

- 1100 Spectral-Domain Green's Function Analysis of Connected Slot Antenna Arrays with Multilayer Dielectric Media**
Dongchu Cho (Ulsan National Institute of Science and Technology, Korea (South)); Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South))
- 1125 Enable Multi-Band Shared-Aperture Patch Array via Symmetrical Residual Current Cancellation**
Chang-Young Lee (University of Science and Technology, UST, Australia); Xi Chen, Li Shiyong, Guoqing Zhao and Houjun Sun (Beijing Institute of Technology (BIT), China)
- 1150 Research on Wireless Technology Connecting Cyber and Physical Systems**
Ryota Taniguchi (NTT Corporation, Japan); Minoru Inomata (NTT, Japan); Wataru Yamada, Tomoki Murakami and Tomoki Ogawa (NTT Corporation, Japan)
- 1215 915MHz Wireless Power Transfer System for Supercapacitor-Energized IoT Terminals**
Wei Lin (The Hong Kong Polytechnic University, Hong Kong)
- Wednesday, October 29 13:40 - 15:20**
- Pos2- Poster Session 2**
- Room E**
- Posm1 Direction Selective Wavefront Engineering with Asymmetric Metagratings**
Zhen Fan (Xian Jiaotong University, France); Jianya Y (Xian Jiaotong University, China); Shah Nawaz Burukur (LEME, France)
- Pos2.2 Fast Calculation Method of Radiation Patterns for on-Glass Electric Dipole Arrays**
Uyso Koma (Tokyo University of Agriculture and Technology, Japan); Toru Udo (Tokyo University of Agriculture and Technology, Japan); Takuji Arima (Tokyo University of Agriculture and Technology, Japan); Keisuke Arai and Osamu Kagaya (AGC Inc., Japan)
- Pos2.3 A Base Station Antenna for 2 GHz and 3.4 GHz with Dual Polarization Using a Frequency-Selective Reflector**
Nobukazu Tanaka and Kei-Kei Chou (Chiba Institute of Technology, Japan)
- Pos2.4 3-D Reconfigurable Wideband Frequency Selective Surface Based on Coupled Slotline Structures**
Rongqi Tang, Hong Wang, Shihong Wang, Xianbo Guo and Wentao Xu (Xidian University, China)
- Pos2.5 Experimental Validation of Up-Down Converter for High-Altitude Platform Station (HAPS)**
Ting Kai Jiang, Chia-Kai Wang and Tzay-Huang Mao (National Taiwan University of Science and Technology, Taiwan)
- Pos2.6 Designing Sparse Planar Arrays with Holes Using Hole-Minimizing Strategy**
Ryachiro Katapala (Yokohama National University, Japan); Steven Wandale (University of Malawi, Malawi); Koichi Ichige (Yokohama National University, Japan)
- Pos2.7 Quantum Computing Formulation for Antenna Applications Using Pseudo Binary Encoding**
Ryo Yamaguchi (SOFTBANK Corp., Japan); Tomonori Ikeda and Kazuma Tomimoto (Softbank Corp., Japan)
- Pos2.8 Geometry Scalable Model of on-Chip Multilayer Interdigital Capacitors**
Yiwen Liu and Huapeng Wang (University of Electronic Science and Technology of China, China); Jia Liu (China National Accreditation Service for Conformity Assessment, China); Yunqiu Wu, Jie Liu, Huihua Liu, Yiming Yu, Chenxi Zhao, Qingfeng Zhang and Kai Kang (University of Electronic Science and Technology of China, China)
- Pos2.9 Design of a W-Band Metasurface Absorber with Optically Transparent Performance**
Jungho Hwang and Tae-Woong Kang (Korea Research Institute of Standards and Science, Korea (South)); In-June Hwang (Korea Research Institute of Standards and Science, Korea (South)); Keisuke Arai and Osamu Kagaya (AGC Inc., Japan); Dahe Shin and Jinwoo Park (Agency for Defense Development, Korea (South))
- Pos2.10 Design of a 4-Beam Orthogonal Switching Matrices Using Couplers with Small Coupling Ratio**
Boyeu Zhang, Shengjia Wu and Jiro Hirokawa (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan); Nelson Fonseca (Anywaves, France)
- Pos2.11 Beamforming of Far Antennas Using Quantum Annealing**
Kayako Yuda and Mitsuki Fujimoto (University of Fukui, Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Kazuma Tomimoto and Tomonori Ikeda (Softbank Corp., Japan)
- Pos2.12 Amplitude-Tailorable Spin-Decoupled Metasurface for Wideband Dual-Circularly Polarized Low-Sidelobe Transmitters**
Wenqiang Ye, Ke Chen and Yijun Feng (Nanjing University, China)
- Pos2.13 Propagation Study on the Feasibility and Hardware Requirements for RIS-Assisted Indoor THz-Communications**
Christoph Herold, Bo Kum Jung and Thomas Kummer (Technische Universität Braunschweig, Germany)
- Pos2.14 Positional Accuracy of Multilateration and ADS-B on Airport Surface Through Flight Experiment**
Junichi Honda and Takuya Otsuyama (Electronic Navigation Research Institute, Japan); Yasuyuki Kakubari (Electronic Navigation Research Institute, MPAT, Japan); Keisuke Matsunaga (Electronic Navigation Research Institute, Japan)
- Pos2.15 Angle-Range Beamforming Based on FDA-MIMO**
Jiangwei Jian (National University of Singapore, Singapore & University of Electronic Science and Technology of China, China); Keen Mouthaan (NUS, Singapore)
- Pos2.16 Performance Evaluation of Non-Linear Preceded Massive MIMO-OFDM with Peak Cancellation**
Kyoaki Inada, Zheuran Li and Osamu Muto (Kyushu University, Japan)
- Pos2.17 Impedance Matching Method of Metasurface-Aided Magnetic Wireless Power Transfer for Deep Implants Based on Maximal Ratio Combining**
