

**Supporting information**

**Simultaneous intercalation of 1-naphthylacetic acid and indole-3-butyric acid into layered double hydroxides and controlled release properties**

Shifeng Li<sup>1, 2\*</sup>, Yanming Shen<sup>2</sup>, Min Xiao<sup>3</sup>, Dongbin Liu<sup>2</sup>, Lihui Fan<sup>2</sup>, Ming Liu<sup>2</sup>

<sup>1</sup>Liaoning Provincial Key Laboratory of Chemical Separation Technology, Shenyang

University of Chemical Technology, Shenyang 110142, China

<sup>2</sup>College of Chemical Engineering, Shenyang University of Chemical Technology,

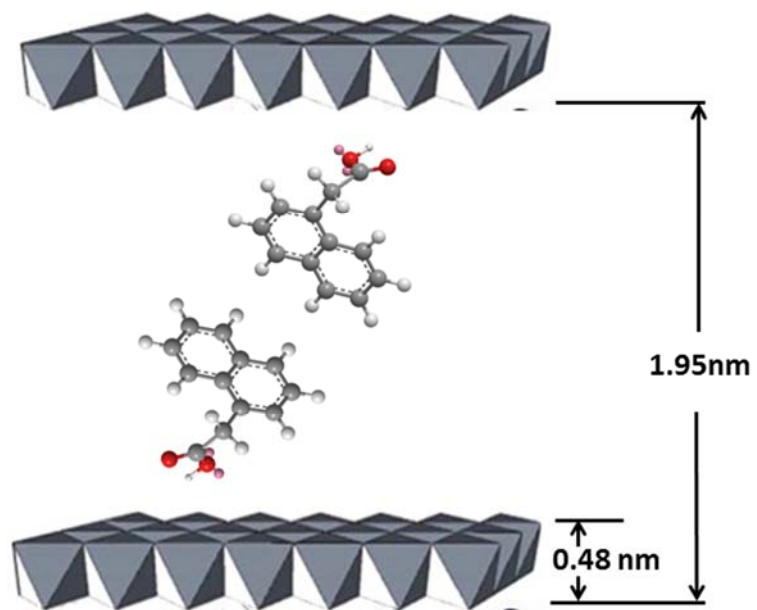
Shenyang 110142, China

<sup>3</sup>Department of Environmental Engineering, Shenyang University, Shenyang 110044,

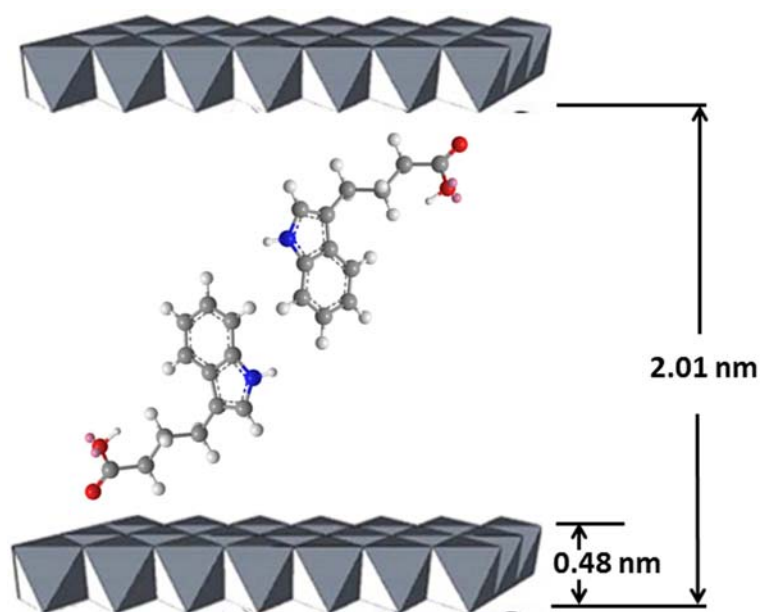
China

\*Corresponding author, Tel: +86-24-89383902, Fax: +86-24-89383760; E-mail:

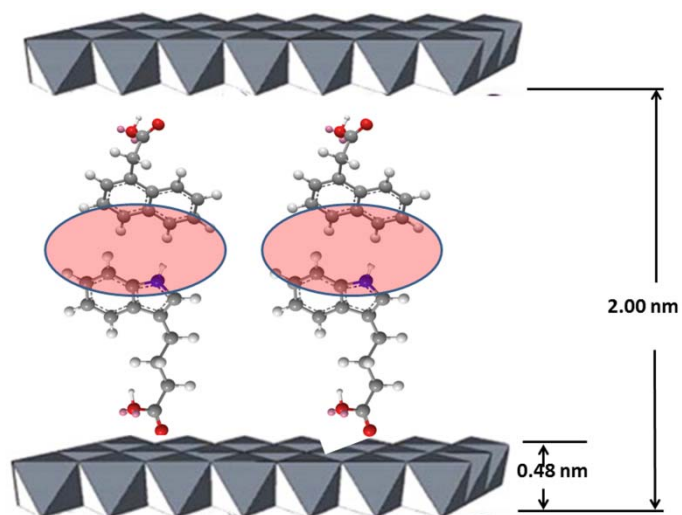
li.shi.feng@163.com



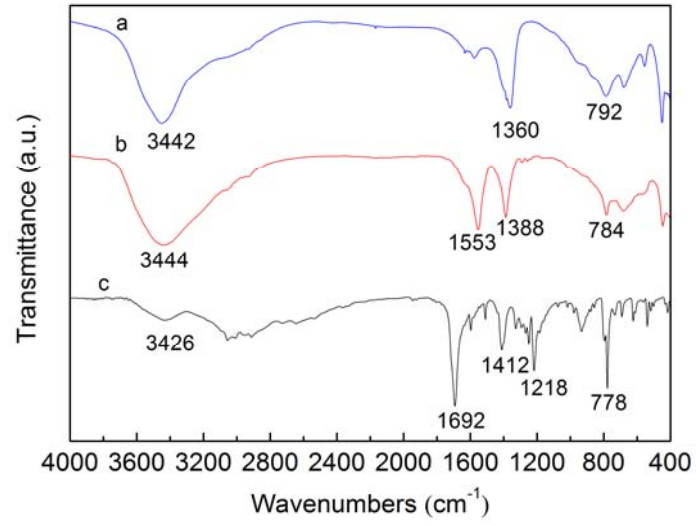
**Figure S1.** The probable orientation of NAA intercalated in MgAl-LDHs interlayer.



