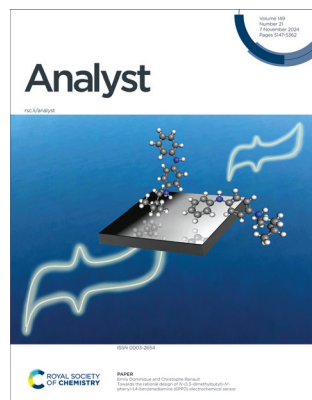


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Cover

See Emily Dominique and Christophe Renault, pp. 5165–5173.

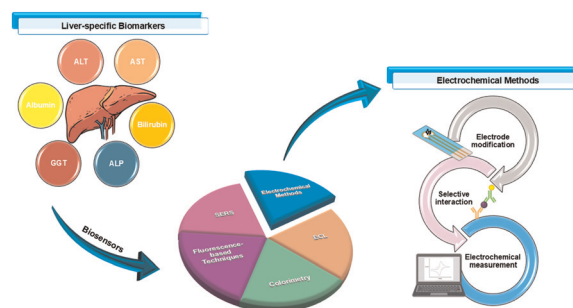
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MINIREVIEW

5156

Current trends in electrochemical approaches for liver biomarker detection: a mini-review

Derya Yaman,* Melanie Jimenez, Sofia Ferreira Gonzalez and Damion Corrigan*

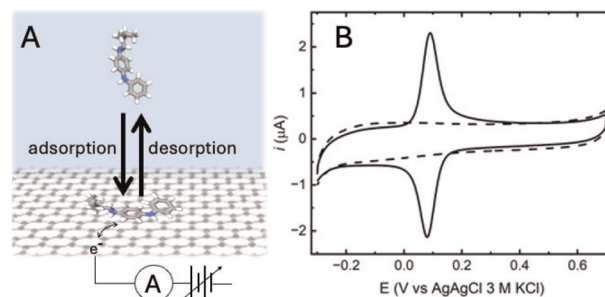


PAPERS

5165

Towards the rational design of *N*-(1,3-dimethylbutyl)-*N*'-phenyl-1,4-benzenediamine (6PPD) electrochemical sensor

Emily Dominique and Christophe Renault*



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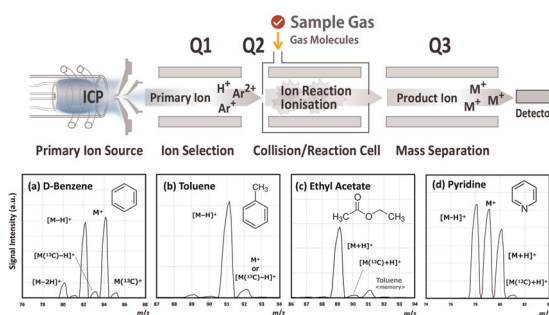


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5174

Detection of several volatile organic compounds through Ar^+ induced chemical ionisation using inductively coupled plasma-tandem mass spectrometry (ICP-MS/MS)

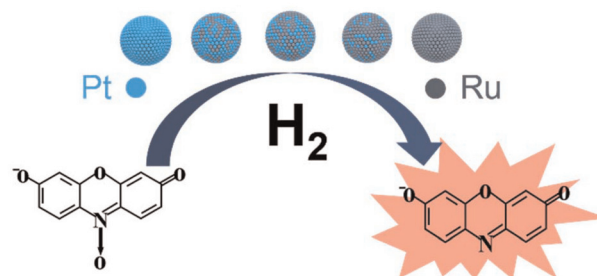
Takafumi Hirata,* Kyoko Kobayashi, Hui Hsin Khoo, Osamu Shikino and Hisashi Asanuma



5184

Revealing the heterogeneous catalytic kinetics of PtRu nanocatalysts at the single particle level

Bowei Zhang, Dezheng Zhang, Jinpeng Bao, Ce Han,* Ping Song* and Weilin Xu*

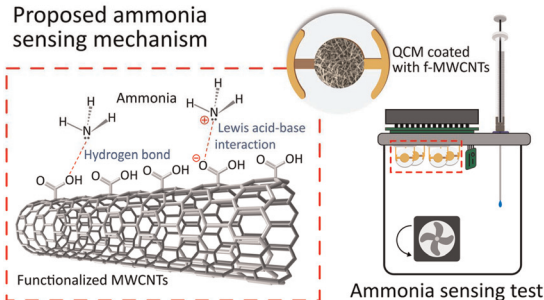


5191

An ultra-sensitive ammonia sensor based on a quartz crystal microbalance using nanofibers overlaid with carboxylic group-functionalized MWCNTs

