

3D Atom Probe

3차원 원자탐침단층촬영분석기

Atom probe microscopy (APM) provides three-dimensional (3D) analytical mapping of materials with atomic scale resolution and so offers unique insights into both the chemical composition and atomic structure of matter.

Model

CAMECA (LEAP4000XHR)

Specifications

- Time of flight mass spectroscopy
- Mass resolving power : > 1100
- Lateral resolution : < 0.4 nm
- Depth resolution : < 0.2 nm
- Analytical sensitivity : < 10 appm

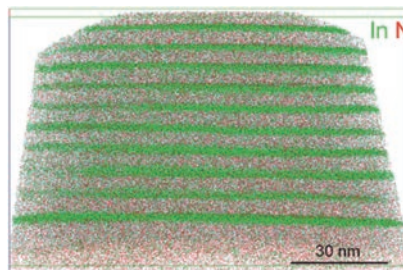
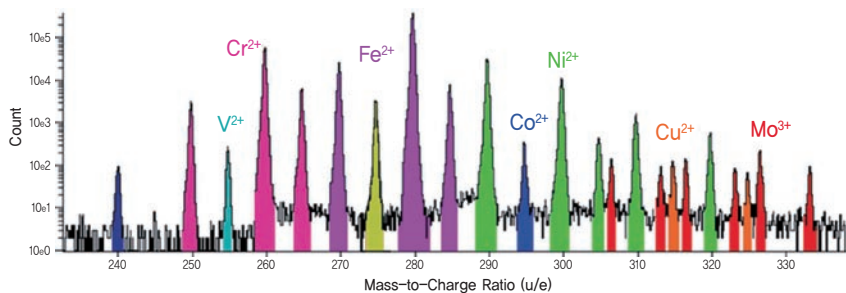
Applications

- Analysis of semiconductor and microelectronic devices
 - High-k dielectrics, 3D dopant distribution,
 - Boron out-diffusion in strained silicon, 3D devices
- Metals and advanced materials
 - Metallic alloys, thin films, dielectrics, nanowire

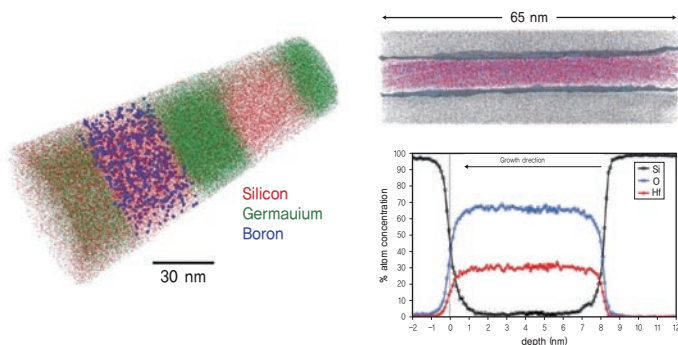


Location L5115C Tel.02-958-4946

High mass resolution & large field of view



Analysis of roughness and diffusion



Analysis of concentration profiles

