Electronic Supplementary Material (ESI) for RSC Advances.

[Supporting Information]

Controlled Synthesis of $EuPO_4$ Nano/microstructures and the Core-Shell SiO_2@$EuPO_4$ Nanostructures with Improved Photoluminescence

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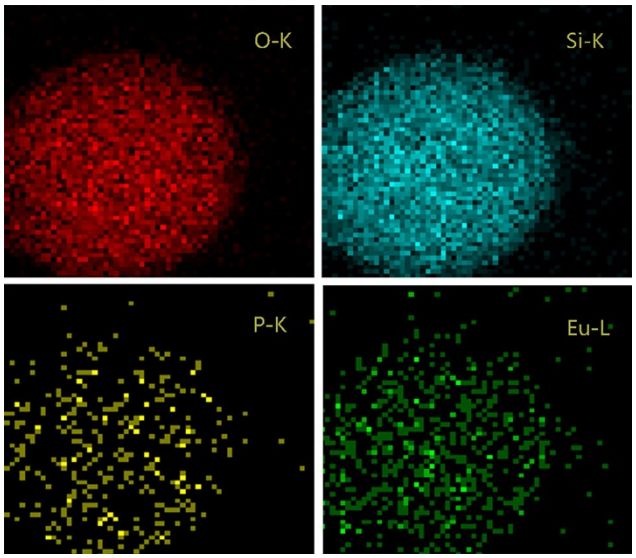

Fig. S1 EDX mapping images of the single nanoparticle.

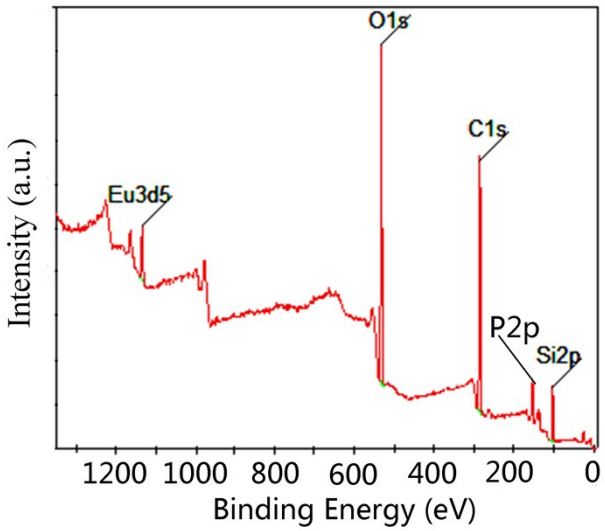

Fig. S2 XPS spectrum of the core-shell SiO_2@$EuPO_4$ nanostructures

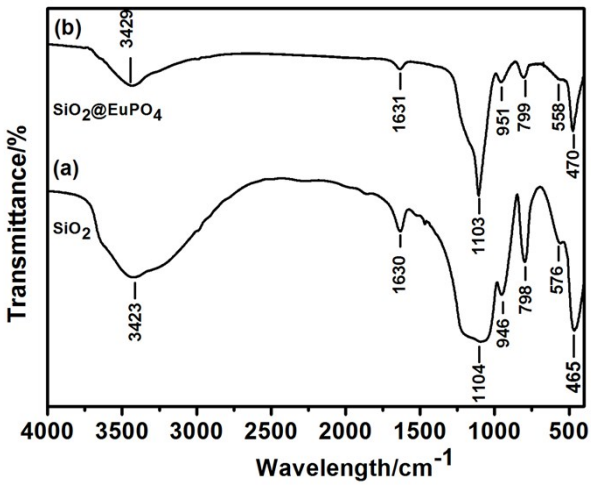

Fig. S3 The IR spectra of (a) SiO_2 submicro-spheres (b) core-shell SiO_2@$EuPO_4$ nanostructures

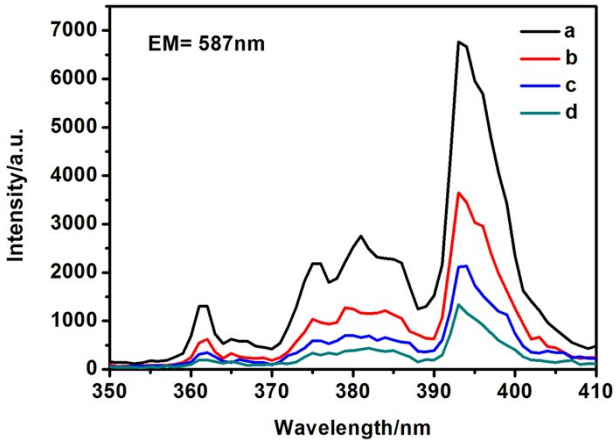

Fig. S4 Excitation spectra of flower-like and spherical-like $EuPO_4$ nanostructures prepared with a different reactant PO_4/Eu molar ratios of: (a) 60, (b) 200, and different pH values (c) pH=2.0, (d) pH=4.0 (PO_4/Eu molar ratio of 200)

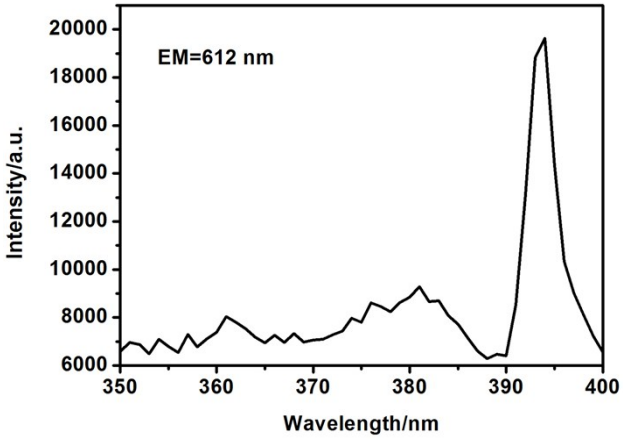

Fig. S5 Excitation spectrum of the core-shell SiO_2@$EuPO_4$ nanostructures

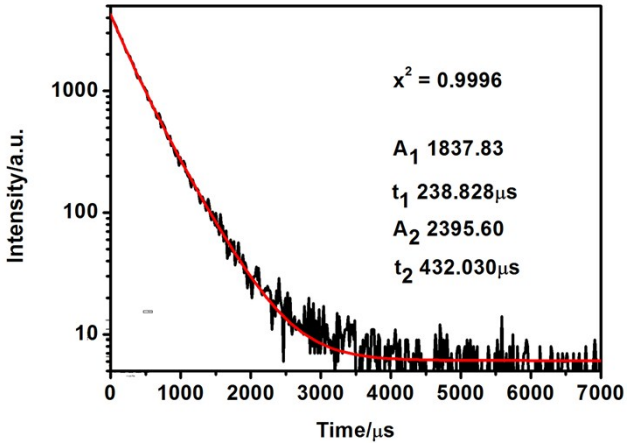

Fig. S6 Photoluminescence fitting curve of the core-shell SiO_2@$EuPO_4$ nanostructures