THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

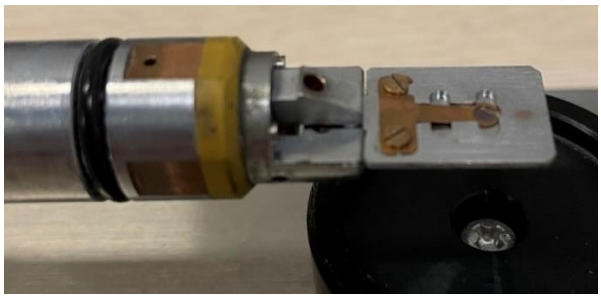
University Research Facility in
Materials Characterization and
Device Fabrication
材料與器件中心實驗室

UMF Equipment – JEOL Single Tilt Holder

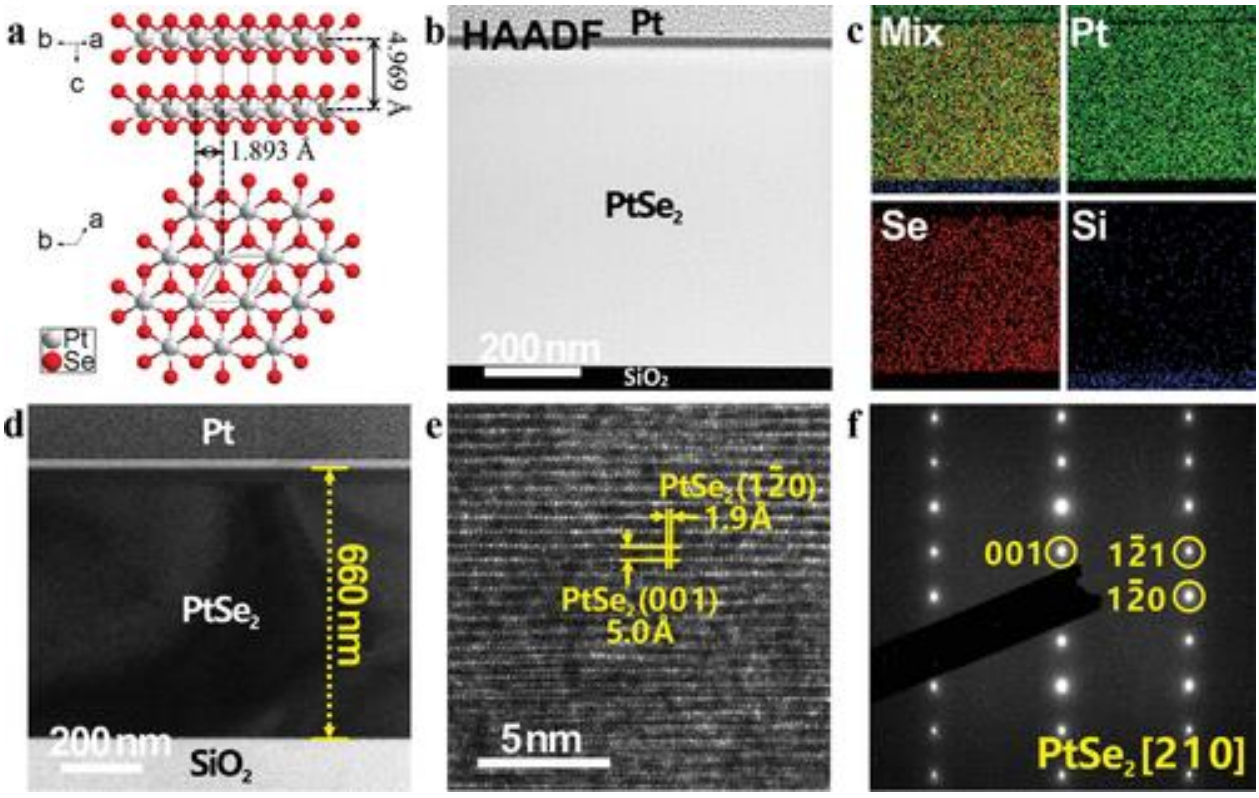
The JEOL Single Tilt Holder is an essential component of transmission electron microscopy (TEM) systems. It is used to hold samples securely and accurately in the path of the electron beam, enabling high-resolution imaging and EDX analysis. This holder is designed with a single-axis tilt mechanism, which allows the sample to be tilted up to ±15° relative to the electron beam. This feature is especially useful for examining the three-dimensional structure of materials, as it provides a way to view the sample from different angles and perspectives.

Features:
- Tilt ±15° around x-axis
- High Resolution & EDX Capable

For any enquiry, please contact Dr. Wei Lu (Tel: 34002077; Email: wei.lu@polyu.edu.hk) or Mark Lai (Tel: 27667797; Email: kh1lai@polyu.edu.hk)



Application:



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Crystal structure of PtSe2 and TEM characterization of a PtSe2 planar waveguide. a) Crystal structure model of the PtSe2 along the [210] (top image) and [001] (bottom image) directions. The unit cells are indicated by black lines. b) Cross-sectional HAADF STEM Z-contrast image with the electron beam along the [210] direction. c) The corresponding EDS elemental mapping of (b). d,e) Cross-sectional low-resolution and high-resolution TEM images, respectively, with electron beam along the [210] direction. f) The corresponding SAED pattern of (e).