

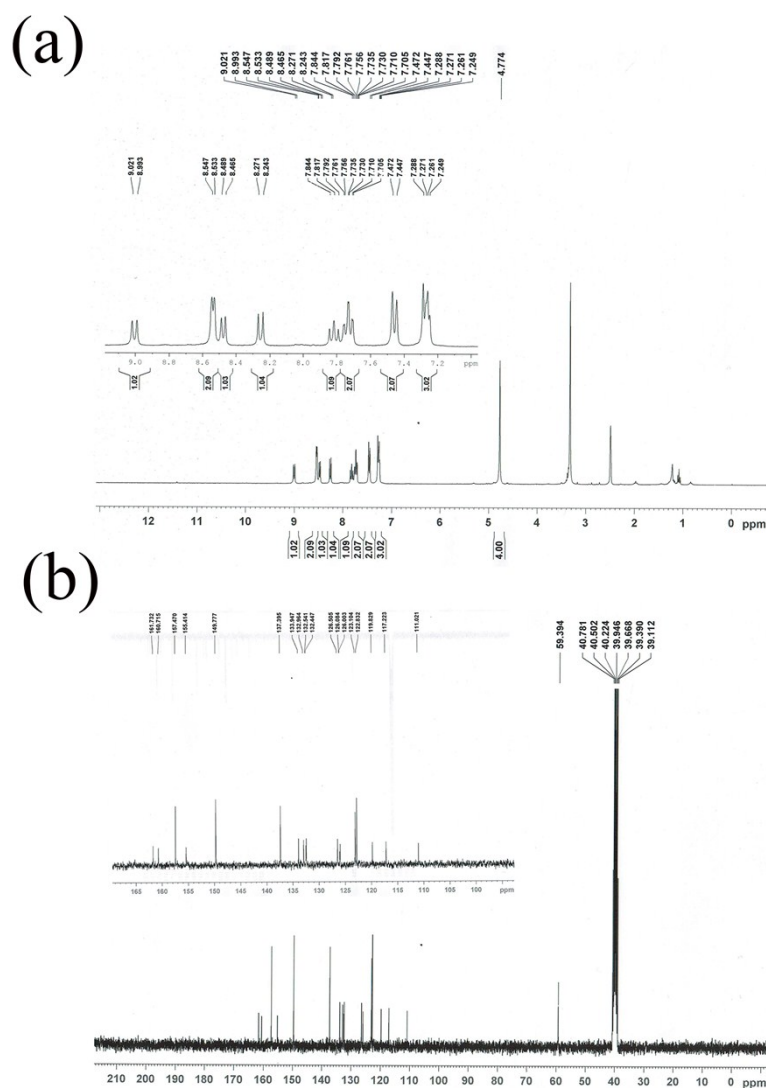
## Water-soluble fluorescent hybrid material based on aminoclay and its bioimaging application

Qing-Feng Li <sup>a,b</sup>, Zengchen Liu <sup>a,b</sup>, Lin Jin <sup>a,b</sup>, Piaoping Yang <sup>c,\*</sup> and Zhenling Wang <sup>a,b\*</sup>

<sup>a</sup> The Key Laboratory of Rare Earth Functional Materials and Applications, Zhoukou, Normal University, Zhoukou 466001, P. R. China. Email: zlwang2007@hotmail.com

<sup>b</sup> International Joint Research Laboratory for Biomedical Nanomaterials of Henan, Zhoukou 466001, P. R. China.

<sup>c</sup> Key Laboratory of Superlight Materials and Surface Technology, Ministry of Education, College of Material Science and Chemical Engineering, Harbin Engineering University, Harbin 150001, P. R. China. E-mail: yangpiaoping@hrbeu.edu.cn



**Fig. S1**  $^1\text{H-NMR}$  (a) and  $^{13}\text{C-NMR}$  (b) spectra of NDPA, Solvent: Deuterated dimethyl-sulfoxide ( $\text{DMSO-}d_6$ ).

