会议详细议程初版（Advanced Program）

2026 International Conference on Display Technology
March 31-April 3, 2026 (Tuesday - Friday)
Conference: Yuelai International Convention Center
Exhibition: Chongqing International Expo Center
Chongqing, China

Opening Remark
开幕式
Wednesday, April 1/14:00-14:30/ Liangjiang Grand Ballroom A

Plenary Session
大会主旨演讲
Wednesday, April 1/14:30-18:30/ Liangjiang Grand Ballroom A
Chair: Xingqun Jiang (姜幸群), BOE Technology Group Co., Ltd.
Co-Chair: Zong Qin (秦宗), Sun Yat-sen University

Short Course
短期课程
Short Course 1 (Language is English)
Tuesday, March 31/9:00-12:00/ Meeting Room 102A
Title: **Display 101**
显示 **101**
Ian Underwood, The University of Edinburgh & Sam Phenix, Phenix Consulting

Short Course 2 (Language is Chinese)
Tuesday, March 31/9:00-12:00/ Meeting Room 102B
Title: **OLED Materials and Devices**
OLED 材料与器件
Lian Duan (段炼), Tsinghua University

Short Course 3 (Language is Chinese)
Tuesday, March 31/9:00-12:00/ Meeting Room 103A
Title: **VR/AR Optical System Design: Principles and Engineering Processes**
VR/AR 光学系统设计：原理与工程工艺
Dewen Cheng (程德文), Beijing Institute of Technology

Short Course 4 (Language is Chinese)
Tuesday, March 31/9:00-12:00/ Meeting Room 103B
Title: **Color Science 101**
颜色科学 101
Minchen Wei (魏敏晨), The Hong Kong Polytechnic University

Seminar
专题技术讲座
Seminar 1 (Language is Chinese)
Tuesday, March 31/14:00-15:30/ Meeting Room 102A
Title: **3D Light Field Display Technology and Applications**
3D 光场显示技术与应用
Xunbo Yu (于迅博), Beijing University of Posts and Telecommunications

Seminar 2 (Language is English)
Tuesday, March 31/15:45-17:15/ Meeting Room 102A
Title: **Breaking Down the Display & Optics Driving the Smart-glass Enabled Future**
面向未来智能眼镜的显示与光学前瞻性技术分析
Radu Reit, Display Training Center

Seminar 3 (Language is Chinese)
Tuesday, March 31/14:00-15:30/ Meeting Room 102B
Title: **The In-depth Analysis of New Automotive Display Technologies: From Principles and Parameters to Application Implementation**
车载显示新技术深度解析：从原理参数到应用落地
Xiongping Li (李雄平), Tianma Microelectronics Co., Ltd.

Seminar 4 (Language is Chinese)
Tuesday, March 31/15:45-17:15/ Meeting Room 102B
Title: **Recent Advancements of High-Mobility Thin-Film Transistors**
高迁移率 **TFT** 研究进展
Lei Lu (陆磊), Peking University

Seminar 5 (Language is Chinese)
Tuesday, March 31/14:00-15:30/ Meeting Room 103A
Title: **Recent Trends in AR Waveguide Design and Fabrication**
AR 波导设计与制造的最新趋势
Lei Zhao (赵蕾), Yongjiang Laboratory

Seminar 6 (Language is English)
Tuesday, March 31/15:45-17:15/ Meeting Room 103A
Title: **Optical Metasurfaces for Imaging, Sensing, and Display**
用于成像、传感和显示的光学超表面
Junsuk Rho, Pohang University of Science and Technology

Display Technology and Industry Standards Forum (Invited Only)
显示技术和产业标准论坛
Tuesday, March 31/ 9:00-12:00/ Apollo VIP Room

Micro/Mini LED Display Core Technology Road Map Forum
Micro/Mini LED 显示关键技术路线研讨会
Tuesday, March 31/14:00-18:00/ Athena Function Room

ICDT "Display Future Star Cup" Innovation Achievement Competition
ICDT "显示未来之星杯"创新成果大赛
Tuesday, March 31/ 14:00-16:30/ Meeting Room 103B

JSID Journal Publication Training Session
JSID 期刊发表培训会
Tuesday, March 31/ 16:45-18:00/ Meeting Room 103B

Display Industry Future Technology Strategy Summit (FTS) (Invited only)
显示产业未来技术战略峰会 (显示行业领袖峰会) (闭门会议)
Wednesday, April 1/9:30-12:00/ Athena Function Room

New Technology and New Product Public Release
新技术新产品发布会
Wednesday, April 1/9:05-10:05/ Central Hall

Exhibitor Forum 1
展商论坛 1
Wednesday, April 1/10:30-11:45/ Central Hall

Exhibitor Forum 2
展商论坛 2
Thursday, April 2/14:00-15:15/ Central Hall

Roadshow of Innovation & Entrepreneurship Projects
创新创业项目路演
Thursday, April 2/9:00-11:40/ Central Hall

Business Conference
商业会议
Thursday, April 2/9:00-12:00 & 13:30-17:00/ Athena Function Room

AI for Imaging and Display Special Forum
AI 赋能成像与显示专题论坛
Thursday, April 2/9:00-12:00/ Fabulous Function Room C
Chair: Xingqun Jiang (姜幸群), BOE Technology Group Co., Ltd.

Human Factor and Visual Health Special Forum
人因与视觉健康专题论坛

Thursday, April 2/8:30-12:00/ Fabulous Function Room B
Chair: Yunhong Zhang (张运红), China National Institute of Standardization
Co-Chair: Weidong Huang (黄卫东), TCL CSOT
1. 40Hz Light Flickering: the Adenosine Hypothesis and Translational Implications (8:30-8:50)
Jiangfan Chen (陈江帆), Wenzhou Medical University
2. Quality of Experience Evaluation: Humans, Data, and Agents (8:50-9:10)
Guangtao Zhai (翟广涛), Shanghai Jiao Tong University
3. From PC Objective Metrics to Scenario-Based User Value Discovery (9:10-9:30)
Ke Shang (尚可), Lenovo
4. The Applications of Micro OLED Based Head Mounted Displays for Surgery and Vision Health (9:30-9:50)
Huajun Peng (彭华军), Shenzhen NEDOptics Co., Ltd.
5. Beneficial Natural Light Technology (BNL) (9:50-10:10)
Ruichen Zhang (张瑞辰), Beijing BOE Display Technology Co., Ltd.
6. Reshaping the Evolutionary Visual Environment: Decoding the Light Signals of Natural Displays (10:10-10:30)
Guofu Tang (唐国富), TCL CSOT
7. Human Factors Meets Optics: SGS' s eye care Journey and Future Vision (10:30-10:50)
Ziwen Liu (刘子文), SGS-CSTC Standards Technical Services Co., Ltd.

Metaverse and Display Special Forum
元宇宙与显示专题论坛
Thursday, April 2/9:00-12:00/ Fabulous Function Room A
Chair: Zong Qin (秦宗), Sun Yat-sen University
1. AI-Driven High-Definition Glasses-Free 3D Light Field Display with Large-Viewing-Angle (9:00-9:20)
Xinzhu Sang (桑新柱), Beijing University of Posts and Telecommunications
2. Three-Dimensional Light Field Display Based on Freeform Directional Backlight (9:20-9:40)
Rengmao Wu (吴仍茂), Zhejiang University
3. Resolution Enhancement of Light Field Near-Eye Display Using Elemental Image Optimization (9:40-10:00)
Jae-Hyeung Park, Seoul National University
4. Novel Optical Architectures of Retinal Projection Near-Eye Displays (10:00-10:20)
Enguo Chen (陈恩果), Fuzhou University.
5. Liquid-Crystal Polarization Volume Holograms Drive Breakthroughs in XR Near-Eye Displays (10:20-10:40)
Kun Gao (高堃), Goertek Alpha Labs
6. Recent Technological Advancements in Color Sequential Front-Lit LCOS for AR Displays (10:40-11:00)
Yuet Wing Li (李悦荣), Himax Display Inc.
7. Enabling High Performance AR Waveguide Display with Semiconductor Manufacturing Technologies (11:00-11:20)
Jinxin Fu, Applied Materials

Women in Tech (Language is Chinese)
科技中的女性
Thursday, April 2/9:00-12:00/ Apollo VIP Room
Chair: Lei Zhao (赵蕾), Yongjiang Laboratory

ICDT "Display Future Star Cup" Debate Competition (Language is Chinese)
ICDT"显示未来之星杯"辩论赛
Thursday, April 2/9:00-12:00 & 14:00-17:30/ Meeting Room 106

SID Beijing Chapter Technical Committee Meeting
SID 北京分会技术委员会会议
Thursday, April 2/19:00-21:00/ Wyndham Chongqing Yuelai

Wide Color Gamut Display Special Forum
广色域显示专题研讨会
Friday, April 3/9:00-12:00/ Felicity Function Room C

Young Leader Conference
中韩青年领袖论坛
Friday, April 3/13:30-17:40/ Felicity Function Room C
Chair: Qijun Sun (孙其君), Beijing Institute of Nanoenergy and Systems, Chinese Academy of Sciences
1. Nonlinear Light Field Manipulation via Ferroelectric Nematic Microstructures (13:30-13:50)
Lingling Ma, Nanjing University
2. Mechanistic Design of Quantum Dots for Stable and High-Performance Display Applications (13:50-14:10)
Jiwoong Yang, Daegu Gyeongbuk Institute of Science and Technology
3. From Inkjet Droplets to Pixels: Data-Efficient CCL Printing Optimization and Real-Time FPGA Image Enhancement (14:10-14:30)
Wu Yongwei, Shenzhen Technology University
4. Ultra-flexible Skin-compatible Organic Optoelectronics for Wearable Application (14:30-14:50)
Sungjun Park, Ajou University
5. Focus-tunable Microlens Array for 2D/3D Switchable Displays (14:50-15:10)
Miao Xu, Hefei University of Technology
6. High-definition & Deformable Quantum Dot Light-emitting Diodes via Transfer Printing (15:10-15:30)
Moon Kee Choi, Ulsan National Institute of Science and Technology
7. Electro-excitation Dynamics of Colloidal Quantum Dots (15:40-16:00)
Yunzhou Deng, University of Cambridge
8. High Performance Compressive Light Field 3D Displays (16:00-16:20)

Chen Gao, Fujian Science & Technology Innovation Laboratory for Optoelectronic Information of China

9. Device Construction and Application Development of Multifunctional Electrophoretic Displays (16:20-16:40)

Guangyou Liu, Wuhan Textile University

10. High-performance Phosphonic-acid-based Monolayer Alignment Materials with Room-temperature Treatment (16:40-17:00)

Yu Xinyi, Hong Kong University of Science and Technology

11. Intelligent Three-dimensional Processing and Display of Light Field (17:00-17:20)

Qiang Li, Xidian University

12. Deep Learning-aided Computer-Generated Holography (17:20-17:40)

Wenbin Zhou, The University of Hong Kong

Display Industry Sustainable Development Special Forum (Invited Only)
显示产业可持续发展研讨会 (闭门会议)
Friday, April 3/14:00-18:00/ Fabulous Function Room A
Chair: Xinyue Zhao (赵心悦), TÜV Rheinland (Shenzhen) Co., Ltd.

the Award Ceremony of SID China Display Industry Award
SID 中国区显示行业奖颁奖仪式
Friday, April 3/9:30-10:30/ Central Hall

Technical Sessions

Session 1: OLED Display - Applications (OLEDs)

Wednesday, April 1/8:30-10:10/ Felicity Function Room A

1.1 *Invited Paper:* Application of ACR Optimization Technology for Wide Viewing Angle in Large-Size OLED Displays (8:30-8:50)

Yunpeng Zhang, Chengdu BOE Optoelectronics Group Co., Ltd.

1.2 *Invited Paper / Distinguished Paper:* Boosting the Efficiencies of OLEDs through ViP™ Technology (8:50-9:10)

Minghan Cai (蔡明瀚), Visionox Technology Inc.

1.3 *Invited Paper:* View-Angle Control Using Light-control Structure in the OLED Panel for Automotive (9:10-9:30)

Youchun Chen, Chengdu BOE Optoelectronics Technology Co., Ltd.

1.4 A 1512 PPI Real RGB Glassed-OLED Display for VR (9:30-9:50)

Rongjuan Yang, Shenzhen China Star Optoelectronics Semiconductor Display Technology Co., Ltd.

1.5 A Technical Method for Implementing Dynamic Privacy Protection in OLED Displays (9:50-10:10)

Junlin Hu, Yungu (Gu'an) Technology Co., Ltd.

Session 2: OLED - TADF Materials & Sensitizer (OLEDs)

Wednesday, April 1/8:30-10:10/ Felicity Function Room B

2.1 *Invited Paper:* Exciplex Host Engineering for High Efficiency and Stable Green PSF Technology (8:30-8:50)

Jang Hyuk Kwon, Kyung Hee University

2.2 *Invited Paper:* Narrowband MR-TADF Materials and OLEDs for High-Definition Displays (8:50-9:10)

Chuluo Yang (杨楚罗), Shenzhen University

2.3 *Invited Paper:* Highly Efficient and Stable Sensitized Blue OLEDs (9:10-9:30)

Dongdong Zhang (张东东), Tsinghua University

2.4 *Invited Paper:* Organic Room-Temperature Phosphorescence Sensitization in MR-TADF OLEDs (9:30-9:50)

Junqiao Ding (丁军桥), Yunnan University

2.5 *Invited Paper:* Narrowband Organic Light-Emitting Materials and Devices (9:50-10:10)

Yuewei Zhang (张跃威), Tsinghua University

Session 3: Micro-LED Epitaxy Technology (EMQ-MicroLED)

Wednesday, April 1/8:30-10:30/ Felicity Function Room C

3.1 *Invited Paper:* Recent Progress in InGaN-based Sub-μm Sized RGB MicroLEDs (8:30-8:50)

Lars Samuelson, Institution of Nanoscience and Applications, Southern University of Science and Technology

3.2 *Invited Paper:* MicroLED Value Chains to Enable the AI Revolution (8:50-9:10)

Burkhard Slischka, ALLOS Semiconductors

3.3 *Invited Paper:* Core Drivers of AR Application: GaN Epitaxy (9:10-9:30)

Liyang Zhang (张丽旸), Enkris Semiconductor, Inc.

3.4 Comparative Analysis of Light Extraction Directionality in Polar, Semi-polar, and Non-polar SAG MicroLEDs for AR Displays (9:30-9:50)

Ze Yuan, Yongjiang Laboratory

3.5 Non-covalent Epitaxy for Flexible and High-definition LED Display Applications (9:50-10:10)

Young Joon Hong, Sungkyunkwan University

3.6 Photolithographic Quantum-Dot OLED for MicroDisplays (10:10-10:30)

Rongzhen Cui, Kunshan Govisionox Optoelectronics Co., Ltd.

