澳門城市大學
Universidade da Cidade de Macau
City University of Macau

Technical Program

2024 Cross Strait Radio Science and Wireless Technology Conference (CSRSWTC 2024)

November 4-7, 2024 Macao SAR, China

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Organizers

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Organizers

City University of Macau

South China University of Technology

Anhui University of Technology

Time Table

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		Oral Session 5-1: Antenna Theory and Technology	Oral Session 6-1: Multifunctional Antennas Enabled by Novel Materials and Methods	Oral Session 7-1: Propagation	Oral Session 8-1: Metamaterial and Metasurface
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	15:40-16:00	**Coffee Break**			
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(Sorted by last name)

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Anqi Wang

Wennan Wang

Bian Wu

Gengshen Wu

Ruofeng Xu

Nan Yang

Zuobin Ying

Lefeng Zhang

Lei Zhao

Shengjun Zhang

General Information

Conference Site and Travel

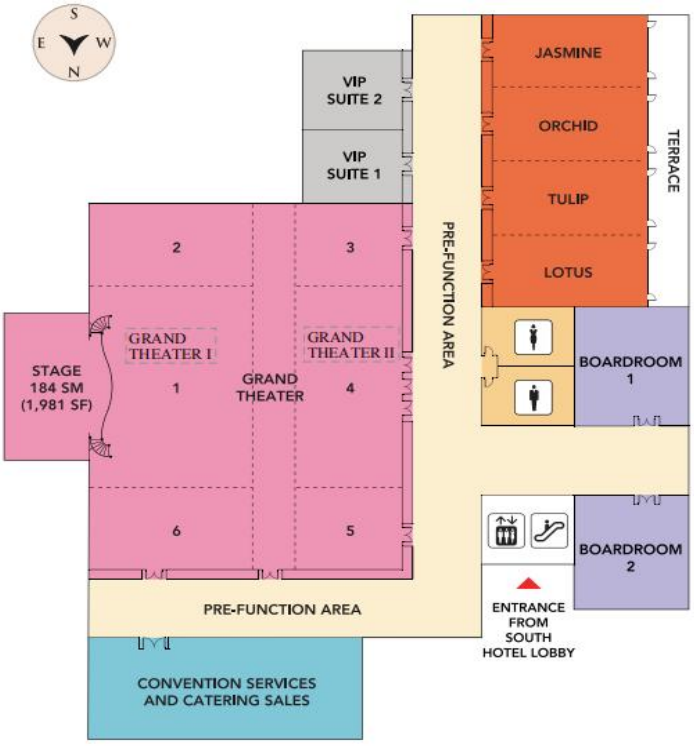
2024 Cross Strait Radio Science and Wireless Technology Conference (CSRSWTC 2024) will be held on November 4-7, 2024 at the lobby of the Wynn Palace, Avenida da Nave Desportiva, Cotai, Macau.

Conference Venue: Wynn Palace

Address: Avenida da Nave Desportiva, Cotai, Macau

Hotel & Conference Building Map

There are free shuttle buses from Macau International Airport and Ferry Terminal to the hotel. Visitors seeking basic accommodation can find a variety of budget hotels (from USD 50 to 100) in downtown Macau. For more information, please visit Macao Government Tourism Office at https://www.macaotourism.gov.mo/en/accommodation/search.



About Macao

Macao-located on the western bank of the Pearl River Delta in southern Guangdong Province, People's Republic of China-adjoins the Mainland city of Zhuhai and lies some 60 kilometres to the west of Hong Kong. Macao comprises Macao Peninsula, Taipa and Coloane. The historic district of Macao is collectively known as "The Historic Centre of Macao" and was inscribed on the World Heritage List in 2005.

Macao was designated as a UNESCO Creative City of Gastronomy on 31st October 2017. The designation is set to endorse the global recognition of Macao's more than 400-year old culinary legacy. There is no better way to experience Macao's unique gastronomy culture by eating around, from world-class restaurants to restaurants tucked away in nooks and crannies, to get a true taste of Macao.

Visa to Macao

A visa to Macao is Easy! Most of the countries do not need a visa or simply apply for a border visa upon arrival. Only citizens of Bangladesh, Nepal, Nigeria, Pakistan, Sri Lanka and Vietnam need to apply for a visa in advance. More information can be found at http://www.macau-airport.com/en/arrivals/article/5268Visit https://www.gov.mo/en/services/ps-1474/ps-1474b/ to find out whether you need a visa or not.

Guidelines for Presentations

Information for Oral Presentations

Presenters are required to report at their session room to their session chair at least 15 minutes prior to the beginning of their session. Presenters are suggested to try out their presentations if there is any concern about the format, presentation length, etc. It is mandatory that the presentations should be loaded to the computer supplied by conference ahead of the beginning of each session. Any delays in the start of a presentation behind schedule due to the presenter's disregard of this guidance will result in less presentation time for that paper. All oral presentations are limited to 15 minutes including 12 minutes' presentation and 3 minutes' Q&A. The Session Chair will remind the presenter 10 minutes after the presentation starts. The session room will be equipped with a computer and an LCD projector. This is the only permissible projection system. Presenters MUST use the session's computer for their presentations, i.e, their presentation must be loaded in advance on this computer.

Each computer is equipped with an USB flash memory, the operating system for session computers is Microsoft Windows 10 (or newer). The software available on each machines are Adobe Acrobat Reader (for PDF), MathType and Microsoft Office (Version: Office 2013) with Word, Excel and PowerPoint available. Therefore, all presenters must be compatible with these packages. There will be also assistance and advice available to presenters at registration desk. Please remember that due to the very large number of papers and a tight schedule, the responsibility of having your paper ready for presentation at the scheduled time is very important.

Information for Poster Presentations

Presenters are required to post their poster within 10 minutes of the start of their session. The display time for each regular poster is detailed in the program manual. During this time, the presenter must stand by the display board to answer questions and discuss about the contents of the poster informally. The poster display should include a statement of the topic, objectives of the research or project, the methodology used to solve the problem or implement the program, the major findings or outcomes and their significance and conclusions. There should be a logical sequence-introduction, development and conclusion of your display.

One poster board is provided for each presentation, which is 1.2 meters high by 0.8 meters wide. The background color of the board is usually beige or white. Pins or tapes are provided by conference committee to mount your posters on the boards. All materials to be displayed should be prepared before your arrival. Supplies will not be available at the conference site.

Information for Student Paper Competition

The Student Paper Competition interactive forum (Poster Session) is anticipated to take place on Nov.5, 2024 from 14:00-15:00, where the finalists posters/presentations will be judged by our Award Committee, Recommended Poster Size: 1.2% (height)* 0.8M (width). No show means the authors withdraw their papers from the contest.

Plenary Talk I

Recent Development on ME dipole antennas and arrays

Prof. Kwai Man Luk

City University of Hong Kong

(09:20-09:50, November 5 GRAND THEATER I)

Abstract

With the increasing demand for faster wireless connectivity, rising adoption of smartphones for consumer electronics, and accelerating digitization, stringent requirements, such as wide bandwidth and compact size, are imposed on antenna technology. The magneto-electric (ME) dipole is proposed to tackle the new challenges. It has been developed for mobile communications, global navigation receivers, radars, sensors, medical imaging systems and wireless power transfer systems. Compared with conventional antennas such as dipoles, slots and microstrip antennas, the ME dipoles have many distinguished features including wide bandwidth, low cross-polarization, low back radiation and stable gain and beamwidth over the operating frequencies. An overview of the theory and recent development of the ME dipoles will be presented.

Biography of the speaker

Professor Luk is specialized in Applied Electromagnetics and Microwave Engineering. He received his Bachelor's and Ph.D. degrees from University of Hong Kong and worked at Chinese University of Hong Kong for 4 years. He has held his Chair Professorship in Electronic Engineering at City University of Hong Kong since 1999.

He is a Fellow of the Royal Academy of Engineering and a Fellow of the Hong Kong Academy of Engineering Sciences. He is also a Fellow of IEEE, HKIE, CIE, IET, and the Electromagnetic Academy. He received the 2001 Croucher Award, the 2011 State Technological Invention Award (2nd Prize), the 2017 IEEE APS John Kraus Antenna Award, 2019 Ho Leung Ho Lee Science and Technology Prize and the 2022 Guanghua Engineering Prize.

He is the Principal Coordinator of an Area of Excellence Project entitled: “Advanced antenna Technology for a smart world”, supported by the Research Grant Council of Hong Kong.

He served as Chair of the Best Paper Award Committee, Chair of the Field Award Committee, Chair of Distinguished Lecturer Program Committee, and Elected Member of the Administrative Committee of the IEEE Antennas and Propagation Society.

He is the Fellow Committee Chair of the Electromagnetic Academy and Deputy Editor-in-Chief of PIERS journals.

Plenary Talk II

Element-Level Beamforming: Empowering Wide-Angle Scanning Phased Array Antennas

Prof. Quan Xue

South China University of Technology

(09:50-10:20, November 5 GRAND THEATER I)

Abstract

With the increasing demand for wireless communication and sensor technology, the research and commercialization of antenna arrays are experiencing rapid growth. Wide-angle scanning antenna array technology has become the mainstream for achieving broad communication and sensing coverage. Numerous scientists and engineers have made significant contributions to enhancing the scanning angle of antenna arrays, leading to notable achievements. This presentation introduces a solution for element-level beamforming. In this kind of design, the radiation pattern of each element can be steered by its multiple feeding ports with different phase combinations to align the pattern of each element to that of the array. With this alignment, the scanning angle of the array can be dramatically increased, while keeping the broadside gain the same as the regular ones.

