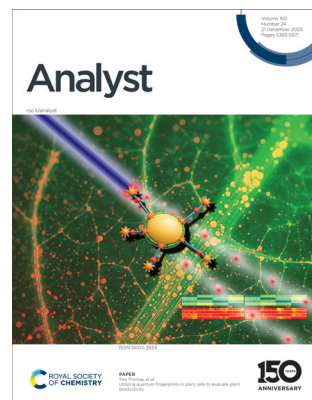


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ISSN 0003-2654 CODEN ANALAO 150(24) 5365–5571 (2025)



### Cover

See Tim Thomay *et al.*, pp. 5394–5402.

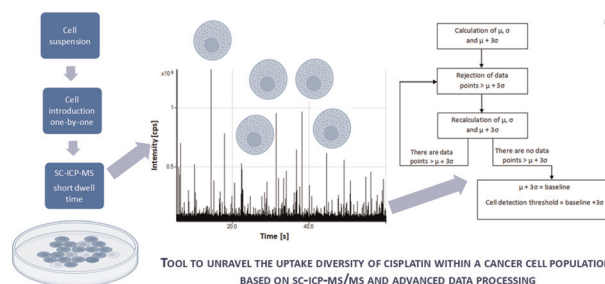
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## COMMUNICATION

5374

### Differentiation of cisplatin uptake within a population of cancer cells – how to “crack this nut” using single-cell ICP-MS

Zuzanna Szymańska, Magdalena Matczuk,\* Agnieszka Żuchowska, Paweł Romańczuk, Andrei R. Timerbaev and Maciej Jarosz

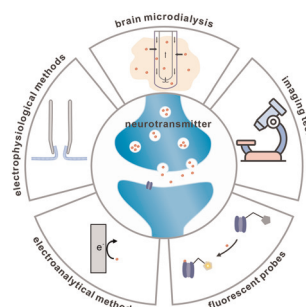


## MINIREVIEW

5379

### Research progress of technology for exocytosis detection in the nervous system

Fu-Li Zhang, Cheng-Bao Xu, Xiao-Ying Zhao, Shi-Yue Du and Jun-Ming Tang\*



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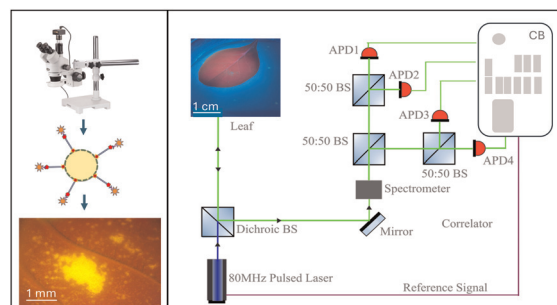
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5394

### Utilizing quantum fingerprints in plant cells to evaluate plant productivity

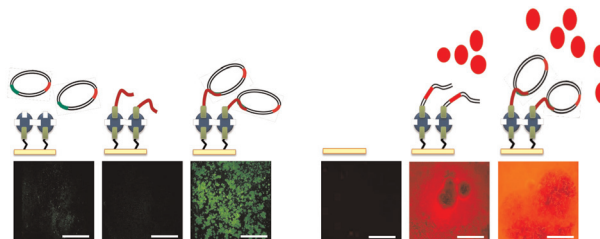
Umadini Ranasinghe, Abigail L. Stressinger, Guangpeng Xu, Yasmin Sarhan, Fred Harrington, James O. Berry and Tim Thomay\*



5403

### Enhanced protein synthesis from immobilized circular DNA via triple-helix formation

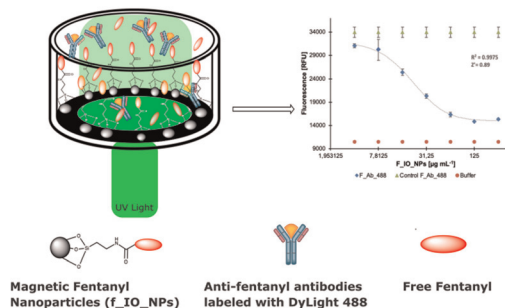
Shunsuke Takahashi,\* Kazuki Hayashi, Jun Okada, Hibiki Takashima, Koko Nakata, Masahiko Oshige\* and Shinji Katsura\*



5411

### Development of one-step magnetic assay for the detection of fentanyl

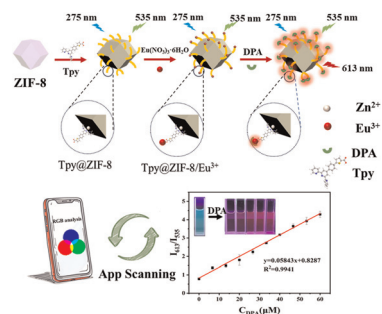
Fabiana Grillo, Elena Piletska, Ewa Moczko, César Cáceres and Sergey Piletsky\*



