Electronic Supplementary Information

A ion-responsive photonic hydrogel sensor for portable visual detection and timely removal of lead ions in water

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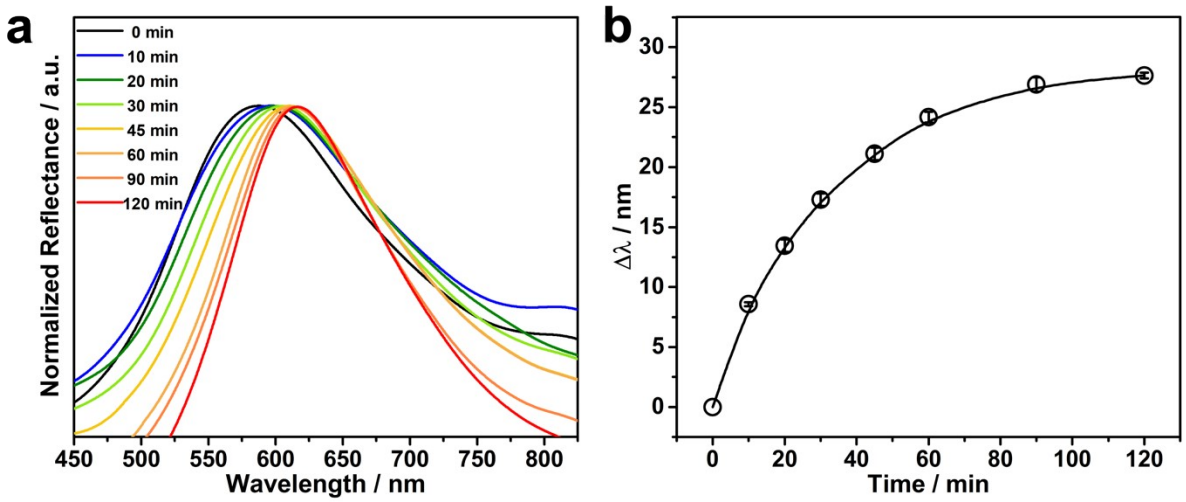

Fig. S1 (a) Reflection spectra and (b) Δλ of the PNBC photonic hydrogel sensor in response to 1.0 mM Pb^{2+} solution for different time.

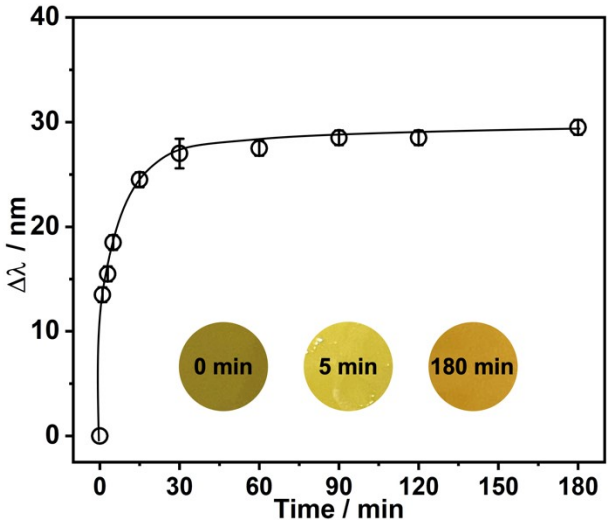

Fig. S2 The Δλ of the 250 μm-thick PNBC photonic hydrogel sensor in response to 5 mM Pb^{2+} solution for different time.

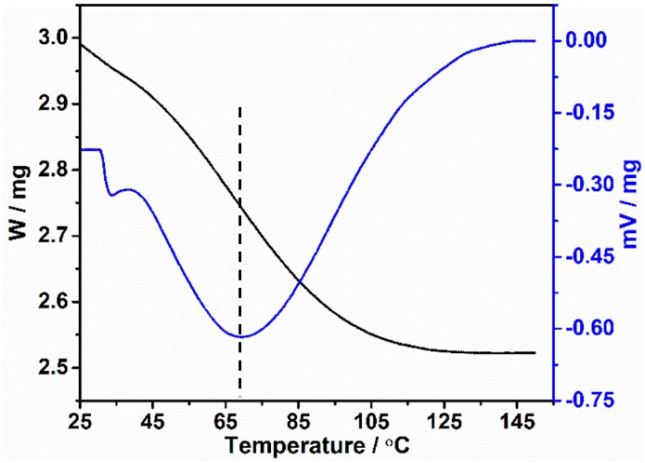

Fig. S3 TG-DSC curves of the PNBC photonic hydrogel.

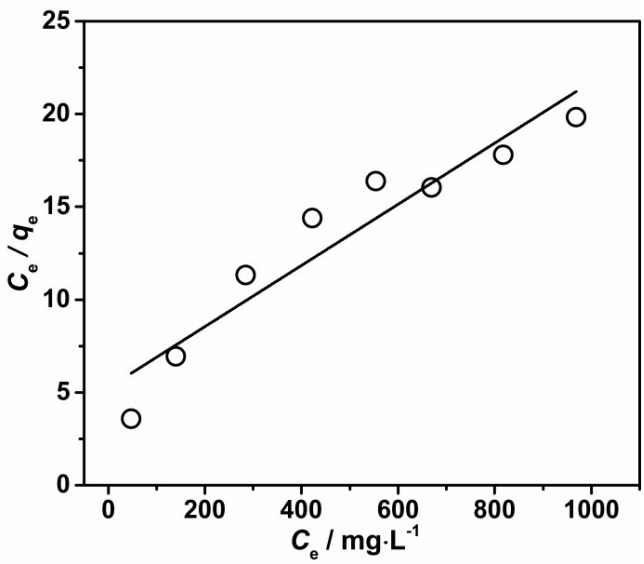

Fig. S4 Fitting of the Langmuir isotherm model for Pb^{2+} adsorption onto the PNBC photonic hydrogel. The usage of the hydrogel is 14 g·L^{-1}, the operating temperature is 25 °C, and the pH value is 5.5.