



Figure 1 (a) Graphical representation of the test structures and inverted U-shaped GeTe thickness profile: GeTe ASD by ALD was performed on TiN in nanotrenches between trimethylsilyl-passivated SiO₂ lines with a line spacing of 55 nm. (b) and (c) Cross-section transmission electron microscopy (TEM) images after 144 and 336 cycles, respectively, of GeTe ALD on TiN in nanotrenches between the trimethylsilyl-passivated SiO₂ lines, demonstrating inverted U-shaped GeTe thickness profiles in all nanotrenches.