

## Supporting information for

### Oil/Water Two-Phase Solvothermal Synthesis of Hydrophobic BaTiO<sub>3</sub> Nanocrystals

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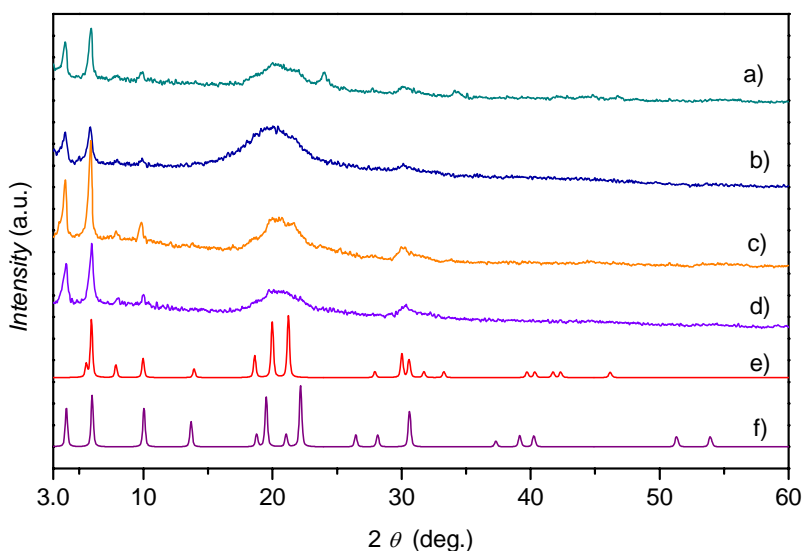
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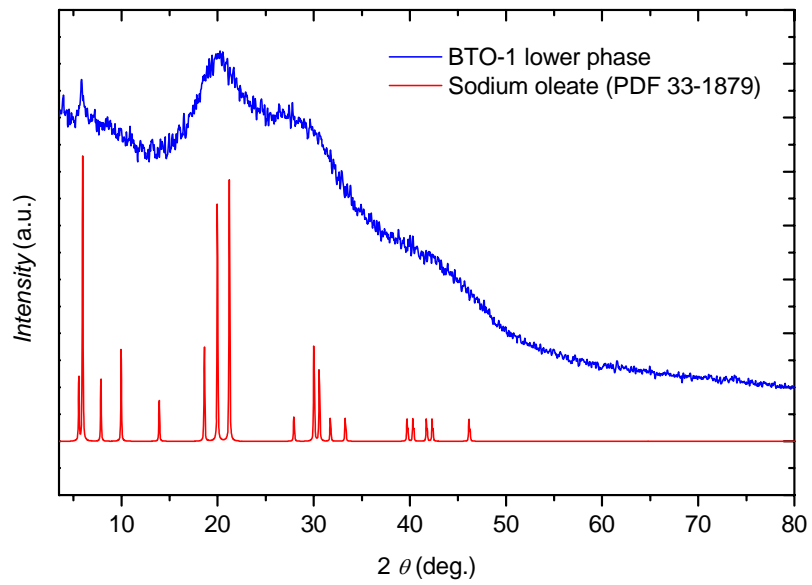
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#### 1. Supporting figures



**Figure 1.** XRD patterns of by-products collected from the upper crude oil phases: a) 15 mL of hexadecene, 5 mL of 4 M NaOH aqueous solution, b) 10 mL of hexadecene, 10 mL of 4 M NaOH aqueous solution, c) 15 mL of toluene, 5 mL of 4 M NaOH aqueous solution, d) 15 mL of heptane, 5 mL of 4 M NaOH aqueous solution, e) simulation of sodium oleate (PDF 33-1879), and f) simulation of gamma-sodium stearate (PDF 2-289).



**Figure 2.** XRD pattern of the by-products from the lower water/ethanol phase after using ethanol to achieve phase separation (precipitated using acetone).