



Thematic Network on Silicon on Insulator Technology, Devices and Circuits.
[IST-1-506653-CA]

EUROSIOI "Who is Who" Guide

Name of the organisation

<i>Organization Legal name:</i>	Universidad de Granada
<i>Organization short name:</i>	UGR
<i>Internet homepage:</i>	http://www.ugr.es/

Contact person

<i>Name:</i>	<i>GAMIZ</i>	<i>Title:</i>	<i>Prof</i>
<i>First name:</i>	<i>Francisco</i>	<i>Sex:</i>	<i>M</i>
<i>Phone:</i>	<i>34 958 246145</i>	<i>E-mail:</i>	<i>fgamiz@ugr.es</i>
<i>Postal Address</i>	<i>Departamento de Electrónica y Tecnología de Computadores. Facultad de Ciencias. Avd.Fuentenueva s/n 18071 Granada SPAIN</i>		

Other Senior Researchers (SOI area):

Juan Roldán, jroldan@ugr.es, Andrés Godoy agodoy@ugr.es, Juan Carceller jcarcell@ugr.es, Pedro Cartujo pcartujo@ugr.es, Juan A. López-Villanueva jalopez@ugr.es, Pedro Cartujo-Cassinello cartujo@ugr.es, Francisco Jiménez jmolinos@ugr.es, Carlos Sampedro csampe@ugr.es, Andrés Roldán amroldan@ugr.es

Experience and expertise fields: (50 words)

UGR has 20 years experience in simulation on electron devices and in particular SOI technology. Modelling of semiconductor devices with emphasis on Full band Monte Carlo transport techniques for free and quantized electron gases.

Facilities and Equipment:

In house developed device simulators:

- 1) Self-consistent Monte Carlo transport simulator for free electron gas (3d in k-space, 2d in r-space, bulk and SOI MOSFET) in different materials Si, Ge, strained-Si, III-V
- 2) general purpose Schroedinger Poisson solver in the effective mass approximation for multi-dielectric gate stacks featuring both electron and hole quantization and tunnelling gate current calculation.
- 3) general purpose self-consistent Monte Carlo transport code for quantized electron gas (2d in k-space, 2d in r-space, bulk and SOI MOSFET).

Three last international research projects:

SINANO
EXTRA