

# Analytical Methods

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## IN THIS ISSUE

ISSN 1759-9679 CODEN AMNECT 18(11) 2149–2370 (2026)



### Cover

See Mara G. Freire, Francisca A. e Silva *et al.*, pp. 2188–2192.

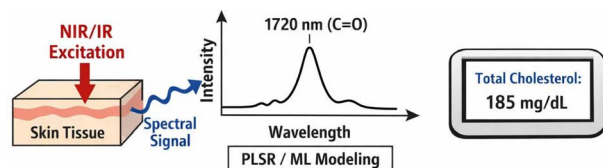
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## CRITICAL REVIEW

2158

### Non-invasive cholesterol assessment: current methods and future perspectives

Ravisankar Dakupati, P N S B S V Prasad V, Syed Ali Hussain and Pradyut Kumar Sanki\*

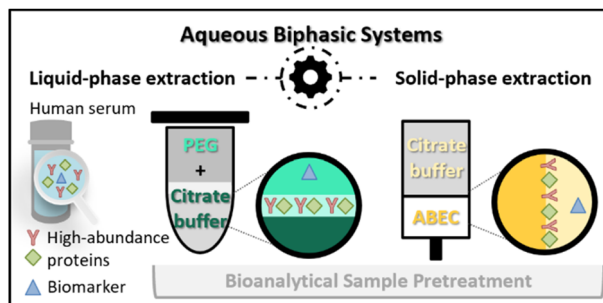


## COMMUNICATION

2188

### Adapting aqueous biphasic systems to solid-phase extraction for bioanalytical applications: high-abundance protein depletion and prostate-specific antigen extraction from human serum

Maria S. M. Mendes, Sofia Pedro, Mara G. Freire\* and Francisca A. e Silva\*



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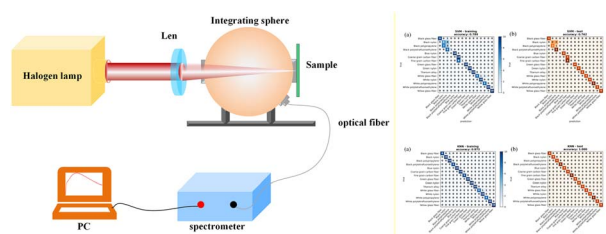
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2193

## Research on spectroscopic determination and classification of diffuse reflectance for low-altitude UAV fuselage materials

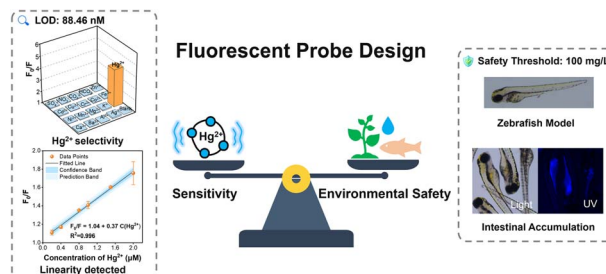
Dongliang Li, Yangyang Hua, Tingting Wang, Yangming Cao, Jianguo Liu and Hongxing Cai\*



2205

## Balancing sensitivity and environmental safety in fluorescent probe design: improved ethanol-thermal carbon dots enable a leap in mercury(II) detection and zebrafish-assessed safety

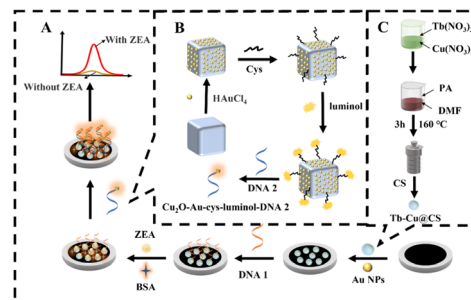
Xixuan Chen, Lei Zheng,\* Rongzhen Ma, Phong H. N. Vo, Jiaxin Ni and Songjun Guo\*



2216

## Highly stable ECL sensor based on a self-supplied H<sub>2</sub>O<sub>2</sub> probe and MOF nanozyme for ultrasensitive environmental mycotoxin ZEA detection

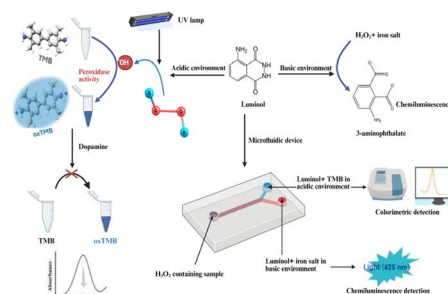
Shangming Xia,\* Xiang Gao, Kangyuan Sun, Fei Liang, Wenbin Jiang and Yanqiu Leng\*



