

Supplementary Information

Mn-complex Modified NaDyF₄:Yb@NaLuF₄:Yb,Er@Polydopamine Core-shell Nanocomposite for Multifunctional Imaging-guided Photothermal Therapy

Tianyun Liu[†], Senzhi Li[†], Yuxin Liu, Quanwei Guo, Lu Wang, Dongdong Liu, and Jing Zhou^{*}

[*] Dr. J. Zhou

Department of Chemistry, Capital Normal University

Beijing 100048, China

E-mail: Jingzhou@cnu.edu.cn

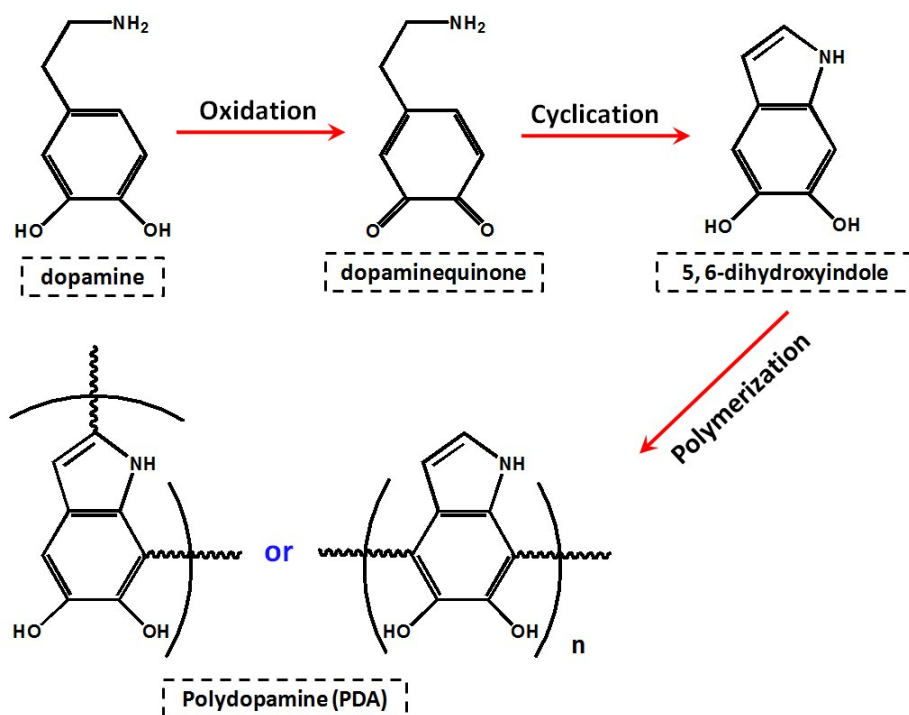


Figure S1. The mechanism of the dopamine oxidation, cyclization, and polymerization

