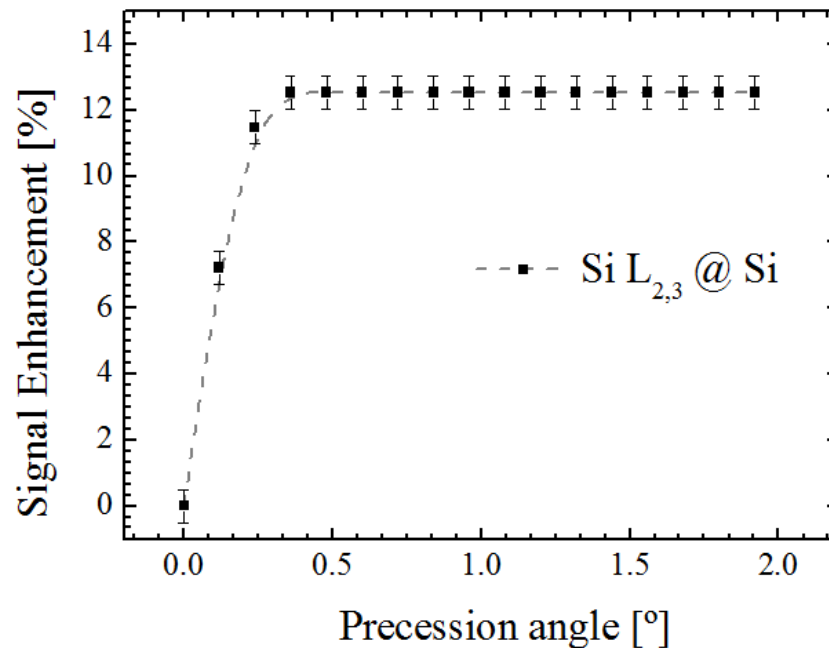
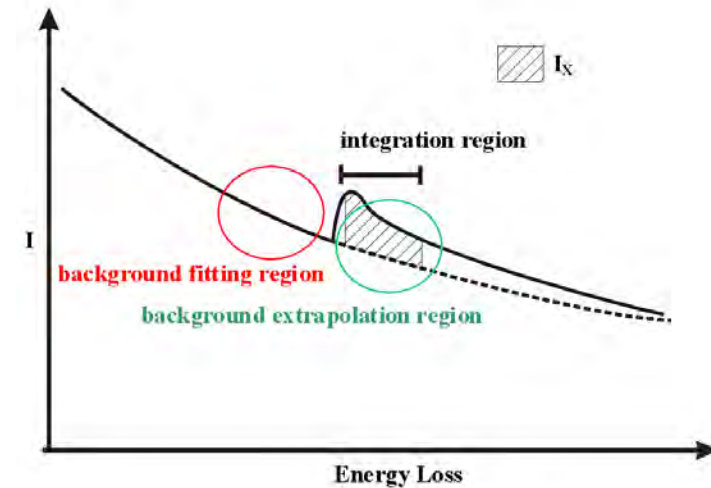
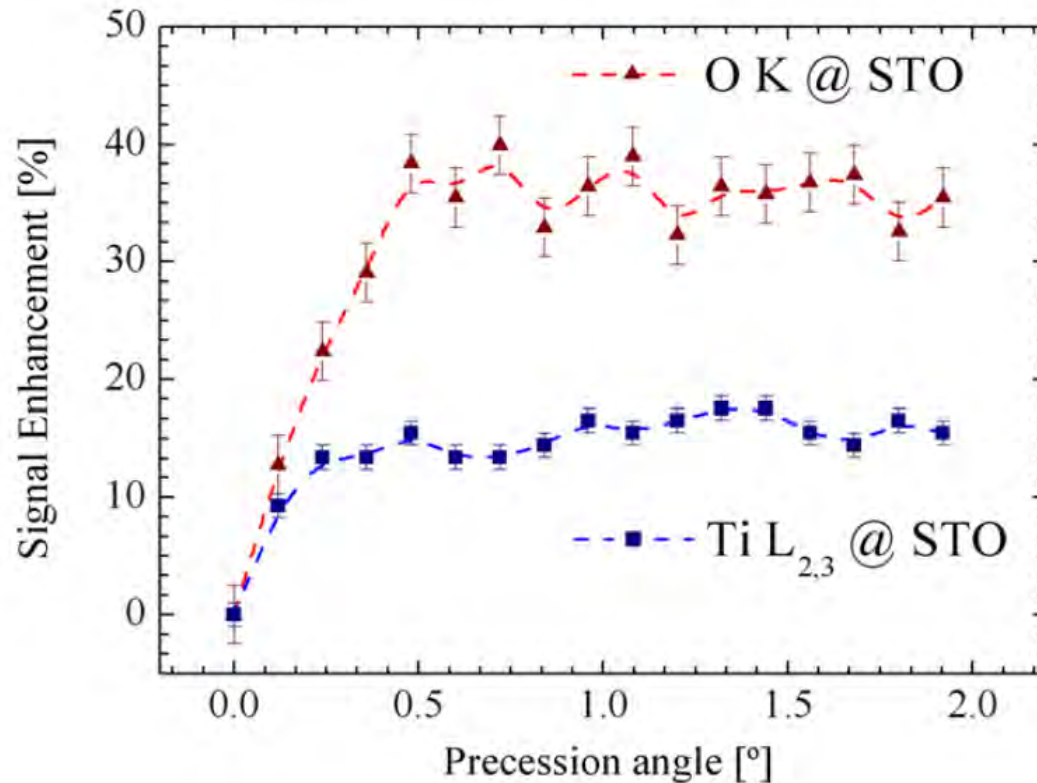


0.48° precessed and precession-less EEL spectra showing the Si L<sub>2,3</sub> edge in a Si crystal in <110> zone axis conditions.



Signal enhancement as a function of precession angle for the Si L<sub>2,3</sub> edge in a Si crystal in <110> zone axis conditions.



The signal enhancement (SE) for a given precession angle  $\alpha$  is given by

$$SE = (I(\alpha) - I(0)) / I(0)$$

EELS Signal enhancement as a function of precession angle experiment for SrTiO<sub>3</sub> (STO) crystal along the [001] zone axis: the O K and Ti L<sub>2,3</sub> edges are measured under changing precession angles from 0° to 1.92°