Final Program

2017 International Conference on Display Technology
February 18th—20th, 2017 (Saturday - Monday)
Sheraton Fuzhou Hotel
Fuzhou, Fujian, China

Session 1: ICDT Business Conference
Saturday, February 18/8:00—11:50/ Function Room 2&3

Session 2: ICDT Seminar
Saturday, February 18/8:30—11:40/ Function Room 1
2.1 Advanced TFT (8:30- 10:00)
“Fundamentals of Thin-film Transistor Technologies for Modern Displays”
XiaoJun Guo (郭小军), Shanghai Jiao Tong University
2.2 Quantum Dots & Related Displays (10:10- 11:40)
“Highly Efficient and Stable Quantum Dot Light-emitting Diodes Produced by Ink-jet Printing”
Lei Qian (钱磊), TCL Corporate Research
Saturday, February 18/8:30—11:40/ Function Room 4
2.3 Printing Displays (8:30- 10:00)
“Overview of Printed Display”
Zheng Cui (崔铮), Suzhou Institute of Nanotech and Nanobionics, Chinese Academy of Sciences
2.4 AR&VR&MR (10:10- 11:40)
Yi-Pai Huang (黄乙白), National Chiao Tung University

Session 3: Opening Remarks / Plenary Session 1
Saturday, February 18/13:40—18:10/ Ballroom1&2

Opening Remarks
Saturday, February 18/13:40—14:00/ Ballroom1&2
• High level government official
• President of Fuzhou University
• Yong-Seog Kim, President of SID
• Baoping Wang, Deputy Vice-President of Southeast University

Plenary Session 1.1
Saturday, February 18/14:00—15:30/ Ballroom1&2
Chair: Shinton Wu (吴诗聪), University of Central Florida
3.1 Future of OLED Displays (14:00-14:30)
Ching W. Tang (邓青云), University of Rochester & Hong Kong University of Science and Technology
3.2 History and Trend of Flat Panel Display Development in Mainland China (中国大陆平板显示发展历史与趋势) (14:30-15:00)
Zhongcan Ouyang (欧阳钟灿), Institute of Theoretical Physics, Chinese Academy of Sciences

3.3 Versatile Chromophores and Triplet Emitters for Efficient Optoelectronic Functions (15:00-15:30)
Vivian Wing-Wah Yam (任咏华), University of Hong Kong

3.4 Technology Advancement in Flexible Displays (15:30-16:00)
Janglin Chen (程章林), Industrial Technology Research Institute (ITRI)

Plenary Session 1.2
Saturday, February 18/16:20-17:50/ Ballroom1&2
Chair: Hoi-Sing Kwok (郭海成), Hong Kong University of Science and Technology

3.5 Oxide TFT Backplanes for OLED Displays (16:20-16:50)
Arokia Nathan, Cambridge University

3.6 The Future TV is Here, It's OLED (16:50-17:20)
Sooyoung Yoon, LG Display

3.7 Challenges for New OLED Display Era (17:20-17:50)
Toshiaki Arai, JOLED

Session 4: Plenary Session 2
Sunday, February 19/8:30—10:30/ Ballroom1-2
Chair: Qun Yan (严群), Fuzhou University

4.1 New frontiers in LCDs (8:30-9:00)
Shintson Wu (吴诗聪), University of Central Florida

4.2 Recent progress in photoalignment technologies (9:00-9:30)
Hoi-Sing Kwok (郭海成), Hong Kong University of Science and Technology

4.3 Latest development of high-performance OLED material suitable for printing fabrication (9:30-10:00)
Takeshi Yamada, Sumitomo Chem.

4.4 Advances in Next Generation Display Materials (10:00-10:30)
Kathleen O’Connell, Dow Chemical

Session 5: OLED Materials 1 (OLEDs)
Sunday, February 19/10:45—12:05/ Ballroom 3
Chair: Lian Duan (段炼), Tsinghua University

5.1 Invited Paper: TADF Materials for High Efficiency OLEDs (10:45-11:05)
Ken-Tsung Wong (汪根權), National Taiwan University

5.2 Invited Paper: TADF Phosphides (11:05-11:25)
Hui Xu (许辉), Heilongjiang University

5.3 Invited Paper: Thioxanthone Derivatives and Their Application for OLEDs (11:25-11:45)
Ying Wang (王莺), Technical Institute of Physics and Chemistry, Chinese Academy of Sciences

5.4 Invited Paper: An alternative way to use the triplet energy of fluorescent dye in OLED via an external iodide (11:45-12:05)
Lixin Xiao (肖立新), Peking University
Session 6: AR & VR 1 (AR&VR)
Sunday, February 19/10:45—12:25/ Function Room 1
Chair: Hong’en Liao (廖洪恩), TsingHua University

6.1 Invited Paper: True 3D Realization in the See-Through Type Head-Mounted Display with Complex Amplitude Modulation (10:45-11:05)
Juan Liu (刘娟), Zhiqi Zhang (张智齐), Qiankun Gao (高乾坤), Beijing Institute of Technology

6.2 Invited Paper: Novel Head-Up Display (HUD) and Human Interface for Vehicles by Employing AR Technologies (11:05-11:25)
Lijun Wang (王立军), Dream World Technology Inc.

6.3 Invited Paper: Perception Intelligence in VR/AR and AI (11:25-11:45)
Fan Lu (陆凡), Senscape Technologies Inc.

6.4 Invited Paper: 3D Augmented Reality based Minimally invasive Surgical Navigation and Precision Intervention (11:45-12:05)
Hong’en Liao (廖洪恩), TsingHua University

6.5 Invited Paper: Applications of VR & Medical Visualization in Healthcare Simulation (12:05-12:25)
Xiaotian Yan (严小天), Tellyes Scientific Inc.

Session 7: Key materials for flexible display and electronics (E-paper and Flexible Displays)
Sunday, February 19/10:45—12:25/ Function Room 2
Chair: Chaoyuan Chen (陈昭远), Jiangsu Hecheng Display Technology Co., Ltd.
Co-Chair: Bo-Ru Yang (杨柏儒), Sun Yat-Sen University

7.1 Invited Paper: Flexible Display Technology Trend and Market Status (10:45-11:05)
Jerry Kang, IHS Markit

7.2 Invited Paper: Recent Progress of Polymer Substrate for Flexible Display (11:05-11:25)
Yi Zhang (张艺), Sun Yat-Sen University

7.3 Invited Paper: Flexible Electronics Printing Technology & Material (11:25-11:45)
Luhai Li (李路海), Beijing Institute of Graphic Communication, Beijing Engineering Research Center of Printed Electronics

7.4 Invited Paper: Perovskite Light-Emitting Diodes based on Solution-Processed, Self-Organized Multiple Quantum Wells (11:45-12:05)
Jianpu Wang (王建浦), Nanjing Tech University

7.5 Invited Paper: Flexible Sensors (12:05-12:25)
Shoujun Li (李守军), Kangdexin Composite Material Group

Session 8: Manufacture of TFT Device, Array, and Circuits 1 (Display Manufacturing)
Sunday, February 19/10:45—12:25/ Function Room 3
Chair: Chengyuan Dong (董承远), Shanghai Jiao Tong University

8.1 Invited Paper: Ink-jet print high-conductive silver electrode in AOS TFT Array (10:45-11:05)
Honglong Ning (宁洪龙), South China University of Technology

8.2 Invited Paper: Application of Array Tester in AMOLED Manufacturing (11:05-11:25)
Junfeng Li (李俊峰), Kunshan Govisionox Optoelectronics Co., Ltd.

