

## Appendix: Inhibition of Self-Assembling Peptide Fibrils Formation Using Thioflavin T as a Photosensitizer

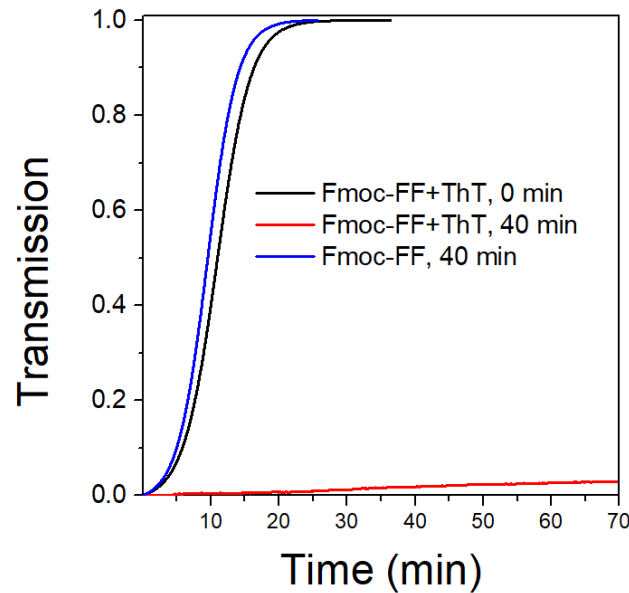


Fig. S1 Time dependence of the gelation kinetics as monitored by light transmission for Fmoc-FF+ThT with 0 (black line) and 40 min (red line) of irradiation of samples and Fmoc-FF with 40 min (blue line) of irradiation  $C_{\text{Fmoc-FF}} = 1865 \mu\text{M}$ ,  $C_{\text{ThT}} = 70 \mu\text{M}$  ( $C_{\text{Fmoc-FF}}/C_{\text{ThT}} = 26$ ). The irradiation power was constant,  $I = 80 \text{ mW/cm}^2$ . The irradiation wavelength was  $\lambda = 460 \text{ nm}$ .

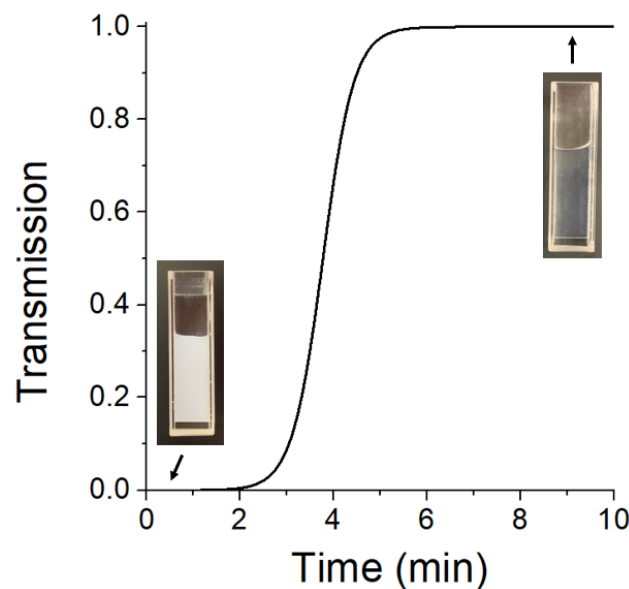


Fig. S2 Time dependence of the gelation kinetics as monitored by light transmission for Fmoc-FF hydrogel with the representative photos of the initial and the final stage of hydrogel formation.  $C_{\text{Fmoc-FF}} = 1865 \mu\text{M}$ .

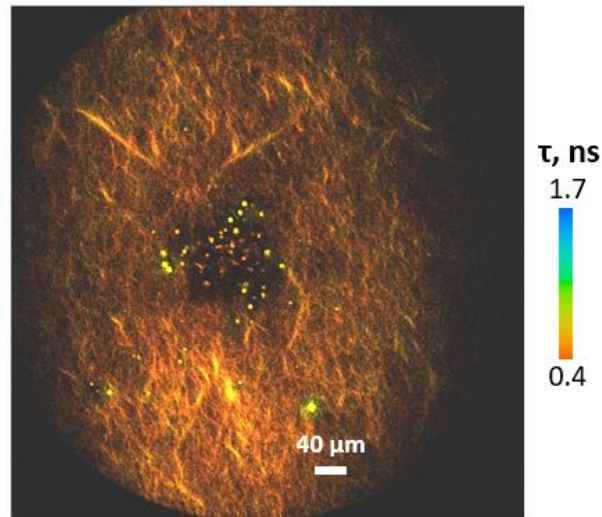


Fig. S3 FLIM image of the formed Fmoc-FF+ThT hydrogel that was irradiated at the central part during 142 min.  $C_{\text{Fmoc-FF}} = 1865 \mu\text{M}$ ,  $C_{\text{ThT}} = 70 \mu\text{M}$  (Scale bar  $40 \mu\text{m}$ ).

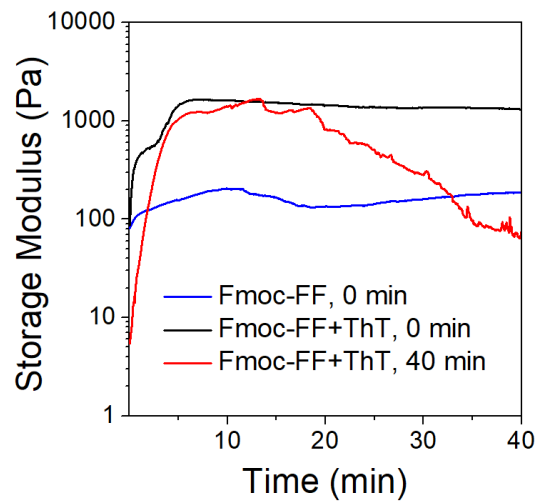


Fig. S4 The dependence of storage modulus on time for Fmoc-FF hydrogel (blue line), Fmoc-FF+ThT hydrogel without irradiation (black line) and with 40 min of irradiation (red line) (the dose of irradiation was  $d = 192 \text{ J/m}^2$ ). Here it is seen that the storage modulus of pure Fmoc-FF and Fmoc-FF+ThT hydrogel differs by an order of magnitude. This data is in consequence with the work [Tikhonova et al., 2012], where it was demonstrated that the presence of ThT modifies mechanical properties of the Fmoc-FF hydrogel.