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Authors: Xing-Pei Liu, Pan-Pan Li, Chang-jie Mao, He-Lin
Niu, Ji-Ming Song, Bao-Kang Jin



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Enhanced Photoelectrochemical Sensing for MUC1 Detection Based on TiO₂/CdS:Eu/CdS Cosensitized Structure

Xing-Pei Liu, Pan-Pan Li, Chang-jie Mao^{*}, He-Lin Niu, Ji-Ming Song, Bao-Kang Jin

Anhui Province Key Laboratory of Chemistry for Inorganic/Organic Hybrid Functionalized Materials, School of Chemistry & Chemical Engineering, Anhui University, hefei230601, PR China

^{*}Corresponding Author; E-mail: maochangjie@sina.com; Tel & Fax: +86 551 6386 1260.

Highlight

- A novel, enhanced photoelectrochemical aptasensing was constructed for MUC1 detection.
- CdS:Eu was first time prepared with successive ionic layer adsorption and reaction technique (SILAR).
- CdS:Eu was first time applied to photoelectrochemical aptasensing
- FTO/TiO₂/CdS:Eu composite electrode could evidently promote the photocurrent intensity.
- The proposed photoelectrochemical protocol presented ultrahigh sensitivity, reproducibility, specificity and stability.

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