**Supporting Information**



**Figure S1.** UV–vis spectra of AgLNPs



**Figure S2.** Surface pressure-area isotherm in buffer of monolayers of AgLNPs, their pristine compounds and their interaction with DMPC.

**Figure S3.** Plot of Δ*D*5-Δ*f*5 -sensorgram presented in Fig 3- obtained during the formation of the model biomembrane and its interaction with AgLNPs. Arrows indicate the circulation of a new fluid.