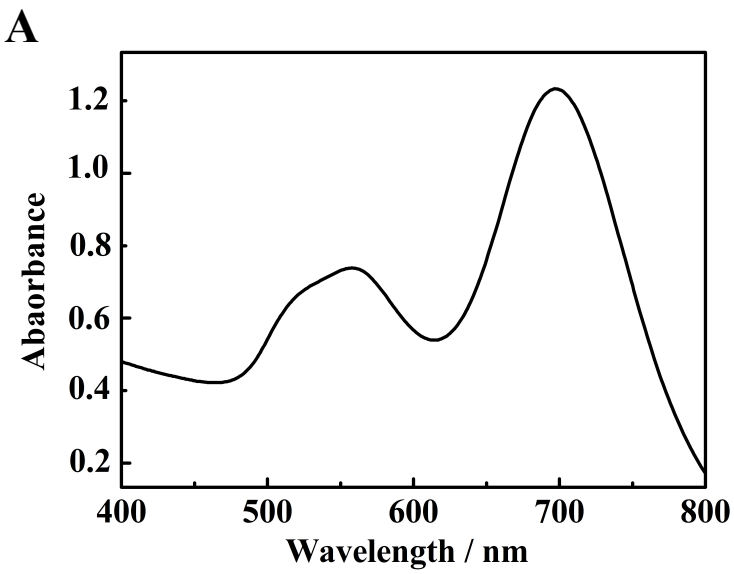
Electronic Supplementary Information

Highly enhanced electrochemiluminescence based on pseudo triple-enzyme cascade catalysis and in situ generate co-reactant for thrombin detection

Lijuan Xiao, Yaqin Chai*, Ruo Yuan*, Haijun Wang and Lijuan Bai

Education Ministry Key Laboratory on Luminescence and Real-Time Analysis, College of Chemistry and Chemical Engineering, Chongqing 400715, People's Republic of China

The UV-vis spectra and TEM of the as-prepared gold nanorods



* Corresponding author. Tel.: +86-23-68252277; Fax: +86-23-68253172.

E-mail address: yqchai@swu.edu.cn (Y. Q. Chai), yuanruo@swu.edu.cn (R. Yuan)

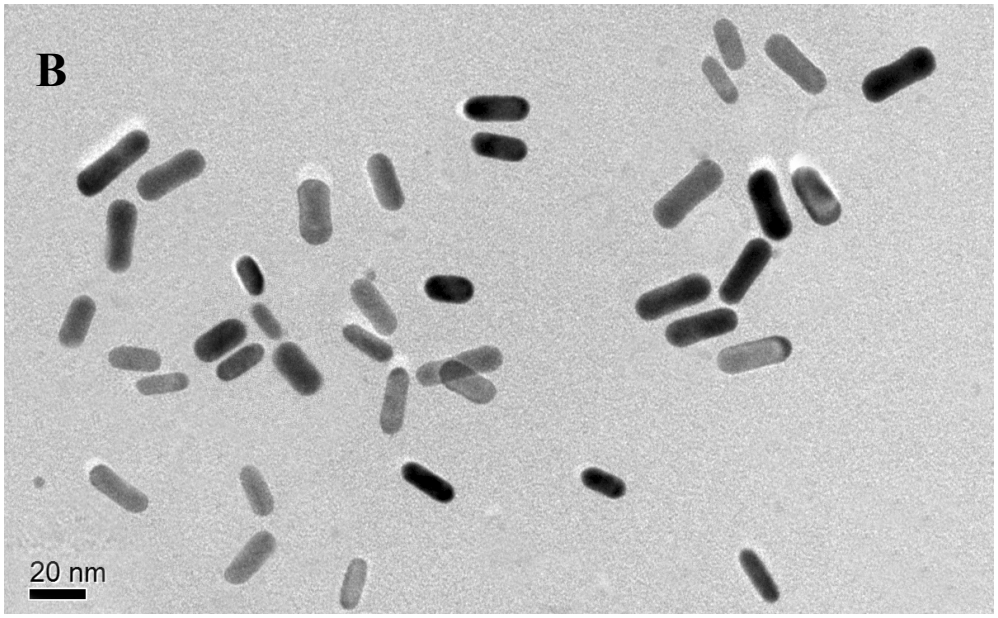


Fig. S1 UV-vis spectra (A) and TEM (B) of the as-prepared gold nanorods.

The analytical properties of different TB assays

The analytical performance of the proposed aptasensor has been compared with those of other detection methodologies reported in the literatures. The results were list in Table S1. As seen from the table, the fabrication time of other methods made little difference, but under this condition we gained the good linear range and detection limit. As a result, the time for fabricating this aptasensor was proper and this method was applicable for hospital applications.

Table S1

Detection method	Linear range (nM)	Detection limit (pM)	Fabrication time (h)	Ref.
CV	0.12~ 46	40	20.17	1
DPV	0.001~30	0.39	18.75	2
DPV	0.0005~20	0.15	18	3
EIS	0.5~500	----	----	4
QCM	50~200	----	----	5

SPR	0.1~150	----	----	6
ECL	0.0005~0.8	0.35	20	7
ECL	0.0001~50	0.033	18	Our work

Abbreviation: cyclic voltammetry (CV); differential pulse voltammetry (DPV); electrochemical impedance spectroscopy (EIS); quartz crystal microbalance (QCM); surface plasmon resonance (SPR); electrochemiluminescent (ECL).

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