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Supporting information for:

Epitaxial GaN using $Ga(NMe_2)_3$ and NH_3 Plasma by Atomic Layer Deposition

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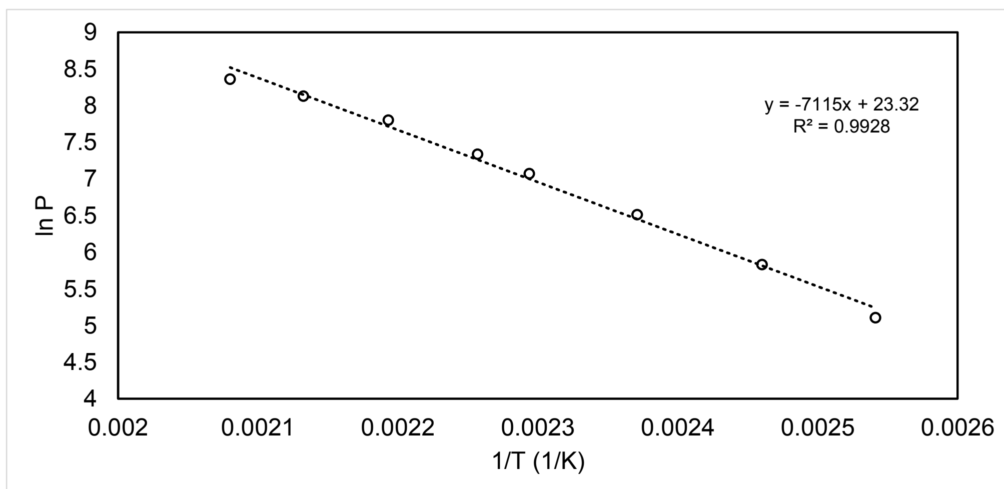

Figure S1: Plot of ln (vapour pressure) vs. 1/T for **1**, obtained from TGA data and used to calculate the 1 Torr temperature.

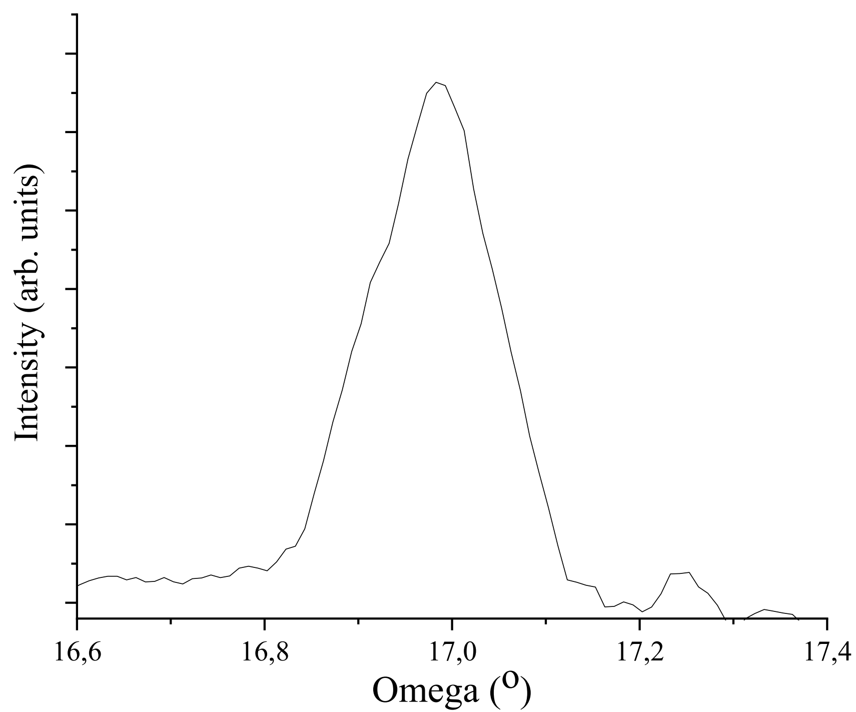

Figure S2: The XRC of the GaN (0002) plane showing a FWHM of 523 arc sec (0.1452°).

