

Supplementary data

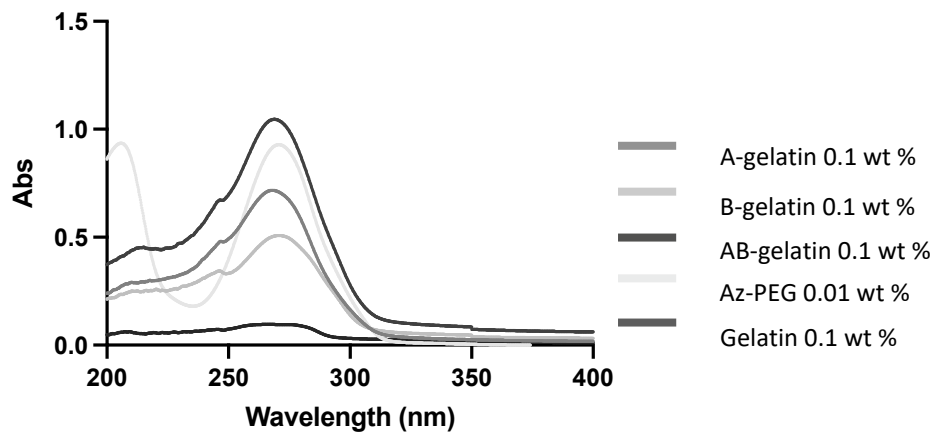


Fig. S1 UV absorbance spectra of different photo-reactive polymers.

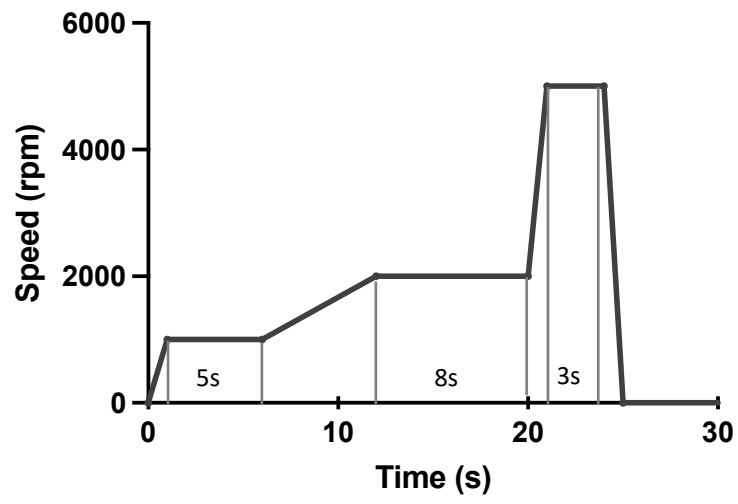


Fig. S2 Spin-coating condition.

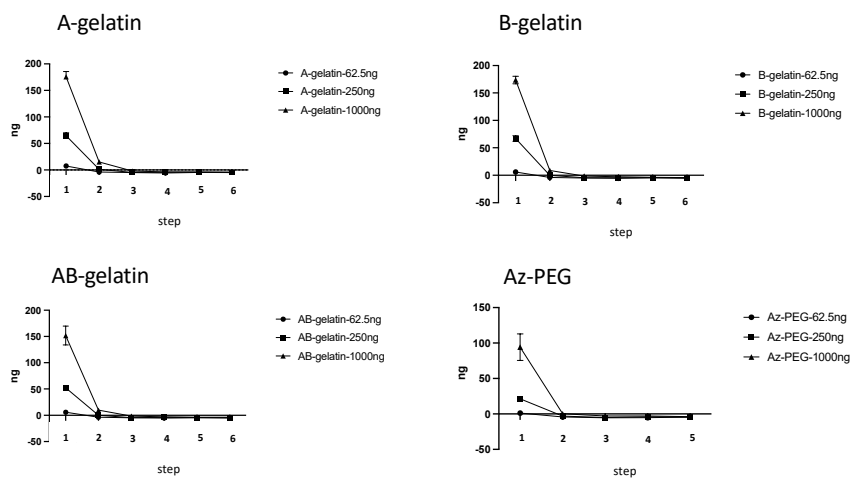


Fig. S3 Amount of EGF-FITC in the phosphate-buffered saline (PBS) wash after spin coating and photo-immobilisation.

