

Fabrication of microlens arrays using screen printing

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Recently, microlens arrays are becoming important components in many applications such as OLEDs enhancement. There is an increasing demand for developing an efficient method to fabricate microlens arrays. In this study, microlenses with well-defined optical parameters are generated from Polymethylmethacrylate(PMMA) on the surface of the glass substrates by screen printing. The advantage of this method is that this array of microlens can be formed under ambient condition. Comparing with other methods, this method is simple and low cost. In addition, the microlens arrays exhibit excellent characteristics such as high diffraction efficiency, and can improve the OLEDs efficiency a lot.