8.3 Invited Paper: New kinds of TFTs and Novel Applications based on TFTs (11:25-11:45)
Yanzhao Li (李延钊), BOE Technology Group Co. Ltd.
8.4 Invited Paper: The properties of Cu metallization based on Cu alloy buffer layer for the applications in thin film transistor(TFT) (11:45-12:05)
Zhinong Yu (喻志农), School of Optoelectronics, Beijing Institute of Technology

Xiaodi Liu (刘晓娣), Shenzhen China Star Optoelectronics Technology Co., Ltd.

Session 9: TFT Circuit and Display Driving (Active-Matrix Devices)
Sunday, February 19/10:45—12:25/ Function Room 4
Chair: Shengdong Zhang (张盛东), Peking University
Co-Chair: Kai Wang, Sun Yat - sen University
9.1 Invited paper: High-Speed Column Driver IC for High-Resolution, High-Frame-Rate Displays (10:45-11:05)
Byong-Deok Choi, Hanyang University, Korea.

9.2 Invited paper: Design of 5.5 inch IGZO TFT FFS In-Cell Touch Panel (11:05-11:25)
Mingxin Wang (王鸣昕), Nanjing CEC Panda FPD Technology Co., Ltd.

9.3 Invited paper: Robust Gate Driver Circuit Design with a-Si:H TFTs (11:25-11:45)
Congwei Liao (廖聪维), Peking University.

9.4 Invited paper: A New Pixel Compensation Circuit for AMOLED Display (11:45-12:05)
Siming Hu (胡思明), KunShan GoVisionox OptoElectronics.

9.5 Stability Analysis of a-IGZO Thin Film Transistors Applied in Integrated Gate Driver of Narrow-border LCD Panel (12:05-12:25)
Hongtao Huang, Nanjing CEC Panda FPD Technology Co., Ltd.

Session 10: Organic TFTs (Active-Matrix Devices)
Sunday, February 19/11:10—12:30/ Ballroom 1
Chair: Xiaojun Guo(郭小军), Shanghai Jiaotong University
Co-Chair: Simon Ogier, NeuDrive, UK

10.1 Invited Paper: High performance printed organic thin film transistors for flexible display (11:10-11:30)
Yong-Young Noh, Dongguk University, Korea

10.2 Invited Paper: Molecular Design toward High Mobility Organic Semiconductors (11:30-11:50)
Yanhou Geng (耿延候), Tianjin University

10.3 Invited Paper: High Performance OFET Package for Printed Organic Electronics (11:50-12:10)
Joseph Hsiao, BASF

10.4 Invited Paper: OLCD: Scalable large area, low cost and high performance conformable plastic LCD (12:10-12:30)
Paul Cain, FlexEnable, UK

Session 11: Quantum Dots materials (Emissive Displays)
Sunday, February 19/11:10—12:30/ Ballroom 2
Chair: Lei Qian (钱磊), TCL.
   Yixing Yang (杨一行), TCL Corporate Research

11.2 *Invited Paper:* Quantum-dot light-emitting diodes based on copper-based semiconductor nanocrystals (11:30-11:50)
   Aiwei Tang (唐爱伟), Beijing jiaotong University

11.3 *Invited Paper:* Recent progress on quantum dots based light-emitting diodes in my group (11:50-12:10)
   Zhan’ao Tan (谭占鳌), North China Electric Power University

11.4 *Invited Paper:* One-pot Synthesis of highly luminescent and stable CH$_3$NH$_3$PbBr$_3$ Quantum Dots assisted with amine functional silane (12:10-12:30)
   Hongshang Peng (彭洪尚), Minzu University of China

**Session 12: New Structure TFT and Backplane Technology (Active-Matrix Devices)**
Sunday, February 19/13:30—14:50/ Ballroom 1
Chair: Guangcai Yuan (袁广才), BOE Technology Group Co. Ltd.
Co-Chair: Xuelei Liang (梁学磊), Peking university

   Linwei Yu (余林蔚), Nanjing University

12.2 *Invited Paper:* Elevated-Metal Metal Oxide Thin-Film Transistor: A New Device Architecture Allowing Improved Performance Metrics (13:50-14:10)
   Man Wong, Hong Kong University of Science and Technology

12.3 *Invited Paper:* Enhanced Bias Illumination Stress Stability of Vertical Field Effect Transistors for AMOLED Displays (14:10-14:30)
   Bo Liu (刘博), nVerPix, USA

12.4 *Invited Paper:* Development and trend of new display backplane technology (14:30-14:50)
   Wei Yang (杨维), BOE Technology Group Co. Ltd.

**Session 13: New TFT Applications (Active-Matrix Devices)**
Sunday, February 19/14:55—15:55/ Ballroom 1
Chair: Wan Qing (万青), Nanjing University

   Feng Yan (严锋), Hong Kong Polytechnic University.

13.2 *Invited Paper:* Emerging Non-Display Applications of Thin-Film Transistors (15:15-15:35)
   Kai Wang, Sun Yat-Sen University.

13.3 *All Solution Processed Low Voltage Organic Thin-film Transistors for Ubiquitous Sensors (15:35-15:55)
   Jiaqing Zhao (赵家庆), Shanghai Jiao Tong University.

**Session 14: New Material TFTs (Active-Matrix Devices)**
Sunday, February 19/16:00—17:40/ Ballroom 1
Chair: Fukai Shan (单福凯), Qingdao University
Co-Chair: Linwei Yu, Nanjing University
14.1 Invited Paper: Ubiquitous Design of Organic-Inorganic Heterojunctions Toward High Performance Field Effect Transistor Applications (16:00-16:20)
Chao Jiang (江潮), National Center for Nanoscience and Technology, China (国家纳米中心).

14.2 Invited Paper: Challenges for carbon nanotube thin film transistors (16:20-16:40)
Xuelei Liang (梁学磊), Peking University.

14.3 Invited Paper: 2D Materials: from fundamental research to thin-film transistor applications (16:40-17:00)
Wenzhong Bao (包文中), Fudan University.

14.4 Invited Paper: Printable high-performance sc-SWCNT inks and application in printed p-type and n-type TFTs and circuits on PET substrates (17:00-17:20)
Jianwen Zhao (赵建文), Printable electronics research center, Suzhou institute of nano-tech and nano-bionics, Chinese Academy of Sciences.

14.5 Invited Paper: Interface and Surface Passivation of Germanium Junctions for High Speed Flexible Electronics (17:20-17:40)
Chi Liu (刘驰), Institute of Metal Research (IMR), Chinese Academy of Sciences.

Session 15: micro-LED (Emissive Displays)
Sunday, February 19/13:30—15:50/ Ballroom 2
Chair: Zhaojun Liu (刘召军), Sun Yat-sen University
Co-Chair: Pengfei Tian (田朋飞), Fudan University

15.1 Invited paper: Current status and issues of QLED displays (13:30-13:50)
Changhee Lee, Seoul National University.

15.2 Invited paper: A high-performance full-color micro display based on quantum-dot aerosol jet technology (13:50-14:10)
Hao-Chung Kuo (郭浩中), National Chiao Tung University, Taiwan.

15.3 Invited paper: GaN-based Micro-LEDs for micor-display and visible light communication (14:10-14:30)
Pengfei Tian (田朋飞), Fudan University

15.4 Invited paper: Micro-LEDs: Homogeneous and Heterogeneous Integrated Devices of Light Emitting Diodos and Driving Circuits (14:30-14:50)
Zhaojun Liu (刘召军), Sun Yat-Sen University.

15.5 Invited paper: The applications of LED/OLED micro-display devices in VR/AR light-field display systems (14:50-15:10)
Lilin Liu (刘立林), Sun Yat-Sen University.

