

## Substituent enhanced fluorescence properties of star $\alpha$ -cyanostilbenes and its application in bioimaging

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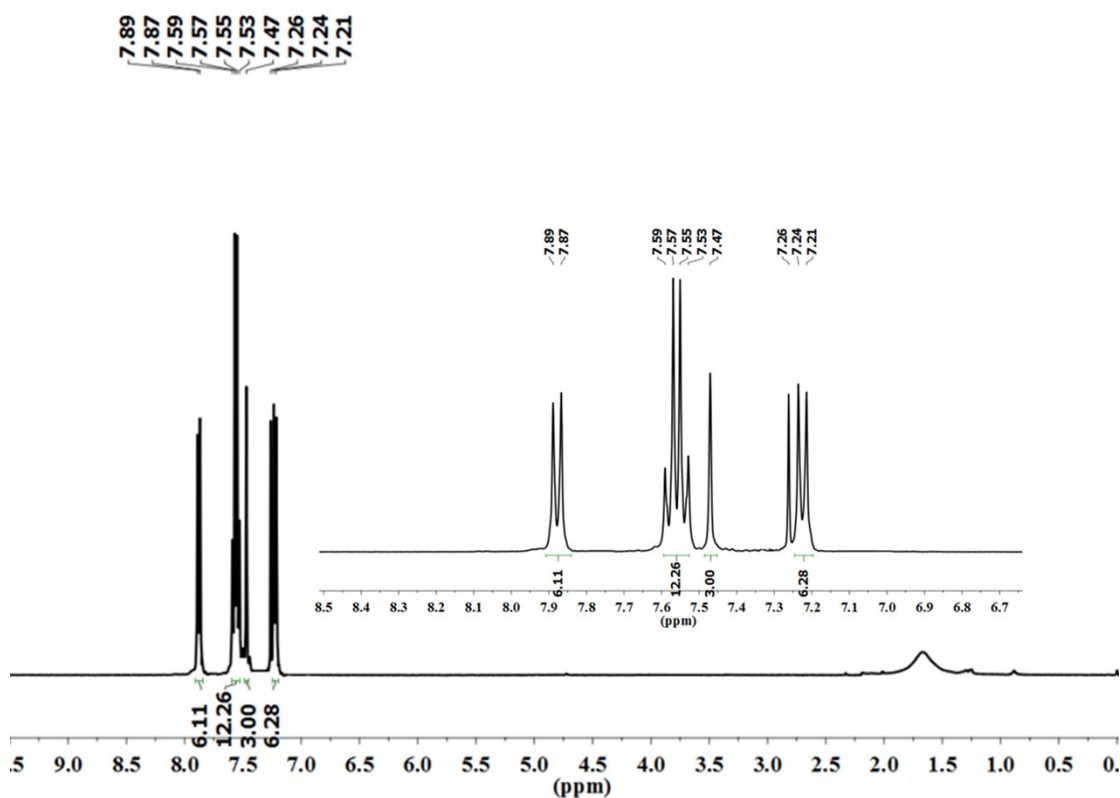


Figure S1. <sup>1</sup>H NMR (300 MHz) spectrum of star NTBTBPA in CDCl<sub>3</sub>.

