

Analytical Methods

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Cover

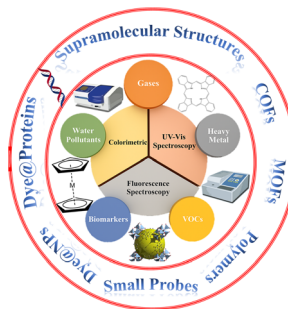
See Fábio R. P. Rocha *et al.*, pp. 9778–9785. Image reproduced by permission of Fábio R. P. Rocha and Gabriel M. Fernandes from *Anal. Methods*, 2025, 17, 9778.

CRITICAL REVIEW

9702

A review for organic probes for chemo/bio-sensors: from small molecules to supramolecular structures

Hani Nasser Abdelhamid*

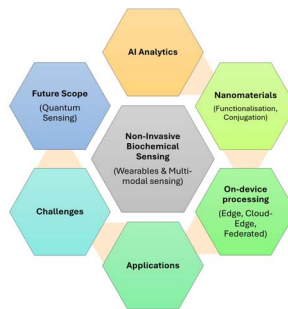


TUTORIAL REVIEW

9736

Non-invasive biochemical sensing with AI-driven analytics: a comprehensive review of technologies, applications, and future directions

Umapathi Krishnamoorthy



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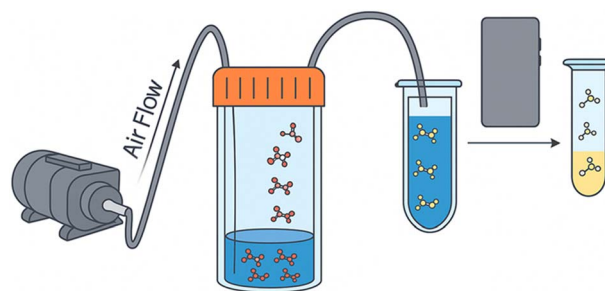
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9778

Determination of volatile acids in sugarcane spirits exploring an air drag system and digital image photometry

Gabriel M. Fernandes, Júlio C. Zacarias, Boaventura F. Reis and Fábio R. P. Rocha*



9786

A green paper-based analytical device for detection of tin in canned fruit samples

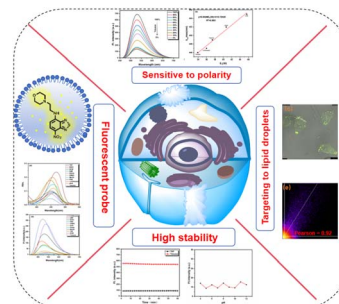
Napaporn Bunnaranurak and Napa Tangtreamjitmun*



9794

A benzothiadiazole-based polar fluorescent probe for targeting lipid droplets in living cells

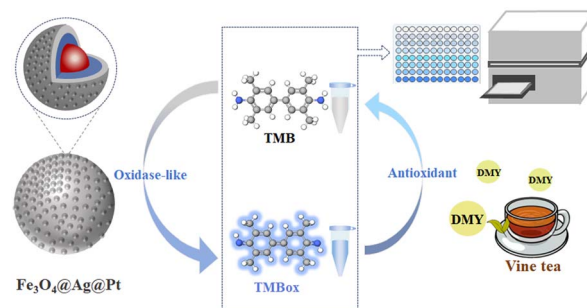
Lin Li, Jing-Xian Chen, Xue-Zhi Chu, Yi-Nuo Wang, Yuan He* and Jian-Yong Wang*



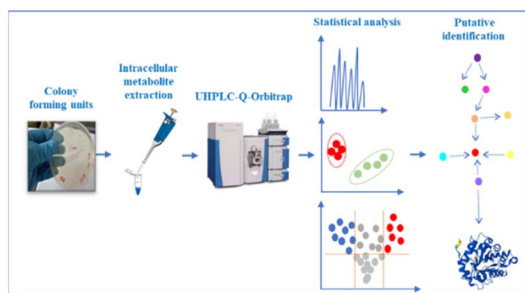
9799

A nanozyme-based colorimetric platform for total antioxidant capacity evaluation: optimizing vine tea brewing with $\text{Fe}_3\text{O}_4@\text{Ag}@\text{Pt}$

Tian Li,* Jiaoyuan Fang, Yun Wang, Jiahui Qu, Xiaoling Zhang, Xiangjun Qiu and Liping Zhang