Biography of the speaker

Quan Xue received the B.S., M.S., and Ph.D. degrees in electronic engineering from the University of Electronic Science and Technology of China (UESTC), Chengdu, China, in 1988, 1991, and 1993, respectively. In 1993, he joined the UESTC as a Lecturer and became a Professor in 1997. From October 1997 to October 1998, he was a Research Associate and then a Research Fellow at the Chinese University of Hong Kong. In 1999, he joined the City University of Hong Kong and was a Chair Professor of Microwave Engineering before he left in 2017. He also served the University as the Associate Vice President, the Director of the Information and Communication Technology Center, and the Deputy Director of the State Key Lab of Millimeter Waves (Hong Kong). In 2017, he joined the South China University of Technology, where now he is a Professor and serves as the dean of the School of Electronic and Information Engineering, the dean of the School of Microelectronics, and the Director of the Guangdong Key Laboratory of Terahertz and Millimeter Waves. He also served as the Antenna Chief Scientist of Huawei Technologies 2012 Labs (2020-2023), a member of the National 6G Technology General Expert Group. He has published over 600 internationally refereed journal papers and over 300 international conference papers. In addition, he has held more than 50 Chinese patents and more than 30 granted US patents. Prof. XUE's research interests include microwave/millimeter-wave/THz passive components, active components, antenna, microwave monolithic integrated circuits, etc.

Plenary Talk III

Advances in field-domain characteristic modes theory

Prof. Jin Pan

University of Electronic Science and Technology of China

(10:40-11:10, November 5 GRAND THEATER I)

Abstract

Characteristic mode theory (CMT) reveals the inherent electromagnetic (EM) properties of structures, providing a comprehensive range of responses to external stimuli. Its applications in antenna design are diverse and grow rapidly. Traditional methods represent characteristic modes through equivalent electromagnetic currents, which relies on the integral equations and equivalence strategies chosen, sometimes altering the fundamental formula of CMT, and leading to ambiguous or even spurious modes.

To address these issues, we present a novel approach for computing characteristic modes in filed domain, rather than using electromagnetic currents. This method leverages electromagnetic scattering matrices and spherical wave expansion to directly decompose electromagnetic fields. Unlike conventional methods that rely on the impedance matrix generated by the method of moments (MoM), our technique simplifies the problem into a small-scale ordinary eigenvalue problem, improving numerical dynamics and computational efficiency. Beyond these advances, our method is independent from specific MoM frameworks, allowing for the use of various numerical methods. This flexibility paves the way for characteristic mode decomposition to become a universal frequency-domain technique.

Biography of the speaker

Jin Pan received the B.S. degree in electronics and communication engineering from the Radio Engineering Department, Sichuan University, Chengdu, China, in 1983, and the M.S. and Ph.D. degrees in electromagnetic field and microwave technique from the University of Electronic Science and Technology of China (UESTC), Chengdu, in 1983 and 1986, respectively. From 2000 to 2001, he was a Visiting Scholar in electronics and communication engineering with the

Radio Engineering Department, City University of Hong Kong, Hong Kong. He is currently a Full Professor with the School of Electronic Engineering, UESTC. His current research interests include electromagnetic theories and computations, antenna theories, and techniques, field and wave in inhomogeneous media, and microwave remote sensing theories and their applications.

Plenary Talk IV

Transforming the Wireless Frontier: Antenna Innovations

Prof. Hang Wong

City University of Hong Kong

(11:10-11:40, November 5 GRAND THEATER I)

Abstract

The technology market forecasts that high-frequency products, encompassing both established microwave electronics and the latest millimeter-wave and terahertz innovations, will see rapid growth in the coming decades. Scientists worldwide are dedicatedly working to validate the feasibility and vast potential of the newly allocated frequency spectrum by the ITU, spanning from 110 to 450 GHz. These frequencies are found the promise to revolutionize wireless systems with groundbreaking applications, including 6G communications, terahertz imaging, millimeter-wave detection and sensing, low-orbit space communications, autonomous driving, cyber transportations, ultra-fast wireless intelligence, and green energy networks. In this presentation, the speaker will delve into recent advancements in high-frequency electronics from leading global antenna research groups. The focus will be on highlighting the state-of-the-art antenna technologies developed at the State Key Laboratory of Terahertz and Millimeter Waves at City University of Hong Kong. Through this discussion, attendees will gain insight into novel antenna technologies that are poised to transform traditional wireless systems into next-generation communications and related emerging applications. The presentation will feature exemplary cases of cutting-edge antenna technologies that are not just innovations but are set to lay the foundation for future wireless advancements. These technologies will redefine user experiences in 6G and beyond, showcasing the incredible potential of high-frequency applications in modern and future communications.

Biography of the speaker

Hang WONG is a Professor in The Department of Electrical Engineering at City University of Hong Kong (CityUHK). He serves as the Director of Applied Electromagnetics Laboratory and Deputy Director of the State Key Laboratory of Terahertz and Millimeter Waves (Hong Kong) at CityUHK. His research focuses on advanced antenna technologies for 5G, 6G, millimeter-wave and terahertz applications. Prof. Wong's numerous accolades include the Best Paper Award at the Chinese National Symposium on Radio Propagation 2023, the President's Award of CityUHK 2022, and the Best Paper Award at Les Journées Nationales Microondes 2017 in France, among others. He was also recognized as the Best Associate Editor in 2016 by IEEE Antennas and Wireless Propagation Letters and received the Outstanding Scientist Award in 2016 from the Shenzhen Science and Technology Bureau. Leading a major project supported by the Ministry of Industry and Information Technology of the PRC, Prof. Wong developed innovative antenna elements for TD-LTE and 5G applications. With over 300 publications, co-authorship of two book chapters, and 30 US and China patents, his impact on the field is substantial. In the IEEE community, Prof. Wong has twice chaired the IEEE Hong Kong Section of the Antennas and Propagation (AP)/Microwave Theory and Techniques (MTT) Chapter and served as the IEEE APS Region-10 Representative. He is an associate editor for IEEE Transactions on Antennas and Propagation and IEEE Antennas and Wireless Propagation Letters. He was the General Co-chair of the Asia Pacific Microwave Conference (AMPC)

2020, Hong Kong; the General Chair of Cross-Strait Radio Science and Wireless Technology Conference 2021, Shenzhen, China; and is the General Chair of 2025 IEEE International Workshop on Electromagnetics (iWEM), Hong Kong. He is an IEEE Fellow and recognized among Stanford's Top 2% of the World's Most Cited Scientists, underscoring his significant contributions to antenna and wireless engineering.

Plenary Talk V

Applications of Symplectic Geometry Theory in Electromagnetic Simulations and Radar Signal Processing

Prof. Xianliang Wu

Anhui University

(11:40-12:10, November 5　GRAND THEATER I)

Abstract

Modern classical mechanics can be described by three systems: classical Newtonian mechanics, Lagrangian mechanics, and Hamiltonian mechanics. Among these, the Hamiltonian system is particularly pivotal due to its fundamental role in unifying all conservative systems, whether they are finite-dimensional, infinite-dimensional, classical, or quantum. The theoretical underpinning of the Hamiltonian system is rooted in symplectic geometry, with the symplectic structure serving as its core mathematical foundation. Symplectic geometry theory has been widely applied in multiple disciplines. This paper investigates the applications of symplectic geometry theory in the high-frequency approximation of electromagnetic fields, the development of high-precision numerical algorithms, and signal processing. It specifically addresses how symplectic geometry high-frequency approximation mitigates the caustics problem through ray lifting in symplectic space. Furthermore, the study introduces symplectic finite-difference time-domain (SFDTD) and multi-symplectic algorithms (MSA), which are noted for their high precision, stability, and fidelity. These algorithms are applied to electromagnetic simulations, quantum mechanics problem-solving, and multi-physics modeling and analysis. Lastly, the paper explores the use of symplectic geometric mode decomposition (SGMD) in signal denoising and mixed signal separation. This comprehensive analysis highlights the pivotal role of symplectic geometry in enhancing computational methods and signal processing techniques.

Biography of the speaker

Professor Wu is the director of Electromagnetic Scattering and Inverse Scattering Committee, Chairman of Anhui Society of Electronics. He was the vice president of Anhui University and the president of Hefei Normal University. His current research interests include electromagnetic multi-physics simulation, semiconductor device modeling, radio frequency chip design and microsystem packaging, etc. He has published more than 300 papers, including more than 100 SCI/EI articles, and 2 monographs.

