

# Sensors & Diagnostics

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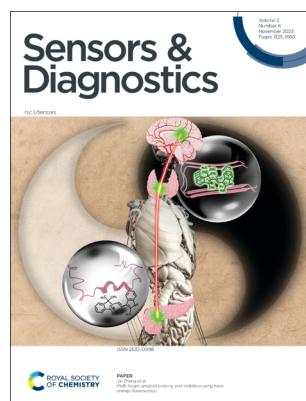
## IN THIS ISSUE

ISSN 2635-0998 CODEN SDEIAR 2(6) 1325–1660 (2023)



### Cover

See Andrew J. Steckl et al., pp. 1460–1468.  
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### Inside cover

See Jie Zheng et al., pp. 1469–1482.  
Image reproduced by permission of Jie Zheng from *Sens. Diagn.*, 2023, 2, 1469.

## CRITICAL REVIEWS

1335

### Dermal-fluid-enabled detection platforms for non-invasive ambulatory monitoring

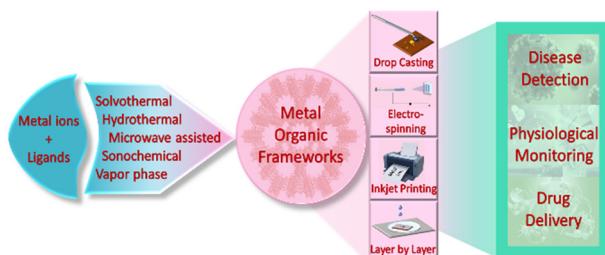
Asmita Veronica, Yanan Li, Yue Li, I-Ming Hsing and Hnin Yin Yin Nyein\*



1360

### Advancing healthcare applications: wearable sensors utilizing metal–organic frameworks

P. N. Blessy Rebecca, D. Durgalakshmi, S. Balakumar and R. Ajay Rakkesh\*



# Sensors & Diagnostics

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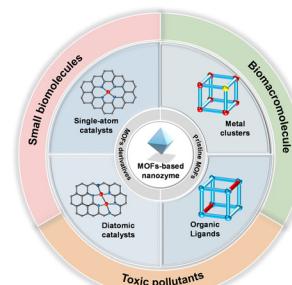


## CRITICAL REVIEWS

1376

**Tuning atomic-scale sites in metal-organic framework-based nanozymes for sensitive biosensing**

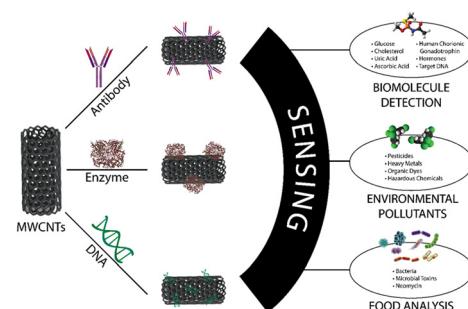
Yating Wen, Weiqing Xu, Liuyong Hu, Miao Xu, Wenling Gu,\* Hongcheng Sun and Chengzhou Zhu\*



1390

**Bioengineered multi-walled carbon nanotube (MWCNT) based biosensors and applications thereof**

Sandeep Kumar, H. K. Sidhu, Ashok K. Paul, Neha Bhardwaj, Neeraj S. Thakur\* and Akash Deep\*

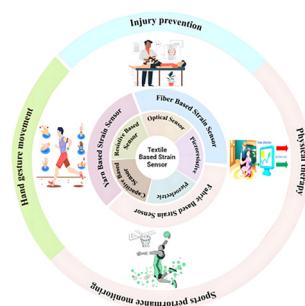


## TUTORIAL REVIEWS

1414

**The technology of wearable flexible textile-based strain sensors for monitoring multiple human motions: construction, patterning and performance**

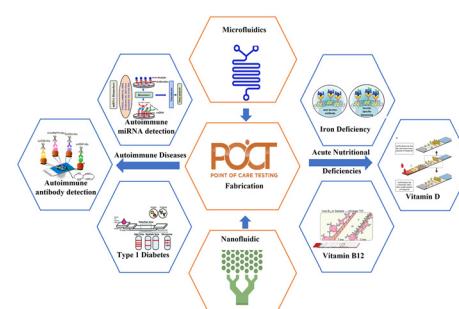
Liza Liza, Md Homaune Kabir, Liang Jiang,\* Stephen Jerrams and Shaojuan Chen\*



