

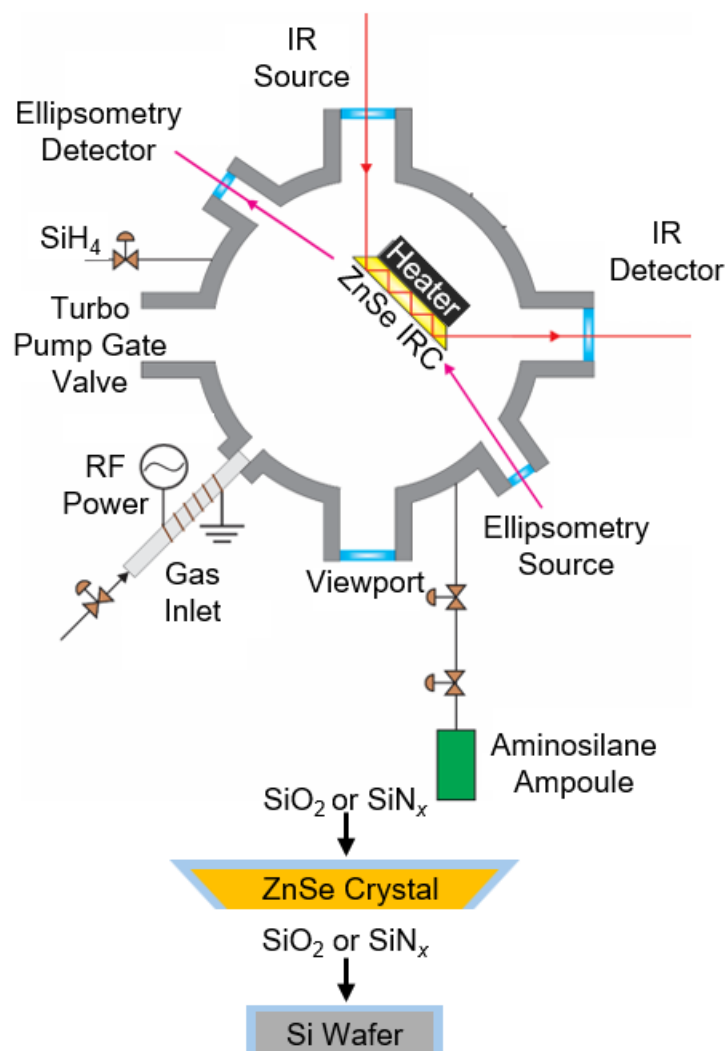


Figure 1. Top-down schematic of the surface analysis chamber equipped with in situ for ATR-FTIR spectroscopy setup. The SiN_x and Si films were plasma-deposited on the trapezoidal ZnSe crystal, which was used as the internal reflection element.

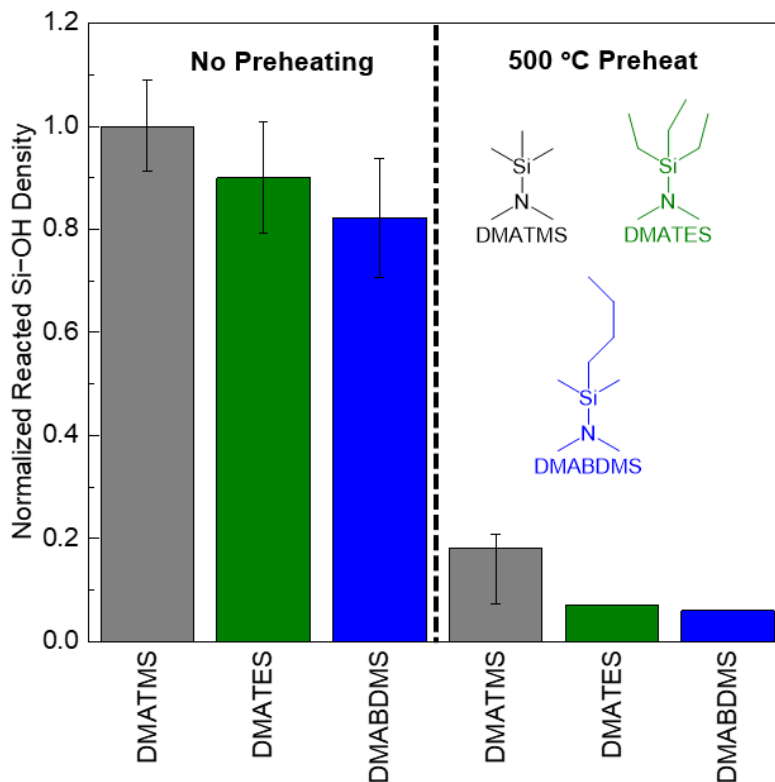


Figure 2. Normalized decrease in integrated absorbance for isolated Si-OH groups on plasma-deposited SiO₂ films after exposure to DMATMS, DMATES, and DMABDMS at 150 °C, with and without preheating to 500 °C.

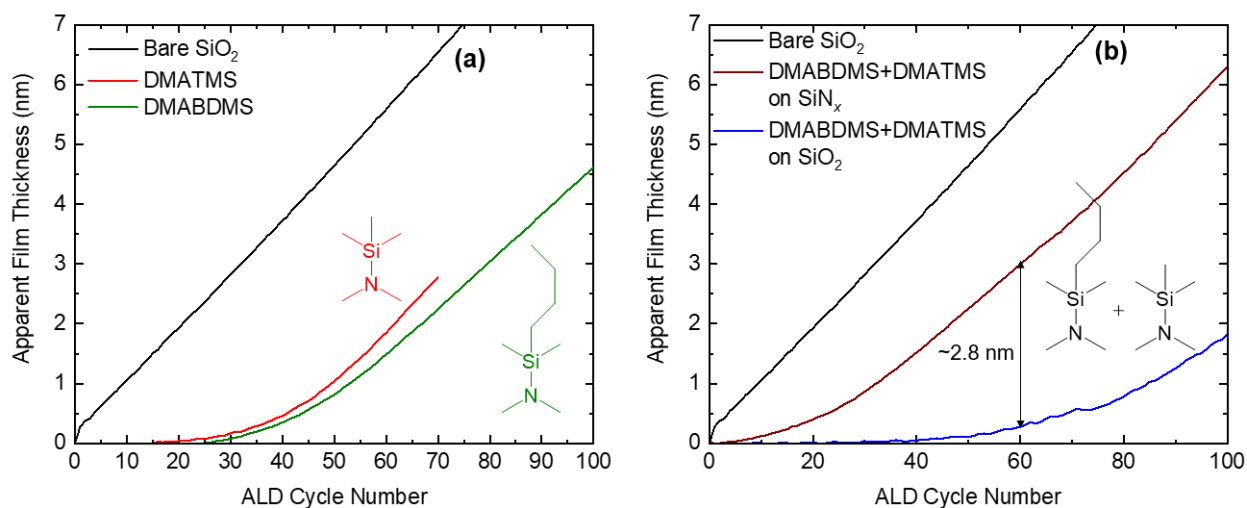


Figure 3. *In situ* ellipsometry measurements of Al₂O₃ ALD on (a) bare SiO₂ (—), DMATMS (—)- and DMABDMS (—)-functionalized SiO₂ surfaces and (b) bare SiO₂ (—), SiO₂ functionalized with DMABDMS and DMATMS (—), and SiN_x:H functionalized with DMABDMS and DMATMS.