Ryota Ishiura, Mayuuan Li and Takahiro Aoyagi (Institute of Science Tokyo, Japan)
- Pos2.18 Sophistication of Machine Learning Model for Temperature Prediction During Microwave Renal Denervation**
Fityanur Nur Asyiah, Tohgo Hosoda, Tsugumi Nishida and Kazuyuki Sato (Chiba University, Japan)
- Pos2.19 Robust First-Order Bragg Peak Extraction Method Based on Improved Dynamic Programming**
Zichun Wang, Yingning Dong and Xin Zhang (Harbin Institute of Technology, China)
- Pos2.20 Initial Functionality Test of a Future Airport Surveillance Radar Using Software-Defined Radio**
Kazuyuki Morikita (Electronic Navigation Research Institute, Japan); Saku Sato (Electronic Navigation Research Institute, Japan & Yokohama National University, Japan); Naoto Yonemoto (Electronic Navigation Research Institute & National Institute of Maritime, Port and Aviation Technology, Japan); Junichi Honda (Electronic Navigation Research Institute, Japan)
- Pos2.21 Accuracy Assessment of Rebar Corrosion Estimation in Concrete Using UWB Radar**
Masahiko Nishimoto (Kumamoto University, Japan); Yoshihiro Naka (University of Miyazaki, Japan); Koichi Ogata (Kumamoto University, Japan)
- Pos2.22 Semi-Implicit FDTD Analysis of a Spoof Plasmonic Structure with High-Contrast Gratings**
Kazuhiro Fujita (Satsuma Institute of Technology, Japan)
- Pos2.23 Accuracy Improvement by Utilizing Electric Field Correction in the FDTD Method**
Haku Hanobe and Takuji Arima (Tokyo University of Agriculture and Technology, Japan); Wataru Yamada (NTT Corporation, Japan)
- Pos2.24 An Open-Loaded Coupled Line with Asymmetric Output Power for Developing Nonplanar Microwave Sensors**
Chen-Hao Liu, Chen-Po Chang, Ching-Lung Yen and Yuan-Tai Ho (National Taiwan University, Taiwan); Pai-Yen Chen (University of Illinois at Chicago, USA)
- Pos2.25 Multimodal Bloch Analysis for the Retrieval of Constitutive Parameters Under Oblique Incidence**
Moises Tercero (KTH Royal Institute of Technology, Sweden & Thales Research and Technology, France); Francisco Mesa (University of Seville, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
- Pos2.26 300-GHz Beam-Steering Wireless Communication Enabled by Tunable Laser & Chromatic Dispersion**
Masato Kawano, Yoshiki Kamura, Bo Li, Yuya Mikami and Kazutoshi Kato (Kyushu University, Japan)
- Pos2.27 A Ka-Band Filtering Leaky-Wave Antenna Based on Single-Ridge Waveguide**
Sandra Zuleta and Yair Zarate (Pontificia Universidad Católica de Valparaíso, Chile); Roberto Gómez-García (University of Alcalá, Spain); Kai-Da Xu (Xian Jiaotong University, China)
- Pos2.28 Electromagnetic Characterization in a Thermally Constrained Environment at ONERA**
Cedric Martel, Jean-Carlos Castells, Aurélie Doré, Hervé Jégou, Aurélie Jankowiak, Jean-François Petex, Loïc Castanet and Francois Issac (ONERA, France)
- Pos2.29 A Novel Low-RCS Phased ArrayBased on Principle of Phase Cancellation**
Xin Yue, Jinbo Liu, Zengqiu Li, Qingxin Guo and Yajin Wang (Communication University of China, China)
- Pos2.30 Design and Simulation of an s-Band Slot Antenna Integrated into a 3U CubeSat Rail**
Daisuke Nakayama, Tohru Matsushima and Yuki Fukumoto (Kyushu Institute of Technology, Japan)
- Pos2.31 A Slot-Coupled SRR Antenna for 5G 77T Applications**
Wen Hsu Hsu (University of SHU-TE, Taiwan)
- Pos2.32 Design of a Circularly Dual-Polarized Wideband Microstrip Antenna Fed by Two Orthogonally-Arranged L-Probes and a Two-Section Hybrid Coupler**
Yo Makabe and Yuichi Kimura (Satsuma University, Japan)
- Pos2.33 Design of a Low-Profile Wideband Ring Microstrip Antenna Fed by Two L-Probes with a Rot-Race Coupler**
Seida Suzuki and Yuichi Kimura (Satsuma University, Japan)
- Pos2.34 Antennas for Wireless Powering of Wearable Devices in Small Animal Medical Research**
Haruki Ishigaki, Takafumi Fujimoto and Chai-Ueo Nagas (Nagasaki University, Japan)
- Pos2.35 A Compact Polarization-Reconfigurable Transmit Phased Array for L-Band Radar**
Haoze Luan and Gong Chen (National University of Singapore, Singapore); Keen Mouthaan (NUS, Singapore)
- Pos2.36 Array Pattern Optimization Method for Modular Subarray-Based Fabry-Perot Cavity Antenna Array**
Zi Li (China)
- Pos2.37 Decoupling and Cross-Polarization Suppression for Antenna Using Parasitic Strips**
Mengliu Liu and Hu Li (Dalian University of Technology, China)
- Pos2.38 Dynamic Pattern Generation of a Two-Element ESPAR Antenna Using Reactance Time Function**
Anand Mohan Gupta and Masato Saito (University of the Ryukyus, Japan)
- Pos2.39 Multiband, Short-Circuited Plate Dipole for Wi-Fi 6 and 6G Applications**
Saou-Wen Su, Tung-Chan Yu and Ji-Cheng Huang (National Kaohsiung University of Science and Technology, Taiwan)
- Pos2.40 A Tri-Band Shared-Aperture Antenna Based on Dipole and Taper Slots with Large Frequency Ratio**
Xin Chen, Qing-Yi Guo and Yu-Xiang Sun (Shenzhen University, China)
- Pos2.41 Omnidirectional Circularly Polarized Dielectric Resonator Antenna for UAV Applications**
