Accepted Manuscript

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Authors: Bo Li, Guosong Lai, Bei Lin, Aimin Yu, Nianjun

Yang

PII: S0925-4005(18)30319-8

DOI: https://doi.org/10.1016/j.snb.2018.02.049

Reference: SNB 24144

To appear in: Sensors and Actuators B

Received date: 14-8-2017 Revised date: 2-2-2018 Accepted date: 6-2-2018



Please cite this article as: Bo Li, Guosong Lai, Bei Lin, Aimin Yu, Nianjun Yang, Enzyme-induced biomineralization of cupric subcarbonate for ultrasensitive colorimetric immunosensing of carcinoembryonic antigen, Sensors and Actuators B: Chemical https://doi.org/10.1016/j.snb.2018.02.049

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Enzyme-induced biomineralization of cupric subcarbonate for

ultrasensitive colorimetric immunosensing of carcinoembryonic

antigen

Bo Li a, Guosong Lai a,*, Bei Lin A, Aimin Yu a,b, Nianjun Yang^c

^a Hubei Key Laboratory of Pollutant Analysis & Reuse Technology, Department of Chemistry,

Hubei Normal University, Huangshi 435002, PR China

^b Department of Chemistry and Biotechnology, Faculty of Science, Engineering and

Technology, Swinburne University of Technology, Hawthorn VIC 3122, Australia

^c Institute of Materials Engineering, University of Siegen, Siegen 57076, Germany

* Corresponding Author.

Tel.: +86-714-6515602; Fax: +86-714-6573832

E-mail address: gslai@hbnu.edu.cn (G. Lai).

Graphical Abstract:

The combination of the enzyme-induced biomineralization of cupric subcarbonate by the gold

nanoparticle (Au NP)/urease nanoprobe with the Cu²⁺ chromogenic reaction leads to the

development of a novel colorimetric immunosensing method. The signal amplification from

the nanoprobe and biomineralization reaction results in ultrahigh sensitivity of the method.

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