Electronic supplementary information (ESI)

Bi-functional Properties of Fe_3O_4@YPO_4:Eu Hybrid Nanoparticles: Hyperthermia Application

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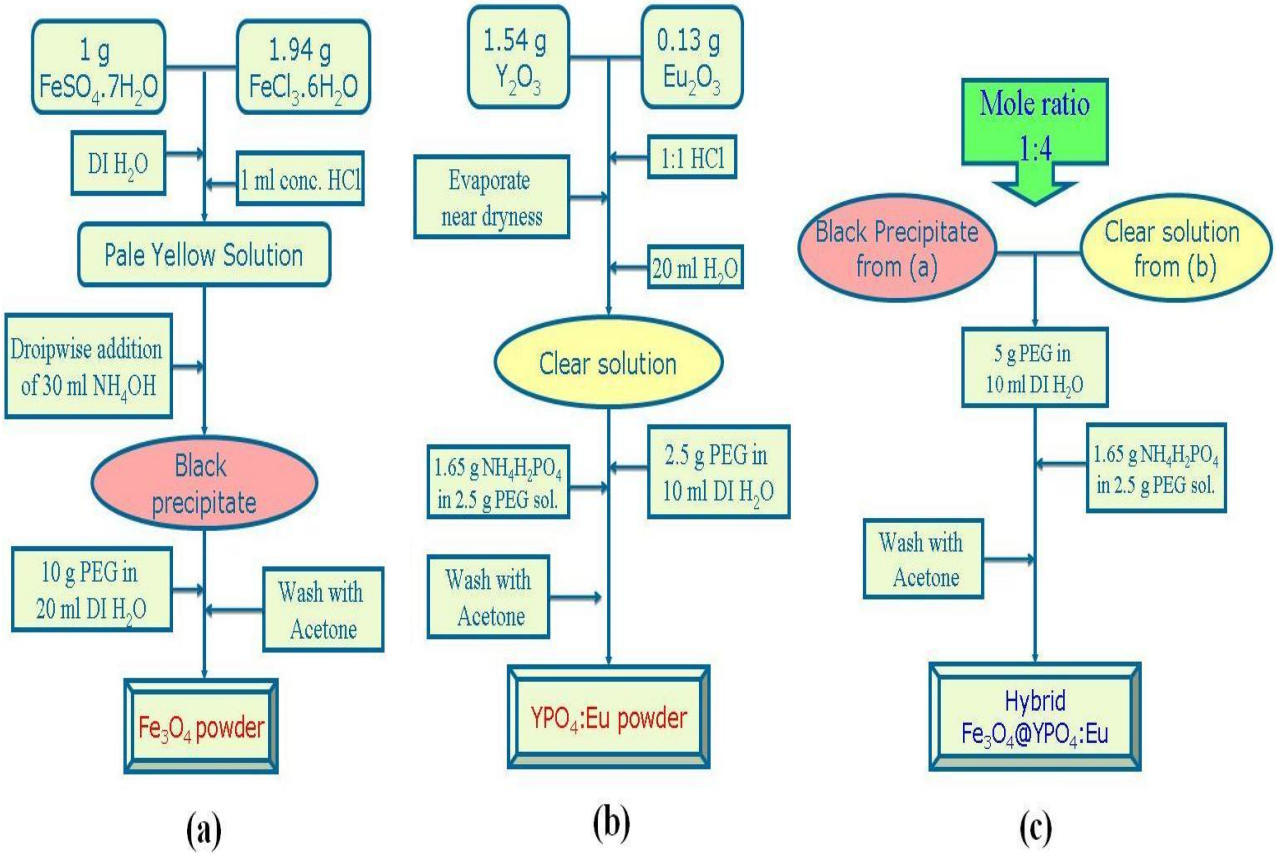

Figure S1. Schematic representation of the processing steps in preparation of (a) Fe_3O_4, (b) YPO_4:Eu and (c) Fe_3O_4@YPO_4:Eu.

