Electronic Supplementary Material (ESI) for RSC Advances.

Direct synthesis of layered double hydroxide nanosheets for efficient siRNA delivery

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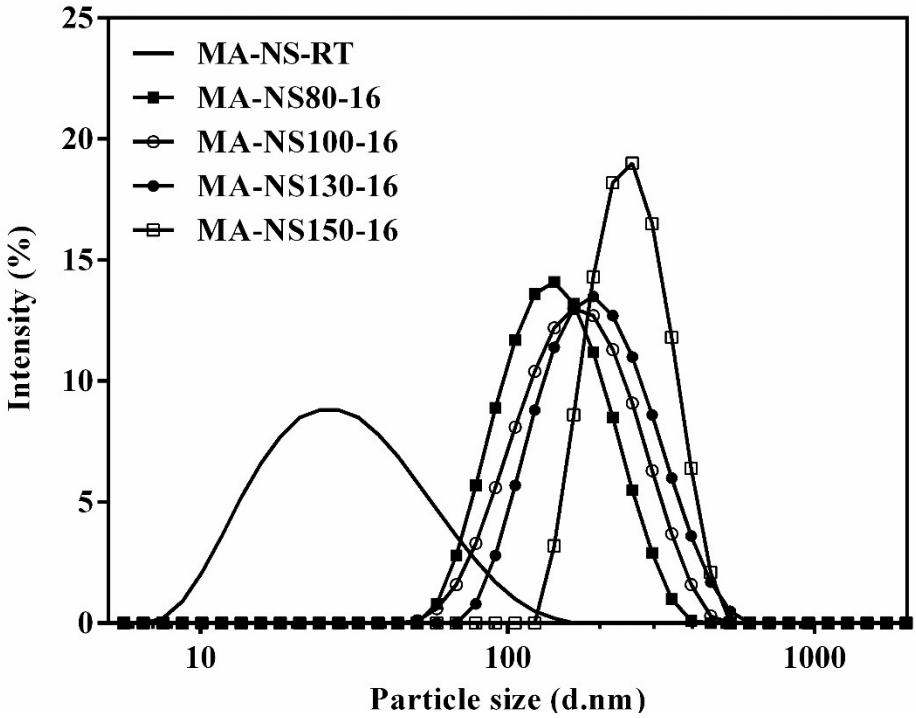

Fig. S1 The particle size distribution of MA-NS-16 with or without hydrothermal treatment for 16 h at the different temperature

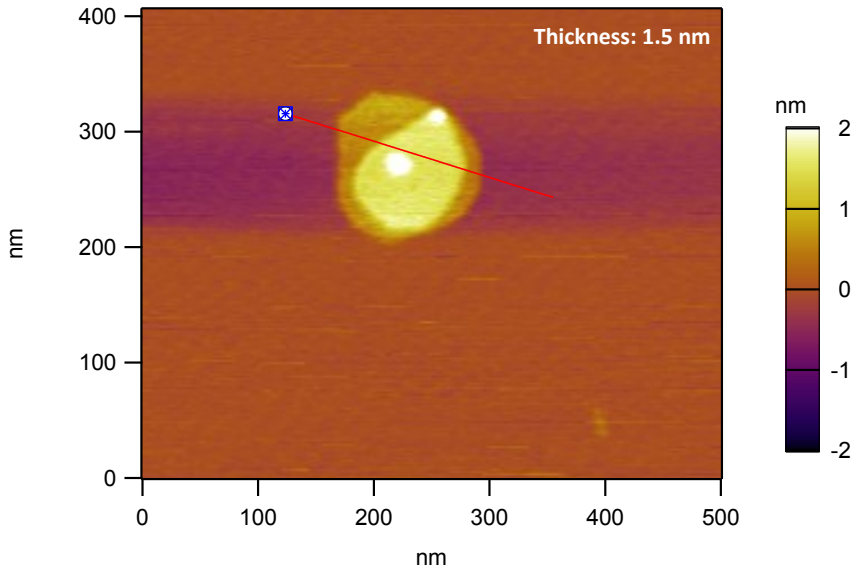

Fig. S2 AFM image of MA-NS100-48 sample after hydrothermal treatment at 100 °C for 48h

