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Cover
See Eliana Gianolio, Nunzia Iaccarino *et al.*, pp. 2415–2424.

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PAPERS

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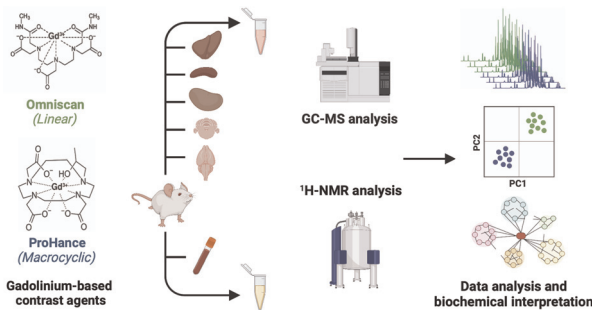
Comparison of the biological effects of gadodiamide (Omniscan) and gadoteridol (ProHance) by means of multi-organ and plasma metabolomics

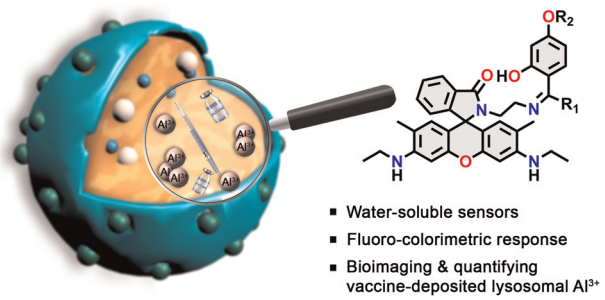
Francesca Romano, Enza Di Gregorio, Gelsomina Riccardi, Chiara Furlan, Nicola Cavallini, Francesco Savorani, Anna Di Porzio, Stefano De Tito, Antonio Randazzo, Eliana Gianolio* and Nunzia Iaccarino*



2425

Trivalent metal ion sensor enabled bioimaging and quantification of vaccine-deposited Al^{3+} in lysosomes

Kavyashree P., Ajmal Roshan Unniram Parambil, Akshay Silswal, Anup Pramanik and Apurba Lal Koner*



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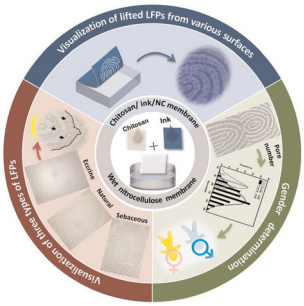
Wet nitrocellulose membrane for the level 3 feature visualization of various latent fingerprints and gender determination

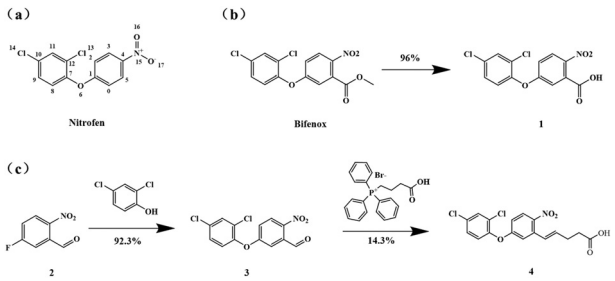
Lu Tian, Hongyu Chen, Xiangyu Sun, Lu Liu and Meiqin Zhang*



2449

Hapten synthesis and a colloidal gold immunochromatographic strip assay to detect nitrofen and bifenox in fruits

Peng Wang, Xinxin Xu, Lingling Guo, Liqiang Liu, Hua Kuang, Jing Xiao* and Chuanlai Xu*



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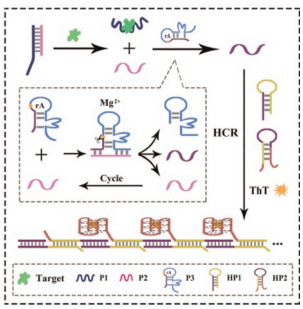
Self-constrained DNAzyme for aptamer-based and sensitive label-free fluorescent assay of sarafloxacin *via* signal amplification cascades

