

The 21st International Meeting on Information Display August 25-27, 2021 / COEX, Seoul, Korea

Session Title: [FC3] Oral 30. Micro-LED Epitaxy, Chip Fabrication, Manufacturing

Processes, and Active and Passive Driving Technologies

Session Date: August 27 (Friday), 2021

Session Time: 14:00-15:40

Session Room: Room C (104+105)

Session Chair(s): Dong-Seon Lee (GIST, Korea)

Jaekyun Kim (Hanyang Univ., Korea)

[FC3-1] [Invited]

On-line (Pre-recorded) / On-demand

Laser-Driven Transfer Printing Techniques for Micro-LED Displays

Chengjun Wang, Hongyu Luo, and Jizhou Song (Zhejiang Univ., China)

[FC3-2] [Invited]

On-line (Pre-recorded) / On-demand

GaN-Based Micro-LEDs for Technological Convergence between Displays and Optical Wireless Communications Systems

Martin Dawson, Johannes Herrnsdorf, Jonathan McKendry, Enyuan Xie, Erdan Gu, and Michael Strain (Univ. of Strathclyde, UK)

[FC3-3] [Invited]

On-line (Pre-recorded) / On-demand

Direct Red-Emitting InGaN MicroLEDs based on Relaxed InGaN Templates

Lars Samuelson (Lund Univ., Sweden)

[FC3-4] [Invited]

On-line (Pre-recorded) / On-demand

**Directional GaN Micro-LED for VR/AR Applications** 

Xuelun Wang (AIST, Japan)

[FC3-5] [Invited]

On-line (Pre-recorded) / On-demand

**Emerging Field of Quasi-2D Flat Nanocrystal Optoelectronics** 

Hilmi Volkan Demir (Bilkent Univ., Turkey)

[FC3-6] [Invited]

Off-line / 14:00-14:25

Fluidic Self-Assembly of Micro-LED Chips with Shaped Magnetic Heads and InGaP/InAlGaP Red LED with Plasmonic Nanohole Structures: Toward Micro LED Displays

In Hwan Lee (Korea Univ., Korea)



[FC3-7] Off-line / 14:25-14:40

# Simultaneous Transfer and Bonding (SITRAB) Process for Mini- and Micro-LEDs

Kwang-Seong Choi, Jiho Joo, Gwang-Mun Choi, Ki-seok Jang, Chanmi Lee, Seok Hwan Moon, Ho-Gyeong Yun (ETRI, Korea), Ji-Hoon Choi, Ji-Woong Choi (AQLASER Co., Ltd., Korea), and Yong-Sung Eom (ETRI, Korea)

[FC3-8] Off-line / 14:40-14:55

# Wave Energy Assisted Fluidic Self-Assembly of LED Chips for Display Application

Jejun Ryu, Seounghyun Noh, Changwan Park (Chung-Ang Univ., Korea), Seungje Lee, Youngrag Do (Kookmin Univ., Korea), and Jaesoo Yoo (Chung-Ang Univ., Korea)

[FC3-9] Off-line / 14:55-15:10

#### An Integrated Scan Driver Circuit based on LTPS TFTs for AM µLED Displays

Eun Kyo Jung, Yong-Hoo Hong, Sung-Hyuck Ahn, Sara Hong, Eunho Kim, Hwarim Im, and Yong-Sang Kim (Sungkyunkwan Univ., Korea)

[FC3-10] Off-line / 15:10-15:25

## A Light-Induced Cu Conductor on Glass Substrates for Thin Film µLED Application

Jung Ho Shin, Seung Hyung Lee, Jae Hee Lee, Sang Hyun Park, Jungwon Oh, and Keon Jae Lee (KAIST, Korea)

[FC3-11] Off-line / 15:25-15:40

### Surface Passivation of AlGaInP/GaInP Red Micro-LED

Juhyuk Park, Dae-Myeong Geum, Woo Jin Baek, and SangHyeon Kim (KAIST, Korea)

[FC3-12] On-line (Pre-recorded) / On-demand

#### Critical Challenges in MicroLED Testing and Inspection

David Lewis, Rimma Dechter (InZiv, Israel), Ryan Ley, Matthew Wong (Univ. of California, USA), and Michel Khoury (Applied Materials, USA)