

### Supporting Figure Captions

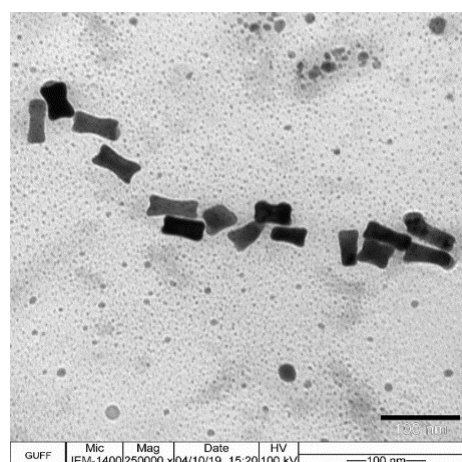
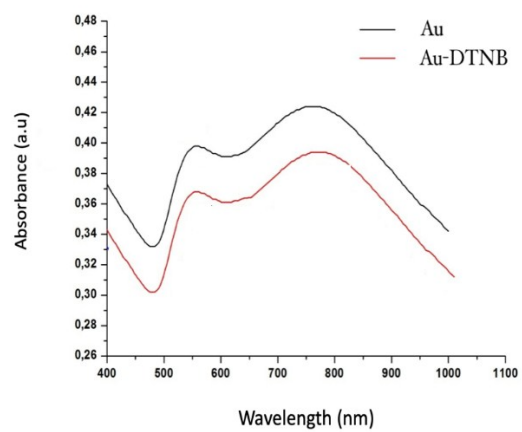
**Fig. S1** (A) UV-Vis spectrum, (B) TEM image of Au-nanorods.

**Fig. S2** The image of Au embedden in CNFs surfaces.

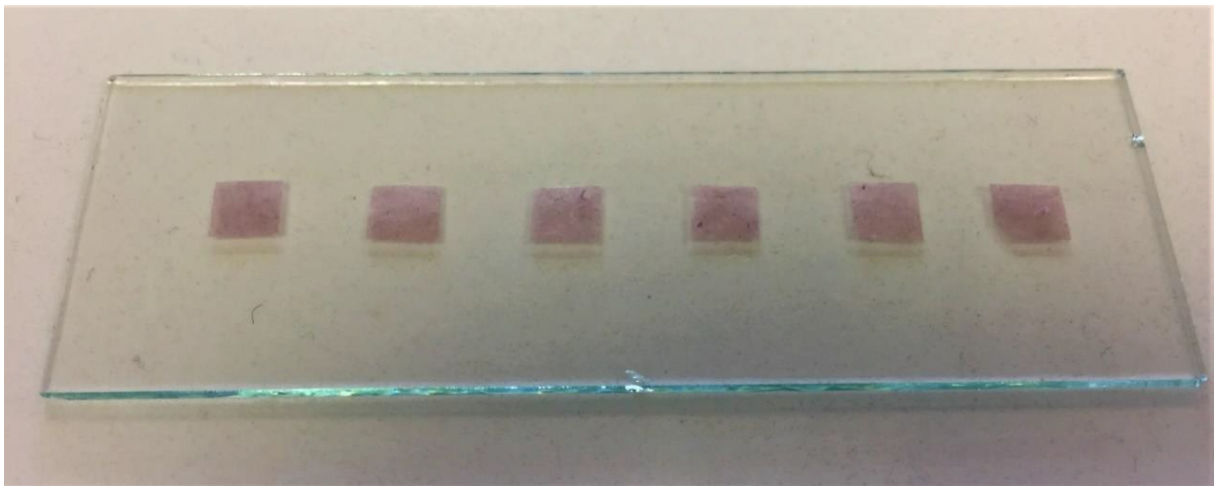
**Fig. S3** The effect of H<sub>AuCl<sub>4</sub></sub> amount (a) 50 μL, (b) 100 μL, (c) 150 μL, (d) 200 μL, (e) 250 μL on Au-CNFs formation.

**Fig S4** SEM images of Au-CNFs' surface networks.

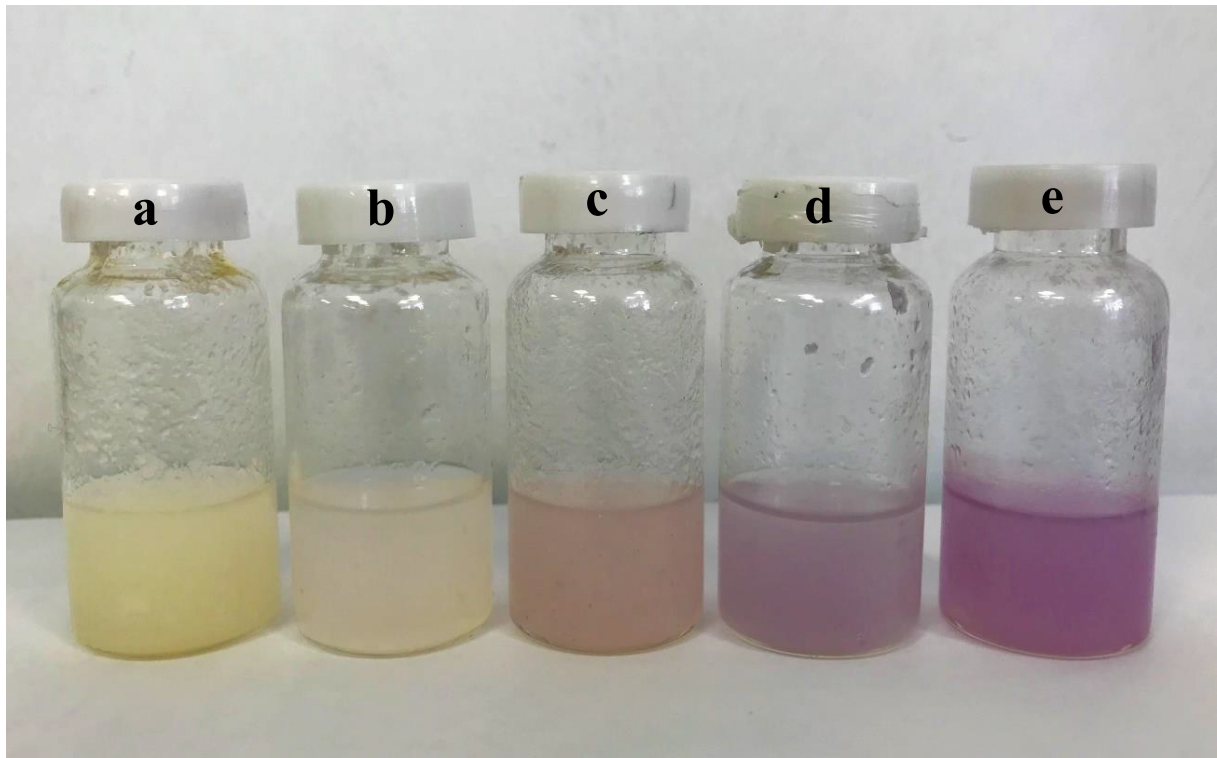
**Fig. S1**



**Fig. S2**



**Fig. S3**



**Fig. S4**

