

*Supplemental Information for:*

**Structurally Characterized Luminescent Lanthanide Zinc Carboxylate Precursors for Ln-  
Zn-O Nanomaterials**

*by*

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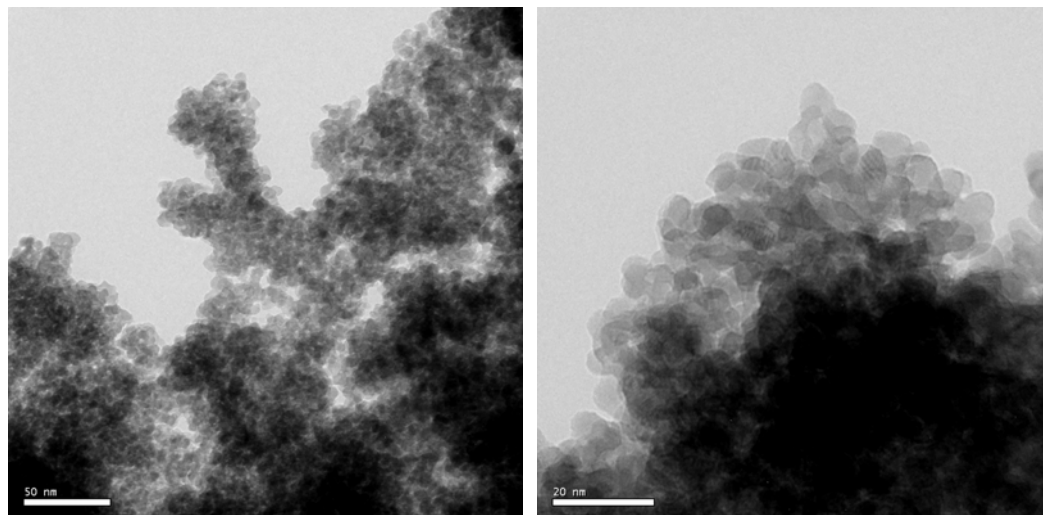
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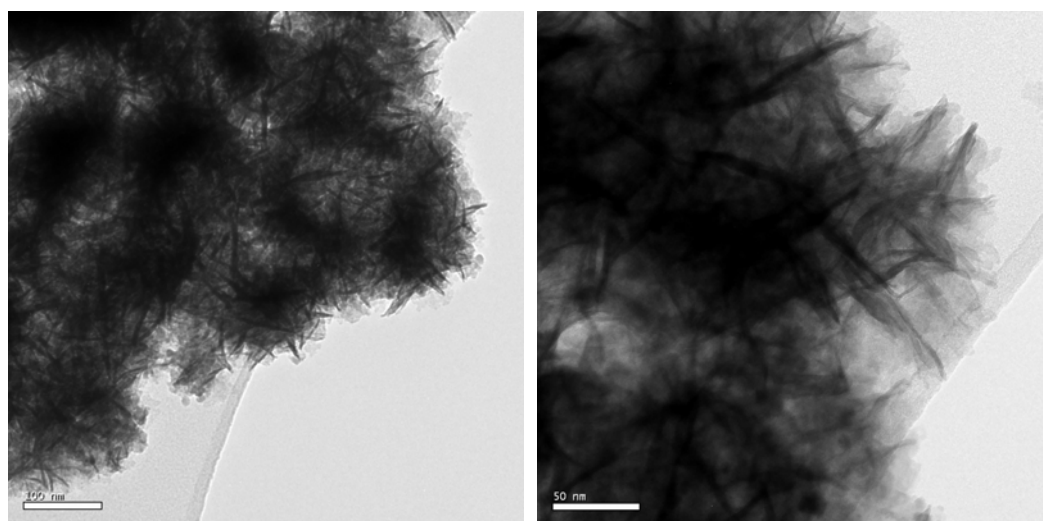
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**Figure SS1.** TEM images of Ln-Zn-O nanoparticles synthesized from: (a) **8** and (b) **18**.

