

Supplementary Information

Effect of Tetrahedrally Coordinated Al on the Surface Acidity of Mg-Al Binary Mixed Oxides

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1. XRD

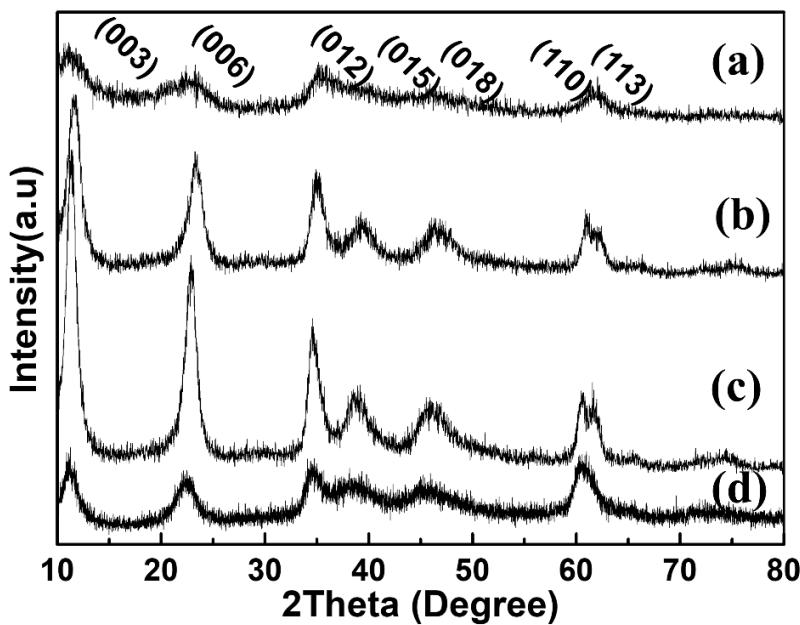


Figure S1. XRD patterns of pristine LDHs (a) LDH-1, (b) LDH-2, (c) LDH-3, and (d) LDH-4.

2. FT-IR

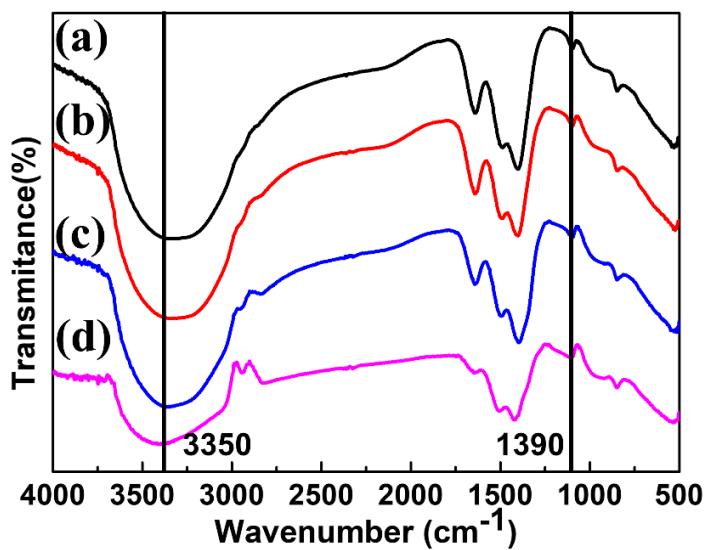


Figure S2. FT-IR spectra of pristine LDHs (a) LDH-1, (b) LDH-2, (c) LDH-3, and (d) LDH-4.

3. Zeta potential

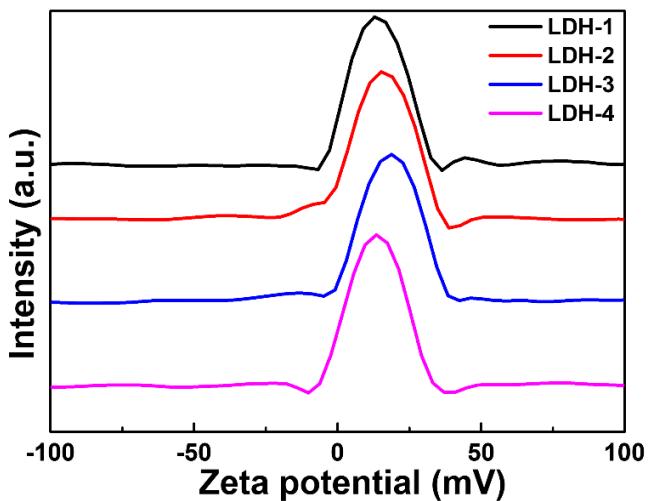


Figure S3. Zeta potential of pristine LDHs: LDH-1, LDH-2, LDH-3, and LDH-4.