15.6 Invited paper: Active Matrix Micro LED Display Based on Digital Modulation Silicon Backplane (15:10-15:30)
Chen-Hsien Chu, Jasper Display Corporation (JDC)

15.7 Fully-Integrated Active Matrix Programmable UV and Blue Micro-Led Display System-On-Panel (Sop) (15:30-15:50)
Ke Zhang, Deng Peng, Zhaojun Liu, Sun Yat-sen University, Hong Kong University of Science And Technology

Session 16: QD PL (Emissive Displays)
Sunday, February 19/16:00—17:00/ Ballroom 2
Chair: Xuyong Yang (杨绪勇), Shanghai University

16.1 Invited paper: QD-LCD vs. OLED: The Battle for the Next Mainstream TV (16:00-16:20)
Zhongsheng Luo (罗忠升), Greater China & Applications Engineering, Nanosys Inc.

Haizheng Zhong (钟海政), Beijing Institute of Technology

16.3 Invited paper: Emerging Photoluminescent Quantum Dot and Quantum Rod Displays (16:40-17:00)
Kai Wang (王恺), Southern University of Science and Technology

Session 17: OLED Device 1 (OLEDs)
Sunday, February 19/13:30—15:10/ Ballroom 3
Chair: Jianhua Zhang (张建华), Shanghai University.

Amal Ghosh, eMagin Corp.

17.2 Invited paper: Development of High EQE OLEDs: from Efficient Internal Generation to External Extraction (13:50-14:10)
Chung-Chih Wu (吴忠幟), National Taiwan University

17.3 Invited paper: Laser nanofabrication for advanced OLEDs (14:10-14:30)
Hong-Bo Sun (孙洪波), Jilin University

17.4 Invited paper: Transient electroluminescence of Organic Light-Emitting Diodes (14:30-14:50)
Suling Zhao (赵谡玲), Beijing Jiaotong University

Session 18: OLED Display 1 (OLEDs)
Sunday, February 19/15:15—16:35/ Ballroom 3
Chair: Zhongjun Li (李重君), BOE Technology Group Co. Ltd.
Co-Chair: Po-Yen Lu (吕伯彦), CSOT

18.1 Invited paper: Inkjet Printing for OLED TV on Large-Area Glass (15:15-15:35)
Jeff Hebb, Kateeva, Inc.

18.2 Invited paper: Enabling OLED Technologies for TVs: PHOLEDs and OVJP (15:35-15:55)
Pete Liu (刘醋炘), UDC

18.3 Invited paper: Approach to AMOLED display market (15:55-16:15)
Kouji Hane (羽根功二), ULVAC Inc.

18.4 Invited paper: Metal Oxide backplane integration challenges for OLED TV applications (16:15-16:35)
Nino Zahirovic, Ignis Innovation

Session 19: Display Module Manufacturing for All Display Technologies (Display Manufacturing)
Sunday, February 19/16:40—17:40/ Ballroom 3
Chair: Jifeng Chen (陈继锋), 北京沃尔德金刚石工具股份有限公司

19.1 Invited Paper: Module bonding process solution for high definition and high display quality (16:40-17:00)
Dankui Wang (王丹奎), BOE Technology Group Co. Ltd.

19.2 Invited Paper: Development of novel diamond cutter wheels for display glass cutting (17:00-17:20)
Wenlin Tang (唐文林), 北京沃尔德金刚石工具股份有限公司.

19.3 Invited Paper: Prospects of Automotive Touch Technology (17:20-17:40)
Xichun Wu (吴锡淳), 汕头超声显示器有限公司.

Session 20: Applications of 3D Display (Display Applications)
Sunday, February 19/13:30—15:30/ Function Room 1
Chair:  谭小地/Xiaodi Tan, Beijing Institute of Technology
20.1 Invited paper: LC-lens Array for 3D Applications (13:30-13:50)
Yi-Pai Huang (黄乙白), National Chiao Tung University
20.2 Invited paper: 360° Realistic 3D Image using Direct Light Scanning Method (13:50-14:10)
Xiaodi Tan (谭小地), Beijing Institute of Technology
20.3 Invited paper: A naked eye 3D LCD with 2D/3D switchable property (14:10-14:30)
Yanna Xue (薛艳娜), BOE Technology Group Co. Ltd.
20.4 Invited paper: Three-dimensional light-field display and its medical applications (14:30-14:50)
Xinzhu Sang (桑新柱), Beijing University of Posts and Telecommunications
20.5 A Multi-Layer 3D Disply Method Based On Depth Map (14:50-15:10)
Xiaoxi Chen, University of Electronic Science and Technology of China
20.6 Light Field Display Optimization Based On Eye-Tracking (15:10-15:30)
Haiming Lu (路海明), Tsinghua University

Session 21: Printed inorganic TFTs & electronics (Active-Matrix Devices)
Sunday, February 19/15:40—17:20/ Function Room 1
Chair:  廖蕾/Liao Lei, Wuhan University
Co-Chair:  江潮/Chao Jiang, The National Center for Nanoscience and Technology
21.1 Invited Paper: Recent Developments of Digital Printing Technologies for Flexible Electronics and Displays (15:40-16:00)
Jun YANG, Western University, Canada
21.2 Invited Paper: Low-temperature high-performance p-type oxide thin-film transistors via solution process (16:00-16:20)
Fukai Shan, Qingdao University
21.3 Invited Paper: Fully Printed Metal-Oxide Thin-Film Transistors (16:20-16:40)
Linfeng Lan, South China University of Technology
21.4 Invited Paper: Electrohydrodynamic printing and its application in TFTs and electronics (16:40-17:00)
Yong’an Huang, Huazhong University of Science and Technology
21.5 Invited Paper: Inkjet Printed Oxide Thin Film Transistor Array with Polymer-doped Metal Nitrate Aqueous Ink (17:00-17:20)
Zheng Chen, Printable Electronics Research Centre, Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences
Session 22: Liquid-Crystal Technology 1 (Liquid-Crystal Technology)
Sunday, February 19/13:30—15:10/ Function Room 2
Chair: Yongrui Li (李泳锐), Shenzhen China Star Optoelectronics Technology Co., Ltd.
Co-Chair: Wenming Han (韩文明), Jiangsu Hecheng Display Technology Co., Ltd.
22.1 Invited paper: Can a Field-Sequential-Color LCD Become a Future Eco-Display?
(13:30-13:50)
Fang-Cheng Lin (林芳正), National Chiao Tung University
22.2 Invited paper: Curved LCD Design and Limitation (13:50-14:10)
Chang Jianyu, Shenzhen China Star Optoelectronics Technology Co., Ltd.
22.3 Invited paper: The Process Influence of TFT-LCD Low Frequency Mura (14:10-14:30)
Cheng-Ming Liu, InfoVision Optoelectronics (Kunshan) Co., Ltd.
22.4 Invited paper: Hybrid view angle liquid crystal display (14:30-14:50)
Zhongfei Zou, InfoVision Optoelectronics (Kunshan) Co., Ltd.
22.5 LED Matrix Design For Field Sequential Color LCDs (14:50-15:10)
Tang Jing-Lang, Zhang Yu-Ning, Shen Zhou-Wen, Chu Hai-Long, Southeast University

Session 23: Liquid-Crystal Technology 2 (Liquid-Crystal Technology)
Sunday, February 19/15:20—17:20/ Function Room 2
Chair: Jiangang Lu (陆建钢), Shanghai Jiao Tong University
Co-Chair: Xiqian Lin (林熙乾), InfoVision Optoelectronics (Kunshan) Co., Ltd.
23.1 Invited paper: Cholesteric Liquid Crystals for Optofluidic Microlasers (15:20-15:40)
Lujian Chen, Xiamen University
23.2 Invited paper: Double-layer templated cholesteric liquid crystal film (15:40-16:00)
LUO DAN, Southern University of Science and Technology
23.3 Invited paper: Micro Display and Digital Spatial Light Modulator (SLM) Using Electro-Optics Platform (16:00-16:20)
Dr. Chun-Wei Tsai, Jasper Display Corp.
Toru Fujisawa, DIC Corporation Fine Synthesis Technical Group 4
23.5 Invited paper: New RM and Room Temperature Nematic RM for Application (16:40-17:00)
Chaoyuan Chen, Jiangsu Hecheng Display Technology Co., Ltd
23.6 Invited paper: Market demand and technology development of color photoresist (17:00-17:20)
Zhuo Zhang, Fuyang Sineva Material Technology Co., Ltd.