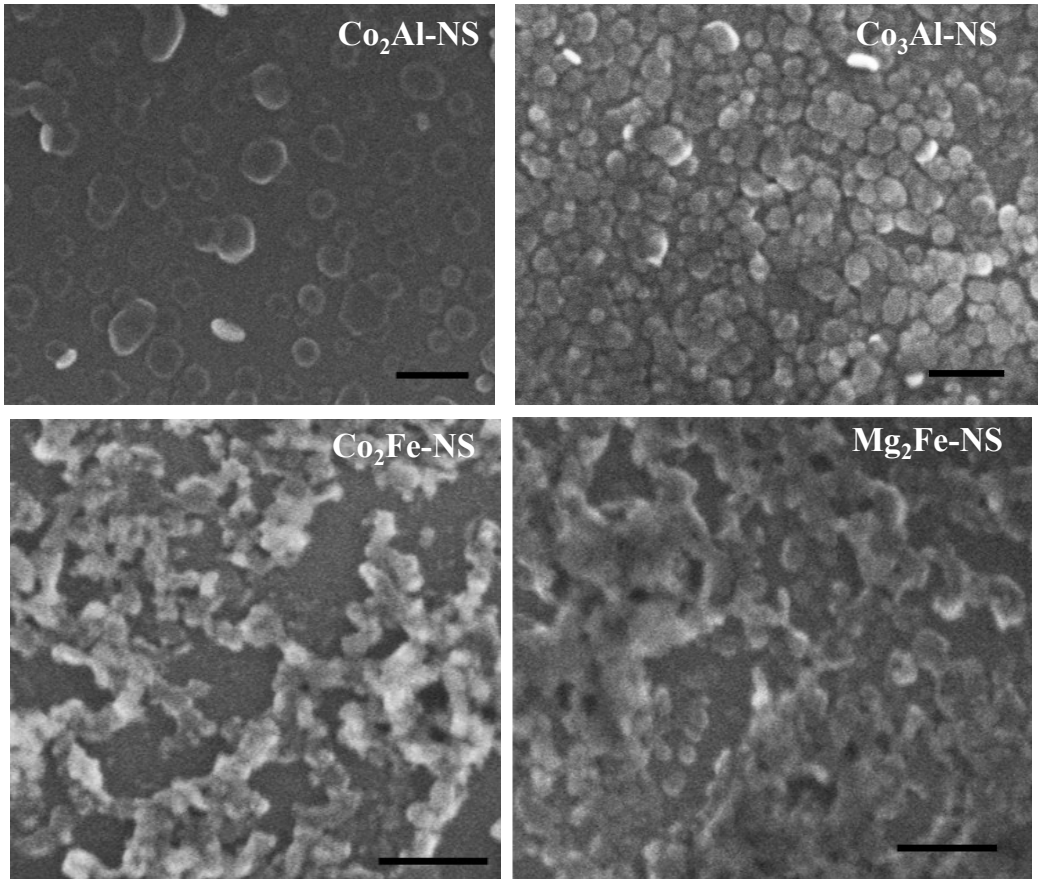

Fig. S3 SEM images of LDH nanosheets containing different metal cation. The scale is 100 nm

