Supporting Information

One-step surfactant-free controllable synthesis and tunable up-conversion/down-shifting white light emissions of Sr_2YF_7 crystals doped with Ln^{3+} ions

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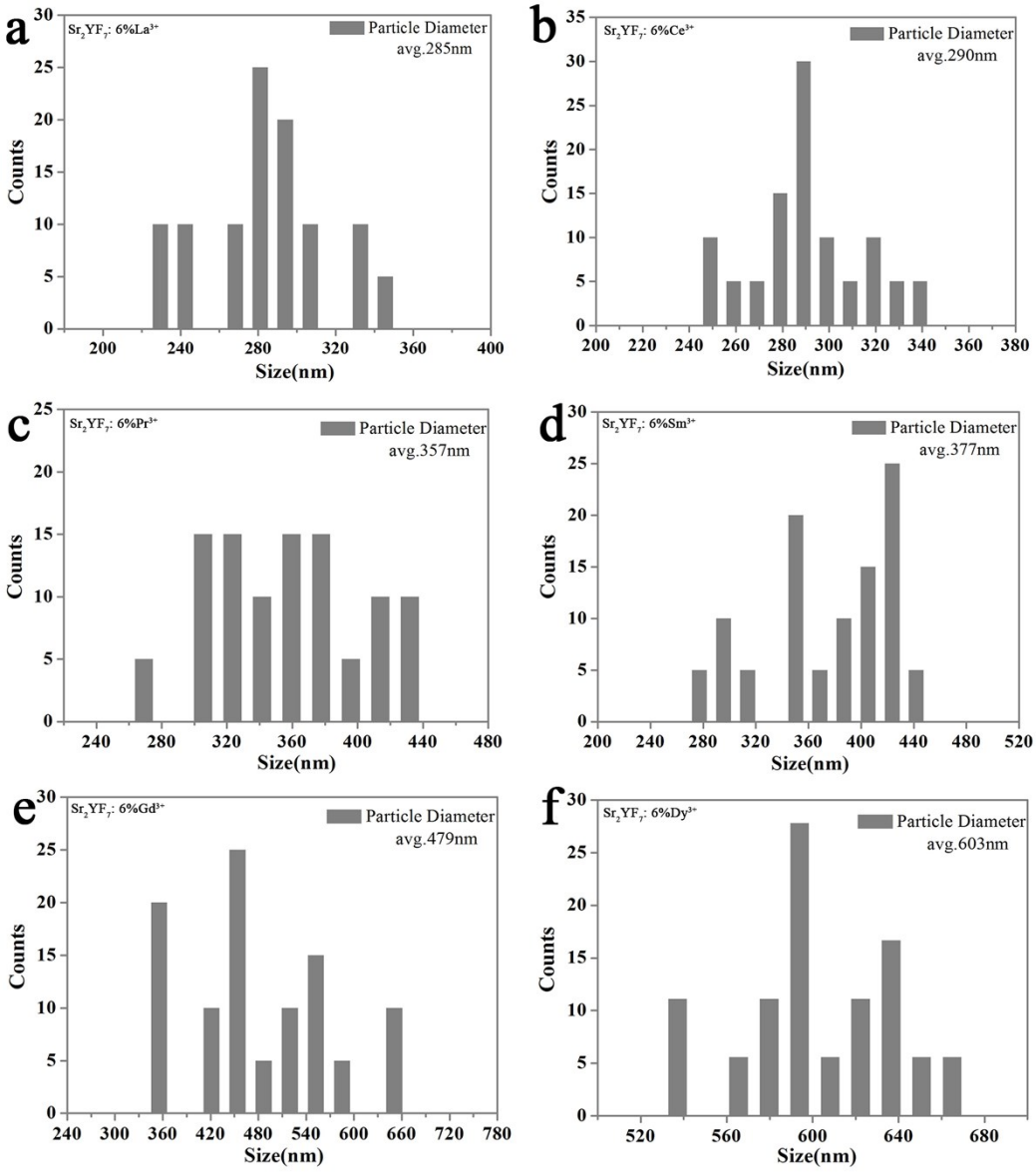

Fig. S1 The average size of Sr_2YF_7 doped with different Ln^{3+} ions: (a) 6% La^{3+}, (b) 6% Ce^{3+}, (c) 6% Pr^{3+}, (d) 6% Sm^{3+}, (e) 6% Gd^{3+} and (f) Dy^{3+}, respectively. Here, two hundred particles of each sample are randomly selected for statistics.

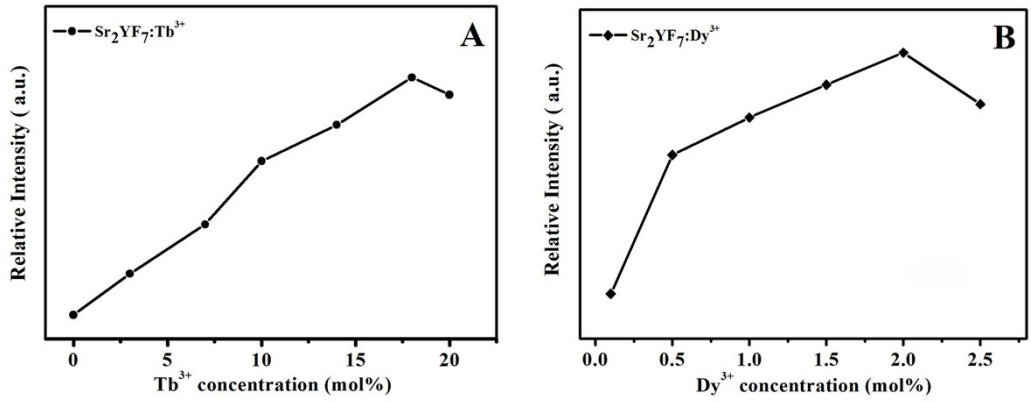

Fig. S2 PL emission intensity of Tb^{3+} ions (A) and Dy^{3+} ions (B) as a function of their doping concentrations in Sr_2YF_7 crystals, respectively. The optimum concentrations of Tb^{3+} ions and Dy^{3+} ions in the Sr_2YF_7 are determined to be as 18 mol% and 2 mol%, respectively.