

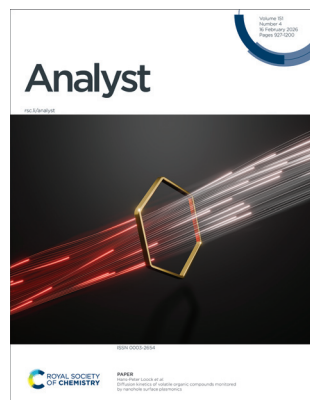
Analyst

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Cover

See Hans-Peter Loock *et al.*, pp. 1014–1022.

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EDITORIAL

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Resolving the chemical space: a legacy of recording separation science and innovation in *Analyst*

Leon P. Barron,* Brett Paull* and Lihua Zhang*

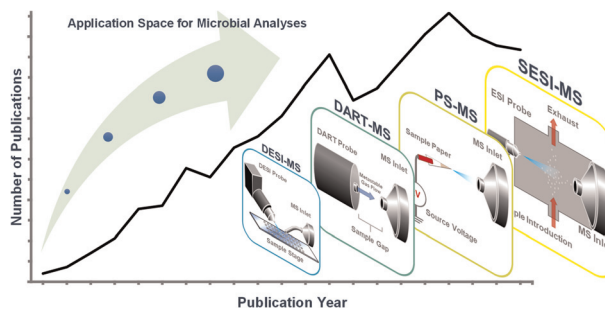


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Ambient ionization strategies for the characterization of microbial systems *via* mass spectrometry

Hawkins S. Shepard, Jody C. May and John A. McLean*



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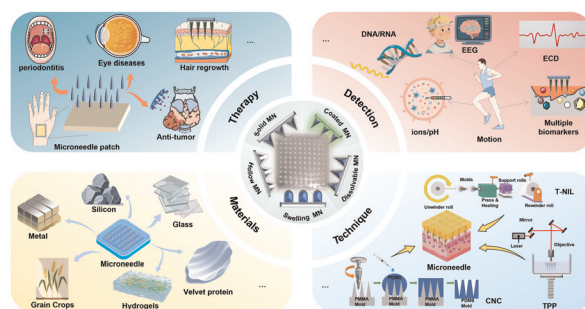
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MINIREVIEWS

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Design, preparation of microneedles and their applications in medical diagnosis and cosmetic regeneration

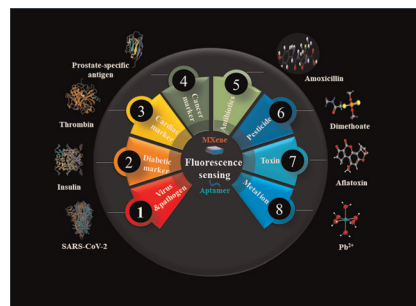
Shanqi Bao, Huanhuan Shi,* Weizheng Xu, Zidong Zhou, Shijie Qu, Xinyi Wang, Ziwen Cheng and Chen Huang



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MXene-based fluorescent aptasensors: advances and prospects in diagnostics and environmental monitoring

Rajapriya Govindaraju and Jongsung Kim*

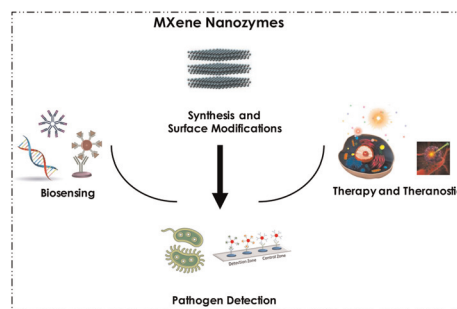


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Recent advances in MXene nanozymes: synthesis, surface modifications, catalytic properties, and their emerging roles in biosensing and therapeutic applications

Hatem A. Al-Aoh, Chellasamy Panneerselvam,* Asim. M. Alghamdi, Abdulrahman Alasmari and Zuhair M. Mohammedsleh

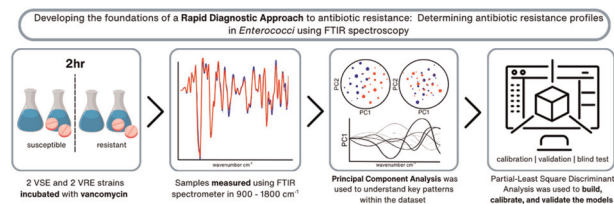


COMMUNICATION

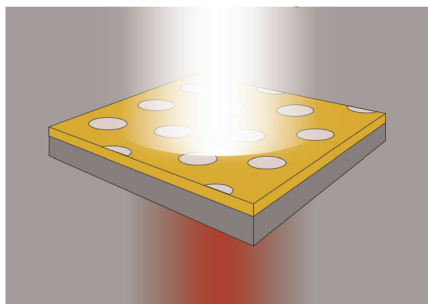
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Vibrational spectroscopy for rapid profiling of vancomycin susceptibility in *Enterococci*

