

Supporting information

## Controlled self-assembly of a pyrene-based bolaamphiphile by acetate ion: from nanodisk to nanofiber with fluorescence enhancement

Shouchun Yin, Lin Dong, Yijun Xia, Bin Dong, Xingxing He, Dong Chen, Huayu Qiu and Bo Song

### XRD, UV-vis and FTIR spectra

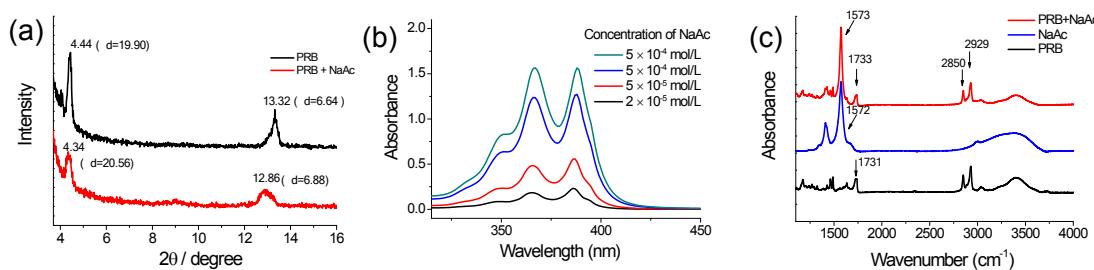


Figure S1 (a) The XRD spectra before and after addition of NaAc into the aqueous solution of PRB. (b) UV-vis spectra of PRB with existence of different concentrations of NaAc; (c) FTIR spectra of PRB, NaAc, and mixture of PRB and NaAc.

### Effect of ionic strength

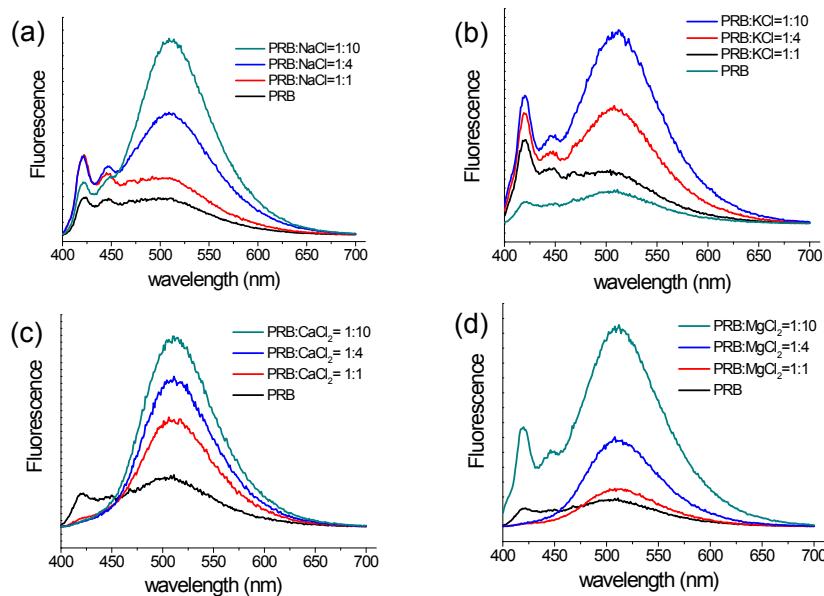


Fig. S2 The effect of ionic strength was testified with adding different amount of chloride salts in the aqueous solution of PRB. (a) NaCl, (b) KCl, (c) CaCl<sub>2</sub>, (d) MgCl<sub>2</sub>. The concentration ratios of PRB to chloride salts were 1:1, 1:4, and 1:10.

### Effect of pH

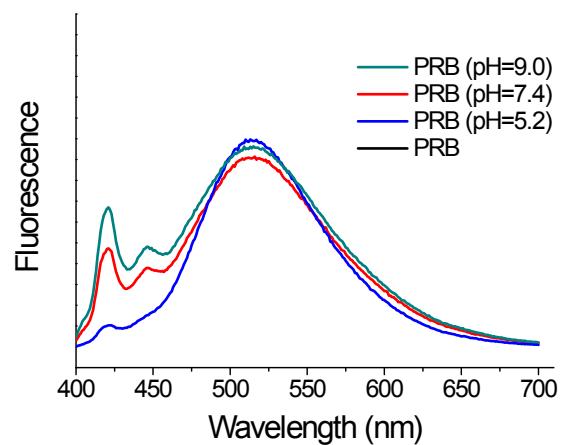


Figure S3 Fluorescence spectra of PRB under different pHs, where the ionic strength were all controlled to be the same.

