Potential Controlling Highly-efficient Catalysis of Wheat-like Silver Particles for Electrochemiluminescence Immunosensor Labeled by Nano-Pt@Ru and Multi-sites Biotin-streptavidin Affinity

Li Mao, a,b Ruo Yuan, a,* Yaqin Chai, a Ying Zhuo, a Wen Jiang a

a. Education Ministry Key Laboratory on Luminescence and Real-Time Analysis, College of Chemistry and Chemical Engineering, Southwest University, Chongqing, China 400715. E-mail: yuanruo@swu.edu.cn
b. Chemical Synthesis and Pollution Control Key Laboratory of Sichuan Province, College of Chemistry and Chemical Engineering, China West Normal University, Nanchong, China 637002

The image of Pt@Ru nanoparticles (Fig. S) was screened by transmission electron microscopy (TEM) (H600, Hitachi Instrument, Japan). In this image, the black dots are the Pt@Ru nanoparticles with average diameter about 8 nm. It can be the proof that the white highlighted irregular particle clusters with large diameter in SEM image (Fig. 1D) were actually formed by agglomerating large amount of Pt@Ru nanoparticles on multiple biotin-SA affinity sites.

Figure S. TEM image of Pt@Ru nanoparticles