

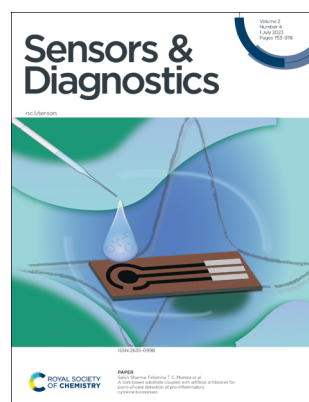
Sensors & Diagnostics

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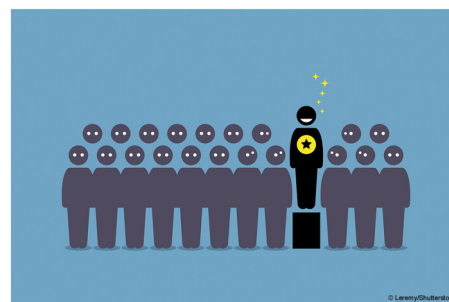
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See Milica Jovic, Denis Prim, Marc E. Pfeifer *et al.* pp. 964–975.
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EDITORIAL

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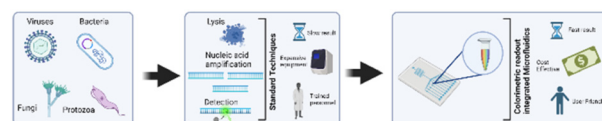


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Microfluidic-based colorimetric nucleic acid detection of pathogens

Sripadh Guptha Yedire, Haleema Khan, Tamer AbdelFatah, Roozbeh Siavash Moakhar and Sara Mahshid*



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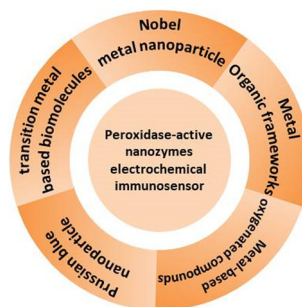


CRITICAL REVIEWS

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Recent advances of peroxidase-active nanozymes in electrochemical immunoassays

Jiejie Feng, Tao Yao and Zhanfang Ma*

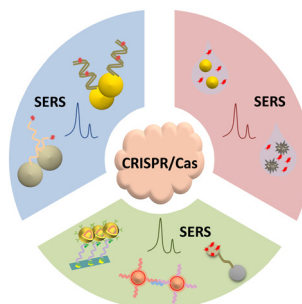


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Current advance of CRISPR/Cas-based SERS technology

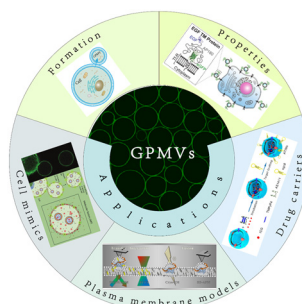
Huimin Wang, Ailing Su, Jingjing Chang, Xiangguo Liu, Chongyang Liang and Shuping Xu*



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Formation of giant plasma membrane vesicles for biological and medical applications: a review

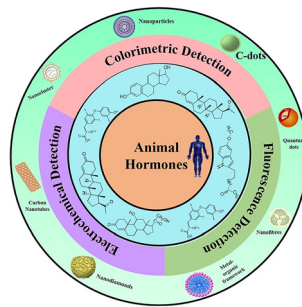
Yang Li, Songyang Liu, Wanyu Xu, Kemin Wang, Fengjiao He* and Jianbo Liu*



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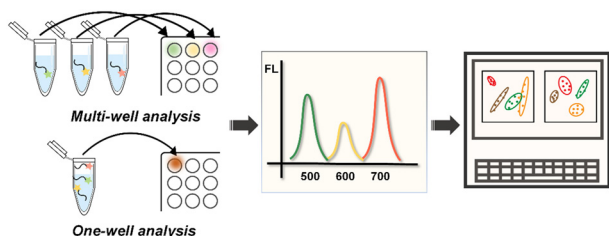
Functional nanostructures in analytical chemistry: new insights into the optical and electrochemical sensing of animal hormones in food, environmental and biological samples

Juhi Bhadresh Raval, Vaibhavkumar N. Mehta, Sanjay Jha, Rakesh Kumar Singhal, Hirakendu Basu and Suresh Kumar Kailasa*



