Supplementary Information

GdF₃ Hollow Spheres: Self-Assembly and Multiple Emission Spanning the UV to NIR Regions under 980 nm Excitation

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Figure S1. a) The N_2 adsorption and desorption isotherms (77 K) and b) pore size

distribution of GdF3 submicrometer hollow structure.



Figure S2. The emission spectra of GdF₃ hollow submicrometer spheres (black) and NaYF₄: 2 at. %Er, 20 at. %Yb nanocrystals (red) under the same measure condition.



Figure S3. TEM image of NaYF₄: 2 at. %Er, 20 at. %Yb nanocrystals.