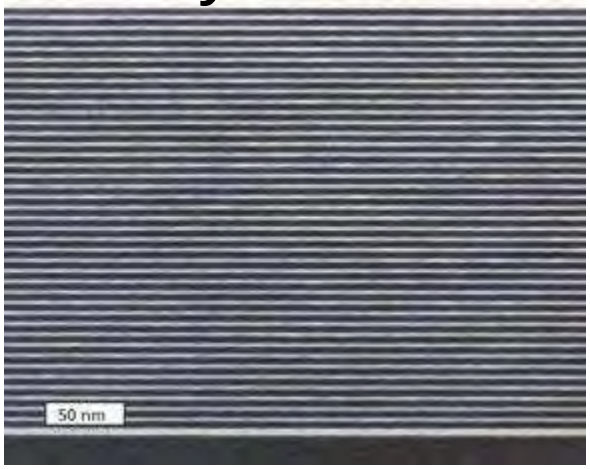
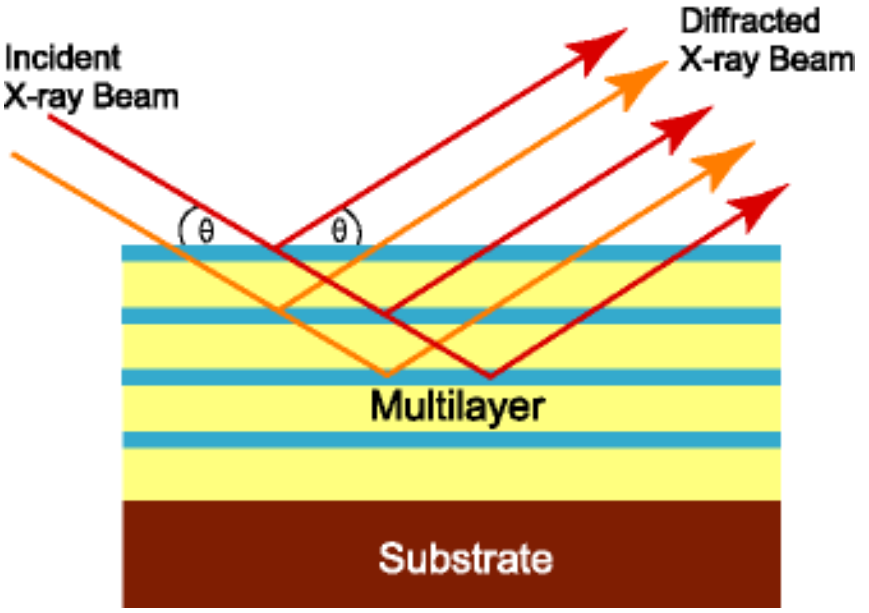
RIT Product–optics for hard and soft x-rays

