



**Figure 1:** Thickness versus cycle (a,c) and selectivity (b,d) on blanket  $\text{SiN}$  and  $\text{SiO}_2$  surfaces exposed to  $\text{TiCl}_4/\text{Ti}(\text{iPrO})_4$  ALD after: (a,b) a dilute  $\text{HF}$  dip; and (c,d) a dilute  $\text{HF}$  dip followed by  $\text{MoF}_6$  for 1 second. The lines correspond to fits to an analytical nucleation model.<sup>4</sup> The selectivity is determined from the difference between the  $\text{TiO}_2$  surface coverage on the growth and non-growth surface, divided by the sum of the coverages. The lines correspond to the data fits, and the dots correspond to values determined from the measured thickness values.