Electronic Supplementary Material (ESI) for CrystEngComm.

Supporting Information

Crystal Phase Transformation and Doping-Induced Blue Emission of Eu-doped InOOH and Cubic/Corundum-Type Rhombohedral In_2O_3 Nanowires

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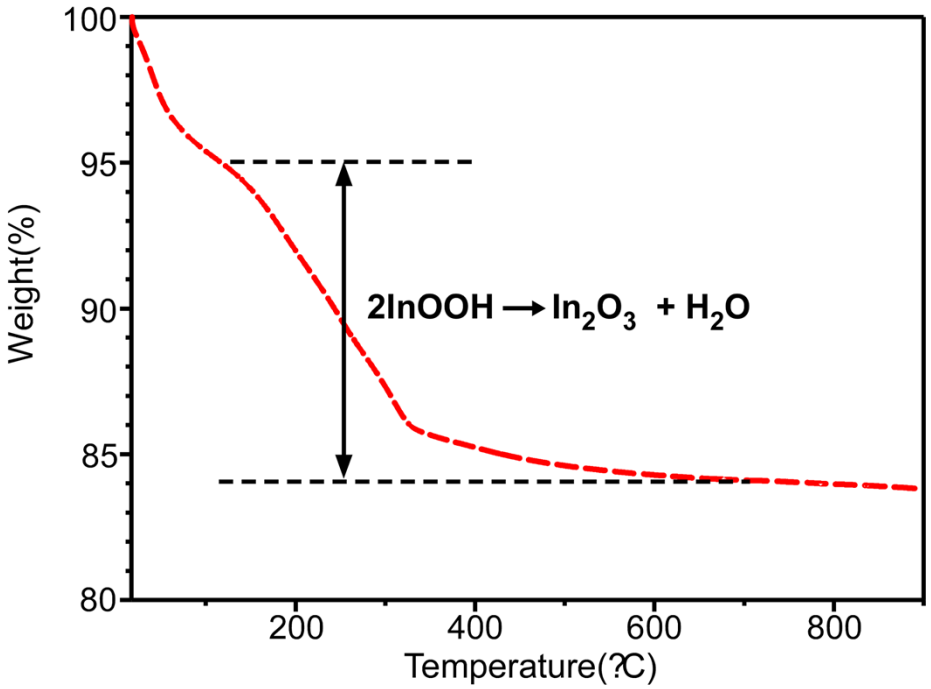

Fig.S1. Typical thermogravimetric analysis curve of InOOH wires.

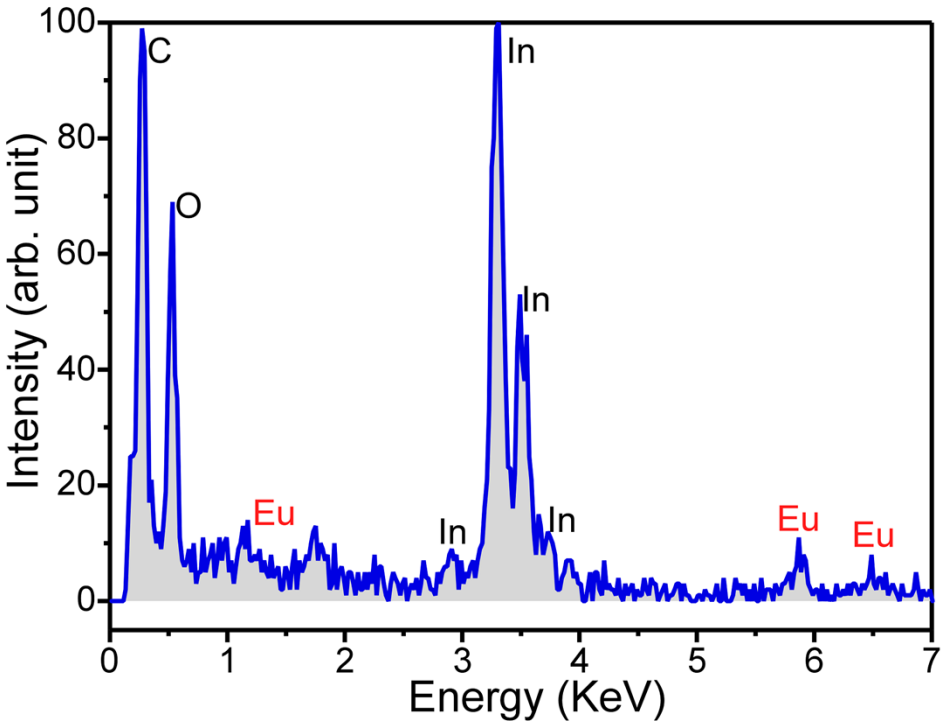

Fig. S2. EDX of 10 mol% Eu doped In_2O_3.