吳先良，教授，安徽省首批學術和科技帶頭人，享受國務院特殊津貼。電磁散射與逆散射委員會主任、天線分會副主任，安徽省電子學會理事長，國家級重點學科“電腦應用”模式信號處理方向學術帶頭人、省級重點學科“電磁場與微波技術”學術帶頭人。全國優秀教師，安徽省勞動模範、五一勞動獎章得主。曾任安徽大學副校長、合肥師範學院院長。主要電磁多物理模擬、半導體器件建模、射頻晶片設計與微系統封裝等方面的研究工作。先後主持國家自然科學基金重點專案 2 項、國家自然科學基金專案 4 項、高校博士點基金項目 2 項，在國內外學術刊物上發表學術論文 300 餘篇，其中 SCI、EI 收錄 100 餘篇，出版專著 2 部，曾獲得國家教委科技進步三等獎 1 項，安徽省科學技術獎一等獎 1 項、安徽省科學技術獎二等獎 4 項。

Oral Session 1
Research on Antenna Modes from Theory to Applications

Chairs: Ying Liu (Xidian University), Neng-Wu Liu (Xidian University), Peng Fei HU (Sun Yat-sen University)

11-05 16:00-17:25

Room A: GRAND THEATER I

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	3334	Mulit-Mode Antennas (Invited)	Neng-Wu Liu, Lei Zhu, Ying Liu	Xidian University
2	16:20-16:40	3305	Millimeter-Wave Dual-Band Filtering Patch Antenna and MIMO Array With A Multi-Null Resonator (Invited)	Peng Fei Hu, Xu Yin, Kwok Wa Leung	Sun Yat-sen University
3	16:40-16:55	3332	A Low Profile and Wideband Quadrifilar Helix Antenna with Wide Beamwidth	Jinshan Zeng, Zhe Chen, Yang Yang, Tao Yuan	Shenzhen University
4	16:55-17:10	3397	Design of a Miniaturized Wideband Circularly Polarized Patch Antenna using Characteristic Mode Analysis	Meng-Jing Liao, Tian-Long Yang, Xiao Zhang	Shenzhen University
5	17:10-17:25	3440	Continuous Frequency-Scanning Polarization-Rotating Antenna	Yingxiang Xiong, Pedro Cheong, Wai-Wa Choi	University of Macau

Oral Session 2-1

Recent Progress in Theoretical and Computational Electromagnetics

Chairs: Bing Wei (Xidian University), Huapeng Zhao (University of Electronic Science and Technology of China), Qiang Ren (Beihang University)

11-05 13:55-16:00

Room B: LOTUS

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	13:55-14:15	1005	Time domain method for calculating electromagnetic properties of the dispersive media (Invited)	Bing WEI	Xidian University
2	14:15-14:35	3410	Recent progress of electromagnetic computation technique based on equivalent models (Invited)	Huapeng Zhao	University of Electronic Science and Technology of China
3	14:35-14:55	3308	A Mesh-free, Broadband, Multi-Input Intelligent RCS Prediction Method Based on PointNet++ (Invited)	Zhendong Yang, Qiang Ren	Beihang University
4	14:55-15:10	3459	A Study of Early Detection of Subthreshold Depression Based on the Pentatonic Theory	Shuiqing Li, Ziran Li, Pan Xu, Zhaoyang Yang, Yueming Gao	Fuzhou University
5	15:10-15:25	3287	An efficient method for solving periodic structures problems with periodic Green's function and simplified prism vector basis functions	Lin Lei, Songbing Cai	University of Electronic Science and Technology of China
6	15:25-15:40	3320	A Novel Characteristic Mode Analysis in Cavity Interference Mode Suppression	Xue Niu, Chengyong Yu, Yunpeng Zhang, Jiawei Long, En Li	University of Electronic Science and Technology of China
	15:40-16:00	**Coffee Break**			

Oral Session 2-2

Microwave Filters: Design and Theory

Chairs: Keli Wu (The Chinese University of Hong Kong), Sai Wai Wong (Shenzhen University)

11-05 16:00-17:40

Room B: LOTUS

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	1022	Microwave Filter Synthesis (Invited)	Keli Wu	The Chinese University of Hong Kong
2	16:20-16:40	1004	A Simplified Physical Realization of Electric and Magnetic Coupling of Coaxial Resonator within Single Cavity (Invited)	Sai-Wai Wong	Shenzhen University
3	16:40-16:55	3324	Design of a six-order Microstrip Low-Pass Filter	Qian Lin, Xu-qing Wang, Hai-feng Wu	Qinghai Minzu University
4	16:55-17:10	3394	Analysis and Design of Bandpass Filters with Ultra-Wide Reflectionless Range in GaAs Technology	Mengjie Qin, Zhongmao Li, Huize Qiao, Zhiqiang Li	Institute of Microelectronics of the Chinese Academy of Sciences
5	17:10-17:25	3403	Wideband Bandpass Filters With Improved Selectivity Using Coplanar Stripline-Based Stub-Loaded Resonators	Zhao-An Ouyang, Chu-Peng Chen, Lei Zhu, Shancheng Zhao	Jinan University
6	17:25-17:40	3355	In-Line Rectangular Waveguide Filter Based on Combined Single/Dual-Mode Resonators	Chen Li, Jun-Jie Yan, Fu-Chang Chen	South China University of Technology

Oral Session 3-1

Electromagnetic Theory and Computational Electromagnetics

Chairs: Hongxing Zheng (Hebei University of Technology), Huiqing Zhai (Xidian University), Qiong-Sen Wu (Guangdong University of Technology)

11-05 13:55-16:00

Room C: TULIP

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	13:55-14:15	3419	Investigation of Single Field Finite-Difference Time-Domain Method Applied to Microwave Component Simulation (Invited)	Hongxing Zheng	Hebei University of Technology
2	14:15-14:35	3423	Research on New Electromagnetic Material Antenna and Array Technology (Invited)	Huiqing Zhai	Xidian University
3	14:35-14:55	3371	Dual-Band and Tri-Band Circularly Polarized Slot Antennas Based on Cascaded Non-Radiative Resonator (Invited)	Qiong-Sen Wu, Zhi-Keng Lin, Fu-Chang Chen	Guangdong University of Technology
4	14:55-15:10	3521	The S-parameter extraction for optical waveguides by the FDFD method	Chengnian Huang, Wei E.I. Sha	Zhejiang University
5	15:10-15:25	3504	The Calculation and analysis of SO-DGTD for media of magnetized ferrite	Linqian Li, QianYang, Xinbo He, Bing Wei	Xidian University
6	15:25-15:40	3429	Accelerating DGTD-based Field-Circuit Coupling Simulations using CUDA	Sifan Wang, Qiangqiang Zhu, Yang Wu, Ruofeng Xu, Lei Zhao	China University of Mining and Technology
	15:40-16:00	**Coffee Break**			

Oral Session 3-2

Metamaterial and Metasurface

Chairs: Lixia Yang (Anhui University), Alex M. H. Wong (City University of Hong Kong)

11-05 16:00-17:25

Room C: TULIP

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	1013	Multi-Channel High-Purity Optical Vortex Generation Technology Based on Aperture-Type Metasurfaces (Invited)	Lixia Yang	Anhui University
2	16:20-16:40	1018	Tailoring EM Waves with Discrete Metasurfaces (Invited)	Alex M. H. Wong	City University of Hong Kong
3	16:40-16:55	3209	Topological Valley Transport in Honeycomb Photonic Crystals	Li Wei, Weiwen Li	Xiamen University
4	16:55-17:10	3481	Polarization and Angle Insensitive Ultrathin Wideband Metamaterial Absorber based on Indium-Tin-Oxide	Mufassal Manzoor, Cunjun Ruan, Lulu Han	Beihang University
5	17:10-17:25	3358	Nonlinear Coherent Perfect Absorption Based on Second Harmonic Generation in a Spoof Plasmonic Waveguide	Wen Yi Cui, Jingjing Zhang	Southeast University

Oral Session 4-1

Antenna Theory and Technology

Chairs: Yu Jian Cheng (University of Electronic Science and Technology of China), Lianghua Ye(Guangdong University of Technology)

11-05 14:15-16:00

Room D: ORCHID

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	14:15-14:35	3447	Large-Angle Scanning Phased Array Antenna (Invited)	Yu Jian Cheng	University of Electronic Science and Technology of China
2	14:35-14:55	3527	Ultra-Wideband Antennas for Base Station Applications (Invited)	Juerui Lin, Jian Dong Peng, Liang Hua Ye	Guangdong University of Technology
3	14:55-15:10	3321	Design Method for Series-Fed Omnidirectional Filtenna Based on Full-Metal 3-D Printing	Shu-Qing Zhang, Shu-Ting Wu, Sai-Wai Wong, Yejun He, Zhonghe Zhang, Xuzhou Yu	Shenzhen University
4	15:10-15:25	3318	Temperature Characteristics Survey for a Doherty Power Amplifier	Qian Lin, Mei Qian Wang, Lin Sheng Liu	Qinghai Minzu University
5	15:25-15:40	3306	A Generalized Synthesis Technique for High-order Bandpass Frequency-Selective Surfaces via Rectangular Patch Resonators and Coupled Apertures	Jiaxin Kuang, Lei Zhu, Wanping Zhang	University of Macau
	15:40-16:00	**Coffee Break**			

Oral Session 4-2

Emerging Antenna Technologies for Communication and Radar Applications

Chairs: Kai Lu (Sun Yat-sen University), Nan Yang (Sun Yat-sen University), Yuehui Cui (South China University of Technology)

11-05 16:00-17:40

Room D: ORCHID

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	1025	Radiation Pattern Decoupling of Dielectric Resonator Antenna with Low Cross Polarization (Invited)	Nan Yang	Sun Yat-sen University
2	16:20-16:40	3424	Dual-Polarized Shared-Cavity Waveguide Slot Antenna for 77 GHz Automotive Radar Applications (Invited)	Yuehui Cui, Xinwei Chen	South China University of Technology
3	16:40-16:55	3532	Ridge Gap Waveguide Fed Slot Array Antenna with Low Sidelobe Level	Shi-Kang Xie, Nan Yang, Kai Lu	Sun Yat-sen University
4	16:55-17:10	3430	Synthetic Aperture Radar Imaging Simulation of Leakage in Underground Water Supply Pipeline	Jingjing Liu, Jinliang Gao, Jiaran Qi, Jinghui Qiu	Harbin Institute of Technology
5	17:10-17:25	3356	A High Linearity V-band Power Amplifier with Gain Response Shaping Method in 65-nm CMOS	Zhenhao Guan, Peng Fei Hu, Pei Qin, Hao Xu, Nan Yang	Sun Yat-sen University
6	17:25-17:40	3516	Broadband Dual-Layer Patch Antenna for Millimeter-Wave Antenna-in-Package Applications	Bin Gong, Zheng Fang, Kai Lu, Nan Yang, Pan Pan	Sun Yat-sen University

