# Supplementary

 **Figure S1.** XP spectra obtained during the process of nanocavity formation on planar Si(100)-wafers: A and B show the Ti 2p and Si 2p regions of an Si-wafer + 80x TiO2, C and D the Ti 2p and Al 2p regions of an Si-wafer + 80x TiO2 + calixarene + 5x Al2O3, and E and F