

# Ultra-thin Spin Coated Crosslinkable Hydrogels for use in Cell Sheet Recovery - Synthesis, Characterization to Application

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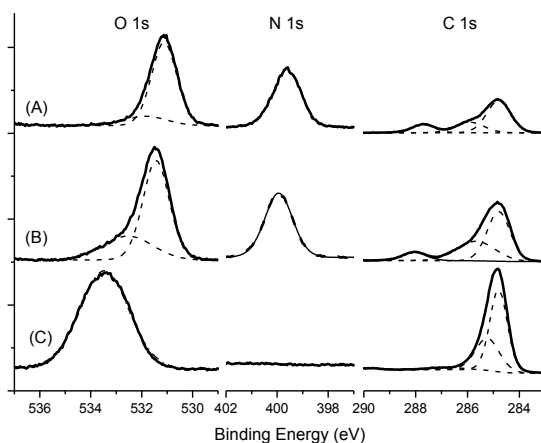
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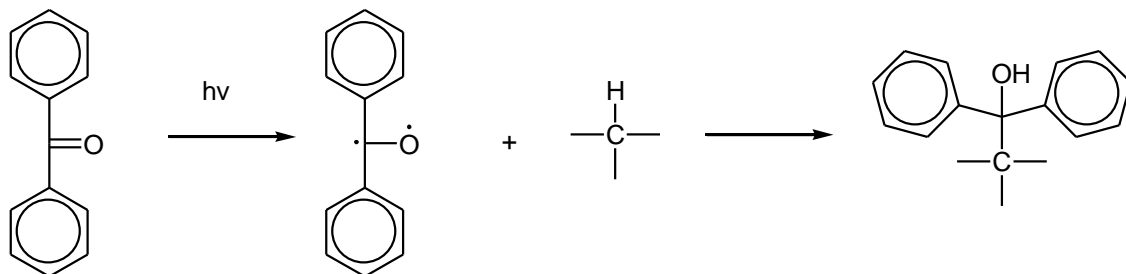
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**Fig.S1** XPS spectra of A)  $\approx$  188 nm thick film. B)  $\approx$  13 nm thick spin coated film. C) TCP substrate. C 1s spectra were scaled down by factor of 5 to fit with other intensities. The solid line represents the actual spectra obtained and the dotted lines represent the deconvolution of the broader peaks into individual components.

Figure 4 shows the XPS spectra of oxygen, nitrogen, carbon regions obtained from; A) NIPAm-*co*-AcBzPh films of approximately 188nm in thickness, B NIPAm-*co*-AcBzPh film of an approximate thickness of 13nm and C) a TCP bare substrate. XPS spectra of the thicker spin coated samples of NIPAm-*co*-AcBzPh correspond to XPS pNIPAm spectra obtained by other authors.<sup>9</sup> The contribution of AcBzPh in XPS spectra is negligible *i.e.* undetectable, because of the relative low concentration of the AcBzPh fraction, similar to FTIR analysis.



**Fig. S.2** The proposed crosslinking mechanism involves a CH insertion as above.