

**11 Dec Thursday**

16:00 - 20:00	<b>Registration</b>
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**12 Dec Friday (Lecture Hall 104)**

Time	Type	Venue	Session Chair	Name	Email	Affiliation	Title
<b>Registration</b>							
<b>Opening Speech (104)</b>							
8:30 - 9:00	Keynote Speech	104	Guangya Zhou Bin Yang	Guangya Zhou		National University of Singapore, Singapore	DMD based arbitrary light spectrum generator and its application in correlation spectroscopic chemical sensing
9:00 - 9:30	Keynote Speech			Bin Yang		Shanghai Jiao Tong University, China	Heterogeneously Integrated Flexible Piezoelectric MEMS Transducer
9:30 - 9:50	Invited Talk			Tong Lin		Southeast University, China	Algorithm-enhanced silicon photonic Vernier caliper spectrometer
<b>Tea Break</b>							
10:30 - 10:50	Invited Talk	104	Xianjie Pu Yiming Ma	Xianjie Pu		Chongqing University, China	Triboelectric Wearable Sensors for Natural Human-Machine Interaction and Rehabilitation
10:50 - 11:10	Invited Talk			Nan Wang (Yiming Ma)		Shanghai University, China	High Q Piezoelectric MEMS Resonators through Anchor Loss
11:10 - 11:30	Invited Talk			Yiming Ma		Shanghai University, China	Denosing-autoencoder-facilitated MEMS computational spectrometer with enhanced resolution on a silicon
<b>Information on social event, appreciation dinner, banquet, etc. (104)</b>							
<b>Lunch Break</b>							
13:00 - 13:30	Keynote Speech	104	Jin Xie Tianyi He	Jin Xie		Zhejiang University, China	Gesture Recognition Based on Wearable Ultrasonic Devices
13:30 - 13:50	Invited Talk			Dan Luo		Beijing Institute of Nanoenergy and	Mechanoelectric coupling materials and bioelectronic devices for physical therapy
13:50 - 14:10	Invited Talk			Tianyi He		Shenzhen MSU-BIT University, China	Non-invasive Plant Phenotyping Analysis Based on Plant E-skin
14:10 - 14:25	Oral Talk			Xianglong Chen (Xiaojing Mu)		Chongqing University, China	Key transmitting/receiving applications based on micromachined ultrasound transducer
<b>Transportation for Social Event</b>							
<b>Social Event</b>							
<b>Appreciation Dinner</b>							

12 Dec Friday (Lecture Hall 105)							
Time	Type	Venue	Session Chair	Name	Email	Affiliation	Title
7:40 - 8:15	<b>Registration</b>						
8:15 - 8:30	<b>Opening Speech (104)</b>						
8:30 - 9:00	Keynote Speech	105	Takahiro Arakawa	Xiaojun Han (Shubin Li)		Harbin Institute of Technology, China	Construction of functional artificial cells from scratch
9:00 - 9:20	Invited Talk			Takahiro Arakawa		Tokyo University of Technology, Japan	Wearable mouthguard biosensor for real-time monitoring of salivary biomarkers
9:20 - 9:35	Oral Talk			Jingfeng Xu		National University of Singapore, Singapore	Edge-AI Enhanced Multimodal Tactile Glove with In-Sensor Computing
10:00 - 10:30	<b>Tea Break</b>						
10:30 - 11:00	Keynote Speech	105	Minglu Zhu	Xueyong Wei (Chuanyu Zhang)		Xi'an Jiaotong University, China	Acoustic assisted microfluidic technology for fabrication, manipulation and detection
11:00 - 11:20	Invited Talk			Minglu Zhu		Soochow University, China	Haptic rendering: from gross to fine teleoperation
11:20 - 11:40	Invited Talk			Pengfei Song		Xi'an Jiaotong-Liverpool University, China	Research on POCT Instruments and Biosensing Based on Paper-Based Microfluidics
11:40 - 12:00	<b>Information on social event, appreciation dinner, banquet, etc. (104)</b>						
12:00 - 13:00	<b>Lunch Break</b>						
13:00 - 13:30	Keynote Speech	105	Xiong Pu	Xiong Pu		Beijing Institute of Nanoenergy and	Mechano-iontronic effects for flexible electronics
13:30 - 13:50	Invited Talk			Fusheng Ma		Nanjing Normal University, China	Magnetostrictive Mechanical Frequency Combs
13:50 - 14:10	Invited Talk			Yongze Li		Soochow University, China	Spoof surface plasmon polariton enabled flexible e-skin for cross-media proximity sensing and material
14:10 - 14:25	Oral Talk			Yuyang Sun		Soochow University, China	Robot Electronic Skin and Intelligent Human-Robot Interaction via Triboelectric Information Encoding
14:25 - 14:40	Oral Talk			Shuhan He		National University of Singapore, Singapore	MEMS-Based Piezoelectric Tactile Sensors with AI Applications
15:00 - 15:30	<b>Transportation for Social Event</b>						
15:30 - 18:00	<b>Social Event</b>						
18:00 Onwards	<b>Appreciation Dinner</b>						

