

Advanced electrical characterization of functional oxide based devices

A postdoctoral research position with a focus on advanced electrical characterization of functional oxide based devices is available at GREYC (CNRS UMR6072) in Caen (France). On-going projects include studies of the effect of defects on electronic transport in epitaxial $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ (LSMO) thin films in order to better design sensors fabricated in the clean room of the lab. The scope of the present project is to study the electrical properties of unpatterned and patterned oxide thin films grown by Pulsed Laser Deposition using Deep Level Transient Fourier Spectroscopy (DLTFS) in closed loop cryostat and electrical modes of scanning probe microscopy, namely conductive Atomic Force Microscopy (AFM) with resistive module, Kelvin Probe Force Microscopy (KPFM) with a possible UV to visible illumination.

Requirements:

- PhD Degree in Physics, Electronics, Material Science or Condensed Matter Physics
- Creative thinking, problem-solving; working both individually and in team

Experimental skills are required. Preference will be given to applicants having experience with DLTFS and/or electrical modes of scanning probe microscopy. Background in related electrical measurement methods and fabrication processes such as pulsed laser deposition, metal deposition, etching and photolithography could be well considered.

How to apply:

Send your CV that includes a list of publications, a one-page statement of your research experience and interests, and letter(s) of reference to **bruno.guillet@unicaen.fr**

Deadline for applications: September 1, 2018

but late applications may also be considered if the position has not been fulfilled.

Start date: October 1, 2018

Duration: One year (expandable to two years)

Location:

GREYC (CNRS UMR 6072)
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