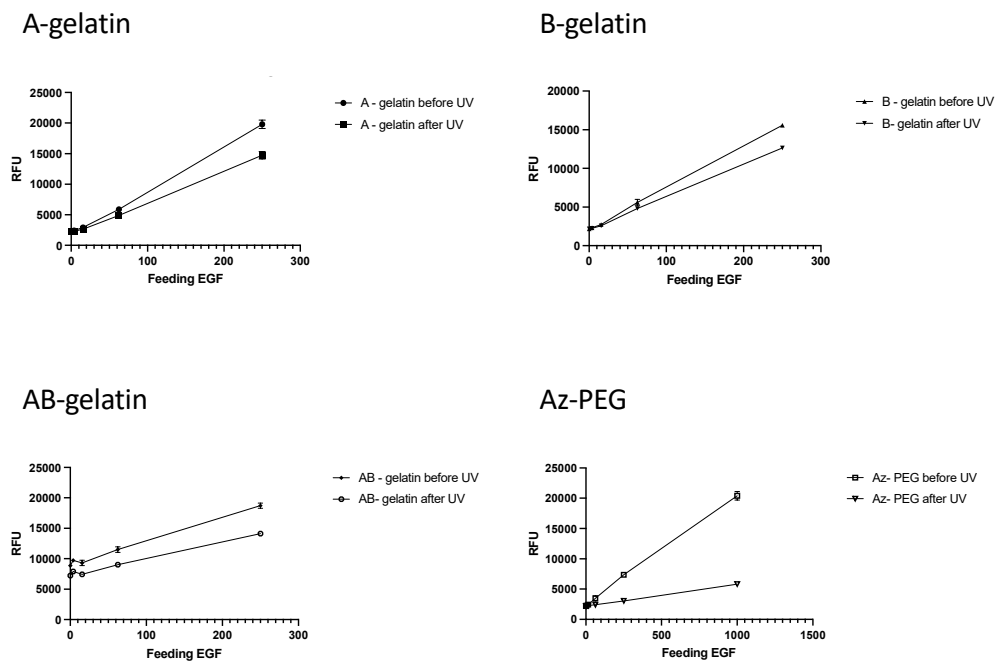


Fig. S4 Measurement of the amount of immobilised EGF. A known amount of EGF-FITC was dropped on the plate with the photo-reactive polymers and the fluorescence intensity (relative fluorescence unit; RFU) was measured before and after UV irradiation for determining immobilisation. The amounts of immobilised EGF, as shown in Table 3, were calculated using the calibration curves .

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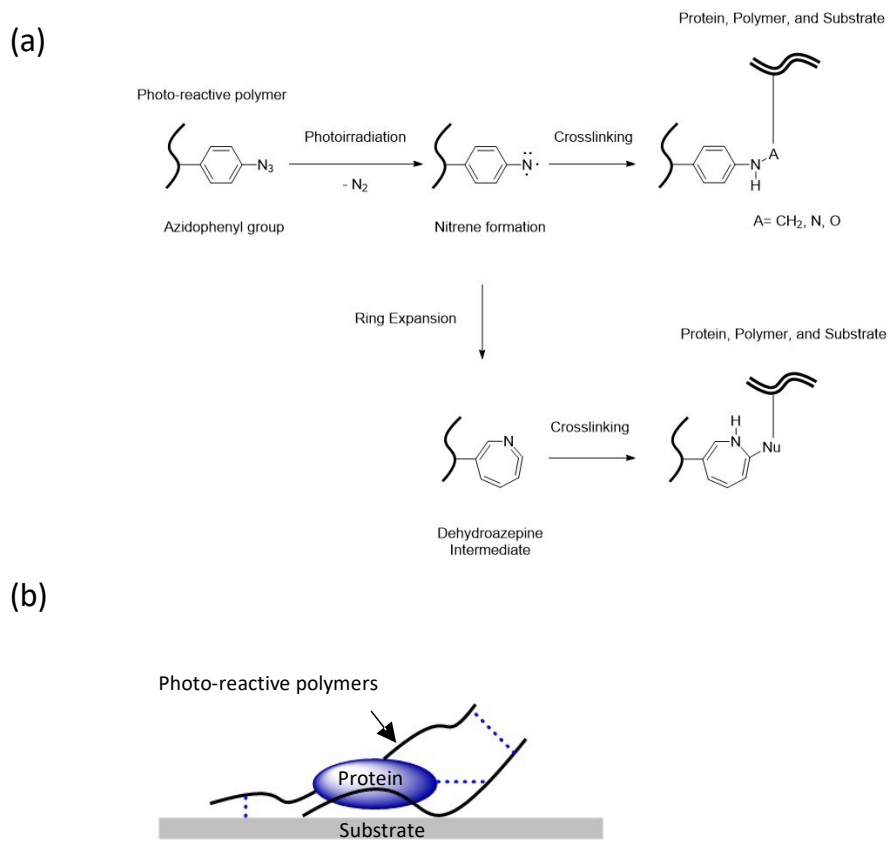


Fig. S5 Working mechanism of the azidophenyl group in the polymers. (a) Chemical reaction of the azidophenyl group after UV irradiation and (b) schematic illustration of the mechanism of immobilisation by cross-linking among photo-reactive polymers, EGF (protein), and substrate.

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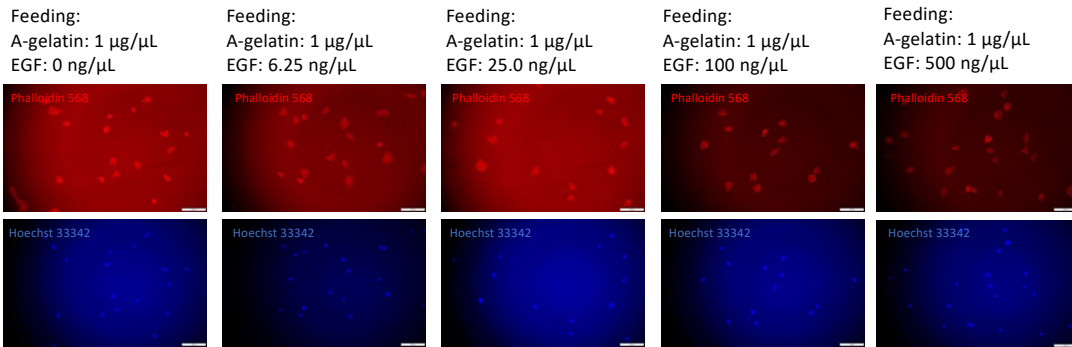
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Fig. S6 Actin filament staining in NRK49F cells. Actin filaments (Red) were stained with Phalloidin-568 reagent and nuclei were stained with Hoechst 33342. Scale bar: 100 μm .

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