

SUPPLEMENTARY MATERIALS

The resistance of the films to prolonged exposure in aqueous media was tested by their immersion for a week in 0.9% NaCl solution (isotonic solution with blood) and subsequent imaging by AFM. Figure 1S shows the topography of the 10 bilayers films and the calculated RMS roughness upon that treatment. CCh/ACh film exhibits similar smooth topography as the untreated sample (see Fig. 2) with little increase of its roughness (see Table 1). The other two films smoothened significantly that may have been caused by desorption of some weakly bounded macromolecules and polyelectrolyte complexes. The detailed studies on this topic are beyond the scope of the current report and will be presented in the following publication focusing on biomedical application of the studied films.

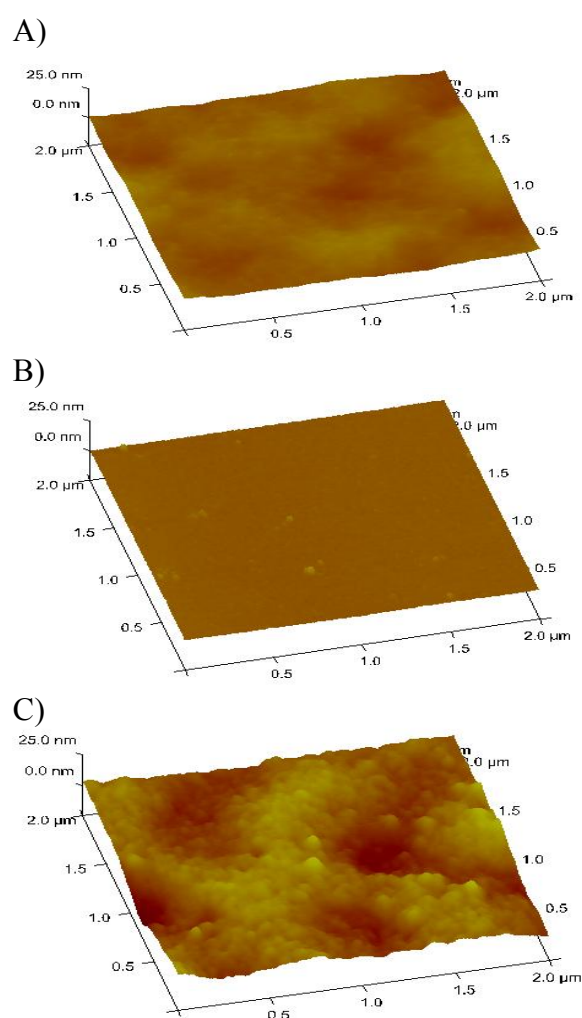


Figure 1S. AFM images in air of the 10 bilayers films after immersion for a week in aqueous medium (0.9% NaCl solution). A) CCh/ACh film (RMS roughness 1.4 nm); B) CCh/PSS film (RMS roughness 0.31 nm); C) PAH/ACh film (RMS roughness 3.2 nm).