### **Analytical Methods**

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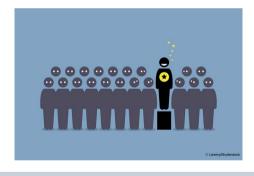
#### Cover

See Ashish Kalkal, Gopinath Packirisamy et al., pp. 4938–4950. Image reproduced by permission of Manali Choramle, Damini Verma, Ashish Kalkal, Rangadhar Pradhan, Avdhesh Kumar Rai, and Gopinath Packirisamy from Anal. Methods, 2024, 16, 4938.

### **EDITORIAL**

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### Outstanding Reviewers for *Analytical Methods* in 2023

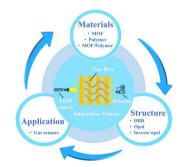


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### Photonic crystal gas sensors based on metal—organic frameworks and polymers

Jianan Wei, Zhihao Yi, Liu Yang, Ling Zhang, Junchao Yang, Molin Qin\* and Shuya Cao\*







# Environmental Science: Atmospheres

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Fundamental questions Elemental answers

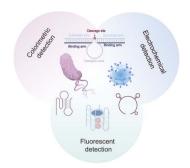


### **CRITICAL REVIEWS**

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### Recent progress on DNAzyme-based biosensors for pathogen detection

Xingxing Liu, Wenxu Yuan and Heng Xiao\*

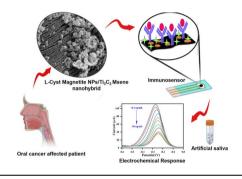


### **PAPERS**

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L-Cysteine functionalized magnetite nanoparticle adorned Ti<sub>3</sub>C<sub>2</sub>-MXene nanohybrid based screen printed immunosensor for oral cancer biomarker detection

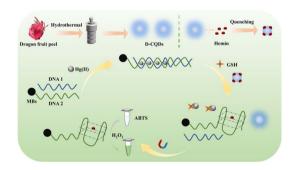
Manali Choramle, Damini Verma, Ashish Kalkal,\* Rangadhar Pradhan, Avdhesh Kumar Rai and Gopinath Packirisamy\*



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Detection of GSH with a dual-mode biosensor based on carbon quantum dots prepared from dragon fruit peel and the T-Hg(II)-T mismatch

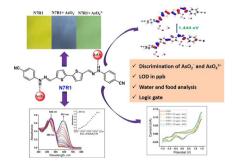
Weigin Zhao, Ruichen Zhai, Qianxiao Chen, Chun Huang, Haojia Li, Youyu Zhu, Yingfeng Duan and Jie Gao\*



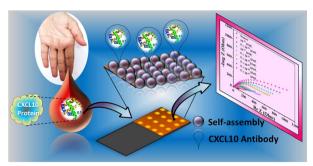
#### 4960

Colorimetric differentiation of arsenite and arsenate anions using a bithiophene sensor with two binding sites: DFT studies and application in food and water samples

Nagaraj K, A. Nityananda Shetty and Darshak R. Trivedi\*



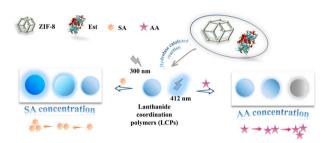
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### Early diagnosis of autoimmune diseases through electrochemical biosensing using a modified plastic chip electrode

Kinjal B. Patel, Sunil Luhar and Divesh N. Srivastava\*

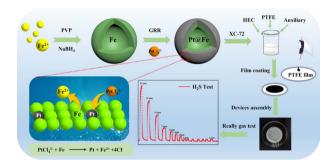
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# Selective fluorescence detection of acetylsalicylic acid, succinic acid and ascorbic acid based on a responsive lanthanide metal fluorescent coordination polymer

Guo-Ying Chen, Mao-Ling Luo, Li Chen, Jia-Li Wang, Tong-Qing Chai, Dan Wang\* and Feng-Qing Yang\*

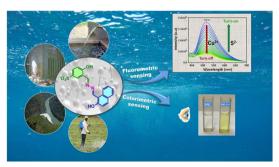
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### An electrochemical H<sub>2</sub>S sensor based on the screen printing Fe@Pt/C/PTFE sensing electrode

Dandan Liu, Xukun Deng, Chunhui Du, Lu Zheng, Yanting Guo, Yanmei Cheng and Guangming Nie\*

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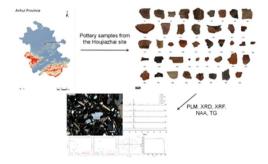
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Suvojit Roy, Prosenjit Choudhury and Bhaskar Biswas\*

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Archaeometric characterization of pottery from the Houjiazhai site (ca. 7.3-5.7 ka BP), Anhui Province, China

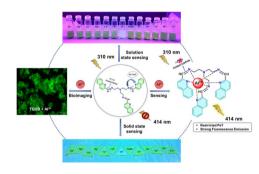
Fei Qi, Jinjiao Qin, Guofeng Wei\* and Xuhang Kan



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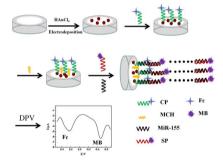
Nidhi Goswami, Sudhanshu Naithani, Tapas Goswami, Pankaj Kumar,\* Pramod Kumar\* and Sushil Kumar\*



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Ratiometric electrochemical biosensor based on hybridization chain reaction signal amplification for sensitive microRNA-155 detection

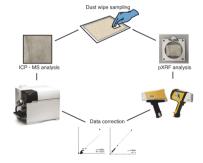
Yan Ma, Mengyao Li and Yuzhong Zhang\*



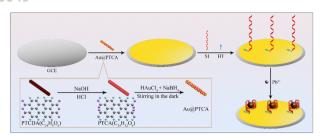
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Portable X-ray fluorescence spectrometry: a costeffective method for analysing trace metals in deposited dust

Carlos Ibañez-Del Rivero, Cassandra A. Wheeler, Kara L. Fry and Mark Patrick Taylor\*



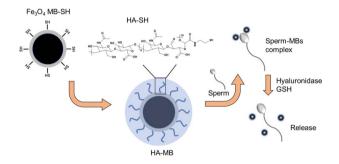
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# Photoelectrochemical analysis of Pb<sup>2+</sup> based on Au@PTCA Schottky junction with Pb<sup>2+</sup>-G quadruplex structure

Mengjie Li,\* Guohao Shen, You Zhou, Yang Chen, Liping Jia, Xiang Li and Feng Zhang\*

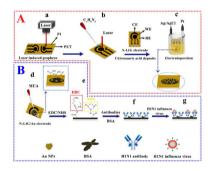
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# Selection of functional sperm by using hyaluronic acid modified magnetic microbeads and an electromagnetic manipulation system

Jing Fan,\* Kexin Chen, Yanjun Cheng, Yanqing Kong, Huakun Zhang, Zhengzhong Wu, Chuan Lei, Chunrong Qin and Xuemei Li\*

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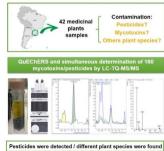


## A label-free H1N1 influenza virus immunosensor based on an N-LIG/Au laser induced graphene microelectrode

Yuchen Zhou, Wanchun Chen, Guangyuan Wang, Zhenfeng Lei, Mei Zhang\* and Yanxia Li\*

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### 5112

Removal and detection of phenols through an SPE-HPLC method using microporous organic networks as adsorbent

Azam Ali, Huipeng Sun, Syed Faheem Askari Rizvi, Ding Nana and Haixia Zhang\*

