

Electronic Supplementary Information

Black phosphorus nanosheet-polypyrrole nanocomposites for high-performance photothermal cancer therapy

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Supplementary Figures

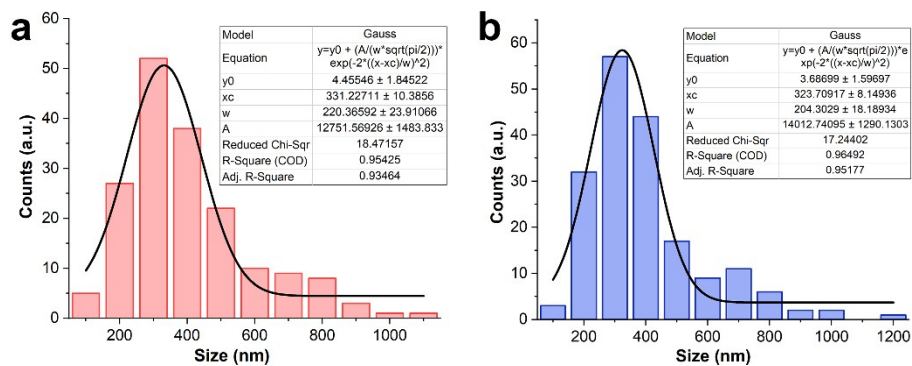


Fig. S1 Flake lateral length histograms of BP NSs (a) and BP/PPy NSs (b), calculated from the TEM images.

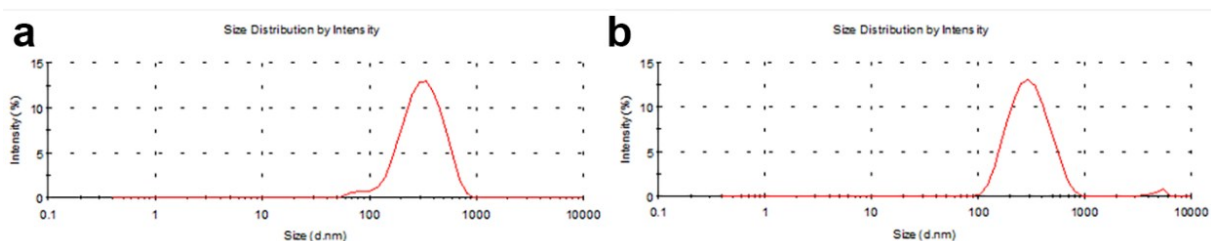


Fig. S2 Size distribution of BP NSs (a) and BP/PPy NSs (b), determined by dynamic light scattering (DLS).

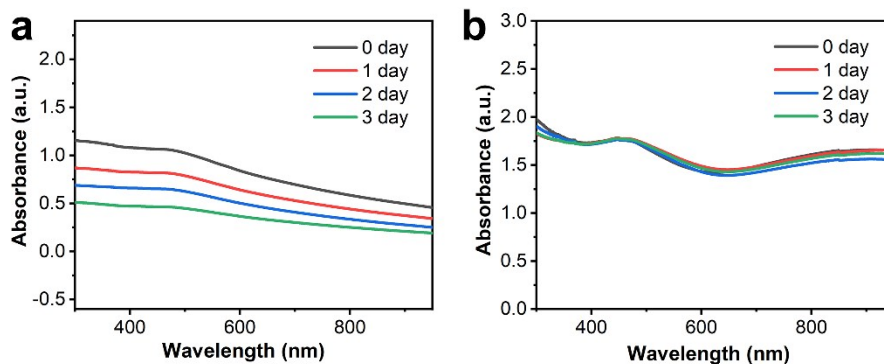


Fig. S3 The UV-Vis-NIR absorbance spectra of BP NSs (a) and BP/PPy NSs (b) during a 3-day observation.

