Program

Time: Jun. 2-4, 2023

Day 1: Jun. 3, 2023 (Saturday), Morning

Opening Ceremony & Plenary Forum

Time: 09:00-11:30, Jun. 3, 2023 (Saturday); Place: Multi-Function Room I, 2F, MHH

Moderator	Prof. Xiaodi Tan, College of Photonic & Electronic Engineering, Fujian Normal University, China
09:00-09:30	Title: Diffuse Optical Tomography of the Brain: Advancing Treatments of Psychiatric Disorders Prof. Huabei Jiang, USF Center for Advanced Biomedical Imaging, University of South Florida, USA
09:30-10:00	Title: Stimuli-Directing Liquid Crystalline Materials: From Tunable Photonics to Deformable Soft Systems and Beyond Prof. Quan Li, Institute of Advanced Materials, Southeast University, China
10:00-10:30	Title: Laser Detection Method of Space Debris Barycenter Prof. Yihua Hu, National University of Defense Technology, China
10:30-11:00	Title: Fast Alignment of Wireless Optical Communication Using Two-Dimensional Mirror Prof. Xizheng Ke, School of Automation and Information Engineering, Xi'an University of Technology, China（Online Speech）
11:00-11:30	Title: Photo/Opto Electronics-based Solutions to Enhance and Ensure Healthy Conditions Prof. Mohamad Sawan, School of Engineering, Westlake University, China（Online Speech）

Day 1: Jun. 3, 2023 (Saturday), Afternoon

Session 1-1: Breaking Research of Optical Technology

Time: 13:00-18:50, Jun. 3, 2023 (Saturday); Place: Multi-Function Room I, 2F, MHH

Chair	Dr. You Wang, Southwest Institute of Technical Physics, China
Co-Chair	Dr. Xiaopeng Hao, National Institute of Metrology, China
13:00-13:20	Title: Vector Beam Generation using Polarization Holography Prof. Xiaodi Tan, College of Photonic & Electronic Engineering, Fujian Normal University, China
13:20-13:40	Title: Air Lasing: Phenomena, Mechanisms and Applications Prof. Li Pei, Key Lab of All Optical Network & Advanced Telecommunication Network, Institute of Lightwave technology, Beijing Jiaotong University, China
13:40-14:00	Title: Progress in Deep Hole Laser Drilling Prof. Wenwu Zhang, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, China
14:00-14:20	Title: Progress on All Solid State pr3+ Lasers Dr. Bin Xu, Xiamen University, China
14:20-14:40	Title: A New Protocol of Drilling Holes with a Dual-wavelength Double-pulse Laser

	Train Prof. You Wang, Southwest Institute of Technical Physics, China
14:40-14:50	**Coffee Break**
14:50-15:10	Title: Diversified High-throughput Florescent Sensing Based on Quantum Dots Dopped Hydrogel Dr. Yufei Liu, Key Laboratory of Optoelectronic Technology & Systems (Chongqing University), Ministry of Education, China
15:10-15:30	Title: Research on the Mechanism of Space Radiation Reference Blackbody Source and Applications Dr. Xiaopeng Hao, National Institute of Metrology, China
15:30-15:50	Title: Preparation of Organic-molecular/carbon Nanotubes Thin Films with High Thermoelectric Performance Dr. Chunmei Gao, College of Chemistry and Environmental Engineering, Shenzhen University, China
15:50-16:10	Title: From Table-top Ultrafast Light Source to Future Collider: Perspectives on Laser Plasma Accelerator Dr. Wei Lu, Professor, Tsinghua University, China
16:10-16:30	Title: Quantum Impedance Lorentz Oscillator Model and Its Optoelectronic Application Dr. Peide Zhao, Hebei University of Technology, China
16:30-16:50	Title: Exciton-polaritons in Two-dimensional Systems Dr. Wenjing Liu, Peking University, China
16:50-17:10	Title: Photonic THz Communications for High-Capacity Radio Access Networks Dr. Lu Zhang, College of Information Science and Electronic Engineering, Zhejiang University, China
17:10-17:30	Title: Controlling the Dynamical Behaviors of Light in Instantaneously Reconfigurable Electromagnetically Induced Photonic Lattices Dr. Zhaoyang Zhang, Xi'an Jiaotong University, China
17:30-17:50	Title: Pattern Optimization for Complex Geometrical and Optical Characteristic in Fringe Projection Profilometry Dr. Jing Xu, Lab of Robotics and Automation, Dept of Mechanical Engineering, Tsinghua University, China
17:50-18:10	Title: Investigation of TunableTerahertz High Q-factor All-dielectric Metamaterials Dr. Xiaoyong He, Mathematics & Science College, Shanghai Normal University, China
18:10-18:30	Title: Near-resonance Enhanced Label-free Stimulated Raman Scattering Microscopy with High Spatial Resolution Near 110nm Dr. Yali Bi, Hefei University of Technology, China
18:30-18:50	Title: Switchable and Tunable Multi-wavelength Emissions in Pulsed Fiber Lasers with Polarization-maintaining Fiber Bragg Gratings Dr. Dongdong Wang, Southwest Institute of Technical Physics, China

