# SYMPOSIUM PROGRAM

**2026 DISPLAY WEEK INTERNATIONAL SYMPOSIUM**

**May 5-8, 2026 (Tuesday – Friday)**
**Los Angeles Convention Center**
**Los Angeles, California, US**

## Session 1: QD Electroluminescence I *(Emissive, Micro-LED, and Quantum-Dot Displays)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 403A**

**Chair:** *Michele Ricks, EMD Electronics*

**1.1:** ***Invited Paper:*** **Direct Photolithography of R/G/B Quantum Dots for Full-Color Electroluminescent Displays**
*Dong Li, BOE Technology Group Co., Ltd., Beijing, China*

**1.2:** **Spherical Quantum Wells with Inverse Type-I Band Alignment for High-Performance Blue QLEDs**
*Haoyu Yang, BOE Technology Group Co., Ltd., Beijing, China*

**1.3:** **Towards Commercialization: Overcoming Challenges in Ink-Jet Printing of QLEDs**
*Longjia Wu, TCL Research, Shenzhen, China*

**1.4:** ***Distinguished Paper:*** **Improved Optoelectronic Characteristics of Blue Quantum Dot Light-Emitting Diodes through Surface Engineering and Inter-Particle Spacing Control**
*Jaekook Ha, Samsung Display Co., Ltd., Yongin, South Korea*

## Session 2: New TFT Materials and Process Innovations *(Display Manufacturing)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 403B**

**Chair:** *Toshiaki Arai, Japan Display, Inc.*

**Co-Chair:** *Hennrik Schmidt, Plansee USA LLC*

**2.1:** ***Distinguished Paper:*** **Crystallization of 1 ?m Unit-Width, Well-Aligned a-IGO in Parallel for Flexible Thin-Film Transistors Exhibiting Mobility over 100 cm2 V-1 s-1 with Excellent Stability**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

**2.2:** ***Invited Paper:*** **Novel Thin Film Solutions to Accelerate High Mobility Metal Oxide TFT Based AMOLED Displays**
*Jung Bae Kim, Applied Materials, Santa Clara, CA US*

**2.3:** ***Distinguished Paper:*** **Normally-Off Top-Gate Self-Aligned Field-Effect Transistor Including Crystal InOx Formed by Hydrogen Gas-Free Sputtering with Channel Length of 3 ?m and High Field-Effect Mobility Over 75 cm2/Vs Fabricated through 400? Process**
*Yukinori Shima, Semiconductor Energy Laboratory Co., Ltd., Tochigi, Japan*

**2.4:** **Research on Back-Channel-Etched Amorphous Oxide Semiconductor Thin-Film Transistor Devices Based on 4Mask Extreme Fabrication Process**
*Meiqi Liu, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

**2.5:** **Development of 85-inch 8K VA LCDs with Large Size Oxide Technology**
*Chuanbao Luo, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

## Session 3: COE OLED Displays *(Display Systems)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 408A**

**Chair:** *Yifan Zhang, Apple, Inc.*

**Co-Chair:** *Jean-Pierre Guillou, Apple, Inc.*

**3.1:** **Polarizer-Free, High-Efficiency OLED Display Architecture Integrating Both Color Filters on Encapsulation (COE) and Microlens Array (MLA)**
*Chin-Chuan Wu, National Taiwan University, Taipei, Taiwan Roc*

**3.2:** **Development of Inkjet-Printable Materials for Color Filters in COE OLED Displays**
*Fu Li, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**3.3:** **COE-Based Low-Reflectivity Interated-Black and High-Brightness Wide-Color-Gamut Display Technology**
*Xiaojing Liu, Visionox Technology, Inc., Hefei, China*

**3.4:** **Research on Optical Improvement Scheme for BM-skip Solution of COE Products**
*Ming Yang, BOE Technology Group Co., Ltd., Chengdu, China*

## Session 4: XR Eye Tracking and Sensing *(XR Technology / Super-Sensing for Enhanced Awareness)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 408B**

**Chair:** ***Paolo Sacchetto, Apple Inc.***

**4.1:** **Eye Tracking in AI-Assisted AR Glasses Using Pancharatnam Berry Optical Elements**
*Luke Benoit, University of Central Florida, Orlando, FL US*

**4.2:** **Design and Simulation of Photodetector-Based Eye-Tracking System with Optically Defined Detection Areas**
*Takeshi Kamijo, Kyushu University, Fukuoka, Japan*

**4.3:** ***Invited Paper:*** **Event Camera Assisted All-Weather High Frequency Gaze Detection for XR Glasses and Headsets**
*Tao Jia, Yongjiang Laboratory, Ningbo, China*

**4.4:** **Multi-Aperture Superposition Optics for Compact VR: Enabling Wide Field of View and Sensor Integration**

*Kento Matuso, Kyushu University, Fukuoka, Japan*

**4.5:** **Gaze-Contingent Foveated Frame-Rate Control for Low-Power XR Devices**
*Seung-Woo Lee, Kyung Hee University, Seoul, South Korea*

## Session 5: Power Saving and Image Quality *(Display Electronics)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 404AB**

**Chair:** *Carlin Vieri, Google*

**Co-Chair:** *Darren Kim, Harman International*

**5.1:** ***Distinguished Paper:*** **LIP-Based Perceptual Optimization for Subpixel Rendering Filters**
*Bo-Jyun Chen, National Yang Ming Chiao Tung University, Wuhan, Taiwan Roc*

**5.2:** **A Design Methodology for PWM-Driven Pixel Circuits with Color-Difference Analysis**
*Jaemyung Lim, Hanyang University, Seoul, South Korea*

**5.3:** **A MicroLED Demura Algorithm on Perceptually Uniform Space for Achieving Both High-Fidelity Color and Luminance Uniformity**
*You-Chuan Liu, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

**5.4:** **A Power-Saving Algorithm for Adaptive Color Adjustment on OLED Display and Its Hardware Implement**
*Ruixin Yan, ESWIN Computing Technology Co., Ltd., Suzhou, China*

## Session 6: Field Sequential Color LCDs *(Liquid Crystal Technology / Sustainable Displays and Green Technologies)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 406AB**

**Chair:** *Xiao-Yang Huang, Ebulent Technologies Corp*

**Co-Chair:** *WenFang Sung, AUO Corporation*

**6.1:** ***Invited Paper:*** **Latest LC Materials Which Enable Field Sequential Color LC Displays**
*Sven Laut, Merck KGaA, Darmstadt, Germany, Darmstadt, Germany*

**6.2:** **RGB Mini LED Backlight for Field Sequential Color LCD**
*Jinglun He, Hisense Visual Technology Co., Ltd., Qingdao, China*

**6.3:** ***Distinguished Paper:*** **Field-Sequential-Color Liquid Crystal Devices for AR and VR Displays**
*Po-Sheng Chiu, University of Central Florida, Orlando, FL US*

**6.4:** **Application of Modified In-Plane Super-Fast Response (M-ipSFR) LCD Mode toward High Resolution VR Displays**
*Takatoshi Hirooka, Sharp Display Technology Corp., Tenri, Japan*

## Session 7: HDR & Gamma *(Applied Vision)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 409AB**

**Chair:** *Prof. Benjamin Watson, North Carolina State University*

**Co-Chair:** *Youn Jin Kim, Apple, Inc*

**7.1:** ***Invited Paper:*** **Real-Time Neural Filtering for Perceptual Enhancement of Digital Experiences**
*Anjul Patney, NVIDIA, Redmond, WA US*

**7.2:** **Ambient Light Adaptive Gamma: Ambient Light Management Solution Beyond AR/AG**
*Shengtao Zhu, Tianma Microelectronics Co., Ltd., Wuhan, China*

**7.3:** **Investigation of Brightness, Colorfulness, and Vividness in HDR Video Using a Dedicated HDR Imaging Pipeline**
*Jisu Ohk, Ulsan National Institute of Science and Technology (UNIST), Ulsan, South Korea*

## Session 8: ALD (Atomic Layer Deposition) for TFTs *(Active Matrix Devices)*

**Tuesday, May 5, 2026 / 11:00 AM - 12:30 PM / 411**

**Chair:** *Prof. Dr. Jin-Seong Park, Hanyang University*

**Co-Chair:** *Kwon-Shik Park, LG Display*

**8.1:** ***Invited Paper:*** **High Mobility Metal Oxide TFTs by Atomic Layer Deposition for AMOLED Display**
*Fa-Hsyang Chen, Visionox Technology, Inc., Kunshan, Jiangsu, China*

**8.2:** ***Invited Paper:*** **Atomic Layer Deposition of High Mobility Oxide Semiconductors for Integrated Device Applications**
*Yukiharu Uraoka, Nara Institute of Science and Technology, Nara, Japan*

**8.3:** **Highly Reliable Oxide TFTs through ALD-deposited Interfacial Gate Insulator**
*Seung-Chan Choi, LG Display. Co., Ltd., Wuhan, South Korea*

**8.4:** ***Late-News Paper:*** **Phase Controlling Layer Deposited by Atomic Layer Deposition for High Mobility and Stable Crystalline InGaO Thin Film Transistors**
*Kyungmoon Kwak, Yonsei University, Seoul, South Korea*

## Session 9: QD Electroluminescence II *(Emissive, Micro-LED, and Quantum-Dot Displays)*

**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 403A**

**Chair:** *Prof. Jeonghun Kwak, Seoul National University*

**9.1:** **Advancement of Quantum Dot-Based nanoLED Displays Using Inorganic HIL for Enhanced Photolithography Processes**
*Ukyo Shiomoto, Sharp Display Technology Corp., Nara, Japan*

**9.2:** **Lifetime Improvement by Organic-Doped QD Film in QLED Devices**
*Xiangan Song, Suzhou Govisionox Innovation Technology Co., Ltd., Kunshan, China*

**9.3:** **Electron Leakage and FRET Mitigation with a Dielectric Barrier Strategy for High-Efficiency Quantum Dot Light Emitting Diodes**
*Kumar Mallem, Southern University of Science and Technology, Shenzhen, China*

**9.4:** ***Late-News Paper:*** **Dual-Insulation Strategies for Electrical Crosstalk Suppression in High Resolution Quantum Dot Electroluminescent Devices**
*Seong-Yong Cho, Hanyang University, Ansan, South Korea*

## Session 10: Optical Materials, Surfaces, and Coatings *(Display Manufacturing)*
**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 403B**
**Chair:** *Bradley Bowden, Corning Research and Development Corporation*
**Co-Chair:** *Tian Xiao, NEXT Biometrics Inc.*

**10.1:** **Optimization of Sparkle In Display Modules with Anti-Glare Cover Glass**
*Endong Chang, Visionox Technology, Inc., Hefei, China*

**10.2:** **Super-hard dielectric Coating on Coverlens**
*Lu shenglin, Visionox Technology, Inc., Kunshan, China*

**10.3:** **Improvement of Surface Waviness for Polarizer-Free Display**
*Daeho Kim, Samsung Display, Yongin, South Korea*

## Session 11: OLED Displays I *(OLEDs)*
**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 408A**
**Chair:** *CC Lee, Visionox*
**Co-Chair:** *Ji Ho Baek, LG Display*

**11.1:** ***Invited Paper:*** **Photolithographic OLED Patterning Empowered OLED Total Solution**
*Minghan Cai, Visionox Technology, Inc., Hefei, China*

**11.2:** ***Invited Paper:*** **Next-Generation Tandem OLED for Automotive display**
*Seung-Kwang Roh, LG Display. Co., Ltd., Seoul, South Korea*

**11.3:** **Development of a New Robust Intermediate Connector Using Indium for Realizing Tandem OLED Display Exceeding 5,000 ppi by Photolithography**
*Nobuharu Ohsawa, Semiconductor Energy Laboratory Co., Ltd., Kanagawa, Japan*

**11.4:** **Design of a New Color Layer Spectrum for New WOLED Devices to Enhance Efficiency.**
*Seungcheol You, LG Display. Co., Ltd., Ganseo, Seoul, South Korea*

## Session 12: XR Sensing System & Applications *(XR Technology / Super-Sensing for Enhanced Awareness)*
**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 408B**
**Chair:** *Paolo Sacchetto, Apple Inc*

**12.1:** **Integrated AR Respiratory Mask with Indoor Navigation**
*Rigo Herold, Westsächsische Hochschule Zwickau (WHZ), Zwickau, Germany*

**12.2:** ***Distinguished Paper:*** **Augmented Reality Integration Improves Ergonomics in Dynamic Navigation for Dental Implant Surgery**
*Weifa Yang, University of Hong Kong, Hong Kong, China*

**12.3:** **Realization of a Speaker-Oriented Augmented Reality Hearing-Aid System by Synchronization of Sound Source Localization and Mouth Opening Detection**
*Hee-Jin Choi, Sejong University, Seoul, South Korea*

**12.4:** **Integrated Sensor-Processer-Display System for Real-Time Visualization of Plant Conditions**
*Jae Joon Kim, Electronics and Telecommunications Research Institute (ETRI), Daejeon, South Korea*

**12.5:** ***Invited Paper:*** **Optical Sensor Products and Technologies STMicroelectronics is Bringing to the XR Headset Ecosystem**
*Jonathan Steckel, STMicroelectronics, Crolles, France*

## Session 13: Driving Schemes and GIP *(Display Electronics)*
**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 404AB**
**Chair:** *Feng-Ting Pai, Novatek Microelectronics Corp.*
**Co-Chair:** *Tsang-Hong Wang, BOE*

**13.1:** ***Invited Paper:*** **The New OLED TDDI Driver IC Architecture**
*HUAJUN ZHUANG, Xiaomi, Beijing, China*

**13.2:** **Development of Low-Cost, Low-Power Consumption, and Narrow-Frame IGZO Panels for IT MFD and DeMUX**
*Tatsuya Kawasaki, Sharp Display Technology Corp., Kameyama, Japan*

**13.3:** **Seamless Switching Technology of Pixel Clock on AMOLED Notebook Display**
*Zhong-jie Wang, BOE Technology Group Co., Ltd., Chengdu, China*

**13.4:** **A High-Refresh Rate and Large-Size OLED Display with DRD Gate Driver for Premium TVs**
*Hong Shin, LG Display. Co., Ltd., Gyeonggi, South Korea*

## Session 14: High Frame Rate LCD *(Liquid Crystal Technology)*
**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 406AB**
**Chair:** *Linghui Rao, Meta*
**Co-Chair:** *Xibin Shao, BOE*

**14.1:** **A New Dual Gate LCD Design with DLG Support for High Transmittance**
*Xin Zhang, BOE Technology Group Co., Ltd., Beijing, China*

**14.2:** **A New Dual Gate Pixel Structure Suitable for Large-Size and High-Refresh-Rate LCD Panels**
*Fulan Zhong, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**14.3:** **High Mobility Oxide for Touch Demux LCD Using Single tTED IC**
*Yanrui Lin, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

## Session 15: Visual Factors in XR *(Applied Vision / XR Technology)*

**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 409AB**

**Chair:** *Scott Murdison, Meta*

**Co-Chair:** *Yun Wang, Meta*

**15.1:** ***Invited Paper:*** **Visual Performance Standards for Virtual and Augmented Reality Displays**
*John Penczek, University of Colorado, Boulder, Boulder, CO US*

**15.2:** ***Invited Paper:*** **Environment to Bits: What do AR Systems Need to Know About the Environment to Ensure High Quality Display Experience**
*Takahiro Doi, Meta Reality Labs, Redmond, WA US*

**15.3:** ***Invited Paper:*** **Towards Building Psychophysics-informed Quality Metrics for Augmented Reality Displays**
*Dongyeon Kim, University of Cambridge, Cambridge, United Kingdom*

**15.4:** ***Invited Paper:*** **Color Aliasing Suppression in a 3-Panel AR Display via Constrained Rendering**
*Pin-Chieh Huang, Reality Labs (Meta), Redmond, WA US*

## Session 16: Novel TFT Structures *(Active Matrix Devices)*

**Tuesday, May 5, 2026 / 2:00 PM - 3:30 PM / 411**

**Chair:** *June-Woo Lee, AUO Corporation*

**Co-Chair:** *Jong Uk Bae, LG Display*

**16.1:** ***Invited Paper:*** **High Performance and Reliable 4F2 IGZO Vertical Channel Transistor (VCT) for Advanced DRAM Cell and High Resolution Display**
*Daewon Ha, Samsung Electronics, Co., Ltd., Hwaseong, South Korea*

**16.2:** ***Distinguished Paper:*** **Subthreshold Swing Control in IGZO TFTs Using Floating-Gate Engineering for AMOLED Displays**
*Sunyeol Bae, Seoul National University, Seoul, South Korea*

**16.3:** ***Invited Paper:*** **Recent Progress in Low-Resistance Gate Metal of LTPS TFT Devices**
*Jia-Hong Ye, AUO Corp., Hsinchu, Taiwan Roc*

## Session 17: QD Electroluminescence III *(Emissive, Micro-LED, and Quantum-Dot Displays)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 403A**

**Chair:** *Xiao Wei Sun, Southern University of Science and Technology*

**17.1:** **Improvement in Luminance of Active-Matrix nanoLED Display by Enhancing Anode Electrode Flatness**
*Masaki Yamanaka, Sharp Display Technology Corp., Mie, Japan*

**17.2:** **Top Emission Full Color Active Matrix Quantum Dot Light Emitting Displays Based on an Overlay Process**
*Zhimin Yan, Suzhou Govisionox Innovation Technology Co., Ltd., Kunshan, China*

**17.3:** ***Distinguished Paper:*** **Intense Light Treatment of Inkjet Printed Metal Oxide HIL for the Electroluminescent QD LEDs**
*Jae Yeong Jeong, Gyeongsang National University, Jinju-City, South Korea*

**17.4:** **Fabrication of a Full-Color Quantum Dot Display Based on Slit Coating**
*Hanbing Zhang, BOE Technology Group Co., Ltd., Beijing, China*

