

# A Novel Growth Method to Improve the Quality of GaAs Nanowires Grown by Ga-Assisted Chemical Beam Epitaxy

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## Supporting Information

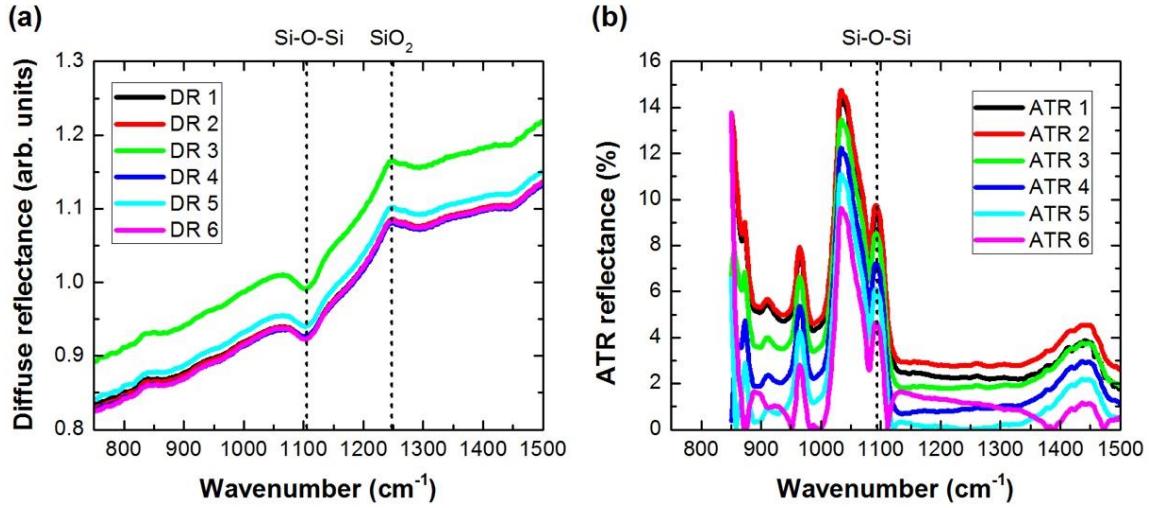


FIG S1. (a) Fourier-transform infrared (FTIR) spectroscopy and attenuated total reflection (ATR) spectra of  $\text{SiO}_x$  layers on Si wafers.

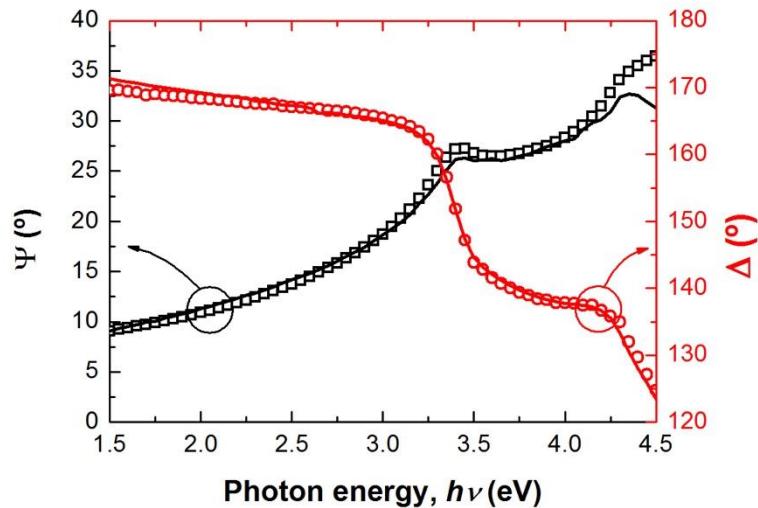


FIG S2. Spectroscopic ellipsometry measurements on a  $\text{SiO}_x/\text{Si}(111)$  sample after etching procedure ( $\psi$ : squares,  $\Delta$ : circles), represented along with their best fittings (lines). Fitting corresponds to the two-layer model.

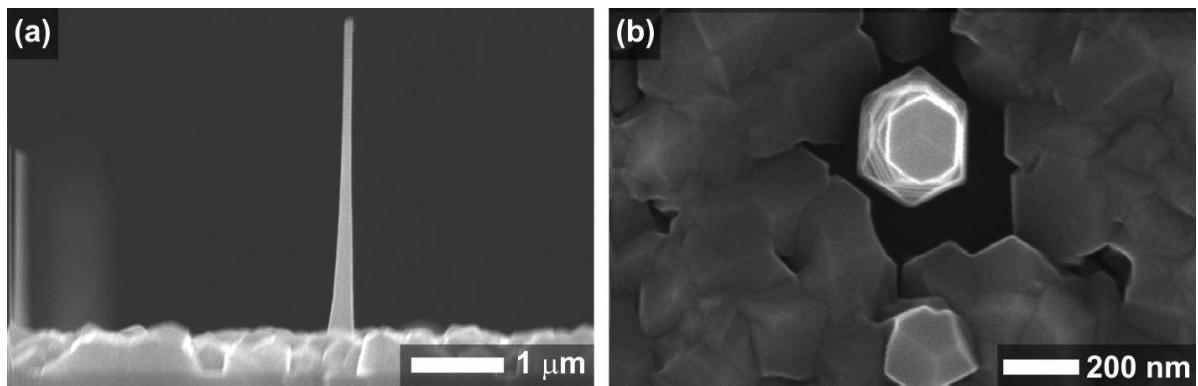


FIG S3. (a) Cross-sectional and (b) top SEM views of a single GaAs NW grown under one-step growth conditions above 60 min.