Oral Session 5-1

Antenna Theory and Technology

Chairs: Yue Li (Tsinghua University), Zhe Chen (Shenzhen University)

11-06 08:30-10:15

Room A: GRAND THEATER I

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	08:30-08:50	1014	Antennas with Epsilon-Near-Zero Metamaterials (Invited)	Yue Li	Tsinghua University
2	08:50-09:10	3432	Circularly-Polarized Antenna with Isoflux Pattern (Invited)	Zhe Chen, Tao Yuan	Shenzhen University
3	09:10-09:25	3497	Wideband Decoupling of Co-Polarization Slot Antenna without Additional Component	Shun Li, Zhi-Hong Tu, Qing-Xin Chu	South China University of Technology
4	09:25-09:40	3510	A Dual-band Eight-Element Terminal MIMO Antenna with Decoupling Structure	Yong Mao Huang, Nian Chen, Jiwei Zhang	Xihua University
5	09:40-09:55	3376	Planar Programmable Metasurface Antenna with Flexible Beam Manipulation Ability	Hui Dong Li, Jun Yan Dai, Qiang Cheng	Southeast University
	09:55-10:15	**Coffee Break**			

Oral Session 5-2

Antenna Theory and Technology

Chairs: Yu Luo (Tianjin University), Shaoqiu Xiao (Sun Yat-Sen University)

11-06 10:15-11:45

Room A: GRAND THEATER I

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	10:15-10:35	1006	Research on multimode high-order mode compressed dipole (Invited)	Yu Luo	Tianjin University
2	10:35-10:55	1015	An Ultra-Low Profile Large Spaced Phased Array with Grating Lobe Suppression (Invited)	Shaoqiu Xiao	Sun Yat-Sen University
3	10:55-11:15	1026	GRAND project: status and perspectives (Invited)	Pengfei Zhang	Xidian Univeristy
4	11:15-11:30	3307	A Pattern Reconfigurable Antenna Loaded with Multi-Circle Sectored Metasurface	Yanshan Wang, Yu Luo, Kaixue Ma	Tianjin University
5	11:30-11:45	3392	Low-Profile Filtering Magneto-Electric Dipole Antenna	Yan-Ming Ren, Guang-Hong Wen, Si-Qi Zhong, Rui Wu	Guangdong University of Technology

Oral Session 6-1

Multifunctional Antennas Enabled by Novel Materials and Methods

Chairs: Bian Wu (Xidian University), Xin Sun (City University of Macau)

11-06 08:15-10:15

Room B: LOTUS

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	08:15-08:35	3420	Multifunctional Antennas Based on Spoof Surface Plasmons Polaritons (Invited)	Bian Wu	Xidian University
2	08:35-08:55	3408	Embedded Structures for Wideband Matching in Antennas (Invited)	Honglin Zhang	South China University of Technology
3	08:55-09:10	3304	Research on high dynamic and broadband electromagnetic modulation characteristics based on plasma and flexible hydrogel materials	Wenchong Ouyang, Zhengwei Wu, Quanming Lu	University of Science and Technology of China
4	09:10-09:25	3389	A Flexible Ultra-thin Transmission Line based on Spoof Surface Plasmon Polaritons	Xia Kexin, Chen Kanglong, Han Lulu, Ruan Cunjun	Beihang University
5	09:25-09:40	3391	High Gain Metal-Bezel Circular Polarization Smartwatch Antenna	Zheng-hua Rong, Qing-xin Chu	South China University of Technology
6	09:40-09:55	3486	Aperture-Shared Design of Multifunctional Dual-Band Antenna Array with Beam Scanning	Jiao Yin, Xiangzhuang Song, Bian Wu	Xidian University
	09:55-10:15	**Coffee Break**			

Oral Session 6-2

Medical Wireless Signal Processing and Applications

Chairs: Gengshen Wu (Lingnan University), Jun-Hui Ou (South China University of Technology)

11-06 10:15-11:20

Room B: LOTUS

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	10:15-10:35	1011	Improving the Robustness of Microwave rectifiers (Invited)	Jun-Hui Ou	South China University of Technology
2	10:35-10:50	3405	Muscle Impedance Circle Mapping for Muscle Tissue Assessment after Stroke	Junwei Zhou, Pan Xu, Peitao Xu, Xinyu Li, Weihan Wang, Wei Wei, Xiehua Xue, Yueming Gao	Fuzhou University
3	10:50-11:05	3467	Research on Impedance Matching for Improving Gain in Conductive Intracardiac Communication	Jiamei Wang, Dongming Li, Han Wang, Jiejie Yang, Sio Hang Pun, Mang I. Vai, Yueming Gao	Fuzhou University
4	11:05-11:20	3442	Improved Depth Weighted Method Based on Target in deformed tHVA Coils	Jun-Hao Dong, Zhi-Hong Tu, Gui-Ping Jin, Yun Wang	South China University of Technology

Oral Session 7-1

Propagation

Chairs: Wei LIN (The Hong Kong Polytechnic University), Xiaoguang Liu (School of Microelectronics Southern University of Science and Technology)

11-06 08:45-10:15

Room C: TULIP

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	08:45-09：05	1009	Key Technologies for Wireless Power Transfer Enabled IoT Systems (Invited)	Wei LIN	The Hong Kong Polytechnic University
2	09:05-09:25	1024	Pushing the limit of Millimeter-wave/THz Signal Generation (Invited)	Xiaoguang Liu	School of Microelectronics Southern University of Science and Technology
3	09:25-09:40	3457	Radiation Characteristics of Aerial VLF Towed Antenna Based on Curved Thin-Wire FDTD Method	Qiang Wu, Zhancao Guo, Shitian Zhang, Mingyue Yang, Kuisong Zheng, Gao Wei	Northwestern Polytechnical University
4	09:40-09:55	3323	Interconnect Reliability Analysis of MCM Based on Different Application Environments	Qian Lin, Bo-Hao Zhang, Hai-Feng Wu	Qinghai Minzu University
	09:55-10:15	**Coffee Break**			

Oral Session 7-2

Advanced Privacy-Preserving Mechanisms in IoT and Wireless Networks

Chairs: Zuobin Ying (City University of Macau), Lefeng Zhang (City University of Macau)

11-06 10:15-11:15

Room C: TULIP

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	10:15-10:30	3465	A Differentially Private Traffic Monitoring Mechanism for Intelligent Transport Systems	Changchun Liu, Zihan Xie	City University of Macau
2	10:30-10:45	3468	Efficient Model Quality Evaluation in Federated Learning via Functional Encryption	Ruichen Xu, Yang He, Yi Wu, Chenfei Hu, Yajie Wang, Liehuang Zhu, Chuan Zhang	Beijing Institute of Technology
3	10:45-11:00	3469	A Privacy Preserving Incentive Mechanism for Intelligent Transportation Systems	Yonghao Wu, Changchun Liu, Zihan Xie	City University of Macau
4	11:00-11:15	3506	A Differentially Private Incentive Method for Sensitive Survey	Jianyu Ma, Zihan Xie	City University of Macau

Oral Session 8-1

Metamaterial and Metasurface

Chairs: Kuang ZHANG (Harbin Institute of Technology), Xue Ren (Shenzhen University)

11-06 08:45-10:15

Room D: ORCHID

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	08:45-09:05	1012	Multilayered metasurfaces for wavefront manipulation (Invited)	Kuang ZHANG	Harbin Institute of Technology
2	09:05-09:25	3322	Low-Profile Beamforming Metasurface with Enhanced Refractive Index (Invited)	Xue Ren	Shenzhen University
3	09:25-09:40	3439	Janus metasurface with independent transmission and reflection phase modulation	Guanyu Shang, Xumin Ding	Harbin Institute of Technology
4	09:40-09:55	3340	Ku-band High-Efficiency 1-Bit Transmissive Programmable Metasurface	Hao Tian Shi, Rui Yuan Wu	Southeast University
	09:55-10:15	**Coffee Break**			

Oral Session 8-2

Spatial Computing and Wireless Applications

Chairs: Xumin Ding (Harbin Institute of Technology), Xiao Zhang (Shenzhen University)

11-06 10:15-11:25

Room D: ORCHID

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	10:15-10:35	3421	High-Degree-of-Freedom Leaky-Wave Antenna Based on Fourier Surface (Invited)	Xumin Ding, Yue Wang	Harbin Institute of Technology
2	10:35-10:55	3341	Pin-loaded Patch Antennas with Improved Pattern Stability and Self-Decoupling for MIMO Arrays (Invited)	Xiao Zhang	Shenzhen University
3	10:55-11:10	3416	Multi-Distance and Multi-Angle Millimeter-Wave Radiation Characteristics of Sea Ship	Yayun Cheng, Yan Fang, Jingdan Zhao, Huimin Xiong, Jinghui Qiu	Harbin Institute of Technology
4	11:10-11:25	3476	Investigating Researcher Mobility Through Geographic Information Systems (GIS)	Fusheng Chen, Te Guo, Chunglun Wei, Chiawei Chu	City University of Macau

Oral Session 9-1

Machine Learning and Its Applications

Chairs: Luyu Zhao (Anhui University), Yimin Yang (Xidian University)

