

## IN THIS ISSUE

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### Cover

See A. Mills *et al.*,  
pp. 5582–5590.

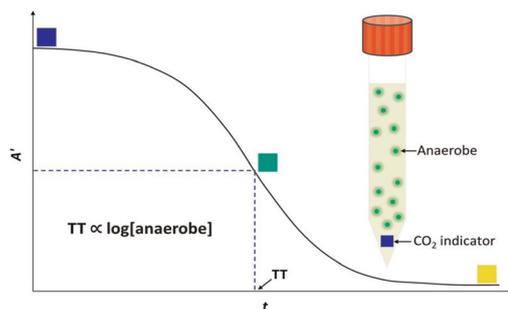
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Andrew Mills  
from *Analyst*,  
2024, **149**, 5582.

## PAPER

5582

### CO<sub>2</sub>-Based micro-respirometry for measuring bacterial load under aerobic and anaerobic conditions

L. McDonnell, D. Yusufu and A. Mills\*

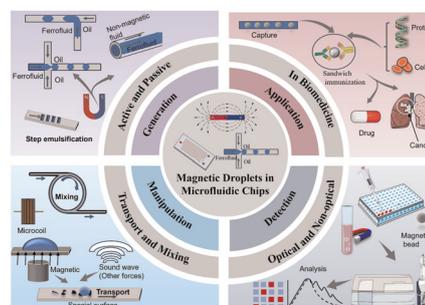


## MINIREVIEW

5591

### Generation, manipulation, detection and biomedical applications of magnetic droplets in microfluidic chips

Chenyang Xu, Huanhuan Shi,\* Zhongjian Tan,  
Yun Zheng, Weizheng Xu, Zhengxian Dan, Jiacong Liao,  
Zhiying Dai and Yali Zhao\*



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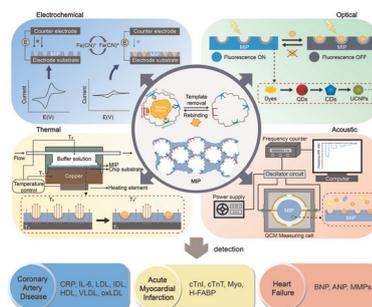
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## CRITICAL REVIEW

5617

## Molecularly imprinted polymer sensors for biomarker detection in cardiovascular diseases

Wenteng Tang, Junlei Han, Wenhong Zhang, Huimin Li, Jun Chen, Wei Song and Li Wang\*

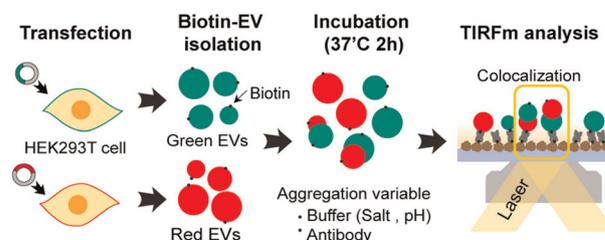


## PAPERS

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## Evaluation of extracellular vesicle aggregation by single vesicle analysis

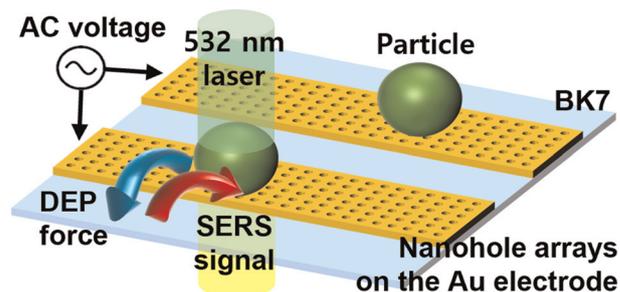
Johan Yi, Suyeon Kim, Chungmin Han\* and Jaesung Park\*



5649

## Surface-enhanced Raman spectroscopy with single cell manipulation by microfluidic dielectrophoresis

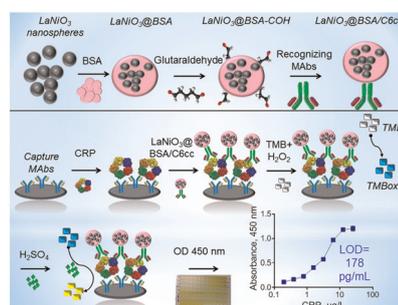
Kwanhwi Ko, Hajun Yoo, Sangheon Han, Won Seok Chang and Donghyun Kim\*



