Characterisation

Electro-optical Characterization

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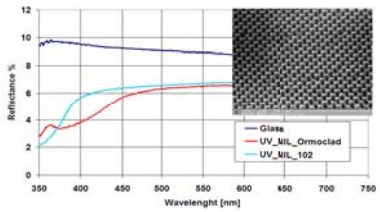
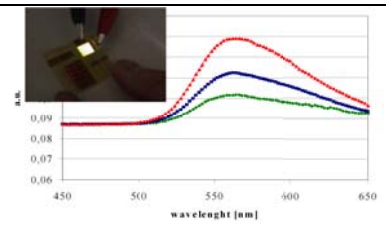
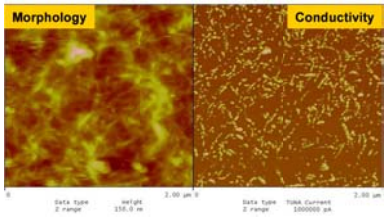
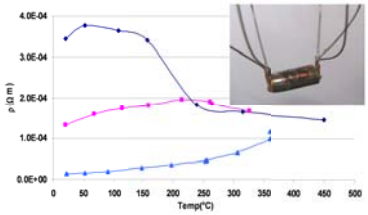
Material class:	Silicon	Polymer X	Metal X	Ceramic X	Glass X	Organic	Other X
Short technology description:	The electro-optical characterization can be performed on passive and active components for several applications (displays, energy, coatings…) to measure: transmittance/reflectance spectra, current-voltage curve, electrical conductivity distribution, electrical conductivity. – Spectrophotometers UV/Vis – Spectrofluorimeter – Gonioreflectometer – Luxmeters – Set up for Harmann method – Conductive AFM – 4-point probe						
Typical structures and designs:	 **Reflectance measurements of antireflective nanostructures**						
	 **Electroluminescent spectra and current/voltage curve for OLEDs**						
	 **Conductive AFM for conductivity distribution of CNT films on glass**						
	 **Electrical conductivity of LAST alloy vs Temperature**						
Special features:	– Full range of electrical and optical characterization tools for the analysis of several surfaces						
Limitations, constraints:	–						
Material examples:	– Polymer nanocomposites, light emitting materials – Metals surfaces, thermoelectrics – Porous anodic alumina, titania and opals – Semiconductor materials (emitting nanocrystals) – Glass surfaces						