Production of W samples for lab and linear-machine experiments

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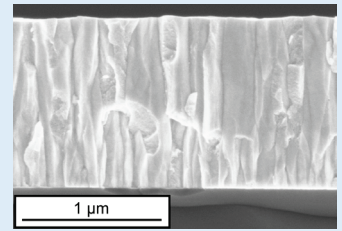
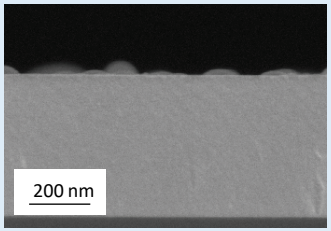
W samples for 2023

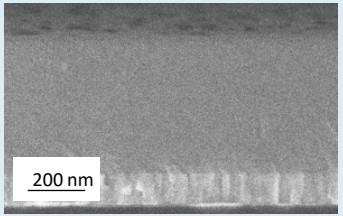
Coatings



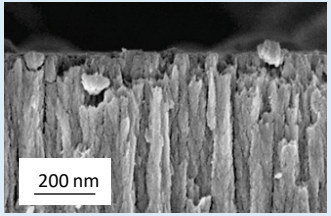
W compact



W+O



W+N+O

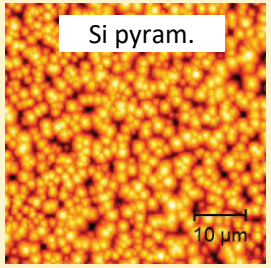


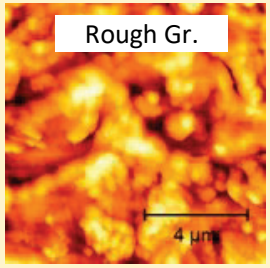
pW+O

- **W compact**: nanocrystalline, bulk W density, crystalline oriented growth (HiPIMS)
- **W+O**: amorphous-like struct., 15% O, density: 60% of bulk W (PLD)
- **W+N+O**: amorphous-like structure, +28% O, 17% N (PLD)
- **pW+O**: porous morphology, 50% O, density: 30% of bulk W (PLD)

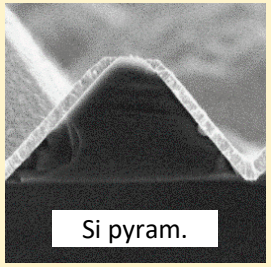
Substrates

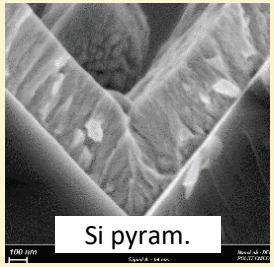
AFM





SEM





- Flat molybdenum (PSI-2 and DIFFER shapes) or W
- Flat silicon and graphite
- Rough graphite (by ISTP-CNR plasma etching)
- pyramidal-Si substrates (by ISTP-CNR chemical etching)
- Au coated quartz microbalance resonators (for ÖAW lab experiments)