

Electronic Supplementary Information

**Self-assembly directed synthesis of Au nanorices induced by polyaniline and their
enhanced peroxidase-like catalytic properties**

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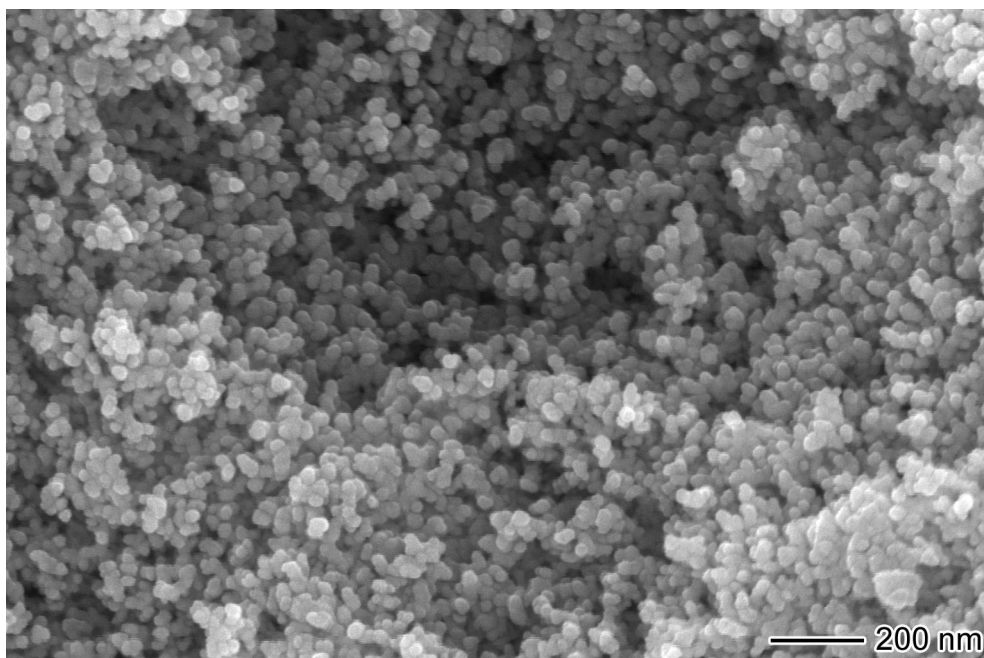


Fig. S1 SEM images of the Au nanospheres that synthesized via a NaBH_4 as a reducing agent.

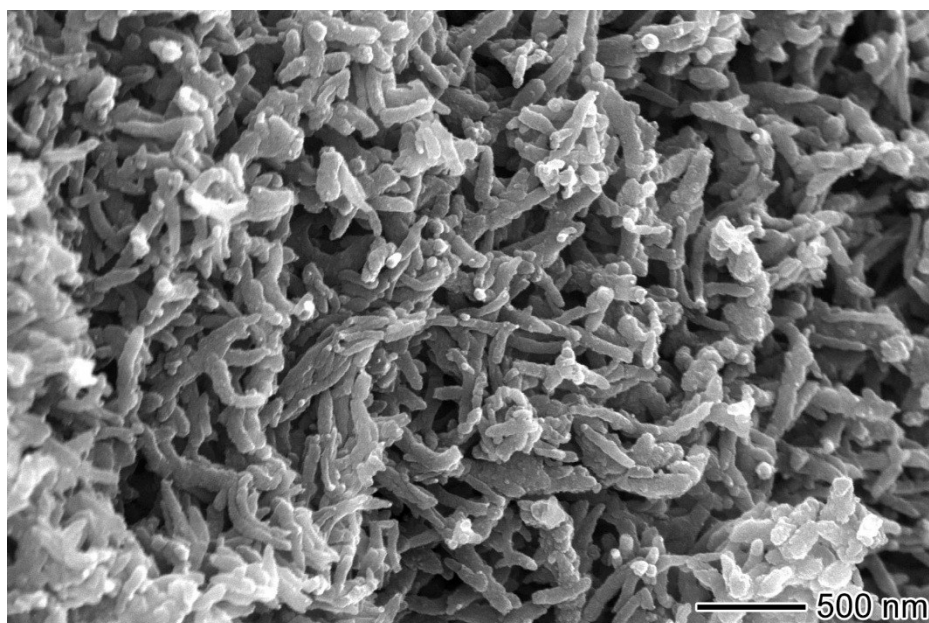
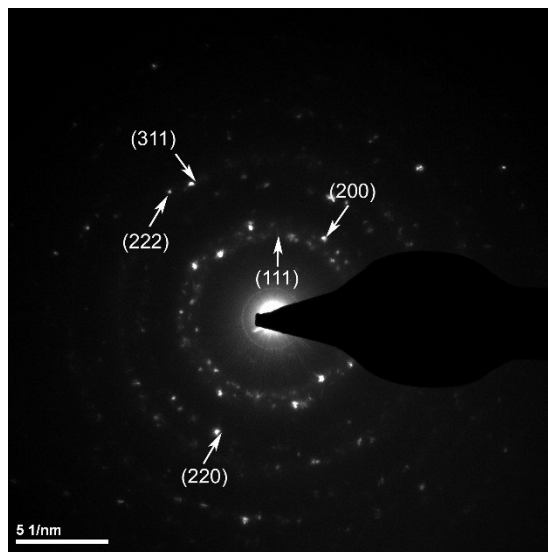