Session 24: Display Measurement 1 (Display Measurement)
Sunday, February 19/13:30—15:30/ Function Room 3
Chair: Xiaohua Li (李晓华), Southeast University
24.1 Invited Paper: Development of the optical calibration facility for displays in NIM (13:30-13:50)
Chi Chen, National Institute of Metrology
24.2 Invited Paper: VR 显示器的動態殘影的量化技術 (13:50-14:10)
Kerson Wang (王科顺), i-boson
24.3 Invited Paper: Key performances characterization of spectral radiance meter (14:10-14:30)
Qian Li, EVERFINE Corporation

Xiaohua Li, Southeast University

**24.5 Invited Paper: Measurements of OLED Key Optoelectronic Properties (14:50-15:10)**
Yang Yang, EVERFINE Corporation

**24.6 Invited Paper: The measurement methods research for HDR display performance (15:10-15:30)**
Weihua Wu, 国家广播电视产品质量监督检验中心

Session 25: Display Measurement 2 (Display Measurement)
Sunday, February 19/13:30—17:40/ Function Room 3
Chair: Xiaohua Li (李晓华), Southeast University

**25.1 Invited Paper: Measurement Issues and International Standardization for Electronic Displays (15:40-16:00)**
Tongsheng Mou, Zhejiang University

**25.2 Invited Paper: Optical Measurement of Display Light Units (16:00-16:20)**
Kalil Kalantar, Ziyu Xu(许子愉), SENSING Optronics Co., Ltd

**25.3 Invited Paper: Study on standards for evaluative methods of display based on user performance (16:20-16:40)**
Yunhong Zhang, China National Institute of Standardization

**25.4 Study of Brain Response During Watching Stereoscopic Display Using an Oddball Task Evoked Event-Related Potential (16:40-17:00)**
Peng Ye, Xiang Wu, Dingguo Gao, Haowen Liang, Jiahui Wang, Shaozhi Deng, Ningsheng Xu, Juncong She, Jun Chen, Sun Yat-Sen University

**25.5 OLED de-mura system (17:00-17:20)**
Chen Ting, Color Space Technology Inc

**25.6 Conoscopic measurements for displays – advantages and limitations (17:20-17:40)**
Bob Liu/刘小波, TechnoTeam Bildverarbeitung GmbH, Germany

Session 26: Electronic paper 1 (E-paper and Flexible Displays)
Sunday, February 19/13:30—14:30/ Function Room 4
Chair: Guofu Zhou (周国富), South China Normal University
Co-Chair: Xidu Wang (王喜杜), Guangzhou OED Technologies,.Inc.

**26.1 Invited Paper: Recent progress in colored video electro-fluidic display technology (13:30-13:50)**
Guofu Zhou, South China Normal University

**26.2 Invited Paper: The design considerations for full-color e-paper (13:50-14:10)**
Bo-Ru Yang, Sun Yat-Sen University

Xidu Wang, Guangzhou OED Technologies,.Inc.

Session 27: Electronic paper 2 (E-paper and Flexible Displays)
Sunday, February 19/14:35—15:35/ Function Room 4  
Chair: Guofu Zhou (周国富), South China Normal University  
Co-Chair: Xidu Wang (王喜杜), Guangzhou OED Technologies,.Inc.  
27.1 Invited Paper: Next Applications of e-Paper (14:35-14:55)  
   Makoto Omodani, Tokai University  
   Shuichi Maeda, Tokai University  
27.3 Invited Paper: R&D Status of E-Paper & Flexible Displays at Chiba University in Japan  
   (15:15-15:35)  
   Akira Suzuki, Chiba University  

Session 28: Color Vision and Color Rendering (Applied Vision)  
Sunday, February 19/15:45—16:25/ Function Room 4  
Chair: Ming Luo (罗明), Zhejiang University  
28.1 Invited Paper: Diffraction efficiency distribution of output grating in HWD (15:45-16:05)  
   Ao Liu, Southeast University  
   Zong Qin(秦宗), National Chiao Tung University  

Session 29: High Performance Metal Oxide TFTs (Active-Matrix Devices)  
Monday, February 20/8:30—10:30/ Ballroom 1  
Chair: Xiang Liu (刘翔), China Star Optoelectronics Technology  
Co-Chair: Lei Wang (王磊), New Vision  
29.1 Invited Paper: Scaling AMOLED displays to high resolution (8:30-8:50)  
   Paul Heremans, IMEC, Belgium/Holster Center, Netherland  
29.2 Invited Paper: Transparent Megahertz Circuits from Solution-Processed Composite Thin Films (8:50-9:10)  
   Lei Liao (廖蕾), Wuhan University  
29.3 Invited Paper: Development of 98 inch 8K4K Oxide TFT-LCD with UV2A Technology (9:10-9:30)  
   Liufei Zhou (周刘飞), Nanjing CEC Panda FPD Technology Co., Ltd.  
29.4 A 31-in UD AM-OLED Display using self-aligned top gate IGZO TFTs (9:30-9:50) (Withdrawn)  
   Yanhong Meng (蒙艳红), Shenzhen China Star Optoelectronics Technology Co., Ltd.  
29.5 Invited Paper: High Performance Thin-film Transistors with Hybrid-phase ITO-stabilized ZnO Active Channel Layer (9:50-10:10)  
   Rongsheng Chen (陈荣盛), South China University of Technology  
29.6 Development of Cu BCE-structure IGZO TFT for High PPI 31-inch 8K4K GOA LCD Display (10:10-10:30)  
   Shimin Ge (葛世民), Shenzhen China Star Optoelectronics Technology Co., Ltd.  

Session 30: Flexible TFTs and Displays (Active-Matrix Devices)  
Monday, February 20/10:40—12:20/ Ballroom 1
Chair: Linfeng Lan (兰林锋), South China University of Technology
Co-Chair: Siming HU, Visionox

30.1 Invited Paper: Highly Robust Oxide TFTs on Polyimide Substrate (10:40-11:00)
Jin Jang, Kyung Hee University, Korea

30.2 Invited Paper: Flexible IZO-based Thin-Film Transistors on Paper Substrates (11:00-11:20)
Qing Wan (万青), Nanjing University, China

30.3 Invited Paper: Current Status and Opportunities of OTFT Technologies (11:20-11:40)
Xiaojun Guo (郭小军), Shanghai Jiao Tong University

30.4 Invited Paper: High mobility organic semiconductor materials for applications in dynamically flexible displays (11:40-12:00)
Simon Ogier, NeuDrive, UK

30.5 Invited Paper: A Novel Flexible LTPS Capacitance Compensating Method for Luminance Uniformity (12:00-12:20)
Yanqin Song (宋艳芹), Kunshan GoVisionox OptoElectronics

Session 31: QLED (Emissive Displays)
Monday, February 20/8:30—10:10/ Ballroom 2
Chair: Fushan Li (李福山), Fuzhou University

