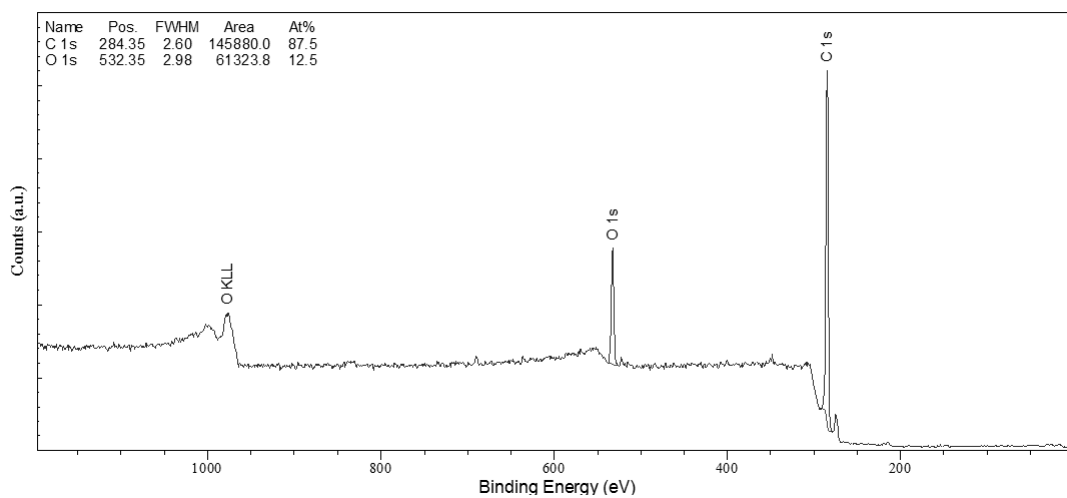


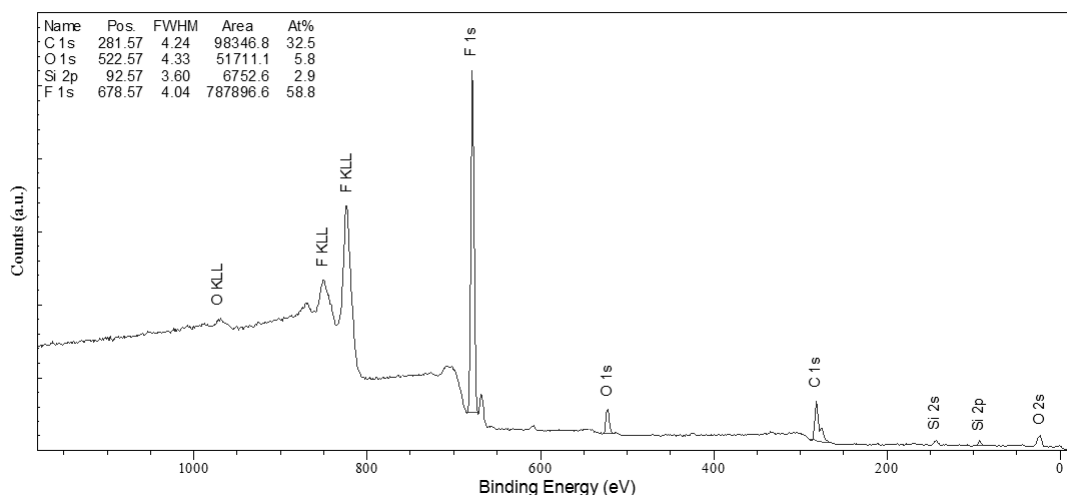
Appendix A. Supplementary Data

The following is supplementary data related to this article:

