Poster Session

Session 1: Infrared Physics and Technology	
ESIT2022-0801-1	**Suppression and simulation of stray radiation in infrared optical system** Jianguo Tian[1, 2*], Mingqian Shi[1, 2], Linbao Hou[1, 2], Jicai Rui[1, 2], Wen Gao[1, 2] 1.Shanghai Aerospace Control Technology Institute, China; 2.Shanghai Key Laboratory of Aerospace Intelligent Control Technology, China
ESIT2022-0804-7	**Research on near infrared spectroscopy based on DMD** Yujuan Liu[1, 2, 3], Yanda Liu[1, 2, 3], Ying Song[3, 4, 5*] 1.Key Laboratory of Geo-exploration Instruments, Ministry of Education of China Jilin University, China; 2.National Engineering Research Center of Geophysics Exploration Instruments Jilin University, China; 3.College of Instrumentation & Electrical Engineering Jilin University, China; 4.Key Laboratory of Geo-exploration Instruments, Ministry of Education of China Jilin University, Changchun, China; 5.National Engineering Research Center of Geophysics Exploration Instruments Jilin University, Changchun, China
ESIT2022-0806-3	**Theoretical achievement of 72 GHz bandwidth of wafer-bonded Ge/Si PIN detector with polycrystalline interlayer** Yuan Huang[1], Chong Wang[1*], Shaoying Ke[2*] 1.Yunnan University, China; 2.Minnan Normal University, China
ESIT2022-0806-4	**Effect of by-product bubbles of direct bonding on the performance of GeSn/Si PIN photodetector** Jianfei Chai[1], Shaoying Ke[2*], Chong Wang[1*] 1.Yunnan University, China; 2.Minnan Normal University, China
ESIT2022-0807-4	**Nanomesh Dielectric Matesurface Based High-Q Fliters For Spectral Integrated Infrared Detector** Xiangxiao Ying[1], Huilian Tian[1, 2], Jian Zhou[1], Min Huang[1], Yi Zhou[1, 3*], Jianxin Chen[1, 3*] 1. Key Laboratory of Infrared Imaging Materials and Detectors, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2. College of Science, University of Shanghai for Science and Technology, China; 3. Research Center of New Photodetector and Imaging, School of Physics and Optoelectronic Engineering, Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, China
ESIT2022-0811-8	**Prioritization Testing for Infrared Object Detection based on Significant Feature Mutation** Haibin Zheng[1], Yunjie Yan[1], Jinyin Chen[1*], Haibo Jin[1], Ruoxi Chen[1], Qi Xuan[1] 1.Zhejiang University of Technology, China
ESIT2022-0812-2	**A Hybrid Approach for Metal Element Identification by using Laser-Induced Breakdown Spectroscopy data** Haofeng Zeng[1], Zhuoxian Zhang[1], Sicong Liu[1*] 1.Tongji University, China

ESIT2022-0812-9	**Liquid Phase Epitaxy(LPE) growth of the room-temperature InAs-based mid-infrared photodetector** Zezhong Chen[1], Yongfei Duan[1], Hongyu Lin[2], Zhenyu Zhang[1], Hao Xie[3], Shuhong Hu[3*], Ning Dai[4*] 1.School of Material and Chemistry, University of Shanghai for Science and Technology, China; 2.Zhejiang Lab, China; 3.Shanghai Institute of Technical Physics of the Chinese Academy of Science, China; 4.Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, China
ESIT2022-0814-1	**Manipulation of the composition, morphology and photoelectric properties of titanium oxide nanostructures** Yan Chen[1, 2, 3], Ao Li[2, 1], Xiuli Fu[2], zhijian Peng[1*], Zhenhua Ye[3*] 1.China University of Geosciences Beijing, China; 2.Beijing University of Posts and Telecommunications, China; 3.Shanghai Institute of Technical Physics, China
ESIT2022-0814-16	**Investigation on p-type Doping of PBn unipolar Barrier InAsSb Devices** Jian Zhang[1*], Chang Chao[1], Yin Hanxiang[1], Deng Gongrong[1], Kong Jincheng[1*], Li Yanhui[1] 1.Kunming Institute of Physics, China
