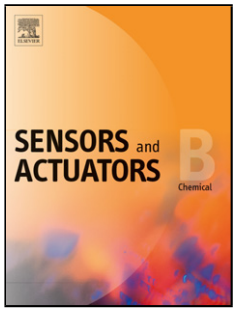

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Correlating surface growth of nanoporous gold with electrodeposition parameters to optimize amperometric sensing of nitrite

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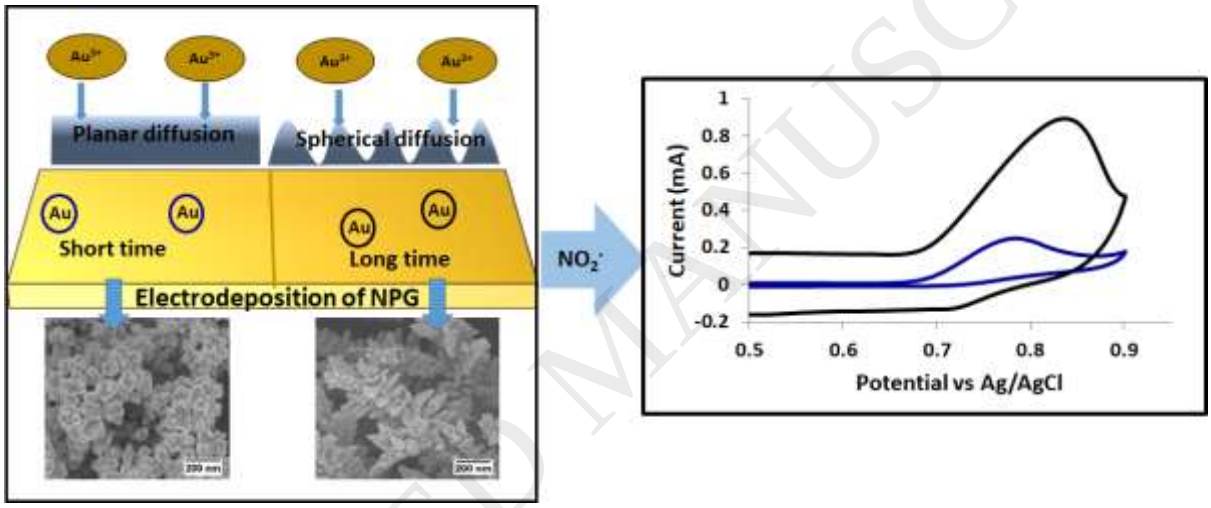
GRAPHICAL ABSTRACT



Highlights

- A nanoporous gold film was electrodeposited on a gold electrode.
- Electrodeposition parameters were optimized to enhance the sensor performance towards nitrite detection.
- A correlation between surface morphology and nitrite response was established.
- The lower limit of detection for nitrite was 10 nM; wide linear range and good selectivity were achieved.
- The sensor applicability was demonstrated in real samples (processed meat and lake water).