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**Title:**

**"Scanning Probe Microscopy (SPM) studies of 2D Materials"**

**Abstract:**

Scanning Probe Microscopy (SPM) is a unique tool to understand different properties of materials at nanoscale. Each mode of SPM offers unique capability to understand various aspects of material properties like morphological, magnetic, electrostatic, thermal, piezoelectric etc at nanoscale.

Scanning Tunneling Microscopy/Spectroscopy (STM)/(STS) is used to study information about Local Density of States (LDOS) which can be used to understand edge states of 2D materials. Electrostatic Force Microscopy (EFM) has been proven to be effective to evaluate layer numbers in 2D structures. By measuring surface potential or work function using EFM, this technique can be used for identify different regions if combination of two different 2D structures is made. Some recent studies on 2D materials using different modes of SPM will be discussed.