

Analytical Methods

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Cover

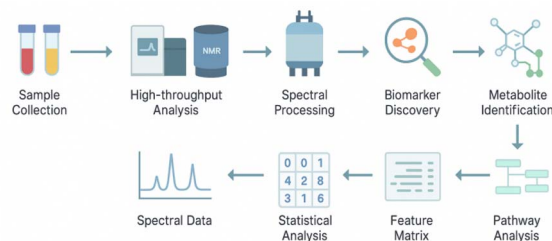
See Fiona Regan *et al.*, pp. 8877–8888. Image reproduced by permission of Fiona Regan from *Anal. Methods*, 2025, 17, 8877. Background colours were generated on Gemini (<https://gemini.google.com/>), permitted by Dublin City University.

MINIREVIEW

8847

Evaluating untargeted metabolomics pipelines for sports nutrition research: a review

Yongfu Liu, Xinghua Liu, Yuting Hu, Feng Gao, Wenjun Yu and Fan Cheng*

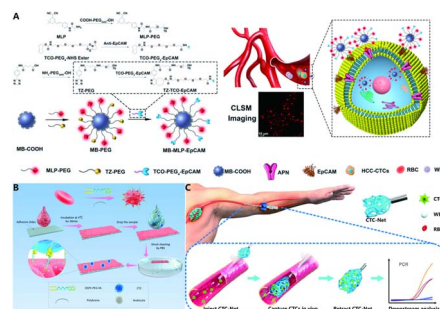


CRITICAL REVIEW

8865

Detection and indications of circulating tumor cells in hepatocellular carcinoma

Longtao Liu, Lingling Qu, Xia Wu, Zhihao Wang, Shiyan He, Zhenyu Liu, Tong Zhang, Jie Wang,* Shouye Zhao* and Jing Lin*



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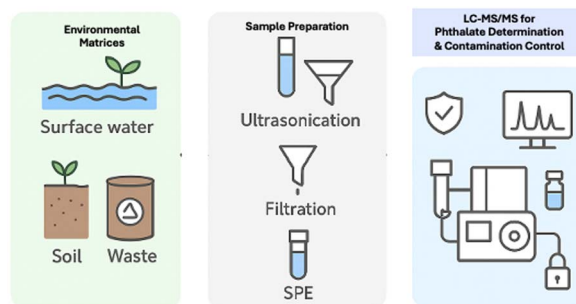
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**Fundamental questions
Elemental answers**

8877

Demonstrating the application of a liquid chromatography-mass spectrometry method for the determination of phthalate diesters in complex solid and liquid environmental samples

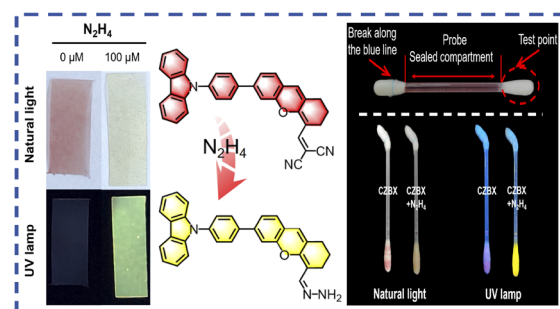
Fiona Regan,^{*} Catherine Allen and Jenny Lawler



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Carbazole-xanthene-based swab/film fluorescent sensors for on-site visual detection of hydrazine in environmental and agricultural samples

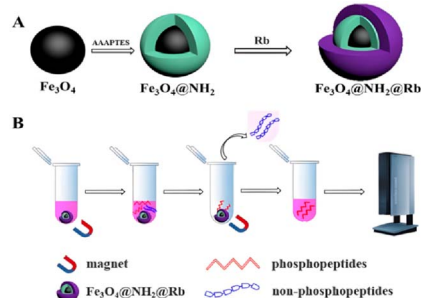
Yonghe Zhang, Fang Zeng^{*} and Shuizhu Wu^{*}



8898

Design of a novel rhodamine B based pH-responsive magnetic adsorbent and its application in phosphopeptidomics

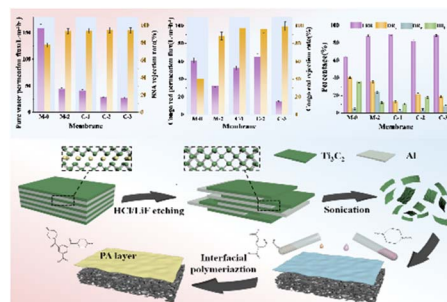
Jinfeng Zhang, Bo Hu, Huifeng Zhang, Haijiao Zheng, Shufang Yang^{*} and Qiong Jia^{*}



