

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

Session Title:	P2. Poster Session 2
Session Date:	August 24 (Thu.), 2023
Session Time:	14:00–15:30
Session Room:	Hall 2A

[P2-001] 14:00–15:30

Artificially Intelligent Photonic Synapse with Structurally Controllable Perovskite Nanocones

Woojoong Kim, Kyuho Lee, Jihye Jang, Seonju Lee, Jong Woong Park, Jioh Yoo, and Cheolmin Park (Yonsei Univ., Korea)

[P2-002] 14:00–15:30

PCB Power Pattern Design Optimized by AI Technologies in Display

Hyo-chul Lee, Ji-won Kim, Youn-yeek Kang, Seung-in Baek, and Sung-chan Jo (Samsung Display Co., Ltd., Korea)

[P2-003] 14:00–15:30

Library Integrated Automation Design Solution for Fast PCB Design

Sung-kwon Kim, Jun-seok Lee, Ji-won Kim, Seungin Baek, and Sungchan Jo (Samsung Display Co., Ltd., Korea)

[P2-004] 14:00–15:30

Design of Spatiotemporally Correlated Propagation-Invariant Plasmonic Pulse in Metal-Insulator-Metal Waveguide

Eui-Soo Cho and Seung-Yeol Lee (Kyungpook Nat'l Univ., Korea)

[P2-005] 14:00–15:30

Analysis for Optimum Eye-Diagram Margin of Display PCB Critical Net

Youn-yeek Kang, Hyo-chul Lee, Ji-won Kim, Seung-in Baek, and Sung-chan Jo (Samsung Display Co., Ltd., Korea)

[P2-006] 14:00–15:30

Deep Learning-Based Defect Map Classification and Similarity Search in Display Manufacturing

Seokyeon Yang and Jaeho Jeong (Samsung Display Co., Ltd., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-007]

14:00-15:30

Layout Optimization for High Resolution Display

Jihoon Yang, Yujin Lee, Seonyoung Choi, Bonyong Koo, and Sanghwan Cho (Samsung Display Co., Ltd., Korea)

[P2-008]

14:00-15:30

Enhanced Light-Field Image Resolution and Viewing Angle for Multi-Plane Holographic Images

Dong-ha Shin and Seung-Yeol Lee (Kyungpook Nat'l Univ., Korea)

[P2-009]

14:00-15:30

AI-Based Similar Pattern Extraction for Design Document Automation

Sangu Lee, Taeseok Jeong, Byeonggeon Ko, Hyunyoung Choi, and Hyunguk Cho (Samsung Display Co., Ltd., Korea)

[P2-010]

14:00-15:30

3D Reconstruction for Integral Imaging Microscopy System Using Deep Neural Networks

Shariar Md Imtiaz, Anar Khuderchuluun, F M Fahmid Hossain, Munkh-Uchral Erdenebat, Ki-Chul Kwon (Chungbuk Nat'l Univ., Korea), Sang-Keun Gil (Suwon Univ., Korea), and Nam Kim (Chungbuk Nat'l Univ., Korea)

[P2-011]

14:00-15:30

Development of Molecular Structure-Property Database Using NLP

Jaehoon Sim, Dongsun Yoo, Eunkyung Koh, Hoilim Kim, Seungin Baek, and Sungchan Jo (Samsung Display Co., Ltd., Korea)

[P2-012]

14:00-15:30

A System for Material Design based on AI and Simulations

Gyeongheon Kim, Hoilim Kim, Dongsun Yoo, Seran Kim, Jihye Kim, Saerom Park, Hyunguk Cho, Jintaek Cho, Yongsub Shim, and Seungin Baek (Samsung Display Co., Ltd., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-013]

14:00-15:30

Machine-Learning-Based Prediction of Optical and Electrical Characteristics of Silver Nanowire Transparent Electrode without Measurement

Yewon Han and Kunsik An (Konkuk Univ., Korea)

[P2-014]

14:00-15:30

Nonlinear Signal Compensation of Active Pen Using Machine Learning

Kyounghun Been, Hoeung Lee, Hyunsoo Yeom, and JungBong Lee (Samsung Display Co., Ltd., Korea)

[P2-015]

14:00-15:30

Development of Methodology of Real-Time Power Consumption Analysis for Predicting Heat Generation of Display Panels

Dongha Kim, Jung Ki Shin, Seungman Baek, Daeyong Kim, Jangwoo Kim, and Sung Chan Jo (Samsung Display Co., Ltd., Korea)

[P2-016]

14:00-15:30

Temperature-Dependent Vapor Pressure Prediction based on Machine Learning

Jihye Kim, Dongsun Yoo, Sohae Kim, Saena Yun, Eunkyung Koh, Hoilim Kim, Seungin Baek, and Sungchan Jo (Samsung Display Co., Ltd., Korea)

[P2-017]

14:00-15:30

Prediction of Image Quality Characteristics Using Machine Learning

Yongbin Kim, Hyunyoung Choi, Hyunguk Cho, and Sungchan Jo (Samsung Display Co., Ltd., Korea)

[P2-018]

14:00-15:30

Feasibility Study on Joule Heating Method for Removal of Organic Material to Prevent Current Leakage in Display Panels

Jung Ki Shin, Gunshik Kim, Seungman Baek, Jangwoo Kim, and Sung Chan Jo (Samsung Display Co., Ltd., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-019]

14:00-15:30

Optimal Design Search Method Using Convolutional Neural Network Based Parasitic Capacitance Extraction Model

Keuk Jin Jeong, Wongyun Kim, Min Kang, and Sang-Hwan Cho (Samsung Display Co., Ltd., Korea)

[P2-020]

14:00-15:30

Developing Neural Network Potentials for Understanding Atomistic-Scale GaN m-Surfaces after Wet Etching for Micro-LEDs

Purun-hanul Kim (Seoul Nat'l Univ., Korea), Youngho Kang (Incheon Nat'l Univ., Korea), and Seungwu Han (Seoul Nat'l Univ., Korea)

[P2-021]

14:00-15:30

Inverse Design of InP/ZnSe/ZnS Quantum Dots based on Tandem Deep Neural Networks

Deokho Jang (Kyung Hee Univ., Korea), Sungchul Kim (Myongji Univ., Korea), and Jungho Kim (Kyung Hee Univ., Korea)

[P2-022]

14:00-15:30

Prediction of Droplet Behavior in Piezoelectric Inkjet Printing based on Waveguide Theory

Taeho Yang, Jongho Park, and Hyungkeon Cho (Samsung Display Co., Ltd., Korea)

[P2-023]

14:00-15:30

Modeling of Charged Particles Behavior and Distribution in Calculated Electric Field

Young-Gu Kang, Hyun Sung Park, HyeonDo Park, Yudeok Seo, and Sung-Chan Jo (Samsung Display Co., Ltd., Korea)

[P2-024]

14:00-15:30

Applying Influence Range to Under-Display Camera Image Restoration

Kyusu Ahn, Byeonghyun Ko, Hyungyu Lee, Chanwoo Park, and Jaejin Lee (Seoul Nat'l Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-025]

14:00-15:30

Angle Insensitive Meta-Surface Color Filters Designed by Integrating Genetic Algorithms with Deep Neural Networks

Ki Won Jeong (Kyungpook Nat'l Univ., Korea), Donghwa Lee (Daegu Univ., Korea), and Yun Seon Do (Kyungpook Nat'l Univ., Korea)

[P2-026]

14:00-15:30

Artificial Intelligence Based Virtual Colour Measurement of OLED Panels

Chang Sub Park, Seong Il Cho, Seung Wook Lee, and Sang Rak Son (Samsung Display Co., Ltd., Korea)

[P2-027]

14:00-15:30

UDC Aperture Optimization for Improving Camera Characteristic

Jaebum Cho, Sujin Choi, Daewook Kim, Hyunjoo Hwang, Jewon Yoo, Seungin Baek, and Sung-Chan Jo (Samsung Display Co., Ltd., Korea)

[P2-028]

14:00-15:30

OLED Pixel Design by an Automatic Placement and Routing Methodology

Dongil Yoo, TaeHyun Kim, Jungsuk Bang, Myunghun Lim, Yongwoo Lee, and SangHwan Cho (Samsung Display Co., Ltd., Korea)

[P2-029]

14:00-15:30

An Implementation of a Natural Language Processing Model with a Custom-Built Chemical Patent Database for OLEDs

Sohae Kim, Hyun Young Choi, Jihye Kim, and Won-Hyouk Jang (Samsung Display Co., Ltd., Korea)

[P2-030]

14:00-15:30

Sparse-Matrix-Based Algorithm for IR Drop Analysis in Large-Size Organic Light Emitting Diode Displays

Qibin Feng, Hongtao Ren (Hefei Univ. of Tech., China), Jianwei Yu, Yongqian Li (Hefei Xinsheng Optoelectronics Tech. Co., Ltd., China), Zi Wang, and Guoqiang Lv (Hefei Univ. of Tech., China)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-031]

14:00-15:30

Multi-Physical Approach for Contact-Electrification Issue in OLED Manufacturing Process

Hyun Sung Park, Hyeseok Na, Sooyong Park, Young-Gu Kang, Hyeondo Park, Dongjin Seo, Yudeok Seo, and Sung-Chan Jo (Samsung Display Co., Ltd., Korea)

[P2-032]

14:00-15:30

Optimizing COP Bending Path for Flexible OLED Manufacturing Using an AI Prediction System

Sungmin Choi, Hanki Park, Jongnam Lee, and Yeol Choi (Samsung Display Co., Ltd., Korea)

[P2-033]

14:00-15:30

Development of Simulator for QD Optical Characteristics with Arbitrary 3D Shape

Hyung Uk Cho, Bowoon Kim, Jintaek Cho, Richard James, Seungin Baek, Sung-Chan Jo, and Changhee Lee (Samsung Display Co., Ltd., Korea)

[P2-034]

14:00-15:30

A Study on the Methodology for Maximizing the Chucking Force of Electrostatic Chuck in Large Glass Deposition Process

Hyeon-do Park, Hyun Sung Park, Young-Gu Kang, Yudeok Seo, and Sung-Chan Jo (Samsung Display Co., Ltd., Korea)

