
**DISPLAY MANUFACTURING: INK-JET
PRINTING**

Thursday, May 24 / 3:40 5:00 pm / Room 102

Chair:

Elliott Schlam, Elliott Schlam Associates, Asbury Park, NJ, U.S.A.

Co-Chair:Lauren F. Palmateer, Qualcomm MEMS Technologies,
San Francisco, CA, U.S.A.**54.1: LED Packaging by Ink-Jet Microdeposition of High-Viscosity Resin and Phosphor Dispersion (3:40)***I. Amemiya, Y. Nomura, K. Mori, M. Yoda, I. Takasu,
S. Uchikoga
Toshiba Corp., Kawasaki, Japan*

High-viscosity phosphor-dispersed resin was deposited by an ultrasonic ink-jet-printing method to package white LEDs. A microlens was printed on the encapsulant dome. The results show the applicability of ink-jet micro-patterning for LED packaging.

54.2: Vertical-Alignment-Type Small Display Panels with Alignment Layer Formed by Ink-Jet-Printing Technology (4:00)*K-H. Liu, Y-C. Lo, C-S. Chuang, K-H. Chen, H-A. Li
ChungHwa Picture Tubes, Ltd., Taoyuan, Taiwan, ROC*

Ink-jet printing was used to coat an alignment film in a vertical-alignment multimedia LED. This resulted in satisfactory performance and confirms the use of this low-cost process.

54.3: Drop-Landing-Accuracy Improvements in Ink-Jet-Printed OLED Displays (4:20)*C. Phillips
Cambridge Display Technology, Godmanchester, U.K.

S. Bruner, D. Xu
Litrex Corp., Pleasanton, CA, U.S.A.*

Improvements in ink-jet printer design have significantly increased the drop-landing accuracy into predefined pixel-well structures. This makes it possible to produce higher-resolution displays.

54.4: Ink-Jet Printing of Single-Wall Carbon Nanotubes with Transparent Conductive Film (4:40)*C-S. Han, J-W. Song, Y-H. Yoon, J. Kim, E-S. Lee
Korea Institute of Machinery & Materials, Daejeon, Korea*

A single-walled carbon-nanotube transparent conductive film (TCF) was fabricated by using a simple ink-jet-printing method. The TCF could be selectively patterned by controlling the dot size to diameters as small as 34 μm and achieved 71% film transmittance and a resistance of 900- Ω /sq. sheet on flexible substrates.

AUTHOR INTERVIEWS**(5:00-6:00)**