

Scheme S1. Synthesis of the di-hydroxyl SP.

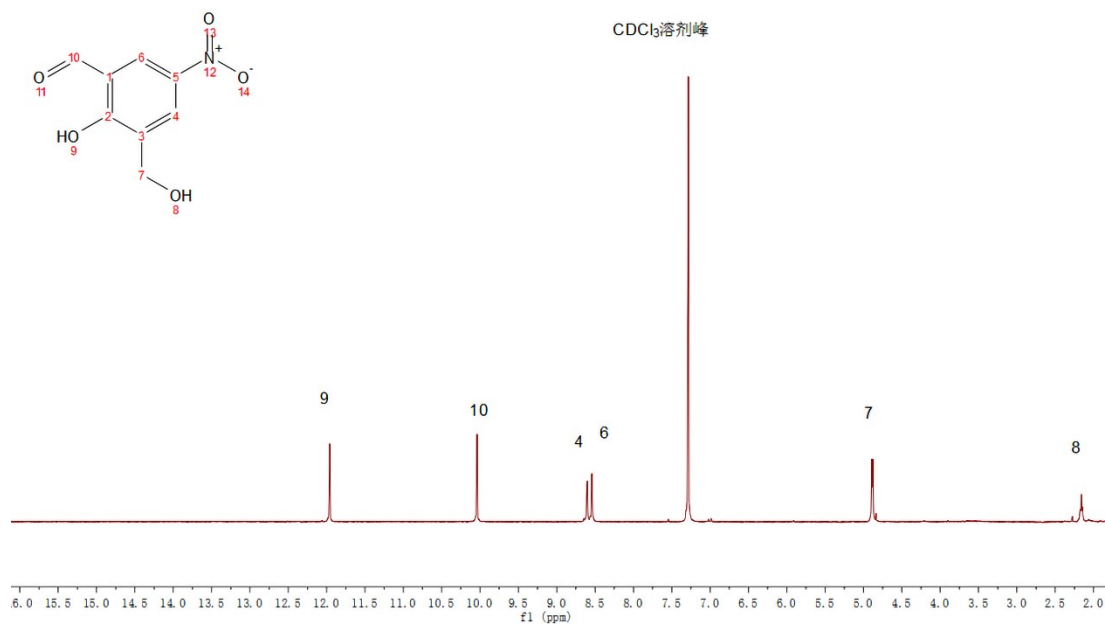


Figure S1. ¹H NMR of compound 5.

