

Metaplan Survey

CATEGORY	Weighting of Priority
displays with high optical performance, high resolution and low power consumption	6
portable devices with low power consumption	-
organic ICs, RFID-tags	8
smart displays, logic sensors, display antenna	13
PROCESSES	
large area, high resolution patterning equipment and processes	9
roll-to-roll manufacturing, high-throughput processes	4
self-assembly systems, enabling further miniaturization, avoiding complicated and expensive patterning techniques	4
process technology for high resolution displays (up to 300ppi)	7
low-cost processes for (flexible) thin film encapsulation	2
environmental friendly processes and materials	-
flexible production techniques for rapid prototyping and customer specific products	8
solution using semiconductor ink composed of inorganic nanoparticles	1
thermal transfer of inorganic layer	-
MATERIALS	
materials with increased chemical and mechanical stability, lifetime and higher efficiency	3
low cost substrates for flexible displays, electronics and solar cells	4
material for transparent electronics	-
material systems for thin film encapsulation for flexible (OLED) displays and solar cells	-
improved LC materials for thin LC layers for high performance displays	4
integration of functional layers of LC with silicon technology	-
DEVICES / DESIGN	
flexible displays / indicators (LCD, OLED, electrophoretic, electrochrome,..)	8
Autostereoscopic and full 3-D displays	14
all organic displays	3
new display architectures that no longer refresh all pixels but have local storage and processing	2
new display architectures to allow displays to be driven from behind, enabling seamless tiled displays, and displays of "unlimited" size and arbitrary shape	3
small projection displays for portable devices	9
ultra-low cost displays/indicators	6
very low power display drivers	2
new device structures and materials for organic thin film transistors with higher performance	1
hybrid organic/inorganic electronic devices	3
organic sensors to increase functionality and performance	4
large area (organic) solar cells	2