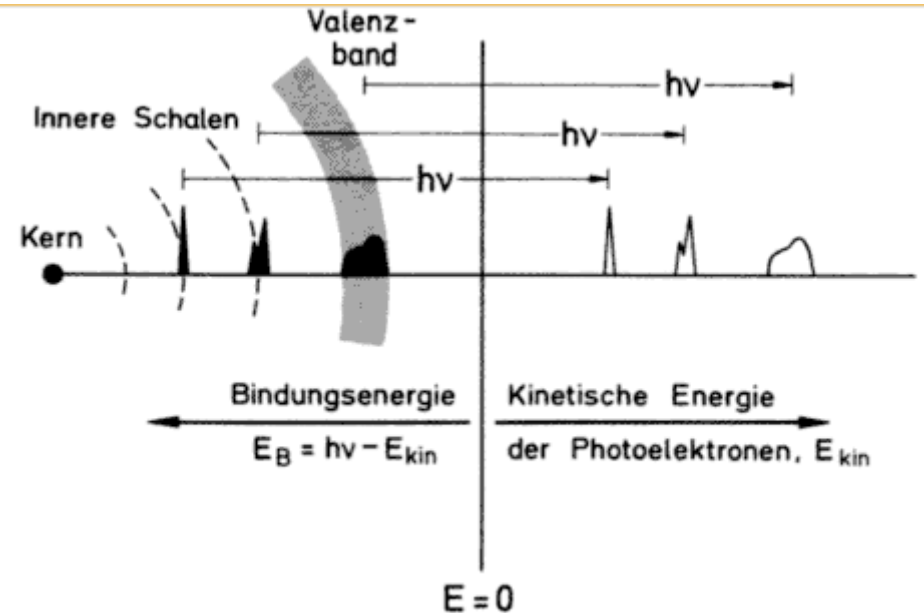
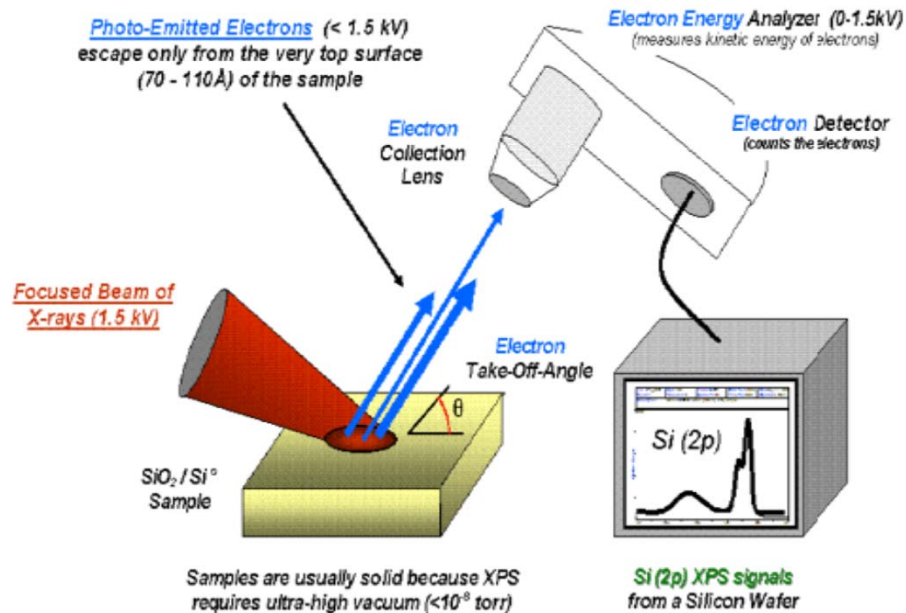
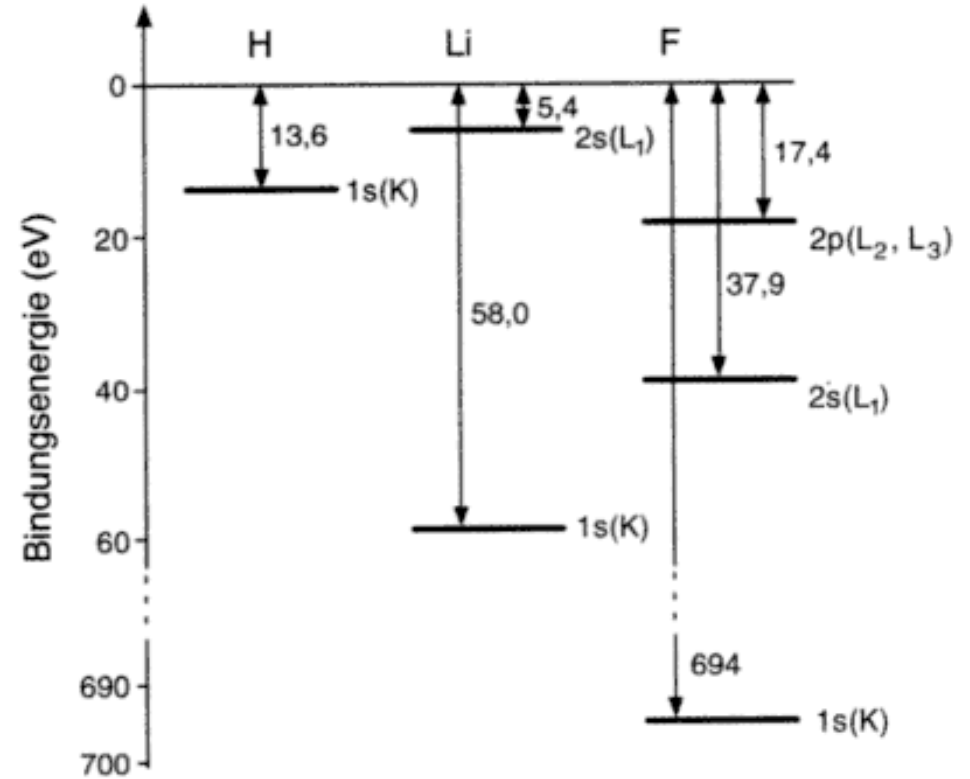


