Accepted Manuscript

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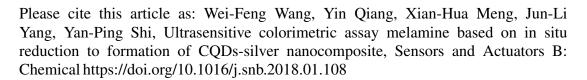
PII: S0925-4005(18)30114-X

DOI: https://doi.org/10.1016/j.snb.2018.01.108

Reference: SNB 23957

To appear in: Sensors and Actuators B

Received date: 5-9-2017 Revised date: 9-1-2018 Accepted date: 9-1-2018



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ACCEPTED MANUSCRIPT

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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