Day 1: Jun. 3, 2023 (Saturday), Afternoon

Session 1-2: Optics in Health Care and Biomedical

Time: 13:00-15:00, Jun. 3, 2023 (Saturday); Place: Multi-Function Room III, 2F, MHH

Chair	Dr. Juqiang Lin, School of Optoelectronics and Communication Engineering, Xiamen Institute of Technology, China
13:00-13:20	Title: Intracoronary OCT, Cold Laser Atherectomy, and Medical Photonics in Pan-Vascular Intervention Dr. Jianan Li, Shenzhen Vivolight Medical Device & Technology Co., Ltd., China
13:20-13:40	Title: Bedside Optical Imaging of Cerebral Hemodynamics for Neurovascular Assessment Dr. Guoqiang Yu, Center for Biomedical Engineering, University of Kentucky, USA
13:40-14:00	Title: Detection of Benign Prostatic Hyperplasia Combining Label-free surface-enhanced Raman Spectroscopy with Multivariate Analysis Algorithm Dr. Huali Jiang, School of Opto-electronic and Communication Engineering, Xiamen University of Technology, China
14:00-14:20	Title: Raman and SERS Spectroscopy of Human Tissue, Body Fluid and Cells Dr. Juqiang Lin, School of Optoelectronics and Communication Engineering, Xiamen Institute of Technology, China
14:20-14:40	Title: Rapid and Ultrasensitive Detection of SARS-CoV-2 Spike Protein Based on Upconversion Luminescence Biosensor for COVID-19 point-of-care Diagnostics Dr. Lihua Li, School of Information and Optoelectronic Science and Engineering, South China Normal University, China
14:40-15:00	**Coffee Break**

Day 1: Jun. 3, 2023 (Saturday), Afternoon

Session 1-3: Laser Technology and Application

Time: 15:00-18:15, Jun. 3, 2023 (Saturday); Place: Multi-Function Room III, 2F, MHH

Chair	Dr. Zhenxu Bai, Advanced Laser Technology Research Center, Hebei University of Technology, China
Co-Chair	Dr. Jing Ren, School of Physics and Optical Engineering, Harbin Engineering University, China
15:00-15:20	Title: High-Power Short pulses generation via stimulated Brillouin scattering Dr. Zhaohong Liu, Center For Advanced Laser Technology, Hebei University of Technology, China
15:20-15:40	Title: Pulse Dynamics of a Fiber Laser Mode-locked by Nonlinear Polarizaiotn Rotation Dr. Liqiang Zhang, School of Physical Science and Information Engineering, Liaocheng University, China
15:40-16:00	Title: Optimization and UpgradeDesign for CAEP THz FEL Facility Dr. Yuhuan Dou, Institute of Applied Physics and Computational Mathematics, China
16:00-16:20	Title: High Precision Laser Interferometry Technology for Space-based Applications Dr. Xuling Lin, Beijing Institute of Space Mechanics and Electricity, China
16:20-16:35	Title: Three-dimensional Positioning Repeatability Error Measurement System Based on Laser Triangulation Sensor Dr. Zhuojiang Nan, School of Electronic Information and Electrical Engineering, SJTU, China