Sandra Zuleta and Yair Zarate (Pontificia Universidad Católica de Valparaíso, Chile); Francisco Mesa (Pontificia Universidad Católica de Valparaíso, Chile)
- Pos2.42 A Low-Profile Wideband Endfire-Broadside Integrated mmWave Phased Array Antenna for 5G IoT Smartphones**
Liang Zhao (University of Electronic Science and Technology of China, China & Nongne, China); Ya Fei Wu and Yu Jian Cheng (UESTC, China)
- Pos2.43 3D-Printed Sub-Terahertz Beam-Scanning Device**
Honghui Li, Yiding Liu, Wang Yuchong and Yao Xiang (Harbin Institute of Technology, China); Zhi Zhang (Harbin Institute of Technology, China); Mingshuang Hu, Zeming Kong and Jiaran Qi (Harbin Institute of Technology, China)
- Pos2.44 A 1-Bit Broadband Angle-Insensitive Reconfigurable Metasurface for Multi-Band Generation and Radar Cross Section Reduction**
Fengyan Li (Shanghai Jiao Tong University, China); Xiaochun Li (SHANGHAI Jiao Tong University, China); Ping Li (University of Electronic Science and Technology of China, China)
- Pos2.45 Fully Additive Manufactured Ku-Feeder Link Antenna for Satellite Communications**
Juan Andres Vázquez Peralvo, Symeon Chatzinotas, Hafsia Talpur and Ulan Myrzakhan (University of Luxembourg, Luxembourg)
- Pos2.46 Flexible Circular Polarized Antenna for Wearable off-Body Medical Monitoring**
Rishabh Kumar Baudh (PDPM IITDM, India); Sonal Shukla (PDPM IITDM JABALPUR, India); Dinesh Vishwakarma (PDPM-IITDM Jabalpur, India); Mangi Srinath Panthar (ABV-IITM, Gwalior, India)
- Pos2.47 Performance Evaluation of Miniaturized HACKEY Using Interdigital Capacitor Based on Simulation and Measurement**
Yoshi Murakami, Ryoya Kishi, Toku Fukasawa and Shigeru Matsu (Kanazawa Institute of Technology, Japan)
- Pos2.48 Effect of Breathing on Reflection and Diffraction of 300 GHz Radio Waves in the Human Body**
Akhiro Hirata (Chiba Institute of Technology, Japan)
- Pos2.49 Effect of Road Width on Non-Line-of-Sight Propagation over Intersections**
Shunsuke Matsuchi and Mitsuki Fujimoto (University of Tokyo, Japan)
- Pos2.50 Oriented Ship Detection in SAR Images with Angle-Aware Gaussian IoU Loss**
Yongxiu Xu (National University of Singapore, Singapore); Xingfeng Zhang (University of Electronic Science and Technology of China, China); Keen Mouthaan (NUS, Singapore)
- Pos2.51 Unit Cell Design and Performance Evaluation of a Reconfigurable Intelligent Surface Utilizing Liquid Crystals**
Kazuki Matsunaga, Mitsutaka Okita, Daiichi Suzuki and Shinichiro Oka (Japan Display Inc., Japan)
- Pos2.52 Wireless Charging System for UAVs Based on High-Integration Integral Asymmetric Coupler and Constant Current Output**
Hao Wang, Chutyan Xiao, Shui-Hao and Bohan Yang (Beihang University, China)
- Pos2.53 An Optically Modulated UHF RFID Tag and Its Application in Range of Motion Arc of Shoulder Rehabilitation**
Chao Yu Jiang (University of Macau, Macao); Kam Weng Tang (University of Macau, China); Chi Hou Chio (University of Macau, Macao); Wenhai Zhang (Soochow University, China); Oweil Chen and Junxiao Lu (Macau Wujing Technology Co Ltd, Macao); Hou-Pan Sio and Man-Chon Si (Macao Science Center, Macao); Fan Zou (Chen University of Macau, Macao); Tian Hua Tang (University of Macao, Macao); Cheng Teng (University of Macau, Macao); Nga Kong (Crosstech Innovation Group Limited, China)
- Pos2.54 A Fast Time-Frequency Transformation Method for EM Response Calculation Based on High-Frequency Transmission Line Equations**
Yiqiang Tao, Chunyan Xiao, Rundong Liu and Weyia Jiang (Beihang University, China)
- Pos2.55 Analysis of Effective Permittivity and Permeability in a Landy-Type Metamaterial Absorber**
Takayuki Matsumuro and Satoru Shimizu (ATR, Japan); Toshikazu Sakano (Advanced Telecommunications Research Institute International, Japan)
- Pos2.56 Dual-Band Metasurface to Improve Transmission Through Glass in mm-Wave Array Modules for Mobile Terminals**
Rocio Rodriguez-Cano and Shuai Zhang (Aalborg University, Denmark)
- Pos2.57 Eliminating Communication Blindspots Using a Single-RF Chain Planar 60 GHz Antenna Featuring High Gain and Wide-Beamwidth**
Sungbin Han (Pohang University of Science and Technology (POSTECH), Korea (South)); Geon Park (POSTECH, Korea (South)); Dongseop Lee (Pohang University of Science and Technology (POSTECH), Korea (South)); Jeonghyo Lee (POSTECH, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
- Pos2.58 Design and Analysis of a 28 GHz Leaky-Wave Antenna with Coaxial Feeding**
Takahisa Kanamoto (I-PEX Inc., Japan & Graduate School of Engineering, Takushoku University, Japan); Takumi Okubo and Toshiyuki Maeyama (Takushoku University, Japan); Hiroki Nakamura (I-PEX Inc., Japan); Gemma Hattori (Graduate School of Engineering, Takushoku University, Japan)
- Pos2.59 Design of 140 GHz Array Antenna Using Synthetic Fused Silica Glass Substrate**
Daisuke Yamazaki and Osamu Kagaya (AGC Inc., Japan)
- Pos2.60 Design of a Novel Planar Filtering Quasi-Yagi Antenna**
Jiangpeng Lu (Northwestern Polytechnical University, China); Xiang Li (Yangtze River Delta Research Institute, Northwestern Polytechnical University, China); Yuntao Tao and Liu Qingyue (Northwestern Polytechnical University, China); Zeyuan Chen (Northwestern Polytechnical University, China); Rui Zhang (Yangtze River Delta Research Institute, Northwestern Polytechnical University, China)