## Session 18: Equipment for Display Manufacturing *(Display Manufacturing)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 403B**

**Chair:** *Dr. Chiwoo Kim, APS Holdings*

**Co-Chair:** *Lai Zhao, Applied Materials, Inc.*

**18.1:** ***Invited Paper:*** **Development of the 12-inch High-poi Deposition System**
*Eiichi matsumoto, Canon Tokki Corp., Niigata, Japan*

**18.2:** **Enhanced Sputtering Process for the Characteristics of Electrode in OLEDs**
*Myungsoo Huh, Samsung Display Co., Ltd., Yongin, South Korea*

**18.3:** **Solderable Anisotropic Polymer Composite Materials and Their Mechanical Bonding Characteristics**
*Seung Han, hnshightech, Wuhan, South Korea*

**18.4:** **Deep UV Femtosecond Laser Cutting Process and Its Application for Thin-film Flexible Displays Manufacturing**
*Woohyun Jung, Samsung Display, Yongin, South Korea*

## Session 19: OLED Displays II *(OLEDs)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 408A**

**Chair:** *DZ Peng, Tianma*

**Co-Chair:** *Yuan-Chun Wu, China Star Optoelectronics*

**19.1:** ***Invited Paper:*** **A Novel Pixel Arrangement: Real RGB in OLED LTPO Display**
*ChunYi Lee, Xiaomi, Beijing, China*

**19.2:** ***Invited Paper:*** **TCL CSOT 27inch 4K Display Using Inkjet Printing Technology**
*Chenglei Nie, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**19.3:** **Improvement of Motion Blur in Low Brightness and Grayscale of OLED Display Devices**
*Pan Wei, Visionox Technology, Inc., KunShan, China*

**19.4:** **Suppression of Internal Reflection and Enhancement of Light Extraction in Rigid Top-Emission OLEDs Using an Index Matching Layer**
*Horyun Chung, Samsung Display Co., Ltd., Yongin, South Korea*

## Session 20: Micro Display Based on Glass for XR *(XR Technology)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 408B**

**Chair:** *Dr. Joon Young Yang, LG Display Co. Ltd*

**Co-Chair:** *Dr. Robert Visser, Applied Materials*

**20.1:** ***Invited Paper:*** **Advancing AR/VR: Innovative Strategies for Future Display Solutions**
*Sug Woo Jung, Samsung Display Co., Ltd., Yongin, South Korea*

**20.2:** **A 1512 PPI Real RGB Glassed-OLED Display for VR**
*Rong Juan Yang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**20.3:** **A Study on the Design Scheme of a 2540 PPI Fast LCD for VR**
*Xinfang Li, BOE Technology Group Co., Ltd., Beijing, China*

**20.4:** **High-Performance Micro-OLED Technology Empowering 1,500ppi real RGB Glass-based VR Display**
*Wenfeng Song, Visionox Technology, Inc., Beijing, China*

## Session 21: Memory-Efficient Architectures for Display ICs *(Display Electronics)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 404AB**

**Chair:** *Dr. Moon-Sang Hwang, Samsung Display Co., Ltd.*

**21.1:** **A Memory Sharing Algorithm Compensation Scheme Combining De Burn-in and Demura for OLED Displays**
*Fei Fang, Visionox Technology, Inc., Hefei, China*

**21.2:** **A Compression Scheme for Enhanced Demura Performance in AMOLED Displays**
*Chunhui Ren, Visionox Technology, Inc., Wuhan, China*

**21.3:** **Finite-Field-Based Data Reordering with a Single-Line Memory**
*Yong-Su Yoo, LG Electronics, Seoul, South Korea*

**21.4:** **Adaptive 3D Integer DCT-Based Compression for Mura Data**
*Jaechan Cho, LX Semicon, Seoul, South Korea*

## Session 22: Low Frequency and High Aperture Ratio LCDs *(Liquid Crystal Technology / Sustainable Displays and Green Technologie)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 406AB**

**Chair:** *Koichi Miyachi, JSR Corporation*

**Co-Chair:** *Yoshitomo Isomae, Sony Semiconductor Solutions Co.*

**22.1:** ***Invited Paper:*** **Development of a 16-inch WQXGA Display that Achieves Both Flicker-Free 1Hz Drive and High Contrast Ratio**
*Tetsuo Fukaya, Sharp Display Technology Corp., MIE, Japan*

**22.2:** **Improvement Strategies for Flicker in Low Frequency LCD Displays**
*Lihong Gui, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

**22.3:** **DIT Technology Applied to VA-Type TFT LCDs**
*An-thung Cho, HKC Optoelectronics Technology Co., Ltd., Chuzhou, China*

**22.4:** **A 65-inch WRGB Liquid Crystal Display with High Transmittance and 4K-Lossless Resolution**
*Hu Shiben, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

## Session 23: Temporal Visual Factors *(Applied Vision)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 409AB**

**Chair:** *Jang Jin Yoo, LG Display*

**Co-Chair:** *Dongchuan Chen, BOE Technology Group Co., Ltd.*

**23.1:** **A Study on the Impact of Refresh Rate on Real-time FPS Gaming Performance**
*Yan Jin, LG Display. Co., Ltd., Seoul, South Korea*

**23.2:** **Dimming Flicker as an Artifact of Moving Stimulus on Full Array Local Dimming (FALD) Displays**
*Hyosun Kim, Samsung Display Co., Ltd., Yongin City, South Korea*

**23.3:** **Field-Sequential Color LCD TV with Simultaneously Optimized Color Breakup, Distortion, and Flicker**
*Feiyi Wu, Sun Yat-sen University, Guangzhou, China*

## Session 24: Highly Reliable TFTs *(Active Matrix Devices)*

**Tuesday, May 5, 2026 / 4:00 PM - 5:30 PM / 411**

**Chair:** *Junho Song, Korea University*

**24.1:** **High-Mobility Transparent Amorphous Oxide Thin Film Transistor with Excellent Stress Stability**
*Wenqi Liang, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

**24.2:** **The Development of Novel Oxide Thin Film Transistors with High Mobility, Good Illuminance Stability, and High Resistibility of High Transverse VoltageV.02**
*Hui Xiao, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

## Session 25: Infrared Quantum Dot *(Emissive, Micro-LED, and Quantum-Dot Displays)*
**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 403A**
**Chair:** *Peter Palomaki, Palomaki Consulting*

**25.1:** ***Invited Paper:*** **Mid-Infrared LEDs Using Colloidal Quantum Dots**
*Philippe Guyot-Sionnest, University of Chicago, Chicago, IL US*

**25.2:** **Synthesis of Cu:InP/ZnSe/ZnS Quantum Dots and Their Application in NIR Color Converter Photoresists**
*Ray-Kuang Chiang, Taiwan Nanocrystals Corp. Ltd., Tainan City, Taiwan Roc*

**25.3:** **Flexible SWIR Area Sensor with PbS Quantum-Dot Photodiodes**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

## Session 26: Printing for Heterogeneous Manufacturing *(Display Manufacturing / Heterogeneous Integration on Glass and Other Substrates for Emerging Applications)*
**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 403B**
**Chair:** *Greg Gibson, nTact*
**Co-Chair:** *Arokia Nathan, Darwin College, University of Cambridge*

**26.1:** ***Invited Paper:*** **14-inch 2.8K Inkjet Printed OLED Display**
*Weiran Cao, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**26.2:** **Improving Printing Stability of 1pL Inkjet Head for Mass Production of High-Resolution Display Panels**
*Satoshi Suemasu, Panasonic Production Engineering Co., Ltd, Osaka, Japan*

**26.3:** **A Comparative Analysis of Inkjet-Printed and Fine Metal Mask Patterned OLED Notebook Panels: Benefits, Challenges, and Costs**
*Charles Annis, Omdia, Kyoto, Japan*

**26.4:** **Laminated and Heterogeneous Integration for Opto-electronics via Nano-Printing**
*Zhixuan Zhao, The University of Hong Kong, Hong Kong, Hong Kong*

## Session 27: OLED Devices I *(OLEDs)*
**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 408A**
**Chair:** *Franky So, North Carolina State University*
**Co-Chair:** *Anna Hayer, Merck KGaA*

**27.1:** ***Invited Paper:*** **Unlocking the Full Potential of Next Generation OLEDs by Sensitized Fluorescence**
*Lian Duan, Tsinghua University, Beijing, China*

**27.2:** **Development of High Performance pTSF Devices for BT.2020 Requirements**
*Guomeng Li, Visionox Technology, Inc., Beijing, China*

**27.3:** ***Invited Paper:*** **Enhancing OLED Efficiency through Dual Red-Emitting Materials: Insights from Kinetic Modeling**
*Long Chen, Tianma Microelectronics Co., Ltd., Shanghai, China*

**27.4:** **Novel p-Dopants for Low Lateral Leakage and High Performance**
*Piermaria Pinter, Novaled GmbH, Dresden, Germany*

## Session 28: Advanced Optical Systems for XR *(XR Technology)*
**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 408B**
**Chair:** *Yi Pai Huang, Apple, Inc.*
**Co-Chair:** *Jisoo Hong, Korea Electronics Technology Institute*

**28.1:** ***Invited Paper:*** **Novel Light Field Display Technology for Commercialization**
*Hoon Kang, LG Display. Co., Ltd., Seoul, South Korea*

**28.2:** **Full Depth-of-Field Light-Field Displays by Exploiting a New Degree of Freedom: Synthetic-Aperture Wavefront Coding**
*MingJing Wang, Sun Yat-Sen University, Guangzhou, China*

**28.3:** **Fast GPU-Based Ray-Rracing Method for Designing Waveguide AR Displays**
*Yefu Zhang, University of Central Florida, Orlando, FL US*

**28.4:** **Ultra-Thin Pancake Lens with Curved Surface Lamination and Segmented Aspheric Elements**
*fang cheng, BOE Technology Group Co., Ltd., Beijing, China*

**28.5:** ***Late-News Paper:*** **Quantized RC-LED Matrix Platform for Advanced LEDoS Microdisplay**
*Hyung Seok Bang, Seoul National University, Seoul, South Korea*

## Session 29: Display Compensation Technologies I *(Display Electronics)*
**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 404AB**
**Chair:** *Weijun Yao, Apple*
**Co-Chair:** *Lei Liu, BOE*

**29.1:** ***Invited Paper:*** **Single-Pin Temperature Data Transmission Between Ultrasonic Fingerprint Sensor IC and DDIC & Machine Learning-Based Full-Screen Prediction for OLED Panel Temperature Compensation and Image Quality Improvement**
*Bin Zhang, BOE Technology Group Co., Ltd., Beijing, China*

**29.2:** **Pixel-Level High-Precision IR-Drop Compensation for Multi-Scenario AMOLEDs via Image-Based Luminance Modeling**
*Byong-Deok Choi, Hanyang University, Seoul, South Korea*

**29.4:** **Hybrid a-IGZO/Si Current Mirror: Heterogeneous Integration and Electrical Performance**
*Yumin Yun, Seoul National University, Seoul, South Korea*

## Session 30: Liquid Crystal Optics *(Liquid Crystal Technology)*

**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 406AB**

**Chair:** *Prof. Jian Gang Lu, Shanghai Jiao Tong University*

**Co-Chair:** *Jenn Jia Su, AU Optronics Corporation*

**30.1:** ***Invited Paper:*** **Design and Fabrication of PVG Waveguides for High-Efficiency Full-Color AR Smart Glasses**
*Koichi Igeta, Japan Display, Inc., Tokyo, Japan*

**30.2:** ***Invited Paper:*** **High Efficiency LCoS Laser Projector with Passive Despeckling**
*Julian Ni, Meta Platforms, Inc., Redmond, WA US*

**30.3:** **Toward Wide-Eyebox Holographic Near-Eye Displays Using Tunable Liquid Crystal Beam Deflector**
*Hak-Rin Kim, Kyungpook National University, Daegu, South Korea*

## Session 31: Perovskite Nanocrystals for Emerging Displays *(Emerging Technologies and Applications / Heterogeneous Integration on Glass and Other Substrates for Emerging Applications)*

**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 409AB**

**Chair:** *Dr. Tae-Woo Lee, Seoul National University*

**Co-Chair:** *Abhishek Srivastava, Hong Kong University of Science & Technology*

**31.1:** ***Invited Paper:*** **Stabilization of Perovskite Nanocrystals for Next-Generation Display**
*Tae-Woo Lee, Seoul National University, Seoul, South Korea*

**31.2:** ***Invited Paper:*** **Controlling the Direction of Light Emission in Anisotropic Perovskite Nanoparticles Using Alignment, Fusing, and Surface Interactions**
*Carissa Eisler, University of California, Los Angeles, Los Angeles, CA US*

**31.3:** ***Invited Paper:*** **Stable Perovskite Quantum Dots for Liquid-Crystal Displays**
*Chao Fan, Zhejiang University, Hangzhou, China*

**31.4:** ***Distinguished Paper:*** **Polarized Emission Perovskite Nano Rod Enhancement Film for Advanced LCD Devices**
*Jianxian Song, The Hong Kong University of Science and Technology, Hong Kong, China*

**31.5:** ***Late-News Paper:*** **Polymer-Enhanced Cs?Cu?I? Perovskite Scintillator Films with Improved Stability and X-Ray Imaging Quality**
*Seong-Yong Cho, Hanyang University, Ansan, South Korea*

## Session 32: Ferroelectric TFTs *(Active Matrix Devices)*

**Wednesday, May 6, 2026 / 8:30 AM - 10:00 AM / 411**

**Chair:** *Mike Hack, Universal Display Corporation*

**Co-Chair:** *Hsing-Hung Hsieh, HP Inc.*

**32.1:** ***Invited Paper:*** **Recent Progresses in Ferroelectric Thin-Film Transistors with Oxide Semiconductor Channels**
*Min Hyuk Park, Seoul National University, Seoul, South Korea*

**32.2:** **A New Ferroelectric TFT Structure for Micro-LED Pixel with Pulse Width Modulation**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

## Session 33: Heterogeneous Electronics for Emissive Displays *(Emissive, Micro-LED, and Quantum-Dot Displays / Heterogeneous Integration on Glass and Other Substrates for Emerging Applications)*

**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 403A**

**Chair:** *Taka Tsujimura, JDI*

**Co-Chair:** *Michele Ricks, EMD Electronics*

**33.1:** **Monolithic GaN n-MOSFET-Micro-LED Integration as a Building Block for Complementary 2T1C Active-Matrix Microdisplays**
*Yanzhen Yin, Visionox Technology, Inc., Shenzhen, China*

**33.2:** **Assembly of Micro-LED Arrays via Simultaneous Transfer and Bonding (SITRAB) Technology**
*Jungho Shin, Electronics and Telecommunications Research Institute (ETRI), Daejeon, South Korea*

**33.3:** **Flexible Temperature Sensor with Colloidal Quantum Dots (CQD)**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

**33.4:** **Dual-side Transparent Micro LED Display**
*Yutang Tsai, AUO Corp., Hsinchu, Taiwan Roc*

## Session 34: Micro LED Manufacturing *(Display Manufacturing)*

**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 403B**

**Chair:** *Dr. Andriy Romanyuk, Glas Troesch AG*

**Co-Chair:** *Oliver Haupt, Coherent Corp.*

**34.1:** **Development and Investigation of Printed Chip Interconnects Using the Example of MicroLED Pixels**

*Kai Waldner, Institute for Large Area Microelectronics, University of Stuttgart, Stuttgart, Germany*

**34.2:** **A Manufacturing and Simulation Technology for Light-Extraction Microstructures**
*Peng Liu, BOE Technology Group Co., Ltd., Beijing, China*

**34.3:** **Wafer-Scale Hybrid 3D Integration of Micro-LEDs and IGZO TFTs via Simultaneous Substrate Removal and Bonding**
*Sungmin Lee, Yeungnam University, Gyeongsan, South Korea*

**34.4:** **3,000 PPI Perovskite Micro Display Pixels Fabricated by Shadow Masked Thermal Co Evaporation**
*Bryan Siu Ting TAM, The Hong Kong University of Science and Technology, Hong Kong, Hong Kong*

## Session 35: OLED Devices II *(OLEDs)*

**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 408A**

**Chair:** *Donghee Nam, Meta*

**Co-Chair:** *Toshiaki Ikuta, SK materials JNC*

**35.1:** ***Invited Paper:*** **Unlocking the Potential of High Efficiency Blue Phosphorescent OLEDs**
*Fadi Jradi, Universal Display Corp., Ewing, NJ US*

**35.2:** **Intelligent Color-Temperature-Adjustable Lighting Based on Novel Stacked OLEDs**
*Can Yuan, BOE Technology Group Co., Ltd., Hefei, China*

**35.3:** **Simulation-Assisted Analysis and Optimization of Blue PhOLED Devices**
*Bart Klumpers, Software for Chemistry & Materials B.V., Amsterdam, Netherlands*

**35.4:** **Exciplex-Assisted Blue Fluorescent OLEDs with Reduced Operating Voltage and Enhanced Device Efficiency**
*Odugu Kumar, Kyung Hee University, Seoul, South Korea*

## Session 36: AR Light Engine *(XR Technology)*

**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 408B**

**Chair:** *Nikhil Balram, Mojo Vision*

**Co-Chair:** *Yun Wang, Meta*

**36.1:** ***Invited Paper:*** **Analysis on Technical Development of LCoS, LEDoS, and Waveguide Used for AR Glasses**
*Yubin Chiou, TrendForce Corp., Taipei, Taiwan Roc*

**36.2:** ***Distinguished Paper:*** **Ultracompact, on-Axis LCoS Illumination System with Local Dimming for Waveguide-Based AR Displays**
*Hosna Tajvidi Safa, University of Central Florida, Orlando, FL US*

**36.3:** ***Invited Paper:*** **Unlocking MicroLED's Potential: Next-Gen BEOL Integration for Scalable, High-Performance Displays**
*Karan Khullar, GlobalFoundries, Dresden, Germany*

