

Supporting Information

Nanocage structure derived from sulfonated β -cyclodextrin intercalated layered double hydroxides and selective adsorption for phenol compounds

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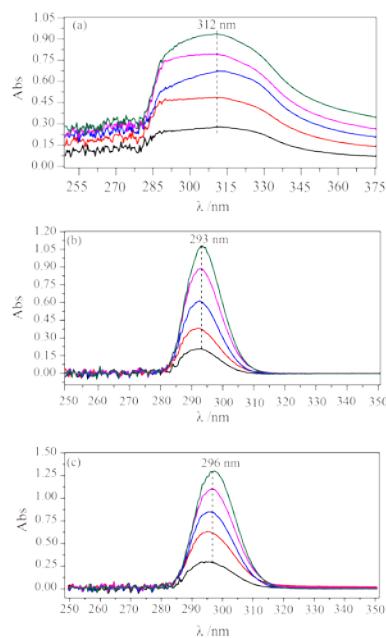


Figure S1. The curves of standard aqueous solutions of HQ (a), DMP (b) and TBP (c), respectively.

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Table S1. The CD-LDH intercalates and related inclusion properties.

LDH host	second host	d_{basal} (nm)/guest layer	d_{basal} (nm) after guest inclusion	included guests	references
MgAl-LDH	CMCD(3.8)	2.46/bilayer	2.46	I ₂	S1
MgAl-LDH	CMCD(3.8)	2.46/bilayer	2.46	naphthalene	S2
MgAl-LDH	CMCD(3.8)	2.46/bilayer	2.46	anthracene	S3
MgAl-LDH	CMCD(3.8)	2.46/bilayer	2.46	ferrocene	S4
MgAl-LDH	CMCD(3.8)	2.45/bilayer	-	-	S5
MgAl-LDH ^a	CMCD(3)	2.06/bilayer	-	organic compounds ^b	S6
MgAl-LDH ^a	CMCD(3)	2.06/bilayer	-	-	S7
MgAl-LDH ^a	CMCD(14)	1.55/bilayer	-	-	S7
ZnAl-LDH	CMCD(3.8)	1.52/monolayer	1.52	Phenol, nitrobenzene	S8
ZnAl-LDH	CMCD(3.8)	1.64/monolayer	-	1-Phenyl-1,2-ethanediol	S9
ZnAl-LDH	CMCD(3.8)	1.52/monolayer	1.79	5-fluorouracil	S10
ZnAl-LDH	CMCD(4.1)	1.61/monolayer	1.80	dodecylbenzene	S11
MgAl-LDH	SCD(6)	1.58/monolayer	-	-	S12
MgAl-LDH	SCD(10)	1.61/monolayer	1.67	phenols ^c	This work
ZnAl-LDH	SCD(10)	1.51/monolayer	1.63	phenols ^c	This work

^a the Mg/Al molar ratio in this case is 3:1 and in other cases is 2:1.

^b the organic compounds are trichloroethylene, tetrachloroethylene, benzene, toluene, *p*-, *o*-, *m*-xylene, ethylbenzene, 1,2,3-trichlorobenzene, naphthalene.

^c the phenols are hydroquinone, 2,3-dimethylphenol, and tert-butyl-phenol.

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