

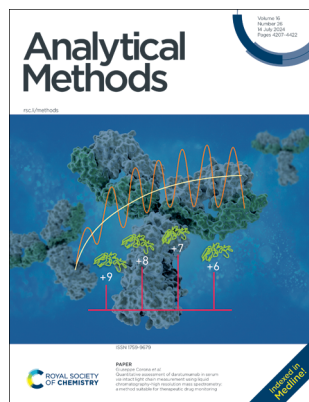
# Analytical Methods

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## IN THIS ISSUE

ISSN 1759-9679 CODEN AMNCT 16(26) 4207–4422 (2024)



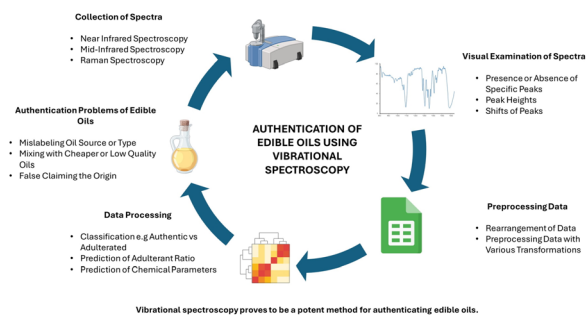
**Cover**  
See Giuseppe Corona *et al.*, pp. 4240–4246. Image reproduced by permission of Giuseppe Corona from *Anal. Methods*, 2024, 16, 4240.

## CRITICAL REVIEW

4216

### Trends in authentication of edible oils using vibrational spectroscopic techniques

Banu Ozen,\* Cagri Cavdaroglu and Figen Tokatli

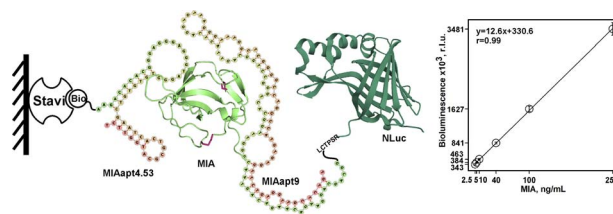


## COMMUNICATION

4234

### Bioluminescent aptamer-based microassay for detection of melanoma inhibitory activity protein (MIA)

Eugenia E. Bashmakova,\* Alexander N. Kudryavtsev, Alexey E. Tupikin, Marsel R. Kabilov, Aleksey E. Sokolov and Ludmila A. Frank



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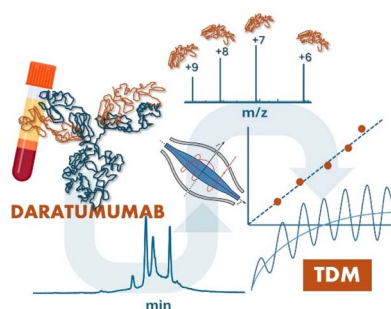
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Fundamental questions  
Elemental answers

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### Quantitative assessment of daratumumab in serum via intact light chain measurement using liquid chromatography-high resolution mass spectrometry: a method suitable for therapeutic drug monitoring

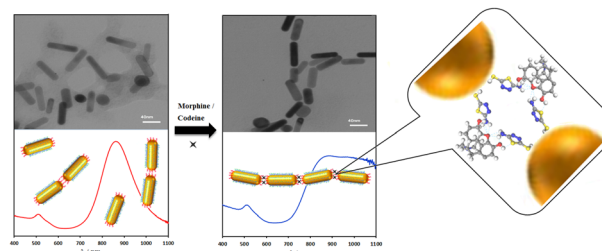
Giovanni Canil, Gianmaria Miolo, Mariapaola Simula, Maurizio Rupolo, Agostino Steffan and Giuseppe Corona\*



4247

### A near-infrared plasmonic biosensor for detection of morphine and codeine in biological samples based on the end-to-end assembly of modified gold nanorods

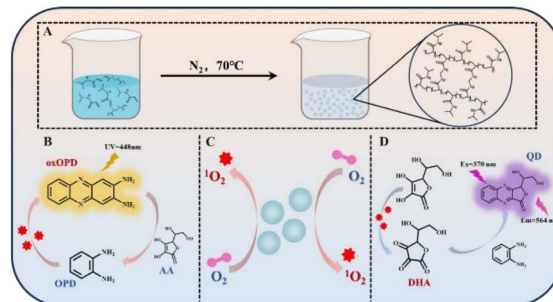
Naimeh Mohseni and Morteza Bahram\*



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### The preparation and dual-mode detection of ascorbic acid based on poly(*N*-isopropylacrylamide) nanogel with oxidase-like activity

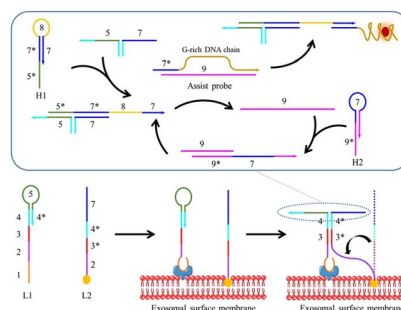
Yuhan Zhang, Qinze Liu,\* Qian Lu,\* Zhi-zhou Yang, Sheng Gao and Xian Zhang\*



