

Analytical Methods

rsc.li/methods

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1759-9679 CODEN AMNECT 16(3) 325–476 (2024)



Cover

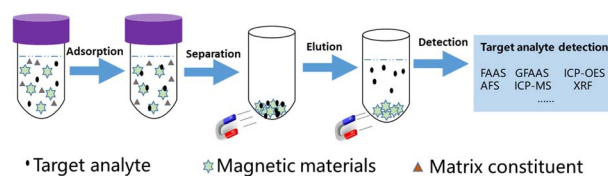
See Hong Zhang and Lunzhao Yi *et al.*, pp. 371–377. Image reproduced by permission of Hong Zhang and Lunzhao Yi from *Anal. Methods*, 2024, **16**, 371.

CRITICAL REVIEWS

333

The application progress of magnetic solid-phase extraction for heavy metal analysis in food: a mini review

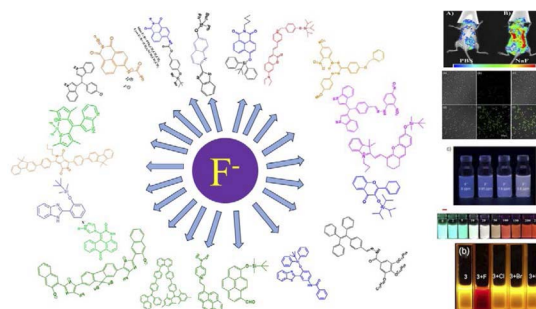
Ming-Ming Zhao, Hai-Zhi Wu,^{*} Xiao-Ke Deng, Rong-Nan Yi and Yuan Yang^{*}



344

Ratiometric fluorescence-based and chromogenic sensors for the detection of fluoride ions and their application in real samples

Supriya Dutta and Animesh Sahana^{*}



RSC Sustainability

GOLD
OPEN
ACCESS

Dedicated to sustainable
chemistry and new solutions

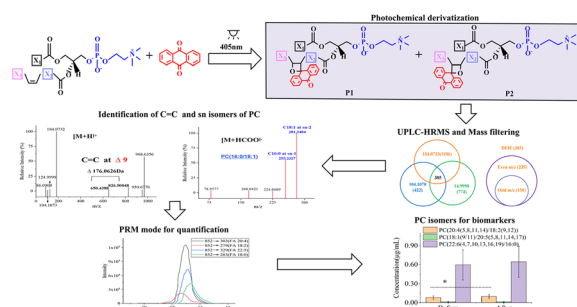
For an open, green and inclusive future

rsc.li/RSCSus

Fundamental questions
Elemental answers

Huimin Li, Qian Xiong, Hao Wu, Yunmei Zhang,
Ke Zhuang, Yan Zhao, Hong Zhang* and Lunzhao Yi*

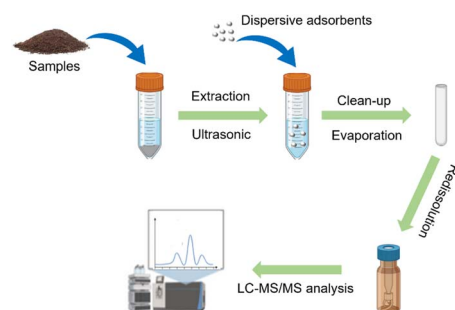
Huimin Li, Qian Xiong, Hao Wu, Yunmei Zhang,
Ke Zhuang, Yan Zhao, Hong Zhang* and Lunzhao Yi*



378

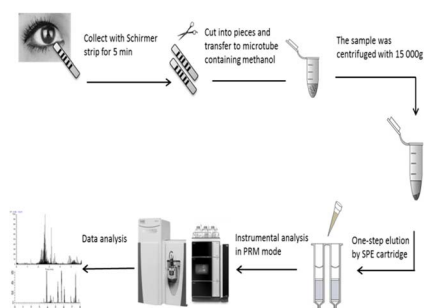
Chen Liu, YouMin Sun, ZhaoTing Zhou, Jing Fan
and JinPeng Yuan*

Chen Liu, YouMin Sun, ZhaoTing Zhou, Jing Fan
and JinPeng Yuan*



Trace analysis of steroid hormones in tear films *via* liquid chromatography-high resolution mass spectrometry

