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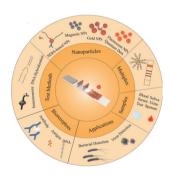
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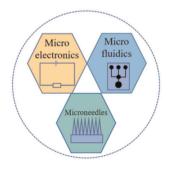
Lateral flow assay of pathogenic viruses and bacteria in healthcare

Xuanxu Nan, Xuesong Yao, Li Yang* and Yue Cui*



Modern microelectronics and microfluidics on microneedles

Yanzhang Han, Jun Li, Tingting Chen, Bingbing Gao* and Huili Wang*



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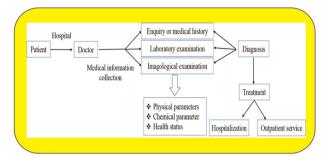


CRITICAL REVIEWS

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Wearable sensor platforms for real-time monitoring and early warning of metabolic disorders in humans

Ravikumar Avvanu, Amutha Arul, Ninghui Song, A. Anand Babu Christus, Xuesong Li, G. Tamilselvan, Yuanging Bu,* S. Kavitha, Zhen Zhang* and Nan Liu*



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Implantable microfluidics: methods and applications

Tao Luo,* Lican Zheng, Dongyang Chen, Chen Zhang, Sirui Liu, Chongjie Jiang, Yu Xie, Dan Du and Wei Zhou

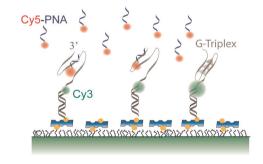


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Detecting secondary structure formation with FRET-PAINT

Sineth G. Kodikara, Kylie J. Merkel, Simon J. Haas, Sajad Shiekh and Hamza Balci*

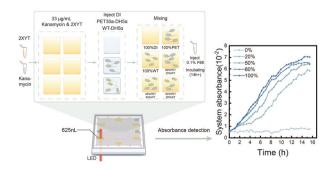


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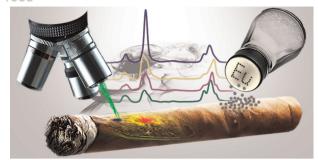
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Enhanced absorbance detection system for online bacterial monitoring in digital microfluidics

Jingya Wu, Maolin Zhang, Jianle Huang, Jingxin Guan, Chenxuan Hu, Mude Shi, Siyi Hu, Shurong Wang* and Hanbin Ma*



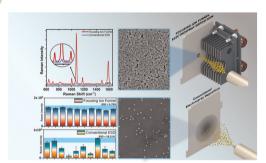
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How tobacco (Nicotiana tabacum) BY-2 cells cope with Eu(III) - a microspectroscopic study

Max Klotzsche, Manja Vogel, Susanne Sachs, Johannes Raff, Thorsten Stumpf, Björn Drobot and Robin Steudtner*

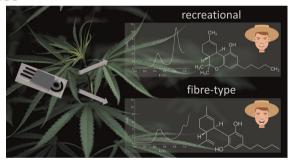
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Focusing ion funnel-assisted ambient electrospray enables high-density and uniform deposition of non-spherical gold nanoparticles for highly sensitive surface-enhanced Raman scattering

Baris Akbali, Cedric Boisdon, Barry L. Smith, Boonphop Chaisrikhwun, Kanet Wongravee, Tirayut Vilaivan, Cassio Lima, Chen-Han Huang, Tsan-Yao Chen, Royston Goodacre and Simon Maher*

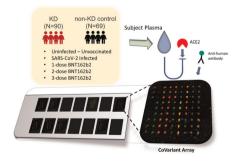
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An electrochemical approach for the prediction of Δ^9 -tetrahydrocannabinolic acid and total cannabinoid content in Cannabis sativa L.

Alessandro Monari, Sara Cantalù, Barbara Zanfrognini, Virginia Brighenti, Patrizia Verri, Chiara Zanardi, Federica Pellati* and Laura Pigani*

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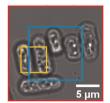
Profiling humoral responses to COVID-19 immunization in Kawasaki disease using SARS-CoV-2 variant protein microarrays

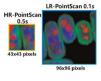
Batuhan Birol Keskin, Shih-Feng Liu, Pin-Xian Du, Pei-Shan Tsai, Tzong-Shiann Ho, Wen-Yu Su, Pei-Chun Lin, Hsi-Chang Shih, Ken-Pen Weng, Kuender D. Yang, Ying-Hsien Huang, Kuang-Che Kuo, Guan-Da Syu* and Ho-Chang Kuo*

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Fast Raman imaging through the combination of context-aware matrix completion and low spectral resolution