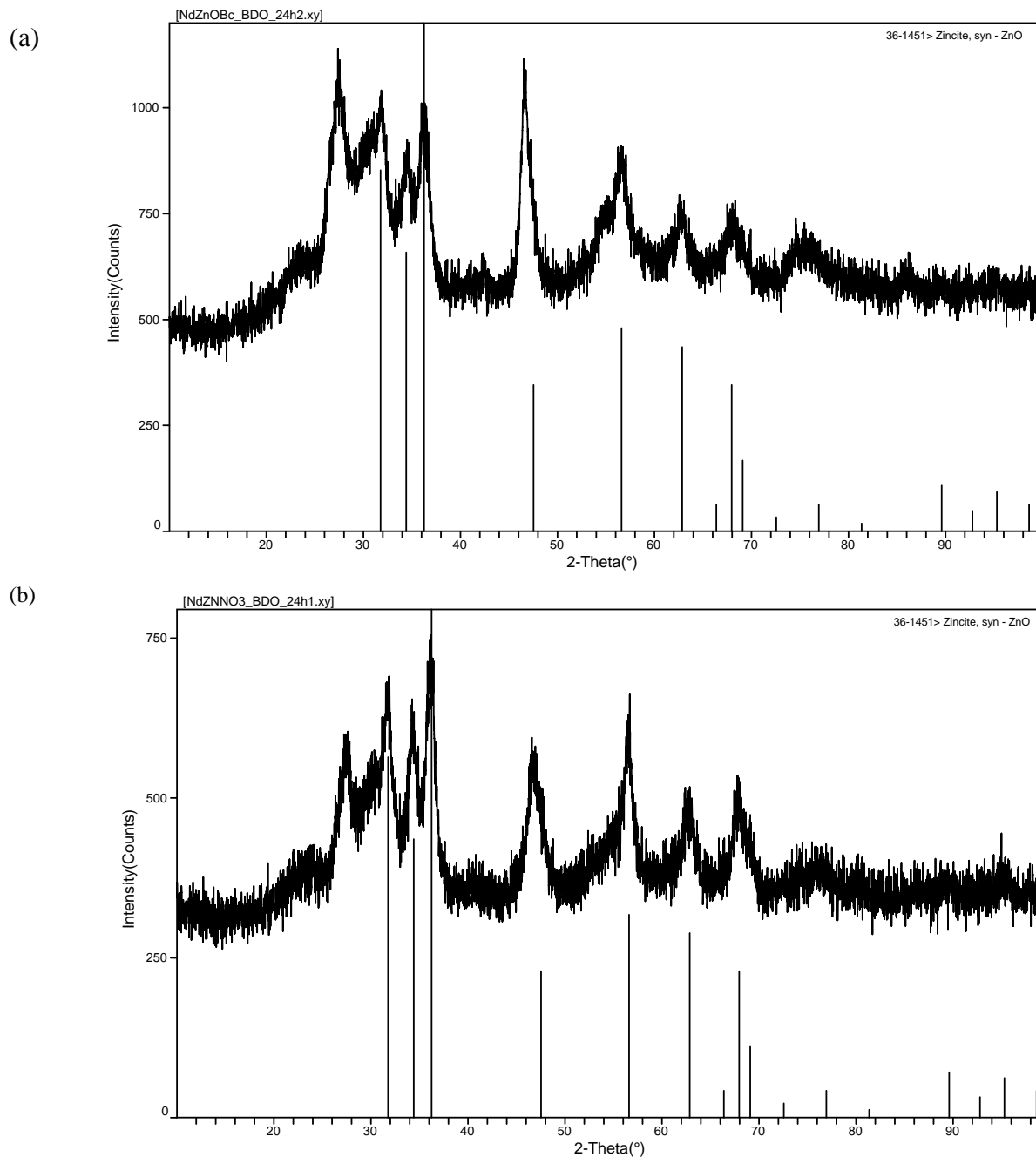
(a)



