Technical Program

2023 Cross Strait Radio Science and Wireless Technology Conference (2023 CSRSWTC)

Guilin, China
November 10-13th, 2023

2023 Cross Strait Radio Science and Wireless Technology Conference (2023 CSRSWTC)

Technical Program

Organizer

November 10-13th , 2023 Guilin, China

2023 Cross Strait Radio Science and Wireless Technology Conference (2023 CSRSWTC)

Technical Program

Organizer

Guilin University of Electronic Technology

Aerospace Information Research Institute, Chinese Academy of Sciences

National Key Laboratory of Science and Technology on Test Physics & Numerical Mathematics

National Engineering Research Center of Dangerous Articles and Explosives Detection Technologies

Peking University

Guangxi University of Science and Technology

Yulin Normal University

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Time Table

2023-11-10	18:00-21:00	**VIP Dinner (以餐券为准)**		
	(十二楼叠彩厅) 20:00-21:30	20:00-21:30	俞俊生教授、博导（北京邮电大学）：“青年学者心理健康沙龙”——《校园抑郁症预防和干预》	Chair: Prof. Wenxin Liu
2023-11-11	**Opening Ceremony (三楼银河厅)** 08:30-08:50	08:30-08:35	Opening Remarks by Huarui Xu, President of Guilin University of Electronic Technology, as the Chair of the Conference	Chair: Prof. Haiou Li
		08:35-08:40	Opening Remarks by Academician Yirong Wu, Institute of Aerospace Information Innovation, Chinese Academy of Sciences, as the Chair of the Conference	
		08:40-08:45	Opening Remarks by Researcher Zhaotian Zhang, National Natural Science Foundation of China	
		08:45-08:50	Opening Remarks by Prof. Qingxin Chu, South China University of Technology, as Co-Chair of the Conference	
	08:50-09:10	**Group Photo and Cafe Break**		
	Plenary Talk I （三楼银河厅） 09:10-11:50	09:10-09:50	Prof. Yirong Wu: Advancements in Terahertz Quantum Electromagnetics	Chairs: Prof. Wenxin Liu Prof. Kailin Pan
		09:50-10:30	Prof. Juncheng Cao: Terahertz Semiconductor Quantum Devices and Their Applications	
		10:30-11:10	Prof. Daxiang Liu: Building the Sky Highway, Letting Low-altitude Economy Take Off- Rethinking the Development of Low-altitude Economy, General Aviation, and Emergency Rescue	
		11:10-11:50	Prof. Dau-Chyrh Chang: The Myth of QZ Specification in Antenna Test Ranges	
	12:00-13:30	**Lunch(二楼咖啡厅)**		
	13:30-15:20	**Oral Session**		

Room: 象山厅	**Room: 观瀑厅**	**Room: 紫荆厅**	**Room: 红梅厅**	**Room: 玫瑰厅**	**Room: 桂花厅**	**Room: 独秀厅**	**Room: 叠彩厅**
Oral Session 1: Student Paper Competition	Oral Session 2-1: Reconfigurable Intelligent Metasurfaces in Applications of Wireless Information Modulation and Wireless Power Transfer	Oral Session 3-1: Vacuum Electronic Radiating Sources and Their Applications	Oral Session 4-1: Radar Signal Processing and Application	Oral Session 5-1: Advanced Design and Application of Programmable Metasurface	Oral Session 6-1: Recent Advances in Antennas and Circuits	Oral Session 7-1: The Simulation and Measurement of EM Scattering and Propagation from Complex Environment and Targets	Oral Session 8-1: Millimeter Wave and Terahertz Reconfigurable Metasufaces
Referees (详见 P18)	Chairs: Long Li Qinghua Song	Chairs: Diwei Liu Yingwei Wang	Chairs: Kefei Liao Haitao Wang Depeng Kong	Chairs: Junyan Dai Qiang Cheng Chien-Nan Lee	Chairs: Qiubo Ye Jun Xiao Xiaojiao Deng	Chairs: Yiwen Wei Jie Li	Chairs: Limei Qi Baiyang Liu Feng Lan

	15:20-15:40	**Cafe Break**							
	15:40-17:30	**Oral Session**							
		Room: 象山厅	**Room: 观瀑厅**	**Room: 紫荆厅**	**Room: 红梅厅**	**Room: 玫瑰厅**	**Room: 桂花厅**	**Room: 独秀厅**	**Room: 叠彩厅**
		Oral Session 1: Student Paper Competition	Oral Session 2-2: Wideband Microwave and Millimeter-wave Multibeam Antenna Array	Oral Session 3-2: Laser THz Emission Spectroscopy and High-field THz Nonlinearity	Oral Session 4-2: Terahertz Source	Oral Session 5-2: Mid-infrared Optoelectronic Materials and Devices	Oral Session 6-2: Photoelectric Devices and Micro-nano Manufacturing	Oral Session 7-2: Materials and Metamaterials for Terahertz Applications	Oral Session 8-2: Lens Antenna and Metasurface Antenna
		Referees (详见 P18)	Chairs: Kuikui Fan Chonghua Fang	Chairs: Xiaojun Wu Xingyu Zhang	Chairs: Guoxiang Shu Jinchi Cai Jinfeng Zhu Luqi Zhang	Chairs: Junqi Liu	Chairs: Zanhui Chen Peihua Wangyang Hailiang Zhu	Chairs: Xinlong Xu Zeyu Zhang	Chairs: Bing Zhang Degao Zhong
	14:00-17:00	**三楼廊厅**							
		Poster Session 1 14:00-15:00			**Poster Session 2 15:00-16:00**		**Poster Session 3 16:00-17:00**		
	18:00-21:00	**Dinner (二楼咖啡厅)**							
2023-11-12	**Plenary Talk II (三楼银河厅)** 08:30-09:50	08:30-09:10	Prof. Zhizhang Chen: Advancements in Time Reversal Techniques for Retrodirective and Inverse Problems: Unveiling New Avenues in Electromagnetic Applications				Chair: Prof. Zhiqiang Zhang		
		09:10-09:50	Prof. Guilu Long: Quantum Secure Direct Communication						
	9:50-10:00	**Cafe Break**							
	10:00-12:00	**Oral Session**							
		Room: 象山厅	**Room: 观瀑厅**	**Room: 紫荆厅**	**Room: 红梅厅**	**Room: 玫瑰厅**	**Room: 桂花厅**	**Room: 独秀厅**	**Room: 叠彩厅**
		Oral Session 9: Multidimensional Electromagnetic Filed Manipulations with Metasurfaces	Oral Session 10: Recent Progress in Theoretical and Computational Electromagnetics	Oral Session 11: Terahertz Devices	Oral Session 12: Terahertz Communication Technology	Oral Session 13: Physics, Devices and Technology of Terahertz Detection	Oral Session 14: Active Adjustable Filters: Design and Theory	Oral Session 15: Compound Semiconductor Devices	Oral Session 16: Underwater Optical Communication and Detection
		Chairs: Zilan Deng Wei Huang	Chairs: Qiang Ren Xianghu Wang	Chairs: Jianqiang Gu Feifei Qin	Chairs: Zhongbo Zhu Chuanbo Li	Chairs: Yingxin Wang Nan Yang	Chairs: Ruofeng Xu Jun Wang Shengjun Zhang Tao Fu	Chairs: Haiou Li Hua Zhu	Chairs: Chunbo Ma Wei Chen

	12:00-13:30	**Lunch(二楼咖啡厅)**							
	13:30-15:20	**Oral Session**							
		Room: 象山厅	**Room: 观瀑厅**	**Room: 紫荆厅**	**Room: 红梅厅**	**Room: 玫瑰厅**	**Room: 桂花厅**	**Room: 独秀厅**	**Room: 叠彩厅**
		Oral Session 17-1: Electromagnetic Radiation and Scattering	Oral Session 18-1: Wide Bandgap Semiconductor Materials and Devices	Oral Session 19-1: Millimeter Wave Devices and Antennas	Oral Session 20-1: AI Med Cross Fusion	Oral Session 21-1: Dielectric Antenna and Metasurface	Oral Session 22-1: THz Photonics Source and Application	Oral Session 23-1: Metasurfaces in Application of Antenna Design	Oral Session 24-1: Millimeter-wave Sensing and Information Transmission
		Chairs: Yannan Jiang Yiying Wang Han Xiong	Chairs: Fabi Zhang Dexian Yan	Chairs: Dongya Shen Zhaofu Chen	Chairs: Junsheng Yu Yuping Yang	Chairs: Bin Li Fuhai Su	Chairs: Degang Xu Yuye Wang Qixiang Zhao	Chairs: Zhao Wu Youfeng Cheng	Chairs: Nannan Wang Yayun Cheng Yuancheng Fan
	15:20-15:40	**Cafe Break**							
	15:40-18:00	**Oral Session**							
		Room: 象山厅	**Room: 观瀑厅**	**Room: 紫荆厅**	**Room: 红梅厅**	**Room: 玫瑰厅**	**Room: 桂花厅**	**Room: 独秀厅**	**Room: 叠彩厅**
		Oral Session 17-2: Plasmonic Metamaterials for Communication, Sensing, and Imaging	Oral Session 18-2: Advanced Microwave Filters	Oral Session 19-2: Millimeter Wave Antennas and Their Applications	Oral Session 20-2: Terahertz Spectroscopy and Biosensor	Oral Session 21-2: Terahertz Detection and Imaging	Oral Session 22-2: Millimeter-to-terahertz Vacuum Electronic Devices	Oral Session 23-2: Advanced Antenna and Metasurface Technologies for Sensing, Imaging, and Communications	Oral Session 24-2: Low-scatterring Antennas and Metasurfaces
		Chairs: Yongjin Zhou Xuanru Zhang Junchen Ke	Chairs: Xuehui Guan Baoping Ren Feng Zhang	Chairs: Xing Jiang Lin Peng Zuanming Jin	Chairs: Cunjun Ruan Cheng Zhang	Chairs: Lei Hou Liangjie Bi	Chairs: Chaohai Du Yue Wang	Chairs: Heng Huang Zaixing Yang	Chairs: Ying Liu Jia Shi
	14:00-17:00	**三楼廊厅**							
		Poster Session 4 14:00-15:00			**Poster Session 5 15:00-16:00**			**Poster Session 6 16:00-17:00**	
	18:00-21:00	**Banquet (三楼银河厅)**						Chair: Prof. Wenxin Liu	

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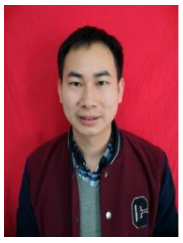

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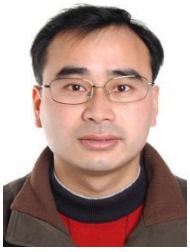

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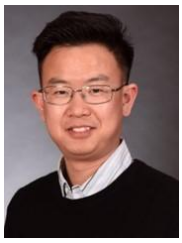

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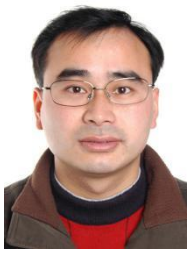

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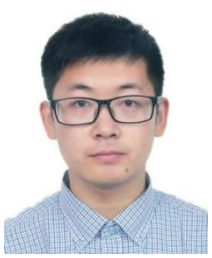

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Qixiang Zhao

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Zeyu Zhang

Yuancheng Fan

Hailiang Zhu

Plenary Talk I-1

Advancements in Terahertz Quantum Electromagnetics

Prof. Yirong Wu

Institute of Aerospace Information Innovation, Chinese Academy of Sciences

(09:10-9:50, November 11th 三楼银河厅)

Abstract:

The terahertz band is currently not fully understood and utilized by humans. Existing theories cannot fully reveal the quantum electromagnetic effects in the terahertz band, and a breakthrough in theoretical methods is crucial to overcoming the bottleneck of terahertz technology. This report discusses the theoretical breakthroughs and progress in terahertz quantum electromagnetics and emphasizes the need for innovative foundational theories to address challenges in terahertz material and device design.

Biograph:

Prof. Yirong Wu is a signal and information processing expert, an academician of the Chinese Academy of Sciences, a research fellow and doctoral supervisor at the Institute of Electronics, Chinese Academy of Sciences, and director of the State Key Laboratory of Microwave Imaging Technology. He is also the Dean of the School of Electronic and Electrical Engineering and Communication at the University of Chinese Academy of Sciences, the Director of the Connotation Construction Special Committee of the Air and Space Information University, and the Director of the Aerospace Information Innovation Research Institute of the Chinese Academy of Sciences. He has long been engaged in the research of synthetic aperture radar (SAR) systems and remote sensing satellite ground processing and application systems. He has systematically solved a series of theoretical problems and key technologies. He is currently a standing committee member of the 14th National People's Congress and a member of the Education, Science, Culture and Public Health Committee.

Plenary Talk I-2

Terahertz Semiconductor Quantum Devices and Their Applications

Prof. Juncheng Cao

Shanghai Institute of Microsystems and Information Technology,

Chinese Academy of Sciences

(09:50-10:30, November 11th 三楼银河厅)

Abstract:

Terahertz (THz) wave refers to the electromagnetic spectrum region between millimeter wave and infrared light with frequency from 300 GHz to 10 THz, corresponding wavelength from 1 mm to 30 micrometer. THz technologies have significant application prospects in physics, material science, biology, astronomy, information science, and national security. THz radiation sources and detectors are the key devices for THz applications. In this report, we focus on the research progresses of the interaction physics between THz radiation and low dimensional semiconductors, the material growth and device fabrication of THz quantum cascade lasers and THz quantum well detectors, as well as the ultrafast wireless communication, high resolution imaging and other applications based on these THz quantum devices.

Biograph:

Prof. Juncheng Cao received his doctor degree from the Department of Electronic Engineering of Southeast University in 1994. Currently, he works at Shanghai Institute of Microsystems and Information Technology, Chinese Academy of Sciences. He was a winner of the National Science Fund for Distinguished Young Scholars, a winner of the talent plan of Chinese Academy of Sciences, a winner of the special government allowance of the State Council, a national candidate for the New Century Millions of Talents Project, and a chief scientist of the major instrument project of the Ministry of Science and Technology/NSFC. His activities mainly include terahertz physics, quantum devices and their applications. He published more than 300 SCI papers. More than 100 national patents were authorized.

Plenary Talk I-3

Building the Sky Highway, Letting Low-altitude Economy Take Off

Rethinking the Development of Low Altitude Economy, General Aviation, and Emergency Rescue

Prof. Daxiang Liu

Beihang University

(10:30-11:10, November 11th 三楼银河厅)

Biograph:

Prof. Daxiang Liu is a professor and PhD supervisor of the School of Energy and Power Engineering of Beihang University, the Honorary Dean of the College of Energy and Power Engineering of Nanjing University of Aeronautics and Astronautics. Prof. Liu, a member of the Chinese Academy of Engineering and an aircraft engine expert, was born in Qidong County of Hunan Province on October 14, 1937. He has been the Chief Engineer and First Chief Designer of China Gas Turbine Establishment (GTE). He is now the deputy director of the Science and Technology Committee of the Aviation Industry of Corporation of China (AVIC) and the senior consultant of AVIC and the Aero Engine Corporation of China. He won a grand prize and two second prizes of the National Science and Technology Progress Award, the Ho Leung Ho Lee Prize for Scientific and Technological Progress, the Aviation Gold Medal and Guanghua Engineering Science and Technology Progress Award. Prof. Liu was awarded the title of "National Advanced Worker" in 1995 and was elected Representative of National People's Congress in 1997. In 2002, Prof. Liu was awarded an honorary doctorate degree by the Russian Academy Sciences. In 2003, he was elected Representative of 10th National People's Congress, a member of the 10th Standing Committee of the National People's Congress and the Foreign Affairs Committee of National People's Congress.

Plenary Talk I-4

The Myth of QZ Specification in Antenna Test Ranges

Prof. Dau-Chyrh Chang

Asia Eastern University of Science and Technology

(11:10-11:50, November 11th 三楼银河厅)

Abstract:

The antenna test ranges, DFR (Direct Far Field Range), NFR (Near Field Range), and CATR (Compact Antenna Test Range), are commonly used for measuring both passive antenna parameters (such as gain, beamwidth, sidelobe levels, etc.) and active parameters of devices (including total radiation power, total isotropic sensitivity, data throughput, etc.). The Device Under Test (DUT) is positioned within the Quiet Zone (QZ) to accurately measure the desired parameters.