**13 Dec Saturday (Lecture Hall 104)**

Time	Type	Venue	Session Chair	Name	Email	Affiliation	Title
8:30 - 9:15	Plenary Speech 1	104		Sang-Woo Kim		Yonsei University, Korea	Triboelectric Medicine: Ultrasound-Driven Bioelectronic Healing
9:15 - 10:00	Plenary Speech 2			Zhou Li		Tsinghua University, China	Self-powered Leadless Pacemaker
10:00 - 10:30	<b>Tea Break</b>						
10:30 - 11:00	Keynote Speech	104	Yiyuan Yang	Rong Zhu		Tsinghua University, China	Multifunctional Sensors and E-Skin based on Thermosensation
11:00 - 11:20	Invited Talk			Qinglei Guo		Shandong University, China	Inorganic semiconducting membranes for multifunctional flexible sensors and devices
11:20 - 11:40	Invited Talk			Yiyuan Yang		National University of Singapore, Singapore	Wireless Implantable Optogenetic Devices for Neuroscience Behavior Studies and Neuro-Disorder
11:40 - 12:00	Invited Talk			Jianlong Ji		Taiyuan University of Technology, China	Ultra-low LOD H2O2 sensor based on synergistic Nernst potential effect
12:00 - 13:00	<b>Lunch Break</b>						
13:00 - 13:30	Keynote Speech	104	Toshihiro Itoh Jianfeng Zang	Toshihiro Itoh		The University of Tokyo, Japan	Bioacoustic Sensing for Animal Health Monitoring
13:30 - 14:00	Keynote Speech			Jianfeng Zang		Huazhong University of Science and Technology, China	Implantable soft acoustic hydrogels for ultrasound sensors on monitoring physiological signals
14:00 - 14:20	Invited Talk			Xindan Hui		Xi'an University of Technology, China	Acoustically enhanced triboelectric stethoscope for ultrasensitive cardiac sounds sensing and disease
14:20 - 14:40	Invited Talk			Changhe Sun		Yangtze University	Development of Ultra-wideband PMUT Based on Multiple High-order Mode Regulation Mechanism for
15:00 - 15:30	<b>Tea Break</b>						
15:30 - 16:00	Keynote Speech	104	Hailing Fu Long Liu	Xinge Yu		City University of Hong Kong, Hong Kong, China	Skin interfaced electronics for healthcare and VR/AR
16:00 - 16:30	Keynote Speech			Chenyang Xue		North University of China, China	Construction of a Digital Information Collection and Intelligent Analysis System
16:30 - 17:00	Keynote Speech			Xinxin Li		Shanghai Institute of Microsystem and	Quantified Model as Guidance for Chemical Sensor Design
17:00 - 17:20	Invited Talk			Zhan Yang		Soochow University, China	Micro-nano swimming robot for bio-applications
17:20 - 17:40	Invited Talk			Hailing Fu		Beijing Institute of Technology, China	Wearable intelligence empowered by energy harvesting and light-weight machine learning
17:40 - 18:00	Invited Talk			Long Liu		Northwestern Polytechnical University,	Smart Glove with Triboelectric Sensors for Dexterous Embodied AI Teaching
18:00 Onwards	<b>Banquet &amp; Award Ceremony</b>						

