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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 μ M 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

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