Supplemental Information



Figure S1 - transmission electron microscope image (TEM) of EuF_3 nanoparticles, showing 'ginger' type morphology. Scale bar = 50 nm.



Figure S2 – X-ray diffraction pattern of EuF₃ particles, showing literature values and associated Miller indices.



Figure S3 – Energy dispersive X-ray analysis of EuF₃ particles, copper and carbon peaks are due to the TEM grid.



Figure S4 – EuF₃ particles prepared without KTFA.



Figure S5 – growth of EuF₃ at different reaction times. a and b = 1 minutes, scale bars are 0.2 μ m ands 100 nm respectively. c = 30 minute sample, d= 60 minute sample. Scale bars are 0.2 μ m ands 100 nm respectively. Red circle shows electron beam damage.