

Dry Plasma Etching Service

ISOM Science and Technology Service within the framework of the field of processing techniques research





Contact information

Address: ISOM, Universidad Politécnica de Madrid, E.T.S.I. Telecomunicación. Edificio López Araújo, Avenida Complu

Phone number: 910672593

Website: isom.upm.es

Email: manuel.abuin@upm.es

Technological Offers type

Technological scientific services

Research and innovation areas

- Digital Technologies, Artificial Intelligence, Cybersecurity, 5G, Robotics
- Industry, Materials and Circular Economy
- Science For Engineering and Architecture

ODS



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Where?

ISOM Semiconductor Devices Group University Optoelectronics and Microtechnology Systems Institute

Keywords: | [plasma](#) | [processing techniques](#) | [reactive attack](#)

Dry reactive plasma material etching ICP-RIE

This equipment makes it possible to attack and eliminate various materials using a Reactive plasma (RIE). The combination of up to six different gases means that almost all kinds of materials used in micronanoelectronics can be etched. The direction of the etch is highly vertical due to the ICP and the system also has an endpoint detector meaning the etching process can be ended when the next structural layer or underlying material is reached.

Description of the services offered

- Etching layers of materials that are not protected by resins or metal overlay. From a few nanometres to a few micron
- Training in using the reactive ion etching equipment

Needs requested and applications

This equipment is used after lithography to remove excess material. It can also be used to create nanocolumns or nanowires.

Sector or area of application

Nanotechnology, electronics, optics, optoelectronics, electronic and magnetic devices

Differential skills

A cleaning process is carried out after every use and, therefore, it is equipment that enables high reproducibility when it comes to making devices. The technicians in the white room have also optimised all the formulae over a period of many years, which means that client requirements are achieved in a very short space of time. The most differential element is the endpoint detector which makes precision etching of a layer without damaging the next one possible.

Previous references for provision of services

Examples of work done can be shown on request from the client

Where it is

ISOM. HTSE for Telecommunications

Request for service

[Protocolo de Acceso](#)
