

Supplementary information

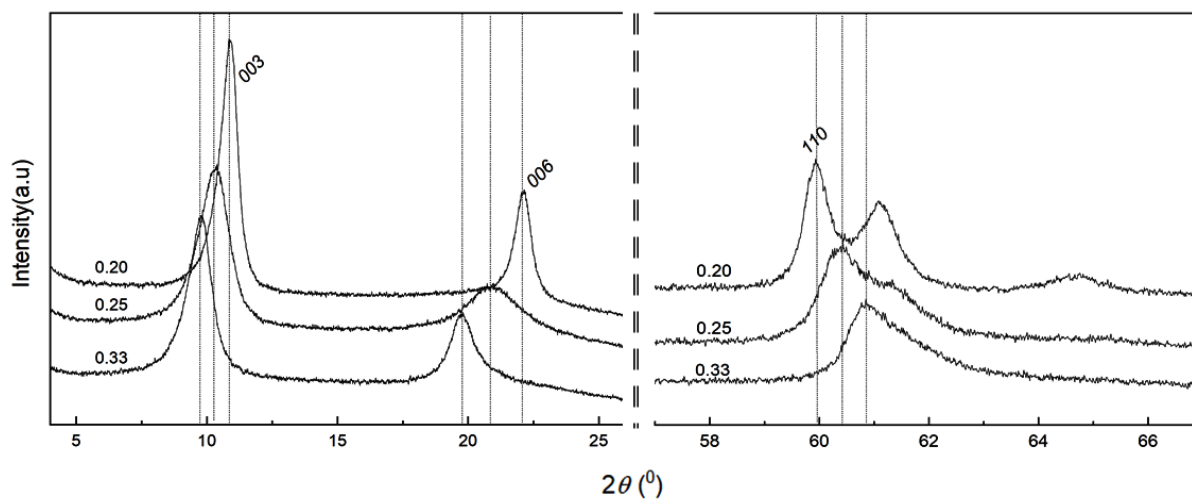


Figure S1. X-ray diffraction profiles of (003), (006) and (110) Bragg-reflections for as-synthesized, freeze dried $\text{Mg}_{1-x}\text{Al}_x(\text{OH})_2(\text{NO}_3)_x \cdot m\text{H}_2\text{O}$ ($x = 0.20, 0.25$ and 0.33 ; $\lambda = 1.540596 \text{ \AA}$).

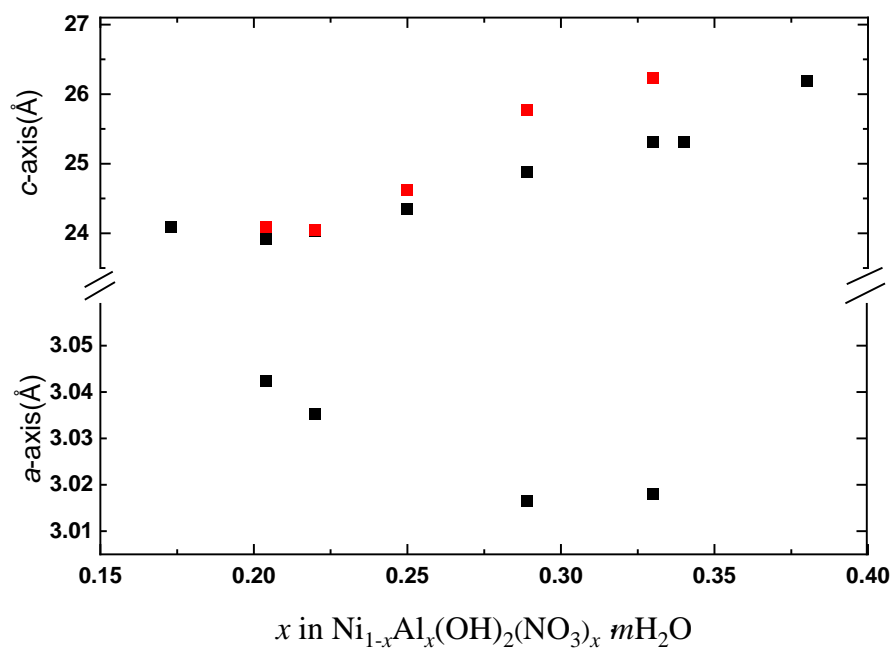


Figure S2. Unit cell dimensions versus nominal composition x for $\text{Ni}_{1-x}\text{Al}_x(\text{OH})_2(\text{NO}_3)_x \cdot m\text{H}_2\text{O}$ prepared at pH = 9.0 (■) and pH = 10.0 (■).

