

Oral Presentation

[OLED4]QD Material & Devices

Special Topics of Interest on Quantum Dot Technologies

Chair: Takeo Wakimoto (Merck Performance Materials)

Co-Chair: Toshiaki Ikuta (JNC Corp.)

Thu. Nov 28, 2019 9:00 AM - 10:35 AM Room 204 (2F)

10:20 AM - 10:35 AM

[OLED4-5L]Solution-Processed Indium-Gallium-Nitride (InGaN) Blue Light-Emitting Diodes (LEDs)

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Keywords: InGaN, Light Emitting Diode (LED), Organic LED (OLED), Quantum Dots (QDs), Blue

A soluble form of InGaN was synthesized, producing a solution that exhibited blue photo-luminescence (PL) upon UV light exposure. This solution was used in the fabrication of a blue light-emitting diode (LED) that was produced using solution processable methods, a world first for an InGaN-base LED. The PL properties of the solution and the electro-luminescence (EL) and device characteristics of the LED are presented.