**36.4:** ***Invited Paper:*** **Direct Retinal Projection by Meta-Optic Mirror for Smart Glasses**
*Tomohito Mizuno, TDK Corp., Wuhan, Japan*

**36.5:** ***Late-News Paper:*** **High-Contrast Dual-Edge Color-Sequential Front-Lit LCOS with Local Dimming Concept for AR Glasses**
*Kuan-Yu Chen, Himax Display Inc., Tainan, Taiwan Roc*

## Session 37: Display Compensation Technologies II *(Display Electronics)*

**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 404AB**

**Chair:** *Sangmoo Choi, Google LLC*

**Co-Chair:** *Hopil Bae, Apple, Inc.*

**37.1:** **A Novel Stress Model Compensation Method for OLED Panel to Solve Short Term Image Sticking**
*Hao-Ping Ku, Novatek Microelectronics Corp., Zhubei City, Taiwan Roc*

**37.2:** **Compensation of Anode-Reset-Induced Luminance Non-Uniformity in OLED Display**
*Dohoon Lee, Samsung Electronics, Hwa-sung, South Korea*

**37.3:** **Lifetime Compensation Scheme for Oxide Active Privacy Displays**
*Pengkun Zheng, Visionox Technology, Inc., Hefei, China*

## Session 38: Ferroelectric Liquid Crystals *(Liquid Crystal Technology)*

**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 406AB**

**Chair:** *Dr. Philip Chen, National Yang Ming Chiao Tung University*

**38.1:** **New Ferroelectric Liquid Crystal suitable for LCOS and SLM with Fine Pixels**
*Tomohiro Ando, Citizen Finedevice Co., Ltd., Tomi, Japan*
*Chris Mathew, State Key Laboratory of Displays and Opto-Electronics and Centre for Display Research, Department of Electronic and Computer Engineering, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, Kowloon, Hong Kong*

**38.3:** **Fine-Tuning Parameters of Electrically Suppressed Helix Ferroelectric Liquid Crystals by Variation of Chemical Structure of Components and Their Composition**
*Valerii Vashchenko, State Key Laboratory of Displays and Opto-Electronics and Centre for Display Research, Department of Electronic and Computer Engineering, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, Kowloon, Hong Kong*

**38.4:** **High Tilt ESHFLC: A New Electro-Optical Mode for High-Speed Continuous Polarization Rotation.**
*Vigneshwaran Swaminathan, Hong Kong University of Science and Technology, Hong Kong, Hong Kong*

**Session 39: Perovskites: Challenges and Opportunities *(Emerging Technologies and Applications / Next-Generation Materials: Perovskites and Beyond / Emissive, Micro-LED, and Quantum-Dot Displays)***
**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 409AB**
**Chair:** *Abhishek Srivastava, Hong Kong University of Science & Technology*
**Co-Chair:** *Tae-Woo Lee, Seoul National University*

**39.1:** ***Invited Paper:*** **Perovskite LEDs and Lasers**
*Dawei Di, Zhejiang University, Hangzhou, China*

**39.2:** ***Invited Paper:*** **Controlled Epitaxial Growth and Fabrication of Single Crystal Hybrid Halide Perovskites**
*Sheng Xu, Stanford University, Palo Alto, CA US*

**39.3:** ***Late-News Paper:*** **Cold-injection Synthesis of Perovskite Nanocrystals for High-Efficiency Next-Generation Displays**
*Tae-Woo Lee, Seoul National University, Seoul, South Korea*

**39.4:** ***Panel:*** **Panel: Perovskite: Challenges and Opportunities**

**Session 40: High Mobility Oxide TFTs *(Active Matrix Devices)***
**Wednesday, May 6, 2026 / 10:30 AM - 12:00 PM / 411**
**Chair:** *Hyun Jae Kim, Yonsei University*
**Co-Chair:** *James Chang, Apple, Inc.*

**40.1:** ***Distinguished Paper:*** **High-Frame-Rate Display Using Short-Channel-Length Crystal IO FET on Backplane**
*Koji Kusunoki, Semiconductor Energy Laboratory Co., Ltd., Wuhan, Japan*

**40.2:** ***Invited Paper:*** **Advancing Oxide Thin-Film Transistors: Trends and Perspectives for Next-Generation AMOLED Displays**
*I. Sak Lee, Yonsei University, Seoul, South Korea*

**40.3:** ***Panel:*** **High-Mobility Oxide (HMO) TFTs**

**Session 41: Advanced Perovskite Materials and LEDs *(Emissive, Micro-LED, and Quantum-Dot Displays / Next-Generation Materials: Perovskites and Beyond / Emerging Technologies and Applications)***
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 403A**
**Chair:** *Dr. Tae-Woo Lee, Seoul National University*
**Co-Chair:** *Abhishek Srivastava, Hong Kong University of Science & Technology*

**41.1:** ***Invited Paper:*** **Perovskite Quantum Dot-Based 650nm Red Light for Healthy Displays**
*Jing Li, Zhijing Beijing Nano Technology Co. Ltd., Beijing, China*

**41.2:** ***Invited Paper:*** **Highly Efficient and Stable Perovskite Light Emitting Diodes**
*Wallace Chik-Ho Choy, The University of Hong Kong, Pokfulam, Hong Kong*

**41.3:** ***Invited Paper:*** **High-Temperature Superfluorescence in Perovskites: A New Platform for Quantum Light**
*Franky So, North Carolina State University, Raleigh, NC US*

**41.4:** ***Invited Paper:*** **Nanostencil and Molecular-Beam Holographic Lithography for Scalable Fabrication of Submicrometer Organic and Perovskite LEDs**
*Chih-Jen Shih, ETH Zurich, Zurich, Switzerland*

**Session 42: Green Design and Life Cycle Assessment *(Display Manufacturing / Sustainable Displays and Green Technologies)***
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 403B**
**Chair:** *Seth Coe-Sullivan, NS Nanotech*
**Co-Chair:** *Bradley Bowden, Corning Research and Development Corporation*

**42.1:** **Analysis of Carbon Emissions in Display Circularity and Upgrades**
*Hung-Che Lin, AUO Corp., Hsinchu, Taiwan Roc*

**42.2:** **Integrated Thermoplastic Multilayer Circuitry with Self-Aligned Interconnect Compensation for Automotive Cockpits**
*Li-Wei Yao, Industrial of Technology Research Institute, Hsinchu, Taiwan Roc*

**42.3:** **Stamping Application and Structural Optimization of Post-Consumer Recycled (PCR) Material Backcovers**
*Zihan Wang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**42.4:** **Assessing Product Carbon Footprint Data Quality within the PACT Framework and Its Strategic Application for Value Chain Communication Evidence from Panel Products**
*Jia-You Guo, AUO Corp., Hsinchu, Taiwan Roc*

**Session 43: OLED Devices III *(OLEDs)***
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 408A**
**Chair:** *Yifan Zhang, Apple, Inc.*
**Co-Chair:** *Malte Gather, University of Cologne*

**43.1:** ***Invited Paper:*** **Unveiling the Device Characteristics of OLEDs with the Simultaneous Measurement of the Displacement Current and the Current Density-Voltage-Luminance (DC-JVL)**
*Masaru Inoue, TOYOTech LLC, Fremont, CA US*

**43.2:** **Highly Stable and High Color-Purity Blue Phosphorescent OLEDs Based on Tetradentate Pt (II) Complex**
*Hyunmin Cho, Kyunghee University, Seoul, South Korea*

**43.3:** **The Mechanism of Thermal Instability in Low-Voltage OLED Capacitance Probed by Modulus Spectroscopy**

*Long Chen, Tianma Microelectronics Co., Ltd., Shanghai, China*

**43.4:** **The Understanding and Improvement of Luminance Overshoot on Tandem OLED Production**
*Xiaoning Liu, Visionox Technology, Inc., Hefei, China*

## Session 44: VR Display and Optics *(XR Technology)*
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 408B**
**Chair:** *Ruiqing Ma, Meta*
**Co-Chair:** *Shin Tson Wu, University Of Central Florida, College of Optics and Photonics*

**44.1:** **Micro OLED Display Exceeding 8000 ppi Using Crystal IO FETs**
*Hidetomo Kobayashi, Semiconductor Energy Laboratory Co., Ltd., Atsugi, Japan*

**44.2:** **150,000nits Full-color Native RGB Single Junction 3,386PPI Micro-OLED**
*Kuo-Cheng Hsu, Taizhou Guanyu Technology Co., Ltd, Taizhou City, Zhejiang Province, China*

**44.3:** ***Invited Paper:*** **High-Resolution OLED Microdisplay for Near-Eye Display Applications**
*Kukjoo Kim, Electronics and Telecommunications Research Institute, Daejeon, South Korea*

**44.4:** **Compact and Lightweight VR Glasses using Double Path Pancake Optics**
*NARU USUKURA, Sharp Display Technology Corp., Tenri, Japan*

## Session 45: MicroLED Driving I *(Display Electronics)*
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 404AB**
**Chair:** *Jacob (Minhyuk) Choi, Meta*
**Co-Chair:** *Weijun Yao, Apple*

**45.1:** **LTPO TFT-Based Micro-LED PWM Pixel Circuit with Compact Feedback and VTH Compensation for Enhanced Low-Gray Expression**
*Jaybum Kim, Seoul National University, Seoul, South Korea*

**45.2:** **Oxide-based Micro-LED Pixel Circuit Employing a Nonlinear Ramp Sweep Generator for Enhanced Low Gray-Level Resolution**
*Subin Kim, Seoul National University, Seoul, South Korea*

**45.3:** **Micro-LED Driving Circuit with TFT and Supply Voltage Compensation for Improved Luminance Uniformity Using Multi-Emission Mode**
*Chung-Tien Chiu, National Cheng Kung University, Tainan, Taiwan Roc*

**45.4:** **A New Progressive Digital PWM Driving Method for Micro-LED Displays**
*Hye-Won Woo, Sungkyunkwan University, Suwon, South Korea*

## Session 46: Liquid Crystal Based Phase Modulation *(Display Measurement)*
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 406AB**
**Chair:** *Dr Akihiro Mochizuki, I-CORE Technology, LLC*
**Co-Chair:** *Philip Bos, Kent State University*

**46.1:** ***Invited Paper:*** **Optical Multi-Parameter Analyzer: Versatile Measurement Platform for Liquid Crystal Materials and Devices**
*Oleksandr Buchnev, University of Southampton, Southampton, United Kingdom*

**46.2:** **Polarization-Independent Hybrid Nematic Liquid Crystal Grating for Phase Modulation**
*Zhao-Yi Chen, State Key Laboratory of Displays and Opto-Electronics and Centre for Display Research, Department of Electronic and Computer Engineering, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, Kowloon, Hong Kong*

**46.3:** **Liquid Crystal Based Neutral Density Filter with High Contrast and Low Angular Dependency**
*Hiroaki Asagi, Sharp Display Technology Corp., Nara, Japan*

**46.4:** **Research on Dye-doped Liquid Crystal Dimming Technology for Electronic Neutral Density Filter**
*Xiaoqian Ju, BOE Technology Group Co., Ltd., Beijing, China*

## Session 47: Glass Interposer in AI Packaging *(Emerging Technologies and Applications / Heterogeneous Integration on Glass and Other Substrates for Emerging Applications)*
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 409AB**
**Chair:** *Arokia Nathan, Darwin College, University of Cambridge*
**Co-Chair:** *Ian Underwood, University of Edinburgh*

**47.1:** ***Invited Paper:*** **Glass Core Substrates – Advanced Packaging Pivot driving future AI and HPC Chip Performance**
*Srinivas Pietambaram, Substrate Packaging Technology Development, Intel Foundry, Intel Corp., Chandler, AZ US*

**47.2:** **Study of ultra-fine Redistribution Layers based on Hybrid Glass Substrate**
*Feng Liu, BOE Technology Group Co., Ltd., Beijing, China*

**47.3:** ***Invited Paper:*** **Technological Development of Next-Generation 2.5D/2.xD Packages, Panel-Level Interposers, and Related Materials through JOINT2 Activities**
*Hidenori Abe, Resonac Corp., Tokyo, Japan*

**47.4:** ***Invited Paper:*** **Optimization of Glass Core Substrate Design for Energy-Efficient High-Density AI Server Packages**
*Satoru Kuramochi, Dai Nippon Printing, Kashiwashi, Japan*

## Session 48: Innovative Circuits I *(Active Matrix Devices)*
**Wednesday, May 6, 2026 / 2:00 PM - 3:30 PM / 411**

**Chair:** *James Lee, AUO Corporation*
**Co-Chair:** *Norbert Fruehauf, University of Stuttgart*

**48.1:** ***Invited Paper:*** **A Study on GOA Driver Circuit for OLED Display**
*Ming Hu, BOE Technology Group Co., Ltd., Chengdu, China*

**48.2:** **Development of 12.7inch 2.8K AMOLED Panel Using Fully High Mobility Oxide TFTs which can Realize 240Hz Refresh Rate**
*Xuehuan Feng, Tianma Microelectronics Co., Ltd., Xiamen, China*

**48.3:** **The First Low-Power Consumption Liquid Crystal Display Panel Based on Dynamic Local Refresh Strategy of 1-120 Hz**
*Haoxiong Zhang, BOE Technology Group Co., Ltd., Beijing, China*

**48.4:** **A Gen-8.6-Fabricated, High-Performance Hybrid Full-Oxide Backplane for Inkjet-Printed OLED Displays**
*Chenning Liu, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

## Session 49: Emerging Perovskite Emitters *(Emissive, Micro-LED, and Quantum-Dot Displays)*

**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 403A**
**Chair:** *Dr. Tae-Woo Lee, Seoul National University*
**Co-Chair:** *Abhishek Srivastava, Hong Kong University of Science & Technology*

**49.1:** ***Invited Paper:*** **Perovskite vs. InP Quantum Dots: Synthesis and Prospects as Classical and Quantum Emitters**
*Maksym Kovalenko, ETH Zurich and Empa, Zurich, Switzerland*

**49.2:** ***Invited Paper:*** **Ultra-Stable, Solution-Processable Perovskite@SiO? Nanospheres via High-Temperature Confined Synthesis**
*Liang Li, Macau University of Science and Technology, Macao, China*

**49.3:** ***Invited Paper: Distinguished Paper:*** **High-Optical Density Perovskite Color Converters for MicroLED Microdisplays**
*Bernard Wenger, Helio Display Materials, Oxford, United Kingdom*

**49.4:** **Synthesis of Pure-Red-Emission Perovskite Quantum Dots with High Color Purity by A-Site Exchange with Lecithin for Display**
*Kenshin Yoshida, Yamagata University, Yonezawa, Japan*

## Session 50: Green Materials and Processes *(Display Manufacturing / Sustainable Displays and Green Technologies)*

**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 403B**
**Chair:** *WenFang Sung, AUO Corporation*
**Co-Chair:** *Greg Gibson, nTact*

**50.1:** **PFAS-Free Anti-Fingerprint Coatings for Automotive Display**
*Nikhil Puranik, Henkel Innovation, Henkel Corp., Lexington, MA US*

**50.2:** **Implementation of Eco-Friendly Display Technology Through Sustainable PET Materials**
*Hyeran Park, LG Display. Co., Ltd., Seoul, South Korea*

**50.3:** **Non-Toxic Solvent Formulation and Waveform Optimization for Highly Uniform Inkjet-Printed OLED EMLs**
*Ji Eun Kim, OLEDON, Yongin City, South Korea*

**50.4:** **High Transparent Polyimide with NMP Free Solvent for AMOLED Display Substrate**
*Heekyun Shin, Samsung Display Co., Ltd., Yongin, South Korea*

## Session 51: OLED Devices IV *(OLEDs)*

**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 408A**
**Chair:** *Jang Hyuk Kwon, Kyung Hee University*
**Co-Chair:** *Guoqiang Tang, BOE*

**51.1:** ***Invited Paper:*** **From Displays to Data Links: High-Speed OLEDs for Visible Light Communication**
*Ifor Samuel, University of St Andrews, St Andrews, UK*

**51.2:** **Engineering OLED Device Structures for Enhancing the Purcell Effect**
*Bin Liu, University of Michigan, Ann Arbor, MI US*

**51.3:** **Efficiency and Lifetime Enhancement Way of Phosphorescent OLEDs via Reducing Surface Plasmon Loss by Additional Plasmon Coupling of Quantum Dot Interlayer**
*Nisha Vergineya S, Kyung Hee University, Seoul, South Korea*

**51.4:** ***Late-News Paper:*** **High Brightness SXGA Resolution Directly Patterned RGB Tandem OLED Microdisplay**
*Amal Ghosh, eMagin Corporation, Hopewell Junction, NY US*

## Session 52: Nanooptics for XR *(XR Technology)*

**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 408B**
**Chair:** *Michael Wittek, Merck Electronics KGaA*
**Co-Chair:** *Yao-Wei Huang, National Yang Ming Chiao Tung University*

**52.1:** ***Invited Paper:*** **Large-Area Metasurfaces for Extended Reality Systems**
*Junsuk Rho, Pohang University of Science and Technology (POSTECH), Pohang, South Korea*

**52.2:** ***Invited Paper:*** **Fast and Reliable Optical Simulation and Structural Optimization of Metasurfaces for XR Displays**
*Min Seok Jang, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea*

**52.3:** ***Invited Paper:*** **1-Micron Pixel Metasurface Liquid Crystal on Silicon (M-LCoS) Technology for AR Displays and Holographic Projectors**
*Arseniy Kuznetsov, A*STAR (Agency for Science, Technology and Research), Singapore, Singapore*

**52.4:** ***Invited Paper:*** **Metasurface- Integrated Augmented Reality Waveguide Enabled by Resolution Enhancement Technology in KrF Photolithography**

*Peichen Yu, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

**52.5:** **High-Efficiency Achromatic Metasurface Waveguides for Full-Color Augmented Reality Displays via KrF Photolithography**
*Shang-Chiang Sung, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

