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An ultrasensitive biosensor for superoxide anion based on hollow porous PtAg nanospheres

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ABSTRACT

The accurate detection of the superoxide anion ($\text{O}_2^{\cdot-}$) has vital academic and medical diagnostic significance due to its important dual roles in biological functioning. In this work, hollow porous PtAg nanospheres (PtAg HPNSs) were fabricated by a facile hydrothermal method followed by a dealloying procedure. The as-made PtAg nanospheres possessed hollow interiors and porous shells composed of interconnected ligaments and pores with the typical size around 4 nm. Benefitting from the unique hollow nanoporous architecture and the specific alloying effect, the PtAg HPNSs showed

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