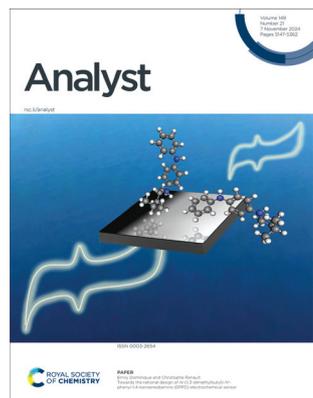


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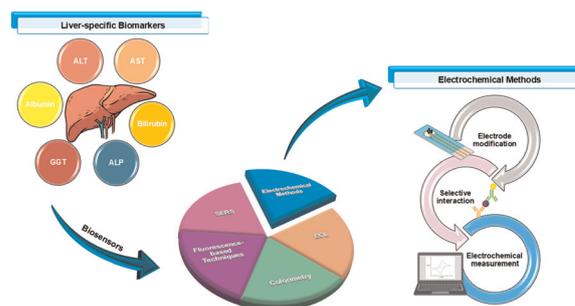
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## MINIREVIEW

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

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

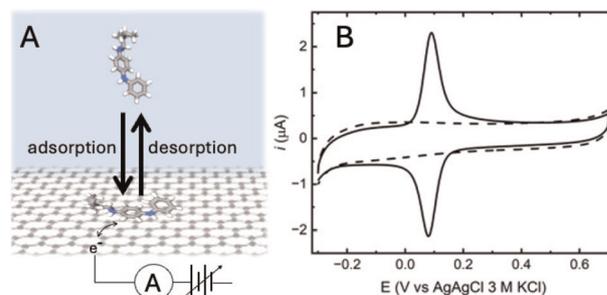


## PAPERS

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### 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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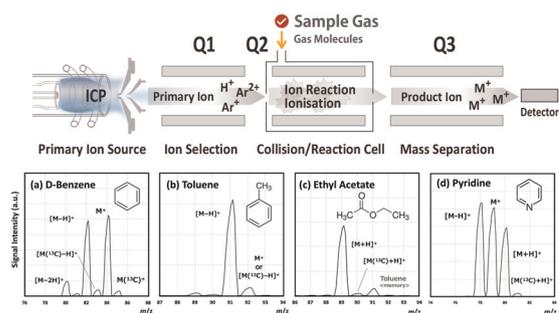


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### Detection of several volatile organic compounds through Ar<sup>+</sup> induced chemical ionisation using inductively coupled plasma-tandem mass spectrometry (ICP-MS/MS)

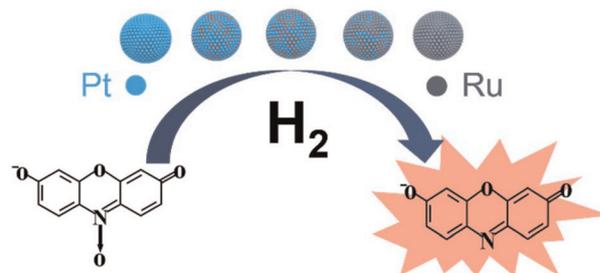
Takafumi Hirata,\* Kyoko Kobayashi, Hui Hsin Khoo, Osamu Shikino and Hisashi Asanuma



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### 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\*

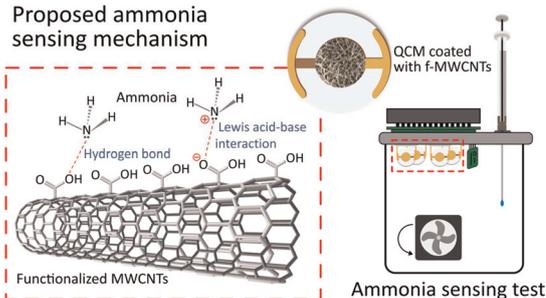


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### An ultra-sensitive ammonia sensor based on a quartz crystal microbalance using nanofibers overlaid with carboxylic group-functionalized MWCNTs