- Pos2.61 Efficient Full-Wave Analysis and Optimization of Large Horn and Waveguide Antenna Arrays**
Min Zhou, Pasquale Giuseppe Nicolaci and Erik Jørgensen (TICRA, Denmark)
- Pos2.62 A DGS-Based Dual-Band Antenna for ISM, WIMAX, and X-Band Satellite Communication**
Tithi Rani (Rajshahi University of Engineering and Technology, Bangladesh); Nayma Rashid and Udon Chandra Pal (Pabna University of Science and Technology, Bangladesh); Sk A. Shezan (Northern Border University, Saudi Arabia); Md. Ashrafu Haque (UTP, Bangladesh); Ali H. Alenezi (Northern Border University, Saudi Arabia)
- Pos2.63 Dual-Band Microstrip Antenna with T- and E-Shape Defected Ground Structure for Wi-Fi 7 Technology**
Lovita Ramnyadur (University of Indonesia, Indonesia); Fitri Yuli Zulfitri (Universitas Indonesia, Indonesia)
- Pos2.64 A Novel Low-Profile UWB Electric Dipole Antenna for Ice-Penetrating Radar Applications**
Pengfei Li, Zhenzhen Zhang and Feng Zhang (University of Surrey, United Kingdom (Great Britain)); Mohtsen Khaliq (University of Surrey & 5G Innovation Centre, Institute for Ultra-Modern Systems (ICS), United Kingdom (Great Britain))
- Pos2.65 A Stacked Wideband Dielectric Resonator Antenna for 5G Communication Systems**
Pan Yin, Qixin Tang, Yongqi Cheng, Ziyang Zhang, Lijia Chen and Shengchang Lan (Harbin Institute of Technology, China)
- Pos2.66 A Study on Miniaturization of Millimeter-Wave UWB Monopole Antenna Using Coupling Structure**
Nobuyasu Takemura (Chukyo University, Japan)
- Pos2.67 A Wideband 2 × 2 Array Antenna with 45-Degree Half-Power Beamwidth for Angular Characterization at 5-to-6 GHz ISM Band**
Indar Sutrisno (RWTH Aachen University, Germany & Universitas Muhammadiyah Yogyakarta, Indonesia); Florian Reiter (RWTH Aachen University, Germany); Widayasmoro Widayasmoro (Universitas Muhammadiyah Yogyakarta, Indonesia); Dirk Heberling (RWTH Aachen University, Germany)
- Pos2.68 Dual-Band Dual Slant-Polarized 5G Base-Station Antenna for Sub-6 GHz Spectrum**
Vikrant Singh (SGIL & GCL, Institute for Communication Systems (ICS), University of Surrey & Digital Catapult, United Kingdom (Great Britain)); Denghe Serghius and Ali Karagi (University of Surrey, United Kingdom (Great Britain)); Mohtsen Khaliq (University of Surrey & 5G Innovation Centre, Institute for Ultra-Modern Systems (ICS), United Kingdom (Great Britain))
- Pos2.69 Dual-Polarized Ultra-Wide-Angle Scattering Metasurface**
Sun-Gyu Lee, Jung-Ick Moon and Jung-Nam Lee (Electronics and Telecommunications Research Institute, Korea (South))
- Pos2.70 Field-of-View-Enhanced Metasurface Lens Based on Dual-Polarized Elements**
Nannan Wang (Harbin Institute of Technology, China); Yongjian Ma, Pengcheng Wang, Jingling Liu and Jinghui Qi (Harbin Institute of Technology, China)
- Pos2.71 Calibration Factor Measurement of RF Power Sensors Using a Vector Network Analyzer**
Young Jin Yun (Korea Testing Laboratory, Korea (South))
- Pos2.72 Three-Axis Magnetic Induction Sensor for Mid-Range Magnetic Communication in Heterogeneous Media Environments**
Jang-Yeol Kim (ETRI, Korea (South)); Hyun Joon Lee (Electronics and Telecommunications Research Institute, Korea (South)); JungHoon Oh (ETRI, Korea (South)); Kye-Seok Yoon (Electronics and Telecommunications Research Institute, Korea (South)); In-Kui Cho (ETRI, Korea (South))
- Pos2.73 Radio Propagation Prediction Using Machine Learning and Multiple Side-View Images**
Kazuki Munatori and Koichi Ichige (Yokohama National University, Japan); Tatsuya Nagao and Takahiro Hayashi (KDDI Research Inc., Japan)
- Pos2.74 Monitoring Pollinators with 60 GHz Micro-Doppler Radar**
Miyuki Norioka (Doctoral Research Fellow of JSPS, Japan); Peter Barnard (PhD, Trinity College Dublin, Ireland); Ian Donohue (Trinity College Dublin, Ireland); Adam Narbudowicz (Associate Professor, DTU Space, Technical University of Denmark, Denmark)
- Pos2.75 A MIMO Array Antenna for Millimeter-Wave Imaging Radar**
Jia Fang (CETC38, China)
- Pos2.76 Estimation Method for Elevation Angle of Arrival Using a Circular Monopole Array Antenna**
Haruto Mouri and Kazuhiro Honda (University of Toyama, Japan)
- Pos2.77 Compact High-Directive Electronically-Beam-Switchable Yagi-Uda Antenna for Sub-6G Technology**
Raneem Jangir (University of Rennes, France); Sylvain Collardey (University of Rennes 1, France); Ala Sharaiah (Université de Rennes & IETR, France)
- Pos2.78 Non-Dispersive Jones Matrix for Polarization Multiplexed Holographic Encryption**
Mingshuang Hu and Jiaran Qi (Harbin Institute of Technology, China)
- Pos2.79 A Dual-Polarized Antenna Array with L-Strip Isolator for Ka-Band Satellite Communication**
Sung-Nien Hsieh, Shu-Ming Yang and Ding-Bing Lin (National Taiwan University of Science and Technology, Taiwan)
- Pos2.80 Double Ridged Antenna with Dipole Element**
Akio Kuramoto (NEC Platforms, Ltd., Japan)