The QZ specification defines the test zone volume with quasi-plane waves for the entire operating frequency bandwidth. The quasi-plane wave's field intensity encompasses both field magnitude and phase magnitude. Traditional QZ specifications define the maximum taper and maximum ripple of quasi-plane waves for both magnitude and phase. Meeting the specifications for the full QZ volume with all frequencies in the band is challenging.

The far-field power pattern results from the convolution of the Quiet Zone (QZ) performance and the antenna aperture field distribution in the angular domain. QZ efficiency constitutes a part of the measured efficiency of the Antenna Under Test (AUT). QZ efficiency is influenced by the magnitude and phase of the quasi-plane wave within the QZ. The stochastic theorem is employed to establish the QZ specification, involving the Confidence Interval (CI) for both phase and magnitude with a Confidence Level (CL), as opposed to the traditional specification. This presentation discusses the simulation and analysis of the degradation of QZ efficiency under various magnitudes and phases of the quasi-plane wave within the QZ.

Biograph:

Prof. Dau-Chyrh Chang, IEEE Life Fellow, is an accomplished figure in the field of electrical engineering, particularly in antenna research and communication engineering. He holds a BS degree and an MS degree from Chung-Cheng Institute of Technology, as well as a Ph.D. degree in Electrical Engineering from the University of Southern California.

For a substantial part of his career, he dedicated 25 years to antenna research and development at CSIST, where he served as the director of the antenna section for 17 years. During this time, he contributed significantly to the development of various types of antennas, including reflector antennas, phased array antennas, slot array antennas, and communication antennas. Additionally, he worked on creating different antenna test ranges.

In 1998, Prof. Chang moved from his director position to become the Dean of the Engineering School at Da-Yeh University (DYU). Later, he was invited to be the Dean of the College of Electrical and Communication Engineering at Asia Eastern University of Science and Technology (formerly known as Oriental Institute of

Technology) in 2006. During his tenure there, he established several research laboratories focusing on hybrid antennas, near field antenna test range, communication measurement systems, electromagnetic compatibility (EMC), and electromagnetic simulation.

Apart from his antenna research, Prof. Chang has shown interest in Signal Integrity (SI) research, with funding support from various industries. In August 2016, he transitioned from academia to industry and has since been working as a consultant for several companies.

Throughout his career, Prof. Chang has been a prolific author, publishing over 400 papers in journals and conferences. He also holds an impressive portfolio of 35 patents. In addition to his research contributions, he has actively engaged in the IEEE community, founding and leading several chapters and organizations, such as the IEEE AP-S Taipei Chapter and IEEE MTT-S Taipei Chapter. He has also served as the President of the Chinese Microwave Association.

Prof. Chang's expertise and leadership have earned him numerous awards and honors. He has been recognized for his research excellence at CSIST, DYU, and AEUST. In 2022, he was honored with the prestigious IEEE Life Achievement Award.

Plenary Talk II-1

Advancements in Time Reversal Techniques for Retrodirective and Inverse Problems: Unveiling New Avenues in Electromagnetic Applications

Prof. Zhizhang Chen

Fuzhou University

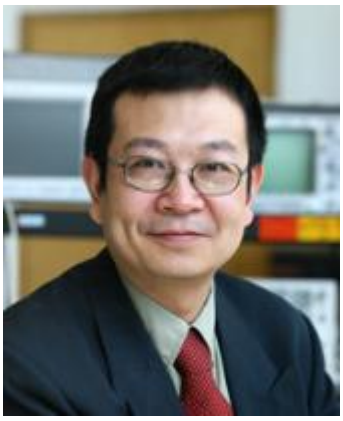
(08:30-09:10, November 12th 三楼银河厅)

Abstract:

Time-reversal (TR) techniques have emerged as powerful alternative tools for retrodictive transmissions in information and power transfer, as well as inverse reconstructions of acoustic and electromagnetic sources and structures. In this presentation, I will delve into the realm of time reversal within the domain of electromagnetics. My focus is to unveil the recent advances in refining the time reversal methodology through the integration of cutting-edge digital signal processing techniques, both in the temporal and spectral domains.

I will introduce a novel theorem that enhances the efficacy of time reversal by mitigating false solutions coupled with an innovative optimization approach. Additionally, the utilization of electromagnetic entropy and kurtosis, along with frequency-domain strategies, is demonstrated to amplify the performance of TR. These advancements collectively pave the way for many applications, each with transformative potential.

Highlighting the practical implications, I will explore the applications of time reversal in diagnosing faulty array elements, reconstructing radiation patterns, and even envision its potential in the synthesis of RF/microwave structures. Notably, these applications mark the inception of novel paradigms in designing electromagnetic circuit structures for wireless systems and in precisely pinpointing the locations of radiation sources in the domains of Electromagnetic Compatibility (EMC) and Electromagnetic Interference (EMI).



Biograph:

Prof. Zhizhang David Chen received a Bachelor's degree in Radio Engineering from Fuzhou University, P. R. China, a Master's degree in Radio Engineering from Southeast University, P. R. China, and a Ph.D. degree in Electrical Engineering from the University of Ottawa, Canada. He was an NSERC post-doctoral fellow at McGill University, Montreal, Canada, where he is a professor and the Department Head of Electrical and Computer Engineering. He has been an adjunct or visiting professor with the University of Nottingham of UK, École Nationale Supérieure des Télécommunications de Bretagne of France, Hong Kong University of Science and Technology, Fuzhou University, Shanghai Jiao Tong University, and the University of Electronic Science and Technology of China. He has authored and co-authored over 450 journal and conference papers. He has been a guest editor, track editor and associate editor for IEEE journals, including the IEEE Journal of Microwaves, IEEE Transactions on Microwave Theory and Techniques and the IEEE Journal on Multiscale and Multiphysics Computational Techniques. He was the Chair of the Field Theory

and Computational Electromagnetics (TC-1) and Wireless Communications Committee (TC-23) of the IEEE Microwave Theory and Techniques Society (IEEE MTT-S) and an elected member of the Ad-Com of IEEE Antennas and Propagation Society (IEEE AP-S). His current research interests are time-domain electromagnetic modelling techniques, ultra-wideband wireless communication systems and wireless power transfer. He is the Fellow of the IEEE, the Canadian Academy of Engineering, and the Engineering Institute of Canada.

Plenary Talk II-2

Quantum Secure Direct Communication

Prof. Guilu Long

Tsinghua University

(09:10-09:50, November 12th 三楼银河厅)

Abstract:

The development of quantum computer puts a serious threat to RSA and other asymmetric cryptographic algorithms, and new secure communication technologies are urgently needed. Quantum communication is based on quantum principle and has high security. Quantum secure direct communication (QSDC) uses quantum state to transmit information directly, which is compatible with existing communication networks, simplifies the procedures of secure communication, and has the characteristics of intrusion awareness and eavesdropping prevention. Quantum direct communication has made continuous progress in the past 20 years, and now it is now maturing, and has been included in the plan of International Science and Technology Innovation Center of Beijing municipal government during the Tenth Five-Year Plan period and the implementation plan of Beijing to promote future industrial innovation and development. This report will introduce the principle and progress of quantum direct communication.

Biograph:

Prof. Guilu Long, Tsinghua University, Vice President of Beijing Academy of Quantum Information Science, Director of Quantum Communication Commission, China institute of communications, Council Member andDeputy Director of Quantum Cryptography Commission of China Cryptology Society, Member of Information and Communication Science and Technology Committee of Ministry of Industry and Information Technology, and Member of Quantum Science and Technology Working Group of IUPAP. Fellow of IoP and APS. He has been engaged in quantum information research for a long time, put forward the theory of quantum secure direct communication, led the team to develop the first international prototype and the first practical system, and successfully tested in 5G private networks and banks; constructed the long algorithm of quantum exact search; proposed the duality quantum computing paradigm. He has won the second-order prize of the National Natural Science Award, the first-order prize of the Natural Science Award of the Ministry of Education, the first-order prize of the Science and Technology Award of the Chinese Institute of Electronics, and the first-order prize of the china institute of communications Science and Technology Award.

Oral Session 1

Student Paper Competition

Referees: Haiou Li (Guilin University of Electronic Technology)
Qingxin Chu (South China University of Technology)
Wenxin Liu (Aerospace Information Research Institute, Chinese Academy of Sciences)
Tangyou Sun (Guilin University of Electronic Technology)
Chaohai Du (Peking University)
Wenmei Zhang (Shanxi University)
Lei Zhao (China University of Mining and Technology)
Junsheng Yu (Beijing University of Posts and Telecommunications)
Ziran Zhao (Tsinghua University)
Weidong Hu (Beijing Institute of Technology)
Lixin Guo (Xidian University)

11 月 11 日 13:30-17:10
会议室：二楼象山厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:40	2384	Port and Radiation Pattern Decoupled Microstrip Antennas Using Shorting Vias	Guangyao Liu	City University of Hong Kong
2	13:40-13:50	2129	Global Ionospheric Total Electron Content Forecasting Model Using Temporal Convolutional Network	Kaiyu Xue	Beihang University
3	13:50-14:00	2251	Modeling Research on Tropospheric Delay Mapping Function	Ruoyu Li	China Research Institute of Radiowave Propagation
4	14:00-14:10	2261	Deep-subwavelength Detection Using Exceptional Point in an Asymmetric Plasmonic Dipole Resonator	Tianshuo Bai	Southeast University
5	14:10-14:20	1816	Ultrawideband Sub-terahertz Transmitted Beam Steering via Current-reversal Encoding Metasurfaces	Dongfang Shen	University of Electronic Science and Technology of China
6	14:20-14:30	2463	Broadband Encoding Stochastic Terahertz Filters Based on Inverse-designed Spatial Light Modulation	Ruifeng Liu	Tsinghua University
7	14:30-14:40	2217	A Millimeter-wave Wideband Low-profile Folded Reflectarray Transceiver for Frequency-diverse Near-field Imaging	Xinhao Chen	Southern University of Science and Technology
8	14:40-14:50	2242	Low-RCS Log-periodic Top-hat Monopole Antenna with Complete Ground Structure	Jiabao Luo	Xidian University

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
9	14:50-15:00	2262	Characterization of Metamaterials in the Ambient Environment Using Continuous Wave Terahertz Frequency-domain Spectroscopy	Yuan Yuan	University of Science and Technology Beijing
10	15:00-15:10	2180	Propagation Characteristics of LF Radio Waves in the Earth-ionosphere Waveguide	Hao Zhang	Northwestern Polytechnical University
11	15:10-15:20	2096	Multi-post Imaging Simulation for Passive Millimeter Wave Security Inspection	Shiqin Li	Harbin Institute of Technology
	15:20-15:40	Cafe Break			
12	15:40-15:50	2469	Inverse Designed Free-form Chiral Metasurfaces	Qianmei Deng	Jinan University
13	15:50-16:00	2084	Multi-functional Optical Fiber Tweezers Based on Annular Aperture Array Metasurface	Zihui Zhao	Guilin University of Electronic Technology
14	16:00-16:10	2254	ZnO/TiO_2 Nanorods Heterojunction Ultraviolet Photodetector	Zubin Qin	Guilin University of Electronic Technology
15	16:10-16:20	2285	Millimeter-wave Miniaturized Planar Dual-reflector Antenna via Transformation Optics	Yingyu Bi	Beijing Jiaotong University
16	16:20-16:30	2381	Pattern Analysis and Placement Optimization of the Four-horn Monopulse for Terahertz Communication	Yonghan Lu	Guilin University of Electronic Technology
17	16:30-16:40	1970	Closely-spaced, Wideband, High-isolation Microstrip Antennas Using Multiple-decoupling Method	Zhengyuan Wan	Beijing Institute of Technology
18	16:40-16:50	2351	Dual Pressure Signal Internal Feature Based Obstructive Sleep Apnea Detection	Zhengdong Li	Beijing University of Posts and Telecommunications
19	16:50-17:00	1990	A Wideband Dual-polarized Endfire Antenna Array with High Isolation for Beam Steering Applications	Qingquan Tan	Hangzhou Dianzi University
20	17:00-17:10	2297	A Novel Optically-transparent Antenna with a Bidirectional Radiation Pattern	Zhicheng Kuang	Fuzhou University

Oral Session 2-1

Reconfigurable Intelligent Metasurfaces in Applications of Wireless Information Modulation and Wireless Power Transfer

Chairs: Long Li (Xidian University)
Qinghua Song (Tsinghua University)

11 月 11 日 13:30-15:40
会议室：二楼观瀑厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	3001	Metamaterials Used in Power Detection and Wireless Power Transmission (Invited)	Han Xiong	Chongqing University
2	13:55-14:20	2402	Research on Polarization Manipulation and Information Manipulation Based on Space-time-coding Metasurface (Invited)	Junchen Ke	Guilin University of Electronic Technology
3	14:20-14:35	1751	Active Reconfigurable Intelligent Surface Element for Bidirectional Polarization Enhancement	Xin Wang	Xidian University
4	14:35-14:50	1837	Phase Sensitivity Study in Wide-angle Incidences of Dual-controlled Reconfigurable Intelligent Surface	Kwok L. Chung	Huizhou University
5	14:50-15:05	1913	A Low-cost Low-profile Reflection-modulated Surface	Xiaohan Yang	Nanjing University of Science and Technology
6	15:05-15:20	2369	Design of a Wideband 1-bit Reconfigurable Beam-scanning Reflectarray	Xuenan Ren	Xidian University
	15:20-15:40	Cafe Break			

Oral Session 2-2

Wideband Microwave and Millimeter-wave Multibeam Antenna Array

Chairs: Kuikui Fan (Hangzhou Dianzi University)
Chonghua Fang (China Ship Development and Design Center)

11 月 11 日 15:40-17:30
会议室：二楼观瀑厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	3002	Multi-functional Terahertz Device with Switchable Absorption and Polarization Conversion Modes by Graphene and Metallic Metasurfaces (Invited)	Lin Peng	Guilin University of Electronic Technology
2	16:05-16:30	3003	Work-in-progress: Structure Reused Antennas for 6G-V2X Applications (Invited)	Youfeng Cheng	Southwest Jiaotong University
3	16:30-16:45	1961	Generation of Ring-pearcey Beams Through Transmission Metasurface	Qifan Li	Xidian University
4	16:45-17:00	1603	A Small Size Low Sidelobe and Broadband Antenna at E-band	Zheng Lei	Tsinghua University
5	17:00-17:15	2186	A MW/MMW Shared-aperture Antenna by Reusing Electromagnetic Band-gap Decoupling Structure	Xin Geng	Nantong University
6	17:15-17:30	1623	Design of Ultra Wideband Tightly Coupled Array Using Quasi-yagi Antenna	Boyuan Hou	Academy of Space Electronic Information Technology

Oral Session 3-1

Vacuum Electronic Radiating Sources and Their Applications

Chairs: Diwei Liu (University of Electronic Science and Technology of China)
Yingwei Wang (Central South University)

11 月 11 日 13:30-15:40
会议室：三楼紫荆厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	2319	Application of THz Spectroscopy and Search for New THz-source Materials (Invited)	Feng Zhang	Xinjiang Technical Institute of Physics and Chemistry, Chinese Academy of Sciences
2	13:55-14:20	2394	Quasi-bound States in the Continuum for Free Electron Radiation (Invited)	Zhaofu Chen	Southeast University
3	14:20-14:35	1911	Experimental Investigation on a 263 GHz Continuously Frequency-tunable Gyrotron	Tao Song	University of Electronic Science and Technology of China
4	14:35-14:50	1876	Theoretical Design of a Ka-band Helically Corrugated Waveguide Gyro-TWT Based on Axis-encircling Electron Beam	Ruiqi Lu	Guilin University of Electronic Technology
5	14:50-15:05	2056	Intermodulation Distortion Analysis in Gridless Inductive Output Tube	Muhammad Khawar Nadeem	University of Electronic Science and Technology of China
6	15:05-15:20	2315	Study of C-band Bi-periodic Sheet Beam EIO Based on Interaction Gap Width Tapering	Bilawal Ali	University of Electronic Science and Technology of China
	15:20-15:40	Cafe Break			

Oral Session 3-2

Laser THz Emission Spectroscopy and High-field THz Nonlinearity

Chairs: Xiaojun Wu (Beijing University of Aeronautics and Astronautics)
Xingyu Zhang (Shandong University)