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

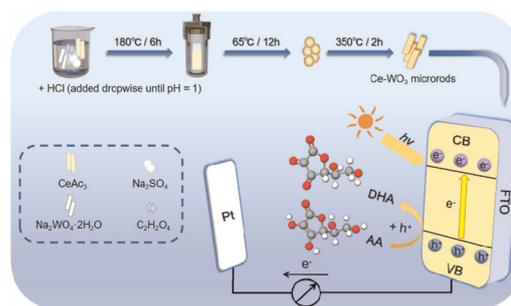
#### Proposed ammonia sensing mechanism



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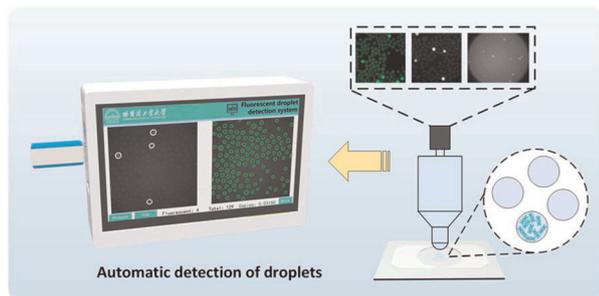
### A cerium-doped tungsten trioxide-functionalized sensing platform for photoelectrochemical detection of ascorbic acid with high sensitivity

Xueying Zhu, Tikai Liang and Dianping Tang\*



## PAPERS

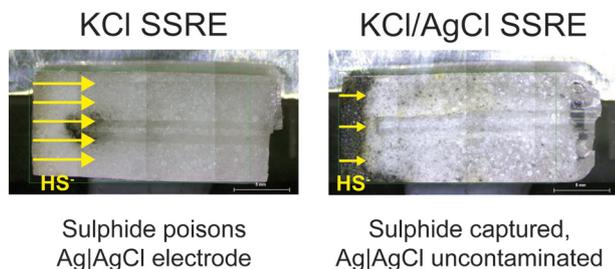
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### Automatic detection of fluorescent droplets for droplet digital PCR: a device capable of processing multiple microscope images

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

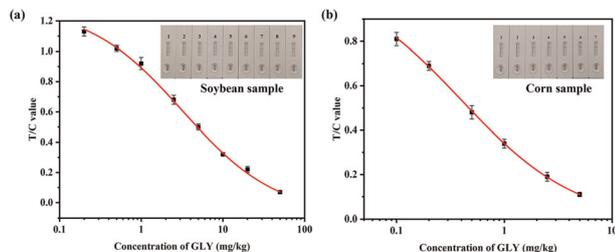
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### A sulphide resistant Ag|AgCl reference electrode for long-term monitoring

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

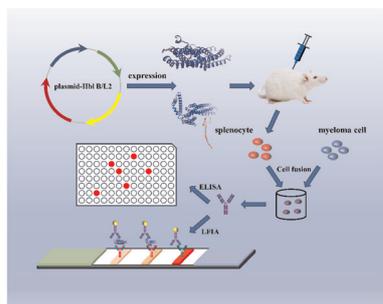
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### A lateral strip assay for ultrasensitive detection of glyphosate in soybeans and corn

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

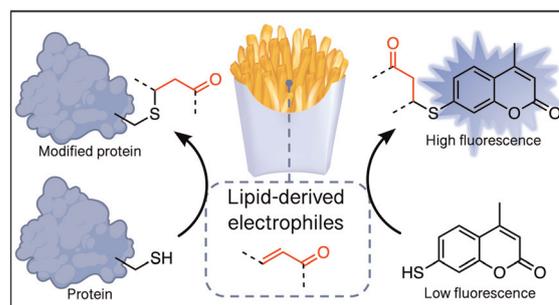
Chunhao Wei, Xinxin Xu, Lingling Guo,\* Aihua Qu, Aihong Wu, Chuanlai Xu\* and Hua Kuang



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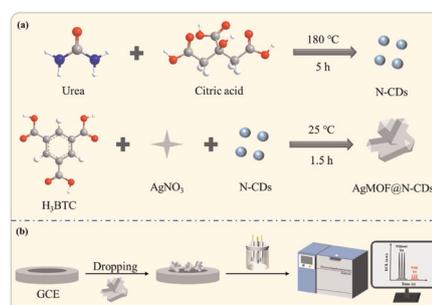
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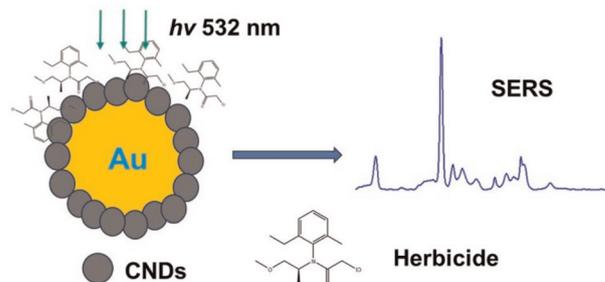
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### Surface-enhanced Raman scattering enhancement using a hybrid gold nanoparticles@carbon nanodot substrate for herbicide detection

