

Figure 1: Sputter yield as a function of ion energy for both as-deposited and fluorinated (a)  $Al_2O_3$  and (b) HfO<sub>2</sub>. Fluorination results in a reduction in sputter threshold and an increase in sputter yield for both materials.

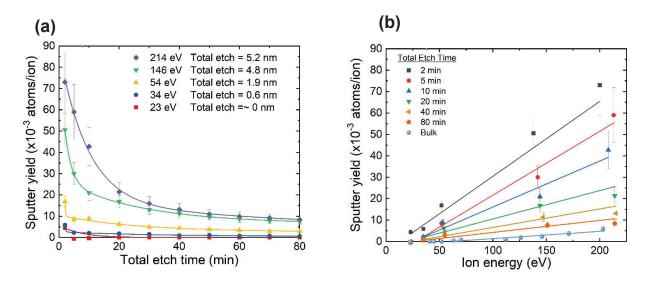


Figure 2: (a) Sputter yield as a function of Ar plasma exposure time for fluorinated  $Al_2O_3$  at varying incident ion energies. Initially high sputter yields decay back toward sputter yields expected for bulk material. For low energies (low sputter yields) the decrease in sputter yield is less pronounced as the removal of the modified layer takes longer. (b) Sputter yield as a function of ion energy after different Ar plasma removal times. The sputter yield of the bulk material is also included, highlighting that the sputter yield does not fully return to that of the bulk.