

LOW COST PRINTED ELECTRONICS TECHNOLOGY

Kalyan Krishna, Dan Gamotaga, Jie Zhang, Jie L, Brazispaul

Labs, Motorola, 1301 E Algonquin Rd, Rm 1014, Schaumburg, Illinois, USA

Abstract:

Since their proof of concept in 1986, organic semiconducting devices have progressed in recent years to a point where they are becoming attractive for practical industrial applications. Most notably, increases in carrier mobility, environmental stability, and advancements in p- and n-type organic semiconductor materials have resulted in reports of device operation suitable for many low-functionality, low-cost products. The technology has become even more attractive after the demonstration of solution-processable materials, which enables the use of low-cost deposition techniques such as screen printing, spin coating, and conventional graphics arts printing technologies. This oral talk will provide an overview of printed active electronics fabrication, product opportunities, and the challenges ahead.