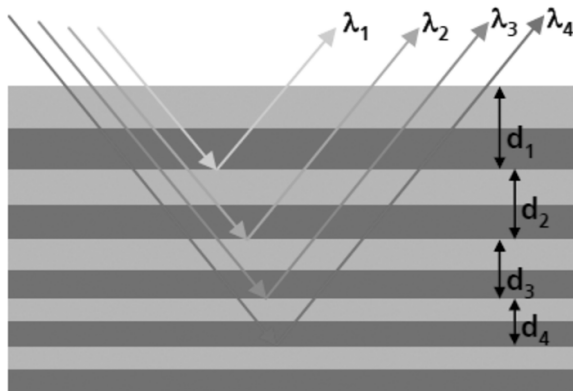
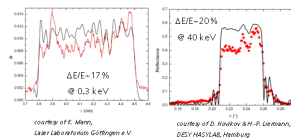




Depth graded multilayers / Broad band reflectors

- multilayer with various bilayer thicknesses to suit the Bragg conditions for many types of photon energy / wave length
- broad band or bandpass reflectors possible
- energy band width of 20% and more
- depth gradient optimized for EUV photon energy to hard X-ray (> 80 keV)
- relative energy band width is constant when the photon energy (and corresponding Bragg angle) changes
- adjustment of band width to a given spectral source
- high flow of photons through reflection of a great part of the spectral source, e.g. at Bending magnet or plasma source

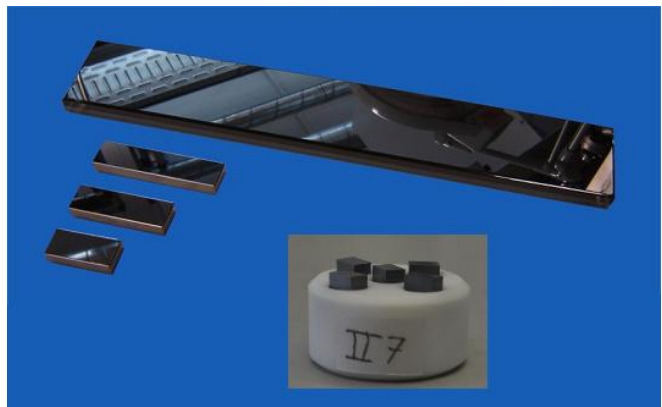
Measurement of broad band reflectors:



[Translate to English:]

Simulation (schwarz) und
Messung (rot) der
Reflektivität eines
Breitbandspiegels für den
EUV-Bereich (R-vs-lambda,
3.8-4.5 nm, links) und für den
harten Röntgenbereich (R-vs-
theta, Braggwinkel
0.21-0.26°, rechts).

Measurement of broad band reflectors:



[Translate to English:] Foto typischer Multilayerspiegel-
Abmessungen.

Multilayer reflectors can be produced in various sizes, from a few square millimeters (e.g. 6 x 4 mm² like shown in the picture) to a length of 500mm (typically synchrotron reflectors) or a diameter of 8" (wafer).