Session 4: Near-Eye Display Optics Technology (VR/AR/MR)

Wednesday, April 1/8:30-10:30/ Fabulous Function Room A

4.1 *Invited Paper:* Light Field 3D Display with High Resolution (8:30-8:50)

Yan Xing (邢妍), Beihang University

4.2 *Invited Paper:* A Compact Full Color Laser Beam Scanning Module for Near-eye Display (8:50-9:10)

Wenjiang Shen (沈文江), Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences

4.3 *Invited Paper:* Achieving Ultra-Lightweight and Slim AR Smart Glasses through an OLED-Based PinTILT Optical Structure (9:10-9:30)

Jeonghun Ha, LetinAR

4.4 The Impact of Waveguide Spectral Filtering on AR Color Fidelity (9:30-9:50)

Tianxing Zhu, Instrument Systems GmbH

4.5 A Two-Stage Optical Design Methodology for an Eyebox-Expanded 3D AR-HUD (9:50-10:10)

Junnan Jin, TCL China Star Optoelectronics Display Technology Co., Ltd.

4.6 *Distinguished Student Paper:* Synthetic-Aperture Wavefront Coding Enabling a Full Depth-of-Field for Light-Field Displays (10:10-10:30)

Mingjing Wang, Sun Yat-sen University

Session 5: Color Assessment (Applied Vision)

Wednesday, April 1/8:30-9:50/ Fabulous Function Room B

5.1 *Invited Paper:* Reproducing Color Appearance of Real Scenes in Head-mounted Displays (8:30-8:50)

Shining Ma (马诗宁), Beijing Institute of Technology

5.2 *Invited Paper:* Evaluation Method and Research on Display Technology Based on Natural Spectrum Similarity (8:50-9:10)

Guofu Tang (唐国富), TCL China Star Optoelectronics Technology Co., Ltd.

5.3 Skin Color Preference of Multiple Ethnic Groups (9:10-9:30)

Beijia Qin, Zhejiang University

5.4 Which Color will Produce More Observer Mismatch for Displays? (9:30-9:50)

Siyuan Song, Zhejiang University

Session 6: AI for Interactive and Novel Displays (AI for Imaging and Display)

Wednesday, April 1/8:30-10:10/ Fabulous Function Room C

6.1 *Invited Paper:* Learning with Graph Attention Network for Human Parsing: Enhancing Perception Foundation for Natural Human-Computer Interaction (8:30-8:50)

Chengrui Le (乐城瑞), Yongjiang Laboratory

6.2 Innovative Applications Based on Absolute Pointing Remote Control Technology (8:50-9:10)

Xingxing Jiao, BOE Technology Group Co., Ltd.

6.3 A Real-Time Eye Tracking System for Man to Machine Interaction on Light Field Display (9:10-9:30)

Runshen Lu, Faith Billion Technology Development Limited

6.4 Beyond MLPs: Convolutional Color Constancy with Kolmogorov-Arnold Networks (9:30-9:50)

Liangwei Chen, Zhejiang University

6.5 Vision-Language Models Internalize Human-Like Memory Colors from Real-World Objects (9:50-10:10)

Zhiyu Chen, Wuhan University

Session 7: LC Photonic Devices (Liquid-Crystal Technology)

Wednesday, April 1/8:30-10:10/ Apollo VIP Room

7.1 *Invited Paper:* Liquid Crystal Devices Transmitted Rays' Doubling (8:30-8:50)

Victor Belyaev, Peoples' Friendship University of Russia

7.2 *Invited Paper:* Photonic Devices of Twist Structure Liquid Crystals (8:50-9:10)

Jiangang Lu (陆建钢), Shanghai Jiaotong University

7.3 *Invited Paper:* 3D Liquid Crystal Microstructures Based on Two-Photon Polymerization (9:10-9:30)

Wanlong Zhang (张万隆), Shenzhen University

7.4 A Highly Efficient Three-Dimensional Nonuniform Finite-Difference Model for Electrically Stimulated Liquid Crystals Photonic Devices Enabling Dynamic Photomask Lithography (9:30-9:50)

Peiyun Li, South China Normal University

7.5 Holographic Image Generation Using Photoaligned Liquid Crystals (9:50-10:10)

Pouya Nosratkhah, The Hong Kong University of Science and Technology

Session 8: HUD (Vehicle Display)

Wednesday, April 1/8:30-10:30/ Meeting Room 103

8.1 Future Trends in Smart Cockpit Displays (8:30-8:50)

Ziqiang Deng (邓紫强), Chipone Technology (Beijing) Co., Ltd.

8.2 *Invited Paper:* Human-Oriented Virtual-Real Fusion Measurement and Optical Characterization for Automotive AR-HUD (8:50-9:10)

Xi Mou (牟希), Hangzhou SanTest Technology Co., Ltd.

8.3 A Micro-LED Based Pixel-Level Optical System: Design and Integration (9:10-9:30)

Yaodong Wu, Shanghai Tianma Microelectronics Co., Ltd.

8.4 High Resolution 3D Augmented Reality Head-up Display Technology with Eye Tracking System (9:30-9:50)

Guiyang Zhang, Wuhan China Star Optoelectronics Technology Co., Ltd.

8.5 High-resolution Automotive Light-field Head-Up Display (9:50-10:10)

HanTsung Hsueh, Zhejiang Chief Technology Co., Ltd.

8.6 Windshield-adaptive Head-up Displays Using Two-dimensional Alvarez Lenses (10:10-10:30)

Haoteng Liu, Sun Yat-sen University

Session 9: Driving Circuit (Display Electronics)
Wednesday, April 1/8:30-10:10/ Meeting Room 102
9.1 A 10-Bit 1280×720 Micro-LED Display Driver (8:30-8:50)
Chih-Wen Lu, Taiwan Tsing Hua University
9.2 An 8-bit 2160-Channel Source Driver IC with Linearity-Improved Digital to Analog Converters for OLED Displays (8:50-9:10)
Byungwha In, DB Globalchip
9.3 Micro-LED Pixel Circuit Using Feedback Structure Based on Double-Gate IGZO TFT for Low Gray Expression (9:10-9:30)
Jinghui Jin, Sungkyunkwan University
9.4 Advanced OTD-Based Pixel Circuits with GOA Design for Low-Power AMOLED Displays (9:30-9:50)
Lei Zhou, South China University of Technology
9.5 A LTPO TFT Gate Driver with Multiple Outputs and Programmable Pulse Width for Ultra-Narrow Bezel AMOLED Displays (9:50-10:10)
Pu Liang, Peking University

Session 10: QLED Mechanism (EMQ-Quantum Dots)
Wednesday, April 1/8:30-10:30/ Meeting Room 101
10.1 *Invited Paper:* Atomistic Mechanisms of Surface Defects and Degradation Pathways in Quantum Dots for Display Applications: A DFT and AIMD Study (8:30-8:50)
Yue Zhang (张悦), Qingdao University of Technology
10.2 *Invited Paper:* Hole Trap Formation in Quantum Dot Light-Emitting Diodes Under Electrical Stress (8:50-9:10)
Quan Niu (牛泉), South China University of Technology
10.3 *Invited Paper:* Water in Quantum-dot Light-emitting Diodes (9:10-9:30)
Yizheng Jin (金一政), Zhejiang University
10.4 Dynamics Analysis of Quantum Dot Light-Emitting Devices Based on Time-Resolved Electroluminescence Technology (9:30-9:50)
Shuai Chang, Shenzhen MSU-BIT University
10.5 Atomic-level Surface Reconstruction of Quantum Dots for Manufacturing Active-Matrix Display (9:50-10:10)
Xingliang Dai, Zhejiang University
10.6 Performance Investigation of Quantum-dot Light-emitting Diodes with Different Structures (10:10-10:30)
Cuixia Yuan, Great Bay University

Session 11: OLED Display - Processing & Driving (OLEDs)
Wednesday, April 1/10:20-12:20/ Felicity Function Room A
11.1 *Invited Paper:* Photoconversion Coating Technology based on Quantum Dots with High PLQY and Colour Purity in OLED Microdisplays (10:20-10:40)
Denis Chausov, Prokhorov General Physics Institute of the Russian Academy of Sciences

11.2 Investigation of Al Plate for Automotive OLED Module (10:40-11:00)

Shuangjun Li, Hefei Visionox Technology Co., Ltd.

11.3 A Customized ASTC-Based Image Compression IP Core for Display Driver Integrated Circuits (11:00-11:20)

Gaobo Yang, Hunan University

11.4 Research on the Design of AMOLED TFT Image Cable Circuit and the Influence of Voltage Signal on the Decrease of Screen Brightness (11:20-11:40)

Jingjing Zhao, Yungu (Gu'an) Technology Co., Ltd.

11.5 Low Damage Sputtering Process Development of MgAg Cathode Electrode (11:40-12:00)

Junsuke Matsuzaki, ULVAC Inc.

11.6 Research on Factors Influencing Display Non-Uniformity in Partial Refresh and Optimization Strategies (12:00-12:20)

Huiming Wang, Hefei Visionox Technology Co., Ltd.

Session 12: OLED - Blue Materials (OLEDs)

Wednesday, April 1/10:20-11:40/ Felicity Function Room B

12.1 *Invited Paper:* Intrametallic Emitters for Deep Blue High Efficient OLEDs (10:20-10:40)

Carsten Rothe, beeOLED

12.2 *Invited Paper:* Molecular Engineering of Emitters for Narrow-Emitting Blue Organic Light-Emitting Diodes (10:40-11:00)

Jun Yeob Lee, Sungkyunkwan University

12.3 *Invited Paper:* Recent Advances in Blue OLED Materials toward High Efficiency and Long Life-time Devices (11:00-11:20)

Yoichi Ikeda, Idemitsu Electronic Materials (China)

12.4 *Invited Paper:* Superbly Efficient and Stable Ultrapure Blue Phosphorescent Organic Light-Emitting Diodes with Tetradentate Pt (II) Complex with Vibration Suppression Effect (11:20-11:40)

Taekyung Kim, Kyung Hee University

Session 13: Micro-LED Light Emission & Extraction (EMQ-MicroLED)

Wednesday, April 1/10:40-12:20/ Felicity Function Room C

13.1 *Invited Paper:* Impacts of Sidewall on the Luminous Characteristics of Micro-LEDs (10:40-11:00)

Weijie Guo (郭伟杰), Xiamen University

13.2 Featuring on TM-polarized Sidewall Emission for AlGaN Deep-Ultraviolet Micro-LED with Enhanced Light Extraction Efficiency (11:00-11:20)

Feng Feng, The Hong Kong University of Science and Technology

13.3 3D Nanowire MicroLED Technology for High-Efficiency, High-Brightness, and Low-Cost AR Displays (11:20-11:40)

Ivan-Christophe Robin, Aledia

13.4 Red-Emitting Quantum Wells in Submicron-Sized Platelets Studied by Low-Temperature Luminescence (11:40-12:00)

Hira Usman, Institute of Nanoscience and Applications，Southern University of Science and Technology

13.5 Monolithic Resonant-Cavity AlGaInP-on-Si Red µLEDs with Highly Directional Emission (12:00-12:20)

Chuyao Yan, Shandong University

Session 14: Near-Eye Display Elements (VR/AR/MR)

Wednesday, April 1/10:40-12:20/ Fabulous Function Room A

14.1 *Invited Paper:* Micron Pixel Metasurface Liquid Crystal on Silicon (LCoS) for AR displays (10:40-11:00)

Arseniy Kuznetsov, Institute of Materials Research and Engineering, A*STAR (Agency for Science, Technology and Research)

14.2 *Invited Paper:* Glasses-free AR Display and its Challenges (11:00-11:20)

Wen Qiao (乔文), Soochow University

14.3 *Invited Paper:* Study of Human Visual Characteristics in Holographic Near-eye Displays (11:20-11:40)

Zi Wang (王梓), Hefei University of Technology

14.4 *Distinguished Paper:* Studies On a-IGZO TFTs Reliability with Different Light-Shielding-Layer Size for Improvement of Short Channel Device in High PPI VRAR LCD Display Technology (11:40-12:00)

Dandan Sun, BOE CHUANGYUAN Technology Co., Ltd.

14.5 Optimization of Bundled Fiber End-Face Heterostructure for Near-Eye Displays (12:00-12:20)

Yiyang Zheng, Fuzhou University

Session 15: Color Modeling (Applied Vision)

Wednesday, April 1/10:00-11:20/ Fabulous Function Room B

15.1 A Color Image Enhancement Method for Anomalous Trichromats Based on a Deep Learning Approach (10:00-10:20)

Ruiqing Ma, Taiyuan University of Technology

15.2 ICONS: A Universal Colour Communication System for Cross Media Colour Reproduction (10:20-10:40)

Molin Li, Zhejiang University

15.3 *Distinguished Student Paper:* How Reliable is Human Memory Color? A Case Study Based on Multiple Methods and Neural Network Prediction (10:40-11:00)

Zhiyu Chen, Wuhan University

15.4 Benchmarking the Scale Consistency and Uniformity of sUCS for High-Dynamic-Range Color Assessment (11:00-11:20)

Molin Li, Zhejiang University

Session 16: AI for Manufacturing (AI for Imaging and Display)

Wednesday, April 1/10:20-12:20/ Fabulous Function Room C

16.1 *Invited Paper:* Visual Chain-of-Thought Reasoning for Display Industrial Defect Management Based on Vision-Language Models (10:20-10:40)

Haiyang Guo, BOE Technology Group Co., Ltd.

16.2 *Invited Paper:* Artificial Intelligence Architecture with Memristor Synapses for Fast Image Processing (10:40-11:00)

Aliaksandr Smirnov, Belarus Chapter, Belarusian State University of Informatics and Radioelectronics

16.3 A Semi-Supervised-Based Virtual Metrology Method for PSH Estimation (11:00-11:20)

Weixue Huang, BOE Technology Group Co., Ltd.

16.4 A Dual-Tower Transfer Learning Strategy for Precise Classification of Extremely Imbalanced LCD Aging Defect Data (11:20-11:40)

Jing Ba, TCL China Star Optoelectronics Technology Co., Ltd.

16.5 Yield Root Cause Analysis System for Display Panel Production Based on Machine Learning and Big Data Technology (11:40-12:00)

Zijian Cheng, BOE Technology Group Co., Ltd.

16.6 AI-based Layout-to-Image Dataset Generation for Lithography Defect Detection (12:00-12:20)

Yuehua Hu, Korea Institute of Industrial Technology (KITECH)

Session 17: LCD Image Quality (Liquid-Crystal Technology)

Wednesday, April 1/10:20-12:00/ Apollo VIP Room

17.1 *Invited Paper:* A Novel Triple-Gate Pixel Architecture with Horizontal RGB Sub-Pixel Arrangement or High Image Quality and Low Cost (10:20-10:40)

Hongmin Li, Hefei BOE Optoelectronics Technology Co., Ltd.

17.2 *Invited Paper:* Ultra-Low-Power FFS LCDs Using Positive Dielectric Liquid Crystals via Suppressing Flexoelectric Flicker (10:40-11:00)

MinSu Kim, Jeonbuk National University

17.3 Enhancing Luminance Uniformity Across Wavelength and Grayscale for High Display Performance of MLCD (11:00-11:20)

Junyang Nie, TCL China Star Optoelectronics Technology Co., Ltd.

17.4 Novel Low-Power Triple-Gate TFT-LCD Pixel Architecture for Improving Color Shift and Power Consumption (11:20-11:40)

Hongmin Li, Hefei BOE Optoelectronics Technology Co., Ltd.