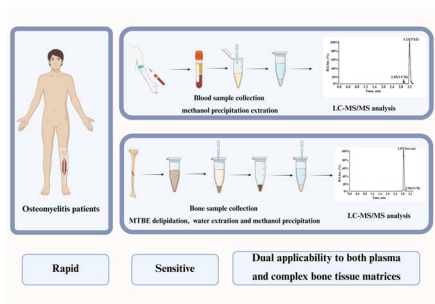
9806



Untargeted metabolomics pilot study using UHPLC-Q-Orbitrap to investigate potential metabolic markers of *Brucella abortus* biovars

Joane M. M. Corrêa, Mauro L. G. de Oliveira, Patrícia G. de Souza, Paulo M. S. Filho, Diego G. Rocha, Adriana N. de Macedo and Adriana F. Faria*

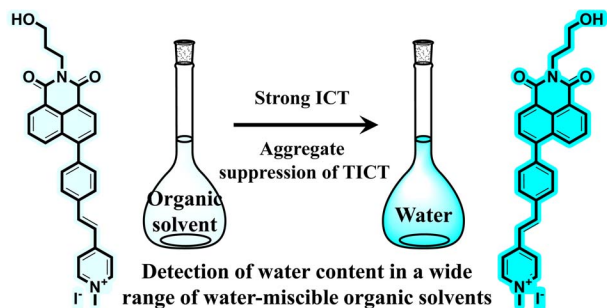
9814



An improved LC-MS/MS-based assay for the quantification of vancomycin in human plasma and bone tissue from osteomyelitis patients

Qixian Ling, Yuanyuan Zhang, Zhe Wang, Haotian Ma, Sihan Wang, Yanan Wang, Xin Xiong* and Libo Zhao*

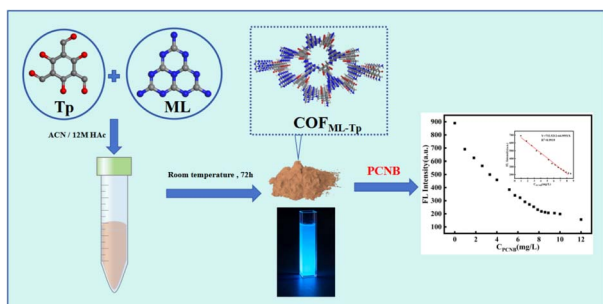
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Rational design of a 1,8-naphthalimide-based fluorescent probe for water detection in organic solvents

Yanpeng Dai,* Haoting Gao and Han Huang

9833



Preparation of fluorescent probes based on covalent organic frameworks (COFs) and their application in the detection of nitro-containing pesticide residues

Yu Gan, Yingying Fu, Zhengchao Duan and Lianzhi Wang*



9841

Chrysanthemum-like Fe–Co LDH with peroxidase mimicking activity for visual and photothermal determination of H₂O₂ and glucose

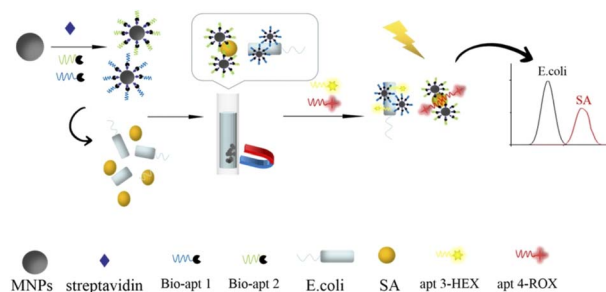
Youxiu Lin,^{*} Yangyang Chen, Jiangwei Huang, Dianping Tang and Wenqiang Lai^{*}



9854

A dual-target fluorescent assay for rapid detection of foodborne pathogens based on aptamer–magnetic bead technology

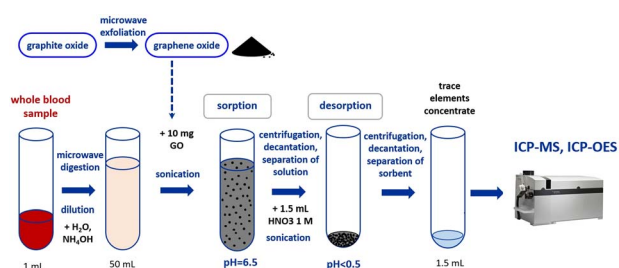
Weixuan Liu, Wen Yan and Lingmei Niu^{*}



9862

Whole blood analysis by ICP-MS and ICP-OES with the preconcentration of heavy and rare earth metals on graphene oxide