31.1 Invited Paper: Towards high-performance quantum-dot light-emitting diodes (8:30-8:50)
Yizheng Jin, Zhejiang University

31.2 Invited Paper: QLED Device Structures for Display Application (8:50-9:10)
Zhuo Chen, BOE Technology Group Co., Ltd.

31.3 Invited Paper: Design and fabrication of high-efficiency and long lifetime quantum dot electroluminescent devices (9:10-9:30)
Xuyong Yang, Shanghai University

Shuming Chen, Southern University of Science and Technology

31.5 Invited Paper: Highly Efficient and Stable Quantum-Dot Light-Emitting Diodes (QLEDs) (9:50-10:10)
Weiran Cao, TCL Corporate Research

Session 32: Visual Healthy (Applied Vision)
Monday, February 20/10:20—12:00/ Ballroom 2
Chair: Hao Chen, Wenzhou Medical University

32.1 Invited Paper: The application of Bayesian adaptive method in human contrast sensitivity function measurement (10:20-10:40)
Fang Hou, Wenzhou Medical University

32.2 Invited Paper: Application of cognitive neuroscience on evaluation of display user experience (10:40-11:00)
Yunhong Zhang, China National Institute of Standardization

32.3 Invited Paper: Visual Fatigue following long-term visual display terminal work under different light sources (11:00-11:20)
Lili Wang, Southeast University
Xinhong Liu, 国家平板显示产业计量测试中心（苏州）

32.5 *Invited Paper:* Real-time modulation of eye dominance in human (11:40-12:00)
Jiawei Zhou (周佳玮), Wenzhou Medical University.

Session 33: OLED Device 2 (OLEDs)
Monday, February 20/8:30—10:10/ Ballroom 3
Chair: Minqiang Feng (冯敏强), Soochow University

33.1 *Invited Paper:* Large-scale nanotechnology for New generation Sunlight-like and High purity OLED (8:30-8:50)
Jianhua Zhang, Shanghai University

33.2 *Invited Paper:* High Efficiency White OLEDs by Exciplex Engineering (8:50-9:10)
Dongge Ma, South China University of Technology

33.3 *Invited Paper:* Flexible OLEDs on Outcoupling Enhanced Plastics (9:10-9:30)
Jianxin Tang, Soochow University

33.4 *Invited Paper:* High efficiency OLED based on ultra-thin emission layer (9:30-9:50)
Shuai Yang, Jun Liu, Xindong Shi, Meijun Yang, Gufeng He*, Shanghai Jiao Tong University

33.5 Non-Doped White Organic Light-Emitting Diodes with Nearly 20% External Quantum Efficiency (9:50-10:10)
Shengfan Wu, Soochow University

Session 34: OLED Materials 2 (OLEDs)
Monday, February 20/10:20—12:00/ Ballroom 3
Chair: Shijian Su (苏仕健), South China University of Technology

34.1 *Invited Paper:* Design and Modulation of Excited State in Organic Electroluminescence Materials (10:20-10:40)
Bing Yang, Jilin University

34.2 *Invited Paper:* New route to breakthrough the 25% upper limit of internal quantum efficiency of OLEDs (10:40-11:00)
Feng Li, Jilin University

34.3 *Invited Paper:* Novel organic electronic materials and its highly efficient electronic devices (11:00-11:20)
Silu Tao(陶斯禄), University of Electronic Science and Technology of China

Wenzheng Gao, Beijing Eternal Material Technology Co., Ltd.

34.5 *Invited Paper:* New Host Materials Based on carbazole for High-performance OLED (11:40-12:00)
Xialei Lv, Wenzhi Zhang, Jianghong Tan, Shaoqing Zhuang, Lei Wang*, Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology

Session 35: AR & VR 2 (AR & VR)
Monday, February 20/8:30—10:30/ Function Room 1
Chair: Lijun Wang (王立军), Dream World Technology Inc.
Co-Chair: Tongsheng, Mou (牟同升), Zhejiang University

35.1 *Invited Paper:* VR/AR Audio Technologies and Standardization; Review, Latest Progress and Tendency (8:30-8:50)
   
   Xingde Pan, Wavarts Inc

35.2 *Invited Paper:* Light-Field Information Capture and Display (8:50-9:10)
   
   Xinzhu Sang, Beijing University of Posts and Telecommunications

35.3 *Invited Paper:* Evaluation and Standardization of Optical Properties of Virtual Imaging Devices (9:10-9:30)
   
   Tongsheng Mou, Zhejiang University

35.4 *Invited Paper:* Quantification of luminance and chromaticity for Apparent Images in Virtual Reality (9:30-9:50)
   
   Chenzi Xu, SENSING Instruments Co., Ltd

35.5 *Invited Paper:* AR Integral Imaging 3D Displays based on holographic optical element (9:50-10:10)
   
   Qiong-Hua Wang, School of Electronic and Information Engineering, Sichuan University

35.6 A 3D Interaction Technique for Augmented Reality on Smart Glasses (10:10-10:30)
   
   Keyu Wang, Chao Ping Chen*, Lei Zhou, Yishi Wu, Bing Yu, and Yang Li, Shanghai Jiao Tong University

Session 36: Touch sensor technology & touch panel process (Touch and Interactive Displays)
Monday, February 20/10:40—12:20/ Function Room 1

Chair: Yinglong Huang (黄应龙), BOE

36.1 *Invited Paper:* A stack of bendable touch sensor for bendable AMOLED display (10:40-11:00)
   
   Zhen Liu, BOE Technology Group Co., Ltd

36.2 *Invited Paper:* High strength technology applying to OGS by adopting OC0 process (11:00-11:20)
   
   Ting Zeng, BOE Technology Group Co., Ltd

36.3 *Invited Paper:* Graphene-Ag nanohexagonal platelets-based ink with high electrical properties at low sintering temperatures (11:20-11:40)
   
   Piao Liu, Hunan LEED Electronic Ink Co., Ltd

36.4 *Invited Paper:* Application of Novel Conductive-Film Materials in Display Module and Mobile Phone (11:40-12:00)
   
   Zhen Yu, Zhangjiagang Kangde Xin Optronics Material Co., Ltd

36.5 *Invited Paper:* Embedded Ag Mesh Electrodes for Polymer Dispersed Liquid Crystal Devices on Flexible Substrate (12:00-12:20)
   
   Yanhua Liu, SVG Optronics, Co., Ltd.

Session 37: Vehicle Displays
Monday, February 20/8:30—9:50/ Function Room 2

Chair: Yan Li(李燕), Shanghai Jiaotong University
Co-Chair: Qi Shan(单奇),昆山国显光电

37.1 *Invited Paper:* Displays for Avionics Applications (8:30-8:50)
   
   Kalluri R.Sarma, Aerospace Advanced Technology
37.2 *Invited Paper*: Bending Stress research on Automotive Curved TFT LCD (8:50-9:10)
William Yang (杨龙卫), Tianma Micro-electronics Co., Ltd

37.3 *Invited Paper*: The future automotive display (9:10-9:30)
Steven Tian (田凡), Tianma Micro-electronics Co., Ltd

37.4 *Invited Paper*: A Novel Emissive Projection Display (EPD) for Vehicle Glass, Digital Signage and AR Applications (9:30-9:50)
Ted Sun, Sun Innovations Inc.

Session 38: Display Applications 1 (Display Applications)
Monday, February 20/10:00—11:40/ Function Room 2
Chair: Zhifu Li (李治福), BOE

38.1 *Invited Paper*: Development of Free Form LCD for Automotive Applications (10:00-10:20)
Yang-Bing Yu, BOE Technology Group Co., Ltd.