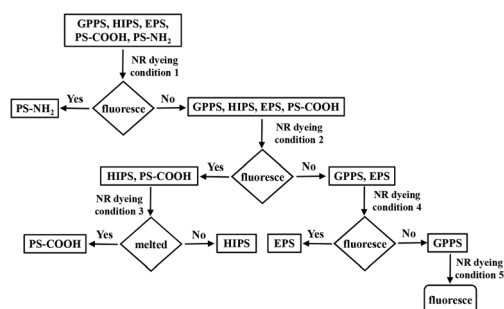
5417

### Synergistic coordination-driven ratiometric fluorescence detection of the anthrax biomarker dipicolinic acid

Junrong Wu, Qian Zhang, Xiaofeng Zhou, Jiaojiao Zhang, Liangquan Sheng, Huajie Xu,\* Fuying Hao and Zhaodi Liu\*



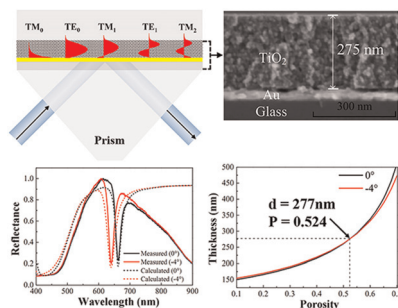
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## Differentiation of different subtypes of polystyrene microplastics using Nile red

Xiaoyan Hu, Chenfei Duan, Qiaocheng Feng, Heng Lu and Liangqia Guo\*

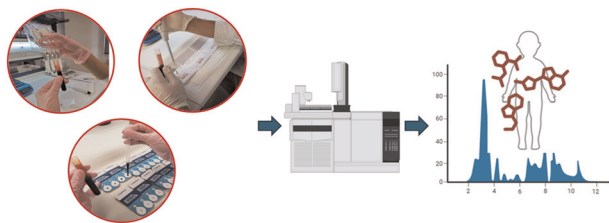
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## Nondestructive multiparameter quantification of nanoporous films by broadband SPR/PWR spectroscopy

Ziwei Liu, Xiumei Wan, Hongyi Tang and Zhi-mei Qi\*

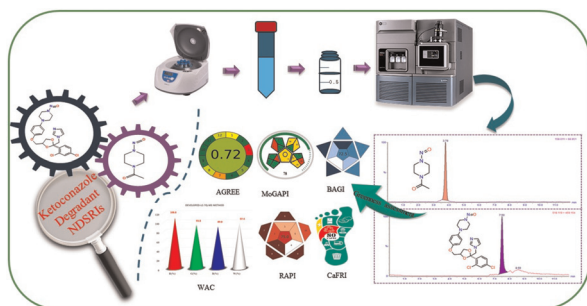
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## Toward minimally invasive metabolomics: GC-MS metabolic fingerprints of dried blood microsamples in comparison to plasma

Daniel Marques de Sá e Silva, Marlene Thaitumu, Christina Virgiliou, Alexandra Tiganouria, Fernanda Rey-Stolle, Glykeria Avgerinou, Anatoli Petridou, Vasileios Mougios, Georgios Theodoridis and Helen Gika\*

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## A sustainable and novel LC-TQ-MS/MS method for quantifying mutagenic Ketoconazole-NDSRIs aligned with green and white analytical chemistry principles

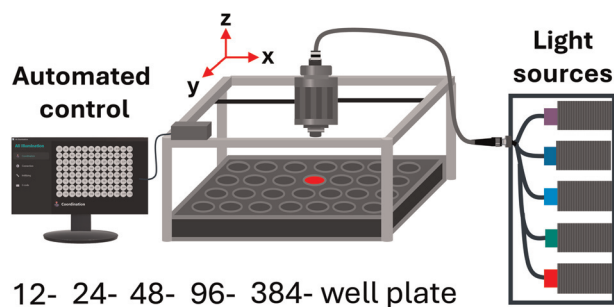
Srinivas Nakka, Vishnu Murthy Mariseti and Surendra Babu Manabolu Surya\*



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### An automated illumination system for high-throughput photopharmacology studies: a case study of ROS-sensitive Zn- and Pd-phthalocyanine-loaded liposomes

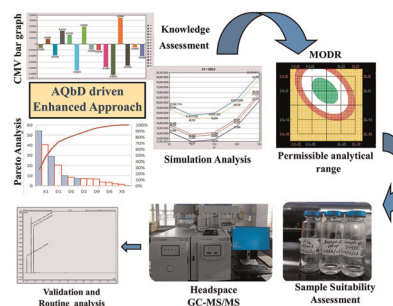
Ali Eftekhari,\* Olga Lem, Alexander Efimov, Timo Laaksonen\* and Nikita Durandin\*



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### AQbD-based headspace GC-MS/MS method development under ICH Q14 guidelines for simultaneous analysis of residual solvents in pharmaceuticals