16:35-16:55	Title: The R&D of the New Glass Scintillator with High Light Yield Dr. Jing Ren, School of Physics and Optical Engineering, Harbin Engineering University, China
16:55-17:15	Title: High-repetition-rate Fiber Lasers with High Stability and Short Pulse Duration Dr. Huihui Cheng, Department of Electronic Engineering, Xiamen University, China
17:15-17:35	Title: Design of a Shaping and Collecting System for a Rod-Shaped Infrared Radiation Source for Photoacoustic Spectroscopy Dr. Yuanyuan Fan, Institute of Microelectronics of the Chinese Academy of Sciences, China
17:35-17:55	Title: Space Laser Communication Technology for Nano and Micro Satellites Dr. Xuan Wang, Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences, China
17:55-18:15	Title: Mechanism and Optimization of Femtosecond Laser Welding Fused Silica and Aluminum Dr. Sumei Wang, School of Mechanical Engineering, Beijing Institute of Technology, China（Online Speech）

Day 2: Jun. 4, 2023 (Sunday), Morning

Session 3-1: Semiconductor Materials and Technology

Time: 8:30-11:50, Jun. 4, 2023 (Sunday); Place: Multi-Function Room I, 2F, MHH

Chair	Dr. Jinzhong Wang, Harbin Institute of Technology, China
Co-Chair	Dr. Shun Dong, School of Astronautics, Harbin Institute of Technology, China
8:30-8:50	Title: Tow-dimensional Structure Modulating the Optoelectronic Performance of β-Ga_2O_3 Solar-blind Photodetector Dr. Jie Su, School of Microelectronics, Xidian University, China
8:50-9:10	Title: A Novel Method for Synthesizing High-quality SiC Nanoparticles Dr. Shun Dong, National Key Laboratory of Science and Technology for National Defence on Advanced Composites in Special Environments, School of Astronautics, Harbin Institute of Technology, China（Online Speech）
9:10-9:30	Title: Triboelectric Potential Driven FETs for Interactive Neuromorphic Synaptic Devices and Systems Dr. Qijun Sun, Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences, China
9:30-9:50	Title: Quantum Photodetectors for High Detectivity and Flexibility Dr. Judy Wu, Department of Physics and Astronomy, University of Kansas, USA
9:50-10:10	Title: Bi_2O_2Se Nanoribbon and Bi_2O_2Se/HfS_2 Heterojunction Photodetector Dr. Chao Chen, University of Electronic Science and Technology of China, China
10:10-10:30	**Coffee Break**
10:30-10:50	Title: Preparation of Large-size 2D Bi_2Te_3 Single Crystal Materials and its Growth Behavior Dr. Jinzhong Wang, Harbin Institute of Technology, China
10:50-11:10	Title: Doped Gallium Oxide Nanowire Thin Films Synthesis and Enhancement of Deep Ultraviolet Light Sensing Performance Dr. Wenqiang Lu, Chongqing Institute of Green &Intelligent Technology, Chinese

	Academy of Sciences. China
11:10-11:30	Title: Preparation of Protein Fibrils Functionalized with Luminescent Materials Dr. Yusheng Yuan, Institute of Advanced Materials, School of Chemistry and Chemical Engineering, Southeast University, China
11:30-11:50	Title: Van der Waals Heterostructures for Broad-spectrum Optoelectronics Dr. Vladimir Falko, School of Physics & Astronomy, The University of Manchester, UK

Day 2: Jun. 4, 2023 (Sunday), Morning

Session 2-2: Thin Films and Devices

Time: 8:30-10:55, Jun. 4, 2023 (Sunday); Place: Multi-Function Room III, 2F, MHH

Chair	Dr. Ke Wang, School of Mechanical and Electronic Engineering, ECUT, China
Co-Chair	Dr. Xiaomin Cheng, School of Integrated Circuit, Huazhong University of Science and Technology, China
8:30-8:55	(Keynote Speech) Title: Atomic Layer Deposition for Thin Film Optoelectronics: Recent Advances and Future Prospects Dr. Tien-Chien Jen, Department of Mechanical Engineering Science, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa
8:55-9:15	Title: Perpendicularly Magnetized Heavy Rare-earth Transition Metal (HRE-TM) Ultrathin Alloy Films Investigated by Extraordinary Hall Effect Dr. Ke Wang, School of Mechanical and Electronic Engineering, ECUT, China
9:15-9:35	Title: Title: Spontaneously Phase-separated O Doped Sb_2Te_3 Phase Change Material and Device with Low Power Consumption and High Reliability Dr. Xiaomin Cheng, School of Integrated Circuit, Huazhong University of Science and Technology, China
9:35-9:55	Title: Fabrication of Aluminum Nitride Powder from Scrap Aluminum Foil Dr. Yenchun Liu, Department of Fashion Styling and Design, Graduate School of Opto-Mechatronics and Materials Flash, Wu-Feng University, Taiwan
9:55-10:15	Title: Effects of Ta_2O_5 Capping on Magnetic Properties of [Pt/Co_2MnSi]n Multilayers Miss Zhenxiao Nie, School of Mechanical and Electronic Engineering, ECUT, China
10:15-10:35	**Coffee Break**
10:35-10:55	Title: Charge-Carrier Transport in Thin Film Solar Cells: New Formulation Dr. Yu.G. Gurevich, Department of Physics, CINVESTAV---I.P.N., Mexico

