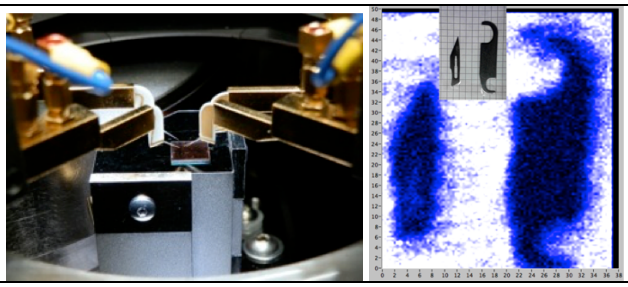
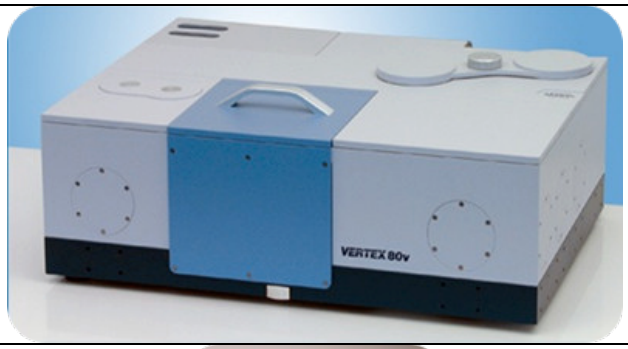
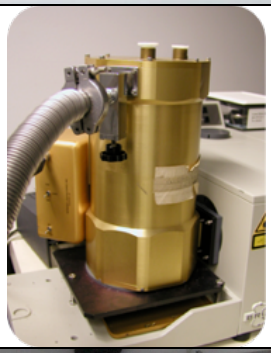
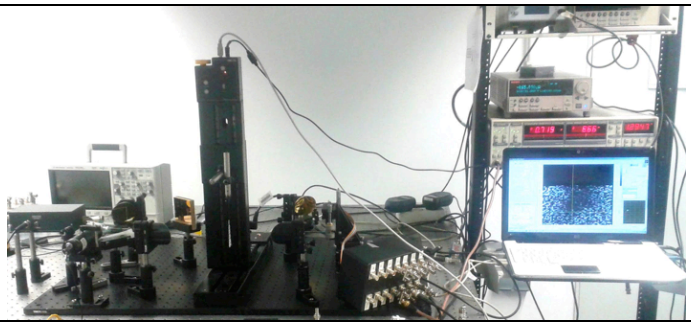
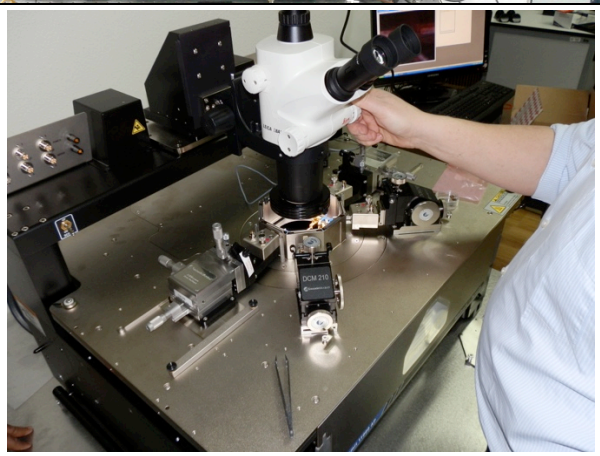
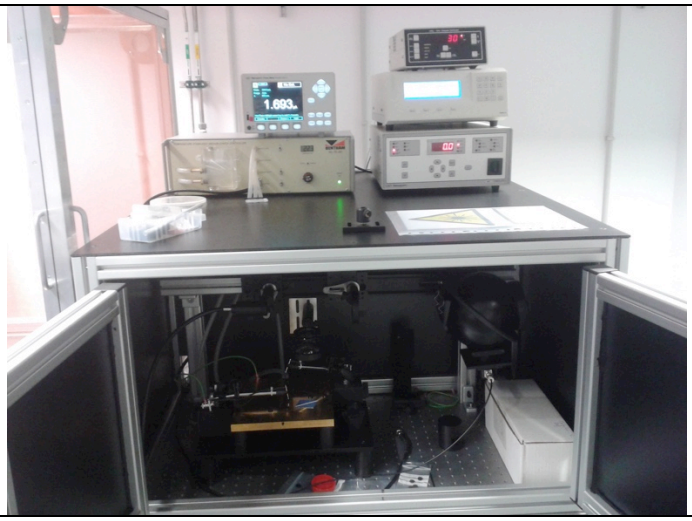
<table>
<tr><td colspan="2">  </td><td>THz and Solar cells laboratory</td></tr>
<tr><td colspan="3">Description</td></tr>
<tr><td colspan="3">The group is devoted to detection and emission of terahertz radiation at room temperature by using submicron size transistors and characterization of solar cell (IV, CV, Quantum efficiency …). The group dispose of different equipment listed below as well as a license of TCAD Synopsys and Monte Carlo software, Pyroelectric detectors, quantum cascade lasers at 2.5THz and other different instruments (Lock-in amplifiers, pulse generators, source meters,…).</td></tr>
<tr><td colspan="3">Equipment</td></tr>
<tr><td>FT-IR Spectrometer-
Vertex 70v
Range: 8000 to 350 cm^{-1}
(10 - 240 THz)
at step: 0.16 cm^{-1}(4.8GHz)</td><td colspan="2"> 
</td></tr>
<tr><td>Highly sensitive 4K Silicon bolometer
600 to 10 cm-1 (0.3 - 18 THz)</td><td colspan="2">  </td></tr>
<tr><td>Terahertz time domain spectroscopy system (TDS-THz) range: 0.2-3THz</td><td colspan="2"> 
</td></tr>
</table>

Terahertz imaging system at 0.15 and 0.3THz	
Probe station (Cascade PureLine/MicroChamber 11000B)	
Agilent B1500A Semiconductor Device analyzer (4 SMUS, C-V and transient units)	
External and internal quantum efficiency of solar cells, Transmittance and reflectance in the range from 200nm to 1100nm.	

Solar simulator	
Closed Cycle Optical Cryostat 4K OptistatAC-V12