

FIG. 1. Contour plots of the GISAXS intensity evolution along the Yoneda wing. The intensity maxima indicated by the dashed lines are related to the average center-to-center distance of adjacent islands as  $L = 2\pi/q_y$ . In<sub>0.83</sub>Al<sub>0.17</sub>N initially grew in a 3D mode for approximately 200 cycles, and then transitioned to 2D growth, as evidenced by the disappearance of the intensity maximum.

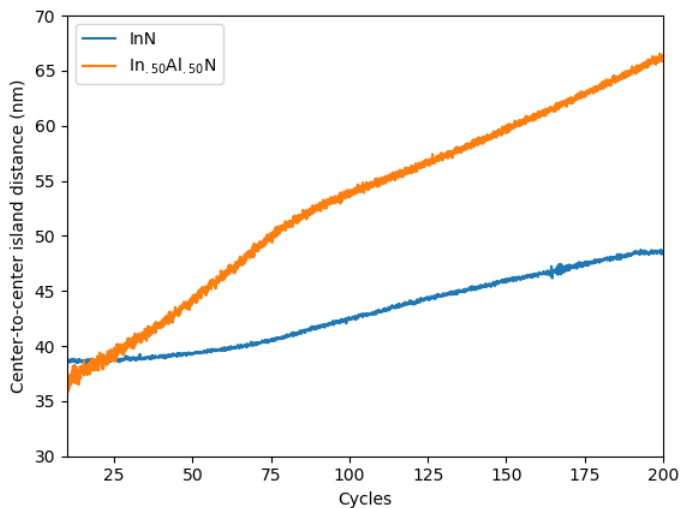


FIG. 2. Evolution of average center-to-center distance of adjacent islands for InN and In<sub>0.50</sub>Al<sub>0.50</sub>N. Island coarsening is increased significantly for the InAlN sample.