1437

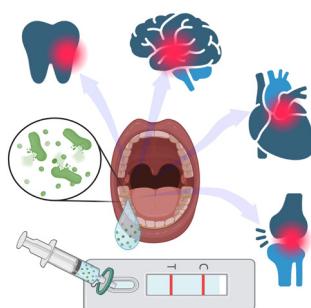
**Integrated microfluidic devices for point-of-care detection of bio-analytes and disease**

Prateechee Padma Behera, Natish Kumar, Monika Kumari, Sumit Kumar, Pranab Kumar Mondal and Ravi Kumar Arun\*



## PAPERS

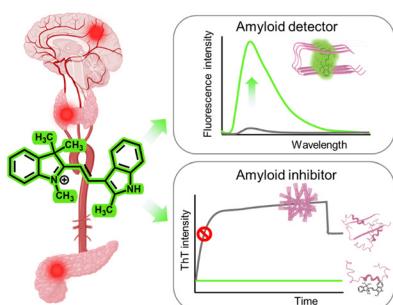
1460



**Salivary endotoxin detection using combined mono/polyclonal antibody-based sandwich-type lateral flow immunoassay device**

Daewoo Han, Sancai Xie and Andrew J. Steckl\*

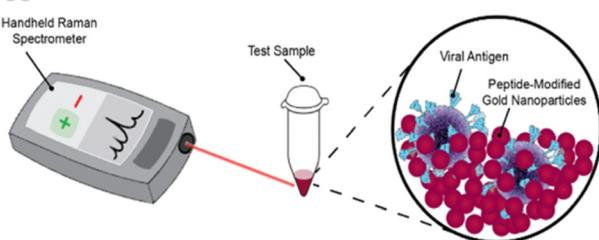
1469



**Multi-target amyloid probing and inhibition using basic orange fluorescence**

Yijing Tang, Dong Zhang, Xiong Gong and Jie Zheng\*

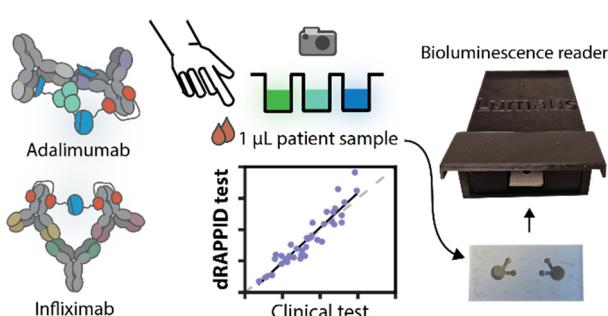
1483



**From the lab to the field: handheld surface enhanced Raman spectroscopy (SERS) detection of viral proteins**

Taylor D. Payne, Stephen J. Klawo, Tengyue Jian, Qunzhao Wang, Sang Hoon Kim, Ronit Freeman\* and Zachary D. Schultz\*

1492



**Point-of-care therapeutic drug monitoring of tumour necrosis factor- $\alpha$  inhibitors using a single step immunoassay**

Eva A. van Aalen, Ivar R. de Vries, Eva T. L. Hanckmann, Jeannot R. F. Stevens, Thomas R. Romagnoli, Luc J. J. Derijks, Maarten A. C. Broeren and Maarten Merkx\*

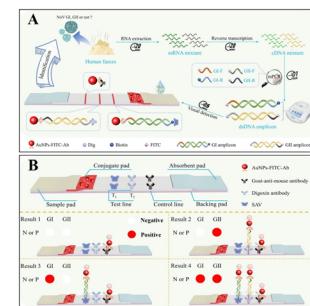


## PAPERS

1501

## Simultaneous on-site visual identification of norovirus GI and GII genogroups with point-of-care molecular lateral flow strip

