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Sensors & Diagnostics

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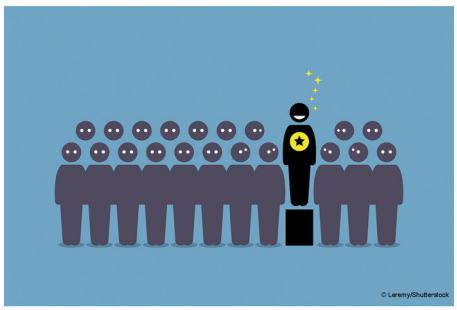

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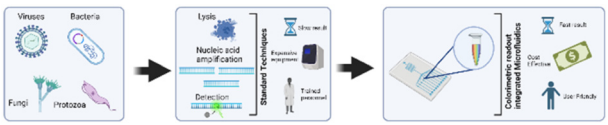
Microfluidic-based colorimetric nucleic acid detection of pathogens

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



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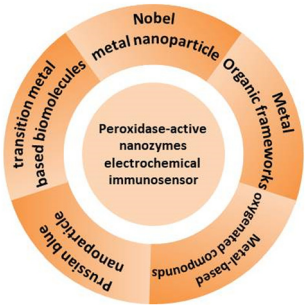
Recent advances of peroxidase-active nanozymes in electrochemical immunoassays

Jiejie Feng, Tao Yao and Zhanfang Ma*



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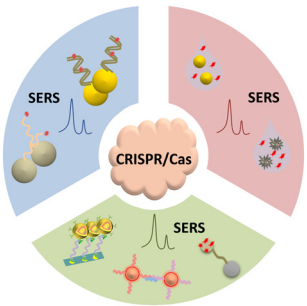

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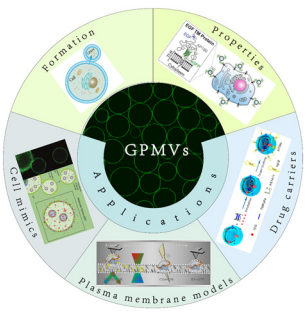
Formation of giant plasma membrane vesicles for biological and medical applications: a review

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



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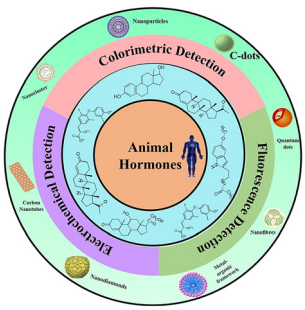
Juhi Bhadresh Raval, Vaibhavkumar N. Mehta, Sanjay Jha, Rakesh Kumar Singhal, Hirakendu Basu and Suresh Kumar Kailasa*



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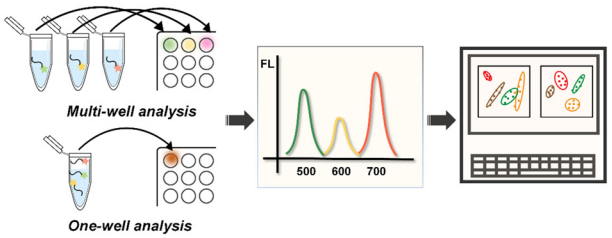

Rapid identification of molecular subtyping of breast cancer cell lines using a multi-channel sensor array

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

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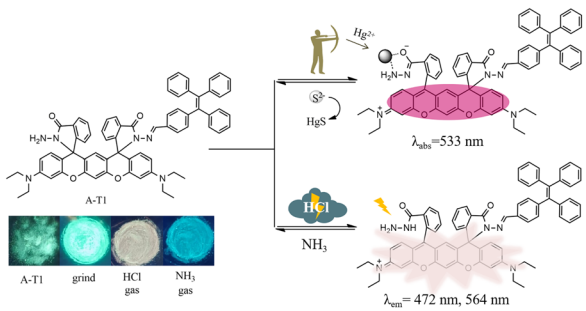

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Yang Yang,* Chang Pei, Chao-Ying Gao and Jinglin Liu*

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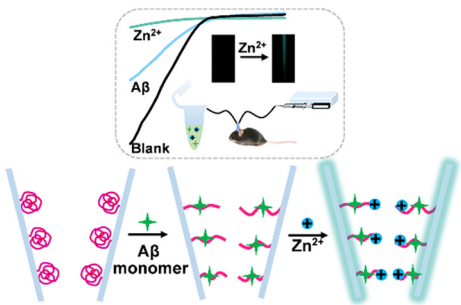

