

## S0701. Oral Session I

🕒 Nov 27, Wednesday, 13:30-15:00

📍 Room 503

🗣️ **Presider:** Prof. Wei-Chih Lai (National Cheng Kung University, Taiwan)  
Prof. Tsung-Hsien Lin (National Sun Yat-sen University, Taiwan)

13:30

2024-WED-S0701-I001

Invited

**Detecting cancer by the plasmonic effect of InGaN quantum wells**

Prof. Kun-Yu Lai, National Central University (Taiwan)

14:00

2024-WED-S0701-O001

**Studies of Micro Light-Emitting Diodes with Controlled Emission Patterns**

Chun-Wei Huang, Tzu-Chi Wang, Chung-Chih Wu, National Taiwan University (Taiwan)

14:15

2024-WED-S0701-O002

**Electronic Transport Properties of  $\beta$ -Ga<sub>2</sub>O<sub>3</sub>: DFT Calculations and Monte Carlo Simulations**

Han-Sheng Fu, Yuh-Renn Wu, National Taiwan University (Taiwan)

14:30

2024-WED-S0701-O003

**Optoelectronic Performance Enhancement of AlGaInP-Based Red Micro-LEDs with HfO<sub>2</sub> ALD Sidewall Passivation**

Yi-Tzu Tseng, Prechatavanich Natchanon, Ming-June Wu, Chee-Keong Yee, Sutheebanjerd Theeradech, Chao-Hsin Wu, National Taiwan University (Taiwan)

14:45

2024-WED-S0701-O004

**Enhanced Efficiency of GaN Micron-scale LEDs by Optimized Surface Treatment Temperature**

Xiang Li, Szu-An Chen, Jian-Jang Huang, National Taiwan University (Taiwan)

## S0702. Oral Session II

🕒 Nov 27, Wednesday, 15:15-16:45

📍 Room 503

🗣️ **Presider:** Prof. Kun-Yu Lai (National Central University, Taiwan)  
Prof. I-Chun Cheng (National Taiwan University, Taiwan)

15:15

2024-WED-S0702-I001

Invited

**Novel switching of liquid crystals for use in rapid THz modulation: Mastering liquid crystals beyond displays**

Prof. Masahito Oh-e, National Tsing Hua University (Taiwan)

15:45

2024-WED-S0702-O001

**Versatile Thermoresponsive Polymer-Stabilized Cholesteric Liquid Crystal Smart Windows without Surface Orientation Treatment**

Min-Han Lu, Wei Lee, National Yang Ming Chiao Tung University (Taiwan)

16:00

2024-WED-S0702-O002

**Dual-Mode Transmission Control of Dye-Doped, Dual-Frequency Liquid Crystal in an In-Plane Switching Cell with Optical Tristate Functionality**

Tsung-Chou Tsai, Wei Lee, National Yang Ming Chiao Tung University (Taiwan)

16:15

2024-WED-S0702-O003

**Non-doped Fluorescent OLEDs with Pyrene Derivative as the Emitting Layer**

Kuan-Wei Chen, Hui-Chun Lu, Man-Kit Leung, National Taiwan University (Taiwan); Tien-Lung Chiu, Yuan Ze University (Taiwan); Jiun-Haw Lee, National Taiwan University (Taiwan)

16:30

2024-WED-S0702-O004

**2D Modeling of Carrier Transport in OLED Host-Guest Systems with Random Dopant Effects**

Min-Hsuan Chang, Yuh-Renn Wu, National Taiwan University (Taiwan)

## S0703. Oral Session III

🕒 Nov 28, Thursday, 10:45-12:00

📍 Room 503

🗣️ Presider: Prof. Tien-Lung Chiu (Yuan Ze University, Taiwan)  
Prof. Chien-Chung Lin (National Taiwan University, Taiwan)

10:45

2024-THU-S0703-I001

Invited

**Triplet management of blue organic light-emitting diode for higher efficiency and longest lifetime**

Prof. Jiun-Haw Lee, National Taiwan University (Taiwan)

