

## 잉크젯 프린팅을 이용한 CNT-FED의 전계 방출 특성

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### **Field emission characteristics of CNT-FED using ink-jet printing**

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**Abstract :** We report the field emission characteristics of transparent single-walled carbon nanotube (SWNT) film printed using an inkjet. Pure SWNTs dispersed in dimethylformamide were printed in a transparent layer on indium-tin oxide-coated glass and annealed at 350°C. After tapping treatment, SWNTs were oriented vertically on the substrate. The front and the back of the fabricated device produced simultaneous emissions of identical quality. In addition, inkjet printing directly achieved a patterned emission, without a secondary pattern process. This method allows simple fabrication using only SWNTs, without the use of other additives.

**Key Words :** Single-wall carbon nanotubes(SWCNTs), Inkjet printing, Field emission characteristics