[P2-035]

14:00-15:30

Aerial Signs Using Quasi-Spatial Floating Image Generated by Optical Illusion Object Maskings Which Block Holographic Recorded Surface Light Sources

Kunio Sakamoto and Ryota Yamamoto (Konan Univ., Japan)

[P2-036]

14:00-15:30

Directional Characteristics of OLED Film Type Panel Speaker

JeongMan Lee, JaeHong Kim, and JangJin Yoo (LG Display Co., Ltd., Korea)

[P2-037]

14:00-15:30

Analysis of the Relationship between Cybersickness and Vestibular System Using Finite Element Method

Si On Cha, Sang Yeon Park, and Wook Sung Kim (POSTECH, Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-038]

14:00-15:30

Turn-Table Geometry Correction System for 3D Registration

Hyunmin Kang and Sungsu Woo (XR Device Development Support Center, Korea)

[P2-039]

14:00-15:30

A Study on the Necessity of Setting the Interpupillary Distance Using the Chart in the Condition of Binocular Fusion Removed during Viewing VR

Sejun Moon, MinJi Gil (Catholic Kwandong Univ., Korea), Hyungki Hong (Seoul Nat'l Univ., Korea), and Hyungoo Kang (Catholic Kwandong Univ., Korea)

[P2-040]

14:00-15:30

Predicting Display Flicker at a Low Frequency Using Temporal Contrast

Youra Kim, Hyosun Kim, Hyungsuk Hwang, Youngwoo Yi, Jaejoong Kwon, and Yongjo Kim (Samsung Display Co., Ltd., Korea)

[P2-041]

14:00-15:30

Flickering Perception in a Multitasking Environment

Jieun Cho, Jeunghwan Choi, Cheongil Kim (Yonsei Univ., Korea), Hyosun Kim, Yongjo Kim, Jaejoong Kwon (Samsung Display Co., Ltd., Korea), Jeong Hyeon Park, and Sang Chul Chong (Yonsei Univ., Korea)

[P2-042]

14:00-15:30

Applying Vignetting Implemented through the Average Vector of Reversed Optical Flow to Frames with Depth of Field for Cybersickness Mitigation in Virtual Reality

Sang Yeon Park, Si On Cha, and Wook Sung Kim (POSTECH, Korea)

[P2-043]

14:00-15:30

Design and Optimization of All-Dielectric Metasurfaces for Asymmetric Transmission Properties at Visible Wavelengths

Younghak Lee, Sungeun Park, and Wooksung Kim (POSTECH, Korea)

[P2-044]

14:00-15:30

Research on Transparent Screens Using Transmission-Type Holographic Optical Elements (HOEs)

Jae Gwan Choi (XR Device Development Support Center, Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-045]

14:00-15:30

Comparison of Imaging Distances for Underwater and Aerial Images by AIRR

Ryosuke Ichikawa, Kohei Kishinami, Daiki Kudo, Kengo Fujii, Masaki Yasugi, Shiro Suyama, and Hirotsugu Yamamoto (Utsunomiya Univ., Japan)

[P2-046]

14:00-15:30

Color Gamut Change by Electrical Crosstalk in High-Resolution Organic Light Emitting Diode Microdisplays

Yeonsu Hwang, Haneul Kang (Sookmyung Women's Univ., Korea), Chan-mo Kang, Joo Yeon Kim, Chul Woong Joo, Jin-Wook Shin (ETRI, Korea), Soobin Sim (Sookmyung Women's Univ., Korea), Hyunsu Cho, Dae Hyun Ahn, Nam Sung Cho (ETRI, Korea), Hyoc Min Youn, Young Jae An, Jin Sun Kim (DONGJIN SEMICHEM CO., LTD., Korea), Chun-Won Byun (ETRI, Korea), and Hyunkoo Lee (Sookmyung Women's Univ., Korea)

[P2-047]

14:00-15:30

Ultra-Wideband Indoor Positioning Using Deep Learning for Integrating Real and Virtual Classroom

Taeyun Kim and Wooksung Kim (POSTECH, Korea)

[P2-048]

14:00-15:30

Evaluation of Appropriate Feedbacks on Operating Aerial Display in Three Senses: Tactile by Vibration to Sole of Foot, Visual, and Auditory

Yasunori Terao, Haruki Mizushina, and Kenji Yamamoto (Tokushima Univ., Japan)

[P2-049]

14:00-15:30

Testbed of Various Tiling Patterns of Retro-Reflector in AIRR

Takeru Nishiyama, Shin Hara, Kengo Fujii, Masaki Yasugi, Shiro Suyama, Tomoharu Ishikawa, and Hirotsugu Yamamoto (Utsunomiya Univ., Japan)

[P2-050]

14:00-15:30

Varifocal-Occlusion Supported Near-Eye Display Using Stack of Geometric Phase Lenses and Electrically Switchable Half Wave Plate

Woongseob Han (Inha Univ., Korea), Jae-Won Lee, Jung-Yeop Shin (Kyungpook Nat'l Univ., Korea), Myeong-Ho Choi (Inha Univ., Korea), Hak-Rin Kim (Kyungpook Nat'l Univ., Korea), and Jae-Hyeung Park (Inha Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-051]

14:00-15:30

Twin Noise Reduction of Optical Reconstruction with Phase-Only Spatial Light Modulator

Gunhee Lee, Woonchan Moon, and Joonku Hahn (Kyungpook Nat'l Univ., Korea)

[P2-052]

14:00-15:30

Measurement of Distortion of a Large Acrylic Beam Splitter in AIRR by Use of 3D Motion Capture

Mayu Adachi, Masaki Yasugi, Shiro Suyama, and Hirotugu Yamamoto (Utsunomiya Univ., Japan)

[P2-053]

14:00-15:30

Removal of Dark Lines Caused by Tiling of Retro-Reflector in a Large-Scale Aerial Display with AIRR

Takumi Watanabe, Kengo Fujii, Masaki Yasugi, Shiro Suyama, and Hirotugu Yamamoto (Utsunomiya Univ., Japan)

[P2-054]

14:00-15:30

Acceptable Maximum Pixel Pitch Between Light-Emitting Parts of LED Banner Display Using Aerial Imaging

Daichi Tasaki (Utsunomiya Univ., Japan), Akinori Tsuji (Tokushima Univ., Japan), Toyotaro Tokimoto, Shiro Suyama, and Hirotugu Yamamoto (Utsunomiya Univ., Japan)

[P2-055]

14:00-15:30

Automatic Keystone Correction for Projectors with Pan/Tilt/Roll

Wook Hong, Hokwon Kim, Bonggu Hwang, and Joon Goo Lee (RAONTECH, Korea)

[P2-056]

14:00-15:30

One-Way Observable Window Signage Using Structural Colors by Interference Fringes Which Enable to Make Images Invisible from Back Side

Kunio Sakamoto and Keiichiro Tamano (Konan Univ., Japan)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-057]

14:00-15:30

Light-Induced and Gate-Tunable Negative Differential Resistance Utilizing Counter Flow Region in Ambipolar Behavior

Seongjae Kim, Yunchae Jeon, and Hocheon Yoo (Gachon Univ., Korea)

[P2-059]

14:00-15:30

Defense System Against Machine Learning Attacks of Physical Unclonable Functions Implemented in a Non-Destructive Analysis

Subin Lee, Minseo Kim, and Hocheon Yoo (Gachon Univ., Korea)

[P2-060]

14:00-15:30

Highly Efficient Top-Emitting Infrared-to-Visible Up-Conversion Device Using Micro-Cavity Effect

Jiho Roh (Kyung Hee Univ., Korea), Chanwoo Lim (KIST, Korea), Minchul Suh (Kyung Hee Univ., Korea), and Hyeonggeun Yu (KIST, Korea)

[P2-061]

14:00-15:30

Investigation of Charge Transport in Organic Heterojunction Transistors through Utilization of Semiconducting Small Molecules

Youngmin Han, Chang-Hyun Kim, and Hocheon Yoo (Gachon Univ., Korea)

[P2-062]

14:00-15:30

Magnetophoresis-Based 3D Motion-Tracking Electroluminescent Display

Jong Woong Park (Yonsei Univ, Korea), Seungwon Lee (Northwestern Univ., USA), Jihye Jang, Jioh Yoo, Woojoong Kim, Seonju Lee, and Cheolmin Park (Yonsei Univ, Korea)

[P2-063]

14:00-15:30

MXene-Silver Nanowires Based Work Function-Tunable Electrode for High Performance Flexible Solution-Processed Quantum Dot Light-Emitting Diodes

Jioh Yoo, Wei Jiang, Jihye Jang, Jong Woong Park, Woojoong Kim, Seonju Lee, and Cheolmin Park (Yonsei Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-064]

14:00-15:30

Capacitive E-Switching Block Copolymer Photonic Crystal Display with Humidity Controller

Seonju Lee, Jihye Jang, Jong Woong Park, Woojoong Kim, Jioh Yoo, and Cheolmin Park (Yonsei Univ., Korea)

[P2-065]

14:00-15:30

Systematic Study of the Various Dopant Materials of Charge Generation Layer for Efficient Tandem Organic Light Emitting Device

Yo-Han Suh, Geunhyuck Ji, Il-Gu Kim, Ho-Chang Yang, and Seung Hyun Lee (KETI, Korea)

[P2-066]

14:00-15:30

Electrical and Mechanical Properties of Al-Based Amorphous Alloy for Flexible Electrode Applications

Changwoo Jeon, Eun-Soo Park (EML Co., Ltd., Korea), Woosuk Seo, Tae-Ho Lee (Samsung Display Co., Ltd., Korea), and Keum-Hwan Park (KETI, Korea)

[P2-067]

14:00-15:30

Physical Unclonable Function based on C8-BTBT Thickness Generating Multiple Security Keys

Jihyun Shin, Subin Lee, and Hocheon Yoo (Gachon Univ., Korea)

[P2-068]

14:00-15:30

Localization of Piezoelectric Speaker on Display Using an Enclosed Diaphragm

In Pyo Hong and Su Seok Choi (POSTECH, Korea)

[P2-069]

14:00-15:30

A Printable Platform for Creating High-Efficiency Metasurfaces in the Deep-Ultraviolet Region Using a Single-Step Approach