11:15

2024-THU-S0703-O001

**Automatic Subpixel Layout Scheme Based on Gradient Descent Optimization**

Kun Yuan Lin, Chieh-En Lee, Chung-Hao Tien, National Yang Ming Chiao Tung University (Taiwan)

11:30

2024-THU-S0703-O002

**Mitigating Vergence-Accommodation Conflict in AR/VR Displays Through Image Precorrection Optimization**

Pei-Chia Tsai, Chieh-En Lee, Chung-Hao Tien, National Yang Ming Chiao Tung University (Taiwan)

11:45

2024-THU-S0703-O003

**Halo Effect on Display Luminance**

Chih-Ting Yeh, Tsai-Yii Chen, Tsung-Hsun Yang, Yeh-Wei Yu, Ching-Cherng Sun, National Central University (Taiwan)

## S0704. Oral Session IV

🕒 Nov 28, Thursday, 13:30-14:45

📍 Room 503

🗣️ Presider: Prof. Hsin-Chieh Yu (National Yang Ming Chiao Tung University, Taiwan)  
Prof. Chun-Ta Wang (National Sun Yat-sen University, Taiwan)

13:30

2024-THU-S0704-I001

Invited

**Switchable Liquid Crystal Polarization Volume Gratings: Design and Applications**

Prof. Chun-Ta Wang, National Sun Yat-sen University (Taiwan)

14:00

2024-THU-S0704-O001

**High-quality AlN buffer for ultraviolet meta-lens and circular polarization meta-splitter**

Zhi-Yan Lin, Chia-Yen Huang, National Yang Ming Chiao Tung University (Taiwan)

14:15

2024-THU-S0704-O002

**Bilayer liquid crystal elastomers achieved using polymer network templates**

Ta-Lung Chang, Ting-Wei Gu, Kuan-Hsuan Chen, Jia-Yu Cao, National Sun Yat-Sen University (Taiwan); Yu-Chieh Cheng, National Taipei University of Technology (Taiwan); Chun-Ta Wang, National Sun Yat-Sen University (Taiwan)

14:30

2024-THU-S0704-O003

**Used for VOHE miniaturized lighting modules**

Ching-Yuan Chen, Chung-Wei Lin, Yeh-Wei Yu, Ching-Cherng Sun, Tsung-Hsun Yang, National Central University (Taiwan)

## S0705. Oral Session V

🕒 Nov 28, Thursday, 15:00-16:00

📍 Room 503

🗣️ **Prsident:** Prof. Hsin-Chieh Yu (National Yang Ming Chiao Tung University, Taiwan)  
Prof. Chia-Yen Huang (National Yang Ming Chiao Tung University, Taiwan)

15:00

2024-THU-S0705-O001

### Ultra-High Brightness Green Quantum Dot Light-Emitting Diodes with Charge Control Layer

You-Huei Jhang, Chung-Kai Chi, Hsin-Chieh Yu, National Yang Ming Chiao Tung University (Taiwan)

15:15

2024-THU-S0705-O002

### New PWM Controlled Mini-LED Driving Circuit without Sweep Signal Using N- and P-type LTPS TFTs

Yu-Chang Chiu, Wei-Sheng Liao, National Cheng Kung University (Taiwan); Ming-Yang Deng, AUO Corporation (Taiwan); Chih-Lung Lin, National Cheng Kung University (Taiwan)

15:30

2024-THU-S0705-O003

### Innovative Stacked Yellow and Blue Mini-LED Chip for White Lamp Applications

Chien-Chi Huang, National Yang Ming Chiao Tung University (Taiwan); Tzu-Yi Lee, Hao-Chung Kuo, National Yang Ming Chiao Tung University/Hon Hai Research Institute (Taiwan)

15:45

2024-THU-S0705-O004

### InGaN blue resonant cavity micro-LED with RGY quantum dot layer for broad gamut, efficient displays

I-Jou Lin, National Yang Ming Chiao Tung University (Taiwan); Tzu-Yi Lee, National Yang Ming Chiao Tung University/Hon Hai Research Institute (Taiwan); Chien-Chi Huang, National Yang Ming Chiao Tung University (Taiwan); Yu-Heng Hong, Hon Hai Research Institute (Taiwan); Hao-Chung Kuo, National Yang Ming Chiao Tung University/Hon Hai Research Institute (Taiwan)