17.5 *Distinguished Paper:* Transversely Oriented Polyvinyl Alcohol Polarizer for Ultra-Large TFT-LCDs (11:40-12:00)

Puman Huang, TCL China Star Optoelectronics Technology Co., Ltd.

Session 18: HUD & Drive System (Vehicle Display)

Wednesday, April 1/10:40-12:00/ Meeting Room 103

18.1 A Method for 5m Long-distance Transmission between the Cockpit and Field Information Display Module (10:40-11:00)

Sun Ji, Wuhan China Star Optoelectronics Technology Co., Ltd.

18.2 Compact Diffractive Optical Waveguide HUD Imaging Simulation (11:00-11:20)

Liang Zhou, Southeast University

18.3 *Distinguished Student Paper:* Eliminating Sunlight Backflow in AR-HUDs through a Faraday Rotator under the étendue Constraint (11:20-11:40)

Yi Liu, Sun Yat-sen University

18.4 Research on Lightweight Super-Resolution GAN Model on Low-Cost FPGA for Automotive Application (11:40-12:00)

Jiahe Zhang, Southeast University

Session 19: Driving Technology (Display Electronics)

Wednesday, April 1/10:20-12:20/ Meeting Room 102

19.1 *Invited Paper:* Analysis and Optimization of LVDS Eye-diagram in Vehicle Products (10:20-10:40)

Dalei Zhang (张大雷), Mian Yang HKC optoelectronics Technology Co., Ltd.

19.2 A Compensation Scheme for Dark-state Luminance and Chromaticity of AMOLED Displays (10:40-11:00)

Lin Chen, Hefei Visionox Technology Co., Ltd.

19.3 A Novel Design of Passive Continuous-Time Linear Equalizer Circuit for High-Speed Serial Channel (11:00-11:20)

Dongmei Chen, TCL China Star Optoelectronics Technology Co., Ltd.

19.4 Research on the Split-Screen Issue of 8T1C Pixel Circuit OLED Anode Reset (11:20-11:40)

Jie Ling, Hefei Govisionox Technology Co., Ltd.

19.5 A Novel 3T1C Pixel Circuit with Two-Scan Switching for Internal Compensation on High-PPI OLED Displays (11:40-12:00)

Weijing Zeng, TCL China Star Optoelectronics Display Technology Co., Ltd.

19.6 Application Analysis of Swire Protocol in OLED EL Power Chip (12:00-12:20)

Fangyun Liu, Hefei Visionox Technology Co., Ltd.

Session 20: QD Display Applications (EMQ-Quantum Dots)

Wednesday, April 1/10:40-12:20/ Meeting Room 101

20.1 *Invited Paper:* Highly Efficient and Stable Quantum Dot Light-Emitting Diodes for Next-Generation Display Applications (10:40-11:00)

Jiangyong Pan (潘江涌), Nanjing University of Information Science & Technology

20.2 *Invited Paper:* Towards Commercialization: Overcoming Challenges in Ink-Jet Printing of QLEDs (11:00-11:20)

Longjia Wu (吴龙佳), TCL Research

20.3 *Invited Paper:* Quantum Dot Light-emitting Devices for Near-infrared Upconversion Applications (11:20-11:40)

Hailong Hu (胡海龙), Fuzhou University

20.4 *Invited Paper:* Colloidal Quantum Dot-Polymer Blend Approach toward Display and Lighting Applications (11:40-12:00)

Jeongkyun Roh, Pusan National University

20.5 *Distinguished Student Paper:* Research on Material Optimization and Pixel Structure for Micro-LED Quantum Dot Color Conversion (12:00-12:20)

Xinyi Wang, Shanghai University

Session 21: OLED Display - Architectures (OLEDs)

Thursday, April 2/8:30-10:30/ Felicity Function Room A

21.1 *Invited Paper / Distinguished Paper:* 3D-OLED: Displays with Pixels in Three Dimensions (8:30-8:50)

Peter Levermore, Excyton

21.2 *Invited Paper:* Multi-Primary Pathways Toward Wide-Gamut, Metamerism-Resilient Emissive Displays (8:50-9:10)

Zhaoqun Zhou (周照群), UDC

21.3 A Device Architecture for OLED Modules with High-Temperature Color Stability (9:10-9:30)

Hongyu Wang, Hefei Visionox Technology Co., Ltd.

21.4 Transfer Printing for Full-Color and Mask-Free OLED Microdisplays (9:30-9:50)

Guohua Xie, Xiamen University

21.5 Research Progress and Prospect of High Efficiency Light-Emitting Technology for OLED Displays (9:50-10:10)

Yunqiang Yang, Hefei Visionox Technology Co., Ltd.

21.6 COE-Based Low-Reflectivity Interated-Black and High-Brightness Wide-Color-Gamut Display Technology (10:10-10:30)

Xiaojing Liu, Hefei Visionox Technology Co., Ltd.

Session 22: OLED - Charge Injection & Transport Materials (OLEDs)
Thursday, April 2/8:30-10:10/ Felicity Function Room B

22.1 *Invited Paper:* Driving OLED Innovation with Novel Metal-Organic P-Dopants (8:30-8:50)

Julia Stolz, CREDOXYS GmbH

22.2 *Invited Paper:* New Organometallic Electron Injection Layer Materials for Blue OLEDs (8:50-9:10)

Mariusz Bosiak, Noctiluca S.A.

22.3 *Distinguished Paper:* Arylphosphine Oxide Derivative for OLEDs: Exhibiting Robust Stability Under Device Operation & Simulated Evaporation Chamber Conditions (9:10-9:30)

Xuhui Zhu, South China University of Technology

22.4 Ultra-Low Cross Talk P-Dopants with High Transparency Tailored for P-HIL Application (9:30-9:50)

Vladimir Uvarov, Novaled GmbH

22.5 Compounds for OLED at INEOS RAS (9:50-10:10)

Sergey Tokarev, A. N. Nesmeyanov Institute of Organoelement Compounds of Russian Academy of Sciences (INEOS RAS)

Session 23: Micro-LED Pixel Technology (EMQ-MicroLED)
Thursday, April 2/8:30-10:10/ Felicity Function Room C

23.1 *Invited Paper:* Promoted Current Injection in GaInN/GaN Multi-Quantum Nanowires-Based LEDs (8:30-8:50)

Weifang Lu (卢卫芳), Xiamen University

23.2 *Invited Paper:* Scalable 3D Nanowire MicroLED Platform for Next-Generation Direct-View Displays and Data Communication Links (8:50-9:10)

Ivan-Christophe Robin, Aledia

23.3 *Invited Paper:* Enabling MicroLED Supply Chain Innovation via A Glass-Based, Chip-First/Chip-Last Integration Platform (9:10-9:30)

Chia-Hung Tsai (蔡佳宏), Smartkem Ltd.

23.4 *Invited Paper:* Effect of KOH Sidewall Treatment on Blue Micro-LEDs in Hybrid Micro-LED/OLED Full-Color Display Devices (9:30-9:50)

Jie Sun (孙捷), Fuzhou University

23.5 Modeling and Optimization of Micro-LED-Fiber Coupling for Inter-Chip Optical Interconnects (9:50-10:10)

Yuxuan Song, Peking University

Session 24: Vehicle Display Engineering (Vehicle Display)

Thursday, April 2/8:30-10:10/ Meeting Room 103

24.1 *Invited Paper:* Advances in Automotive Displays beyond Mainstream Flat Designs (8:30-8:50)

Kai Hohmann, Aumovio Germany GmbH

24.2 *Invited Paper:* Optimizing Color Reproduction for Automotive Displays Using Quantum Dot Technology (8:50-9:10)

Zhongsheng Luo (罗忠升), Nanosys (Shoei Electronic Material Inc.)

24.3 Research on Improvement of High-Temperature and High-Brightness Crosstalk In-Vehicle Triple Gate Designed Display (9:10-9:30)

Minghang Zhu, InfoVision Optoelectronics (Kunshan) Co., Ltd.

24.4 A Quantitative Evaluation Method for the Risk of White Spots Appearing on Vehicle Display Modules Caused by Vibration Testing (9:30-9:50)

Qianshuang Hu, TCL China Star Optoelectronics Technology Co., Ltd.

24.5 Cover Glasses with High Headform Impact Test Strength for Automotive Displays (9:50-10:10)

Shunei Fukuyama, AGC Inc.

Session 25: Display Structure (Display Electronics)

Thursday, April 2/8:30-10:10/ Meeting Room 102

25.1 *Invited Paper:* 3D Cellular Automata Modeling of Excimer Laser Annealed Amorphous Silicon Surfaces (8:30-8:50)

Chenzhe Li (李辰喆), Hefei Govisionox Technology Co., Ltd.

25.2 A Novel Digital Driving Architecture for Power Minimization in AMOLEDs (8:50-9:10)

Xiangyu Dai, Kunshan Govisionox Optoelectronics Co., Ltd. (Visionox's Affiliated Company)

25.3 A Novel Design of Optimization for Power Distribution Network Based on Machine Learning (9:10-9:30)

Dongmei Chen, TCL China Star Optoelectronics Technology Co., Ltd, Shenzhen, China

25.4 Luminance and Chromaticity Uniformity Compensation Scheme for Low Brightness Scenarios (9:30-9:50)

Shuaizhao Wang, Hefei Visionox Technology Co., Ltd.

25.5 A Low Refresh Rate Display Flicker Improvement Scheme (9:50-10:10)

Chengyuan Li, Hefei Govisionox Optoelectronics Co., Ltd.

Session 26: Perovskite Quantum Dots (EMQ-Quantum Dots)

Thursday, April 2/8:30-10:10/ Meeting Room 101

26.1 *Invited Paper:* Nanopatterning of Perovskite and Organic LEDs via Molecular-Beam Holographic Lithography (8:30-8:50)

Sudhir Kumar, ETH Zurich

26.2 *Invited Paper:* Perovskite Quantum Dots Commercialized in Displays (8:50-9:10)

Samuel Halim, Avantama AG

26.3 Perovskite Quantum Dots Photoresist for Direct Photolithography (9:10-9:30)

Gaoling Yang, Beijing Institute of Technology

26.4 Monolithic Integration of Full-Color Micro-LED with Quantum Dot Color-Conversion Pixels (9:30-9:50)

Ziwei Li, Hunan University

26.5 Multifunctional Crystal Regulation via Guanidinium Thiocyanate-Assistance Enables Efficient Blue Light-Emitting Diodes (9:50-10:10)

Na Jiang, Beijing Jiaotong University

Session 27: OLED Module Technology 1 (OLEDs)

Thursday, April 2/10:40-12:00/ Felicity Function Room A

27.1 Optimization of Sparkle in Display Modules with Anti-Glare Cover Glass (10:40-11:00)

Endong Chang, Hefei GoVisionox Technology Co., Ltd.

27.2 Reducing the Color Shift of Large Angle by Adopting the TP Bias Technology (11:00-11:20)

Meng Jin, Hefei Visionox Technology Co., Ltd.

27.3 Development and Research of Lamination Process with High Specs in Application of Four-Curve OLED Modules (11:20-11:40)

Guofeng Zhang, Wuhan Tianma Microelectronics Co., Ltd.

27.4 Study on Improving OLED Screen Backside Impact Resistance (11:40-12:00)

Zhishuai Jia, Yungu (Gu'an) Technology Co., Ltd. (Visionox's Affiliated Company)

Session 28: OLED - Other Functional Materials (OLEDs)

Thursday, April 2/10:20-12:20/ Felicity Function Room B

28.1 *Invited Paper:* Green Host for High Performance OLEDs (10:20-10:40)

Xinyang Wang (王忻扬), Merck Display Materials (Shanghai) Co., Ltd.

28.2 *Invited Paper:* Heteroatom-Doped Polycyclic Aromatic Hydrocarbons and Their Applications in Organic Light-Emitting Diodes (10:40-11:00)

Wan Pyo Hong, Gachon University

28.3 *Invited Paper:* Ultra-pure Green Top-Emitting OLEDs with LT90 Lifetime over 540000 h at 1000 cd/m2 (11:00-11:20)

Guijie Li (李贵杰), Zhejiang University of Technology

28.4 The Enhancement of Color Purity of OLED with Excitonic Polariton Material (11:20-11:40)

Dong Wan Kang, LinkGlobal21

28.5 Low Leakage Current Material for Tandem OLEDs (11:40-12:00)

Zhibin Wang, OTI Lumionics

28.6 Lifetime Improvement by Organic-Doped QD Film in QLED Devices (12:00-12:20)

Xiangan Song, Suzhou Govisionox Innovation Technology Co., Ltd.

Session 29: Mini & Micro-LED System & Applications (EMQ-MicroLED)

Thursday, April 2/10:20-12:20/ Felicity Function Room C

29.1 *Invited Paper:* Luminance Boosted MicroLED Head-Up Display By“Smart Micro-Lens” Design (10:20-10:40)

Guowei Zha (查国伟), TCL China Star Opto-Electric Technology Limited.

29.2 *Invited Paper:* Research on the Seams between Micro-LED Transparent Display (10:40-11:00)

Qiang Peng (彭强), Chengdu Vistar Optoelectronics Co., Ltd.

29.3 Glass Mini LED-Based Ultra-Thin Backlight Technology Research (11:00-11:20)

Yue Yang, BOE Technology Group Co., Ltd.

29.4 Chip Scale Packaging of Mini-LEDs for Viewing Angle Compression (11:20-11:40)

Weigao Sun, TCL China Star Optoelectronics Technology Co., Ltd.

29.5 Hybrid μ LED-OLED Red Sub-Pixel with ALCC Using Global Regularized Inversion for Stable D65 White Reproduction (11:40-12:00)

Junghoon Kim, LX semicon

29.6 FPGA Drive Architecture for RGB Mini-LED Backlight System (12:00-12:20)

Hao Guo, TCL China Star Optoelectronics Technology Co., Ltd.

Session 30: TFT Backplane Manufacturing (Display Manufacturing)

Thursday, April 2/10:20-12:20/ Meeting Room 103

30.1 *Invited Paper:* High-Performance Indium-Tin-Zinc-Oxide TFTs Fabricated by a Novel ALD Supercycle Process (10:20-10:40)

Honglong Ning (宁洪龙), South China University of Technology

30.2 *Invited Paper:* Flexible Optoelectronic Synapse Transistor Based on the Persistent Photoconductivity Effect of Pr-InZnO (10:40-11:00)

Rihui Yao (姚日晖), South China University of Technology

30.3 Redefining Ultra-Narrow Bottom Bezels through Halftone Mask Process Breakthrough Beyond Fanout Pitch Limits (11:00-11:20)

Yuqi Li, China Star Optoelectronics Semiconductor Display Technology Co., Ltd. Guangzhou, China

30.4 Study on the Impact of Different Isolation Pillar Schemes on Panel Efficiency and OLED Crosstalk (11:20-11:40)

Ao wen Zhang, Visionox (Hefei) Co., Ltd.

30.5 Finetuning Molybdenum-Oxide Targets to Optimize the Behavior of Sputtered Thin Films in TFTs (11:40-12:00)

Zecui Gao, Plansee (Shanghai) High Performance Materials Co.

