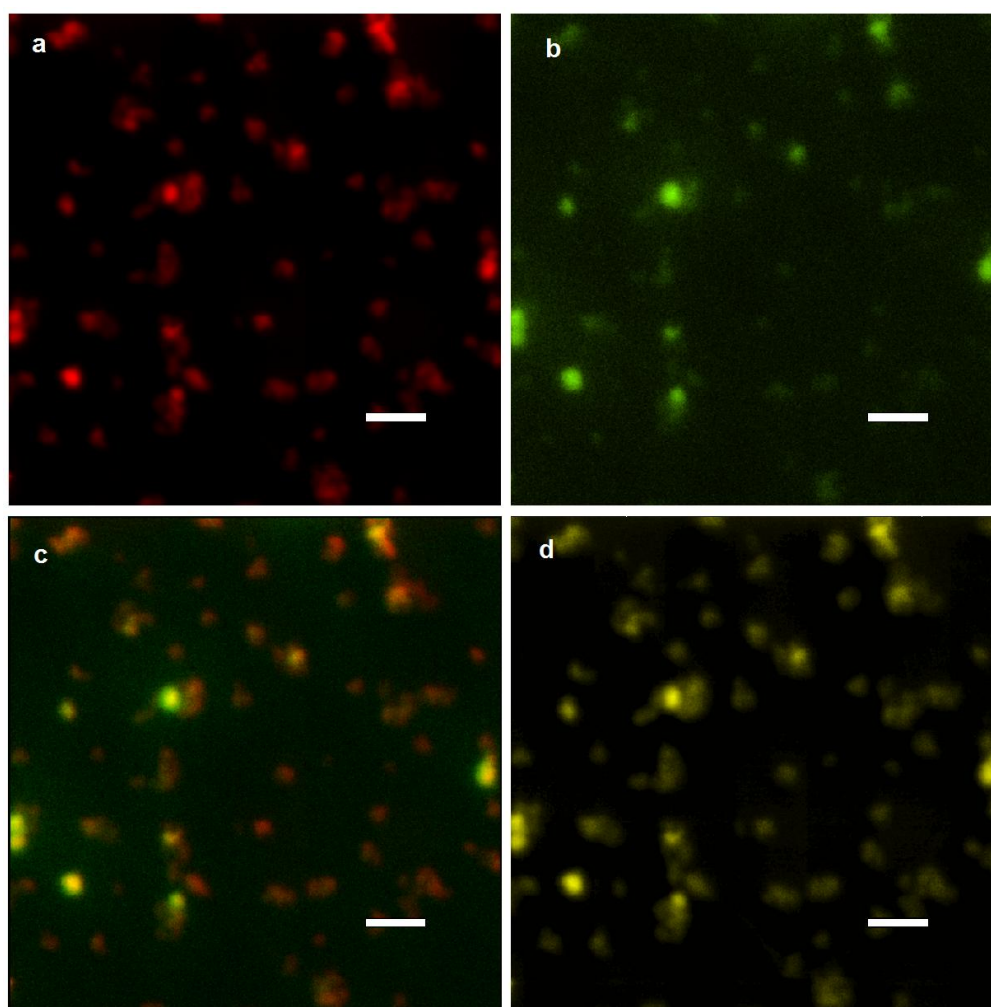


# Correlative light and electron microscopy using cathodoluminescence from nanoparticles with distinguishable colours

## Supplementary Information

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**Figure S1:** Co-localization of secondary electron (SE) and cathodoluminescence (CL) images of LuAG:Ce nanoparticles (NPs), reproduced from column 1 of Fig. 2 in the main text. (a) SE image of LuAG:Ce NPs, with a red colourmap applied to the pixel intensities. (b) CL image of the same NPs, with a green colourmap. (c) Image showing panels (a) and (b) superimposed by color merging. Regions of that contain high pixel intensities in both SE and CL images (corresponding to brightly cathodoluminescent NPs) appear yellow in this panel. (d) Pixel-wise square root of the product of the SE and CL images (calculated as  $P_{ij} = (R_{ij} \times G_{ij})^{1/2}$ , for  $P_{ij}$ ,  $R_{ij}$  and  $G_{ij}$  the  $i$ - $j$ th pixel in the product image, the SE image, and the CL image respectively). The product was calculated after normalization and background subtraction to show the degree of overlap between the SE and CL images. A yellow colourmap has been applied to the product pixel intensities. Most particles in the field of view emit at least some green CL, demonstrating their utility as coloured markers for correlative microscopy. Scale bars are 200 nm.