Dohyun Kang, Jooheon Kim, and Junsuk Rho (POSTECH, Korea)

[P2-070]

14:00-15:30

A Study on TiN Anode in Micro Display

Changho Lee, Junghwa Park, Mihyang Sheen, Jaehan Lee, and Nari Ahn (Samsung Display Co., Ltd., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-071]

14:00-15:30

Low-Temperature Gas Sensing based on Solution-Processed Tin Oxide Nanoparticles/Silicon Heterojunction Optical Gas Sensor with Fast Response

Jisoo Park, Taehyun Park, and Hocheon Yoo (Gachon Univ., Korea)

[P2-072]

14:00-15:30

Color Filter Made with Fabry-Perot Cavity-Type Electrochromic Materials

Jugyeong Lee (Pukyong Nat'l Univ., Korea), Juhyun Park, Sangkyu Lee (ETRI, Korea), ChilSeong Ah, Jiyoung Oh (Pukyong Nat'l Univ., Korea), Doohee Cho (ETRI, Korea), Jongsu Kim (Pukyong Nat'l Univ., Korea), and Tae-Youb Kim (ETRI, Korea)

[P2-073]

14:00-15:30

High Color Purity Plasmonic Color Filter with Fabry-Perot Interferometer

Hyo Jong Cho and Yun Seon Do (Kyungpook Nat'l Univ., Korea)

[P2-074]

14:00-15:30

Variable Transmittance from VIS to SWIR Region of ECD

Sangkyu Lee, Juhyun Park, Ju gyeong Lee, Chil Seong Ah, Jiyoung Oh, Doohee Cho, and Tae-Youb Kim (ETRI, Korea)

[P2-075]

14:00-15:30

Facilitating Wireless Stand-Alone Trimodal Interactive Display through Direct Capacitive Coupling

Jihye Jang, Jong Woong Park, Jioh Yoo, Seonju Lee, Woojoong Kim, and Cheolmin Park (Yonsei Univ., Korea)

[P2-076]

14:00-15:30

Metal Mesh Electrode-Based Infrared Transmittance Variable Electrochromic Device

Ju Hyun Park (Korea Univ., Korea), Jiyoung Oh, Chil Seong Ah, Sangkyu Lee, Ju Gyeong Lee, Doo-Hee Cho (ETRI, Korea), Byeong-Kwon Ju (Korea Univ., Korea), and Tae-Youb Kim (ETRI, Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-077]

14:00-15:30

The Properties of Perhydropolysilazane-Derived Silica Layer Treated by Intense Pulsed UV Light for Functional Optical Films

Jeong Ju Baek, Eun Young An, Ki Cheol Chang, and Gyo Jic Shin (KITECH, Korea)

[P2-078]

14:00-15:30

Maximizing Ternary-Based Photo Absorption to Improve Organic Photovoltaics Efficiency

Selim Han, Hyojeong Choi, Jooyeong Kim, Swarup Biswas (Univ. of Seoul, Korea), Dongwook Lee (KITECH, Korea), and Hyeok Kim (Univ. of Seoul, Korea)

[P2-079]

14:00-15:30

High-Resolution, Low-Temperature-Processed Distributed Bragg Reflector for Efficient Quantum Dot-Organic Light-Emitting Diode (QD-OLED) Displays

Seung Wan Woo, Hyunsu Cho, Sukyung Choi, Jin-Wook Shin, Gi Heon Kim, Nam Sung Cho (ETRI, Korea), Hyoc Min Youn, Jin Sun Kim, Young Jae An (DONGJIN SEMICHEM Co., Ltd., Korea), Jonghee Lee (Hanbat Nat'l Univ., Korea), and Chan-mo Kang (ETRI, Korea)

[P2-080]

14:00-15:30

Large-Area Organic Photovoltaics for Indoor Applications

Jooyeong Kim, Hyojeong Choi, Selim Han, Biswas Swarup (Univ. of Seoul, Korea), Dong-Wook Lee (KITECH, Korea), and Hyeok Kim (Univ. of Seoul, Korea)

[P2-081]

14:00-15:30

Laser-Reduced Graphene Oxide/Polymer Blends for Black Matrix Application

Yekang Ku, Soobin Sim, Suhyun Park (Sookmyung Women's Univ., Korea), Hanyung Jung (Korea Polytechnics, Korea), and Hyunkoo Lee (Sookmyung Women's Univ., Korea)

[P2-082]

14:00-15:30

Novel Multilayer High Performance Charge Trapping HfAlO Nonvolatile Memory based on ALD-Assisted Interface Engineering

Yifan Hu, Jaewoong Cho, Suresh Kumar Dhungel, Duy Phong Pham, Fucheng Wang, and Junsin Yi (Sungkyunkwan Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-083]

14:00-15:30

A Study on High Efficiency And High Reliability Aluminum Solder Ball For Display Panel

Yeo-Min Yoon, Jong-Keun Choi, and Kwan-Young Han (Dankook Univ., Korea)

[P2-084]

14:00-15:30

Enhanced Mechanical Stability and Performance of Ag Flake-Based Stretchable Conductive Adhesives for Next-Generation Healthcare Monitoring System

Jun-Young Jeon and Heesuk Kim (KIST, Korea)

[P2-085]

14:00-15:30

Inverted OLEDs with ZnO Nanoparticles Electron Injection Layer

Go-Eun Kim, Sang-Uk Byun, Hwan-Jin Yoo, Se-Jin Lim, Da-Young Park, and Dae-Gyu Moon (Soonchunhyang Univ., Korea)

[P2-086]

14:00-15:30

Fabrication of Nanostructured Parylene-C Films for Enhanced Optical Properties of Displays

Hyun-Bin Kim, Seung-Yo Baek, Baeksang Sung, Jonghee Lee, and Jae-Hyun Lee (Hanbat Nat'l Univ., Korea)

[P2-087]

14:00-15:30

Characteristics Evaluation of Siloxane-Based Photosensitive Low-Temperature Curable Overcoat Materials for Touch Sensor on Thin Film Encapsulation

Dongyoung Shim, Il-ji Bae (KETI, Korea), Sun Yu (Herachem Tech. Co., Ltd., Korea), and Sun Hong Yoon (KETI, Korea)

[P2-088]

14:00-15:30

Hierarchical Wrinkled Architecture with Ultrathin Plasma Polymer Fluorocarbon Film and Its Applications to Transparent/Conformal Triboelectric Nanogenerator

Eunmi Cho, Mac Kim (KRICT, Korea), Jin-Seong Park (Hanyang Univ., Korea), and Sang-Jin Lee (KRICT, Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-089]

14:00-15:30

Low-Temperature Fabrication Of In_2O_3 Nanofibers Using Electrospinning For Flexible Electronic

Cao Van Thu, Tan Tan Bui, Le Minh Nhut, and Myung-Gil Kim (Sungkyunkwan Univ., Korea)

[P2-090]

14:00-15:30

Halide Perovskite Quantum Dot Down Conversion Organic Light-Emitting Diode for Pure Green/Red Emission Source

Ji-Hoon Choi, Hyunsu Cho, Stephy Jose, Chang Mo Kang, Sukyung Choi, Dae Hyun Ahn, Byoung-Hwa Kwon, Jin-Wook Shin, Kukjoo Kim, Chul Woong Joo, Jae-Eun Pi, Chunwon Byun, Nam Sung Cho, and Joo Yeon Kim (ETRI, Korea)

[P2-091]

14:00-15:30

Analysis of Deformation of Thin Polyimide Film by Pre-Strained Silicone Elastomer

Falguni Ahmed, SeungMin Shin, Joonho Song (Korea Univ., Korea), Jung Yup Kim, Ah-Young Park (KIMM, Korea), and MunPyo Hong (Korea Univ., Korea)

[P2-092]

14:00-15:30

Characterization and Optical Applications of Multilayer Visible Parylene Films

Seung-Yo Baek, Ye-Seul Lee, Hyun-Bin Kim, Akeem Raji, Jonghee Lee, and Jae-Hyun Lee (Hanbat Nat'l Univ., Korea)

[P2-093]

14:00-15:30

Patternable Cul Arrays for Multimodal Sensor Application

Mokurala Krishnaiah, Ajit Kumar, Bidyashakti Dash, Geun Lee, Hyeon-Bin Jo, Hyeonjong Lee, and Sung Hun Jin (Incheon Nat'l Univ., Korea)

[P2-094]

14:00-15:30

Arc Discharge Detection with Self-Powered Vertical Metal-Semiconductor-Metal Photodetectors based on Asymmetric Schottky Junctions

Wangmyung Choi, Taehyun Park, Hocheon Yoo, and Jaehyun Hur (Gachon Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-095]

14:00-15:30

Co-Passivation Engineering for Highly Stable Tin-Based Perovskite Solar Cells by Fullerene Derivative-Based Additives

Jinhyeok Choi and Kilwon Cho (POSTECH, Korea)

[P2-096]

14:00-15:30

Suppressing Dopant-Induced Disorder to Improve the Electrical Performance of Doped Organic Semiconductors

Jimin Kim, Duckhyun Ju, and Kilwon Cho (POSTECH, Korea)

[P2-097]

14:00-15:30

Fabrication of Ferroelectric Al/HZO/ITO Capacitor on a Glass Substrate for Display Application

Taewon Jin, Hyo-Bae Kim, Ji-Hoon Ahn, and Younghyun Kim (Hanyang Univ., Korea)

[P2-098]

14:00-15:30

Ethanol Dispersed NiO Nanoparticle for Hole Injection Layer of Quantum Dots LED

Hyojun Lim, Sunwoo Jin, Dang Thi Huong Thao, Nayoon Lee, Juhan Kim, Hyunil Jo, and Young-Woo Heo (Kyungpook Nat'l Univ., Korea)

[P2-099]

14:00-15:30

P-Type CuOx-Based Resistive Random Access Memory (RRAM) for Interactive Flexible Flatpanel Display Application

Chang Woo Seo, Su Hyun Cho, Hyeonjong Lee, Geun Lee, and Sung Hun Jin (Incheon Nat'l Univ., Korea)

[P2-100]