Ziling Jiang, Xianli Wang, Kaigin Chu and Zachary J. Smith*







Bright Field Image Provides Spatial Prior

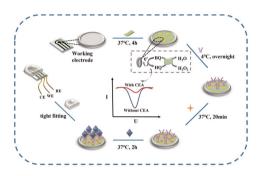
Improves SNR

Low-Resolution. Low Resolution Raman = Context Aware Raman: 10x faster imaging

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A bimetallic metal-organic framework with high enzyme-mimicking activity for an integrated electrochemical immunoassay of carcinoembryonic antigen

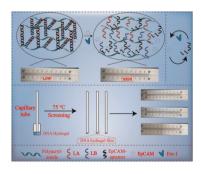
Yun Shu,* Lu Yan, Mingli Ye, Long Chen, Qin Xu and Xiaoya Hu*



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Exo I signal amplification of a DNA hydrogel film combined with capillary self-driven action for **EpCAM** detection

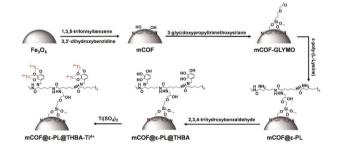
Shuang Li, Zhiguang Wang, Xiaoxiao Lin, Yalan Bian and Ligun Chen*



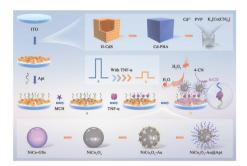
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Post-synthesis of a titanium-rich magnetic COF nanocomposite with flexible branched polymers for efficient enrichment of phosphopeptides from human saliva and serum

Luyan Meng, Bing Wang, Baichun Wang, Quanshou Feng, Sijia Zhang, Zi Xiong, Shun Zhang,* Ting Cai, Chuan-Fan Ding* and Yinghua Yan*



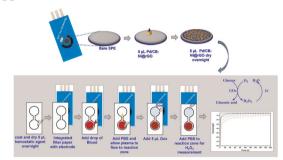
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An ultrasensitive photoelectrochemical assay for tumor necrosis factor-alpha based on hollow CdS cubes as a signal generator and NiCo₂O₄-Au as a signal extinguisher

Yamin Fu,* Baohuan Fan, Shenzhen Chang, Dongyu Guo,* Fuxiang Wang and Qinhe Pan*

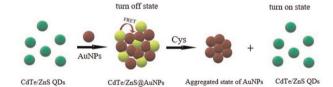
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A sensitive and facile electrochemical paper-based sensor for glucose detection in whole blood using the Pd/CB-Ni@rGO modified electrode

Chim Math, Kamolwich Income, Kawin Khachornsakkul, Paweenar Duenchay and Wijitar Dungchai*

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An off-on fluorescent nanoprobe for L-cysteine sensing based on the FRET effect

Cai Shi, Yiming Zhao, Ruoqian Xu and Yujie Ding*

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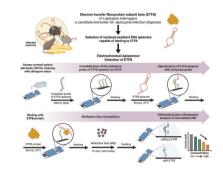
Fabrication and characterization of multi-biomarker optimized tissue-mimicking phantoms for multi-modal optical spectroscopy

Rekha Gautam,* Danielle Mac Mahon, Gráinne Eager, Hui Ma, Claudia Nunzia Guadagno, Stefan Andersson-Engels and Sanathana Konugolu Venkata Sekar

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Electrochemical aptasensor detection of electron transfer flavoprotein subunit beta for leptospirosis diagnosis

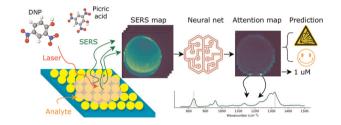
Uraiwan Kositanont, Chatchawan Srisawat, Sirinapa Sripinitchai, Charin Thawornkuno, Thanyarat Chaibun, Sinthu Karunaithas, Chamras Promptmas and Benchaporn Lertanantawong*



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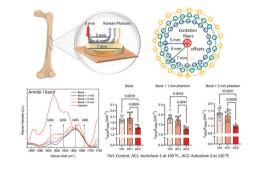
Bo Li,* Giulia Zappalá, Elodie Dumont, Anja Boisen, Tomas Rindzevicius, Mikkel N. Schmidt and Tommy S. Alstrøm



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Sensitivity of the amide I band to matrix manipulation in bone: a Raman micro-spectroscopy and spatially offset Raman spectroscopy study

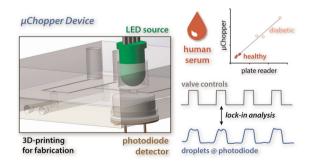
Rafay Ahmed, Mustafa Unal,* Rekha Gautam, Sasidhar Uppuganti, Shrey Derasari, Anita Mahadevan-Jansen and Jeffry S. Nyman