38.2 *Invited Paper*: Anti-press ability study on smartphone lcd (10:20-10:40)
Jiongliang Fu, Tianma Micro-electronics Co., Ltd

38.3 *Invited Paper*: Processing technology and application of bar display based on TFT-LCD (10:40-11:00)
Quan Li, Shenzhen China Star Optoelectronics Technology Co., Ltd

38.4 *Invited Paper*: A New Method of Display Application based on Adaptive Theory (11:00-11:20)
Zhiyong Ren, Tianma Micro-electronics Co., Ltd

38.5 *Invited Paper*: A novel low power reflective LCD development (11:20-11:40)
Lei Wang (王磊), Tianma Micro-electronics Co., Ltd

Session 39: Display Material and Component Manufacturing (Display Manufacturing)
Monday, February 20/8:30—9:50/ Function Room 3
Chair: Changyu Chen (陈昶宇), Shenzhen China Star Optoelectronics Technology Co., LTD

39.1 *Invited Paper*: The Development of Emerging LCD with Black Photo Spacer Application (8:30-8:50)
Minggang Liu (柳铭岗), Shenzhen China Star Optoelectronics Technology Co., LTD.

39.2 *Invited Paper*: Reliability impact of residual reactive mesogen at PS-VA mode (8:50-9:10)
Gang Wen (温刚), Shijiazhuang Chengzhi Yonghua Display Material Co., LTD.

39.3 *Invited Paper*: Colorless Polyimide for LCD Substrate Application (9:10-9:30)
CJ Chen (陈志荣), CHIMEI CORPORATION

39.4 *Invited Paper*: Mechanism analysis of air pocket in the color film on array LCD display (9:30-9:50)
Ying Yan (晏英), Shenzhen China Star Optoelectronics Technology Co., LTD.

Session 40: Manufacturing Equipments for All Display Technologies (Display Manufacturing)
Monday, February 20/10:00—12:00/ Function Room 3
Chair: Baohua Gu (顾葆华), CEC Panda FPD Technology Co., Ltd

40.1 *Invited Paper*: Inkjet Printing Technology For Next Generation Display (10:00-10:20)
Takayuki Harada (原田孝幸), Nakan Techno Co., Ltd.

40.2 *Invited Paper*: Overview of Image Restoration technique for Flat Panel (10:20-10:40)
Mike Zheng (郑增强), Wuhan Jingce Electronic Technology Co., Ltd.

40.3 Invited Paper: Unveiling New Inspection & Repair Technology in Display Manufacturing Process; airSEM & Auto Repair (10:40-11:00)
Yeo Hong Yoon (尹汝洪), Charm Engineering Co., Ltd.

40.4 Invited Paper: Enabling OLEDs display by applying semi yield methods (11:00-11:20)
Xuena Zhang (张雪娜), Peter Nunan, Applied Materials Inc.

40.5 Invited Paper: Intelligent Manufacturing of LCD Factory (11:20-11:40)
James Zhang (张世超), Nanjing CEC Panda FPD Technology Co., Ltd.

Session 41: Novel Displays (Display Systems)
Monday, February 20/8:30—10:10/ Function Room 4
Chair: Gang Liu (刘刚), 中航华东光电

41.1 Invited paper: Flexible Clocking For Modern Pixel-Driven Displays (8:30-8:50)
Liming Xiu (修黎明), BOE Technology Group Co., Ltd.

41.2 Invited paper: Real time efficient pedestrian detection (8:50-9:10)
Haijun Su (苏海军), BOE Technology Group Co., Ltd.

41.3 Invited paper: Ultra-High-Definition 3D Medical Display Technology (9:10-9:30)
Chuang Wei (卫创), BOE Technology Group Co., Ltd.

41.4 Invited paper: Fiber Optic Transmission System For 8K UHD (9:30-9:50)
Lu Tong (佟璐), BOE Technology Group Co., Ltd.

41.5 Invited paper: Research of visible light communication method based on display panel (9:50-10:10)
Yingyi Li, BOE Technology Group Co., Ltd.

Session 42: Printed OLED Materials (Printed Displays)
Monday, February 20/10:20—12:20/ Function Room 4
Chair: Junyou Pan (潘君友), TCL
Co-Chair: Lian Duan (段炼), Tsinghua University

42.1 Invited Paper: Novel luminescent dyes enabling new solution-based AMOLED technology (10:20-10:40)
Yuguang Ma, South China University of Technology

42.2 Invited Paper: Inkjet printed OLED&QLED based on cross-linkable materials (10:40-11:00)
Zheng Cui, Suzhou Institute of Nanotech, Chinese Academy of Sciences

42.3 Invited Paper: Development of Advanced Materials for Printed OLED Displays (11:00-11:20)
Dave Flattery, Du Pont

42.4 Invited Paper: Ink Formulation for Inkjet Printed OLED Displays (11:20-11:40)
Hsin-Rong Tseng, Merck

42.5 Invited Paper: TBD (11:40-12:00)
Huaping Li (李华平), ATOM Nanoelectronics

42.6 Layer formation of polymer yellow inks in inkjet-printing process (12:00-12:20)
Qian Tang, Yun Ye, Xiongtu Zhou, Tailliang Guo, Fuzhou University
Session 43: TFT Reliability (Active-Matrix Devices)
Monday, February 20/13:30—15:10/ Ballroom 1
Chair: Qun Zhang (张群), Fudan University
Co-Chair: Rongsheng Chen (陈荣盛), South China University of Technology
43.1 Invited Paper: Reliability Issues and Progress in Foldable Amorphous InGaZnO and LTPS TFTs (13:30-13:50)
   Ting-Chang Chang, National Sun Yat-sen University
43.2 Invited Paper: Reliable n-channel Four-Terminal LTPS TFTs (13:50-14:10)
   Mingxiang Wang (王明湘), Soochow University
43.3 Invited Paper: Development of Highly Reliable Amorphous In-Ga-Zn-Sn-O TFTs with BCE structure (14:10-14:30)
   Hiroshi Goto, Kobe Steel, Ltd
43.4 Invited Paper: Low Frequency Noise model For Thin-Film Transistors Considering Power-Law Mobility Parameter (14:30-14:50)
   Hongyu He, Shengdong Zhang (张盛东)*, Peking University
43.5 Invited Paper: Suppression of Light Induced Instability of BCE InGaZnO Transistors and Panel Flicker Improvement for 32-in. 8K4K LCD (14:50-15:10)
   Longqiang Shi (石龙强), China Star Optoelectronics Technology

Session 44: Manufacture of TFT Device, Array, and Circuits 2 (Display Manufacturing)
Monday, February 20/15:15—16:35/ Ballroom 1
Chair: Junfeng Li (李俊峰), 昆山国显光电有限公司
44.1 One Solution of Cu Oxidation of Source/Drain On SiNx, SiO2 Dielectric in BCE IGZO TFT (15:15-15:35)
44.2 Electrical Characterization of In-Ga-Zn-Sn-O Thin-Film Transistor With a Self-Aligned Top-gate Structure (15:35-15:55)
44.3 Novel 3-Mask TFT Technology with ITO Lift-Off Enhancement Process for First Worldwide 28” HVA AM-LCD TV (15:55-16:15)
   Hongyuan Xu, Shenzhen China Star Optoelectronics Technology Co., Ltd
44.4 The Effects of Different Gate Insulator Deposition Power on Top Gate IGZO TFT Porperties (16:15-16:35)
   Macai Lu, Shenzhen China Star Optoelectronics Technology Co., Ltd

