## **Sensors & Diagnostics**

#### rsc.li/sensors

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

#### IN THIS ISSUE

ISSN 2635-0998 CODEN SDEIAR 3(12) 1879-1994 (2024)





Cover See Mounir A. Koussa *et al.*, pp. 1899–1922. Image reproduced by permission of Mounir A. Koussa from *Sens. Diagn.*, 2024, **3**, 1899.



Inside cover See Neso Sojic *et al.,* pp. 1887–1898. Image reproduced by permission of Neso Sojic from *Sens. Diagn.,* 2024, **3**, 1887.

C ROYAL SOCIETY Mount A. Rouss et al. OF CHEMISTRY VasCent<sup>1</sup> a point-of-care plat

#### 1886

EDITORIAL

Towards greater accountability and trust: the launch of transparent peer review in Sensors & Diagnostics



#### CRITICAL REVIEW

#### 1887

### Recent advances in electrochemiluminescence immunosensing

Jing Yu, Dalibor Stankovic, Jasmina Vidic and Neso Sojic\*







## **EES Batteries**

## Exceptional research on batteries and energy storage

Part of the EES family



Registered charity number: 207890

#### PAPERS

#### 1899

## VitalOne<sup>™</sup>: a point-of-care platform for rapid, comprehensive, central-lab quality blood testing

M. A. Koussa,\* M. Barreiros, P. S. Ehrlich Perez, S. R. Jean, T. C. Lee, R. MacLeod, A. Witham, G. Bhat, T. Campbell, S. Lizano, M. Toth, A. Venkateswaran, D. Yang, N. Zaman, W. Alfaqheri, A. Ardalan, L. Barbosa, M. Behrouzi, V. Borisenko, R. Chand, K. S. Ho, P. Kumar, M. Lengyel, W. Luo, F. Masum, L. Piñeros, A. R. Kozhipuram, S. Sanders, D. Santos, V. Nadella, F. Kazemzadeh and I. Khodadad



#### 1923

#### A fluorescent sensor array based on carbon dots for the accurate determination of pH

Haobo Guo, Pooria Lesani, Hala Zreiqat and Elizabeth J. New\*



#### 1935

## Challenges in aptamer-based sensor development using carbon nanotube networks

Laura Ferrer Pascual, Eero Gustafsson, Juha Siitonen, Vasuki Durairaj and Tomi Laurila\*

#### 1947

#### Detection of SARS-CoV-2 and noroviruses in coldchain food samples using aptamer-functionalized graphene field-effect transistors

Qingliu Wu, Songjia Luo, Lu Wang,\* Baolei Dong, Hao Qu\* and Lei Zheng





#### PAPERS

# 1957

## Peroxidase-mimicking Prussian blue nanoparticles *versus* HRP for high colorimetric detection of miRNA-141 in competitive RNA-RNA systems

Maliana El Aamri, Hasna Mohammadi and Aziz Amine\*

#### 1966



#### A DNA biosensor integrating surface hybridization, thermo-responsive coating, laminar-flow technology and localized photothermal effect for efficient electrochemical detection of nucleic acids

Ludovica Maugeri, Giorgia Fangano, Angelo Ferlazzo,\* Giuseppe Forte, Antonino Gulino and Salvatore Petralia\*



## A self-assembling protein–DNA complex with an inbuilt DNA release system for quantitative immuno-PCR applications

A. E. Sorenson and P. M. Schaeffer\*

1984

8



## Application of surface selective site-directed crystallization in a visual assay of DNA

Jinrong Chen, Ruwen Xie, Rui Liu, Lishang Liu\* and Shusheng Zhang\*

#### 1992

Correction: modulation of the binding sites for an adaptable DNA interactive probe: efficient chromo-fluorogenic recognition of Al<sup>3+</sup> and live cell bioimaging

Atanu Maji, Debarpan Mitra, Amitav Biswas, Moumita Ghosh, Rahul Naskar, Saswati Gharami, Nabendu Murmu and Tapan K. Mondal\*