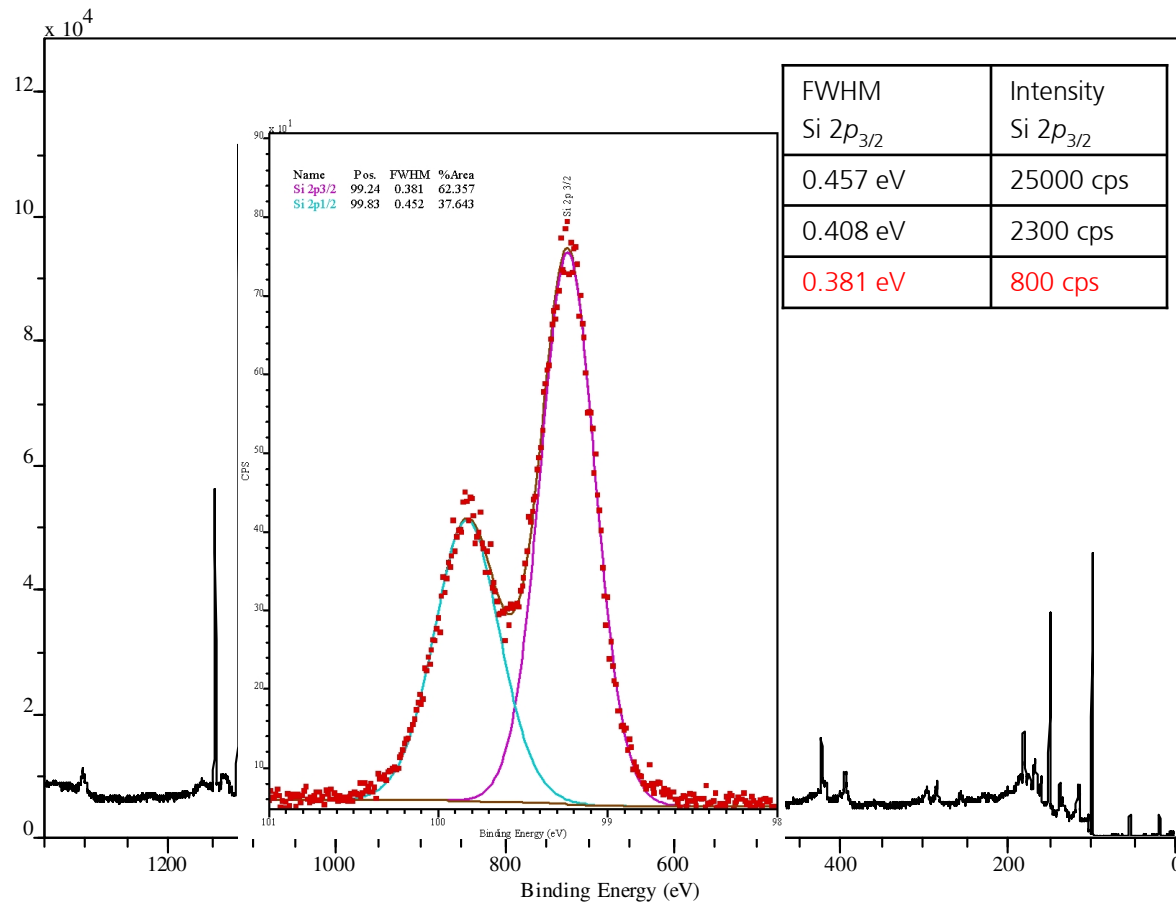


# Monochromated XPS of Silicon (111)

## Application Notes

The high resolution capability of the PHOIBOS 150 MCD-9 analyzer and the FOCUS 500 monochromator was demonstrated by XPS measurements on GaSe terminated Silicon (111). The spin orbit splitting of the Si 2*p* states (binding energies 99.24 eV and 99.83 eV) is clearly resolved, with a FWHM down to 0.38 eV for the Si 2*p*<sub>3/2</sub> component. For peak fitting Gaussian/Lorentzian product formula (mixing *m* = 0.3) and Shirley background were used.



Data by courtesy of C. Pettenkofer and S. Andres (HMI Berlin, Germany), B. Jaeckl (TU Darmstadt, Germany)

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