## **Supporting Information**

## Establishment of an immunofiltration strip for the detection of 17β-estradiol based on thephotothermal effect of black phosphorescence

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Figure S1. The home-made portable photothermal detection device (808 nm infrared laser and the temperature sensor).



Figure S2. FT-IR spectra of E2 and E2-CME.



Figure S3. AFM image and height profiles along the black lines of BP nanosheets.



Figure S4. Correlation of the recovery between immunofiltration strip and HPLC method.