## S0706. Oral Session VI

🕒 Nov 29, Friday, 09:00-10:30

📍 Room 503

🗣️ **Prsident:** Prof. Shun-Wei Liu (Ming Chi University of Technology, Taiwan)  
Prof. Lung-Chien Chen (National Taiwan University of Science and Technology, Taiwan)

09:00

024-FRI-S0706-I001

Invited

### Persistent and stimulated luminescence of organic semiconductors

Prof. Ryoto Kabe, Okinawa Institute of Science and Technology Graduate University (Japan)

09:30

2024-FRI-S0706-O001

### Cyan Thermally Activated Delayed Fluorescence Organic Light-emitting Diode Based on Triazine Derivative

Hung-Yi Liu, National Taiwan University (Taiwan); Ikbal Marghad, Centre national de la recherche scientifique (France); Jiun-Haw Lee, National Taiwan University (Taiwan); Tien-Lung Chiu, Yuan Ze University (Taiwan)

09:45

2024-FRI-S0706-O002

### Analysis of the efficiency performance of different hybrid layer triplet-triplet fusion OLEDs

Wei-Zhi Chen, Chia-Hsun Chen, Hung-Yi Lin, Lian-Chun Huang, Yuan-Zhen Zhuang, Jiun-Haw Lee, National Taiwan University (Taiwan); Tien-Lung Chiu, Yuan Ze University (Taiwan); Tuh-Renn Wu, National Taiwan University (Taiwan)

10:00

2024-FRI-S0706-O003

### Study of Band-edge Transition, Luminescence and Highly Photoresponse in Anisotropic Layered $\text{AgBiP}_2\text{Se}_6$

Anna Milatul Ummah, Ching-Hwa Ho, National Taiwan University of Science and Technology (Taiwan)

10:15

2024-FRI-S0706-O004

### Surface Morphology and Polarity of GaN Epitaxy on Silicon

Wei-Ming Hsu, Ya-Ching Lin, Kun-Yu Lai, Sheng-Hui Chen, National Central University (Taiwan)

## S7. Poster Session I

🕒 Nov 27, Wednesday, 13:30-16:00

📍 Room 521

2024-WED-P0701-P001

### Performance improvement of the GaN-based micro-LEDs by laser lift-off and KOH texturing processes

Tsung-Chih Wan, Yu-Yun Lo, Hsiao-Wen Zan, Ray-Hua Horng, National Yang Ming Chiao Tung University (Taiwan)

2024-WED-P0701-P002

### Subjective and Objective Evaluations of Users' Concentration under Different Proportions of Blue Light

Wei-Lun Hung, Yu-Shu Chiu, Yi-Chun Chen, National Central University (Taiwan)

2024-WED-P0701-P003

### Broadband quarter-wave plates based on liquid crystal optical elements and their polarization characteristics

Chia-Min Hsu, Tien-Jung Chen, Chun-Hsien Wu, National Taipei University of Technology (Taiwan)

2024-WED-P0701-P004

### Fabrication of high efficiency green InGaN/GaN Micro LEDs by modulating potential barrier height of the sidewall MQWs in V-pits during barrier growth

Hsin-Yu Liu, National Cheng Kung University (Taiwan); Chung-Ying Chang, Xiamen San'an Optoelectronic Company Ltd. (Taiwan); Sheng-Po Chang, National Kaohsiung University of Science and Technology (Taiwan); Shoou-Jinn Chang, National Cheng Kung University (Taiwan)

2024-WED-P0701-P005

### Enhanced Photoelectronic Performance of Low Current Injected Green GaN-based Micro-LEDs by Removing p-AlGaIn Electron Blocking Layer

Hsin-Yu Liu, National Cheng Kung University (Taiwan); Chung-Ying Chang, Xiamen San'an Optoelectronic Company Ltd. (Taiwan); Sheng-Po Chang, National Kaohsiung University of Science and Technology (Taiwan); Shoou-Jinn Chang, National Cheng Kung University (Taiwan)