Day 2: Jun. 4, 2023 (Sunday), Morning

Session 1-4: Preparation and Application of Optical Materials

Time: 11:00-12:20, Jun. 4, 2023 (Sunday); Place: Multi-Function Room III, 2F, MHH

Chair	Dr. Ping Liu, South China University of Technology, China
11:00-11:20	Title: Photonic Spin-orbital Coupling Based on Organic Crystal Microcavities Dr. Qing Liao, Department of Chemistry, Capital Normal University, China
11:20-11:40	Title: Flexible Organic Electrochromic Devices Having Multicolored, Low-Voltage-Driven and High Contrast Based on Oligomers and Viologen Derivatives

	Dr. Ping Liu, South China University of Technology, China
11:40-12:00	Title: Liquid Crystalline Nanocellulose Printing for Engineered Photonics Dr. Guang Chu, School of Chemistry and Chemical Engineering, Southeast University, China
12:00-12:20	Title: Generation of Vortex Beams Based on Geometric Phase Metasurfaces in Near-Infrared Band Dr. Xiaodong Zhang, College of Physics and Electronic Engineering, Zhengzhou University of Light Industry, China

Day 2: Jun. 4, 2023 (Sunday), Afternoon

Session 2-1: Electronic Materials, Dielectric Materials and Devices

Time: 13:30-15:30, Jun. 4, 2023 (Sunday); Place: Multi-Function Room I, 2F, MHH

Chair	Dr. Guangdong Zhou, College of Artificial Intelligence,Southwest University, China
13:30-13:50	Title: Self-Powered Memristive Systems for Storage and Neuromorphic Computing Dr. Ye Tao, School of Physics, Northeast Normal University, China
13:50-14:10	Title: Multimodal-multifunction Optoelectronic Analogue Memristor for Artificial Vision System Dr. Guangdong Zhou, College of Artificial Intelligence,Southwest University, China
14:10-14:30	Title: Discovery of Glycoproteins as a Cancer Biomarker in Human Plasma by Mass Spectrometry Dr. Tianyu Wang, School of Microelectronics, Fudan University, China
14:30-14:50	Title: Simply Grinded Organic-inorganic Hybrid Perovskite /CNTs Composites for Efficient Microwave Absorption Dr. Guohua Wu, College of Materials Science and Chemical Engineering, Harbin Engineering University, China
14:50-15:10	Title: Optoelectronic Neuromorphic Devices and the Application of Artificial Retina Dr. Jialin Meng, School of Microelectronics, Fudan University, China
15:10-15:30	**Coffee Break**

Day 2: Jun. 4, 2023 (Sunday), Afternoon

Session 3-3: Optoelectronic Imaging and Multimedia Technology

Time: 15:30-17:30, Jun. 4, 2023 (Sunday); Place: Multi-Function Room I, 2F, MHH

Chair	Dr. Chunlai Li, Shanghai Institute of Technical Physics (SITP), Chinese Academy of Sciences (CAS), China
Co-Chair	Dr. Shixiang Xu, College of Physics and Optoelectronic Engineering, Shenzhen University, China
15:30-15:50	Title: Safety Factor in Food by Spectral Imaging Dr. Yue Huang, College of Food Science & Nutritional Engineering, Jinan University, China
15:50-16:10	Title: Robust Far-field Imaging by Spatial Coherence Engineering Dr. Chunhao Liang, School of Physics and Electronics, Shandong Normal University, China
16:10-16:30	Title: Mechanism and Verification of High-resolution Snapshot Hyperspectral Imaging System

