

ETIC (Einstein Telescope Infrastructure Consortium) – ETICO² Coatings

Coating Deposition Laboratory

- ❑ Deposition of dielectric multilayers for mirror coatings
- ❑ High-temperature thermal evaporation and e-beam deposition

Coating Characterization Laboratory

- ❑ Surface and optical characterization
- ❑ Atomic-Force Microscopy and Spectroscopic Ellipsometry

Thermo-optics Test Laboratory

- ❑ Temperature-dependent optical properties of dielectric coatings
- ❑ Thermal and photothermal effects

Thermo-optics Computational Laboratory

- ❑ Computational methods for multilayer systems
- ❑ Linear expansion coefficient and thermal conductivity

Glove-box-integrated deposition chamber

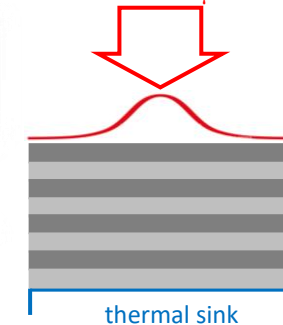


(all sample images)

High-power SM NIR laser



1.06-1.55 μm



thermal sink

Optical cryostat



Workstation

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Transient absorption & time-resolved photoluminescence spectroscopy

- Femtosecond to nanosecond excited-state processes
- Photoinduced absorption of electronic defects



*fs TA spectrometer
ps streak camera*

Additional resources

- SEM-EDX
- HR-TEM
- Thin-film XRD



SEM-EDX



HR-TEM

(all sample images)



Thin-film XRD

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