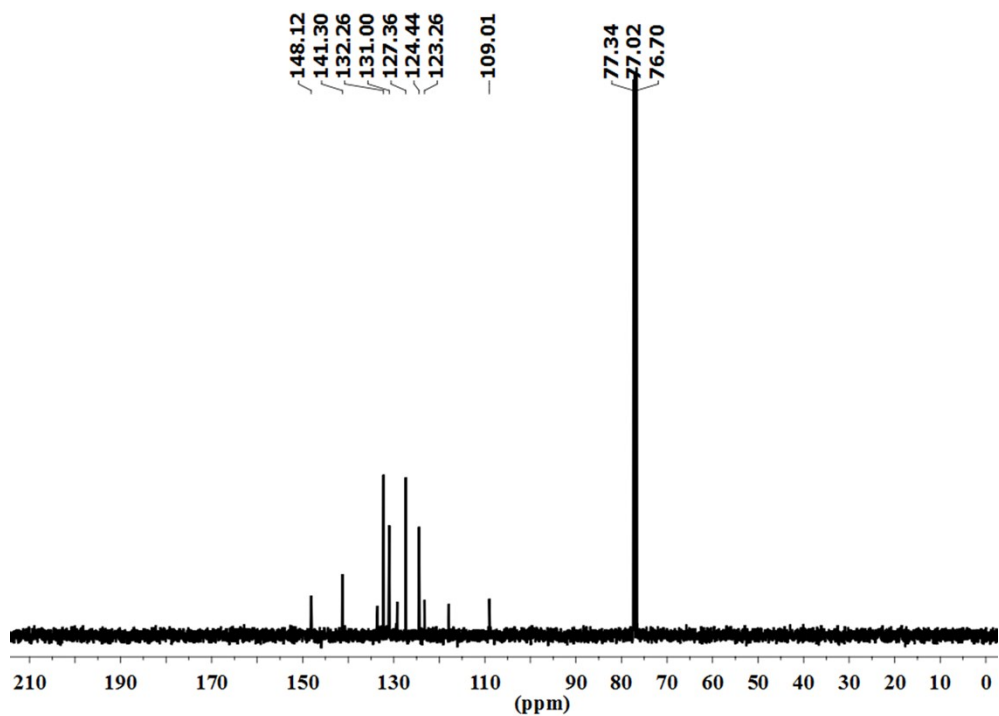


Figure S2.  $^{13}\text{C}$  NMR (300 MHz) spectrum of star NTBTBPA in  $\text{CDCl}_3$ .

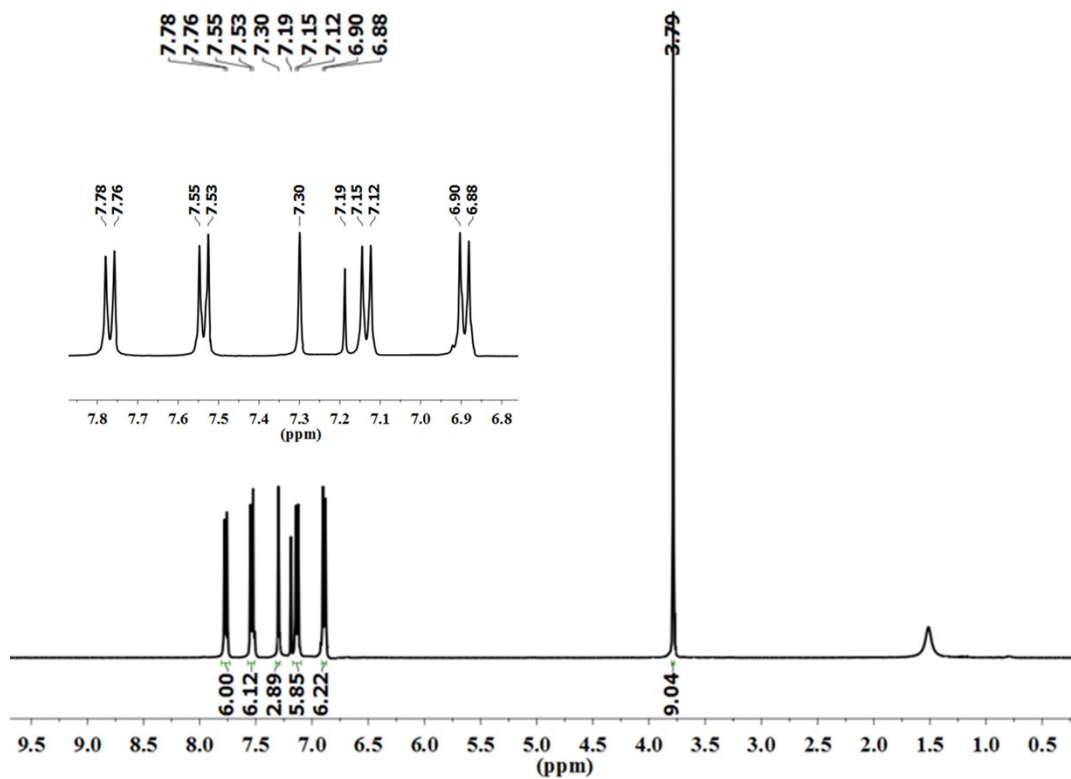


Figure S3.  $^1\text{H}$  NMR (300 MHz) spectrum of star NTBTMPA in  $\text{CDCl}_3$ .