11-06 14:15-16:00

Room A: GRAND THEATER I

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	14:15-14:35	1023	Advanced Design of Full Duplex Antenna Arrays using Machine-Learning and Intelligent Surface (Invited)	Luyu Zhao	Anhui University
2	14:35-14:55	3409	Bridging Practical Engineering and Mathematical Prototypes in Filter Design (Invited)	Yimin Yang	Xidian University
3	14:55-15：10	3382	DPT-YOLO: An Improved Underwater Object Detection Model Based on YOLO	Kexiang Huang, Minghe Xu, Te Guo, Fusheng Chen, Chung-Lun Wei, Chiawei Chu	City University of Macau, Zhuhai College of Science and Technology
4	15:10-15:25	3433	Infrared and Visible Image Fusion via Double Fusion Branch	Wang Ren, Jia Ren	City University of Macau
5	15:25-15：40	3511	Towards Improved Clinical Diagnostics: The LASF Approach for Coronary Angiogram Segmentation	Hao Ren, Yu Sun, Fengshi Jing, Wen Jin, Weibin Cheng	City University of Macau
	15:40-16:00	**Coffee Break**			

Oral Session 9-2

IEEE Young Professional Session

Sponsored by IEEE MTT-S Technical Committee 25

Chairs: Zhizhang David Chen (Dalhousie University), Changjun Liu (Sichuan University), Wenjie Feng (South China University of Technology)

11-06 16:00-17:20

Room A: GRAND THEATER I

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	1027	IEEE MTT-S: Your Partner in Career Advancement and Professional Development	Zhizhang David Chen	Dalhousie University
2	16:20-16:40	3520	Microwave Rectifiers with Feedback and Adaptive Strategy for Large Dynamic Input Power Levels (Invited)	Changjun Liu, Fei Liu, Jing Lan, Liping Yan	Sichuan University
3	16:40-17:00	3437	Overview of W-band Gap Waveguide Circuit and System (Invited)	Wenjie Feng	South China University of Technology
4	17:00-17:20	3530	Dual-mode CMOS Power Amplifier Covering both Sub-6GHz and mm-Wave Bands for 5G NR (Invited)	Haoshen Zhu	South China University of Technology

*Quizzes with exciting prizes at the end of the session! Complimentary snacks and beverages available throughout the event.

Oral Session 10-1
Microwave Remote Sensing

Chairs: RongLin Li (South China University of Technology), Zhi-Xia Du (Guangdong University of Technology)

11-06 14:30-16:00
Room B: LOTUS

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	14:30-14:50	1010	All-Metal mm-Wave Antennas for Automotive Radar Sensors (Invited)	RongLin Li	South China University of Technology
2	14:50-15:10	1019	Highly-Integrated Pulse Transmitters based on Self-Oscillating Active Integrated Antennas (Invited)	Zhi-Xia Du	Guangdong University of Technology
3	15:10-15:25	3452	A Novel CNN-based Method for Predicting the Land Clutter of Large and Complex Terrain	Dong Zhu, Qiang Zhao, Xia Li Yang, Peng Zhao, Jinpeng Zhang, Qingliang Li	Information Materials and Intelligent Sensing Laboratory of Anhui Province
4	15:25-15:40	3512	Anti-collision Sensing for Unmanned Aerial Vehicle in Planetarium Using Circular RFID Array on Spherical Balloon	Kam-Weng Tam, Hon-Pan Sio, Man-Chon Si, Sio-Weng Ting, Kong Ngai, Jia-Jie Liang, Yue-Qi Chen	University of Macau
	15:40-16:00	**Coffee Break**			

Oral Session 10-2

Research on Electromagnetic Scattering Methods and Scattering Center Extraction Techniques for Targets in Complex Environments

Chairs: Xincheng REN (Yan'an University), Shuirong Chai (Xidian University), Anqi Wang (Anhui University), Juan Li (Xidian University)

11-06 16:00-17:45

Room B: LOTUS

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	1002	Composite Electromagnetic Scattering Characteristics of Actual Terrain and Moving Rockets (Invited)	Xincheng REN	Yan'an University
2	16:20-16:40	3428	Multi-target Coupling Effect Evaluation and Analysis Method Via Scattering Center Model (Invited)	Shui-Rong Chai, Fang-Yin Zhu, Li-Xin Guo, Zhen-Xiang He, Yu-Feng Zou	Xidian University
3	16:40-17:00	3449	Simulation of Electromagnetic Scattering from Three-Dimensional Target Based on Point Cloud Technology (Invited)	Han Li, Anqi Wang, Lixia Yang, Zhixiang Huang, Xianliang Wu	Anhui University
4	17：00-17:15	3365	Fast Automatic Mesh Generation Method for FIT and FDTD Solvers	Ming Fang, Xingang Ren, Gang Wang, Yongchun Miao, Jian Feng, Ke Xu	Anhui University
5	17:15-17:30	3345	Analysis on parameters inversion of hypersonic plasma flow field	Wei Chen, Xiaojun Sun, Lixia Yang, Xianliang Wu	Anhui University, Zhuhai College of Science and Technology
6	17:30-17:45	3500	Research on EM Scattering from Composite Rough Surface with vegetated sub-regions and Overhead Targets Based on the SBR-VRT Method	Yufeng Zou, Shuirong Chai, Lixin Guo, Wei Liu, Fangyin Zhu, Zhenxiang He	Xidian University

Oral Session 11-1
Wideband Microwave and Millimeter-wave Multibeam Antenna Array

Chairs: Kuikui Fan (Hangzhou Dianzi University), Jianxing Li (Xi'an Jiaotong University), Qing-Yi Guo (Shenzhen University)

11-06 13:55-16:00

Room C: TULIP

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	13：55-14:15	3531	Wideband and Polarization Reconfigurable Antenna Array for Beam Scanning Applications (Invited)	Xiuping Li	Beijing University of Posts and Telecommunications
2	14:15-14:35	3451	High Isolation Dual-polarized Antennas and Their Application in Multi-beam Antenna Systems (Invited)	Kuikui Fan, Guo Qing Luo	Hangzhou Dianzi University
3	14:35-14：55	3526	Millimeter/Terahertz wave circulaly polarized multi-beam antenna/surfaces (Invited)	Qing-Yi Guo, Ming-Qin Yang	Shenzhen University
4	14:55-15:10	3350	Design of an X-band Circularly Polarized Luneburg Lens Antenna	Yuhui Ren, Kailong Ji, Fuwei Wang, Ke Li, Yingxi Liu, Feng Cui, Guoxuan Yin, Handong Wu	Northwest University
5	15:10-15:25	3426	Study on High-Frequency System of S-Band Multi-Beam Klystron	Yaqi Zhao, Cunjun Ruan	Beihang University
6	15:25-15:40	3243	Absorptive Energy Selective Surface for High-Power Microwave Protection and Stealth	Haoke Liu, Weikang Li, Wenmei Zhang	Shanxi University
	15:40-16:00	**Coffee Break**			

Oral Session 11-2
Antenna array

Chairs: Yejun He (Shenzhen University), Chunxu Mao (South China University of Technology), Yiming Zhang (Sun Yat-sen University)

11-06 16:00-17:15

Room C: TULIP

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	3535	Base Station Antennas for 5G mmWave and Sub-6GHz Bands (Invited)	Yejun He	Shenzhen University
2	16:20-16:40	1021	Circularly Polarized Phased Array Antennas (Invited)	Chunxu Mao	South China University of Technology
3	16:40-17:00	3412	Decoupling methods for millimeter-wave antenna arrays (Invited)	Yiming Zhang	Sun Yat-sen University
4	17:00-17:15	3453	Effect of Array Element Arrangement on Planar Endfire Array Characteristics	Guibin Zhang, Leyan Pan, Yuanming Cai	Xidian University

Oral Session 12-1
Remote and Wireless Smart Education

Chairs: Kuok Weng Tak (City University of Macau), Yu-Xiang Sun (Shenzhen University), Fu Mo (Guangdong University of Science and Technology), Wennan Wang (Guangdong University of Science and Technology)

11-06 14:20-16:00
Room D: ORCHID

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	14:20-14:40	3317	Wideband Millimeter-Wave QMSIW MIMO Antenna Array for 5G Wireless Communication (Invited)	Zengtai Zhou, Jiayi Wang, Yu-Xiang Sun	Shenzhen University
2	14:40-14:55	3446	A Personalized Combination of Remote Block Search and Wireless Intelligence Technology for Online Course Content	Yang Zhao	Guangdong University of Science and Technology
3	14:55-15:10	3466	Design of Scholar Portrait System Based on Network Representation Learning	Yanchao Li	Guangdong University of Science and Technology
4	15:10-15:25	3360	Enhancing Real-time Student Emotion Recognition in Online Classrooms Using LSTM and CNN Hybrid Models"	Shao Ke, Wang Tian Cheng, Jinhai Tang	Guangdong University of Science and Technology
5	15:25-15:40	3368	Real-time Wireless Adaptive Learning Systems Using Reinforcement Learning and IoT for Smart Education	Wennan Wang, Shiyang Song	Guangdong University of Science and Technology
	15:40-16:00	**Coffee Break**			

Oral Session 12-2
Electronic devices and instruments

Chairs: Juncheng Cao (Shanghai Institute of Microsystem and Information Technology), Guoxiang Shu (Shenzhen University)

11-06 16:00-17:30
Room D: ORCHID

No.	Time	Paper ID	Title	Author's Name	First Author's Affiliation
1	16:00-16:20	3533	Teraherz quantum cascade laser and its applications in imaging and communication (Invited)	Juncheng Cao	Shanghai Institute of Microsystem and Information Technology
2	16:20-16:40	3411	Study of high power and wideband sheet beam travelling wave tube amplifiers (Invited)	Guoxiang Shu, Huaxing Pan, Jiawei Tang, Jiacai Liao, Wenlong He	Shenzhen University
3	16:40-17:00	3414	Setup and Experiment of 400MHz DNP NMR System Based on Self-developed Terahertz Radiation Source and Terahertz Transmission Line (Invited)	Diwei Liu, Wei Wang, Tao Song	University of Electronic Science and Technology of China
4	17:00-17:15	3319	Behavioral Modeling of GaN Power Amplifier Based on CG-BPNN	Qian Lin, Shu Yue Yang, Lin Sheng Liu	Qinghai Minzu University
5	17:15-17:30	3325	A 1.9 - 2.7 GHz High Efficient and Broadband GaN HEMT PA	Qian Lin, Da-an Zhao, Hai-Feng Wu	Qinghai Minzu University