Fig. S2 SEM image of the individual PANI nanofibers that synthesized via a rapid mixing polymerization approach.



$h\ k\ l$	d_{hkl} (nm)	
	experiment	theory
(111)	0.2300	0.2355
(200)	0.1987	0.2039
(220)	0.1424	0.1442
(311)	0.1206	0.1230
(222)	0.1161	0.1177

Fig. S3 ED pattern of the prepared Au/PANI nanorice and the corresponding data for experimental and theoretical d_{hkl} .

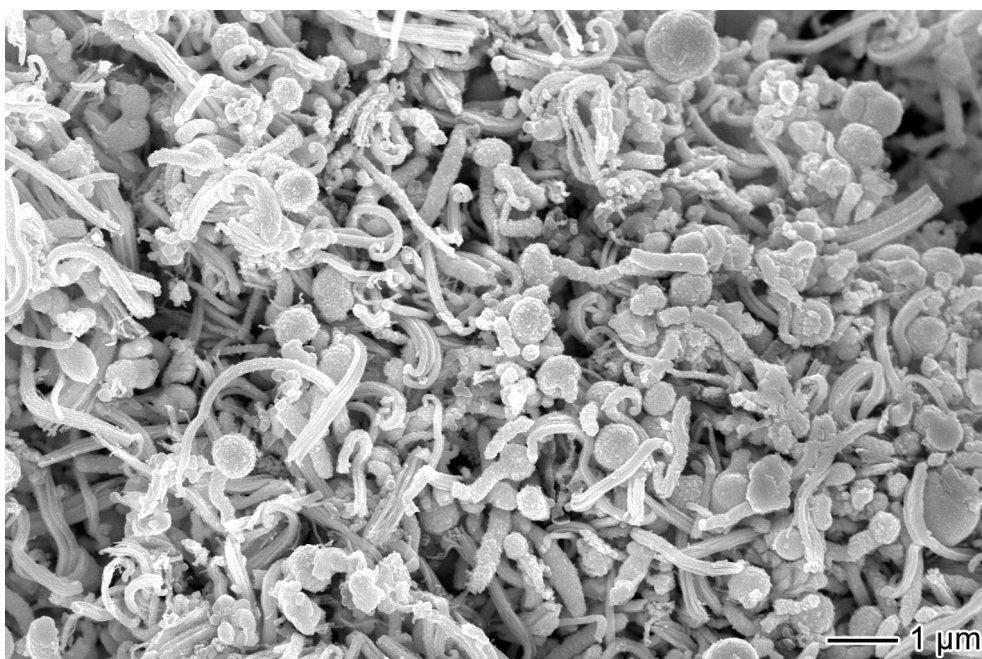


Fig. S4 SEM image of the prepared Au/PANI nanocomposites synthesized in the absence of APTES.

