

# Analytical Methods

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## IN THIS ISSUE

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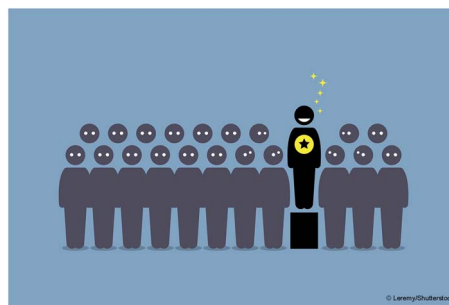
### Cover

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## EDITORIAL

5545

### Outstanding Reviewers for *Analytical Methods* in 2024

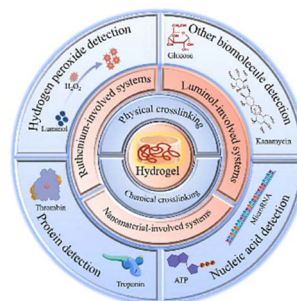


## MINIREVIEWS

5546

### Hydrogel-assisted chemiluminescence and electrochemiluminescence systems for bioanalytical applications

Weiyan Liang, Rongxian Huang, Qiguang Li, Yaru Liang\* and Xu Teng\*



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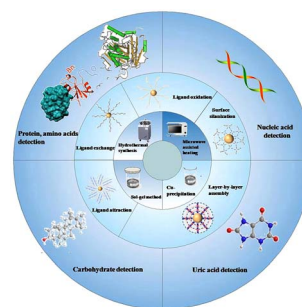


## MINIREVIEWS

5563

## Recent advances in upconversion nanoparticles for biomolecule detection: a review

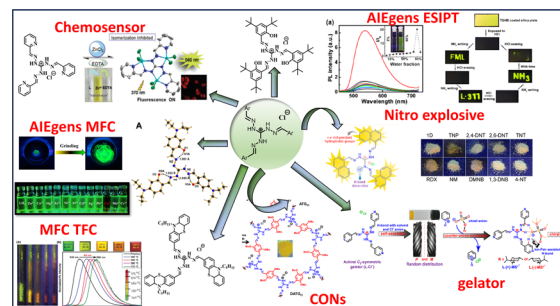
Shuoshuo Cheng, Bin Huang, Kangqiang Lu, Jinhui Li, Herui Wen and Jialin Zhang\*



5579

## Recent advances in small-molecule fluorescent probes bearing a triaminoguanidinium unit and their sensing, bio-imaging and multifunctional applications

Balamurugan Tharmalingam\*

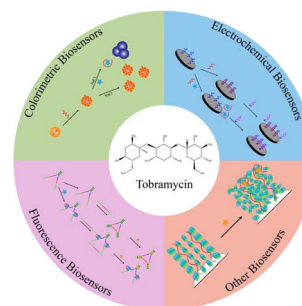


## CRITICAL REVIEWS

5605

## Aptamer-based biosensors for tobramycin

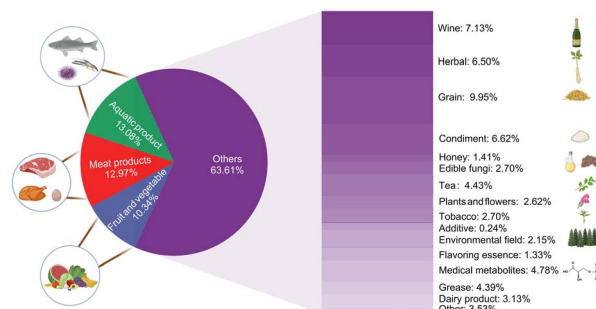
Jizhao Zhang and Qiang Zhao\*



5621

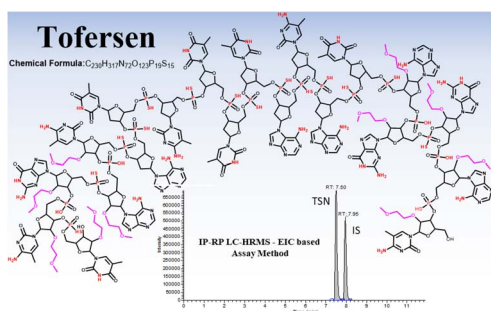
## Advancements in gas chromatography-ion mobility spectrometry for analysing natural medicines