2024-WED-P0701-P006

### COB LEDs with on-board drivers

Hao Lyu, Yuk Fai Cheung, Hoi Wai Choi, University of Hong Kong (China)

2024-WED-P0701-P007

### Patterned polymer-stabilized cholesteric liquid crystals by two-photon polymerization direct laser writing

Kun-Zhong Wu, Jia-De Lin, Pei-Shen Hsieh, National Dong Hwa University (Taiwan)

2024-WED-P0701-P008

### Surface Ligand Engineering in Photopatternable Perovskite Quantum Dot Thin Films

Ching-Deng Lin, Wan-Chen Chang, Fang-Chung Chen, National Yang Ming Chiao Tung University (Taiwan)

2024-WED-P0701-P009

### Novel Lift-off Lithography Process for Transparent Electrode Fabrication by the Scanning of an Optical Pickup Head

Ru-Zhe Youh, Hsi-Fu Shih, National Chung Hsing University (Taiwan)

2024-WED-P0701-P010

### Size-dependent deformations of photothermal liquid crystal elastomer films

Chun-Huang Tsai, Jia-De Lin, National Dong Hwa University (Taiwan)

## S7. Poster Session II

🕒 Nov 28, Thursday, 13:30-16:00

📍 Room 500

2024-THU-P0702-P001

### Blue/Green/Red Micro-LED for Wavelength Division Multiplexing Visible Light Communication

Fu-He Hsiao, Wen-Chien Miao, Tzu-Yi Lee, Chien-Chi Huang, Yu-Heng Hong, Hao-Chung Kuo, National Yang Ming Chiao Tung University (Taiwan); Yu-Heng Hong, Hon Hai Research Institute (Taiwan); Hao-Chung Kuo, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0702-P002

### Color Conversion Techniques with Transparent Photoresist for Ultra-High-Resolution Panchromatic Micro-LED Displays

Yu-Han Kung, Shan-Yu Chen, Chen-Hsun Wu, Ting-Chun Lee, Ching-Fuh Lin, National Taiwan University (Taiwan)

2024-THU-P0702-P003

### Investigation of a polarizer-free liquid crystal phase modulation via nanometer size encapsulation of nematic liquid crystals

Chang Nien Mao, Seok-Lyul Lee, Yi-Hsin Lin, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0702-P004

### P-type Tellurium Thin-Film Transistors by Thermal Evaporation

Chi-Hao Chang, I-Chun Cheng, Chun-Han Shen, National Taiwan University (Taiwan)

2024-THU-P0702-P005

### Design of a Freeform Mirror-Based Floating Dashboard Display

Chih-Hao Chuang, Feng Chia University (Taiwan); Ding-Yu Zhuo, Chien-Yu Chen, National Taiwan University of Science and Technology (Taiwan); Zhi-Sheng Wang, Feng Chia University (Taiwan)

2024-THU-P0702-P006

### Molecular designs using cyanobenzene-modified phenazine acceptors for efficient deep-red and near-infrared TADF emitters

Chi-Hao Huang, Fong-Yu Yang, Chih-Hao Chang, Yuan Ze University (Taiwan); Atul Chaskar, Chemical Technology (India)

2024-THU-P0702-P007

### Exploring phenanthroline-based TADF emitters and their EL applications

Chia-Hsu Ku, Cai-Fan Lo, Kuan-Yu Su, Yi-Ting Chen, Chih-Hao Chang, Yuan Ze University (Taiwan); Pratima Yadav, Sunil Madagyal, Atul Chaskar, Chemical Technology (India)

2024-THU-P0702-P008

### A New a-Si TFT Pixel Circuit for Micro-LED Display with $\Delta V_{th}$ and Mobility Compensation

Yo-Lin Chang, Chih-Chen Huang, Po-Tsun Liu, Guang-Ting Zheng, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0702-P009

### Dimensional Effects of Electrodes on Liquid Crystal THz Phase Modulation Between In-plane and Out-of-plane

Chun-Han Chen, Deng-Yun Zheng, Masahito Oh-e, National Tsing Hua University (Taiwan)