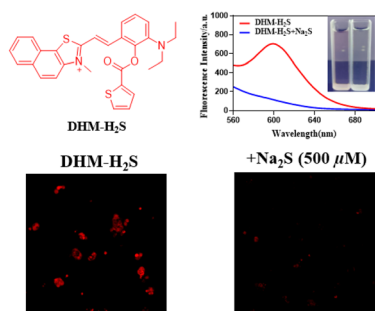
2225

## Expanding luminol activity: UV-enhanced peroxidase-like activity for dual-mode wide-pH biosensing

Mohamed Hassan Mahana, Syed Rahin Ahmed, Poushali Das, Seshasai Srinivasan\* and Amin Reza Rajabzadeh\*



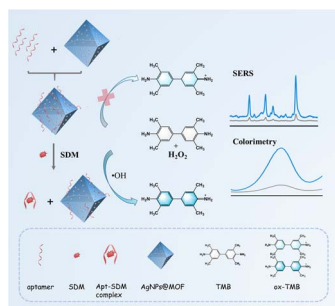
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### A novel fluorescent probe for hydrogen sulfide imaging in living inflammatory models

Xin-Ai Shi, Yu Jiang, Pei Tang, Xin-Ru Zhang, Ge Wang, Hao Peng, Peng-Peng Wang,\* Li-Sheng Xu,\* Qian-Qian Han\* and Ya-Xi Ye\*

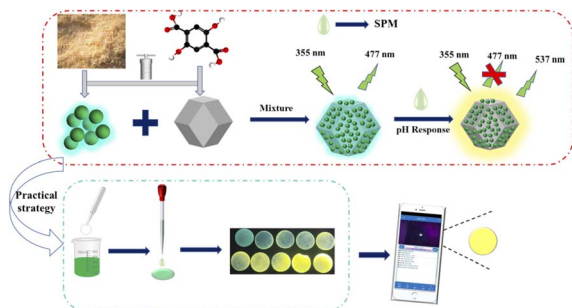
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### An aptamer sensor based on peroxidase-like AgNPs@MOF for SERS and colorimetric dual-mode detection of sulfadimethoxine

Renjie Zhao, Zhanye Yang, Xin Sun, Guantong Liu, Shutong Zhang, Xinge Ju, Yuru Wang, Yuan Tian,\* Lan Ding\* and Daqian Song

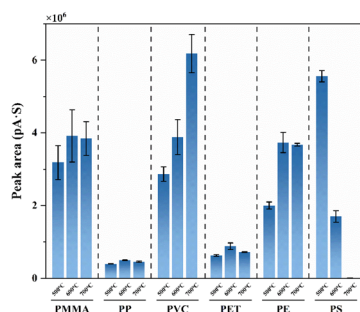
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### Biomass carbon quantum dots and Zr-MOFs as ratiometric fluorescent probes for sensitive detection of biogenic amines in shrimp samples

Long Jing, Zheng Liu,\* Mengyu Su, Qirong Lu,\* Xiangfei Kong, Xiaoyan Wang and Guo-Cheng Han\*

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### Simultaneous determination of six microplastics in drinking water by pyrolysis-gas chromatography/mass spectrometry

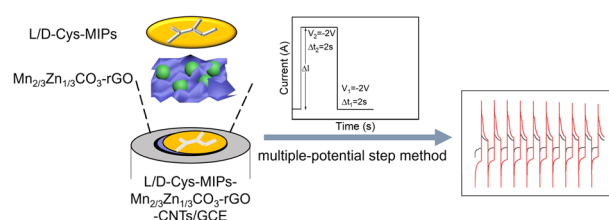
Mingming Yin, Jingli Fan, Gang Cheng, Qiaoying Chang, Bing Shao\* and Ruobin Bai\*



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### Enantioselective recognition and detection of cysteine using a three-dimensional $\text{Mn}_{1/3}\text{Zn}_{2/3}\text{CO}_3$ -rGO/CNT heterostructure-based molecularly imprinted sensor

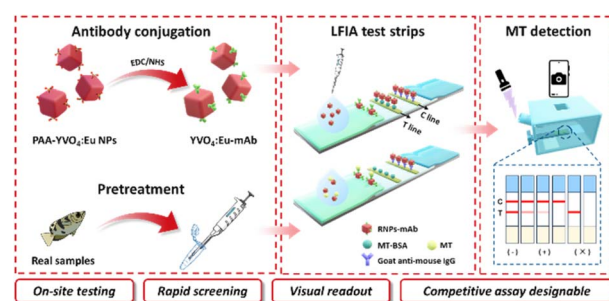
Yu Rao, Qian Jian, Chenrui Tan, Xinyao Yu, Xinwu Jiang, Hao Dai, Jiangyu Zhang, Ling Wu,\* Dan Li\* and Zhong Cao\*



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### Lanthanide-doped luminescent lateral flow immunoassay for the ultrasensitive and quick detection of methyltestosterone in fish samples