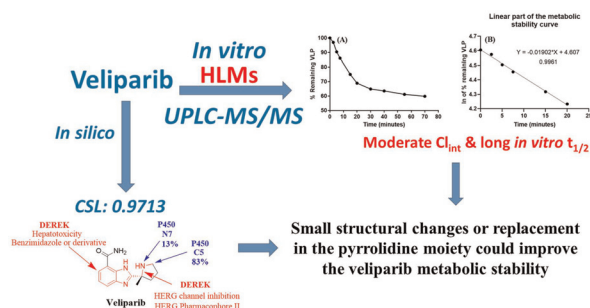
Bontha Koteswaramma, Shubham Dhiman, Kalva Bhadrappa, Anupam Jana and Ramalingam Peraman\*



5501

### Determination of veliparib metabolic stability in the human liver microsomes using a hydrophilic interaction UPLC-MS/MS quantitative method: greenness assessment with an *in silico* study for ADME, DEREK alarms and metabolic lability

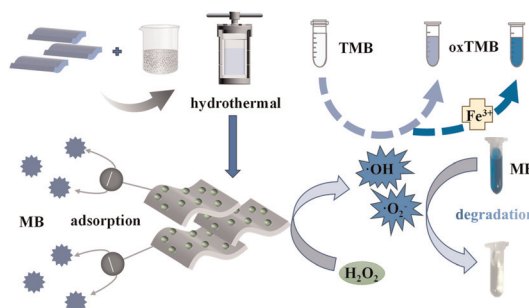
Mohamed W. Attwa,\* Ali S. Abdelhameed, Haitham AlRabiah and Adnan A. Kadi



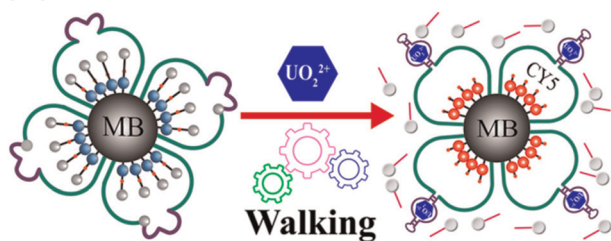
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### V-Ti<sub>3</sub>C<sub>2</sub> nanozyme with peroxidase-like activity for dye removal and the colorimetric detection of Fe<sup>3+</sup>

Feng Yang, Congying Ding, Zihui Chen, Guoqing Zhao, Lamei Zhou\* and Wanqing Yue\*



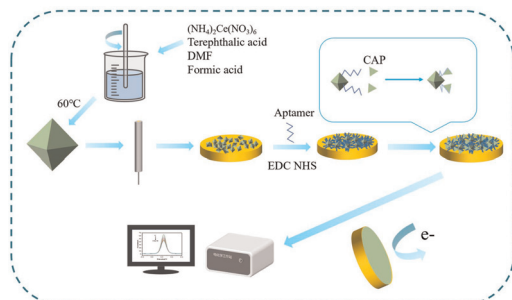
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### An enzyme-free fluorescence biosensor for $\text{UO}_2^{2+}$ detection using a four-leaf clover-shaped quadruple walker as a signal amplifier

Nan Hu,\* Yimei Guo, Ying Zeng, Weichao Zhao, Dexin Ding, Jiafeng Pan\* and Junhua Chen\*

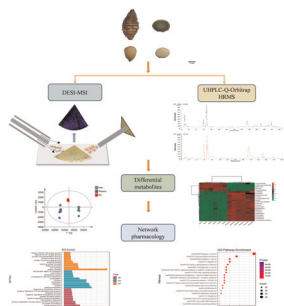
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### Octahedral Ce-MOF as an electrochemical sensor for the detection of chloramphenicol

Yuting Luo, Yiwei Sun, Haoxiang Wang, Yuyang He, Ruoyu Wang, Mengqi Lu, Yingong Wang, Xinlong Yan and Dongpo Xu\*

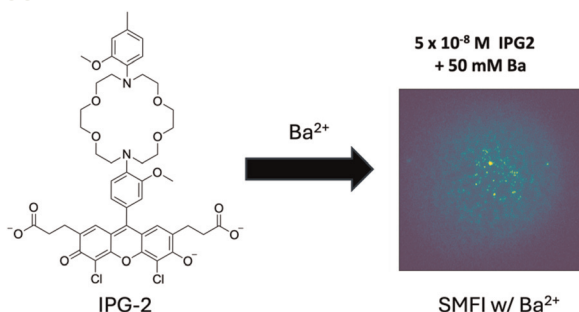
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### Spatial distribution of differential metabolites in different parts of *Curcuma phaeocaulis* Val. using ultra-high-performance liquid chromatography-quadrupole Orbitrap high-resolution mass spectrometry and desorption electrospray ionization mass spectrometry imaging

Ying Zhu, Chuyue Wu, Qinwan Huang\* and Jin Wang\*

5558



### Barium ion sensing with IPG $\text{K}^+$ molecular probes

F. W. Foss, Jr., B. J. P. Jones\* et al.



## CORRECTION

5568

**Correction: Utilizing quantum fingerprints in plant cells to evaluate plant productivity**

Umadini Ranasinghe, Abigail L. Stressinger, Guangpeng Xu, Yasmin Sarhan, Fred Harrington, James O. Berry\* and Tim Thomay\*

