

【Forum D】ICAFPM 2025 Smart Fibers and Wearable Technology
D. 智能纤维与可穿戴技术

Topic: Smart Fibers and Wearable Technology
Chairman: 1. Dae Woon Lim, Yifan Wang, 雷霆, 王宏志, 侯成义

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November 1, 2025 Afternoon (下午) Venue: Room No.6 (6 号厅)

Session A Moderator: Chengyi Hou, Jiahui Li 侯成义 李佳慧

Time	Type	Speaker	Title	Affiliation
13:20-13:40	Keynote	Xuetong Zhang 张学同	From Aramid Nanofibers to Colloidal Aerogels	Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences 中国科学院苏州纳米技术与纳米仿生研究所
13:40-14:00	Keynote	Yingying Zhang 张莹莹	Silk-Based Electronic Fiber Materials 蚕丝基电子纤维材料	Tsinghua University 清华大学
14:00-14:20	Keynote	Xuanyong Liu 刘宣勇	Bionic Fibers Designed Based on Gas-Liquid Two-Phase Flow and Their Wearable Applications 基于气液两相流设计的仿生纤维及其可穿戴应用	Donghua University 东华大学
14:20-14:35	Invited	Yongyi Zhang 张永毅	Mass Production and Applications of Carbon Nanotube Fibers 碳纳米管纤维批量化技术与应用	Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences 中国科学院苏州纳米技术与纳米仿生研究所
14:35-14:50	Invited	Xiaosheng Zhang 张晓升	Wearable MEMS Multi-Sensor Integration Technology 穿戴式 MEMS 多传感集成技术	University of Electronic Science and Technology of China 电子科技大学
14:50-15:05	Invited	Wei Tang 唐伟	Accurate, Stable, and Rapid Wearable Sensing Research 准确稳定快速的可穿戴传感研究	Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences 中国科学院北京纳米能源与系统研究所

15:05-15:10 Coffee Break (茶歇)

Session A Moderator: Ronghui Wu, Wei Fan 吴荣辉 樊威

15:10-15:30	Keynote	Tingrui Pan 潘挺睿	Iontronic Sensing-Enabled Sports Technologies	University of Science and Technology of China 中国科学技术大学
15:30-15:45	Invited	Lili Wang 王丽丽	Multimodal Sensor Device 多模态传感器件	Institute of Semiconductors, Chinese Academy of Sciences 中国科学院半导体研究所
15:45-16:00	Invited	Rufan Zhang 张如范	High-Performance Carbon-Based Functional Fiber Materials 高性能碳基功能纤维材料	Tsinghua University 清华大学
16:00-16:15	Invited	Qichong Zhang 张其冲	Fiber-Shaped Photodetector Materials and Devices 纤维状光电探测材料与器件	Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences 中国科学院苏州纳米技术与纳米仿生研究所
16:15-16:30	Invited	Haitao Yang 杨海涛	Flexible Electronics-Integrated Smart Robots and Their Aerospace Applications 柔性电子集成的智能机器人及其空天应用	Northwestern Polytechnical University 西北工业大学
16:30-16:45	Invited	Wei Fan 樊威	Passive Sensing Fibers and Smart Wearable Textiles 无源传感纤维与智能可穿戴纺织品	Xi'an Polytechnic University 西安工程大学

November 1, 2025 Afternoon (下午) Venue: Room No.6 (6 号厅)

16:45-17:00	Invited	Jian Fang 方剑	Smart Textile Structures and Their Anti-interference Design	Soochow University 苏州大学
17:00-17:15	Invited	Kai Dong 董凯	Novel Electromechanical Fiber Materials and Self-Powered Wearable Devices 新型机电纤维材料与自供能可穿戴器件	Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences 中国科学院北京纳米能源与系统研究所
17:15-17:30	Invited	Jiewei Chen 陈杰威	Low-Power Sensing and Computing Devices for Smart IoT 用于智能物联网的低功耗感算器件	South China Normal University 华南师范大学
17:30-17:45	Invited	Ronghui Wu 吴荣辉	Intelligent Textiles for Personal Thermal Management and Physiological Signal Monitoring 用于人体热管理与生理信号监测的智能纺织品	Nanyang Technological University 南洋理工大学
17:45-18:00	Invited	Ze Xiong 熊泽	Digitalized Wound Management Based on Wireless Flexible Bioelectronics 基于无线柔性生物电子的数字化创伤管理	ShanghaiTech University 上海科技大学

