Supporting Figures

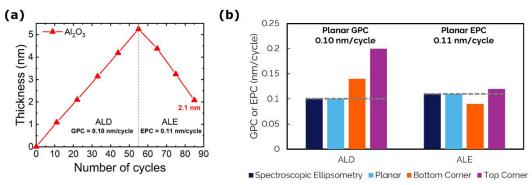


Figure 1: (a) In-situ film thickness measurement of Al₂O₃ during 55 cycles of ALD (O₂ plasma + TMA) followed by 30 cycles of ALE (SF₆:H₂ plasma + TMA). (b) Comparison of the different GPC and EPC values extracted from the in-situ spectroscopic ellipsometry and TEM analysis. GPC is higher in corners, while the EPC changes very little.

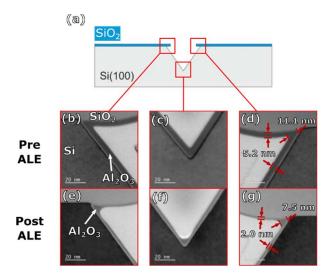


Figure 2: (a) V-shaped trench structure used for TEM analysis. The overhanging SiO_2 mask is let in place to provide additional corners in the structure. (b,c,d) TEM images of the structure pre-ALE, showing a 5 nm film in the planar regions and thicker film in the corner. (e,f,g) Post 30 ALE cycles the film is thinned down, however a thicker film is maintained in the corners.

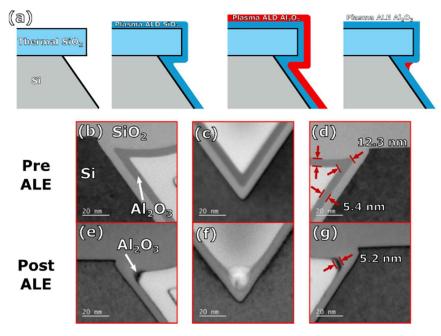


Figure 3: (a) Steps used during the CL process; ALD of SiO_2 , ALD of Al_2O_3 , ALE of Al_2O_3 . (b,c,d) Pre-ALE there is 5 nm of Al_2O_3 deposited on the 5 nm SiO_2 , with comparatively thicker film in the corner. (e,f,g) Post 52 ALE cycles the planar film is fully removed, while 5 nm of material is left in the top corners.