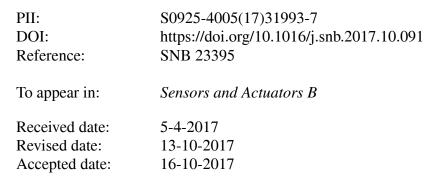
#### Accepted Manuscript

Title: A colorimetric detector for lung cancer related volatile organic compounds based on cross-response mechanism

Authors: Shixian Zhao, Jincan Lei, Danqun Huo, Changjun Hou, Xiaogang Luo, Huixiang Wu, Huanbao Fa, Mei Yang



Please cite this article as: Shixian Zhao, Jincan Lei, Danqun Huo, Changjun Hou, Xiaogang Luo, Huixiang Wu, Huanbao Fa, Mei Yang, A colorimetric detector for lung cancer related volatile organic compounds based on cross-response mechanism, Sensors and Actuators B: Chemical https://doi.org/10.1016/j.snb.2017.10.091

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



#### ACCEPTED MANUSCRIPT

# A colorimetric detector for lung cancer related volatile organic compounds based on cross-response mechanism

Shixian Zhao<sup>1</sup>, Jincan Lei<sup>2</sup>, Danqun Huo<sup>\*,1</sup>, Changjun Hou<sup>\*,1</sup>, Xiaogang Luo<sup>1</sup>, Huixiang Wu<sup>1</sup>, Huanbao Fa<sup>3</sup>, Mei Yang<sup>1</sup>

<sup>1</sup>Key Laboratory of Biorheology Science and Technology, Ministry of Education, College of Bioengineering, Chongqing University, Chongqing, 400044, China

<sup>2</sup>School of Health Care and Elderly Services, ChongQing City Management College, Chongqing,

401331, China

<sup>3</sup>College of Chemistry and Chemical Engineering, Chongqing University, Chongqing, 400044,

China

\*Corresponding Author: Prof. Dr. Danqun Huo, E-mail address: huodq@cqu.edu.cn,

Prof. Dr. Changjun Hou, E-mail address: houcj@cqu.edu.cn

Highlights

- In this paper, a **novel**, simple, rapid, and low-cost detection device for lung cancer related Volatile Organic Compounds (VOCs) was constructed.
- A sensor array based on a **cross-responsive** mechanism, using six chemical materials, was designed.
- A new uniformly-illuminative light source was made to insure the RGB signals accurately and stably acquired by CMOS camera.

Download English Version:

# https://daneshyari.com/en/article/7141618

Download Persian Version:

### https://daneshyari.com/article/7141618

Daneshyari.com