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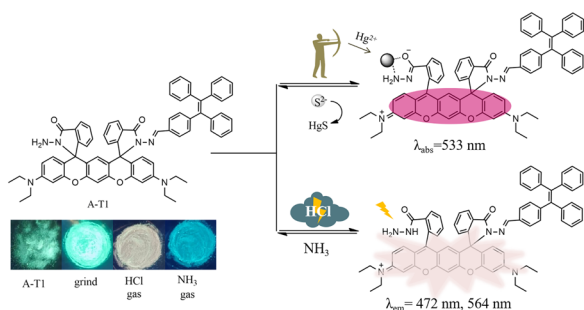


Rapid identification of molecular subtyping of breast cancer cell lines using a multi-channel sensor array

Yuyao Jin, Yuanjie Sun, Nan Du, Wei-Tao Dou, Ying Tan, Xiao-Peng He, Naihan Xu* and Chunyan Tan*

PAPERS

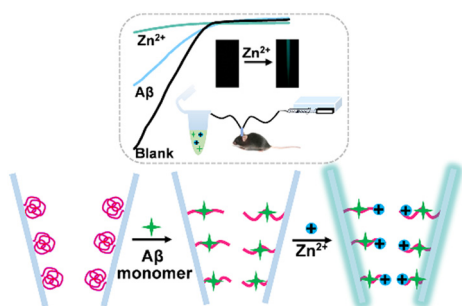
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Tetraphenylethene-capped aminobenzopyranoxanthene hydrazone probes for colorimetric recognition of Hg^{2+} and fluorescent sensing of HCl gas

Yang Yang,* Chang Pei, Chao-Ying Gao and Jinglin Liu*

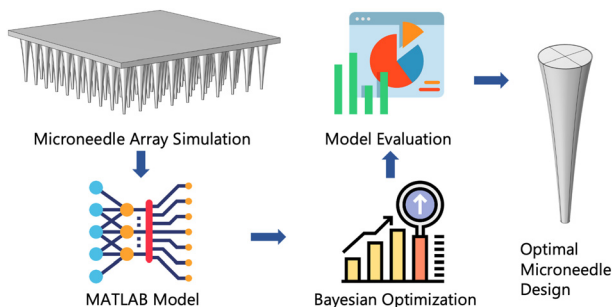
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A stimuli-responsive polymer modified nanopore for measuring β -amyloid peptide and zinc ions in brains of live mice with Alzheimer's disease

Shushu Ding, Yue Zhu, Anwei Zhu and Guoyue Shi*

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Bayesian machine learning optimization of microneedle design for biological fluid sampling

Ceren Tarar, Erdal Aydın, Ali K. Yetisen and Savas Tasoglu*



The development of matrix-metalloproteinase responsive sensors for the machine-independent detection of oral inflammation

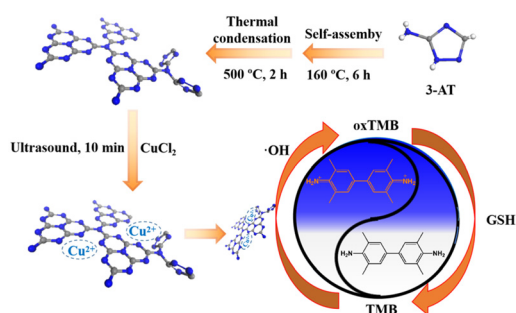
The diagram illustrates the Bitter Guard system. At the top, a chemical structure of a bitter compound is shown, which is a cyclic amide. Below it, the linear sequence of the system is depicted: a Linker (orange), a Protease sensitive linker (black), another Linker (orange), and the Bitter flavor (blue). The bottom part of the diagram shows the process: a Surrogate marker (red) is added to the bitter compound, forming a complex. This complex is then released as the Bitter flavor (blue) and the Surrogate marker (red) is released. The bottom right shows two types of cleavage: Specific cleavage (red) and Unspecific cleavage (grey).

Light-driven room temperature methane gas sensor based on Ag modified flower-like ZnO microsphere

A three-dimensional microfluidic flow cell and system integration for improved electrochemical substrate detection in HRP/TMB-based immunoassays

Synthesis of molybdenum nanoclusters from *Vitex negundo* leaves for sensing epinephrine in a pharmaceutical composition

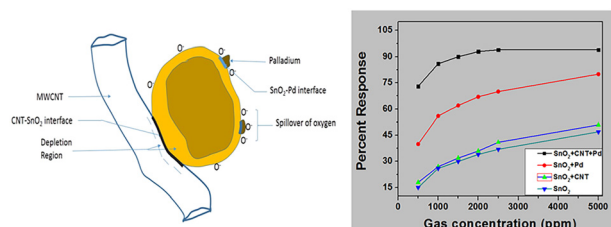
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Graphitic carbon nitride with Cu²⁺ and triazole group co-doping for enhanced peroxidase-like activity and its application for glutathione detection