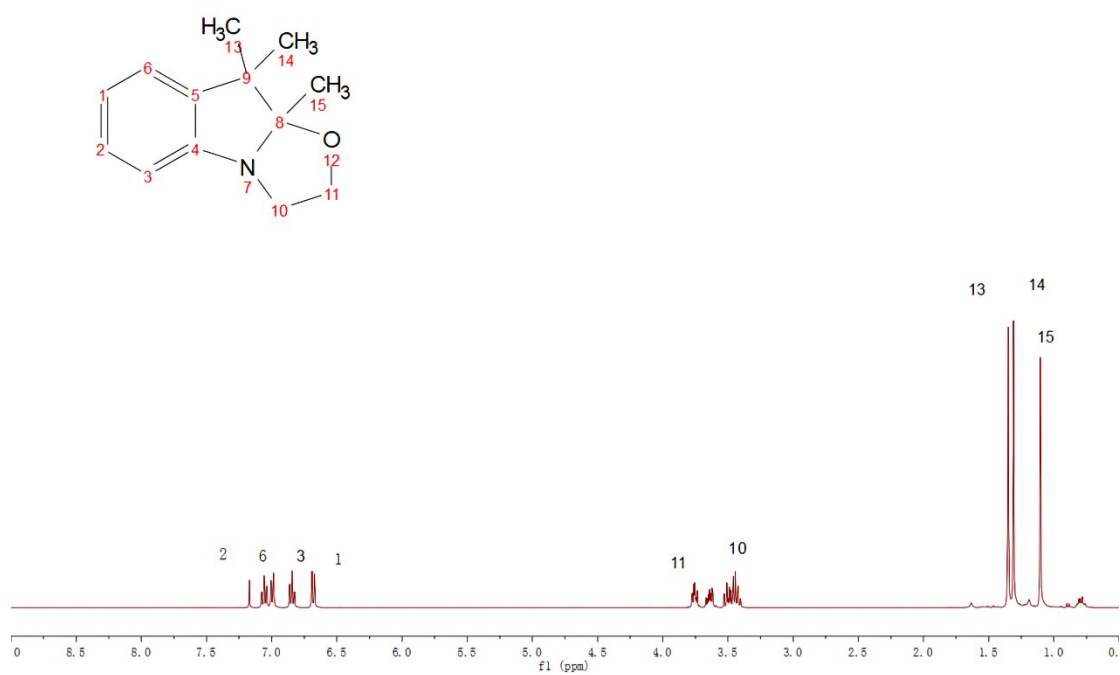


Figure S2. ¹H NMR of compound 3.

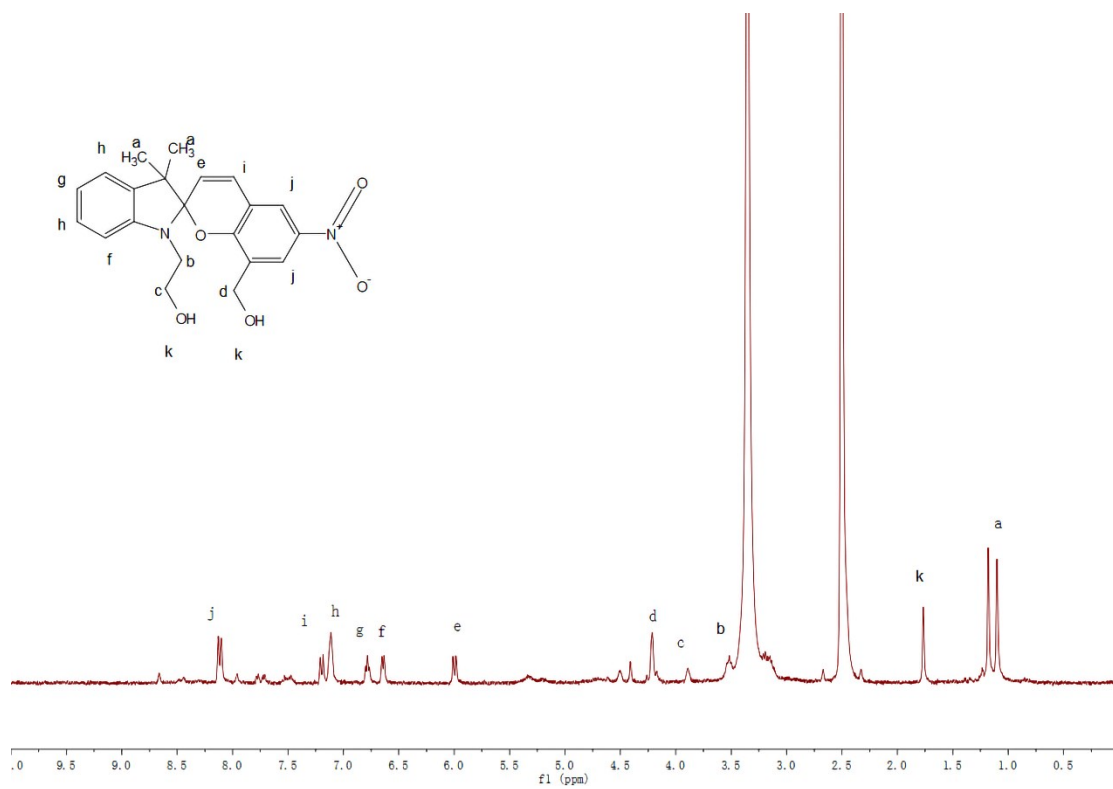


Figure S3. ¹H NMR of compound 6.

