

Supporting Information

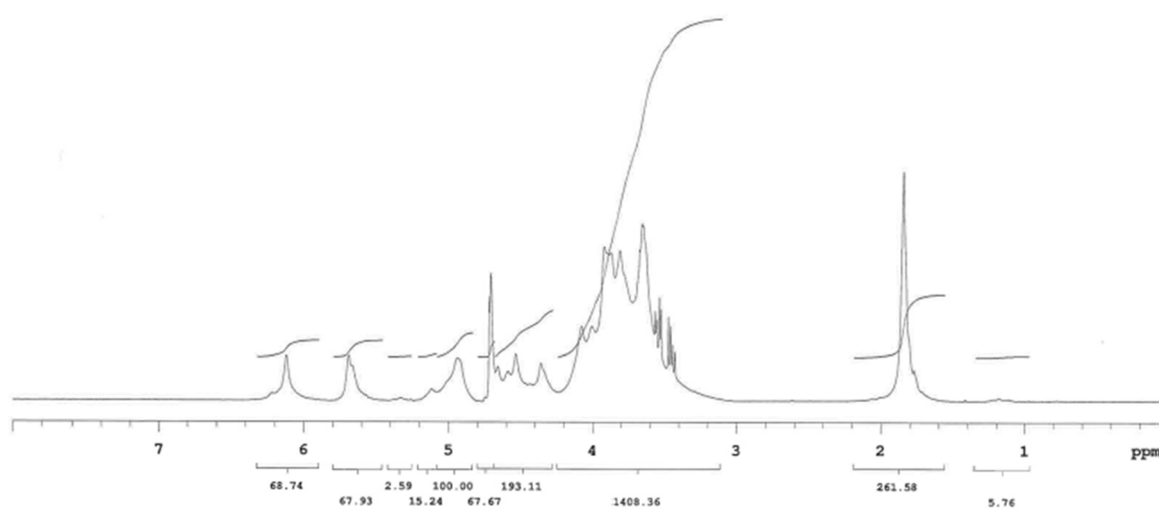


Figure S1. ^1H -NMR spectrum of the methacrylated alginate with a low degree of substitution (L hydrogels)

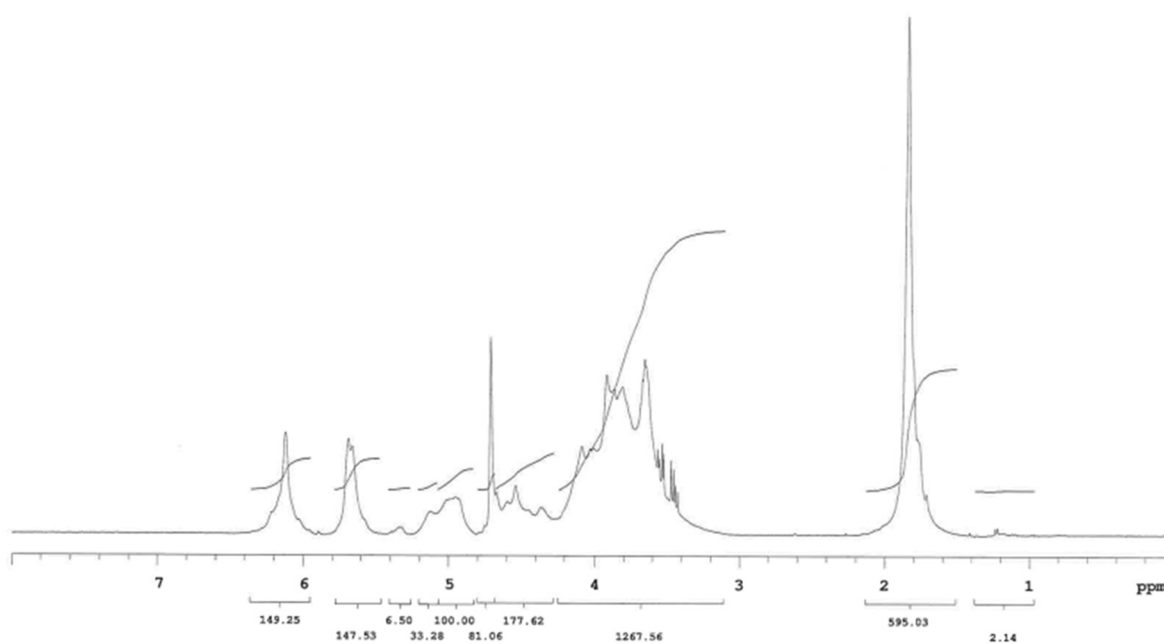


Figure S2. ^1H -NMR spectrum of the methacrylated alginate with a high degree of substitution (H hydrogels)

