

Electronic Supplementary Information (ESI) for New Journal of Chemistry

Rice oil as a green source of capping ligands for GdF₃ nanocrystals

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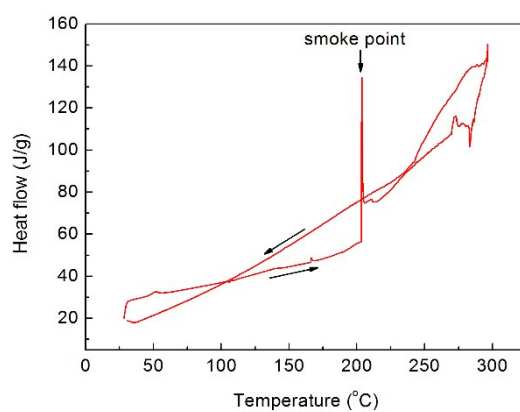


Figure S1. DSC spectrum of glyceryl trioleate.

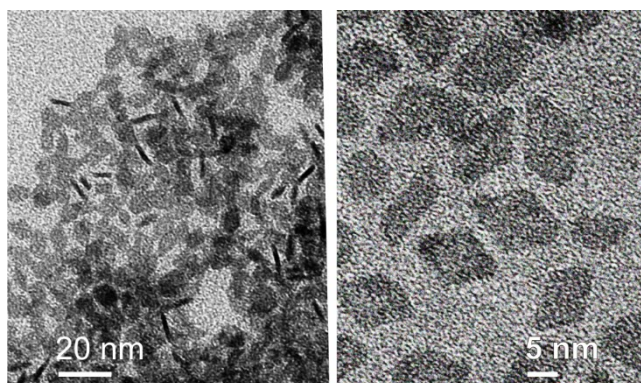


Figure S2. TEM images of rhombic GdF₃ NCs after 120 minutes of synthesis at 340°C.

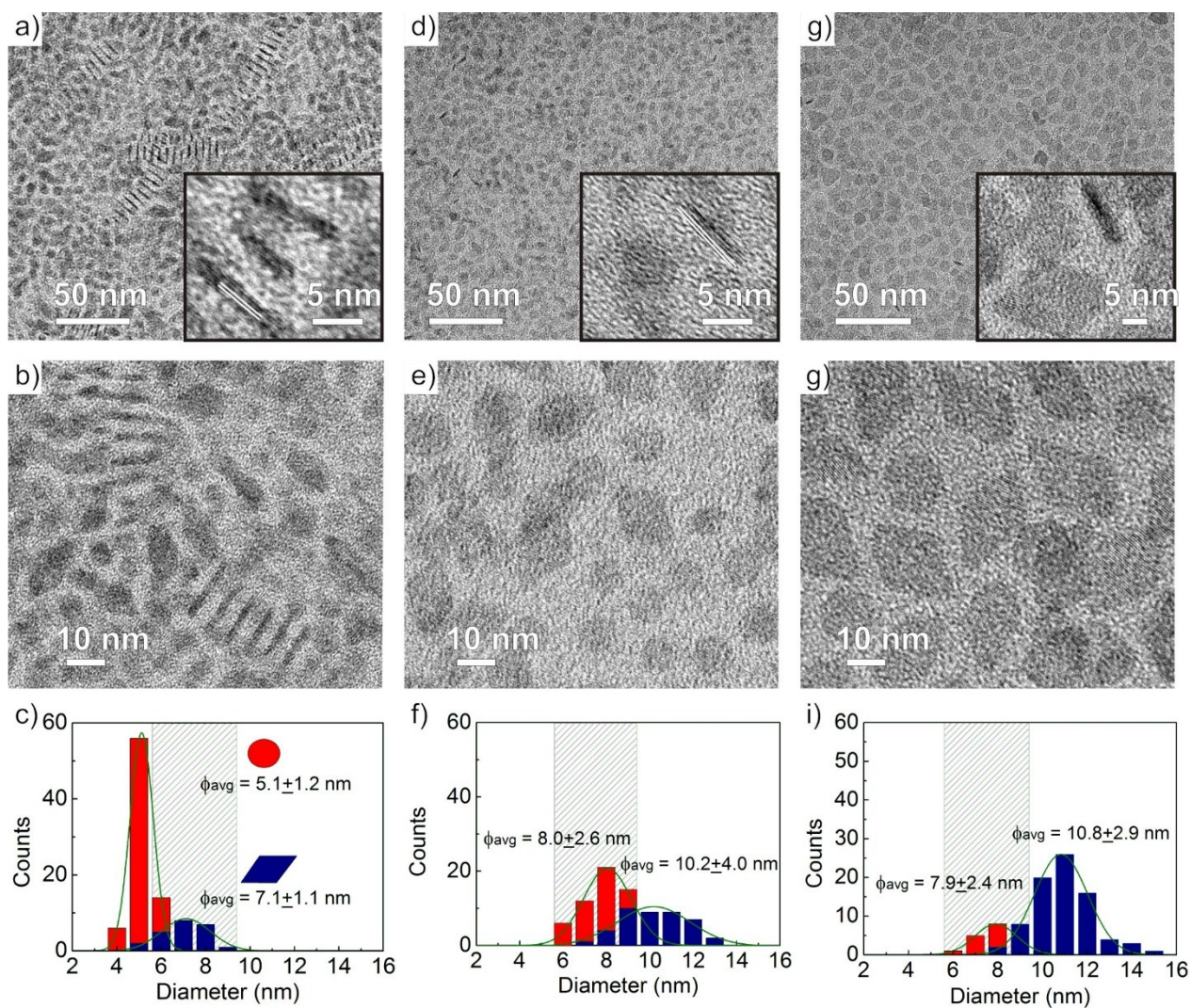


Figure S3. TEM images and size distribution histograms of GdF₃ NCs growth for 60 minutes in 255°C (a, b, c), 295°C (d, e, f) and 340°C (g, h, i). (diameter of spherical NCs - red; edge length of rhombic NCs - blue).

