

Supplemental Information

Facile Synthesis of Flower-Shaped Au/GdVO₄:Eu Core/Shell Nanoparticles by Using Citrate as Stabilizer and Complexing Agent

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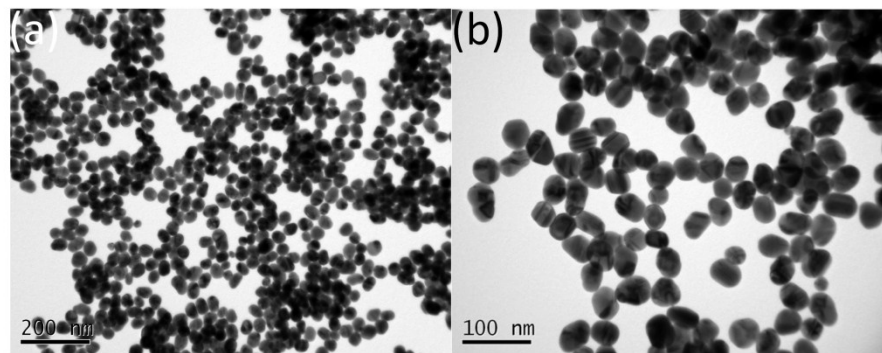


Figure S1. TEM images of Au NPs.

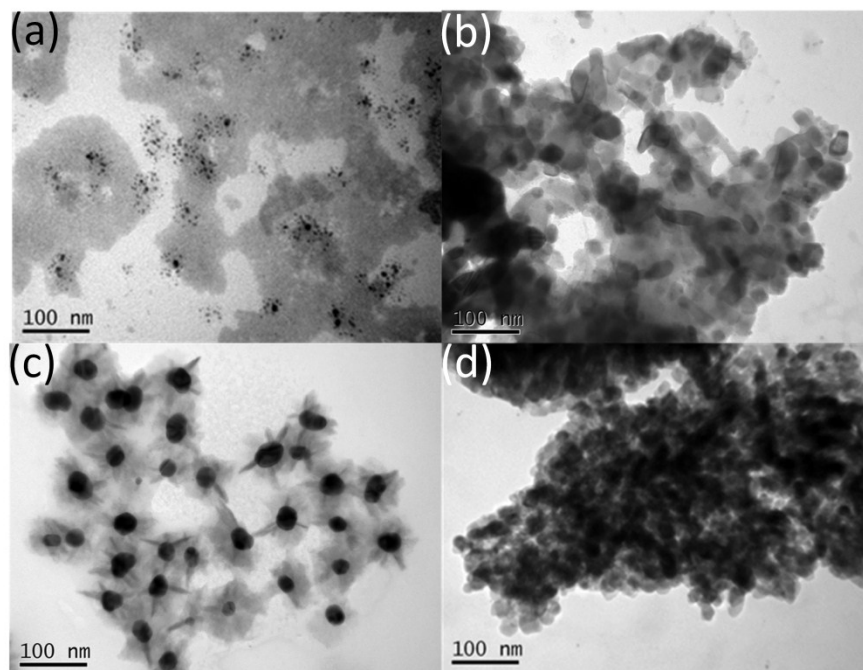


Figure S2. TEM images of Au/GdVO₄:Eu NPs synthesized a) using CTAB-stabilized Au NPs, b) without/with a small amount of sodium citrate, c) with moderate sodium citrate, d) with excess sodium citrate.

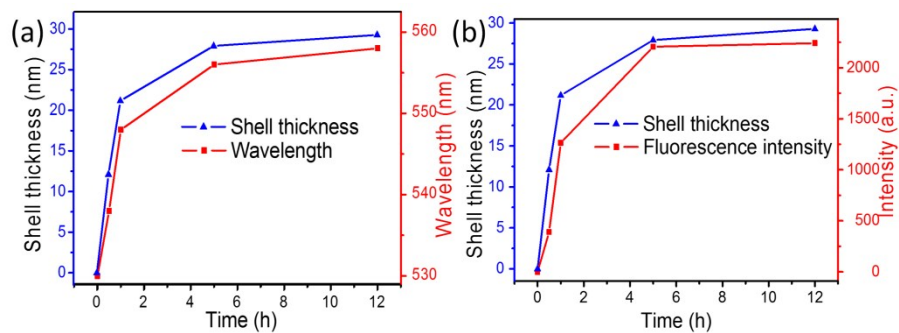


Figure S3. The increasing trend of different reaction times: the thickness of vanadate shells versus a) SPR peak wavelength and b) the fluorescence intensity.

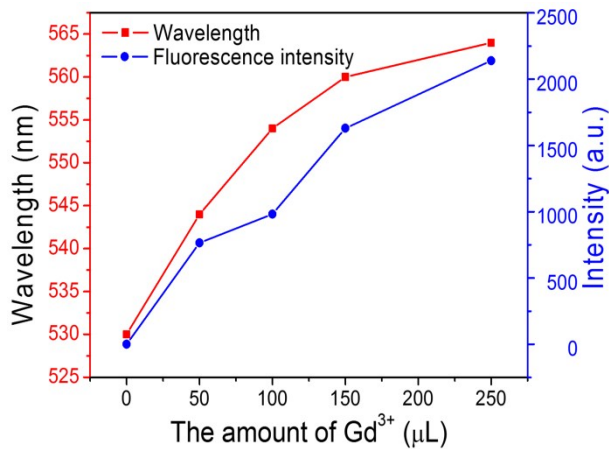


Figure S4. The increasing trend with different amount of 0.1 M Gd(NO₃)₃ aqueous solution: SPR peak wavelength versus the fluorescence intensity.

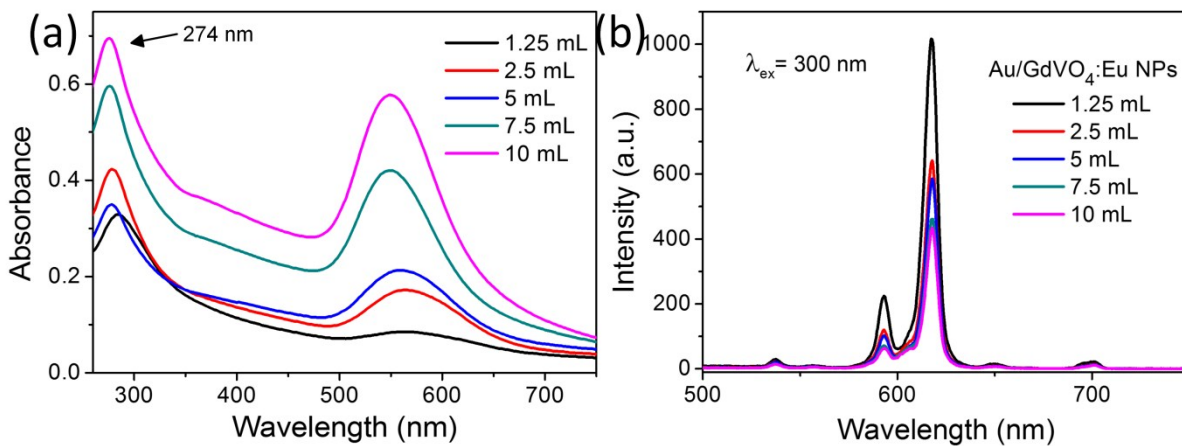


Figure S5. (a) Absorption and (b) fluorescence spectra of Au/GdVO₄:Eu NPs with different amount of as-synthesized AuNPs. The volume of 0.1 M Gd(NO₃)₃ aqueous solution is 200 μL.