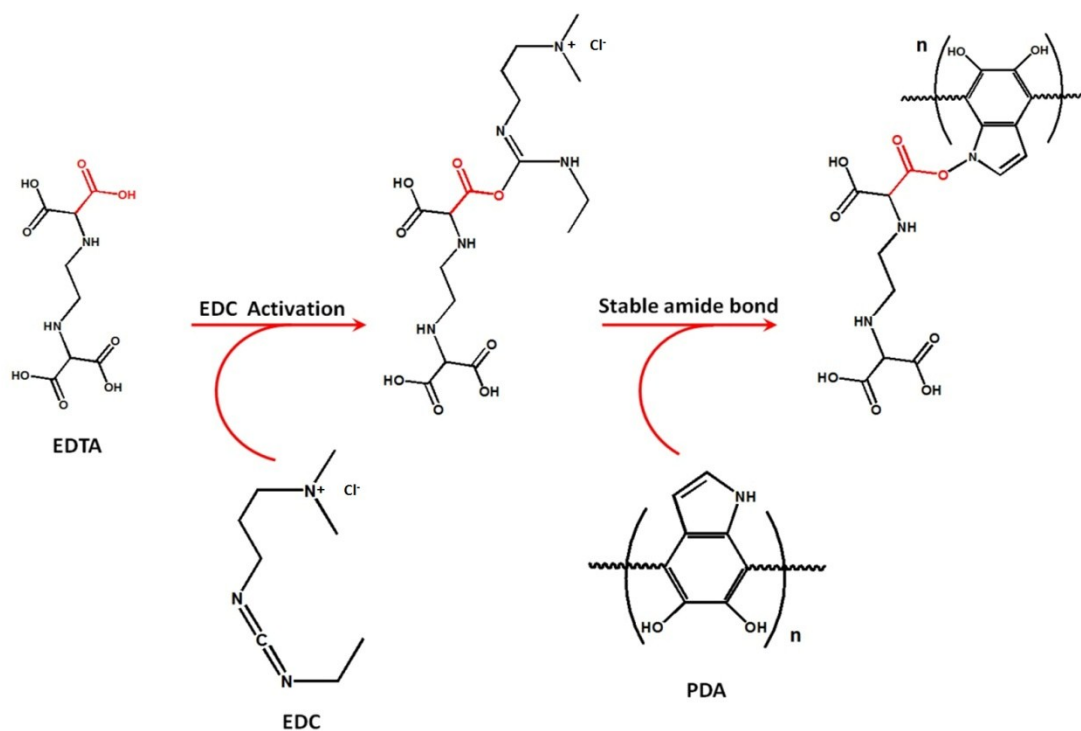


Figure S2. The mechanism of the carboxyl activation and EDTA modification

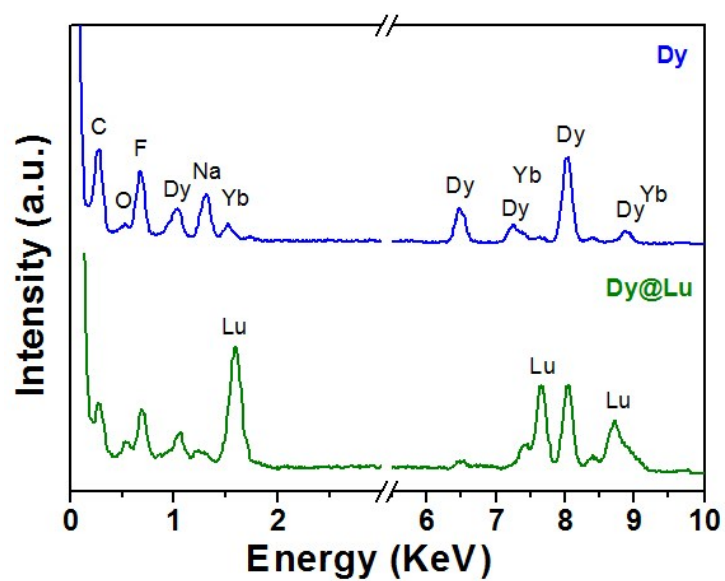


Figure S3. Energy-dispersive X-ray analysis (EDAX) spectra of **Dy** and **Dy@Lu**.

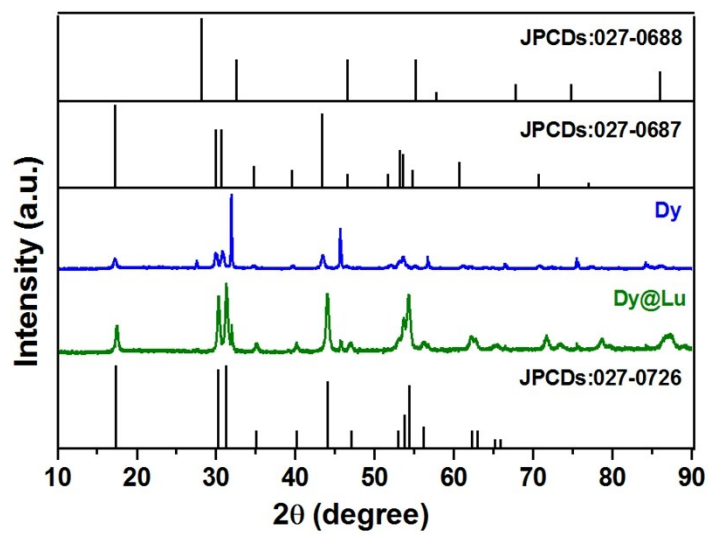


Figure S4. XRD patterns of **Dy** and **Dy@Lu**.