## Session 53: MicroLED Driving II *(Display Electronics)*
**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 404AB**
**Chair:** *Prof. Soo-Yeon Lee, Seoul National University*
**Co-Chair:** *Seung Woo Lee, Kyung Hee University*

**53.1:** **Analog-PWM Micro-LED Pixel Circuit Featuring VTH and VDD I-R Drop Compensation with a Positive-Feedback Fast-Rising Mechanism**
*Yi-Chien Chen, National Cheng Kung University, Tainan, Taiwan Roc*

**53.2:** **Driver Circuit to Generate Sweep Signal Using TFT-Based Charge Pump for Micro LED Displays**
*Jing Hui Jin, Sungkyunkwan University, Seoul, South Korea*

**53.3:** **Integrated Driver Circuit to Generate Sweep and Emission Signals Employing Current Program Method**
*Han Cheol Lee, Sungkyunkwan University, Suwon, South Korea*

**53.4:** **Research on New Hybrid Driving Mode Based on Micro LED in High-Brightness Applications**
*Xialing Liu, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

## Session 54: Automotive Liquid Crystal Displays *(Liquid Crystal Technology / Automotive/Vehicular Displays and HMI Technologies)*
**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 406AB**
**Chair:** *Takahiro Ishinabe, Tohoku University*
**Co-Chair:** *David Hermann, Volvo Car Corporation AB*

**54.1:** **Dual View Display Technology for Enhanced Cockpit Usability**
*Yasuhiro Sugita, Sharp Display Technology Corp., Nara, Japan*

**54.2:** **Novel P-polarized Light Reflection Screen for AR-HUD with Wide Field of View**
*Shinya Watanabe, FUJIFILM Corp., Minamiashigara, Japan*

**54.3:** ***Invited Paper:*** **Ultra Low Specular Reflection LCD with High Visibility for Next Generation Automotive Applications**
*Takahiro Ishinabe, Tohoku University, Sendai, Japan*

## Session 55: Next-Gen Glass Integration *(Emerging Technologies and Applications / Heterogeneous Integration on Glass and Other Substrates for Emerging Applications)*
**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 409AB**
**Chair:** *Ryosuke Kuwada, Project Far East Corporation*
**Co-Chair:** *Ian Underwood, University of Edinburgh*

**55.1:** **Integrated Through Glass Via (TGV) Technology for Advanced Co-Packaged Optics (CPO) Development**
*Jia-Hong Ye, AUO Corp., Hsinchu, Taiwan Roc*

**55.2:** **Glass-Silicon Heterogeneous Integration for System-in-Package of MEMS Differential Pressure Sensors**
*Qiuxu Wei, BOE Technology Group Co., Ltd., Beijing, China*

**55.3:** **TFT Display-compatible Fabrication of Low-insertion-loss Radio Frequency Micro-electro-mechanical Systems Switches on Glass Substrates**
*Chao Zhou, BOE Technology Group Co., Ltd., Beijing, China*

**55.4:** ***Invited Paper:*** **Heterogeneous Integrated Glass Substrate for Phased Array Antenna in Satellite Communication**
*Shih-Hsien Yang, AUO Corp., Hsinchu, Taiwan Roc*

## Session 56: Innovative Circuits II *(Active Matrix Devices)*
**Wednesday, May 6, 2026 / 4:00 PM - 5:30 PM / 411**
**Chair:** *Kazuyoshi Omata, Konica Minolta*
**Co-Chair:** *Xi Chen, BOE Technology Group Co., Ltd.*

**56.1:** ***Invited Paper:*** **The New CMOS GOA Circuit with Partitioned Frequency Division Function in AMOLED**
*Huanxi Zhang, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**56.2:** **Design Scheme of LTPS Pixel Circuit for Enhanced Threshold Compensation of Driving TFT**
*Qian Xu, BOE Technology Group Co., Ltd., Chengdu, China*

**56.3:** **Novel Double Rate Driving Pixel Structure for High-Performance 4K 165Hz OLED TVs with Reduced Number of Source Driver ICs**
*Won-Ho Lee, LG Display. Co., Ltd., Seoul, South Korea*

**56.4:** ***Late-News Paper:*** **An Embedded Gate Driver Architecture for Scalable Large-Area OLED Displays**
*Dahye Shim, Yonsei University, Seoul, South Korea*

## Session 57: Micro-Displays and Color Conversion *(Emissive, Micro-LED, and Quantum-Dot Displays)*
**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 403A**
**Chair:** *Larry Weber, Consultant*
**Co-Chair:** *Yong Seog Kim, Hongik University*

**57.1:** ***Invited Paper:*** **Metasurface Thin-Film Wavefront Control for High-Performance Augmented-Reality Waveguide Displays**
*Ningning Wang, University of California Los Angeles, Los Angeles, CA US*

**57.2:** ***Invited Paper:*** **Taking OLED Microdisplays to the Next Level**
*Gunther Haas, MICROOLED S.A., Grenoble, France*

**57.3:** **Light Extraction Concepts for Displays Using Quantum Dot Color Converters (QD-CC)**
*Dmitri Kuksenkov, Corning, Inc., Corning, NY US*

**57.4:** ***Invited Paper:*** **Spectrally Selective Reflecting Element for Increased Efficiency in Remote Color-Conversion Liquid Crystal Display Backlights.**
*Dave Lamb, 3M Company, St. Paul, MN US*

## Session 58: AI for Display Manufacturing *(Display Manufacturing / Artificial Intelligence for Displays and Imaging)*

**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 403B**

**Chair:** *Simon Kurmann, Helbling*

**Co-Chair:** *Xiaolin Yan, TCL Corporation*

**58.1:** **Segment-Aware Anomaly Transformer (SegAT) for Dry Pump Waveform Anomaly Detection in OLED Photolithography**
*Junkyun Lim, Samsung Display, Yongin, South Korea*

**58.2:** **A Dual-Tower Transfer Learning Strategy for Precise Classification of Extremely Imbalanced LCD Aging Defect Data**
*Jing Ba, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**58.3:** **Large Model-Based Defect Detection and Repair Methods for the Display Industry**
*Xile Huang, BOE Technology Group Co., Ltd., Beijing, China*

**58.4:** **Real-Time Consumption Scheduling Engine with Reinforcement Learning for Display Manufacturing**
*Dahai Yu, TCL Corporate Research(HK) Co., Ltd, Shatin, Hong Kong*

## Session 59: OLED Materials I *(OLEDs)*

**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 408A**

**Chair:** *Chihaya Adachi, Kyushu University*

**Co-Chair:** *Jinwon Sun, Samsung Display*

**59.1:** ***Invited Paper:*** **Recent Advances in Boron-based MR-TADF Materials**
*Takuji Hatakeyama, Kyoto University, Kyoto, Japan*

**59.2:** **Hybridized Charge Transfer MR-TADF for High Efficiency Over 33% in Deep-Blue Narrowband OLEDs**
*Ui Sung Lee, Sungkyunkwan University, Wuhan, South Korea*

**59.3:** ***Distinguished Paper:*** **High-Efficiency and Long-Lifetime Narrowband Green MR-TADF OLEDs Enabled by Distinct Molecular Design Strategies**
*Truyen Dang, Kyung Hee University, Seoul, South Korea*

**59.4:** **Universal Approach to Achieve Low Index HTL for OLEDs**
*Zhibin Wang, OTI Lumionics, Inc., Toronto, ON Canada*

## Session 60: AI for Imaging and Computer Vision *(Artificial Intelligence for Displays and Imaging)*

**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 408B**

**Chair:** *Xiaolin Yan, TCL Corporation*

**Co-Chair:** *Zuoqian Joe Wang, Meta*

**60.1:** ***Invited Paper:*** **Physics-Grounded Visual World Generation**
*Jiajun Wu, Stanford University, Stanford, CA US*

**60.2:** ***Invited Paper:*** **Artificial Intelligence-Based Holographic Glasses**
*Suyeon Choi, Seoul National University, Seoul, South Korea*

**60.3:** ***Distinguished Paper:*** **A Method for Generating New Viewpoints in Monocular Images Based on Diffusion Models**
*Yingdong Gu, BOE Technology Group Co., Ltd., Beijing, China*

**60.4:** ***Invited Paper:*** **Revisiting Hologram Generation, Compression, and Display with AI-Empowered Computational Techniques**
*Yifan Peng, University of Hong Kong, Hong Kong, China*

## Session 61: Automotive Display Design and Manufacturing *(Automotive/Vehicular Displays and HMI Technologies)*

**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 404AB**

**Chair:** *David Hermann, Volvo Car Corporation AB*

**Co-Chair:** *Karlheinz Blankenbach, Pforzheim University*

**61.1:** ***Invited Paper:*** **OLEDs for Automotive Lighting**
*Marina Kondakova, OLEDWorks, Rochester, NY US*

**61.2:** ***Invited Paper:*** **Driving Visual Innovation: GMSL's Contribution to State-of-the-Art Automotive Displays**
*Geir Ostrem, Analog Devices Inc, Colorado Springs, CO US*

**61.3:** **Hidden Display Structure Utilizing Micro-LEDs**
*Heumeil Baek, LG Display. Co., Ltd., Seoul, South Korea*

**61.4:** **Luminance Boosted MicroLED Head-up Display By "Smart Micro-lens" Design**
*Guowei Zha, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

## Session 62: Self Aligned LCDs *(Liquid Crystal Technology / Sustainable Displays and Green Technologies)*

**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 406AB**

**Chair:** *Achim Goetz, Merck Electronics KGaA*

**Co-Chair:** *Matthew Sousa, 3M*

**62.1:** ***Invited Paper:*** **SA-VA – Technology for Next Generation TV LCDs**
*Lynne Guo, Merck KGaA, Shanghai, China*

**62.2:** **Novel Liquid Crystal Materials for Achieving the Shortest UV2 Process of Polymer-stabilized Vertically Aligned Liquid Crystal Displays**
*Ji Li, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**62.3:** **New Monomolecular Photo-Rewritable Material and Simulation Study of Surface Behavior**
*Oleksandr Semenenko, Hong Kong University of Science and Technology, Hong Kong, Hong Kong*

**62.4:** **The Study on HVA Dual PI Less Alignment**
*Guoren Luo, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

## Session 63: Light Engineering and Visual Health *(Emerging Technologies and Applications / Sustainable Displays and Green Technologies)*

**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 409AB**

**Chair:** *Jignesh Gandhi, Microsoft Corp*

**Co-Chair:** *Seth Coe-Sullivan, NS Nanotech*

**63.1:** ***Invited Paper:*** **Display Light Characteristics and Health: An Overview**
*Peter Veto, Pixun Technologies Co., Budapest, Hungary*

**63.2:** ***Invited Paper:*** **The Natural Human Construction of Multiple Image Stereopsis From A Stanhope Lightfield Array to Correct Image Loss Due To Many Types Of Vision Issues.**
*Neal Weinstock, Soliddd Corp., New York, NY US*

**63.3:** **Displays as Ambient Light Therapy: Health and Wellness Through Invisible NIR Integration**
*Anne Berends, SunLED Life Science, Amsterdam, Netherlands*

## Session 64: New Applications *(Active Matrix Devices)*

**Thursday, May 7, 2026 / 8:30 AM - 10:00 AM / 411**

**Chair:** *Takashi Nakamura, Magnolia Unitas Corp.*

**Co-Chair:** *Kalluri Sarma, Display Technology Consulting*

**64.1:** ***Invited Paper:*** **Ultra-Flexible and Breathable Electronics for Sensing Application**
*Tomoyuki Yokota, The University of Tokyo, Tokyo, Japan*

**64.2:** ***Invited Paper:*** **Electrically and Optically Programmable Neuromorphic Synapses Based on IGZO-Oxide FeTFT and Resistive Memory Cells**
*Sungjun Kim, Dongguk University, Seoul, South Korea*

**64.3:** ***Invited Paper:*** **Low-Voltage Organic Thin-Film Transistors and Neuromorphic Devices Enabled by High-k Polymer Dielectrics**
*Junhwan Choi, Dankook University, Yongin City, South Korea*

## Session 65: Eye Health in Emissive Displays *(Emissive, Micro-LED, and Quantum-Dot Displays / Sustainable Displays and Green Technologies)*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 403A**

**Chair:** *Seth Coe-Sullivan, NS Nanotech*

**65.1:** ***Invited Paper:*** **Beyond Image Quality: Violet-Light–Enabled Displays for Visual Health**
*Takahiro Ishinabe, Tohoku University, Sendai, Japan*

**65.2:** **Eye Comfort in LED Displays: Challenges and Solutions**
*Liangliang Jin, BOE Technology Group Co., Ltd., Beijing, China*

**65.3:** ***Panel:*** **Health Effects of Emissive Color in Displays**

## Session 66: Color Filter on Encapsulation OLED Manufacturing *(Display Manufacturing)*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 403B**

**Chair:** *Dr. Sangyeol Kim, Samsung Display*

**Co-Chair:** *Ion Bita, Google LLC*

**66.1:** **Research on Residual Characteristics of Low-Temperature Curable Black Matrix for COE Technology Applied in OLED Display**
*Ying Shen, Guangzhou Govisionox Technology Co., Ltd., Guangzhou, China*

**66.2:** **A Novel Color-Tunable, BM-Free COE Design Using a Gray Overcoat for Simplified Manufacturing**
*Tianle Cheng, Hubei Changjiang New Display Industry Innovation Center Co., Ltd., Wuhan, China*

**66.3:** **Enhancement of AMOLED Display Performance and Lightweight-Thin Design Based on COE Technology**
*Long Zhang, Visionox Technology, Inc., Hefei, China*

## Session 67: OLED Materials II *(OLEDs)*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 408A**
**Chair:** *Yasunori Kijima, Huawei Technologies Japan K.K.*
**Co-Chair:** *Nicholas Thompson, Universal Display Corporation*

**67.1:** ***Invited Paper:*** **Recent Developments in OLED Materials for High Efficiency, Long lifetime, and Wide Color Gamut**
*Keunchan Oh, Samsung Display Co., Ltd., Yongin, South Korea*

**67.2:** ***Invited Paper:*** **A Self-Powered Display Technology: Breaking the Efficiency Trade-off in Electroluminescence and Photovoltaics using MR-TADF Emitters**
*Hirohiko Fukagawa, Chiba University, Chiba, Japan*

**67.3:** **Highly Efficient, Stable Blue MR-TADF Emitters with High Color Purity for Next-Generation Display Applications**
*Meghana Tirupai, Kyung Hee University, Seoul, South Korea*

**67.4:** **Beyond Conventional EILs with NCEIL-4 for Next-Generation High-Performance OLEDs**
*Ji Hun Kim, Sungkyunkwan University, Suwon, South Korea*

## Session 68: AI for Display Manufacturing *(Artificial Intelligence for Displays and Imaging)*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 408B**
**Chair:** *Jia-Hong Wang, AUO Corporation*
**Co-Chair:** *Hyoungsik Nam, Kyung Hee University*

**68.1:** **High-Throughput Detection and Inspection of Through Glass Vias with Deep Learning-Assisted Holographic Optical Metrology**
*Chau-Jern Cheng, National Taiwan Normal University, Taipei, Taiwan Roc*

**68.2:** **Research on AI Agent in the Display Industry**
*Lixin Wang, BOE Technology Group Co., Ltd., Beijing, China*

**68.3:** **A Unified Incremental Learning Object Detection Framework For Display Industry**
*Ting Wang, BOE Technology Group Co., Ltd., Beijing, China*

**68.4:** **An Automated Compensation Method for Fine Stripes of LCD Modules Based on Computer Vision**
*Yingjie Li, BOE Technology Group Co., Ltd., Beijing, China*

## Session 69: Automotive Display Human Factors *(Automotive/Vehicular Displays and HMI Technologies)*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 404AB**
**Chair:** *Eric Margulies, Universal Display Corporation*
**Co-Chair:** *Taewoong Kim, Samsung Display Co.*

**69.1:** **Comparison of Perceived Brightness and Colorfulness for Different (Automotive) Display Technologies by Helmholtz-Kohlrausch Effect**
*Karlheinz Blankenbach, Pforzheim University, Display Lab, Pforzheim, Germany*

**69.2:** **Display Simulation Model-based Backlight Optimization and Compensation for Enhanced Picture Quality FALD Displays**
*Seungchul Ryu, Forvia Faurecia, Montreal, PQ Canada*

**69.3:** **Polarization Accurate Simulations of Complex Multilayer Optical Films for Automotive Display Systems**
*David Rosen, 3M Company, Saint Paul, MN US*

**69.4:** **Eliminating Sunlight Backflow in AR-HUDs Through a Faraday Rotator Under the Étendue Constraint**
*Yi Liu, Sun Yat-Sen University, Guangzhou, China*

## Session 70: Projection Displays *(Display Systems / XR Technology))*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 406AB**
**Chair:** *David Eccles, Consultant*
**Co-Chair:** *Shin Tson Wu, University Of Central Florida, College of Optics and Photonics*

**70.1:** **Analysis of the Illumination Method and Ghost Image in High-Brightness Single-Panel LCD Projection Optical System**
*Wenhao Jiang, BOE Technology Group Co., Ltd., Beijing, China*

**70.2:** **High-Resolution LCOS Backplane of High Contrast Grating Achieves High Brightness Display**
*Haining Yang, Southeast University, Nanjing, China*

**70.3:** **Laser Beam Scanner Achieving Wide Field of View of 77 degrees by Using a Pair of Parabolic Reflective Lenses Between MEMS Mirrors**
*Masaya Nakazumi, Panasonic Industry Co., Ltd., Kadoma-City Osaka, Japan*

**70.4:** **Eyebox Brightening and Expansion in AR Waveguide Devices via Polarization Multiplexing**
*Kevin Nilsen, University of Central Florida, Orlando, FL US*

