

Oral Presentation

[OLED5]OLED Optical Design

Chair: Yasunori Kijima (Huawei Technologies Japan K. K.)

Co-Chair: kengo Kishino (idemitsu Kosan Co, Ltd.)

Thu. Nov 28, 2019 5:20 PM - 6:40 PM Room 204 (2F)

6:00 PM - 6:20 PM

[OLED5-3]Design of Color Filter based on Metallic Nanostructure and Color Conversion Material for White OLED Display

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Keywords: Metallic Nanostructure, Color Filter, White OLED, Color Conversion Material (CCM)

We have designed and optimized the geometric parameters of metallic nanostructure with color conversion material as a color filter for white OLED display to enhance the optical efficiency. Optical intensity of red and green light in white OLED was increased by 73.0% and 29.1%, respectively after applying metallic nanostructure with quantum-dot materials.