

# **Carbon dots/Prussian blue satellite/core nanocomposites for optical imaging and photothermal therapy**

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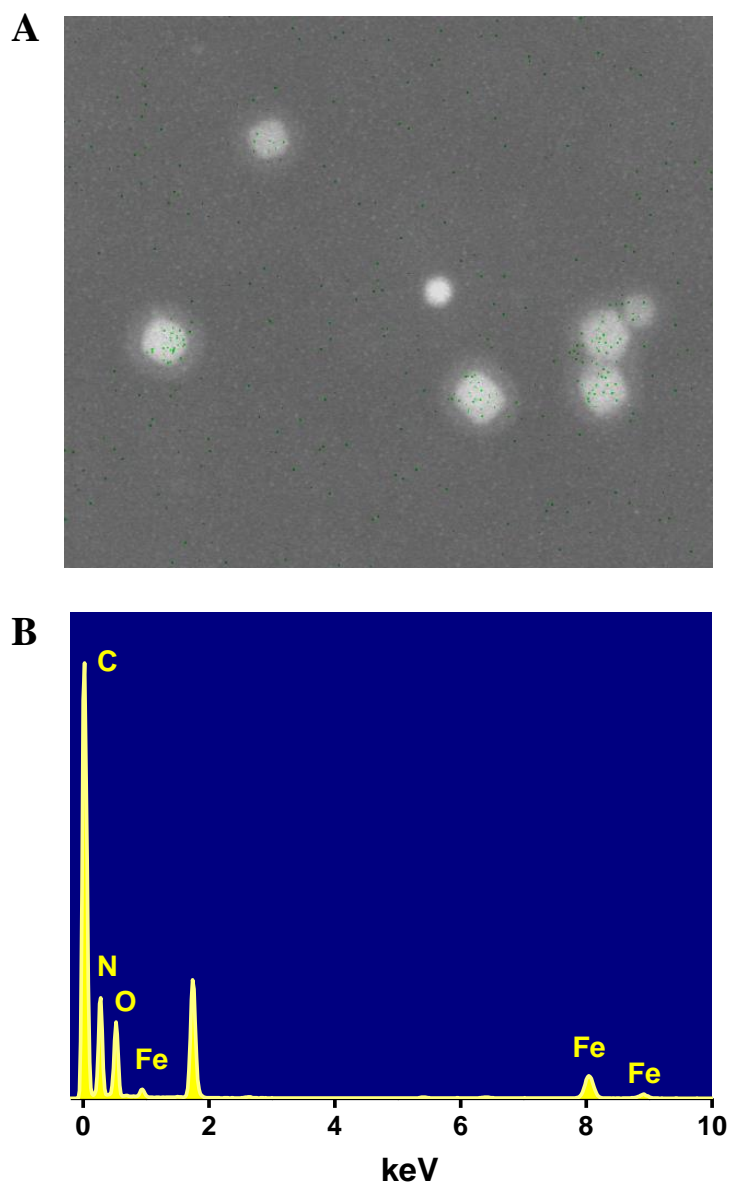
## Supporting Information

### *Chemicals*

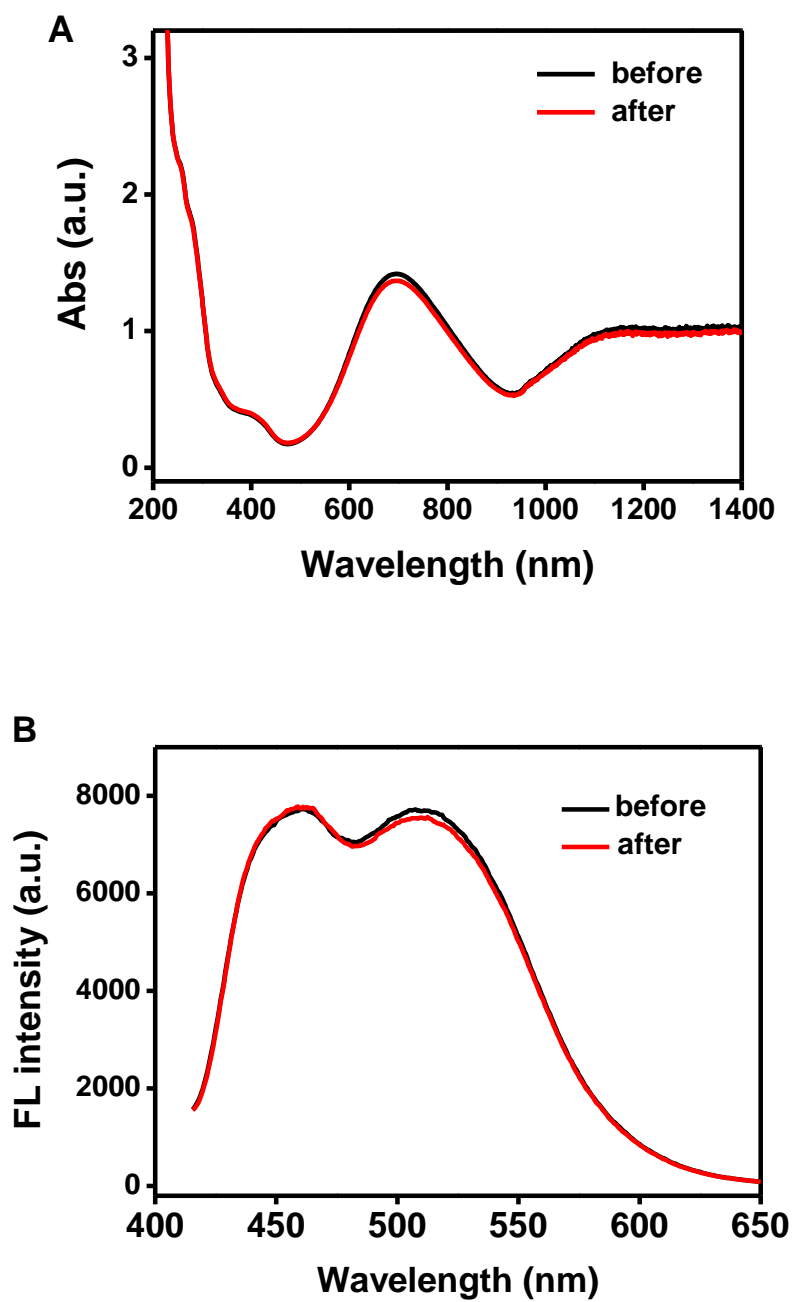
Citric acid (CA), urea, iron(III) chloride hexahydrate ( $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ ), and potassium hexacyanoferrate (II) ( $\text{K}_4[\text{Fe}(\text{CN})_6]$ ) were provided by Sinopharm Chemical Reagent Co., Ltd. (Beijing, China). All other chemicals were of analytical grade and used as received.

