Supplemental Information:

K(Mn,Zn)F_3 Mesoporous Microspheres: One-Pot Synthesis via the Nanoscale Kirkendall Effect

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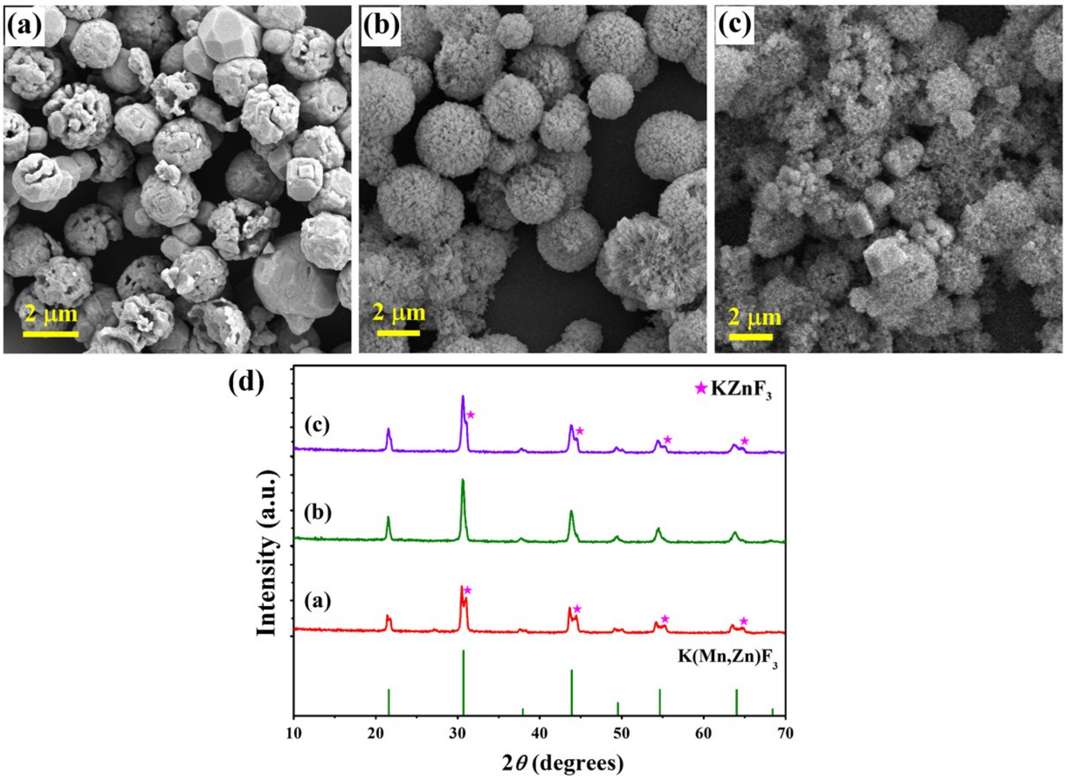

Figure S1. SEM images of samples obtained with different amounts of K_3Cit as chelating agent at 220 °C for 5 h: (a) 0 mmol, (b) 1 mmol, (c) 2 mmol, and (d) their corresponding XRD patterns.

