

## **SUPPORTING INFORMATION**

### **Synthesis of Magnesium Aluminum Layered Double Hydroxide in Reverse Microemulsions**

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#### **Contents:**

Figure 1S Wide angle XRD patterns of LDH-RM1 showing the structural evolution during drying in air.

Figure 2S EDX patterns of LDH samples synthesized by reverse microemulsions

Figure 3S Topography images and typical cross-sectional data obtained from AFM experiments.

Supporting Data

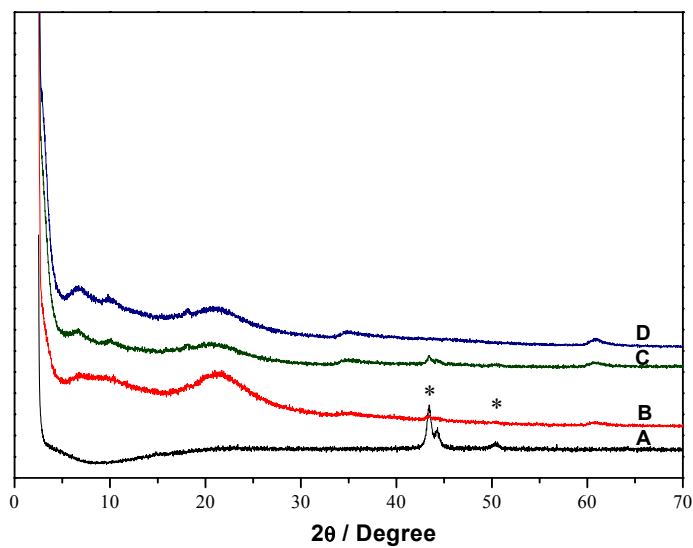


Figure 1S. Powder XRD patterns of (A) empty sample holder; (B) the gel-like sample LDH-RM2 separated by centrifuge; (C) the same sample after drying for 30 min and for (D) 180 min.