## Session 71: Emerging Biomedical Technologies *(Emerging Technologies and Applications / Next-Generation Materials: Perovskites and Beyond)*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 409AB**
**Chair:** *Susan Jones, Nulumina Corp.*
**Co-Chair:** *Abhishek Srivastava, Hong Kong University of Science & Technology*

**71.1:** ***Invited Paper:*** **Quantum Dot Optoelectronics for Biomedical Implants**
*Sedat Nizamoglu, Koc University, Istanbul, Turkey*

**71.2:** ***Invited Paper:*** **All-Inorganic CsPbBr3 Perovskite for Next-Generation Direct X-Ray Image Sensors: A Comprehensive Review**
*Hang Zhou, Peking University, Shenzhen, China*

**71.3:** **Bioinspired RBC Nanocarriers Co-Loaded with NIR Fluorophore and Paramagnetic Agent for Multimodal Imaging**

*Bahman Anvari, University of California, Riverside, CA US*

**71.4:** **Flexible Quantum Dot Light-Emitting Diodes for Antimicrobial Photodynamic Therapy**
*Shruti Jayaprakash Saiji, University of Central Florida, Orlando, FL US*

**71.5:** ***Distinguished Paper:*** **High-Performance Flexible Conformal Quantum-Dot Light-Emitting Diodes for Photodynamic Therapy**
*Shuming Chen, Southern University of Science and Technology, Shenzhen, China*

## Session 72: Micro-LED Displays *(Active Matrix Devices)*

**Thursday, May 7, 2026 / 10:30 AM - 12:00 PM / 411**

**Chair:** *Norbert Fruehauf, University of Stuttgart*

**Co-Chair:** *James Lee, AUO Corporation*

**72.1:** ***Invited Paper:*** **A Study on Color-Sequential Tandem Driving Method for Reducing Power Consumption in Micro-LED Displays**
*YuSheng Huang, AUO Corp., Hsinchu, Taiwan Roc*

**72.2:** ***Invited Paper:*** **Eutectic-Free MicroLED and OTFT Integration: A Scalable Solution Across Display Generations**
*Chia-Hung Tsai, Smartkem, Manchester, UK*

**72.3:** ***Panel:*** **Micro-LED Displays**

## Session 73: Green Packaging and Transportation *(Display Manufacturing)*

**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 403A**

**Chair:** *WenFang Sung, AUO Corporation*

**73.1:** **New Trends in Circular and Sustainable Design: Green Revolution of Display Packaging**
*Tai Chan, AUO Corp., Hsinchu, Taiwan Roc*

**73.2:** **Green Packaging Material for the LCD Panel Industry Development and Application of 100% PCR EPS Eco-Friendly New Material**
*Yufeng Que, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**73.3:** **Research on Simulation and Optimization of LCD Panel Splicing Box Packaging for Improving Transportation Loading Rate**
*Shaoyong Li, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

## Session 74: OLED Manufacturing I *(Display Manufacturing)*

**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 403B**

**Chair:** *Jakob Bollhalder, Evatec AG*

**Co-Chair:** *Yung-Yu Hsu, Meta*

**74.1:** **Control of the Shadow Mura in AMOLED Displays**
*Xun Fu, BOE Technology Group Co., Ltd., Chongqing, China*

**74.2:** **A Study on Low-Brightness Color Shift and Mura in AMOLED LTPO Displays under Full DC Dimming-Challenges, Modeling, Mitigation**
*Xinquan Chen, Visionox Technology, Inc., Hefei, China*

**74.3:** ***Distinguished Paper:*** **8.3-inch 1058-ppi Crystal Indium Oxide Display with Side-by-side Method Using Fine Metal Mask and Partition Wall Dividing OLED between Sub-pixels**
*Shingo Eguchi, Semiconductor Energy Laboratory Co., Ltd., Wuhan, Japan*

## Session 75: OLED Physics and Modelling *(OLEDs)*

**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 408A**

**Chair:** *Denis Kondakov, DuPont*

**Co-Chair:** *Anna Hayer, Merck KGaA*

**75.1:** ***Invited Paper:*** **Spontaneous Orientation Polarization in Organic Optoelectronics**
*Wolfgang Bruetting, University of Augsburg, Augsburg, Germany*

**75.2:** **Preventing Display Artifacts: The Advantage of Mixtures and Combinations**
*Martin Kraska, Merck Electronics KGaA, Darmstadt, Germany*

**75.3:** **Reflectance Differences in OLED COE Structure with Mg/Ag and Transparent Cathodes: A Comparative and Mechanistic Study via Optical Simulation**
*Puyu Qi, BOE Technology Group Co., Ltd., Chengdu, China*

**75.4:** **New Simulation Software for Power- and Color-Optimized Subpixel Layouts in Advanced Display Technologies**
*Markus Regnat, Fluxim AG, Winterthur, Switzerland*

## Session 76: AI for Display Production *(Artificial Intelligence for Displays and Imaging / Display Manufacturing)*

**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 408B**

**Chair:** *Xingqun Jiang, BOE Technology Group Co., Ltd.*

**Co-Chair:** *Simon Kurmann, Helbling*

**76.1:** **LLM-based Dynamic Hierarchical RL for Display Manufacturing**
*Youngteak Seo, Samsung Display Co., Ltd., Suwon, South Korea*

**76.2:** **Multi-Fidelity Digital Twin Framework with AI Optimization for OLED Manufacturing**
*Seki Park, Samsung Display Co., Ltd., Asan, South Korea*

**76.3:** **A Heterogeneous Mixture of Expert Model Based on Anisotropic Filtering and Its Application in Display Manufacturing**

*Yunlong Li, BOE Technology Group Co., Ltd., Beijing, China*

**76.4:** ***Invited Paper:*** **Toward Robust Anomaly Detection for Real-World Display Inspection**
*Suk-Ju Kang, Sogang University, Seoul, South Korea*

## Session 77: Automotive HUDs I *(Automotive/Vehicular Displays and HMI Technologies)*
**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 404AB**
**Chair:** *Kai-Han Chang, General Motors*
**Co-Chair:** *Rashmi Rao, Harman International*

**77.2:** ***Invited Paper:*** **High-Resolution Automotive Light-Field Head-Up Display with Eye-Tracking**
*Yunfan Wang, Zhejiang Chief Technology Co., Ltd., Shanghai, China*

**77.3:** **A Two-Stage Optical Design Methodology for an Eyebox-Expanded 3D AR-HUD**
*Junnan Jin, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**77.4:** **Dual-SLM Tiled Holographic HUD with Dammann Grating for Wide Eye-box**
*Jinsu Lee, Electronics and Telecommunications Research Institute (ETRI), Daejeon, South Korea*

## Session 78: Holographic and XR Displays *(Display Systems)*
**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 406AB**
**Chair:** *Zong Qin, Sun Yat-Sen University*
**Co-Chair:** *Hirotsugu Yamamoto, Utsunomiya University*

**78.1:** ***Invited Paper:*** **Real-Time Holographic Media System Using CGH Processor**
*Wonok Kwon, Electronics and Telecommunications Research Institute (ETRI), Daejeon, South Korea*

**78.2:** ***Invited Paper:*** **Study of Human Visual Characteristics in Holographic Near-Eye Displays**
*Zi Wang, Hefei University of Technology, Hefei, China*

**78.3:** ***Distinguished Paper:*** **Thin Maxwellian Virtual Reality Near-Eye Display Using Holographic Optical Element and Micro Lens Array**
*Minseong Kim, Seoul National University, Seoul, South Korea*

**78.4:** **3D Eyebox Expansion for Pupil-aware Holographic Displays via Multi-Source Illumination**
*Xinxing Xia, Shanghai University, Shanghai, China*

## Session 79: Emerging Technologies for Ocular Health *(Emerging Technologies and Applications / Sustainable Displays and Green Technologies)*
**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 409AB**
**Chair:** *Seth Coe-Sullivan, NS Nanotech*
**Co-Chair:** *Vincent Gu, Apple, Inc.*

**79.1:** ***Distinguished Paper:*** **Perceptually Flicker-Free Transparent White OLEDs via 40 Hz Chromatic Modulation**
*Young Hun Jung, KAIST, Wuhan, South Korea*

**79.2:** **The OLED with an Extremely Low Proportion of Harmful Blue Light and Excellent Viewing Angle Performance**
*Xuesen Zhao, Yungu(Gu'an) Technology Co., Ltd., Langfang, China*

**79.3:** **An Universal Approach to Minimizing the Ratio of Harmful Blue Light in OLEDs by Modification of POL Structure**
*Hui Chen, Tianma Microelectronics Co., Ltd., Wuhan, China*

## Session 80: Foldable Displays *(Adaptive Display Technologies: Wearable, Flexible, and Non-Volatile)*
**Thursday, May 7, 2026 / 2:00 PM - 3:30 PM / 411**
**Chair:** *Jennifer Lin, AUO Corporation*
**Co-Chair:** *Ze Yuan, UltraReality Technology Limited*

**80.1:** ***Invited Paper:*** **Enhanced Low-Temperature Mechanical Reliability of Foldable Screen**
*Shuangbing Zhang, Visionox Technology, Inc., Hefei, China*

**80.2:** ***Invited Paper:*** **A Quantitative Assessment for Foldable Screen Crease Correlated with Visual Perception Metrics**
*Haoran Wang, BOE Technology Group Co., Ltd., Beijing, China*

**80.3:** **Surface-segregated Nanodomains for a Fast Room-temperature Self-healing Elastomer with Exceptional Scratch and Chemical Resistance and Folding Reliability**

**80.4:** **Research on the Rigid-Flexible Coupling Model for Multi-Objective Optimization of Flexible AMOLED Module and Foldable Hinge**
*Baofeng Sun, BOE Technology Group Co., Ltd., Beijing, China*

## Session 81: Optoelectronics *(Emissive, Micro-LED, and Quantum-Dot Displays)*
**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 403A**
**Chair:** *Dr. Khaled Ahmed, Intel Corporation*

**81.1:** **Recent Progress in Inkjet-Printed Electroluminescent Quantum-Dot Displays: Lifetime Enhancement Through Material and Device Engineering**
*Donghoon Kwak, Samsung Display Co., Ltd., Yongin, South Korea*

**81.2:** **High-Performance Flexible CQD/IGZO Phototransistors for Real-Time SWIR Imaging**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

**81.3:** **Hybrid Circularly Polarized LED via a Chiral Perovskite Transport Layer**

*Haonan Jiang, The Hong Kong University of Science and Technology, Hong Kong, Hong Kong*

**81.4:** **Research on High-Transmittance Hidden Display of Micro LED**
*Hailong Pan, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

## Session 82: OLED Manufacturing II *(Display Manufacturing)*
**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 403B**
**Chair:** *Neetu Chopra, Apple Inc*
**Co-Chair:** *Kazutaka Hayashi, AGC Inc.*

**82.1:** **Effects of the Conduction Properties of Donor Metal Plates on the Plane-Source Deposition Process of OLEDs**
*Young Jun Lee, OLEDON, Yongin City, South Korea*

**82.2:** **Research on the Design and Application of Integrated Cover**
*Lifang Zhou, Visionox Technology, Inc., KunShan, China*

**82.3:** ***Invited Paper:*** **ViP Technology for Mask Less OLED: Mass Production Readiness and Future Applications on Gen 8.6 Lines**
*Genmao Huang, Visionox Technology, Inc., Hefei, China*

## Session 83: AI/ML for OLEDs *(OLEDs)*
**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 408A**
**Chair:** *Nicholas Thompson, Universal Display Corporation*
**Co-Chair:** *Denis Kondakov, DuPont*

**83.1:** **Accelerating Optoelectronic Innovation via Integrating Machine Learning and Physics-Based Modeling**
*Hadi Abroshan, Schrodinger, Inc., New York, NY US*

**83.2:** **Sync-OLED–Enabled Physics-Informed AI for High-Throughput Screening of OLED Stacks**
*Sang Ho Jeon, Samsung Display Co., Ltd., Yongin, South Korea*

**83.3:** **Accelerated Inverse Design Framework for High Efficiency RGB Tandem OLEDs via Physics Embedded General Artificial Neural Network**
*Jun Hee Han, Electronics and Telecommunications Research Institute (ETRI), Seongnam, South Korea*

**83.4:** ***Distinguished Paper:*** **Enabling Next-Generation OLEDs-A Revolutionary AI-Driven Model for Geometric Optical Design**
*Bo Shi, BOE Technology Group Co., Ltd., Beijing, China*

## Session 84: AI for Display Quality Control and Defect Detection *(Artificial Intelligence for Displays and Imaging)*
**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 408B**
**Chair:** *Eunkyung Koh, Samsung Display Research Center*
**Co-Chair:** *Xingqun Jiang, BOE Technology Group Co., Ltd.*

**84.1:** **Attention-Guided Large Vision Models for Data-Efficient Display Defect Detection**
*Zhihong Pan, Samsung Display Co., Ltd., San Jose, CA US*

**84.2:** ***Invited Paper:*** **From General AI Agents to a Domain-Adapted Co-Scientist: A Framework for Solving Complex Reliability Challenges in Display Manufacturing**
*Kyongtae Park, Samsung Display Co., Ltd., Yongin City, South Korea*

**84.3:** **Visual Chain-of-Thought Reasoning for Display Industrial Defect Management Based on Vision-Language Models**
*Haiyang Guo, BOE Technology Group Co., Ltd., Beijing, China*

**84.4:** ***Invited Paper:*** **Fine-grained Action Detection in Visual HCI with Spatial Mask Video Foundation Models**
*Haiyang Guo, BOE Technology Group Co., Ltd., Beijing, China*

## Session 85: Automotive HUDs II *(Automotive/Vehicular Displays and HMI Technologies)*
**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 404AB**
**Chair:** *Eric Margulies, UDC, Inc.*
**Co-Chair:** *Kai-Han Chang, General Motors*

**85.3:** **Lens-Based CGEI Algorithm with GPU Acceleration for Integral Imaging Light-Field Displays System**
*Shao-Yu Hung, National Taiwan University, Taipei, Taiwan Roc*

**85.4:** ***Distinguished Paper:*** **Accelerated CGH Generation for AR Head-Up Display Based on DeepCGH and YOLO**
*Pin-Yin Huang, National Taiwan University, Taipei, Taiwan Roc*

## Session 86: 3D Display *(Display Systems)*
**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 406AB**
**Chair:** *W. Hendrick, Collins Aerospace*
**Co-Chair:** *Zong Qin, Sun Yat-Sen University*

**86.1:** **Crosstalk Suppression and Interleaved Frame Rate Enhancement Technology for Naked-eye 3D Displays**
*Danfeng Zhu, BOE Technology Group Co., Ltd., Beijing, China*

**86.2:** ***Distinguished Paper:*** **Ultra-Wide-Field Autostereoscopic Floating 3D Display Using Isolated-MLA and Gradual Radius Lens Design.**
*Hsin You Hou, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

**86.3:** ***Distinguished Paper:*** **Extended and High-Resolution Mid-Air 3D Visualization Using a Light-Field Display with Magnifying Lens and Fresnel-Lens-Enhanced AIRR**
*Akito Fukuda, Utsunomiya University, Utsunomiya, Japan*

**86.4:** **Towards High-Resolution Multi-Projection Light-Field Displays with Wide Field of View**
*Xinxing Xia, Shanghai University, Shanghai, China*

**86.5:** ***Late-News Paper:*** **Under Display Face Authentication Enabled by Polarization Imaging**
*Pawel Latawiec, Metalenz, Inc., Boston, MA US*

## Session 87: Emerging Display Technologies: Health and Durability *(Emerging Technologies and Applications / Sustainable Displays and Green Technologies)*

**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 409AB**

**Chair:** *Maple Peng, Meta*

**Co-Chair:** *WenFang Sung, AUO Corporation*

**87.1:** **The Impact of Different Physical Properties on the Surface of LCD Panels on Visual Health**
*Zheng Ping, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**87.2:** **A Novel Approach to Natural Light Film for Eye-protective Displays**
*Ji Li, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**87.3:** ***Late-News Paper:*** **Mechanically Robust Stretchable micro-LED Displays with Exceptional Cyclic Stretching Endurance**
*Jinwoo Choi, Samsung Display, Yongin, South Korea*

## Session 88: Flexible/Rollable Displays *(Adaptive Display Technologies: Wearable, Flexible, and Non-Volatile)*

**Thursday, May 7, 2026 / 4:00 PM - 5:30 PM / 411**

**Chair:** *Shiming Shi, BOE Technology Group Co., Ltd.*

**Co-Chair:** *Jia-Chong Ho, ITRI*

**88.1:** ***Invited Paper:*** **Materials for Low-Temperature Solution Processed Organic Transistors Integrated in Flexible Transparent Emissive Displays**
*Simon Ogier, Smartkem, Manchester, UK*

**88.2:** ***Distinguished Paper:*** **Extremely Robust Rollable AMOLED Display with Outstanding Surface Quality Using Smart Module and Panel Structure**
*Taewoong Kim, Samsung Display Co., Ltd., Yongin, South Korea*

**88.3:** **Research on Thin-Film Technology for Bending of Flexible OLED Modules**
*Fanzhong Bu, Visionox Technology, Inc., KunShan, China*

**88.4:** **Airtightness Enhancement in Flexible OLED Modules Using Mechanically Foamed SCF**
*Yu Gu, Visionox Technology, Inc., KunShan, China*

## Session 89: Micro-LED Displays *(Emissive, Micro-LED, and Quantum-Dot Displays)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 403A**

**Chair:** *Yong Seog Kim, Hongik University*

**Co-Chair:** *Zhaojun Liu, Southern University of Science and Technology*

**89.1:** **8.9-inch P0.6 Excellent Dark Color Uniformity Active-Matrix LTPS Micro-LED Splicing Screen**
*Jia Zhen Yu, Tianma Microelectronics Co., Ltd., Shanghai, China*