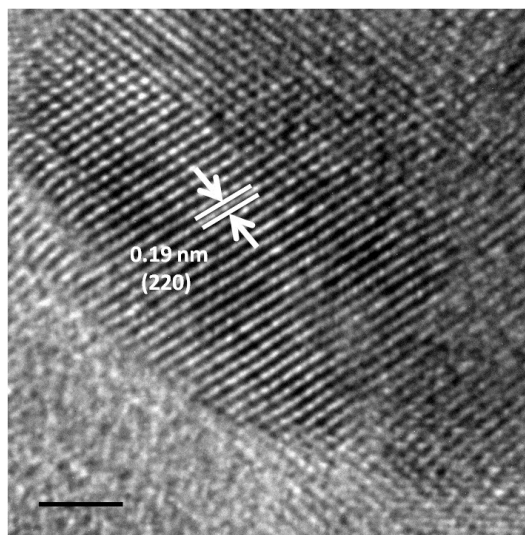


Figure S5. The HR-TEM of Dy.

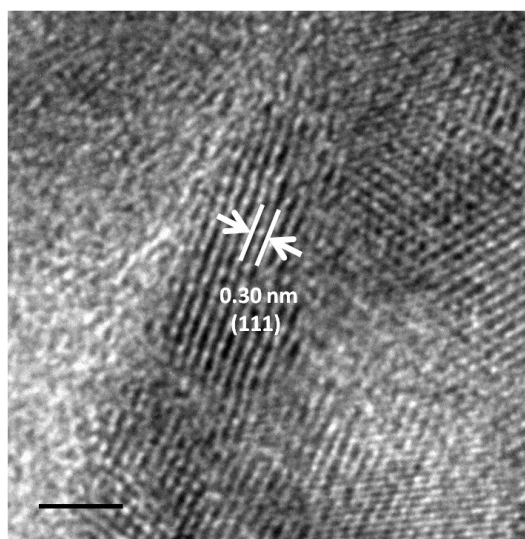


Figure S6. The HR-TEM of Dy@Lu.

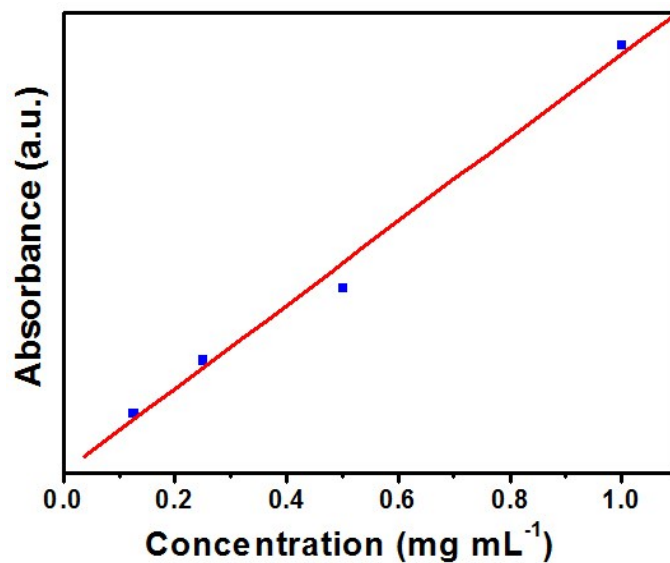


Figure S7. Absorbance at 808 nm of **Dy@Lu@PDA-Mn** dispersion in water vs concentration.

