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Lumino-Magnetic YAG:Ce Nanophosphors: A Novel Synthesis routes for efficient luminescence and magnetic properties

K.Jayanthi and Sunkara V Manorama

Nanomaterials Laboratory, Inorganic and Physical Chemistry Division, CSIR-Indian Institute of Chemical Technology, Hyderabad -500007, India.

▪ *SUPPLEMENTARY INFORMATION*

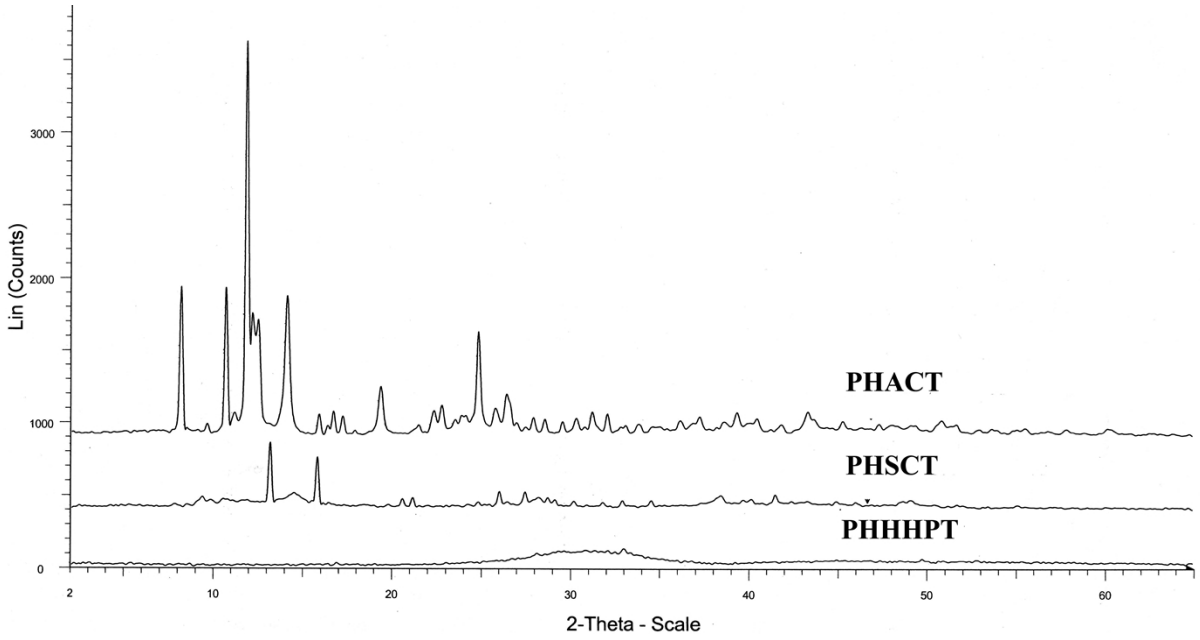

Figure 1. Structural properties of YAG:Ce NPs. An XRD pattern of the Ce doped YAG (0.1M) prepared under various synthesis methods without annealing.

