

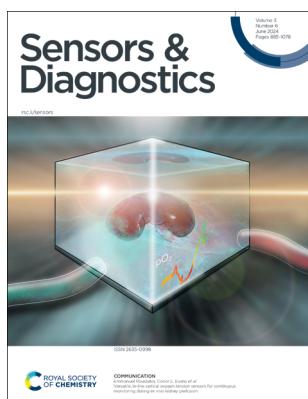
Sensors & Diagnostics

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(6) 885–1078 (2024)



Cover

See Emmanuel Roussakis, Conor L. Evans *et al.*, pp. 1014–1019.

Image reproduced by permission of Juan Pedro Cascales from *Sens. Diagn.*, 2024, 3, 1014.

CRITICAL REVIEWS

893

Advances in electrochemical sensors for real-time glucose monitoring

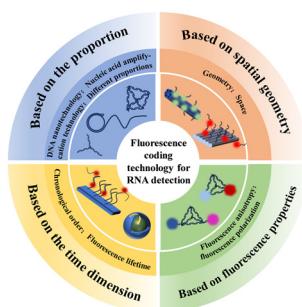
Md. Harun-Or-Rashid, Most. Nazmin Aktar, Veronica Preda and Noushin Nasiri*



914

Fluorescence coding techniques for RNA detection

Junren Wang, Qin Xiang,* Haifeng Dong* and Xueji Zhang



Environmental Science journals

One impactful portfolio for
every exceptional mind

Harnessing the power of interdisciplinary
science to preserve our environment

rsc.li/envsci

Fundamental questions
Elemental answers



Registered charity number: 207890

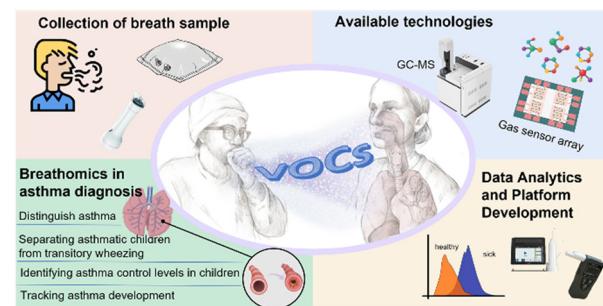


CRITICAL REVIEWS

933

Application of breathomics in pediatric asthma: a review

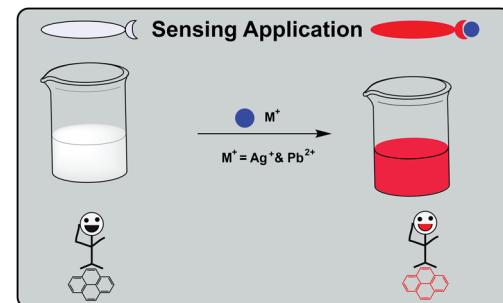
Lei Chi, Xiaoli Wang, Yuxia Shan, Chonghui Zhu, Ling Leng, Rong Chen, Qing Xie, Zhenze Cui* and Minghui Yang*



946

Recent developments in pyrene-based fluorescence recognition and imaging of Ag^+ and Pb^{2+} ions: Synthesis, applications and challenges

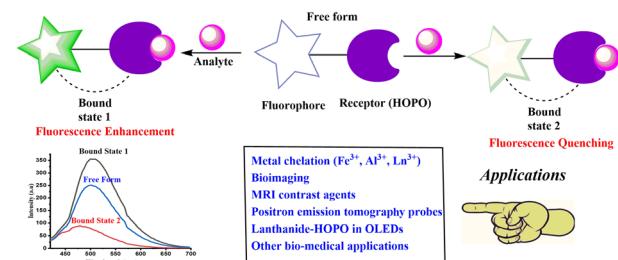
Suvendu Paul,* Prasenjit Barman, Nilanjan Dey and Michael Watkinson*



968

Hydroxypyridinone based chelators: a molecular tool for fluorescence sensing and sensitization

