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Ultrasensitive colorimetric assay melamine based on in situ reduction to formation of CQDs-silver nanocomposite

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Highlights

- In situ reduction Ag^+ to formation of CQDs-silver nanocomposite was exploited to develop colorimetric assay platform.
- Low at pM detection limit was obtained by the biosensing system.
- The detection sensitivity was full fill with the requirement of food resource melamine detection.
- The mild sensing condition made it could employ in on-site detection.

Abstract: In this work, the in situ reduction of Ag^+ by carbon quantum dots (CQDs) to the formation of CQDs-silver nanocomposite (CQDs-silver NPs) was exploited to develop a facile and ultrasensitive colorimetric sensor platform. Due to the high

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