13:50 - 14:15  2D-3D Printed Antennas  George Xian, National Research Council, Canada
14:15 - 15:00  Connecting the architectural solid designs to 3D printed sensors and wearables  Woo Seo-Kim, Simon Fraser University, Canada
15:10 - 15:40  Emerging Designs for Organic Infrared Photodetectors  Tina Ng, University of California, San Diego, USA
Coffee Break
16:30 - 17:15  Thin Film Transistor Technologies for foldable androllable AMOLED displays  Jin Juang, Kyung Hee University, Korea
17:15 - 18:00  TFT-based active sensors and sensor interface  Kai Wang, Sun Yat-sen University, China
Plenary  Flexible Inorganic Substances for Electronic Device Integration  Ching-Gang Zhang, Corning, USA
Plenary  Future Oxide, Challenges and Applications  Guang-Hsia Yu, BOEC, China
Coffee Break
10:15 - 11:00  Session 1 Flexible Transistor and Integration  Flexible, Scalable and Biaxially Electronics-Based On-Oxide Thin- Film Transistors (Invited) Giuseppe Contarino, Free University of Bonn-Berlino Organic and carbon nanotubes electronics for flexible nanoscale high-frequency circuits and physical unclonable functions (Invited) James Buecker, Georgia-Universität Göttingen Flexible and Printed Integrated Circuits and Biosensors (Invited) Sungho Jung, Pohang University of Science and Technology Flexible Active-Matrix Sensor Arrays Based on Solution-Processed Multifunctional Organic Semiconductors (Invited) Boven Zhi, Wroclaw University, Poland Organic electronic devices and circuits for printed and flexible electronics (Invited) Jasmin Ahmadi, Karlsruhe Institute of Technology Printed-Oxide-Based Unipolar P-SiCMOS Electronics (invited) Softic-Dragoje, Indian Institute of Science (IISc)
Session 2 Focus Session: Fiber Electronics and Wearables  Lighting Fibers and Displaying Textiles (Invited) Handhong Peng, Pudong University Fabrication of high-performance conductive fiber with intrinsically conductive polymer for smart textile textiles (Invited) Joo-Young Choi, Dong-A University Film transducer for wearable electrocardiography sensor (invited) Hyung Woo Choi, University of Cambridge Advancing stretchable IIOCT towards medical wearables (Invited) Shining Zhang, The University of Hong Kong Fabric-Based, Garment-Integrated Pressure Sensor Arrays for Physiological Monitoring in Natural Environments (Invited) Trioth L. Andrew, University of Massachusetts Amherst Lunch
14:00 - 15:00  Session 4 Organic and Polymer Transistors and Sensors  Polymer sensors and its applications in skin inspired electronics (Invited) Li-Jia Pan, Nanjing University Polymer FETs. Low voltage operation and operational stability (Invited) Utkarsh Kruli, Max Planck Institute for Polymer Research Interface and Design Engineering for Polymer Thin-Film Transistors (Invited) Wenme Li, Pudong University Application and fabrication of monolayer organic field-effect transistors (Invited) Paddy Chu, University of Hong Kong Selective Doppling of a Single Ambipolar Organic Semiconductor for Device Fabrication (Invited) Yangchen Chen, Nanjing University
Session 6 Flexible/Stretchable Materials and Mechanics  Designing Organic and Polymer Transistors for High-Performance Field-Effect Transistors (Invited) Pei He, Hunan University Bio-inspired Pressure-Wicking Electronic Skins for Comfort and Reliable Multifunctional Health Monitoring (Invited) Zhao Li, Pudong University Stretchable and Highly Conducive AgNP/SiN Film with Winkled Ag Layer for Electromagnetic Interference Shielding (Invited) Zeyu Zhao, Shenzhen Institutes of Advanced Technology, CAS
Session 7 Low Dimensional Material Transistors and Sensors  Three-dimensional transistors and integrations based on low- dimensional semiconductors for the post-Moore era (Invited) Dong-Ming Sun, Institute of Material Research, CAS StretchableCarbon Nanowire Network Based Wearable Sensor for Threat Related Diseases (Invited) Mohammad Hasnain, Purdue University Flexible sensor devices and electronics based on two-dimensional materials (Invited) Daniel Neumann, Bergische Universität Wuppertal Stretchable synaptic transistors based on carbon nanotubes (Invited) Mi Zhang, Peking University Shanghai Graduate School Flexible, planar, and stretchable carbon nanotubes field-effect transistor-based sensor for ammonium detection in water (Invited) Matia Petrelli, Free University of Bemuse-Bologna
Session 8 Optical Sensing  Responsive Organometallic Semiconductors for Optoelectronic Applications (Invited) Qiang Zhao, Nanjing University of Posts and Telecommunications Vertically Stacked Pristine Organic Photodetectors for High-Performance Color-Sensing (Invited) Vincenzo Pecunia Photonic crystal membrane cavities for optical sensing and gas analysis systems (Invited) Hang-Joon Chao, The University of Texas at Arlington Flexible Integrated Photonics: Materials, Devices, and Applications (Invited) Lai Li, Westlake University Plasmonic biosensing of kidney wastes using carbon-based nanomaterials (Invited) Liang Zeng, Jiaxing University
Session 9 Integrated Circuits and Systems  The wave of OpenSW for flexible digital electronic circuits (Invited) Jordi Carmona Bardetl, Universitat Autonoma de Barcelona Integrating sensors, logic circuits, and emerging memories towards flexible smart systems (Invited) Jianwen Tang, Tsinghua University High-Density Energy-Efficient Charge-Domain Computing Based on CAA-G2D2 TFT With BEOL-Compatible 3D Integration (Invited) Wenxi Tang, Tsinghua University A Computing-in-Memory Cell Design Based on LTPO Hybrid Thin Film Transistor Integration (Invited) Liansheng Zhang, Shanghai Jiao Tong University
Session 10 Focus Session: From Lab to Fab  Application of CMIC Semiconductor Color Changing Technology in All-Smart Wearable Devices (Invited) York Chen, QuickFlash Universal TFTs for High-Throughput and Low-Cost Optical/Chemosensors, From Lab to Fab (Invited) Zhi Liu, Luozhixi Flexible devices and novel fabrication routes taking advantage of high mobility OTFT devices processed at 80 °C (Invited) Simon Oger, SmartNan.
Reception
Organic Photonics from Lab to Fab: Opportunity, Challenges and
Stamina (Invited)
Si-Yong Chuan (Invited)
Development of OPD innovative application: Fingerprint behind
display or standalone Internet solution (Invited)
Jiaojiao Zhou ISORB

