

## SUPPLEMENTARY INFORMATION

### Effect of Photoconversion Conditions on the Spectral and Cytotoxic Properties of Photoconvertible Fluorescent Polymer Markers

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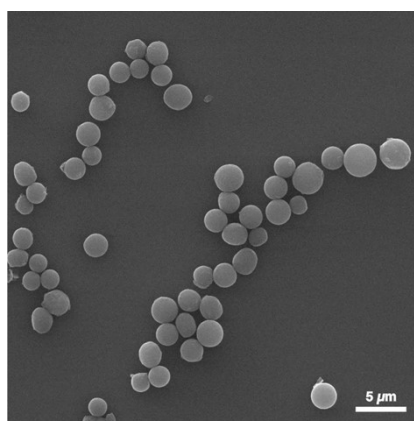


Fig. S1. SEM images of fluorescent microcapsules.

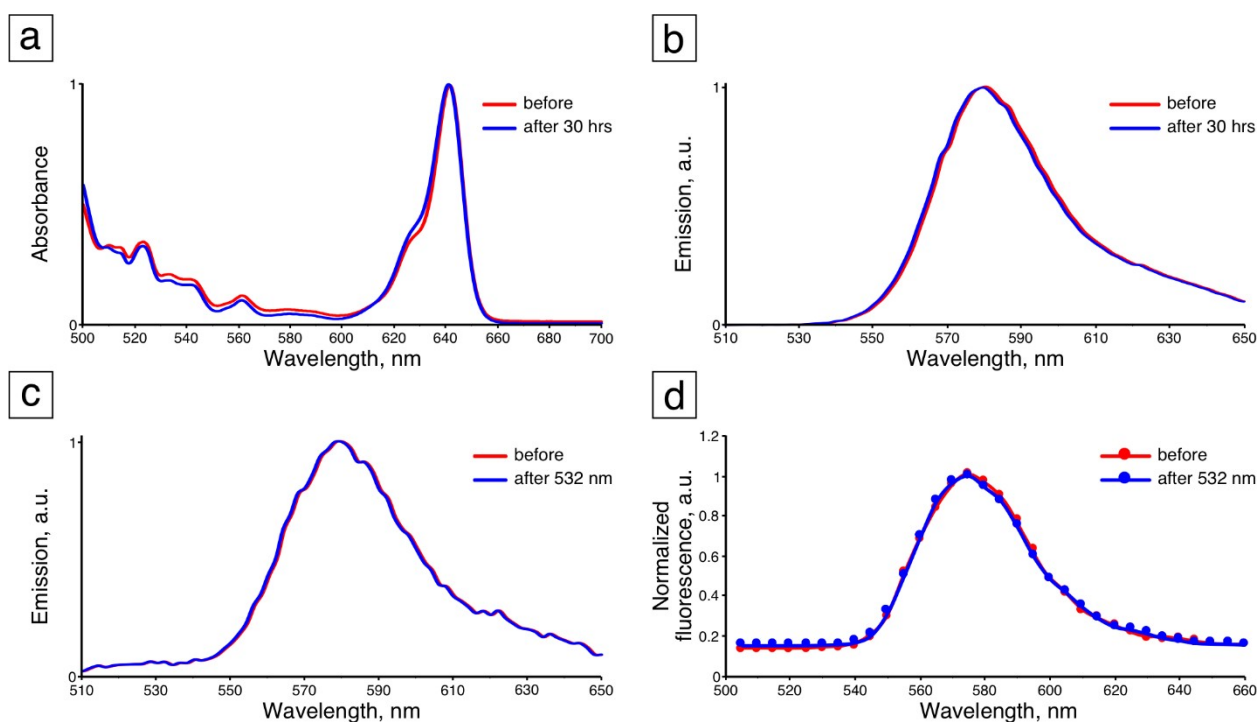


Fig. S2. Normalized absorbance (a) and emission (b) (Ex 490 nm) spectra of RhB aqueous solution (0.1 mg/mL) before and after 30-hour treatment under 180 °C in high-pressure autoclave. Normalized emission (Ex 490 nm) spectra of RhB aqueous solution before and after 2-hour irradiation under 532 nm pulsed laser (c). Emission spectra (Ex 490 nm) obtained from dried droplet of RhB aqueous solution before and after laser irradiation with the 532 nm wavelength and recorded with CLSM ( $\lambda$ -scans). Spectra were normalized using LAS X software (d).

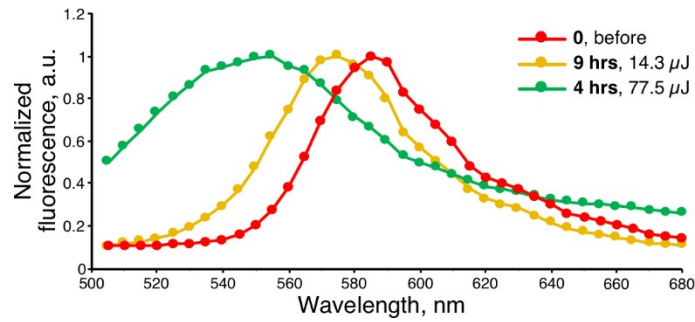


Fig. S3. Fluorescent microcapsule emission spectra under 488 nm excitation before and after laser irradiation under 14.3  $\mu\text{J}$ , 9 hrs, and 77.5  $\mu\text{J}$ , 1 hrs, recorded with CLSM ( $\lambda$ -scans). Spectra were normalized using LAS X software.