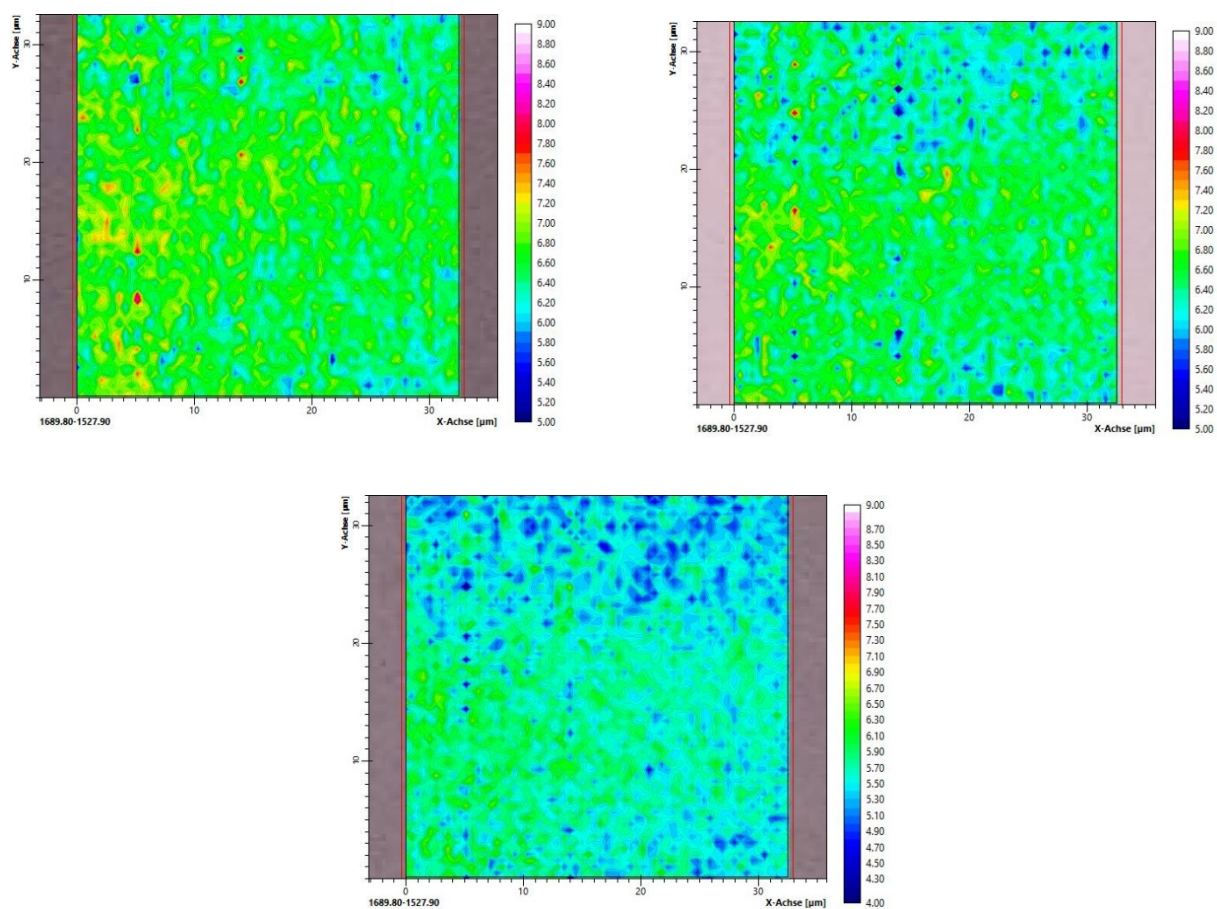


Figure S3. FTIR microspectral imaging of L_PEG after irradiation with an electron dose of 1x3 kGy (top left), 1x5 kGy (top right) and H_PEG after irradiation with an electron dose of 1x5 kGy (bottom).

