Fig. S1 XRD patterns of (a) background and MgAl-LDH nanosheets standing for

(b) 24 h, (c) 48 h, (d) 55h.



Fig. S1 showed patterns of background (a), and that of MgAl-LDH nanosheets standing for 24 h, 48 h, 55 h (b-d), resectively. For sample standing for 24 h, the missing of (003) reflection at 20 of 11.5° and obvious (110) reflection at 20 of 61° indicated that the 2D crystalline LDH layer had been formed. The characteristic reflections of (003) and (009) at 20 of 11.5 and 36° became stronger with the increase of standing time, which indicated nanosheets stacked to build a three-dimensional network and the integrated plate-like structure of LDH was formed progressively.