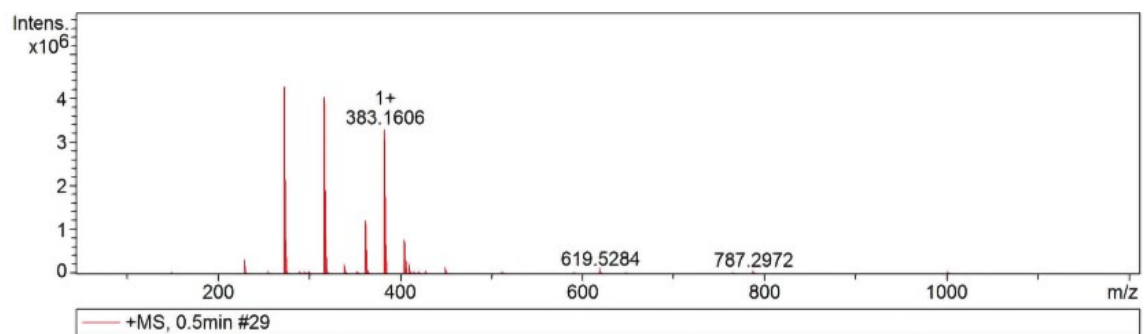


Figure S4. HRMS(ESI) spectrum of compound 6.

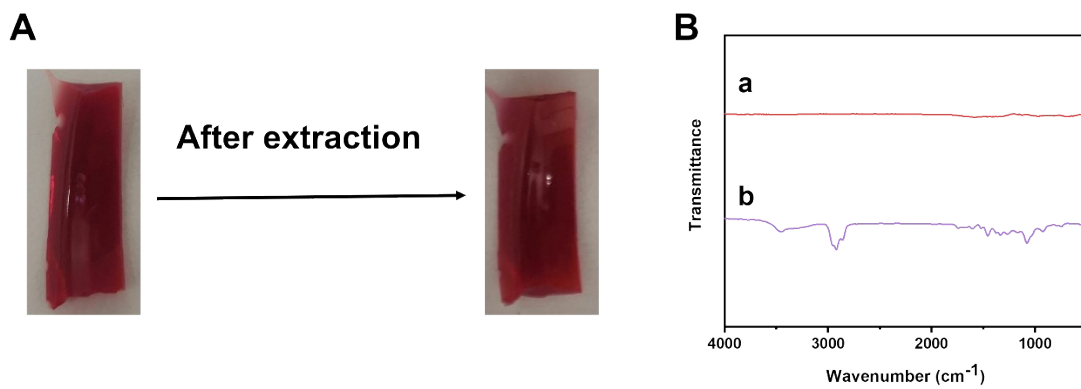


Figure S5. (A) Photo of PU-SP-4 hydrogel and (B) FT-IR spectra of (a) leaching liquor, (b) SP solution.

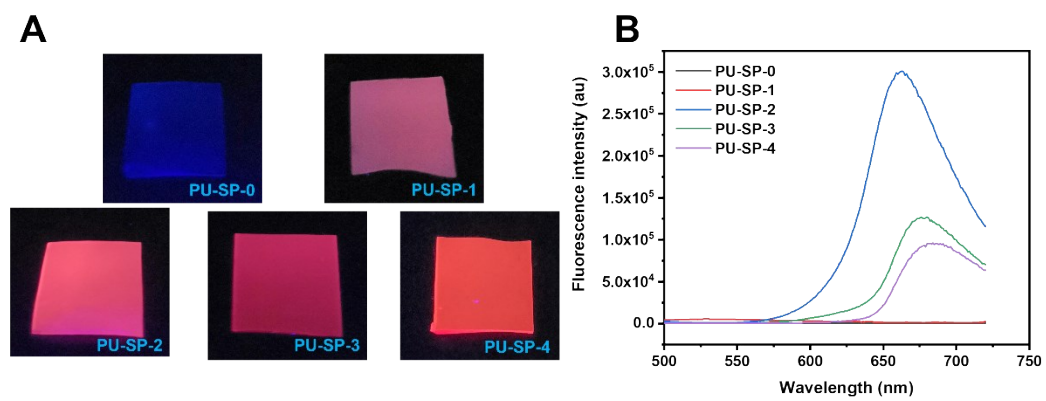


Figure S6. (A) Photos of luminous PU-SP hydrogels and (B) Fluorescence emission spectra.

