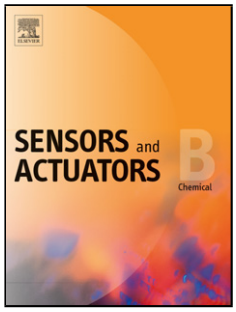

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PII: S0925-4005(18)30674-9
DOI: https://doi.org/10.1016/j.snb.2018.03.176
Reference: SNB 24461

To appear in: *Sensors and Actuators B*

Received date: 18-1-2018
Revised date: 27-3-2018
Accepted date: 28-3-2018

Please cite this article as: Wenying Gui, Huan Wang, Yang Liu, Qiang Ma, Ratiometric fluorescent sensor with molecularly imprinted mesoporous microspheres for malachite green detection, Sensors and Actuators B: Chemical https://doi.org/10.1016/j.snb.2018.03.176

Ratiometric fluorescent sensor with molecularly imprinted mesoporous microspheres for malachite green detection

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Highlights

- A dual-emission molecularly imprinted mesoporous microspheres with green fluorescent QDs into the core and red fluorescent QDs embedded around the pores.
- Continuous color changes from orange to yellow to green upon addition of MG can be easily observed by the naked eyes.
- The sensing method has a large linear response in the range of 27.4 nM-137 μM malachite with a detection limit of 17.0 nM.

Abstract

A dual-emission molecularly imprinted mesoporous microspheres was designed for specific recognition and highly sensitive and selective determination of malachite