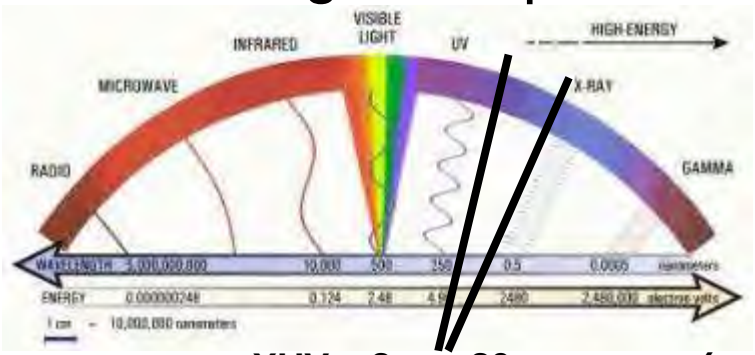
multilayer thin films



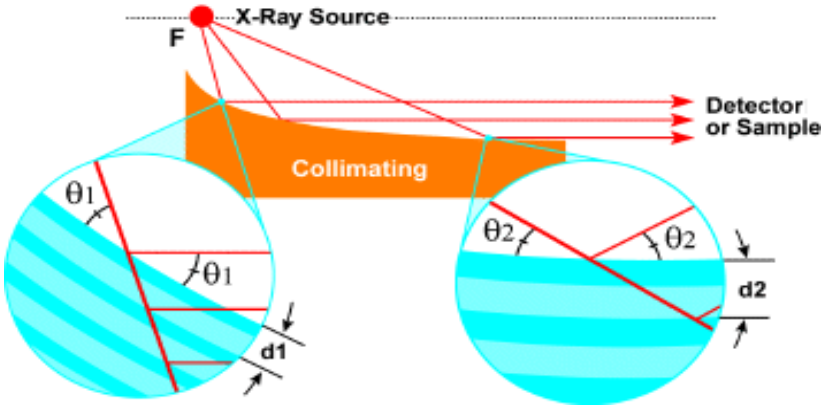


Collimating Multilayer Optic

electromagnetic spectrum



XUV ~ 2 nm-20 nm range (approx.)
EUV = 13.6 nm exactly



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Next generation EUVL?

Innovative Technologies

1st Generation EUVL

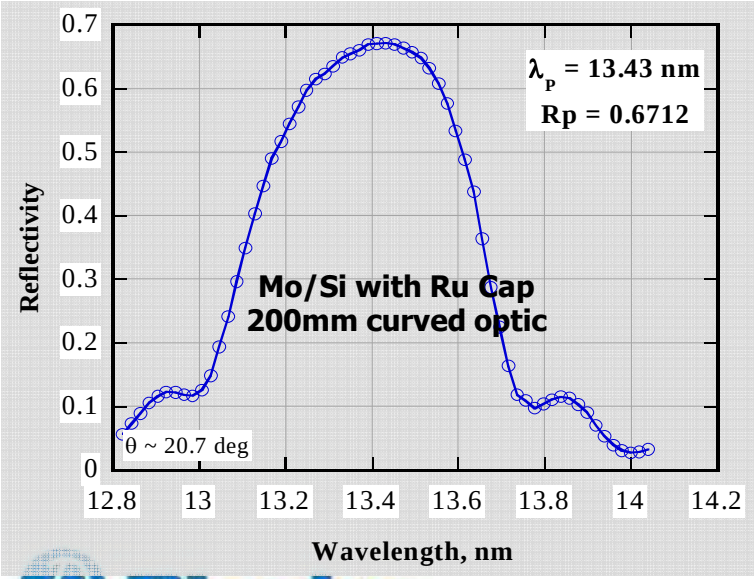
λ=13.5nm, Mo/Si LSM
R(calc) ~ 73%
Δλ(calc) ~ 0.54nm

R(exp) ~ 70%,
Δλ(exp) ~ 0.54nm

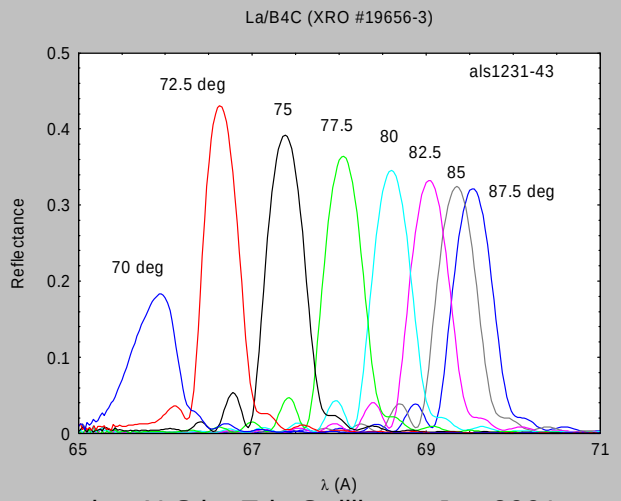
Next Generation EUVL

λ=6.7nm, La/B4C LSM
R(calc)~73%
Δλ(calc)~0.064nm

R(exp)=43% (Year - 2000)
Δλ(exp)~0.044nm



Y.Platonov, L.Gomez, D.Broadway, SPIE Proc. (2002), p152



Measured at ALS by Eric Gullikson. Jan.2001

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