Yanan Xu, Ruiren Li, Lequn Zhang, Xueyuan Bai\* and Wei Zhang\*



## COMMUNICATION

5636

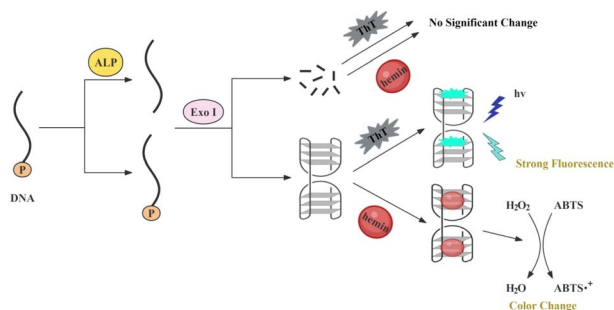


### Development of an assay method for tofersen using IPRP-LC-HRMS with an extracting ion chromatogram processing approach

Anuradha A. Hargude, Vijay S. Bhalekar and Ravi P. Shah\*

## PAPERS

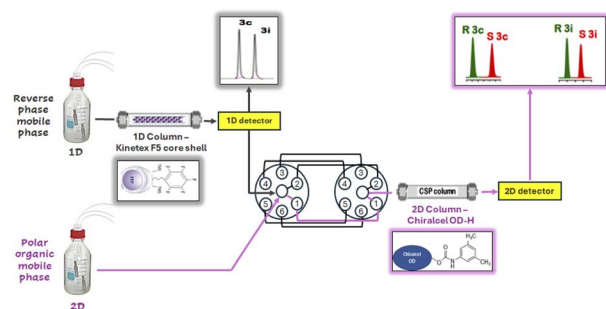
5644



### A dual-mode detection strategy for alkaline phosphatase activity based on dimeric G-quadruplex

Yangfan Chen, Xi Zhou, Hailun He, Changbei Ma\* and Dejian Yuan\*

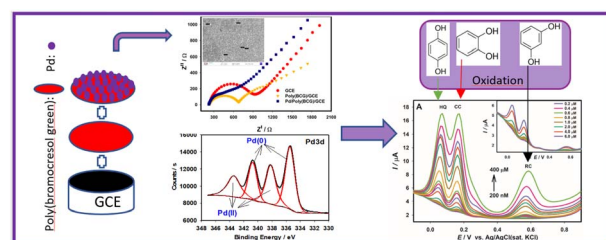
5650



### Application of 2D-liquid chromatography for the separation of a mixture of isomeric and structurally related azatryptophan derivatives

Parinita Shaw, Pandidurai Sekar, Balasaheb Chavan,\* Sharad Duche,\* Arvind Mathur and Amrita Roy

5662



### Simultaneous and sensitive determination of hydroquinone, catechol, and resorcinol with a palladium nanoparticles/poly(bromocresol green) modified glassy carbon electrode

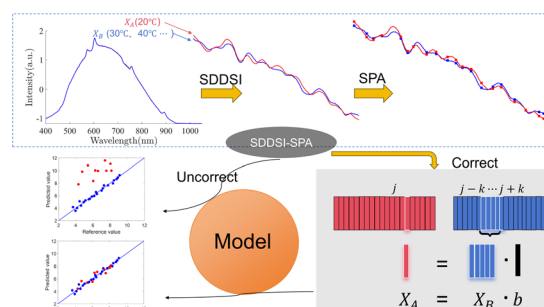
Çağrı Ceylan Koçak\*



5672

## A stable variable selection method based on SDDSI-SPA for temperature calibration of Vis-NIR spectroscopy in water pH monitoring

