

## **Annealing Effect on Roughness of Gravure Printed MEH-PPV and Rubrene Layer**

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Annealing effect for gravure-printed OLED device is investigated. Gravure printing for organic light emitting diode(OLED) is doctored emitting material to the grooves of gravure printing roll and then printed onto oxygen plasma pre-treatment of substrate. Poly[2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylenevinylene] (MEH-PPV) and 5,6,11,12-Tetraphenyl naphthacene (Rubrene), red and yellow emitting material mixture, was printed by gravure printing. and substrate is ecthed induim tin oxide(ITO) electrode layer. To control the roughness and thicknesss of MEH-PPV/Rubrene organic layer, multi-printing and post-treatment were performed. Multi-printing is increase thickness of organic layer. Post-treatment in this work is annealing after printing MEH-PPV/Rubrene layer.