

## A novel Au/electroactive ploy(amic acid) composite as an effective catalyst of p-nitrophenol reduction

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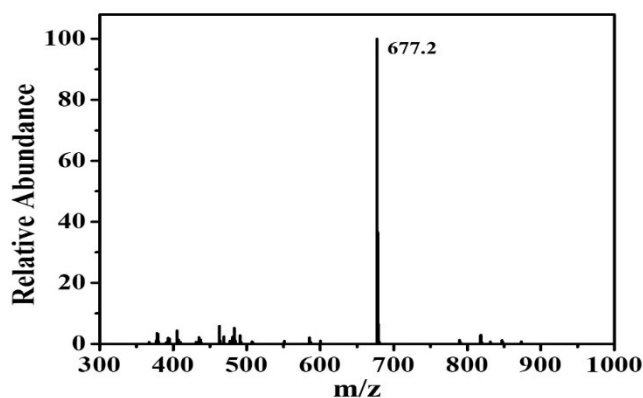


Fig. S1. LC-Mass of EPAA oligomer.

<sup>1</sup>H NMR (*d*<sub>6</sub>-DMSO):  $\delta=12.58$  (br, 2H, due to carboxylic acid),  $\delta= 10.23-10.21$  (m, 2H, due to sec amide),  $\delta=8.05-6.86$  (2H, due to sec amine),  $\delta=7.975$  (dd, 2H,  $J=8$ , 4Hz, due to H<sub>2</sub>, H<sub>2'</sub>),  $\delta=7.66-7.43$  (m, 6H, due to Ar),  $\delta= 7.22-7.20$  (m, 14H, due to Ar),  $\delta=6.81-6.75$  (m, 2H, due to Ar)

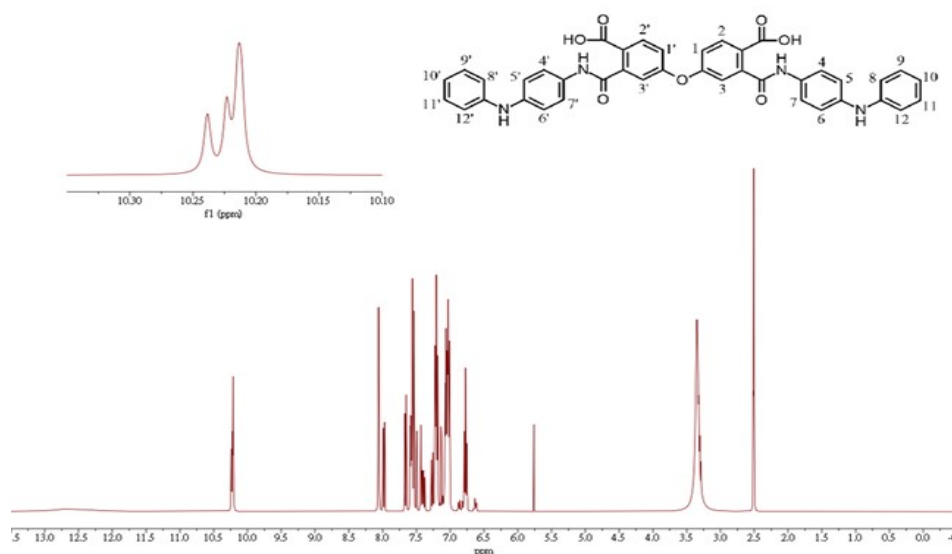


Fig. S2. <sup>1</sup>H NMR of EPAA oligomer.