2024-THU-P0702-P010

### The Experiment of Automatic Compensation of Degraded Organic Light-Emitting Diode by a Micro-Controller

Henglong Yang, Ming-Hsuan Tu, Yi-Chien Lin, Shi-Jie Chen, National Taipei University of Technology (Taiwan)

2024-THU-P0702-P011

### High Efficiency Blue Triplet-triplet Fusion OLED Based on Pyrene Derivative with Different Dopant Concentrations

Shao-An Chen, National Taiwan University (Taiwan); Yi-Ting Lee, Soochow University (Taiwan); Tien-Lung Chiu, Yuan Ze University (Taiwan); Jiun-Haw Lee, National Taiwan University (Taiwan)

2024-THU-P0702-P012

### Energy-Saving Smart Windows with Self-Assembled Multistable Dynamic Scattering Mode

Chun-Ting Wu, Pravinraj Selvaraj, Hsiu-Ming Kuo, Cheng-Kai Liu, Chung-Kung Lai, Jyun-Cong Lai, Sharon Tan Fang Jie, Ko-Ting Cheng, National Central University (Taiwan)

2024-THU-P0702-P013

### Mixing Nanoparticles in Color Conversion Layers for Enhancing Conversion Efficiency

Ting Chun Lee, Chih Yuan Tsai, Chen Hsun Wu, Ching Fuh Lin, National Taiwan University (Taiwan)

2024-THU-P0702-P014

### Efficient Phosphorescent OLEDs with Bipolar Host Materials Featuring Carbazole-Quinazolinone Moieties

Rong-Miao Chang, Chih-Hung Ko, Shih-Wei Huang, Yi-Ting Chen, Yi-Qi Chao, Chih-Hao Chang, Yuan Ze University (Taiwan), Atul Chaskar, Institute of Technology (India)

## S7. Poster Session II

🕒 Nov 28, Thursday, 13:30-16:00

📍 Room 500

2024-THU-P0702-P015

### Applying Control Theory for Automatic Detection and Compensation of Degraded Organic Light-Emitting Diode

Henglong Yang, Jun-Hong Chen, Tzu-Heng Huang, National Taipei University of Technology (Taiwan)

2024-THU-P0702-P016

### Performance of Bipolar Carbazole Derivatives in Green Phosphorescent OLEDs

Yu-Chieh Chang, Fu-Chuan Fan, Chih-Hao Chang, Yuan Ze University (Taiwan); Saulius Grigalevicius, Kaunas University of Technology (Lithuania)

2024-THU-P0702-P017

### Development of Phenanthroline and Diindolocarbazole Emitters for Efficient TADF OLEDs

Cai-Fan Lo, Chia-Hsu Ku, Kuan-Yu Su, Yi-Ting Chen, Chih-Hao Chang, Yuan Ze University (Taiwan); Atul Chaskar, Chemical Technology (India)

2024-THU-P0702-P018

### Novel bipolar derivatives incorporating diphenylsulfone or dibenzophenone as TADF emitters for OLEDs

Yu-Feng Ye, Szu-Jung Wang, Yi-Ting Chen, Kuan-Yu Su, Chih-Hao Chang, Yuan Ze University (Taiwan); Gintare Krucaite, Raminta Beresneviute, Daiva Tavgeniene, Saulius Grigalevicius, Kaunas University of Technology (Lithuania)

2024-THU-P0702-P019

### Electrical Characteristics Enhancement of a-IWZO TFTs for High-Resolution Display Applications

Chi-Ruei Huang, National Tsing Hua University (Taiwan); Tsung-Che Chiang, Sin-Yi Jiang, Chen-Kai Hsu, Cheng-Hsuan Chan, Po-Tsun Liu, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0702-P020

### Research on Improving Epitaxial Growth of Gallium Oxide by Hydride Vapor Phase Epitaxy

Yu Hung Shih, Hsun Cheng Tu, Chu An Li, National Sun Yat-sen University (Taiwan); Ming Chi Chou, National Cheng Kung University (Taiwan)

2024-THU-P0702-P021

### Enhancing P-type SnO Thin Film Transistor Electrical Characteristics by High-k Metal Gate Structure for High-resolution Display Technology