Poster Session-Student Paper Competition

11-05 13:40-14:40

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3315	Investigation on the Wideband Performance of Non-Resonant Partially Reflective Surface Antennas	Xiaodong Zheng, Yuehe Ge, Zhizhang (David) Chen	Fuzhou University
2	3483	H/E-plane Port and Radiation Pattern Decoupled Microstrip Antenna	Guang-Yao Liu, Nan Yang, Kwok Wa Leung	City University of Hong Kong
3	3375	On Obtaining the MoM Formula for the Characteristic Mode Theory	Chenbo Shi, Jin Pan	University of Electronic Science and Technology of China
4	3370	Wireless Power Transfer Enabled Supercapacitor- Energized IoT Sensor System Facilitated by Voltage-Dependent Scattering Parameter Analysis Method	Haowen Cai, Wei Lin	The Hong Kong Polytechnic University
5	3352	Innovative Machine Learning Approaches for Real-Time Detection of Obstructive Sleep Apnea Using ECG Signals in Medical Wireless Systems	Xuan Liu, Wenjian Liu	City University of Macau
6	3493	Study of a 60 GHz Quasi-optical Resonator for the Measurement of Low-loss Dielectrics' Complex Permittivity	Xinqiang Li, Guoxiang Shu, Binbin Shi, Jiacai Liao, Shengtao Hong, Longshen Huang, Wenlong He	Shenzhen University
7	3386	Composite Scattering of a Target Above the Snow Ground	Yong-Ji Xi, Juan Li, Li-Xin Guo, Wei Meng, Zi-Hao Li, Rui-Feng Liu	Xidian University
8	3309	Triple-Mode Wideband Patch Antenna With Enhanced Gain and Omnidirectional Radiation	Xiaohan Zhai, Lei Zhu	University of Macau
9	3357	Design of Ultra-Wideband and Miniaturized Spiral Antenna	Bochuan Jin, Nengwu Liu, Ying Liu, Cheng Shang	Xidian University
10	3443	FMCW Radar Crowd Counting with Beamforming and Attention-Enhanced Multi-Scale CNN	HongZhou Du, Pedro Cheong, Wai-Wa Choi	University of Macau
11	3514	Characteristic Mode Cancellation for Radiation Pattern Decoupling of Asymmetric Dipole Antennas	Yu-Zhuo Deng, Nan Yang, Kai Lu, Jingchang Nan	Sun Yat-sen University

No.	Paper ID	Title	Author's Name	First Author's Affiliation
12	3454	Image Processing Units based on Epsilon-near-zero Metamaterials	Pengyu Fu, Yue Li	Tsinghua University
13	3327	Research on the Inhomogeneity of Evaporation Duct in the South China Sea Based on the ERA5 Data	Zhao Qiang, Zhu Dong, Liu Chao, Guo Xiangming, Li Qingliang, Yang Lixia	Anhui University
14	3523	Polarizer Lens Applied to Planar Dual Circularly Polarized Multi-beam Antenna	Zhen Wang, Kuikui Fan, Guo Qing Luo	Hangzhou Dianzi University

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11-05 14:40-15:40

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3460	Ultrawideband Dual-polarized Magneto-electric Dipole Antenna with High Isolation	Yongmao Wang, Liangliang Zhao, Jiaping Hou, Mingxuan Zheng, Chuwei Li, Aidong Li, Chufeng Hu, Tao Ma, Huiling Zhao	Northwestern Polytechnical University
2	3461	A Low-profile Ultrawideband Dual-polarized TCDA	Liangliang Zhao, Aidong Li, Chufeng Hu, Chuwei Li, Mingxuan Zheng, Hailiang Zhu, Tao Ma, Yongmao Wang, Jiaping Hou, Huiling Zhao	Northwestern Polytechnical University
3	3462	Efficient Neural Network-Based Synthesis of Low Sidelobe Frequency-Invariant Directional Patterns	Xinchang Su, Weiqi Cai, Xinkun Liu, Qingdong Zhang	Research Institute for Special Structures of Aeronautical Composite AVIC Jinan
4	3472	A Wideband Antipodal Double-slit Vivaldi Feed Antenna for Millimeter-Wave Imaging	Nannan Wang, Yongjian Ma, Pengcheng Wang, Hongxiao Zhang, Jinghui Qiu	Harbin Institute of Technology
5	3496	Novel Extended Thinned Coprime Arrays With Increased Uniform Degrees of Freedom	Jianbo Wang, Jianyu Ye, Jianqing Sun, Guang Hua	Southeast University
6	3507	Design of A Broadband Comb-line Array Antenna for Millimeter-Wave Radar Application	AoJie Li, JunKai Ruan, Daming Du, ZhengFang Qian, Hua Zhu	Shenzhen University
7	3508	Pattern Diversity Circularly Polarized Antenna with Wide Axial-Ratio Beam	Zi-Qi Bi, Zhi-Hong Tu	South China University of Technology
8	3495	Preliminary Investigation of Electromagnetic Compatibility Analysis for Magnetic Resonance Human Body Communication	Shaoze Jiang, Han Wang, Dongming Li, Jiamei Wang, Sio Hang Pun, Mang I Vai, Yueming Gao	Nan'an Public Security Bureau

No.	Paper ID	Title	Author's Name	First Author's Affiliation
9	3326	Time-Harmonic Electromagnetic Source Reconstruction by Time-Reversal and FOCUSS	Juan Li, Zhi Zhang Chen, Zhi Meng Xu	Fuzhou University
10	3415	Radio Environment Map Construction for EMI Multi-Radiation Source based on Blind Source Separation	Chenyu Zhao, Jiaji Qin, Wenjun Xu, Yifei Wang, Haifeng Li	Shanghai Aerospace Electronics Co., Ltd.
11	3351	The octupole radiation and absorption spectrum of the HCL molecule	Minghe Wu, Yihua Hao, Baohua Teng, Ren Wang	University of Electronic Science and Technology of China
12	3402	Worst case analysis of random parameter circuits or devices via Taylor models method	Huaibin Wang, Tongyu Ding, Chong-Zhi Han, Ying Huang	Jimei University
13	3485	A Method for Evaluating the Position Tolerance Performance of a Planar Magnetic Coupling Resonant Wireless Power Transfer System	Wei Kun Yang, Jin Yu Chen, Zhi Meng Xu, Zhi zhangZ Chen, Juan Li	Fuzhou University
14	3505	Transient Multiphysics Simulation for Multiscale RF ICs and Uncertainty Quantification	Kaikun Niu, Wenkai Zhang, Zhixiang Huang, Xianliang Wu	Anhui University
15	3366	A Progressive Training Framework for Image Super-Resolution	Yanzhen Lin, Yongde Guo, Jun Yan, Qiuji Zhou	City University of Macau

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11-05 16:00-17:00

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3330	Crowdsensing Based on NB-IoT: Approaches to Enhancing Efficiency and Ensuring Data Security	Jiangrong DENG	Hong Kong Baptist University
2	3377	A Dynamic Topology-considered UAV Swarm Path Planning Method in City Environment	Yan Du, Teng Wu, Peifeng Wu, Hui Xie, Changzhen Hu, Shengjun Wei	Beijing Institute of Technology
3	3404	Industry 4.0 Conceptual Model for Small-Scale Automated Assembly Line Equipment Manufacturers Based on Motion Control Technology	Hu Yang	China University of Geosciences
4	3342	Drink-PulseNet: Recognize Drinking Status with Pulse Wave-Based Learning Method	Kexin Zhou, Junsheng Yu	Beijing University of Posts and Telecommunications
5	3353	A Bluetooth-Based System for Real-Time Health Monitoring: Integrating Multiple Medical Devices	Kaiian Kuok, Xuan Liu, Yaokang Wang, Wenjian Liu	City University of Macau
6	3425	An Innovative Study on Automatic Sleep Stage Classification Using Feature Extraction and Machine Learning Based on Radio Signal Analysis	Jinwei Ye, Wenjian Liu, Liyun Qiu	City University of Macau
7	3427	A Noise Reduction Algorithm Applied to PET Systems	Xin Tang, Feng Lin Yan, Hu Zheng	University of Electronic Science and Technology of China
8	3499	Accurate Vital Sign Extraction by Variational Nonlinear Chirp Mode Decomposition	Junkai Ruan, AoJie Li, DaMing Du, Zhengfang Qian, Hua Zhu	ShenZhen University
9	3383	Dual Frequency and Dual Polarization Beamforming based on Tensor Impedance Metasurface	Hui-Fen Huang, Xiao-Mei Lei	South China University of Technology
10	3436	Design of a dielectric radome with high power tolerance and frequency selective characteristics	Xingwang Zhang, Qunsheng Cao, Yingyan Zhao	Nanjing University of Aeronautics and Astronautics