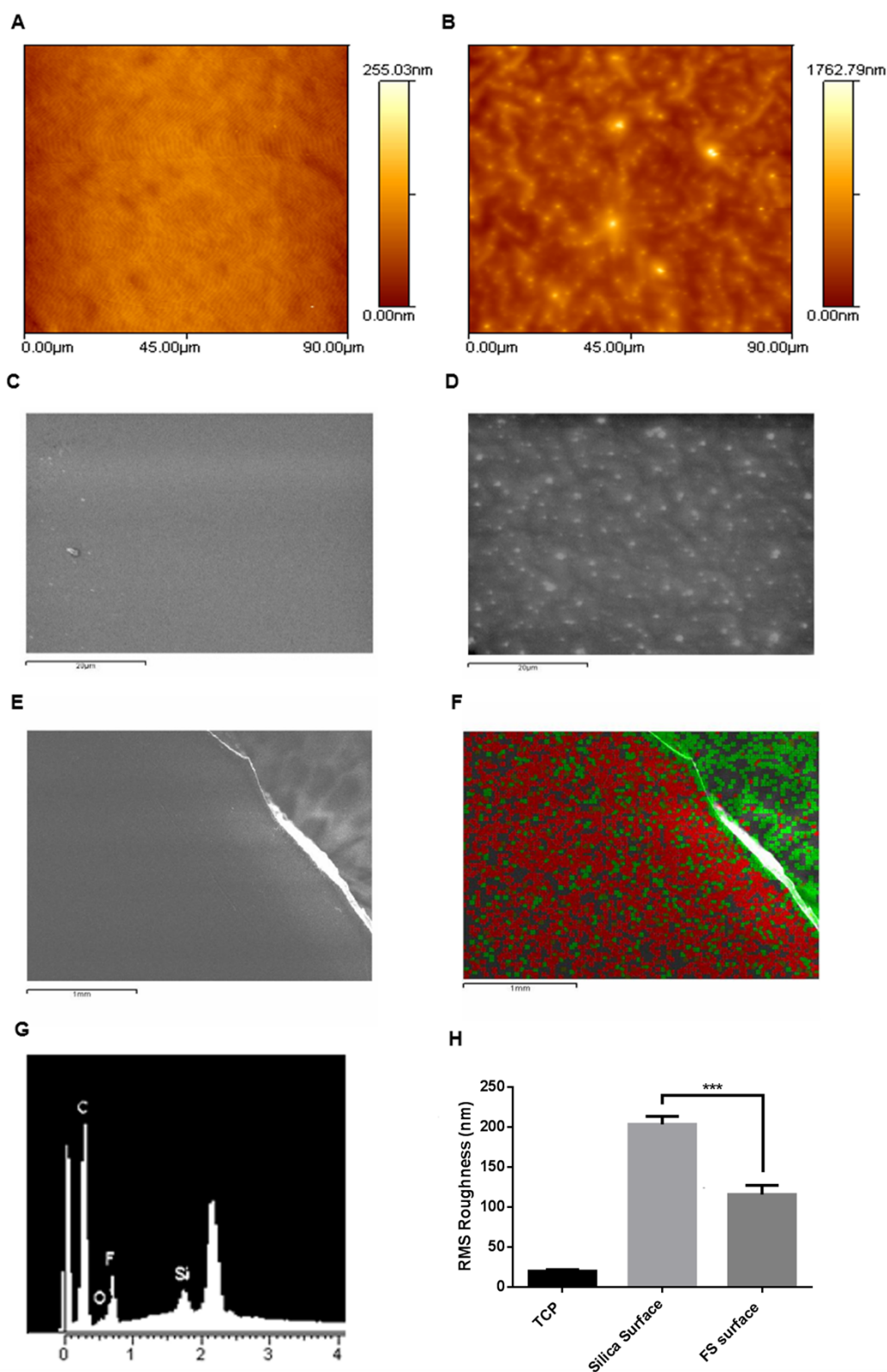
A



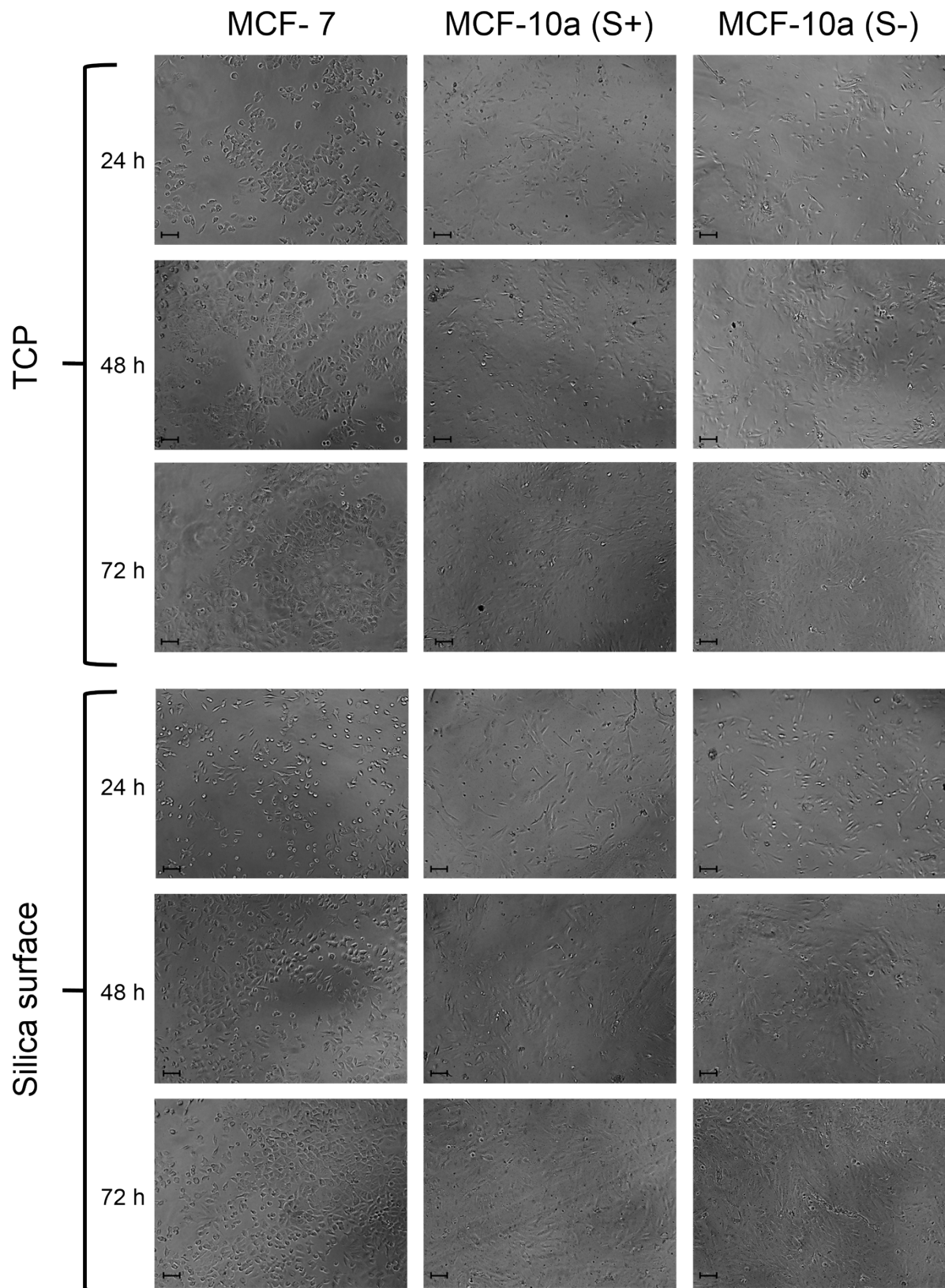
B



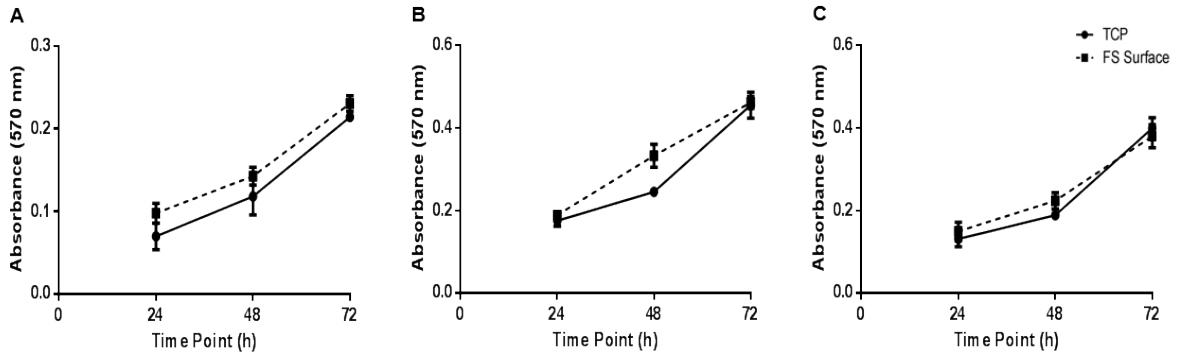
Supplementary Fig. 1. Surface analysis of materials by XPS: TCP (A) and the FS surface (B) confirms the incorporation of F and Si atoms to the FS surface.



Supplementary Fig. 2. Microscopy (SEM/ AFM) and elemental analysis (EDXa) of prepared surfaces together with a comparison of surface roughness, including TCP, the silica (Si) surface used for FS functionalisation and the FS surface itself. AFM scans of TCP and FS surfaces are shown in A and B respectively. Scanning electron micrograph (SEM) images in the same respect are shown in C and D. An SEM of the FS surface is shown in E, and with EDXa mapping in F to detect Carbon (green) and Fluorine (red). EDXa spectra shows the presence of both Si and F upon the FS surface (G). AFM RMS roughness measurements of TCP, the Si and FS surfaces are shown in H (n=3). Corresponding SEM data for TCP with silica can be found in reference 19 of the main paper (Hickman *et al.*, 2012 J. Mater. Chem. 22, 12142-12148).



Supplementary Fig. 3. Morphology of MCF-7, MCF-10a S+ and MCF-10a S- cells when cultured upon TCP and the silica surface. Images taken at x100 magnification with scale bars representing 100 μm . Further information regarding the cellular response to the silica surface can be found at reference 19 of the main paper (Hickman *et al.*, 2012 *J. Mater. Chem.* 22, 12142-12148).

