

## Electronic Supplementary Information (ESI)

# AIE luminogen-functionalised mesoporous silica nanoparticles as nanotheranostic agents for imaging guided synergetic chemo-/photothermal therapy

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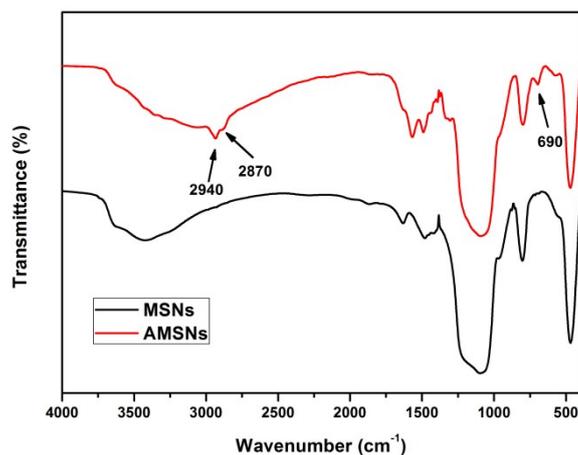
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**Fig. S1.** FT-IR spectra of MSNs and AMSNs.

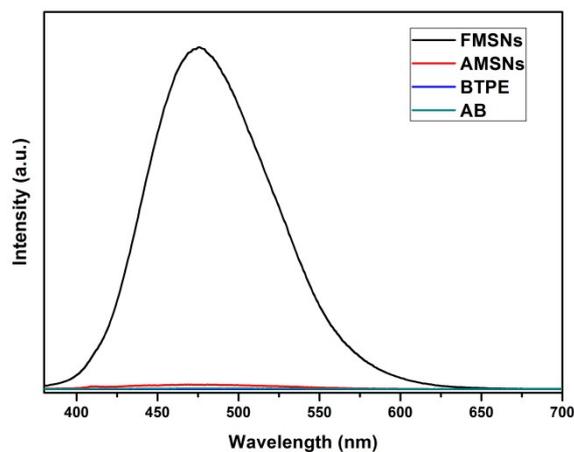
**Fig. S2.** Fluorescence spectra of samples in DMSO. Excitation wavelength: 365 nm. AMSNs, BTPE, and a mixture of AMSNs and BTPE in DMSO solvent (denoted as AB) showed nearly no luminescence under the UV irradiation (Fig. S2). However, after AMSNs and BTPE reacted at 80 °C for 24 h, the FMSNs emitted strong luminescence in the same condition, indicating that BTPE molecules were successfully anchored onto AMSNs.

**Fig. S3.** (a) Low-angle X-ray diffraction (XRD) pattern of as-prepared CFMSNs nanocomposites. (b) XRD pattern of as-prepared CFMSNs nanocomposites, which can be indexed as covellite phase CuS (JCPDS: 079-2321).

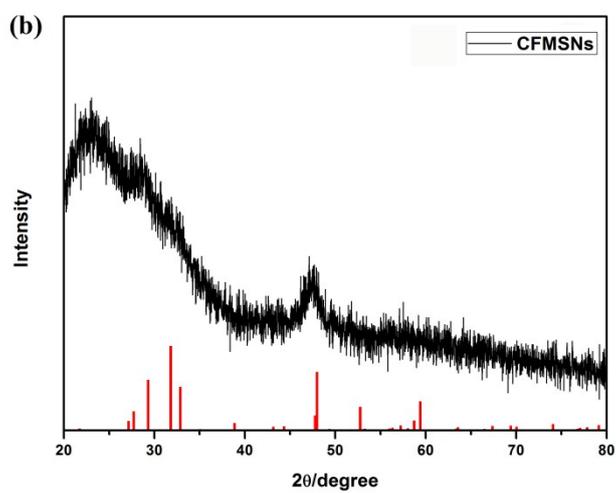
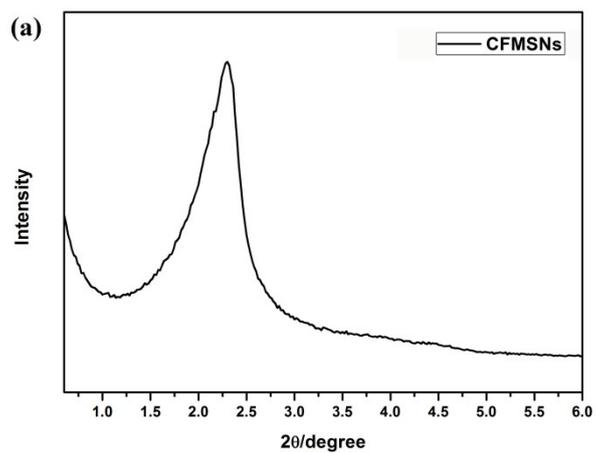
**Fig. S4.** TGA curves of the as-prepared nanoparticles before and after conjugating PEG.



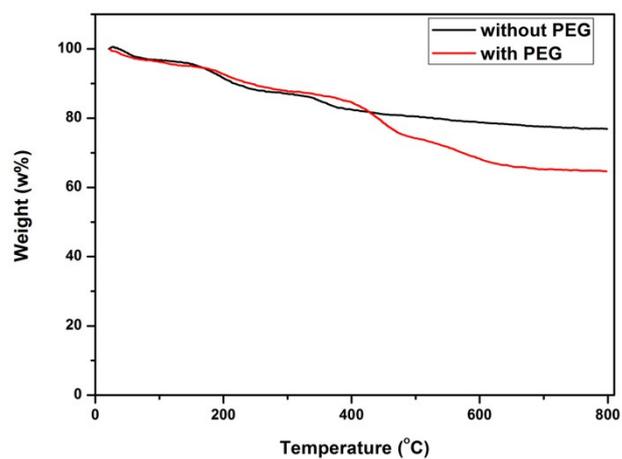
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1. D. Li, J. Yu and R. Xu, *Chem. Commun.*, 2011, **47**, 11077-11079.
2. D. Li, Y. Zhang, Z. Fan and J. Yu, *Chem. Commun.*, 2015, **51**, 13830-13833.