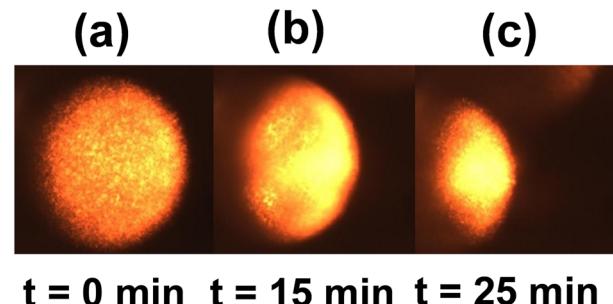
Ziwen Zong, Xianzhuo Meng, Weiwei Li, Jianguo Xu, Junling Yu, Xinxin Wang, Peng Wang, Guodong Liu, Yong Sun\* and Wei Chen\*



1509

## Machine learning based microfluidic sensing device for viscosity measurements

Adil Mustafa,\* Daniyal Haider, Arnab Barua, Melikhan Tanyeri,\* Ahmet Erten and Ozlem Yalcin\*

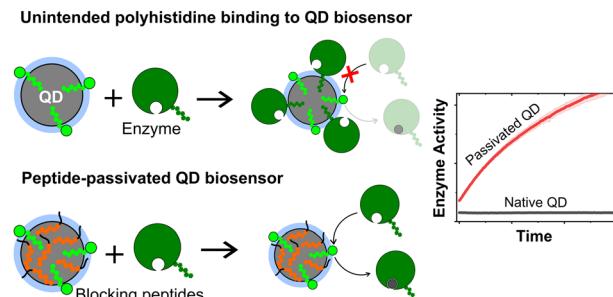


**t = 0 min   t = 15 min   t = 25 min**

1521

## Passivating quantum dots against histag-displaying enzymes using blocking peptides: salient considerations for self-assembling quantum dot biosensors

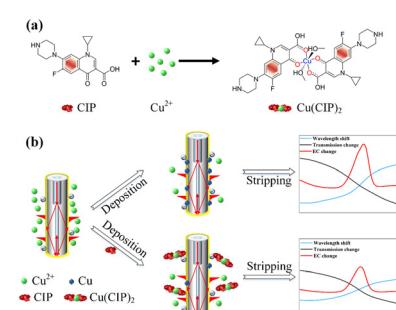
Christopher M. Green,\* David A. Hastman, Kimihiro Susumu, Joseph Spangler, David A. Stenger, Igor L. Medintz and Sebastián A. Díaz\*



1531

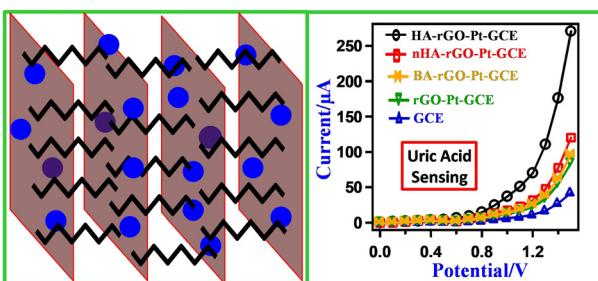
## Optical & electrochemical fiber-optic sensor: *in situ* detection of antibiotics with fM detection limit

Xiaoling Peng, Bo Peng, Xicheng Wang, Zhicong Ren, Zhiyong Yang, Lei Liu, Jiahai Li, Liang Chen, Daotong You, Jianqing Li,\* Minghui Du\* and Tuan Guo\*



## PAPERS

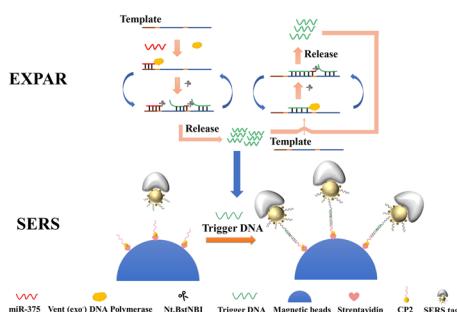
1541



### Enhancement of functional surface and molecular dynamics at Pt-rGO by spacer 1,6-hexanediamine for precise detection of biomolecules: uric acid as a specimen

Mohammad Razaul Karim,\* Mohammad Jayed, Md. Zakariya Rahman Laskar, Md Murshed Bhuyan, Md. Saidul Islam, Shinya Hayami and Mohammed M. Rahman