**13 Dec Saturday (Lecture Hall 105)**

Time	Type	Venue	Session Chair	Name	Email	Affiliation	Title
<b>Tea Break</b>							
10:00 - 10:30	Keynote Speech	105	Zhen Wen	Xuhui Sun (Zhen Wen)		Soochow University, China	Artificial Olfaction Platform and its Applications based on MEMS Gas Sensor Array
11:00 - 11:20	Invited Talk			Yili Hu		Zhejiang Normal University, China	Self-Powered NB-IoT Remote Monitoring System Based on Energy Harvesting Technology and AI Prediction
11:20 - 11:40	Invited Talk			Yina Liu		Xi'an Jiaotong-Liverpool University, China	Triboelectric Sensors for Intelligent Recognition
11:40 - 12:00	Invited Talk			Hong Zhou (Yuxi Gong)		Northwestern Polytechnical University,	MEMS-driven photonic platform for biochemical sensing applications
<b>Lunch Break</b>							
13:00 - 13:30	Keynote Speech	105	Jian Chen Jianxiong Zhu	Gang Tang		Jiangxi University of Water Resources and Electric	Optical-mechanical metamaterials for energy harvesting
13:30 - 13:50	Invited Talk			Jian Chen		Chinese Academy of Sciences, China	MEMS Based Single-Cell Transduction
13:50 - 14:10	Invited Talk			Jianxiong Zhu		Southeast University, China	AI+ Multi-dimensional Optical spectrum for Gas Identification
14:10 - 14:25	Oral Talk			Zhihao Ren		National University of Singapore, Singapore	Photonic in-sensor computing by Si/AIN waveguide
14:25 - 14:40	Oral Talk			Bairong Sun		Southeast University, China	Research of an AI-based motion capture hand rehabilitation system for Parkinson's patients
<b>Tea Break</b>							
15:00 - 15:30	Invited Talk	105	Xiaoyang Kang Xingzhao Wang	Xiaoyang Kang		Fudan University, China	Soft neural interface with color adjusted PDMS encapsulation layer for neural recording and stimulation
15:50 - 16:10	Invited Talk			Xingzhao Wang		Zhejiang University, China	Towards a Minimally Invasive Brain-Machine Interface via Intravascular Neural Electrode and Implantation
16:10 - 16:30	Invited Talk			Faheng Zang		Shanghai Jiao Tong University, China	Nanofabricated photonic sensors for biological and chemical detection
16:30 - 16:50	Invited Talk			Minghao Wang		Hangzhou Dianzi University, China	Structural Design of 3D Stretchable Neural Microelectrodes and Research on Their Transcortical Construction and Applications of Smart Knitted Triboelectric Fabrics
16:50 - 17:10	Invited Talk			Chaoyu Chen		Jiangnan University, China	Triboelectric Fabrics
17:10 - 17:25	Oral Talk			Lei Liu		Southeast university, China	Stretchable piezoelectric acoustic sensor for intelligent speech recognition
17:25 - 17:40	Oral Talk			Tong Zheng		Southeast university, China	Dual-phase, highly-conductive and ultra-robust elastic conductors for stretchable electronics
18:00 Onwards	<b>Banquet &amp; Award Ceremony</b>						