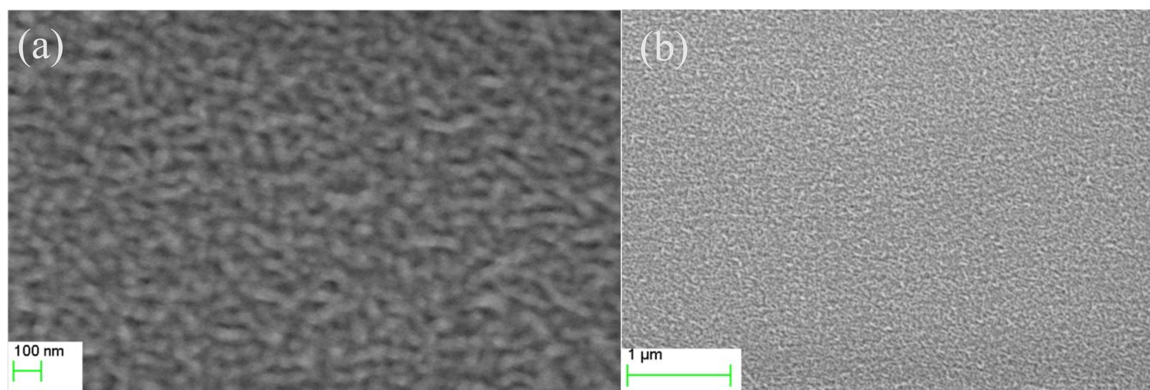

Figure S3: The top-view SEM of the GaN film on SiC with 4 s of **1** and 9 s NH_3 plasma deposited at 250 ˚C with both high magnification a) and low magnification b).

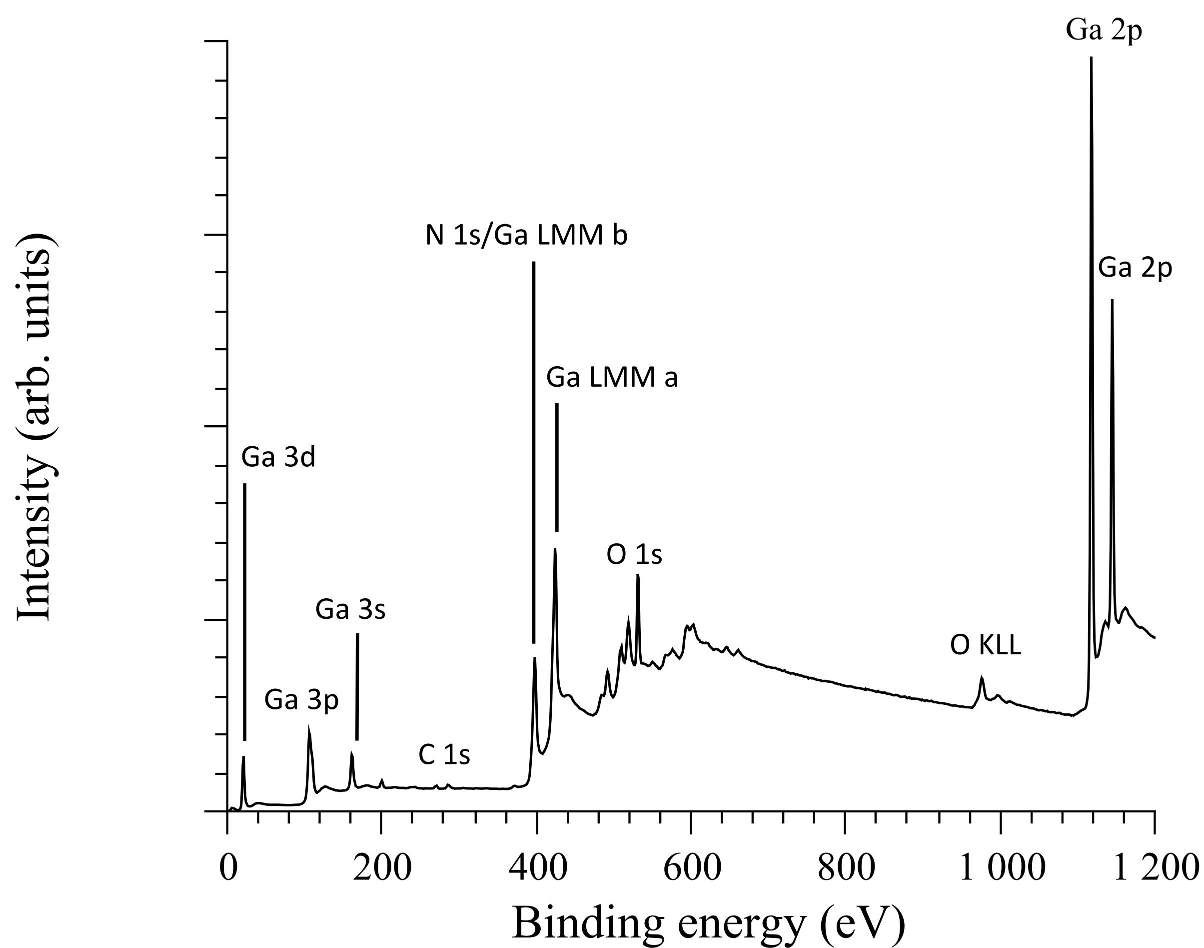

Figure S4: The XPS measurement with 4s precursor pulse and 16 NH_3 pulse deposited at 200 °C after cleaning sputtering.