A stimuli-responsive polymer modified nanopore for measuring β-amyloid peptide and zinc ions in brains of live mice with Alzheimer's disease

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

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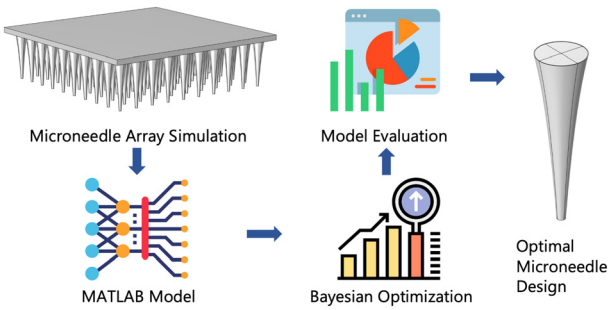

Bayesian machine learning optimization of microneedle design for biological fluid sampling

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

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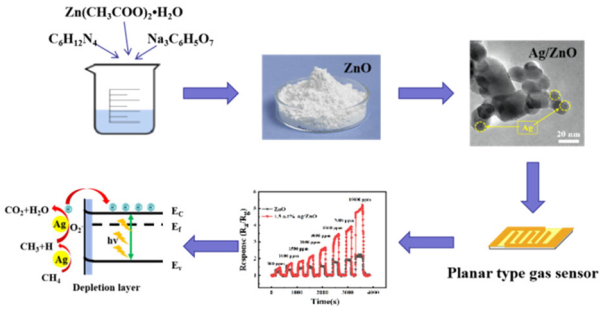
Mengwei Li, Xueya Sun, Yihui Wang, Cong Qin, Jianliang Cao and Yan Wang*



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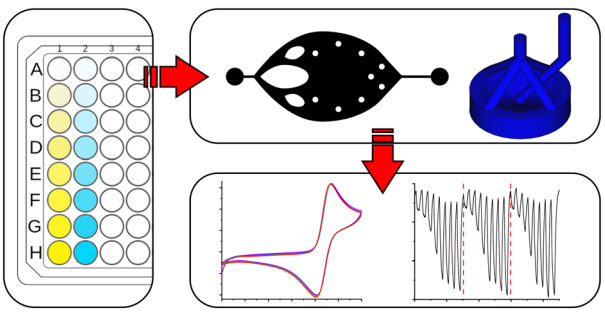
A three-dimensional microfluidic flow cell and system integration for improved electrochemical substrate detection in HRP/TMB-based immunoassays

Alexander Ecke, Jérémy Bell* and Rudolf J. Schneider*



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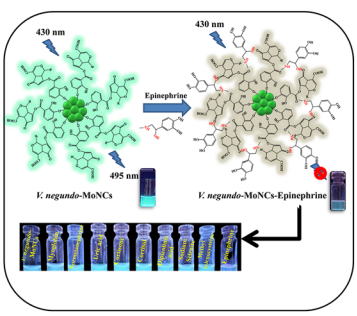
Synthesis of molybdenum nanoclusters from *Vitex negundo* leaves for sensing epinephrine in a pharmaceutical composition

Harshita, Sanjay Jha, Tae-Jung Park and Suresh Kumar Kailasa*



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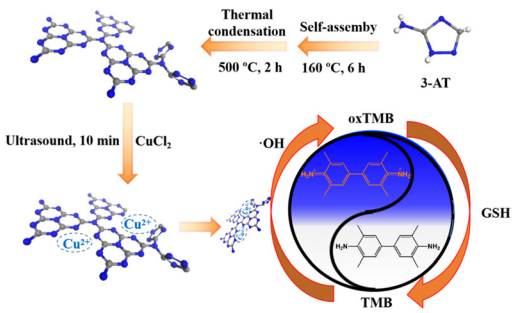

Graphitic carbon nitride with Cu^{2+} and triazole group co-doping for enhanced peroxidase-like activity and its application for glutathione detection

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

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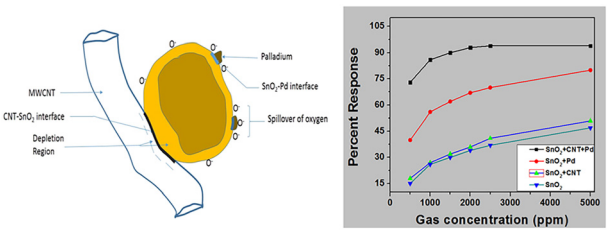