30.6 Study on the Influence of Different Metal Electrodes on the Mobility of InGaO-Based TFTs and the Breakdown Voltage of Multilayer Insulating Structures (12:00-12:20)

Shan Hu, Sun Yat-Sen University

Session 31: Display Algorithm (Display Electronics)

Thursday, April 2/10:20-12:00/ Meeting Room 102

31.1 *Invited Paper:* Sampled Analog Video Transport - Enhanced Color Reproduction (10:20-10:40)

Alex Henzen, Hyphy USA Inc.

31.2 A Pixel-Wise Color Uniformity Compensation Method for High Refresh Rate LCD Dual-Gate Notebook (10:40-11:00)

Yanhong Wu, BOE Technology Group Co., Ltd.

31.3 Pixel-Level High-Precision IR-Drop Compensation for Multi-Scenario AMOLEDs via Image-Based Luminance Modeling (11:00-11:20)

Mingxuan Chen, BOE Technology Group Co., Ltd.

31.4 A FPGA-Based Real-Time Dynamic Range Adjustment Algorithm for 4K Video Processing (11:20-11:40)

Jian Zhang, Southeast University

31.5 *Distinguished Student Paper:* Lanczos-Based Perception-Enhanced Super-Resolution (LPSR) for Real-Time Mobile Image Enhancement (11:40-12:00)

Chenhao Hu, Southeast University

Session 32: High Resolution Patterning (EMQ-Quantum Dots)

Thursday, April 2/10:20-11:40/ Meeting Room 101

32.1 *Invited Paper:* Direct Photolithography Technique for Full-Color Quantum Dots Display (10:20-10:40)

Shaoyong Lu, BOE Technology Group Co., Ltd.

32.2 High-Resolution Quantum Dot Patterning Technologies and Their Applications in Efficient Light-Emitting Diodes and Displays (10:40-11:00)

Chengzhao Luo, Soochow University

32.3 Photo-Click Chemistry Enables High-Resolution and High-Fidelity Photolithography of Quantum Dots (11:00-11:20)

Chang Gu, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences

32.4 Research on High Resolution Display Applications of Quantum Dot Light Emitting Devices (11:20-11:40)

Kaiyu Yang, Fuzhou University

Session 33: OLED Module Technology 2 (OLEDs)

Thursday, April 2/13:30-15:10/ Felicity Function Room A

33.1 Delicate Research on the Influence of Shape Morphologies of Adhesive at Bending Area Dedicated to the Development of OLED Narrow Bezel (13:30-13:50)

Guofeng Zhang, Wuhan Tianma Microelectronics Co., Ltd.

33.2 Impact of the Polarizer on Corrosion in AMOLED Displays (13:50-14:10)

Hang Zhang, Hefei Visionox Technology Co., Ltd.

33.3 Universal Analyses of Fogging Phenomenon in Glass Ceramics under High Temperature and High Humidity (14:10-14:30)

Guofeng Zhang, Wuhan Tianma Microelectronics Co., Ltd.

33.4 Research on Thin-Film Technology for Bending of Flexible OLED Modules (14:30-14:50)

Fanzhong Bu, Visionox Technology Inc.

33.5 Modulation of BP Acrylic PSA Modulus for Enhanced Drop Impact Strength of Flexible OLED Panels (14:50-15:10)

Lijia Pan, Xiamen Tianma Display Technology Co., Ltd.

Session 34: High Performance Oxide TFT (Active-Matrix Device)
Thursday, April 2/13:30-15:10/ Felicity Function Room B
34.1 *Invited Paper:* Advanced Control of In-Rich IGO Channels: Compositional Optimization and Nitrogen-Mediated Structural Stabilization via PEALD (13:30-13:50)
Jin-Seong Park, Hanyang University
34.2 *Invited Paper:* Applications for ALD Dielectrics in Full Metal-Oxide Backplane Technology (13:50-14:10)
Dejiu Fan (范德久), Applied Materials Inc.
34.3 Development of 12.7inch 2.8K AMOLED Panel Using Fully High Mobility Oxide TFTs Which Can Realize 240Hz Refresh Rate (14:10-14:30)
Yana Gao, Tianma Microelectronics Co., Ltd.
34.4 Enhanced High Overall Performance of Solution-Processed IGO/IZTO Thin-Film Transistor via Heterogeneous-Bilayer Channel (14:30-14:50)
Meng Xu, Shanghai University
34.5 High Mobility and Excellent Stability of HMO Hybrid TFT for G8.6 Ink-Jet Printing AMOLED Backplane (14:50-15:10)
Jierong Huo, TCL China Star Optoelectronics Technology Co., Ltd.

Session 35: Micro-LED Color Technology (EMQ-MicroLED)
Thursday, April 2/13:30-15:30/ Felicity Function Room C
35.1 *Invited Paper / Distinguished Paper:* GaN-On-Si Single-Chip Full-Color Micro-LED Display (13:30-13:50)
Qian Sun (孙钱), Suzhou Institute of Nano-Tech and Nano-Bionics (SINANO), Chinese Academy of Sciences (CAS)
35.2 *Invited Paper:* Technology Trends in Full-Color Micro-LED Displays for AR the NPQD Monolithic Solution (13:50-14:10)
Chen Chen (陈辰), Saphlux LLC
35.3 Research on Temperature Color Shift for Micro-LED Based on Machine Learning (14:10-14:30)
Yanjun Zhang, Shanghai Tianma Microelectronics Co., Ltd.
35.4 Patterning Technology of Perovskite Quantum Dots for Micro-LED Displays (14:30-14:50)
Shuli Wang, Xiamen University
35.5 Fabrication of Color-Conversion Nanostructures Compatible with Mini-LED and Micro-LED Displays Using Nanoimprint Lithography (14:50-15:10)
Yalin Lu, Beijing Jiaotong University
35.6 Photon Recycling Effect in Color-Conversion Micro-LED Displays (15:10-15:30)
Qing Zhao, Shenzhen University

Session 36: Metaverse & 3D Content Generation (VR/AR/MR)
Thursday, April 2/13:30-15:10/ Fabulous Function Room A
36.1 *Invited Paper:* Virtual and Augmented Reality for Stem Education and Teachers Training (13:30-13:50)
Andrey A. Belyaev, State University of Education

36.2 *Invited Paper:* A Method for Improving Micro-Gesture Technology Utilizing Distal-Joint Attention and Loss-Weighting Scheme (13:50-14:10)

TK PEN (潘仲光), ChiMeta Limited

36.3 *Invited Paper:* Advancing from 3D Displays to Computer-Generated Holography at NTUST (14:10-14:30)

Chien-Yu Chen (陈建宇), Taiwan University of Science and Technology

36.4 Research on Inverted Tandem Green OLED for AR (14:30-14:50)

Qiang Liu, Yungu (Gu'an) Technology Co., Ltd.

36.5 Crosstalk-Free Content Generation Method for Light Field 3D Displays (14:50-15:10)

Yijian Liu, Beihang University

Session 37: Visual Health (Applied Vision)

Thursday, April 2/13:30-14:50/ Fabulous Function Room B

37.1 *Invited Paper / Distinguished Paper:* Adaptive Dominant Eye-Based Binocular Vision for Virtual Reality (13:30-13:50)

Chaoping Chen (陈超平), Shanghai Jiao Tong University

37.2 From Parameters to Experience An Exploration of the Theoretical Path for Subjective Evaluation of the Eye-Protection Mode on Mobile Phones (13:50-14:10)

Yang Yi, China National Institute of Standardization

37.3 Influence of Display Spectral Similarity to Natural Light on Visual Search Performance (14:10-14:30)

Yunhong Zhang, China National Institute of Standardization

37.4 Light Field Displays Correcting Early-Stage Cataract by Engineering Vectorial Beams (14:30-14:50)

Jie Tang, Sun Yat-sen University

Session 38: AI for Display R&D 1 (AI for Imaging and Display)

Thursday, April 2/13:30-14:50/ Fabulous Function Room C

38.1 *Invited Paper:* Intelligent Screening and Design of OLED Luminescent Materials (13:30-13:50)

Dandan Song (宋丹丹), Beijing Jiaotong University

38.2 Multi-Modal Pre-Training Framework for Molecular Property Prediction (13:50-14:10)

Min Zeng, BOE Technology Group Co., Ltd.

38.3 Enhancing Chemical Capabilities of Large Language Models for OLED Materials Design (14:10-14:30)

Tsun-Hin Cheung, TCL AI Lab

38.4 Performance Analysis of Rare-Earth Doped Oxide Thin-Film Transistors Using Neural Network Method (14:30-14:50)

Zengyi Peng, South China University of Technology

Session 39: LCD New Materials & Application (Liquid-Crystal Technology)

Thursday, April 2/13:30-15:30/ Apollo VIP Room

39.1 *Invited Paper:* Ferroelectric Liquid Crystals Material Engineering and Application (13:30-13:50)

Abhishek Kumar Srivastava, The Hong Kong University of Science and Technology

39.2 *Invited Paper:* The Fundamental Role of Anisotropy, Self-Organizing Systems in the Development of New Displays and Devices (13:50-14:10)

Vladimir Bezborodov, Belarusian State Technological University

39.3 *Invited Paper:* Typical and Untypical Electric Responses in the Emerging Ferroelectric Nematic Liquid Crystals (14:10-14:30)

Satoshi Aya, South China University of Technology

39.4 Liquid Crystal Photoalignment on Azodye Nanolayers for New Liquid Crystal Devices (14:30-14:50)

Vladimir Chigrinov, The Hong Kong University of Science and Technology

39.5 Novel Liquid Crystal Materials for Achieving the Shortest UV2 Process of Polymer-Stabilized Vertically Aligned Liquid Crystal Displays (14:50-15:10)

Yali Liu, TCL China Star Optoelectronics Technology Co., Ltd.

39.6 Research on Dye-Doped Liquid Crystal Dimming Technology for Electronic Neutral Density Filter (15:10-15:30)

Xiaoqian Ju, Beijing BOE SINCE Technology Co., Ltd.

Session 40: Display Materials and Components 1 (Display Manufacturing)

Thursday, April 2/13:30-14:50/ Meeting Room 103

40.1 Research and Enhancement of Anti-Static Performance of Glass Cover Plates (13:30-13:50)

Shuai Chen, Yungu (Gu'an) Technology Co., Ltd.

40.2 Nanoscale Degradation Study of the Optically Clear Adhesive (OCA) (13:50-14:10)

Jiajun Lin, Exponent Science and Technology Consulting Co., Ltd.

40.3 Precision Control of Organic Optical Film Taper Angle for Flexible Display Integration (14:10-14:30)

Dongliang Yu, Hefei Govisionox Technology Co., Ltd.

40.4 Stamping Application and Structural Optimization of Post-Consumer Recycled (PCR) Material Backcovers (14:30-14:50)

Zihan Wang, TCL China Star Optoelectronics Technology Co., Ltd.

Session 41: Display Integration (Display Electronics)

Thursday, April 2/13:30-14:50/ Meeting Room 102

41.1 *Invited Paper:* From GMSL to OpenGMSL: Enabling Next-Generation Automotive Display Systems through Standards and Innovation (13:30-13:50)

Geir Ostrem, Analog Devices

41.2 *Invited Paper:* Flexible and Stretchable Synaptic Transistors for Mimicking Cognition and Neuromorphic Computing (13:50-14:10)

Min Zhang (张敏), The Chinese University of Hong Kong, Shenzhen

41.3 A Compensation Solution for Display In-Panel Uniformity of EL Power System (14:10-14:30)

Jinxin Wei, TCL China Star Optoelectronics Technology Corporation

41.4 An Efficiency Optimization Solution for ELIC (14:30-14:50)

Zhisong Sun, Kunshan Govisionox Optoelectronics Co., Ltd.

Session 42: Quantum Dots Materials (EMQ-Quantum Dots)
Thursday, April 2/13:30-15:50/ Meeting Room 101

42.1 *Invited Paper:* Commercial Readiness of High-Performance, Cadmium-Free Quantum Dot Ink for MicroLED and QD-OLED Color Conversion Applications (13:30-13:50)
Kim De Nolf, QustomDot BV

42.2 *Invited Paper:* Unraveling Defects in NiO-Based Hole Transport Materials for Efficient Quantum Dot Electroluminescent Devices (13:50-14:10)
Jaehoon Lim, Sungkyunkwan University

42.3 Stable and Highly Efficient InGaP Quantum Dots for Display Device Applications (14:10-14:30)
June-hyuk Jung, Samsung Display Company

42.4 Colloidal Quantum Well Light-Emitting Diodes (14:30-14:50)
Baiquan Liu, Sun Yat-sen University

42.5 Analyzing the Bandwidth of QLEDs through Impedance Spectroscopy (14:50-15:10)
Siqi Jia, Institute of Advanced Displays and Imaging, Henan Academy of Science

42.6 Electric Field Dependent Carrier Mobility of Quantum Dots Film (15:10-15:30)
Shipei Sun, Beijing Institute of Technology

42.7 Efficient and Stable Top-Emitting Quantum Dot Light-Emitting Diode Enabled by Self-Assembled Monolayer Interface Engineering (15:30-15:50)
Yiduo Wang, Guangxi University

Session 43: OLED - Simulations 1 (OLEDs)
Thursday, April 2/15:20-17:20/ Felicity Function Room A

43.1 A Dual-Function Interlayer Enabling Time-Multiplexed OLED Emission and NIR Sensing via Optical-Mode Modeling (15:20-15:40)
Yaxin Tang, TCL China Star Optoelectronics Technology Co., Ltd.

43.2 Accelerating OLED Design: Integrating Machine Learning and Physics-Based Simulation (15:40-16:00)
Hadi Abroshan, Schrodinger Inc.

43.3 Exploring the Flow and Leveling Behavior of Inkjet Printing in Narrow Emission Areas for High-Resolution OLEDs (16:00-16:20)
Mudan Chen, Kunshan Govisionox Optoelectronics Co., Ltd. (Visionox's Affiliated Company)

43.4 A Power-Saving Algorithm for Adaptive Color Adjustment on OLED Display and Its Hardware Implement (16:20-16:40)
Ruixin Yan, ESWIN Computing Technology

43.5 *Distinguished Student Paper:* A Physics-Based Compact Modeling Framework for OLEDs: Capacitance Analysis, Prediction, and Application (16:40-17:00)
Yujia Gong, Peking University

43.6 DFT-Enhanced Machine Learning for Accurate PLQY Prediction and Inverse Design of Novel MR-TADF Materials (17:00-17:20)
Haochen Shi, Beijing Jiaotong University

Session 44: Structure Engineering for TFTs (Active-Matrix Device)
Thursday, April 2/15:20-17:00/ Felicity Function Room B

44.1 A Novel Dual-Patterning Process for High-PPI OLED Displays Utilizing Organic Layer Structuring with Optimized Taper Angles and Dry Etching (15:20-15:40)

Chuanzhi Xu, Hefei Visionox Technology Co., Ltd.

44.2 Improving the Large-Area Uniformity and Performance of A-IGZO Vertical TFTs (15:40-16:00)

Chen Shen, TCL China Star Optoelectronics Technology Co., Ltd.