No.	Paper ID	Title	Author's Name	First Author's Affiliation
11	3477	Deep Learning Enabled Bandpass Electromagnetic Metasurface Inverse Design	Shenghui Zhao, Ruizhi Zhang, Meng Guo, Xuewei Zhang, Lifeng Nie, Xiaoyu Pang	The Research Institute for Special Structures of Aeronautical Composite AVIC
12	3501	Design of a Broadband Absorption Transmission Frequency Selective Surface Structure	Aomei Zhang, Qunsheng Cao	Nanjing University of Aeronautics and Astronautics
13	3502	A Huygens metasurface unit design based on rectangular periods	Shuangshuang Chen, Chuanxiang Lian, Deqiang Yang, Jifan Li	University of Electronic Science and Technology of China
14	3517	Wideband Low-RCS Dual-Band Circularly Polarized Metasurface Antenna	Zhao Gao, Xi Gao	Guangxi University of Science and Technology
15	3381	Bandpass 3-D Frequency Selective Surface With High Selectivity and Wide Out-of-Band Rejection	Jia-Wei Xu, Fu-Chang Chen, Kai-Ran Xiang	South China University of Technology

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11-06 8:30-09:30

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3344	A Fast Synthetic-Frame Method for MIMO Radar Global Imaging	Xiaocha Liu, Kai Tan, Xiaoyi Wang, Guo-Min Yang, Lirong Zheng	Fudan University
2	3303	A Compact Quint-Band Bandpass Filter With Coupled-Line Structure	Yi Wu, Kaixue Ma, Yu Zhan	Tianjin University
3	3328	Design of An 80GHz Passive Vector Modulated Phase Shifter In 22-nm CMOS SOI Technology	Siyuan Liu, Guoxiang Shu, Mingze Li, Jiawei Tang, Hang Liu, Guanqin Guo, Wenlong He	Shenzhen University
4	3362	A 40GHz Frequency Doubler With 22-nm CMOS SOI Process	Mingze Li, Guoxiang Shu, Siyuan Liu, Hang Liu, Guanqin Guo, Wenlong He	Shenzhen University
5	3380	A 24-27GHz Broadband High Linearity Low Noise Amplifier with Small Area	Ziqi Ke, Wenlong He, Shifeng Nie, Zhuoji Wu	Shenzhen University
6	3434	Design of a Low Phase Noise LC-VCO in 22nm Process Technology	Feng Liu, Yunxiao Zhu, Ziqi Ke, Zhuoji Wu, Mingze Li, Wenlong He	Shenzhen University
7	3311	High-power microwave electric field measurement based on microwave thermoacoustic principle	Jiawei Long, Jiahao Zheng, Lingxiao Li, Yong Gao, Xuan Ran, Lin Huang, En Li, Yang Zhou	University of Electronic Science and Technology of China
8	3329	Stripline resonator with the coaxial radiation probe for permittivity detection	Hui Zhu, Kaibo Zhang, Chong Gao, Chengyong Yu, En Li	University of Electronic Science and Technology of China

No.	Paper ID	Title	Author's Name	First Author's Affiliation
9	3331	Asymmetrically Split-Cylinder Resonator with Air Gap for Complex Permittivity Measurements	Xiao He, Chengyong Yu, Xuan Ran, Chong Gao, Yunpeng Zhang, Xue Niu, En Li	University of Electronic Science and Technology of China
10	3361	Dielectric Measurement of Irregular Materials based on Open-circuit Coaxial Resonant Cavities	Donghao Li, Kaibo Zhang, Chong Gao, Jiawei Long, Chengyong Yu, En Li	University of Electronic Science and Technology of China
11	3372	A Resonant Cavity for the Evaluation of Dielectric Properties of Dielectric Liquids	Kaibo Zhang, Donghao Li, Chong Gao, Jiawei Long, Chengyong Yu, En Li	University of Electronic Science and Technology of China
12	3378	Design of a test system for dielectric constant uniformity of P-band materials	Pinhong Xie, Chong Gao, En Li	University of Electronic Science and Technology of China
13	3456	Noncontact Multi-Target Heart Rate Variability Detection Using FMCW Radar	Tao Ye, Dan Li, Zhimeng Xu, Zhizhang Chen, Qinghao Sun	Fuzhou University
14	3458	Multi-Target Separation Algorithm Based on Range-Doppler Map	Xinhui Lin, Zhimeng Xu, Zhizhang Chen	Fuzhou University
15	3464	Wall Position Estimation for FMCW Radar Indoor Tracking	Yongxin Wang, Zhonghao Mao, Zhimeng Xu, Zhizhang Chen	Fuzhou University

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11-06 09:30-10:30

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3490	A Cylinder Resonator Used for Testing Z-axis Dielectric Properties of Substrate Material	Nan Chen, Jiawei Long, Chong Gao, Yunpeng Zhang, En Li	University of Electronic Science and Technology of China
2	3503	Characterization of Shielding Effectiveness of Composites Based on Rectangular Resonator	Xuan Ran, Jiawei Long, Xue Niu, Yunpeng Zhang, Yong Gao, Chong Gao, Chengyong Yu, En Li	University of Electronic Science and Technology of China
3	3312	A Computation Offloading Strategy Based on Distributed Deep Learning	Xin-ke Zheng, Xiao Zheng	Anhui University of Technology
4	3364	Tunable optoelectronic Properties of A Type-II Violet Phosphorus/MoS_2 Heterojunction: First-Principles Calculation	Yongfa Ling, Ying Lin, Guangxin Zhang, Xiaoyan Xuan, Qi Wang, Qing Liao	Guilin University of Electronic Technology
5	3529	A Study on Question and Answer Intent Recognition in Medical Domain Based on Prompt Learning	Chiyu Shi, Chiawei Chu, Junyu Su	Faculty of Data Science City University of Macau
6	3314	Hypersonic target classification based on BP neural network	Xiaojun Sun, Wei Chen, Lixia Yang, Daisheng Zhang	Anhui University
7	3347	Research on Underwater Object Detection Algorithm Based on YOLOv7	Biying SHI, Lianbo ZHANG, Jialin TANG, Yan Jinghui	Zhuhai College of Beijing Institute of Technology
8	3348	Image Expression Classification and Recognition Based on Semantic Knowledge	Jinwei Wang, Yintao Hong, Rongsheng Cai, Baiming Li	The Faculty of Data Science of City University of Macau, Liming Vocational University
9	3354	A GPR road anomaly interpretation system based on YOLO algorithm	Na Qiao, Yannan Jiang, Jiao Wang, Wanguang Xiong	Guilin University Of Electronic Technology

No.	Paper ID	Title	Author's Name	First Author's Affiliation
10	3400	MT-SAL: Multi-task Structure-aware Learning for Legal Document Summarization	H. Bai, W. Chunglun	City University of Macau
11	3470	Remote Sensing Change Detection Based on Multi-scale Spatio-temporal Perceptual Attention Network	Haoran Jia, Yongde Guo	City University of Macau
12	3482	Remote Scene Image Classification Based on Vision-LSTM Model	Yufeng Weng, Yongde Guo	City University of Macau
13	3299	TGNet: A Lightweight Infrared Thermal Image Gesture Recognition Network Based on Knowledge Distillation and Model Pruning	Liangqin Chen, Qinghao Sun, Zhimeng Xu, Yipeng Liao	Fuzhou University
14	3349	Research on Processing Precision of Multi-Frequency Plasma CNC Machining Centers	HongYintao, Wang Jinwei, Li Baiming, Cai Rongsheng	The Faculty of Data Science of City University of Macau, Liming Vocational University
15	3487	Simulation Analysis of Argon and Air Discharge Characteristics in a Large-Scale ICP Generator	Yue Niu, Weimin Bao, Donglin Liu, Xiaoping Li, Yanmin Liu	Xidian University

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11-06 10:30-11:30

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3455	Optimal Design of RF Signal Power Amplifier Circuit	Wang Li, Shen Xiaobo, Shu Renyi, Zheng Xiaodong, Wang Jian, Shen Yiming	Huainan Normal University
2	3448	An Adaptive Beamforming Anti-Interference System Based on Software-Defined Radio	Junchen Luo, Sai-Wai Wong, Xiao Zhang	Shenzhen University
3	3374	Efficient Federated Learning via Low-Rank Gradient Compression for Intelligent Transportation System	Qing Li, Xiaoli Ma, Ting Xiao, Yizhao Zhu, Rongsheng Cai	Hunan Engineering Technology Research Center of Digitalization of CNC Machining Process for Precision Parts
4	3387	Research on offshore ship trajectory prediction and accuracy optimization based on dual-layer LSTM-Transformer model	Hui Li, Chao Han, Ruimin Jin, Dandan Wang, Yadi Fu, Lin Gao	Shandong University of Science and Technology
5	3401	Hierarchical Feature Selection Algorithm Combined with Category Information Constraints	Zhihui Zhang	Wanjiang University of Technology
6	3525	Robustness Study of Website Fingerprinting Based on Feature Fusion	Da-Fu Su, Bo Chen, Xiao-Feng Jia, Zhen-Yu Wan, Yi-Bing Hou, Hong-Chi Zhou, Tao Tao	Anhui University of Technology
7	3522	Adaptive Neighbors Graph Convolutional Networks with Transfer Entropy Optimization	Qianqian Wang, Xiujun Wang, Tao Tao	Anhui University of Technology
8	3431	Hybrid Neural Network Based on Parameterized Quantum Circuits for Image Classification	Jun Zhang, XiLing Xue, Yue Ruan	Anhui University of Technology
9	3441	Solving the Traveling Salesman Problem with Quantum Self-Attention Networks	Hao Li, Yue Ruan	Anhui University of Technology
10	3471	A 13.59 ppm/°C Compensated Bandgap Reference Source	Xinyi Zhang, Shibin Lu, Ming Zhu, Zheng Chen, Xianwei Jiang, Lin Jin	Anhui University

