



Fig. S2. X-ray diffraction patterns for CaAl-LDHs reacted with Na⁺-taurine salt via solid phase intercalation with respect to the amount of added water (a) 0 (b) 5 (c) 10 (d) 20 (e) 30 and (f) 40 μL. (★: Na⁺-taurine salt)

(002)¹: (002) for NO₃⁻ intercalated CaAl-LDH (Ca_{2.04}Al(OH)₆(NO₃)·5.25H₂O)

(002)²: (002) for taurine intercalated CaAl-LDH (Ca_{1.99}Al(OH)_{6.01}(Tau)_{0.97}·5H₂O)

(002)³: (002) for CaAl-LDH with slightly expanded gallery space. (between NO₃⁻ intercalated phase and taurine intercalated phase)