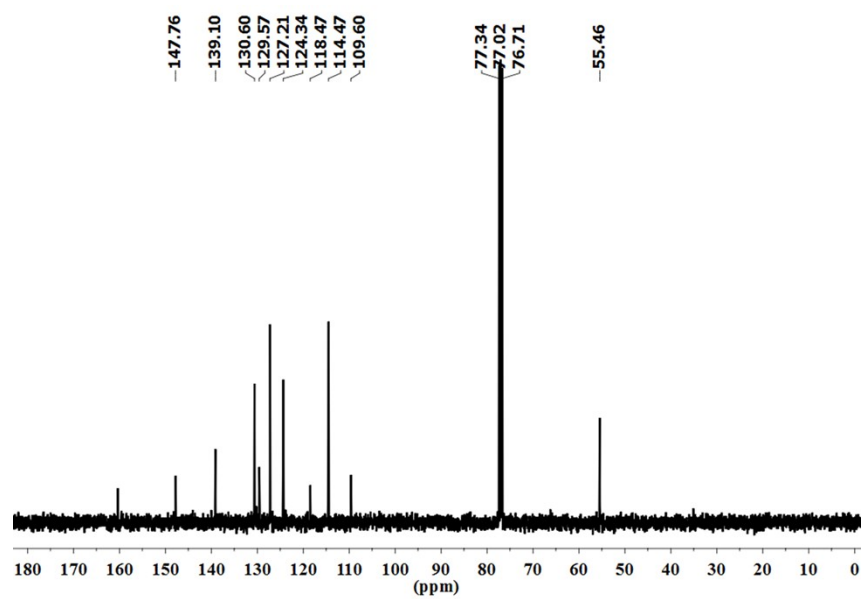


Figure S4.  $^{13}\text{C}$  NMR (300 MHz) spectrum of star NTBTMPA in  $\text{CDCl}_3$ .

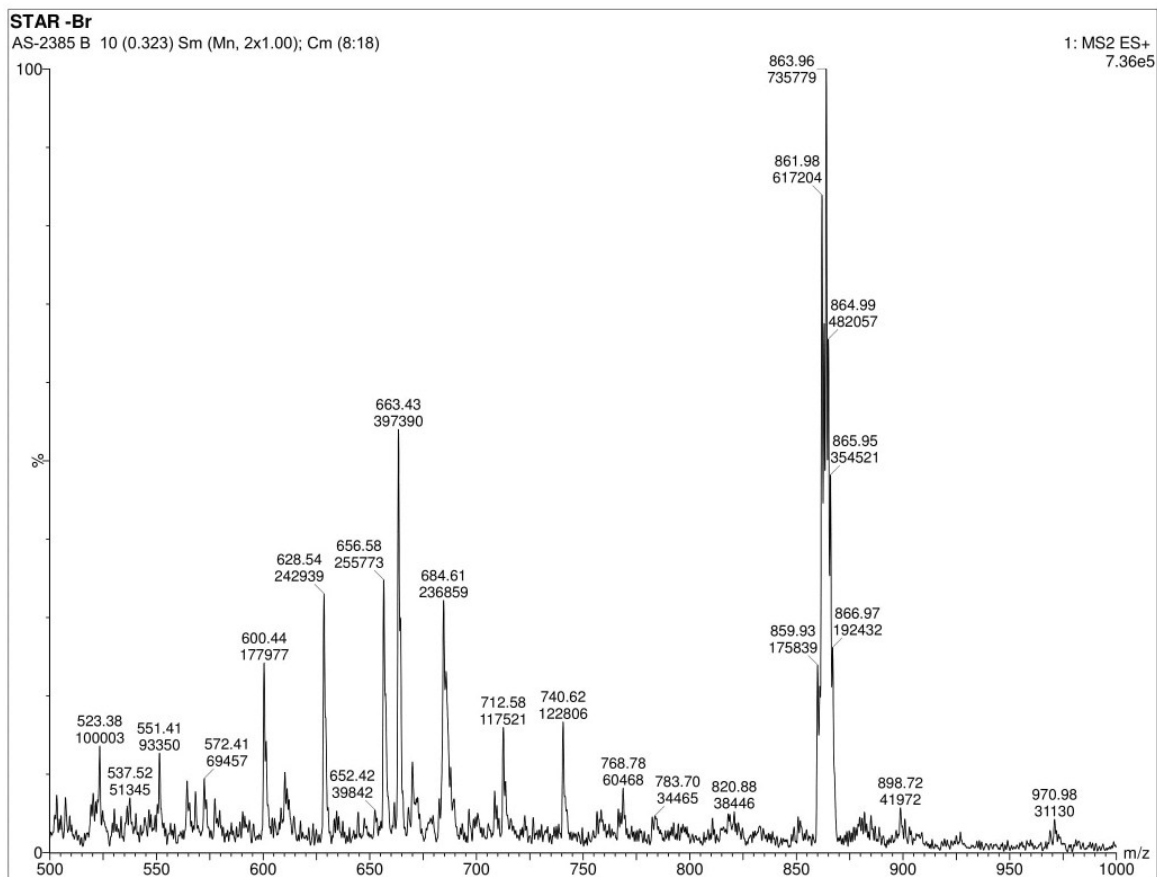


Figure S5. ESI Mass spectrum of of star NTBTBPA, Calculated molecular Weight = 859.97  
Mass obtained in positive mode = 859.93.