Pei-Yun Huang, Tsung-Che Chiang, Zhen-Hao Li, Cheng-Wei Wang, Kai-Cheng Syu, Huei-Yun Zeng, Shi-Qian Guo, Po-Tsun Liu, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0702-P022

### High Reliability Tin-doped Indium Zinc Oxide Thin-film Transistors for Next Generation Display Technology

Hsin-Ying Lin, Tsung-Che Chiang, Zhen-Hao Li, Chien Chao, Xin-Yan Wu, Yi-De Tsai, Po-Tsun Liu, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0702-P023

### Research on Growth of Six Inches 4H Silicon Carbide Single Crystal and Basal Plane Bending by Physical Vapor Transport

Jeng Yu Chen, Ting Wei Hu, Chen Jiun Du, Wen Tung Hsu, National Sun Yat-Sen University (Taiwan); Ming Chi Chou, National Cheng Kung University (Taiwan)

2024-THU-P0702-P024

### Optoelectronic properties of liquid crystals combined with electrochromic materials for smart dimming

Yi Xuan Lin, Chih-Hui Huang, Ko-Ting Cheng, National Central University (Taiwan)

2024-THU-P0702-P025

### Highly Reliable a-Si Gate Driver on Array with Dual Low Voltage Pre-Bootstrapping Structure for Automotive Display Application

Xin-Ya Lai, Ta-Wei Lin, Guang-Ting Zheng, Po-Tsun Liu, National Yang Ming Chiao Tung University (Taiwan)

## S7. Poster Session III

🕒 Nov 29, Friday, 09:00-11:00

📍 Room 500

2024-FRI-P0703-P001

### Screen Setting Effect on Eye Protection Effectiveness and Viewing Clarity

Yi-Jia Li, Shu-Guang Girls' Senior High School (Taiwan); Yao-Hua Liu, Hsuan Min Wang, Pin-Kuan Liu, National Tsing Hua University (Taiwan); Ming-Li Chou, Shu-Guang Girls' Senior High School (Taiwan); Po-Ting Yeh, Jwo-Huei Jou, National Taiwan University Hospital (Taiwan)

2024-FRI-P0703-P002

### Effect of screen hanging light on Eye Protection Effectiveness

Zi-Yu Zhou, Chen-Ying Liao, Shu-Guang Girls' Senior High School (Taiwan); Hong-Wei Yang, Wen-Hsun Cheng, Yui-Ruei Huang, National Tsing Hua University (Taiwan); Ming-Li Chou, Shu-Guang Girls' Senior High School (Taiwan); Po-Ting Yeh, National Taiwan University Hospital (Taiwan); Jwo-Huei Jou, National Tsing Hua University (Taiwan)

2024-FRI-P0703-P003

### Exploration of The Eye Protection Effectiveness and Clarity of E-ink Reader

Wei-Ling Wei, Yun Chen, Shu-Guang Girls' Senior High School (Taiwan); Che-Wei Chang, Bo-Hsun Peng, Wei-Shu Liu, Wen-De Hsieh, National Tsing Hua University (Taiwan); Ming-Li Chou, Shu-Guang Girls' Senior High School (Taiwan); Po-Ting Yeh, National Taiwan University Hospital (Taiwan); Jwo-Huei Jou, National Tsing Hua University (Taiwan)

2024-FRI-P0703-P004

### Is tablet friendlier than hard-copy? From the perspectives of eye protection and concentration

Yu-Hsien Chen, Zih-Si Wang, Shu-Guang Girls' Senior High School (Taiwan); Wei-Zhu Lin, Yu-Lun Hsiao, Ming-Feng Tsai, National Tsing Hua University (Taiwan); Ming-Li Chou, Shu-Guang Girls' Senior High School (Taiwan); Po-Ting Yeh, National Taiwan University Hospital (Taiwan); Jwo-Huei Jou, National Tsing Hua University (Taiwan)

2024-FRI-P0703-P005

### Application of two-color $\text{Cs}_{2.9}\text{K}_{0.2}\text{PEA}_{0.4}\text{Pb}_2\text{I}_{3.9}\text{Br}_{3.6}$ and $\text{MAPbBr}_3$ double-layer perovskite films as light-emitting diodes by spin-coating and vapor deposition method

