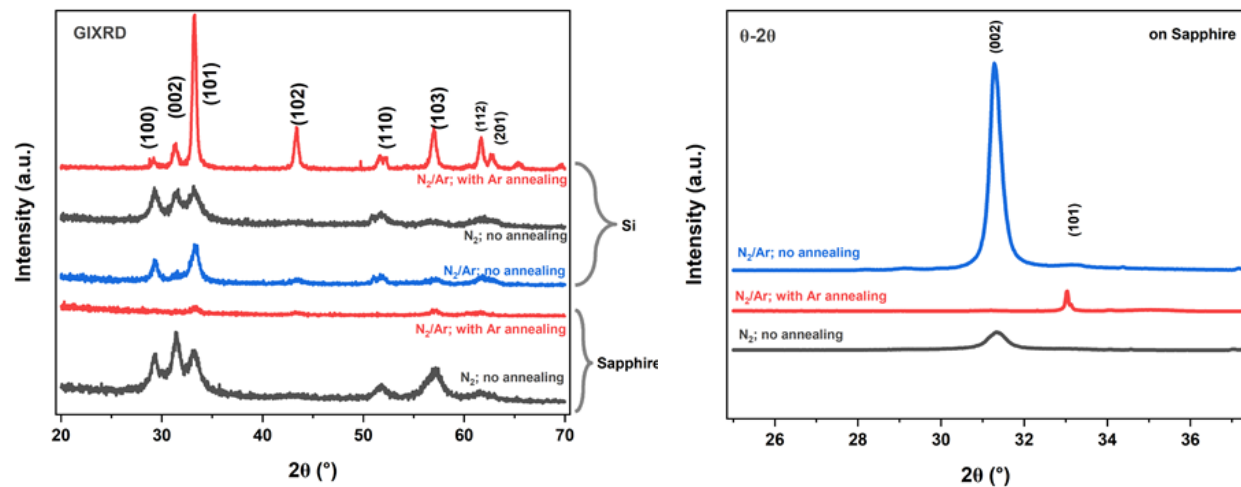


**Figure 1.** X-ray diffraction patterns of hollow-cathode plasma-enhanced ALD (HCP-ALD) grown GaN films. (a) Grazing-incidence XRD (GIXRD) measurements of GaN films on Si substrates confirming the polycrystalline film character on Si surfaces while GaN/sapphire depict weaker crystal peaks; (b) XRD ( $\theta - 2\theta$ ) measurements of the GaN films grown on sapphire substrates confirming highly (002) oriented hexagonal GaN growth at 200 °C pointing towards epitaxial film quality.



**Figure 2.** X-ray diffraction patterns of hollow-cathode plasma-enhanced ALD (HCP-ALD) grown InN films. (a) Grazing-incidence XRD (GIXRD) measurements of InN films on Si substrates confirming the polycrystalline film character on Si surfaces while InN/sapphire depict weaker crystal peaks; (b) XRD ( $\theta - 2\theta$ ) measurements of the InN films grown on sapphire substrates confirming highly (002) oriented hexagonal InN growth at 200 °C signaling epitaxial InN films.