14:00-15:30

Ruggedizing Adhesion Strength of Polymer-Stabilized Liquid Crystal Smart Windows

HanByeol Park, Gyuri Choi, Jisu Kim, MinSu Kim, and Seung Hee Lee (Jeonbuk Nat'l Univ., Korea)

[P2-101]

14:00-15:30

Minimizing Light Leakage in Homogeneously Aligned Liquid Crystal Displays with Vertically Aligned Dichroic Dyes

Hyun Soo Jeon, Minu Ju, Yeon Jin Han, Young Jin Lim, MinSu Kim, and Seung Hee Lee (Jeonbuk Nat'l Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-102]

14:00-15:30

High Transmittance Electrophoretic Carbon Black Light Shutters with Surface Control

Yeon Jin Han, Hyun Soo Jeon, Ha Young Jung, Young Jin Lim, MinSu Kim, and Seung Hee Lee
(Jeonbuk Nat'l Univ., Korea)

[P2-103]

14:00-15:30

Optically Coding in Cholesteric Liquid Crystals for a Data-Hidden-LCD

Xiang Zhang, Yubo Wang, Shihao Sun, Yongfang Zhang, and Yang Liu (Donghua Univ., China)

[P2-104]

14:00-15:30

Thermomechanical Shape Deformation Using Liquid Crystal Elastomer Actuator

Ji Yoon Park, Chae Hyun Kwon, and Su Seok Choi (POSTECH, Korea)

[P2-105]

14:00-15:30

Transmittance Control of Guest-Host Liquid Crystal for Eyewear Devices

Chaeyeong Yun, Seungmin Nam, Chaehyun Kwon, Wontae Jung, and Su Seok Choi (POSTECH, Korea)

[P2-106]

14:00-15:30

Negative Dispersion of Single-Layered Retardation Films from Mixtures of H-Shaped Reactive Molecules

Hoai Thu Luong (Jeonbuk Nat'l Univ., Korea), Ja Won Kim, Jae-Won Ka (KRICT, Korea), and Ji-Hoon Lee (Jeonbuk Nat'l Univ., Korea)

[P2-107]

14:00-15:30

Newly Synthesized Z-Plate Retarder Used for LCD Compensation Film

Manh-Thang Tran, Minwook Kim, Jahyeon Koo, Kwang-Un Jeong, and Ji-Hoon Lee (Jeonbuk Nat'l Univ., Korea)

[P2-108]

14:00-15:30

Liquid Crystal Elastomer Fiber Actuator with Double Network: Tailored Mechanical Property and Adhesion for Smart Textile

Seung-Joon Oh and Suk-kyun Ahn (Pusan Nat'l Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-109]

14:00-15:30

Programmable Mechanochromic Response in 3D Printed Cholesteric Liquid Crystal Elastomers

Jihye Choi, Yeongyu Choi, Tae-Hoon Yoon, and Suk-kyun Ahn (Pusan Nat'l Univ., Korea)

[P2-110]

14:00-15:30

Chiral Liquid Crystal with Polymer Template for Tunable Photonic Band Filter

Wontae Jung, Seungmin Nam, Dahee Wang, Chaeyeong Yun, and Su Seok Choi (POSTECH, Korea)

[P2-111]

14:00-15:30

Control of Carbon Fibers Dispersed in Nematic Liquid Crystals Using UV Light

Jae-Hui Kang, Jun-Yong Lee, Jae Hoon Lee, Jeong-Seon Yu, and Jong-Hyun Kim (Chungnam Nat'l Univ., Korea)

[P2-112]

14:00-15:30

Study on the Electro-Optical Characteristics of a Dual Cell Panel Using Vertical Alignment Liquid Crystal Sub-Cell

Yeongseop Lim, Minseo Kang, and Ji-Hoon Lee (Jeonbuk Nat'l Univ., Korea)

[P2-113]

14:00-15:30

Optical Property Dependence of Dual Cell Liquid Crystal Display on the Optical Design Parameters of Subcell

Minseo Kang, Yeongseop Lim, and Ji-Hoon Lee (Jeonbuk Nat'l Univ., Korea)

[P2-114]

14:00-15:30

A Study on Optical Responses in Chiral Liquid Crystal Elastomers under Uniaxial and Biaxial Stretching

Chaehyun Kwon, Seungmin Nam, Sang Hyun Han, and Su Seok Choi (POSTECH, Korea)

[P2-115]

14:00-15:30

With a Mini-Led Backlight Super-Curved Vertical-Alignment LCD Development

An-thung Cho, Zhi-peng He, Gui-qing Du, Chen-I Huang, James Hsu, and Wade Chen (Chuzhou HKC Optoelectronics Tech. Co., Ltd., China)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-116]

14:00-15:30

Metal-Insulator-Metal Based Meta-Mirror for Angle Independent Color Filter

Yeonah Kim and Seung-Yeol Lee (Kyungpook Nat'l Univ., Korea)

[P2-117]

14:00-15:30

Optical Compensation for Reduction of Off-Axis Color Differences in a Light Control Dichroic Dye Film

Tae-Hoon Choi, Hyun Wook Lee, and Jin Uk Ha (KATECH, Korea)

[P2-118]

14:00-15:30

Synthesis and Characterization of Carbon-Quantum-Dot Liquid Crystals

Suhyun Kim, Subhangi Subedi, Avinash KumarRella, Maibam Tarachand, and Shin-Woong Kang (Jeonbuk Nat'l Univ., Korea)

[P2-119]

14:00-15:30

Aperture-Scalable Artificial Iris based on Radially Controlled Molecular Switching of Photochromic Dye

Young-Min Cho, Asad Nauman, Jae-Won Lee, and Hak-Rin Kim (Kyungpook Nat'l Univ., Korea)

[P2-120]

14:00-15:30

Augmented Reality Displays with Folded Optical System based on Round-Trip Geometric Phase Modulation Effects

Jin-Hyeok Seo, Hye-Won Jang, Min-Seok Kim, Jae-Won Lee, Jung-Yeop Shin, and Hak-Rin Kim (Kyungpook Nat'l Univ., Korea)

[P2-121]

14:00-15:30

Reflective Geometric Phase Lens to Resolving Chromatic Aberration for Full Color Augmented Reality Display Optics

Min-Seok Kim, Jin-Hyeok Seo, Hye-Won Jang, Jae-Yeol Cha, Seung-Jae Lee, Hyeon-Su Jeong, Jae-Won Lee, Jung-Yeop Shin, and Hak-Rin Kim (Kyungpook Nat'l Univ., Korea)

[P2-122]

14:00-15:30

Lens Design with Microstructures and Freeform Surfaces in Ultra-Thin Backlight Units

Qibin Feng, Qiyu Sun, Yusong Guo, Zi Wang, and Guoqiang Lv (Hefei Univ. of Tech., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-123]

14:00-15:30

Window Shutter with Stable States

Jeong Won Ryu, Gyu Jin Choi, Hwajun Jeon (Yeungnam Univ., Korea), Chul Gyu Jhun (Hoseo Univ., Korea), and Jin Seog Gwag (Yeungnam Univ., Korea)

[P2-124]

14:00-15:30

Inversion of Circular Polarization in Twisted Mesogenic Luminophores

Gi-Eun Kim, Jae-Hoon Kim, and Chang-Jae Yu (Hanyang Univ., Korea)

[P2-125]

14:00-15:30

Vertical Alignment Liquid Crystal Polarization CCTV Camera

Sung-Min Kim, Hyeon-Sik Ahn, Min-Sang Kim, and Yoonseuk Choi (Hanbat Nat'l Univ., Korea)

[P2-126]

14:00-15:30

Liquid Crystal Device Emitting Polarized Light without a Polarizer

Gyu Jin Choi, Jeong Won Ryu (Yeungnam Univ., Korea), Suk-Won Choi (Kyung Hee Univ., Korea), and Jin Seog Gwag (Yeungnam Univ., Korea)

[P2-127]

14:00-15:30

Flexible Micro Lens Array Patterned Polymer Dispersed Liquid Crystal Film for Improved Organic Light Emitting Diode Light Outcoupling Efficiency

Na-Kyung Lee, Seongmin Lim, and Yoonseuk Choi (Hanbat Nat'l Univ., Korea)

[P2-128]

14:00-15:30

Light Extraction Technique of OLEDs via Reflective Sub-Bank Structures

Junho Kim and Seunghyup Yoo (KAIST, Korea)

[P2-129]

14:00-15:30

XtraFast: New LC Mixture Developments for Gaming Application

Ki-Sun Kwon (Merck Performance Materials Co., Ltd., Korea), Sven Christian Laut, Achim Götz (Merck KGaA, Germany), Sun-Mi Park, and Heui-Seok Jin (Merck Performance Materials Co., Ltd., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-130]

14:00-15:30

Highly Sensitive and Conformable Brain-Integrated Inkjet-Printed Voltage Amplifiers for Neural Interfaces

Yongwoo Lee (POSTECH, Korea), Alejandro Carnicer-Lombarte, Sanggil Han, Ben J. Woodington (Univ. of Cambridge, UK), Seungjin Chai (POSTECH, Korea), George G. Malliaras (Univ. of Cambridge, UK), and Sungjune Jung (POSTECH, Korea)

[P2-131]

14:00-15:30

Dual Residual Attention Convolutional Neural Network for Sparsely Sampled Magnetic Resonance Image Reconstruction

Md. Biddut Hossain, Nyamsuren Darkhanbaatar, Erkhembaatar Dashdavaa, Rupali Kiran Shinde, F M Fahmid Hossain (Chungbuk Nat'l Univ., Korea), Jong-Rae Jeong (Suwon Science College, Korea), and Nam Kim (Chungbuk Nat'l Univ., Korea)

[P2-132]

14:00-15:30

Dermnet Dataset Optimization Strategy for Effective Classification

Rupali Kiran Shinde, Joon Hyun Kim, Oh-Seung Nam, Ki-Chul Kwon, Md. Biddut Hossain (Chungbuk Nat'l Univ., Korea), Kwon-Yeon Lee (Sunchon Nat'l Univ., Korea), and Nam Kim (Chungbuk Nat'l Univ., Korea)

[P2-133]