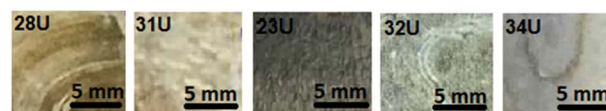
Valeriya D. Kurbatova,^{*} Nikolay S. Medvedev,^{*} Alexandra O. Frolova, Dmitry Yu. Troitskii, Victor G. Macotchenko and Anatoly I. Saprykin



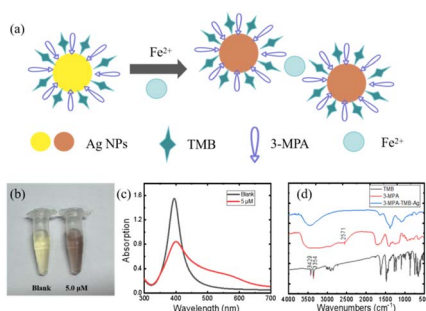
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Investigation of the occurrence and sources of calcium (Ca) in urinary stones using synchrotron radiation based X-ray fluorescence and X-ray absorption spectroscopy (XAS)

Abdallah A. Shaltout,^{*} Safaa S. M. Ali, Gangadhar Das, Giuliana Aquilanti, N. Imam, Dhaifallah R. Almalawi, Waraporn Tanthanuch, Somchai Tancharakorn and Wutthikrai Busayaporn



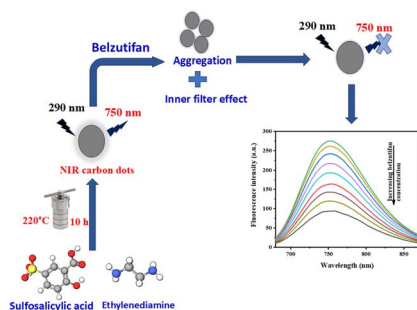
9882



Fast and sensitive visual detection of Fe^{2+} using silver nanoparticles modified with 3,3',5,5'-tetramethylbenzidine and 3-mercaptopropionic acid

Qian Wang, Xiaoyun Li, Haiyan Zhang, Heng Wei, Jin Han, Guangzhou Xu, Jianlei Chao, Kun Wang* and Tao Jiang*

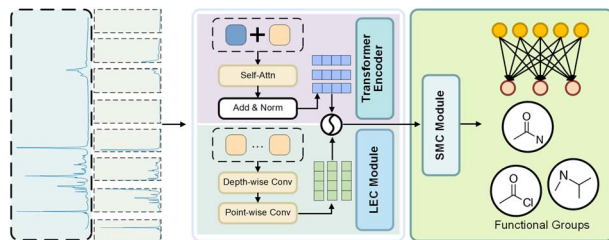
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Near-infrared carbon dots enable ultra-sensitive fluorometric detection of belzutifan: a novel approach for real-time therapeutic drug monitoring in cancer treatment

Mohamed N. Goda, Laila S. Alqarni, K. S. Al-Namshah, Hossieny Ibrahim, Mohamed M. El-Wakil, Ramadan Ali and Al-Montaser Bellah H. Ali*

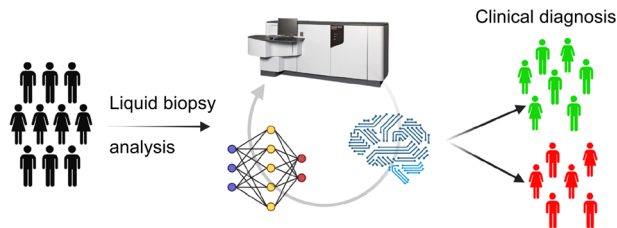
9898



LEC-former: enhancing functional group identification in FTIR spectra by improving weak peak perception

ShiDi Xie, LiJuan Peng,* JunNa Zhang, YiLong Kang, HongCheng Zhou and ZongJun Ren

9909



End-to-end workflows for liquid biopsy biotyping analysis using combined MALDI MS and machine learning approach

Lukáš Pečinka,* Jaromíra Pantůčková, Monika Vlachová, Lukáš Moráň, Tereza Růžičková, Petra Weselá, Lubomír Prokeš, Josef Havel, Luděk Pour, Sabina Ševčíková and Petr Vaňhara*



9915

Correction: A microfluidic paper-based analytical device based on a surface-modified screen-printed electrode Pt-Pd/RGO nanocomposite for glucose detection in urine

Chaozhan Chen, Ruhuan Ye, Zidong Chen, Jiayi Ye, Bin Ran, Bo Liu, Jialin Liang, Jiale Huang* and Teng Shen*