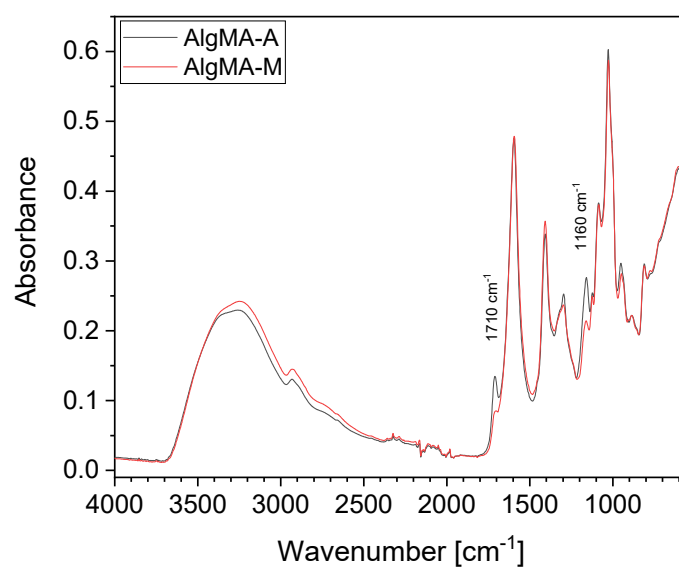


Figure S4. FTIR/ATR spectra of ALGMA H and ALGMA L after their functionalization.