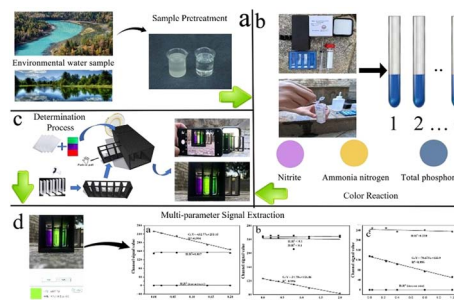
Xiaojian Hu, Lina Li\* and Hanjun Su



5683

## Real-time smartphone-based multi-parameter detection of nitrite, ammonia nitrogen, and total phosphorus in water

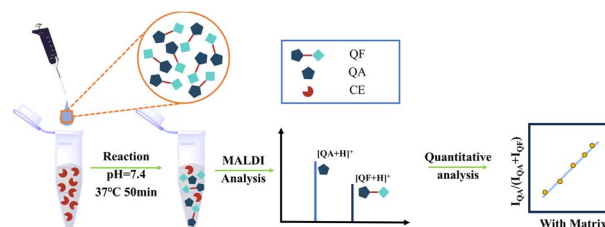
Hao-Yu Zhang, Yan Zhang, Dengni Lai,\* Li-Qun Chen, Le-Qian Zhou, Chang-le Tao, Zhou Fang, Rui-Rui Zhu, Wen-Qi Long, Jun-Wu Liu, Ying-Chun Fang, Jia Zhao, Zhi-Bin Wu, Lin Luo and Yuan Yang\*



5697

## A rationally designed MALDI-TOF MS probe for rapid quantitative analysis of carboxylesterase activity

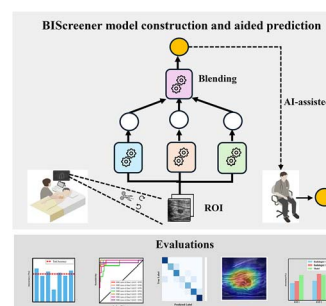
Jiarui Li, Shuai Tang, Hao Wang\* and Xinhua Guo\*



5704

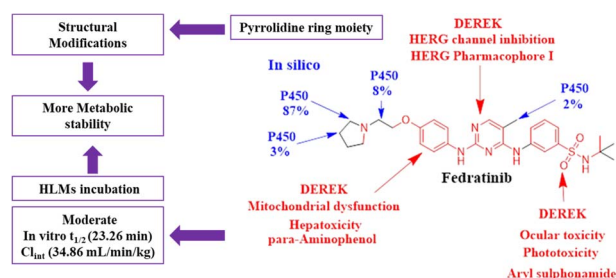
## BIScreener: enhancing breast cancer ultrasound diagnosis through integrated deep learning with interpretability

Yao Chen, Peiling Wang, Jing Ouyang, Miduo Tan, Libo Nie, Yibo Zhang\* and Tong Wang\*





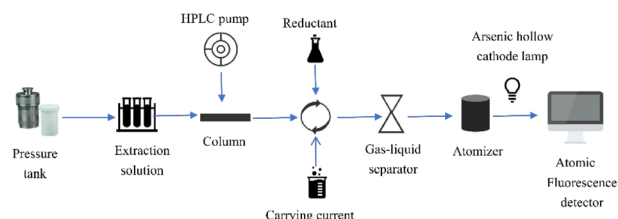
5714



### Validated green ultra-fast UPLC-MS/MS method for the quantification of fedratinib in an HLM matrix: application to *in vitro* and *in silico* metabolic stability studies