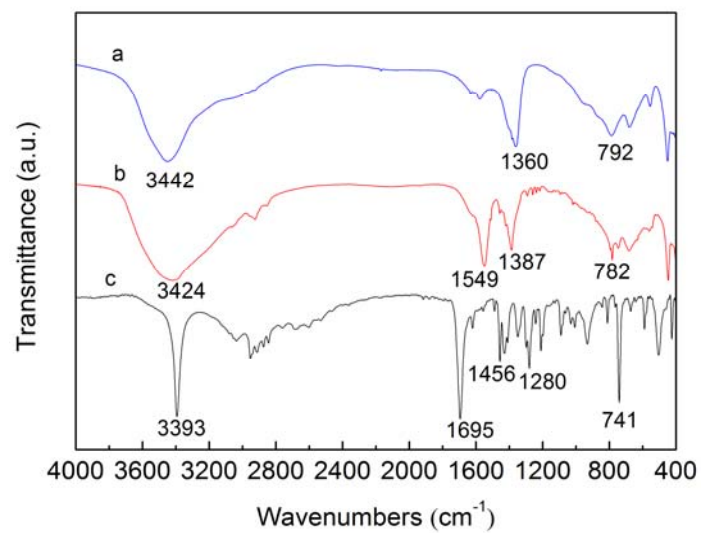
**Figure S2.** The probable orientation of IBA intercalated in MgAl-LDHs interlayer.



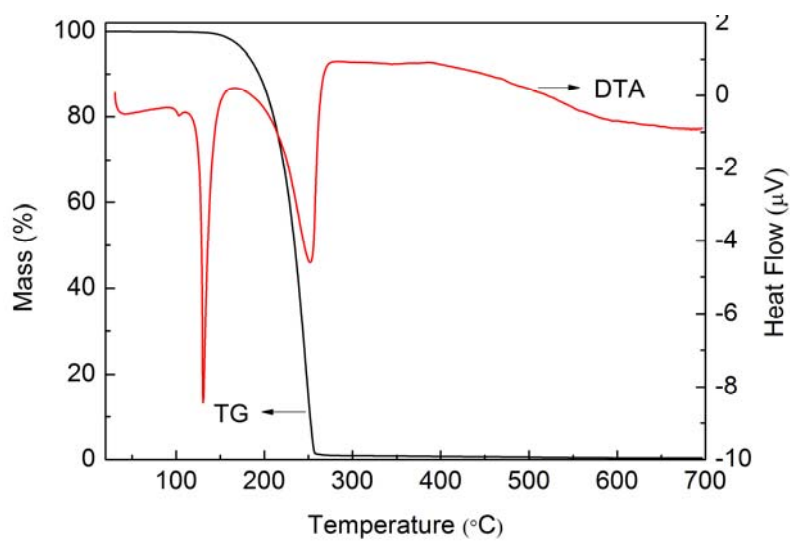
**Figure S3.** The probable orientation of NAA and IBA intercalated in MgAl-LDHs interlayer.



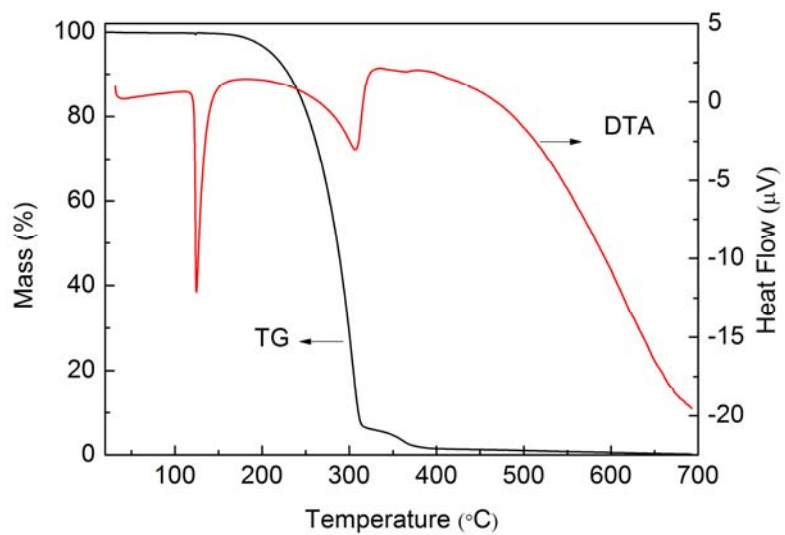
**Figure S4.** FT-IR spectra of (a) MgAl-CO<sub>3</sub>-LDHs, (b) MgAl-NAA-LDHs, (c) NAA.



**Figure S5.** FT-IR spectra of (a) MgAl-CO<sub>3</sub>-LDHs, (b) MgAl-IBA-LDHs, (c) IBA.



**Figure S6.** TG-DTA curve of NAA.



**Figure S7.** TG-DTA curve of IBA.