Hideaki Araki², Youji Akaki¹
- △8Pa-3 Proof of chirality between D-glucose and L-glucose through TDS polarimetry
Univ. of Ulsan *Sujeong Park, Hyeji Son, Teun-Teun Kim
- △8Pa-4 Polarization Characterization of Enantiomers of Tartaric Acid in Terahertz Region
Univ. of Ulsan *Miso Lee, Hyeji Son, Teun-Teun Kim
- △8Pa-5 Glucose Sensing via THz Near-field Molecular Fingerprint Spectroscopy
Univ. of Ulsan¹, Dongguk Univ.², SKKU IBS 2DQH³ *Hyeji Son¹, Jeong-Sik Jo², Hyunwoo Park¹, Taewoo Ha³, Jae-Won Jang², Teun-Teun Kim¹
- 8Pa-6 Control of Terahertz Wave Polarization Rotation through Fermi Level Modulation in Bilayer Graphene
University of Ulsan¹, Korea Institute of Machinery and Materials (KIMM)² *Sodam Jeong¹, Hyeonggi Park¹, Hye Ji Son¹, Eunjin Hwang², Hyeon-Don Kim², Teun-Teun Kim¹
- 8Pa-7 Visualizing Surface Lattice Resonance in Two-dimensional Gold Nanorod Arrays via Fourier-Plane Measurement
University of Ulsan *Jae-Eon Shim, Changwon Seo, Teun-Teun Kim
- △8Pa-8 Defect Engineering of Ferroelectric Hysteresis in Lead-Free Bi_{1/2}(Na,K)_{1/2}TiO₃ Thin Films
University of Ulsan¹, Korea Institute of Science and Technology² *Min-Hui Kim¹, Muhammad Sheeraz¹, Viet-Dung tran¹, Young-Han Shin¹, Chang Won Ahn¹, Tae Heon Kim²

- △8Pa-9 Growth of polycrystalline diamond films and phosphorus doping at low methane concentrations
Kyushu Institute of Tech. *Yuka Horita, Yuki Katamune, Akira Izumi
- △8Pa-10 Improvement of conductivity of non-woven flexible substrates using IZO nanofibers.
Kagoshima Univ. *K. Uchida, Y. Ogawa, K. Matsuda, Y. Uchiyama, D. Saifu, T. Nomiyama,
Y. Horie
- △8Pa-11 Sputter epitaxy of atomically flat $(\text{ZnO})_x(\text{InN})_{1-x}$ films on sapphire using 3D buffer layers:
influence of deposition rate of buffer layer
Kyushu Univ. *Satoshi Kumamoto, Shotaro Hata, Ryota Narishige, Naoto Yamashita,
Kunihiro Kamataki, Takamasa Okumura, Haruki Kiyama, Kazunori Koga, Masaharu Shiratani,
Naho Itagaki
- △8Pa-12 Effect of nanofiberization on ionic conduction at $\text{Li}_{0.35}\text{La}_{0.55}\text{TiO}_3/\text{Li}_4\text{Ti}_5\text{O}_{12}$ interface
Kagoshima Univ. *K. Oura, M. Kurogi, Y. Sasaki, K. Tsuruda, T. Nomiyama, Y. Horie
- △8Pa-13 Epitaxial growth of InN-rich $(\text{ZnO})_x(\text{InN})_{1-x}$ films on sapphire substrate via inverted Stranski-
Krastanov mode using magnetron sputtering
Kyushu Univ. *Shotaro Hata, Ryota Narishige, Naoto Yamashita, Kunihiro Kamataki,
Takamasa Okumura, Haruki Kiyama, Kazunori Koga, Masaharu Shiratani, Naho Itagaki
- △8Pa-14 Electrical and Optical Properties of MoS_2 Monolayers on Plasmonic Au-Nanoislands
Ewha Womans University *Jungyoon Cho, Anh Thi Nguyen, Dong-Wook Kim
- △8Pa-15 Oxidation Effect on MoS_2 Under Controlled Baking Temperature
University of Ulsan *Takmo Jeong, Seok Joon Yun
- 8Pa-16 Design of a Miniaturized Electron Gun for Compact MBE System
University of Ulsan *Jeongwook Park, Taegi Kim, Hwa Jun Lee, Sunglae Cho
- 8Pa-17 Study the dielectric and structural properties of $(1-x)\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3-x\text{BaTiO}_3$ ceramic system
Chinese Culture Univ¹, National Taipei University of Technology² C.-M. Lei¹, *Y.-Y. Luo¹,
C.-H. Tai¹, X.-B. Wang¹, Y.-C. Wu²
- 8Pa-18 Low temperature physical properties of BaZrO_3 single crystal
Department of Physics, Ulsan National Institute of Science and Technology (UNIST), South
Korea¹, Pohang Accelerator Laboratory, Pohang University of Science and Technology
(POSTECH), South Korea² *Yoon Seok Oh¹, Joon Woo Lee¹, Dawood Ahmad¹,
Byeong-Gwan Cho², Tae-Yeong Koo²
