

IBS can undertake your R&D project and tests thanks to its long experience in this domain. The expertise of our engineers is available to assist you in defining your process.

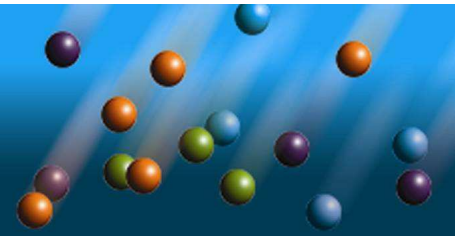
The Total Ion Implantation Solution

- You look for expertise in ion implantation to lead your new R&D project ?
- You need to run some tests to adapt your process to your objectives ?
- You need a R&D tool for your prototypes ?
- You need a customised service for your unique process ?
- We offer the most complete implant “service” in the industry that can process wafers and substrates from 2” to 200mm, with 300mm plasma ion implantation also available.
- Independence, Quality (ISO 9001/2000) and Confidentiality

Your benefit



- We offer flexibility at affordable price:
 - Versatility in your project
 - test your processes without capital investment
 - freedom to meet your objectives
- Support and follow-up of your projects
- R&D dedicated equipment
- Confidentiality - Quality proved by Statistical Process Control
- Precise controls of contamination, uniformity and reproducibility
- Application fields: microelectronics, power devices, optics, flat panel displays, material science



IBS R&D offer

- Species: any species from the periodic table of the elements
- Substrate: any material (InSb, AsGa, Al₂O₃, GaN, InP, Ge, sapphire...)
any shape: square, triangle, partial and/or non-plane substrates,...)
any size: from pieces of wafers up to 300mm wafers
special handling tool for thin wafers
- Dose: from 1^{E10} at/cm² to 1^{E17} at/cm²
uniformity on 200mm wafers: <1%
wafer to wafer reproducibility: <1%
- Energy: from few eV with PIII technology on PULSION™ implanter
up to 600 keV
- Implant temperature:
Low temperature implant available (Ln₂ cooling - down to -300 °C)
High temperature implant available (up to 600 °C)
- Tilt: from 0° to 10° in standard
from 0° to 160° upon request
- Rotation: available
- Profile simulations and characterisations

Activities range from technological development to fundamental research:

- Very low energy Boron and preamorphization implants for ultra-shallow junctions
- Nitrogen implants for surface layer synthesis
- Metal silicide synthesis
- Implantation into glasses for integrated circuits
- Noble metal or high energy proton implants for carrier lifetime control
- High temperature implants for SiC or other applications
- SIMS standard manufacturing
- Polysilicon doping for active matrix flat panel display

