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## **Supporting Information**

## Facile preparation of versatile Gadolinium-chelated protein nanocomposite for T1 magnetic resonance imaging guided photodynamic and photothermal synergetic therapy

Pei Liu,‡a Hongyi Zheng,‡b,c Zhe Yang,a Li Ba,b Wei Zhu,a Leping Lin,a Yuxuan Xiong,a Zushun Xu\*a and Jinghua Ren\*b

- <sup>a</sup> Hubei Collaborative Innovation Center for Advanced Organic Chemical Materials; Ministry of Education Key Laboratory for the Green Preparation and Application of Functional Materials, Hubei University, Wuhan, Hubei 430062, China
- <sup>b</sup> Cancer Center, Union Hospital, Tongji Medical College of Huazhong University of Science and Technology, Wuhan, Hubei 430030, China.
- <sup>c.</sup>The First Clinical Medical college of Gannan Medical University, Ganzhou, 341000, China.
- \* Corresponding author.
- \*\* Corresponding author.

E-mail addresses: zushunxu@hubu.edu.cn (Z. Xu), jhrenmed@hust.edu.cn (J. Ren)

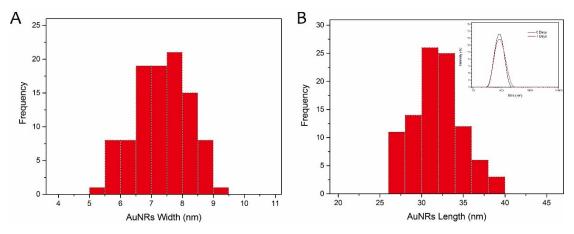


Figure S1. Width (A) and Length (B) distributions of 100 GNRs counted

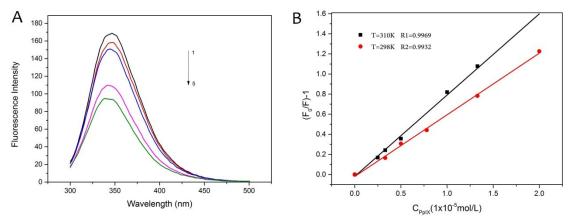


Figure S2. (A) Fluorescence emission spectra of BSA in the presence of PpIX. (B) Stem-Volmer plots for the interaction of BSA with PpIX at different temperature.

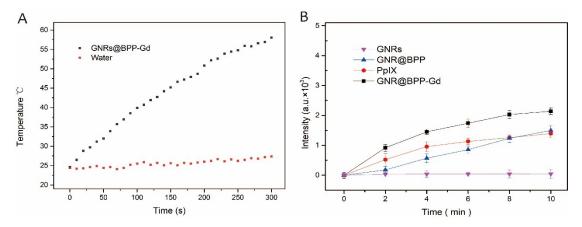


Figure S3. (A) The elevation of temperature between GNRs@BPP-Gd and water. (B) The fluorescence intensity of each group at the present of DCFH

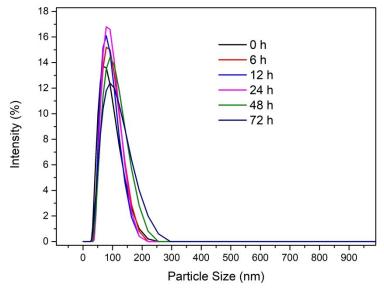


Figure S4. Hydrodynamic size of GNR@BPP-Gd incubated in MEM containing 10% fetal bovine serum at different times.

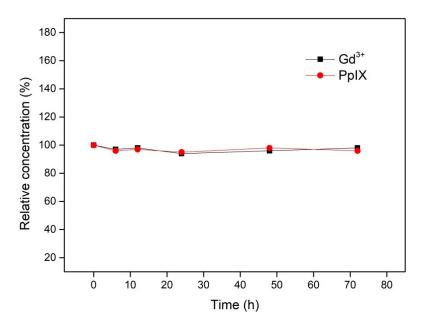


Figure S5. The stability of PpIX and Gd in GNRs@BPP-Gd nanoplatform. The concentration of Gd<sup>3+</sup> was evaluated by ICP and the concentration of PpIX was indirect determined by measuring the absorption at 660 nm.

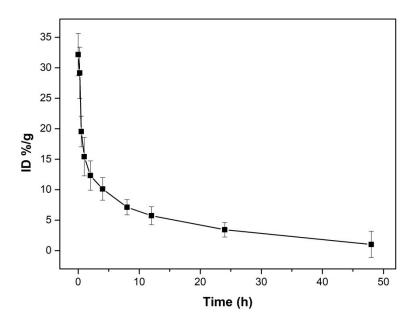


Figure S6. Blood circulation curve of GNRs@BPP-Gd