

## Accepted Manuscript

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PII: S0925-4005(18)31662-9  
DOI: <https://doi.org/10.1016/j.snb.2018.09.049>  
Reference: SNB 25355

To appear in: *Sensors and Actuators B*

Received date: 12-6-2018  
Revised date: 10-9-2018  
Accepted date: 10-9-2018

Please cite this article as: Wang T, Tao Z, Lyu Y, Qian P, Li Y, Lin X, Wang S, Liu Y, A reusable ratiometric fluorescent biosensor with simple operation for cysteine detection in biological sample, *Sensors and Actuators: B. Chemical* (2018), <https://doi.org/10.1016/j.snb.2018.09.049>

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## **A reusable ratiometric fluorescent biosensor with simple operation for cysteine detection in biological sample**

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### **Highlights**

- A reusable ratiometric fluorescent biosensor for Cys has been developed.
- Cys in serum sample could be detected sensitively and selectively.
- The sensing system could be reused time after time with excellent repeatability.
- The ratiometric strategy could eliminate false positive and false negative results.
- The sensing assay offers an effective “mix-then-test” way for Cys detection.

### **ABSTRACT**

Highly sensitive detection of cysteine is critical for early warning and diagnosis of cysteine-

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