**13 Dec Saturday (Lecture Hall 106)**

Time	Type	Venue	Session Chair	Name	Email	Affiliation	Title
<b>Tea Break</b>							
<b>Lunch Break</b>							
13:00 - 13:20	Invited Talk	106	Zhiran Yi Shilun Feng	Zhiran Yi		Shanghai Jiao Tong University, China	Piezoelectric active air cooling devices
13:20 - 13:40	Invited Talk			Shilun Feng		Shanghai Institute of Microsystem and Technology Co., Ltd.	Microfluidics-based Point-of-care testing (POCT) for Pathogens Detection
13:40 - 14:00	Invited Talk			Haochen Lv		Shanghai Melon Technology Co., Ltd.	Module Functional Development and Mass Production Validation of Sc-Doped AlN PMUTs for Lightweight
14:00 - 14:20	Invited Talk			Xiao Zhi		Shanghai Jiao Tong University, China	BioMEMS Microfluidic Chip-Based Biosafety Prevention and Control Technology
14:20 - 14:40	Invited Talk			Qi Wang		Tianjin University of Technology, China	Piezoelectric MEMS speaker
14:40 - 15:00	Invited Talk			Weijin Guo		Shantou University, China	May the capillary force be with you: package and flow rate control of $\mu$ PADs and $\mu$ TADs
<b>Tea Break</b>							
15:30 - 15:50	Invited Talk	106	Liang Lou Tao Wu	Lijun Lu		Zhengzhou University, China	Design and Application of Flexible Polymer Composite Sensors
15:50 - 16:10	Invited Talk			Yang Li		Suzhou University of Science and Technology	Organic intelligent materials and neuromorphic devices
16:10 - 16:30	Invited Talk			Jian Fang		Soochow University, China	Electroactive fibrous materials and textile structures
16:30 - 16:50	Invited Talk			Liang Lou		Shanghai Industrial $\mu$ Technology Research	Miniaturized PMUT-Based Sensing Systems
16:50 - 17:10	Invited Talk			Tao Wu		ShanghaiTech University, China	PMUT Process and Applications
17:10 - 17:25	Oral Talk			Xingzhuo Hu		The University of Tokyo, Japan	AI-assisted multimodal characterization of cardiomyocytes by a thin-film-transistor array (TFI-
17:25 - 17:40	Oral Talk			Ruxiao Yang		Soochow University, China	Bioelectronic Triboelectric Cap with Dual-Mode Self-Powered Tactile Sensing for Colonoscopic Devices
17:40 - 18:00							
18:00 Onwards	<b>Banquet &amp; Award Ceremony</b>						

**13 Dec Saturday (Lecture Hall 107)**

Time	Type	Venue	Session Chair	Name	Email	Affiliation	Title
<b>Tea Break</b>							
<b>Lunch Break</b>							
13:00 - 13:15	Oral Talk	107	Zixuan Zhang Yunlong Xu	Zixuan Zhang		National University of Singapore, Singapore	Initiator-free Supramolecular Zwitterionic Gels for Skin-inspired Soft Iontronics
13:15 - 13:30	Oral Talk			Luwei Wang		National University of Singapore, Singapore	AI-Enhanced Multimodal Insole Sensing System for Sports Monitoring
13:30 - 13:45	Oral Talk			Shuai Ma		Soochow University, China	Application of multi-axis MEMS force sensors in surgical robots
13:45 - 14:00	Oral Talk			Zhicun Zhou		Soochow University, China	MEMS-Based 3D Force Sensing and Bilateral Impedance Feedback for Tactile Perception in Robot-Assisted
14:00 - 14:15	Oral Talk			Yifan Zhan		Southeast university, China	Machine learning-enhanced miniaturized infrared spectroscopic system for noninvasive exhaled breath
14:15 - 14:30	Oral Talk			Xiangjin Kong		Anhui University, China	Research on High-Efficiency, Triboelectric Self-Powered Flexible Fabric Tactile Sensors
14:30 - 14:45	Oral Talk			Yunlong Xu		NUS (Suzhou) Research Institute, China	Bionic e-skin with droplet perception function
<b>Tea Break</b>							
<b>Banquet &amp; Award Ceremony</b>							

**14 Dec Sunday**

16:00 - 20:00	<b>Free Activities</b>						
16:00 - 20:00	<b>Relocation to NUS</b>						