Ava Rossetti, Xenia Kostoulas, Magdalena Giergiel, Jih-Hang Jiang, Anton Y. Peleg and Kamila Kochan*



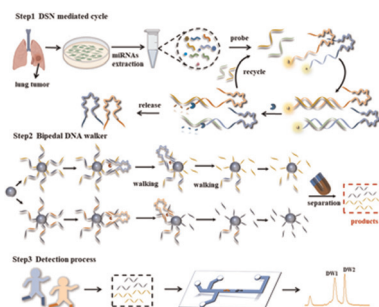
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Diffusion kinetics of volatile organic compounds monitored by nanohole surface plasmonics

Swapnil Daxini, Chris Prüfert, Paul Reid, Pedro Barros, Juan Gomez-Cruz, Carlos Escobedo, Jack A. Barnes and Hans-Peter Looock*

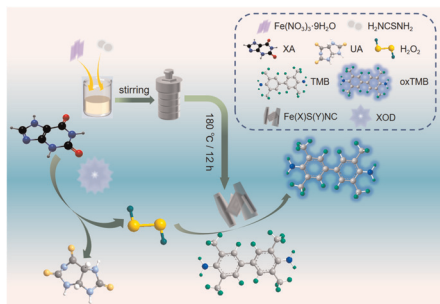
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Microchip electrophoretic sensing of multiplex microRNAs based on dual nucleic acid amplification

Qihui Xie, Shuang Tang, Jianan Lv, Xing Geng, Fan Zhang* and Qingjiang Wang*

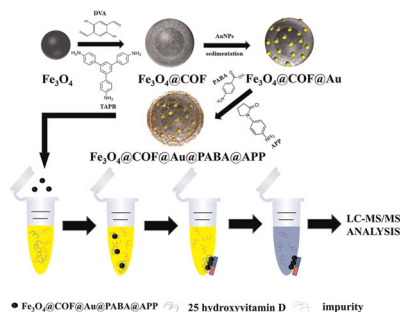
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FeS-loaded nitrogen-doped carbon nanozymes for sensitive colorimetric detection of xanthine in urine samples

Xueying Zhu, Shuo Tian, Shuyun Chen, Yunsen Wang and Dianping Tang*

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Pyrrolidone modified magnetic COF materials for the quantitative determination of 25-hydroxyvitamin D in human serum via isotope dilution mass spectrometry

Xiaojie Zhang, Jixing Huang, Yazhou Han, Wentao He, Chuan-fan Ding* and Yinghua Yan*

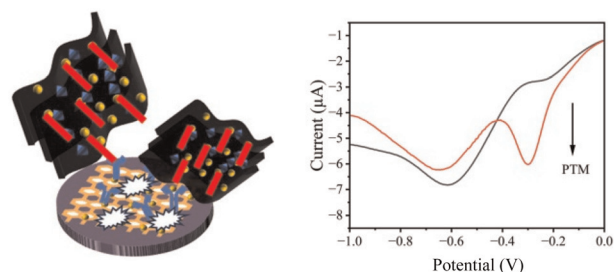


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An electrochemical immunosensor based on MXene–Au and Au–Ce-COF to detect methyl parathion

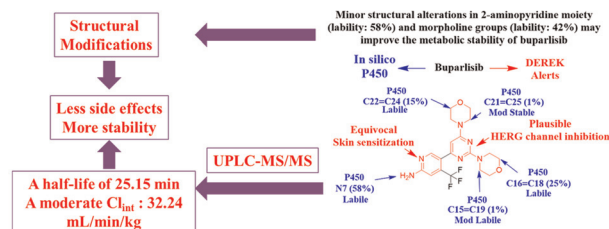
Peiyao Zhu, Deyu Liu, Yaqi Chen, Haiping Huang* and Fang Xu*



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Quantification of buparlisib in human liver microsomes employing an ultra-fast, sensitive UPLC-MS/MS method: *in vitro* and *in silico* metabolic stability evaluation