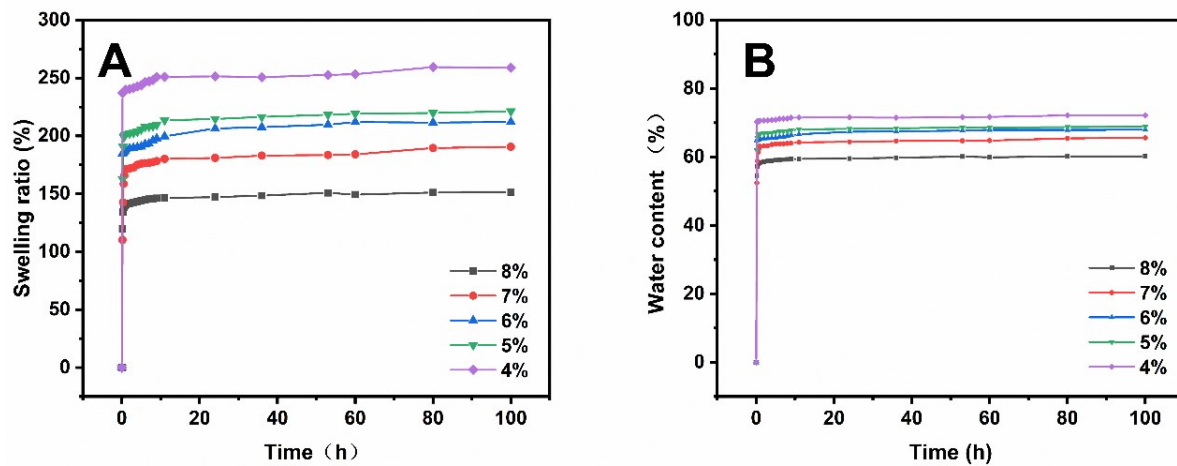


Figure S7. (A) Swelling ratio with time of PU-TMP-x; (B) Water content with time of PU-TMP-x.