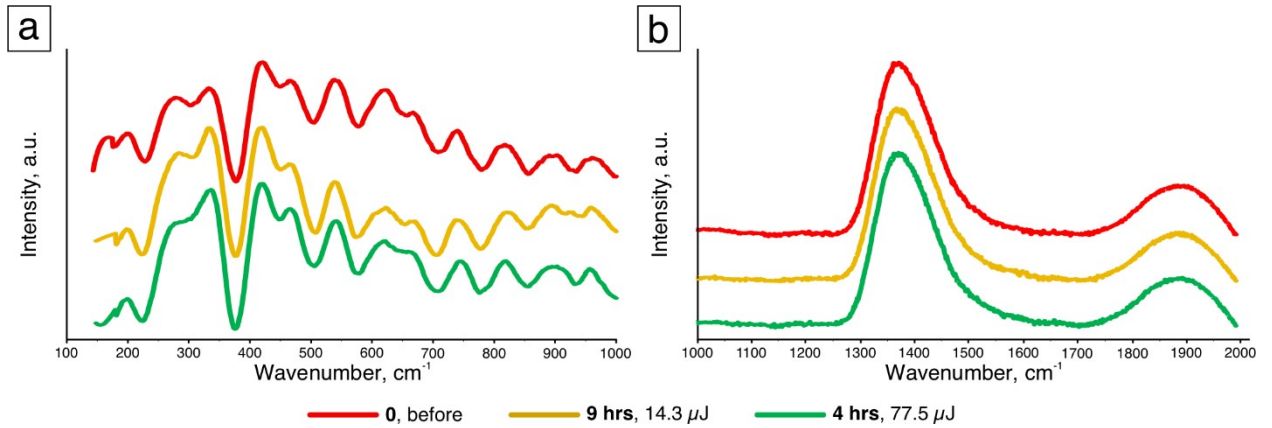


Fig. S4. Raman spectra after baseline correction and normalization of initial fluorescent microcapsules (before laser irradiation) and fluorescent microcapsules after irradiation under 14.3  $\mu\text{J}$ , 9 hrs, and 77.5  $\mu\text{J}$ , 1 hrs, recorded in SynchroScan TM mode (a) and regular mode (b) under excitation with a laser at 785 nm. All spectra were normalized by the Renishaw WiRE software.

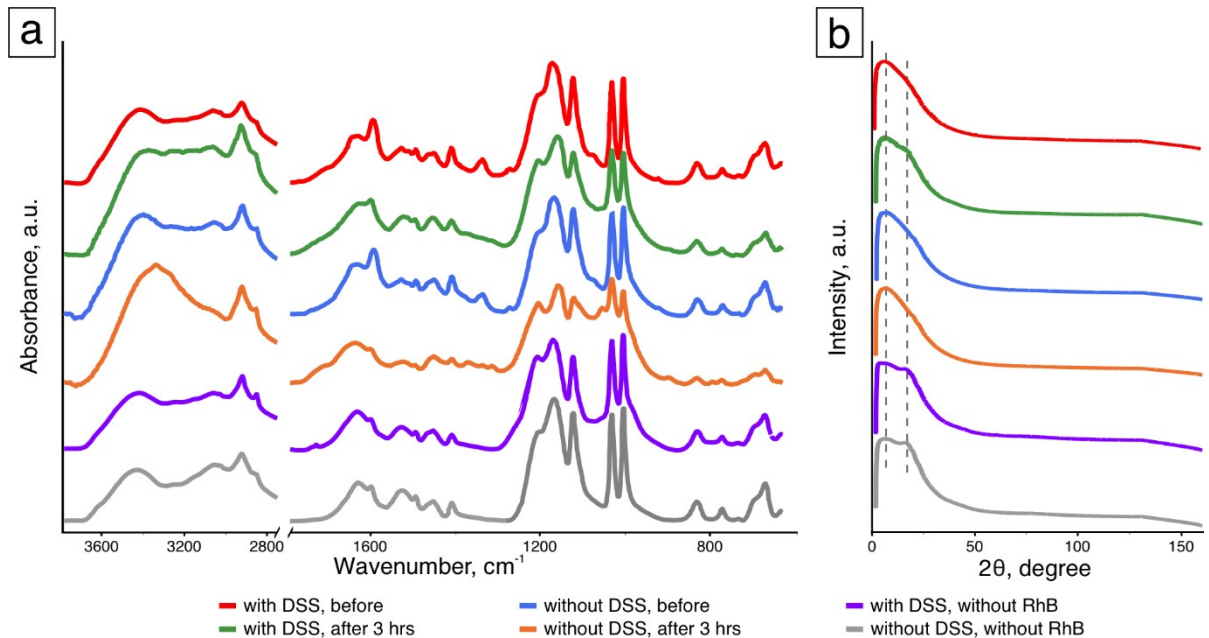


Fig. S5. FTIR spectra (a) and XRD patterns (b) of samples.

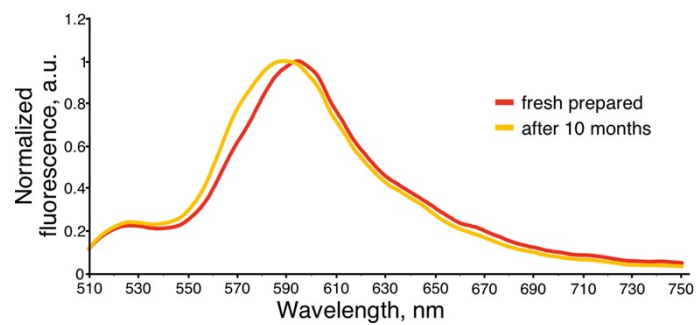


Fig. S6. Normalized fluorescent spectra ( $\lambda_{\text{ex}} = 490 \text{ nm}$ ) of fresh prepared fluorescent microcapsules and fluorescent microcapsules kept under  $7^\circ\text{C}$  in transparent flask without protective foil (normal intensity of illumination) during 10 months.