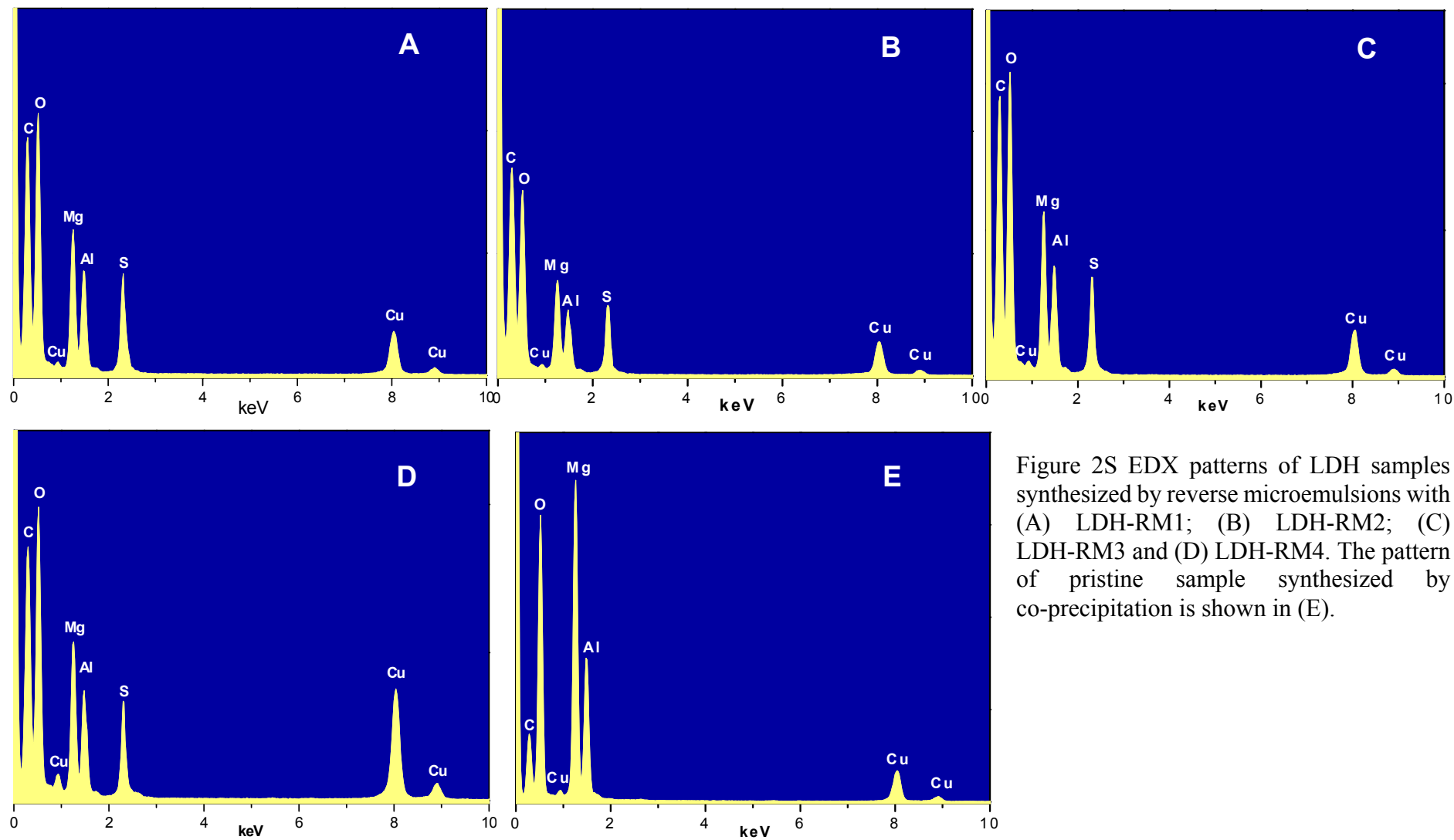
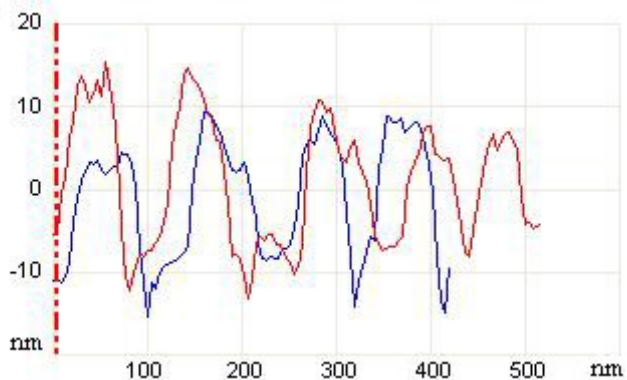
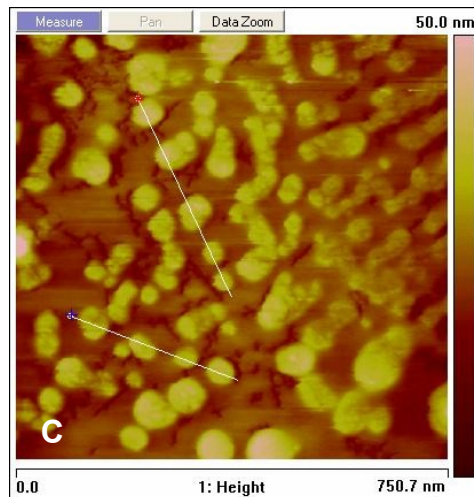
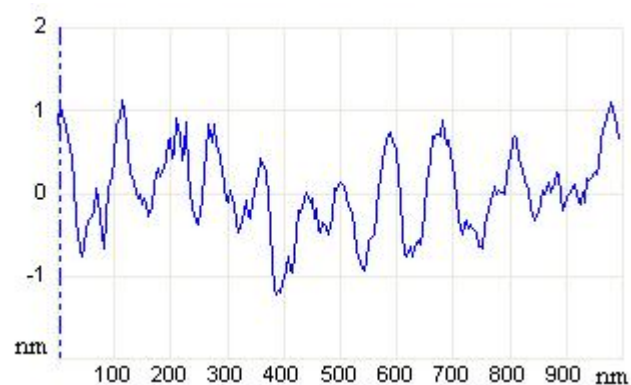
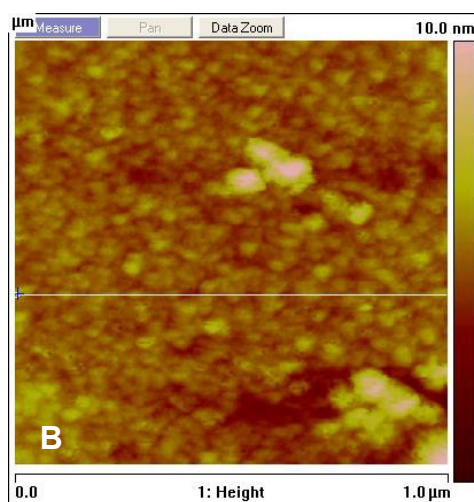
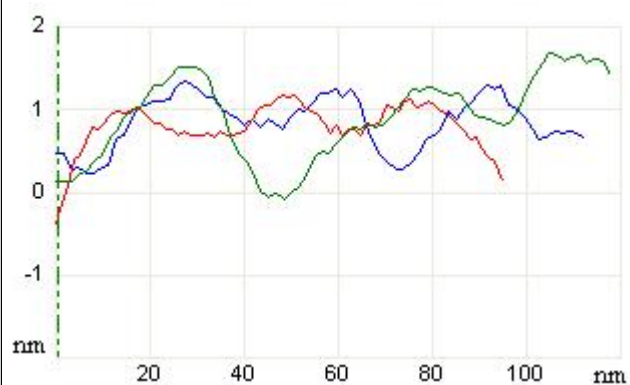
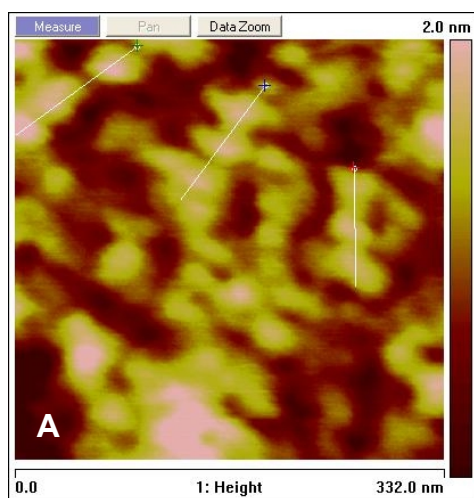