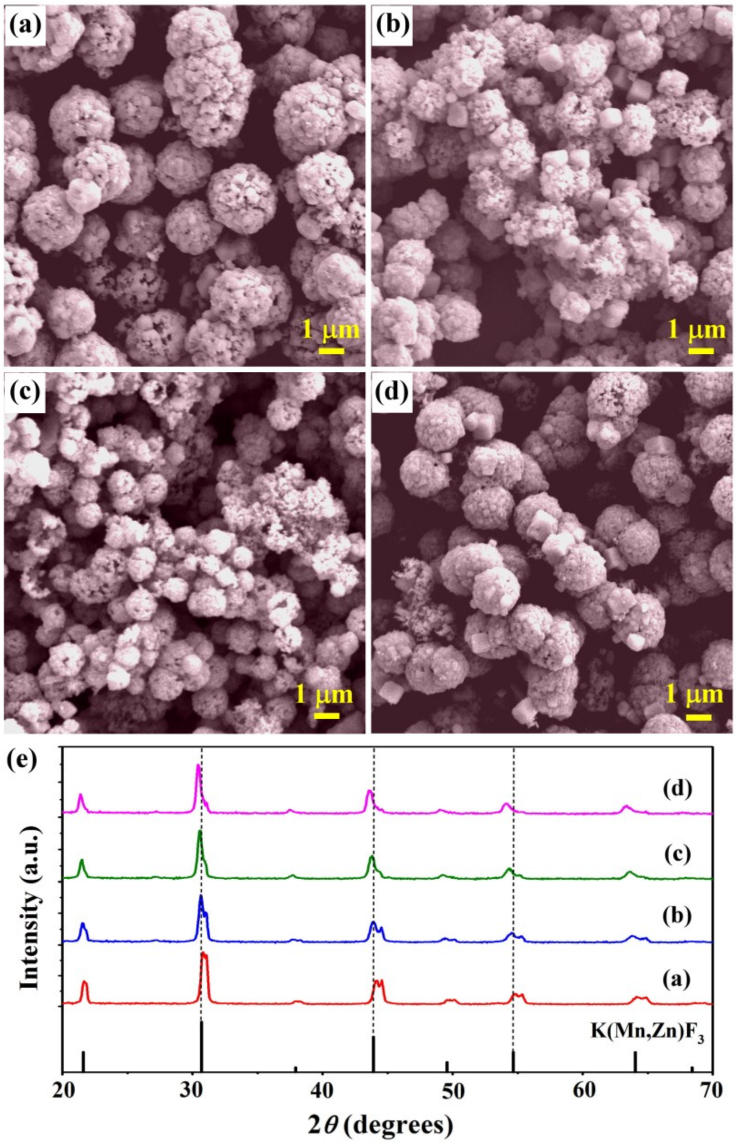

Figure S2. SEM images of samples obtained with different reactive species ratios (Zn^{2+}/Mn^{2+} molar ratio) at 220 ^{o}C for 5 h in the presence of 1 mmol K_3Cit: (a) 80/20 mol%, (b)70/30 mol%, (c) 60/40 mol%, (d) 50/50 mol%, and (e) their corresponding XRD patterns.

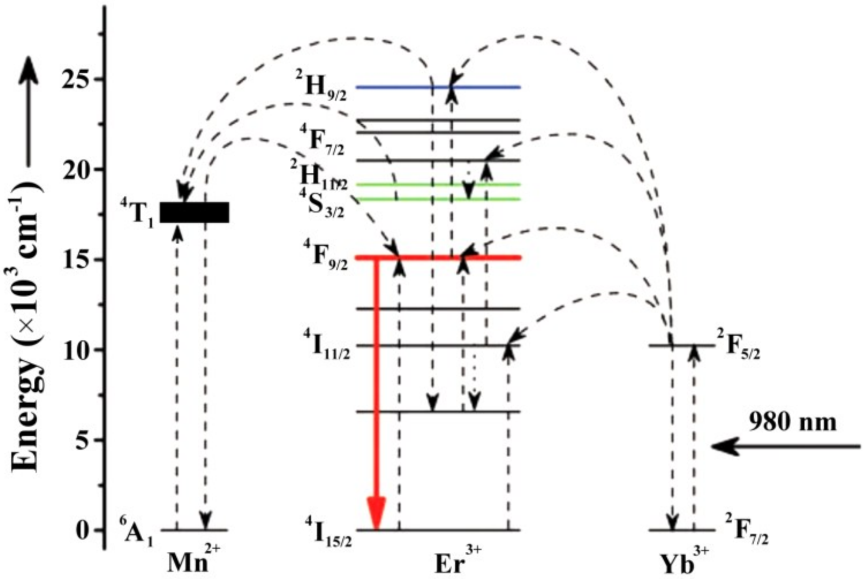

Figure S3. Schematic energy level diagram showing the possible up-conversion mechanism of the K(Mn,Zn)F_3: 0.5%Yb^{3+}, 0.5%Er^{3+} microspheres under 980 nm laser excitation.