Ahmad Hasan As'ari, Rizky Aflaha, Laila Katriani, Ahmad Kusumaatmaja, Iman Santoso, Rike Yudianti* and Kuwat Triyana*

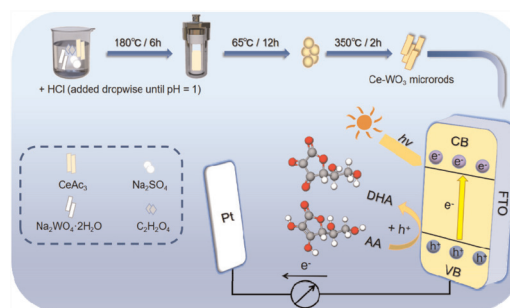
Proposed ammonia sensing mechanism



5206

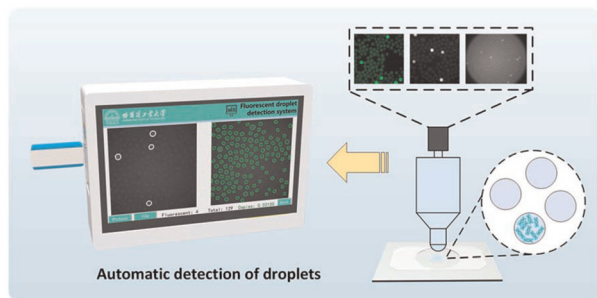
A cerium-doped tungsten trioxide-functionalized sensing platform for photoelectrochemical detection of ascorbic acid with high sensitivity

Xueying Zhu, Tikai Liang and Dianping Tang*



PAPERS

5213

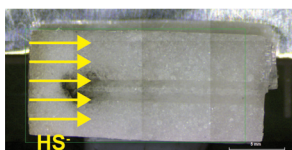


Automatic detection of fluorescent droplets for droplet digital PCR: a device capable of processing multiple microscope images

Kaihao Mao, Ye Tao,* Wenshang Guo, Qisheng Yang, Meiyang Zhao, Xiangyu Meng, Yinghao Zhang and Yukun Ren*

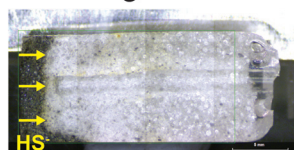
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KCl SSRE



Sulphide poisons
Ag|AgCl electrode

KCl/AgCl SSRE

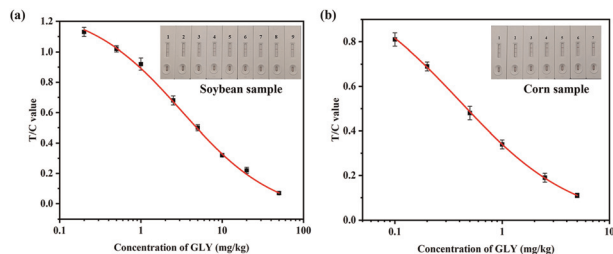


Sulphide captured,
Ag|AgCl uncontaminated

A sulphide resistant Ag|AgCl reference electrode for long-term monitoring

David S. Macedo,* Mikko Vepsäläinen,* Theo Rodopoulos, Stephen Peacock and Conor F. Hogan

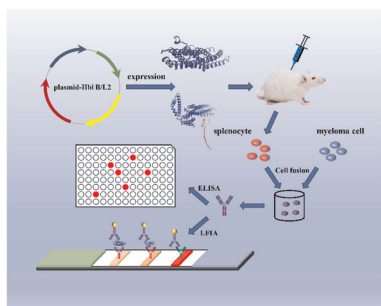
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A lateral strip assay for ultrasensitive detection of glyphosate in soybeans and corn

Xuyang Ma, Liqiang Liu, Shanshan Song, Hua Kuang, Chuanlai Xu and Xinxin Xu*

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A rapid and ultrasensitive paper sensor for *Bacillus cereus* Haemolysin BL detection