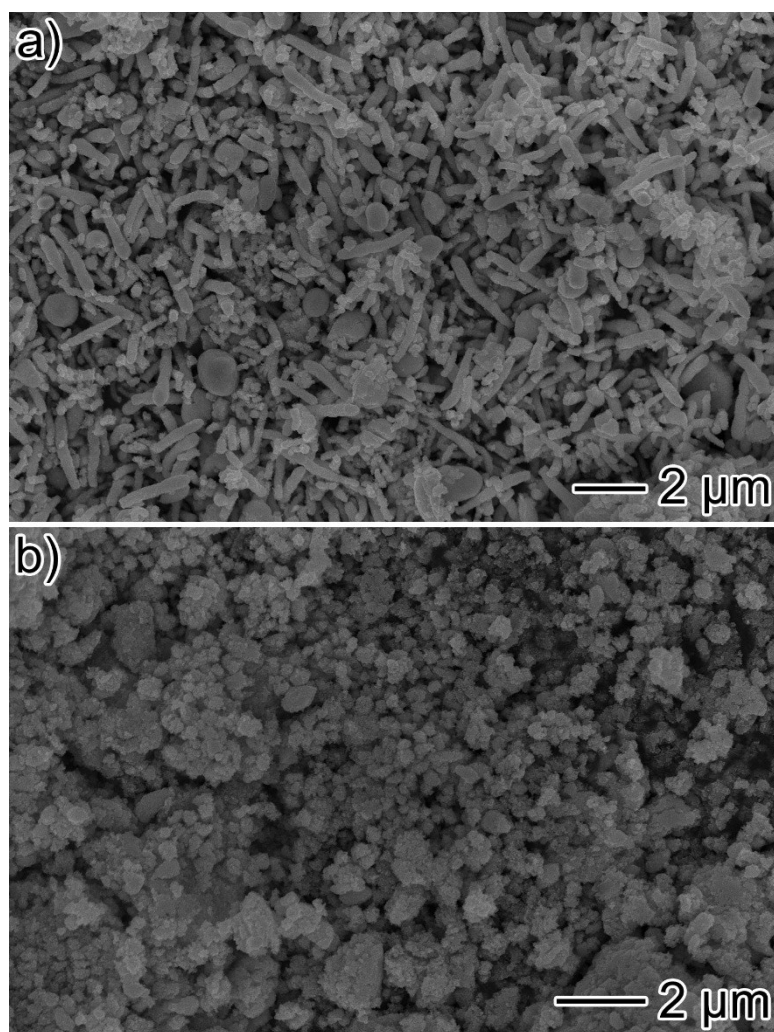


Fig. S5 SEM images of the prepared Au/PANI nanocomposites synthesized with different contents of APTES. a) 5 μL ; b) 20 μL .

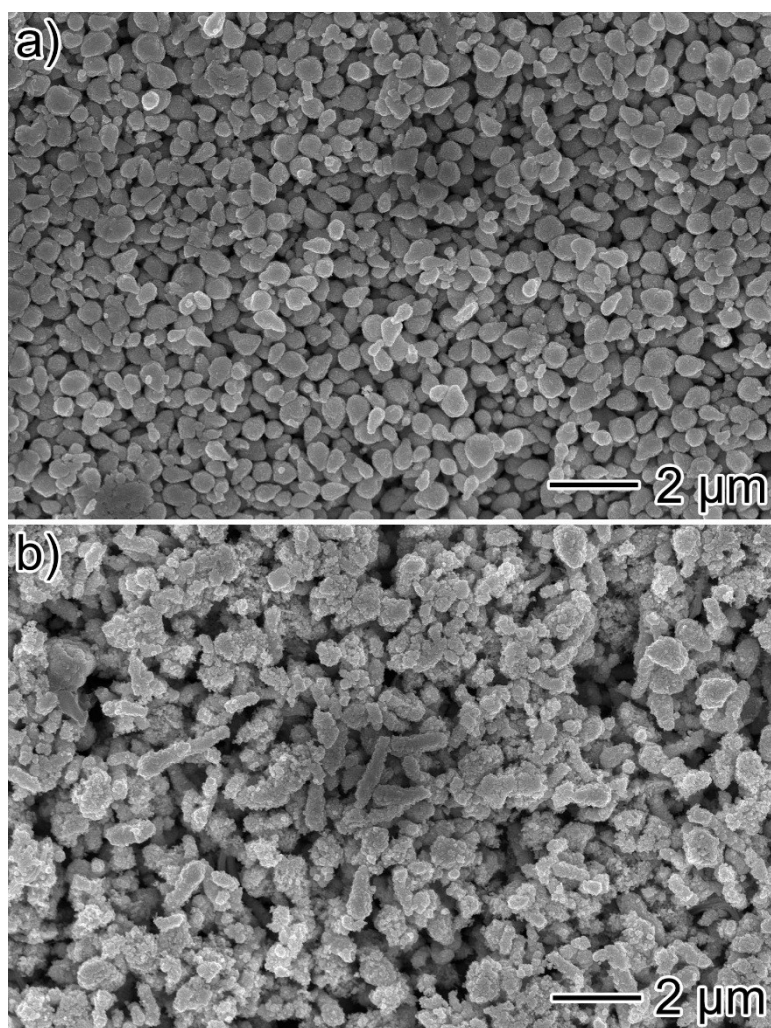


Fig. S6 SEM images of the prepared Au/PANI nanocomposites synthesized with different contents of HAuCl_4 . a) 0.25 mL; b) 1.0 mL.