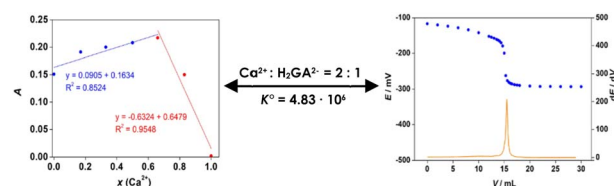
Zhu Huang*



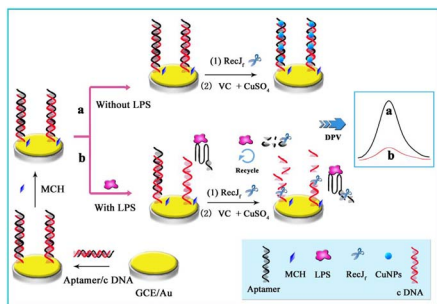
391

Dominik Goman, Anamarija Stanković, Olivera Galović,
Branka Njegić Džakula, Jasminka Kontrec
and Martina Medvidović-Kosanović*

Dominik Goman, Anamarija Stanković, Olivera Galović,
Branka Njegić Džakula, Jasminka Kontrec
and Martina Medvidović-Kosanović*



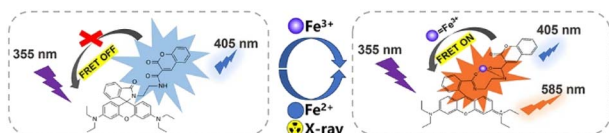
396



Electrochemical aptasensor based on DNA-templated copper nanoparticles and RecJf exonuclease-assisted target recycling for lipopolysaccharide detection

Shunbi Xie,^{*} Shuting Liang, Liangliang Tian, Ge Ding, Meiting He, Haojie Li and Heshan Yang^{*}

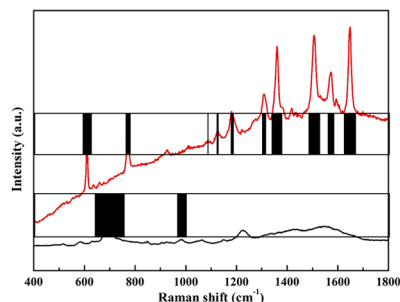
403



A rhodamine coumarin-derived fluorescence probe that selectively detects Fe³⁺ and measures radiation doses

Danni Qin, Yaqi Han, Hao Jiang and Liang Hu^{*}

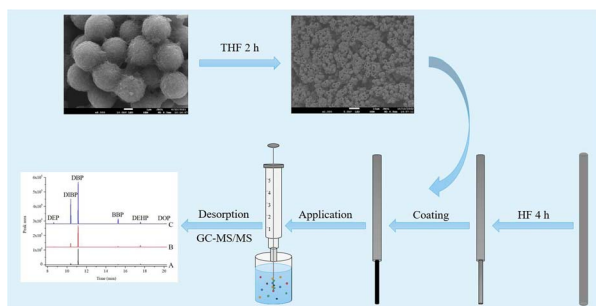
411



Surface-enhanced Raman scattering using flower-like Ag/ZnO as active substrates for the label-free and sensitive detection of rhodamine 6G and melamine

Xiaohui Ren, Xinyue Song, Lili Wang, Wenjie Ma^{*} and Xin Li^{*}

420



Facile fabrication of carbon nanotube hollow microspheres as a fiber coating for ultrasensitive solid-phase microextraction of phthalic acid esters in tea beverages

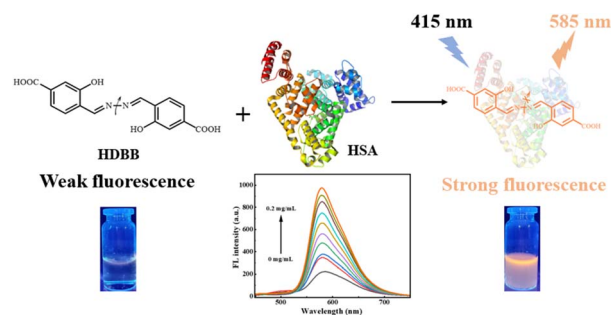
Xin-Li Song,^{*} Yu-Qing Liu, Fei-Yan He, Yi-Yao Wu, Dong-Dong Wang, Hui Lv, Xue-Shan Wang, Zhong-Guan Sun, Can-Ling Cheng, Ke-Chao Liao^{*} and Yue Chen