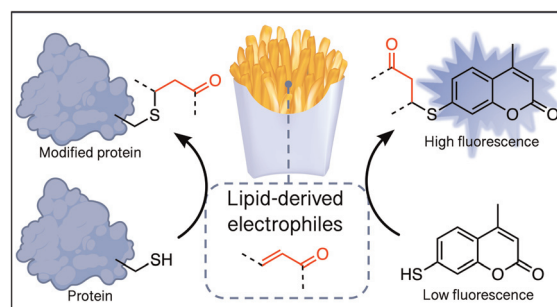
Chunhao Wei, Xinxin Xu, Lingling Guo,* Aihua Qu, Aihong Wu, Chuanlai Xu* and Hua Kuang



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Fluorescent probe to quantify lipid-derived electrophiles in edible oils

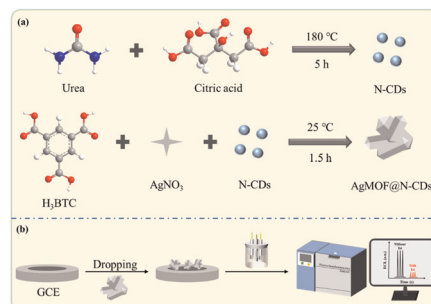
Lucille Kuster, Priscilia Diane Mamboundou, Asma Boushah, Yasmine Rassi, Alexandre Benoît, Samuel Parent-Vézina, Michel Lord-St-Vincent, Jean-Philippe Guillemette and Mathieu Frenette*



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A novel electrochemiluminescent sensor based on AgMOF@N-CD composites for sensitive detection of trilobatin

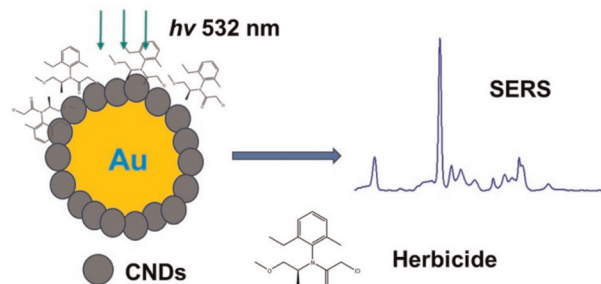
Longmei Yao, Xue Mei, Jiajia Zhi, Wenchang Wang,* Qingyi Li, Ding Jiang, Xiaohui Chen and Zhidong Chen*



5277

Surface-enhanced Raman scattering enhancement using a hybrid gold nanoparticles@carbon nanodot substrate for herbicide detection

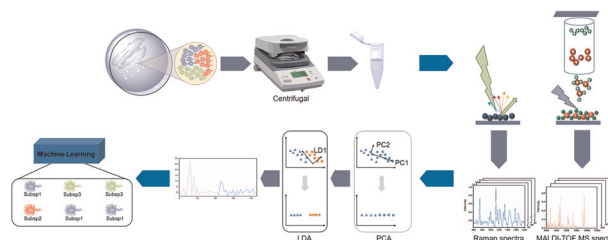
Naghme Aboualigaledari, Anitha Jayapalan, Panesun Tukur, Mengxin Liu, Frank Tukur, Yanling Zhang, Gerald Ducatte, Madan Verma, Janet Tarus, Simona E. Hunyadi Murph* and Jianjun Wei*



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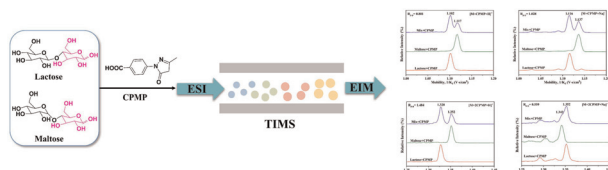
A new fusion strategy for rapid strain differentiation based on MALDI-TOF MS and Raman spectra

Jian Song, Wenlong Liang, Hongtao Huang, Hongyan Jia, Shouning Yang, Chunlei Wang* and Huayan Yang*



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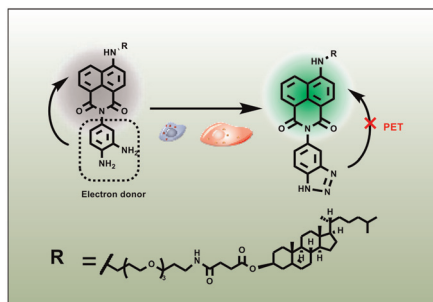
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Rapid quantification of disaccharide isomers by derivatization in combination with ion mobility spectrometry in beer and milk