**89.2:** **Advanced Cover Glass for micro-LED Displays**
*Shenping Li, Corning, Inc., Corning, NY US*

**89.3:** **Minimising Plasma-Induced Damage on n-GaN and its Recovery by Isotropic Etching Process for micro-LEDs Application**
*Sungjin Cho, Oxford Instruments Plasma Technology, Bristol, United Kingdom*

**89.4:** **MicroLED Value Chains to Enable the AI Revolution**
*Burkhard Slischka, ALLOS Semiconductors, Dresden, Germany*

## Session 90: Display Manufacturing for AR/VR/MR *(Display Manufacturing)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 403B**

**Chair:** *Yung-Yu Hsu, Meta*

**Co-Chair:** *Chiwoo Kim, APS Holdings*

**90.1:** ***Invited Paper:*** **Light Engine Design for Meta Rayban Display**
*Serhan Isikman, Meta Inc, REDWOOD CITY, CA US*

**90.2:** **Novel Ultra-low Refractive Index Material for Light-guide of AR-Glass Device**
*Daisuke Hattori, Nitto Denko Corp., Osaka, Japan*

**90.3:** ***Distinguished Paper:*** **A New Pixel Structure for High-Resolution OLED Microdisplays, Enhancing Efficiency and Color Gamut Using Patterned OLEDs and Aligned Lightguides**
*Masaya Ogura, Sony Semiconductor Solutions Corp., Wuhan, Japan*

**90.4:** **A Study on Large Area SiOx CMP for High Resolution AMOLED Display**
*Woojin Cho, Samsung Display Co., Ltd., Yongin City, South Korea*

**90.5:** **Investigation of Water Resistance in Monolithic AMOLED Modules**
*Rukang Zhang, Guangzhou Govisionox Technology Co., Ltd., Guangzhou, China*

## Session 91: Under-Display Cameras *(Interactive Displays and Sensors)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 408A**

**Chair:** *Mark Winkler, Apple, Inc.*

**Co-Chair:** *Kavitha Ratnam, Meta*

**91.1:** ***Distinguished Paper:*** **Breaking the Under-Display Camera's Dilemma Between Diffraction and Pixel Density Using Incoherent Pupil Synthesis**
*Xinni Xie, Sun Yat-Sen University, Guangzhou, China*

**91.2:** **A New Design for CUP to Reduce Reflection and Diffraction Based on LTPO and CFOT**
*Chong Qian, Tianma Microelectronics Co., Ltd., Suwon, China*

**91.3:** **Drive Circuit and Optical Co-Design for High-Performance Under-Display Infrared Recognition**
*Miao Chang, Visionox Technology, Inc., Hefei, China*

**91.4:** **High Transmittance OLED for Under Display Face Recognition**
*Chuanxiang Xu, BOE Technology Group Co., Ltd., Beijing, China*

## Session 92: AI for OLED *(Artificial Intelligence for Displays and Imaging)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 408B**

**Chair:** *Hyoungsik Nam, Kyung Hee University*

**Co-Chair:** *Eunkyung Koh, Samsung Display Research Center*

**92.1:** **AI-Based Joint Optimization Algorithms for Flicker and Variable Refresh Rate in LTPS/LTPO AMOLED Displays**
*Chaofan Xu, BOE Technology Group Co., Ltd., Chengdu, China*

**92.2:** **Accurate Prediction of OLED Dark-state Optical Simulation via Spectral Splitting**
*Senbao Jiang, BOE Technology Group Co., Ltd., Beijing, China*

**92.3:** **Diffusion-Based Data Expansion for Reliable Inspection of Low-Gray Line Mura around HIAA Regions**
*Hong-bin Lim, Samsung Display, Yongin, South Korea*

**92.4:** **FM3D: Flow Matching for 3D Molecular Generation in OLED Materials Discovery**
*Sheng Zhang, BOE Technology Group Co., Ltd., Beijing, China*

## Session 93: LC Technology and Display Measurement *(Liquid Crystal Technology / Display Measurement)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 404AB**

**Chair:** *Thomas Fiske, Intuitive Surgical*

**Co-Chair:** *Gang Xu, Jingce Electronics, USA*

**93.1:** ***Invited Paper:*** **Development of an Animation Driving Mode for Active-Matrix Cholesteric Liquid Crystal Display**
*Heng-Yi Tseng, AUO Corp., Hsinchu, Taiwan Roc*

**93.2:** **Mitigating Cell Gap Analysis Fluctuations of Vertical-Aligned LCDs by Integrating Multi-Focus Data of Microscopic Mueller Matrix Polarimeter**
*Yitao Liang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**93.3:** ***Distinguished Paper:*** **Diffraction Efficiency Mapping of Pancharatnam-Berry Diffractive Optical Elements**
*Hiroyuki Yoshida, Kwansei Gakuin University, Sanda, Japan*

**93.4:** **A Novel Triple-Gate Pixel Architecture with Horizontal RGB Subpixel Arrangement for High Image Quality and Low Cost**
*Hongmin Li, BOE Technology Group Co., Ltd., Hefei, China*

## Session 94: Optical Surface Engineering *(Display Systems)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 406AB**

**Chair:** *Sergei Yakovenko, consultant*

**Co-Chair:** *Daming Xu, Apple Inc*

**94.1:** **The Impact of System-Level Configuration on Sparkle Performance in Self-emissive Display Devices**
*Rui Zu, 3M, Saint Paul, MN US*

**94.2:** **Corning Gorilla Matte Pro, a Novel Anti-Reflection and Anti-Glare Cover Glass for High-Resolution Displays**
*Christine Cecala, Corning, Inc., Corning, NY US*

**94.3:** ***Invited Paper:*** **Scalable 3D Micro- and Nanostructures for Next-Generation Large-Area Displays**
*Samuli Siitonen, Nanocomp Oy Ltd, Lehmo, Finland*

**94.4:** **Micro-Nano Scale Ultra-HD Low-Sparkle Anti-Glare Cover Glass**
*Peng Hu, Xinsheng Optoelectronics Technology Co., Ltd., Hefei, China*

## Session 95: Emerging Sensing and Photonic Technologies *(Emerging Technologies and Applications)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 409AB**

**Chair:** *Fang-Cheng Lin, Apple, Inc.*

**Co-Chair:** *Jun Park, Samsung Display*

**95.1:** ***Invited Paper:*** **Micro-LED and Fiber Interface Design for Optical Communications**
*Jiahao Kang, Peking University, Beijing, China*

**95.2:** **Angle-Stable Polariton-Based Spectral Filters for Advanced Display, Imaging, and Sensing Applications**
*Emma Puttock, University of Cologne, Koln, Germany*

**95.3:** **Ultrafast Single-Shot Full Stokes Polarization Photodetection using Quantum Dot Photodetector and Photopatterned Azo-Dye stack**

*Debjyoti Bhadra, The Hong Kong University of Science and Technology, Hong Kong, Hong Kong*

**95.4:** **Multi-Wavelength and Multi-Modality Programmable Microscopy Using a Liquid-Crystal Spatial Light Modulator**
*I-Jan Chen, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

## Session 96: AI for Adaptive Displays *(Adaptive Display Technologies: Wearable, Flexible, and Non-Volatile / Display Measurement)*

**Friday, May 8, 2026 / 8:30 AM - 10:00 AM / 411**

**Chair:** *Dr. Jeong-Ik Lee, ETRI*

**Co-Chair:** *Zuoqian Joe Wang, Meta*

**96.1:** **Agent-Analytics Framework for Physics-Informed Crease Modeling in Multilayer Flexible Cover Stacks**
*Kyongtae Park, Samsung Display Co., Ltd., Yongin City, South Korea*

**96.2:** **AI-Adaptive Resolution for Flexible Display Applications**
*Zheyuan Song, BOE Technology Group Co., Ltd., Beijing, China*

**96.3:** **A Geometric Feature–based Conditional Diffusion Model for Predicting Stress and Strain Distributions in Curved OLED Screens**
*Xiaoyin Cui, BOE Technology Group Co., Ltd., Beijing, China*

**96.4:** **Two-Dimensional Pixel-Level Image-Data Analysis in an Electrochromic Nonvolatile Device**
*Masayoshi Higuchi, National Institute for Materials Science (NIMS), Tsukuba, Japan*

## Session 97: Transparent Mini /Micro LED Display *(Emissive, Micro-LED, and Quantum-Dot Displays)*

**Friday, May 8, 2026 / 10:30 AM - 12:00 PM / 403A**

**Chair:** *Qun Yan, Fuzhou University*

**Co-Chair:** *Jean-Jacques Drolet, Osram Opto Semiconductors*

**97.1:** **Unveiling a High-Performance Solution for Micro LED Transparent Displays**
*Peilin Zhang, BOE Technology Group Co., Ltd., Beijing, China*

**97.2:** **Transparent Borderless Micro-LED Display: Design and Manufacturing of Standard Tileable Screens**
*Liwei Zhang, Tianma Microelectronics Co., Ltd., Shanghai, China*

**97.3:** **Research on Wiring and Component Arrangement of High Transmission and High Clarity Mini LED Transparent Display Products**
*Jiao Li, BOE Technology Group Co., Ltd., Beijing, China*

**97.4:** **Optimizing Seamlessness in Tiled Transparent Micro LED Displays**
*Yutang Tsai, AUO Corp., Hsinchu, Taiwan Roc*

## Session 98: Capacitive Touch Sensing *(Interactive Displays and Sensors)*

**Friday, May 8, 2026 / 10:30 AM - 12:00 PM / 408A**

**Chair:** *Jeff Han, Consultant*

**Co-Chair:** *Vic Garg, Apple, Inc.*

**98.1:** **Real In-cell Integrated Touch Sensor for Flexible OLED Display**
*Lihua Wang, Visionox Technology, Inc., Kunshan, China*

**98.2:** **TDDI-Based Charge-Sensing for Aftermarket Defect-Detection in OLED Pixel Circuit with Internal Charging Process**
*Chien-Ju Lai, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

## Session 99: AI for Next-Gen LCD *(Artificial Intelligence for Displays and Imaging)*

**Friday, May 8, 2026 / 10:30 AM - 12:00 PM / 408B**

**Chair:** *Jia-Hong Wang, AUO Corporation*

**Co-Chair:** *Xingqun Jiang, BOE Technology Group Co., Ltd.*

**99.1:** **Color Temperature Uniformity Correction for LCD Screens Based on AI and FPGA**
*Zheyuan Song, BOE Technology Group Co., Ltd., Beijing, China*

**99.2:** **Polygon-Based Illusory Contour Segmentation and Detection for AI-Generated Content**
*Chao Ping Chen, Shanghai Jiao Tong University, Shanghai, China*

**99.3:** **Deep Learning-Driven Robotic Process Automation for Defect Detection and Automated Repair in TFT-LCD Manufacturing**
*Li Yifan, BOE, Wuhan, China*

**99.4:** **AI-Driven Enhancement of MAI for LCD-Based XR Displays**
*Jing Ba, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

## Session 100: Advances in XR Measurements *(Display Measurement / Super-Sensing for Enhanced Awareness)*

**Friday, May 8, 2026 / 10:30 AM - 12:00 PM / 404AB**

**Chair:** *Thomas Fiske, Intuitive Surgical*

**Co-Chair:** *Chaohao Wang, Apple Inc.*

**100.1:** ***Invited Paper:*** **Binocular Stereo Measurements of 3D Spatial Accuracy on Video See-Through Head-Mounted Displays**
*Chumin Zhao, U.S. Food and Drug Administration, Silver Spring, MD US*

**100.2:** ***Invited Paper:*** **Spatiotemporal Tracking Accuracy of Marker-Based Registration Using Augmented Reality Head Mounted Displays**

*Ryan Beams, U.S. Food and Drug Administration, Silver Spring, MD US*

## Session 101: Reliable Display *(Display Systems)*
**Friday, May 8, 2026 / 10:30 AM - 12:00 PM / 406AB**
**Chair:** *Shinichi Uehara, AGC Inc.*
**Co-Chair:** *W. Hendrick, Collins Aerospace*

**101.1:** **Integrated Circuit-3D Electromagnetic Simulation Framework for Joule-Heating Sensitivity Analysis in Narrow-Border OLED Panels**
*Hyun Sung Park, Samsung Display Co., Ltd., Yongin, South Korea*

**101.2:** **Thermal Dissipation in AMOLED Display Module for Handheld Gaming Application**
*Zhiyong Xiong, Tianma Microelectronics Co., Ltd., Shanghai, China*

**101.3:** **Failure Mechanism and Material System Collaborative Optimization of AMOLED Modules Under Back Impact**
*Yaling Wang, Yungu (Gu'an) Technology Co., Ltd., Gu'an, China*

**101.4:** **Anti-Electrostatic Field Performance of AMOLED Modules**
*Rukang Zhang, Guangzhou Govisionox Technology Co., Ltd., Guangzhou, China*

## Session 102: Enhanced Display and Sensor Technologies *(Emerging Technologies and Applications)*
**Friday, May 8, 2026 / 10:30 AM - 12:00 PM / 409AB**
**Chair:** *Jim Zhuang, Meta*
**Co-Chair:** *Tong Li, Chinese Academy of Sciences*

**102.1:** ***Invited Paper:*** **Slot-Die Based Fluidic Self-Assembly - A Scalability Breakthrough in MicroLED Display Manufacturing**
*Rick Smith, Pixel-Flo Ltd., Sheffield, United Kingdom*

**102.2:** **Featuring on TM-polarized Sidewall Emission for AlGaN Deep-Ultraviolet micro-LED with Enhanced Light Extraction Efficiency**
*Feng Feng, The Hong Kong University of Science and Technology, Hong Kong, Hong Kong*

**102.3:** **A 10.2-inch Highly Stretchable, Multi-Directional Strain Sensor Platform for Stretchable Devices**
*Jun Hyeong Park, Samsung Display Co., Ltd., Yongin, South Korea*

**102.4:** **Investigation of the Radiation Resistance Characteristics of Backplane of IGZO TFT Flat Panel Detector**
*Yong Zhang, BOE Technology Group Co., Ltd., Wuhan, China*

## Session 103: Non-Volatile Displays *(Adaptive Display Technologies: Wearable, Flexible, and Non-Volatile)*
**Friday, May 8, 2026 / 10:30 AM - 12:00 PM / 411**
**Chair:** *Masayoshi Higuchi, National Institute for Materials Science*
**Co-Chair:** *HongMei Zang, E Ink Calif*

**103.1:** ***Invited Paper:*** **Flexible, Microcapsule-Based Color Electrophoretic Displays with Improved Image Quality**
*James Aborn, E Ink Corp., Billerica, MA US*

**103.2:** **Development of flexible E Ink Spectra 6 displays in A1 and A2 sizes with IGZO-TFT Backplane**
*Shigeyuki Yamada, Sharp Display Technology Corp., Tenri, Japan*

**103.3:** **Fabry–Pérot Structure Electrochromic Device for Visible Color Tuning and Mid-Infrared Emissivity Modulation**
*Jaewoo Seo, Electronics and Telecommunications Research Institute, Daejeon, South Korea*

**103.4:** **High-Voltage Oxide GOA for Electrophoretic Display**
*Ming Yang, BOE Technology Group Co., Ltd., Beijing, China*

**103.5:** ***Late-News Paper:*** **Organic TFT driven Flexible Colour EPD with Spectra E6**
*Charlotte Harrison, FlexEnable, Cambirdge, United Kingdom*

## Session 104: MicroLED Processing *(Emissive, Micro-LED, and Quantum-Dot Displays)*
**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 403A**
**Chair:** *Ioannis Kymissis, Columbia University*
**Co-Chair:** *Jean-Jacques Drolet, Osram Opto Semiconductors*

**104.1:** **Chip-Level Angular Emission Engineering via DBR-Inspired Structures for Superior Optical Seamlessness in MLCD**
*Junyang Nie, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**104.2:** ***Distinguished Paper:*** **High-Performance Micro-LED Display Based on Optimized Laser Bonding and Mass Transfer**
*Wenya Tian, BOE Technology Group Co., Ltd., Beijing, China*

**104.3:** **Identifying High-Value EL Test Points Through MicroLED Device Physics**
*Tali Hurvitz, InZiv, Jerusalem, Israel*

## Session 105: Emerging Components for Display and Sensing *(Interactive Displays and Sensors)*
**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 403B**
**Chair:** *Chaohao Wang, YLab*

**105.1:** **Visually-Transparent Integrated Millimeter-wave and Microwave Antennas for AI/AR Smart Glasses in 5G and 6G**
*Huan-Chu Huang, Visionox Technology, Inc., Beijing, China*

**105.2:** **Ultra-Compact Monolithic Metasurface-PCSEL Dot Projector for Next-Generation XR Headsets**
*Yao-Wei Huang, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

**105.3:** **Positive-Feedback Accelerated Two-Stage Cascaded A-PWM Micro-LED Pixel Circuit with 0.58 ns Conversion Time for Display-Sensing-Communication Applications**
*Haohang Zeng, Peking University, Shenzhen, China*

**105.4:** ***Invited Paper:*** **Sampled Analog Video Transport: High Accuracy and Perceptually Error Free**
*Alex Henzen, HYPHY USA Inc., San Jose, CA US*

**105.5:** ***Invited Paper:*** **A 12.5-Gb/s Receiver with Two-Stage Offset Calibrated DTSA and Adaptive Equalization for Next-Generation XR Devices**
*Hyun-Wook Lim, Samsung Display Co., Ltd., Hwaseong, South Korea*

## Session 106: Optical Sensing in Displays *(Interactive Displays and Sensors)*

**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 408A**

**Chair:** *Deok-Hoi Kim, Samsung Display*

**Co-Chair:** *Derek Solven, Synaptics*

**106.1:** ***Invited Paper:*** **Sensor OLED: Sophisticated User Interactive Display in the Emerging AI Era**
*Chul Kim, Samsung Display Co., Ltd., Yongin, South Korea*

**106.2:** **OLED Display with Integrated Organic Photodiode using Crystal IO as Backplane**
*Motoharu Saito, Semiconductor Energy Laboratory Co., Ltd., Atsugi, Japan*

