

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)

5:40 PM - 6:00 PM

[OLED5-2]Thermal evaporation process based organic/Ag/ organic transparent conducting electrode for flexible optoelectronic applications

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Keywords:ITO free, Transparent electrode, Thermal evaporation

Herein, we report a new organic/Ag/organic (OAO) multilayer flexible transparent electrode fabricated a thermal evaporation process. This OAO electrode showed superior optical and electrical characteristics of which transmittance of 81.34% at 550 nm wavelength and low sheet resistance of 9.51 Ω /sq. Its flexible reliability is also very excellent as sheet resistance variation at the radius of curvature of 5 mm with bending cycles of 2,000 is negligible. Fabricated green phosphorescent organic light emitting diodes with this OAO electrode showed high current efficiency of 75.1 cd/A.