Shalini Singh, Neha Kumari, B. K. Kanungo and Minati Baral*

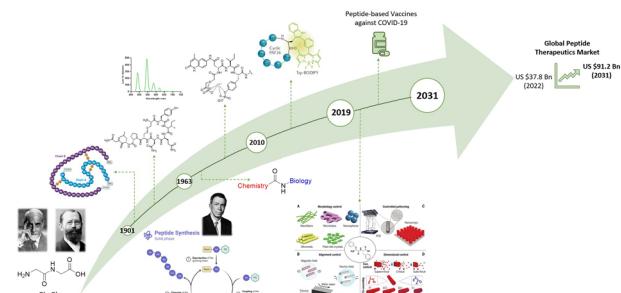


PERSPECTIVE

987

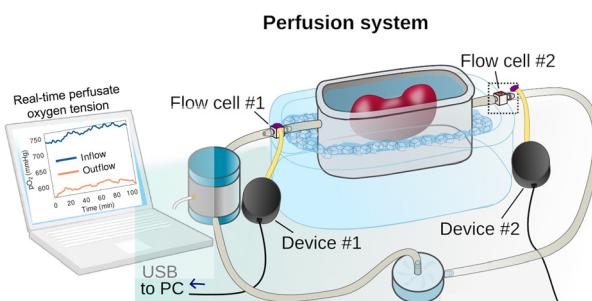
Modified synthetic peptides: from therapeutics to chemosensors

Conor Wynne and Robert B. P. Elmes*



COMMUNICATION

1014

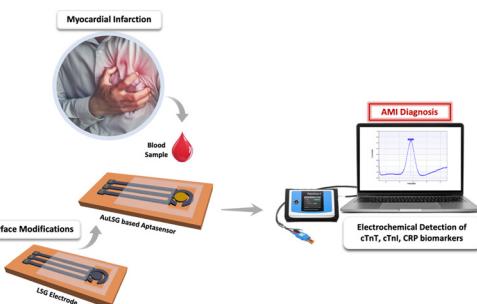


Versatile, in-line optical oxygen tension sensors for continuous monitoring during *ex vivo* kidney perfusion

Emmanuel Roussakis,* Juan Pedro Cascales, Dor Yoeli, Alexis Cralley, Avery Goss, Anna Wiatrowski, Maia Carvalho, Hunter B. Moore, Ernest E. Moore, Christene A. Huang and Conor L. Evans*

PAPERS

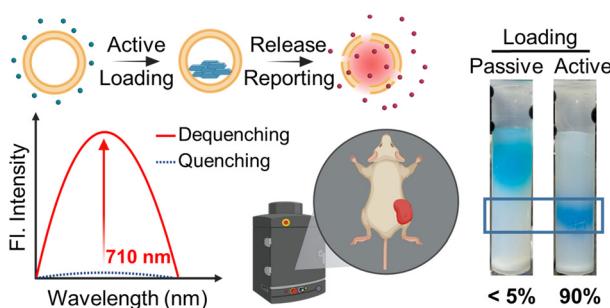
1020



Multiplexed aptasensor for detection of acute myocardial infarction (AMI) biomarkers

Duygu Beduk, Tutku Beduk, Abdellatif Ait Lahcen, Veerappan Mani, Emine Guler Celik, Gamze Iskenderoglu, Ferhat Demirci, Soysal Turhan, Oner Ozdogan, Su Ozgur, Tuncay Goksel, Kutsal Turhan, Khaled Nabil Salama* and Suna Timur*

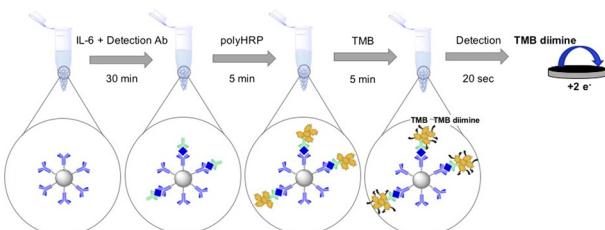
1028



Active loading of cyanine 5.5 derivatives into liposomes for deep self-quenching and their applications in deep tissue imaging