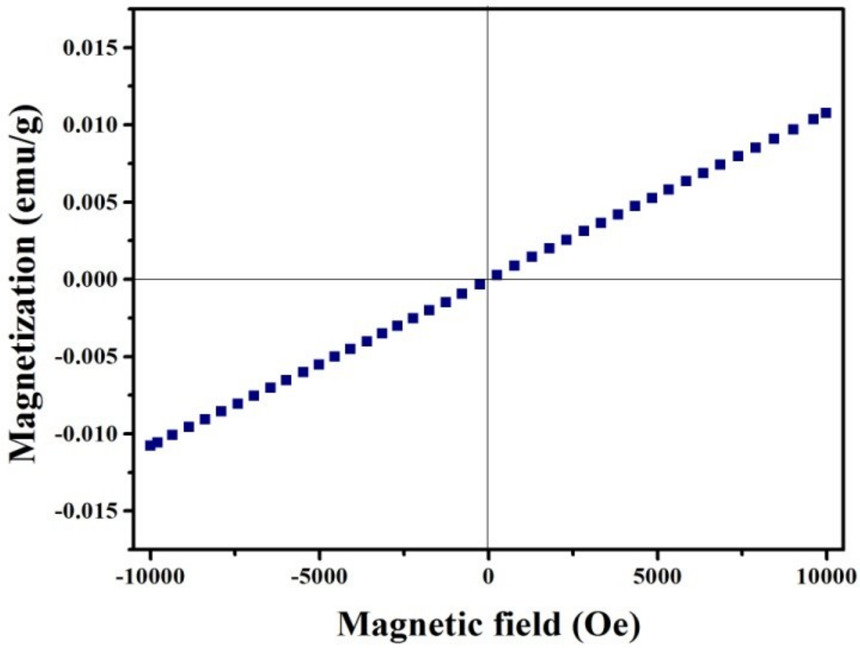

Figure S4. Magnetization as a function of the applied field for the porous $K(Mn,Zn)F_3$: Yb^{3+}, Er^{3+}microspheres at room temperature.

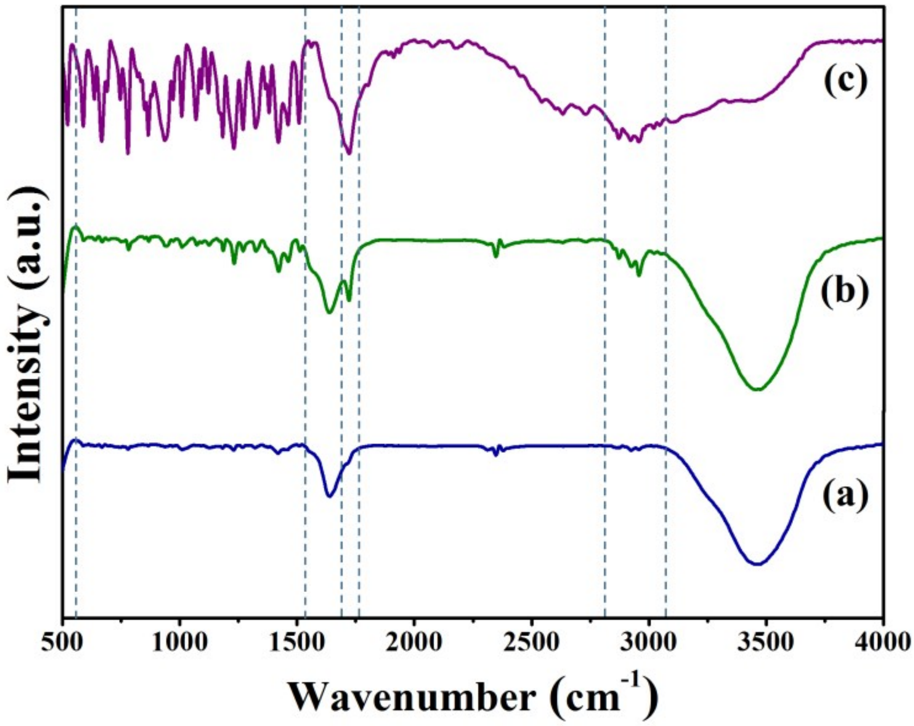

Figure S5. FT-IR spectra of (a) $K(Mn,Zn)F_3$: Yb^{3+}, Er^{3+} microspheres, (b) IBU-loaded $K(Mn,Zn)F_3$: Yb^{3+}, Er^{3+} microspheres, and (c) IBU alone.