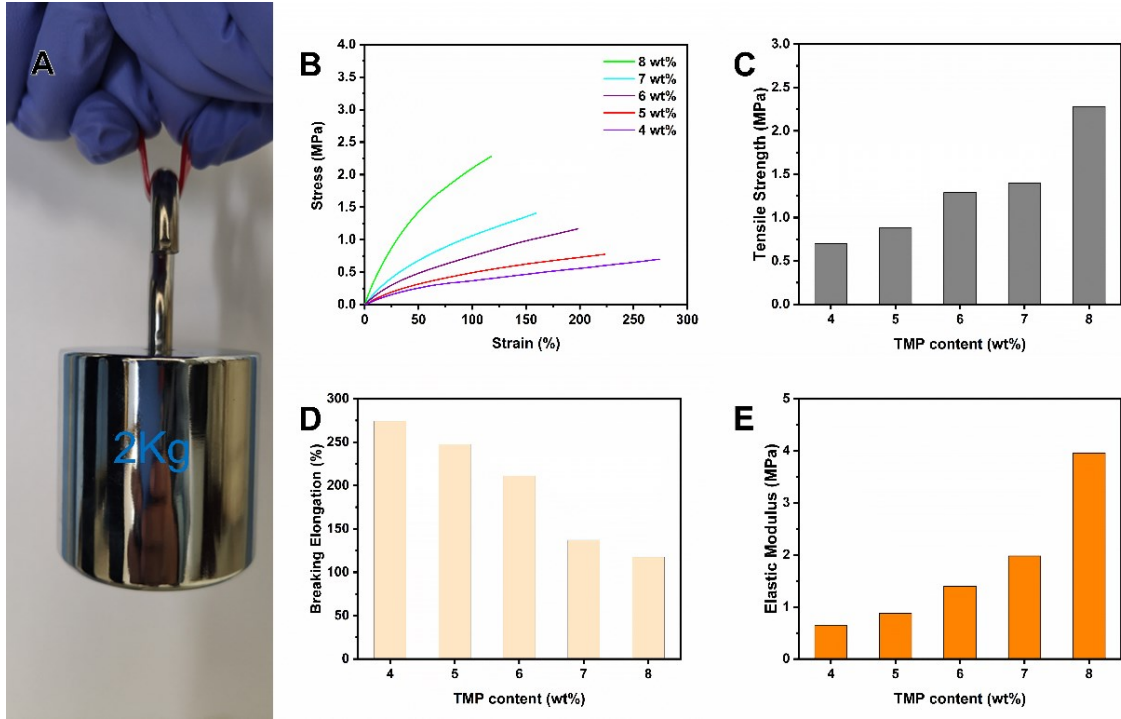


Figure S8. (A) Photo of weight capacity (B) Tensile strain-stress curves of PU-SP hydrogels; Mechanical properties of PU-SP hydrogels: (C) Tensile strength; (D) Breaking strain; (E) Elastic modulus.

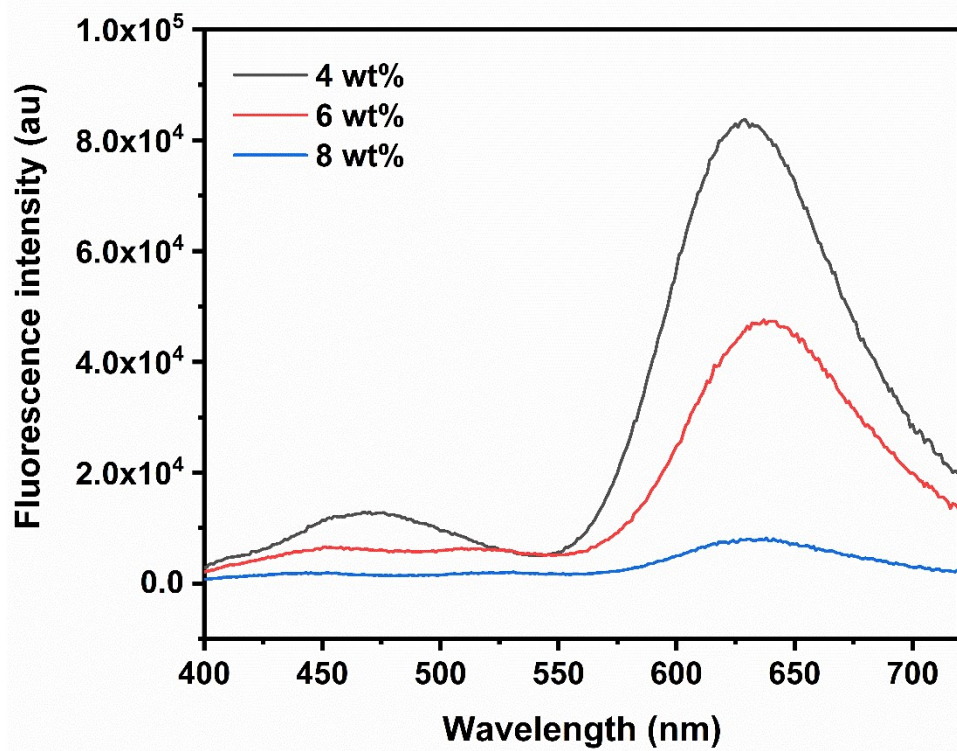


Figure S9. Fluorescence spectra of PU-TMP hydrogels.