

Supermirrors for the Surface Analysis Beamline at BESSY-II

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ABSTRACT

X-ray multilayer supermirrors as a beamline mirror elements for the BESSY II Surface Analysis beamline have been fabricated at LORXN and tested at BESSY. A multilayer mirror with 50 W/Si bi-layers of different thicknesses on a Si substrate has a smooth reflectivity of 12% - 30% in the whole energy range from 5 keV to 25 keV at a grazing incidence angle of 0.5°.

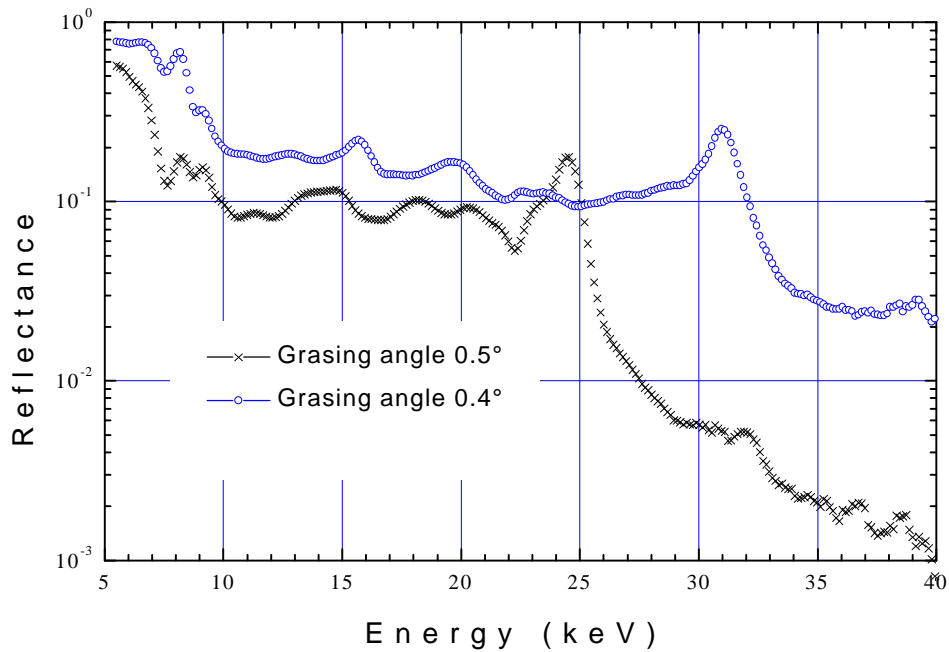


Fig.1 Supermirror reflectivity vs photon energy.