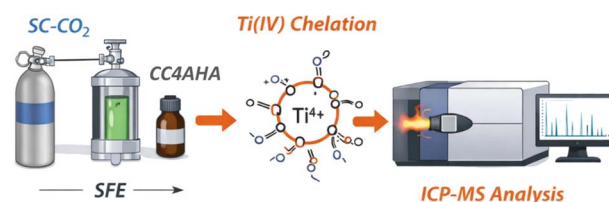
Hechen Lu, Yaohui Xue, Jinhua Li,\* Ming Ma, Qingwei Song, Sihua Qian, Jian Li and Yuhui Wang\*



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### Integrated supercritical fluid extraction and online ICP-MS nano-gram determination of titanium(IV) using calixarene hydroxamic acid

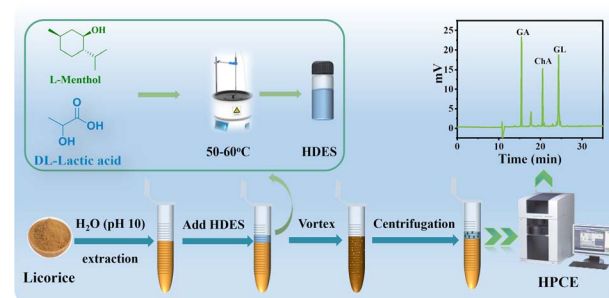
Devarshi Thaker, Bignesh Thakur, Nirav Pandya and Yadvendra Agrawal\*



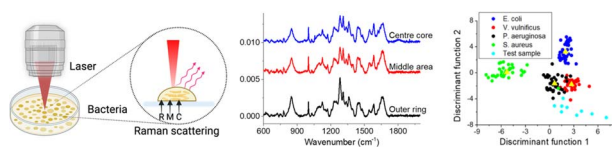
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### Menthol-based hydrophobic deep eutectic solvent for vortex-assisted liquid-liquid microextraction and capillary electrophoretic determination of bioactive compounds in licorice

Chenjiang Jiang, Xiaoqi Liu, Yunfeng Yuan, Haodong Zhou, Jinhua Zhu,\* Dandan Niu and Xiuhua Liu\*



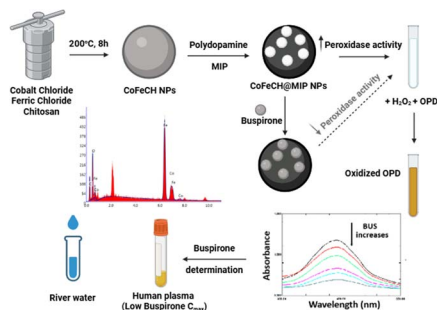
2320



### Rapid identification of *Vibrio vulnificus* by Raman spectroscopy

Mya M. Hlaing,\* Mingyu Han,\* Michelle Dunn, Paul R. Stoddart and Sally L. McArthur

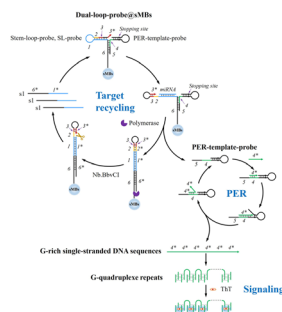
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### Rational design of a chitosan-coated cobalt ferrite nanozyme coupled with a molecularly imprinted polymer for trace analysis of buspirone in complex matrices: application in spiked human plasma and environmental water samples

Veronia S. Nazim, Ghada M. El-Sayed, Sawsan M. Amer and Ahmed H. Nadim\*

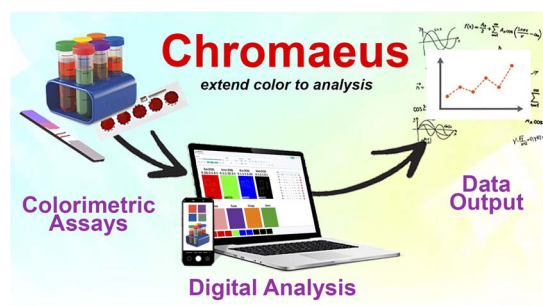
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### A self-priming dual-hairpin probe-mediated primer exchange reaction for label-free fluorescence detection of microRNA in Alzheimer's disease

Zhiqiang Liu, Zhaoxia Zang, Dawei Li and Shanshan Wu\*

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### Chromaeus: a browser-based analytical platform for quantitative colorimetric measurement in digital chemistry applications

Hichem Moulahoum\* and Faezeh Ghorbanizamani\*



## CORRECTION

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**Correction: Surface-enhanced confocal Raman microscopy to characterize esophageal cancer cell-derived extracellular vesicles and maternal cells**

Qianjin Liu, Mengdong Liu, Wenjing Lu, Han Li, Zixuan Ma, Jingwei Xiong\* and Ping Zhang\*