Poster Session
14:00-12:50

Session 13 Memory and Synapses
Ultraflexible, Degradeable Organic Synaptic Transistors (Invited)
Qingxin Tang Northeast Normal University
Reliability Challenges of Flash Memory and its Opportunities to
Flexible Electronics (Invited)
Jiachi Chen Shanghai University
Intensive Nanosynaptic Devices and Systems (Invited)
Ojjan Sun Beijing Institute of Nano-Energy and Systems, CAS
Fully Printed Tion Oxide Thin Film Transistors for Flexible Logic
Circuits and Artificial Otoplactic Synapses
Kang Liang Westlake University
Vertical Ferroelectric OTFTs for Non-Volatile Memory and
Neuroimpulsive Applications
Enlou Li Fudan University

Plenary Session 14
Lunch

Session 14 Photo-detectors from X-ray to Infrared
Flexible photo-detectors from low-dimensional semiconducting
nanostructures (Invited)
Guozhen Shen Beijing Institute of Technology
Spectral X-Ray Detector Using a Flexible Multi-Layer TFT (Invited)
Steven Tiley KA Imaging Inc
High mobility narrow-bandgap III-V nanowires for infrared
detectors (Invited)
Zaixing Tong Shanghai University

Coffee break
Plenary Session 2

Session 15 Youth Professional Session
Active Matrix Digital Microfluidics Chip for Efficient Droplets
Manipulation
Dongping Wang Suraksha Institute of Biomedical Engineering and
Technology, CAS
Camera TDI Using a Laser Cap Knappe Tape for Flexible POF
Applications
Kyle M Schramm Alpha Bionanotronics
Low-Voltage High-Performance Intrinsically Stretchable
Opampotransistor Transistors
Kai Liu Institute of Chemistry, CAS
Strategy Toward High-Mobility Oxide Semiconductors Thin-Film
Transistors by Atomic Layer Deposition
Maoyi Li Shanghai Jiao Tong University
Flexible Tactile Sensor Interfaced with a TTF Analog Front-end
for Material Texture Recognition
Jiajie Lin Sun Yat-sen University