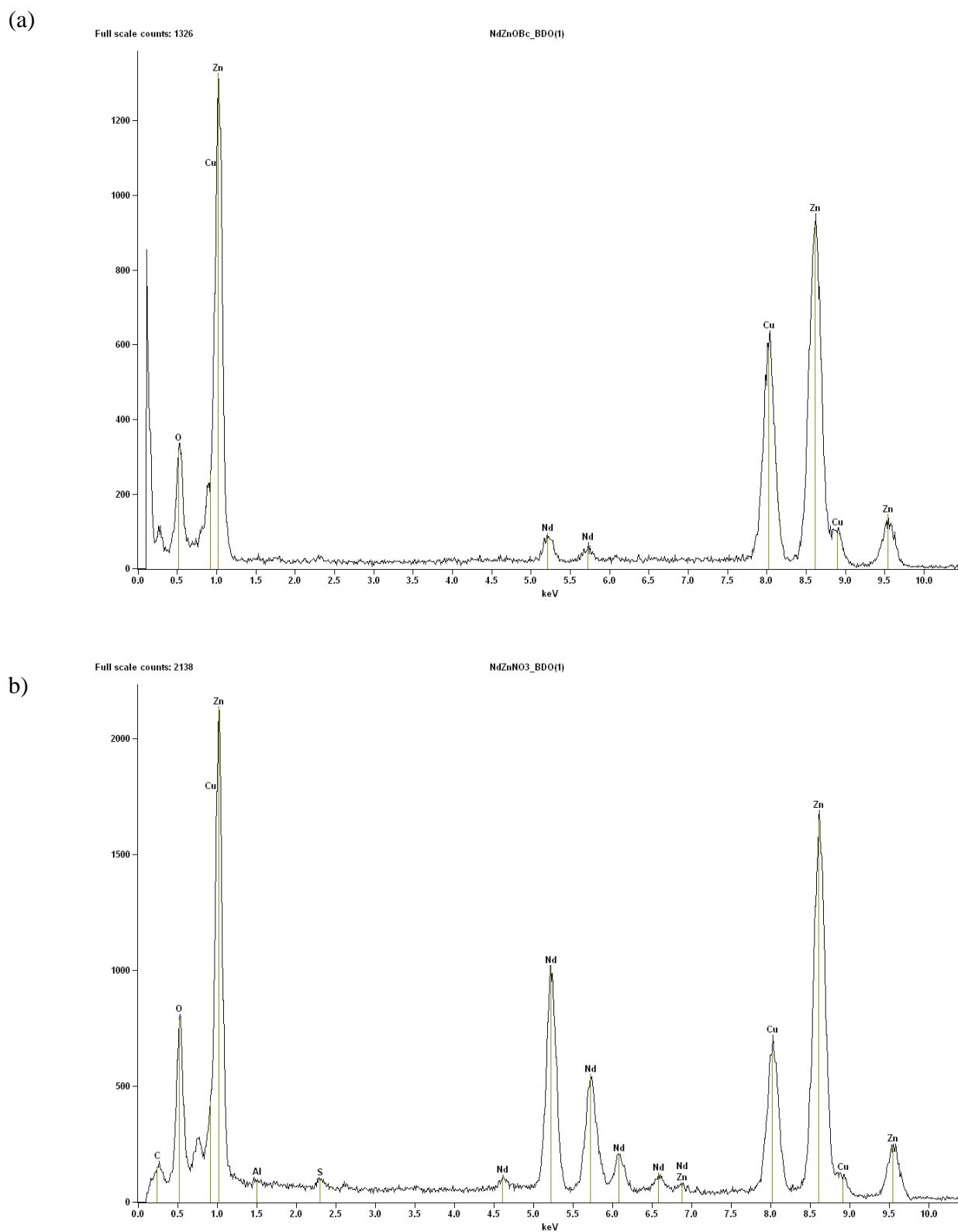
(b)



**Figure SS2.** XRD patterns of Ln-Zn-O nanoparticles synthesized from: (a) **8** and (b) **18**. Zincite pattern shown below