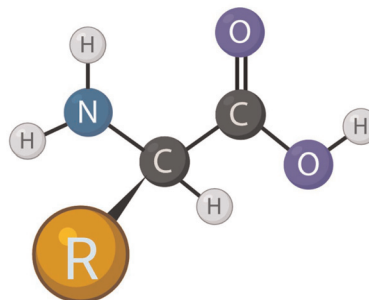
Mohamed W. Attwa,* Haitham AlRabiah, Ali S. Abdelhameed and Adnan A. Kadi



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AminoacidDB: a liquid chromatography-tandem mass spectrometry-based toolkit for the untargeted analysis of non-protein amino acids

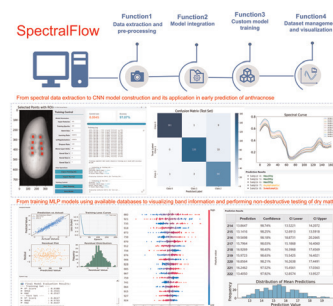
Pawanjit K. Sandhu, Ryland T. Giebelhaus, Ryan Hayward, Tingting Zhao, Alix Tucker, Daniel Gaudet, Tao Huan and Susan J. Murch*



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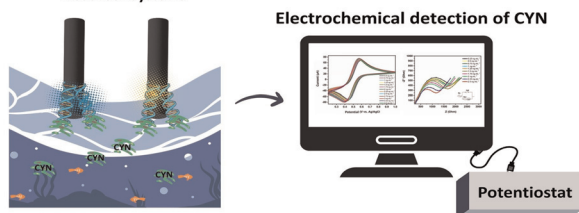
SpectralFlow: an integrated platform for spectral data preprocessing and predictive modeling analysis in fruit quality evaluation

Zhikai Chen, Guanzhi Lyu, Xiaochan Wang, Mengfei Yang, Xin Xu and Xiaolei Zhang*



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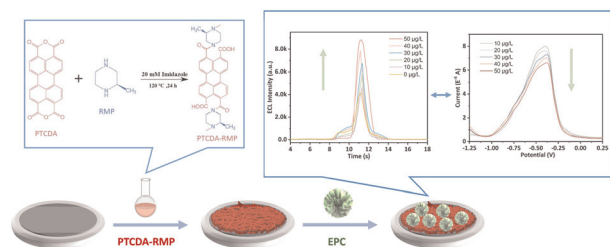
PGE/PEDOT/cynApt and PGE/PPy/cynApt Biosensor Systems



Conductive polymer-based electrochemical aptasensor for sensitive detection of cylindrospermopsin in water resources

Ece Kesici-Meco and Ece Unur-Yilmaz*

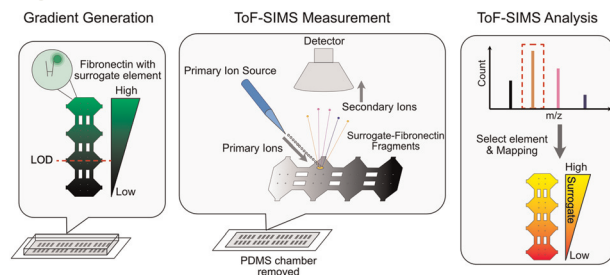
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Synchronous dual-mode sensing platform based on 1D chiral ionic COF for epoxiconazole detection

Yeqian Ruan, Xiaodong Zheng, Xuan Kuang* and Shusheng Li*

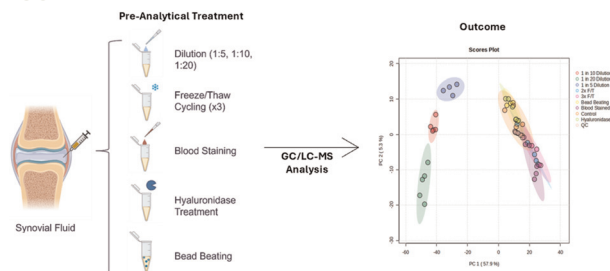
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Evaluation of ToF-SIMS imaging for semi-quantitative mapping of BODIPY-labeled fibronectin surface gradients

Chao Liu, Tae Kyong John Kim, Douglas H. Wu, Radhika Atit, Rodrigo A. Somoza and Samuel E. Senyo*

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Systematic evaluation of pre-analytical variables on synovial fluid metabolomic profiles using GC-ToF-MS and UHPLC-MS