November 2, 2025 Morning (上午) Venue: Room No.6 (6 号厅)

Session A Moderator: Hongzhi Wang, Jiuke Mu 王宏志 穆九柯

Time	Type	Speaker	Title	Affiliation
8:30-8:50	Keynote	Ting Lei 雷霆	Heavily doped polymer semiconductors and their wearable devices 重掺杂高分子半导体及其可穿戴器件	Peking University 北京大学
8:50-9:10	Keynote	Dong Wang 王栋	Fiber-Based Flexible Electronic Devices and All-Fabric Smart Wearable Platforms 纤维基柔性电子器件与全织物智能可穿戴平台	Wuhan Textile University 武汉纺织大学
9:10-9:25	Invited	Zhisong Lu 鲁志松	Yarn-based Power Devices for Textile Electronics 面向织物电子的纱线结构供能器件	Southwest University 西南大学
9:25-9:40	Invited	Nan Zhu 朱楠	Self-Powered Wearable Electrochemical Sensors 可穿戴电化学传感器及其自供能研究	Dalian University of Technology 大连理工大学
9:40-9:55	Invited	Ziqian Bai 白紫千	Key Issues for Design of Wearable Sensing System for Human-computer Interaction 交互感知一体化柔性可穿戴系统设计与关键问题	Southern University of Science and Technology 南方科技大学
9:55-10:10	Invited	Nazmul Karim	Sustainable Wearable Electronic Textiles	University of Southampton 南安普顿大学

10:10-10:20 Coffee Break (茶歇)

Session A Moderator: Rufan Zhang, Zhisong Lu 张如范 鲁志松

10:20-10:40	Keynote	Yagang Yao 姚亚刚	Boron Nitride Nanotube 氮化硼纳米管	Nanjing University 南京大学
10:40-11:00	Keynote	Runwei Li 李润伟	Fiber-Based Elastic Magneto-Electric Functional Materials 纤维基弹性磁电功能材料	Eastern Institute of Technology, Ningbo 宁波东方理工大学
11:00-11:15	Invited	Rongzhou Lin 林容周	Unobtrusive Body Area Sensing System for Proactive Health 面向主动健康的无感化体域传感系统	South China University of Technology 华南理工大学
11:15-11:30	Invited	Zhaoling Li 李召岭	Fiber-Based High-Sensitivity Breathable E-Skin 纤维基高灵敏可呼吸电子皮肤	Donghua University 东华大学

November 2, 2025 Morning (上午) Venue: Room No.6 (6号厅)

11:30-11:45	Invited	Jiahui Li 李佳慧	MXene-Based Multidimensional Architectures for Integrated Energy Harvesting, Soft Actuation, and Self-Powered Smart Textiles 基于MXene的多维集成结构：面向能量采集、柔性驱动与自供能智能织物	Nanjing University of Posts and Telecommunications 南京邮电大学
11:45-12:00	Invited	Weili Deng 邓维礼	Controlled Fabrication of Piezoelectric Fiber Devices for Wearable Sensing 压电纤维器件的可控构筑及可穿戴传感	Southwest Jiaotong University 西南交通大学

November 2, 2025 Afternoon (下午) Venue: Room No.6 (6号厅)