Session 45: Liquid-Crystal Technology 3 (Liquid-Crystal Technology)
Monday, February 20/16:40—17:40/ Ballroom 1
Chair: Yubao Sun (孙玉宝), Hebei University of Technology
Co-Chair: Zhuo Zhang (张卓), Fuyang Sineva Material Technology Co., Ltd.
45.1 The study of an display device and materials for black-and-white reflective bistable display (16:40-17:00)
Session 46: Flexible OLEDs and key material technology (E-paper and Flexible Displays)
Monday, February 20/13:30—15:10/ Ballroom 2
Chair: Xiaoyu Gao (高孝裕), 国显光电
46.1 Invited Paper: A Novel Design of Magnet Array for Solving Mask Deformation (13:30-13:50)
Jian Xu, Tianma Micro-electronics Co., Ltd.
46.2 Invited Paper: Design of Coil Assembly for Solving Mask Deformation (13:50-14:10)
Yaoyang Liu, Tianma Micro-electronics Co., Ltd.
46.3 Invited Paper: A new design of metal lines with high mechanical reliability used in flexible AMOLED (14:10-14:30)
Kun Hu, Kunshan New Flat Panel Display Technology Center Co., Ltd.
46.4 Invited Paper: High Performance of Flexible AMOLED Display with BCE structure (14:30-14:50)
Lei Wang (王磊), Guangzhou New Vision Opto-Electronic Technology Co., Ltd.
Chuan Liu, Sun Yat-Sen University

Session 47: Flexible Electronics (E-paper and Flexible Displays)
Monday, February 20/15:20—17:00/ Ballroom 2
Chair: Xidu Wang (王喜杜), 奥翼电子
47.1 Invited Paper: Printing approach to making flexible stretchable wearable electronics (15:20-15:40)
Zheng Cui, Suzhou Institute of Nanotech, Chinese Academy of Sciences
47.2 Invited Paper: Silver Nanowire Transparent Conductive Films fabricated by High-output, Large-scale R2R Coating Process for Flexible Electronics (15:40-16:00)
Junliang Yang, Central South University
47.3 Invited Paper: TBD (16:00-16:20)
Dongming Sun, Institute of Metallurgy, Chinese Academy of Sciences
47.4 Invited Paper: Flexible Senors and Systems with Low-Dimensional Nanostructures (16:20-16:40)
Guozhen Shen, Institute of Semiconductors, Chinese Academy of Sciences
47.5 When Conventional Clothes And Wearables Become Indistinguishable A Bold Look At The Inflexion Point In Wearable Displays (16:40-17:00)
WALLEN MPHEPO, xShuu Technologies [UAB LARIAN LT]
Session 48: Display Electronics  
Monday, February 20/13:30—15:30/ Ballroom 3  
Chair: Yongming Tang (汤勇明), Southeast University  
Co-Chair: Mingzhong Zhou (周明忠), China Star Optoelectronics Technology  
48.1 Invited Paper: The research of 3D touch technology based on capacitance touch panel (13:30-13:50)  
Qiwen Zhu, Southeast University  
48.2 Invited Paper: A Fast TFT Threshold Voltage Sensing Method Based on Iterative Feedback (13:50-14:10)  
Jianhang Fu, China Star Optoelectronics Technology  
48.3 Invited Paper: A Brightness-Compensable Driving System for AMOLED Displays (14:10-14:30)  
Jinguo Yang, KunShan GoVisionox OptoElectronics Co., LTD.  
Yufeng Jin, China Star Optoelectronics Technology  
48.5 Invited Paper: A Novel Driving Architecture for 280 ppi 8K4K TV Panel Using High-Mobility IGZO Technology (14:50-15:10)  
Xiaolong Chen, China Star Optoelectronics Technology  
48.6 Digital-analog-syncretized drive strategy for high definition LED microdisplays (15:10-15:30)  
Yuan Ji, Shanghai University

Session 49: OLED Display 2 (OLEDs)  
Monday, February 20/15:40—17:20/ Ballroom 3  
Chair: 黄秀颀, 昆山国显光电有限公司  
49.1 Invited Paper: Technologies for small and medium-sized AMOLED display (15:40-16:00)  
Guanzheng Peng, 天马  
49.2 Invited Paper: Why is OLED in explosive growth and BOE's challenges in this war (16:00-16:20)  
Na Li, BOE  
49.3 Invited Paper: Realization of Al2O3/MgO laminated structure at low temperature for thin film encapsulation in organic light-emitting diodes (16:20-16:40)  
Min Li, Guangzhou New Vision Opto-Electronic Technology Co., Ltd  
49.4 Invited Paper: Development progress of Foldable AMOLED (16:40-17:00)  
Li Lin (林立), KunShan New Flat Panel Display Technology Center Co. Ltd.  
49.5 Invited Paper: Flexible OLED Encapsulation: TFE with ALD, Testing Method (17:00-17:20)  
Xingwei Ding, Shanghai University

Session 50: Lighting and Emissive Materials  
Monday, February 20/13:30—15:50/ Function Room 1  
Chair: Guoxu Liu(刘国旭), 易美芯光  
Co-Chair: Rongjun Xie(谢荣军), National Institute for Material Science  
50.1 Invited Paper: (13:30-13:50)
Qiuhong Hu (胡秋红), Zhejiang Tricolor Photoelectric Technology Co., Ltd.

50.2 **Invited Paper: Characteristics of road lighting and driving recognition (13:50-14:10)**
Jiangbi Hu (胡江碧), Beijing University of Technology

50.3 **Invited Paper: A Color Temperature Adjusting Method Based On Fuzzy Neural Network (14:10-14:30)**
Tu Lv, Hefei BOE Display Lighting Co., Ltd.

50.4 **Invited Paper: Research on Tunnel Lighting Based on Visual Physiology (14:30-14:50)**
Xin Xu, Tongsheng Mou, Zhejiang University

50.5 **Long persistence phosphors applied to Electrophoretic Displays (14:50-15:10)**
Hui-Juan Chen, Xiaogang Chen, Shuai Xiao, Jingshen Qiu, Bo-Ru Yang*, Sun Yat-Sen University

50.6 **Synthesis and Characterization of ZnMoO₄ phosphor powders doped with Light Rare Earth Sm (15:10-15:30) (To Poster Session)**
Yang Yang, Tao Lu, Deng Peng, Zhaojun Liu*, Sun Yat-Sen University

50.7 **Mesoporous Aluminum Hydroxide as a High Quantum Yield Blue Phosphor for UV Pumped White Light-Emitting Diodes (15:30-15:50)**

Bingkun Chen¹², Andrei S. Susha², Claas Reckmeier², Stephen V. Kershaw², Yongtian Wang¹, Bingsuo Zou¹, Haizheng Zhong¹, and Andrey L. Rogach²*

1. Beijing Engineering Research Center of Mixed Reality and Advanced Display
2. Department of Physics and Materials Science & Center for Functional Photonics (CFP)

Session 51: Novel Interactive Displays (Touch and Interactive Displays)
Monday, February 20/16:00—18:00/ Function Room 1

Chair: Sp Chou (周诗博), Wuhan China Star Optoelectronics Technology Co., Ltd

51.1 **Invited Paper: Design and application of photosensitive sensor (16:00-16:20)**
Rui Xu, BOE Technology Group Co., Ltd.

51.2 **Invited Paper: Electrostatic Tactile Display with Localized Multiple Sensations (16:20-16:40)**
Haga Hiroshi, NLT technologies. Ltd

51.3 **Invited Paper: Force sensing integrated display module developed for the industrial products (16:40-17:00)**
Liang Liu, Shanghai Tianma Micro-electronics Co., LTD.