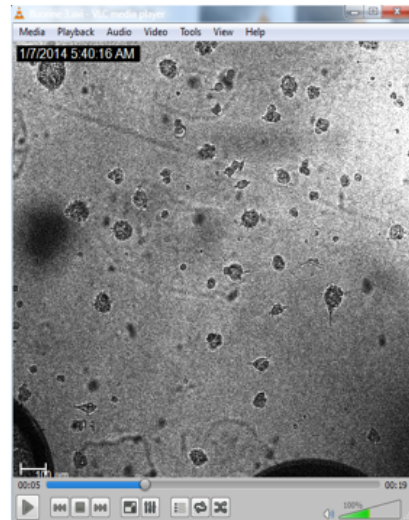
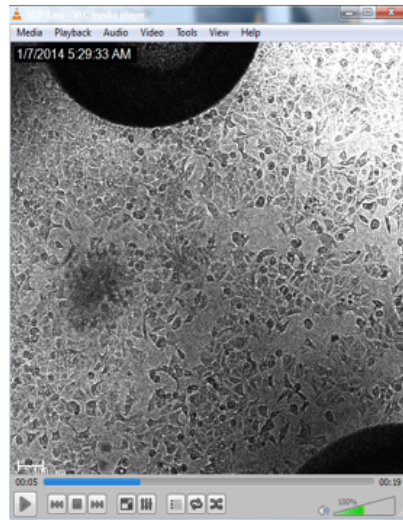


Supplementary Fig. 4. MTT proliferation studies of the various cell lines. Relative absorbance values represent MCF-7 (A), MCF-10a S- (B) and MCF-10a S+ (C) proliferation upon TCP and the FS surface (n=3).

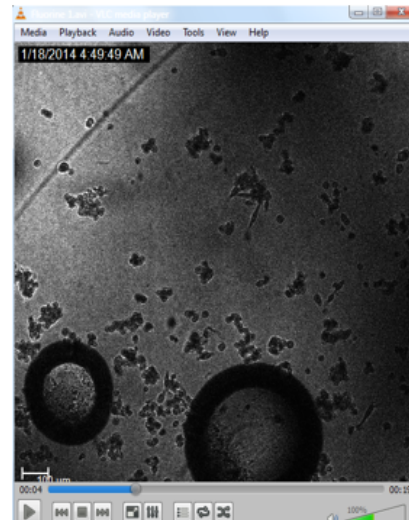
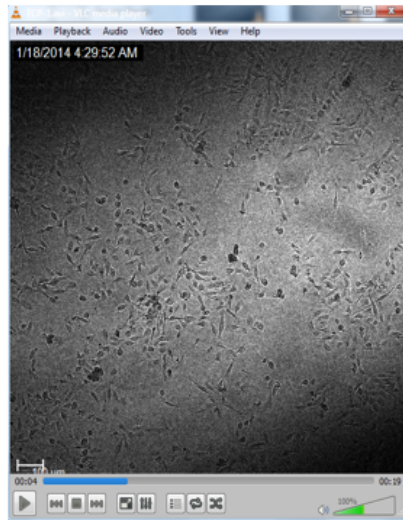
TCP

FS Surface

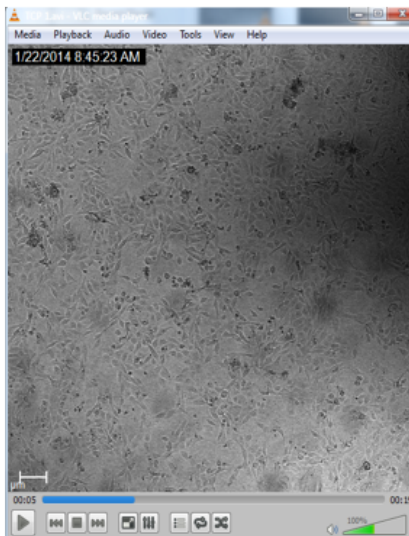
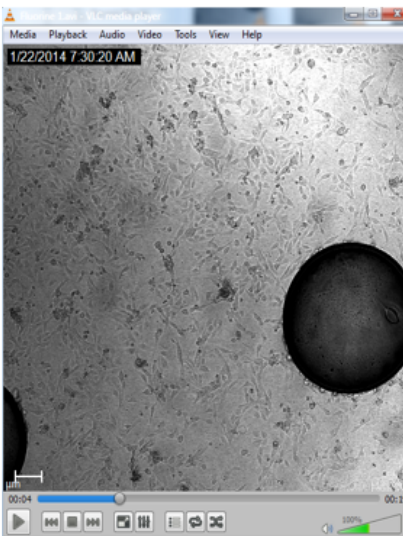
MCF-7



MCF-10a S+



MCF-10a S-



Supplementary Video Set (Stills). Live imaging of MCF-7, MCF-10a S+ and MCF-10a S- upon TCP and the FS surface over a 46 h period (x100 magnification, scale bar represents 100 μ M) .