

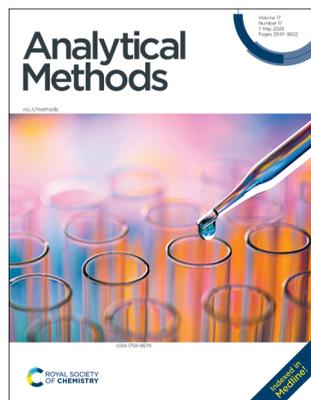
Analytical Methods

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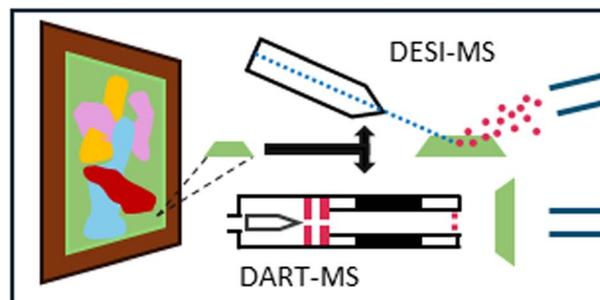
Cover
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CRITICAL REVIEWS

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Heritage science applications of ambient mass spectrometry

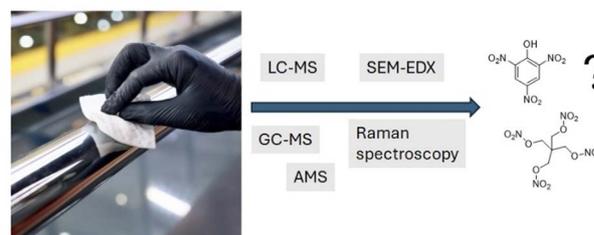
Chiara Vettorazzo, Edith Sandström, Lore G. Troalen,
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Gareth D. Crapper, Alysha S M Green, John R. Dean
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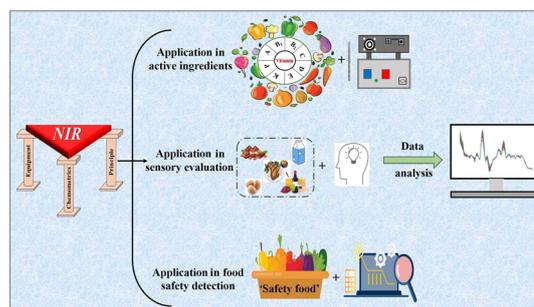
Fundamental questions
Elemental answers

CRITICAL REVIEWS

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Near-infrared spectroscopy: application in ensuring food quality and safety

Yuxia Xu, Tianyu Kong,* Yinfei Ma, Yan Zhao, Le Chu and Mingzhu Zheng*

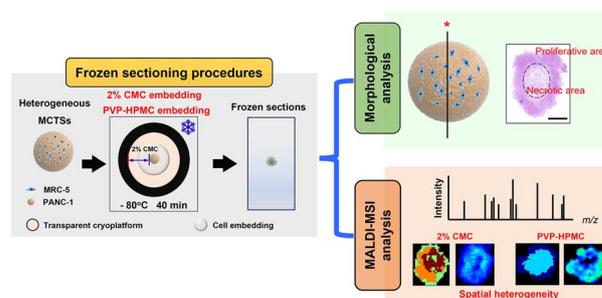


COMMUNICATION

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Preparation of multicellular spheroid sections embedded with sodium carboxymethyl cellulose for mass spectrometry imaging

Xin Wang, Xuantong Liu, Chao Zhao,* Zhiyi Yang, Tianyou Cao, Qian Luo* and Wei Bian*

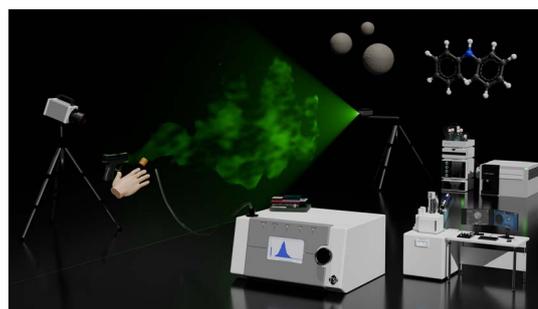


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Uncovering gunshot residue flow and deposition mechanisms using novel visualization methods, real-time atmospheric particle sampling, and spectrochemical techniques

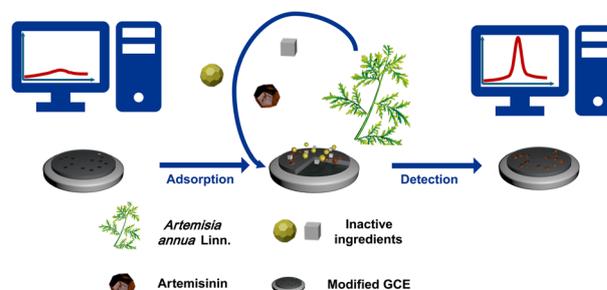
Thomas D. Ledergerber, Matthew Staymates, Kourtney A. Dalzell, Luis E. Arroyo, Roger Jefferys and Tatiana Trejos*