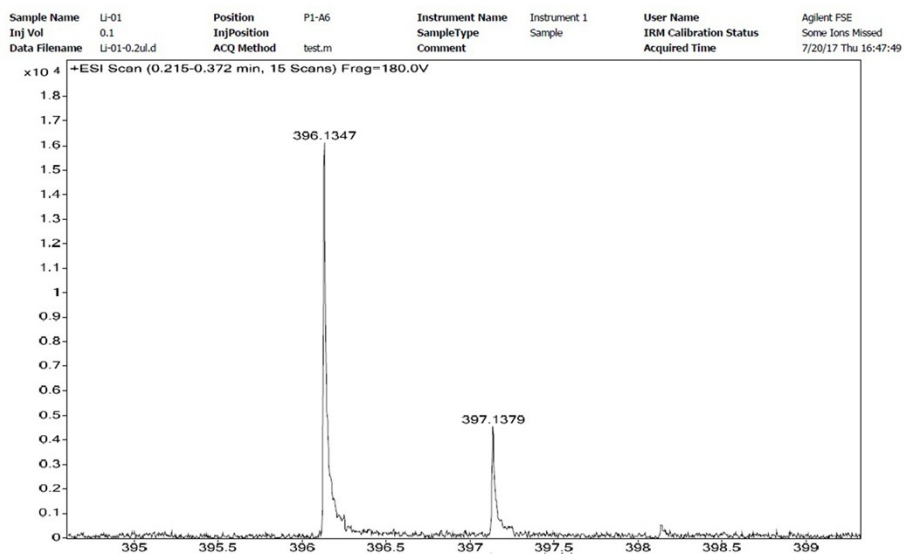


Fig. S2 Mass spectroscopy of NDPA

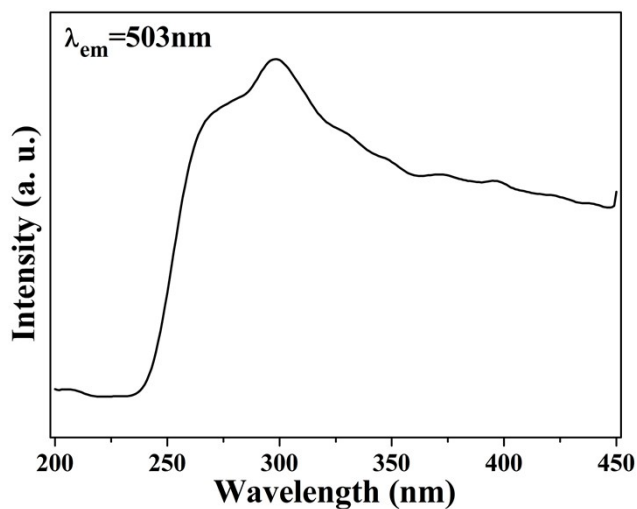


Fig. S3 Excitation spectrum of AC-NDPA in aqueous solution monitored at 503 nm ( $1\text{ mg mL}^{-1}$ ).

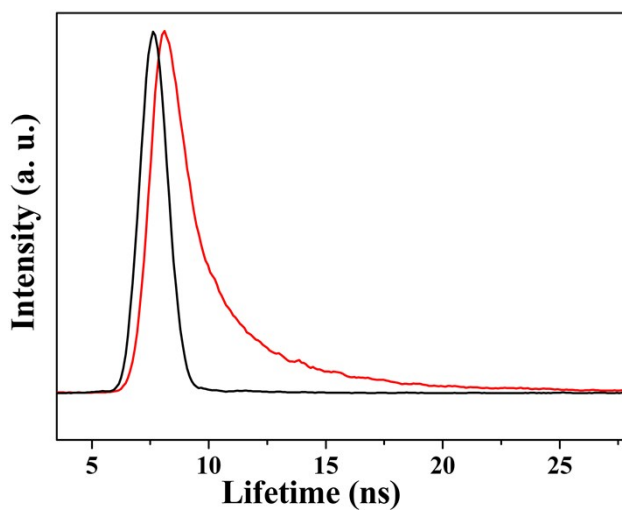
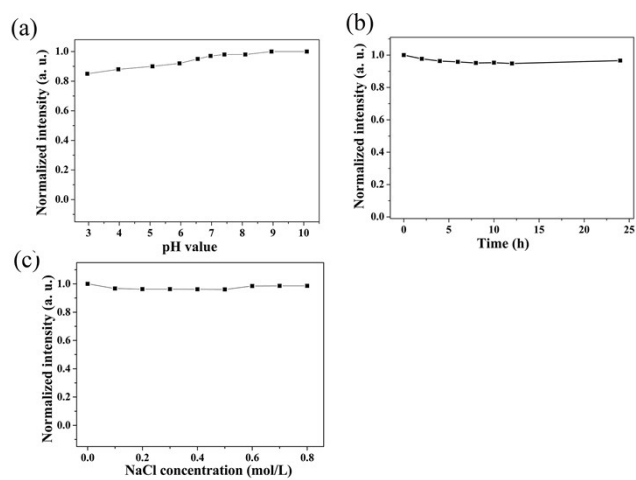
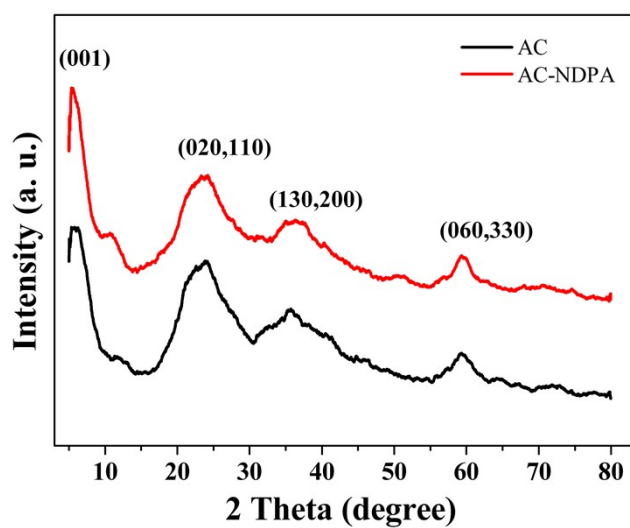


Fig. S4 Fluorescence lifetime curves of AC-NDPA solution, red line: reference curve.



**Fig. S5** Effect of pH value (a), time (b) and NaCl concentration (c) on the fluorescence intensity of AC-NDPA (1 mg mL<sup>-1</sup>).



**Fig. S6** XRD patterns of AC and AC-NDPA.