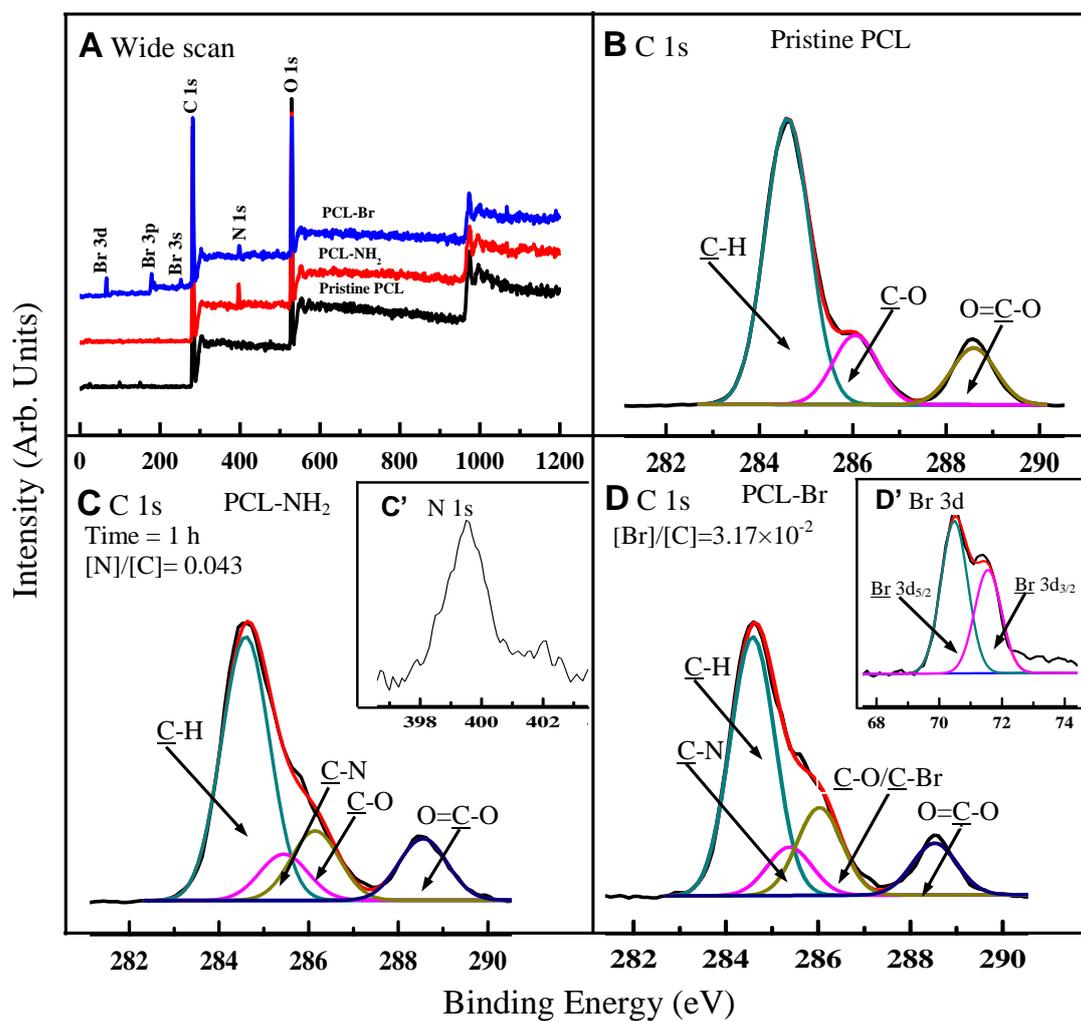
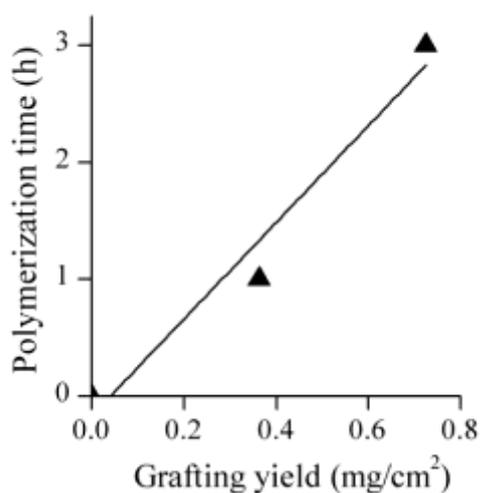