44.3 The Impact of Polysilicon Taper Angle on the Electric Characteristics of Low-Temperature Polysilicon Thin-Film Transistors and Image Sticking Performance of AMOLED (16:00-16:20)

Mengmeng Hu, Visionox Technology Inc.

44.4 Analysis of LTPO Inverter with Double-Gate Oxide TFT Structure for Backplane Display Circuits (16:20-16:40)

Dayun Li, Sungkyunkwan University

44.5 Enhancement of Persistent Photoconductive Effect in IGZO TFTs Passivated by MoOx: Ta Films (16:40-17:00)

Yongliang Chen, Shanghai Jiao Tong University

Session 45: Micro-LED Displays (EMQ-MicroLED)

Thursday, April 2/15:40-17:20/ Felicity Function Room C

45.1 *Invited Paper:* Micro-QLED for AR Display: Challenges and Chances (15:40-16:00)

Haizheng Zhong (钟海政), Beijing Institute of Technology

45.2 *Invited Paper:* The Potential and Challenges of Transparent Micro LED Displays (16:00-16:20)

Chiahao Tsai (蔡嘉豪), Innolux Corporation

45.3 Borderless μ LED Transparent Display (16:20-16:40)

Fancheng Liu, China Star Optoelectronics Technology Co., Ltd.

45.4 Enhancing the Contrast Ratio of Monolithically Integrated Micro-LED Display Device (16:40-17:00)

Xiaodan Wei, Beijing Yishixin Technology Development Co., Ltd.

45.5 Micro-LED Displays with Progressive Quaternary Digital PWM Using Double-Gate Structure (17:00-17:20)

Dayun Li, Sungkyunkwan University

Session 46: Display Methodology (VR/AR/MR)

Thursday, April 2/15:20-17:20/ Fabulous Function Room A

46.1 *Invited Paper:* Benefits of Multi-Apertures in a Light-Field Display (15:20-15:40)

Zong Qin (秦宗), Sun Yat-Sen University

46.2 *Invited Paper:* Displays in STEM Education (15:40-16:00)

Iakovlev Vladislav, State University of Education

46.3 *Distinguished Paper:* Prospective Wearable Display Glasses Built-In with Terahertz Wireless Communications (16:00-16:20)

Darwin Hu, Phasereality Laboratory, Sysview Technology, Inc.

46.4 Systematic Simulation and Optimization of Waveguide Display with An Efficient Ray Tracing Platform (16:20-16:40)

Jianghao Xiong, Beijing Institute of Technology

46.5 Colorimetric Characterization of See-Through Near-Eye Displays (16:40-17:00)

Tianxing Zhu, Instrument Systems GmbH

46.6 Compact Holographic Waveguide Display Architecture Optimized by CITL (17:00-17:20)

Weixian Chen, Shanghai Jiaotong University

Session 47: Visual Fatigue (Applied Vision)

Thursday, April 2/15:00-16:40/ Fabulous Function Room B

47.1 *Invited Paper:* The Effect of Different PWM Settings on Visual Fatigue under Different Luminance Levels on Mobile Displays (15:00-15:20)

Fang Hou (侯方) , Eye Hospital of Wenzhou Medical University

47.2 *Invited Paper:* From Pixels to Photoreceptors: Bio-Informed Deep Learning for Visual Discomfort Assessment (15:20-15:40)

Yunyang Shi (史韞杨), Nanjing Technology University

47.3 Assessment of Visual Fatigue in 2D and 3D Displays Using Graph-Theoretic Analysis of Global Functional Connectivity (15:40-16:00)

Lixiu Jia, Nanjing Institute of Technology

47.4 Neural Dynamics of Motion Sickness in In-Vehicle Movie Watching Scenarios (16:00-16:20)

Si Feng, China National Institute of Standardization

47.5 Parameter Optimization for Visual Comfort and Reading Efficiency A Systematic Investigation Using Subjective and Objective Measures (16:20-16:40)

Zhenzhen Li, Zhejiang University

Session 48: AI for Display R&D 2 (AI for Imaging and Display)

Thursday, April 2/15:00-16:20/ Fabulous Function Room C

48.1 *Invited Paper:* AI-Driven Innovations in R&D and Production of Display Industry: A Comprehensive Review of Material Design, Device Fabrication, Defect Detection, and Compensation Technologies (15:00-15:20)

Bo-ru Yang (杨柏儒), Sun Yat-Sen University

48.2 Color Temperature Uniformity Correction for LCD Screens Based on AI and FPGA (15:20-15:40)

Zheyuan Song, BOE Technology Group Co., Ltd.

48.3 An Automated Compensation Method for Fine Stripes of LCD Modules Based on Computer Vision (15:40-16:00)

Yingjie Li, BOE Technology Group Co., Ltd.

48.4 *Distinguished Student Paper:* AI-Algorithm-Driven Automated Layout Generation Method for Flat Panel Display with High Aperture-Ratio and Charging-Ratio (16:00-16:20)

Haodong Tang, Peking University

Session 49: LCD Process Development (Liquid-Crystal Technology)

Thursday, April 2/15:40-17:00/ Apollo VIP Room

49.1 Study on the Analysis and Improvement of Line Image Sticking in TFT-LCD Based on VCOM Coupling Mechanism (15:40-16:00)

Yingmeng Miao, Beijing BOE Display Technology Co., Ltd.

49.2 Research on Taper Process Improvement of Negative-Tone Color Photoresist with High Pigment Concentration System (16:00-16:20)

Ji Li, TCL China Star Optoelectronics Technology Co., Ltd.

49.3 Enhancement of ESD Performance in Low-Reflectance Displays Based on BITO-Skip Architecture (16:20-16:40)

Boyu Ren, Wuhan BOE Optoelectronics Technology Co., Ltd.

49.4 Improvement of Dark Patches Mura on Curved Gaming Monitors (16:40-17:00)

Guining Reng, Suzhou China Star Optoelectronics Technology Co., Ltd.

Session 50: Display Materials and Components 2 (Display Manufacturing)

Thursday, April 2/15:00-16:20/ Meeting Room 103

50.1 *Invited Paper:* A Study on Low-Brightness Color Shift and Mura in AMOLED LTPO Displays under Full DC Dimming-Challenges, Modeling, Mitigation (15:00-15:20)

Xinquan Chen (陈心全), Hefei Visionox Technology Co., Ltd.

50.2 *Invited Paper:* Eye Care Films for Displays: Converting Linear Polarization to Circular or Natural Light (15:20-15:40)

Xingzhou Tu (涂醒洲), Rayboch

50.3 Introduction to the Value of 20um-Thick Fine Metal Mask (15:40-16:00)

Xiaoding Xia, Zhejiang Zhongling Technology Co., Ltd.

50.4 Study on Factors Affecting the Reflectance of Hard-Coating Low-Reflective Films (16:00-16:20)

Ping Liang, TCL China Star Optoelectronics Technology Co., Ltd.

Session 51: Driving Technology for OLED (Display Electronics)

Thursday, April 2/15:00-16:40/ Meeting Room 102

51.1 DSC Decoding Optimization for AMOLED Application (15:00-15:20)

Hsueh-Yen Yang, Galaxy Core Microelectronics

51.2 Research on an Optimization Method for Low-Frequency Flicker in AMOLED Displays Based on an Adaptive Timing Algorithm (15:20-15:40)

Yong Pei, Kunshan Govisionox Optoelectronics Co., Ltd.

51.3 Research on Dynamic OBS Solution for DTFT Based on Different Gray Scales in OLED Panels (15:40-16:00)

Qiangqiang Song, Hefei Govisionox Optoelectronics Co., Ltd.

51.4 Research on Optimization Methods for Brightness Transition in AMOLED Screen Mode Switching (16:00-16:20)

Yongbin Yang, Kunshan Govisionox Optoelectronics Co., Ltd. (Visionox's Affiliated Company)

51.5 Research on Optimization of Low-Brightness Screen Flicker (SVM) in AMOLED Modules (16:20-16:40)

Weiwei Pan, Hefei Visionox Technology Co., Ltd.

Session 52: Performance Enhancement (Display Application)

Thursday, April 2/15:00-16:20/ Meeting Room 101

52.1 Methods to Improve the Contrast Ratio as Defined by Display Specification for Automotive Application (15:00-15:20)

Jimin Tang, Infovision Optoelectronics (Kunshan) Co., Ltd.

52.2 Brand-New AIE Material for Eye-Friendly Screens with Natural Light-Like Spectrum (15:20-15:40)

Yi Feng, TCL China Star Optoelectronics Technology Co., Ltd.

52.3 Study of Factors Affecting the Antistatic Performance of AMOLED Display (15:40-16:00)

Yun Chen, Yungu (Gu'an) Technology Co., Ltd. (Visionox' s Affiliated Company)

52.4 A Four-Ways Viewing Angle Controllable Liquid Crystal Display Technology with Dual Cell Design (16:00-16:20)

Tao Liu, Infovision Optoelectronics (Kunshan) Co., Ltd.

Session 53: OLED - Simulations 2 (OLEDs)

Thursday, April 2/17:30-19:10/ Felicity Function Room A

53.1 Assisting OLED Material Development Based on Molecular Generation and Machine Learning Prediction (17:30-17:50)

Lu Wang, Beijing Eternal Material Technology Co., Ltd.

53.2 Improvement of FOV in OLED Device Design via Optical Simulation (17:50-18:10)

Min Zou, Hefei Visionox Technology Co., Ltd.

53.3 The Improvement of the Angular Characteristics of OLED with Micro Lens Array (18:10-18:30)

Dong Wan Kang, LinkGlobal21

53.4 Understanding Physical Mechanism of Realistic OLED Stacks by 3D Kinetic Monte Carlo Simulations (18:30-18:50)

Feilong Liu, South China Normal University

53.5 Mitigation and Optimization of AMOLED HBM High-Brightness Thermal Burn-In with Mechanistic Insight Elucidation via Global IR Drop Simulation (18:50-19:10)

Hao Dong, Hefei Visionox Technology Co., Ltd.

Session 54: Printed TFT and Sensors (Active-Matrix Device)

Thursday, April 2/17:10-19:10/ Felicity Function Room B

54.1 *Invited Paper:* Integrated Flexible Printed Carbon Nanotube Thin-Film Transistors as an Active-Matrix Backplane for E-Paper Displays (17:10-17:30)

Jianwen Zhao (赵建文), Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences

54.2 *Invited Paper:* Oxide Thin-Film Transistors as Switching, Driving and Sensing Elements in Active-matrix Backplanes (17:30-17:50)

Pedro Barquinha, NOVA FCT

54.3 *Invited Paper:* Solution Processing of High-Performance Inorganic and Hybrid Materials for Large Area Electronics (17:50-18:10)

Myung-Gil Kim, Sungkyunkwan University

54.4 Vertically-Stacked 2T1C Printed Active-Matrix Backplane for High-Aperture Active-Matrix OLED Displays (18:10-18:30)

Sungjune Jung, Pohang University of Science and Technology

54.5 *Distinguished Student Paper:* Large-Area Complementary Organic-Inorganic Hybrid TFT Technology for Integrated On-Panel Computing in Immersive Display Systems (18:30-18:50)

Zhengyang Hu, Shanghai Jiaotong University

54.6 Miniaturized and Environmentally Friendly InP Quantum Dots /a-IGZO Phototransistors with High Detectivity and Tunable Photoresponse Performance (18:50-19:10)

Jiaxin Yang, Peking University

Session 55: Mass Transfer, Bonding & Repair (EMQ-MicroLED)

Thursday, April 2/17:30-19:20/ Felicity Function Room C

55.1 *Invited Paper:* A Holistic Approach to Deterministic Massive Transfer (17:30-17:50)

Makarem Hussein, LuxNour Technologies

55.2 *Invited Paper:* Detection and Repair Solutions for Achieving 100% Pixel Yield in Micro-LED Displays (17:50-18:10)

Gang Feng (冯刚), Chengdu Vistar Optoelectronics Co., Ltd.

55.3 *Invited Paper:* Different MicroLED Transfer Technologies: Potential and Challenges (18:10-18:30)

Reza Chaji, VueReal

55.4 *Invited Paper:* Micro Transfer Printing Technologies toward the Assembly and Repair of Micro LED Modules (18:30-18:40)

Changhong Cao (曹长宏), McGill University

55.5 High-Yield Fabrication of Micro-LED Displays Based Advanced Laser Bonding and Mass Transfer (18:40-19:00)

Wenya Tian, BOE TECHNOLOGY GROUP CO., LTD.

55.6 High-Resolution Patterning of Fluorescent Films by Femtosecond Laser-Induced Forward Transfer (19:00-19:20)

Yuefeng Liu, Jilin University

Session 56: Micro-Display Technology (VR/AR/MR)

Thursday, April 2/17:30-18:50/ Fabulous Function Room A

56.1 *Invited Paper:* Microdisplay on Silicon Technology and Its Application of Light Field Holography (17:30-17:50)

Jun Xia (夏军), Southeast University

56.2 AI-Driven Enhancement of MAI for LCD-Based XR Displays (17:50-18:10)

Jing Ba, TCL China Star Optoelectronics Technology Co., Ltd.

56.3 High-Performance Micro-Cavity White-OLED Technology for 1,500ppi Real RGB Glass-Based VR Display (18:10-18:30)

Wenfeng Song, Beijing Visionox Technology Co., Ltd.

56.4 Mask Compensation Optimization Method for High-Step Topography in Microdisplay Panel Design (18:30-18:50)

Hejing Sun, TCL Star Optoelectronics Technology Co., Ltd.

Session 57: Brightness Perception (Applied Vision)

Thursday, April 2/16:50-18:10/ Fabulous Function Room B

57.1 Ambient Light Adaptive Gamma: Ambient Light Management Solution Beyond AR/AG (16:50-17:10)

Shengtao Zhu, Shanghai Tianma Microelectronics Co., Ltd.

57.2 A Perceptual Brightness Evaluation Tool for Displays Applicable to Different Scenarios (17:10-17:30)

Yueyuan Zhang, Southeast University

57.3 Effects of Mobile Phone Luminance Adjustment Strategies on Visual Comfort under Indoor Lights-Off Conditions (17:30-17:50)

Lan He, Southeast University

57.4 The Phantom Array Effect on Mobile Phones (17:50-18:10)

Huimin Chen, Southeast University

Session 58: AI for Novel Applications (AI for Imaging and Display)

Thursday, April 2/16:30-18:30/ Fabulous Function Room C

58.1 *Invited Paper:* On-Device AI: Gaussian-Sigmoid Transistors, Light-Driven Spikes, and Intelligent Risk Sensors (16:30-16:50)

Hocheon Yoo, Hanyang University

58.2 *Invited Paper:* Research on a Highly Robust Deep Learning Classification Model for Fine-Grained Industrial Surface Defect Detection (16:50-17:10)

Qinhao Piao, BOE Technology Group Co., Ltd.

58.3 *Invited Paper:* Complex Hologram Encoding Method for Holographic 3D Display (17:10-17:30)

Shufeng Lin (林述锋), Beijing University of Technology

58.4 Fine-Grained Action Detection in Visual HCI with Spatial Mask Video Foundation Models (17:30-17:50)

Haiyang Guo, BOE Technology Group Co., Ltd.

