

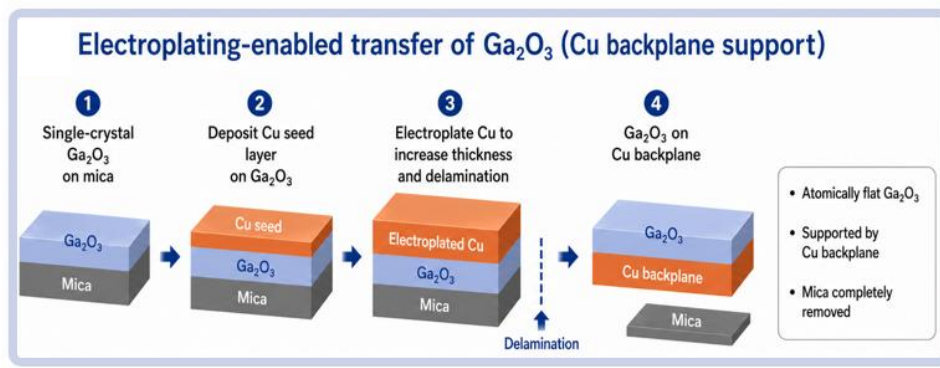


Fig. 1. Schematic illustration of epitaxial growth of Ga_2O_3 on mica and subsequent transfer onto a copper foil.

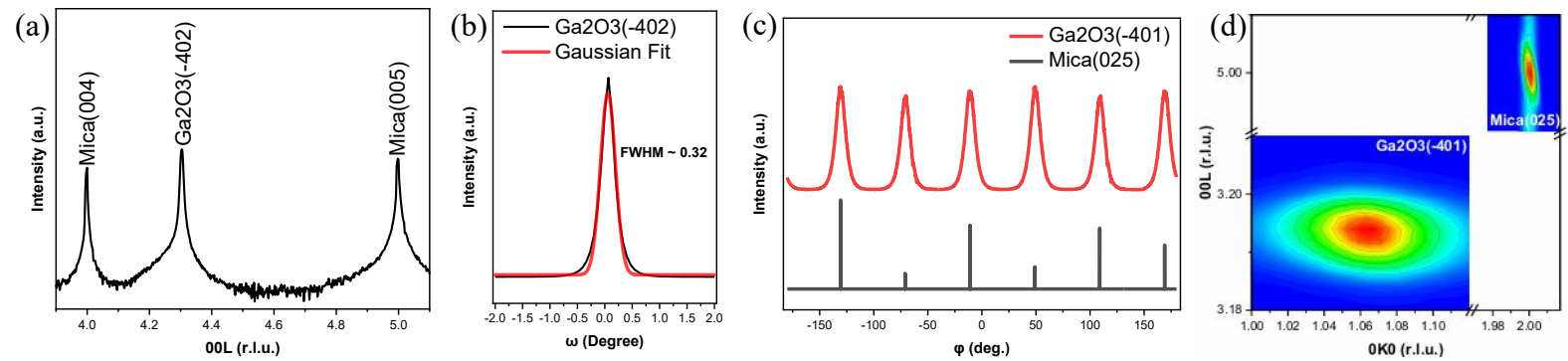


Fig. 2. X-ray diffraction (XRD) characterization of the Ga_2O_3 thin film on mica, including (a) θ - 2θ scan, (b) rocking curve, (c) ϕ -scan, and (d) reciprocal space mapping (RSM), confirming the crystalline quality and epitaxial nature of the film.

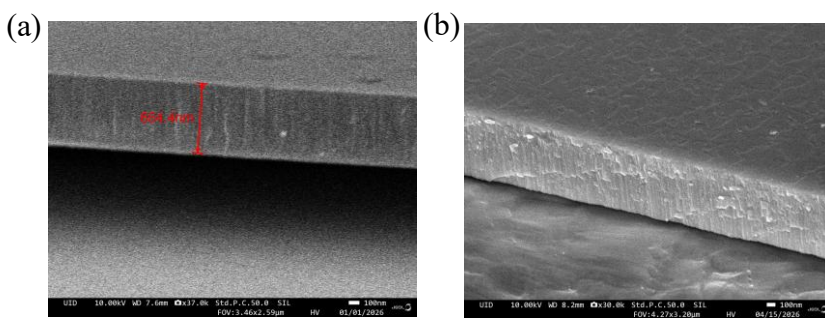


Fig. 3. Cross-sectional scanning electron microscopy (SEM) images of Ga_2O_3 on (a) mica and (b) Cu.

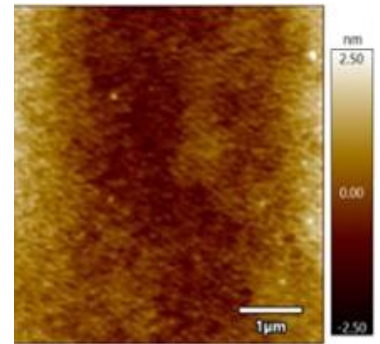


Fig. 4. Atomic force microscopy (AFM) image of the $\text{Ga}_2\text{O}_3/\text{Cu}$ surface, showing atomically smooth surface morphology with a root-mean-square (RMS) roughness of 0.6 nm.

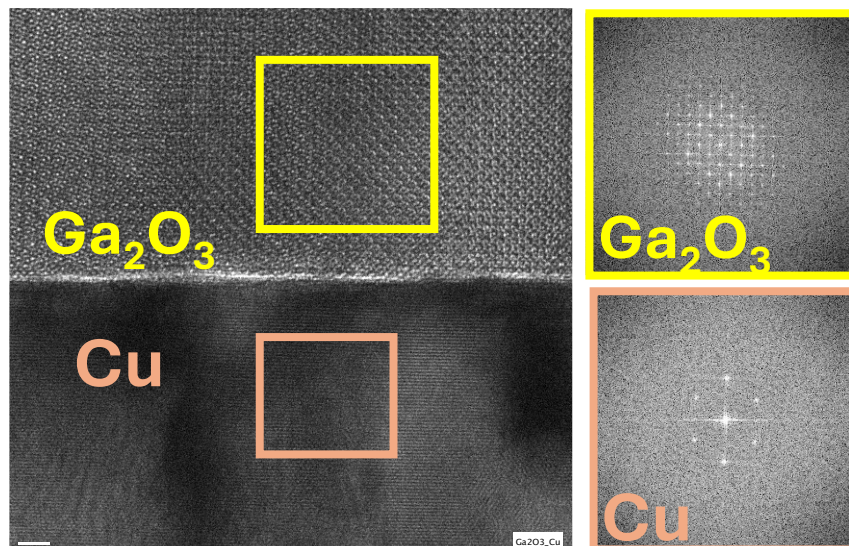


Fig. 5. Transmission electron microscopy (TEM) image of $\text{Ga}_2\text{O}_3/\text{Cu}$, showing a single-crystalline lattice arrangement.