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A novel signal-on photoelectrochemical sensing platform based on biosynthesis of CdS quantum dots sensitizing ZnO nanorod arrays

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Highlight

- ▶ A novel signal-on photoelectrochemical sensing platform was fabricated.
- ▶ The platform was fabricated by in situ biosynthesis of CdS quantum dots sensitizing ZnO nanorod arrays.
- ▶ Three-dimensional ZnO nanorod arrays were used as sensing platform.
- ▶ (3-Aminopropyl)triethoxysilane was adopted to bind CdS quantum dots.
- ▶ CdS quantum dots were used as sensitization unit.

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