14:00-15:30

Novel Driving Process for Enhancing the Fingerprint Authentication of In-Cell Organic Photodiode Panel

HyangA Park, Soo-Young Hong, Kwang-Soo Bae, Dae-Young Lee, Gun-Hee Kim, and Yongjo Kim (Samsung Display Co., Ltd., Korea)

[P2-134]

14:00-15:30

Wavelength Tunable Quantum Dots High-Power NIR Wearable Organic Light Emitting Diodes for Photomedicine Application with Micro Cavity Effects

Young Woo Kim, DongWoon Lee, Yeji Shin, Minseong Park (Gachon Univ., Korea), Kyoung Hwa Kim (InnoQD, Co., Ltd., Korea), Eou-Sik Cho, Sang Jik Kwon, and Yongmin Jeon (Gachon Univ., Korea)

[P2-135]

14:00-15:30

A Low-Temperature Solution-Processed Transparent Heterojunction Photodiode for Real-Time UV Monitoring Applications

Hyoun Ji Ha and Seong Jun Kang (Kyung Hee Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-136]

14:00-15:30

Fabrication of Simple UV Dosimeter with Mobile Application for Skin Protection

Seong Jae Kang, Jin Hyun Ma, and Seong Jun Kang (Kyung Hee Univ., Korea)

[P2-137]

14:00-15:30

Thermal Stable Flexible Vertical μ LED Patch for Hair Growth Treatment

Min Seo Kim, Han Eol Lee, and Keon Jae Lee (KAIST, Korea)

[P2-138]

14:00-15:30

Optogenetic Modulation of Body Behavior by Employing Flexible Vertical LightEmitting Diodes on the Brain Surface

Ki Yun Nam, Jung Ho Shin, and Keon Jae Lee (KAIST, Korea)

[P2-139]

14:00-15:30

Patch-Type Metasurface Based Wireless Power Transfer System for Bioimplantable Devices

Wonwoo Lee, Semin Jo, and Hojin Lee (Soongsil Univ., Korea)

[P2-140]

14:00-15:30

OLED for Healthcare: Management of Diabetes via Inner-Body Photobiomodulation

Jee Hoon Sim (KAIST, Korea), Jinhee Kwon (Asan Medical Center, Korea), Hyeonwook Chae, Su-Bon Kim (KAIST, Korea), Hyunsu Cho (ETRI, Korea), Woochan Lee (KAIST, Korea), So Hee Kim (Asan Medical Center, Korea), Chun-Won Byun (ETRI, Korea), Sangin Hahn (KAIST, Korea), Do Hyun Park (Asan Medical Center, Korea), and Seunghyup Yoo (KAIST, Korea)

[P2-141]

14:00-15:30

Highly Efficient Top-Emitting Red OLEDs with Ultrathin Biocompatible MLA for on-Skin Phototherapy Device

Youngjin Song, Carmela Michelle Esteban, Junho Kim, and Seunghyup Yoo (KAIST, Korea)

[P2-142]

14:00-15:30

Stretchable Organic-Inorganic Hybrid Dry Electrodes for Skin-Compatible Electrocardiogram Sensors

Taeyeon Oh, Hyeongbeom Lee, Inho Lee, and Sungjun Park (Ajou Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-143]

14:00-15:30

Doped System of Platinum (II) Complexes for Deep-Red to Near-Infrared Organic Light-Emitting Diodes

Carmela Michelle Esteban, Woochan Lee, Palanisamy Rajakannu, and Seunghyup Yoo (KAIST, Korea)

[P2-144]

14:00-15:30

Design and Characterization of Cellulose-Based Vertical Humidity Sensor

Baeksang Sung, Eun-Jeong Jang, Jeong-In Lee (Hanbat Nat'l Univ., Korea), Joo Won Han (Pukyong Nat'l Univ., Korea), Dasol Kim, Jinhwa Kim, Sora Han, Jooho Lee, Hyunjun Jang (Hanbat Nat'l Univ., Korea), Yong-Hyun Kim (Pukyong Nat'l Univ., Korea), Yoonseuk Choi, Jae-Hyun Lee, Min-Hoi Kim, and Jonghee Lee (Hanbat Nat'l Univ., Korea)

[P2-145]

14:00-15:30

Bio-Signal Monitoring Band Using Inkjet-Printed Flexible Temperature Sensor

Sehyuk Yeom, Sanghoon Jung, Jae-Sung Lee, Byoungho Kang, and Wang-Hoon Lee (GERI, Korea)

[P2-146]

14:00-15:30

Tailoring Actuation Properties of Exchangeable Liquid Crystal Elastomers Comprising Dynamic Thiourea Bonds

Jin-Hyeong Lee (Pusan Nat'l Univ., Korea), Dong-Gyun Kim (KRICT, Korea), and Suk-kyun Ahn (Pusan Nat'l Univ., Korea)

[P2-147]

14:00-15:30

Effects of Continuously Bending Ridges on Morpho Butterfly Wings

Yelin Lee, Ju Hong Park and Wook-sung Kim (POSTECH, Korea)

[P2-148]

14:00-15:30

Device for Sensing of Isolated Pressure

Wooseok Kim and Sang Min Won (Sungkyunkwan Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-149]

14:00-15:30

Improvement of Fingerprint Image Quality by Optimized Hole Position in a Sensor Device

Soo Yeong Hong, Bo Gwang Song, Dae-Young Lee, Gun Hee Kim, and Yongjo Kim (Samsung Display Co., Ltd., Korea)

[P2-150]

14:00-15:30

Skin-Breathable and Stretchable Electrode based on Square-Shaped Silver Nanowire Bundle Mesh with Wavy Bridges

Eun Young An, Jeong Ju Baek, Ki Cheol Chang (KITECH, Korea), Jeong Ho Cho (Yonsei Univ., Korea), Geun Yeol Bae (Kumoh Nat'l Inst. of Tech., Korea), and Gyojic Shin (KITECH, Korea)

[P2-151]

14:00-15:30

Piezoelectric/Resistive Bimodal Sensor for Strain and Location Sensing

Dongjun Kim, Jun Hyuk Shin, and Su Seok Choi (POSTECH, Korea)

[P2-152]

14:00-15:30

Flexible Electrochromic Device Integrated with Wireless Control Module

Doyoung Kim and Sang Min Won (Sungkyunkwan Univ., Korea)

[P2-153]

14:00-15:30

Structure Reconfigurable Antenna Using Soft Dielectric Actuator

Sang Gyeong Nam and Su Seok Choi (POSTECH, Korea)

[P2-154]

14:00-15:30

Optical Design of Energy Conversion Layer for High Photoelectric Conversion Efficiency of the Organic Solar Cell

Liang Zhang and Chul Gyu Jhun (Hoseo Univ., Korea)

[P2-155]

14:00-15:30

Room Temperature Welding of Silver Nanowires for Flexible Transparent Conductive Electrodes with Hydrochloric Acid

Seung-Beom Shin and Myung-Gil Kim (Sungkyunkwan Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-156]

14:00-15:30

Novel Optical Structure for Enhancing the Fingerprint Identification Performance

Kwang Soo Bae, Min Oh Choi, Bokwang Song, Dae-Young Lee, Gun Hee Kim, and Yongjo Kim (Samsung Display Co., Ltd., Korea)

[P2-157]

14:00-15:30

Multi-Layered Triboelectric Nanogenerator for an Artificial Synapse Using Organic Electrochemical Transistor

Yong-Jin Park, Yun Goo Ro, Young-Eun Shin, Cheolhong Park, Sangyun Na, Yoojin Chang, and Hyunhyub Ko (UNIST, Korea)

[P2-158]

14:00-15:30

Self-Healable Bilayered Film with Ion Accumulation Interface for HighPerformance Piezoionic Tactile Sensor

Young-Ryul Kim, Geumseok Lim, Haryeong Cho, and Hyunhyub Ko (UNIST, Korea)

[P2-159]

14:00-15:30

Octopi-Inspired Adhesive Patches for Biosignal Detection

Tae Woo Koo, Da Ye Kim, and Seung Goo Lee (Univ. of Ulsan, Korea)

[P2-160]

14:00-15:30

Colorimetric Strain Sensor based on Colloidal Gold Nanocluster Embedded Thermoplastic Polyurethane Nanofibers

Hyun Tae Ju, Na Gyeong Lee, and Seung Goo Lee (Univ. of Ulsan, Korea)

[P2-161]

14:00-15:30

Liquid-Solid Triboelectric Nanogenerator based on Superhydrophobic Surface

Joon Kim, Yu Jin Kim, and Seung Goo Lee (Univ. of Ulsan, Korea)

[P2-162]

14:00-15:30

In-Cell Ambient Light Sensors (ALSs) LCD Integration Using α -Si TFT Phototransistor

An Thung Cho, Hao Dong, Ming Liang Wang, Wen Xin Li, Dong Sheng Guo, Chao Wei, Jin Chang Feng, Ni Chen, Feng Yun Yang, James Hsu, and Wade Chen (ChuZhou HKC Optoelectronics Tech. Co., Ltd., China)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-163]

14:00-15:30

Biodegradable, Disposable, and Flexible Capacitive Sensor for Sensing and Human Motion Monitoring

Mohammad Zarei, Deristisya Zahra, and Seung Goo Lee (Univ. of Ulsan, Korea)

[P2-164]

14:00-15:30

Epidermal Mechano-Acoustic System for Respiratory Diagnosis

Hee Kyu Lee and Sang Min Won (Sungkyunkwan Univ., Korea)

[P2-165]

14:00-15:30

Highly Flexible Pressure Sensor with Performance based on Porous Thin-Film of High-k Polymer

Sehwan Park (Dong-A Univ., Korea), Haechang Lee (KIST, Korea), Duhyoung Gong (Dong-A Univ., Korea), Sungyun Kim (Dong-A Univ., Korea), Seunghyup Yoo (KAIST, Korea), and Hanul Moon (Dong-A Univ., Korea)

[P2-166]

14:00-15:30

Ion Conductive Polymer Composites for the Detection of Transepidermal Water Loss

Sangyun Na, Jeonghee Yeom, Yoojin Chang, Yeju Kwon, Young-Eun Shin, Yong-Jin Park, and Hyunhyub Ko (UNIST, Korea)

