Transverse Shear Microscopy

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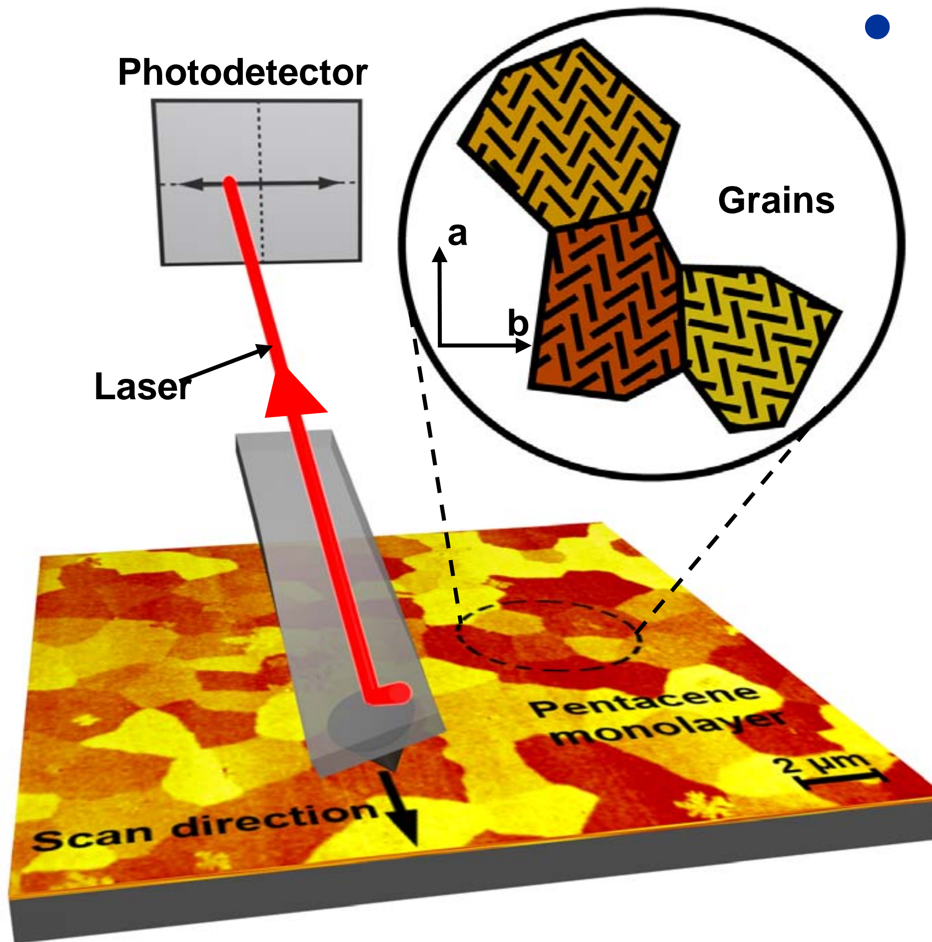
NNIN Facility utilized: Characterization Facility



- Transverse Shear Microscopy (TSM)
  - A contact mode variant of Atomic Force Microscopy
  - Reveal grains in ultrathin polycrystalline organic semiconductor films
  - Sensitive to relative orientation between the scan direction and the crystallographic direction
  - Can be used to generate Grain Orientation Maps

- TSM can be used for following analysis:
  - Grain Shape
  - Grain Size
  - Grain Boundary
  - Diffusion Activation Energy