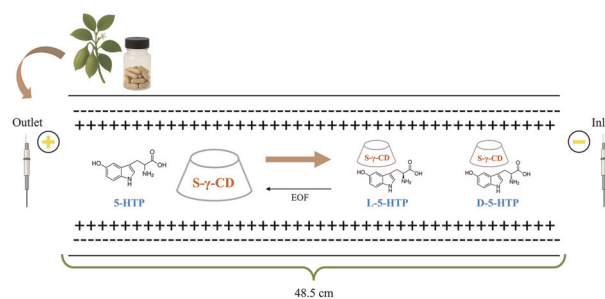
Yumna Ladha,* Adam Burke, Nigel Gotts, Royston Goodacre, Karina Wright, Jade Perry and Charlotte H Hulme



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Development of an electrokinetic chromatography method for the rapid enantiomeric determination of 5-hydroxytryptophan. Application to the analysis of dietary supplements

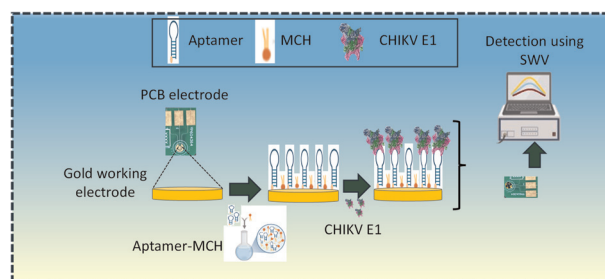
Sandra Adámez-Rodríguez, María Luisa Marina and María Castro-Puyana*



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Development of a PCB-based electrochemical aptasensor for Chikungunya virus protein detection

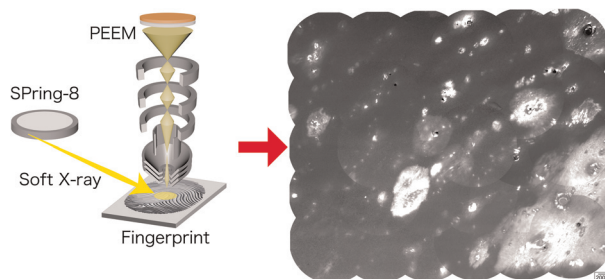
Syama Sajikumar, Naveenkumar Sureshkumar, V. V. R. Sai, Verma Jyoti, Sujatha Sunil* and Ramanathan Srinivasan*



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Visualization of heated latent fingerprints by synchrotron radiation soft X-ray photoemission electron microscopy

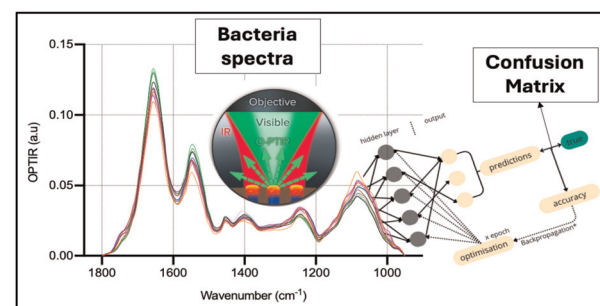
Satoru Hamamoto,* Masahisa Takatsu, Hiroyuki Fujiwara, Hideya Okada, Takuo Ohkochi, Shimpei Watanabe, Masaki Oura and Yasuo Seto*



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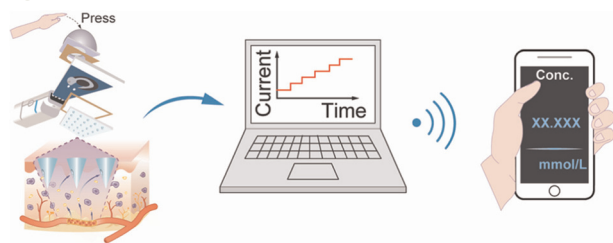
Optical photothermal infrared (OPTIR) spectroscopy assisted by machine learning for lactic acid bacteria identification at strain level

Paul Lagneaux,* Nathan Widjaja, Bastien Lagneaux, Thi Kim Chi Nguyen, H el ene Licandro, Pascale Winckler and Yves Wach e



PAPERS

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**3D-printed hollow microneedle-based electrochemical sensor for wireless glucose monitoring**

Chuchu Chen, Yonghao Fu, Yuehe Lin, Yun Liu, Dan Du* and Kaiyan Qiu*

CORRECTION

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Correction: Light-activated nanocomposite thin sheet for high throughput contactless biomolecular delivery into hard-to-transfect cells

Hima Harshan Padma, Donia Dominic, Kavitha Illath, Srabani Kar and Tuhin Subhra Santra*