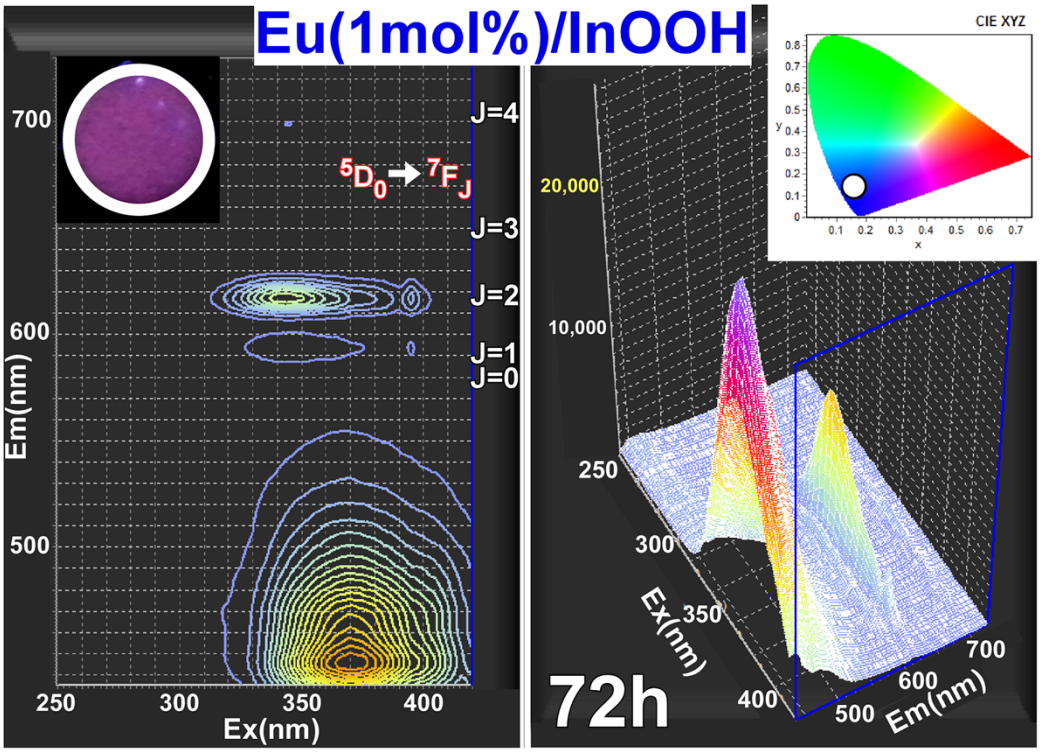

Fig. S3. 2D and 3D-PL profiles of the as-prepared 1 mol% Eu-doped InOOH nanowires synthesized for a longer reaction duration of 72 h. Inset photo (left) shows the color of the sample under UV irradiation. The CIE color coordinate (right) is for the emission spectra at an excitation wavelength of 370 nm.

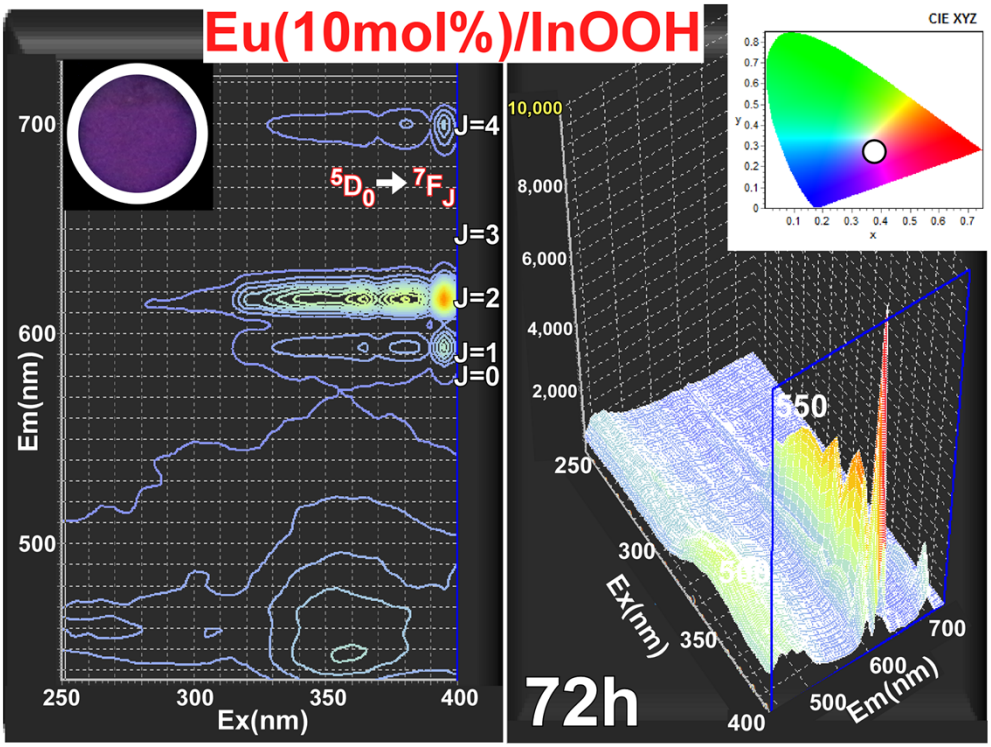

Fig. S4. 2D and 3D-PL profiles of the as-prepared 10mol% Eu-doped InOOH nanowires synthesized for a longer reaction duration of 72 h. Inset photo (left) shows the color of the sample under UV irradiation. The CIE color coordinate (right) is for the emission spectra at an excitation wavelength of 395 nm.