ESIT2022-0814-17	**Broadband chaos of interband cascade laser** Ran Yin[1, 2], Zhiwei Jia[1], Ke Yang[1, 2], Jinchuan Zhang[1*], Shu-Man Liu[1, 2], Ning Zhuo[1], Shen-Qiang Zhai[1], Jun-Qi Liu[1, 2], Li-Jun Wang[1, 2], Feng-Qi Liu[1, 2] 1.Key Laboratory of Semiconductor Materials Science, Institude of Semiconductor, CAS, China; 2.Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences, China
ESIT2022-0814-18	**Long-wave infrared PπBN photodetectors based on InAs/GaSb type-II superlattice** Zhi Jiang[1], Junbin Li[1], Xuchan Zhou[1*], Haipeng Wang[1], Yanhui Li[1], Jincheng Kong[1*] 1.Kunming insititute of physics
ESIT2022-0814-7	**LEC-MTNN: A Novel Multi-frame Infrared Small Target Detection Method based on Spatial-Temporal Patch-Tensor** Yuan Luo[1], Xiaorun Li[1*], Shuhan Chen[1], Chaoqun Xia[2] 1.Zhejiang University, China; 2.Wenzhou University, China
ESIT2022-0815-10	**Hot Carrier-Triggered High Speed Infrared Photodetectors based on Quantum Dots** Xinning Huang[1], Tengteng Jiang[1], Jinhong Chen[1], Tie Lin[1], Jingjing Liu[1], Tianle Guo[1*] 1.Shanghai Institute of Technical Physics Chinese Academy of Sciences, China
ESIT2022-0815-11	**Dual band infrared picture-in-picture optical system design** Xuezhuan Ding[1*], SiLi Gao[1], Yang Yu[1], Yi Jian[1], JiangQing Huang[1], Panwei Zhou[1], Fanming Li[1] 1.Shanghai Institute of Technical Physics, China
ESIT2022-0815-13	**Hybrid, multi-channel infrared detectors based on narrow bandgap semiconductors** Xuechao Yu[1*], Weijian Zhou[1] 1.Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO), CAS, China
ESIT2022-0815-18	**High performance very long wave infrared quantum cascade detector** Kai Guo[1, 2], Kun Li[2], Yi Xuan Zhu[2], Jun Qi Liu[2*], Feng Qi Liu[2], Xiao Hua Wang[1*], Zhi Peng Wei[1*] 1.Changchun University of Science and Technology, China; 2.Institute of Semiconductors,Chinese Academy of Sciences, China
ESIT2022-0815-7	**Long-wave infrared GaAs/AlGaAs quantum well hyperspectral detector** Tianyun Zhu[1, 2], Zeshi Chu[1, 2], Jing Zhou[1, 2*], Ning Li[1, 2], Xiaoshuang Chen[1, 2], Wei Lu[1, 2] 1.State Key Laboratory of Infrared Physics, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.University of Chinese Academy of Sciences, China

ESIT2022-0816-2	**High-performance room-temperature mid-wave infrared photodetector based on black phosphorus/HgCdTe van der Waals heterojunction** Hanxue Jiao[1], Xudong Wang[1*], Jianlu Wang[1, 2, 3*], He Hu[4], Jun Ge[1], Tie Lin[1], Hong Shen[1], Xiangjian Meng[1], Junhao Chu[1] 1.State Key Laboratory of Infrared Physics, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.Frontier Institute of Chip and System, Fudan University, China; 3.Institute of Optoelectronics, Fudan University, China; 4.Unit 32184 of PLA, China
ESIT2022-0816-3	**Pixel-scale metasurface splitter for infrared three-color detector** Jindong Wang[1, 2, 3] 1.Shanghai Institute of Technical Physics, China; 2.Key Laboratory of Infrared Imaging Materials and Devices, China; 3.University of Chinese Academy of Sciences, China
ESIT2022-0816-4	**Characterization of gain and excess noise factor for mid-wavelength infrared HgCdTe electron avalanche photodiodes** Dan Yang[1, 2, 3], Huijun Guo[1], Liao Yang[1], Lu Chen[1], Chun Lin[1, 2*], Ruijun Ding[1, 2*] 1.Key Laboratory of Infrared Imaging Materials and Detectors, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.School of Information Science and Technology, ShanghaiTech University, China; 3.University of Chinese Academy of Sciences, China