51.4 **Human-computer Interaction Based on Eye Tracker and Gesture Recognition (17:00-17:20)**
Meng Zhou, Display R&D Center of Southeast University

51.5 **Light Filed Render and Optimization for Measurable 3D Depth Perception Interaction (17:20-17:40)**
Renjing Pei, State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences

51.6 **Integrated display assembly: from embedded touch to display-based fingerprint sensor (17:40-18:00)**
Kimi Lin, IHS Markit

Session 52: Laser Projection Display and Key Devices & Applications (Projection)
Monday, February 20/13:30—15:30/ Function Room 2

Chair: Wanguo Liang (梁万国), 中国科学院物质结构研究所

52.1 **Invited Paper: Influence of unite size of diffuser on speckle contrast in laser projector**
13:30-13:50
Yuan Yuan, Technical Institute of Physics and Chemistry of the Chinese Academy of Sciences

52.2 Invited Paper: Influence of Light integral rods to the speckle diversity in laser projector (13:50-14:10)
Tao Fang, Technical Institute of Physics and Chemistry of the Chinese Academy of Sciences

52.3 Invited Paper: The influence of optical system on speckle measurement and a speckle measurement method based on the characteristics of human eye (14:10-14:30)
Minyuan Sun, Technical Institute of Physics and Chemistry of the Chinese Academy of Sciences

52.4 Invited Paper: The research of the speckle effect reduction based on LCOF (14:30-14:50)
Dongdong Wang, Technical Institute of Physics and Chemistry of the Chinese Academy of Sciences

52.5 Invited Paper: Research on Large Color Gamut and Multi Primary Display Based on Laser Display Technology (14:50-15:10)
Wenping Zhang, Technical Institute of Physics and Chemistry of the Chinese Academy of Sciences

52.6 Invited Paper: The study of three-LCOS laser projection display with RGB LD source (15:10-15:30)
Weinan Gao, Technical Institute of Physics and Chemistry of the Chinese Academy of Sciences

Session 53: Display Applications 2 (Display Applications)
Monday, February 20/15:40—17:20/ Function Room 2
Chair: Gang Xu (徐刚), Hua Wei

53.1 Invited Paper: AMOLED for Wearable Application (15:40-16:00)
JJ Lih (利锦洲), AU Optronics

53.2 Invited Paper: The Development of 5.5 inch FHD Flexible AMOLED Display (16:00-16:20)
Donglun Yang (杨东伦), Everdisplay Optronics (Shanghai) Limited

53.3 Invited Paper: Sensors using Semiconductor Display Technology (16:20-16:40)
Jiaqiang Lin (林家强), BOE

53.4 Invited Paper: A Privacy Liquid Crystal Display (16:40-17:00)
Bo Hai (海博), CSOT

53.5 Invited Paper: See-Through Near-Eye Displays for Myopia (17:00-17:20)
Chaoping Chen (陈超平), Shanghai Jiao Tong University

Session 54: Manufacture of LCDs and other Non-Emissive Display Panels (Display Manufacturing)
Monday, February 20/13:30—15:10/ Function Room 3
Chair: Guo Zhao (赵国), Shenzhen China Star Optoelectronics Technology Co., Ltd.

54.1 Invited Paper: Tigerbone target, higher utilization rate solution (13:30-13:50)
Qiyu Zhao (赵其煜), PLANSEE

54.2 Invited Paper: A found and analysis of the PS mode (13:50-14:10)
Weimin Zhang (张伟闵), Shenzhen China Star Optoelectronics Technology Co., Ltd.

54.3 Invited Paper: TOYO COLOR's challenge for the color-gamut expansion of color filter (14:10-14:30)
54.4 Invited Paper: The study of HVA Process Conditions Influence Pressed Recovery Time of Panel (14:30-14:50)
Guining Ren (任贵宁), Shenzhen China Star Optoelectronics Technology Co., Ltd.
54.5 The Property Differences of Copper Thin Films Deposited by One-step and Multi-step DC Magnetron Sputtering Technique (14:50-15:10)
Hui Xia (夏慧), Shenzhen China Star Optoelectronics Technology Co., Ltd.

Session 55: Manufacture of OLEDs and Other Emissive Display Panels (Display Manufacturing)
Monday, February 20/15:15—16:35/ Function Room 3
Chair: Weiqi Xu (徐伟齐), Tianma Micro-electronics Co., Ltd.
55.1 Invited Paper: Development of Fabrication Processes for Main Defects in AMOLED Displays (15:15-15:35)
Lu WANG, Shanghai Tianma AM-OLED Co., Ltd.
55.2 Invited Paper: An overview of high resolution AMOLED display’s process (15:35-15:55)
Chunxia Li, Shanghai Tianma AM-OLED Co., Ltd.
55.3 Invited Paper: FMM solution for high resolution OLED manufacture (15:55-16:15)
Xiaoping Gao, Anhui TAF Optoelectronics technology CO., LTD.
Lei Zhou, Guangzhou New Vision Opto-Electronic Technology Co., LTD.

Session 56: Processing and Devices of Printing Display 1 (Printed Displays)
Monday, February 20/13:30—14:50/ Function Room 4
Chair: Zheng Cui (崔铮), Suzhou Institute of Nanotech and Nanobionics
Co-Chair: Xiaojun Guo (郭小军), Shanghai Jiaotong University
56.1 Invited Paper: Full color polymer light emitting Display(13:30-13:50)
Junbiao Peng, South China University of Technology
56.2 Invited Paper: Research on full colour OLED display based on advanced Ink-jet printing technology (13:50-14:10)
Jingyao Song, Guangdong Juhua printed Display Technology
56.3 Invited Paper: New Solution Processable QLEDs Device with Ink Jet Printing (14:10-14:30)
Xiangwei Xie, TCL Corporate Research
56.4 Invited Paper: Inkjet-printed QLEDs for display applications (14:30-14:50)
Changgua Zhen, Najing Technology

Session 57: Processing and Devices of Printing Display 2 (Printed Displays)
Monday, February 20/14:55—16:15/ Function Room 4
Chair: Junbiao Peng (彭俊彪), South China University of Technology
Co-Chair: James Lee, 聚华
57.1 Invited Paper: Important technologies of Ink Jet system for OLED display fabrication (14:55-15:15)
Teruyuki Hayashi, TEL Japan
Xiao Chen, Kateeva

57.3 Versatile printing technology for efficient use of OLED materials (15:35-15:55)
Marcel Grooten, James Peng, DoMicro BV, Eindhoven, the Netherlands

57.4 Viscosity of emissive organic inks for inkjet-printed OLED (15:55-16:15)
Shanhong Lv, Yun Ye, Dongru Kang, Jiangsheng Wang, Qian Tang, Tailiang Guo, Fuzhou University

Session 58: Performance Optimization of Display system (Display Systems)
Monday, February 20/16:20—17:40/ Function Room 4
Chair: Gang Liu (刘刚), 中航华东光电

58.1 Invited Paper: OLED luminance degradation delay based on equivalent lifetime method (16:20-16:40)
Rui Fan, Xi’an Jiaotong University&Shenzhen China Star Optoelectronics Technology Co., Ltd.

58.2 Invited Paper: Optimization of luminance compensation to delay OLED degradation (16:40-17:00)
Shidong Xia, Xi’an Jiaotong University&Shenzhen China Star Optoelectronics Technology Co., Ltd.

58.3 Invited Paper: The improvement of light intensity by using multilayer ZnO films and the research of array driving circuit on HfOx film light emitting device (17:00-17:20)
YU Bo-jiang, Xi’an Jiaotong University

58.4 Invited Paper: The influence of annealing heating rate on a-IGZO TFTs electric properties (17:20-17:40)
He Zhang, Xi’an Jiaotong University

Session 59: Poster Session
Saturday, February 18/18:10—19:00/Atrium of 2nd Floor in Sheraton Fuzhou Hotel