

Principles and Applications of Angle- and Spatially-Resolved EELS

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Electron energy loss spectroscopy (EELS) has become a mainstream characterization method. It provides access to high spatial resolution analytical and electronic properties information in a TEM. When combined with the imaging and diffraction capabilities of a TEM a nanomaterial can be characterized in great detail. The aim is to review the principles and implementation of angle- and spatially-resolved EELS and its applications to study of material properties at nanoscale. Fundamental limits imposed on momentum and spatial resolution will be discussed.