8905

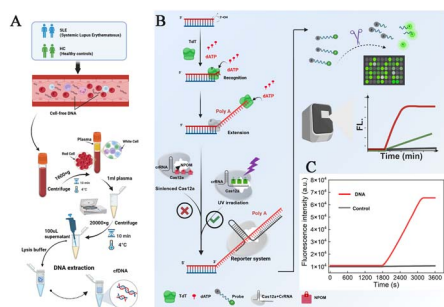
Study of multifunctional controlled separation performance of PVDF/EAA/MXene nanofiltration membranes for the treatment of dyeing wastewater

Dongju Liu, Kunlan Diao, Yu Xue and Daohai Zhang^{*}



PAPERS

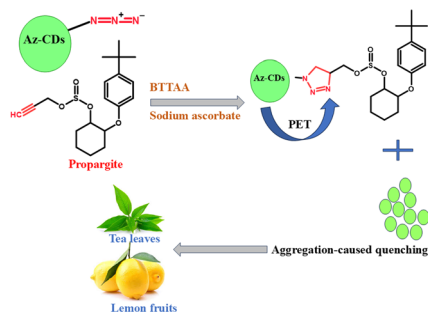
8916



Light-controlled CRISPR–Cas12a one-pot platform for ultrasensitive cell-free DNA detection in systemic lupus erythematosus diagnosis

Jing Pu, Shaolan Zhou, Wenxin Ma, Chang Liu, Le Guo, Bei Yan* and Zhenghao Huo*

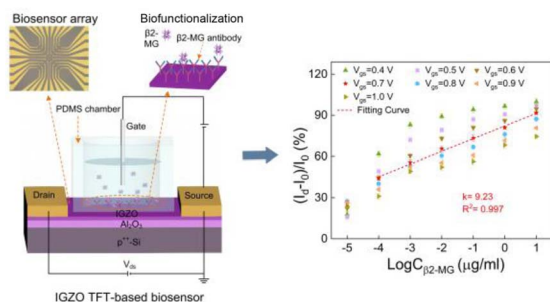
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Selective detection of terminal alkyne acaricide via click-reactive carbon dots: applications in food safety monitoring

Ramadan Ali, Khalid Alhazzani, Ahmed Z. Alanazi, James Barker, Aya M. Mostafa, Mohamed M. El-Wakil, Mohamed N. Goda and Al-Montaser Bellah H. Ali*

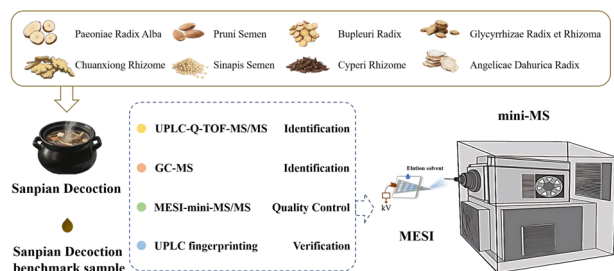
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IGZO thin-film transistor biosensor array for highly sensitive detection of β 2-microglobulin

Xinyue Zhang, Xiaohong Wen, Xinle Han, Yongliang Deng, Xiangmei Dong, Xuefeng Zhao and Xiumin Gao*

8943



A multi-component quality control strategy for Sanpian Decoction using MESI-mini-MS/MS: rapid on-site evaluation of complex traditional Chinese medicine formulas

Xuan Gu, Jiayan Lin, Xiuhuan Guo, Shuaidan Zhao, Liping Li, Xiumei Cui, Yanwu Cheng* and Mei Zhang*

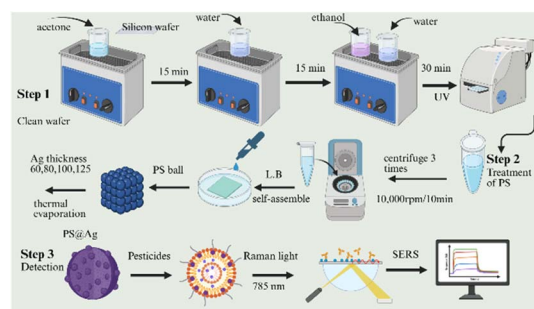


PAPERS

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Simultaneous detection of multiple pesticide residues in tobacco leaves using a PS@Ag SERS substrate and portable Raman spectrometer

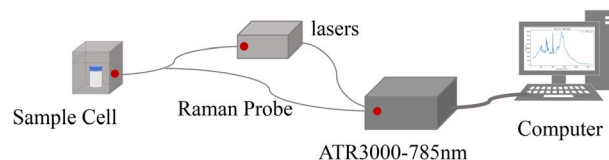
Junaid Younus, Qi Wang, Weifan Pan, Jimin Shao, Xiaowei Guo* and Xue Yang*



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Light fuel classification based on Raman spectroscopy and region-adaptive convolutional neural networks

