Supporting Information

Poly(sulfobetaine) versus poly(ethylene glycol) based copolymers modified polyurethane catheters for antifouling

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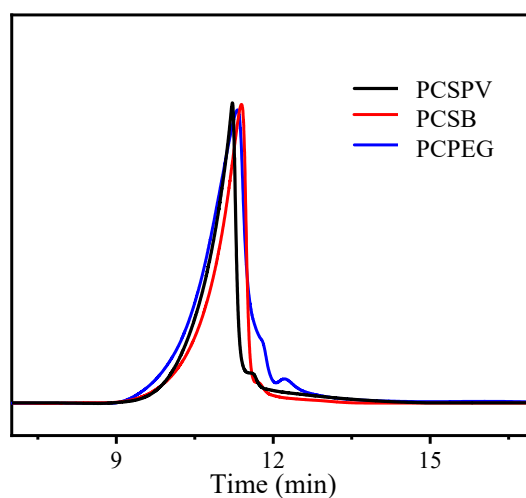
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Figure 1 GPC traces of the PCSPV, PCSB and PCPEG copolymers prepared from free radical copolymerization of MSA and SPV or SBMA or PEGMA, respectively.
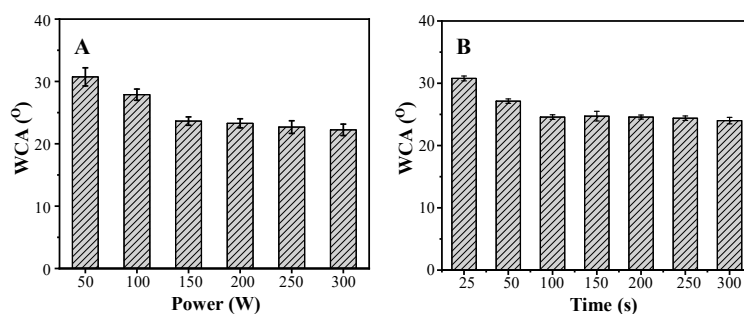
Figure 2 Influences of power (A) and time (B) on WCA of PU surface treated by plasma.
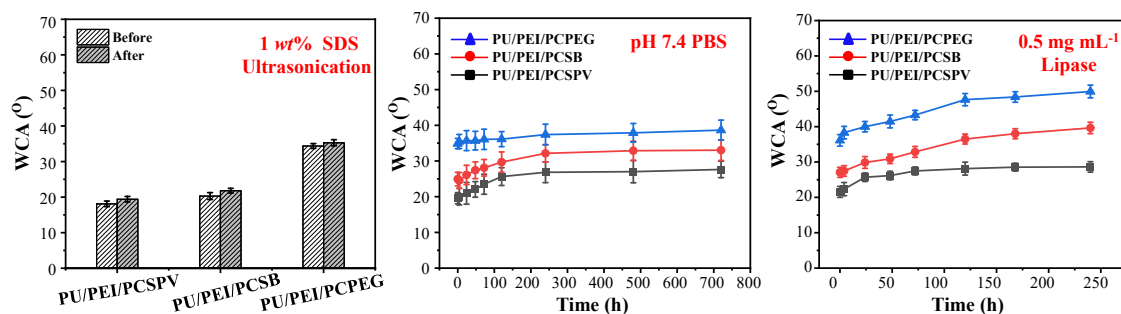

Figure 3 Stability results of modified coatings in 1 wt% SDS with ultrasonication for 10 min, PBS (pH=7.4) buffer for 720 h, and in 0.5 mg mL^{-1} lipase CALB solution for 240 h. Data represent mean ± SD (n = 3).
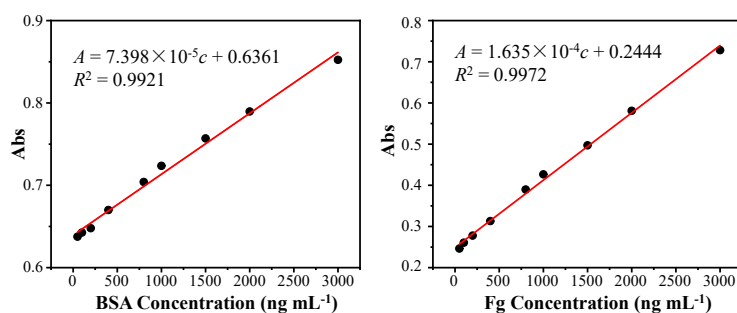

Figure 4 The calibration curves of the BSA and Fg proteins.

$$\frac{m}{n} = \frac{2I_c}{I_{d,e,f,g}} \qquad (1)$$

$$\frac{x}{y} = \frac{3I_c}{2I_o} \qquad (2)$$

$$\frac{p}{q} = \frac{6I_c}{I_z} \qquad (3)$$

Where I_c is the integral of methylene proton of MSA unit at 2.65 ppm, $I_{d,e,f,g}$ is the integral of the protons on the heterocycle of SPV unit at 7.94~8.78 ppm, I_o is the integral of two methyl protons of SBMA unit at 3.10 ppm, I_z is the integral of methylene proton of PEGMA unit at 3.70 ppm, and m, x, and p are repeat numbers of the MSA unit, n, y, and q are the corresponding repeating number of SPV, SBMA, and PEGMA units in the three copolymers, respectively.