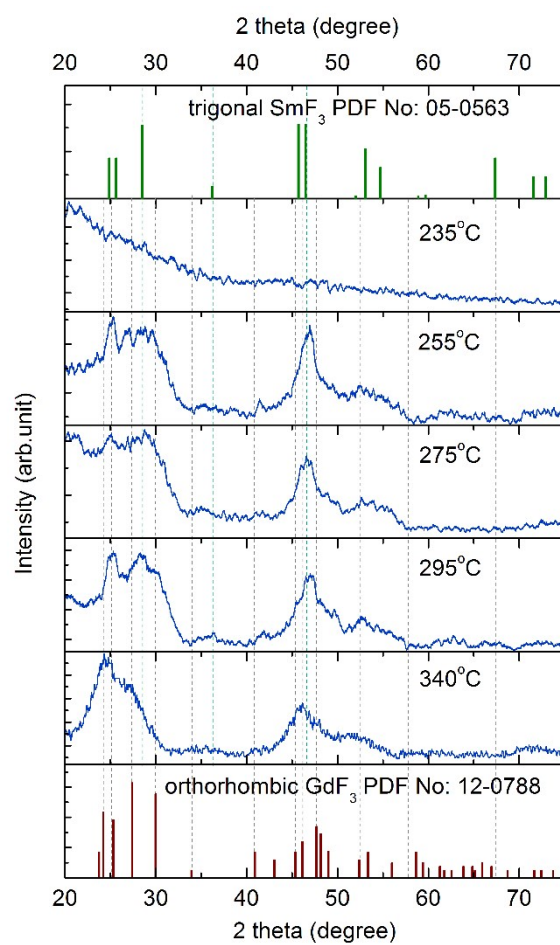


Figure S4. XRD spectra of GdF₃ NCs synthesized at various synthesis temperature for the 60 minutes. The diffraction peaks positions of orthorhombic GdF₃ (PDF: no 12-0788) and trigonal SmF₃ (PDF no: 05-0563) are shown for reference.

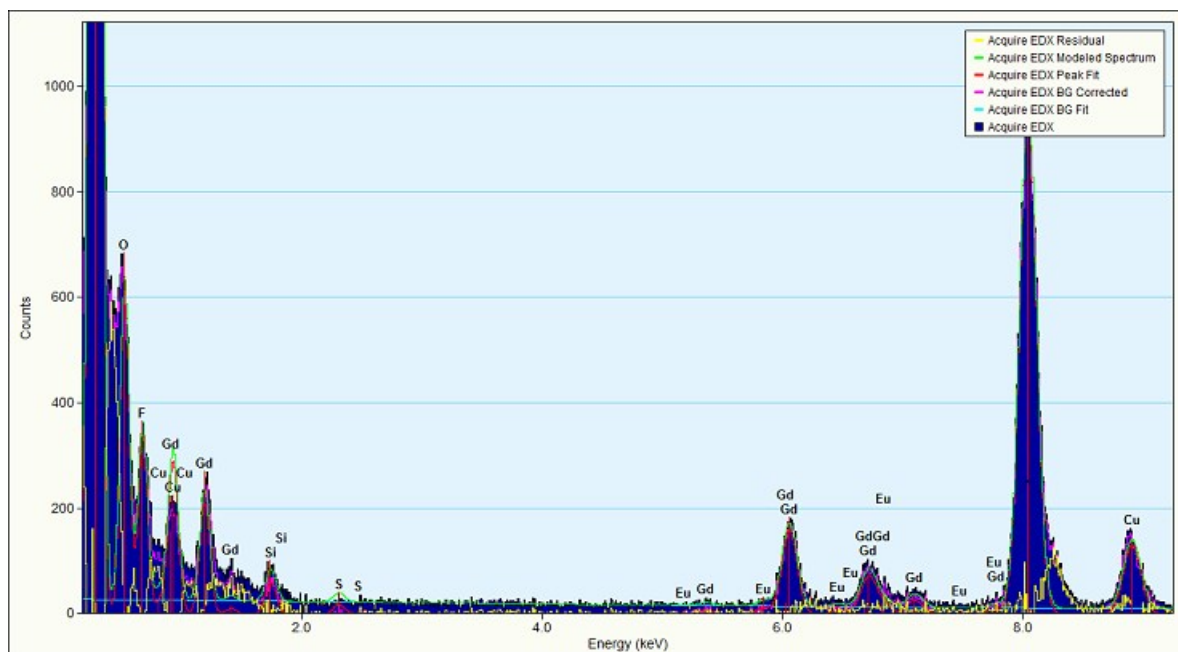


Figure S5. EDX spectrum of Eu^{3+} doped GdF_3 nanocrystals. The determined dopant concentration is $\sim 6\%$.