16:15 - 17:55
Plenary
Flexible Electronic Skin for Robotics and Interactive Systems
Ravinder Dahiya Glasgow University, UK
The Energy Revolution Driven by Thin Film Processing
Neil Morris Applied Materials, Germany

18:30-21:00
Banquet

August 24, 2022 (Wednesday)

18:00-10:00

Session 16 Special Sessions: Circuits and Systems for Wearable
Healthcare
An Event-Driver System Architecture for Smart Flexible Sensors in
Healthcare Applications (Invited)
Yong Liu Shanghai Jiao Tong University
Embedded Low Power Heart Rate Estimation Processor for Flexible
Applications (Invited)
Jian Zhao Shanghai University of Science and Technology of China
Energy-Efficient Body-Channel Communication for Distributed
Flexible Sensors (Invited)
Jian Zhao Shanghai Jiao Tong University
Dry-Electrode Interface Circuit for Flexible ECG Sensors (Invited)
Yang Zhao Shanghai Jiao Tong University
Flexible Bluetooth Antenna Integrated With Electronics for
Wearable ECG Sensors (Invited)
Zhengbing Quan Shenzhen University

Session 17 Focus Session: E-Skin for Smart Robotics
Flexible Sensors, Circuits, and Systems for Bioelectronic Interfacing
Yingtao Xie Chongqing University of Posts and
Communications
Flexible and Air-Stable Near-Infrared Sensors Based on Solution-
processed Inorganic-Organic Hybrid Phototransistor
Sanjiv Sambandan Indian Institute of Science
Self-Assembled Peptides-Modified Flexible Field Effect Transistors
for Nanoelectronic Systems (Invited)
Shouhua Wu Peking University

Coffee break

Session 18 Flexible Electronics Scalable Manufacturing
BiR2 Manufacturing of Flexible to Stretchable Soft Electronics for
Prosthetics (Invited)
Andrew John VTT
ActiwaveTM Transparent Conductive Materials Enabling Next
Generation Flexible Electronics Designs (Invited)
Xiaolin Chen 3M Inc
Powering flexible electronics: Scaling up Printed Batteries and their
Use Cases (Invited)
Pradip Hiralal Zynex Ltd
Flexible MicroLED Display Technology and Applications (Invited)
Ali Acar Planarix

14:00 - 15:40

Session 19 Focus Session: Flexible Neuromorphic Devices and
Systems
Artificial neurotransmitter nerves and synaptic devices (Invited)
Wumao Xu Nankai University
Organic Flexible Membrane Stages, Integration and Smart
Applications (Invited)
Baohuan Li Shandong Normal University
Mask Switchable Organic Electrochemical Transistor for Flexible
Sensor Computing Applications (Invited)
Wu Xia Xin Jiao Tong University
Organic electrochemical memory for flexible and healed
neuromorphic systems (Invited)
Scott T. Keene University of Cambridge

Coffee break

Session 20 Bio-sensing and Bioelectronics
Flexible and their applications in bio-sensing (Invited)
Yuan Lin University of Electronic Science and Technology of China
Portable Electrochemical Biosensors for Highly Sensitive Detection
of Biomarkers (Invited)
Ying Yu University of Strathclyde
BioFETs and impedance biosensors for medical and environmental
applications (Invited)
Pinvil Patelpatt University of Bath
Smart and Connected Nanoelectromembrane Biosensors for
Advancing Human Healthcare (Invited)
W.Jun Hua Georgia Institute of Technology

Lunch

Session 21 Heterogeneous and Hybrid integration
Multiscale and Multiphysics Design in Advanced Packaging
(Invited)
Sheng Liu William University
Flexible Thin-Film Inorganic-Organic Hybrid Transistors (Invited)
Soong Kiew University of Cambridge
Flexible and Printed Artificial Skin for Robotic Hands
Kai Liu Hebei University

15:55 - 17:35

Plenary
TFT Foundry MPG for Display and Sensor Development – Design, Prototype material, Equipment
Tong Qiu Tianjin Microelectronics

16:54-16:45
Closing