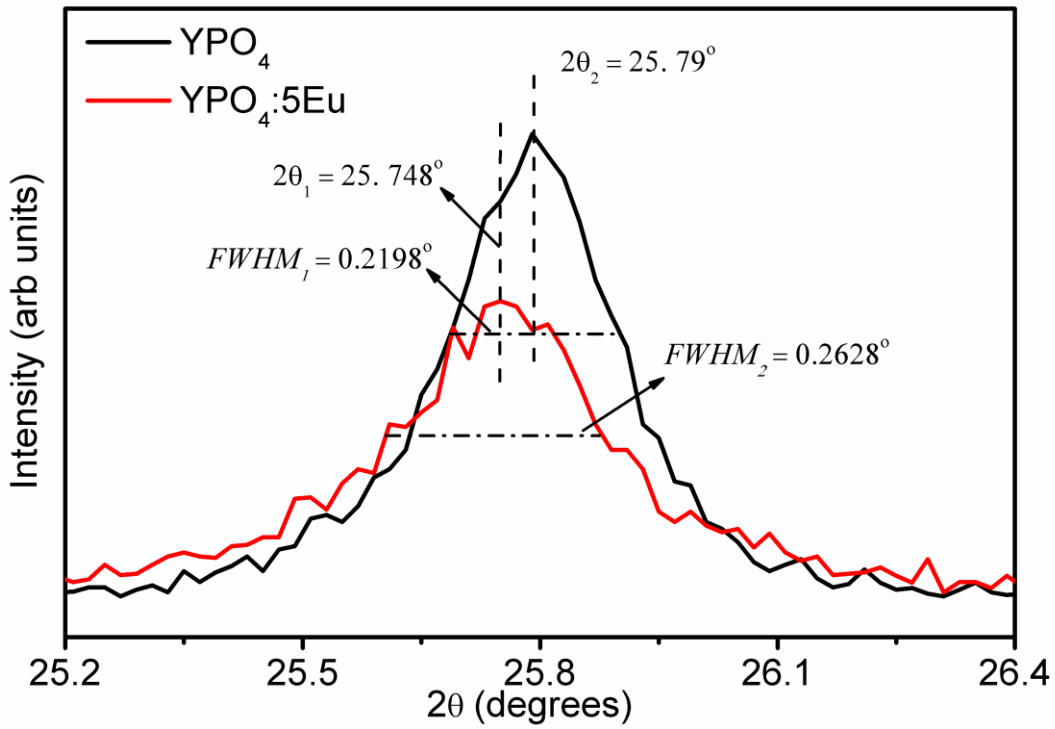

Figure S2. Change in peak position of (*200*) plane with and without 5 at.% Eu^{3+} doping in YPO_4 host.

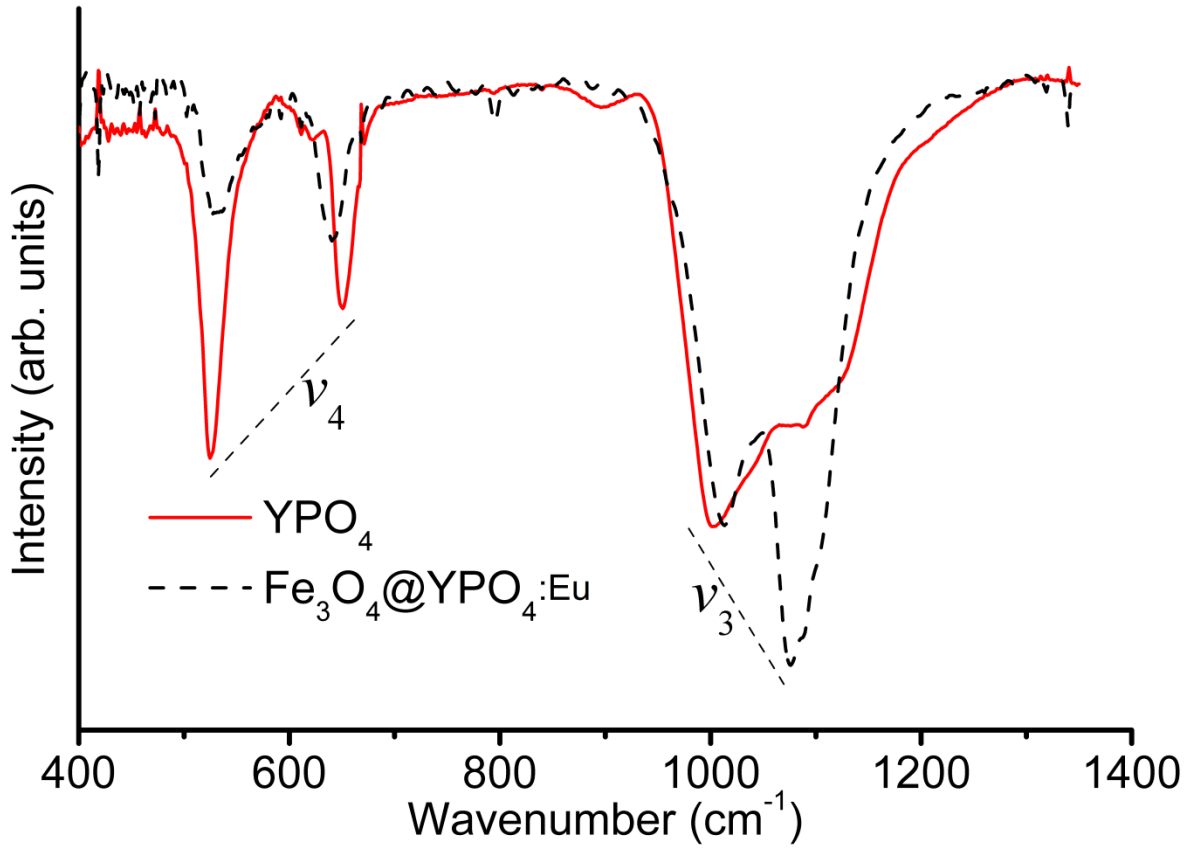

Figure S3. Comparision of peaks corresponding to PO_4 group in FTIR spectra of YPO_4:Eu and Fe_3O_4@YPO_4:5Eu nanoparticles (400-1400 cm^{-1}) after background correction.