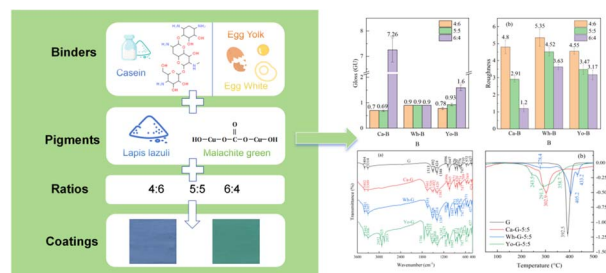
Bin Tang,* Yongjiao Yuan, Hua Yang, Wenjuan Zhang, Zihang Xia, Mi Zhou and Tao Song



8979

Multi-analytical characterization of the physicochemical stability of proteinaceous binders in traditional painted coatings

Tong Chen, Tongtong Li,* Jianing Li and Xinyou Liu*



8991

A green HPLC-UV method for the simultaneous analysis of enalapril, enalaprilat and diketopiperazine in pharmaceutical formulations

Matheus Miranda Fracetti,* Paula Rocha Chellini and Marcone Augusto Leal de Oliveira

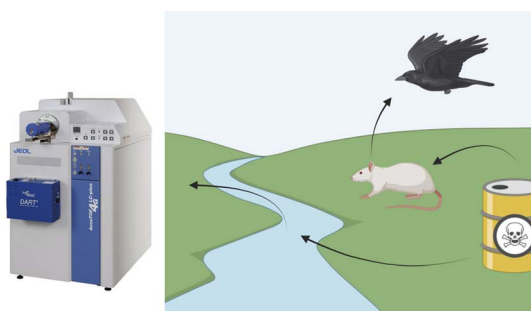
Method 1
ACN:phosphate buffer 25:75
v/v and flow 1.8 mL min⁻¹



Method 3
EtOH: phosphate buffer
30:70 v/v and flow 1.8 mL min⁻¹



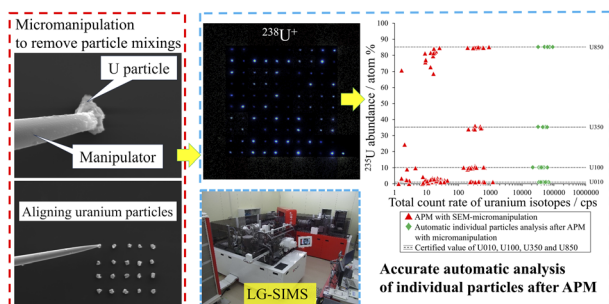
9000



Detection of anticoagulant rodenticides by direct analysis in real time time-of-flight mass spectrometry: novel screening techniques and rapid semi-quantitative determination

Trista Yu, Arun S. Moorthy,* Pamela Brunswick, Bianca Rosary, Robert Cody, Marcus Gian, Vanessa Dang, Honoria Kwok, Jeffrey Yan and Dayue Shang*

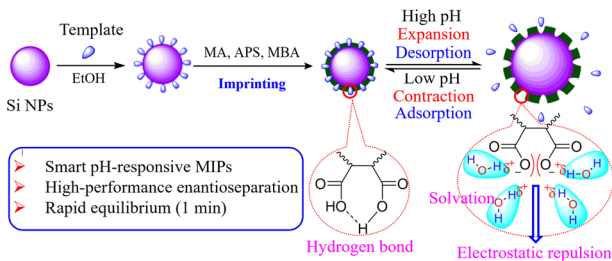
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Accurate automatic analysis of individual uranium particles to improve the timeliness of safeguards environmental sample analysis using an LG-SIMS instrument and SEM-micromanipulation

Ryohei Tomita,* Jumpei Tomita, Takumi Yomogida, Daisuke Suzuki, Yutaka Miyamoto and Kenichiro Yasuda

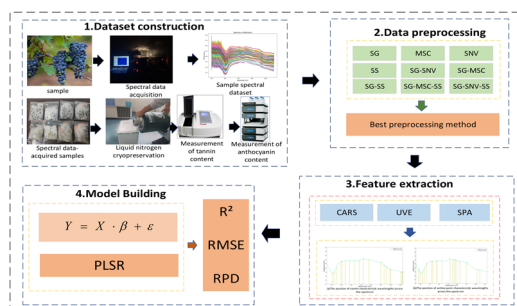
9026



pH-Switchable molecularly imprinted polymers for enantioselective recognition and separation of (S)-amlodipine besylate from its chiral counterpart

Hang Gong,* Xiaoli Ouyang, Feng Chen, Chunyan Chen,* Bin Yang, Junjie Du and Changqun Cai*

9038



Construction of prediction models for phenolic compounds in Cabernet Sauvignon grapes based on visible/near-infrared spectroscopy

Shaorui Wang, Bo Li, Xuedan Zhang, Yanling Li, Pingzeng Liu, Ke Zhu* and Yan Zhang*