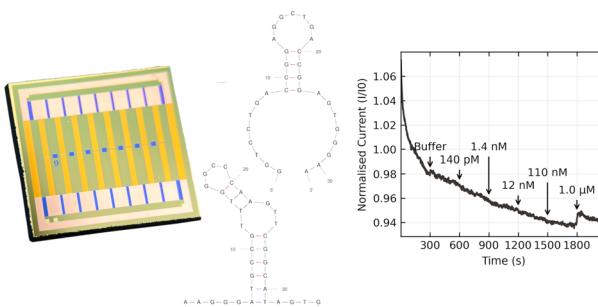
1553



### EXPAR and Au–Ag mushroom-shaped SERS probe assisted detection of exosomal miR-375 in prostate cancer

Chenxiao Tang, Zhipeng Huang, Huixiang Li, Ren Zhang, Guopeng Yu, Jilie Kong, Hui Chen\* and Wenhao Weng\*

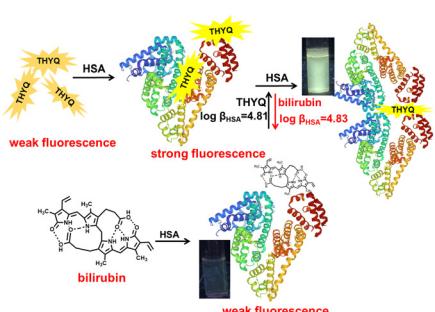
1561



### A comparison between oestradiol aptamers as receptors in CNT FET biosensors

Erica Cassie, Hamish Dunham, Erica Happe, Hong Phan T. Nguyen, Janet L. Pitman and Natalie O. V. Plank\*

1574



### Efficient detection of bilirubin in human serum through a displacement approach

Nancy Singla, Manzoor Ahmad, Vishal Mahajan, Prabhpreet Singh and Subodh Kumar\*

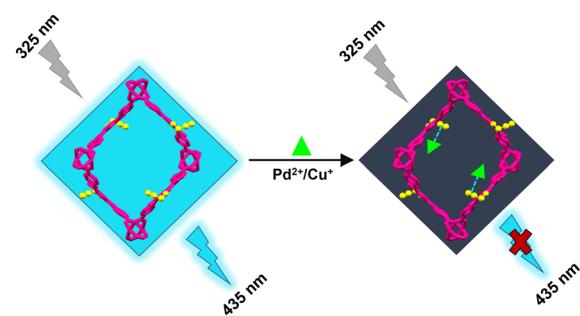


## PAPERS

1585

**A Zn-MOF functionalized with alkyne groups: ultrasensitive detection of  $\text{Cu}^+$  and  $\text{Pd}^{2+}$  ions in aqueous medium**

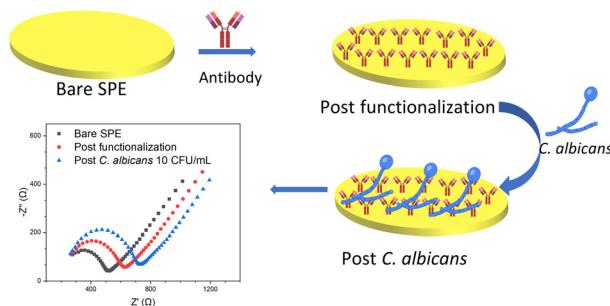
Aashish, Ruchika Gupta and Rajeev Gupta\*



1597

**Rapid detection of *Candida albicans* in urine by an Electrochemical Impedance Spectroscopy (EIS)-based biosensor**

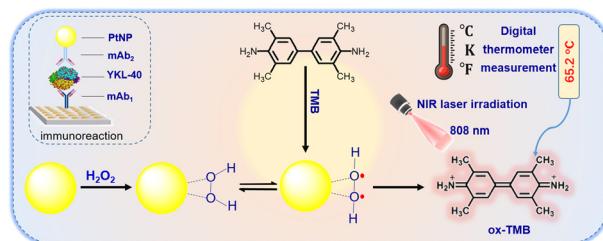
Tina D'Aponte, Maria De Luca, Nikola Sakač, Martina Schibeci, Angela Arciello, Emanuela Roscetto, Maria Rosaria Catania, Vincenzo Iannotti, Raffaele Velotta and Bartolomeo Della Ventura\*



