The Global Market for Nanomaterials in Flexible Screens, Transparent Conductive Films, Printable Electronics and Displays

Description:
As well as enabling novel approaches to display designs, nanomaterials are also incorporated into display components, such as transparent electrodes, thin film transistors, coatings, sensors, transparent conductors, and infrared and visible photodetectors.

Multinational companies such as Toshiba, Motorola, Hitachi, Sony, Panasonic, Philips and Samsung are developing nanomaterial-based display technologies, utilizing a variety of nanomaterials including graphene, carbon nanotubes, silver nanowires and quantum dots.

Nanomaterials for ITO replacement

ITO is the dominant material in transparent conductive films. However, the growth in flexible and curved devices requires novel materials to replace ITO. The unsuitability of ITO for flexible and stretchable electronics applications opens up opportunities for nanomaterials.

Quantum dot TVs

The significant increase in energy consumption globally has led to a market push for environmentally-friendly and renewable energy sources. When compared to LCD-TVs, QD-enhanced LCD-TVs use one fifth of the power. QDs also allow for improved battery life in other electronic devices such as smartphones and tablets.

This 238 page report provides a comprehensive analysis of the current and future competitive landscape for nanomaterials in Flexible Screens, Transparent Conductive Films and Displays, a market that will be worth over $10 billion at the components level by 2030.

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