[P2-167]

14:00-15:30

Highly Sensitive Flexible Pressure Sensor with Asymmetric Structure for Wearable Electronics

Yeoul Kang and Jung Woo Lee (Pusan Nat'l Univ., Korea)

[P2-168]

14:00-15:30

Autonomous Self-Healable Electronic Skin Exhibiting Piezo-Ionic Dynamics for Touch Modulation

Elvis K. Boahen (Hanyang Univ., Korea), Baohai Pan (Chungnam Nat'l Univ., Korea), Hyukmin Kweon, Joo Sung Kim, Hanbin Choi, Zhengyang Kong, Dong Jun Kim, Wu Bin Ying (Hanyang Univ., Korea), Kyung Jin Lee (Chungnam Nat'l Univ., Korea), and Do Hwan Kim (Hanyang Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-169]

14:00-15:30

Silica-Augmented Hybrid Ionic Electroactive Polymer Actuator Exhibiting High Electromechanical Energy for Soft Robotic Applications

Hanbin Choi (Hanyang Univ., Korea), Yongchan Kim (Soongsil Univ., Korea), Seonho Kim (Inha Univ., Korea), So Young Kim, Joo Sung Kim (Hanyang Univ., Korea), Eseudeo Yun (Soongsil Univ., Korea), Hyukmin Kweon (Hanyang Univ., Korea), Vipin Amoli (Rajiv Gandhi Inst. of Petroleum Tech., Korea), U hyeok Choi (Inha Univ., Korea), Hojin Lee (Soongsil Univ., Korea), and Do Hwan Kim (Hanyang Univ., Korea)

[P2-170]

14:00-15:30

Enhancement of Reliability of CuI RRAMs with Hydrophobic Polymer Encapsulation for Interactive VR/AR Application

Yoon-Hee Kim, Myoung-Seok Lee, Hyeon Bin Jo, Han Min Kim, Geun Lee, and Sung Hun Jin (Incheon Nat'l Univ., Korea)

[P2-171]

14:00-15:30

Remarkable Conductivity Increase and Pure Metallic Properties in from Semiconducting Colloidal Nanocrystals via Cation Exchange Synthesis

Hyo-Geun Kwon, Gihyo Kim, Do-Hyun Kim, and Sang-Wook Kim (Ajou Univ., Korea)

[P2-172]

14:00-15:30

Self-Driven Wavelength Dependent Bipolar Photo-Response of Tin Oxide Quantum Dots-Fluorene Copolymer-Based Vertically Stacked Dual Heterojunction Photodetector

Taehyun Park and Hocheon Yoo (Gachon Univ., Korea)

[P2-173]

14:00-15:30

Facile Formation of Multicolored Quantum Dot Stack Films for Efficient White Light-Emitting Diodes

Eun A Kim (Myongji Univ., Korea) and Seong-Yong Cho (Hanyang Univ., Korea)

[P2-174]

14:00-15:30

Enhanced Device Performance of Quantum Dot Light-Emitting Diodes by Adopting ALD Mg-Alloyed ZnO Interlayer

Hyo Geun Lee, Min Seok Kim (Hanyang Univ., Korea), Jaehoon Lim (Sungkyunkwan Univ., Korea), and Seong-Yong Cho (Hanyang Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-175]

14:00-15:30

Control of Reaction Kinetics of Monodispersed InP/ZnSeS/ZnS-Based Quantum Dots Using Organophosphorus Compounds for Electroluminescent Devices

Awais Ali, Yonghyeok Choi, and Heeyeop Chae (Sungkyunkwan Univ., Korea)

[P2-176]

14:00-15:30

Bright, Narrow Emissivity of Quaternary Green Ag-In-Ga-S Quantum Dots

Yuri Kim, Yubeen Kong, Seong Min Park, Seoyeon Park, and Heesun Yang (Hongik Univ., Korea)

[P2-177]

14:00-15:30

Coherent Heteroepitaxial Growth of I-III-VI₂ Ag(In,Ga)S₂ Colloidal Nanocrystals with Near-Unity Quantum Yield

Seongbin Im, Hak June Lee, Dongju Jung, Se Jong Min, Jin Su Park, Jun Yeol Im, Jae Seung Lee, and Wan Ki Bae (Sungkyunkwan Univ., Korea)

[P2-178]

14:00-15:30

Synthesis of Green CdSe/CdZnS Core-Shell QDs by Steric Hindrance with High Quantum Yield for Mass Production

ByoungHo Kang, Jaesung Lee, Sanghoon Jung, Sehyuk Yeom, and Wanghoon Lee (GERI, Korea)

[P2-179]

14:00-15:30

High-Performance of Solution Processed SWIR Photodetectors Using PbS/CdS Core/Shell Colloidal Quantum Dots

Jae-Sung Lee, Byoung-Ho Kang, Sang-Hoon Jung, Se-Hyuk Yeom, and Wang-Hoon Lee (GERI, Korea)

[P2-180]

14:00-15:30

High-Resolution, Nondestructive Photolithography for Multi Color Patterning of InP Quantum Dot Films by Atomic Layer Deposition of ZnO

Eun Sang Lee (Hanyang Univ., Korea), Joon Yup Lee (Myongji Univ., Korea), and Seong-Yong Cho (Hanyang Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-181]

14:00-15:30

Improving the Performance of Quantum Dot Light-Emitting Diodes Using ZnMgO Alloy Interlayers via Atomic Layer Deposition

Hyeonseung Ban, Min Seok Kim, and Seong-Yong Cho (Hanyang Univ., Korea)

[P2-183]

14:00-15:30

Enhanced Performance of InP Quantum-Dot Light-Emitting Diodes by ZnMgO Mixed Emissive Layer

Beomsoo Chun and Jeonghun Kwak (Seoul Nat'l Univ., Korea)

[P2-184]

14:00-15:30

Comprehensive Study of Thermal Effects in Inverted InP Quantum Dot Light-Emitting Diodes

Ganghyun Park and Jeonghun Kwak (Seoul Nat'l Univ., Korea)

[P2-185]

14:00-15:30

Colloidal Synthesis of Deep-Blue-Emitting CsEuBr₃ and Cs₄EuBr₆ Nanocrystals

Jaeyeong Ha, Seongbeom Yeon, and Himchan Cho (KAIST, Korea)

[P2-186]

14:00-15:30

Quantum Dot/Organic Nanohybrids for InP-Based QD-LEDs

Yohan Kim, Jiyong Kim, Manuel Gensler, Christine Boeffel, and Armin Wedel (Fraunhofer IAP, Germany)

[P2-187]

14:00-15:30

Synthesis and Characterization of Novel Polymeric Hole-Transporting Materials for Perovskite LEDs

Hyejin Na, Hyeon Woo Jeong, Gwang-il Kim, Bonju Koo, Jinyoung Park, Sungho Choi, Seon Joo Lee, and Jaemin Lee (KRICT, Korea)

[P2-188]

14:00-15:30

Solution Processible Thin Film Nonvolatile Memory Device Using Quantum Dots/Polyvinylcarbazole Hybrid Materials

Sanghoon Jung, Byoung-ho Kang, Jaesung Lee, Sehyuk Yeom, and Wanghoon Lee (GERI, Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-189]

14:00-15:30

Structural Engineered Green-Emitting InP/ZnSe/ZnS Quantum Dots for High Performance Light-Emitting Devices

Kahyung Kim, Jaemin Lim, and Wan Ki Bae (Sungkyunkwan Univ., Korea)

[P2-190]

14:00-15:30

Fabricating a Multi Barrier Layer on Plastic Substrate and Enhancing the Device Stability of Flexible Quantum-Dot Light-Emitting Diodes

Jimyoung Kim and Honyeon Lee (Soonchunhyang Univ., Korea)

[P2-191]

14:00-15:30

Transient Analysis on Degradation Mechanisms of InP Quantum Dot Light-Emitting Diodes

Hyungsuk Ryu (Kwangwoon Univ., Korea), Doyoon Shin, Wanki Bae (Sungkyunkwan Univ., Korea), Jeonghun Kwak (Seoul Nat'l Univ., Korea), Hyunho Lee (Kwangwoon Univ., Korea)

[P2-192]

14:00-15:30

Polarized Luminescence in Asymmetrically Strained Quantum Dots

Dongju Jung, Jeong Woo Park (Sungkyunkwan Univ., Korea), Hak June Lee (Seoul Nat'l Univ., Korea), Doyoon Shin, Jaemin Lim, Ka Hyung Kim, Seongbin Im, Se Jong Min, and Wan Ki Bae (Sungkyunkwan Univ., Korea)

[P2-193]

14:00-15:30

Improvement of Quantum Efficiency of InP/ZnSe/ZnS Core-Shell Quantum Dots with Thick-ZnS Shell Using Hexamethyldisilathiane Sulfur Precursor

Kangwoo Lee, Boram Kim, Yonghyeok Choi, Mina Kim, and Heeyeop Chae (Sungkyunkwan Univ., Korea)

[P2-194]

14:00-15:30

Bilayered Electron Transport Layer by Lithium and Magnesium Doped Zinc Oxide for Efficiency Enhancement of Inverted Quantum Dot Light-Emitting Diodes

Yonghyeok Choi, Mina Kim, and Heeyeop Chae (Sungkyunkwan Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-195]

14:00-15:30

Colloidal Synthesis of InGaP Magic-Sized Clusters and Quantum Dots

Changhyun Joo, Jaehwan Lee, and Himchan Cho (KAIST, Korea)

[P2-196]

14:00-15:30

Improving Quantum Dot Light-Emitting Diode Performance through Electron Transport Layer Air Exposure

Eunyong Seo, Kyung Jae Lee (Gyeongsang Nat'l Univ., Korea), Jeong Ha Hwang (Sungkyunkwan Univ., Korea), Dong Hyun Kim, Jin Young Jang, Dae Geun Song (Gyeongsang Nat'l Univ., Korea), Jaehoon Lim (Sungkyunkwan Univ., Korea), and Donggu Lee (Gyeongsang Nat'l Univ., Korea)

[P2-197]

14:00-15:30

Enhanced Hole Injection of Quantum Dot Light-Emitting Diode Using Multi-Layer Hole Transport Layer with PMA and VNPB Alternating Structure