### *Characterization*

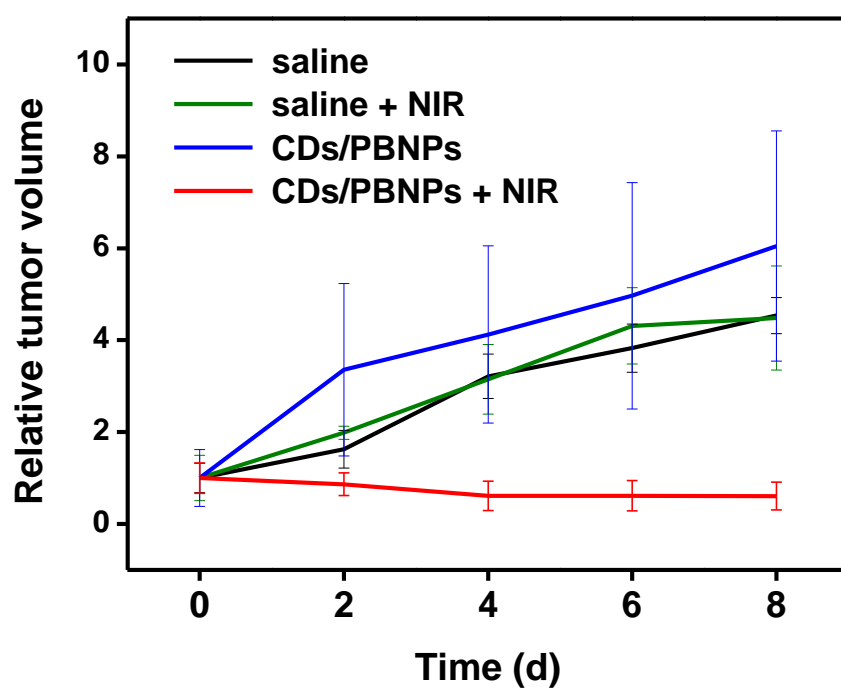
The size and morphology of the NPs were observed by a JEM-2010 transmission electron microscopy (TEM, JEOL, Japan) at operating voltage of 160 kV. The high-angle annular dark field (HAADF) - scanning transmission electron microscopy (STEM) image was obtained on a JEM-2100F transmission electron microscopy (TEM, JEOL, Japan). The size distribution profile of the NPs in water was acquired on a Nano-ZS90 Zetasizer (Malvern, UK). Powder X-ray diffraction (XRD) was performed on a PANalytical X'pert Pro diffractometer (PANalytical, Holland) using  $\text{Cu K}\alpha$  radiation ( $\lambda = 1.5405 \text{ \AA}$ ). Infrared spectra were collected on an iS5 FTIR spectrometer equipped with iD5 ATR accessory (Nicolet, USA). UV-vis absorption spectra were acquired on a UV-3010 spectrophotometer (Hitachi, Japan). The PL emission and excitation spectra were recorded on an F-2500 fluorescence spectrophotometer (Hitachi, Japan) equipped with an integration sphere.



**Figure S1.** HAADF-STEM image (A) and corresponding EDX spectrum (B) of CDs/PBNPs



**Figure S2.** UV-vis (A) and PL emission (B) spectra of CDs/PBNPs before and after 5 laser-on/laser-off cycles.



**Figure S3.** Tumor growth curves for the saline, saline + NIR, CDs/PBNPs, and CDs/PBNPs + NIR treated mice. The relative tumor volumes are normalized to their initial volumes.