**106.3:** **A Novel Pol-Less OLED Display with In-Cell Large-Area Fingerprint Sensor Recognition**
*Mengying Jiang, Tianma Microelectronics Co., Ltd., Shanghai, China*

## Session 107: AI for Display Module Design *(Artificial Intelligence for Displays and Imaging)*

**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 408B**

**Chair:** *Wei Yao, Apple Inc*

**Co-Chair:** *Zuoqian Joe Wang, Meta*

**107.1:** ***Invited Paper:*** **Display Embedding: Advancing Industrial Knowledge Retrieval Through Foundation Models**
*Qianhong Yu, BOE Technology Group Co., Ltd., Beijing, China*

**107.2:** ***Invited Paper:*** **Machine Learning Enabled Design of Damping Films for Flexible Displays**
*David Arreaga, Ares Materials, Plano, TX US*

**107.3:** **Unsupervised OLED Mura Defect Detection via Denoising Diffusion Probabilistic Models**
*Wei-Ting Tsao, Novatek Microelectronics Corp., Zhubei, Taiwan Roc*

**107.4:** **Open-Set PCB Defect Detection for Dynamic Display Manufacturing**
*Qiao Xu, BOE Technology Group Co., Ltd., Beijing, China*

## Session 108: Display Reflectance Measurement *(Display Measurement)*

**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 404AB**

**Chair:** *Thomas Fiske, Intuitive Surgical*

**108.1:** **Evaluating Reproducibility of Display Reflection Measurements**
*John Penczek, University of Colorado, Boulder, Boulder, CO US*

**108.2:** ***Distinguished Paper:*** **Reflection Measurement Methods for Modern Display Standards**
*Dirk Hertel, E Ink Corp., Billerica, MA US*

**108.3:** **Measuring and Predicting Color in Display Reflection using a Color Reflectance Matrix**
*Ingo Rotscholl, TechnoTeam Bildverarbeitung GmbH, Ilmenau, Germany*

**108.4:** **A Study on Measurement of Diffractive Reflection for Polarizer-Free Display Using a Point Spread Function of Display Reflection**
*Sang-Bin Lee, LG Display. Co., Ltd., Seoul, South Korea*

## Session 109: Advanced Display Systems *(Display Systems)*

**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 406AB**

**Chair:** *Sam Phenix, Phenix Consulting*

**Co-Chair:** *Jean-Pierre Guillou, Apple, Inc.*

**109.1:** **Multi-Device Linkage Technology for Eye-controlled Content Continuation Display**
*Xiufeng Wang, BOE Technology Group Co., Ltd., Beijing, China*

**109.2:** ***Invited Paper:*** **Thinking Differently About Video Processing at the Edge with AI in Systems Including Professional Displays**
*Ben Cope, Intel Corp., London, United Kingdom*

**109.3:** **Ultra-Low Interactive Latency with Frameless Render-Display Integration**
*Evan Jonson, North Carolina State University, Raleigh, NC US*

## Session 110: Emerging Optical Technologies for AR/VR *(Emerging Technologies and Applications / XR Technology)*

**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 409AB**

**Chair:** *Li Zhou, BOE*

**Co-Chair:** *Jignesh Gandhi, Microsoft Corp*

**110.1:** ***Invited Paper:*** **A High-Performance Display Scheme for VR Module**
*Fei Liang, BOE Technology Group Co., Ltd., Beijing, China*

**110.2:** ***Invited Paper:*** **Key Issues of AR Waveguide Glasses**
*Yun Lai, BOE Technology Group Co., Ltd., Beijing, China*

**110.3:** **Multicoated-Layer and Multi-Layer SRGs for Single-Waveguide Full-Color Augmented Reality Displays**
*Yongziyan Ma, University of Central Florida, Orlando, FL US*

## Session 111: Stretchable Displays *(Adaptive Display Technologies: Wearable, Flexible, and Non-Volatile)*

**Friday, May 8, 2026 / 1:30 PM - 3:00 PM / 411**

**Chair:** *Min Chul Suh, Kyung Hee University*

**Co-Chair:** *Zhen Zhang, Apple, Inc.*

**111.1:** ***Invited Paper:*** **Unprecedented Stretchable High-Resolution Micro-LED Display Achieves Successful Mechanical Testing**
*Tsung-Ying Ke, AUO Corporation, Hsinchu, Taiwan Roc*

**111.2:** ***Invited Paper:*** **Highly Stretchable Deformable Displays Enabled by Liquid Metal Integration**
*Masashi Miyakawa, NHK Science and Technology Research Laboratories, Tokyo, Japan*

**111.3:** ***Invited Paper:*** **Stretchable, High-Efficiency OLED**
*Sihong Wang, The University of Chicago, Chicago, IL US*

**111.4:** ***Distinguished Paper:*** **Intrinsically Stretchable Phosphorescence Light-Emitting Diodes with Small Molecule Emissive Layer**
*Min Chul Suh, Kyung Hee University, Seoul, South Korea*

**111.5:** ***Late-News Paper:*** **Facile Interconnect Patterning Methods for Multi-Layer Stretchable Platforms**
*Yongtaek Hong, Seoul National University, Seoul, South Korea*

## Session 112: MicroLED Chip Technology *(Emissive, Micro-LED, and Quantum-Dot Displays)*

**Friday, May 8, 2026 / 3:30 PM - 5:00 PM / 403A**

**Chair:** *Jean-Jacques Drolet, Osram Opto Semiconductors*

**Co-Chair:** *Khaled Ahmed, Intel Corporation*

**112.1:** ***Invited Paper:*** **Relaxed InGaN Platelets as Templates for Deep-Red sub-micrometer Sized InGaN microLEDs**
*Lars Samuelson, Lund University, Shenzhen and Lund, China*

**112.2:** **3D Nanowire MicroLED Technology for High-Efficiency, High-Brightness, and Low-Cost AR Displays**
*Pierre Tcoulfian, Aledia, Champagnier, France*

**112.3:** **Scaling Rules of Nanowire LEDs and microLEDs**
*Seth Coe-Sullivan, NS Nanotech, Inc., Rolling Hills Estates, CA US*

**112.4:** **High-Performance GaN Nanorod-Array LED Chips for Micro-LED Displays**
*Yingxiang Zhang, BOE Technology Group Co., Ltd., Beijing, China*

## Session 113: Active-Matrix Sensing Beyond Displays *(Interactive Displays and Sensors)*

**Friday, May 8, 2026 / 3:30 PM - 5:00 PM / 408A**

**Chair:** *Hiroshi Haga, Tianma Japan, Ltd.*

**113.1:** ***Distinguished Paper:*** **Differential-Driven MHz-Range High-Voltage Ultrasound 2D Beamsteering 50.4cm2 Imaging Cardiac Patch in LTPS**
*Florian De Roose, imec vzw, Leuven, Belgium*

**113.2:** **Evolution In IGZO TFT-Based TCAP Fingerprint Sensing Technology**
*Toru Sakai, Touch Biometrix B.V., Eindhoven, Netherlands*

**113.3:** **Reset-and-Correlated Double Sampling Low Noise oxide TFT Active Pixel Circuit for Dynamic X-Ray Imging**
*haotian Han, Peking University, Shenzhen, China*

**113.4:** ***Invited Paper:*** **The Process and Technology Development of Large-size Ultrasonic Fingerprint Sensor**
*Xi Chen, BOE Technology Group Co., Ltd., Beijing, China*

## Session 114: AI for Display System and Electronics *(Artificial Intelligence for Displays and Imaging)*

**Friday, May 8, 2026 / 3:30 PM - 5:00 PM / 408B**

**Chair:** *Chaohao Wang, YLab*

**Co-Chair:** *Xiaolin Yan, TCL Corporation*

**114.1:** ***Invited Paper:*** **A Low-Overhead and Content-Aware Brightness Roll-off Method for VR Devices**
*Fengzhi Cui, Goerpixel Co., Ltd., Xi'an, China*

**114.2:** ***Invited Paper:*** **Computer Vision and Agentic AI - New Paradigm Shift for Display Applications and Manufacturing**
*Dahai Yu, TCL Corporate Research(HK) Co., Ltd, Shatin, Hong Kong*

**114.3:** **AI-Based Component Placement for Printed Circuit Boards**
*Eunkyung Koh, Samsung Display Co., Ltd., Yongin City, South Korea*

**114.4:** **A Unified Framework for Multi-modal and Multi-Task Enterprise QA System with LLM**
*Yue Li, BOE Technology Group Co., Ltd., Beijing, China*

## Session 115: Spatial / Temporal Measurement *(Display Measurement)*

**Friday, May 8, 2026 / 3:30 PM - 5:00 PM / 404AB**

**Chair:** *Dr.-Ing. Ingo Rotscholl, TechnoTeam Bildverarbeitung GmbH*

**Co-Chair:** *Dr. Jaejoong Kwon, Samsung Display*

**115.1:** **Automated Detection of Temporal Visual Artifacts for Robust Display Subsystem Design**

*Ki-Chan (KC) Lee, Microsoft, Redmond, WA US*

**115.2:** ***Invited Paper:*** **Moiré Effects and Mitigation Techniques in Display Metrology**
*Alexander Voelz, TechnoTeam Bildverarbeitung GmbH, Ilmenau, Germany*

**115.3:** **Quantification Method for Artifact in Star Field Images Caused by Full Array Local Dimming**
*Inhye Heo, Samsung Display Co., Ltd., Yongin City, South Korea*

**115.4:** **Filtering Techniques for Display Metrology with Imaging LMDs**
*Michael Becker, Display-Messtechnik&Systeme, Rottenburg am Neckar, Germany*

**115.5:** ***Late-News Paper:*** **An Integrated Holography-Stereo Camera Multimodal System with Conditional Latent Diffusion for Display Inspection**
*Sanghoon Cho, Samsung Display, Yongin, South Korea*

## Session 116: Mini-LED Backlight *(Display Systems)*
**Friday, May 8, 2026 / 3:30 PM - 5:00 PM / 406AB**
**Chair:** *Zong Qin, Sun Yat-Sen University*
**Co-Chair:** *Brian Berkeley, Highlight Display, LLC*

**116.1:** **MLED Uniformity Calibration System**
*Xitong Ma, BOE Technology Group Co., Ltd., Beijing, China*

**116.2:** **Design of a High Efficiency Backlight System for ARHUD**
*Huanli Yang, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**116.3:** **Low Cost MLED Direct Back Lights for High-end Liquid Crystal Displays**
*Xianqin Meng, BOE Technology Group Co., Ltd., Beijing, China*

**116.4:** **An Ultra-Low Power Consumption Glass-based Direct Micro-LED Backlight and LCD System**
*Xianqin Meng, BOE Technology Group Co., Ltd., Beijing, China*

## Session 117: Emerging Optical Technologies *(Emerging Technologies and Applications)*
**Friday, May 8, 2026 / 3:30 PM - 5:00 PM / 409AB**
**Chair:** *Jim Zhuang, Meta*
**Co-Chair:** *Li Zhoue, BOE*

**117.1:** ***Invited Paper:*** **Hybrid Scan: A Multi-Viewer True-Perspective Strong Parallax Display With Algorithmicly Controlled Directionality**
*Steen Iversen, Realfiction ApS, Copenhagen, Denmark*

**117.2:** ***Distinguished Paper:*** **Light-Controlled Polarization Volume Grating via Liquid Crystal Elastomer Actuation**
*Ming Cheng, Hong Kong University of Science and Technology, Hong Kong, Hong Kong*

**117.3:** **Wide-Viewing Multi-Projection Light Field Display using Holographic Directional Diffuser**
*Sung-Wook Min, Kyung Hee University, Seoul, South Korea*

**117.4:** **Angular-Insensitive Multi-Wavelength Bandpass Filters with Simple Layer Structure for Advanced Display and Sensor Applications**
*Shimpei Yoshida, FUJIFILM Corp., Minamiashigara, Japan*

## Session 118: Stretchable/Textile Displays *(Adaptive Display Technologies: Wearable, Flexible, and Non-Volatile)*
**Friday, May 8, 2026 / 3:30 PM - 5:00 PM / 411**
**Chair:** *Yong Taek Hong, Seoul National University*
**Co-Chair:** *Kyung Cheol Choi, KAIST*

**118.1:** ***Invited Paper:*** **High-Efficiency Geometrically Stretchable and Textile-Integrated OLEDs for Wearable SpO? Monitoring**
*Min Chul Suh, Kyung Hee University, Seoul, South Korea*

**118.2:** ***Invited Paper:*** **Writable ACEL Display Textiles: Enabling Flexible and Interactive Wearable Electronics for IoT Applications**
*Jiajun Qin, State Key Laboratory of Molecular Engineering of Polymers, Department of Macromolecular Science, Institute of Fiber Materials and Devices, and Laboratory of Advanced Materials, Fudan University, Shanghai, China*

**118.3:** **E-Paper Textiles for Next-Gen Woven Pixel Displays**
*Bo-Ru Yang, Sun Yat-Sen University, Guangzhou, China*

**118.4:** **Applicability of Flexible and Stable Fabric-based OLEDs for Automotive Interior Displays**
*Jingi An, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea*

## Poster Session
**Thursday, May 7, 2026 / 5:00 PM - 7:30 PM / Concourse Hall**

### Active Matrix Devices

**P..1:** **A Novel LTPS TFT with Simple Architecture and Excellent Performance**
*Zhuang Li, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**P..2:** **Refinement of the a-Si TFT Backplane as an Enabling Technology for World's First 800Hz Refresh Rate Display**
*Hejing Zhang, HKC Optoelectronics Technology Co., Ltd., Chong Qing, China*

**P..3:** **Analysis on Influence and Mechanism of Physical Tempering Derived Technology on Anti-Crack Propagation Performance of Thin-Film Transistors**
*Jianlong Wu, Tianma Microelectronics Co., Ltd., Wuhan, China*

**P..4:** **A High Stability WOLED Display with Adapting GOA for Gaming MNT**
*Zhidong Yuan, Hefei Xinsheng Optoelectronic Technology Co., Ltd, Hefei, China*

**P..5:** **The Negative Bias Temperature Illumination Stress Mechanism of Top Gate Self Aligned Amorphous Oxide Semiconductor Thin Film Transistors**
*Haoxiong Zhang, BOE Technology Group Co., Ltd., Beijing, China*

**P..6:** **Key Parameters for Controlling Electrical Properties of Dual-gate Oxide Thin-Film Transistors under Single-gate Sweep Mode**
*Mamoru Furuta, Kochi University of Technology, Kami, Japan*

**P..8:** **Threshold Voltage Reversal Induced by Competation between Vacancy Diffusion and Passivation in Downscaled InGaO Thin-Film Transistors**
*Lei Lu, Peking University, Shenzhen, China*

**P..9:** **A Novel Ultra Wide Variable Refresh Rate without Band Mura Pixel Circuit for 14-inch 2.8K OLED Display**
*Yinghsiang Tseng, Everdisplay Optronics (Shanghai) Co., Ltd., Shanghai, China*

**P..10:** **Frequency-Dependent Stability of Oxide TFTs under Gate Pulse Bias**
*Rui Huang, BOE Technology Group Co., Ltd., Beijing, China*

**P..11:** ***Distinguished Poster:*** **High-Mobility Indium Gallium Oxide TFTs Fabricated from an Aqueous Precursor with Excimer-Light Activation**
*Kazuki Ueda, Osaka Institute of Technology, Osaka, Japan*

**P..12:** **Improving the Large-Area Uniformity and Performance of a-IGZO Vertical TFTs**
*Chen Shen, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..13:** **Engineering Hydrogen- Supplying Interlayers for In-Situ Passivation toward Top-Gate Self-Aligned ALD Indium-Based Oxide Thin-Film Transistors**
*Lei Lu, Peking University, Shenzhen, China*

**P..14:** **Thermally Robust 1-µm-Channel Oxide TFTs Enabled by Selective Incorporation of a Highly Conductive Oxide Layer**
*Ji Hun Choi, Electronics and Telecommunications Research Institute (ETRI), Daejeon, South Korea*

**P..15:** **Transparent, Hysteresis-Free Complementary Inverters Using p-Channel SWNT and n-Channel IGZO TFTs for Light-to-Frequency Conversion**
*Jin Sung Hun, Kyung Hee University, Seoul, South Korea*

**P..16:** **A Multi-Scan Module Circuit with High Mobility Poly-Oxide TFTs for High Resolution AMOLED Display over 1500 ppi**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

**P..17:** **Compact Emission Gate Driver for Narrow-Bezel Displays**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

**P..18:** **Polycrystalline Oxide TFT-Based AMOLED Pixel Circuit for 1494-ppi AR and VR Applications**
*Jin Jang, Kyung Hee University, Seoul, South Korea*

**P..19:** **Accurate Mixed-Mode Simulation for OLED Short-Term Image Sticking Verification and Optimization**
*Nan Liu, BOE Technology Group Co., Ltd., Beijing, China*

**P..20:** **Multi-Slope Ramp PWM to Extend the Lower Gray Limit for Target LED Current and Improve Robustness to TFT Threshold Voltage Variation in Micro-LED Displays**
*Jiro Yanase, Tianma Japan, Kawasaki, Japan*

**P..21:** **Studies On a-IGZO TFTs Reliability with Different Light-Shielding-Layer Size for Improvement of Short Channel Device in High PPI VR/AR LCD Display Technology**
*Dandan Sun, BOE CHUANGYUAN Technology Co., Ltd, Beijing, China*

**P..22:** **High Performance Ultra-thin InGaO TFTs by Spray Pyrolysis for Low-Cost Display Electronics**
*Arqum Ali, Inha University, Incheon, South Korea*

**P..23:** **The Development of Back-Channel-Etch Thin Film Transistors with High-Mobility Metallic Oxide and without Planarization Layer**
*Zhihui Cai, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

