**Supplementary information**

**Dual-light emitting Yb3+,Er3+-doped La(IO3)3 iodate nanoparticles:**

**Up-conversion & Second Harmonic Generation**

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**Figure S1.** *Power-dependence of SHS signal for α-La0.88Yb0.1Er0.02(IO3)3 nanocrystals dispersed in ethylene glycol*



**Figure S2.** *Schematic of the energy level diagram of Yb3+ and Er3+ and some examples of energy transfers between the two ions.*