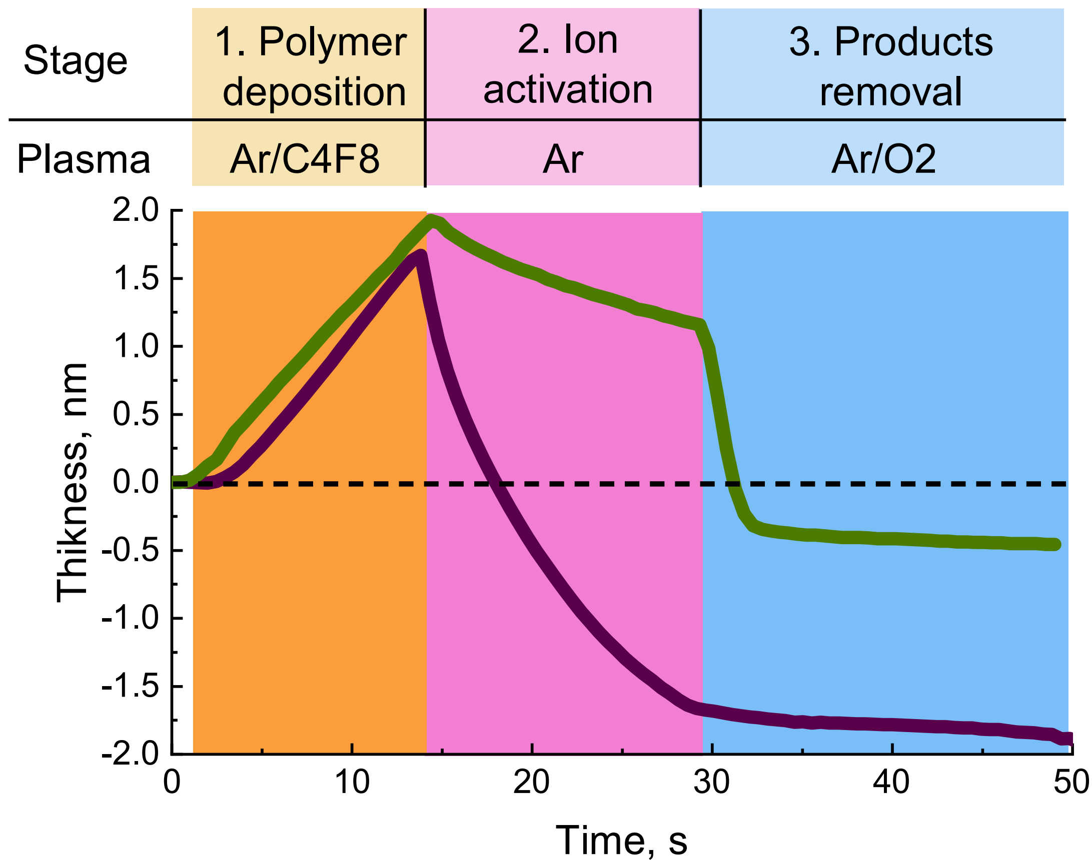

Figure 1. One cycle of PEALE SiO2. 1. Polymer deposition in down-stream ICP mode similar to PEALD. 2. Activation of surface reactions by low-energy ions in damage-free PEALE. Products removal in standard PEALE. 3. Products removal and chamber cleaning by oxygen atoms reactions.

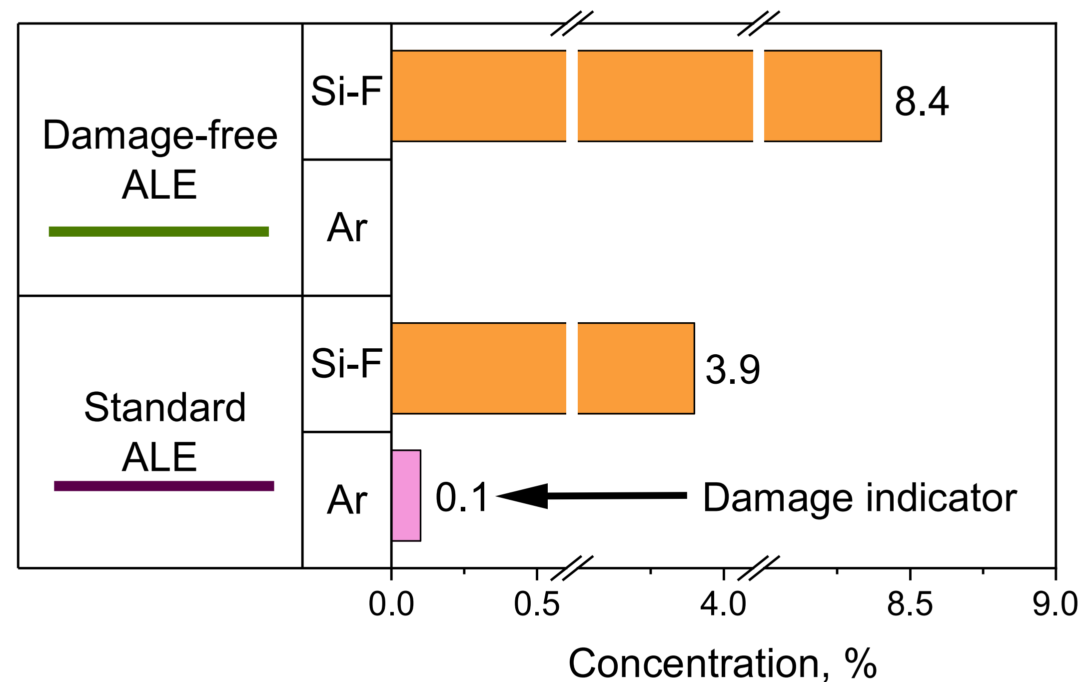

Figure 2. Main results of XPS analysis. Concentrations of surface Si-F bonds and implanted Ar atoms. Presence of implanted Ar demonstrates structural damage in standard PEALE.