

## Electronic Supplementary Information

### Highly efficient photothermal sterilization in water mediated by Prussian blue nanocages

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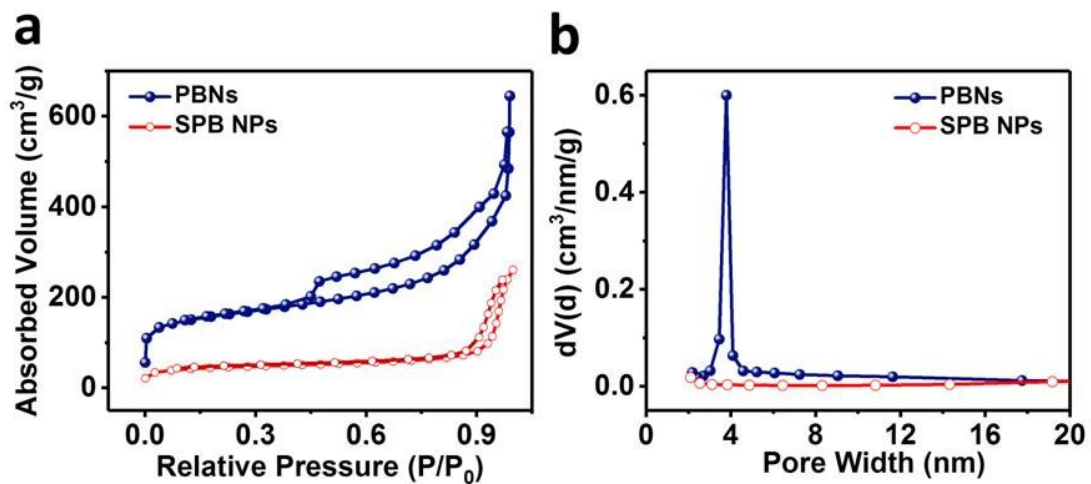


Fig. S1 (a) Nitrogen adsorption-desorption isotherm and (b) pore size distribution of both the PBN and SPB samples.

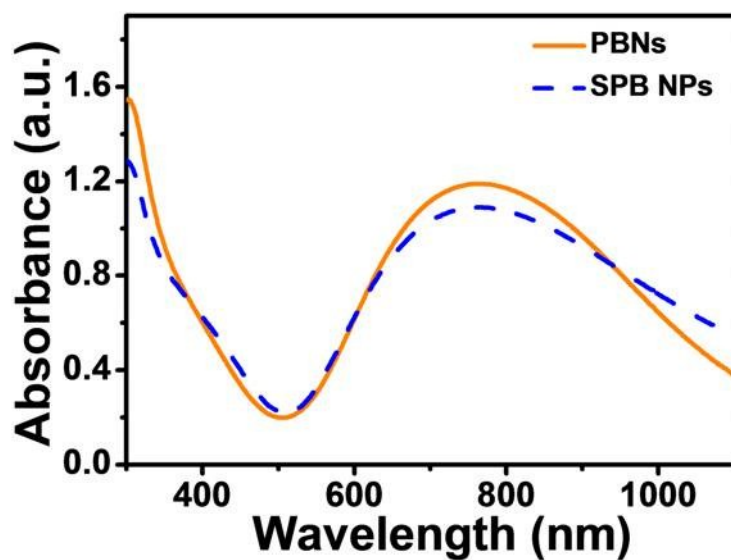
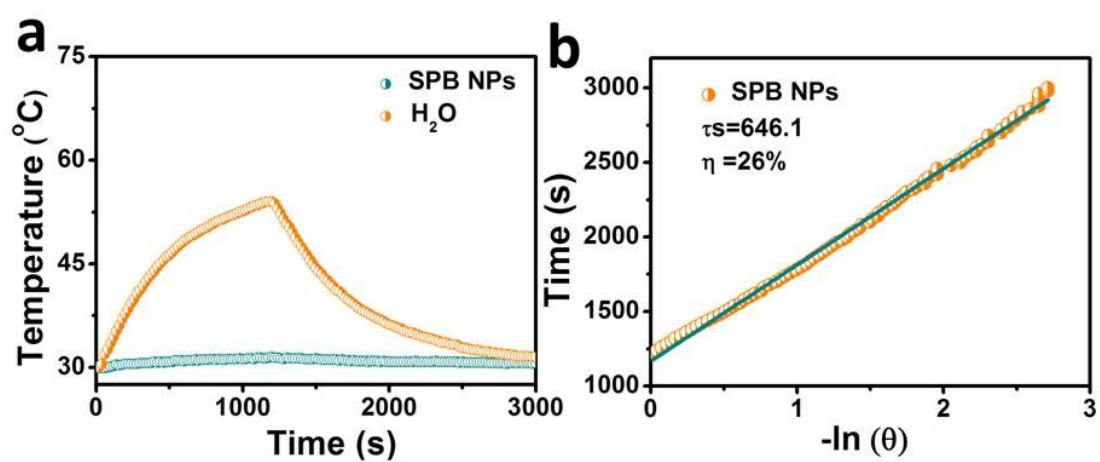
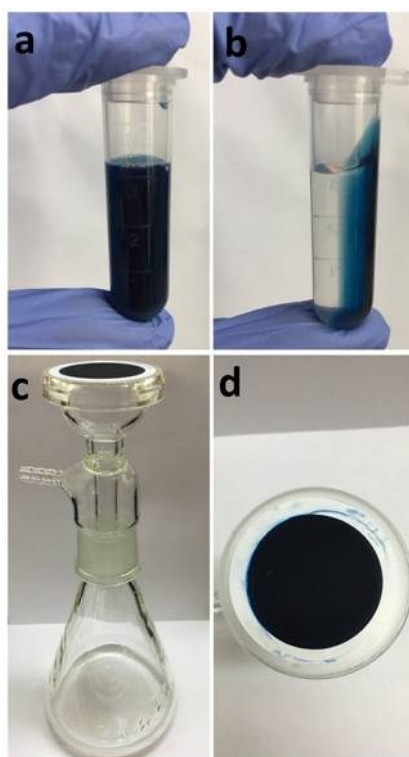


Fig. S2 UV-vis-NIR absorption spectra of the PBNs and SPB NPs.



**Fig. S3** (a) Heating and cooling curves of the SPB NPs dispersion (100 μg/mL, 3 mL). (b) Plot of cooling time *versus* negative natural logarithm of the temperature driving force, which is obtained from the cooling period shown in panel a.



**Fig. S4** Photographs of PBNs (a) before and (b) after centrifugation, (c-d) Collection of PBNs by filtration.