- Pos2.81 Variation of Global Ionospheric Parameters on Space-Borne VLF Antenna Characteristics**
Yangyong Zhang and Yu Chen (722 Research Institute, CSC, China); Zhiqiang Cai, Dudu Huang and Huiran Zeng (Xidian University, China); Tong He (Zhejiang Lab, China); Li Kai (Zhejiang University, China)
- Pos2.82 Accurate Measurement of Electric Fields Near Scattered Objects in the GHz Band Using Electro-Optic (EO) Probes**
Takaji Arima and Hiaku Inakawa (Tokyo University of Agriculture and Technology, Japan); Wataru Yamada (NTT Corporation, Japan)
- Pos2.83 Current Ratio Conditions for Optimal Efficiency in a Dual-TWT System with Different Cell Specifications**
Hiroaki Kim (Noboru Korea Maritime & Ocean University, Korea (South))
- Pos2.84 A Quick and Low-Cost Simulation Approach for the OAM-TSS Pattern with 20 × 20 Unit Cells**
Dong-Hu Huang, Yulu Tsukuma and Akinori Hara (Mitsubishi Electric Corporation, Japan); Akinori Taira (Mitsubishi Electric Corp., Japan); Kazuki Ishikawa, Nagahiko Abe and Koji Yamazaki (Mitsubishi Electric Corporation, Japan)
- Pos2.85 Passive Single-Layer Smart Electromagnetic Skin for Enhancing 5G Signal Coverage in Urban Areas**
Zhuo Huang, Guan-Long Huang and Mustafa Khalid Taher Al-Nuaimi (Foshan University, China); Wei Lin (The Hong Kong Polytechnic University, Hong Kong); Yiannis Vardazoglou (Tokyo University of Technology, China)
- Pos2.86 Receiver Design Considerations for Non-Coil Wireless Power Transfer Systems**
Jungho Kim and Sungmin Shin (Ulsan National Institute of Science and Technology, Korea (South)); Seongbin Kwon (UNIST, Korea (South)); Franklin Biehn (Ulsan National Institute of Science and Technology, Korea (South))

Wednesday, October 29 15:40 - 17:40

- 384: [Q504] Antenna Measurement Techniques Association (AMTA) (by Dr. Satoru Kurokawa)**
- Room A**
- 1540 Recent Advances in Plane Wave Generators for Low Frequency Antenna and System Level Testing**
Lars Foged (Microwave Vision Italy, Italy)
(Invited Paper)
- 1620 One-Port Calibration Technique for Measuring the Reflectivity of Millimeter-Wave Absorbers**
Jin-Seob Kang (KRIS, Korea (South))
- 1640 Comparison of Near-Field to Far-Field Transformations for Bistatic Radar Cross-Section Prediction with Fixed Transduction**
Yoshihiko Akamine (Japan Ministry of Defense, Japan)
- 1720 Near-Field Reconstruction Using Gaussian Process Regression for Sparse Spherical near-Field to Far-Field Transformation**
Michitaka Ameya (AIST, Japan)
- 1720 Receiving Performance of the 4-Element Array Antenna-Coupled Electro-Optic Modulator for 80 GHz Band**
Satoru Kurokawa (National Institute of Advanced Industrial Science and Technology, Japan); Michitaka Ameya (AIST, Japan); Masatoshi Seikawa (Seikocho Saitoh (ONIKO GIKEN, Japan); Hiroshi Murata (Mie University, Japan)
- 384: [Q519] Innovative antenna systems for the realization of integrated wireless technology (by prof. Kentaro Murata)**
- Room B**
- 1540 Improved Data Transmission Rates in 300-GHz-Band Communication Using Reconfigurable Metaleans**
Adam Pander and Hibiki Kagami (NTT Device Technology Laboratories, Japan); Hiroshi Hamada and Daisuke Kitayama (NTT Corporation, Japan); Haruka Matsunaga and Hiroyuki Takahashi (NTT Device Technology Laboratories, Japan)
- 1600 FDTD Analysis of Characteristics of Reflection from Ocean Debris in Marine FMCW Radar**
Takaji Arima and Kyoya Inakawa (Tokyo University of Agriculture and Technology, Japan)
- 1620 Study on Improving Target Detection Accuracy of Sensing Using Mobile Communication Systems**
Kazuma Tomimoto (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan); Toshiaki Hazen and Shumpei Tabuchi (Softbank Corp., Japan)
- 1640 Interference-Free Human-Aware Beamforming for Microwave Wireless Power Transfer**
Mao Sekine, Shunto Arai, Kentaro Murata and Naoki Horima (Wate University, Japan)
- 1700 A Rodial Line Curl Array Antenna Radiating Gaussian Beam for 24-GHz-Band Fixed Wireless Power Transmission**
Yuki Kohra (Institute of science Tokyo, Japan); Gen Nakayama (Institute of Science Tokyo, Japan); Takashi Tomura (Tokyo Institute of Technology, Japan)
- 1720 Decoupling of Antenna and Arrays Using Meta-Surface Polarization-Rotators**
Luyi Zhao, Jiafeng Ge and Huihui Li (Xinhua University, China); Zexing Fan (Aihui Lambda Science and Technology Corporation Limited, China)
- 384: [Q522] Recent Advancement of Microwave, Millimeter Wave, and Terahertz Wave Circuits and Applications (by prof. Takuichi Hirano)**
- Room C**
- 1540 Development of End-Fire 60-GHz-Band 2×2 Digital Beam Forming Antenna for Built-in Mobile Devices**
Takehiro Yamaki and Satoshi Ishida (Ryukoku University, Japan)
- 1600 Measurement of Principle 300-GHz Antenna with a Dual-Beam Module**
Nagahiro Abe, Takuma Nishimura, Hiko Watanabe, Ichiro Somada, Takumi Nagamine, Akimichi Ferao and Yuta Sugiyama (Mitsubishi Electric Corporation, Japan); Kenichi Okada (Tokyo Institute of Technology, Japan)
- 1620 Terahertz Sensing Using an OAM-RFIC with on-Chip Patch Antenna**