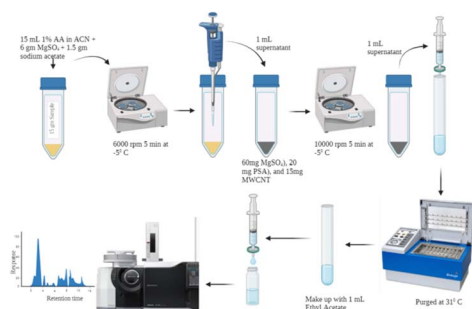
4262

### A proximity ligation hybridization triggered structure-switching based signal amplification strategy for sensitive and accurate exosome detection

Wendi Yang, Jing Yang, Na Zhou\* and Yali Wang\*



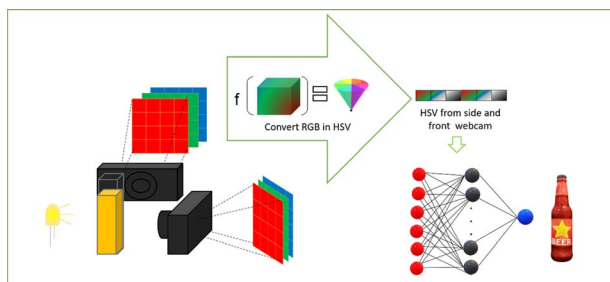
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### Multivariate optimization and validation of 200 pesticide residues in the banana matrix by GC-MS/MS

Tushar Rajaram Ahire, Rupal Rajesh Thasale, Ankita Das, Nikhil Pradip Kulkarni, Dhyan Mineshkumar Vyas and Sivaperumal Perumal\*

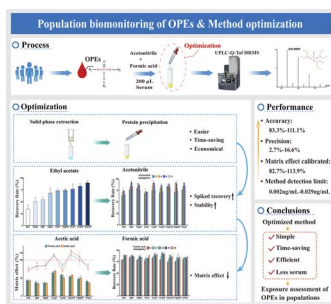
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### Computer vision with artificial intelligence for a fast, low-cost, eco-friendly and accurate prediction of beer styles and brands

João Victor de Sousa Dutra, Maiara Oliveira Salles, Ricardo Cunha Michel and Daniella Lopez Vale\*

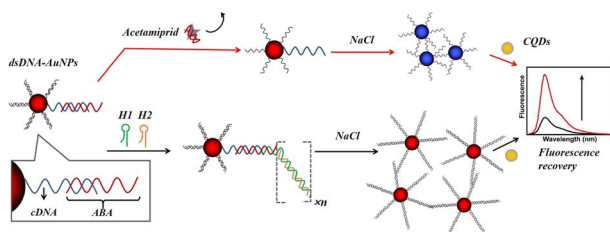
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### Organophosphate esters in human serum: a relatively simple and efficient liquid chromatography-mass spectrometry method

Zhiyuan Du, Xiaoyi Wei, Xiaohua Hu, Yijing Zhao, Guanghua Chen, Xiushuai Du, Jialing Li,\* Ming Zhan\* and Weiwei Zheng\*

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### Enhanced detection of acetamiprid via a gold nanoparticle-based colorimetric aptasensor integrated with a hybridization chain reaction

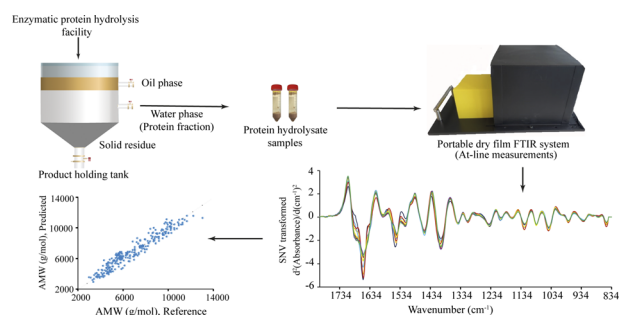
Xingyi Liu, Mingming Li, Hao Wang and Limin Yang\*



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### A portable dry film FTIR instrument for industrial food and bioprocess applications

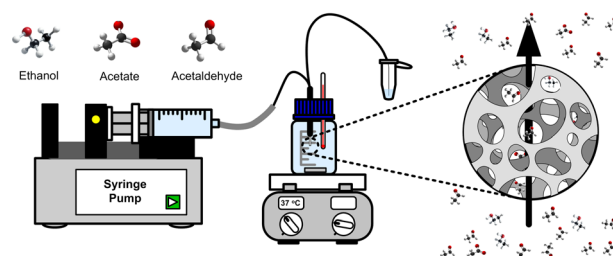
Bijay Kafle,\* Sileshi Gizachew Wubshet, Kari Anne Hestnes Bakke, Ulrike Böcker, Marion O'Farrell, Katinka Dankel, Ingrid Måge, Jon Tschudi, Dimitrios Tzimos, Nils Kristian Afseth and Tim Dunker