58.5 Simulation and Optimization Design for Backside Rigidity Testing of Notebook Module (17:50-18:10)

Cen Yi, TCL China Star Optoelectronics Technology Co., Ltd.

58.6 Process-Controllable Lithography Simulation Based on Flow Matching Generative Model (18:10-18:30)

Qiao Xu, BOE Technology Group Co., Ltd.

Session 59: Emerging LC Technology (Liquid-Crystal Technology)

Thursday, April 2/17:10-18:50/ Apollo VIP Room

59.1 *Invited Paper:* Actively Tunable Liquid Crystal Elastomer Terahertz/Microwave Metasurface (17:10-17:30)

Dan Luo (罗丹), Southern University of Science and Technology

59.2 *Invited Paper:* Enhancing Liquid Crystal Display Performance: From Second-Scale to Nanosecond Response Times (17:30-17:50)

Valeri Lapanik, Institute of Applied Physical Problems

59.3 *Invited Paper:* Fast Switchable Polarization Interference Filter Using Fast Switchable Liquid Crystal (17:50-18:10)

Zhibo Sun (孙栉博), The Hong Kong University of Science and Technology

59.4 *Invited Paper:* Generation and Modulation of High-Dissymmetry Circularly Polarized Luminescence (18:10-18:30)

Yanjun Liu (刘言军), Southern University of Science and Technology

59.5 Automating Liquid Crystal Analysis Using Artificial Intelligence (18:30-18:50)

Giorgio Manzoni, The Hong Kong University of Science and Technology

Session 60: Optoelectronic Device Manufacturing - OLED (Display Manufacturing)

Thursday, April 2/16:30-18:30/ Meeting Room 103

60.1 OLED Display Cutting-Using a Deep-UV Laser and Large Scan Field Optics to Improve the Edge Quality and Avoid Delamination in Foldable Displays (16:30-16:50)

Oliver Haupt, Coherent Corp.

60.2 Research on Residual Characteristics of Low-Temperature Curable Black Matrix for COE Technology Applied in OLED Display (16:50-17:10)

Weikang Xiao, Yungu (Gu'an) Technology Co., Ltd. (Visionox' s Affiliated Company)

60.3 Design and Fabrication of High-Performance Transparent Conductive Electrode (17:10-17:30)

Leah Yang, TCL China Star Optoelectronics Display Technology Co., Ltd.

60.4 Research Progress on the Impact of Plasma Treatment on the Luminous Efficiency of OLED Displays (17:30-17:50)

Yunqiang Yang, Hefei Visionox Technology Co., Ltd.

60.5 Cathode Patterning by Photolithography (17:50-18:10)

Chuanxiang Xu, BOE Technology Group Co., Ltd.

60.6 Failure Mechanism and Material System Collaborative optimization of AMOLED Modules Under Back Impact (18:10-18:30)

Yaling Wang, Yungu (Gu'an)Technology Co., Ltd. (Visionox)

Session 61: Novel Display System Technology 1 (Display System)

Thursday, April 2/16:50-18:30/ Meeting Room 102

61.1 *Invited Paper:* A Variable Refresh Rate Technology and Driving Scheme (16:50-17:10)

Yuqing Wang (王玉青), Hefei Govisionox Optoelectronics Co., Ltd.

61.2 Novel Structure Design for Mitigating Horizontal Stripe Mura in Display at Wide Viewing Angle (17:10-17:30)

Zhicong Zhai, Hefei Visionox Technology Co., Ltd.

61.3 Implementation of a Light Field Display for Personalized Content in Multi-Viewer Settings Based on Vector Pixel Scanning Technology (17:30-17:50)

Runshen Lu, Faith Billion Technology Development Limited

61.4 A Novel Approach to Natural Light Film for Eye-Protective Displays (17:50-18:10)

Ji Li, TCL China Star Optoelectronics Technology Co., Ltd.

61.5 An AI Technology Anti-Photography System for Display Terminals in Conference Scenarios (18:10-18:30)

Yimeng Ma, BOE Technology Group Co., Ltd.

Session 62: 3D and Sensors (Display Application)

Thursday, April 2/16:30-17:50/ Meeting Room 101

62.1 Novel View Synthesis for 3D Video Communication System (16:30-16:50)

Siyan Ma, BOE Technology Group Co., Ltd.

62.2 High-Precision Eye Tracking System Based on the Kalman Prediction (16:50-17:10)

Jinhui Hua, Shanghai Tianma Microelectronics Co., Ltd.

62.3 A Polarization-Multiplexed Heterogeneous Microlens Array Enabling Light Field Display with Natural Defocus Blur (17:10-17:30)

Yifan Ding, Sun Yat-Sen University

62.4 Portable Light-Field AR Display for In-Situ 3D Ultrasound Guidance in Emergency Care (17:30-17:50)

Yutong Wu, Tsinghua University

Session 63: OLED - Device Physics (OLEDs)

Friday, April 3/8:30-10:10/ Felicity Function Room A

63.1 *Invited Paper:* High Performance pTSF Devices to Meet the Demand for Wide Color Gamut (8:30-8:50)

Guomeng Li (李国孟), Beijing Visionox Technology Co., Ltd.

63.2 *Invited Paper:* Impact of Excited State on Efficiency Roll off in OLEDs (8:50-9:10)

Man Chung Tang (邓敏聪), Tsinghua University

63.3 *Invited Paper:* Fabrication of Plasmonic Printed OLEDs (9:10-9:30)

Spyros Kassavetis, Aristotle University of Thessaloniki

63.4 An Universal approach to Minimizing the Ratio of Harmful Blue Light in OLEDs by Modification of POL Structure (9:30-9:50)

Hui Chen, Tianma Microelectronics Co., Ltd.

63.5 Transient Electroluminescence as a Unified Probe of Charge Transport and Recombination Dynamics in OLEDs (9:50-10:10)

Jeong-Hwan Lee, Inha University

Session 64: Channel Engineering for Oxide TFTs (Active-Matrix Device)

Friday, April 3/8:30-10:30/ Felicity Function Room B

64.1 *Invited Paper:* Functional Al2O3 Interfaces for Contact Improvement and Plasma Damage Protection in IGZO TFTs (8:30-8:50)

Soo-Yeon Lee, Seoul National University

64.2 *Distinguished Paper:* The Negative Bias Temperature Illumination Stress Mechanism of Top Gate Self Aligned Amorphous Oxide Semiconductor Thin Film Transistors (8:50-9:10)

Haoxiong Zhang, BOE Technology Group Co., Ltd.

64.3 LTPS TFT Taper Region Characterization Method and Its Application (9:10-9:30)

Weibin Zhang, Hefei Visionox Technology Co., Ltd.

64.4 Improved Long-Term Reliability of IGZO TFTs with Sol-Gel Magnesium Oxide Passivation (9:30-9:50)

Hanzhi Huang, Sungkyunkwan University

64.5 Optimizing Dual-Gate ITZO TFT Performance by Tuning Oxygen Plasma Time in Plasma-Enhanced Atomic Layer Deposition (9:50-10:10)

Tan Zhang, Shandong University

64.6 Enhanced Stability of AOS TFTs via Hydrogen Regulation of Gate Insulator (10:10-10:30)

Yuchun Zhong, Peking University

Session 65: Holographic Display Elements (VR/AR/MR)

Friday, April 3/8:30-10:10/ Fabulous Function Room A

65.1 *Invited Paper:* Application of Holographic Optical Elements in Near-Eye Display (8:30-8:50)

Juan Liu (刘娟), Beijing Institute of Technology

65.2 *Invited Paper:* Photopolymer-Based 2D Exit Pupil Expansion Volume Holographic Waveguide (8:50-9:10)

Chengzhe Chai (柴诚哲), Yongjiang Laboratory

65.3 Augmented-Reality Motorcycle Helmet Based on a Synergy of Holographic Approach and Laser-Beam Scanning Technology (9:10-9:30)

Sergei Ivanov, Emerging Technology Research Center, XPANCEO

65.4 High-Efficiency 2D Exit Pupil Expansion Waveguide Display System Based on Ultra-Broadband Polarization Volume Gratings (9:30-9:50)

Lili Liu, Southeast University

65.5 Expanding the Field of View of Light-Field Displays Using a Quasi-telecentric Pancake Lens (9:50-10:10)

Qimeng Wang, Sun Yat-sen University

Session 66: Display Measurement Methods - High-Dynamic Range and Wide Color Gamut Displays (Display Measurement)

Friday, April 3/8:30-10:10/ Fabulous Function Room B

66.1 *Invited Paper:* Characterization and Measurement Methods for Color Gamut of Displays Under Ambient Light (8:30-8:50)

Li Song (宋立), Everfine Corporation

66.2 *Invited Paper:* A Method for Evaluating CR under Ambient Light Conditions (8:50-9:10)

Lingdan Bo, BOE Technology Group Co., Ltd.

66.3 Multiple Color Matching Function 2D Colorimetry (9:10-9:30)

Andreas Liebel, Instrument Systems GmbH

66.4 Characterization of Factors Influencing the Measurement Results of Imaging Luminance Measuring Devices (ILMDs) (9:30-9:50)

Zeyuan Lou, Light-All Co., Ltd.

66.5 Perceptually Optimized Characterization for Displays using Sparse Color Sampling and sUCS (9:50-10:10)

Miaosen Zhou, Zhejiang University

Session 67: AI for Visualization and Graphics (AI for Imaging and Display)

Friday, April 3/8:30-9:50/ Fabulous Function Room C

67.1 *Invited Paper:* Perception-Oriented Stereo Matching and Scene Understanding (8:30-8:50)

Ying Gao (高颖), Qingdao University of Science and Technology

67.2 A Method for Generating New Viewpoints in Monocular Images Based on Diffusion Models (8:50-9:10)

Yingdong Gu, BOE Technology Group Co., Ltd.

67.3 DWvs: Depth-Guided Image Warping and Hole Filling for Novel View Synthesis (9:10-9:30)

Haozhan Wei, Southern University of Science and Technology

67.4 Low-Light Integral Imaging 3D Saliency Detection via a Physically-Guided Transformer with Retinex Prior (9:30-9:50)

Hanlin Liu, Xidian University

Session 68: Flexible Electronic Devices (E-Paper and Flexible Displays)
Friday, April 3/8:30-10:30/ Apollo VIP Room
68.1 *Invited Paper:* Highly Efficient, Fully Stretchable OLEDs (8:30-8:50)
Tae-Woo Lee, Seoul National University
68.2 *Invited Paper:* Fibertronic OLED Textiles for Wearable Displays (8:50-9:10)
Sung-Min Lee, Hanyang University
68.3 *Invited Paper:* Flexible, Foldable, and Stretchable QLEDs for Next-generation Display Applications (9:10-9:30)
Dong Chan Kim, Gachon University
68.4 A Stretchable, Transparent, and Conductive Hydrogel Fiber for Weavable ACEL Displays (9:30-9:50)
Ziming Xue, Wuhan Textile University
68.5 Factors Affecting Backside Impact Resistance in Bending Area of Foldable AMOLED Modules (9:50-10:10)
Shuang Wang, Hefei Govisionox Technology Co., Ltd.
68.6 Flexible, Multicolor Anti-Counterfeiting Textile Display Device Based on AC Electroluminescence (10:10-10:30)
Yuchen Yang, Wuhan Textile University

Session 69: Optoelectronic Device Manufacturing – LCD (Display Manufacturing)
Friday, April 3/8:30-10:30/ Meeting Room 103
69.1 A Strategy for Low Reflectance of 4-side Bezel-less LCD Display with TFT Glass Outside (8:30-8:50)
Xiaoping Yu, Shenzhen China Star Optoelectronics Technology Co., Ltd.
69.2 Design and Optimization of High-Performance Photo-Alignment Polyimide Films For Liquid Crystal Displays (8:50-9:10)
Yuanxi Liu, China Star Optoelectronic Technology Co., Ltd.
69.3 Panel Defect Detection Technique Operating in Display Driver IC Itself for Data and Scan Line of TFT-LCD Panel (9:10-9:30)
Cheonwi Park, DB GlobalChip
69.4 Study on the Optical Properties of Polarizing Film in the PVA Stretching Process (9:30-9:50)
Yue Wang, TCL China Star Optoelectronics Technology Co., Ltd.
69.5 Analysis and Improvement of LCD Peeling by Polymer Film on Array (9:50-10:10)
ChunMei Li, TCL China Star Optoelectronics Technology
69.6 Analysis of the Long-term Mura Performance of LCD Panel with PFA and Sealant (10:10-10:30)
Xueqin Wang, TCL China Star Optoelectronics Technology Co., Ltd.

Session 70: Novel Display System Technology 2 (Display System)
Friday, April 3/8:30-10:30/ Meeting Room 102
70.1 *Invited Paper:* Trends in Display Technology in Russia (8:30-8:50)
Viacheslav Ivanov, National Research University Higher School of Economics

70.2 Theoretical Characteristics of LMR Used in Projectors (8:50-9:10)

Yury Gushcho, Longevity-122 AS

70.3 Computational Design and Optimization of Subpixel Concepts for Innovative OLED Displays (9:10-9:30)

Lu Zhang, Fluxim AG

70.4 Extreme Low-Power Driving Solution for Large-Size Oxide Display (9:30-9:50)

Shirong Ye, TCL China Star Optoelectronics Technology Co., Ltd.

70.5 Wide Range Low Power Intra-panel Interface Design Using AFC (Auto Frequency Control), ALC (Auto LCO Control) and ABC (Adaptive Bias Control) Technique in Large Display Driver IC (9:50-10:10)

TakJun Oh, DB Globalchip

70.6 *Distinguished Student Paper:* Breaking the Under-display Camera's Dilemma between Diffraction and Pixel Density Using Incoherent Pupil Synthesis (10:10-10:30)

Xinni Xie, Sun Yat-sen University

Session 71: LCD Application (Display Application)

Friday, April 3/8:30-9:50/ Meeting Room 101

71.1 *Invited Paper:* Liquid Crystal Spatial Light Modulators for Phase, Amplitude or Polarization Modulation (8:30-8:50)

Kristiaan Neyts, Hong Kong University of Science and Technology

71.2 Research on the Application of Field Sequential Color Display in Large and Medium-sized LCD Products (8:50-9:10)

Shuming Chang, TCL China Star Optoelectronics Technology Co., Ltd.

71.3 Innovative Application of Custom Color Space on Digital LCD Pen Display (9:10-9:30)

Zhiling Ma, Shenzhen Huion Trend Technology Co., Ltd.

71.4 Blue Photoresist Residue on Green Films: Mechanistic Insights and Effective Suppression Strategies (9:30-9:50)

Jiahao Zheng, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences

Session 72: OLED - Electrodes (OLEDs)

Friday, April 3/10:20-12:00/ Felicity Function Room A

72.1 *Invited Paper:* Enhanced Current Efficiency in Top-emitting Organic Light-emitting Diodes (10:20-10:40)

Sergey Stakharny, Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia/Central Research Institute "Cyclone"

72.2 *Invited Paper:* Reduction of the Percolation Threshold of Ag Films Using a Surface-active ITO Layer (10:40-11:00)

Alexander Nuriev, Prokhorov General Physics Institute of the Russian Academy of Sciences, Moscow, Russia/Central Research Institute "Cyclone"

72.3 *Invited Paper:* Reflectance Difference in OLED COE Structure with MgAg and Transparent Cathodes A Comparative and Mechanistic Study via Optical Simulation (11:00-11:20)

Puyu Qi, Chengdu BOE Optoelectronics Technology Co., Ltd.

