Influence of Plasma Power and Supercycle Conditions on Selectivity in DIPAS-Based SiO_2 AS-ALD

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Representative Figures

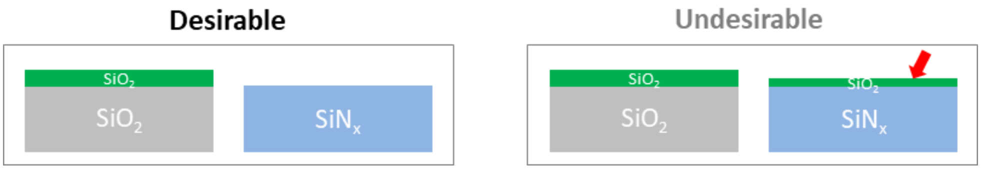

Figure 1 Schematic illustration of desirable area-selective SiO_2 growth on SiO_2 and suppression of undesired nucleation on SiN_x.

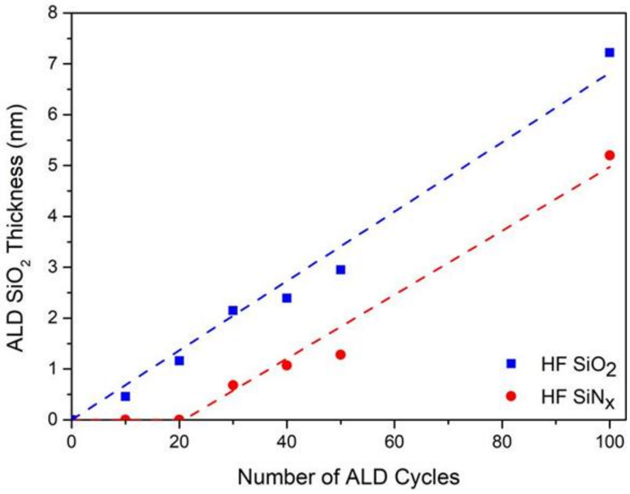

Figure 2 Cycle-dependent growth behavior of DIPAS/O_3-based SiO_2 ALD on SiO_2 and SiN_x, showing pronounced incubation on SiN up to ~20 cycles.

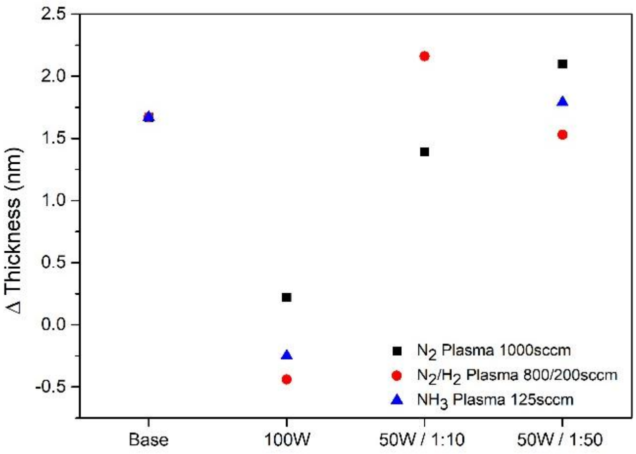

Figure 3 Effect of plasma power and supercycle frequency on SiO_2/SiN_x thickness contrast in DIPAS-based AS-ALD. (The horizontal line indicates the thickness contrast obtained without plasma pretreatment.)