

Investigations of 2D materials in the Transmission Electron Microscope (TEM)



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With its high lateral resolution and the capability of performing spectroscopic measurements, the TEM is a versatile tool to complement Light Microscopy (LM) and Atomic Force Microscopy (AFM).

We present preliminary results obtained from GaSe and WSe₂ layers. Taking high resolution images we obtained structural information for both materials. As shown in the figure the image of WSe₂ layers shows considerable variations of intensity, indicating differences in the projected mass density. Using spectroscopic imaging, differences in the energy of plasmon losses were observed, when comparing regions of different intensities.

