

## Supplementary Material

# One step e-beam radiation cross-linking of quaternary hydrogels dressings based on Chitosan-Poly(Vinyl-Pyrrolidone)-Poly(ethylene Glycol)-Poly(Acrylic acid)

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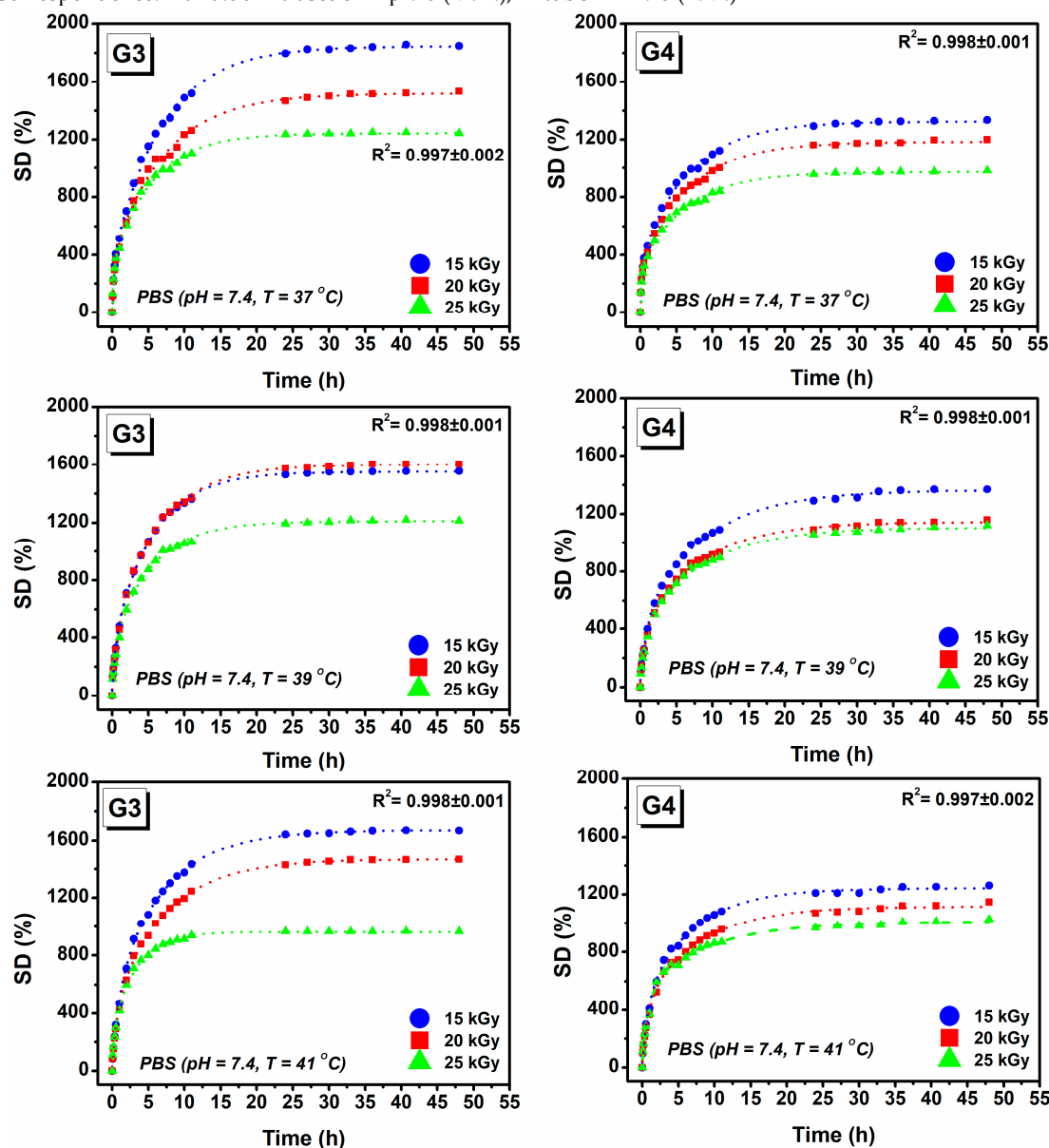