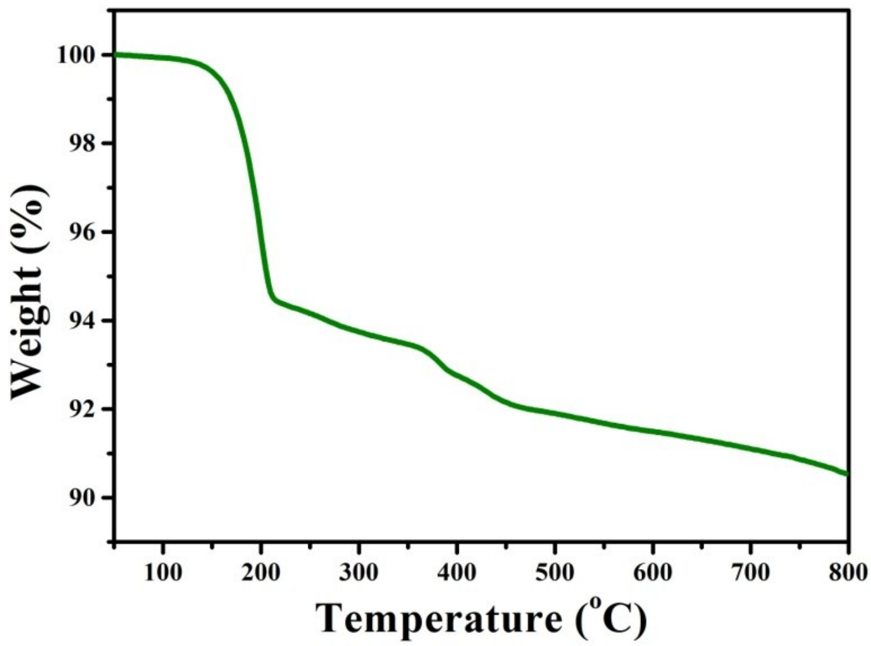

Figure S6. TG curve of IBU-loaded K(Mn,Zn)F_3: Yb^{3+}, Er^{3+}microspheres.