Supplementary figures and captions



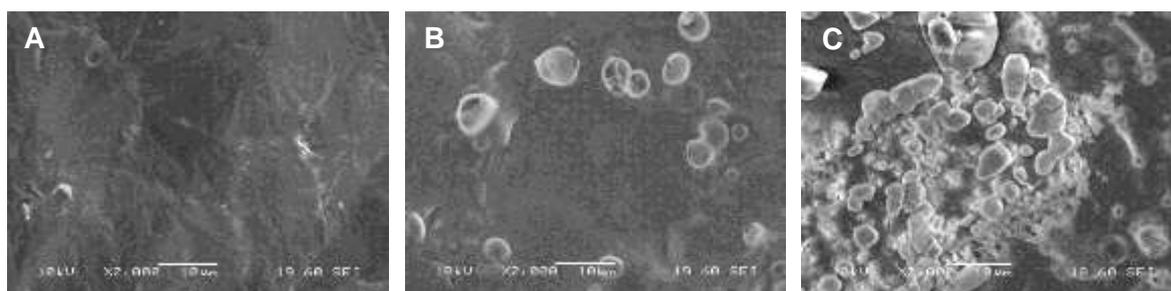
Supp. Fig. S1. Wide scan and C 1s core-level curve-fitted XPS spectra of the (A, B) pristine PCL, (A, C) PCL-NH₂ from 1 h of aminolysis, and (A, D) PCL-Br surfaces. Insets correspond to the (C') N 1s and (D') Br 3d core-level XPS spectra of the PCL-NH₂ and PCL-Br surfaces, respectively.



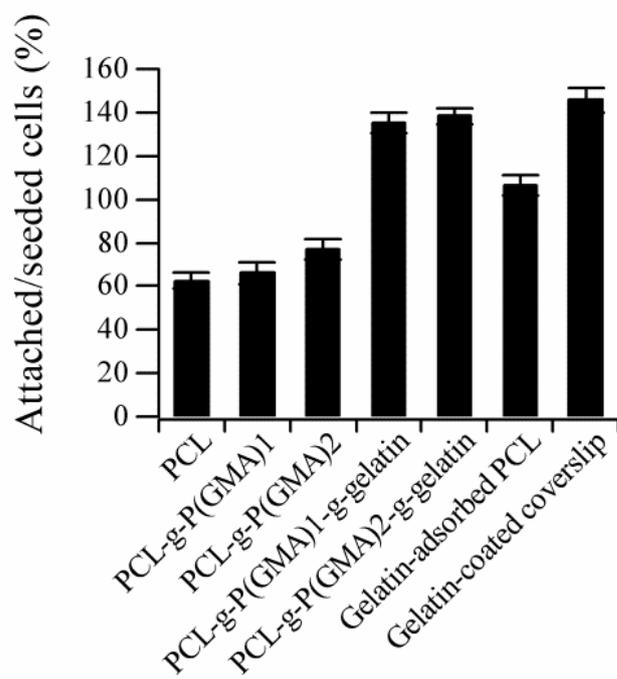
Supp. Fig. S2. A linear relationship for the grafting yield (GY) of the ATRP reaction was observed for the polymerization of GMA on the PCL surfaces with respect to polymerization time. The GY was defined by the following equation:

$$GY = \frac{W_a - W_b}{A}$$

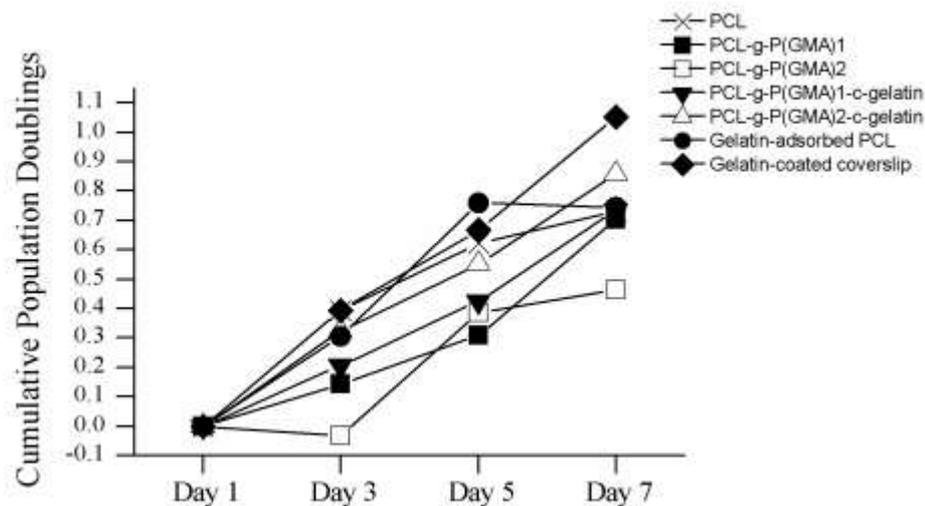
where W_a and W_b are the weights of the dry surfaces after and before graft polymerization, respectively, and A is the film area (3.2 cm²). The average values of at least 3 modified PCL surfaces were taken.