ESIT2022-0816-8	**Arrayed focusing hyperbolic phonon polaritons on biaxial van der Waals crystals** Lei Ma[1], Liaoxin Sun[1*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0817-3	**Amulti-shells prediction target reporting algorithm based on aerial three-dimensional trajectory estimation** Juan Yue[1], Sili Gao[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0818-1	**High performance HgCdTe infrared detectors for Wide Swath Imager instrument onboard DQ-1 satellite** Hui Qiao[1*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0818-3	**Design of Cooled Infrared Bionic Compound Eye Optical System with Large Field-of-view** Yang Yu[1, 2], Ying-hao Chi[1, 2], Lin-han Li[1, 2, 3], Xiao-yu Wang[1, 2, 3], Jun Chen[4, 5, 6], Juan Yue[1, 2], Yu-zhang GU[7*], Hai-feng Su[8*], Si-li Gao[1, 2*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.Key Laboratory of Infrared Detection and Imaging Technology,Chinese Academy of Sciences, China; 3.University of Chinese Academy of Science, China; 4.School of Automation, China University of Geosciences, China; 5.Hubei Key Laboratory of Advanced Control and Intelligent Automation for Complex Systems, China; 6.Engineering Research Center of Intelligent Technology for Geo-Exploration, Ministry of Education, China; 7.Shanghai Institute of Microsystem and Information Technology, China; 8.Shanghai University, China
ESIT2022-0819-10	**A study of HgCdTe HOT MW infrared detector** BiSong Tan[1*], KeJun Li[1], JiangWei Yan[1], Yu Du[1], JianHong Mao[1], TianQing Chen[1], ChengPan Peng[1] 1.Zhejiang JueXin Microelectronics Co., Ltd, China
ESIT2022-0819-11	**Ultra-sensitive polarization-resolved black phosphorus homojunction photodetector defined by ferroelectric domains** Shuaiqin Wu[1], Yan Chen[1], Xudong Wang[2*], Jianlu Wang[1*] 1.Fudan University, China; 2.State Key Laboratory of Infrared Physics, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China

ESIT2022-0819-6	**The Relation between the (111)A/B face of CdZnTe and the IR-Transmittance in the annealing process** Chao Xu[1], Changhe Zhou[1], Shangshu Li[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0819-8	**Research progress in brazing of Cf/SiC composites with metals** Tong Zhao[1, 2], Defeng Mo[1, 2*], Jun Li[1], Cui Fan[1], Xue Li[1], Haimei Gong[1*] 1.Shanghai Institute of Technical Physics, China; 2.University of Chinese Academy of Sciences, China
ESIT2022-0820-9	**Improved infrared remote sensing image mosaic based on thin plate spline theory** Xiaoyu Wang[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0821-12	**Improved YOLOv5 Based on Hybrid Backbone for Infrared Small Target Detection on Complex Backgrounds** Xinyi Ye[1, 2], Li Fanming[2*] 1.ShanghaiTech University, China; 2.Shanghai Institute of Technical Physics Chines Academy of Science, China
ESIT2022-0821-14	**Investigation of large-scale chip hybridizing connectivity on surface warpage** Huihao Li[1, 2], Zhenhua Ye[1*] 1.Key Laboratory of Infrared Imaging Materials and Detectors, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.University of Chinese Academy of Sciences, China;
ESIT2022-0821-15	**Biological Phototransistor with Memory Function Based on Photosensitive Protein and Inorganic Semiconductor Materials** Wenqing Liu[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0821-17	**Research of IRFPA ROIC for Astronomy Applications** Qinghua Liang[1], Ruijun Ding[1*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Science, China
ESIT2022-0821-24	**A low-power, high-speed programmable arbitrary windowing infrared focal plane readout circuit** HongYi WANG[1, 2], WenGang TAO[1, 3], YiFan LU[1, 2], SongLei HUANG[1*], JiaXiong FANG[1*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.University of Chinese Academy of Sciences, China; 3.ShanghaiTech University, China
ESIT2022-0821-5	**Research on Infrared Target Detection Algorithm Inspired by Insect Compound Eye Vision System** Lihan Li[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Science, China
