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Accessory Publication

Adsorption of ink-jet inks and anionic dyes onto Mg-Al-NO_3 layered double hydroxides of variable Mg/Al molar ratio

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Table S1. Basal spacing for Mg-Al-LDH-NO_3 with different Mg:Al ratio

Mg/Al molar ratio	(003) reflection	
	Degrees 2-theta	d-spacing (Å)
2.2	9.9	8.9
3.1	10.3	8.6
4.0	11.0	8.0
4.8	10.8	8.2
5.5	10.9	8.1
6.0	10.8	8.2
6.7	10.8	8.2
7.5	10.7	8.3
8.1	10.8	8.2

Figure S1. Adsorption-desorption isotherms of Mg-Al-LDH-NO_3 with Mg/Al molar ratio of (a) 2.2, (b) 3.1, (c) 4.0, (d) 4.8, (e) 5.5, (f) 6.0, (g) 6.7, (h) 7.5, (i) 8.1) and (j) pure $Mg(OH)_2$

Figure S2. Adsorption isotherm for (a) Acid Blue 9, (b) Acid Yellow 23 and (c) Acid Red 37 binding to Mg-Al-LDH-NO_3 with Mg/Al = 3.1. For b, full line represents fitting of the data to the Langmuir equation.

Figure S3. Adsorption isotherm for (a) Acid Blue 9, (b) Acid Yellow 23 and (c) Acid Red 37 binding to Mg-Al-LDH-NO_3 with Mg/Al = 4.8. For a and c, full line represents fitting of the data to the Langmuir equation.

Figure S4. Adsorption isotherm for (a) Acid Blue 9, (b) Acid Yellow 23 and (c) Acid Red 37 binding to Mg-Al-LDH-NO_3 with Mg/Al = 5.5. For a and c, full line represents fitting of the data to the Langmuir equation.

Figure S5. Adsorption isotherm for (a) Acid Blue 9, (b) Acid Yellow 23 and (c) Acid Red 37 binding to Mg-Al-LDH-NO_3 with Mg/Al = 6.0. For a and c, full line represents fitting of the data to the Langmuir equation.