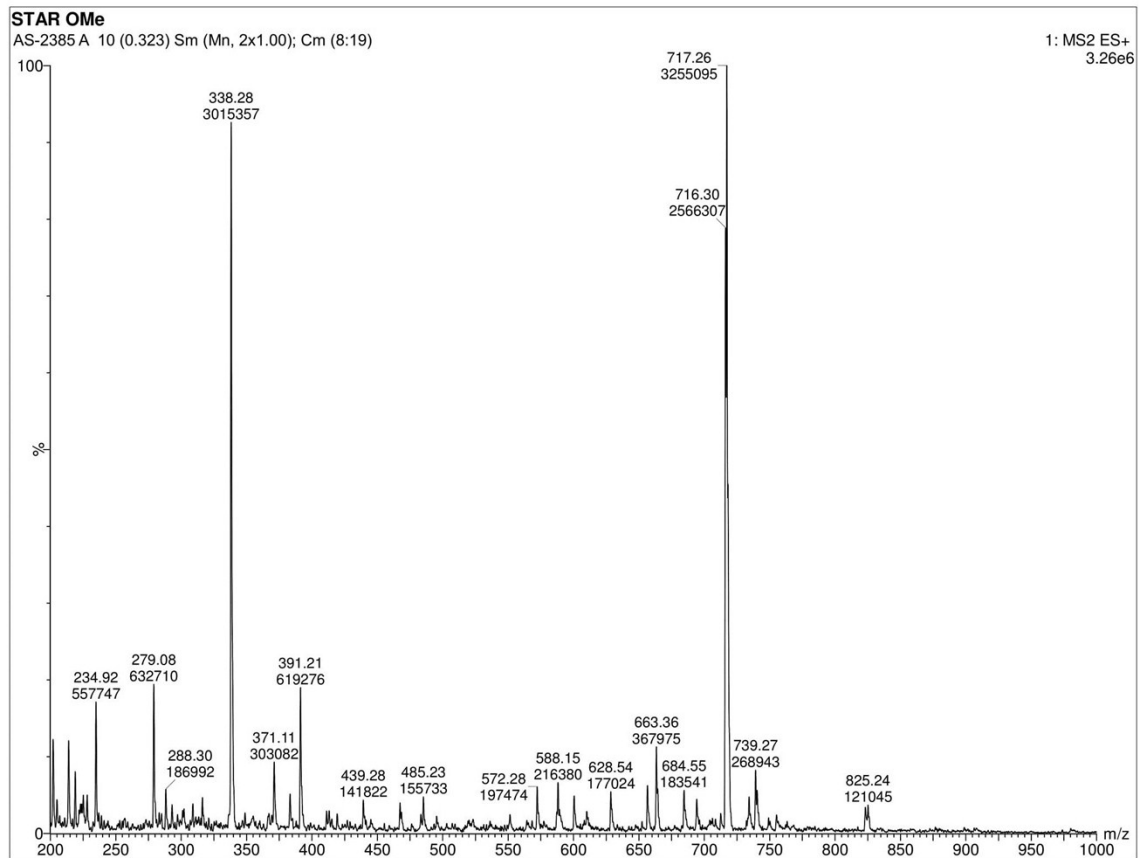


Figure S6. ESI Mass spectrum of of star NTBTMPA, Calculated molecular Weight = 716.27  
Mass obtained in positive mode = 716.30.

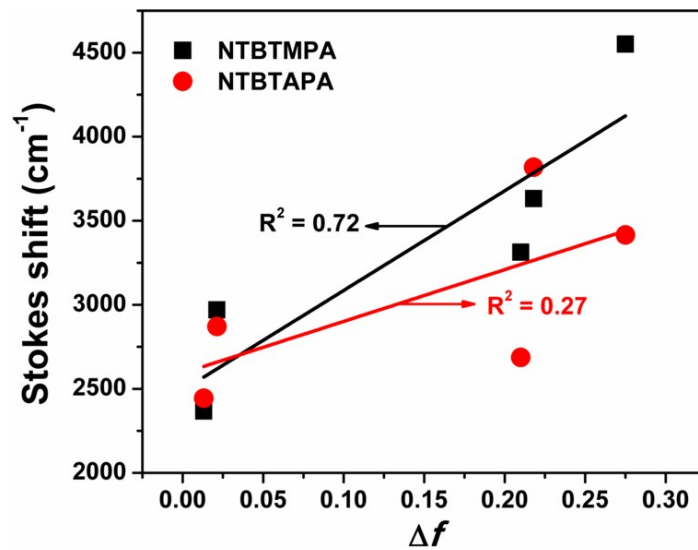


Figure S7 the Lippert-Mataga plot of the fluorescent star molecules NTBTMPA and NTBTAPA.