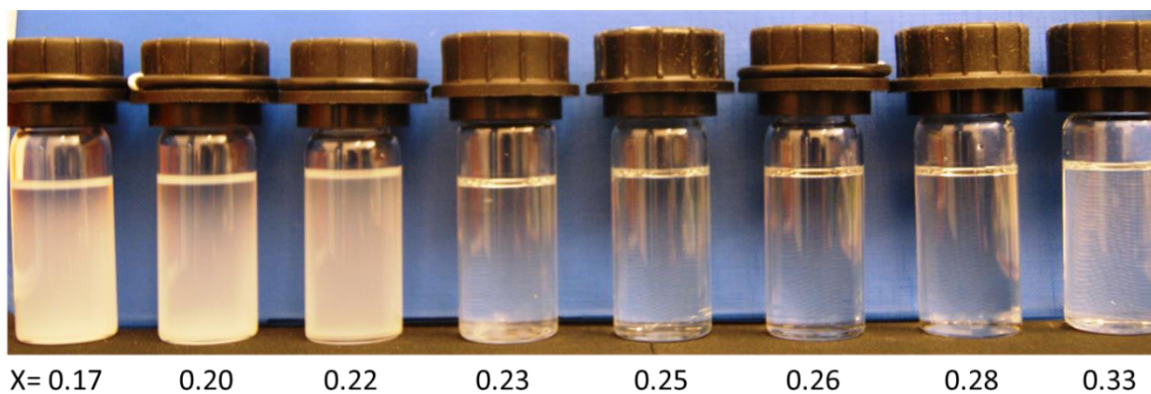


Figure S3. Cuvettes with suspensions of exfoliated $\text{Mg}_{1-x}\text{Al}_x(\text{OH})_2(\text{NO}_3)_x \cdot m\text{H}_2\text{O}$ after 4 hours of sonication.

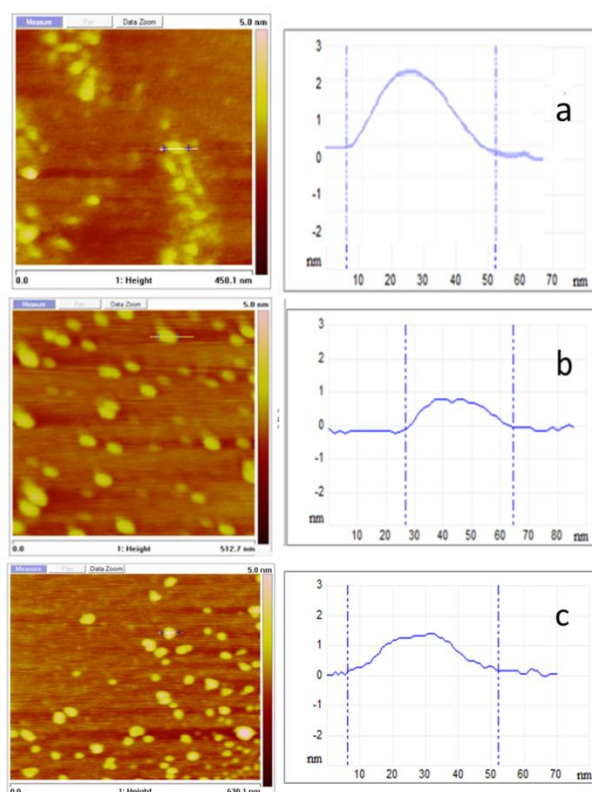


Figure S4. Tapping mode AFM images of $\text{Mg}_{1-x}\text{Al}_x(\text{OH})_2(\text{NO}_3)_x \cdot m\text{H}_2\text{O}$, **a)** $x = 0.20$, **b)** $x = 0.25$, **c)** $x = 0.33$ and its section profile analysis.