Keqi Ye, Jiacheng Ye,* Yinghua Yan* and Chuan-Fan Ding*

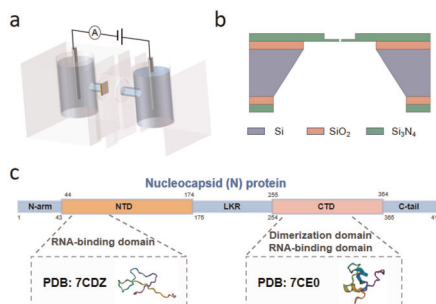
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Engineering fluorescent NO probes for live-monitoring cellular inflammation and apoptosis

Qun Wu, Chengbin Liu, Yifan Liu and Tao Li*

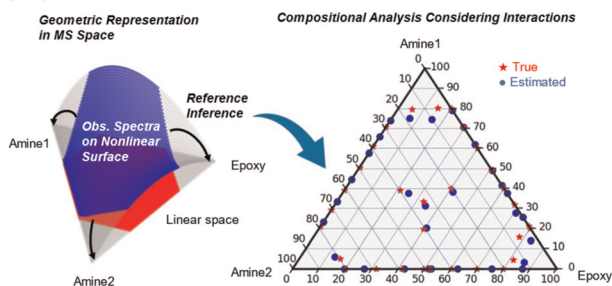
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Utilizing solid-state nanopore sensing for high-efficiency and precise targeted localization in antiviral drug development

Wei Xu, Lichun Zou, Haiyan Wang, Changhui Xu, Qinyang Fan and Jingjie Sha*

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Reference-free quantitative mass spectrometry in the presence of nonlinear distortion caused by *in situ* chemical reactions among constituents

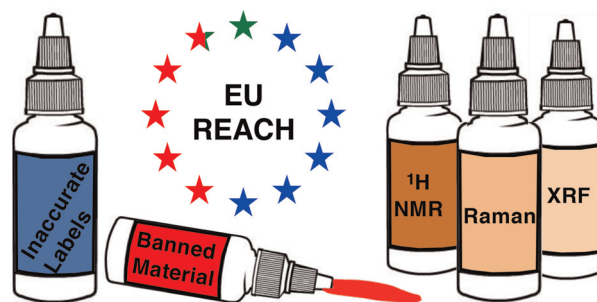
Yusuke Hibi



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Analysis of blue and green REACH compliant tattoo inks

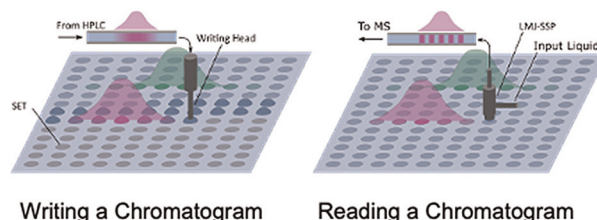
Kelli Moseman, Sasha Noble, Sage Sanders, Huiyuan Guo and John R. Swierk*



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Storing liquid chromatographic separations on surface energy traps: decoupling the LC and the mass spectrometer

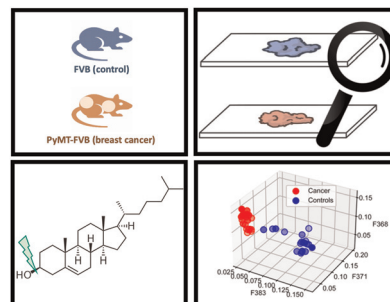
Timothy T. Salomons, David Simon and Richard Oleschuk*



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Alterations of the chemical profile of cholesterol in cancer tissue as traced with ToF-SIMS

Auraya Manaprasertsak, Julhash U. Kazi, Catharina Hagerling, Kenneth J. Pienta, Per Malmberg and Emma U. Hammarlund*



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A highly sensitive and reproducible fluorescence sensor for continuously measuring hydrogen peroxide at the sub-ppm level

Yang Yang, Rui Jiang, En-lai Yang, Jiahao Liang, Ying Xu and Xu-dong Wang*

