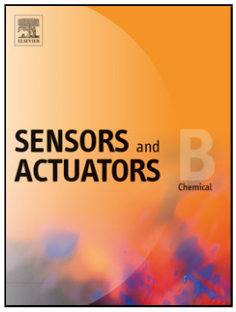

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Enzyme-induced biomineralization of cupric subcarbonate for ultrasensitive colorimetric immunosensing of carcinoembryonic antigen

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Graphical Abstract:

The combination of the enzyme-induced biomineralization of cupric subcarbonate by the gold nanoparticle (Au NP)/urease nanoprobe with the Cu^{2+} 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.