11 月 11 日 15:40-17:30
会议室：三楼紫荆厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	2103	Cascaded Amplification and Manipulation of Terahertz Pulses Emitted from Flexible Spintronic Heterostructures (Invited)	Zuanming Jin	University of Shanghai for Science and Technology
2	16:05-16:30	3004	AuNP-integrated THz Toroidal Metamaterial and its Highly Sensitive and Specific Sensing (Invited)	Yuping Yang	Minzu University of China
3	16:30-16:45	2329	Investigations on Terahertz Double-confocal Waveguide Gyro-TWA	Diwei Liu	University of Electronic Science and Technology of China
4	16:45-17:00	2409	The Generation Process and Electron Emission of a Novel Barium-calcium Aluminate for Ba-W M-type Cathode	Yongfeng Cai	Beijing University of Technology
5	17:00-17:15	2410	Machine Learning Assisted Density Prediction of Cathodes Alloy Matrix	Hexiong Liu	Beijing University of Technology
6	17:15-17:30	2438	The Research of Ce-doped Cathode	Zheng Liu	Beijing University of Technology

Oral Session 4-1

Radar Signal Processing and Application

Chairs: Kefei Liao (Guilin University of Electronic Technology)
Haitao Wang (Guilin University Of Electronic Technology)
Depeng Kong (Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences)

11 月 11 日 13:30-15:40
会议室：三楼红梅厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	3017	Adaptive Multi-band Rectifier System for Stabilized Wireless Energy Harvesting at Flexible Distances and Dynamic Conditions (Invited)	Cheng Zhang	Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences
2	13:55-14:20	2250	Probing Photocarrier Dynamics in Materials Under Hydrostatic Pressure (Invited)	Fuhai Su	Institute of Solid State Physics, HFIPS, Chinese Academy of Sciences
3	14:20-14:35	2435	Frequency Diversity Array Radar Target Imaging Base on the Joint Design of Intra-array and Inter-array Frequency Offset	Qinlin Li	Guilin University of Electronic Technology
4	14:35-14:50	1674	A Clustering Algorithm for Traffic Targets Using Millimeter-wave Radar	Jingjie Qin	Guilin University of Electronic Technology
5	14:50-15:05	2478	Improved Interacting Multiple Model Expansion Box Particle Bernoulli Filter Algorithm	Yujing Mo	Guilin University of Electronic Technology
6	15:05-15:20	1946	Ocean Surface Vector Current Prediction Method of HF Radar Based on GA-BP Model	Shucheng Wang	Wuhan University
	15:20-15:40	Cafe Break			

Oral Session 4-2

Terahertz Source

Chairs: Guoxiang Shu (Shenzhen University)
Jinchi Cai (University of Electronic Science and Technology of China)
Jinfeng Zhu (Xiamen University)
Luqi Zhang (China Academy of Engineering Physics)

11 月 11 日 15:40-17:45
会议室：三楼红梅厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	2225	Design and Analysis of Phase-locked Extended Interaction Circuits for High-power THz Radiation (Invited)	Liangjie Bi	University of Electronic Science and Technology of China
2	16:05-16:30	3005	The Development of High Power Terahertz Gyrotron (Invited)	Qixiang Zhao	Guilin University of Electronic Technology
3	16:30-16:45	2263	Radar Performance of the OFDM Directional Modulation Waveforms for Joint Radar-communication	Kailuo Zhang	Henan Polytechnic University
4	16:45-17:00	2264	Time-modulated OFDM-IM Directional Modulation Antenna Array Transmitters	Yuxin Lei	Henan Polytechnic University
5	17:00-17:15	2444	A Weighted IMM Method for Tracking Hazardous Chemical Vehicles in Semi Enclosed Environment	Linliang Zhang	Southwest Jiaotong University
6	17:15-17:30	1855	Design of a W-band Sheet Beam Extended Interaction Klystron Working at 2π-Mode	Jialang Ling	Guilin University of Electronic Technology
7	17:30-17:45	2136	On Impulse Response for a Vertical Underwater Optical Channel Based on Chlorophyll Depth Profiles	Xiang Yi	Xidian University

Oral Session 5-1

Advanced Design and Application of Programmable Metasurface

Chairs: Junyan Dai (Southeast University)
Qiang Cheng (Southeast University School of Information Science and Engineering)
Chien-Nan Lee (Asia Eastern University of Science and Technology)

11 月 11 日 13:30-15:40
会议室：三楼玫瑰厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	3006	Carbon Nanotubes Metasurface Resonance and Applications (Invited)	Yue Wang	Xi'an University of Technology
2	13:55-14:20	1789	Enhanced Detection of Terahertz Fingerprints Based on Microstructures (Invited)	Dexian Yan	China Jiliang University
3	14:20-14:35	1861	Animate Amplitude-modulated Leaky-wave Antennas	Gengbo Wu	City University of Hong Kong
4	14:35-14:50	1965	A Ku-band Reconfigurable Metasurface for Broadband Far-field Beam Control	Xiaoyu Pang	The Research Institute for Special Structures of Aeronautical Composite AVIC
5	14:50-15:05	2199	A Wideband Element for Dual-polarized Reconfigurable Transmitarray Antenna	Zikang Zhang	Guangzhou University
6	15:05-15:20	2241	A Dual Linearly Polarized RIS Element for High-speed Modulat	Hanqing Yang	Southeast University
	15:20-15:40	Cafe Break			

Oral Session 5-2

Mid-Infrared Optoelectronic Materials and Devices

Chairs: Junqi Liu (Institute of Semiconductors, Chinese Academy of Sciences)

11 月 11 日 15:40-17:45

会议室：三楼玫瑰厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	2353	Low-dimensional Antimonide and Optoelectronic Devices (Invited)	Zaixing Yang	Shandong University
2	16:05-16:30	2201	Coherent Wavefront Modulation with Dielectric Terahertz Metasurface (Invited)	Yuancheng Fan	Northwestern Polytechnical University
3	16:30-16:45	2252	Freestanding and Broadband Terahertz Spatial Light Modulator	Hangbing Guo	Nanjing University
4	16:45-17:00	1781	Design of a 2-bit Unit for Amplifying Information Metasurface	Lijie Wu	Southeast University
5	17:00-17:15	2392	Free-space Mid-IR Communications Using Quantum Cascade Lasers	Qin Qi	Shenzhen University
6	17:15-17:30	2117	A Low-power Reflective Coding Metasurface with Metal-oxide-semiconductor Field-effect Transistor Integrated	Zhenjie Qi	Southeast University
7	17:30-17:45	2233	A High-performance Dual-polarized Base Station Antenna Array for 5G Applications	Ning Yang	Foshan University

Oral Session 6-1

Recent Advances in Antennas and Circuits

Chairs: Qiubo Ye (Jimei University)
Jun Xiao (Jimei University)
Xiaojiao Deng (Tsinghua University)

11 月 11 日 13:30-15:40
会议室：三楼桂花厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	1869	Resin-based Dielectric Terahertz Metalens and Applications (Invited)	Jia Shi	Tiangong University
2	13:55-14:20	3007	Mid Wavelength Infrared Avalanche Photodetectors Based on Antimonide Material (Invited)	Jianliang Huang	Institute of Semiconductors Chinese Academy of Sciences
3	14:20-14:35	1974	Research on Channel Modeling in Enclosed Metal Scenario with Aperture	Haotian Xu	Shenyang Aircraft Design and Research Institute
4	14:35-14:50	1978	Research on the Principles of Roughness Estimation and Range Correction for Flat Surface Based on Frequency-modulated Continuous Wave Radar	Jia Chen	Jimei University
5	14:50-15:05	2002	Optimization of Irregular Slot Antenna Based on Conditional Generative Adversarial Networks	Yitao Liu	Jimei University
6	15:05-15:20	2003	Machine Learning Assisted Optimization of an Irregular Slot Antenna	Ping Chen	Jimei University
	15:20-15:40	Cafe Break			

Oral Session 6-2

Photoelectric Devices and Micro-nano Manufacturing

Chairs: Zanhui Chen (Guilin University of Electronic Technology)
Peihua Wangyang (Guilin University of Electronic Technology)
Hailiang Zhu (Northwestern Polytechnical University)

11 月 11 日 15:40-17:45
会议室：三楼桂花厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	2346	Artificial Intelligence Optoelectronic Sensor Devices (Invited)	Zanhui Chen	Guilin University of Electronic Technology
2	16:05-16:30	2450	Advanced Studies on the Construction of X-ray Detector Based on Perovskite Thick Film (Invited)	Peihua Wangyang	Guilin University of Electronic Technology
3	16:30-16:45	2042	Design of Dual-element UWB MIMO Antenna	Haobin Yang	Jimei University
4	16:45-17:00	2471	OpenCV-based Trouser Leg Recognition Algorithm Design	Jiaxu Liu	Xiamen University of Technology
5	17:00-17:15	2255	Hot Electron Photodetector Based on Au/Si Nanopillar Arrays	Yue Jiang	Guilin University of Electronic Technology
6	17:15-17:30	2283	Vertical MoS_2 Field-effect Transistor via Chemical Vapor Deposition	Yongfa Lin	Guilin University of Electronic Technology
7	17:30-17:45	1556	A New Method for Inverse Designing Metasurfaces of Bound States in the Continuum	Shiting Cao	Guilin University of Electronic Technology

Oral Session 7-1

The Simulation and Measurement of EM Scattering and Propagation from Complex Environment and Targets

Chairs: Yiwen Wei (Xidian University)
Jie Li (Chengdu University of Information Technology)

11 月 11 日 13:30-15:40
会议室：十二楼独秀厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	2389	Research on Inversion and Propagation of Complex Targets in Hypersonic Targets (Invited)	Wei Chen	Anhui University
2	13:55-14:10	1715	Machine Learning Based Inversion Method for 3-D Plasma Parameters	Xiaojun Sun	Anhui University
3	14:10-14:25	2411	Study of Bi-SAR Imaging Simulation Based on GNSS Reflected Signal	Min Chen	Yan'an University
4	14:25-14:40	2229	Application of TAMSGrad in Method of Moments	Meng Yuan	Anhui University
5	14:40-14:55	2321	Intelligent Electromagnetic Scattering Analysis Based on Inherent Feature Extraction	Dehua Kong	Peking University
6	14:55-15:10	2322	Time-domain Shielding Effectiveness Analysis of Metallized Carbon Fiber Composite Cavity	Le Cao	Xi’an University of Science and Technology
7	15:10-15:25	1834	A SIW Multi-beam Feed Network for 5×5 Orthogonal Beams	Binyu Han	Nanjing University of Science and Technology
	15:25-15:40	Cafe Break			

Oral Session 7-2

Materials and Metamaterials for Terahertz Applications

Chairs: Xinlong Xu (Northwest University)
Zeyu Zhang (University of Chinese Academy of Sciences)

11 月 11 日 15:40-17:55
会议室：十二楼独秀厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	2271	Terahertz Emission Properties of Halide Perovskites (Invited)	Yixuan Zhou	Northwest University
2	16:05-16:30	2360	High Spatial and Temporal THz Spectroscopy for 2D Materials (Invited)	Tianwu Wang	Aerospace Information Resaerch Institute, Chinese Academy of Sciences
3	16:30-16:55	2045	Fundamental Material Solutions for High-efficient Controlling of Terahertz Transmission (Invited)	Qiwu Shi	Sichuan University
4	16:55-17:10	2169	Tunable Metamaterial Perfect Absorber Based on Vanadium Dioxide	Qichao Gao	Guilin University of Electronic Technology
5	17:10-17:25	2470	Broadband Terahertz Metamaterial Absorber Based on Three-dimensional Printable Structure and Liquid Metal	Guanqiong Ma	Beijing Jiaotong University
6	17:25-17:40	2308	Deep Learning Enabled Inverse Design of Interlayer-coupled Chiral Metamaterials	Haotian Zhong	Guilin University of Electronic Technology
7	17:40-17:55	1806	Towards Fabrication of High-tuning-range Liquid Crystals High-aspect-ratio Coplanar Waveguide Phase Shifter by LIGA, DRIE and Laser Ablation	Jinfeng Li	Beijing Institute of Technology

Oral Session 8-1

Millimeter Wave and Terahertz Reconfigurable Metasufaces

Chairs: Limei Qi (Beijing University of Posts and Telecommunications)
Baiyang Liu (Southern University of Science and Technology)
Feng Lan (University of Electronic Science and Technology of China)

11 月 11 日 13:30-15:40
会议室：十二楼叠彩厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	1928	VO_2 Based Metasurface with Strong and Continuously Switchable Circular Dichroism in THz Region (Invited)	Huan Jiang	Guangdong University of Technology
2	13:55-14:20	2413	Steering Smith-purcell Radiation Direction in Fixed Frequency by Electron Beam (Invited)	Tao Fu	Guilin University of Electronic Science and Technology
3	14:20-14:35	1734	1-bit Terahertz Time-space-coding Metasurfaces with Refined Wavefront Modulation for Harmonic Beam Scanning Enhancement	Munan Yang	University of Electronic Science and Technology of China
4	14:35-14:50	2273	Unmanned Aerial Vehicle Inspection Action Setting Scheme for Highway Scenes	Chenshuo Miao	Beijing Electronics Science and technology Institute
5	14:50-15:05	1877	Cellular Traffic Prediction Using Multivariate Time Series LSTM Based on Meteorological Data	Yichao Xu	Beijing University of Posts and Telecommunications
6	15:05-15:20	2368	Statistical Average Optical Properties of Al_2O_3 Particles Near the Nozzle of a Solid Rocket Engine	Lu Bai	Xidian University
	15:20-15:40	Cafe Break			

Oral Session 8-2

Lens Antenna and Metasurface Antenna

Chairs: Bing Zhang (Sichuan University)
Degao Zhong (Qingdao University)

11 月 11 日 15:40-17:45
会议室：十二楼叠彩厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	1696	Coupling of Metamaterial (Invited)	Wei Huang	Guilin University of Electronic Technology
2	16:05-16:30	2479	Research on Terahertz Communication for Near Space Hypersonic Vehicle (Invited)	Wenchong Ouyang	University of Science and Technology of China
3	16:30-16:45	1641	Electromagnetic Waves Regulation by Using Dual-frequency Reflective Digital Metasurfaces	Chenglong Ren	Shanxi University
4	16:45-17:00	1649	A Tri-band Low-profile Shared-aperture Microstrip Path/Fabry-perot Cavity Antenna	Tong Xie	Sichuan University
5	17:00-17:15	1657	A Compact Zeroth-order Based Omnidirectional Circularly Polarized Antenna with Hemispherical Coverage for In-vehicle Communication Applications	Yisi Jiang	Sichuan University
6	17:15-17:30	2414	Design of a Flat Gain Broadband Metasurface Antennas Using Characteristic Mode Analysis	Caixia Feng	Shanxi Datong University
7	17:30-17:45	2477	Design of Single Layer Optically Transparent Reflectarray for 5G Outdoor and Indoor Coverage Enhancement	Jiaqi Dong	Beijing University of Posts and Telecommunications

Oral Session 9

Multidimensional Electromagnetic Filed Manipulations with Metasurfaces

Chairs: Zilan Deng (Jinan University)
Wei Huang (Guilin University of Electronic Technology)

11 月 12 日 10:00-11:50
会议室：二楼象山厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2330	Metasurface Topological Singularities Based on Exceptional Point and Bound State in the Continuum (Invited)	Qinghua Song	Tsinghua University
2	10:25-10:50	3010	MXene Based Ultrashort Pulse Time-domain Modulation (Invited)	Yingwei Wang	Central South University
3	10:50-11:05	2132	Vectorial Meta-grating-lens Enabled Singlet-integrated Full Stock Polarization Imaging	Fengjun Li	Jinan University
4	11:05-11:20	1761	Metasurface with Directional Controlled Asymmetric Transmissions	Guanyu Shang	Harbin Institute of Technology
5	11:20-11:35	2249	Hybrid Bound States in the Continuum in Terahertz Metasurfaces	Junxing Fan	Southern University of Science and Technology
6	11:35-11:50	1942	A Triple-band Miniaturized Circularly Polarized Microstrip Antenna for GNSS Applications	Jingxin Wang	Beijing Institute of Technology

Oral Session 10

Recent Progress in Theoretical and Computational Electromagnetics

Chairs: Qiang Ren (Beihang University)
Xianghu Wang (Shanghai DianJi University)