Figure S1. The time evolution of swelling degree of hydrogels in PBS (pH = 7.4) at temperatures in the

range 37–41 °C

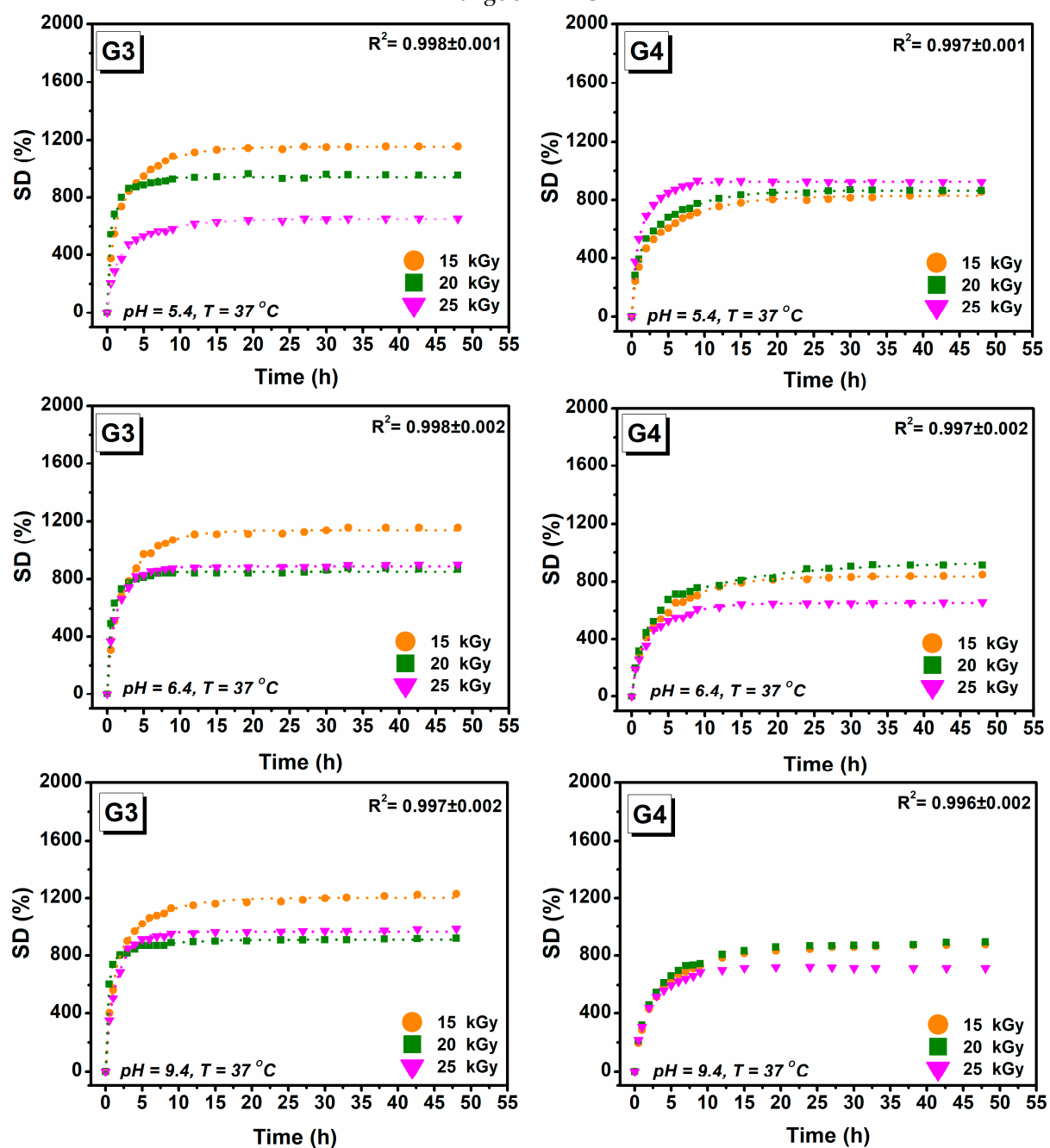
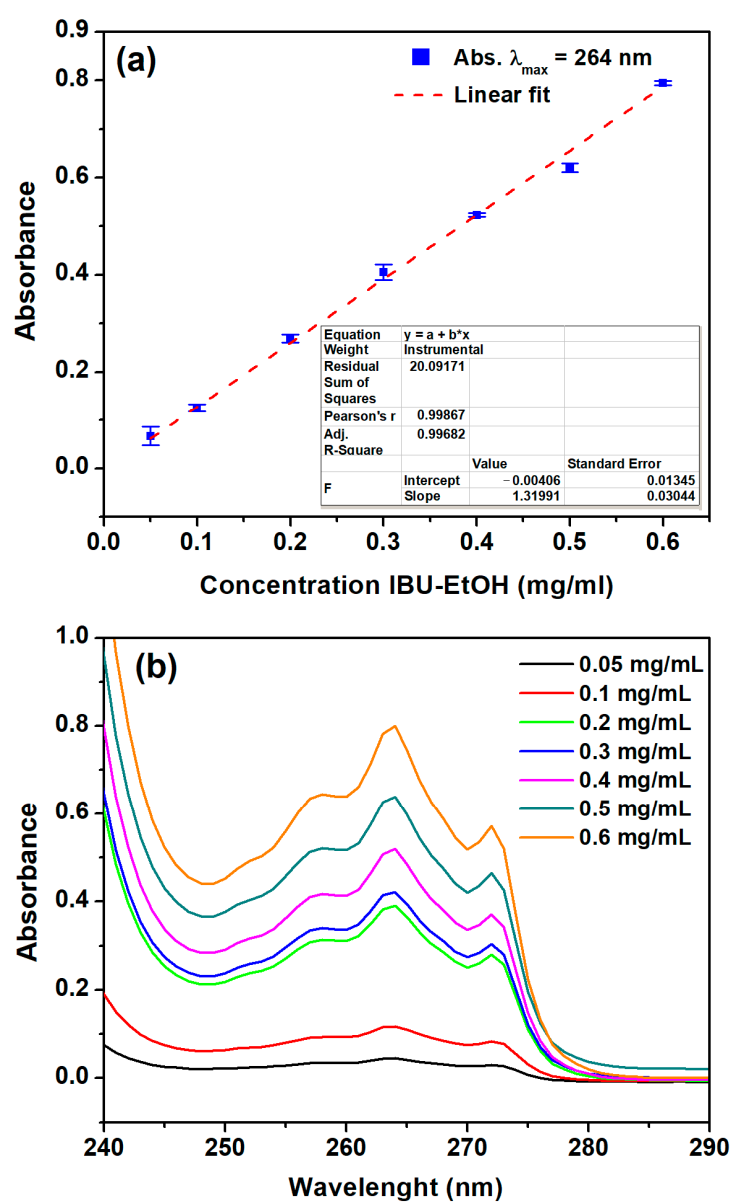
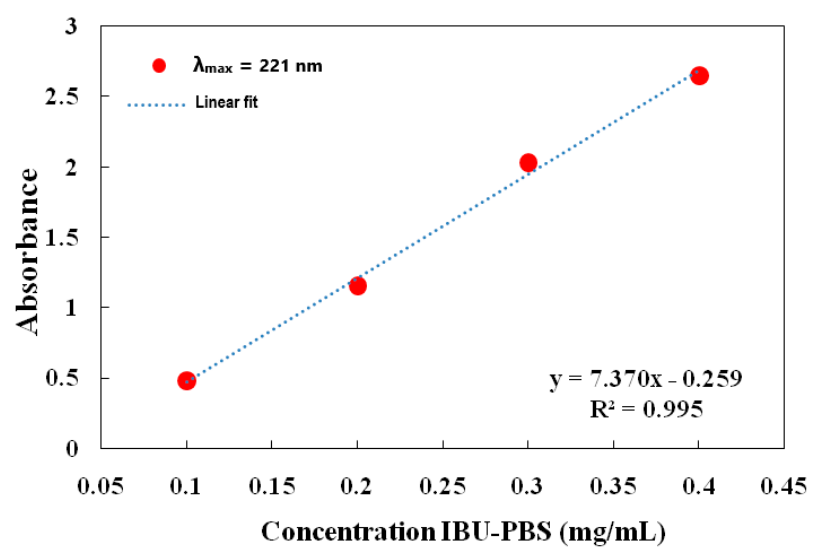


Figure S2. The time evolution of swelling degree of hydrogels in the pH range 5.4–9.4 at 37 °C.



**Figure 3.** (a) Calibration curve of IBU-EtOH (0.05–0.6 mg/mL) at 264 nm; (b) UV-Vis absorption spectra of IBU in EtOH.



**Figure S4.** Calibration curve of IBU-PBS (0.1–0.4 mg/mL) at 221 nm