Xiaotao Liu, Xueyi Zheng, Chunqiu Xia and Liangqia Guo*

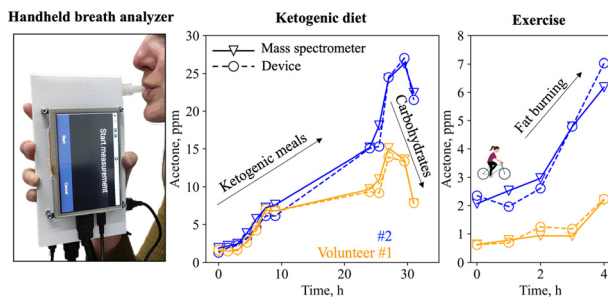
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Beneficial effect of Pd and MWCNT co-loading in SnO₂ nanoparticles towards the low temperature detection of *n*-butane gas: synergistic effect on sensing performance

P. Rana, M. Narjinary, A. Sen and M. Pal*

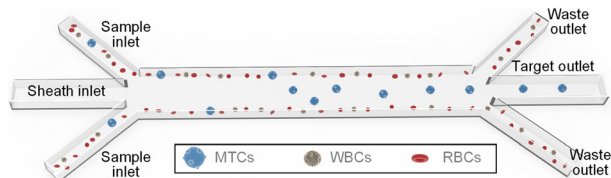
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Handheld device quantifies breath acetone for real-life metabolic health monitoring

Grégoire M. G. B. H. Bastide, Anna L. Remund, Dina N. Oosthuizen, Nina Derron, Philipp A. Gerber and Ines C. Weber*

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High-throughput and high-purity separation of malignant tumor cells in pleural and peritoneal effusions using interfacial elasto-inertial microfluidics

Nan Xiang,* Zhonghua Ni and Dan Wu*

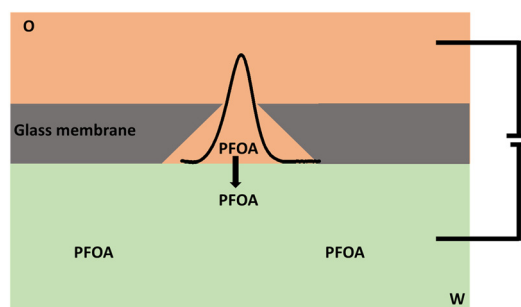


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Ion-transfer electroanalytical detection of perfluorooctanoic acid at a liquid–liquid micro-interface array

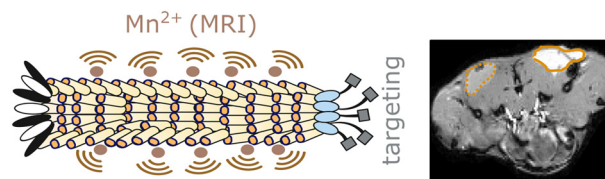
Hum Bahadur Lamichhane and Damien W. M. Arrigan*



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Genetically engineered filamentous phage for bacterial detection using magnetic resonance imaging

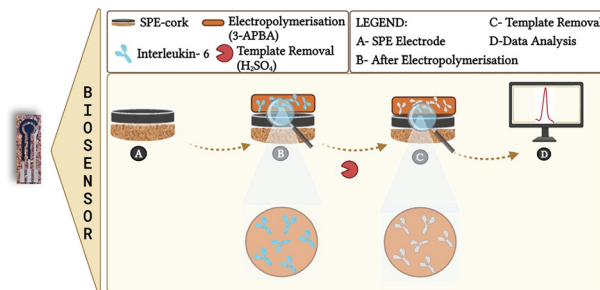
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A cork based substrate coupled with artificial antibodies for point-of-care detection of pro-inflammatory cytokine biomarkers

Bárbara Correia, Daniela Oliveira, Georgeta Vulpe, Ana P. M. Tavares, M. Goreti F. Sales, Abel J. Duarte, Sanjiv Sharma* and Felismina T. C. Moreira*



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A novel point-of-care diagnostic prototype system for the simultaneous electrochemiluminescent sensing of multiple traumatic brain injury biomarkers

Milica Jović, Denis Prim, Ophélie Righini, David Tagan, Mélanie Stäuble, Marc Pignat, Steve Gally, Martial Geiser and Marc E. Pfeifer*

