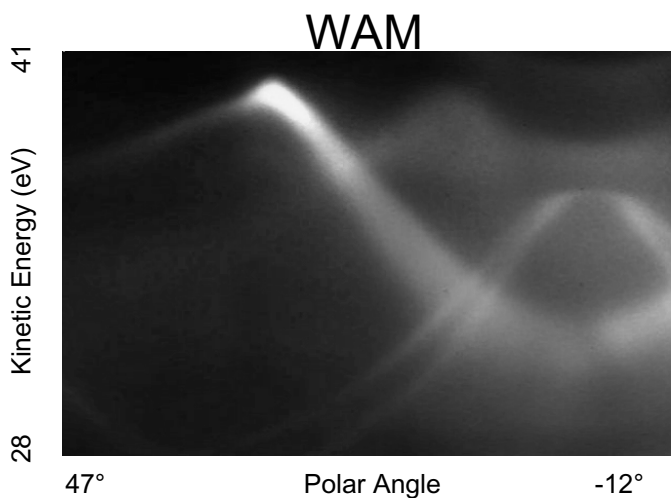


Band Structure of Crystalline Graphite Layers on SiC(0001)

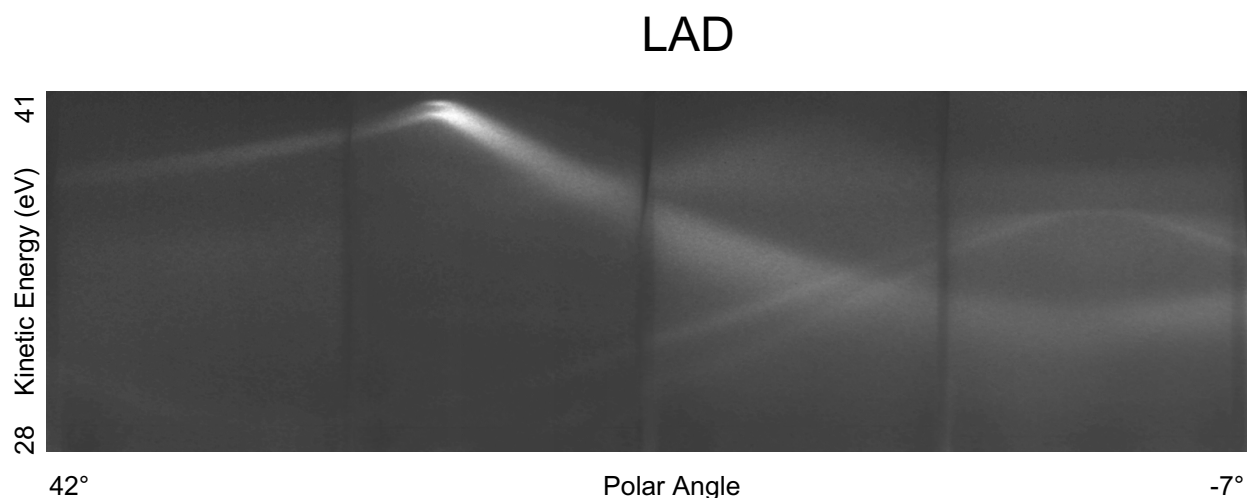
Application Notes

The band structure of crystalline graphite layers on the (0001) surface of SiC was measured by high-resolution angle-resolved photoelectron spectroscopy. The experiments were performed using a SPECS UV source 10-35, which has an energy resolution of about 2 meV and a spot size of about 0.6 mm in diameter. The photon energy for all measurements were 40.81 eV (He II).

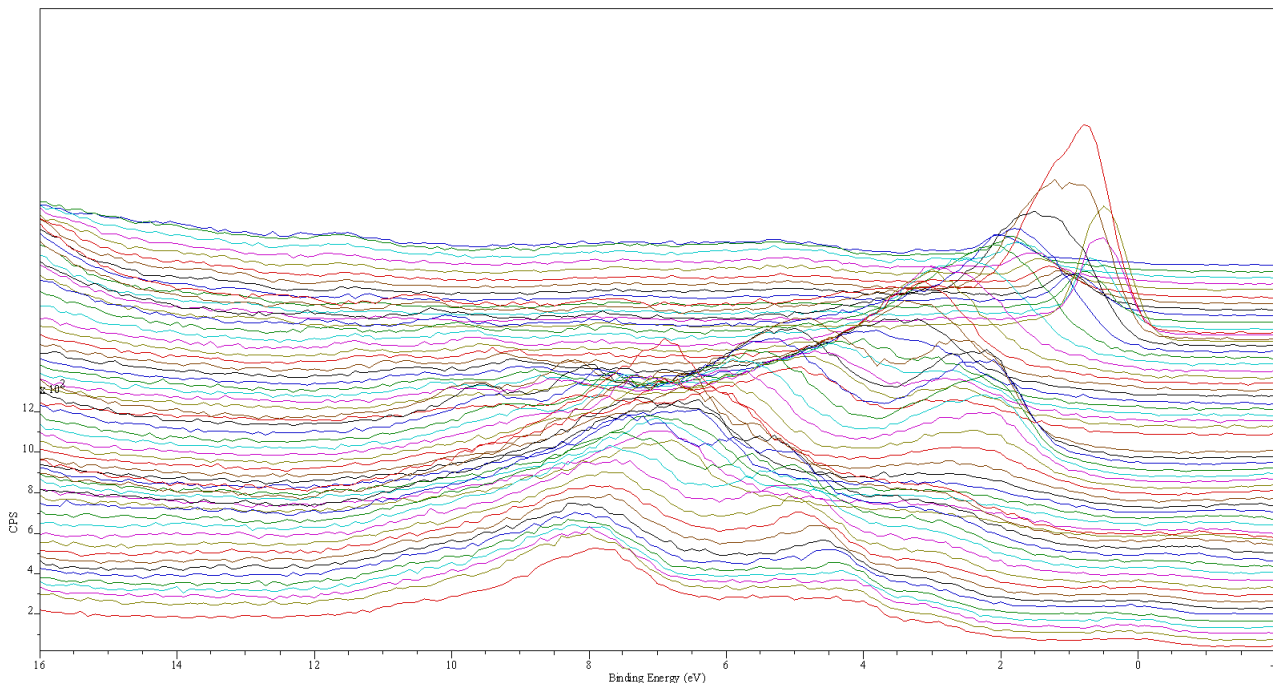
The surface has been analyzed using a PHOIBOS 100 analyzer with the 2D CCD Detector. Data courtesy T. Balasubramanian (MAX-Lab, Sweden) and R. Uhrberg (Linköping University, Sweden).



Band structure of crystalline graphite measured using the snap shot mode at room temperature. The analyzer entrance slit size used was 0.5 mm wide and the pass energy 80 eV. The angular mode used, Wide Angle Mode (Low Angular Dispersion), allows one to simultaneously measure an angular range of $\pm 13^\circ$ ($\pm 7^\circ$). The acquisition time for each image was 50 s. Between each image the sample was rotated 15° around the polar axis.



0 - 35 degree



Band structure of graphite measured with the energy scanned modus. The analyzer entrance slit size used was 0.5 mm wide and the pass energy 20 eV. The angular mode used, Low Angular Dispersion, allows one to simultaneously measure an angular range of $\pm 7^\circ$. The ordinate shows the polar angle from 0 to 40° .

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