72.4 Microstructured Metal Electrodes Induced Light Manipulation in OLEDs (11:20-11:40)

Yangang Bi, Jilin University

72.5 Highly Conductive and Transparent Flexible Composite Electrodes for Flexible Organic Light-Emitting Diodes (11:40-12:00)

Jiamin Sun, South China University of Technology

Session 73: New Material TFTs (Active-Matrix Device)
Friday, April 3/10:40-12:20/ Felicity Function Room B
73.1 *Invited Paper:* Structure and Optical Properties of Thin-film Materials based on Phthalocyanine Derivatives (10:40-11:00)

Margarita Marchenkova, Ivanovo State University

73.2 *Invited Paper:* Reduced Processing Complexity via Single-Layer Dual-Gate Architecture in Organic Multimodal Thin-Film Transistors (11:00-11:20)

Radu Sporea, University of Surrey

73.3 *Invited Paper:* High-Performance Carbon Nanotube Thin Film Transistors Enabled by Atomic Layer Etching Process for Display Driving (11:20-11:40)

Yu Cao (曹宇), Peking University

73.4 Theory of the Distributions of the Hyper-Fine Sub-Boundaries in the (100)-Oriented Grain-Boundary-Free CW-Laser Crystallized Single Crystal Films on Insulator (11:40-12:00)

Nobuo Sasaki, Sasaki Consulting

73.5 Transistor-Level Tunable Sigmoid and Gaussian Activation Functions via Two-Gate Designs: From Analog Activation Function Control to Real-Time Hardware Demonstrations (12:00-12:20)

Junhyung Cho, Hanyang University

Session 74: Projection (Projection)
Friday, April 3/10:20-11:40/ Fabulous Function Room A
74.1 *Invited Paper:* Enhancing Speckle Reduction in Speckle-Reduce Screens via Phosphor Particle-based Wavelength Conversion (10:20-10:40)

Mulin Chen (陈牧林), HOLOKOOK Co., Ltd.

74.2 A Novel Free-Form, Fully Transparent Photon-Driven RGB Emissive Display (10:40-11:00)

Xiaodong Sun, Sun innovations Inc

74.3 Holographic 3D Display Based on Novel Dynamic Phase Modulators Current Status and Prospects (11:00-11:20)

Jianchao Zhang, Hisense Laser Display Co., Ltd.

74.4 Ultra-short Throw Ratio Projection based on MEMS Scanner and Multiple Laser Input (11:20-11:40)

Yuefan Shan, Beijing Institute of Technology

Session 75: Display Measurement Methods - Key Performance (Display Measurement)
Friday, April 3/10:20-12:00/ Fabulous Function Room B
75.1 *Invited Paper:* Research on Optical Improvement Scheme for BM-skip Solution of COE Products (10:20-10:40)

Ming Yang, BOE Technology Group Co., Ltd.

75.2 *Invited Paper:* Measurement, Evaluation, and Calibration of Luminance and Chromaticity Mura in Mini/Micro LED Displays (10:40-11:00)

Peng Zhuang (庄鹏), Xiamen Product Quality Supervision and Inspection Institute

75.3 *Invited Paper:* A Novel Method for Evaluating the Anti-Glare Performance of LCD Display (11:00-11:20)

Junying Xiao, BOE Technology Group Co., Ltd.

75.4 High-precision Hyperspectral Analyzer Applications in Optical Measurement of Micro LED Display (11:20-11:40)

Chen-Hsien Chu, TechnoOptis Co., Ltd.

75.5 Correction Methods, Equipment and Tools for Brightness and Chromaticity Uniformity of LCD Modules (11:40-12:00)

Changjia Fu, Beijing BOE Display Technology Co., Ltd.

Session 76: Joint Session with Organic and Printed Electronics Association (OE-A) (Printed Display)

Friday, April 3/10:00-12:00/ Fabulous Function Room C

76.1 *Invited Paper:* Emerging Technologies for a Sustainable Electronic Industry (10:00-10:20)

Rodrigo Martins, NOVA University (FCT-NOVA)

76.2 *Invited Paper:* Introduction to Printed Electronics and New OE-A Roadmap (10:20-10:40)

Luke Pan, Zhejiang Brilliant Optoelectronic Technology, OE-A

76.3 *Invited Paper:* OTFT Backplanes: From Flexible ePaper Displays to Pixelated Dimming for Smart Glasses (10:40-11:00)

Erin McDowell, FlexEnable

76.4 *Invited Paper:* Ultra Durable Printed Sensors (11:00-11:20)

Ivica Kolaric, Fraunhofer IPA

76.5 All Printed Flexible TFT-AM Device based on a Hybrid Gravure and Flexography Printing Strategy (11:20-11:40)

Junfeng Sun, Huazhong University of Science and Technology

76.6 Revolutionizing Manufacturing for Micro-Pixels & 3D Chip Interconnection with MEMS-type Industry EHD Printing Technology (11:40-12:00)

Wentang Hao, Scrona-YixinTech

Session 77: Electrophoretic Display (E-Paper and Flexible Displays)

Friday, April 3/10:40-12:20/ Apollo VIP Room

77.1 *Invited Paper:* Application and Future Development of Inkjet Printing (IJP) Technology in Epaper (10:40-11:00)

Zhuo Zhang (张卓), National Innovation Technology Optoelectronics Equipment Co., Ltd.

77.2 *Invited Paper:* The Evaluating Methods and Optimizing Algorithm for the Ghosting of EPD (11:00-11:20)

Xidu Wang (王喜杜), Guangzhou OED Technologies., Inc.

77.3 High Performance Cholesteric Liquid Crystal Displays of Single Cell and Dual Cell Structures (11:20-11:40)

Xueqin Zhou, InfoVision Optoelectronics (Kunshan) Co., Ltd.

77.4 Quantum-Dot Dual-Mode Electrophoretic Displays for All-Weather Readability and Low-Power Bistable Imaging (11:40-12:00)

Xingke Zheng, Fuzhou University

77.5 Functional Coupling and Decoupling Strategies for Synergistic Optimization of Dual-Mode Performance in Fluorescent Electrophoretic Displays (12:00-12:20)

Junjie He, Sun Yat-sen University

Session 78: Mini/Micro LED Display Manufacturing (Display Manufacturing)

Friday, April 3/10:40-12:20/ Meeting Room 103

78.1 *Invited Paper:* Innovative Research on Micro-LED Mixed Bin Technology (10:40-11:00)

Xintong Li (李欣曈), Chengdu Vistar Optoelectronics Co., Ltd.

78.2 *Invited Paper:* Laser Processing of MicroLED's Beyond Limits to Enable Mass Production of MicroLED Displays (11:00-11:20)

Oliver Haupt, Coherent Corp.

78.3 *Invited Paper:* Unlocking MicroLED's Potential: Next-Gen BEOL Integration for Scalable, High-Performance Displays (11:20-11:40)

Karan Khullar, GlobalFoundries

78.4 *Invited Paper:* Ultra-Precise Dispensing for Next-Generation Display Manufacturing: From Pixel Repair to Wrap-Edge Interconnects (11:40-12:00)

Filip Granek, XTPL SA, ul.

78.5 Optimization of High Copper Selective Deposition Process in Through Glass Via (TGV) (12:00-12:20)

Jong Hyun Seo, Cuprum Materials Corp./ Korea Aerospace University

Session 79: 3D Display System (Display System)

Friday, April 3/10:40-12:20/ Meeting Room 102

79.1 A Light-shaping Diffuser Film for 3D Display (10:40-11:00)

Runshen Lu, Faith Billion Technology Development Limited

79.2 Spatial Display Solution for Heavy Duty Vehicles Reverse Driving System (11:00-11:20)

Rolf-Dieter Naske, Metavista3D Inc.

79.3 Crosstalk Suppression and Interleaved Frame Rate Enhancement Technology for Naked-Eye 3D Displays (11:20-11:40)

Zhixin Wang, BOE Technology Group Co., Ltd.

79.4 Footage3D: A Low-Cost Method for Generating Autostereoscopic 3D Content from Moving Camera (11:40-12:00)

Mengjie Zhai, Southern University of Science and Technology

79.5 Resolution Enhancement of Naked-Eye 3D Displays Using a Combined Dual-Size Lens Array (12:00-12:20)

Haodong Wang, Shanghai Jiao Tong University

Session 80: Display Optimization (Display Application)

Friday, April 3/10:00-11:40/ Meeting Room 101

80.1 *Invited Paper:* A High Vth Compensation Rate Pixel Circuit Based on LTPS (10:00-10:20)

Jianchao Zhu, BOE Technology Group Co., Ltd.

80.2 A New Scheme for Optimizing the Switching Effect Between PWM Mode and DC Mode (10:20-10:40)

Xiuning Shangguan, Yungu (Gu'an) Technology Co., Ltd. (Visionox's Affiliated Company)

80.3 Optimizing Stimulus Arrangement for SSVEP-BCI Under Local Dimming Displays (10:40-11:00)

Yuang Li, Southeast University

80.4 RGB Mini-LED Backlit LCD Integrated with Multi-input, Multi-output, and Multi-color Li-Fi (11:00-11:20)

Zihao Liang, Sun Yat-sen University

80.5 Intelligent Television Control System Based on EEG–EOG Fusion (11:20-11:40)

Tong Zou, Southeast University

Session 81: OLED - Tandem & Top Emitting Devices (OLEDs)

Friday, April 3/13:30-15:30/ Felicity Function Room A

81.1 *Invited Paper:* Analysis of Lateral Light Leakage in Tandem Organic Light-Emitting Diodes (13:30-13:50)

Masaru Inoue, TOYOTech LLC

81.2 *Invited Paper:* Improving External Light Extraction and Minimizing Viewing-Angle Dependence in Top-Emission OLEDs (13:50-14:10)

Min Chul Suh, Kyung Hee University

81.3 The Understanding and Improvement of Luminance Overshoot on Tandem OLED Production (14:10-14:30)

Xiaoning Liu, Hefei Visionox Technology Co., Ltd.

81.4 The Understanding and Improvement of Charge Generation Layer Stability in Tandem Organic Light-emitting Diodes (14:30-14:50)

Bin Liu, Yungu (Gu'an) Technology Co., Ltd.

81.5 Top Emission Full Color Active-Matrix Quantum Dot Light Emitting Display by Overlay Process (14:50-15:10)

Zhimin Yan, Kunshan Govisionox Optoelectronics Co., Ltd.

81.6 Transparent Tandem OLED with Symmetric Dual-Side Emission and Long Lifetime (15:10-15:30)

Guancheng Zhu, South China University of Technology

Session 82: TFT Circuits and Systems 1 (Active-Matrix Device)

Friday, April 3/13:30-15:30/ Felicity Function Room B

82.1 *Invited Paper:* Full Oxide TFT Technology for AMOLED Displays (13:30-13:50)

Shengdong Zhang (张盛东), Peking University

82.2 A High Stability WOLED Display with Adapting GOA for Gaming MNT (13:50-14:10)

Zhidong Yuan, BOE Technology Group Co., Ltd.

82.3 Research on Solution for Improving Low-Frequency Flicker in LTPO Products (14:10-14:30)

Wenyu Zeng, Hefei Visionox Technology Co., Ltd.

82.4 A Novel Micro-LED Pixel Circuit Designed for Hybrid Pulse Modulation Driving Method (14:30-14:50)

Yingteng Zhai, Shanghai Tianma Microelectronics Co., Ltd.

82.5 Design of Triple Gate Display Panel with DLG Mode Support (14:50-15:10)

Tao Yang, BOE Technology Group Co., Ltd.

82.6 Implementation of CMOS GIP Circuits Using LTPO Technology (15:10-15:30)

Lanfen Lv, Hefei Visionox Technology Co., Ltd.

Session 83: Measurement Methods for Metaverse (Display Measurement)
Friday, April 3/13:30-15:10/ Fabulous Function Room B
83.1 *Invited Paper:* A Study on the Impact of Virtual Display Distortion Characteristics on Visually Induced Motion Sickness (VIMS) (13:30-13:50)
Yandan Lin (林燕丹), Fudan University
83.2 Understanding and Optimizing Lens Performance in AR Display Metrology (13:50-14:10)
Bob Liu, Light-All Co., Ltd.
83.3 Gaze vs. View A Framework for Correlating Dynamic and Static Measurements in AR Optics (14:10-14:30)
Tianxing Zhu, Instrument Systems GmbH
83.4 Application of an Automated Detection System for Image Transmission Performance Evaluation of AR Waveguide (14:30-14:50)
Luning Liu, Wuhan Jingce Electronic Group Co., Ltd.
83.5 Quantitative Measurement of Binocular Just-Noticeable Color Difference for Near-Eye Display System (14:50-15:10)
Zheng Huang, Wuhan University

Session 84: Printed Display Manufacturing (Printed Display)
Friday, April 3/13:30-15:10/ Fabulous Function Room C
84.1 *Invited Paper:* Unlocking the Potential of IJP OLED Technology (13:30-13:50)
Yuheng Liang (梁宇恒), TCL China Star Optoelectronics Technology Co., Ltd.
84.2 *Invited Paper:* Research Progress on the Industrialization of Printed QLEDs (13:50-14:10)
Yawen Chen (陈亚文) , Guangdong Juhua Printed Display Technology Co., Ltd.
84.3 Research on Large-Area QLED Fabrication via Slot-Die Coating Process Based on Hybrid Solvent Engineering (14:10-14:30)
Changfeng Han, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences
84.4 UV-Curable Quantum Dots: Synthesis and Patterning via High-Efficiency Piezoelectric Inkjet Printing (14:30-14:50)
Yongming Yin, Shenzhen MSU-BIT University
84.5 Ultrasound-Mediated Processing Technology for Modulating Viscoelasticity for Polymer Light Emitting Diodes (14:50-15:10)
Dongryul Lee, Pohang University of Science and Technology

Session 85: Components and Electronics for Flexible Displays (E-Paper and Flexible Displays)
Friday, April 3/13:30-14:50/ Apollo VIP Room
85.1 *Invited Paper:* Printed Sustainable Materials for Flexible Electronics and Energy Applications (13:30-13:50)
Elvira Fortunato, NOVA University Lisbon
85.2 Stretchable Organic Light-Emitting Diode Array with Buckled Bridges and Planar Light-Emitting Islands by Strain Engineering (13:50-14:10)
Da Yin, Jilin University

85.3 High Quality Polyimides and Displays (14:10-14:30)

Zugang Liu, China Jiliang University

85.4 Research on the Rigid-Flexible Coupling Model for Multi-Objective Optimization of Flexible AMOLED Module and Foldable Hinge (14:30-14:50)

Baofeng Sun, BOE Technology Group Co., Ltd.

