

Post-Doctorate Position

Advanced Characterization of GaN power Devices

In the framework of the ICPEI/Nano 2022 project, Ampere laboratory will recruit a postdoctoral position to achieve advanced characterization of GaN power devices.

The main target corresponds to lateral diodes on GaN (with a 2DEG channel) but some test could be applied to HEMT devices depending on the availability.

On diode devices the targets are

- Identification of electrically active defects (traps) in GaN Diode by DLTS
- Impact of the possible ageing on the defects
- Characterization of the efficiency of periphery protection by optical setup (Optical Beam Induced Current)

On HEMT devices the targets are

- Identification of electrically active defects (traps) in HEMT by DLTS
- Impact of the possible ageing on the defects

During each test, some electrical characterization will be achieved to follow the possible aging.

The candidate must have some knowledge on Power Electronics. An experience in Power Semiconductor Device characterization or reliability test will be appreciated.

Duration: 12 months

Start: from March

Contact:

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