Supp. Fig. S3. Scanning electron microscopy images of (A) pristine PCL, (B) PCL-g-P(GMA)1 and (C) PCL-g-P(GMA)2 surfaces.



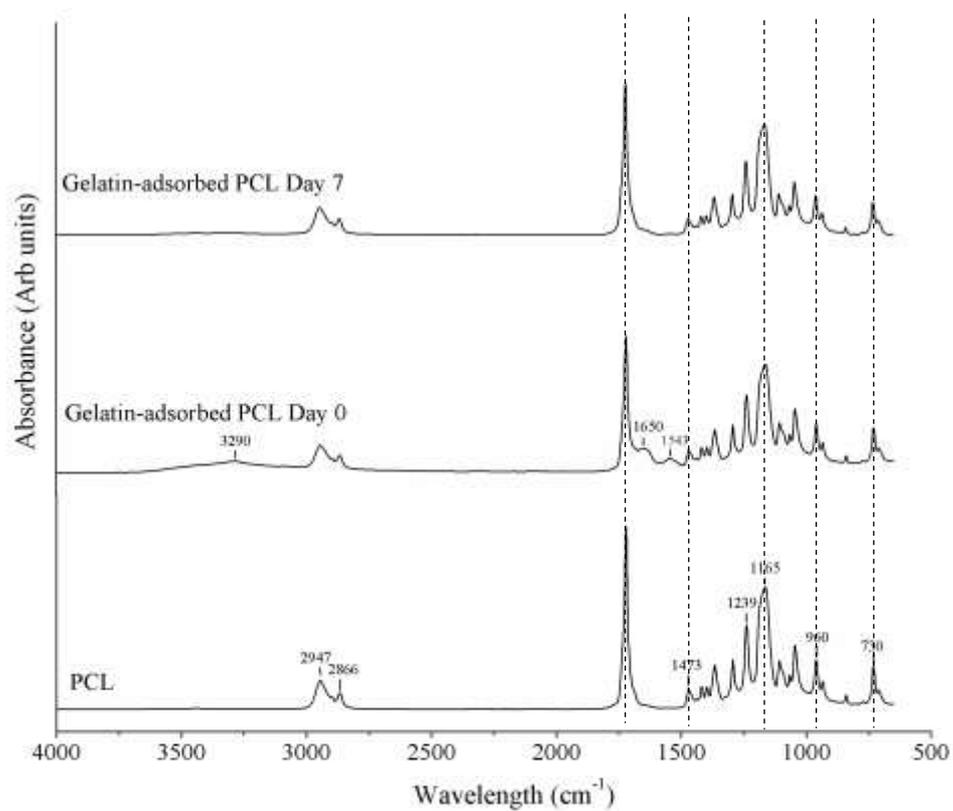
Supp. Fig. S4. EC attachment on the modified PCL surfaces 18 h after seeding. The number of cells attached was normalized to the number of cells seeded and quantitated using the alamarBlue® assay ($n=3$).



Supp. Fig. S5. Cumulative population doublings (CPD) of the ECs over 7 days on the modified PCL surfaces were calculated in relation to the cell numbers at day 1. The population doublings of the ECs on days 3, 5 and 7 were each calculated using the following equation:

$$PD = \frac{\ln N_d - \ln N_i}{\ln 2}$$

where N_d is the number of cells present on the surface at the respective time point and N_i is the initial number of cells seeded on the surface at day 1 ($n=3$). The CPD for each time point was calculated by adding up prior population doublings.



Supp. Fig. S6. FTIR spectra curves of pristine PCL surface, PCL surface after 24 h adsorption with gelatin (Day 0), and of the same surface after 7 days in cell culture medium (Day 7). Each graph is representative of 4 samples.