

MgAl layered double hydroxides with chloride and carbonate ions as interlayer anions for removal of arsenic and fluoride ions in water

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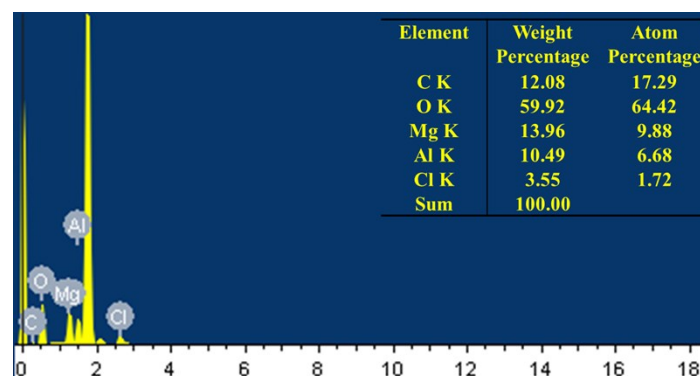


Fig. S1 EDS of the as-prepared MgAl-LDHs.

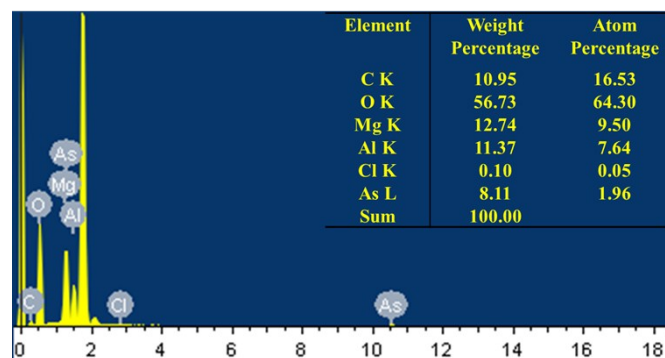


Fig. S2 EDS of MgAl-LDHs after As (V) adsorption, the initial concentrations of As (V) is 100 ppm.

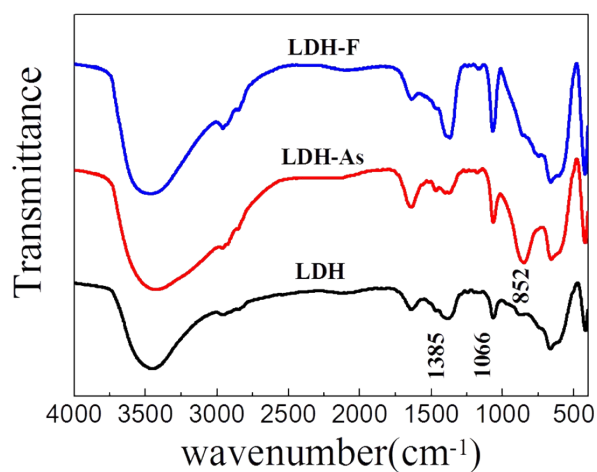


Fig. S3 FTIR spectra of MgAl-LDHs before and after As (V)/F⁻ adsorption, the initial concentrations of As (V) and F⁻ both are 100 ppm.

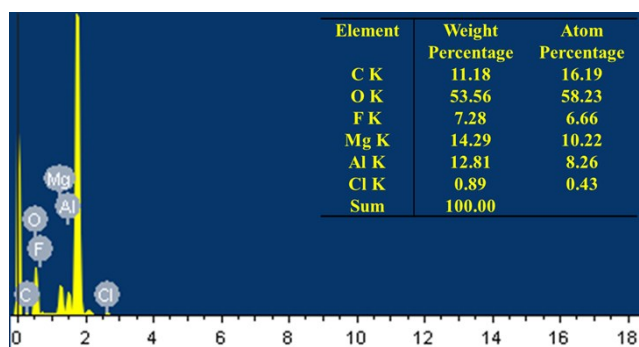


Fig. S4 EDS of MgAl-LDHs after fluoride adsorption, the initial concentration of fluoride is 100 ppm.

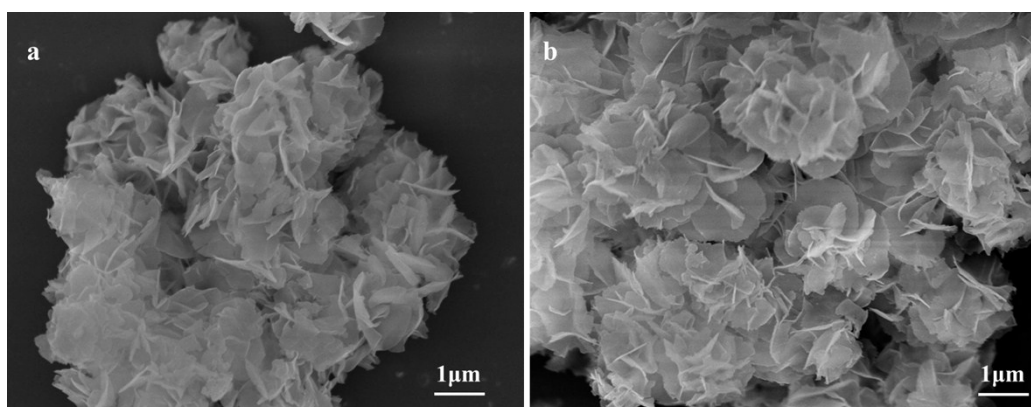


Fig. S5 SEM images of MgAl-LDHs after adsorption of As (V) (a) and F⁻ (b), the initial concentrations of As (V) and F⁻ are both 100 ppm.

Table S1 Summary of the Langmuir and Freundlich isotherms model parameters for the As (V)/F⁻ uptake capacity on MgAl-LDHs.

Sample name	Langmuir			Freundlich		
	q_m (mg/g)	b (L mg ⁻¹)	R ²	K_F	n	R ²
LDH-As	125.80	0.429	0.983	44.28	0.24	0.763
LDH-F	28.60	0.046	0.843	4.74	0.34	0.988
R ² : correlation coefficient						