11 月 12 日 10:00-12:05
会议室：二楼观瀑厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2202	The Simulation and Analysis of Quantum Radar Cross Section (Invited)	Chonghua Fang	China Ship Development and Design Center
2	10:25-10:50	2219	Modeling of Terahertz Parametric Oscillators (Invited)	Xingyu Zhang	Shandong University
3	10:50-11:05	1925	Efficient Online Multi-objective Antenna Optimization	Xiaoxian Zhang	Beijing University of Posts and Telecommunications
4	11:05-11:20	2342	Porosity Inversion of Multilayer Medium at THz Frequency	Bingyang Liang	University of Electronic Science and Technology
5	11:20-11:35	2391	An Applied Study of Improved Deep Q-networks for Marine Path Planning	Pengcheng Li	Xi'an University of Science and Technology
6	11:35-11:50	1926	200W Broadband Power Amplifier Design over 9 kHz to 400 MHz	Jun Hou	Chengdu SIWI Power Electronic Technology Co., Ltd
7	11:50-12:05	1939	Susceptibility of Optocoupler to Conducted EMI	Jiayue Xing	Beihang University

Oral Session 11

Terahertz Devices

Chairs: Jianqiang Gu (Tianjin University)
Feifei Qin (Nanjing University of Posts and Telecommunications)

11 月 12 日 10:00-11:50
会议室：三楼紫荆厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2039	Novel Terahertz Metasurfaces with New Raw Materials (Invited)	Jianqiang Gu	Tianjin University
2	10:25-10:50	2043	Overcoming Barriers of Dielectric Metasurface Sensing for Trace Terahertz Molecular Fingerprint (Invited)	Jinfeng Zhu	Xiamen University
3	10:50-11:05	2311	Enhanced Terahertz Emission from Gallium Arsenide Nano-hole Array Under Low Power Optical Pump	Yangfan Gu	Tianjin University
4	11:05-11:20	2152	Design and Optimize of a G-band Double Staggerd Vane Traveling Wave Tube	Dongxing Zhou	Aerospace Information Research Institute, Chinese Academy of Sciences
5	11:20-11:35	2155	A Survey of Satellite Internet Network Attack and Defense Techniques	Yanyan Han	Beijing Electronic Science and Technology Institute
6	11:35-11:50	2485	A Preliminary Study of Frequency Shift Mechanism in Magnetic Resonance Coupled Human Body Communication	Lina Chen	Fuzhou University

Oral Session 12

Terahertz Communication Technology

Chairs: Zhongbo Zhu (China Academy of Space Technology)
Chuanbo Li (Minzu University of China)

11 月 12 日 10:00-11:25
会议室：三楼红梅厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2113	A Roller Sticky Cleaning Robot (Invited)	Chien-Nan Lee	Asia Eastern University of Science and Technology
2	10:25-10:40	2109	Design of THz Low-loss Flexible Waveguide Structure	Wei Shao	National Key Laboratory of Science and Technology on Space Microwave, CAST Xi'an
3	10:40-10:50	2171	A Terahertz Reconfigurable Transmitarray with Controllable Binary-amplitude Elements	Qiangli Xi	CAST Xi'an
4	10:50-11:10	2387	Retrodirective Reflector Antenna for Terahertz Communication System	Jiangjie Zeng	University of Electronic Science and Technology of China
5	11:10-11:25	2025	Chip Rate Estimation of DSSS Signals Based on the Morlet Wavelet Power Spectrum Method	Hang zhao	Guilin University of Electronic Technology

Oral Session 13

Physics, Devices and Technology of Terahertz Detection

Chairs: Yingxin Wang (Tsinghua University)
Nan Yang (Sun Yat-sen University)

11 月 12 日 10:00-11:50
会议室：三楼玫瑰厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2312	Application of Terahertz Spectroscopy in Gas Detection and Analysis (Invited)	Xiaojiao Deng	Tsinghua University
2	10:25-10:50	2080	Key Technologies of Terahertz Focal Plane Array Detectors (Invited)	Hailiang Zhu	Northwestern Polytechnical University
3	10:50-11:05	2211	Hybrid 1D/2D Heterostructure with Electronic Structure Engineering Toward High-sensitivity Photodetector	Yingying Niu	Henan University of Technology
4	11:05-11:20	2111	Bias Tunable and High Temperature Characteristics in Ratchet detector	Yi Wang	North China University of Technology
5	11:20-11:35	1884	Room-temperature Terahertz Detector Based on Photothermoelectric Effects of Suspended Carbon Nanotube Bundle	Yifan Xue	Beijing Information Science and Technology University
6	11:35-11:50	2313	A Broadband Miniaturized Circularly Polarized Microstrip Patch Antenna for UHF RFID Reader	Chuang Wu	Soochow University

Oral Session 14

Active Adjustable Filters: Design and Theory

Chairs: Ruofeng Xu (China University of Mining and Technology)
Jun Wang (China University of Mining and Technology)
Shengjun Zhang (Beijing Aerospace Long March Aircraft Research Institute)
Lei Zhao (China University of Mining and Technology)
Tao Fu (Guilin University of Electronic Science and Technology)

11 月 12 日 10:00-12:05
会议室：三楼桂花厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2138	Organic Optoelectronic Molecules with Inverted Singlet-triplet Gaps (Invited)	Jie Li	Chengdu University of Information Technology
2	10:25-10:50	2487	Monopulse Beam Tracking Technology for Terahertz Communication (Invited)	Sheng Li	China Academy of Space Technology
3	10:50-11:05	2327	Active Adjustable Filter Based on the Spoof Surface Plasmon Polaritons	Jun Wang	China University of Mining and Technology
4	11:05-11:20	2388	Radiation Characteristics of a Wide-band and Low Emissivity Ge/ZnS Photonic Crystal	Yuning Zhang	Beijing Institute of Space Long March Vehicle
5	11:20-11:35	2390	Tunable Wideband Metamaterial Absorber	Jing Wang	China University of Mining and Technology
6	11:35-11:50	2306	Novel 0.22-THz Extended Interaction Devices Based on the Four-sheet-beam Orthogonal Interconnection Structure	Zhenhua Wu	University of Electronic Science and Technology of China
7	11:50-12:05	2332	Topologically-enabled On-chip THz Taper-free Waveguides	Wenhao Li	Zhejiang University

Oral Session 15

Compound Semiconductor Devices

Chairs: Haiou Li (Guilin University of Electronic Technology)
Hua Zhu (Shenzhen University)

11 月 12 日 10:00-11:40
会议室：十二楼独秀厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2166	Terahertz Emission Spectroscopy for Emergent Semiconductors (Invited)	Zeyu Zhang	University of Chinese Academy of Sciences
2	10:25-10:40	2172	Design of 16-bit Sigma Delta ADC Modulator and itsDigital Decimation Filter	Siyu Feng	Guilin University of Electronic Technology
3	10:40-10:55	1917	Smoke Detection Model Based on Adaptive Feature Extraction Network	Huisheng Zhang	Fuzhou University
4	10:55-11:10	2000	Deep Learning and Depth Integrated Method for Visual Tracking of Object Under Complicated Background	Qiming Wang	Fuzhou University
5	11:10-11:25	2116	Ground-penetrating Radar Random Missing Data Reconstruction Method Based on U-net Network	Weikun Liu	Guilin University of Electronic Technology
6	11:25-11:40	2139	Two-stage Pose Generation Assisted Human Motion Prediction	Jianfeng Tu	East China Jiaotong University

Oral Session 16

Underwater Optical Communication and Detection

Chairs: Chunbo Ma (Guilin University of Electronic Technology)
Wei Chen (Anhui University)

11 月 12 日 10:00-11:40
会议室：十二楼叠彩厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	10:00-10:25	2277	Wide Span and High Sensitivity THz-wave Detection Based on Nonlinear Optical Frequency Up-conversion (Invited)	Pengxiang Liu	Shenyang Institute of Automation, Chinese Academy of Sciences
2	10:25-10:40	1824	A Hollow-core Fiber with High Birefringence in the Near-infrared Band	Yiming Xiao	Guilin University of Electronic Technology
3	10:40-10:55	2468	A Vector Magnetic Field Sensor Based on MF-coated HCF-PMF-HCF Fiber Structure	Yifei Xu	Guilin University of Electronic Technology
4	10:55-11:10	1982	Multi-octave Linearization and Self-interference Cancellation Based on Photonics	Hui Xu	Nanjing University of Aeronautics and Astronautics
5	11:10-11:25	1994	Microwave Photonic Image-reject Mixer with Improved Spurious-free Dynamic Range	Chao Zhang	Nanjing University of Aeronautics and Astronautics
6	11:25-11:40	2050	An Intensity-modulated Magnetic Field Sensor Based on Magnetic Fluid and HCF-SMF-HCF Fiber Sensing Structure	Ben Luo	Guilin University of Electronic Technology

Oral Session 17-1

Electromagnetic Radiation and Scattering

Chairs: Yannan Jiang (Guilin University of Electronic Technology)
Yiying Wang (Guilin University of Electronic Technology)
Han Xiong (Chongqing University)

11 月 12 日 13:30-15:40
会议室：二楼象山厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	3011	Research on Dielectric Resonator Antenna Integrated with Circuit Package and Equipment Housing (Invited)	Hongxing Zheng	Hebei University of Technology
2	13:55-14:20	2228	Organic Nonlinear Optical Crystal Growth for Broadband Terahertz Radiation Sources (Invited)	Degao Zhong	Qingdao University
3	14:20-14:35	1997	A Hilbert Transform for Antenna Array Beam Synthesizing	Yan Zhang	Southeast University
4	14:35-14:50	1930	Analysis of Microstrip Patch Antenna Array Using the Sub-structure Characteristic Modes	Lei Wu	Anhui University
5	14:50-15:05	2001	Miniaturized Design of Broadband FSS for RCS Reduction of Radome by Using FDTD Method	Tingrui Zhang	Hebei University of Technology
6	15:05-15:20	2488	A Compact Dual-Polarized Magnetoelectric Dipole Antenna and Array with Wide Scanning Angle for 5G Millimeter Wave Applications	Chuanming Wu	Xidian University
	15:20-15:40	Cafe Break			

Oral Session 17-2

Plasmonic Metamaterials for Communication, Sensing, and Imaging

Chairs: Yongjin Zhou (Shanghai University)
Xuanru Zhang (Southeast University)
Junchen Ke (Guilin University of Electronic Technology)

11 月 12 日 15:40-18:00
会议室：二楼象山厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	3009	High-capacity RIS for Integrated Sensing and Communication (Invited)	Baiyang Liu	Southern University of Science and Technology
2	16:05-16:30	2486	Research on Low-cost Antennas with High Gain for Terahertz Communication (Invited)	Xianqi Lin	University of Electronic Science and Technology of China
3	16:30-16:45	1716	Localized Spoof Surface Plasmon Skyrmions Excited by Two-conductor Line	Siqi Li	Peking University
4	16:45-17:00	2081	Reconfigurable RCS Reduction Based on Broadband Metasurface Absorber	Haifan Li	Shanghai University
5	17:00-17:15	2083	Ultra-wideband Dual-polarization Absorber/reflector Based on Reconfigurable Metasurface	Yihao Xu	Shanghai University
6	17:15-17:30	2093	Passive Microwave Non-destructive Testing System Based on Back-scattering Sensor	Zhiying Zou	Shanghai University
7	17:30-17:45	1695	A Novel High Selectivity Sheet-metal Diplexer Design with Frequency Dependent Couplings	Chuicai Rong	Gannan Normal University
8	17:45-18:00	1722	Impedance Characterization for Liquid Crystal Tunable Coaxial Transmission Lines at 60 GHz	Jinfeng Li	Beijing Institute of Technology

Oral Session 18-1

Wide Bandgap Semiconductor Materials and Devices

Chairs: Fabi Zhang (Guilin University of Electronic Technology)
Dexian Yan (China Jiliang University)

11 月 12 日 13:30-15:40
会议室：二楼观瀑厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	3012	High Quality β-Ga_2O_3 Film Preparation and its Application in Solar-blind Ultraviolet Communication (Invited)	Xianghu Wang	Shanghai Dianji University
2	13:55-14:20	2179	High Quality Si-based GaN Microcavity Fabrication and Applications in Light Emission and Detection Devices (Invited)	Feifei Qin	Nanjing University of Posts and Telecommunications
3	14:20-14:45	2164	Engineered Graphene/Semiconductor Van Der Waals Heterostructure Saturable Absorbers for Ultrashort Pulse Lasers (Invited)	Xu Wang	Ningbo University
4	14:45-15:00	2352	Local Surface Plasmon Enhancement of $(GaIn)_2O_3$ Based Ultraviolet Photodetector	Chenhao Weng	Guangxi Key Laboratory of Precision Navigation Technology and Application
5	15:00-15:15	1950	Predictive Analysis of COVID-19 Data Using Machine Learning	Bin Gong	City University of Macau
6	15:15-15:30	2294	A Novel Identity Recognition Network for Person Identification via Radar Micro-doppler Signatures	Junyin Ding	Fuzhou University
	15:30-15:40	Cafe Break			

Oral Session 18-2

Advanced Microwave Filters

Chairs: Xuehui Guan (East China Jiaotong University)
Baoping Ren (East China Jiaotong University)
Feng Zhang (Xinjiang Technical Institute of Physics and Chemistry, Chinese Academy of Sciences)

11 月 12 日 15:40-18:05

会议室：二楼观瀑厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	3013	Sn Catalyzed Si Based GeSn Materials and Devices (Invited)	Chuanbo Li	Minzu University of China
2	16:05-16:20	2320	Accurate Design of a Novel High-performance 11-pole Triple-mode Dielectric Resonator Bandpass Filter with Fully Controllable Multiple Transmission Zeros	Fan Liu	Changsha University of Science and Technology
3	16:20-16:35	1746	Dual-band Bandpass Filter Based on Two Pairs of Degenerate Modes of a Regular Hexagonal Prism Dielectric Waveguide Resonator	Shiwen Xiong	East China Jiaotong University
4	16:35-16:50	1747	Miniaturized Triple-band Bandpass Filter Based on Cylinder Dielectric Resonator with Cut Holes	Chaowu Fu	East China Jiaotong University
5	16:50-17:05	1864	Design Optimization of Ultra-wideband Vivaldi Antenna Using Genetic Algorithm	Aiyun Zhan	East China Jiaotong University
6	17:05-17:20	1879	A Three-layered Monopole Antenna Design with EBG Structures	Aiyun Zhan	East China Jiaotong University
7	17:20-17:35	2011	A Method for Extracting Coupling Matrix of Lossless Filtering Antenna from Reflection Coefficient	Hanyu Xie	Xidian University
8	17:35-17:50	2286	Broadband and Dual-band Bandpass Filter Using Spoof Surface Plasmons Polaritons and Microstrip Coupled-line Structure	Chunhua Qin	East China Jiaotong University
9	17:50-18:05	2483	Miniaturized Biosensing System for Electrochemical Tear Lactate Detection	Xing Chen	Fuzhou University

Oral Session 19-1

Millimeter Wave Devices and Antennas

Chairs: Dongya Shen (Yunnan University)
Zhaofu Chen (Southeast University)

11 月 12 日 13:30-15:40
会议室：三楼紫荆厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	2340	Radiation Pattern Decoupling of Linear Array MIMO Patch Antennas (Invited)	Nan Yang	Sun Yat-sen University
2	13:55-14:20	2442	Power Dividers for Millimeter Wave Communication (Invited)	Hong Yuan	Yunnan University
3	14:20-14:35	1922	X/Ku-band Highly-isolated Circularly Polarized Horn Antennas for Full Duplex Applications	Yulin Tao	Beijing Institute of Technology
4	14:35-14:50	2296	A Millimeter-wave 3D Substrate Integrated Dual-polarized Magneto-electric Dipole Antenna	Yujiao Guo	Beijing Jiaotong University
5	14:50-15:05	1619	OAM-SK Optical Communication System Based on CNN in Plasma Sheath Turbulence	Zhengwei Hou	Anhui University
6	15:05-15:20	2399	Near-field-enhanced Supersurface Structures for UCNPs Fluorescence Enhancement and Ultrasensitive Gas Sensing	Shengbin Cheng	Hunan University
	15:20-15:40	Cafe Break			

Oral Session 19-2

Millimeter Wave Antennas and Their Applications

Chairs: Xing Jiang (Guilin University of Electronic Technology)
Lin Peng (Guilin University Of Electronic Technology)
Zuanming Jin (University of Shanghai for Science and Technology)

