Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting Information

Near-Infrared Luminescent $CaTiO_3$: Nd^{3+} Nanofibers with Trackable Drug Release Kinetics

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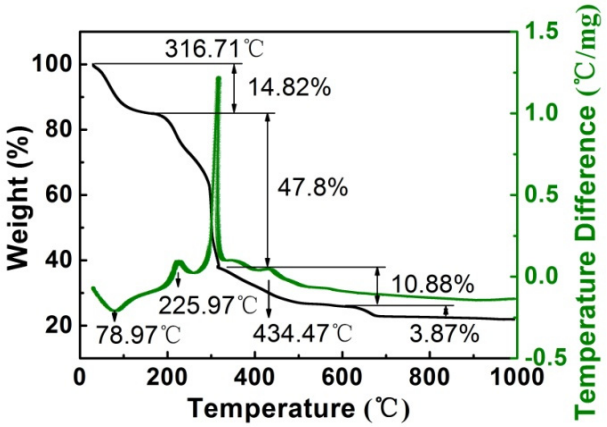

Figure S1. TG- DSC curve of the $CaTiO_3$: 1% Nd^{3+} nanofibers (Black and green curves refer to TG and DSC spectrum, respectively).

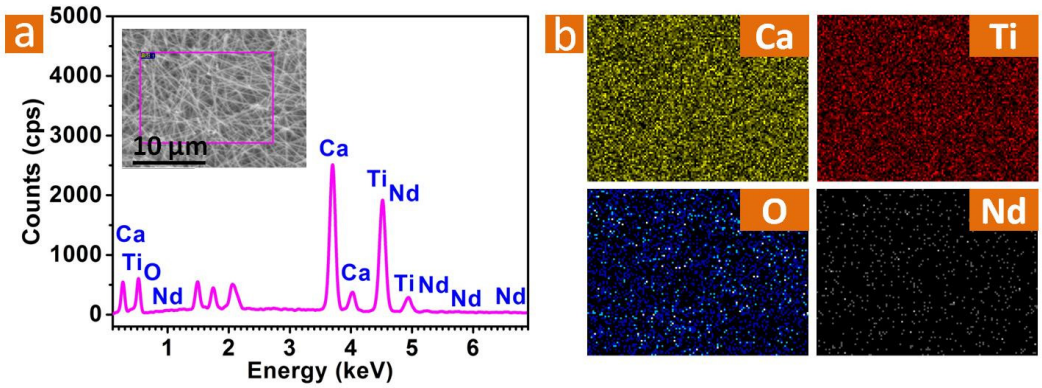

Figure S2. (a) EDS and (b) elemental mapping of the $CaTiO_3$: 1% Nd^{3+} nanofibers.

Table S1. The EDS elemental quantification of $CaTiO_3$: 1% Nd^{3+} nanofibers

Element	Wt %	Atom %
Ca	24.91	15.71
Ti	30.70	16.20
O	42.94	67.84
Nd	1.46	0.26
Total	100.00	

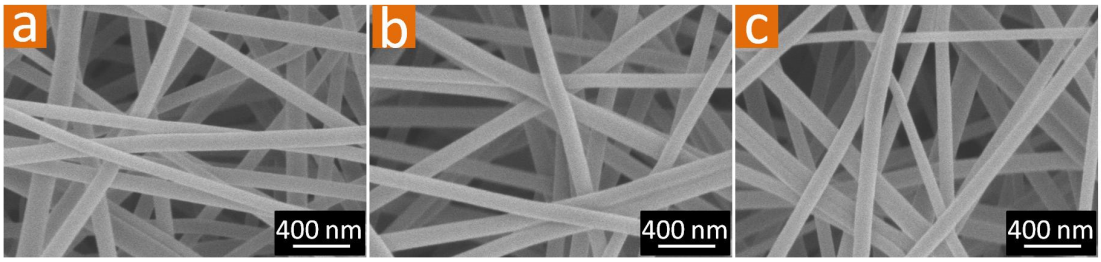

Figure S3. SEM images of the as-formed $CaTiO_3$: 1% Nd^{3+} precursor nanofibers obtained at different F127/CTO molar ratios: (a) 0, (b) 2.5m, and (c) 5m.