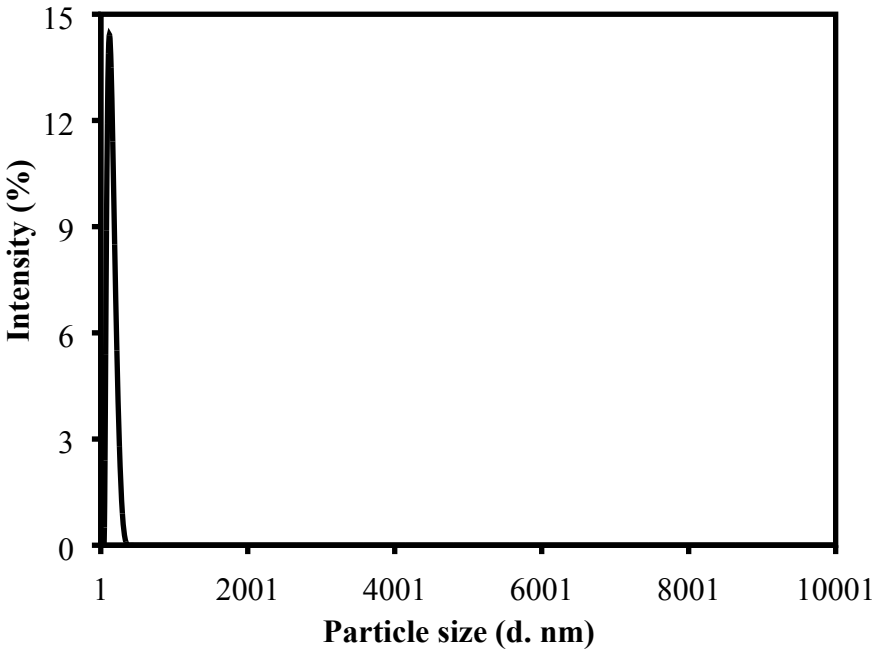

Fig. S4 The particle size distribution of MA-NP sample

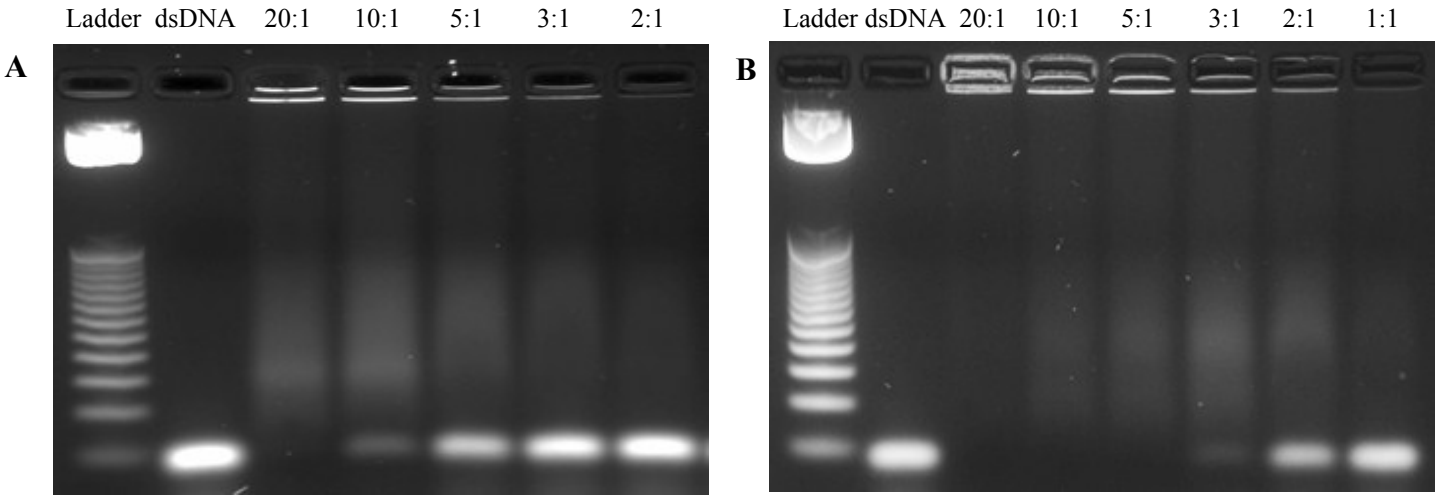

Fig. S5 DNA-binding ability of MA-NP and MA-NS100-24 with the mass ratio of dsDNA to MA-NP (A) or MA-NS100-24 (B) in the range of 1:20~1:1, respectively.

Table S1 Average particle size and polydispersity index (PDI) of some LDH nanosheets prepared by current method

Samples	Z-ave (nm)	PDI
Ni_2Al-NS-RT	96.3	0.476
Co_2Al-NS-RT	69.9	0.283
Co_2Fe-NS-RT	165.5	0.261
Co_2Al-NS100-72	183.2	0.543
Mg_2Fe-NS-RT	64.3	0.287
Fe_2Al-NS-RT	180.5	0.324