$^1\text{H}$  NMR ( $d_6$ -DMSO):  $\delta=10.49$  (br, 1H, due to carboxylic acid),  $\delta=10.33$  (br, 1H, due to carboxylic acid),  $\delta= 10.22$ - $10.13$  (m, 2H, due to sec amide),  $\delta=8.05$ - $6.86$  (28H, due to Ar)

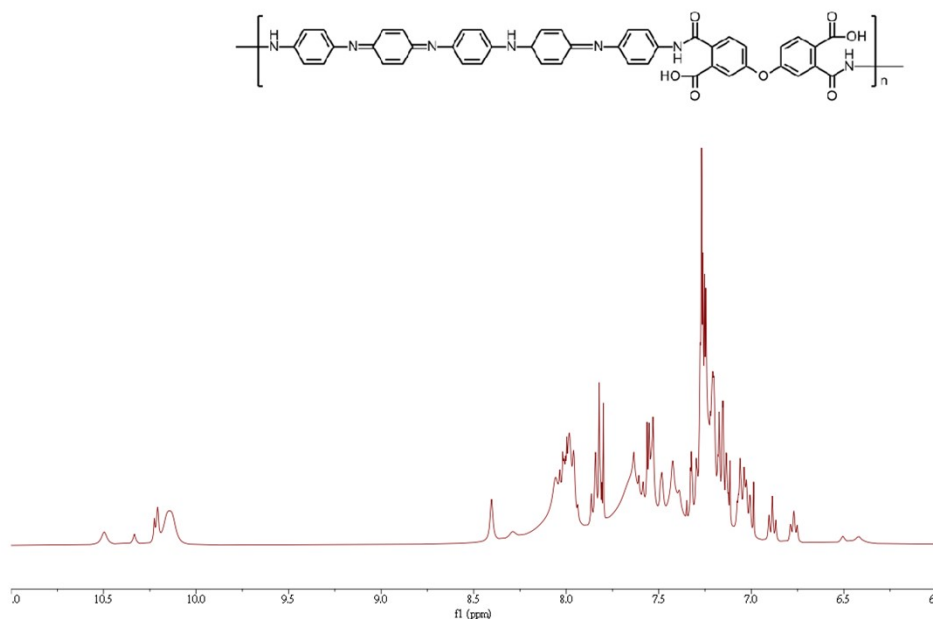


Fig. S3.  $^1\text{H}$  NMR of EPAA.

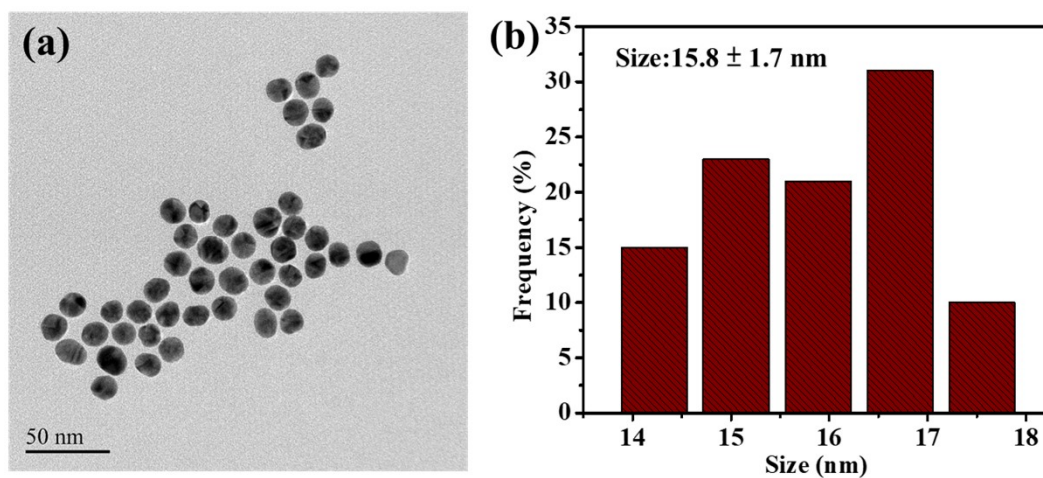


Fig. S4. (a) TEM image of Au nanoparticles and (b) the particle size distribution of the Au nanoparticles.