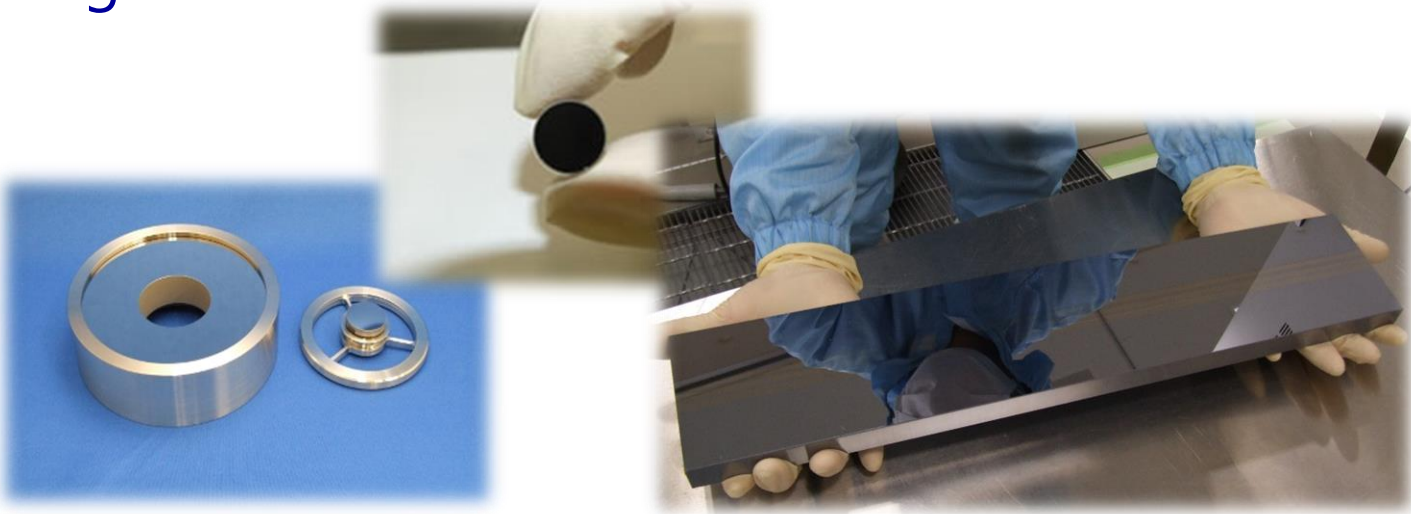


# XUV/X-ray Multilayer Mirror

---

NTT-AT provide custom/standard design multilayer mirror in XUV(EUV) region and X-ray region.



## **Fabrication**

- System: Magnetron-sputtering Multilayer Deposition
- Size: up to 400 mm dia. (Circular mirror)  
up to 500 mm (L) (Bar mirror)
- Coating accuracy: 1.5% (guarantee), <0.5% (target)

## **Evaluation**

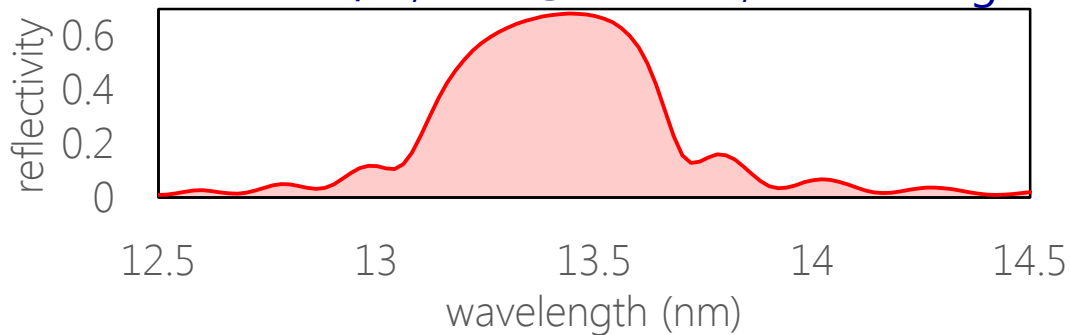
- Reflectivity measurement in Synchrotron Facility:
- XRR, TEM, SEM, AFM