Session 86: Display Process & Equipment (Display Manufacturing)

Friday, April 3/13:30-15:10/ Meeting Room 103

86.1 Improvement Methods for Water Stain Mura in the 2W1D Process (13:30-13:50)

Qi Wang, TCL China Star Optoelectronics Technology Co., Ltd.

86.2 Multiple Display Mode Compatible Exposure Equipment and Exposure Process Development (13:50-14:10)

Ju Ren, Chengdu BOE Display Sci-tech Co., Ltd.

86.3 Research on the Design and Application of Integrated Cover (14:10-14:30)

Lifang Zhou, Visionox's Affiliated Company

86.4 Systematic Investigation of Substrate Type, AG Haze, and Low-Refractive-Index Coating Thickness on Anti-Glare Low-Reflection Optical Performance (14:30-14:50)

GangSheng Liu, TCL China Star Optoelectronics Technology Co., Ltd.

86.5 The Pad Structure Design to Improve the Success Rate of Cell Test (14:50-15:10)

Tingting Zhang, Hefei Visionox Technology Co., Ltd.

Session 87: Field Sequential Color Display (Display System)

Friday, April 3/13:30-14:50/ Meeting Room 102

87.1 *Invited Paper / Distinguished Paper:* RGB Mini LED backlight for Field Sequential Color LCD (13:30-13:50)

Jinglun He (贺靖伦), Hisense Visual Technology Co., Ltd.

87.2 *Invited Paper:* Objective Flicker Evaluation of Field Sequential Color Displays (13:50-14:10)

Changqing Shao (邵长庆), Hisense Visual Technology Co., Ltd.

87.3 Towards Practical Field Sequential Color LCDs by Considering Non-ideal Spatiotemporal Characteristics (14:10-14:30)

Hengxuan Liu, Sun Yat-Sen University

87.4 Field-Sequential Color LCDs with Simultaneously Optimized Color Breakup, Distortion, and Flicker (14:30-14:50)

Feiyi Wu, Sun Yat-Sen University

Session 88: OLED Application (Display Application)

Friday, April 3/13:30-14:50/ Meeting Room 101

88.1 *Invited Paper:* Enhanced Low-Temperature Mechanical Reliability of Foldable Screen (13:30-13:50)

Shuangbing Zhang (张双兵), Hefei Visiononx Technology Co., Ltd.

88.2 The study on HVA Dual PI Less Alignment (13:50-14:10)

Guoren Luo, TCL China Star Optoelectronics Technology Co., Ltd.

88.3 *Distinguished Paper:* Novel AMOLED Panel with Anti-UV Design for Outdoor Application (14:10-14:30)

Zhiyong Xiong, Shanghai Tianma Microelectronics Company Limited

88.4 Research on the GIP Circuit Corrosion Mechanism in an AMOLED Module (14:30-14:50)

Zhijia Zhang, Yungu (Gu'an) Technology Co., Ltd. (Visionox's Affiliated Company)

Session 89: Antenna-on-Display (AoD) and Touch Displays (Touch & Interactive Displays)

Friday, April 3/15:40-18:00/ Felicity Function Room A

89.1 *Invited Paper:* Design Evolution of Millimeter-wave and Microwave Antenna-on-Display (AoD) on the TFE of an OLED Display for 5G and 6G Smartphones (15:40-16:00)

Huan-Chu Huang (黃奐衢), Visionox Technology Inc.

89.2 *Invited Paper:* Wearable Microneedle-Based Biosensing System for Continuous In-Situ Monitoring of Physiological Signals (16:00-16:20)

Hui-Jiuan Chen (陈惠琄), Sun Yat-Sen University

89.3 A New Design for CUP to Reduce Reflection and Diffraction based on LTPO and CFOT (16:20-16:40)

Chong Qian, Tianma Microelectronics Co., Ltd.

89.4 A Technology for Enhancing the Water Resistance of Touchscreen Edges (16:40-17:00)

Junjie Lv, Jiangsu Huixian Display Technology Co., Ltd.

89.5 Metal-Mesh In-Cell Touch Sensor for Interactive Micro-LED Displays (17:00-17:20)

Ziyang Ge, Peking University

89.6 Human-Computer Interaction Transparent Imaging System for Augmented Reality (17:20-17:40)

Enhao Shao, Southeast University

89.7 Study on the 1TFT-1C Touch Unit for Fingerprint Recognition with Conventional Neural Network (17:40-18:00)

Aoran Xu, Peking University

Session 90: TFT Circuits and Systems 2 (Active-Matrix Device)

Friday, April 3/15:40-17:20/ Felicity Function Room B

90.1 *Invited Paper:* IGZO-Compatible 2T DRAM and RRAM Devices for Potential Display-Driven Applications (15:40-16:00)

Sungjun Kim, Dongguk University

90.2 *Invited Paper:* Emerging Monolithic 3D Integration for Extreme-PPI AR/XR Microdisplay: Projection and Design (16:00-16:20)

Jiahao Kang (康佳昊), Peking University

90.3 The First Low-Power Consumption Liquid Crystal Display Panel Based on Dynamic Local Refresh Strategy of 1-120 Hz (16:20-16:40)

Haoxiong Zhang, BOE Technology Group Co., Ltd.

90.4 *Invited Paper:* Electrically Modulated Subthreshold Swing for Improved Current Control (16:40-17:00)

Man Wong (王文), The Hong Kong University of Science and Technology

90.5 *Distinguished Paper:* Ultra-Narrow Border Design for High-PPI Wearable Displays (17:00-17:20)

ManMan Li, Hefei Visionox Technology Co., Ltd.

Session 91: Measurement Methods for OLED (Display Measurement)
Friday, April 3/15:20-16:40/ Fabulous Function Room B
91.1 *Invited Paper:* A Quantitative Evaluation Method Towards The Clean and Legible Characteristics of OLED Displays (15:20-15:40)
Guoqiang Tang, Chengdu BOE Optoelectronics Technology Co., Ltd.
91.2 *Invited Paper:* Research on Flexible Display Folding Resilience Force Test (15:40-16:00)
Yanling Liu (刘艳玲), Visionox Technology Inc.
91.3 Research on Anti-Corrosion Testing Methods for AMOLED Modules (16:00-16:20)
Huiyun Zhu, Kunshan Govisionox Optoelectronics Co., Ltd.
91.4 Research on Thermal Dissipation in AMOLED Display Module for Handheld Gaming Application (16:20-16:40)
Zhiyong Xiong, Shanghai Tianma Microelectronics Company Limited

Session 92: Printed Display Materials (Printed Display)
Friday, April 3/15:20-17:00/ Fabulous Function Room C
92.1 *Invited Paper:* Solution-Processed OLEDs at the Crossroads: Now Rivaling Vacuum Thermal Evaporation in Performance (15:20-15:40)
Yaqin Pan (潘雅琴), Beijing Summer Sprout Technology Co., Ltd.
92.2 *Invited Paper:* Developing Anode Interfacial Layer for Printed OLED Applications (15:40-16:00)
Lei Ying (应磊), South China University of Technology
92.3 *Invited Paper:* Solution-Processed OLED Materials and Devices: Horizontal Dipole Orientation and Charge Transport Tuning (16:00-16:20)
Shumeng Wang (王淑萌), Changchun Institute of Applied Chemistry, Chinese Academy of Sciences
92.4 *Invited Paper:* Theoretical Insight into Precise Control of Dipole Horizontal Orientation in Emissive Layers in Solution-Processed OLEDs (16:20-16:40)
Xiankai Chen (陈先凯), Soochow University
92.5 *Invited Paper:* Multi-Dopant Strategy in Solution-Processed Emission Layer for High Performance Blue Fluorescent OLEDs (16:40-17:00)
Yanfeng Liu (刘彦峰), Zhejiang Brilliant Optoelectronic Technology Co., Ltd.

Session 93: Reflective Displays (E-Paper and Flexible Displays)
Friday, April 3/15:00-16:40/ Apollo VIP Room
93.1 *Invited Paper:* ChLCD as the Next Generation Low-Power Outdoor E-Paper Display (15:00-15:20)
Albert Liao (廖奇璋), IRIS OPTRONICS Co., Ltd.
93.2 *Invited Paper:* Towards high-resolution Bright full-color Video-speed Reflective Display (15:20-15:40)
Biao Tang (唐彪), South China Normal University
93.3 *Invited Paper:* Full Color Reproduction in Electrochromic Display (15:40-16:00)
Jian Wang (王坚), Dongguan University of Technology
93.4 Flash-Free Partial Update of ZBD LCD (16:00-16:20)
Bryan-Brown Guy, New Vision Display

93.5 A Novel Full-Color Cholesteric Bistable Electronic Paper: Design, Fabrication, and Performance (16:20-16:40)

Lixue Yang, TCL China Star Optoelectronics Technology Co., Ltd.

Session 94: Lighting (Lighting)

Friday, April 3/15:20-17:20/ Meeting Room 103

94.1 *Invited Paper:* Candlelight OLED (15:20-15:40)

Jwohuei Jou (周卓煇), Taiwan Tsing Hua University

94.2 *Invited Paper:* Evaluation and Analysis of Intelligent Vehicle Light Environment (15:40-16:00)

Zuo Zhu (竺佐), China Automotive Parts Technology (Tianjin) Co., Ltd.

94.3 A Novel High Performance Frontlight for Large Reflective Displays (16:00-16:20)

Peter Ren, New Vision Display

94.4 An Intelligent Color Temperature-adjusted Lighting based on Novel Stacked OLEDs (16:20-16:40)

Can Yuan, BOE Technology Group Co., Ltd.

94.5 Mathematic Model of Lighting Illuminance Effects on Ocular Physiological Functions Illuminance-amplitude Effect and Illuminance-contrast-sensitivity Effect (16:40-17:00)

Jianqi Cai, China National Institute of Standardization

94.6 Organic Single-Crystalline Semiconductors for Light-Emitting Devices (17:00-17:20)

Ran Ding, Jilin University

Session 95: Micro-LED and Ultra High-Definition Display (Display System)

Friday, April 3/15:00-16:40/ Meeting Room 102

95.1 A Novel LCD Quadruple-Frequency Driving System (15:00-15:20)

Rong Su, TCL China Star Optoelectronics Technology Co., Ltd.

95.2 Analysis of the Illumination Method and Ghost Image in High-brightness Single-panel LCD Projection Optical System (15:20-15:40)

Wenhao Jiang, Beijing BOE Display Technology Co., Ltd.

95.3 Application of 8.1 Gbps High-Speed Signals in High-Resolution VR Panels (15:40-16:00)

Wang Tao, TCL China Star Optoelectronics Technology Co., Ltd.

95.4 Towards a Breakthrough in Mini-LED Local Dimming A Novel Dark Noise Suppression Algorithm (16:00-16:20)

Tiankuo Shi, Nanjing ICD Microelectronic Technology Co., Ltd.

95.5 A Hardware-Parallel Architecture for Real-Time Video and Audio Analysis and On-Screen Display in 4K Ultra-High-Definition Systems (16:20-16:40)

Wenyuan Zhao, Southeast University

Session 96: Emerging Application (Display Application)

Friday, April 3/15:00-16:40/ Meeting Room 101

96.1 *Invited Paper:* Self-Illuminated Color Background Oriented Schlieren with Sub-Micron Displacement Accuracy Using Advanced Display Technologies (15:00-15:20)

Alexander Kurilov, Federal State University of Education

96.2 Software GenLock: Achieving Precise Multi-System Display Synchronization (15:20-15:40)

Arshad Mehmood, Intel Corporation

96.3 Virtual Yield Platform for Yield Simulation AI+EDA Co-Design Practice to Boost Display Panel Yield (15:40-16:00)

Jing Ba, TCL China Star Optoelectronics Technology Co., Ltd.

96.4 A Real-Time Myocardial Blood Flow Imaging System Based on Laser Speckle Contrast Imaging (16:00-16:20)

Renbin Wang, Technical Institute of Physics and Chemistry, CAS

96.5 *Distinguished Student Paper:* High-Quality Metasurface Holographic Display and Applications (16:20-16:40)

Shuo Sun, China Jiliang University

Poster Session

P 1 AMD

P 1.1 A Dynamic Luminance Compensation Algorithm for Mitigating IR-Drop-Induced Brightness Non-Uniformity in AM Mini-LED Backlights

Xianke zhan, Tianma Microelectronics Co., Ltd.

P 1.2 Study on the Stability of IGZO Thin Film Transistors under AC Stress

Ting Chen, Tianma Microelectronics Co., Ltd.

P 1.3 A Hybrid Backplane Technology for Inkjet-Printed OLEDs Using High-Mobility and Highly Reliable Amorphous Oxide Top-Gate TFTs

Chenning Liu, TCL China Star Optoelectronics Technology Co., Ltd.

P 1.4 A Novel LTPS TFT with Simple Architecture and Excellent Performance

Zhuang Li, Wuhan China Star Optoelectronics Technology Co., Ltd.

P 1.5 A Systematic Study of Influencing Factors of Gate Fall Time in TFT-LCD Panel Design

Zhan Wei, Beijing BOE Display Technology Co., Ltd.

P 1.6 Accurate Channel and Contact Resistance Extraction in Oxide TFTs Using a Voltage-Driven Gated Van der Pauw Method

Woo-Seok Lee, Inha University

P 1.7 Analysis and Prevention of Vertical Stripe Defects in Irregular TX Blocks

Peng Zhou, Beijing BOE Display Technology Co., Ltd.

P 1.8 Analysis of the heat resistance performance of Oxide TFT

Tianjing Yu, Beijing BOE Display Technology Co., Ltd.

P 1.9 BEOL-Compatible High-Performance Low-Temperature Polycrystalline Silicon Thin-Film Transistors with Fluorine Plasma Treatment

Peng Dai, Shandong University

P 1.10 Broadband Photoresponse Synaptic devices from Organic Assisted Engineering

Kyounghoon Kim, Gachon University

P 1.11 Corbino versus Rectangular TFTs: Analytical Area Comparison and High-Resolution Implications

Jiaquan Kong, Electric Power Research Institute of Guangdong Power Grid Co., Ltd.

P 1.12 Dam-Assisted Thermal Growth of MAPbI3 Polycrystalline Perovskite for X-ray Detector

Sun Kuo, University of Electronic Science and Technology of China

P 1.13 Degradation of InSnZnO Thin-Film Transistors Under Positive Bias Illumination Stress

Zilang Wu, Shenzhen University

P 1.14 Design Scheme of LTPS Pixel Circuit for Enhanced Threshold Compensation of Driving TFT

Qian Xu, Chengdu BOE Optoelectronic Technology Co., Ltd.

P 1.15 Design Strategies of Improving Color Shift under Strong Light Irradiation in LTPS AMOLED

Wenpeng Lin, Tianma Microelectronics Co., Ltd.

P 1.16 Effect of Bottom-Gate Insulator Capacitance on Electrical Performance of IGZO TFTs

Sijin Cen, Tianma Microelectronics Co., Ltd.

P 1.17 Effect of PIN Structure Integration on the Electrical Performance of TFTs in X-ray Imaging Sensors

Wei Guo, Hefei University of Technology

P 1.18 Effects of Different Annealing Processes on the Output Characteristics of IGZO TFT Devices

Yanli Cao, Tianma Microelectronics Co., Ltd.

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