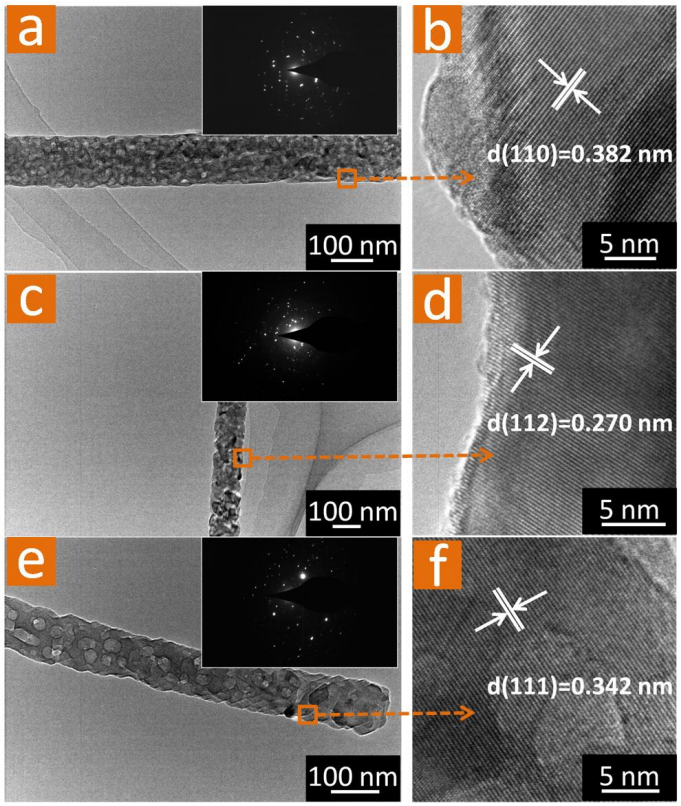

Figure S4. TEM and HRTEM images of $CaTiO_3$: 1% Nd^{3+} nanofibers obtained at different F127/CTO molar ratios: (a, b) 0, (c, d) 2.5m, and (e, f) 5m.

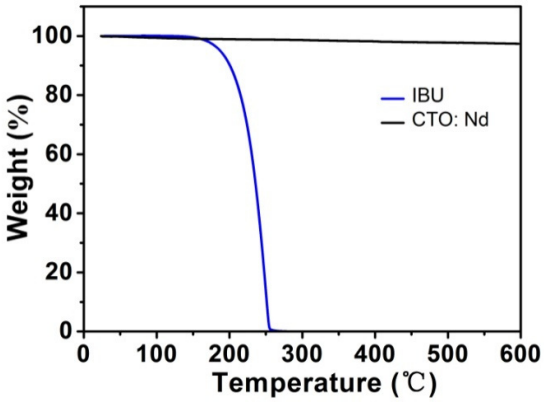

Figure S5. TG curve of the $CaTiO_3$: 1% Nd^{3+} nanofibers and pure IBU.

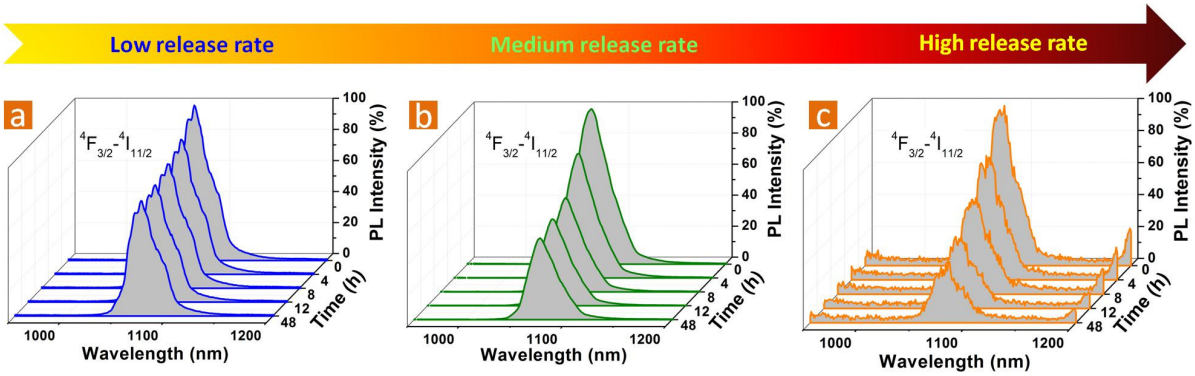

Figure S6. PL emission intensity as a function of release time for IBU loaded $CaTiO_3$: 1% Nd^{3+} nanofibers obtained at different F127/CTO molar ratios: (a) 0, (b) 2.5m, and (c) 5m.

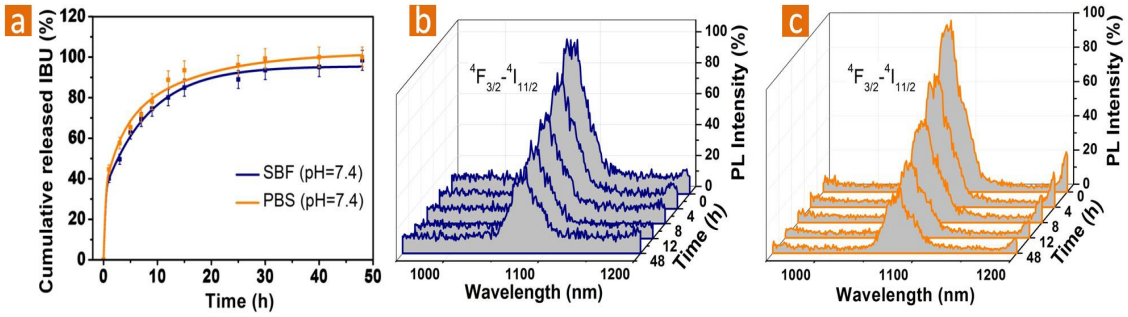

Figure S7. Cumulative drug release profiles (a) and the relative photoluminescence emission intensity (b, c) as a function of release time for IBU loaded $CaTiO_3$: 1% Nd^{3+} nanofibers obtained at F127/CTO molar ratios of 5m in (b) SBF medium and (c) PBS medium.