## Accepted Manuscript

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

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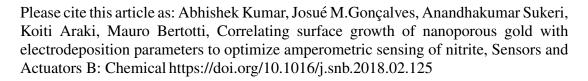
PII: S0925-4005(18)30404-0

DOI: https://doi.org/10.1016/j.snb.2018.02.125

Reference: SNB 24220

To appear in: Sensors and Actuators B

Received date: 13-11-2017 Revised date: 14-2-2018 Accepted date: 16-2-2018



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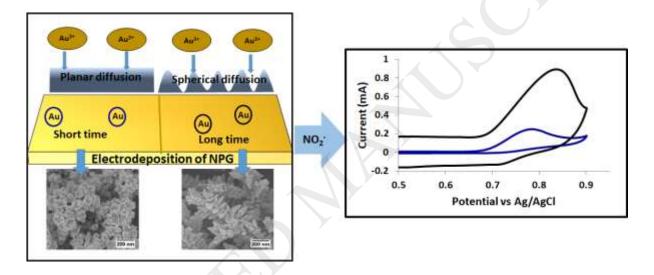
### ACCEPTED MANUSCRIPT

# 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).

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