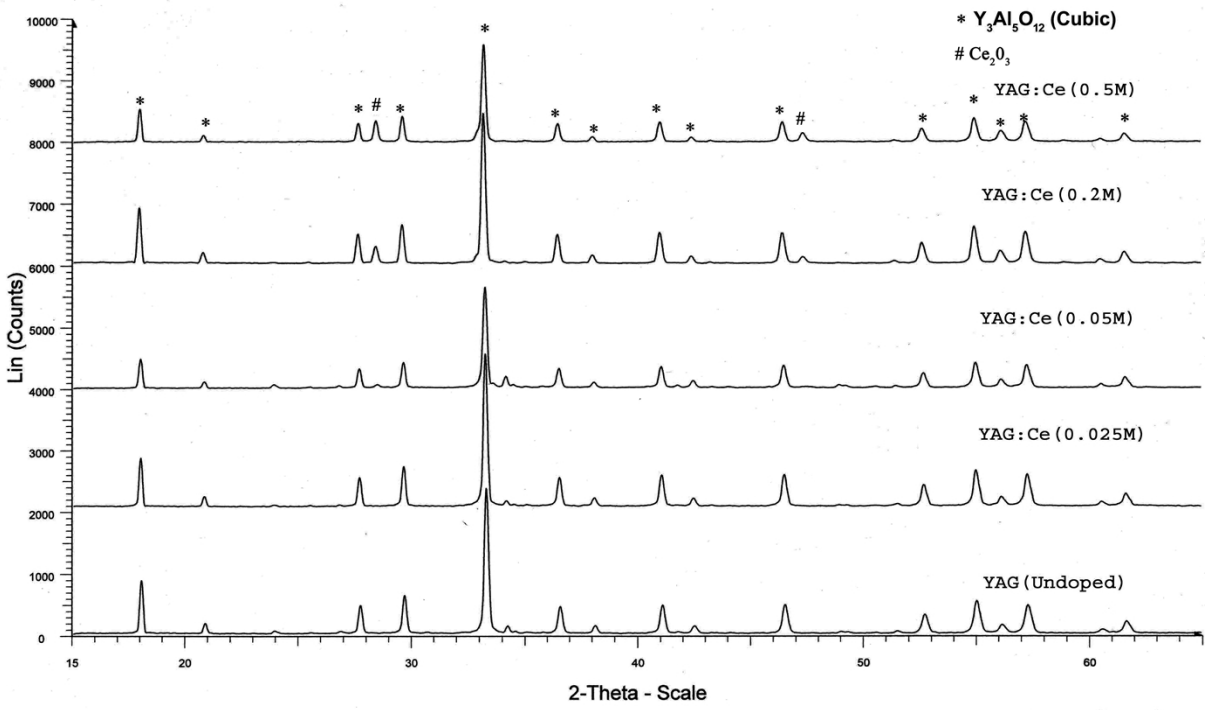

Figure 2. Structural properties of undoped and Ce doped YAG NPs. An XRD pattern of the undoped and Ce doped YAG NPs shows purity and crystalline nature of the samples. Observed changes in lattice parameters and (2θ) angle peak shift and precipitated secondary phase of Ce at high Ce concentration confirmed the presence of dopant.

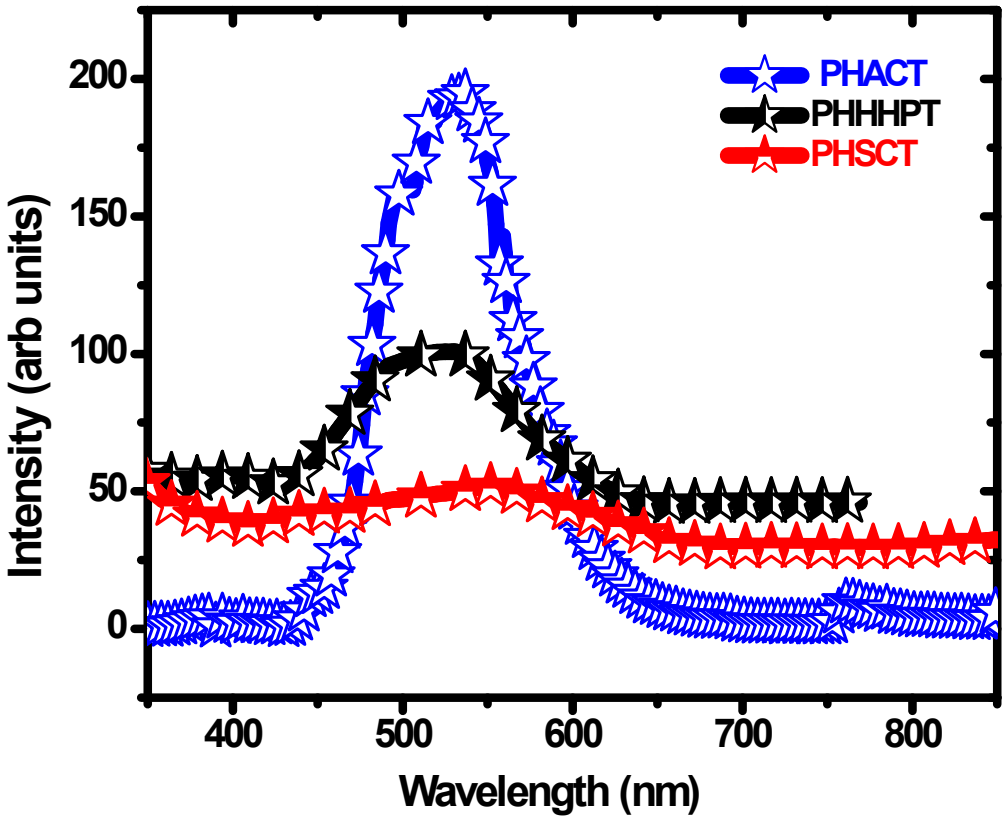

Fig 3. (Colour online) **Spectroscopic investigation of the YAG:Ce NPs**. PL studies of the undoped YAG NPs prepared by various synthesis techniques.