

# HIKE: the HAXPES Facility at BESSY II

In the last decade hard x-ray high kinetic energy photoelectron spectroscopy (HAXPES or HIKE) has led to a break-through in the field of photoemission due to its non destructive way of investigating the bulk electronic properties of materials and in particular buried interfaces in layered systems. Nanolayered systems are the keystones of current and future devices. The electronic, magnetic and magneto-transport properties of these structures are determined not only by the characteristics of each layer, but also by their interfaces.

The HIKE facility at the Berliner synchrotron light source BESSY II successfully combines the bending magnet source of the KMC-1 beamline [1] with a new generation electron spectrometer optimized for high kinetic energy electrons. In the present contribution several experiments performed at the HIKE HAXPES user facility [2] will be detailed with emphasis on the performance and abilities of the technique.

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