Hsin-Wen Yen, Jen-Yu Fang, Lung-Chien Chen, National Taipei University of Technology (Taiwan)

2024-FRI-P0703-P006

### Light-Guide Plate with Curve-Ridged Micro Structures

Chun-Ting Lin, Hung Tsou, Yi-Hsiang Huang, Industrial Technology Research Institute (Taiwan)

2024-FRI-P0703-P007

### Injection current-dependent color deviation of phosphor-based white LEDs by hyperspectral imaging

Hung Ji Huang, Yan-Fang Lai, Zhi-Lin Chen, National Formosa University (Taiwan)

2024-FRI-P0703-P008

### Study of Two-Dimensional Near- Ultraviolet Perovskite Thin Films $(\text{PEA})_2\text{PbBr}_3\text{Cl}$ Light-Emitting Diodes

Li-Lin Huang, Jing-Suei Ni, Lung-Chien Chen, National Taipei University of Technology (Taiwan)

2024-FRI-P0703-P009

### Achieving Highly Stable and Ultrahigh-Definition Color Conversion in Augmented Reality Devices By Using Encapsulation Technology

Tzu-Yi Yang, Chih-Yuan Tsai, Ching-Fuh Lin, National Taiwan University (Taiwan)

2024-FRI-P0703-P010

### Blue aggregation-induced emission bipolar materials incorporating triphenylethene-carbazole fragments

Szu-Jung Wang, Yu-Feng Ye, Yi-Qi Chao, Zih-Ru He, Chih-Hao Chang, Yuan Ze University (Taiwan); Gintare Krucaite, Daiva Tavgeniene, Mantas Kirstukas, Saulius Grigalevicius, Kaunas University of Technology (Lithuania)

2024-FRI-P0703-P011

### A convolutional neural network for color harmony prediction of clothes matching

Hung-Chung Li, National Chung Hsing University (Taiwan)

2024-FRI-P0703-P012

### Development and Application of Automotive LED Packaging Technology

Kun-Ting Lin, Bang-Wei Huang, Wei-Chih Cheng, Chun-Nien Liu, Wood-Hi Cheng, National Chung Hsing University (Taiwan)

## S7. Poster Session III

🕒 Nov 29, Friday, 09:00-11:00

📍 Room 500

2024-FRI-P0703-P013

### A Study on the Passivation Process Using a Laser Writer and Laser Drilling on YAG: Ce<sup>3+</sup> Glass Phosphors for LEDs to Improve Emission Angles

Chih-Le Kang, Bang-Wei Huang, Wei-Chih Cheng, Chun-Nien Liu, Wood-Hi Cheng, Zhi Ting Ye, National Chung Hsing University (Taiwan)

2024-FRI-P0703-P014

### Ambipolar MoTe<sub>2</sub> Field-Effect Transistors with Graphite Contacts

Chi-Ting Chung, Chih-Yu Chen, National Taiwan University (Taiwan); Wei-Li Lee, Academia Sinica (Taiwan); I-Chun Cheng, National Taiwan University (Taiwan)

2024-FRI-P0703-P015

### Vertically Stacked Micro-LEDs Using Hybrid Bonding Techniques

Wen-Ching Hung, National Central University (Taiwan); Jui-fu Chang, Shoou-Jinn Chang, National Cheng Kung University (Taiwan); Sheng-Po Chang, National Kaohsiung University of Science and Technology (Taiwan); Jyh-Chen Chen, National Central University (Taiwan)

2024-FRI-P0703-P016

### Micro Flip Chips and Vertical Chip Stacking Through Laser Eutectic Bonding

Jui-Fu Chang, National Cheng Kung University (Taiwan); Wen-ching Hung, National Central University (Taiwan); Sheng-Po Chang, Jyh-Chen Chen, National Kaohsiung University of Science and Technology (Taiwan); Shoou-Jinn Chang, National Cheng Kung University (Taiwan)