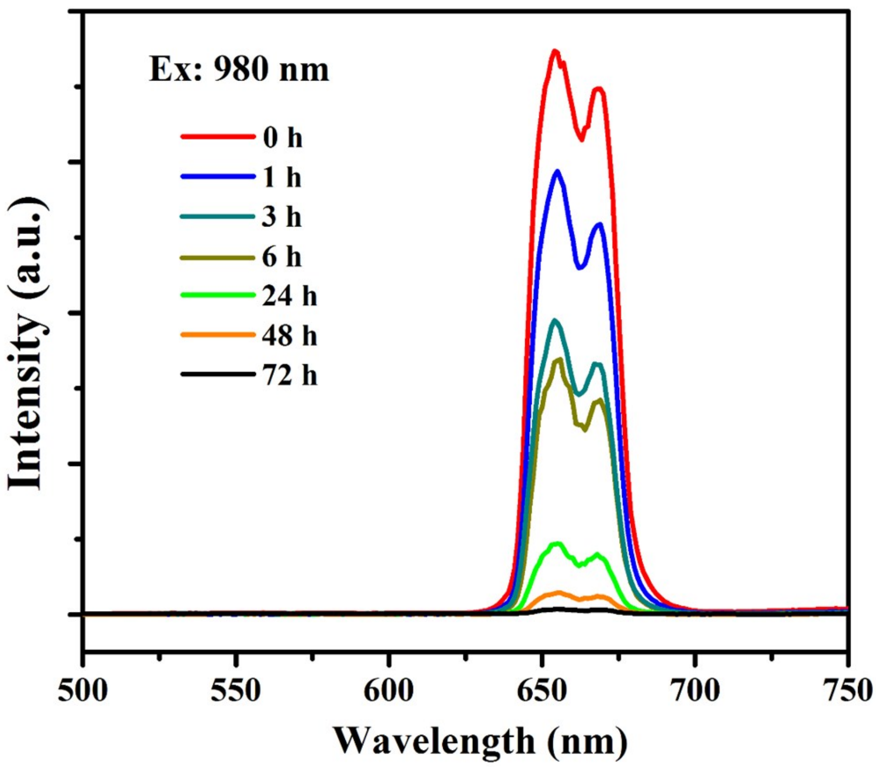

Figure S7. Up-conversion emission spectra of IBU-K(Mn,Zn)F_3: Yb^{3+}, Er^{3+} microspheres in SBF buffer at different release times.

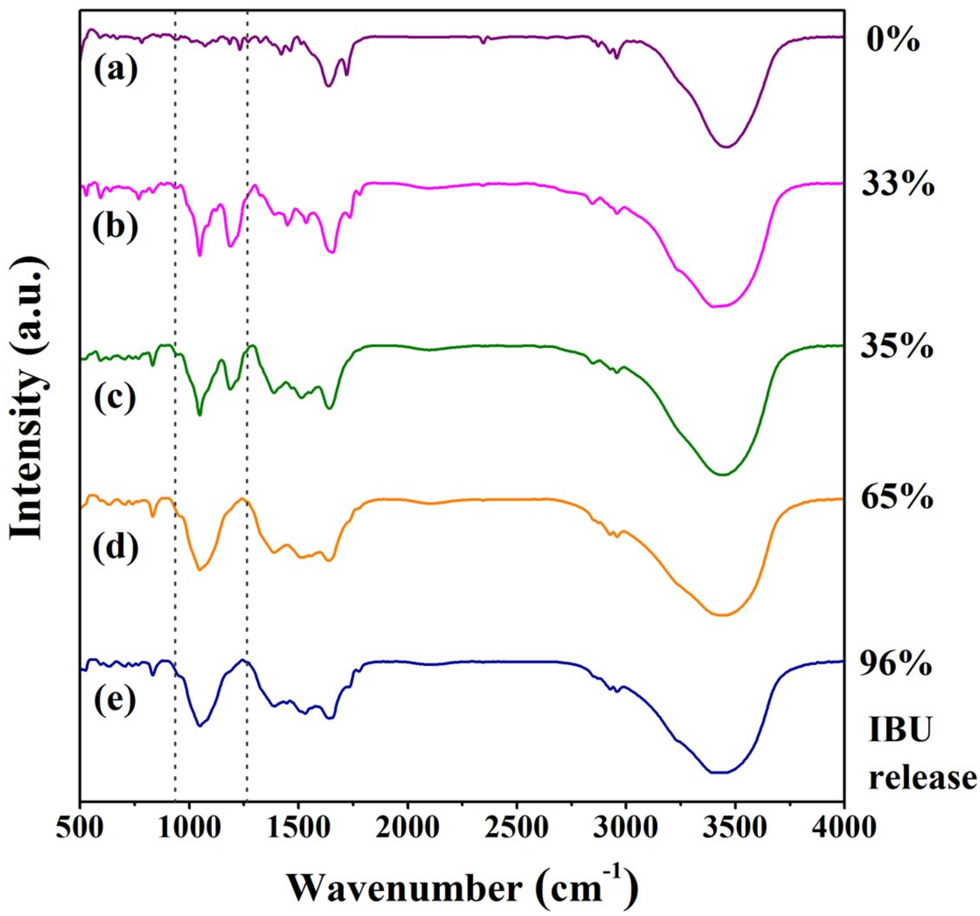

Figure S8. FT-IR spectra of IBU-loaded K(Mn,Zn)F_3: Yb^{3+}, Er^{3+}microspheres with different cumulatively released drug in SBF: (a) 0%, (b) 33%, (c) 35%, (d) 65%, (e) 96%.