

## Supplementary Figures: Controlled hydrogel photopolymerization inside live systems by X-ray irradiation

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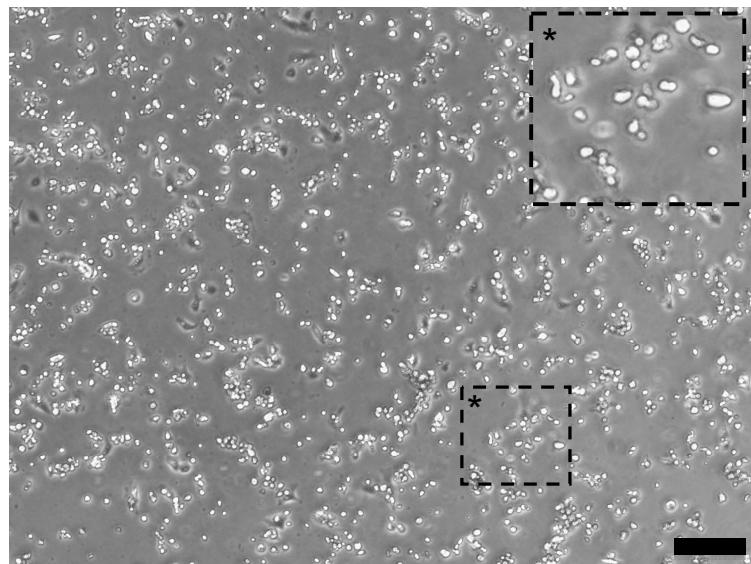
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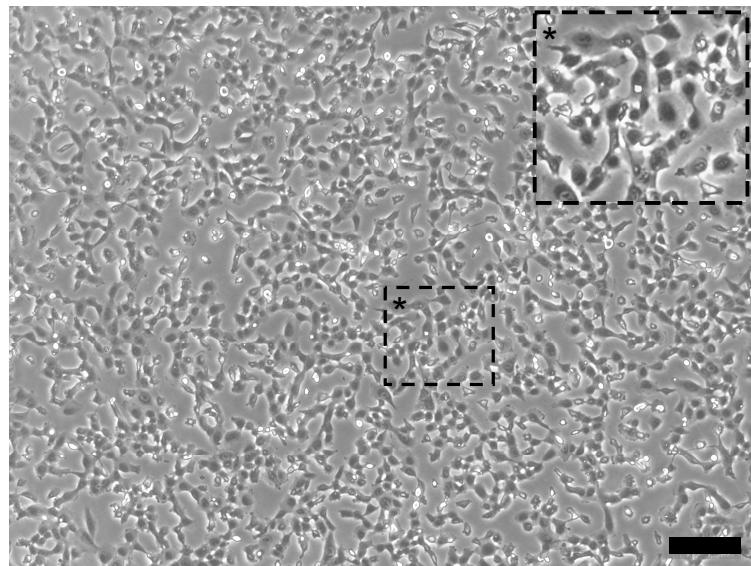
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a)

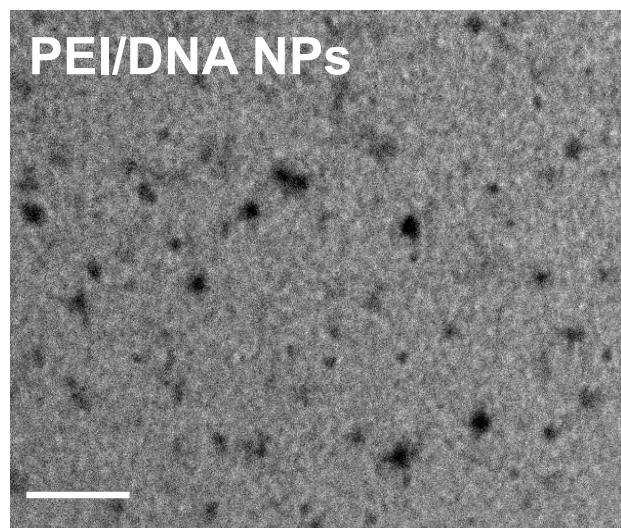


b)

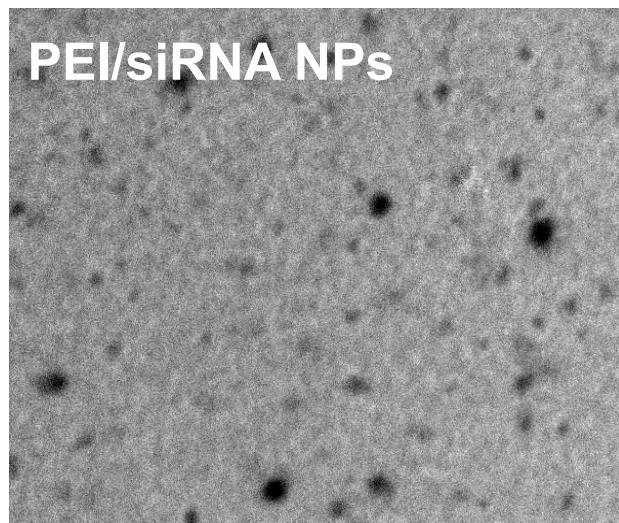


**Fig. S1.** (a) and (b): Morphology of human HT-1080 fibroblasts 1 day post seeding on our (a) PEG DA-based hydrogel and (b) hydrogel with heparin inclusion. Insets are higher magnification images of the areas marked the squares. Scale bars: 200  $\mu\text{m}$ .

a)



b)



**Fig. S2.** The transmission electron micrograph (TEM) reveals both kinds of PEI/plasmid DNA (a) and PEI/siRNA (b) NPs (scale bar, 250 nm).