Oral Presentation

[OLED3]OLED Display

Chair: Taishi Tsuji (NIPPON STEEL Chemical &Material)

Co-Chair: Masaya Adachi (Japan Display Inc)

Wed. Nov 27, 2019 5:00 PM - 6:25 PM Room 204 (2F)

5:55 PM - 6:10 PM

[OLED3-5L]Spectral Narrowing and Efficiency Enhancing in Deep-Red Organic Light Emitting Diode

*Yuichiro Kawamura¹, Takushi Shiomi¹, Kei-ichi Yasukawa¹, Shota Sawano¹, Hiromi Nakano¹, Hisato Matsumoto¹, Toshinari Ogiwara¹, Keiji Okinaka¹, Kazumasa Nagao², Kazunari Kawamoto² (1. Idemitsu Kosan Co.,Ltd. (Japan), 2. Toray Industries, Inc. (Japan))

Keywords:Organic Light Emitting Diode, Deep Red, Fluorescence, TADF, Top-Emission

We developed both thermally activated delayed fluorescence materials with high performances and spectral-narrow fluorescent dopants for deep-red organic light-emitting diodes. We achieved the efficiency of 46 cd/A at 10 mA/cm² and the LT95 of around 90 hours at 50 mA/cm² in the top emission device at CIEx = 0.679.