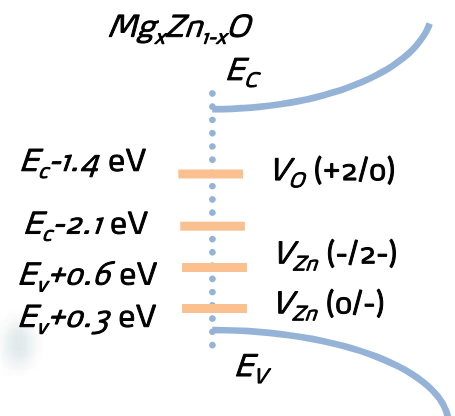
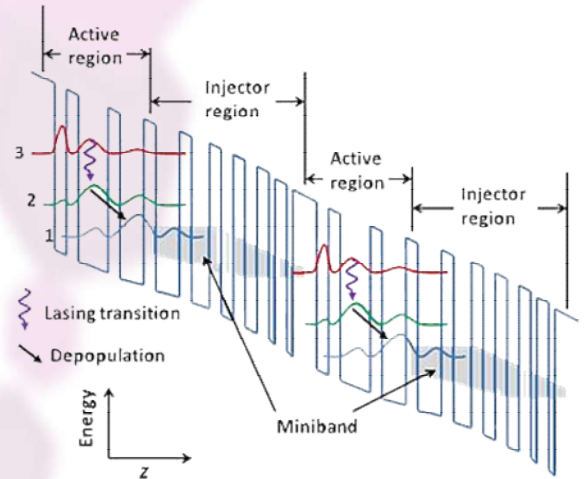


PHD THESIS

The goal of this PhD thesis is to contribute to the EU Project "Zinc Oxide for TeraHertz Cascade Devices (Zoterac)" dedicated to the development of THz quantum well infrared photodetectors (QWIPs) and quantum cascade lasers (QCLs), using ZnO/MgZnO quantum wells (QWs). To do so, the electrical properties of the heterostructures will be analyzed with advanced electrical and defect/trap spectroscopies.

This PhD thesis will be undertaken at ISOM-UPM under the framework of the Zoterac project, in close collaboration with CRHEA-CNRS (France), Univ. Paris-Sud (France), ETH-Zurich (Switzerland) and Tech. Univ. Wien (Austria).

ISOM-UPM (www.isom.upm.es) is a leading institution in IR semiconductor optoelectronics and advanced electrical/trap analysis.



Benefits: 4 year-long fellowship (gross income: 1375€/month), course registration fees, health insurance, full coverage of research stays at other institutions and attendance to international conferences.

Prerequisites:

- B.S. in Physics, Electrical or Material Science Engineering (M.S. a plus).
- Programming skills (LabView preferred).
- Interest in semiconductors device physics and electronics.
- High level of English (Spanish not necessary).

Applications:

Adrian Hierro, adrian.hierro@upm.es
Include Letter of Presentation, Curriculum Vitae, and BS/MS Diploma with Courses and Grades.