## **Supporting Information**

## Mono-molecule-layer nano-ribbons formed by self-assembly of bolaamphiphiles

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(right) addition of 5 µL CH<sub>3</sub>CN into 3 mL H<sub>2</sub>O: pages S5.

**Fig. S1.** <sup>1</sup>H NMR spectra of **B**.

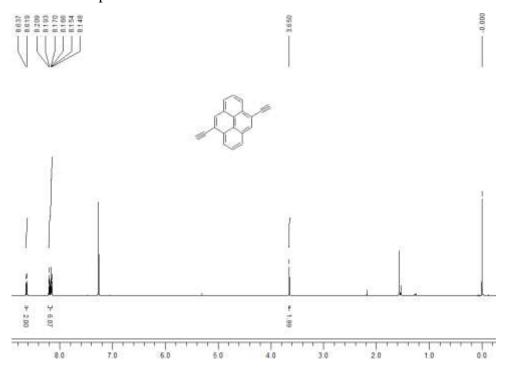


Fig. S2. <sup>1</sup>H NMR spectra of C.

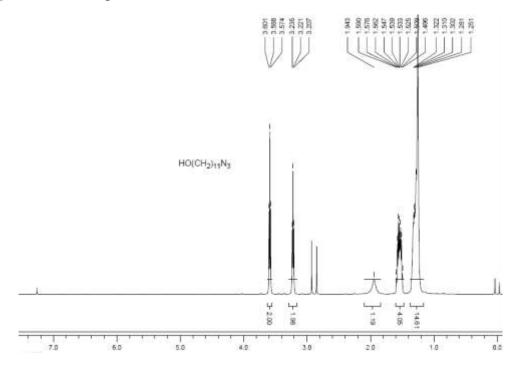
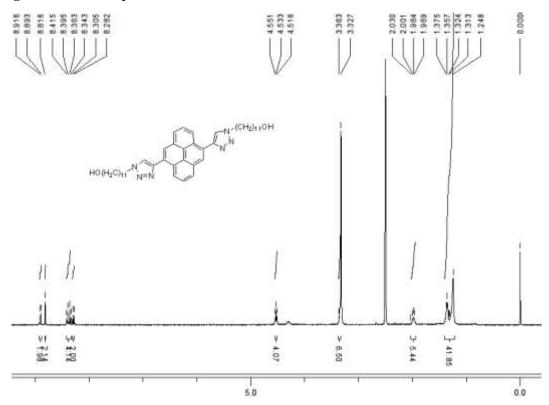
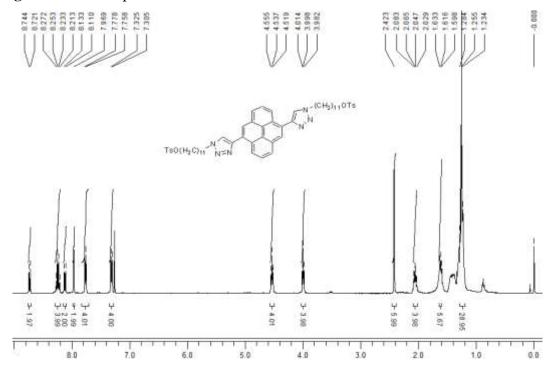
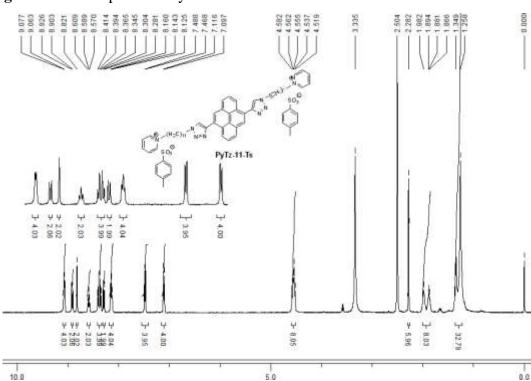


Fig. S3. <sup>1</sup>H NMR spectra of **D**.



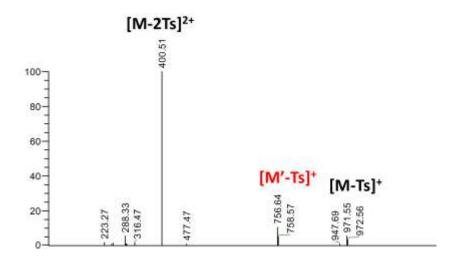
**Fig. S4.** <sup>1</sup>H NMR spectra of **E**.



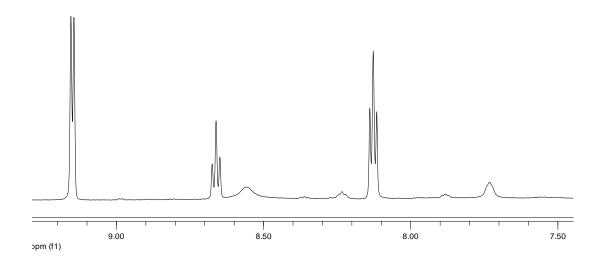


**Fig. S5.** <sup>1</sup>HNMR spectra of PyTz-11-Ts.

Fig. S6. ESI-MSspectra of PyTz-11-Ts.



**Fig. S7.** NMR spectra of PyTz-11-Ts in aqueous solution with concentration of  $1.0 \times 10^{-3}$  mol/L. The peaks of pyridine are clear and strong, while the peaks of bistriazole-pyrene become relatively wide and weak, indicating the aggregation of the bolaamphiles.



**Fig. S8.** Intermittent contact AFM images of PyTz-11-Ts after addition of 5  $\mu$ L CH<sub>3</sub>CN into 3 mL H<sub>2</sub>O. The concentration of PyTz-11-Ts is  $5\times10^{-4}$  mol/L.