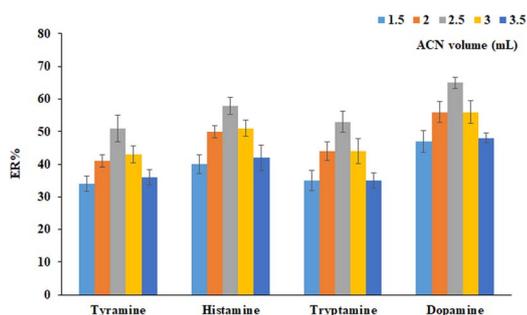
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Study on a TCM evaluation method based on an MIP-modified MOF sensor with highly selective electrocatalytic activity—an *Artemisia annua* L. perspective

Jingbo Zhang, Quancheng Chen, Xuemin Gao, Ziqin Suo, Di Wu, Yunxian Zhou, Yingying Zeng, Yanping Li, Yanyun Che* and Qing Chen*



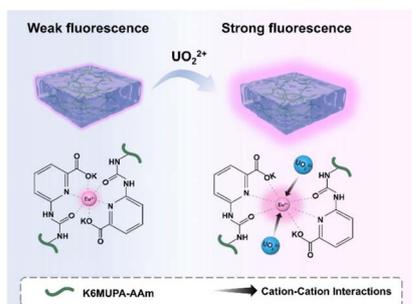
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Monitoring biogenic amines in cream and cheese samples using liquid nitrogen-induced homogeneous liquid–liquid extraction combined with magnetic ionic liquid-based dispersive liquid–liquid microextraction and HPLC-DAD

Mahdi Beheshtian,
 Mohammadhosein Movassaghghazani*
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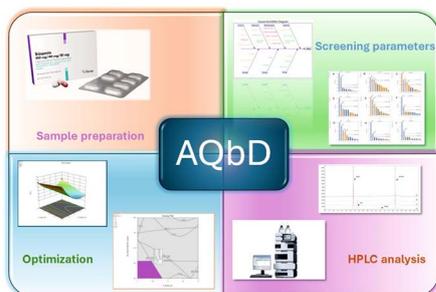
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A cation-mediated fluorescence enhanced hydrogel for the sensitive detection of uranyl ions in water

Yuxiao Wang, Chenyi Deng, Shusen Chen, Yan Song,
 Haotian Wu, Wenfang Du* and Fubing Xiao*

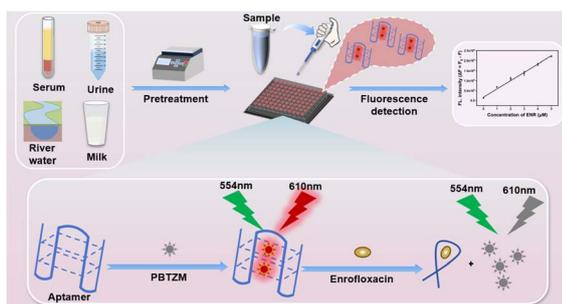
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Application of AQbD principles on the development of a stability-indicating HPLC method for the determination of acetylsalicylic acid, ramipril and atorvastatin in their fixed-dose polypills

Halil Kasem, Marianna Ntorkou, Paraskevas D. Tzanavaras
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A label-free aptasensor based on a fluorescent probe containing styrylbenzothiazole for detection of enrofloxacin

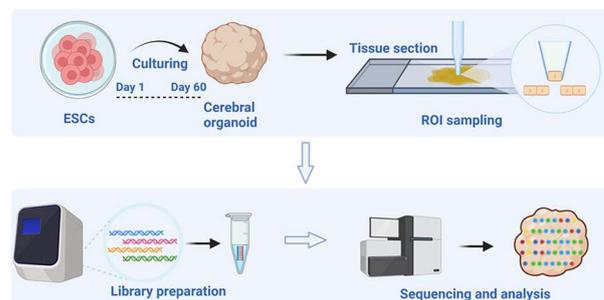
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Micro-region transcriptomics profiling of cerebral organoids using a capillary-based microdissection system