Session A Moderator: Nan Zhu, Zhixun Wang 朱楠 汪志勋

Time	Type	Speaker	Title	Affiliation
13:00-13:20	Keynote	Feng Yan 严锋	Polyionic Liquid Electrospinning and Devices 聚离子液体电纺丝与器件	Donghua University 东华大学
13:20-13:35	Invited	Zhixun Wang 汪志勋	Thermally Drawn Electronic Fibers: Fabrication and Applications 热拉制电子纤维的制造与应用	The Hong Kong Polytechnic University 香港理工大学
13:35-13:50	Invited	Dae-Woon Lim	Superior Proton Conduction in a HOF Based Mixed Matrix Membrane	Yonsei University 延世大学
13:50-14:05	Invited	Ryo Nakayama	Cu-Based Metal–Organic Framework Thin Films Prepared by Physical Vapor Deposition Coupled with Solvent Vapor Annealing	The University of Tokyo 东京大学
14:05-14:20	Invited	Xiuqiang Li 李秀强	Nano-Enabled Thermoregulatory Smart Textiles 纳智能热控智能织物	Nanjing University of Aeronautics and Astronautics 南京航空航天大学
14:20-14:35	Invited	Wei Yan 严威	Fiber Electronic Materials and Devices 纤维电子材料与器件	Donghua University 东华大学
14:35-14:50	Invited	Dezhi Tan 谭德志	Glass Structure and Photonic Function Manipulation 玻璃结构与光子功能调控	Zhejiang University 浙江大学
14:50-15:05	Invited	Wenjin Guo 郭文瑾	Torsion-Driven Novel Elastocaloric Cooling System: Low-Hysteresis, High-Carnot-Efficiency Elastocaloric Heat Pump via Periodic Nonlinear Stress 扭转驱动的新型弹热制冷系统：基于周期性非线性应力的低滞后、高卡诺效率的弹热热泵	Nankai University 南开大学

15:05-15:15 Coffee Break (茶歇)

Session A Moderator: Dezhi Tan, Yannan Liu 谭德志 刘彦男

15:15-15:30	Invited	Gang Wang 王刚	Functional Semiconductor Fiber 半导体功能纤维	Donghua University 东华大学
15:30-15:45	Invited	Yannan Liu 刘彦男	Fabrication of Cellulose-Based Piezoresistive Devices 纤维素基压阻器件制备和性能研究	Shanghai Jiao Tong University 上海交通大学
15:45-16:00	Invited	Si Cheng 程丝	Bioinspired Construction of Electrospun Nanofiber-Based Flexible Sensors: from Unidirectional, Bidirectional to Patterned Architectures	Soochow University 苏州大学

November 2, 2025 Afternoon (下午) Venue: Room No.6 (6 号厅)

16:00-16:15	Invited	Jiuke Mu 穆九柯	High-Performance Soft Actuators and Artificial Muscles 高性能软体执行器及人工肌肉	Tianjin University 天津大学
16:15-16:30	Invited	Linpeng Li 李林鹏	Fiber Bioelectronics and Their Interfacial Cell Research 生物电极及其界面细胞行为研究	Shanghai Sixth People's Hospital Affiliated to Shanghai Jiaotong University 上海交通大学医学院附属第六人民医院
16:30-16:45	Invited	Hao Yin 殷溟	Highly Sensitive Multimodal Temperature and Strain Sensing with Auxetic Structure-Assisted Decoupling 基于负泊松比结构辅助解耦的高灵敏多模态温度与应变传感	Shanghai Jiao Tong University 上海交通大学
16:45-17:00	Invited	Yanli Wang 王艳丽	Flexible Intelligent Systems Based on Hierarchical Microstructure Design: Integration of Self-Healing Sensing and Integrated Perception-Actuation 基于多级微结构设计的柔性智能系统：自修复感知与一体化感知 - 驱动的融合	Tianjin University of Technology 天津理工大学
17:00-17:15	Invited	Chengyi Hou 侯成义	Sensing and Interactive Fiber Electronic Devices 传感与交互纤维电子器件	Donghua University 东华大学
17:15-17:30	Invited	Fei Wang 王飞	Exploration on Intelligent Textile Sensing in Impact Safety and Health Monitoring 智能纺织传感在冲击安全和健康监测中的探索研究	Wuyi University 五邑大学
17:30-17:45	Invited	Yinben Guo 郭隐森	Basalt-Based Triboelectric Textiles for Ultra-Wide Temperature Range Environments 玄武岩基摩擦电织物用于超宽温度范围环境	Shanghai University Of Engineering Science 上海工程技术大学