2024-FRI-P0703-P017

### Pyrene-based Host Material of Blue Organic Light-emitting Diode

Yu-Ting Lin, Jiun-Haw Lee, National Taiwan University (Taiwan); Tien-Lung Chiu, Yuan Ze University (Taiwan); Yi-Ting Lee, Soochow University (Taiwan)

2024-FRI-P0703-P018

### PMMA-Silica Composites Enhances Light Extraction Efficiency in Multiple Resonance OLED

Min-Xiang Liao, Mao-Ying Chen, Bo-Yen Lin, National Dong Hwa University (Taiwan); Ya-Lei Hu, Chang-Rui Chen, Yi-Ting Lee, Soochow University (Taiwan)

2024-FRI-P0703-P019

### IPS-LCD for Augmented Reality Systems Characterized by Rapid Switching and Wide Viewing Angle

Pei-Ching Wei, Wei Lee, National Yang Ming Chiao Tung University (Taiwan)

2024-FRI-P0703-P020

### Enhancing OLED Performance by Utilizing Exciplex-forming Hosts with MR-TADF Emitter

Ting Hao Liang, Yu Cheng Kung, Wen Yi Hung, National Taiwan Ocean University (Taiwan)

2024-FRI-P0703-P021

### Visual Comfort of a Head-up Display under High Illuminance Level

Hsin-Pou Huang, Chihlee University of Technology (Taiwan); Hung-Chung Li, National Chung Hsing University (Taiwan); Hsing-Chen Wu, Yi-Jie Wu, Chihlee University of Technology (Taiwan)

2024-FRI-P0703-P022

### Performance Improvement of Amorphous IZTO TFTs with Xenon Pulsed-Light Annealing

Yung-Sheng Tsai, Yan-Quan Chen, Ching-Lin Fan, National Taiwan University of Science and Technology (Taiwan)

2024-FRI-P0703-P023

### Analysis of Sidewall-Defect Related Optical Performance of Selectively Implanted InGaN/GaN Green Micro-LEDs in Cryogenic Temperature

Cheng-Jui Yu, Yuan-Chao Wang, Yu-Hsiang Chang, Jian-Jang Huang, National Taiwan University (Taiwan)



## S7. Poster Session III

🕒 Nov 29, Friday, 09:00-11:00

📍 Room 500

2024-FRI-P0703-P024

### Optimization of Through-Glass Via (TGV) Fabrication Using Potassium Hydroxide (KOH) Chemical Etching

Guang Liu, Chi-Feng Lin, Po-Yu Chen, National United University (Taiwan); Nan-Hao Lin, Lunghwa University of Science and Technology (Taiwan)

2024-FRI-P0703-P025

### Screen Resolution Effect on Reading Illuminance and Viewing Clarity

Jia-Qi Wu, Hwei-Cen Cheng, Shu-Guang Girls' Senior High School (Taiwan); Xian-Qing Huang, Zhan-Ting Lin, Ting-Hao Liu, National Tsing Hua University (Taiwan); Ming-Li Chou, Shu-Guang Girls' Senior High School (Taiwan); Po-Ting Yeh, National Taiwan University Hospital (Taiwan); Jwo-Huei Jou, National Tsing Hua University (Taiwan)

2024-FRI-P0703-P026

### Photoluminescence Mapping Measurement for Early Defect Identification of LED Chip

Chen-Feng Lin, Shang-Ping Ying, Minghsin University of Science and Technology (Taiwan)

2024-FRI-P0703-P027

### Surface Engineering of ZnO nanoparticles with sulfonate ligands as the electron transport layer in quantum dot light-emitting diodes

Yu-Cheng Chang, You-Fu Wang, Sheng-Hsiung Yang, National Yang Ming Chiao Tung University (Taiwan)

2024-FRI-P0703-P028

### Enhancing Light Extraction from Light-Emitting Electrochemical Cells

Dian Luo, Min-Chih Hou, National Yang Ming Chiao Tung University (Taiwan); Yu-Ting Huang, Providence University (Taiwan); Shun-Wei Liu, Providence University (Taiwan); Chin-Wei Lu, Yuan Ze University (Taiwan); Chih-Hao Chang, Hai-Ching Su, National Yang Ming Chiao Tung University (Taiwan)