	Dr. Chunlai Li, Shanghai Institute of Technical Physics (SITP), Chinese Academy of Sciences (CAS), China
16:30-16:50	Title: Tunable Mid-infrared Detail-enhanced Imaging with Micron-level Spatial Resolution and Photon-number Resolving Sensitivity Dr. Shixiang Xu, College of Physics and Optoelectronic Engineering, Shenzhen University, China
16:50-17:10	Title: Investigations on the microscopic light emission of Mini/Micro LEDs by using hyperspectral imaging Dr. Weijie Guo, School of Electronic Science and Engineering, Xiamen University, China
17:10-17:30	Title: Fluorescence Microscopy Image Segmentation Based on Attention Enhanced Deep Learning Dr. Yu Lin, ZJU – UIUC Institute, Zhejiang University, China

Day 2: Jun. 4, 2023 (Sunday), Afternoon

Session 3-2: Optical Sensor & Fiber Optic Sensor

Time: 13:30-16:10, Jun. 4, 2023 (Sunday); Place: Multi-Function Room III, 2F, MHH

Chair	Dr. Huijuan Wu, University of Electronic Science and Technology of China, China
13:30-13:50	Title: Experimental Exploration of Multi-dimensional Remote Sensing Technology Applied to Target Aviation Search and Rescue Dr. Dong Yao, Changchun Institute of Optics, Fine Mechanics and Physics (CIOMP), Chinese Academy of Sciences, China
13:50-14:10	Title: A Photoelectric Integrated Device based on Dual Photodiode-Body-Biased MOSFET Enabling Optical Measurement Applications Dr. Kai Wang, School of Electronics and Information Technology, Sun Yat-Sen University, China
14:10-14:30	Title: Breaking Through the Design Limits of Miniaturized High-Precision Fiber Optic Gyroscopes Dr. Yue Zheng, Beihang University (BUAA), China
14:30-14:50	Title: Novel Fiber Structures for SDM and Fiber Mode Degeneracy Manipulating Dr. Jingjing Zheng, Institute of Lightwave Technology, Beijing Jiaotong University, China
14:50-15:10	Title: Long Wavelength Quantum Well Infrared Photodetector Focal Plane Arrays for Polarimetric Imaging Dr. Jiqiang Wang, Shanghai Institute of Technical Physics of the Chinese Academy of Sciences, China
15:10-15:30	**Coffee Break**
15:30-15:50	Title: A New Generation of Smart Internet of Things Based on the Fiber-optic Distributed Acoustic Sensor(DAS) Dr. Huijuan Wu, University of Electronic Science and Technology of China, China
15:50-16:05	Title: Separation of Nonlinear Mixed Sources Sensed by the Underground Communication Cable in Fiber-optic DAS Dr. Mingyang Lu, School of Information and Communication Engineering, University of Electronic Science and Technology of China, China

Day 2: Jun. 4, 2023 (Sunday), Afternoon

Young Scientist Forum

Time: 16:10-17:55, Jun. 4, 2023 (Sunday); Place: Multi-Function Room III, 2F, MHH

Chair	Chao Feng, Institute of Fundamental and Frontier Sciences, University of Electronic Science and Technology of China, China
16:10-16:25	Title: Pyroptosis-Mediated Synergistic Photodynamic and Photothermal Immunotherapy Enabled by Tumor Membrane-Targeted Photosensitive Dimer Yuqi Tang, Institute of Advanced Materials, School of Chemistry and Chemical Engineering, Southeast University, China
16:25-16:40	Title: Helical Polariton Lasing from Topological Valleys in an Organic Crystalline Microcavity Long Teng, Department of Chemistry, Capital Normal University, China
16:40-16:55	Title: Theoretical Investigations on Structural, Electronic and Optical Properties of Wurtzite InxGa1-xN (x=0, 0.25, 0.5, 0.75 and 1) Angyang Yu, Liaoning University of Petroleum and Chemical Technology, China
16:55-17:10	Title: Detection of Prostate Cancer Combining Raman Spectroscopy with Multilayer Perceptron Houyang Ge, Xiamen University of Technology, China
17:10-17:25	Title: A Self-healing Catalyst for Electrocatalytic and Photoelectrochemical Oxygen Evolution in Highly Alkaline Conditions Chao Feng, Institute of Fundamental and Frontier Sciences, University of Electronic Science and Technology of China, China
17:25-17:40	Title: Study on Polarized Directions of a Nd:YVO4 Pulsed Laser at the Beginning of Gate Signal Working Xinyang Wu, Xinjiang University, China
17:40-17:55	Title: Phase Retrieval Based on Deep Learning with PQ/PMMA Material Recording Jie Zheng, College of Photonic and Electronic Engineering, Fujian Normal University, China