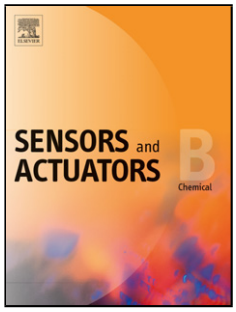

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Colorimetric Detection of Amoxicillin based on Querecetagetin Coated Silver Nanoparticles.

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Highlights

- New querecetagetin stabilized silver nanoparticles were synthesized and characterized.
- Quercetagetin silver nanoparticles showed excellent selectivity and sensitivity for amoxicillin.
- UV-visible, FT-IR and AFM spectroscopic techniques were used for characterization and sensing studies.
- The binding stoichiometry is determined by Job's plot method.
- The results are consistent for the detection of amoxicillin in tap water and plasma samples.

Abstract

A different approach to the molecular recognition events consists in synthesis and conjugating silver nanoparticles with flavonoid quercetagetin isolated from *T. erecta*. In this article we are reporting rapid and feasible procedure for the synthesis of querecetagetin stabilized silver nanoparticle (**Qt AgNPs**). These nanoparticles were characterized by UV-Visible spectroscopy,