Dong Hyun Kim (Gyeongsang Nat'l Univ., Korea), Jeong Ha Hwang (Sungkyunkwan Univ., Korea), Eunyong Seo, Kyung Jae Lee, Jin Young Jang, Dae Geun Song (Gyeongsang Nat'l Univ., Korea), Jaehoon Lim (Sungkyunkwan Univ., Korea), and Donggu Lee (Gyeongsang Nat'l Univ., Korea)

[P2-198]

14:00-15:30

Defect Passivation by In-Situ & Dynamic Treatment for Improved Efficiency and Stability of Quasi-2D Blue Perovskite Light Emitting Diodes

Beomhee Yoon and Hyunho Lee (Kwangwoon Univ., Korea)

[P2-199]

14:00-15:30

Investigation of Azide-Based Photo-Crosslinker for All-Solution Processed Quantum Dot Light-Emitting Diodes

Sujin Park (Kumoh Nat'l Inst. of Tech., Korea), Jeong Ha Hwang, Jaehoon Lim (Sungkyunkwan Univ., Korea), Donggu Lee (Gyeongsang Nat'l Univ., Korea), and Wonho Lee (Kumoh Nat'l Inst. of Tech., Korea)

[P2-200]

14:00-15:30

Highly Efficient of Quantum Dot Light Emitting Diodes Using a Mixture of MoO₃ and V₂O₅ Transition Metal Oxides as a Hole Injection Layer

Suyoung Kim, Jimyoung Kim, Youngbin Chae, and Changkyo Kim (Soonchunhyang Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-201]

14:00-15:30

Tailoring Dodecyl-Based Ligand Precursors for Efficient Red-Emitting CsPb(Br,I)₃ Perovskite Nanocrystals

Semin Ko, Hyeon Woo Jeong (KRICT, Korea), Donryeol Lee (UNIST, Korea), Ja Yeon Kim, Hyejin Na, Seon Joo Lee (KRICT, Korea), Myoung Hoon Song (UNIST, Korea), Jaemin Lee (KRICT, Korea), Soong Ju Oh (Korea Univ., Korea), and Sungho Choi (KRICT, Korea)

[P2-202]

14:00-15:30

Symmetry Broken Zincblende CdSe / ZnSe Quantum Dots : Subthermal Room-Temperature Linewidths and Polarized Emission

Jeong Woo Park, Dongju Jung (Sungkyunkwan Univ., Korea), Hak June Lee (Seoul Nat'l Univ., Korea), Doyoon Shin, Seongbin Im, and Wan Ki Bae (Sungkyunkwan Univ., Korea)

[P2-203]

14:00-15:30

Highly Efficient Quantum Dots Light-Emitting Diodes with Atomic Layer Deposited Aluminum Oxide Interlayer

Sunhwee Kim (Kyonggi Univ., Korea), Taegyu Kim (Sungkyunkwan Univ., Korea), Hyeyoung Jung (Kyonggi Univ., Korea), Yong-Hoon Kim (Sungkyunkwan Univ., Korea), and Jiwan Kim (Kyonggi Univ., Korea)

[P2-204]

14:00-15:30

A Study on Quantum Dot Light-Emitting Diodes with Zn_{0.85}Mg_{0.15}O Electron Transport Layer Deposited by RF Sputtering

Bomi Kim, Jungho Kim, Seongrae Kim, and Jiwan Kim (Kyonggi Univ., Korea)

[P2-205]

14:00-15:30

The Isomer Chemistry of Magic Sized Clusters

Youngjae Ryu and Sungjee Kim (POSTECH., Korea)

[P2-206]

14:00-15:30

Enhanced Performance of CsPbBr₃ Thin Film-Based Light-Emitting Diodes by Atomic Layer Deposition of MgO

Minju Kim and Seong-Yong Cho (Hanyang Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-207]

14:00-15:30

Multi-Stacked Hybrid Anode Structure for Enhanced Charge Balance in InP Quantum Dot Light-Emitting Diodes

Jeong Ha Hwang (Sungkyunkwan Univ., Korea), Eunyong Seo, Dong Hyun Kim (Gyeongsang Nat'l Univ., Korea), Yeongho Choi, Yong Woo Kwon, Woon-ho Jong (Sungkyunkwan Univ., Korea), Kyung Jae Lee (Gyeongsang Nat'l Univ., Korea), Jin Young Jang, Dae Geun Song, Jaehoon Lim (Sungkyunkwan Univ., Korea), and Donggu Lee (Gyeongsang Nat'l Univ., Korea)

[P2-208]

14:00-15:30

Ligand Crosslinking Strategy for Efficient Quantum Dot Light-Emitting Diodes via Thiol-Ene Click Chemistry

Seungki Shin, Hyunwoo Jang, Yunseo Lee, and Nuri Oh (Hanyang Univ., Korea)

[P2-209]

14:00-15:30

Variation of Hole Transport Layer Configuration for Solution-Processed Perovskite Quantum-Dot Light-Emitting Diodes

Gwang Il Kim, Hyejin Na, Seon Joo Lee, Yurim Mo (KRICT, Korea), Hyo Sung Choi (Hanyang Univ., Korea), and Jaemin Lee (KRICT, Korea)

[P2-210]

14:00-15:30

Efficient Azide Ion Solution Treatment of Electron Transport Layer for Self-Powered Infrared Quantum Dot Photodetector

Young Kyun Choi, Byung Ku Jung, Taesung Park, Seongkeun Oh, and Soong Ju Oh (Korea Univ., Korea)

[P2-211]

14:00-15:30

Development of Black QD-Bank with Excellent Liquid-Repellent Performance Using Novel Fluorinated Compound

Jaehyun Lim, Hyejung Choi, Hanbyeol Lim, Hyunsang Cho, Yeonsoo Lee, and Changmin Lee (DUKSAN Neolux Co., Ltd., Korea)

[P2-212]

14:00-15:30

Photomultiplication-Type Colloidal Quantum Dot Infrared Photodiode via Charge Accumulation Strategy

Byung Ku Jung, Taesung Park, and Soong Ju Oh (Korea Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-213]

14:00-15:30

Chemically and Electronically Active Metal Ions on InAs Quantum Dots for Infrared Detectors

Seongchan Kim, Jaeyoung Seo, Jina Na, and Nuri Oh (Hanyang Univ., Korea)

[P2-214]

14:00-15:30

Photomultiplication Effect of Quantum Dots Inverted Photodiodes

Seongkeun Oh, Byung Ku Jung, Young Kyun Choi, Junhyeok Park, Junhyuk Ahn, and Soong Ju Oh (Korea Univ., Korea)

[P2-215]

14:00-15:30

Dual Fabry-Perot Interferometer to Enhancing The Color Purity of Display Devices

Keun Soo Shin, Jun Yong Kim, and Yun Seon Do (Kyungpook Nat'l Univ., Korea)

[P2-216]

14:00-15:30

External Quantum Efficiency Enhancement of Photoluminescent Quantum Dot Displays via Index-Mismatching Scatterers in Organic Composites

DaYeon Lee, Hayoung Jung, MinSu Kim, and Seung Hee Lee (Jeonbuk Nat'l Univ., Korea)

[P2-217]

14:00-15:30

Stability Enhancement of Quantum Dot Color Conversion Layer via Inkjet Printing by Organic Encapsulation Resin

Sang Youn Lee (KITECH, Korea), Chun Sakong (ChemE Inc., Korea), Byeong-Kwon Ju (Korea Univ., Korea), and Kwan Hyun Cho (KITECH, Korea)

[P2-218]

14:00-15:30

Inkjet Solvent Formulation of InP/ZnSeS/ZnS Quantum Dot Emitter for the Improved Pixel-to-Pixel Printing Uniformity

Yoon-Jeong Choi, Jeong-Yeol Yoo, and Byung Doo Chin (Dankook Univ., Korea)

[P2-219]

14:00-15:30

Constructing an Exceptionally Thick Hole Transport Layer for Highly Stable Quantum Dot Light Emitting Diodes

Minseok Choi, Yeyun Bae (Pusan Nat'l Univ., Korea), Woon Ho Jung, Jaehoon Lim (Sungkyunkwan Univ., Korea), and Jeongkyun Roh (Pusan Nat'l Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-220]

14:00-15:30

Heteroepitaxial Chemistry on Colloidal InP Quantum Dots for Uniform Zinc Chalcogenide Epilayers Enabling Unity Quantum Yield

Yeongho Choi, Donghyo Hahm, Wan Ki Bae, and Jaehoon Lim (Sungkyunkwan Univ., Korea)

[P2-221]

14:00-15:30

Strategy for Improving Moisture Stability of Perovskite Nanocrystals via Polyethylene Microcapsule Encapsulation

Geon Jong Yu, Jung Hyeon Yoo, Seok Bin Kwon, Ho Chan Yoo, and Dae Ho Yoon (Sungkyunkwan Univ., Korea)

[P2-222]

14:00-15:30

Dispersion Stability and Color Conversion Characteristics of Quantum Dot Matrix with Different Hollow and Solid-Type Light Diffusing ZnS Nanoparticles

Jae Ho Ban, Min Su Lee, Yoon-Jeong Choi, Jeong-Yeol Yoo, Jang Sub Kim, and Byung Doo Chin (Dankook Univ., Korea)

[P2-223]

14:00-15:30

Enhancing the Efficiency of Cadmium-Free Quantum Dot Light-Emitting Diodes by Inserting the Interlayer

Ahyoung Hong and Jeonghun Kwak (Seoul Nat'l Univ., Korea)

[P2-224]

14:00-15:30

Role of ZnCl₂ in Single-Crystalline InP Tetrapod Nanocrystals

Sunghu Kim, Seongmin Park, Sinil Choi, and Sohee Jeong (Sungkyunkwan Univ., Korea)

[P2-225]

14:00-15:30

QD-LED with PEIE Inserted between the Emission Layer for Charge Balance and Distribution

Hyo-Bin Kim, Jae-In Yoo, Seong-Chen Kang, and Jang-Kun Song (Sungkyunkwan Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-226]

