# Supplementary Material

*Figure 1. SEM image of a 60-nm-thick $YbRh_2Si_2$ film on a Ge(001) substrate.*

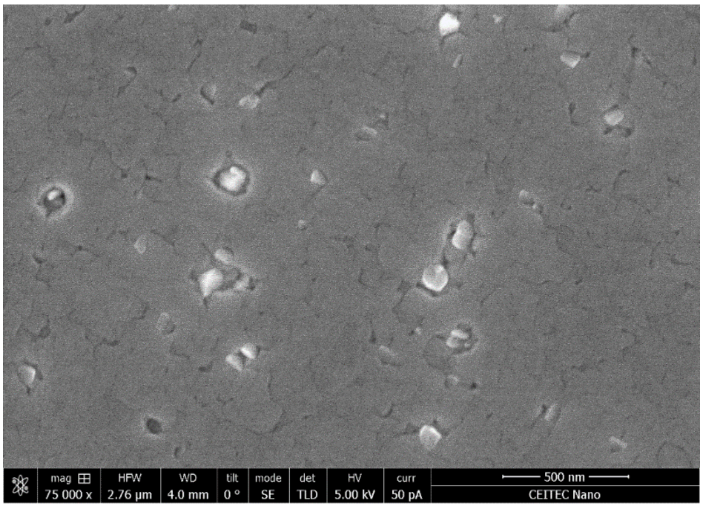

*Figure 2. AFM image of the $5 \times 5 \mu m^2$ surface morphology of a 10- nm-thick $YbRh_2Si_2$ film on Ge after a sub-monolayer Yb soak, RMS = 1.8 nm*

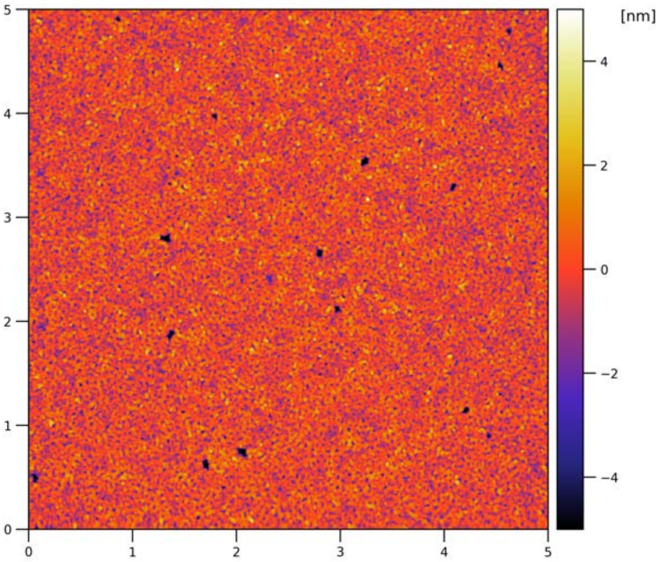

*Figure 3 XRD scan of $Ce_3Bi_4Pd_3$ on sapphire. The RMS roughness of the sample, measured by AFM, is 2.8 nm*