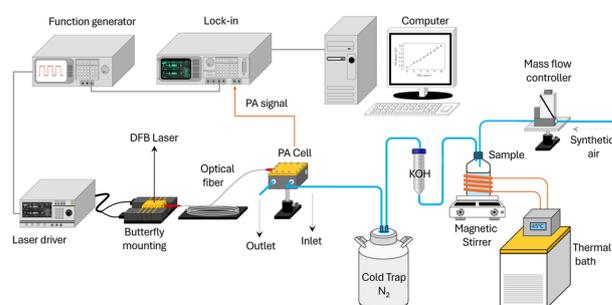
Kaiqiang Ye, Yunxia Guo, Ning Chang, Jitao Xu, Qingyang Qin, Xi Yang, Yan Huang, Qinyu Ge, Dianhui Meng* and Xiangwei Zhao*



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Sensitive gas spectroscopy method for real-time determination of urease activity via ammonia production

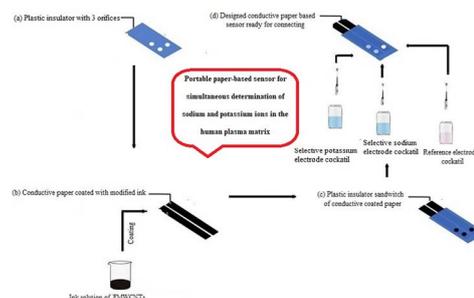
Leticia Andrade Simões Lopes,* Dominik Clara Luz Lopes, Leonardo Mota,* Guilherme Rodrigues Lima, Bruno José Rodrigues Alves and Marcelo Gomes da Silva*



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A portable paper-based sensor for simultaneous determination of sodium and potassium ions in the human plasma matrix

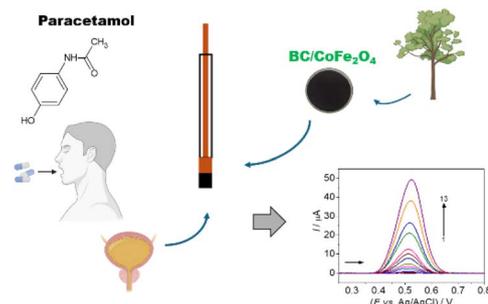
Mohammed Alqarni



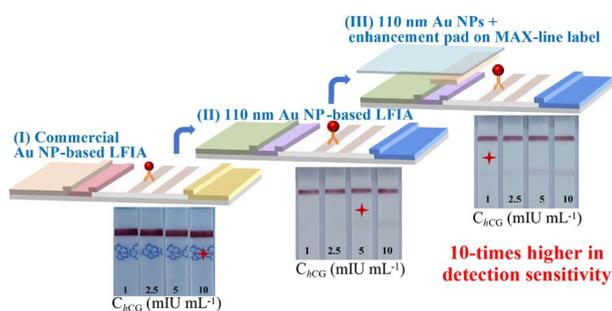
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Development of sustainable electrodes based on cobalt ferrite-decorated biochar for the voltammetric determination of paracetamol in biological fluids

Noemí Cristina Silva de Souza, Gustavo Alves Puiatti, Gessica do Carmo Dias, Rafael Matias Silva, Renata Pereira Lopes Moreira and Tiago Almeida Silva*



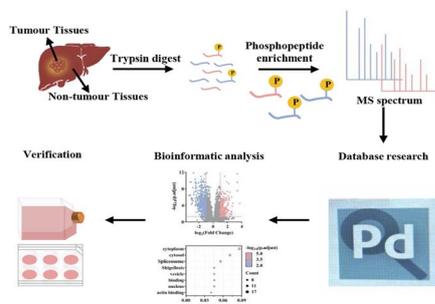
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Rational design to improve the detection sensitivity of sandwich-type lateral flow immunoassays

Feiqian Wang, YINUO Sun, Muzi Jin, Baoxin Zhang, Yiwen Cui, Dexin Kong, Dongmei Li, Xiluan Yan and Aiping Fan*

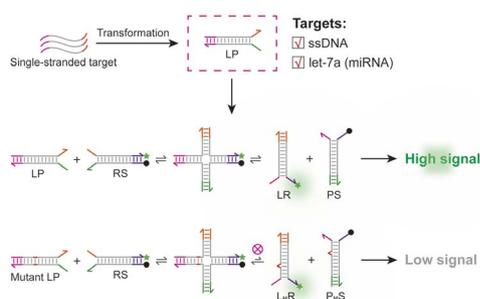
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Integrated proteomics and phosphoproteomics study reveals the potential tumour suppressive function of PCK2 in hepatocellular carcinoma

Xiao Long, Rong Liu, Meng Zhang, Yannan Wu, Shun Zhang,* Keqi Tang* and Hongxia Wang*

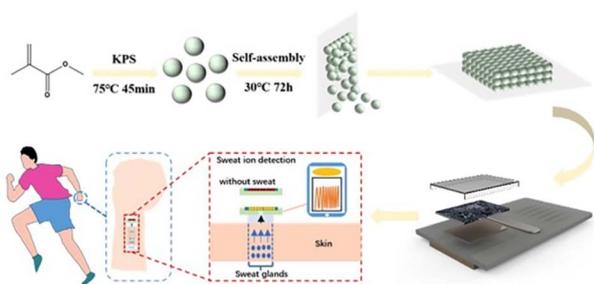
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Specific fluorescence detection strategy for single-stranded nucleic acids by dual-toehold branch migration