1605

**Platinum nanozyme-mediated temperature sensor for sensitive photothermal immunoassay of YKL-40 under near-infrared light**

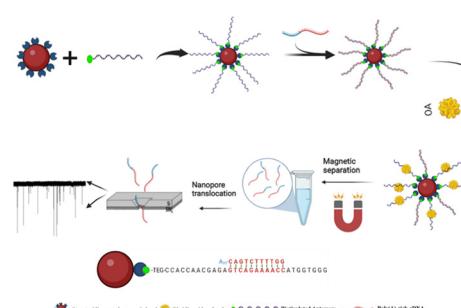
Shaoyang Yu, Qiaohong Ke, Fan Cai, Sisi Gong, Rongfu Huang and Chunmei Fan\*



1612

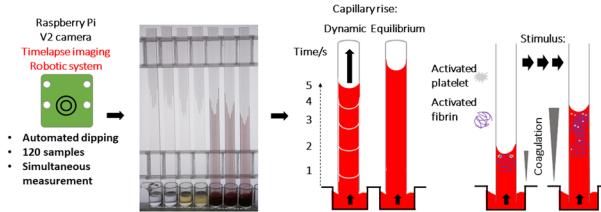
**Highly sensitive solid-state nanopore aptasensor based on target-induced strand displacement for okadaic acid detection from shellfish samples**

Mohamed Amin Elaguech, Yajie Yin, Yunjiao Wang, Bing Shao,\* Chaker Tlili\* and Deqiang Wang\*



## PAPERS

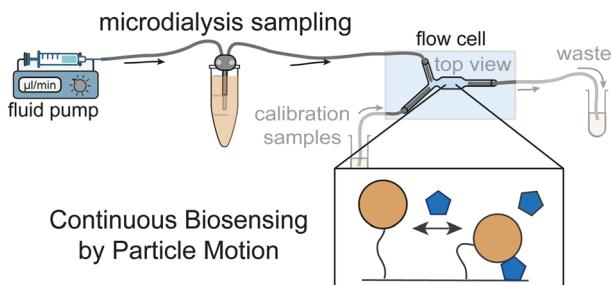
1623



**Time- and distance-resolved robotic imaging of fluid flow in vertical microfluidic strips: a new technique for quantitative, multiparameter measurement of global haemostasis**

Rüya Meltem Sarıyer, Kirandeep Gill, Sarah H. Needs, Daniel Hodge, Nuno M. Reis, Chris I. Jones and Alexander D. Edwards\*

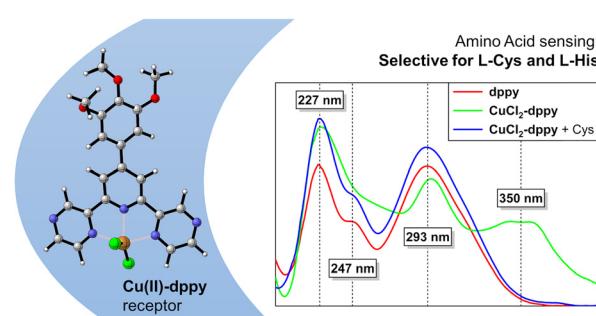
1638



**Integrated sampling-and-sensing using microdialysis and biosensing by particle motion for continuous cortisol monitoring**

Laura van Smeden, Arthur M. de Jong and Menno W. J. Prins\*

1649



**A simple copper(II) dppy-based receptor for sensing of L-cysteine and L-histidine in aqueous acetonitrile medium**

Dipankar Das, Aritra Roy, Sourav Sutradhar, Felipe Fantuzzi\* and Biswa Nath Ghosh\*

## CORRECTION

1658

**Correction: Chemiresistive sensor for breath frequency and ammonia concentration in exhaled gas over a PVA/PANI/CC composite film**

Sandeep Kumar, Chandra Shekhar Kushwaha, Pratibha Singh, Kritika Kanojia and Saroj Kr Shukla\*