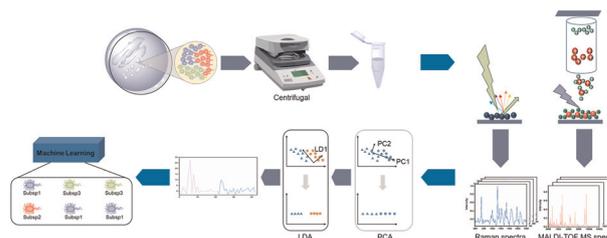
Naghmeh Aboualigaledari, Anitha Jayapalan, Panesun Tukur, Mengxin Liu, Frank Tukur, Yanling Zhang, Gerald Ducatte, Madan Verma, Janet Tarus, Simona E. Hunyadi Murph\* and Jianjun Wei\*



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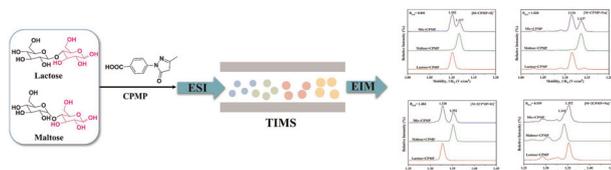
### A new fusion strategy for rapid strain differentiation based on MALDI-TOF MS and Raman spectra

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



## PAPERS

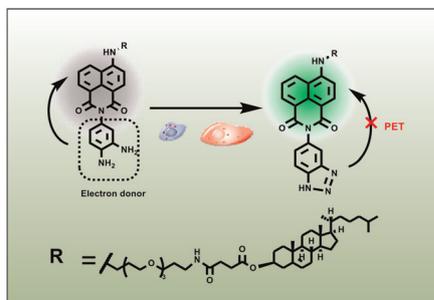
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### Rapid quantification of disaccharide isomers by derivatization in combination with ion mobility spectrometry in beer and milk

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

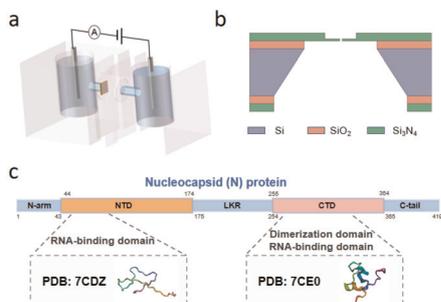
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### Engineering fluorescent NO probes for live-monitoring cellular inflammation and apoptosis

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

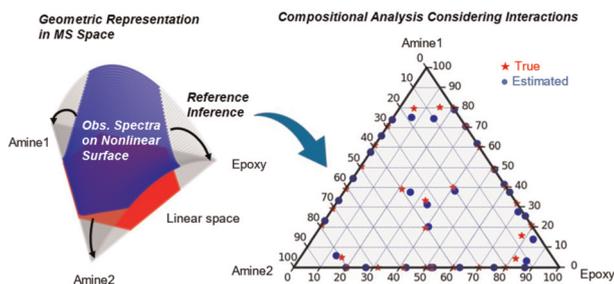
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### Utilizing solid-state nanopore sensing for high-efficiency and precise targeted localization in antiviral drug development

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

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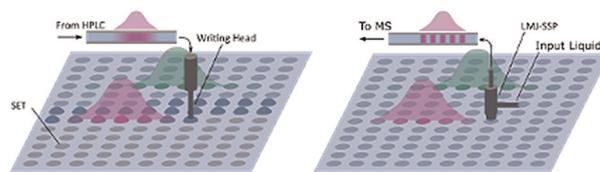
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Timothy T. Salomons, David Simon and Richard Oleschuk\*



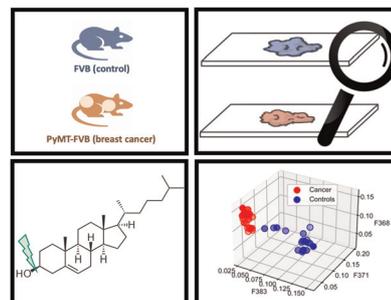
Writing a Chromatogram

Reading a Chromatogram

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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\*