Mohamed W. Attwa,\* Ali S. Abdelhameed and Adnan A. Kadi

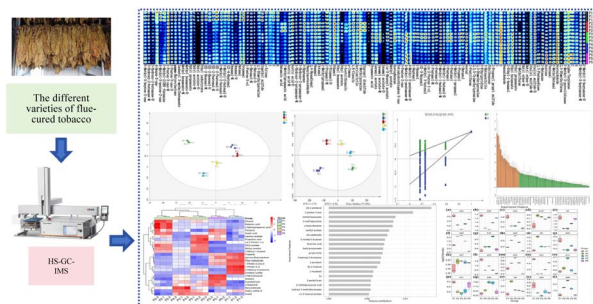
5726



### Quantification of four arsenic species in dried seafood *via* pressure tank-assisted extraction with HPLC-AFS

Caijuan Ma,\* Peipei Ouyang, Qianqing Zheng and Fubao Qiu

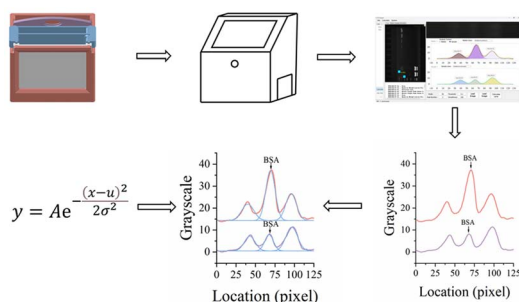
5736



### Deciphering the differences in aroma components of tobacco from different origins based on HS-GC-IMS and multivariate statistical analysis

Suxuan Li, Ningyang Mao, Cong Chen, Hui Zhao, Xiaoyu Chen, Liusheng Wang, Fuyun Cui, Wenning Feng\* and Zhiyong Wu\*

5749



### Protein quantification in complex samples using gel electrophoresis with online intrinsic fluorescence imaging and Gaussian fitting arithmetic

Xinke Zhai, Yiren Cao, Youli Tian, Ke-er Chen, Zixian Yu, Qiang Zhang, Chengxi Cao\* and Xu Xu\*

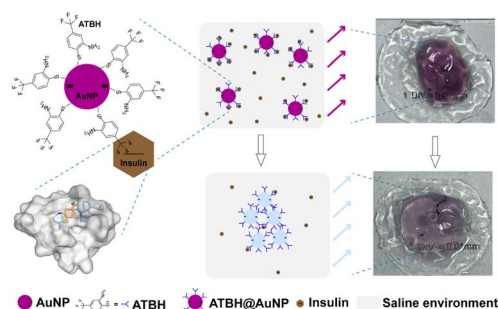


## PAPERS

5759

### A novel ATBH-modified gold nanoparticle for colorimetric detection and release monitoring of insulin across a wide concentration range

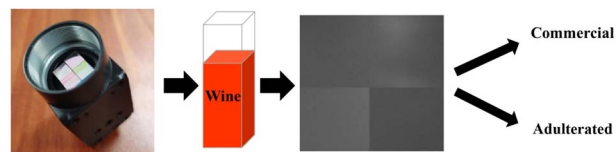
Xiaojie Dou, Wei Qiu and Xiang Chen\*



5774

### An innovative multispectral sensor for rapid wine adulteration detection using wavelength selection algorithms

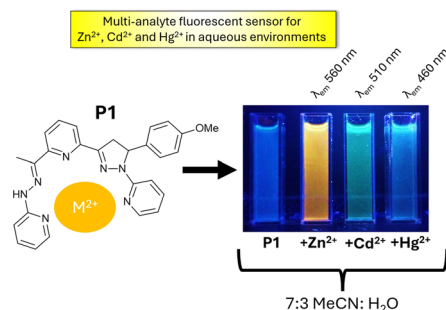
Chengbo Yang,\* Jingjun Wu,\* Zhouqing Qian and Zhiliang Zhao



5782

### First-in-class hydrazone–pyrazoline sensors for selective detection of $\text{Zn}^{2+}$ , $\text{Cd}^{2+}$ , and $\text{Hg}^{2+}$ in aqueous environments

Alexander Ciupa\*



5788

### Selenium and organic- and inorganic-Hg in stir-fried mushrooms

Jerzy Falandysz,\* Yuanzhong Wang, Małgorzata Rutkowska, Anetta Hanć and Alwyn R. Fernandes

*Boletus bainiugan*Health  
Benefit  
Value<sub>Se</sub>:37  
(raw)77  
(stir-fried)

## CORRECTION

5795

**Correction: Real-time kinetic analysis and detection of glycated hemoglobin A1c using a quartz crystal microbalance-based aptasensor**

Yossawadee Sriondee, Pasara Vijitvarasan, Arunothai Rattanachata, Hideki Nakajima, Sukunya Oaew\* and Sarawut Cheunkar\*