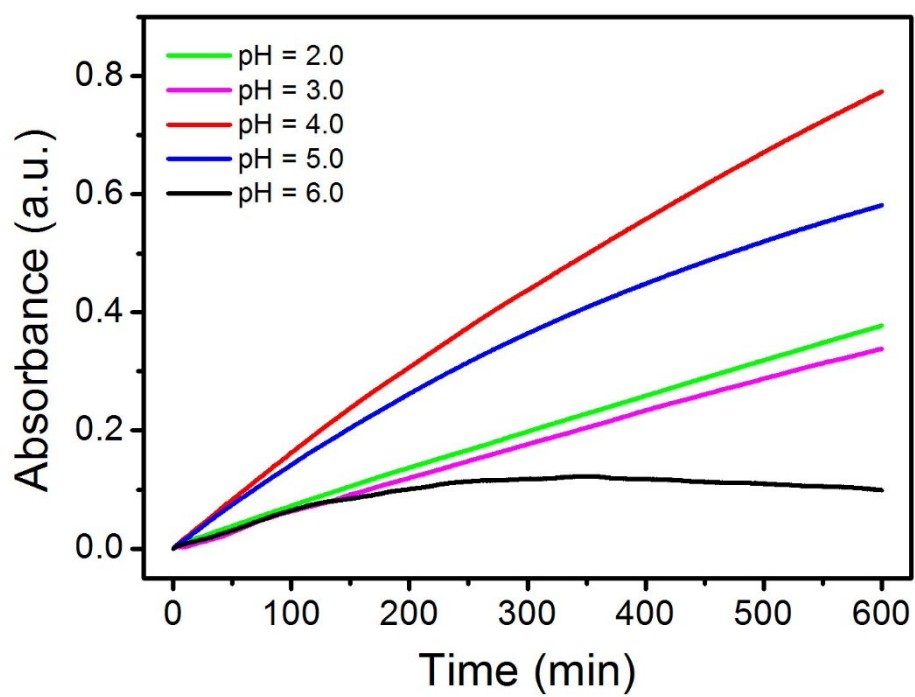


Fig. S7 Dependence of the peroxidase-like catalytic activity of the prepared Au/PANI nanorice on the pH values in acetate buffer solution.

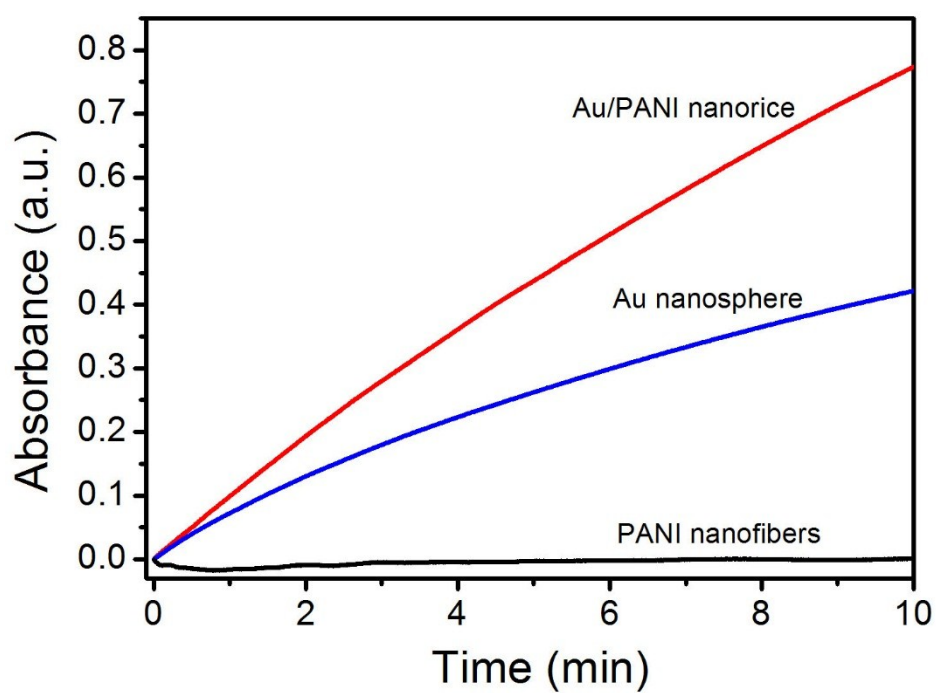


Fig. S8 Time-dependent absorption changes at 650 nm with the addition of different types of catalysts (Au/PANI nanorice, Au nanospheres, PANI nanofibers).