ESIT2022-0821-8	**A high-speed infrared wide spectrum thermometer for micro region temperature measurement** Nili Wang[1*], Qizhi Tian[1], Yi Jian[1], Xiangyang Li[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China;
ESIT2022-0822-10	**Mid-infrared quantum cascaded laser based on MOCVD growth** Yupei Wang[1, 2], Yang Cheng[2, 3], Wu Zhao[2, 3, 1], Shaoyang Tan[2], Yintao Guo[2], Bo Li[2], Jun Wang[2, 3, 1*], Dayong Zhou[3] 1.Sichuan University, China; 2.Suzhou Everbright Photonics Co., Ltd, China; 3.Gusu Lab, China;
ESIT2022-0822-17	**Study on small pitch total internal reflection quantum well infrared focal plane array devices** Enshan Shao[1], Fucheng Yang[2], Hong Huang[2], Xiangyang Li[3*] 1.ShanghaiTech University, China; 2.University of Shanghai for Science and Technology, China; 3.Shanghai Institute of Technical Physics, Chinese Academy of Science, China

ESIT2022-0822-20	**Overview of hybridization technology for high density infrared focal plane array** Pengfei Bao[1], Xianliang Zhu[1], Dafu Liu[1*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0822-25	**Design of short-wave infrared focal plane readout circuit based on 5μm ultra-small pixel** Yifan Lu[1], Hongyi Wang[1], Wengang Tao[1, 2], Xue Li[1], Songlei Huang[1*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.ShanghaiTech University, China
ESIT2022-0822-27	**Study on the Si Based Photodetector with the Mesa Structure** Wang Bo[1, 2, 3], Yuping Zhang[2, 3], Libin Tang[1, 2, 3, 4*], Gongrong Deng[2], Kar Seng Teng[5*], Gang Wu[2, 3, 4], Liyuan Song[2, 3, 4] 1.Yunnan University, China; 2.Kunming Institute of Physics, China; 3.Yunnan Key Laboratory of Advanced Photoelectronic Materials & Devices, China; 4.The Laboratory of Photonics Information Technology, Ministry of Industry and Information Technology, School of Optics and Photonics, Beijing Institute of Technology, Afghanistan; 5.Department of Electronic and Electrical Engineering, Swansea University, Bay Campus, Fabian Way, Swansea SA1 8EN, United Kingdom, United Kingdom
ESIT2022-0822-28	**Broadband Photovoltaic Detector Based on SnTe/Si Heterostructure** Liyuan Song[1, 2, 3], Libin Tang[1, 2, 3*], Qun Hao[4*], Chunli Yang[2], Kar Seng Teng[5*], Haipeng Wang[2], Junbin Li[2] 1.The Laboratory of Photonics Information Technology, Ministry of Industry and Information Technology, School of Optics and Photonics, Beijing Institute of Technology, China; 2.Kunming Institute of Physics, China; 3.Yunnan Key Laboratory of Advanced Photoelectronic Materials & Devices, China; 4.The Laboratory of Photonics Information Technology, Ministry of Industry and Information Technology, School of Optics and Photonics, Beijing Institute of Technology, China; 5.Department of Electronic and Electrical Engineering, Swansea University, Bay Campus, Fabian Way, Swansea SA1 8EN, United Kingdom, United Kingdom
ESIT2022-0822-30	**Solution-Processed PbS Colloidal Quantum Dots / PCBM Based Photodetector for Multispectral Detection** Lijing Yu[1, 2, 3], Pin Tian[2, 3], Libin Tang[2, 3, 4*], Qun Hao[4*], Kar Seng Teng[5*] 1.School of Optics and Photonics, Beijing Institute of Technology, China; 2.Kunming Institute of Physics, China; 3.Yunnan Key Laboratory of Advanced Photoelectronic Materials & Devices, China; 4.School of Optics and Photonics, Beijing Institute of Technology, China; 5.Department of Electronic and Electrical Engineering, Swansea University, Bay Campus, Fabian Way, Swansea SA1 8EN, United Kingdom, China
ESIT2022-0822-4	**Two-dimensional modeling of the saturation characteristics of laser irradiation on HgCdTe MWIR photodiode** Xiangyang Li[1], Maosheng Sang[1], Fan Yang[1], Guoqing Xu[1], Kaihui Chu[1], Hui Qiao[1], Xiaoyang Yang[1], Pengling Yang[2], Dahui Wang[2] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.Northwest Institute of Nuclear Technology, China
