

Micro and Nanofabrication Clean Room

Techniques and equipment

IMPLANTATION

Two medium current ion implantation systems are available for implanting a number of species: B, P, As, N, Ar, Al, Si, Mg, O, He.

Surface: 106 m²

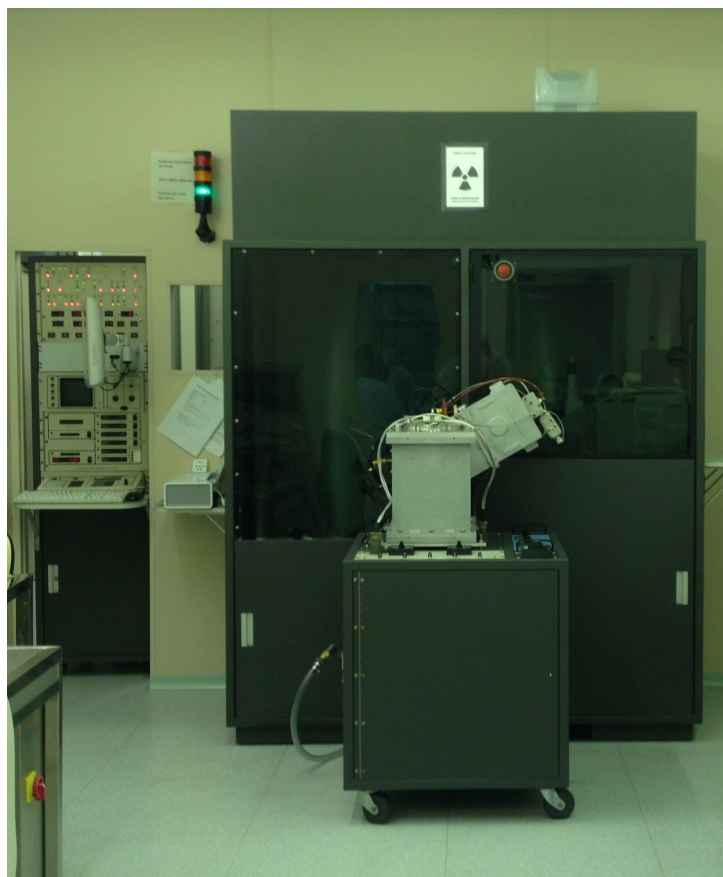
Available technologies

- *Ion Implantation: Medium current implantation.*
- **Ion Implanter IBS IMC 210RD:**
- Medium current implanter used to introduce dopants into the wafers.
- Precursors: BF₃, SiF₄, N₂, Ar, CO₂, He /Ar, As, P, Mg, AlCl₃, GeS₂ and H₂O.
- Implanted doses from 1.0x10¹¹ to 1.0x10¹⁷ at/cm².
- Energy from 1 to 210 KeV in simple charged.
- Angle of incidence (tilt): From 0 to 15 ° at standard chamber and from 0 to 10° at R & D chamber (limited by software).
- Maximum wafer diameter: 150 mm.
- Temperature: Possibility to heat the wafer up to 500 ° C.
- Exclusively to process CMOS samples.



a) Ion Implanter EATON NV4206:

- Medium current implanter used to introduce dopants into the wafers.
- Precursors: BF_3 , SiF_4 , Ar, N_2 , P and As
- Implanted doses from 1.0×10^{12} to 5.0×10^{15} at/cm².
- Energy between 30 and 150 KeV.
- Angle of incidence: (tilt): 1-15° limited to 7° on control system software.
- Maximum wafer diameter: 100 mm.
- Exclusively to process CMOS samples.



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