11 月 12 日 15:40-18:00
会议室：三楼紫荆厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	2293	A Two-dimensional Beam Scanning 60 GHz Antenna Array Based on SIW Butler Matrix (Invited)	Hua Zhu	Shenzhen University
2	16:05-16:30	2476	Millimeter Wave Wideband and Wide Scanning Angle Circular-polarized Sip-based Antenna Array (Invited)	Guoqiang He	Shanghai University
3	16:30-16:45	2006	Millimeter Wave ±45° Dual-polarized Wide Angle Scanning Antenna Array	Tingjing Dai	Guilin University of Electronic Technology
4	16:45-17:00	2051	Design of Self-biased Microstrip Double-Y Junction Circulator at Ka Band	Runhu Jiao	Guilin University of Electronic Technology
5	17:00-17:15	2119	A Single-fed Dual-band Fabry-perot Antenna for Millimeter-wave Communications	Chenhao Shao	Southwest Jiaotong University
6	17:15-17:30	2133	Dual-polarized Wideband Wide-beam Millimeter-wave Magneto-electric Dipole Antenna	Linglong Gou	Guilin University of Electronic Technology
7	17:30-17:45	2421	Application of Free Space Method in Measuring Dielectric Constant in PCB	Hailang Xi	Guilin University of Electronic Technology
8	17:45-18:00	1813	Stacked Ring-slit Dual-band Broadband Circularly Polarized Antenna for Satellite Navigation	Tengxiang Zeng	Guilin University of Electronic Technology

Oral Session 20-1

AI Med Cross Fusion

Chairs: Junsheng Yu (Beijing University of Posts and Telecommunications)
Yuping Yang (Minzu University of China)

11 月 12 日 13:30-15:40
会议室：三楼红梅厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	2168	Frequency Response of the Terahertz Air Coherent Detection Technology and its Development (Invited)	Haiwei Du	Nanchang Hangkong University
2	13:55-14:10	1770	Deep Time-series Prediction of Complications and Deterioration in ICU Patients Based on the MSIPA Model	Duanyang Feng	City University of Macau
3	14:10-14:25	1778	Design of Chronic Disease Smart Management and Detection System Based on NB-ioT Technology	Baoping Wang	Guangdong University of Science and Technology
4	14:25-14:40	2404	A Channel Gain Measurement Method for Magnetic Resonance Human Body Communication	Bingheng Chen	Fuzhou University
5	14:40-14:55	1992	Optimization of Mobile Medicalmonitoring Channel Based Onreinforcement Learning and Game Theory	Wennan Wang	Xiamen University
6	14:55-15:10	2079	An Analog Front-end with Automatic Gain Control for Galvanic-coupled Human Body Communication	Wenxiang Zhao	Fuzhou University
7	15:10-15:25	2282	Energy Expenditure Estimation for Schoolchildren Using Accelerometers	Qi Zhao	Beijing University of Posts and Telecommunications
	15:25-15:40	Cafe Break			

Oral Session 20-2

Terahertz Spectroscopy and Biosensor

Chairs: Cunjun Ruan (Beihang University)
Cheng Zhang (Photoelectric Devices and Micro-Nano manufacturing)

11 月 12 日 15:40-17:50
会议室：三楼红梅厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	3008	Research on Miniaturized Terahertz Source for DNP-NMR (Invited)	Wenxin Liu	Aerospace Information Research Institute, Chinese Academy of Sciences
2	16:05-16:20	2170	Neural Signal Compression System with Spike Detection Using Compressed Sensing	Ruihan Zheng	University of Macau
3	16:20-16:35	2377	A Novel Deep Neural Network for Sleep Apnea Event Detection with Pressure Signals	Yi Liu	Beijing University of Posts and Telecommunications
4	16:35-16:50	2326	Machine Learning Combining Expert Features to Differentiate Infection Types Based on Physiological and Biochemical Indicators of Malayan Pangolin	Tengcheng Qu	City University of Macau
5	16:50-17:05	2197	Electromagnetically Induced Transparency-like Metamaterial Sensor with Split-ring Resonator	Lulu Han	Beihang University
6	17:05-17:20	1832	Directional Target Localization in NLOS Environments Using RSS-TOA-AOA Combined Measurements	Peiliang Zuo	Beijing Institute of Electronic Science and Technology
7	17:20-17:35	2258	Heart Rate Detection for Radar via Wavelet Decomposition and Savitzky-golay Filtering	Dan Li	Fuzhou University
8	17:35-17:50	2142	The Design of 0.22THz Staggered Double Vane Traveling Wave Tube with a Flat Gain Curve	Pengcheng Yin	University of Electronic Science and Technology of China

Oral Session 21-1

Dielectric Antenna and Metasurface

Chairs: Bin Li (Beijing Institute of Technology)
Fuhai Su (Institute of Solid State Physics, HFIPS, Chinese Academy of Sciences)

11 月 12 日 13:30-15:40
会议室：三楼玫瑰厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	2350	Compact Filtering Antenna Based on Dense Dielectric Strip Resonator (Invited)	Kai Xu	Nantong University
2	13:55-14:20	2247	Dual-band Diversity Glass Antenna for WiFi Applications (Invited)	Pengfei Hu	Sun Yat-sen University
3	14:20-14:35	1981	Study on Reconfigurable Dielectric Resonator Antennas	Xiyao Liu	Shenzhen University
4	14:35-14:50	2367	A High Efficiency SIW-integrated Dielectric Resonator Antenna Array for Millimeter-wave Applications	Rui He	Xidian University
5	14:50-15:05	2417	Decoupling Tightly Spaced Antennas with Dielectric Resonators	Zhichao Jin	Sun Yat-sen University
6	15:05-15:20	2216	The Study of Raman Characteristic Differences Between U87 Glioma Tumor Tissue and Normal Tissue	Meilan Ge	Tianjin University
	15:20-15:40	Cafe Break			

Oral Session 21-2

Terahertz Detection and Imaging

Chairs: Lei Hou (Xi'an University of Technology)
Liangjie Bi (University of Electronic Science and Technology of China)

11 月 12 日 15:40-17:50
会议室：三楼玫瑰厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	3014	Terahertz Huygens' Metasurface and Applications (Invited)	Jinhui Shi	Harbin Engineering University
2	16:05-16:20	1993	Design of the Electron Optics System of 220 GHz Traveling Wave Tube	Kedong Zhao	Beihang University
3	16:20-16:35	2010	CMOS Mixer and VCO with Balun for ZigBee Health Monitoring and Communications	Tanvir Islam	University of Houston
4	16:35-16:50	2475	Broadband Planar Microstrip-to-WR12-waveguide Transition for E1 Band Transceiver Application	Jichao Cha	Beijing University of Posts and Telecommunications
5	16:50-17:05	2231	Design of 2×4 Filtering Butler Matrix Based on All-resonator Structure	Yi Lu	Foshan University
6	17:05-17:20	2378	Effect of Ion Bombardment Induced Cathode Degradation on the Performance of a Gyrotron Electron Gun	Yan Bai	Southeast University
7	17:20-17:35	2196	Theoretical Investigation on Terahertz Wave Detection Using Rydberg Quantum Atoms	Junnan Wang	Xi'an University of Technology
8	17:35-17:50	2245	Exciting Extended Bound States in the Continuum in Symmetry-broken Scalable All Dielectric THz Metasurface	Guangcheng Sun	Xi'an University of Technology

Oral Session 22-1

THz Photonics Source and Application

Chairs: Degang Xu (Tianjin University)
Yuye Wang (Tianjin University)
Qixiang Zhao (Guilin University of Electronic Technology)

11 月 12 日 13:30-15:40
会议室：三楼桂花厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	3015	Multi-mode Metasurface Terahertz Manipulation (Invited)	Jiusheng Li	China Jiliang University
2	13:55-14:20	2276	Terahertz Near-field Bio-detection Techniques (Invited)	Huabin Wang	Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences
3	14:20-14:35	1719	Tunable Continuous-wave Terahertz Generator Based on Difference Frequency Generation with DAST Crystal	Zelong Wang	Tianjin University
4	14:35-14:50	2415	Narrow Linewidth, Energy-enhanced Injection-seeded Tunable Terahertz Parameter Oscillator	Jingxi Zhang	Tianjin University
5	14:50-15:05	1918	A 50 GHz-frequency-spaced Multiwavelength Brillouin-erbium Fiber Laser	Yuanmin Pang	Guilin University of Electronic Technology
6	15:05-15:20	1675	Scattering Performance of Terahertz Channels by Space Debris	Yuanshuai Lei	Beijing Institute of Technology
	15:20-15:40	Cafe Break			

Oral Session 22-2

Millimeter-to-terahertz Vacuum Electronic Devices

Chairs: Chaohai Du (Peking University)
Yue Wang (Xi'an University of Technology)

11 月 12 日 15:40-18:05
会议室：三楼桂花厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	3016	THz Polaritonic Van Der Waals Crystals and Their Nanostructures (Invited)	Huanjun Chen	Sun Yat-sen University
2	16:05-16:20	1708	Research on a Long-pulse High-power 170 GHz Gyrotron	Bentian Liu	Hefei Comprehensive National Science Center
3	16:20-16:35	1844	Beam-scanning Antenna with High Chirality	Yulu Lei	Peking University
4	16:35-16:50	2059	Bimodal Spoof Surface Plasmons Excitation on a Depth-modulated Composite Grating by Electron Beam	Yongqiang Liu	National Key Laboratory of Scattering and Radiation
5	16:50-17:05	2089	Design of a High-power Edge-aligned Staggered Double-vane Traveling-wave Tube at G-band	Wenbo Wang	Beihang University
6	17:05-17:20	1914	An Improved Corrugated Interaction Structure for 0.34 THz Sheet Beam Backward Wave Oscillator	Jibran Latif	University of Electronic Science and Technology of China
7	17:20-17:35	1923	Simulation of Terahertz Wave Transmission Characteristics in Non-uniform Plasma	Jinhai Sun	National Key Laboratory of Scattering and Radiation
8	17:35-17:50	2376	Multi-band Terahertz Switch Realized with Plasmon-induced Transparency Based on a Graphene Metamaterial Structure	Youpeng Yang	Shenzhen University
9	17:50-18:05	1702	Influence of Plasma Density Arrangement on Millimeter-wave Transmission Characteristics	Wenbo Liu	Beijing Institute of Technology

Oral Session 23-1

Metasurfaces in Application of Antenna Design

Chairs: Zhao Wu (Yulin Normal University)
Youfeng Cheng (Southwest Jiaotong University)

11 月 12 日 13:30-15:40
会议室：十二楼独秀厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	1851	Coupled Theory and Application of Terahertz Chiral Metasurfaces (Invited)	Shan Yin	Guilin University of Electronic Technology
2	13:55-14:20	2041	Development of Microstructured Polymer Terahertz Fiber (Invited)	Depeng Kong	Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences
3	14:20-14:35	2238	Fiber-integrated Catenary Structure for Light Modulation	Zhongyue Luo	Guilin University of Electronic Technology
4	14:35-14:50	1626	Broadband Circularly Polarized Antenna Using Metasurface for 5G Applications	Bihui Xu	Jimei University
5	14:50-15:05	2173	Design of Antenna and Low Profile Metamaterial Array for Compact Antenna Test Range	Meng Cui	Beijing University of Posts and Telecommunications
6	15:05-15:20	2453	Millimeter-wave Beam Steering Metasurface Based on Vanadium Dioxide	Yichun Xing	Harbin Institute of Technology
	15:20-15:40	Cafe Break			

Oral Session 23-2

Advanced Antenna and Metasurface Technologies for Sensing, Imaging, and Communications

Chairs: Heng Huang (City University of Hong Kong)
Zaixing Yang (Shandong University)

11 月 12 日 15:40-17:30
会议室：十二楼独秀厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	2141	Overview ISGW bandpass filter (Invited)	Jianpei Chen	Yunnan Minzu University
2	16:05-16:30	2067	Enhancing Microwave Imaging by Exploiting Diversity (Invited)	Dingfei Ma	Hongkong University of Science and Technology
3	16:30-16:45	1797	A Low-profile Folded Transmitarray for High-resolution Random Transmit-receive Sensing	Jinyu Wu	Southern University of Science and Technology
4	16:45-17:00	2440	Application and System Study of Rotational Reconstructed Convolutional Neural Network	Xingyu Huang	Mapúa University
5	17:00-17:15	2372	Dual-polarization MSBL-based Beamforming for GNSS Multipath Mitigation	Ning Chang	Xi’an Jiaotong University
6	17:15-17:30	2480	Preliminary Research on Super-regenerative Receiver for Intracardiac Communication	Xueyu Weng	Fuzhou University

Oral Session 24-1

Millimeter-wave Sensing and Information Transmission

Chairs: Nannan Wang (Harbin Institute of Technology)
Yayun Cheng (Harbin Institute of Technology)
Yuancheng Fan (Northwestern Polytechnical University)

11 月 12 日 13:30-15:40
会议室：十二楼叠彩厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	13:30-13:55	2085	Ultra-low Power Spectrum Wireless Transmission Technology (Invited)	Jinghui Qiu	Harbin Institute of Technology
2	13:55-14:20	2030	Nonlinear Optical Responses in Metamaterials (Invited)	Yuanyuan Huang	Northwest University
3	14:20-14:35	1842	RFI Source Localization via Joint Reweighted Nuclear Norm and L0-norm Minimization in Microwave Interferometric Radiometry	Jingyu Tao	Huazhong University of Science and Technology
4	14:35-14:50	2108	A Design of 3-D Wide-angle Scanning GRIN Lens Antenna with Flat Focal Surface	Pengcheng Wang	Harbin Institute of Technology
5	14:50-15:05	2148	Radio-frequency Interference Source Detection Based on Enhanced YOLOv8 for Synthetic Aperture Interferometric Radiometers	Shimeng Lu	Huazhong University of Science and Technology
6	15:05-15:20	2210	A W-band Large FOV Scanning Metalens Antenna Based on Coaxial Ring Aperture Unit	Yongjian Ma	Harbin Institute of Technology
	15:20-15:40	Cafe Break			

Oral Session 24-2

Low-scatterring Antennas and Metasurfaces

Chairs: Ying Liu (Xidian University)
Jia Shi (Tiangong University)

11 月 12 日 15:40-18:05
会议室：十二楼叠彩厅

No.	Time	Paper ID	Title	First Author's Name	First Author's Affiliation
1	15:40-16:05	3018	Study on Nonlinear Optical Effect of GaSe Crystal with Intense THz Pulse (Invited)	Guohong Ma	Shanghai University
2	16:05-16:20	2246	Low Scattering Design of Satellite Navigation Antennas under Grazing Incidence Conditions	Yunpeng Shi	Xidian University
3	16:20-16:35	2075	Flexible Transmission Control of Mode Conversion and Application of Reconfigurable On-chip Optical Tweezer	Han Xu	Shenzhen University
4	16:35-16:50	2072	Gain Simulation of Bidirectional Pumped Broadband EDFA	Lu Ren	Guilin University of Electronic Technology
5	16:50-17:05	2100	Total Variation Deconvolution-based Enhancement of Spatial Resolution in Microwave Radiometer Measurements	Zhen Tan	Beijing Institute of Technology
6	17:05-17:20	2355	Inversion of Mars' Zephyria Planum Based on Roughness Correction	Xin Shu	Fudan University
7	17:20-17:35	2128	Analysis of Relaxation Factor Function for Ionospheric Tomography	Ying Liu	Beihang University
8	17:35-17:50	2266	Spatial Resolution Enhancement Technology of FY-3D MWRI Based on Convolutional Auto-encoder	Han Jiang	Beijing Institute of Technology
9	17:50-18:05	2279	A Fast MUSIC Algorithm for High-quality Real-time Point Clouds Acquisition	Qingtong Lin	Fuzhou University

