

Electronic Supplementary Information

Controlling Growth of Porphyrin Based Nanostructures for Tuning Third-order NLO Properties

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Caption of Content

- 1. Fig. S1.** SEM image of the size evolution process of nanostructures obtained by adding SDS aqueous solution with concentration of (A) 0.01, (B) 0.05, (C) 0.15, and (D) 0.45 mg/ml into the aqueous solution of (H₆TPyP)⁴⁺ (0.30 mg/ml).
- 2. Fig. S2.** Electronic absorption spectra of (A) (H₆TPyP)⁴⁺ in water and the nanostructures with the long axis length of 330 nm (B), 550 nm (C), 800 nm (D), and 4 μm (E) deposited on quartz substrate with an excitation wavelength of 430 and 405 nm for solution and nanostructure sample, respectively.
- 3. Fig. S3.** The CLSM fluorescence spectra of (A) H₆TPyP⁴⁺ in water and the nanostructures with the long axis length of 330 nm (B), 550 nm (C), 800 nm (D), and 4 μm (E) deposited on quartz substrate.

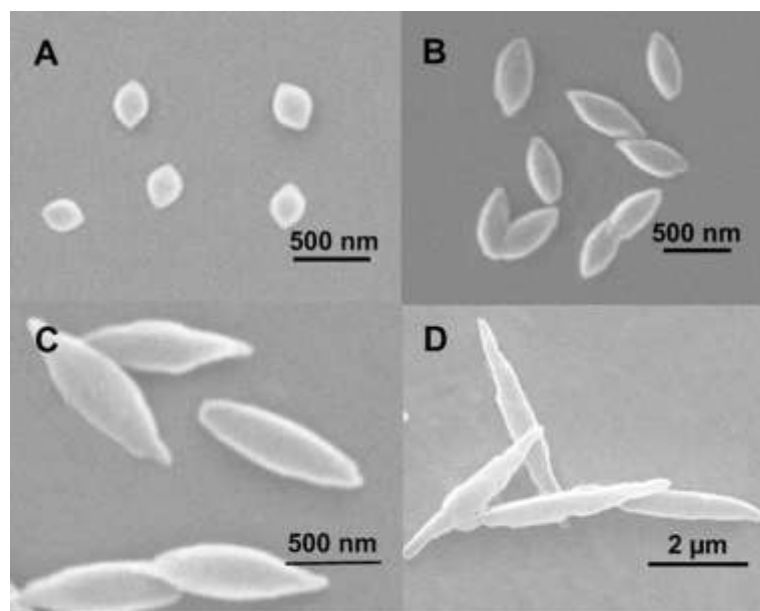


Fig. S1 SEM image of the shape and size evolution process of the nanostructures obtained by adding SDS aqueous solution with concentration of (A) 0.01, (B) 0.05, (C) 0.15, and (D) 0.45 mg/ml with $(\text{H}_6\text{TPyP})^{4+}$ (0.30 mg/ml).

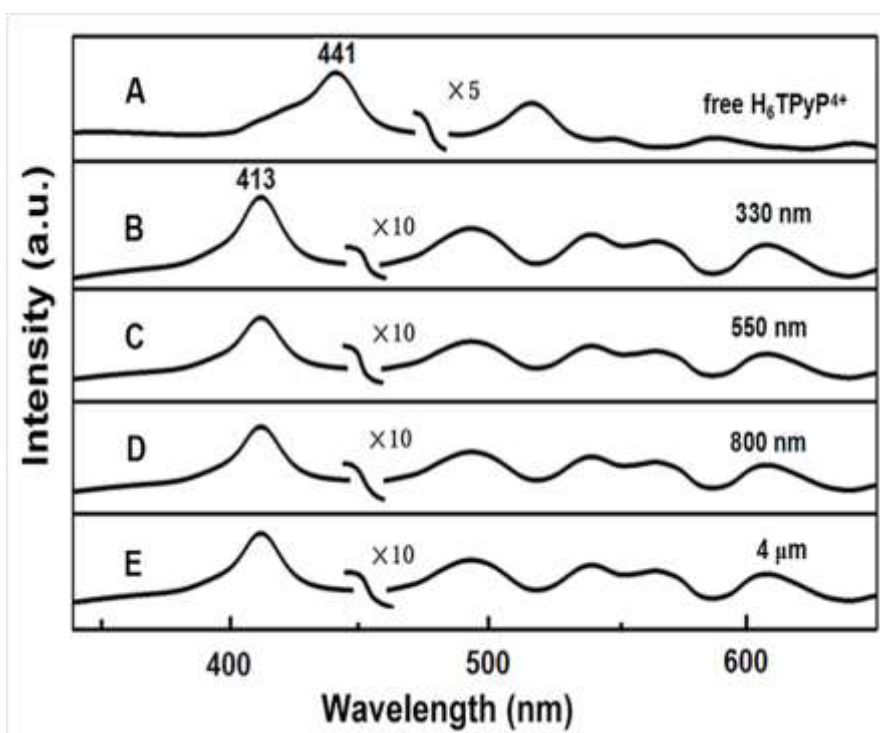


Fig. S2 Electronic absorption spectra of (A) H₆TPyP⁴⁺ in water and the nanostructures with the long axis length of 330 nm (B), 550 nm (C), 800 nm (D), and 4 μm (E) deposited on quartz substrate.

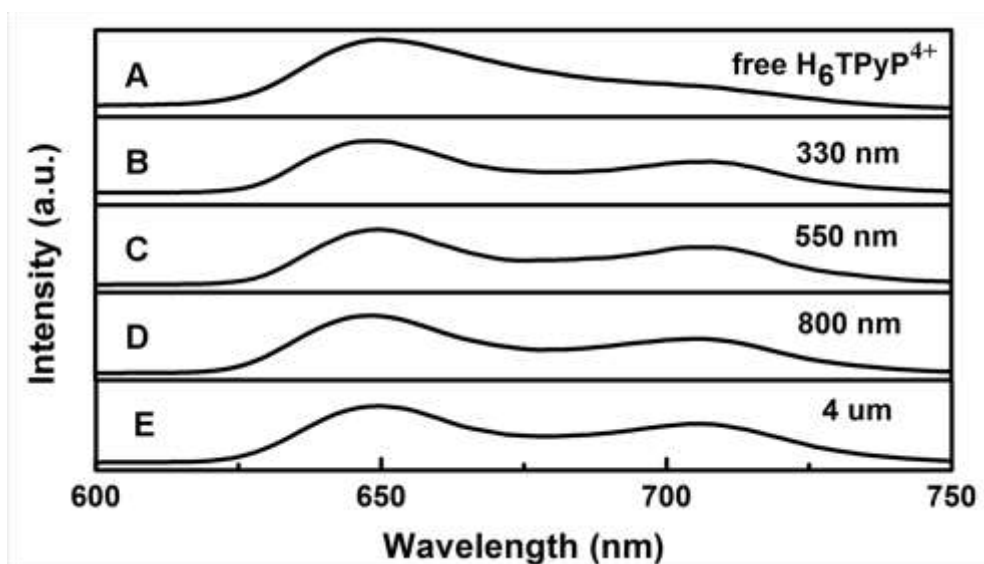


Fig. S3 The CLSM fluorescence spectra of (A) H₆TPyP⁴⁺ in water and the nanostructures with the long axis length of 330 nm (B), 550 nm (C), 800 nm (D), and 4 μm (E) deposited on quartz substrate with an excitation wavelength of 430 and 405 nm for solution and nanostructure sample, respectively.