Qianying Wang, Junyi Zhang, Ruo Yuan and Yun Xiang*



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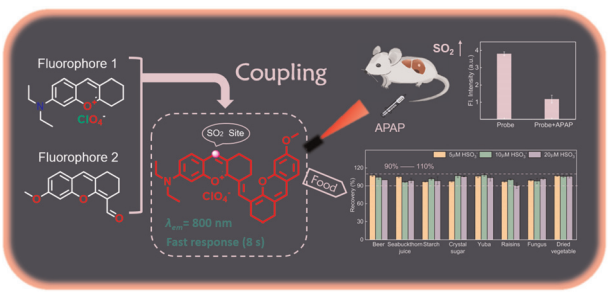
A near-infrared fluorescent probe for *in situ* imaging of SO_2 flux in drug-induced liver injury

Xingwei Li, Huming Yan, Fangjun Huo,* Yongbin Zhang, Le Zhang, Haixian Ren and Caixia Yin*



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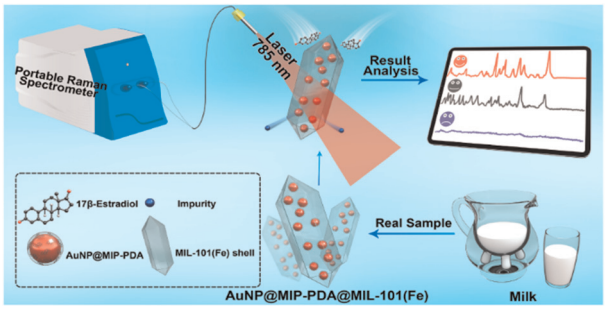

Fabrication of molecularly-imprinted gold nanoparticle-embedded Fe-MOFs for highly selective SERS detection of 17β-estradiol in milk

Mengmeng Zhang, Zhouya Wu, Yunhan Yang, Jing Ye, Sheng Han* and Yuanting Li*

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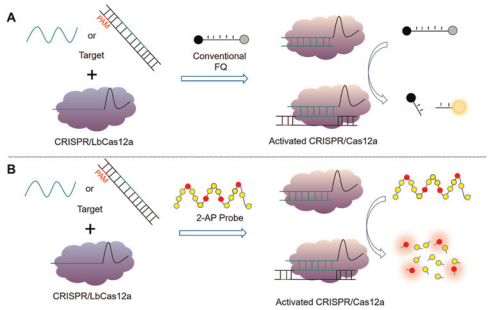

Sensing platform for nucleic-acid detection based on a 2-aminopurine probe sheared by trans-cleavage activity of the CRISPR/Cas12a system

Xiaolong Chen, Chaowang Huang, Qiao Hu, Jing Zhang, Dan Wang, Qianyi You and Mingdong Hu*

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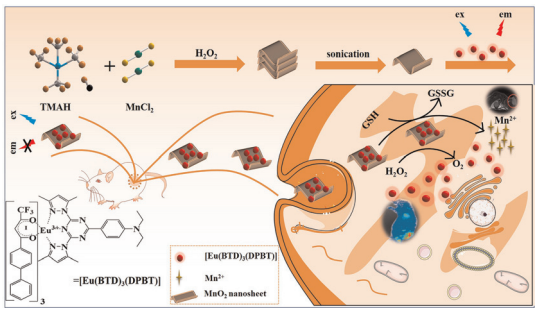

An activatable nanoprobe based on nanocomposites of visible-light-excitable europium(III) complex-anchored MnO_2 nanosheets for bimodal time-gated luminescence and magnetic resonance imaging of tumor cells

Bo Song,* Huinan Yan, Jiao Jiang, Jin Yu, Shengjun Huang and Jingli Yuan*

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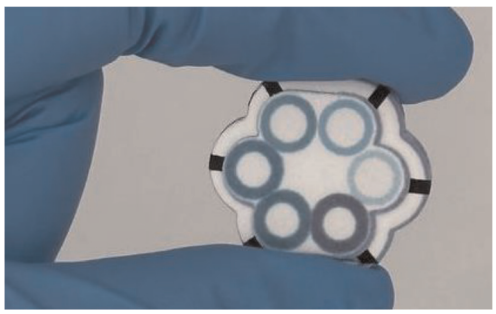

All-electrical antibiotic susceptibility and resistance profiling of electrogenic *Pseudomonas aeruginosa*