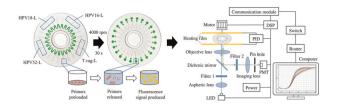
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Droplet-based µChopper device with a 3D-printed pneumatic valving layer and a simple photometer for absorbance based fructosamine quantification in human serum

Yvette Kayirangwa, Md Mohibullah and Christopher J. Easley*



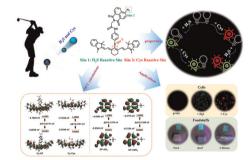
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A microfluidic-chip-based system with loop-mediated isothermal amplification for rapid and parallel detection of *Trichomonas vaginalis* and human papillomavirus

Zeyin Mao, Anni Deng, Xiangyu Jin, Meng Li, Wenqi Lv, Leyang Huang, Hao Zhong, Han Yang, Shihong Wang, Yixuan Shi, Lei Zhang,* Qinping Liao* and Guoliang Huang*

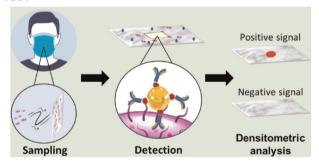




A dual-response NIR fluorescent probe for separately and continuously recognizing H_2S and Cys with different fluorescence signals and its applications

Lisha Yue, Yin Ai, Gang Liu, Haichang Ding* and Shouzhi Pu*

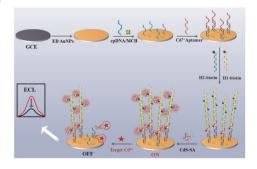
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Facemask analyses for the non-invasive detection of chronic and acute *P. aeruginosa* lung infections using nanoparticle-based immunoassays

David Delgado-Cano, Antonio Clemente,* Cristina Adrover-Jaume, Andreu Vaquer, Meritxell López, Rocío Martínez, Isabel M. Roig, Amanda Iglesias, Borja G. Cosío and Roberto de la Rica

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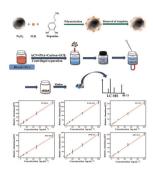
A novel DNA-quantum dot nanostructure electrochemiluminescence aptamer sensor by chain reaction amplification for rapid detection of trace Cd²⁺

Runze Wang, Yu Zhao and Guifen Jie*

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Sensitive detection of synthetic cannabinoids in human blood using magnetic polydopamine molecularly imprinted polymer nanocomposites

Jiajia Li, Yong Wang, Anran Liu and Songgin Liu*



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Platform-agnostic electrochemical sensing app and companion potentiostat

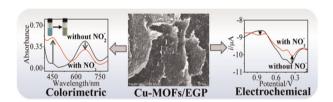
Vijayalaxmi Manoharan, Rui Rodrigues, Sara Sadati, Marcus J. Swann, Neville Freeman, Bowen Du, Ender Yildirim, Ugur Tamer, Theodoros N. Arvanitis, Dmitry Isakov, Ali Asadipour* and Jérôme Charmet*



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Diazo-reaction based dual-mode colorimetric-electrochemical sensing of nitrite in pickled food

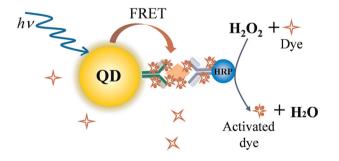
Yixin Pan, Jing Jiang and Xianwen Kan*



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Homogeneous immunoassay utilizing fluorescence resonance energy transfer from quantum dots to tyramide dyes deposited on full immunocomplexes

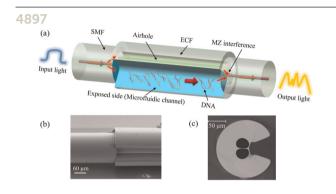
Zihan Xu, Xiaojun Liu, Chenghua Zong, Qingquan Zhang and Hongwei Gai*



without target dopamine

A label-free fluorescent sensor for rapid and sensitive detection of ctDNA based on fluorescent PDA nanoparticles

Xiao Yang, Yang Huang, Siyi Yang, Miao Tang, Juan Liu, Jinhui Shen, Huanbao Fa, Danqun Huo, Changjun Hou* and Mei Yang*



Label-free DNA quantification using isothermal amplification on an exposed core optical fiber microfluidic platform

Xuegang Li, He Zhang, Yanan Zhang, Yong Zhao, Linh Viet Nguyen, Xue Zhou* and Stephen C. Warren-Smith

CORRECTION

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Correction: Voltammetric pH sensor based on electrochemically modified pseudo-graphite

Haoyu Zhu, Tanim Hassan, Humayun Kabir, Jeremy May, Kailash Hamal, Ricardo Lopez, Hailey J. Smith, Nolan W. Nicholas, Prasanna Sankaran, David N. McIlroy and I. Francis Cheng*