Oral Presentation

## [OLED6]OLED Advanced Technologies Chair: Yoshimasa Sakai (MITSUBISHI CHEMICAL) Co-Chair: Sukekazu Aratani (Samsung Electronics)

Fri. Nov 29, 2019 9:00 AM - 10:15 AM Room 204 (2F)

## 9:40 AM - 10:00 AM

## [OLED6-3]Enhanced Operational Stability of Quantum Dot based Light-

Emitting Diodes by Improving Charge Injection Balance \*Seunghyun Rhee<sup>1</sup>, Jun Hyuk Chang<sup>1</sup>, Donghyo Hahm<sup>1</sup>, Kyunghwan Kim<sup>1</sup>, Hak June Lee<sup>1</sup>, Kookheon Char<sup>1</sup>, Changhee Lee<sup>1</sup>, Wan Ki Bae<sup>2</sup>, Jeonghun Kwak<sup>1</sup> (1. Seoul National University (Korea), 2. Sungkyunkwan

University (Korea)) Keywords:Quantum dot LED, Operational stability, Charge injection balance, Hole injection barrier

Charge injection balance is the key factor for high efficiency and lifetime of quantum dot lightemitting diodes (QLEDs). However, it is unidentified how the operational conditions affect lifetime of QLEDs. Herein, grounded on the quantitative assessment, the impact of electrical parameters to QLEDs performance and operational stability is identified.