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P. Rana, M. Narjinary, A. Sen and M. Pal*

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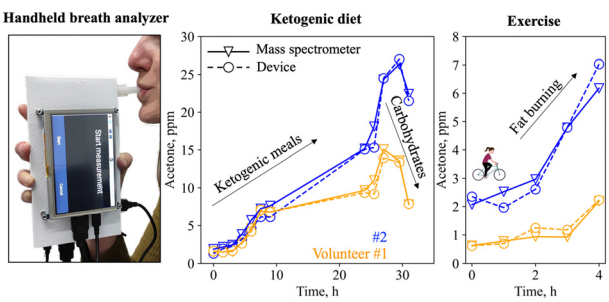

Handheld device quantifies breath acetone for real-life metabolic health monitoring

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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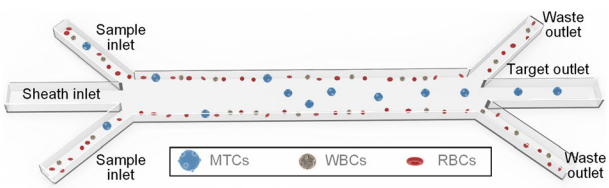

High-throughput and high-purity separation of malignant tumor cells in pleural and peritoneal effusions using interfacial elasto-inertial microfluidics

Nan Xiang,* Zhonghua Ni and Dan Wu*

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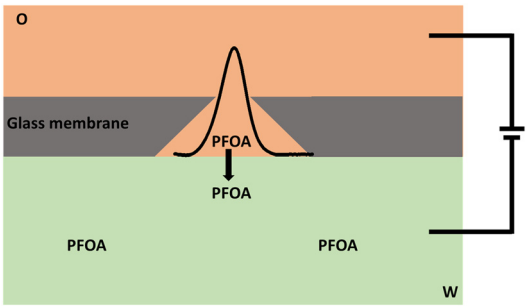
Ion-transfer electroanalytical detection of perfluorooctanoic acid at a liquid–liquid micro-interface array

Hum Bahadur Lamichhane and Damien W. M. Arrigan*



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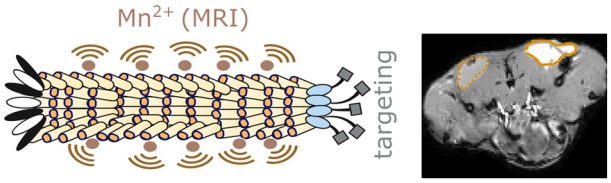
Genetically engineered filamentous phage for bacterial detection using magnetic resonance imaging

Raymond E. Borg, Harun F. Ozbakir, Binzhi Xu, Eugene Li, Xiwen Fang, Huan Peng, Irene A. Chen* and Arnab Mukherjee*



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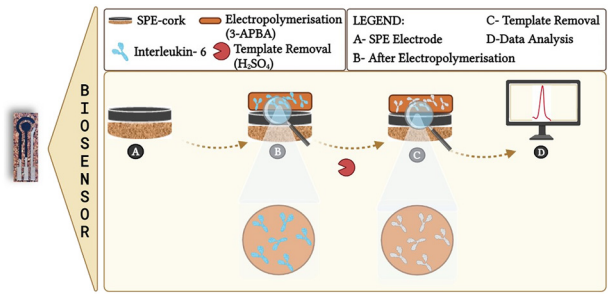
A cork based substrate coupled with artificial antibodies for point-of-care detection of pro-inflammatory cytokine biomarkers

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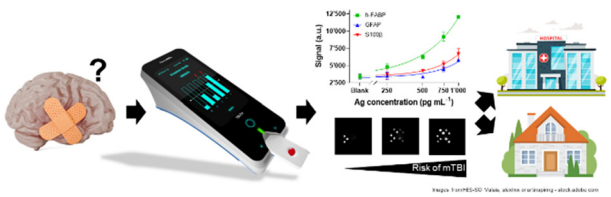
Milica Jović, Denis Prim, Ophélie Righini, David Tagan, Mélanie Stäuble, Marc Pignat, Steve Gallay, Martial Geiser and Marc E. Pfeifer*



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