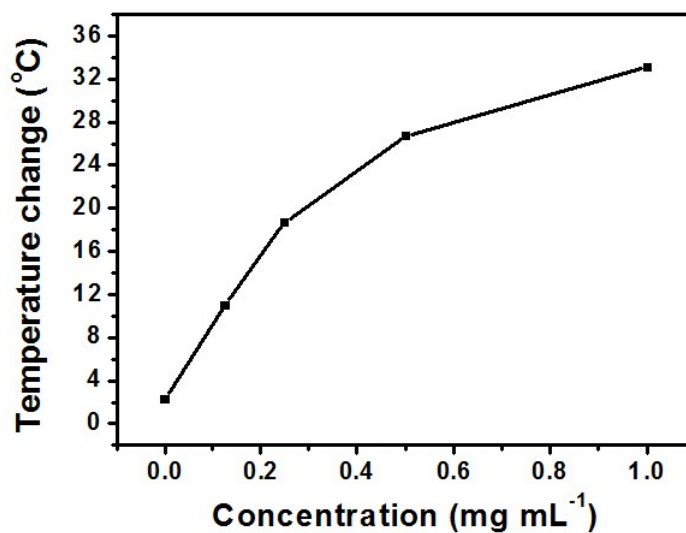


Figure S8. Temperature change of **Dy@Lu@PDA-Mn** dispersion in water vs concentration. The result demonstrated that the temperature change was positive related to the concentration of **Dy@Lu@PDA-Mn**

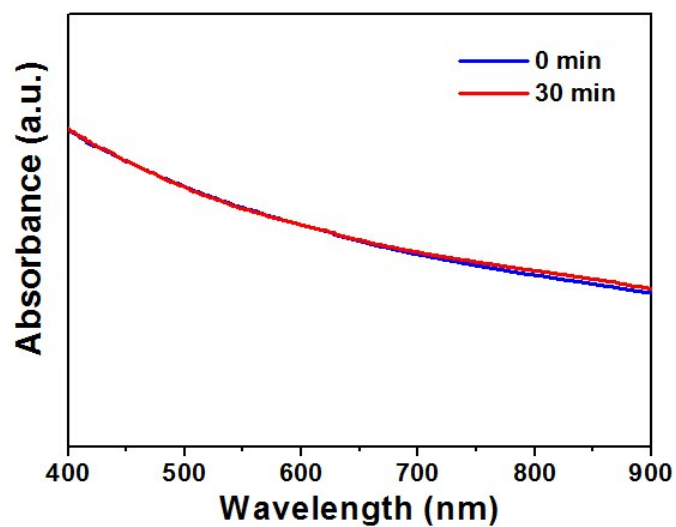


Figure S9. UV-vis-NIR absorbance spectra of **Dy@Lu@PDA-Mn** dispersion in water before and after laser irradiation for 30 minutes.

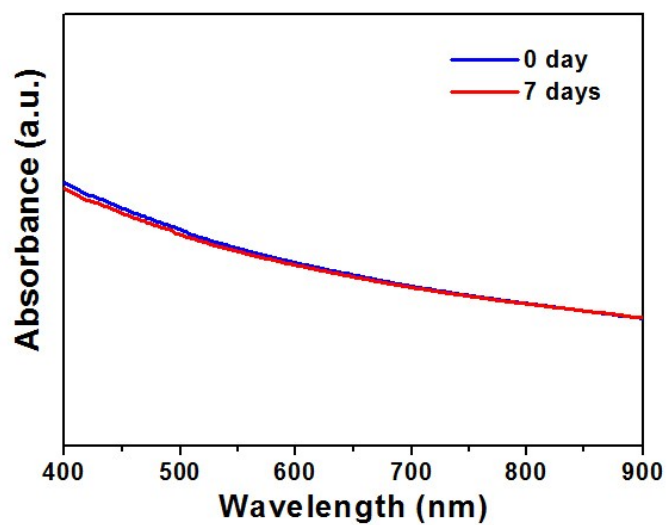


Figure S10. UV-vis-NIR absorbance spectra of **Dy@Lu@PDA-Mn** dispersion in water after 7 days standing.