Toshiyuki Norioka (Doctoral Research Fellow of JSPS, Japan); Tetsuya Nagao (PhD, Trinity College Dublin, Ireland); Ian Donohue (Trinity College Dublin, Ireland); Adam Narbudowicz (Associate Professor, DTU Space, Technical University of Denmark, Denmark)
- 1640 Stretchable Reconfigurable Intelligent Surfaces with Dynamic Reflection Beam Width Control Functionality at Terahertz Frequency Band**
Yuki Tankawa (The University of Osaka, Japan); Yuto Kato (National Institute of Advanced Industrial Science and Technology, Japan); Yosuke Nakata and Masatoshi Sanada (The University of Osaka, Japan); Yuta Kato (National Institute of Advanced Industrial Science and Technology, Japan)
- 1700 A Novel Varactor-Tuned Filtenna Array with Frequency Agile and Beam Steering Functions**
Masataka Ohira (Doshisha University, Japan); Kazusa Watanabe and Zhewang Ma (Satsuma University, Japan); Hiroyuki Deguchi (Doshisha University, Japan)
- 1720 SDR-Based Propagation Measurements in Indoor Corridors**
Grant Lewis M Bulspong and Takuichi Hirano (Tokyo City University, Japan)
- 384: [Q523] Advanced Techniques for Expanding Millimeter-Wave/Terahertz Network Coverage (by prof. Minseok Kim & prof. Wonbin Hong)**
- Room D**
- 1540 Near-Field Reflector-Assisted Indoor Dual-Beam MIMO Capacity Analysis at Sub-THz Bands**
Minghe Mao and Minseok Kim (Niigata University, Japan)
- 1600 Wireless Coverage Enhancement via EM Scattering Redistribution**
Wongjeong Jo and Hyunjae Shin (Pohang University of Science and Technology (POSTECH), Korea (South)); Donggeun An and Myoungsun Kim (Pohang University of Science and Technology, Korea (South)); Daehyeon Kim (POSTECH, Korea (South)); Youngnoo Yun (Incheon National University, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
- 1620 Experimental Evaluation of Zone Plate Reflector for 300 GHz Coverage Enhancement**
Cong Ming Hieu (U, H. Lang Son, Zopnon Keetavornan and Andrey S Andrenko (Institute of Science Tokyo, Japan); Minghe Mao and Minseok Kim (Niigata University, Japan); Junichi Takahashi (Institute of Science Tokyo, Japan)
- 1640 Inverse-Designed Holographic Surfaces for Multi-Focus Spatial Beamforming with Flexible Focal Region and Polarization Control**
Jihwan Lee (Pohang University of Science and Technology (POSTECH), Korea (South)); Siros Bahrami (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
- 1700 A Reconfigurable Multi-Band Radio-Wave Absorber for Beyond 5G/6G Applications**
Sangyeop Lee and Motohiro Takayasu (Institute of Science Tokyo, Japan); Shinsuke Hara (National Institute of Information and Communications Technology, Japan)
- 1720 Octave-Bandwidth Resistive Absorber for Multi-Band Radar and Communication Systems**
Youngnoo Yun (Incheon National University, Korea (South)); Daehyeon Kim (POSTECH, Korea (South)); Donggeun An (Pohang University of Science and Technology, Korea (South)); Wonbin Hong (Pohang University of Science and Technology (POSTECH), Korea (South))
- 384: [Q516] Advanced Antenna and RF Technologies for Satellite Communications and Remote Sensing (UNIST RRC Special Session) (by prof. Gangil Byun)**
- Room E**
- 1540 W-Band Circularly Polarized Antenna Array Using Sequentially Coupled Feed Structure for Satellite Communications**
Chang Hee Lee (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); Gangil Byun (Ulsan National Institute of Science and Technology (UNIST), Korea (South))
- 1600 A 28-GHz GaN Front-End Module with a Deep Back-off Doherty Power Amplifier**
Sangjin Yoon and Ockgook Lee (Pusan National University, Korea (South))
- 1620 A 5.74-8.02 GHz Air-Efficient and Low-Noise CMOS Cross-Coupled LC-VCO**
Hyeogyoung An, Hyeonjun Nam, Heen Yoon and Sungmin Kim (Ulsan National Institute of Science and Technology (UNIST), Korea (South))
- 1640 A Systematic Study of Field Electron Emission Properties of Wxene Film for Cold-Cathode Applications**
Si Eun Han and Jaebeom Park (Ulsan National Institute of Science and Technology (UNIST), Korea (South)); Mincheol Kim and Eunmi Choi (UNIST, Korea (South)); Jun Yeop Lee and Soon-Yong Kwon (Ulsan National Institute of Science and Technology (UNIST), Korea (South))
- 1700 Interface Carbon Defect Location in SiC Oxides for Reliable SiC RF Devices**
Young-Jin Ahn, Yuh Ho Lee, Su Hyun Park, Jeong Wook Kim and Cheul Hyun Yoon (POSTECH, Korea (South)); Byoung Dong Kong (Pohang University of Science and Technology (POSTECH), Korea (South))
- 1720 Dual-Output RF Energy Harvester with Adaptive Energy Buffering for Enhanced Power Availability Under Intermittent Input for PPG Sensors**
Mun-Jung Cho, Seung-Ju Lee, Yeon-Woo Jeong, Jong-Hun Kim, Min-Sik Kim, Myeong-Ho Kim, Geon Kim, Min-Gyu Jeong and Dong-Chan Lee (Pohang University of Science and Technology (POSTECH), Korea (South)); Seun Shin (POSTECH, Korea (South))

Wednesday, October 29 15:40 - 17:20

- 3F4: [Q523] IEEE AP-S and ISAP 2025 Young Professional Special Session (by prof. Can Ding)**
- Room F**
- 1540 Modelling and Experimental Validation of Fluorescence Modulation in Mid-Infrared Photothermal Microscopy**
