

Supporting Information Available

Hydrothermal Synthesis of Prismatic NaHoF_4 Microtubes and NaSmF_4 Nanotubes

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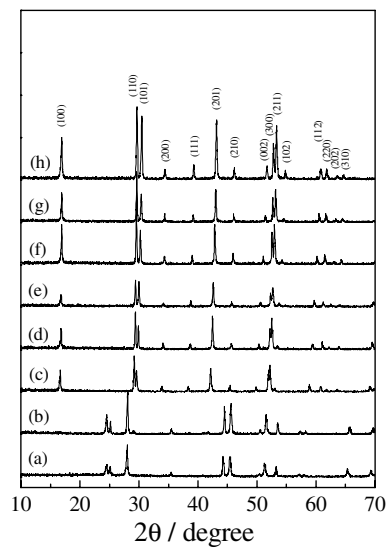
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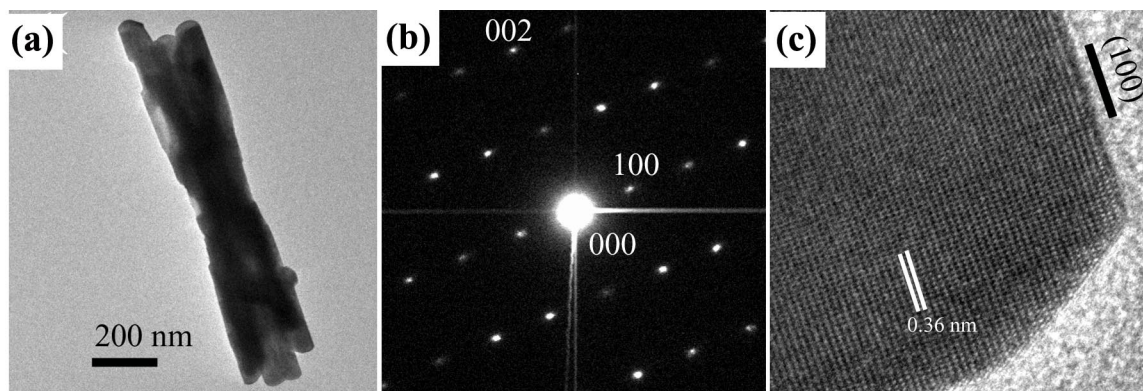
Supporting Information 1 Powder XRD patterns of hydrothermal products in the system of NaF-LnF_3 [$\text{Ln}=(\text{a}) \text{Pr}, (\text{b}) \text{Nd}, (\text{c}) \text{Sm}, (\text{d}) \text{Eu}, (\text{e}) \text{Cd}, (\text{f}) \text{Tb}, (\text{g}) \text{Dy}, \text{ and } (\text{h}) \text{Ho}$].

Supporting Information 2: TEM images and an electron diffraction pattern of the NaSmF_4 nanostructure. (a) Low magnification TEM image, (b) $[0 \bar{1} 0]$ SAED pattern, and (c) $[0 \bar{1} 0]$ HRTEM image. The forbidden 00l reflections with $l = 2n+1$ appear in the $[0 \bar{1} 0]$ SAED pattern, but the intensity is systematically weak or extinctive when the crystal is rotated along the c-axis.

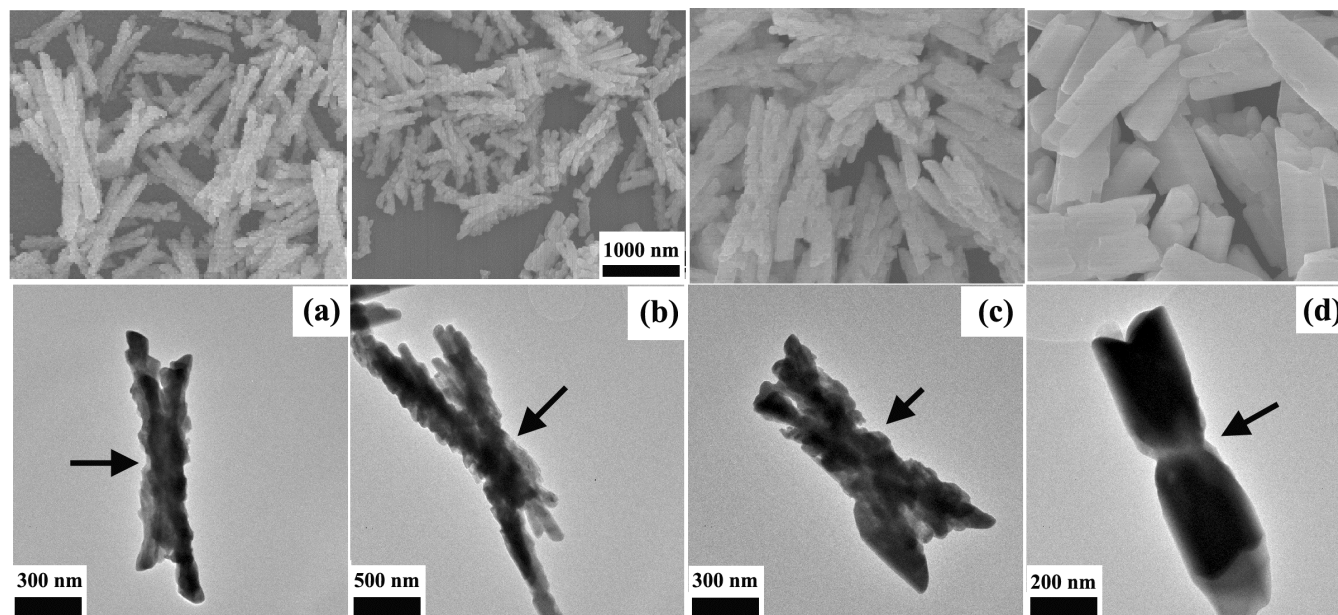
Supporting Information 3 SEM (upper row) and typical TEM (lower row) images of (a) NaEuF_4 , (b) NaGdF_4 , (c) NaTbF_4 , and (d) NaDyF_4 . The arrows point to the sections with solid interiors that initially serve as seeds. All images in upper row are at the same scale, as annotated in (b).



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