ESIT2022-0822-5	**Research and Design of a High Resolution Successive Approximation Analog to Digital Converter based on Non-binary Redundant Structure** Wengang Tao[1, 2], Hongyi Wang[2], Yifan Lu[2], Jiaxiong Fang[2*], Songlei Huang[2*] 1.ShanghaiTech University, China; 2.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0822-6	**Metal/dielectric microcavity quantum well infrared detector with whispering gallery mode** Pengkang Jin[1, 2], Honglou Zhen[1] 1.Shanghai Institute of Technical Physics, China; 2.Shanghai Normal University, China
ESIT2022-0822-8	**Method to Check the Abnormal Detectors among Infrared Focal Plane based on its Noise Frequency Characteristic** Xiaoxian Huang[1*], Feifei Xu[1], Yutian Fu[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Science, China

ESIT2022-0822-9	**Deep Low Temperature Medium-Wave Infrared Convex Blazed Grating** Mingliang Yao[1] 1.NanTong Academy Of Intelligent Sensing, China
ESIT2022-0823-2	**Passivation of InSb photodetectors with atomic layer deposited Al_2O_3** Ailiang Cui[1] 1.AVIC CAMA (Shanghai) Infrared Technology Co.Ltd, China
ESIT2022-0823-3	**Detection of weak targets in complex infrared background based on Duffing oscillators** Gaorui Liu[1] 1.Shanghai Institute of Technical Physics of the Chinese Academy of Sciences, China
ESIT2022-0823-5	**Tracking Infrared UAVs Based onDense Optical Flow and Self-supervised Network** Jie Li[1], Xiayang Huang[1], Pengxi Liu[1], Wennan Cui[1*], Zhang Tao[1*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
ESIT2022-0829-3	**Radiometric correction and Validation of GF-5/VIMI Infrared window Bands with Fengyun Satellites** Hanlie Xu[1], Yanhua Zhao[2], Yan Li[2] 1. National Satellite Meteorological Center 2.Beijing Institute of Space Mechanics&Electricity
ESIT2022-0829-4	**Multi-sample thicknesses extraction by parallel detection of thin film reflectance** Haotian Zhang[1] 1.Fudan University, China
ESIT2022-0913-1	**MWIR Photodetector with Electric and Optical Unite Manipulations** Fang Wang, Fuxing Dai, Weida Hu Shanghai Institute of Technical Physics, Chinese Academy of Sciences Shanghai
ESIT2022-0913-2	**A 3D adaptive sequential model based infrared small target detection method** Jinyan Gao1, Luyuan Wang1, Weiwei Liu1, Zhongshi Pan2 1.Institute of Spacecraft System Engineering, China Academy of Space Technology, China 2.Institute of Remote Sensing Satellite, China Academy of Space Technology, China
ESIT2022-0913-3	**Photoelectric properties of 3D silicon photodiodes under white light** Tiantian Cheng[1], Niming Shen[1], Jiayi Qin[1], Yuxin Meng[1], Xin Wang[1], Yuanze Zu[1], Man Luo[1,2], Chenhui Yu[1*] 1 Jiangsu Key Laboratory of ASIC Design, School of Information Science and Technology, Nantong University, China 2 Key Laboratory of Space Active Opto-Electronics Technology, and State Key Laboratory of Infrared Physics, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, People's Republic of China
Session 2: Terahertz and Millimeter Waves	
ESIT2022-0510-1	**A 0.2-4.0 THz terahertz detector based on a dense array of antenna-coupled AlGaN/GaN HEMTs arranged in bow-tie shape** Yifan Zhu[1] 1.Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO),Chinese Academy of Sciences, China
ESIT2022-0629-1	**An AlGaN/GaN nonlinear transmission line terahertz multiplier** Lanyong Xiang[1] 1.Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO), China
ESIT2022-0804-2	**High-frequency rectifiers based on type-II Dirac fermions** Libo Zhang[1, 2], Huaizhong Xing[3*], Lin Wang[1*], Xiaoshuang Chen[1, 2*] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.Hangzhou Institute for Advanced Study, University of Chinese Academy of Science, China; 3.Donghua University, China

