

Supplementary Information:

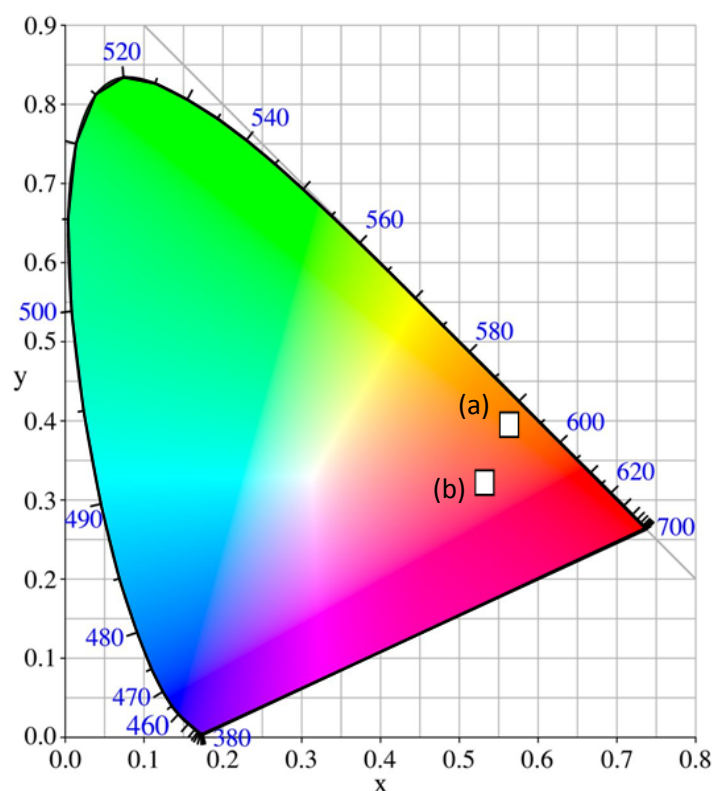


Fig. S1. CIE standard chromaticity colour coordinates corresponding to the total visible up-conversion emission under infrared 980 nm laser excitation at 300 mW of two different RE-doped organic resins with (a) 1:1:1 and (b) 10:1:1 Yb³⁺:Er³⁺:Tm³⁺ ratio.

The overall emitted luminescence has been represented by using the CIE standard chromaticity diagram in order to quantify the colour for this Yb³⁺-Er³⁺-Tm³⁺-doped luminescent resins when changing ratio concentration from 1:1:1 (a) to 10:1:1 (b). The CIE diagram represents the colour of visible luminescence emitted by the sample seen by the human eye when is corrected to sensitivity of blue, green and red receptors of the eye. The x and y-axis of CIE diagram are the respective coordinates of the total visible luminescence. Thus corresponding coordinates for the sample are presented in Fig. S1. The appreciable variation of these values from orange-reddish to purplish colour shows the potential of the presented resins as tuneable upconversion phosphors.