No.	Paper ID	Title	Author's Name	First Author's Affiliation
11	3515	Multi-step and Iterative Backdoor Injection in Federated Machine Unlearning	Zirui Ling, Chao Zhang, Zijie Pan	Guangzhou University
12	3528	Fault Diagnosis of Rolling Bearings Based on Cross Attention Network with Multi-Scale Feature Fusion	Tao Tao, Xiao-Feng Jia, Da-Fu Su, Xin-Le Zhang, Jia-Fu Gao, Run-Ze Xu, Lei Mo, Xiu-jun Wang	Anhui University of Technology
13	3445	Diabetic Foot Monitoring Based on A Lightweight Model	Zhihuan Zhang, Yongde Guo, Qiuji Zhou	City University of Macau
14	3407	A Broadband Low-Profile Microstrip Antenna Based on Gradually Fed Probe	Di Gao, Peng Liu, Yao Guo, Mengjie Li, Xiaoyu Pang	AVIC Research Institute for Special Structures of Aeronautical Composite
15	3316	W-Band High-Gain Wideband Slot Antenna Array With Ridge Gap Waveguide Feeding Network	Yuhan Chen, Yan Zhang, Lihui Jiang, Xiaohui Tao, Tong Zuo, Rui Cao	The 38th Research Institute of China Electronics Technology Group Corporation

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11-06 13:40-14:40

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3336	Study on Composite Electromagnetic Scattering from Frozen Soil Surface with Complex Moving Target Using Method of Moments	Wei Chen, Xincheng Ren, Yuqing Wang	Yan'an University
2	3438	Simulation of Electromagnetic Scattering from a target above a rough surface based on IEM-PO	Hong-lei Cao, An-qi Wang, Li-xia Yang, Zhi-xiang Huang, Xian-liang Wu	Anhui University
3	3359	A Wideband Filtering Antenna with Ultra-Wideband Harmonic Suppression	Yuhan Wu, Yudi Zhang, Guorui Han, Liping Han, Xinwei Chen, Chenglong Ren	Shanxi University
4	3509	Low Profile F-P Antenna Based on Metasurface	Weiqi Cai, Qing Zhang, Xiaoyu Pang, Weiwei Men, Qingdong Zhang	AVIC Research Institute for Special Structures of Aeronautical Composites
5	3343	A Pattern Reconfigurable Slot-Fed Patch Antenna for Millimeter Wave	Weiming Liang, Xiaocha Liu, Xiaoyi Wang, Guo-Min Yang, Lirong Zheng	Tsinghua University
6	3484	A high gain and two-dimensional beam scanning liquid crystal phased antenna array	Daming Du, JieJun Peng, AoJie Li, JunKai Ruan, ZhengFang Qian, Hua Zhu	Shenzhen University
7	3494	A Triangular Grid Millimeter Wave Planar Array with Wide Bandwidth and Angular Scanning	Xumin Li, Xiangzhuang Song, Jiao Yin, Bian Wu	Xidian University
8	3339	UCAP: A Novel Attribute Matching Authentication Model using Knowl-edge Graph Approach	Jian Chen, Shanwen Hu, Zhiming Cai	City University of Macau
9	3463	A Differentially Private Offloading Mechanism for Federated Learning	Mingyuan Zhou, Zihan Xie	City University of Macau

No.	Paper ID	Title	Author's Name	First Author's Affiliation
10	3474	Improved Public-key Searchable Encryption Scheme for Cloud-Based Responsible Gaming Systems	Juanjuan Huang, Yizhao Zhu, Xiangqian Kong, Shengnan Xu	Airforce Communication NCO Academy
11	3489	Enhancing User Privacy in Personalized Recommendation Systems	Rongsheng Cai, Suzhen Luo	Quanzhou College of Technology, City University of Macau
12	3367	Enhancing Remote Learning Experiences with AI-powered Adaptive Content Delivery Over Wireless Networks	Chen tu li, Yan jun jie, Peng ping	Guangdong University of Science and Technology
13	3369	Enhancing Student Engagement in New Business Discipline Experimental Teaching through Smart Resource Allocation Systems	Fu Luo, Yingying Zhu, Xuan Guo, Chunhong Deng, Zheng Zhang	Guangdong University of Science and Technology
14	3379	Intelligent Talent Cultivation Quality Evaluation in Digitalized Educational Settings	Luoyang Luo, Qiu Linrun	Guangdong University of Science and Technology
15	3384	Real-time traffic sign detection system for autonomous driving based on YOLO algorithm	Linrun Qiu	Guangdong University of Science and Technology, City University of Macau

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11-06 14:40-15:40

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3395	Research and Application of the “5A” Educational Model of AIGC-Enabled Wireless Sensor Networks Curriculum	Xiaochen Zhang, Kangji Cui, Fu Mo, Liang Yu	Guangdong University of Science and Technology
2	3435	Enhancing Student Engagement in Smart Classrooms Using Reinforcement Learning Algorithms	Li Yantao, Ji Wei	Guangdong University of Science and Technology
3	3444	Construction of Scholar Portraits and Intelligent Analysis Method for Academic Information Based on Pre-trained Models	Fu Mo, Wenjian Liu, Hao Zhong	City University of Macau, Guangdong University of Science and Technology
4	3479	Cloaking in Periodic Epsilon-Near-Zero Waveguide with Smith-Purcell Radiation	Yu-Lu Lei, Ji-Tao Yang, Chai-Hai Du	Peking University
5	3491	Q-BIC Enhanced Free Electron Radiation Based on a Double-period Grating Structure	Ji-Tao Yang, Yu-Lu Lei, Chao-Hai Du	Peking University
6	3492	Terahertz Edge Detection Based on All-Dielectric Metasurfaces	Yue-Yi Zhang, Yi-Bing Xiao, Feng-Yuan Han, Chao-Hai Du	Peking University
7	3498	Research on Terahertz Synthetic Aperture Radar Imaging	Yi-Bing Xiao, Yue-Yi Zhang, Feng-Yuan Han, Chao-Hai Du	Peking university
8	3246	FSO Channel Modeling between UAVs and Ships	Ran Tan, Ruike Yang	Xidian University
9	3363	Optimizing Remote Smart Learning with Wireless Networks Using Federated Learning Algorithms	Wang Baoping, Lichengyifan	Guangdong University of Science and Technology
10	3373	A Low Complexity Optimization Algorithm for Activating Antenna Number for Energy Efficiency in Massive MIMO System	Hui-Fen Huang, Ke-Chun Niu	South China University of Technology
11	3473	Design of relay system based on WiFi and visible light communication	JiaHao Chen	City University of Macau
12	3388	The Application of Spatio-temporal Intelligence in Urban Sensing	Guowei Zeng, Chunlan Guo, Biao Liu	Shenzhen Greatbay Technology Ltd.
13	3295	Machine learning of CatBoost for global vertical total electron content prediction	Kaiyu Xue, Chuang Shi, Cheng Wang	Beihang University

No.	Paper ID	Title	Author's Name	First Author's Affiliation
14	3310	Spatial characteristics analysis of higher-order terms in the ionosphere based on optimization method	Linhan Jia, Cheng Wang	Beihang University
15	3335	Enhanced Deep Brain Tumor Segmentation with Medical Image Signal of MRI	Wenhui Yu, Gengshen Wu	Lingnan University

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11-06 16:00-17:00

PRE-FUNCTION AREA

No.	Paper ID	Title	Author's Name	First Author's Affiliation
1	3393	Fault Diagnosis Method Based on Multi-Attention Convolutional Neural Network	Danlan Zuo, Xiaowen Wang	Shanxi University
2	3398	Multi-Performance Improvement Methods for Millimeter Wave Antenna Arrays with High Dielectric Constant Layer - Mimic Metasurfaces	Yuqi He, Wei Lin	The Hong Kong Polytechnic University
3	3475	Radar-Based Joint Gesture and Identity Recognition via Multi-Feature Two-Stream Neural Network	Zhonghao Mao, Yongxin Wang, Zhimeng Xu, Zhizhang Chen	Fuzhou University
4	3301	The Propagation Delay Analysis of Short-wave Multipath Based on the Ionospheric Ray-tracing Homing-in Algorithm	Xiaoli Jiang, Huimin Li, Lixin Guo	Xidian University
5	3488	Wide-Angle Scanning Millimeter-wave Phased Array Based on Cascaded Triangular Cavity	Yuqi Ma, Zhi-Hong Tu, Yun Wang	South China University of Technolgy
6	3385	Design and implementation of learner sentiment analysis system based on LSTM in smart education	Li Rongrong, Fang Qiaozhen	Guangdong University of Science and Technology
7	3390	Compact Dual-Band MIMO Antenna with High Isolation Using Small Common Decoupling Ground	Chuzhao Liu, Yongpin Chen, Kai Sun, Deqiang Yang, Zhihong Tu	University of Electronic Science and Technology of China
8	3480	Research on Optimization Strategies for the Application of Emerging Wireless Technologies in Real Estate Appraisal	Yue Cao	City University of Macau
9	3399	Research on GNSS Jamming Signal Recognition Based on Improved-YOLOv8n Model	Yadi Fu, Chao Han, Ruimin Jin, Dandan Wang, Hui Li, Yongheng Wang	Shandong University of Science and Technology
10	3513	Application of FPGA in Terahertz	Chuxuan Sun, Zhenjun Liu	The 30th Research Institute of China Electronics Technology Group Corporation
11	3396	Application of SP-UNet++ in Remote Sensing Image Segmentation	Yifan Li, Gengshen Wu	City University of Macau

No.	Paper ID	Title	Author's Name	First Author's Affiliation
12	3534	Research on Vehicle Model Recognition Algorithm Based on Morphological Image Processing	Liuliu Wang, Xiaobo Shen, Li Wang, Yaling Zheng	Huainan Normal University

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