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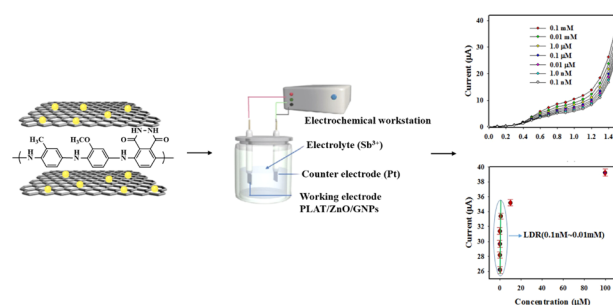
Tse-Ang Lee, Jessie Peng, Divjot Walia, Rueben Gonzales and Tanya Hutter\*



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### Development of an efficient electrochemical sensing platform based on ter-poly(luminol-*o*-anisidine-*o*-toluidine)/ZnO/GNPs nanocomposites for the detection of antimony ( $\text{Sb}^{3+}$ ) ions

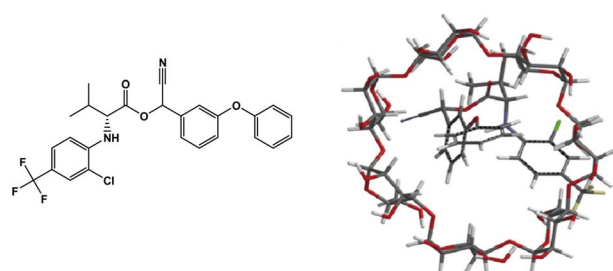
Salsabeel Al-Sodies, Abdullah M. Asiri, M. M. Alam, Khalid A. Alamry, Mohammed M. Rahman\* and Mahmoud A. Hussein\*



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### Cyclodextrin-enhanced photo-induced fluorescence of *tau*-fluvalinate, molecular modelling of inclusion complexes and determination in natural waters

El Hadji Tombé Bodian, Coumba Faye, Diène Diégane Thiaré, Ndeye Arame Diop, Pape Abdoulaye Diaw, François Delattre, Atanasse Coly and Philippe Giamarchi\*

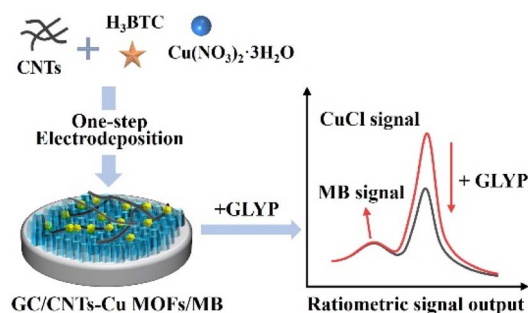




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### One-step electrodeposition of MWCNTs-Cu MOF films for the ratiometric electrochemical analysis of glyphosate

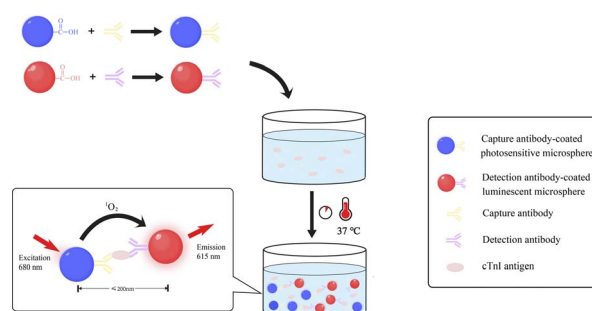
Fan Zhao,\* Dongqing Guo, Jingyue Lan and Yunxi Liu



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### Establishment of a microspheres-based homogeneous fluorescence immunoassay for the rapid detection of cardiac troponin I

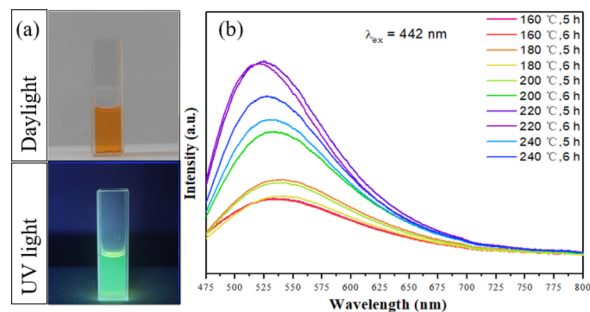
Yan Tang, Fuzhong Chen, Wei Lv, Zixuan Zhou, Yulin Fu, Yuan Qin, Xueqin Zhao,\* Junhong Wang\* and Biao Huang\*



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### Detection of sulphur(II) of carbon dots synthesized from *Gardenia* residue

Zhaoxia Li, Yuchuan Dong, Xinyi Li, Dongchun Li, Jia Dong, Panchen Wang, Shuwei Chen\* and Huiling Geng\*



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### A home-made nanoporous gold microsensor for lead(II) detection in seawater with high sensitivity and anti-interference properties

Renato Soares de Oliveira Lins, Anandhakumar Sukeri\* and Mauro Bertotti\*

