

Ma 4 - XPS

Physics:

- Photoelectric effect (photoelectron and Auger electron)
- Fermi's Golden Rule
- Work function, Fermi energy
- Binding energy of core-level electrons

Technical:

- X-ray gun
- Hemispherical electron analyzer (HSA)
- Ultrahigh vacuum

Data analysis:

- Linear/Shirley backgrounds
- Lorentzian/Gaussian peak fitting