427

An HDBB-based fluorescent probe for the sensitive detection of human serum albumin

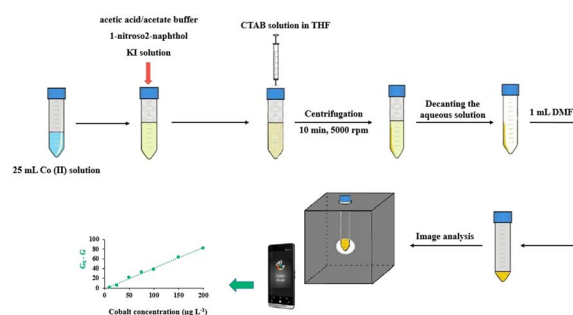
Liwen Wang, Tengfei Wang, Guang Wu and Dating Tian*



434

Dispersive surfactant micelle-mediated extraction combined with a smartphone-based portable colorimeter: a cost-effective and simple approach for cobalt determination

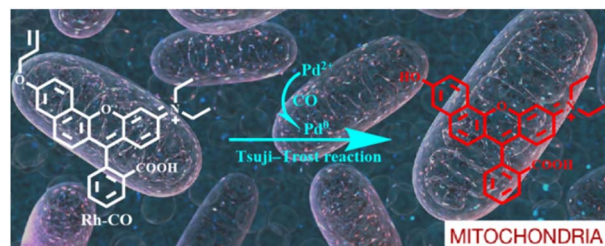
Leila Khoshmaram* and Elahe Bagherian



442

A long-wavelength mitochondria-targeted CO fluorescent probe for living cells and zebrafish imaging

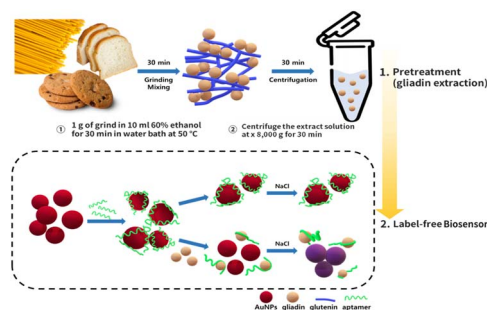
Xiaodi Rong, Caiyun Liu, Mingzhu Li, Jiafan Shi, Miaohui Yu, Wenlong Sheng,* Baocun Zhu* and Zhongpeng Wang*



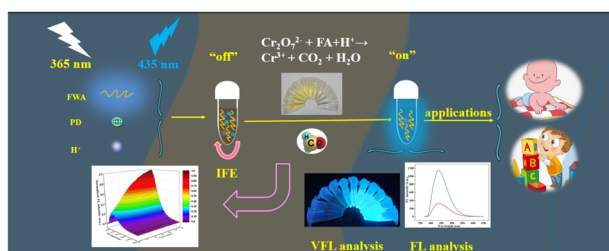
449

A label-free aptamer-based colorimetric biosensor for rapid gliadin detection in foods: a focus on pasta, bread and cookies

Seung Hwan Ham, Eunghee Kim, Hyebin Han, Min Gyu Lee, Young Jin Choi* and Jungwoo Hahn*



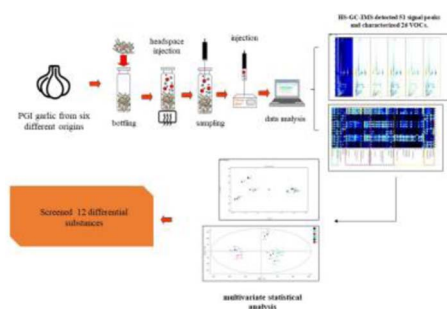
458



An internal filtration effect-based "off–on" probe for fluorescent and visual sensing of formaldehyde

Wanli Fan,^{*} Shiwei Yang,^{*} Yan Kou, Xiao Wang, Qiling Zhang and Huijing Tan

465



Geographical differentiation of garlic based on HS-GC-IMS combined with multivariate statistical analysis

Ya-Wei Cui, Ling-Xiao Liu, Le-Yi Zhang, Jun Liu, Cui-Juan Gao^{*} and Yun-Guo Liu^{*}

