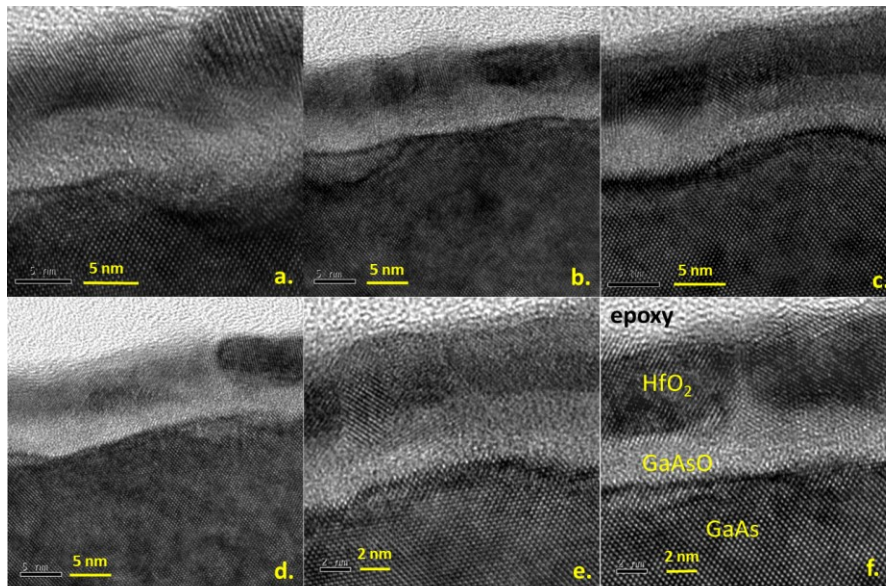


**Figure 1.** (a)-(c) Bright field and (d)-(f) High Resolution Transmission Electron Microscopy data for a 12 nm *as-deposited* HfO<sub>2</sub> film from TEMAHf and H<sub>2</sub>O at 250°C on native oxide GaAs(100) surfaces. The presence of crystallites is evident in all images. Some of the grains span the film thickness but many smaller ones are clearly visible. The film has not been subjected to post deposition thermal treatment.



**Figure 2.** (a)-(f) High Resolution Transmission Electron Microscopy data for a 6 nm HfO<sub>2</sub> film deposited from TEMAHf and H<sub>2</sub>O at 250°C on 4.6 nm chemical oxide GaAs(100) surfaces. The presence of crystallites is evident in all images. The film has not been subjected to post deposition thermal treatment.