- 8Pa-19 Analysis of the Microstructure and Dielectric Properties of $\text{BaTiO}_3\text{-Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3\text{-Nb}_2\text{O}_5$ X9R
Ceramics Prepared Using One-Step Calcination
Institute of Materials Science and Engineering, National Taipei University of Technology
*Yu-Ze Lin, Yu-Chuan Wu
- 8Pa-20 Analysis of the Microstructure and Dielectric Properties of $\text{BaTiO}_3\text{-Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3\text{-SiO}_2\text{-Nb}_2\text{O}_5\text{-}$
 MgO X8R Ceramics Prepared Using One-Step Calcination
Institute of Materials Science and Engineering, National Taipei University of Technology
*Ming-You Cai, Yu-Chuan Wu
- 8Pa-21 Thermal Conductivity and Dielectric Properties of BTO/MXene Composites
Hankuk University of Foreign Studies *Ji Hun Seo, Ye Jin In, Chunli Liu, Lei Liu, Tae Han Kim,
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- △8Pa-22 Fabrication and Optical Characterizations of Au-Nanowire/ MoS_2 Integrated Structures
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- △8Pa-23 Fabrication of Plasmonic Ag Nanogratings using PDMS Templates
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- 8Pa-24 Studies on the Optical Properties of Dy³⁺-doped High Entropy Oxide via Raman and Photoluminescence Spectroscopy
Department of Physics, Ewha Womans University¹, Department of Chemical Engineering and Materials Science, Ewha Womans University², Institut de Moléculaire et des Matériaux d'Orsay, Paris-Saclay University³ *Hanseul Cho¹, Sojeong Ko¹, Joohee Park¹, Seungyeon Lee², Sooyeon Cho², David Berardan³, Claudia Decorse³, Seokhyun Yoon¹
- 8Pa-25 Core Loss Properties of Fe-6.5Si Soft Magnetic Composites Based on Core Molding Conditions
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- 8Pa-26 Spin Hall conductivity of Cu; bulk and (111) thin film
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- △8Pa-27 The effect of parasitic capacitance on the inductance measurement using ac bia
University of Ulsan *Jaewon An, Eunji Im, Jinju Pi, Eungyu Jeon, Sanghoon Kim
- △8Pa-28 Required Dzyaloshinskii-Moriya constant and Perpendicular Magnetic Anisotropy for Zero-Field Skyrmion Formation in a Hole-Structured Bilayer
Kyushu Univ. *Yujian Tang, Kazuhiko Tokunaga, Tsz Chung Cheng, Yuichiro Kurokawa, Hiromi Yuasa
- △8Pa-29 A study on the high-temperature retention characteristics of L1₀-FePt for automotive semiconductor
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- 8Pa-30 Advancing Problem-Solving Capabilities of Spin Hall Nano-Oscillator-based Ising Machines
National Taiwan University *PENG, CHIH-CHEN
- △8Pa-31 Preparation and evaluation of porous titania/polyaniline composite within titania pellet by vacuum impregnation for storage layer of photorechargeable battery
Kagoshima Univ. *T. Matsumoto, S. Maeda, N. Kitayama, T. Nomiyama, Y. Horie
- 8Pa-32 Temperature-Dependent Properties of MoS₂/Perovskite Heterostructure Using Raman Spectroscopy
Ewha Womans University¹, Sungkyunkwan University², Hanyang University³ *Gaeun Kim¹, Seoyeon Ko¹, Seokhyun Yoon¹, Hyeonjun Jeong², Jieun Jo³, Chan Kwon³, Mun Seok Jeong³
- 8Pa-33 Role of alkali ions for beneficial transport effects over grain boundaries in Cu₂CdSnS₄ thin-film solar cells
Ewha W. Univ.¹, Nanyang Tech. Univ.² *Y. Choi¹, E. Julianto², H. K. Park¹, G. Lim¹, A. Ibrahim², S. Lie², L. H. Wong², W. Jo¹
- 8Pa-34 Raman Study on the Origin of Symmetry-Forbidden Phonon Modes in Cobalt Niobate (CoNb₂O₆) Nanofibers
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