Ultra-high resolution lithography using electron beams (EBL)

ISOM Science and Technology Service within the framework of the field of PROCESSING TECHNIQUES



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Technological Offers type

Technological scientific services

Research and innovation areas

- Digital Technologies, Artificial Intelligence, Cybersecurity, 5G, Robotics
- Industry, Materials and Circular Economy



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Where?

ISOM Semiconductor Devices Group University Optoelectronics and Microtechnology Systems Institute

Keywords: | ebeam litho | electron microscopy | nanofabrication | nanotechnology | PMMA

High resolution electron beam lithography

Electron beam lithography equipment enabling designs of less than 50 nm to be carried out. The beam has a minimum diameter of 2 nm. The system has also been recently updated with a high precision interferometric stage.

Description of the services offered

- Production of all kinds of nanometric devices using electron beams.
- Training in the use of electron beam lithography

Needs requested and applications

It is increasingly necessary to produce devices with nanometric sizes. Devices of these sizes have different properties from micromillimetric devices. Their high aspect ratio means that they are more sensitive devices that consume less energy.

Sector or area of application

Nanotechnology, electronics, optoelectronics, photonics, energy, spintronics.

Differential skills

It is the equipment with the highest resolution for producing nanometric devices in the country. It is up-to-date with the very best features and is the testing and demonstrating bench for the Japanese company in Europe.

Previous references for provision of services

National projects, European projects, international projects.

Where it is

ISOM. HTSE for Telecommunications

Protocolo de Acceso