**P..243:** ***Late-News Poster:*** **Non-Contact SHG Imaging of Defect-Induced Electric Fields in Oxide Semiconductors**
*Hyunmin Hong, Samsung Display Co., Ltd., Yongin, South Korea*

**P..244:** ***Late-News Poster:*** **Simultaneous Enhancement of Mobility and Stability in Top-Gate IGZTO Thin Film Transistors via Sn Composition Optimization**
*Hwa Seon Kim, Yonsei University, Seoul, South Korea*

**P..245:** ***Late-News Poster:*** **Enhancement of Specific Contact Resistivity in a-IGZO Thin-Film-Transistors Using an ALD-Based Interlayer**
*Joo Hee Jeong, Hanyang University, Seoul, South Korea*

**P..246:** ***Late-News Poster:*** **Optimizing the Crystal Growth of Ultrathin In–Sn–O Thin-Film-Transistor via Plasma-Enhanced ALD**
*Soojin Park, Hanyang University, Seoul, South Korea*

**P..247:** ***Late-News Poster:*** **Hydrogen Control via Gate Stack Engineering for High-Performance of a-IGZTO Thin-Film Transistors**
*Yena Kim, Hanyang University, Seoul, South Korea*

**P..248:** ***Late-News Poster:*** **Impact of the Back-Channel layer on the Mobility in thin a-IGZO TFTs**
*Masatake Tsuji, Institute of Science Tokyo, Yokohama, Japan*

## Adaptive Display Techonlogies: Wearable, Flexible and Non-Volatile

**P..24:** **Actual Measurement Method for Bending Fixture Trajectory Based on DIC Technology**
*Haoyang Xia, Tianma Microelectronics Co., Ltd., Shanghai, China*

**P..25:** **Quantitative Evaluation of Layer-Thickness Sensitivity and Mechanical Reliability in Multilayer Display Modules Based on Finite Element Simulation**
*Yu Chen, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**P..26:** **Research on Low-Pressure Injection Molding Technology for Ultra-Narrow Bezel Flexible OLED Modules**
*Zhao Huan, Visionox Technology, Inc., KunShan, China*

**P..27: Fracture Mechanics-Inspired Interfacial Strength Testing for Display Technologies**
*Evan Brown, Exponent, Inc., Menlo Park, CA US*

**P..28: Asymmetric Pattern Design for Enhancing the Impact Resistance of Flexible OLED Modules**
*Houjiang Yang, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**P..29: Study on the Precipitation of UTG after the Reliability Experiment**
*Miao Nan, Visionox Technology, Inc., Hefei, China*

**P..30: Factors Affecting Backside Impact Resistance in Bending Area of Foldable AMOLED Modules**
*Shuang Wang, Visionox Technology, Inc., Hefei, China*

**P..31: Study on Improving OLED Screen Backside Impact Resistance**
*Zhishuai Jia, Yungu(Gu'an) Technology Co., Ltd., Langfang, China*

**P..32: Folding New Material UFG Structural Design and Its Enhancement to Module Performance**
*Xueyin Peng, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**P..33: Process-Induced Structural Defects and the Crack Propensity in Flexible OLED Panels**
*Chiming Jin, Tianma Microelectronics Co., Ltd., Wuhan, China*

**P..34: Study on the Variation of Adhesion Between Flexible Display Covers and Ink Over Time**
*Yongsheng Chen, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**P..35: Bending Failure Mechanism of Carbon Fiber BKT in Flexible Displays**
*Yali Liu, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

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**P..36: Just-Noticeable-Chromaticity-Difference in Low Luminance Conditions**
*Chaeeun Bae, Ulsan National Institute of Science and Technology (UNIST), Ulsan, South Korea*

**P..37: Quantitative Evaluation of Monocular Depth Perception in 2D Displays**
*Hongseop Shin, LG Display. Co., Ltd., Seoul, South Korea*

**P..38: Linking Spectroradiometric Characterisation to User Colour Matches in an Optical See-Through AR Display: A PLVC Study on HoloLens 2**
*Jinbi Jiang, University of Leeds, Leeds, UK*

**P..39: Improved CW-SSIM for Assessing See-Through Image Quality in Transparent Displays Across Varying Spatial Resolutions**
*Pei-Yu Chu, National Taiwan University of Science and Technology, Taipei, Taiwan Roc*

**P..249: *Late-News Poster:* Subjective Visual Comfort during Display Brightness Adaptation under Abrupt Illuminance Change**
*Lan He, Southeast University, Nanjing, China*

## Artificial Intelligence for Displays and Imaging

**P..40: Virtual Yield Platform for Yield Simulation: AI-EDA Co-Design Practice to Boost Display Panel Yield**
*Jing Ba, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..41: Neural Network Based Automatic Gain Demura for OLED Panels**
*Wei Yang, TCL Group Industrial Research Institute Co. Ltd., Wuhan, China*

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*Yalong Jiang, BOE Technology Group Co., Ltd., Beijing, China*

**P..43: Multi-Modal Pre-training Framework for Molecular Property Prediction**
*Min Zeng, BOE Technology Group Co., Ltd., Beijing, China*

**P..44: A Semi-Supervised-Based Virtual Metrology Method for PSH Estimation**
*Weixue Huang, BOE Technology Group Co., Ltd., Beijing, China*

**P..45: Performance Optimization Methods for Large Image Generation Models on Low-Computing-Power Devices**
*Jiaojiao Meng, BOE Technology Group Co., Ltd., Beijing, China*

**P..46: Order Consolidation and Logistics Intensive Assembly Algorithm Based on Three-Dimensional Loading**
*Congguang Dong, BOE Technology Group Co., Ltd., Beijing, China*

**P..49: Real-Time Monitoring of Drying Dynamics in Inkjet-Printed Display Manufacturing via Low-Resolution Deep Learning**
*Sung Jun Park, Gyeongsang National University, Jinju, South Korea*

**P..50: Temperature Color Shift Compensation System for Micro-LED Displays**
*Bojia Lyu, Tianma Microelectronics Co., Ltd., Shanghai, China*

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*Jaemin Choi, Sogang University, Seoul, South Korea*

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*Ngai Wong, The University of Hong Kong, Hong Kong, Hong Kong*

**P..53: A Small-Dataset-Driven Framework for Inkjet-Printed Quantum Dot Color Conversion Layers Powered by Random Forest and Bayesian Optimization**
*Yongwei Wu, Shenzhen Technology University, Shenzhen, China*

**P..54: Accurate Non-Invasive Blood Glucose Prediction Using Dual Long-Wavelength PPG Signals at 1480 nm and 1640 nm with Machine Learning**
*Paul C.-P. Chao, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

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*Ting-Yu Chen, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

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*Jeong Moon Lee, Samsung Display Co., Ltd, Suwon, South Korea*

**P..251: *Late-News Poster:* Optical Lens Design Engines Based on Advanced Algorithms**
*Chih Chen, National Taiwan University of Science and Technology, Taipei, Taiwan Roc*

**P..252:** ***Late-News Poster:*** **Research on Enhancement of Data Query for Display Manufacturing Based on Multi-Agent Technology**
*Shuo Feng, BOE Technology Group Co., Ltd., Beijing, China*

**P..253:** ***Late-News Poster:*** **AI Agent in the Display Industry: From Conceptual Evolution to Practical Application**
*Shujuan Yin, BOE Technology Group Co., Ltd., Beijing, China*

**P..254:** ***Late-News Poster:*** **Dual-dimension Graph Convolution Enhanced Transformer for Time Series Forecasting**
*Zheng Jin, BOE Technology Group Co., Ltd., Beijing, China*

**P..255:** ***Late-News Poster:*** **An AI-Based Ambient Light Adaptive System for Display Devices**
*Yingdong Gu, BOE Technology Group Co., Ltd., Beijing, China*

**P..256:** ***Late-News Poster:*** **Reducing Training Time of Display Radiance Fields via Hash Encoding**
*Ziyang Chen, University College London, London, London, United Kingdom*

**P..257:** ***Late-News Poster:*** **Diffusion-Based Data Augmentation for Robust AI Metrology in Low-Quality Inspection Images**
*Un Yang, Mechatronics Technology Research Center, Samsung Display, Yongin, South Korea*

**P..258:** ***Late-News Poster:*** **Quantitative Modeling and AI-Assisted Suppression of Fringe-Field Effects by Pixel-to-Pixel Spatial Voltage Control in an 8,485-PPI VA-LCoS Micro-Display**
*Hyunmyung Lee, Raonteach, Seongnam, South Korea*

**P..259:** ***Late-News Poster:*** **End-to-End Inverse Designed Metasurfaces for Snapshot Full-Stokes Polarization Imaging**
*Mengdi Sun, Southeast University, Nanjing, China*

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*Guiyang Zhang, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

**P..56:** **A Micro-LED Based Pixel-Level Optical System: Design and Integration**
*Qijun Yao, Tianma Microelectronics Co., Ltd., Wuhan, China*

**P..57:** **Research on Visibility Phenomena Induced by Anode Surface Non-Flatness**
*Gao Yamei, BOE Technology Group Co., Ltd., Chengdu, China*

**P..58:** **Reducing Attentional Capture in Automotive Head-Up Displays Using Image Distance and Lateral Offset**
*Jay Kantharaja, NSNA, Troy, MI US*

**P..59:** **Research on Temperature Rise Reduction of Ultra-Thin and High Brightness COB Module for Vehicular MLED Display**
*Mei You, BOE Technology Group Co., Ltd., Beijing, China*

**P..60:** **Thin Actuator for Automotive Haptic Displays**
*Seung Hyun Sung, LG Display. Co., Ltd., Seoul, South Korea*

**P..61:** **Research on Optical Performance Non-Uniformity of Flexible OLED Automotive Displays under Bending Stress**
*Gaohui Xie, Guangzhou Govisionox Technology Co., Ltd., Guangzhou, China*

**P..62:** **Integrating Mixed-Criticality Display Technologies for the Enhancement of Large Area Displays in Fighter Cockpits**
*Juan Carlos Bautista Bolonio, Tecnobit Grupo Oesia, Rivas Vaciamadrid, Spain*

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*Wei Wang, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

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*Hye-Won Woo, Sungkyunkwan University, Suwon, South Korea*

**P..65:** **High-Dynamic-Range Micro-LED Driver Using Hybrid PWM/PAM Architecture**
*En Tsung, National Yang Ming Chiao Tung University, Hsinchu, Taiwan Roc*

**P..66:** **Research on Dynamic OBS Solution for DTFT Based on Different Gray Scales in OLED Panels**
*Qiangqiang Song, Visionox Technology, Inc., Hefei, China*

**P..67:** **An External-Compensation Pixel Circuit for High-PPI AMOLED Displays Combining Double-Gate Oxide TFT Characteristics**
*Eunho Kim, Sungkyunkwan University, Suwon, South Korea*

**P..68:** **Hybrid-Output Generation Oxide TFT Gate Driver**
*Seung-Woo Lee, Kyung Hee University, Seoul, South Korea*

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*Tao Yang, BOE Technology Group Co., Ltd., Beijing, China*

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*jiaxi Lu, Shanghai EverDisplay Optronics Co.,LTD, Shanghai, China*

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*Yingteng Zhai, Tianma Microelectronics Co., Ltd., Shanghai, China*

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*Hee Jae Kang, Soongsil University, Seoul, South Korea*

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*Shin-Hyeong Kim, Sungkyunkwan University, Suwon, South Korea*

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*Chaeyeon Park, Soongsil University, Seoul, South Korea*

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*Po-Sheng Liao, Novatek Microelectronics Corp., Zhubei, Taiwan Roc*

**P..76:** **A Real-Time Compression and Decompression Scheme for Accumulated Aging Data in DBI**
*Pan Yang, Yungu(Gu'an) Technology Co., Ltd., Langfang, China*

**P..77:** **A two-stage Correlated Color Temperature Uniformity Compensation Scheme for Display**
*Yuan Tian, BOE Technology Group Co., Ltd., Beijing, China*

**P..78:** **System-Level OLED Luminance Forecasting and Compensation**
*Jung Ki Shin, Samsung Display Co., Ltd., Yongin City, South Korea*

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*Chuanyong Li, BOE Technology Group Co., Ltd., Chong Qing, China*

**P..80: A Skew-Immune Data-Shifting Column Driver for Ultra-High-Resolution Micro-Displays**
*Jaesuk Choi, Samsung Display Co., Ltd., Giheung, Yongin, South Korea*

**P..81: Research on the Spilt-Screen Issue of 8T1C Pixel Circuit OLED Anode Reset**
*Jie Ling, Visionox Technology, Inc., Hefei, China*

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*LIN Yiyang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..83: Low Power and High Reliability QB Control Unit for a-IGZO AMOLED Emission Drivers**
*Seung-Won Kwak, Kyung Hee University, Seoul, South Korea*

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*Lin Chen, Visionox Technology, Inc., Hefei, China*

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*Yue Wang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..86: Improved Design of Frit Width Flutuation in OLED Panel**
*Bing Han, Visionox Technology, Inc., KunShan, China*

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*Yamin Wang, Visionox Technology, Inc., Hefei, China*

**P..88: Improvement Methods for Water Stain Mura using a new 2-Wet-1-Dry Etching Process**
*Qi Wang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

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*Lei Song, BOE Technology Group Co., Ltd., Beijing, China*

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*Xueqin Wang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

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*Cheng Jiang, Tianma Microelectronics Co., Ltd., Xiamen, China*

**P..92: Redefining Ultra-narrow Bottom Bezels through Halftone Mask Process Breakthrough Beyond Fanout Pitch Limits**
*Yuqi Li, TCL China Star Optoelectronics Technology Co., Ltd., Guangzhou, China*

**P..93: Design and Fabrication of High-Performance Transparent Conductive Electrode**
*Siyu Yang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..94: High Refractive Index Metal Oxide Thin Films with High Optical Performance for Modern Displays**
*Omid Sadeghi, Phosio, Corvallis, OR US*

**P..95: Design and Optimization of High-Performance Photo-Alignment Polyimide Films For liquid Crystal Displays**
*Ming Chen, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China*

**P..96: A Strategy for Low Reflectance of 4-Side Bezel-Less LCD Display with TFT Glass Outside**
*Xiaoping Yu, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

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*Shenghao Shi, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

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*Guodan Wei, Tsinghua University, Shenzhen, China*

**P..99: Stress-Induced Birefringence Measurement for Crack Detection in Bessel Beam Laser-Drilled Glass**
*Nakcho Choi, Samsung Display Co., Ltd., Yongin, South Korea*

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*Takahito Makinouchi, Mitsubishi Chemical Corp., Kanagawa, Japan*

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*Yinchuan Li, Tianma Microelectronics Co., Ltd., Wuhan, China*

**P..102: A New Solution for Rapid in Situ Identification of TFE Peeling Risks and Effectiveness of Failure Improvement**
*Shunqi Tang, Tianma Microelectronics Co., Ltd., Wuhan, China*

**P..103: Detection of Defective Micro-LEDs via Array-Level Electroluminescence Using a Probe Wafer**
*Huijin Kim, Yeungnam University, Gyeongsan, South Korea*

**P..104: Category-Aware Adaptive Masking for Industrial Anomaly Detection**
*Wei Gao, BOE Technology Group Co., Ltd., Beijing, China*

**P..105: The Role of Optical Coatings in Display Technologies for Augmented Reality**
*Daniel de Sa Pereira, Bühler Alzenau GmbH, Alzenau, Germany*

**P..106: A Novel Method for Edge Strength Evaluation of Cover Glass for In-Vehicle Displays**
*Yuki Yasui, AGC Inc., Automotive Company, Mobility General Division, Yokohama, Japan*

**P..107: High-Weatherability Silicone Optical Clear Adhesive for Advanced Optical Bonding**
*Song Li, Guangdong Polomo New Materials Technology Co., Ltd., Dongguan, China*

**P..108: Process-Controllable Lithography Simulation Based on Flow Matching Generative Model**
*Qiao Xu, BOE Technology Group Co., Ltd., Beijing, China*

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*Min Hong, Samsung Display Co., Ltd., Asan, South Korea*

**P..110: Chain-of-Thought Enhanced Vision-Language Model for Key Information Extraction in Logistics Documents of the Display Industry**
*Pan Zhong, BOE Technology Group Co., Ltd., Beijing, China*

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*Sung Hwan Hong, Samsung Display Co., Ltd., Yongin City, South Korea*

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*Hyunseo Park, Sungkyunkwan University, Suwon, South Korea*

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*Dongyoun Yoo, Samsung Display Company, Tangjeong, South Korea*

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*Zheng Kening, BOE Technology Group Co., Ltd., Beijing, China*

**P..115: Evaluation of Color Crosstalk in RGB Independently Controlled Backlight Displays**
*Mingshen Zhao, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..116: A Study of Sandy Mura Based on AMOLED**
*Hongyuan Zhao, BOE Technology Group Co., Ltd., Chong Qing, China*

**P..117: A Framework for Ambient Picture-Quality Assessment of HDR Televisions**
*Junghyun Ham, LG Electronics, Pyeongtaek, South Korea*

**P..118: Characterization and Measurement Methods for Color Gamut of Displays Under Ambient Light**
*Li Song, EVERFINE Corp., Hangzhou, China*

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*Andreas Liebel, Instrument Systems GmbH, Munich, Germany*

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*Lulin Xiong, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..121: Quantitative Metrics for the Impact of Polarizer Surface Treatment on Display Image Quality**
*Jiao Wang, TCL China Star Optoelectronics Technology Co., Ltd., Shenzhen, China*

**P..122: Random Depolarization Film for Reducing Birefringence-Induced Color Degradation in Displays**
*Shizuki Sasaki, Keio Photonics Research Institute (KPRI), Keio University, Kawasaki, Japan*

**P..123: Moiré-Enabled Light Shaping in the High-Efficiency Backlight**
*Su-Yun Wang, TCL China Star Optoelectronics Technology Co., Ltd., Wuhan, China*

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