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A Facile Approach to Surface Modification on Versatile Substrates for Biological Applications

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**Figure S13.** The optical image of DDT immobilized onto the PEAC-modified surface with regular growth patterns. For producing such patterns, a 400 mesh (37 μm hole, 25 μm bar) copper grid was used as a photomask. A few drops of a freshly prepared solution of DDT (30 mM) and Irgacure 651 (15mM) in absolute ethanol were spread on the PEAC-modified surface directly contacted with a TEM grid and irradiated with UV light for 5 minutes. The grid was then removed and the sample was washed with ethanol.
Figure S14. The FT-IR spectra of the three synthesized polymers: P(EEGE-co-AGE), its deprotection [DP(EEGE-co-AGE)] and PEAC.

In FT-IR spectra, there is a strong absorption peak around 3400 cm\(^{-1}\) after the removal of protection of hydroxyl groups of P(EEGE-co-AGE). When the deprotected polymer further was modified by DOPA (PEAC), the peak around 3400 cm\(^{-1}\) became wide and strong and the characteristic peaks of benzene ring appeared (1608, 1525 and 1462 cm\(^{-1}\)).
Figure S15. The photographs of the cell adhesion assay observed after 3T3 fibroblast cell culturing for 4 hrs at 37 °C by inverted fluorescence microscopy on the bare (A), PEAC-modified (B) and further thiol (MPA) modified (C) substrate surfaces of glass. All the figures have the same scale bar as in Figure 5 in the main text.
Figure S16. The photographs of the cell adhesion assay observed after 3T3 fibroblast cell culturing for 4 hrs at 37 °C by inverted fluorescence microscopy on the bare (A), PEAC-modified (B) and further thiol (MPA) modified (C) substrate surfaces of Ti. All the figures have the same scale bar as in Figure 5 in the main text.