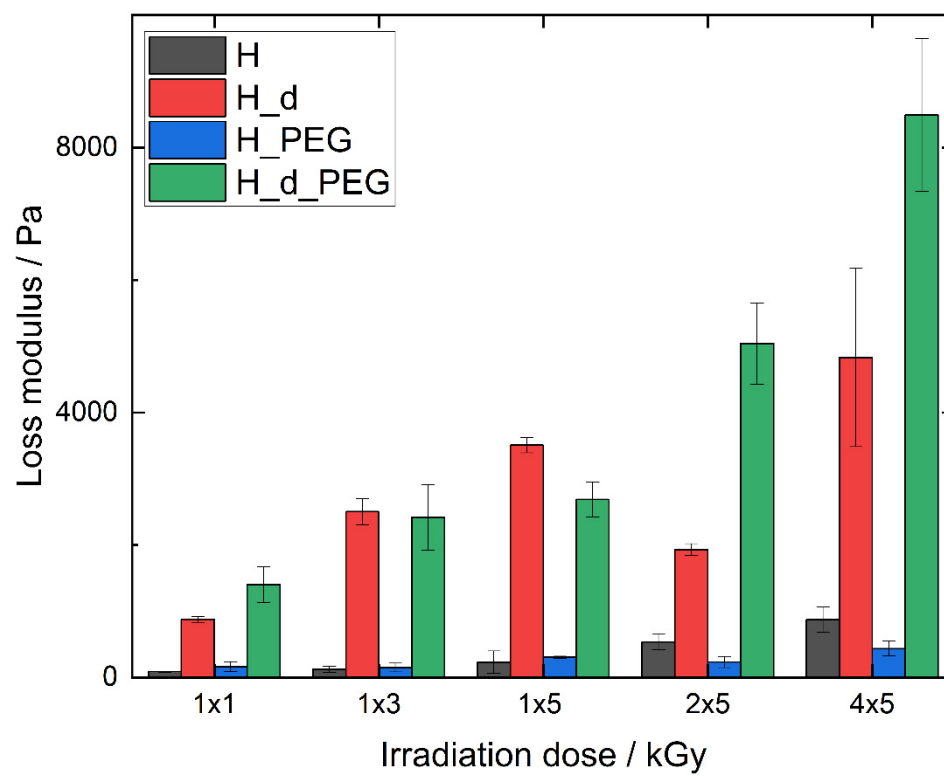


Figure S5. Loss modulus of AlgMA H hydrogels

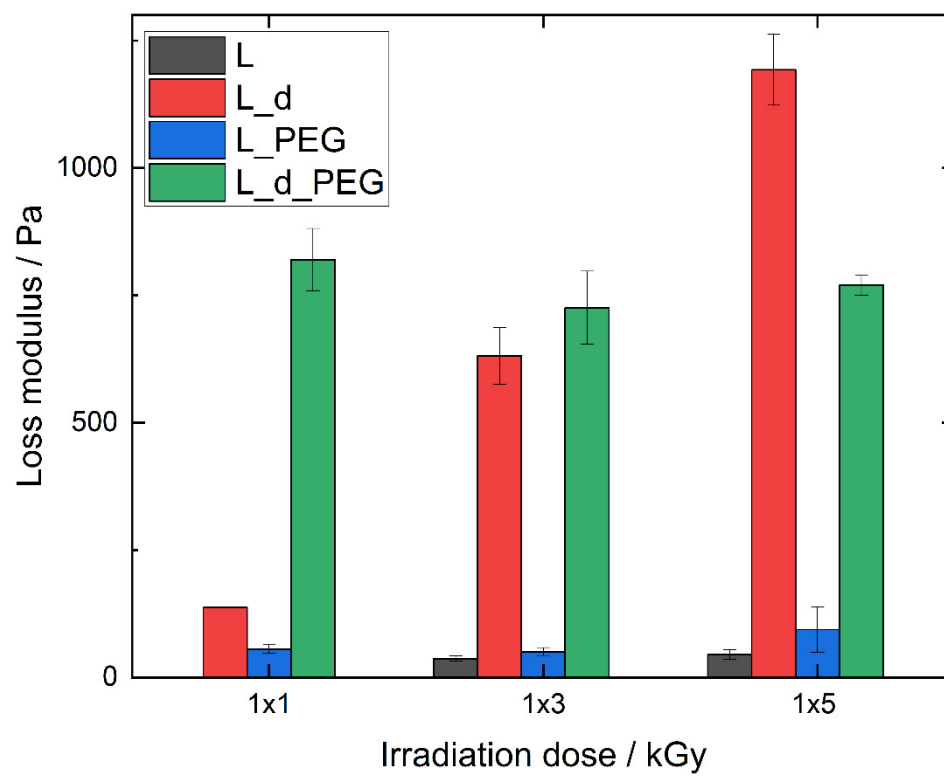


Figure S6. Loss modulus of AlgMA L hydrogels

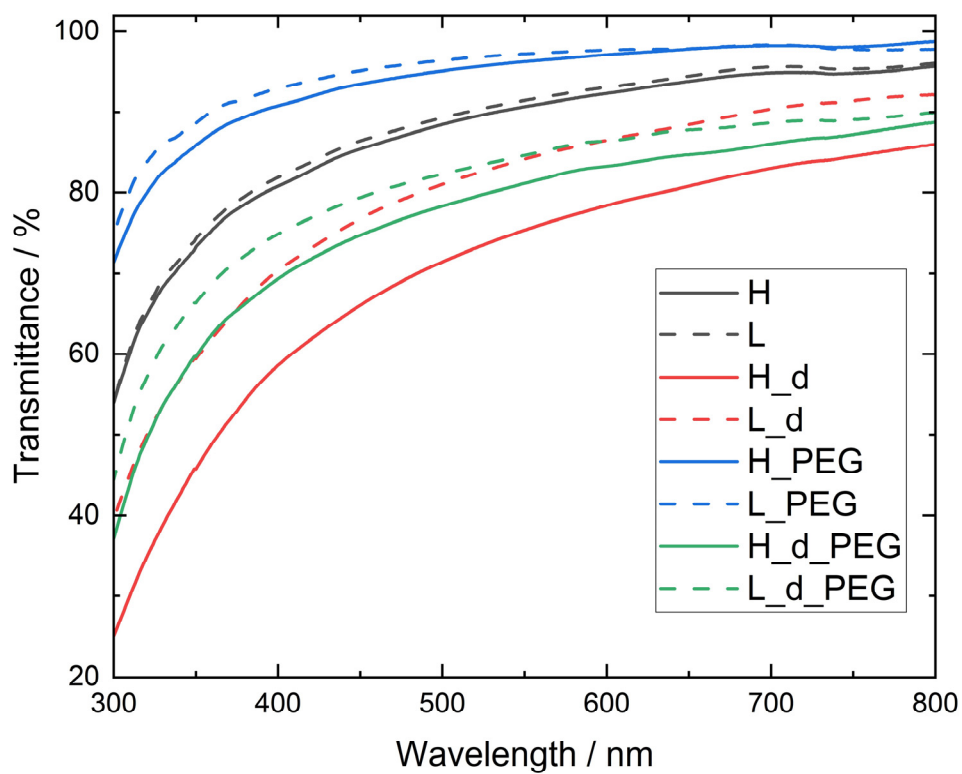


Figure S7. Frequency sweep with UV-VIS to measure the transparency of the polymers (1x5 kGy)

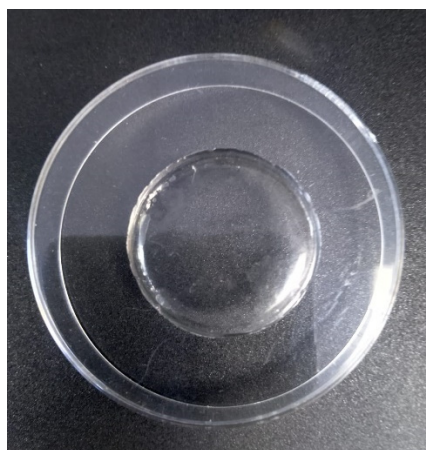


Figure S8. Visualization of the irradiated samples inside a petri dish indicating the transparency. The outer diameter of the petri dish is 55 mm.