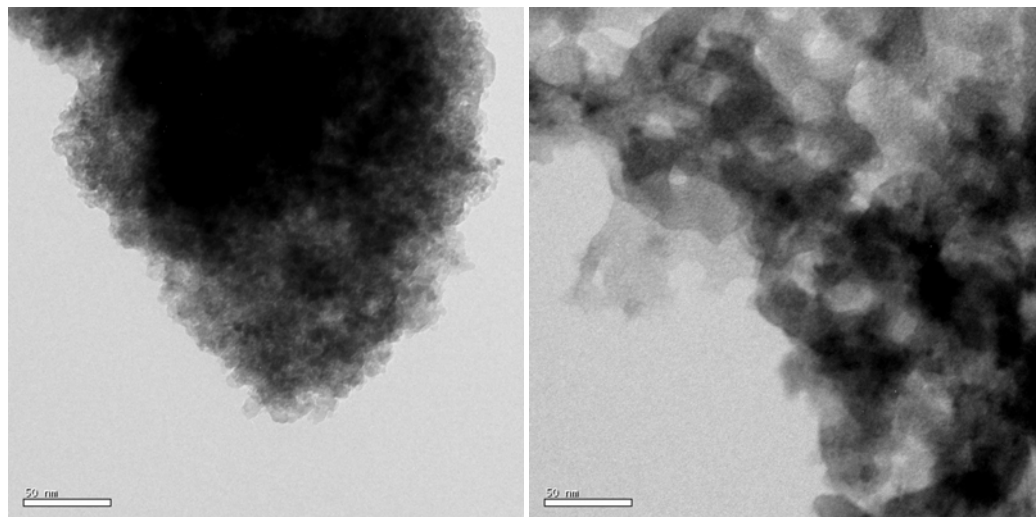


**Figure S3.** EDS patterns of Ln-Zn-O nanoparticles synthesized from: (a) **8** and (b) **18**.

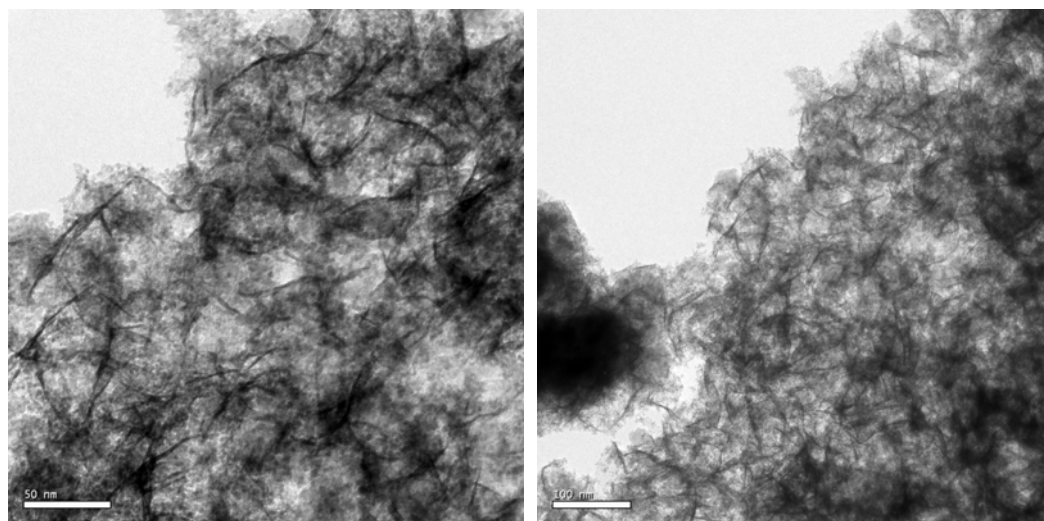


**Figure S4.** TEM images of Ln-Zn-O nanoparticles synthesized from: (a) **10** (b) **22**.

(a)

