Contribution ID: **9** Type: **Invited Talk**

Hard X-ray Photoelectron Spectroscopy at DESY

Monday, November 4, 2024 3:00 PM (30 minutes)

Photoelectron spectroscopy using excitation by hard X-rays in the range of 2.5-10 keV (HAXPES) is rapidly developing at synchrotron light sources worldwide. Its comparatively large probing depth (10-30 nm) makes it a powerful tool for the study of complex materials, magnetic (buried) nanostructures, device-like structures, and catalytic interfaces.
The P22 beamline at PETRA III is a cutting-edge facility dedicated to HAXPES techniques, featuring four specialized experimental end stations for high-resolution studies of the electronic structure of solids. These instruments are fully operational and used in close collaboration with external user groups, reflecting the wide range of scientific fields engaged by the P22 beamline community. The P22 beamline first received light in November 2017 and conducted its first user experiments in June 2018. Since then, it has contributed to over 100 publications. Access to P22 is granted through a rolling review process, with accelerated turnover times as short as two months. Users from Ukrainian universities can receive full travel reimbursement under the new EU program NEPHEWS.
This contribution provides a concise overview of the experimental capabilities of the P22 beamline and highlights the most prominent scientific results from the HAXPES end station.

Type of presence

Presence online

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