Chong-Yan Chen, Cheng-Bang Jian, Hua-De Gao, Xu-En Yu, Yuan-Chih Chang, Shwee Khuan Leong, Jiun-Jie Shie* and Hsien-Ming Lee*

1039



Electrochemical immunomagnetic assay for interleukin-6 detection in human plasma

Grace Buckey, Olivia E. Owens, Hannah A. Richards and David E. Cliffel*

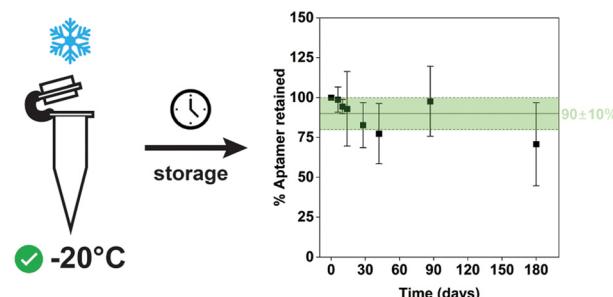


PAPERS

1044

Effects of storage conditions on the performance of an electrochemical aptamer-based sensor

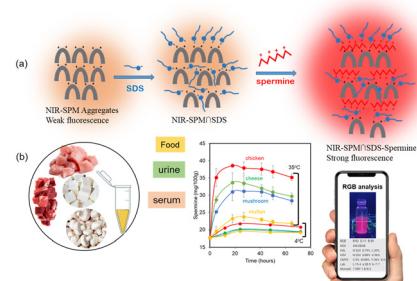
Julia Chung, Adriana Billante, Charlotte Flatebo, Kaylyn K. Leung, Julian Gerson, Nicole Emmons, Tod E. Kippin, Lior Sepunaru and Kevin W. Plaxco*



1051

Red and NIR active dipod-SDS self-assemblies for “turn on” quantification of spermine in serum, urine and food: smart-phone assisted on-site determination of spermine in amine-rich foods

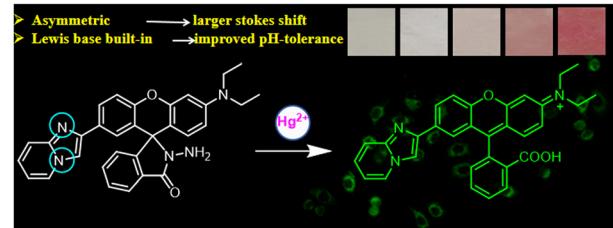
Nancy Singla,* Sukhvinder Dhiman, Manzoor Ahmad, Satwinderjeet Kaur, Prabhpreet Singh and Subodh Kumar*



1062

An imidazo[1,2-a]pyridine-functionalized xanthene fluorescent probe for naked-eye detection of Hg^{2+} and its application in cell imaging and test strips

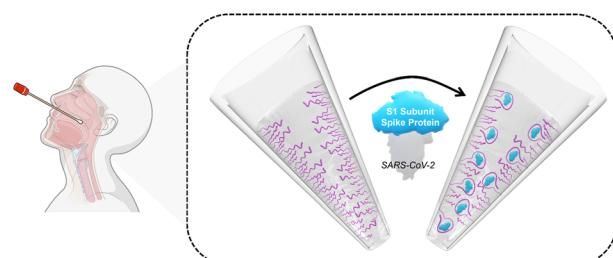
Xu-Hong Han, Piao Zhao, Meng-Ke Tang, Lei Yang, Qing Wang* and Shu-Sheng Zhang*



1068

Aptamer-functionalized nanopipettes: a promising approach for viral fragment detection via ion current rectification

Shekemi Denuga, Dominik Duleba, Pallavi Dutta, Guerrino Macori, Damion K. Corrigan, Séamus Fanning and Robert P. Johnson*



CORRECTION

1076

Correction: 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*

