
Auger Electron Spectroscopy (AES)



Leibniz Institute
for high
performance
microelectronics

Technical Parameters

Auger Electron Spectrometer:

Physical Electronics PHI 670 Nanoprobe

Ion source: Ar⁺ Ions (Energy 1-5 keV)

Primary Beam: focused electron beam (1 - 25 keV) – Field emitter

Signal Detected: Auger electrons,
Secondary electrons

Elements Detected: Li-U; Chemical
bonding information

Lateral Resolution: 100 nm

Depth Resolution: 2 – 3 nm (Profiling
mode)

Detection Limits: 0.1-1at% sub-monolayer



Application areas

- Surface analysis
- Particle analysis
- Small-area depth profiling
- Defect analysis
- Thin film composition analysis

Contact person

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