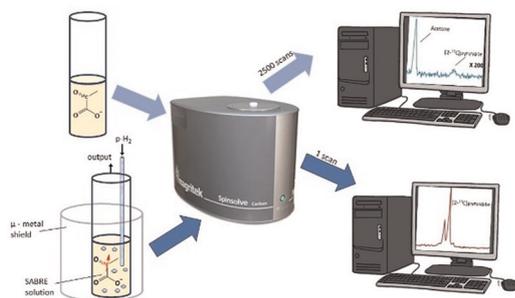
5657

The development of a method to produce diagnostic reagents using LaNiO<sub>3</sub> nanospheres and their application in nanozyme-linked immunosorbent assay for the colorimetric screening of C-reactive protein with high sensitivity

Maria Nikitina,\* Pavel Khramtsov, Stepan Devyatov, Rishat Valeev, Marina Eryomina, Andrey Chukavin and Mikhail Rayev



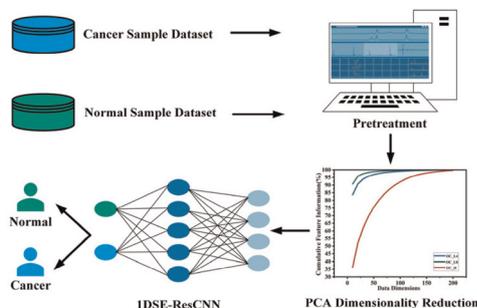
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### Hyperpolarised [2-<sup>13</sup>C]-pyruvate by <sup>13</sup>C SABRE in an acetone/water mixture

Oksana A. Bondar, Gamal A. I. Moustafa and Thomas B. R. Robertson\*

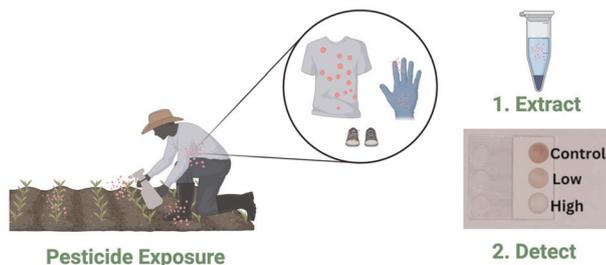
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### An improved cancer diagnosis algorithm for protein mass spectrometry based on PCA and a one-dimensional neural network combining ResNet and SENet

Liang Ma, Wenqing Gao,\* Xiangyang Hu, Dongdong Zhou, Chenlu Wang, Jiancheng Yu\* and Keqi Tang\*

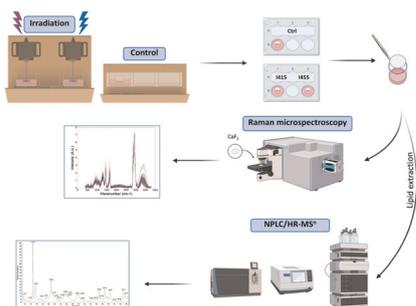
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### Capillary-flow driven microfluidic sensor based on tyrosinase for fast user-friendly assessment of pesticide exposures

Claire E. Hefner, Prakash Aryal, Eric Brack, Todd Alexander and Charles S. Henry\*

5693



### Impact of blue light on cutaneous barrier structures and properties: NPLC/HR-MS<sup>n</sup> and Raman analyses

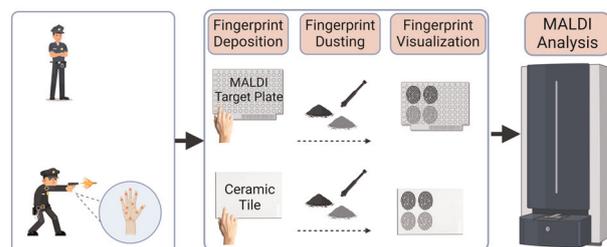
Léa Habib, Rime Michael-Jubeli,\* Marie Abboud, Roger Lteif and Ali Tfayli



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## Exploring gunshot residue detection in fingerprints by functionalized particle-coupled matrix-assisted laser desorption/ionization mass spectrometry

Sunil S. Adav, Yan Wen Crystal Tan, Choon Teck Low, Song Wei Loo, Ridhwan Yusoff, Archana Gautam, Yuk Lin Yong, Chiew Yung Yang, Chin Chin Lim and Kee Woei Ng\*



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## Structural determination of fructooligosaccharides and raffinose family oligosaccharides using logically derived sequence tandem mass spectrometry

Chia Yen Liew, Wun-Long Li and Chi-Kung Ni\*