Poster Session 1

11 月 11 日 14:00-15:00

会议室：三楼

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
1	1624	Narrow Band VHF High-temperature Superconducting Filter Design Based on LaAlO3	Rui Zhang	Northwestern Polytechnical University
2	2464	Differential HTS Bandpass Filters Based on Coplanar Stripline	Linping Feng	Xi'an Jiaotong University
3	1724	A Bandpass Filter with Low Loss Using Glide-symmetric Holey Structure	Tingting Xie	Beijing Institute of Radio Metrology and Measurement
4	1767	An X-band Circularly-polarized Marine Radar Antenna Based on Spoof Surface Plasmon Polariton	Dezhuang Zhang	Dalian Maritime University
5	1768	A Bandpass Filter with Switch Function Based on Slotline Resonator and PIN Diode	Bingjie Yang	Dalian Maritime University
6	1771	Design and Fabrication of Ultra-narrow band High-temperature Superconducting (HTS) Filter with 1 MHz Bandwith	Shuai Shang	Beijing Institute of Spacecraft System Engineering
7	1777	Differential HTS Bandpass Filters based on Coplanar Stripline	Linping Feng	School of Microelectronics, Xi'an Jiaotong University
8	1827	A Low-profile Ultra-wideband and Wide-scanning Phased Array Loaded with Star-shaped Patches	Runze Zhang	Beijing Institute of Technology
9	1976	Millimeter-wave AlGaN/GaN HEMTs on Si Operated at 12V and its Modeling for 5G Handset Applications	Zhentao Wei	Fudan Univercity
10	2070	Cascaded Barbell Shape Cavity for Millimeter and Terahertz Wave Bands	Bingchuan Xie	Aerospace Information Research Institute, Chinese Academy of Sciences
11	2149	A UAV Airdrop Emergency Base Station Antenna Based on COCO Structure	Shiyi Zhang	Guilin University of Electronic Technology
12	2150	A New Type of Shipborne Fence Antenna	Qi Zhou	Guilin University of Electronic Technology
13	2151	A Compact Omnidirectional Antenna for WLAN/WiMAX/5G Mobile Communication Applications	Cande Lu	Guilin University of Electronic Technology
14	2161	A Wave Absorbing Structure of an Analog Circuit Loaded with Magnetic Materials	Fang Liang	The Research Institute for Special Structures of Aeronautical Composite AVIC

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
15	2163	Transparent Power Divider Based on Metal Mesh and ITO Composite Structure	Rui Geng	Jilin University
16	2234	Optically Transparent Frequency Selective Surface for Polytype Windows	Zhijun Qin	Jilin University
17	2325	A Horizontally Polarized Omnidirectional Antenna with Arc-shaped Dipoles and Parasitic Elements	Shenghao Zhou	Fuzhou University
18	2400	An Electrically Small Flexible Microstrip Antenna with Stable Performance	Bin He	East China Jiaotong University
19	2420	Design and Analysis of Broadband Vertical via Interconnection Technology for Multilayer Circuit Board of Heart Rate Sensor	Kunwu Song	Jiaxing Nanhu College
20	2418	Ground-based Weak Target Recognition Based on Improved YOLOv5	Yijie Zhang	Xi'an Modern Control Technology Research Institute
21	1602	A Multitargets Shadow Tracking Method for W-band Video-SAR	Han Wu	Nanjing Research Institute of Electronics Technology
22	1659	GPS Smart Location Tracking Mobile Application for Train Transportation	Akila Jayasinghe	Sri Lannka Institute of Information Technology
23	1987	Improving the Quality of Unstained Transmission Electron Microscope Images Using Deep Learning	Weidong Li	Guangxi Medical University
24	2157	Study on GNSS Spoofing Interference Detection Method in Urban Multipath Environment Based on CNN and Clustering Model	Xuechun Ma	Shandong University of Science and Technology
25	2445	A Real-time SAR Ship Detection Method Based on Improved YOLOv5	Chuanshuo Cao	Xi'an Modern Control Technology Research Institute
26	2260	A Target Recognition Method for Small Sample SAR Images Based on Heterogeneous Feature Fusion	Benyuan Lv	Air Force Engineering University
27	2280	Transforming Dust Storms into Clean on Mars Images via Self -supervised Learning	Haiyue Xiang	Fudan University
28	1551	Arbitrary Rotation of Spherical Coordinate for Anechoic Chamber Data Analysis	Wenrui Zheng	Dalian University of Technology
29	1795	W-band Wireless Communication Signal Measurement Technology Based on Electro-optical Sampling	Peijun Xu	Beijing Institute of Radio Metrology and Measurement
30	1886	Measurement of Dielectric Properties and Reflection Loss for Low-loss Substrates and Conductors in Millimeter-wave Ranges	Hao Xu	National Institute of Metrology

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
31	1938	Resonant Cavity Suitable for Micro Area Dielectric Property Testing	Nan Chen	University of Electronic Science and Technology of China
32	2023	Measurement of Complex Permittivity of Thin Plates Using Multimode of Split-cylinder Resonator	Chengyong Yu	University of Electronic Science and Technology of China
33	2074	A Study on the Correction of Reflection and Transmission Coefficients for Electromagnetic Waves Incident on Dielectric and Plasma Based on FDTD Method	Jingru Gao	Xidian University
34	2090	Study on Multiple Physical Fields of S-band Klystron Collector	Yaqi Zhao	Beihang University
35	2120	A Design Method of Large Dynamic Range Vector Network Analyzer Receiver	Mingfei Yang	Ceyear Technologies Co., Ltd
36	2124	Research on Equivalent Far-field Testing Methods Based on the Luneburg Lens Antenna	Shi Qiao	Beijing Institute of Technology
37	2126	Fine-grained Gesture Recognition by Using FMCW Millimeter-wave Radar	Chenchen Yuan	Beijing Institute of Radio Metrology and Measurement
38	2232	A Method for Rapid Terahertz Power Measurement Based on DC Substitution	Hang Wu	China Jiliang University
39	2268	Dynamic Beam Manipulation Based on Space-time-coding Metasurfaces	Sihai Zeng	Harbin Engineering University
40	2373	A W-band Cavity Backed Slot Antenna Based on Multi-layer Silicon Platelets	Jinping Yang	Nanjing University of Posts and Telecommunications

Poster Session 2

11 月 11 日 15:00-16:00

会议室：三楼

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
1	1748	Analysis of Terahertz Generation Characteristics of Grating Photoconductive Antenna	Ying Li	Beijing Institute of Radio Metrology and Measurement
2	1755	Non-destructive Imaging of Human Sperm Internal Nucleus Based on Terahertz Technology	Wenbing Zhang	Institute of Energy, Hefei Comprehensive National Science Center
3	1785	Design of a 510GHz High-isolation Multi-branch Waveguide Coupler	Hao Li	The CAS Key Laboratory of Microwave Remote Sensing; National Space Science Center, Chinese Academy of Sciences
4	1793	A New Method of Human Sperm Head Imaging Based on Terahertz Scattering Near-field Imaging Technology	Chengyao Peng	Institute of Energy, Hefei Comprehensive National Science Center
5	1811	Terahertz Near-field Imaging Experiments of Sperm Cell Tails	Zhenchun Yu	Institute of Energy, Hefei Comprehensive National Science Center
6	1829	Effects of Different Etching Methods on Performance of Photoconductive Antenna	Jianchun Liu	Beijing Institute of Radio Metrology and Measurement
7	1854	Glioma Cell Imaging Experiment Based on Terahertz Near-field Technique	Fengting Jiang	Institute of Energy, Hefei Comprehensive National Science Center
8	1908	A Real-time Phase Analysis System on SSI	Jiamin Zhang	Anhui University
9	1959	Low-cost Terahertz Polarizers Manufacture in Virtue of PCB Production Process	Qiyuan Mu	Xi’an Institute of Optics and Precision Mechanics
10	1968	The Development of Diamond Out-put Window for 170GHz Gyrotron	Bo Chen	Institute of Energy, Hefei Comprehensive National Science Center
11	1998	Investigation of a Double Y-type Metamaterial Terahertz Sensor Integrated with Microfluidic Channel	Yue Zhang	University of Electronic Science and Technology of China
12	2078	Design of 560GHz Subharmonic Mixer Based on GaAs Monolithic Integration Technology	Yiming Zhang	University of Electronic Science and Technology of China
13				

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
14	2153	The Design of a Monolithic Wideband GaN-based Frequency Doubler for G-band	Xiang Luo	University of Electronic Science and Technology of China
15	2156	Design of Sparse MIMO Array for Imaging Fuze	Xu He	Beijing Institute of Remote Sensing Equipment
16	2187	A New Design of Terahertz Suspended Microstrip	Jin Su	Beijing University of Posts and Telecommunications
17	2253	Terahertz Radiation from Grating-coupled Plasma Waves	Shengpeng Yang	University of Electronic Science and Technology of China
18	2259	Circular Dichroism in Centrosymmetric Material without Optical Absorption	Zhen Lei	Northwest University
19	2309	Nonlinear Calibration Algorithm of THZ FMCW Radar	Huanyu Jiang	Beijing Institute of Technology
20	2334	High-speed THz Imaging Using a HCN Laser and a HEMT THz Detector	Nu Zhang	Institute of plasma physics, Hefei Institutes of Physical Science, Chinese Academy of Sciences
21	2341	Study of a Fuzzy Control System for Terahertz Lasers Based on the ZYNQ System	Yan Wang	University of Science and Technology of China
22	2375	A Novel Sine Waveguide for 220GHz Traveling Wave Tube	Xia Lei	Civil Aviation Flight University of China
23	1836	Simulation of Nearshore Altimeter Echo and Reliability Determination of SWH Data	Xia Lei	Fudan University
24	2188	Bayesian-based 3-D MMW Radar Imaging of Non-line-of-sight Environments	Xiang Cai	University of Electronic Science and Technology of China
25	2192	NMTCS: Non-line-of-sight Sparse Reconstruct for Hidden Motion Targets	Yanbo Wen	University of Electronic Science and Technology of China
26	2257	Research on Denoising Ability of Deconvolution Methods in Microwave Atmospheric Remote Sensing	Linhai Jia	Beijing Institute of Technology
27	2398	Validation of IRI-2012 and IRI-2016 Models over Oceans Using Jason Data	Ming Ou	China Research Institute of Radiowave Propagation
28	1871	Study on Photoelectric Auroral Absorption in Photochemical Cells with Surface Trapping Structure	Xiangli Song	Guilin University of Electronic Technology
29	2086	Topside Ionospheric Scale Height Prediction: Random Forest Modeling and Performance Evaluation	Gang Pang	Shandong University of Science and Technology
30	2323	Research on the Adaptability Evaluation Techniques of Ka-band Satellite Communication System's Radio Frequency Environment	Yating Sun	Research Institute of Radiowave Propagation

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
31	1996	Microwave Wireless Energy Transfer and Storage for Railway Internet of Things	Ziyong Wu	NanNing University
32	2206	An UWB Positioning Algorithm Based on Clock Compensation and Filtering	Chao He	Guilin University of Electronic Technology
33	2433	Tag Number Estimation Based on Loaded Quality Factor of Reader Antenna	Jia Chai	Beijing Institute of Computer Technology and Application
34	2361	Construction and Implementation of Unstructured Data Processing Platform in Universities under the Background of Digital Transformation	Fangzhong Qi	China Fire and Rescue Institute
35	1784	Detecting to Distinguish the Origin of Radix Bupleuri Based on Ultraviolet to Mid Infrared Spectroscopy	Jie Shu	Anhui Huadong Photoelectric Technology Institute Co., Ltd
36	1983	Analysis of the Impact of Charged Dust on the Performance of Quantum Illumination Radar	Ruike Yang	Xidian University
37	2145	Analysis of the Influence of Complex Atmospheric Environment on the Performance of Quantum Illumination Radar	Ruike Yang	Xidian University
38	2215	Characterization of the Propagation Dynamics of the Topological Charge Pairs Embedded in Auto-focusing Airy Vortex Beam	Xu Yan	Air Force Engineering University
39	1943	Water Surface Floating Object Detection Method Based on Improved YOLOv5s Model	Biqi Chu	Anhui University of Technology
40	2436	Design and Simulation Beam-wave Interactions of 263GHz Extended Interaction Klystron for Dynamic Nuclear Polarization	Xiangpeng Liu	Beijing University of Technology

Poster Session 3

11 月 11 日 16:00-17:00

会议室：三楼

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
1	1944	Improvement of Object Detection Networks by Fusion of Attention Mechanism and Efficient Convolution	Lu Tao	Anhui University of Technology
2	2307	Research on the Evaluation Model of Multimedia Teaching Courseware Based on Principal Component Analysis Method	Ying Si	China Fire and Rescue Institute
3	2354	Evaluation of the Effectiveness of Major Clustering Construction in Private Undergraduate Institutions Based on Machine Learning	Lixing Zhu	Guangdong University of Science and Technology
4	1729	Thermodynamic Parameters and Energy Transfer Analysis of High En-thalpy Inductively Coupled Plasma	Yue Niu	Xidian University
5	1765	A New Type of Solid Plasma Device Silicon-based Backfed PINIP Diode Array	Chunkao Meng	Beijing Institute of Remote Sensing Equipment
6	2430	Simulation Analysis of a Novel TM021 Mode Microwave Resonant Cavity	Hongbo Cui	Anhui University of Science and Technology
7	2198	Exploration of SPR Excitation Mechanism Based on Seven-core Spiral-tapered Optical Fiber	Shuang Tian	Guilin University of Electronic Technology
8	2366	Study on Electromagnetic Parameters of Inductively Coupled Plasma Based on Spectroscopy	Yan Zheng	Xidian University
9	1704	Design of Array Antenna for High-strength Radiation Field Generation at k-band	Jing Dong	China Ship Development and Design Center
10	1891	Design and Optimisation of Strong Electromagnetic Pulse Protection Devices Based on Semiconductors and Gas Discharges Tube	Qingyao Wang	China Ship Development and Design Centre
11	1979	Test and Analysis of Electromagnetic Susceptibility of Motor Protection Module	Wenxuan Huang	Beihang Universary
12	2014	Shielding Effectiveness Measurement of Twisted Pair Cable for Common-mode and Differential-mode Signals Using Absorbing Clamp Method	Wenxuan Huang	Beihang University
13	2037	Design of the Wideband Cone-and-ground-plane Chamber with Multi-resistor Loaded	Xinyi Wang	China Ship Development and Design Center
14	2220	Test Technique for Suppressing Surface Waves between Coplanar Antennas by Magnetic Materials	Feng Liu	China Ship Development and Design Center

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
15	2380	Research on Maximum Ratio Combining Detection for MIMO-OTSM	Hailing Guo	Guilin University of Electronic Technology
16	2383	Low Sidelobe Optimization Design of Conformal Sparse Array Antenna Using Active Pattern	Li Tang	Northwestern Polytechnical University
17	1646	W-band Folded Reflectarray Using Elements with Polarization Torsion	Zhicheng Wang	Aerospace Information Research Institute, Chinese Academy of Sciences
18	2194	Design of a Novel Frequency Selective Surface with Multiple Functions	Mengyuan Li	The Research Institute for Special Structures of Aeronautica
19	2221	Wideband Transmission/Reflection Switchable Active Frequency Selective Surface with Dual Polarization	Yifang Song	The Research Institute for Special Structures of Aeronautical Composite AVIC
20	1912	Low Sidelobe Antenna Based on Single-substrate Transmissive Metasurface	Wei Zhang	Shanxi University
21	1941	Research on RCS Variation of Luneburg Lens Reflectors Array	Jiahao Zhi	Nanjing University of Aeronautics and Astronautics
22	2147	A Novel Inverse-L Buried GaN Current-aperture Vertical Electron Transistors	Yuanmei Liao	Guilin University of Electronic Technology
23	2158	Design and Performance of a Thin-film Lithium Niobate Modulator with a Sunken Electrode Structure	Hanyu Li	Guilin University of Electronic Technology
24	2159	Design and Analysis of Lithium Niobate Electrooptic Modulators with T-type Electrode	Jiayu Yang	Guilin University of Electronic Technology
25	2177	Fabrication and Characterization of High Indium $In_{0.7}Ga_{0.3}As$ Channel MHEMT on GaAs Substrate	Benzheng Qu	Guilin University of Electronic Technology
26	2182	Trident Spot-size Convertor for Thin-film Lithium Niobate	Liangpeng Qin	Guilin University of Electronic Technology
27	2185	Preparation and Characterization of $BaTiO_3$/ $Nb:SrTiO_3/La_{0.65}Sr_{0.35}MnO_3$ Heterostructure Ferroelectric Thin Films	Yiming Peng	Guilin University of Electronic Technology
28	2012	Wideband and Low-profile Filtering Antenna Based on Metasurface and CRSS	Long Li	Yulin Normal University
29	2115	A Dual-polarization Bandwidth Metasurface Reflectarray Antenna	Weiwei Lv	Aerospace Information Research Institute, Chinese Academy of Sciences
30	2212	A Dual-polarization Broadband Transmission Frequency Selective Rasorber Design with Low Insertion Loss	Longfei Liang	The Research Institute for Special Structures of Aeronautical Composite AVIC