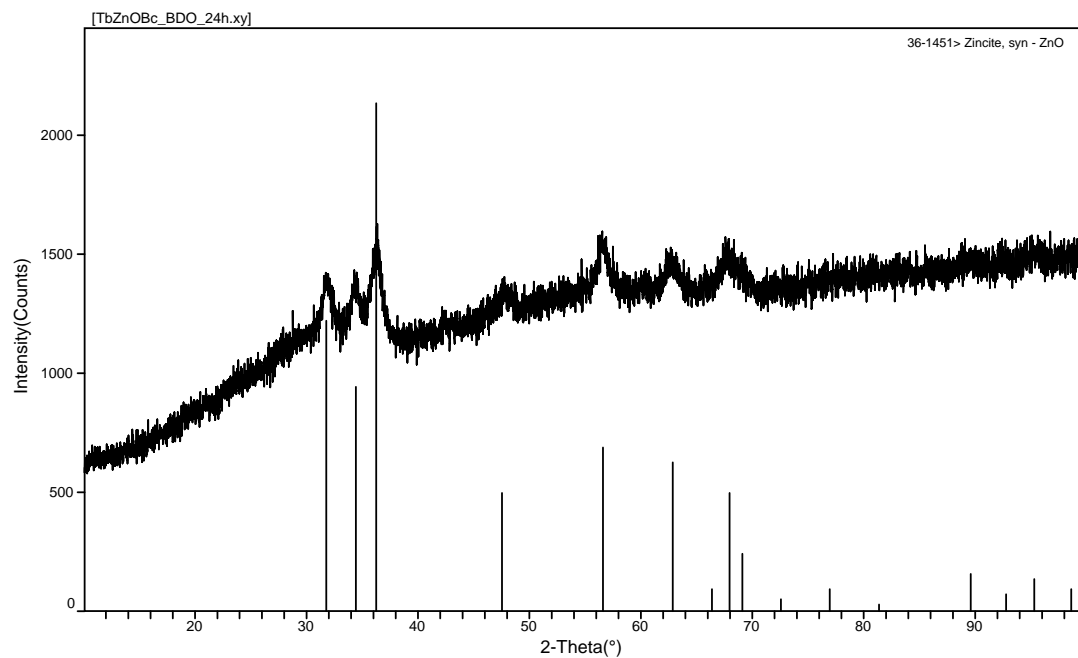


(b)

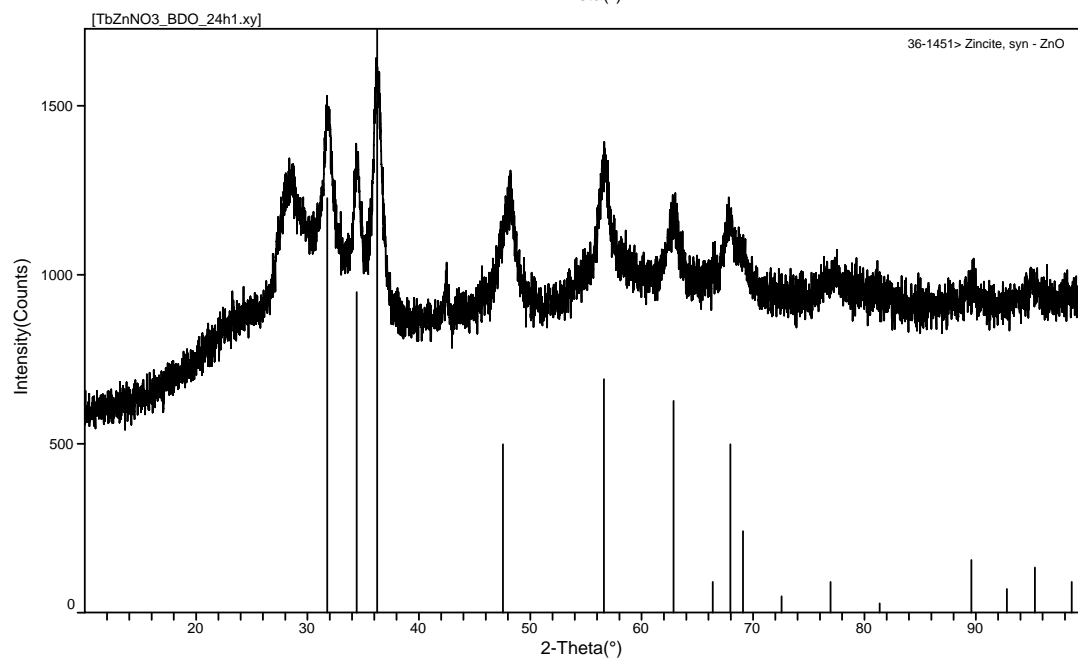


**Figure S5.** XRD patterns of Ln-Zn-O nanoparticles synthesized from: (a) **10** and (b) **22**. Zincite pattern shown below