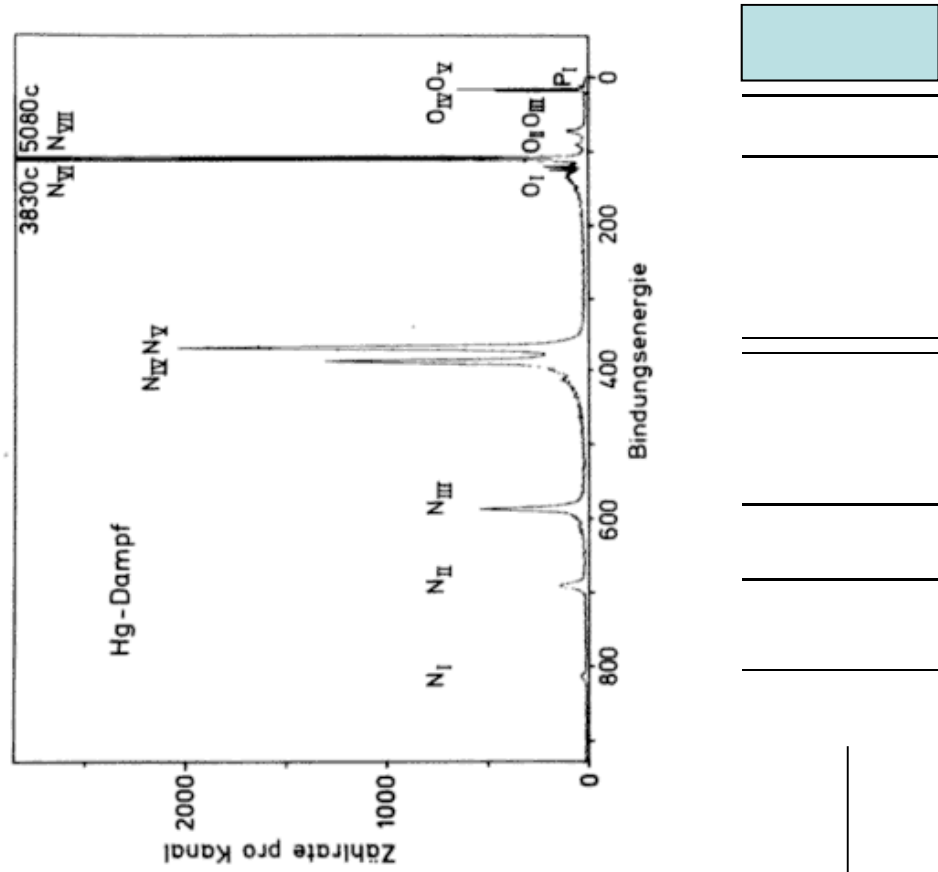
Deutung des Photoeffekts:
 A. Einstein 1921 Nobel Physik