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
31	2291	Tensor Holographic Metasurface for Independently Manipulating Multibeams	Xiangyu Yin	Beijing Institute of Technology
32	1860	ISAR Target Recognition Method Based on Time-frequency Two-dimensional Joint Domain Adversarial Learning Network	Chen Wei	The 705 Research Institute, China State Shipbuilding Industry Corporation
33	1866	Feature Extracted-based Method Against Radar Interference via Deep Learning	Shuailin Chen	Xi'an Modern Control Technology Research Institute
34	1867	A Simulation Software for SAR Learning	Chen Wei	The 705 Research Institute, China State Shipbuilding Industry Corporation
35	2267	Surveillance of Ground and LSS Targets: a Radar-photoelectric Early Warning System	Shuailin Chen	Xi'an Modern Control Technology Research Institute
36	2270	Target Detection from Drone Perspectives: Enhancing YOLOv5.3S with SIoU Loss and SPD Modules	Yuanjie Dang	Xi'an Modern Control Technology Research Institute
37	1906	A Wide-band Planar Dipole Antenna with Switched Beam	Tianqing Liu	Beijing Jiaotong University
38	2022	Millimeter-wave Multi-beamforming Reflectarray Antenna with Wide-angle Beam Scanning	Xiangzhuang Song	Xidian University
39	2122	Design of Mm-wave Planar Tightly Coupled Dipole Arrays	Jing Tao	723 Research Institute of CSSC
40	2125	A Low-profile Large Spacing Array Antenna with 9:1 Bandwidth	Jun Liu	723 Research Institute of CSSC

Poster Session 4

11 月 12 日 14:00-15:00

会议室：三楼

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
1	2190	A Short Length Smooth-walled Spline-profile Horn for Ka-band Satellite Communication Applications	Xihong Ye	Beijing Muniu Technology Co., Ltd
2	1875	SD-CSMA/CA Underwater Optical Wireless Communication Access Protocol Incorporating Spatial Location Information	JunJie Shi	Guilin University of Electronic Technology
3	1880	An Adaptive Multi-scale Binocular Stereo-matching Method for Wave Surface Reconstruction	Yanhong Wang	Guilin University of Electronic Technology
4	2018	Survery on Underwater Wireless Communication Technology	Lijun Hao	Guilin University of Electronic Technology
5	2019	A High Impedance Rectangular Folded Waveguide SWS for 0.66 THz Sheet Beam TWTs	Yinyu Zhang	University of Electronic Science and Technology of China
6	2020	Design of a High Pressure Ratio Carbon-based Cold Cathode ElectronGun for Terahertz TWTs	Lecheng Weng	University of Electronic Science and Technology of China
7	2094	Design of Metasurface for Retroreflection	Yueyi Zhang	Peking University
8	1730	L2, P-norm and L2, S-norm Distance	Jie Yang	Xidian University
9	1758	Design of Microwave Near-field Imaging Probe Based on Substrate Integrated Cavity	Hang Mo	Guilin University of Electronic Technology
10	1799	Dual-polarized Full-space Terahertz Coding Metasurfaces with HEMT-switched Current Reversal	Lan Chen	University of Electronic Science and Technology of China
11	1803	Dual-band Conformal and Co-aperture Antenna Based on Slot Array	Haoyi Li	University of Electronic Science and Technology of China
12	2473	Design of Dual-polarized Switchable Frequency Selective Surface for Cylindrical Surfaces	Zelong Xu	Nanjing University of Aeronautics and Astronautics
13	1874	Application Verification Design and Experiment of High-performance Microprocessor	Heng Peng	Sichuan Jiuzhou Electric Group Co., Ltd
14	1878	Design and Experiment of ARINC429 Bus Transceiver for Application Validation	Geng Chang	Sichuan Jiuzhou Electric Group Co., Ltd
15	2040	A HEMT-embedded Metasurface for Terahertz Beam-scanning Based on Amplitude-phase Quantization Error Optimization	Tianyu Hu	University of Electronic Science and Technology of China

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
16	2178	Sub-terahertz Antipodal Vivaldi Antenna with CSRR Meta-walled SIW Excitation	Hongru Wu	University of Electronic Science and Technology of China
17	2218	High-precision Terahertz Beam Steering via Space-time Coding HEMT-metasurfaces	Xiaolei Nie	University of Electronic Science and Technology of China
18	2224	Design and Fabricate of Terahertz Groove Gap Waveguide Filter	Fanyi Liu	Tsinghua University
19	2244	Quasi-bound States in the Continuum Based on All-dielectric Metasurface	Tingnuo Pan	Harbin Engineering University
20	2305	Terahertz Independently Encoded 1-bit HEMT-embedded RIS	Yueting Li	University of Electronic Science and Technology of China
21	1766	300 GHz Four Ways On-chip Power Combiner Based on BCB Transmission Line	Haomiao Wei	University of Electronic Science and Technology of China
22	1800	170 GHz Monolithically Integrated GaN SBD-Based Frequency Doubler with High Power Handing Capability	Li Wang	National Space Science Center, Chinese Academy of Sciences
23	2295	An Ultra-wideband Elliptical Bowtie Antenna with Depressed Bias for THz Vacuum Photomixers	Jujian Lin	Shenzhen University
24	2310	Simulation and Analysis for a Laser-modulated Vacuum Photodiode Terahertz Radiation Source	Guangxin Lin	Shenzhen University
25	2076	A Coupling Matrix Reduction Method Based on Optimization Algorithm and Matrix Transformation	Keke Zhang	Anhui University
26	1700	Design of a Conformal Omnidirectional Matching Absorption Surface	Peng Tian	Anhui University
27	2162	Design of a Ku and Ka Dual Bands Feed	Yisong Jiao	The 54th Research Institute of China Electronics Technology Group Corporation
28	2287	Design of a Ka Band Phased Array Feed Based on the Focal Plane Field Sampling for Edge Beam	Qing Shi	The 54th Research Institute of China Electronics Technology Group Corporation
29	1780	Metasurface-based Wideband Low-RCS Circularly Polarized Antenna	Liyan He	Guangxi University of Science and Technology
30	1890	RCS Research on Antennas Based on Polarization Conversion Metamaterials	Fangyi Cheng	Tangshan Research Institute of Beijing Institute of Technology

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
31	1924	Broadband, Wide-angle and Lightweight 3D Metamaterial Absorber for P and L Bands	Xiaoyu Pang	The Research Institute for Special Structures of Aeronautical Composite AVIC
32	1999	Design of an Active Metasurface with a Switchable Reflection Band Between Two Absorption Bands	Shen Meng	Communication University of China
33	2009	Energy Selective Surface with Wide Scattering Dand	Ting Li	Shanxi University
34	2071	A Deep Learning Based Design Method for Circuit Analogue Absorbers	Xinyu Li	Communication University of China
35	2426	Research on Cardiovascular Disease Classification and Recognition Method Based on Deep Learning	Shaorui Zhang	Beijing University of Posts and Telecommunications
36	1683	Study on Physiological Characteristics of Firefighters in Fire Simulation Training	Yuan Min	China Fire and Rescue Institute
37	2213	Identifying Autistic Children by Machine Learning Models with Features Extracted from Wearable Inertial Sensors	Kai Qiu	Southeast University
38	2290	Fingertip Pulse Analysis of an Anxiety Patient Based on Deep Learning	Zhuya Huang	Beijing University of Posts and Telecommunications
39	2298	Random Forest Analysis Based on Fingertip Pulse for Changes in an Individual Before and After Discontinuation of Medication	Ying Shan	Beijing University of Posts and Telecommunications
40	2304	Comparison of the Performance of Chinese Text Classification Based on Bert Augmented Model	Zhiying Hou	Beijing University of Posts and Telecommunications
41	2317	Radiation Effects of On-chip Transmission Lines on Devices Lying in a Same Chip	Yuxin Bai	Guilin University of Electronic Technology

Poster Session 5

11 月 12 日 15:00-16:00

会议室：三楼

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
1	2424	PPG Signal Classification for Shift Workers Based on Improved ResNet-18	Xuechen Liu	Beijing University of Posts and Telecommunications
2	2425	PPG Signal Detection Before and After Human Movement Based on ResNet	Shuai Wang	Beijing University of Posts and Telecommunications
3	2365	Label-free Evaluation of Treatment Efficacy in Laser Therapy by Terahertz Imaging	Cong Xu	Tiangong University
4	1772	Design of Periodic Permanent Magnet Focusing Structure for an X-band 1MW Klystron	Shidong Liu	Aerospace Information Research Institute Chinese Academy of Sciences
5	2223	L-band Pulse Compression Design and Testing Applied to HPM System	Hongyu Dai	China Ship Development and Design Center
6	2183	High Range Resolution Terahertz FMCW Radar Imaging	Qingguo Liu	Beijing Institute of Technology
7	2200	Detection of Terahertz Waves by Four-level Rb Rydberg Atoms	Lei Hou	Xi'an University of Technology
8	2243	Thermoelectric Effect in Carbon Nanotube Films for THz and IR Ultra-broadband Photodetectors	Yue Wang	Xi'an University of Technology
9	2007	Graphical Design of Terahertz Metasurfaces Based on Machine Learning	Zhendong Ke	Guilin University of Electronic Technology
10	2091	Terahertz Beam Splitter Based on Double-layered Metasurface	Zijie Huang	Guilin University of Electronic Technology
11	2466	Numerical Study of Bifunctional Switching Devices with Metamaterial Structures in the Terahertz Range	Ying Wei	Guilin University of Electronic Technology
12	2462	Switchable Bifunctional Metasurface for Broadband Polarization Conversion and Perfect Absorption in Mid-infrared Band	Xingfeng Yan	Guilin University of Electronic Technology
13	1625	A Wideband Dual-polarized Differential Fed Dipole with Low Profile Based on Square Patch Resonator	Yi Li	Nanjing University of Science and Technology
14	1790	A New Multi-human Targets Impulse Response Extraction Algorithm Using UWB Radar	Zhihuan Liang	Guilin University of Electronic technology
15	1887	High-isolated MIMO Antenna Design Based on Polygonal DGS	Xuesong Hu	Ningxia University
16	2474	Variable Thickness Radome Design Method with Optimised Cross-section Thickness	Xianglan Kuai	Nanjing University of Aeronautics and Astronautics

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
17	2467	Tunable Infrared Reflection Polarization Converter Based on Graphene Metasurface	Meiling Mo	Guilin University of Electronic Technology
18	2106	Target Detection of Ground Penetrating Radar Actual Road Anomaly Data	Xuan Chen	Guilin University of Electronic Technology
19	2167	Analysis of Electromagnetic Scattering of Plasma-coated Metal Cylinder Based on FDTD	Yannian Wei	Xidian University
20	2214	Design of Compact High-transmission Feed Support Radome for Deployable Reflector Antenna	Yanfei Wu	The 54th Research Institute of China Electronics Technology Group Corporation
21	2412	Based on In-homogeneous Dielectric SBR Method for Research on Electromagnetic Scattering Characteristics of Coated Targets	Qian Ma	Xidian University
22	2362	Prediction of Radar Image Position of Cavity Targets Based on Ray Analysis	Xiaoyi Wang	Wuhan University
23	1763	Study on Composite Electromagnetic Scattering from Layered Rough Surface with Moving Target Using Method of Moments	Shaoshuai Yu	Yan'an University
24	1933	An Inversion Method for Buried Targets Combining BP Network and Outdoor Measurement	Dilong Wu	Xidian University
25	1934	Target Classification and Location Extraction Based on Scattering Data	Run Huang	Xidian University
26	1977	Simulation Analysis Thermal Damage Effect of Strong Electromagnetic Pulse on PIN Limiter	Bing Ruan	China Ship Development and Design Center
27	2130	The Design and Measurement of an Ultra-wideband Microwave Absorbing Materials	Bing Lv	Xidian University
28	2131	Two-dimensional Imaging Algorithm of Asteroid Tomography Based on Filtered Inverse Projection	Wenyan Wang	XiDian University
29	2135	Meteorological Particle Clusters Time-domain Simulation Based on Missile-borne Radar	Danyang Li	Xidian University
30	2204	Simulation for the Electromagnetic Scattering and SAR Image of Multi-source Ocean Waves	Letian Wang	National University of Defense Technology
31	1825	Block-wise Multiple-fold Redundancy Arrays	Jingyu Tao	Huazhong University of Science and Technology

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
32	2403	Theoretical Analysis and Simulation Verification of Non-regular Circularly Polarized Array Antenna	Peng Zhang	Suzhou Chien-shiung Institute of Technology
33	2472	Research on C-band Metasurface Broadband Microstrip Antenna	Haixuan Li	Aerospace Information Research Institute
34	1986	A Low-profile, Broadband Metasurface Antenna Loaded with Nonuniform Structure	Xinyang Li	Anhui University
35	2184	Design of LC Dual Band Dielectric Loaded Feed	Zeyu Meng	The 54th Research Institute of China Electronics Technology Group Corporation
36	2099	A Wideband Polarization Conversion Metasurface with Stable Wide-angle Performance	Chenwei Wei	Guangxi University of Science and Technology
37	2284	Spin-momentum Locking Based on Single Layer Bianisotropic Metasurface	Yiqian Sun	Harbin Engineering University
38	1762	Temperature Dependent Current-voltage Characteristics of GaN (Si) Heterojunction Barrier Schottky Diodes (HJBS)	Chenxing Liu	Fudan University
39	1873	Ultrathin Barrier Layer AlN/GaN HEMTs Grown by Molecular Beam Epitaxy	Shaokun Xing	Hubei Jiufengshan Laboratory
40	2140	Freestanding Large-scale Lead Iodide Hydroxid Microwire Crystal for X-ray Detector Application	Siyuan Huang	Guilin University of Electronic Science and Technology
41	2489	An Inflatable Antenna Loaded on a Swimming Ring	Zitong Zhao	Hunan University
42	2490	An Inflatable Antenna Applied to Balloons	Zitong Zhao	Hunan University

Poster Session 6

11 月 12 日 16:00-17:00

会议室：三楼

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
1	2274	Low-cost Fabrication and Electrical Properties of IZO Thin Film Transistors	Zhenyu Shen	Guilin University of Electronic Technology
2	1779	Deep Learning Assisted Enhance Vertical Field Confinement of Spot Size Converter	Qinghao Tan	Guilin University of Electronic Technology
3	1808	Facile Synthesis of Self-powered ZnO Nanostructures On P-inP for UV Detection	Fanyu Meng	Dalian Minzu University
4	1815	High Performance Self-powered UV Detector Based on In_2S_3 Nanostructures/InN Film Structure	Liang Zhao	Dalian Minzu University
5	1818	NiO/GaAs Heterostructure UV Photo-detector Fabricated By Simple Aqueous Method	Liying Ji	Dalian Minzu University
6	2393	High-performance Lateral Near-infrared Organic Photodetector Based on Silver Nanoparticles	Meihua Shou	Guilin University of Electronic Technology
7	2054	Design of Electron Collector Magnetic Field for 0.67 THz Traveling Wave Tube	Jianliang Wang	Aerospace Information Research Institute, Chinese Academy of Sciences
8	2154	Design and Simulation of 220 GHz Folded Waveguide Traveling Wave Tube	Hongjing Li	Aerospace Information Research Institute, Chinese Academy of Sciences
9	2144	Design and Thermal-mechanical Analysis of a 220 GHz TWT Collector	Gongao Xia	Aerospace Information Research Institude, Chinese Academy of Sciences
10	1892	An Explicit Extrapolation Time-stepping Scheme for Nodal DGTD Method	Jiawei Qian	Southeast University
11	2371	1-D Multi-parameter Inversion Based on Deep Neural Network for Geophysical	Bingyang Liang	Yangtze Delta Region Institute, University of Electronic Science and Technology of China
12	1732	Research on Broadband Metamaterial Absorbers Based on Three-dimensional Pyramid Arrays	Chen Zhu	Guilin University of Electronic Technology
13	2038	Long Beak Optical Fiber Tweezers Probe	Tao Wang	Guilin University of Electronic Technology