Sungmin Han (Korea Advanced Institute of Technology, Daejeon, Korea); Joby Joseph (Professor IIT Delhi, India); Gammer Abbas, Jonathan Taylor and Hasan Altabab (University of Glasgow, United Kingdom (Great Britain))
- 1605 RePH: RIS-Inspired Electronic Phantom**
Kentaro Murata (National Institute of Advanced Industrial Science and Technology, Japan)
- 1620 Study on Materials for Weight Reduction of Lens Antennas for HAPS Ground Stations**
Takuya Okura and Hiroyuki Tsuji (National Institute of Information and Communications Technology, Japan)
- 1655 Radar Signal for Enhanced Resident Monitoring in Long-Term Care Facilities**
Hajar Abdel and Ahmed Ansariyan (University of Waterloo, Canada)
- Thursday, October 30**
- Thursday, October 30 9:00 - 10:40**
- 4A1: Reflector, Reflectarray and Lens Antennas**
- Room A**
- 940 Design and Analysis of Propagative Mesh Reflector Antennas for Satellite Applications**
Changyeon Im and Hossung Choo (Hongik University, Korea (South))
(Invited Paper)
- 940 A Beam-Forming Method for 1-Bit Time-Modulate Reflectarray at Carrier Frequency**
Xianbo Cao (Xidian University, China); Wen Wu (Tohoku University, Japan); Xiaosong Liu, Tao Hong and Wen Jiang (Xidian University, China)
- 1000 Design and Experimental Verification of SF6-Gas Inflated Dual-Reflector Antenna for HPM System**
Dong-Hoon Lee (Chungnam National University, Republic of Korea, Korea (South)); Wonkyu Kim (Chungnam National University, Korea (South)); Min-Seok Cha (Chung-Nam National University, Korea (South)); Junyeon Kim and Donggeun Seo (Agency for Defense Development, Korea (South)); Ik-Jae Yoon (Chungnam National University, Korea (South))
- 1020 New Foaming 3D Printing Filaments with Adjustable Low Permittivity for Printing Gradient Index (GRIN) Lens Antennas**
Oscar Moschinger, Volker Wierstorf, Markus Heinrichs and Rainer Kronberger (TH Cologne University of Applied Sciences, Germany)
- 4B1: [Q509] Advanced Antenna and EMC Measurement Technologies for Microwave and Millimeter Wave Systems (by prof. Kun Li & prof. Xiaoming Chen)**
- Room B**
- 900 Experimental Verification of OTA Testing Method for Test Zone Extension**
Takumi Omoto and Kazuhiro Honda (University of Toyama, Japan); Kun Li (The University of Electro-Communications, Japan)
- 920 RCS Measurements of Single Parabolic Cylindrical Compact Range with Linear Array Feed**
Ke Yang, Zhengpeng Wang and Zhiming Lu (Beihang University, China)
- 940 Interpolation Techniques for Sparse Surface Near-Field Measurements: a Comparative Study**
Kittipon Sukprecha, Tippong Lertwirayaprapha, Danai Torruengruang and Kittisak Paevarua (King Mongkut's University of Technology North Bangkok, Thailand)
- 1000 Fast Nonlinear Reconstruction for Radiation Patterns in Reverberation Chamber with Full Data**
Mengsheng Wang and Qiwen Xu (Hangzhou Dianzi University, China); Fanyun Peng (Xian Jiaotong University, China); Xiaoming Chen (Xi'an Jiaotong University, China)
- 1020 Open-Boundary Quad-Ridged Horn Antenna Loaded with Absorbing Materials**
Hyeongchul Kim (Noboru Korea Maritime & Ocean University, Korea (South)); Guokai Jiang (China Automotive Technology and Research Center Co., Ltd., China)
- 4C1: [Q509] Recent Advances and Applications of Metamaterials and Metasurfaces (by prof. Ryuji Kuse)**
- Room C**
- 900 Constitutive Method for Topological Waveguides Using Two-Dimensional T- and π -Type Rhombic Unit Cell Structures**
Tsutomu Nagayama (Kagoshima University, Japan)
- 920 Leveraging Symmetries for the Dispersion Analysis of Open 2D-Periodic Structures**
Jesus Maria Jimenez-Suarez (KTH Royal Institute of Technology, Sweden); Sergio Garcia-Martinez (Universidad Politécnica de Madrid, Spain); Francisco Mesa (University of Seville, Spain); Oscar Quevedo-Teruel (KTH Royal Institute of Technology, Sweden)
- 940 Forward Scattering Enhancement of Monopole Antenna with Huygens' Metasurface**
Hiroshi Hashiguchi and Naobumi Michishita (National Defense Academy, Japan)
- 1000 Experimental Control of Dual-Polarized Beams in Reflectarray Antenna with Low Cross-Polarization Design**
Yosuke Maruno (Kumamoto University, Japan); Makoto Sano (Yokohama National University, Japan); Takeshi Fukusako and Ryuji Kuse (Kumamoto University, Japan); Kazuma Tomimoto, Toshiaki Hazen and Tomonori Ikeda (Softbank Corp., Japan); Ryo Yamaguchi (SOFTBANK Corp., Japan)
- 1020 Prototyping of the Electromagnetic Scattering Sheet in 20 and 70 GHz Band**
Lira Hamada (National Institute of Information and Communications Technology, Japan); Yasutaka Murakami (UEC, Japan); Jerdvisanop Chakraborty and Katsumi Fujii (National Institute of Information and Communications Technology, Japan)
- 4D1: [Q503] Underwater Wireless Technology Using Electromagnetic Waves (by prof. Nozomu Ishii)**
- Room D**
- 900 Maximum Distance Verification for Undersea Radar Using Multiple Loop Antennas Using Wavelet-OFDM**
Jairus Carlos Rosales Rodríguez, Tohru Matsushima, Yuki Fukumoto, Kazuhiro Eguchi and Daisuke Nakayama (Kyushu Institute of Technology, Japan)
- 920 Underwater Robust Navigation Under Sea Ice Using Very Low Frequency Electromagnetic Waves in the Polar Regions**
