
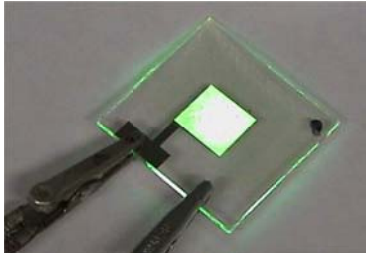


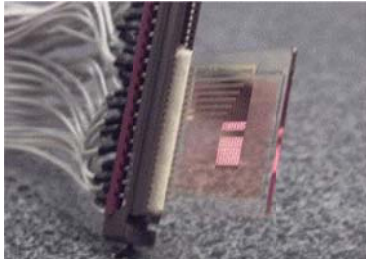


Thin Film Deposition							
<b>PVD-Cluster for organic device fabrication</b>							
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<b>Material class:</b>	Silicon	Polymer X	Metal X	Ceramic	Glass	Organic X	Other
<b>Short technology description:</b>	Fabrication of light emitting devices based on organic and polymeric materials (OLED/PLED) <ul style="list-style-type: none"> <li>– Thermal evaporator AUTO306 for organic (light emitting molecules) and metallic (silver, aluminium, gold, copper...) layers with thickness control</li> <li>– Sputtering EDWARDS for ITO deposition on glass and plastic materials</li> <li>– RC8 KS spin coater for polymers deposition</li> <li>– Microlithography clusters for patterned devices</li> </ul>						
<b>Typical structures and designs:</b>			<b>OLED single pixel (10x10 mm) fabricated by vacuum deposition</b>				
			<b>PLED Icons fabricated by spin coating and thermal evaporation (substrate 40x30 mm)</b>				
			<b>PLED device fabricated on flexible substrates</b>				
			<b>Pixeled matrix device (up to 50x50 mm substrates) with 250x250 um pixel</b>				
<b>Special features:</b>	<ul style="list-style-type: none"> <li>– Full line deposition processes for OLED device fabrication: patterning, liquid and vacuum deposition</li> <li>– OLED and PLED device with different colors</li> <li>– Fabrication of devices on different substrate shape</li> </ul>						
<b>Limitations, constraints:</b>	<ul style="list-style-type: none"> <li>– Lifetime of devices suitable for characterization (few weeks)</li> <li>– Mask design and fabrication</li> </ul>						
<b>Material examples:</b>	<ul style="list-style-type: none"> <li>– Emitting small molecule (Alq3)</li> <li>– Hole transporting layers (PEDOT/PSS, PANI)</li> <li>– PPVs derivatives</li> </ul>						