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
14	2101	A W-band Dual-band Filter Based on Dual-mode Resonators	Qiyao Liang	Nanjing University of Information Science and Technology
15	2189	Deep Learning Assisted Terahertz Metasurface Unit Structure Reverse Design and Multiple Solution Seeking	Shengxiao Jin	National Key Laboratory of Science and Technology on Space Microwave, CAST Xi'an
16	2272	Photon-assisted Ultra-wideband Terahertz Frequency Hopping Signal Generation Technology	Bochao Kang	China Academy of Space Technology Xi'an
17	1804	Single-layer Circular Polarized Endfire Antenna Based on HMSIW and Quasi-yagi	Xin Guan	Beijing Institute of Technology
18	2110	Aperture Field Discretization Method for Array Antenna Using Genetic Algorithm	Jing Wang	Aerospace Information Research Institute, Chinese Academy of Sciences
19	2191	A Novel Scheme for Solar Cell Receiving Microwave Energy	Xuan Ran	University of Electronic Science and Technology of China
20	2357	Design of an Anti-high Overload Wide Beamwidth Antenna	Yangdong Yan	Xi'an Institute of Electromechanical Information Technology
21	1841	Multifunctional Wideband Antenna for GNSS Application	Xianrong Yu	Guangzhou Geoelectron Co., Ltd
22	1843	A Combined GNSS Antenna with Multipath Mitigation Strategy	Yongyuan Luo	Guangzhou Geoelectron Co., Ltd
23	1883	An Antenna Element and Subarray Design for 5G Massive MIMO Systems	Jiazhi Qin	Foshan University
24	2004	Design and Implementation of an Intelligent Warning Management System for Grinding Based on Deep Forest Overflow Particle Size Prediction	Ruiling Xu	Anhui University of Technology
25	2437	Analyze the Electromagnetic Scattering Coupling of Ship Structures at Multiple Scales Using a Rapid Shooting and Bouncing Ray Method	Nan Wu	China Ship Development and Design Center
26	2226	Terahertz Dual-polarization Frequency Scanning Coding Metasurface	Jiayao Yang	University of Electronic Science and Technology of China

No.	Paper ID	Title	First Author's Name	First Author's Affiliation
27	2443	Modeling and Analysis of Wideband Gold Ribbon Interconnection with Multi-chip Modules on Si Based Package	Shang Gao	Anhui University
28	2447	Max-min Rate Optimization in Cell-free Massive MIMO Systems Using RSMA Scheme	Shunyu Si	Guilin University of Electronic Technology
29	2449	SAR Image Despeckling Based on Local Noise Variance	Shaona Wang	Tiangong University
30	2451	Application Validation of High-performance Microcontroller	Shihu Han	Sichuan Jiuzhou Electric Group Co. Ltd
31	2452	Simulation of E-mode P-channel GaN/AlGaN HFETs with Hybrid AlGaN Barrier Layer	Feng Chen	Guilin University of Electronic Technology
32	2465	A Multiband Omnidirectional Antenna for Sub-6 GHz 5G Automotive Applications	Jinliang Lian	Fuzhou University
33	1929	Design of a Low-profile Broadband Rectangular Slot Antenna with Dual Resonances	Weikang Zhang	Shenzhen University
34	2248	Group-based Slice Authentication Mechanism for IoTs	Xuewen Liu	Beijing Electronic Science and Technology Institute
35	2314	Federated Learning for VANET Based on Homomorphic Encryption	Boya Liu	Beijing Electronic Science and Technology Institute
36	2292	Identifying Autistic Children Using Multi-scale Entropies of Right Prefrontal Oxy-hemoglobin Signals	Guoyu Yu	Southeast University
37	2461	Image Stitching Method Based on Improved ORB-GMS	Hui Peng	Guilin University of Electronic Technology
38	1960	Research on the Measurement of Driving Shaft Angle of Automobile Air Conditioning Actuator Based on Image Processing Technology	Bo Luo	Changjiang Polytechnic
39	2356	Research on the Model and Method of Postgraduate Education Evaluation Based on BP Neural Network	Lifang Liu	Wuhan University of Technology
40	2416	Optimization Mechanism of Postgraduate Education Fund Allocation Based on DIKWP Model	Xinya You	Wuhan University of Technology
41	2209	Design of Slow Wave Structure for 0.263 THz Travelling Wave Tube	Ang Jiao	Aerospace Information Research Institute, Chinese Academy of Sciences
42	2063	Evaluating Autistic Children’s Dynamic Balance Ability by an Azure Kinect Sensor	Yuxin Liu	Southeast University

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Aerospace Information Research Institute, Chinese Academy of Sciences

The Aerospace Information Research Institute of the Chinese Academy of Sciences is a research institution that combines three main areas of expertise: optoelectronic engineering, aerospace technology, and applied science. It functions as both a general management and technical overall unit.

微波真空电子器件

【产品介绍】

1 大科学装置连续波高功率速调管

产品名称	参数	
	功率	效率
KC4392 (C波段)	>500kW	>45%
KC4269 (C波段)	>250kW	>45%
KS4322 (S波段)	>200kW	>45%
KX4398 (X波段)	>250kW	>45%
KP4352 (P波段)	>800kW	>60%

KC4392　KC4269　KS4322　KX4398

KP4352

2 大科学装置高峰值功率速调管

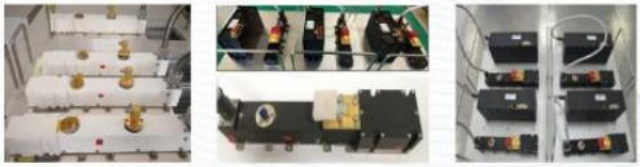
KS4326A　KS4326B　KS4141　KC4327　KL4394　KX4316

产品名称	参数	
	功率	效率
KS4326A/B (S波段)	>50MW	>45%
KS4141 (S波段)	>120MW	>45%
KC4327 (C波段)	>50MW	>45%
KL4394 (L波段)	>25MW	>45%
KX4316 (X波段)	>50MW	>45%

微波真空电子器件

3 空间行波管系列

工作波段	指标	
	功率	效率
K波段	≥170W	≥65%
Ka波段	≥150W	≥58%
Q波段	≥60W	≥50%



空间行波管系列

4 大功率水负载系列

WLP-9　WLS-22　WLH-32S　WL2C-48　WL2C-10058

WL2C-58　WL2X-8458　WL3X-84　WL2X-7032　WL2X-8432　WLKa-320100

产品名称	主要参数		
	工作频段	水流量	耐受平均功率
WLP-9	P波段	≥30L/Min	≥30KW
WLS-22	S波段	≥20L/Min	≥20KW
WLH-32S		≥45L/Min	≥45KW
WL2C-48	C波段	≥18L/Min	≥18KW
WL2C-10058		≥20L/Min	≥20KW
WL2C-58		≥18L/Min	≥18KW
WL2X-8458	X波段	≥15L/Min	≥12KW
WL3X-84		≥5L/Min	≥4KW
WL2X-7032		≥150L/Min	≥150KW
WL2X-8432		200L/Min	≥200KW
WLKa-320100	Ka波段	≥5L/Min	≥250W

微波真空电子器件

5 2856MHz 5MW工业辐照用速调管

主要参数	
工作频率	2856MHz
输出功率	5MW
效率	≥45%
增益	≥45dB

2856MHz 5MW工业辐照用速调管

6 W波段分布式速调管

W波段分布作用速调管

主要参数	
工作频段	W波段
中心频率	94.5GHz+1GHz
最大输出功率	2.5kW
增益	>40dB
重量	<7.5kg

7 G波段空间行波管

G波段行波管放大器

主要参数	
工作频段	G波段
功率	≥30W
增益	>30dB
效率	>5%

地址：北京市怀柔区雁栖东二路5号
邮编：101400
官方网址：www.air...

Beijing Vikaitech Ltd

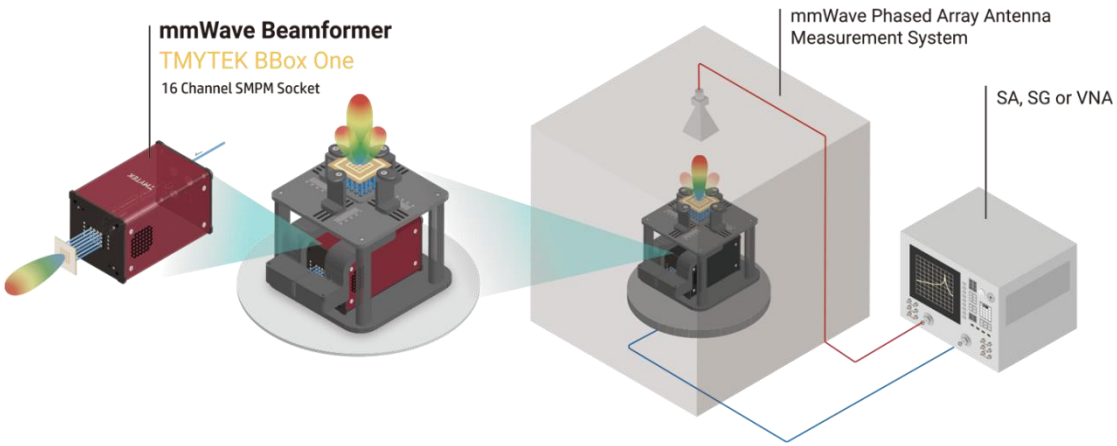
Foshan Lambda Technology Co., Ltd

Foshan Lambda Technology Co., Ltd is a high-tech enterprise specializing in the research, development, production and sales of RF microwave devices and integrated electromagnetic measurement systems. The company is strong in technical research and development. Four independent series (full-band multi-scene comprehensive electromagnetic measurement system, high-performance movable millimeter wave test box, material electromagnetic parameter measurement system, millimeter wave beamforming system) nearly more than 20 kinds of products, has constructed for a number of colleges and universities, research institutes, enterprises with full band and muti-scenarios of electromagnetic measurement system.
The core products have completely independent intellectual property rights, with high cost-effective, strong compatibility and other outstanding advantages.

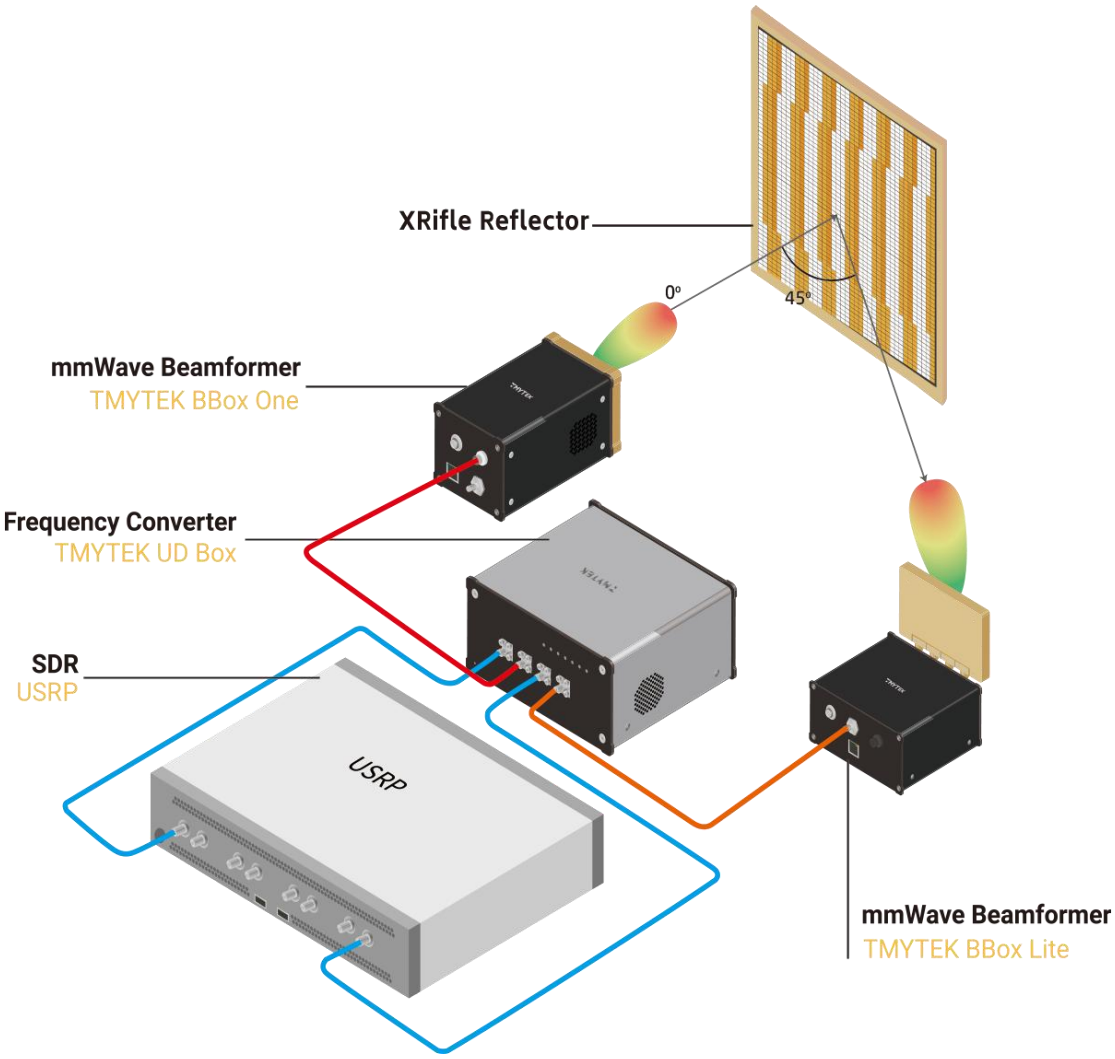
Product image:

1.High-performance movable millimeter-wave measurement system.
Features:8-110GHz(customizable)Including gain, side-lobe, beamwidth, 2D/3D Farfield patterns, crosspolarization, beam direction, Axis-Ratio measurement.

2. mmWave phased array anteena fast measurement solutions.



3. Multi-degree mmWave phased array communication system with passive reflector metasurface.


XRifle Reflector
0°
45°
mmWave Beamformer
TMYTEK BBox One
Frequency Converter
TMYTEK UD Box
SDR
USRP
USRP
mmWave Beamformer
TMYTEK BBox Lite

Huirui Optics Technology (Beijing) Co., Ltd

HUIRUI OPTICS
您的光电战略合作伙伴

Huirui Optics Technology (Beijing) Co., Ltd was founded in 2014 by researchers from Beijing Institute of Technology, Capital Normal University, Tsinghua University and other universities. The team members have many years of design experience of high precision optical component and foundation of optical system development and research. The team members also fully grasp the cutting-edge technology in the field of optical detection and life sciences and health care, and are the industry leader in theoretical research, crystal materials, processing technology and other aspects.

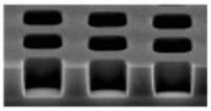
Our company focuses on terahertz optical research and constantly tries to expand the research field. At present, it has become the fastest developing enterprise of customization, design and processing of high-precision optical components in China. The performance of our products can be comparable with that of Thorlabs, Edmund opt and Newport, which are three optical giants. The applications of our products cover the fields of substance detection, biological detection, environmental monitoring, medical imaging, security inspection, communication and energy. Huirui Optics is a professional optical equipment supplier and service provider. and aims to replace high-end precision terahertz optical devices with domestic production. We are committed to introducing the best optical instruments and equipment at home and abroad, combined with our own professional knowledge and industry experience, to scientific research and enterprise users, and provide optimized solutions. Our company has a wealth of standard product inventory for scientific research and enterprise users to choose, and can quickly respond to the special needs of customers for product design and processing.

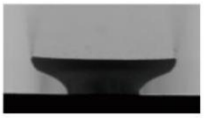
Suzhou Yilan Microelectronics Co., Ltd

义兰微电子
YILAN MICRO ELECTRONICS

光 刻 胶

正性紫外光刻胶	负性紫外光刻胶	Lift off 光刻胶	电子束光刻胶
S1800系列 AZ1500系列 SPR220系列 SPR955系列 AZ 4620	AZ nXT系列 NR系列 SU8 国产替代	LOR系列 AZ nlof系列 AZ 5214 国产替代	ZEP 520A HSQ PMMA

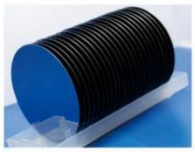




衬 底

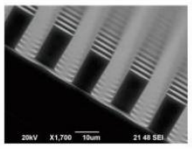
CZ、MCZ硅片 FZ片（进口） 氧化硅片 氮化硅片	BF33玻璃片 ITO玻璃片 熔融石英片 单晶石英片 蓝宝石片 各类不同牌号玻璃片化硅片 氮化硅片	陶瓷片 SOI片 外延片 砷化镓、磷化铟、氮化镓等 碳化硅片 锗片	特殊功能衬底 超薄片 超平片 金属靶材 金属化硅片 通孔硅片等等

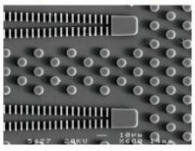




委 托 加 工

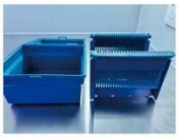
光刻	刻蚀	氧化	镀膜	切割	键合	激光键合	PDMS	翻模	芯片封装





无 尘 耗 材

料盒	定制花篮	特氟龙花篮	金属花篮

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