## **Material**

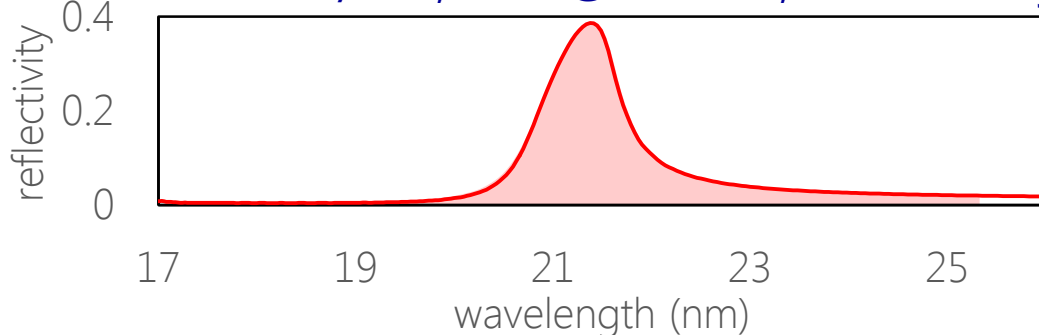
- Si base            Mo/Si, MoSi<sub>2</sub>/Si, Ru/Si, Nb/Si
- AlSi base        Zr/AlSi
- Mg base         SiC/Mg, Y<sub>2</sub>O<sub>3</sub>/Mg
- C base            W/C, Mo/C, Pt/C, Ru/C, Cr/C, CoCr/C
- B<sub>4</sub>C base        W/B<sub>4</sub>C, Mo/B<sub>4</sub>C, Cr/B<sub>4</sub>C

# Reflectivity measurement samples

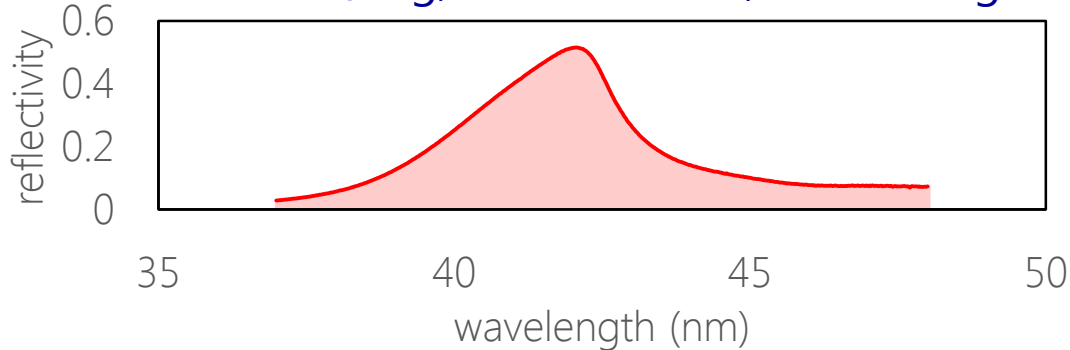
Standard Mo/Si, 68% @13.5 nm, AOI=2 deg



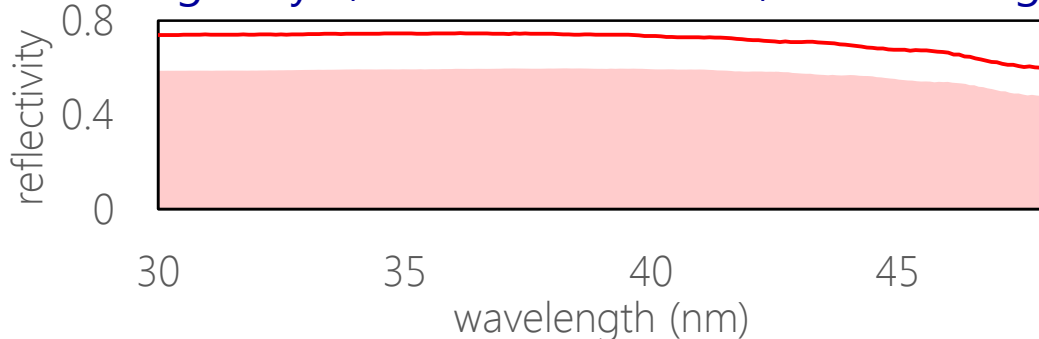
Narrowband Zr/AlSi, 39% @21.3 nm, AOI=45 deg



Standard SiC/Mg, 51% @41 nm, AOI=5 deg



SiC Single layer, 75% @25 – 40 nm, AOI=80 deg



NTT Advanced Technology Corporation

**Global Sales Section**

E-mail: [nano-sales@ml.ntt-at.co.jp](mailto:nano-sales@ml.ntt-at.co.jp)

WEB: <http://www.ntt-at.com>