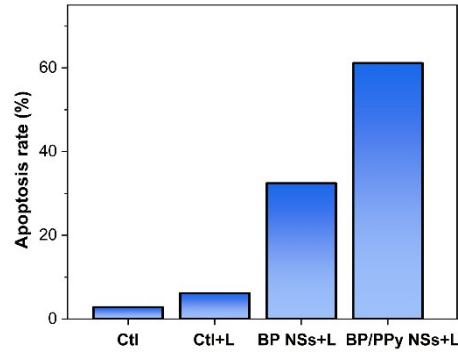


Fig. S4 Apoptosis rate of 4T1 cells after NIR photothermal ablation.

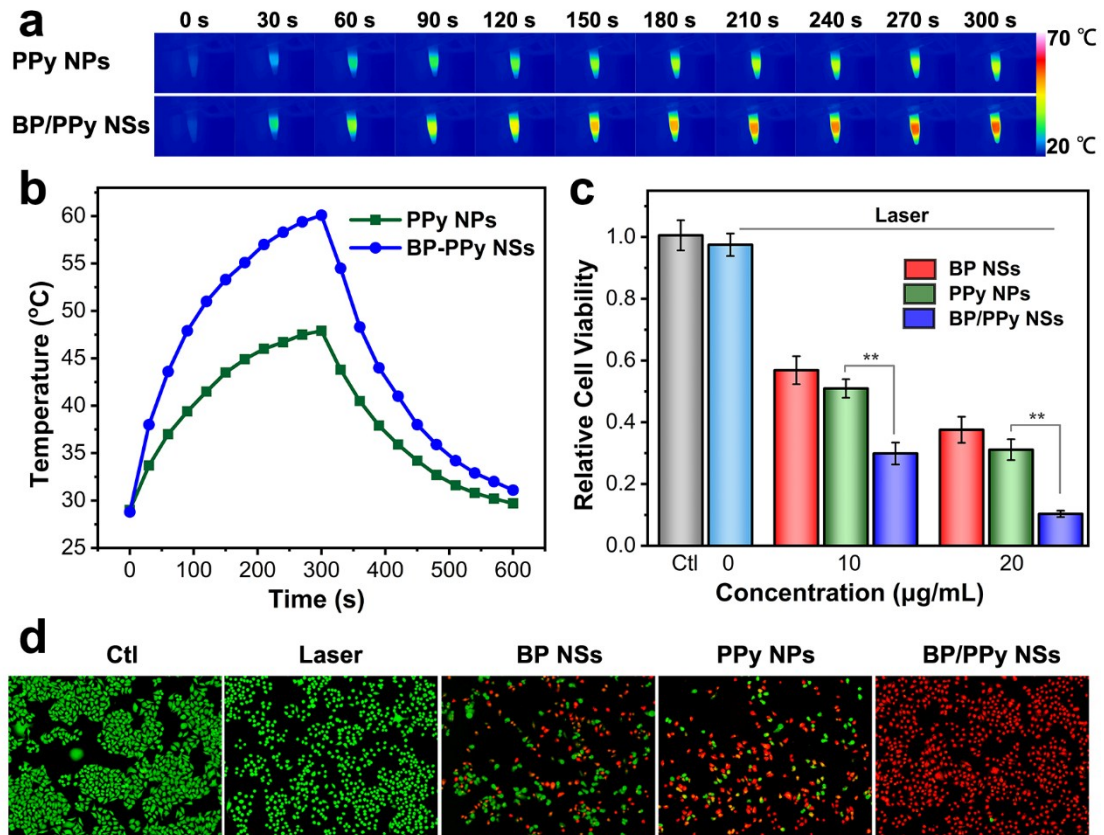


Fig. S5 The comparative photothermal experiments between BP/PPy NSs and PPy NPs. a) The infrared thermal images of PPy NPs and BP/PPy NSs solutions (20 µg/mL) and b) their corresponding temperature curves. c) In vitro NIR photothermal effect of BP-based nanomaterials on cancer cells. Data are presented as mean ± SD, **P < 0.01. d) Fluorescence photomicrographs of cancer cells stained with calcein AM (live cells, green fluorescence) and PI (dead cells, red fluorescence).