14:00-15:30

Improved Performance of Quantum Dot Light-Emitting Diodes with ZnO/ZnMgO Bilayered Electron Transport Layers by UV-Ozone Treatment

Kyoungeun Lee (Pusan Nat'l Univ., Korea), Jaehoon Kim (Dong-A Univ., Korea), and Jeongkyun Roh (Pusan Nat'l Univ., Korea)

[P2-227]

14:00-15:30

Flexible Heterostructured Photodetectors based on Colloidal Quantum Dots and Laser-Induced Graphene

Jiyoon Oh, Hyeona Jo (Pusan Nat'l Univ., Korea), Hanchul Cho (KITECH, Korea), Byeongguk Jeong, and Jeongkyun Roh (Pusan Nat'l Univ., Korea)

[P2-228]

14:00-15:30

Size and Composition-Dependent Electronic Properties of ZnMgO Nanoparticle Electron Transport Layers

Yong Woo Kwon (Sungkyunkwan Univ., Korea), Hyeonjun Lee (KAIST, Korea), Woon Ho Jung, and Jaehoon Lim (Sungkyunkwan Univ., Korea)

[P2-229]

14:00-15:30

Optical Simulation of Capsuled QD-OLEDs: Establishing Optimized Film Conditions through Geometric Modeling and Performance Analysis

Seyoung Yoon, Junho Kim (KAIST, Korea), Hyeyoung Lee, Bongjun Kim (Sookmyung Women's Univ., Korea), Ohkwon Kwon (Inno QD Co., Ltd., Korea), and Seunghyup Yoo (KAIST, Korea)

[P2-230]

14:00-15:30

Utilizing a Charge Generation Junction to Enable Efficient Hole Injection in InP-Based Quantum Dot Light-Emitting Diodes

Yeyun Bae, Minseok Choi, and Jeongkyun Roh (Pusan Nat'l Univ., Korea)

[P2-231]

14:00-15:30

Color Conversion Sheet with Perovskite Material for Mini-LED-Based LCDs

Da Bin Kim, Kyungkook Jang, Seungbeom Lee, Younghoon Kim, Taehyung Kwak, Kwon-Shik Park, and Soo Young Yoon (LG Display Co., Ltd., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-232]

14:00-15:30

Direct Photocatalytic Patterning of Colloidal Emissive Nanomaterials

Seongkyu Maeng, Sun Jae Park, Jaehwan Lee, Hyungdoh Lee, Jonghui Choi, Jeung Ku Kang, and Himchan Cho (KAIST, Korea)

[P2-233]

14:00-15:30

Comparative Study of the Ground-State Exciton Emission Wavelengths of InP/ZnSe/ZnS Quantum Dots Calculated by the Effective Mass Approximation and 8×8 k·p Method

Sungjun Kim and Jungho Kim (Kyung Hee Univ., Korea)

[P2-234]

14:00-15:30

Facile Calibration of High Magnification Three-Dimensional Digital Image Correlation for Stretchable Display Analysis

Jinsu Yoon, Jong Ho Park, and Yongtaek Hong (Seoul Nat'l Univ., Korea)

[P2-235]

14:00-15:30

Effect of Spikes in an OLED Display Waveform on Flicker Perception

Hyosun Kim, Hyungsuk Hwang, Youra Kim, Youngwoo Yi, Jaejoong Kwon, and Yongjo Kim (Samsung Display Co., Ltd., Korea)

[P2-236]

14:00-15:30

Optimal Design of Magic Mirror and Beam Splitter for Maximizing Contrast Ratio between an Aerial Image by AIRR and a Mirror Image by Magic Mirror

Kyoya Hino, Kohei Kishinami, Shiro Suyama, and Hirotsugu Yamamoto (Utsunomiya Univ., Japan)

[P2-237]

14:00-15:30

Autostereoscopic 3D Technology with Viewing Distance Adaptation

Wook Jeon, Hoon Kang, Gi-Hong Kim, JoonYoung Yang, and SooYoung Yoon (LG Display Co., Ltd., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-238]

14:00-15:30

A Study on Light Field Display View Map Through Measurement Using Conoscopic Lens

Youngmin park, SuMi Lee, Youngjun Seo, Jaejoong Kwon, and Yongjo Kim (Samsung Display Co., Ltd., Korea)

[P2-239]

14:00-15:30

Design of OLED Angular Intensity Distribution for Virtual Reality Headset

Soomin Baek, Juhwa Ha, Cheon Myeong Lee, Jiwon Lee, and Sangho Kim (Samsung Display Co., Ltd., Korea)

[P2-240]

14:00-15:30

How to Measure a Chief Ray of the Light into the Eye from a Microdisplay for an Unknown Optical Design Pancake Lens

Hyeyoung Ha, Young-Keun Lee, Young-Min Park, Aree Song, Junga Choi, Young-Jun Seo, Jaejoong Kwon, and Yongjo Kim (Samsung Display Co., Ltd., Korea)

[P2-241]

14:00-15:30

Stability Control of Lead-Free Perovskite Red Light-Emitting Diodes

Seungjae Lee, Heeseung Lee, and Jung-Yong Lee (KAIST, Korea)

[P2-242]

14:00-15:30

Effect of Partial Oxygen Pressure and Annealing Condition Control on Reliability of Bottom Gate IGZO Thin Film Transistor

Kyung Jun Park, Jeong-Min Park, and Jang-Yeon Kwon (Yonsei Univ., Korea)

[P2-243]

14:00-15:30

Flexible Electromagnetic Shielding Film with High Electromagnetic Shielding Performance and Adhesion for Flexible Displays

Sun Hong Yoon and Dongyoung Shim (KETI, Korea)

[P2-244]

14:00-15:30

Selective Adhesion-Based Facile Liquid Metal Patterning for Stretchable Devices

Dongju Jang, Byeonggeol Lee, and Yongtaek Hong (Seoul Nat'l Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-245]

14:00-15:30

All Electrohydrodynamic 3D-Printed Micro-Supercapacitor for Enhanced Display Applications

Sujin Jung, Sung Min Rho, Jonghyuk Ahn, and Hyun Jae Kim (Yonsei Univ., Korea)

[P2-246]

14:00-15:30

Facile Oxygen Plasma Treated Ag Nanofiber-Based Flexible Resistive Random Access Memory for E-Skin Display Applications

Sung Min Rho, Seungmin Lee, Sujin Jung, Jonghyuk Ahn, Kunho Moon, Youjin Seo, Dong Keun Lee, and Hyun Jae Kim (Yonsei Univ., Korea)

[P2-247]

14:00-15:30

Electrically Tunable Nanocolloidal Lenses for an Augmented Reality System

Sahul Hameed Syed Ali, P. A. N. S. Priyadarshana, Seung-Ho Hong, and Jang-Kun Song (Sungkyunkwan Univ., Korea)

[P2-248]

14:00-15:30

Development of Cross-Talk Compensation Algorithms for High Resolution Display Device

YongWoo Lee (Hanyang Univ., Korea), KookHyun Choi, WooGun Gang, HyeRyoung Park, SangHwan Cho (Samsung Display Co., Ltd., Korea), and MinJe Ko (Hanyang Univ., Korea)

[P2-249]

14:00-15:30

A Study on Micro-Sized Liquid Crystal Array Lattice Using Pulse-Train Signals

Sun-Kuk Kim, Young-Woo Park, Vitaly P. Panov, and Jang-Kun Song (Sungkyunkwan Univ., Korea)

[P2-250]

14:00-15:30

Ultrathin Cellulose-Based Flexible Pressure Sensor with Thin Adhesive Layer

Dong Keon Lee, Dahyun Kim, Jinsu Yoon, and Yongtaek Hong (Seoul Nat'l Univ., Korea)

[P2-251]

14:00-15:30

Growth Control of II-VI Epilayer on III/V Nanocrystals

Doyoon Shin, Sejong Min, and Wan Ki Bae (Sungkyunkwan Univ., Korea)

IMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-252]

14:00-15:30

Film-State Ligand and Color Change Patterning Process for Perovskite Quantum Dot Light Emitting Diodes

Junho Kim, Taehyun Kim, and Jung-Yong Lee (KAIST, Korea)

[P2-253]

14:00-15:30

Numerical Simulation Study of Trap Effects on Charge Transport in Quantum Light-Emitting Diodes

Kyung Jae Lee, Eunyoung Seo, Dong Hyun Kim, Jin Young Jang, Dae Geun Song, and Donggu Lee (Gyeongsang Nat'l Univ., Korea)

[P2-254]

14:00-15:30

Conductivity Heightening Effect of Using Green-Solvent for Hole Transport Layer in All-Solution Process

Jeong-Beom Kim, Jae-In Yoo, Seong-Cheon Kang, and Jang-Kun Song (Sungkyunkwan Univ., Korea)

[P2-255]

14:00-15:30

Improve of Charge Balance Using $Zn_{1-x}Mg_xO$ Layer in All-Solution Processed Inverted QDLED

Su-Hyeon Lee, Jae-In Yoo, Sung-Cheon Kang, and Jang-Kun Song (Sungkyunkwan Univ., Korea)

[P2-256]

14:00-15:30

Improvement of Quantum Dot Light Emitting Diodes Performance by Doping PCBM to Hole Transport Layer

Jeong-Bin Park, Hyo-Bin Kim, and Jang-Kun Song (Sungkyunkwan Univ., Korea)

[P2-257]

14:00-15:30

A Study on Current Characteristics in Pixel Units of Quantum Dot Light Emitting Diodes

Hansol Seo, Geun Woo Baek, and Jeonghun Kwak (Seoul Nat'l Univ., Korea)

iMiD 2023

The 23rd International Meeting on Information Display
August 22-25, 2023 / BEXCO, BUSAN, KOREA

[P2-258]

14:00-15:30

Enhancing Performance of InP Quantum Dot Light-Emitting Diodes by Employing Acid-Treated ZnMgO Electron Transport Layer

Minhyung Lee and Jeonghun Kwak (Seoul Nat'l Univ., Korea)

[P2-259]

14:00-15:30

Degradation Characteristics of Inverted Quantum Dot Light-Emitting Diodes with Different Hole-Transporting Layer

Jaekwon Kim and Jeonghun Kwak (Seoul Nat'l Univ., Korea)