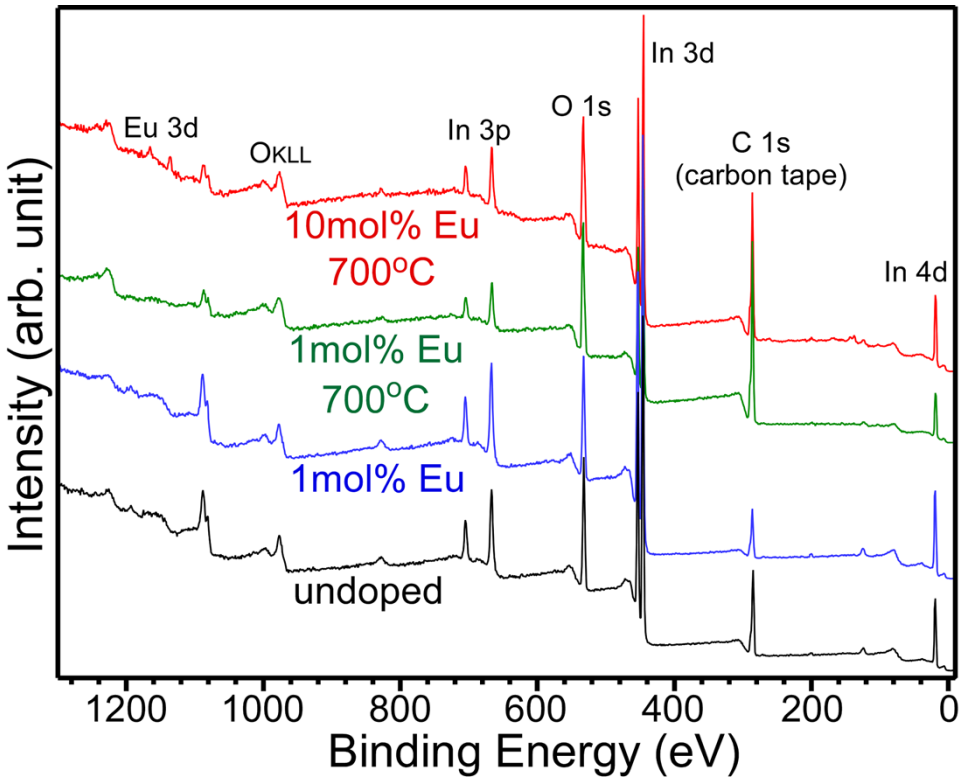

Fig. S5. Survey XPS spectra of undoped and 1mol% Eu-doped InOOH, and 700°C-annealed 1 and 10mol% Eu-doped In_2O_3 samples.

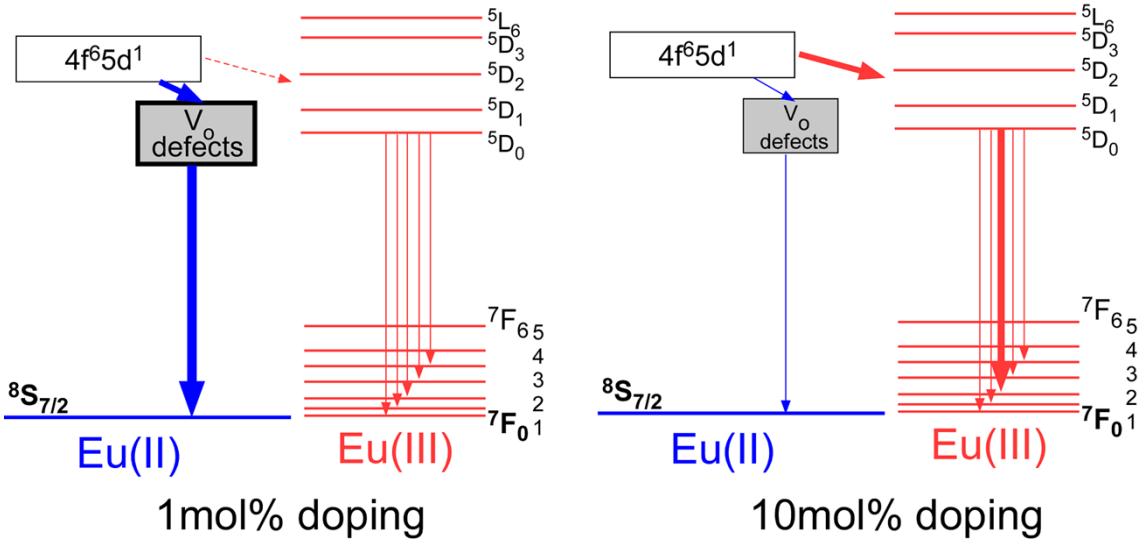

Fig. S6. Energy transfer and luminescence mechanism for 1 and 10 mol% Eu-doped samples.