Yu Lin, Yaxing Xie, Guoming Xie, Jianhong Zhang, Ying Yu, Yulei Hou* and Hui Chen*

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A photonic crystal-hydrogel sensor for the monitoring of potassium ions in sweat

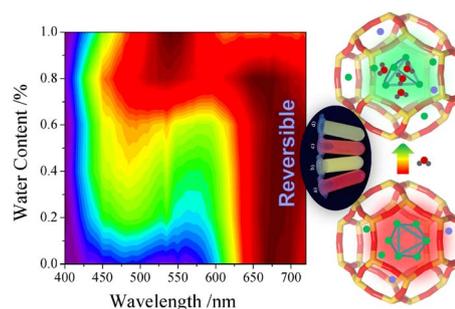
Bing Lin, Irfan Muhammad, Wenxin Zhang, Yifei Wang and Zihui Meng*



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Silver nanocluster-based fluorescent probes for detection of trace water in organic solvents with potential application in reaction monitoring

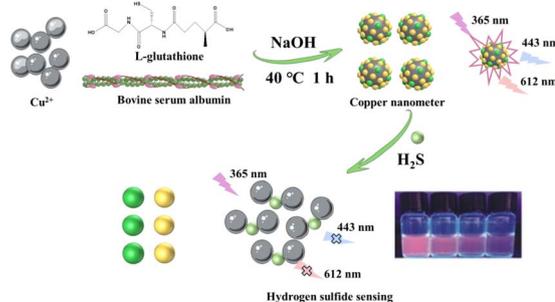
Decui Yao,* Ningning Yuan, Zhenzhen Miao, Dong Li* and Jing Yang*



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Dual-emission copper nanoclusters for hydrogen sulfide detection: a novel approach

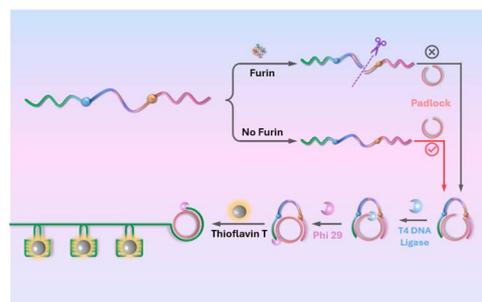
Longyan Wang, Huachao Che, Lizhu Fang, Liqiang Lu,* Xike Tian* and Yeukuang Hwu



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Peptide–DNA conjugate-assisted DNA cyclization for highly efficient and sensitive detection of furin

Minghui Wang, Cuifei Chen, Keqin Ying, Lingjun Sha, Deqi Kuang, Yue Huang,* Jie Yang* and Tingting Yin*

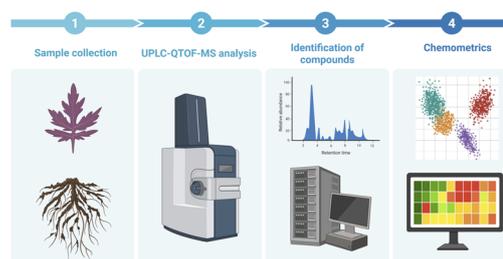


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Research on chemical constituent differences in wild and cultivated *Arnebia euchroma* by combining UPLC-QTOF-MS with chemometrics

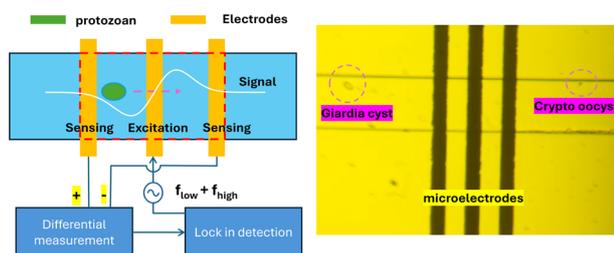
R. Huang, D. X. Wu, R. Wu, N. Yang, F. Wei, S. Y. Dai* and J. Zheng*

Research on chemical constituent differences in wild and cultivated *Arnebia euchroma* by combining UPLC-QTOF-MS with chemometrics



PAPERS

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Waterborne protozoan parasite detection using two-frequency impedance flow cytometry

Yunhao Peng, Bruce K. Gale and Himanshu J. Sant*

CORRECTION

3600

Correction: Development of a fluoruous trapping reagent for rapid detection of electrophilic reactive metabolites

Yusuke Akagi, Hiroyuki Yamakoshi and Yoshiharu Iwabuchi*

