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Self-Assembled Fe_3O_4-Layered Double Hydroxide Colloidal Nanohybrids with Excellent Performance for Treatment of Organic Dyes in Water

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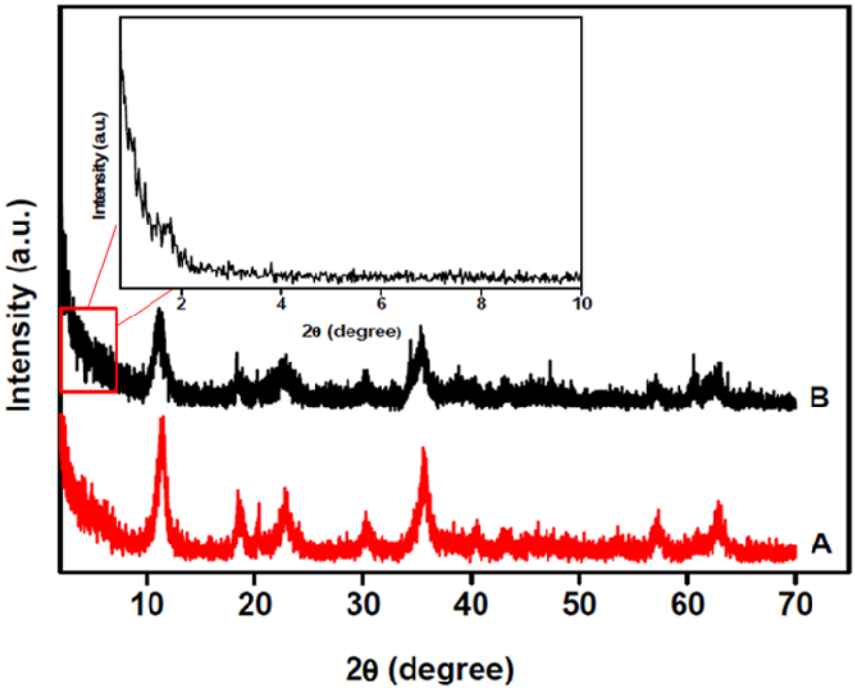

Fig. S1 XRD patterns of the nanohybrid sample LDH-NS^Fe_3O_4-NP(1:0.3) before (A) and after (B) adsorption of Congo red.

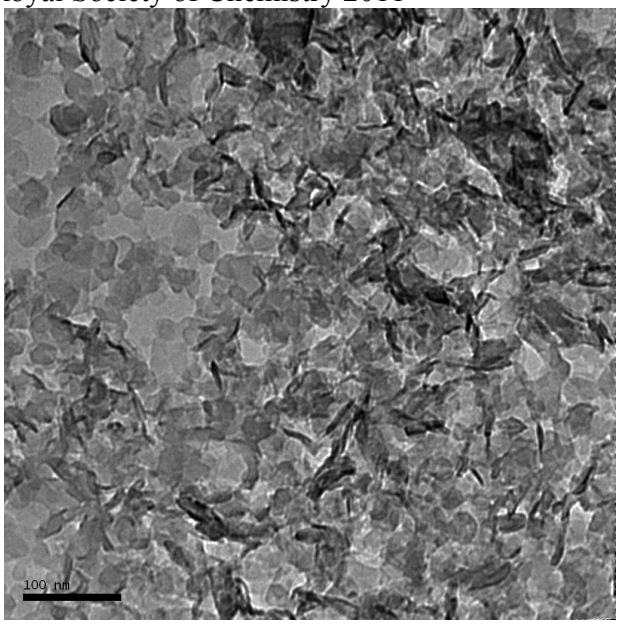

Fig. S2 TEM image of LDH-C (control LDH sample prepared by conventional co-precipitation method).

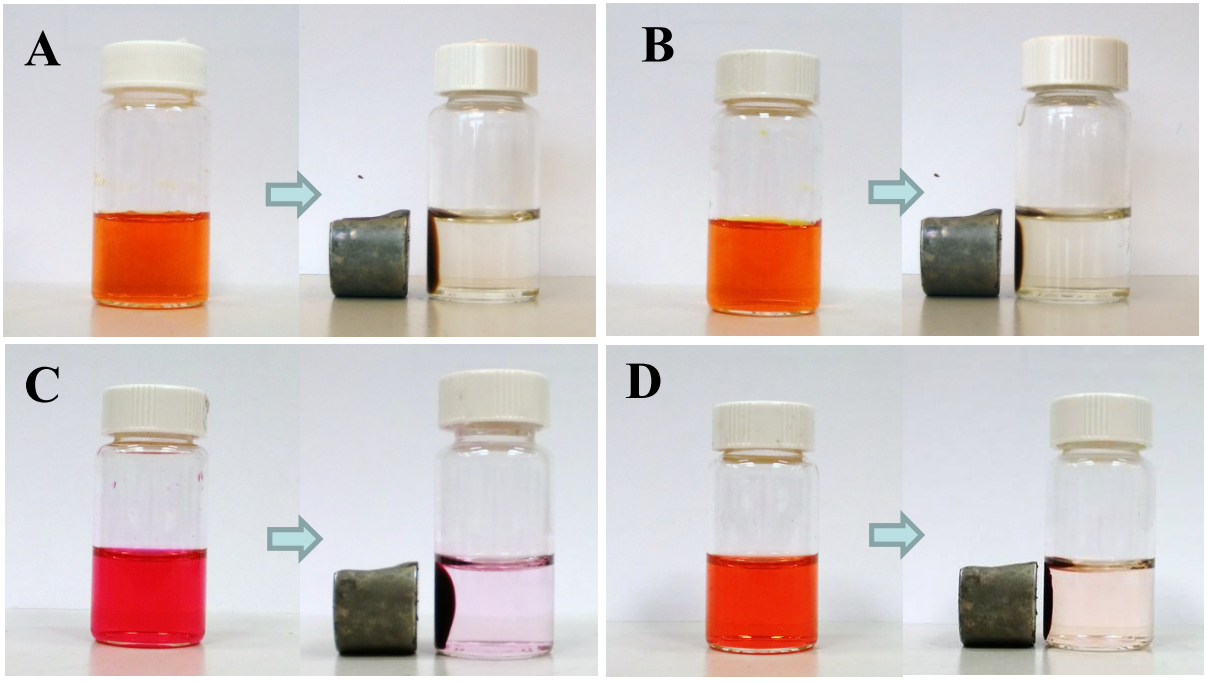

Fig. S3 Photos of the dye solutions before (100 mg/L) and after adsorption by the nanohybrid sample LDH-NS^Fe_3O_4-NP(1:0.3) with a contact time of 15 min and different dosages. (A) Orange II, 0.67 g/L, (B) Methyl orange, 0.89 g/L, (C) Rose bengal, 0.89 g/L and (D) Eosin B, 0.89 g/L. After adsorption, all the particles can be separated from the solutions by an external magnet.