ESIT2022-0804-3	**The culmination of multiple principles: Hybrid Dirac semimetal-based photodetectors** Han Li[1, 2*], Wang Lin[1], Xing Huaizhong[3], Chen Xiaoshuang[1] 1.State Key Laboratory for Infrared Physics, Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China; 2.Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, China; 3.Donghua University, China
ESIT2022-0804-5	**Terahertz device modeling and parameter extraction of heterojunction bipolar transistors** Ao Zhang[1], Jianjun Gao[2*] 1.Nantong University, China; 2.East China Normal University, China
ESIT2022-0804-8	**Function Analysis of Loop Inductanchor in photo-conductive terahertz source** Ting Shang[1], Wei Shi[1*], Zhi Jin[1], Tiantian Wang[1] 1.Xi'an University of Technology, China
ESIT2022-0805-4	**Characterization of α-lactose solution using high-power THz-ATR spectroscopy** Haiqing Wang[1], Wei Shi[1*], Chunhui Li[1] 1.Key Laboratory of Ultrafast Photoelectric Technology and Terahertz Science in Shaanxi, Xi'an University of Technology, Xi'an 710048, China, China
ESIT2022-0806-1	**Study of terahertz ellipsoidal lens assembly method based on surface fitting** Liang Liu[1*], Lanbo Liu[1], Yuan Li[1], Shiqi Zhu[1], Yanhong Chai[1], Chao Lu[1] 1.Shanghai Aerospace Electronic Technology Institute, China
ESIT2022-0806-2	**Extraction of optical parameters of Escherichia coli using terahertz time-domain spectroscopy** Yusong Zhang[1], Lei Hou[1], Wei Shi[1*] 1.Xi'an University of Technology, China
ESIT2022-0807-1	**A review of the Terahertz antenna** Yicong Chen[1], Jianjun Gao[1], Guohua Zhai[1*] 1.East China Normal University, China
ESIT2022-0807-3	**The analysis of high order dispersion effects on a compact accelerator-based THz generation** Yin Kang[1, 2] 1.Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China; 2.University of Chinese Academy of Sciences, China
ESIT2022-0808-1	**Buried heterostructure terahertz quantum cascade lasers for epitaxial-side-down mounting with high continuous-wave power** Yu Ma[1], Wei-Jiang Li[1], Yun-Fei Xu[1], Jun-Qi Liu[1*], Jin-Chuan Zhang[1], Shen-Qiang Zhai[1], Li-Jun Wang[1], Shu-Man Liu[1], Feng-Qi Liu[1] 1.Institute of Semiconductors, Chinese Academy of Sciences, China
ESIT2022-0808-5	**Identification of Breast Cancer Tissue by Terahertz Imaging Technique** Qi Liao[1] 1.University of Electronic Science and Technology of China, China
ESIT2022-0809-1	**Ultrafast Terahertz Emission Amplification and Valley Current Manipulation in Monolayer WSe_2/Si Heterostructure** Zeyu Zhang[1*] 1.Hangzhou Insititute of Advanced Study, University of Chinese Acadamy of Science, China
ESIT2022-0811-2	**Measuring system and method of millimeter wave active pulse radar pattern** Yufeng Ma[1*], Wei Li[2] 1.CAST Xi'an, China; 2.Shaanxi Aerospace Technology Application Research Institute Co., Ltd., China

ESIT2022-0811-3	**Observation of human sperm acrosome based on near-field terahertz imaging technique** Chengyao Peng[1], Shun Bai[2], Xiaohua Jiang[2*], Wenbing Zhang[1], Min Hu[1, 3], Fukun Liu[1, 4] 1.Institute of Energy, Hefei Comprehensive National Science Center, Anhui, China; 2.Reproductive and Genetic Hospital, The First Affiliated Hospital of USTC, Division of Life Sciences and Medicine, University of Science and Technology of China, Hefei, China; 3.Terahertz Research Center, School of Electronic Science and Engineering, University of Electronic Science and Technology of China, China; 4.Institute of Plasma Physics, Chinese Academy of Sciences, China
