

Supplementary Materials

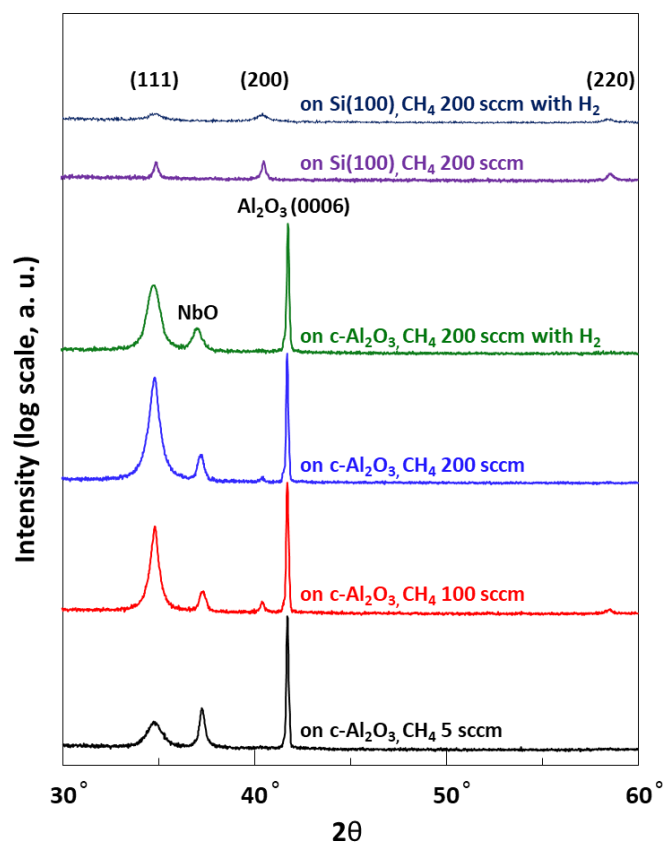


Figure S1. XRD patterns (logarithmic scale) of NbC films grown at different conditions.

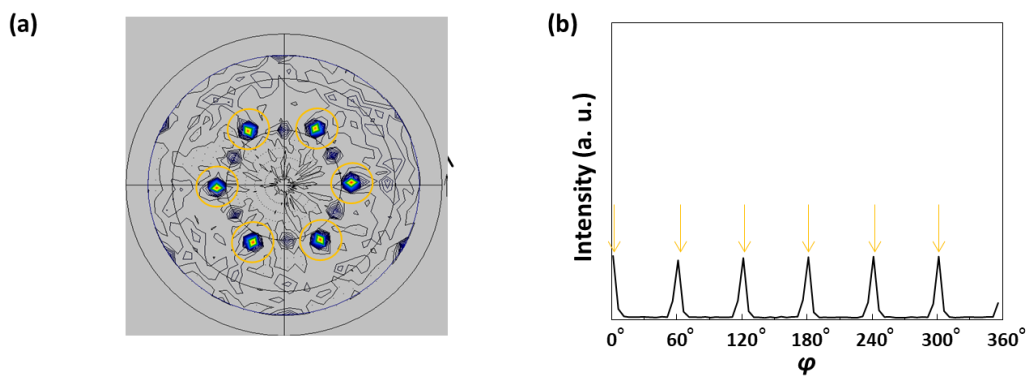


Figure S2. (a) X-ray pole figure of the NbC/*c*-sapphire system measured at a 2θ angle of 58.34° for the NbC (220) peak; (b) azimuthal (ϕ) scan data measured at a χ angle of 35° .

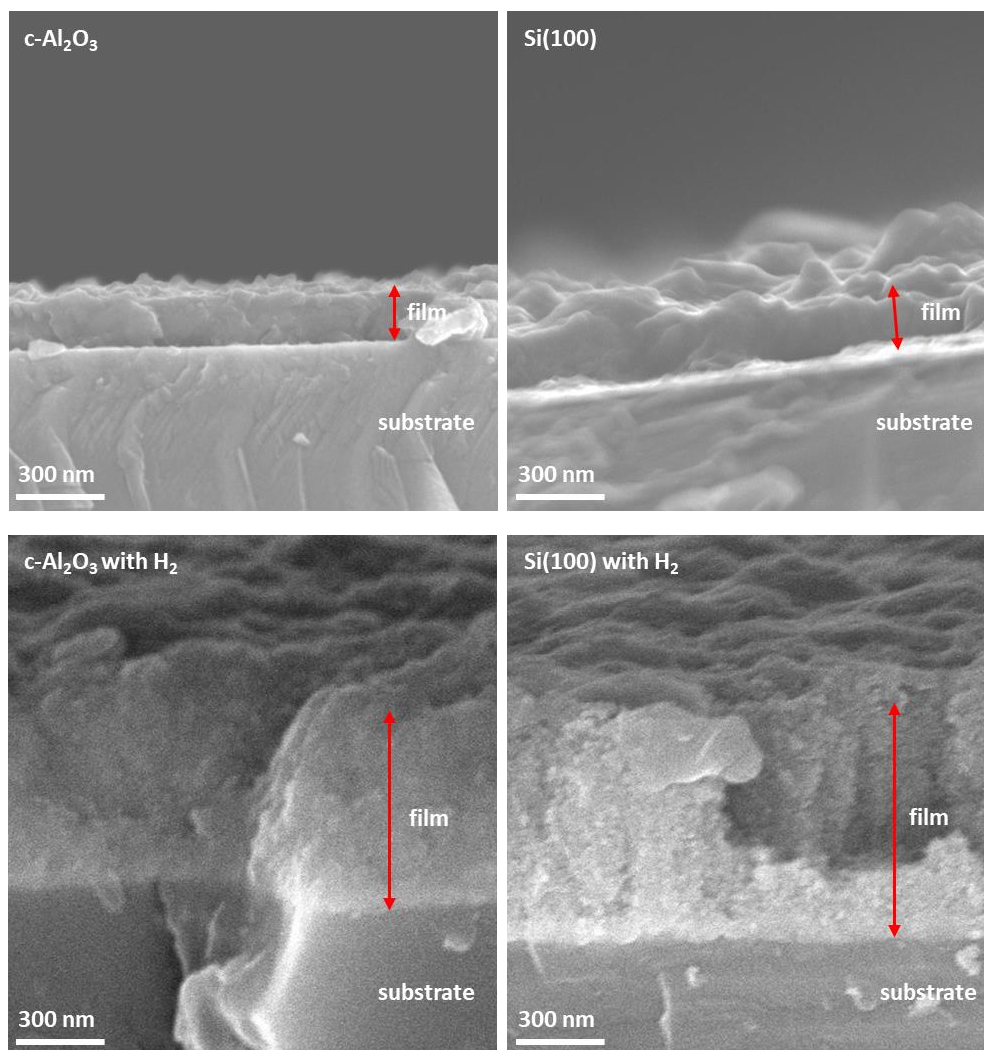


Figure S3. Cross-sectional SEM images of NbC films.