4. DLS

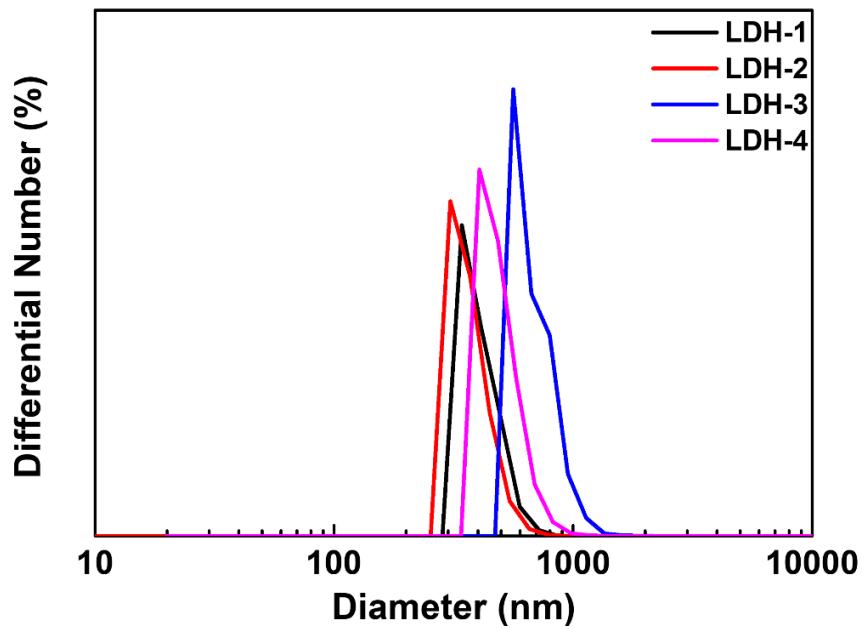


Figure S4. DLS of pristine LDHs: LDH-1, LDH-2, LDH-3, and LDH-4.

5. SEM

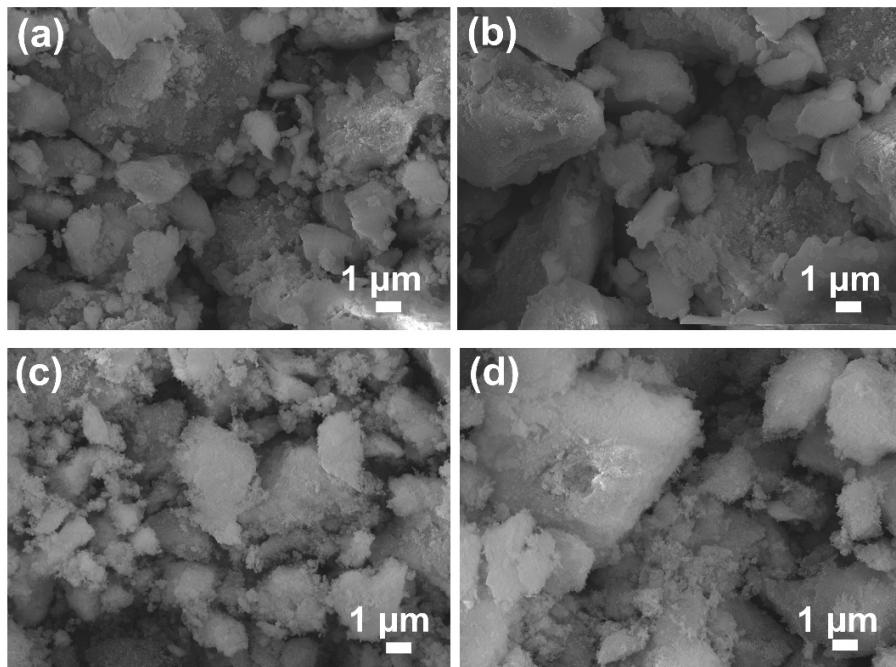


Figure S5. Scanning electron microscopy (SEM) images of (a) MO-1, (b) MO-2, (c) MO-3, and (d) MO-4.

6. ^{27}Al NMR deconvoluted spectra

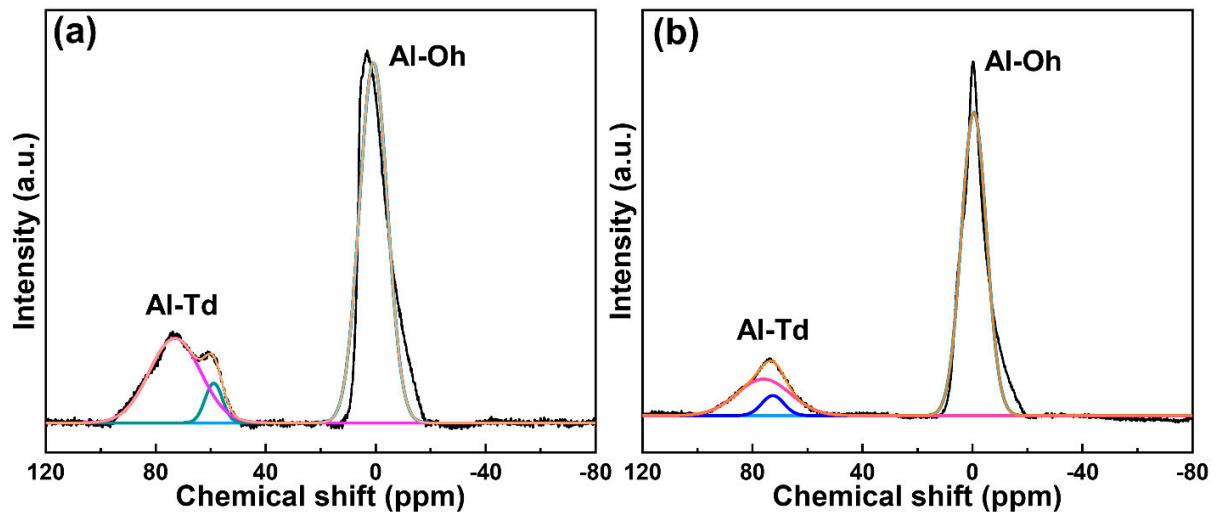


Figure S6. Deconvoluted Solid state ^{27}Al MAS-NMR spectra of (a) MO-3 and (b) MO-4.