Hiroshi Yoshida (JAMSTEC & IACE, Japan); Masaharu Tanaka and Shinnosuke Sakaya (Chiba University, Japan); Nozomu Ishii (Niigata University, Japan); Qiang Chen (Tohoku University, Japan)
- 940 Applicable Range of Pseudo-Scale Models for Air-Sea Two-Layer Problems Using Sommerfeld Integral**
Akio Segimoto and Nozomu Ishii (Niigata University, Japan)
- 1000 Electromagnetic Propagation in Seawater and Hybrid Air-Seawater Environments Using a Hollow Cylindrical Concrete Structure**
Qiaowei Yuan (Tohoku Institute of Technology, Japan)
- 1020 Scaled Transmission Measurement Between Dipole Antennas in Proximity to PVC Pipe in Seawater**
Naoki Kuzu and Nozomu Ishii (Niigata University, Japan); Masaharu Takahashi (Chiba University, Japan); Qiaowei Yuan (Tohoku Institute of Technology, Japan); Qiang Chen (Tohoku University, Japan); Hiroshi Yoshida (JAMSTEC & IACE, Japan)
- 4E1: Millimeter-wave and Terahertz Antennas I**
- Room E**
- 900 Photonic-Integrated InGaAs/SiC UTP-PD-Fed Microstrip Stub Array Antenna for 300-GHz Fan-Beam Generation**
Ming Che, Yoshiki Kamura, Ryo Doi and Kazutoshi Kato (Kyushu University, Japan)
- 920 A Type V-Band 4-Element Circular Polarized Patch Array Antenna with Matching Circuit**
Welday Zergerieher Beldie, Koki Furukuchi, Toriyuki Furuchi, Satoshi Tsukamoto and Noriharu Suematsu (Tohoku University, Japan)
- 940 An Experimental Verification of 300-GHz-Band Kymocera Resonator Antenna**
Jiro Kim, Hiroshi Kamura and Nobuki Hiramatsu (Luminera Corporation, Japan); Kunio Sakakibara and Yoshiki Sugimoto (Nagoya Institute of Technology, Japan)
- 1000 Expansion of Sheet LAN Alignment Margin by Using Branched Structure Waveguide Probe**
Shintaro Nakamura, Hayato Sasaki and Akihiko Hirata (Chiba Institute of Technology, Japan)
- 1020 Contactless BGA Interconnection of Gap Waveguide MSLW Slot Array Antenna for E-Band Automotive Radar Applications**
Juan Luis Alameda Lizarra (Chalmers University of Technology, Sweden & Gagneväs AB, Sweden); Abbas Vosoughi and Carlo Benvenuti (Gagneväs AB, Sweden); Ashraf Uz Zaman (Chalmers University of Technology, Sweden)
- 4F1: Part2: Technical session [Q525] Highlighting Research Achievements Beyond Gender (by prof. Parwati Yuar)**
- Room F**
- 900 Phased Arrays in Waveguide Technology for Low Earth Orbit (LEO) Active Payloads**
Esteban Mengarues and Gabriela Capdevila (SWISSLO2, Switzerland); Maria Garcia-Viguera (IETR-INSIS Rennes, France)
- 925 Wide-Power-Range RF Harvester with Constant Output Voltage for Autonomous Sensing Systems**
Lei Guo, Kuo Guai, Xuwang Li and Mengye Yan (Dalian University of Technology, China); Wenwen Yang (Nantong University, China); Ke Wu (Technique Montreal, Canada)
- 950 Design of Triple Band Microstrip Antenna for 5G Network Applications in Indonesia**
Nadya Raka Salakalia (University of Indonesia, Indonesia); Fitri Yuli Zulfitri (Universitas Indonesia, Indonesia)
- 1015 Design Method of Normal-Mode-Hybrid Antenna at 10MHz for Undersea Radio Communication**
Muhammad Syam Fitri Qthman and Kamila Kamardin (University Teknologi Malaysia, Malaysia); Yoshihide Yamada (Malaysia-Japan International Institute of Technology, Universiti Teknologi Malaysia, Malaysia); Idnin Payya (University of Alzu, Japan); Nozomu Ishii (Niigata University, Japan); Masaharu Takahashi (Chiba University, Japan)
- Thursday, October 30 11:00 - 12:40**
- 4A2: Antenna Theory and Design**
- Room A**
- 1100 Design of High Gain and Low Scattering Antennas**
Ying Jia (Gdairi, China)
(Invited Paper)
- 1140 Design of Inco-Profile Dual-Polarized Metasurface Antenna Using Characteristic Mode Analysis**
Haoqiang Chen and Xiang Zhang (University of Science and Technology of China, China); Jun Gu (University of Science and Technology of China, China & USTC, China); Weidong Chen (University of Science & Technology of China, China); Chang Chen (University of Science and Technology of China, China)
- 1200 Circular Polarization Characteristics of a High Impedance Rampart-Type Microstrip Line Array Antenna**
Fumiaki Matsukura, Keisuke Noguchi, Kenji Itoh

Yuki Hokazono, Hirofumi Nakajo, Megumi Oozono, Atsunori Shimamura and Kenji Fukasawa (NTT DOCOMO, Japan); Yuto Muroki and Yoshihisa Kishiyama (Space Compass Corporation, Japan)

14:20 Improvement of HAPS System Availability Using Open-Loop UPC Based on Local Meteorological Observation Data
Yuto Muroki, Sunao Toya, Takuya Miyashita and Yoshihisa Kishiyama (Space Compass Corporation, Japan); Yuki Hokazono and Kenji Fukasawa (NTT DOCOMO, Japan); Hiromu Kitanozono (SKY Perfect JSAT Corporation, Japan)

14:40 HAPS Cell Design Considering Array Antenna Configuration for Improving Spectral Efficiency
Koichi Maai, Koji Tashiro, Tutomu Ishikawa and Kenji Hoshino (SoftBank Corp., Japan)

15:00 Experimental Evaluation of Beam Tracking for HAPS Feeder Link
Kazuki Matsuura (SoftBank Corp., Japan); Yoshichika Ohta (Softbank Corp., Japan)

15:20 Model-Based DRL for Dynamic Antenna Beamforming in HAPS Communication System
Siyuan Yang, Mondher Bouazizi and Tomoaki Ohtsuki (Keio University, Japan)