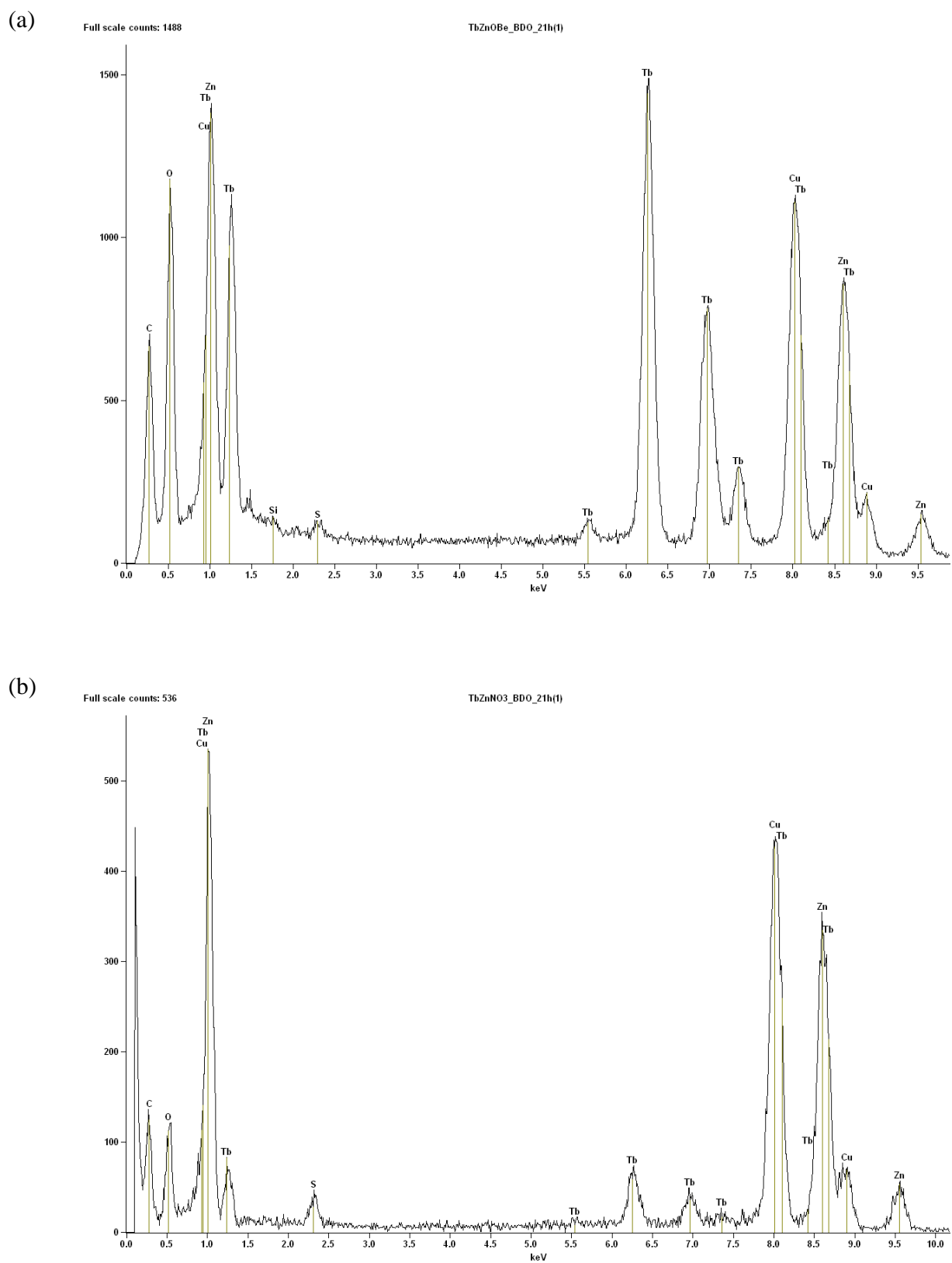
(a)



(b)



**Figure S6.** EDS patterns of Ln-Zn-O nanoparticles synthesized from: (a) **10** and (b) **22**.





**Figure S7. TGA/DTA of 8, 10, and 18.**

(a)

QuickTime™ and a  
TIFF (Uncompressed) decompressor  
are needed to see this picture.

(b)

QuickTime™ and a  
TIFF (Uncompressed) decompressor  
are needed to see this picture.

(c)

QuickTime™ and a  
TIFF (Uncompressed) decompressor  
are needed to see this picture.

**Figure S8.** PXRD of fired (400 °C) nanoparticles of **8** and **18**.

