## Fabrication of hybrid silver-grid/ITO electrode for large area OLED lighting



In the near future, OLEDs are believed to be the main stream in lighting industry because of their high efficiency and environment-friendly. For lighting application, the size of OLED panel should be enlarged. But large area OLED panels have problem like non-uniform emission due to relatively high sheet resistance of transparent anode.

In this study, we fabricate hybrid silver-grid/ITO electrode to get low sheet resistance anode for large area OLED panels. We use gravure-offset printing for making silver grid on ITO. And silver grid is insulated with photoresist(PR) to prevent short circuit. We use simple PR reflow method to insulate silver grid. Silver grid can act as mask for photolithography, so we do not need additional mask and alignment process. And to cover whole silver grid, PR reflow process is followed.

With this simple method, we fabricate high performance anode for OLED panels. Its sheet resistance is below 5 /sq and optical transmittance is around 90%.