Figure 2S EDX patterns of LDH samples synthesized by reverse microemulsions with (A) LDH-RM1; (B) LDH-RM2; (C) LDH-RM3 and (D) LDH-RM4. The pattern of pristine sample synthesized by co-precipitation is shown in (E).



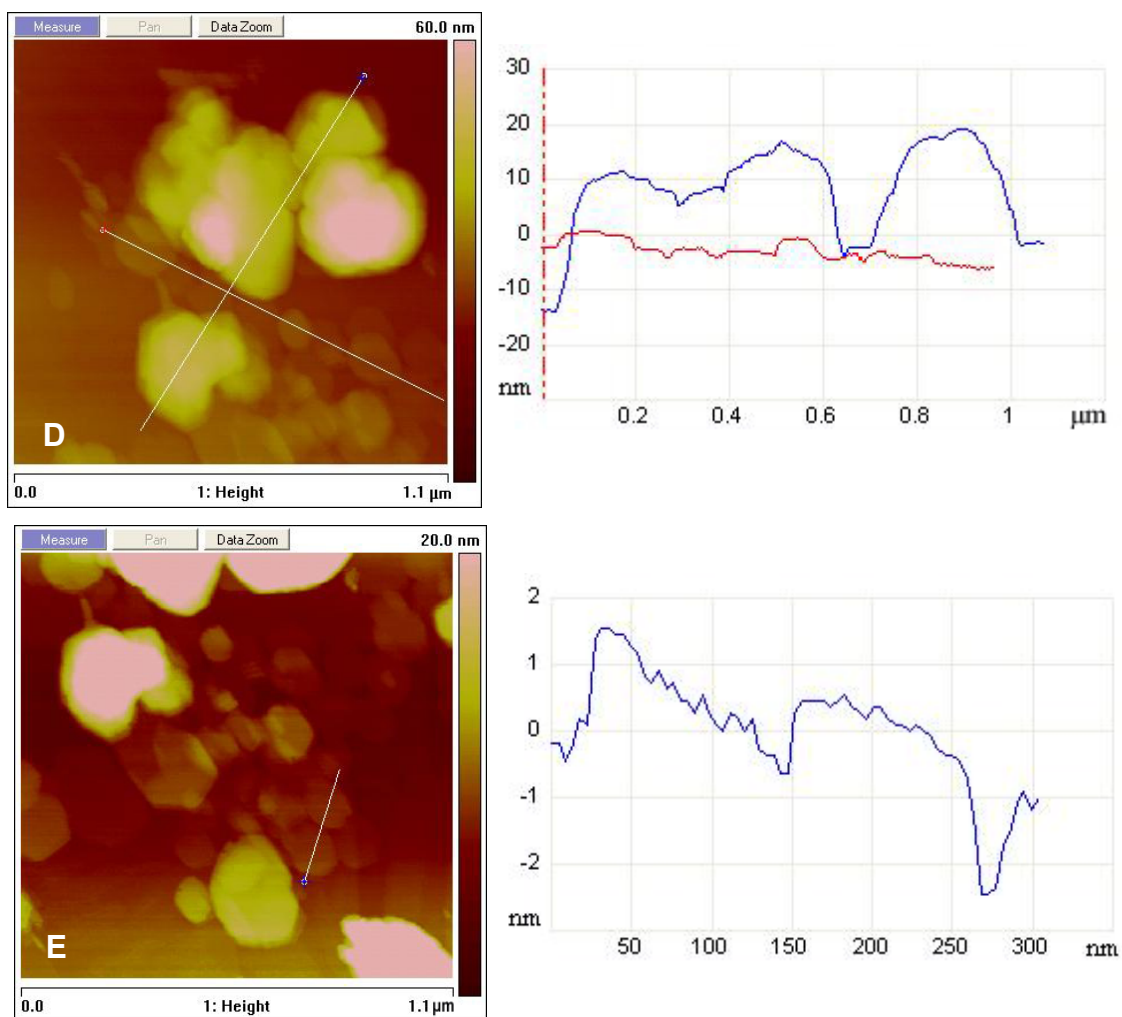


Figure 3S Topography images and typical cross-sectional data of the A) LDH-RM1; B) LDH-RM2; C) LDH-RM3; D) and E) LDH-RM4 samples synthesized in reverse microemulsions.