ESIT2022-0811-4	**Ultrafast Photodetector Based on 2H-$NbSe_2$/Graphene Van der Waals Heterostructure** Mengjie Jiang[1*], Lin Wang[2], Huaizhong Xing[2] 1.DongHua University, China; 2.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China;
ESIT2022-0811-6	**Application and Outlook of Terahertz in Various Areas** Xianglin Niu[1*], Mingjian Gu[2], Yiqi Zhu[2] 1.Shanghai Institute of Technical Physics of the Chinese Academy of Sciences, China; 2.Zhongke Technical Physics Suzhou Research Institute, China
ESIT2022-0811-7	**Asymmetry-coupled Dirac electronic state for sensitive detection and Imaging** Changlong Liu[1*] 1.Hangzhou Institute for Advanced Study, China
ESIT2022-0812-11	**Terahertz detector module based on antenna-coupled AlGaN/GaN HEMTs** Yifan Zhu[1] 1.Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO), Chinese Academy of Sciences, China
ESIT2022-0812-12	**Ultra-sensitive terahertz detection readout and characterization technology** Tianyuan Chi[1], Lili Shi[1], Jingbo Wu[1], Xuecou Tu[1], Guozhu Sun[1], Runfeng Su[1], Jian Chen[1*], Peiheng Wu[1] 1.Nanjing University, China
ESIT2022-0812-4	**Ultrasensitive Self-Driven terahertz photodetectors based on ternary topological semimetal and van der Waals heterojunction** Kaixuan Zhang[1*], Lin Wang[2], Huaizhong Xing[1] 1.Donghua University, China; 2.Shanghai Institute of Technical Physics, China
ESIT2022-0813-2	**Directional response characteristics of a silicon lens-coupled HEMT terahertz detector** Yifan Zhu[1] 1.Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO),Chinese Academy of Sciences, China
ESIT2022-0814-13	**Theoretical Investigation on Multi-Harmonic Mode Interaction in the One THz Gyrotron** Fanhong Li[1] 1.Peking University, China
ESIT2022-0814-19	**3D Printing Terahertz Absorber** Jun Pan[1], Peidi Yang[1], Yongshan Liu[2], Yong Xu[2], Sai Chen[1], Xiaojun Wu[1*] 1.School of Electronic and Information Engineering, Beihang University, China; 2.MIIT Key Laboratory of Spintronics, School of Integrated Circuit Science and Engineering, Beihang University, China
ESIT2022-0814-2	**A terahertz near-field scanning probe microscope using a quartz tuning fork based probe** Xinxing Li[1], Jiandong Sun[1], Lin Jin[1], Yang Shangguan[1], Hua Qin[1] 1.Suzhou Institute of nano-tech and nano-bionics, Chinese academy of sciences, China
ESIT2022-0815-16	**Effect of roughness at the edge of foam defects on terahertz images** Hui Wang[1], Yan Wang[1], Renfeng Sun[1], Xuecou Tu[1], Xiaoqing Jia[1], Lin Kang[1], Huabing Wang[1], Biaobing Jin[1], Jian Chen[1*], Peiheng Wu[1] 1.Nanjing University, China

ESIT2022-0815-3	**The preliminary study on compound Banlangen granules based on terahertz time-domain spectroscopy** Wei Xu[1], Jie Shu[1*], Hongzhu Xi[1] 1.Anhui Huadong Polytechnic Institute, China
ESIT2022-0815-6	**Study on the Effects of Aqueous Sample Thickness on Terahertz Time-Domain Attenuated Total Reflection Spectra** Fu Ying[1, 2, 3], Zhang Ming Kun[1, 2, 3], Wang Hua Bin[1, 2, 3*] 1.Research Center of Super-Resolution Optics, Chongqing Institute of Green and Intelligent Technology, Chinese Academy of Sciences, China; 2.Chongqing School, University of Chinese Academy of Sciences, China; 3.Chongqing Engineering Research Center of High-Resolution and Three-Dimensional Dynamic Imaging Technology, Chinese Academy of Sciences, China
ESIT2022-0816-5	**Free-electron-driven Vortex Beam Generator based on Helical Grating** Ziwen Zhang[1], Chaohai Du[1], Fanhong Li[1] 1.Peking University, China
ESIT2022-0817-4	**Room temperature terahertz photoresponse based on type II Dirac fermions** Zhen Hu[1], Lin Wang[1], Xiaoshuang Chen[1] 1.Shanghai Institute of Technical Physics, Chinese Academy of Sciences, China
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