Photoelektronenspektroskopie
 UPS / XPS
 Auch ESCA

Kai Siegbahn, 1981 Nobel Physik
 (Manne Siegbahn, 1924 Nobel Physik
 für die Röntgenspektroskopie)



XPS von Quecksilber



K, L und M Schale

X-ray Data Booklet:
<http://xdb.lbl.gov/>

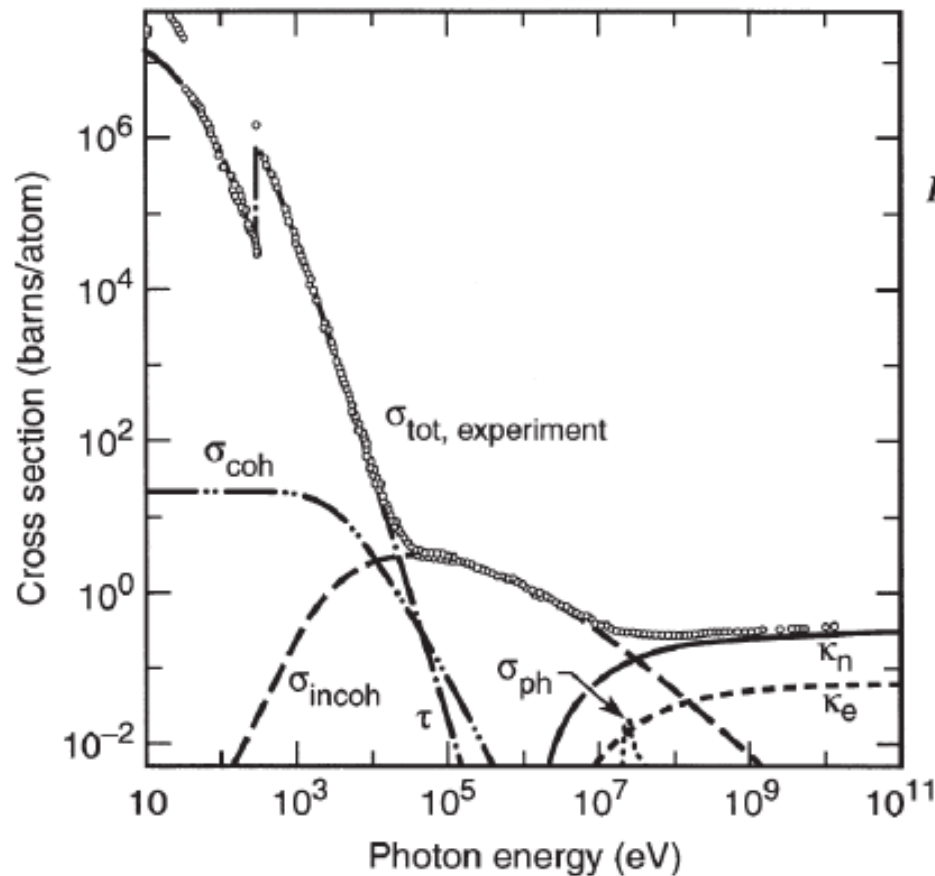


Fig. 3-1. Total photon cross section σ_{tot} in carbon, as a function of energy, showing the contributions of different processes: τ , atomic photo-effect (electron ejection, photon absorption); σ_{coh} , coherent scattering (Rayleigh scattering—atom neither ionized nor excited); σ_{incoh} , incoherent scattering (Compton scattering off an electron); κ_n , pair production, nuclear field; κ_e , pair production, electron field; σ_{ph} , photonuclear absorption (nuclear absorption, usually followed by emission of a neutron or other particle). (From Ref. 3; figure courtesy of J. H. Hubbell.)