Zahra Rafiee and Seokheun Choi*

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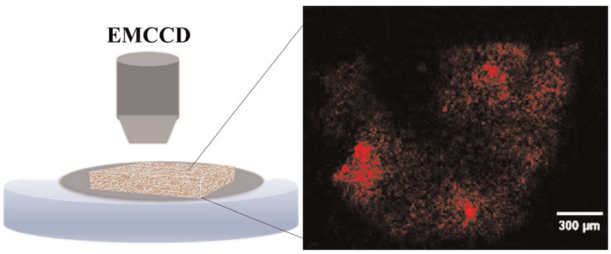
Electrochemiluminescence imaging of a membrane carcinoembryonic antigen at single tissue sections

Junwei Shi, Dongni Han, Zengyu Feng, Dechen Jiang and Depeng Jiang*



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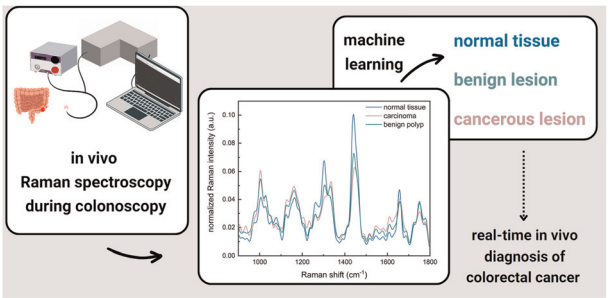
***In vivo* Raman spectroscopy in the diagnostics of colon cancer**

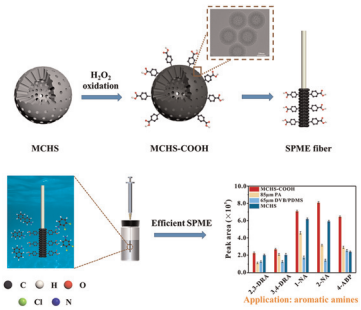
Markéta Fousková,* Jan Vališ, Alla Synytsya, Lucie Habartová, Jaromír Petrtýl, Luboš Petruželka and Vladimír Setnička



2527

Carboxylated mesoporous carbon hollow spheres for the efficient solid-phase microextraction of aromatic amines

Shixiang Chen, Zejun Yu, Wenmin Zhang, Hui Chen, Qingqing Ding, Jinhua Xu, Qidong Yu and Lan Zhang*



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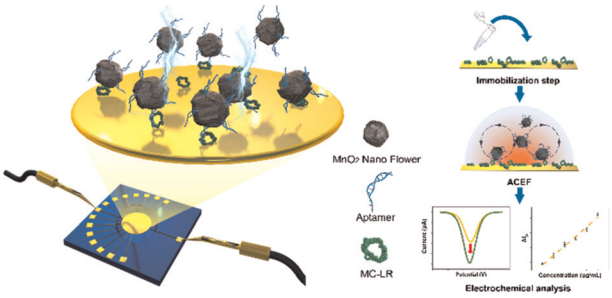
Construction of a rapid electrochemical biosensor consisting of a nanozyme/aptamer conjugate for waterborne microcystin detection

Jeong Ah Park, Yein Kwon, Xuan Ai Le, Trung Hieu Vu, Hanbin Park, Hoseok Lee, Hye Kyu Choi, Chulhwan Park, Moon Il Kim* and Taek Lee*



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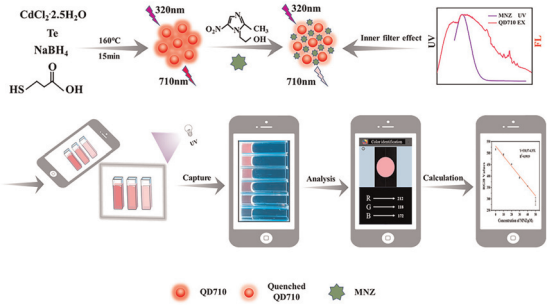

Inner filter effect-based near-infrared fluorescent probe for detection of metronidazole on a smartphone-integrated analytical platform

Shaojie Wang, Yongbo Wang,* Yuanna Ning and Qiming Liu

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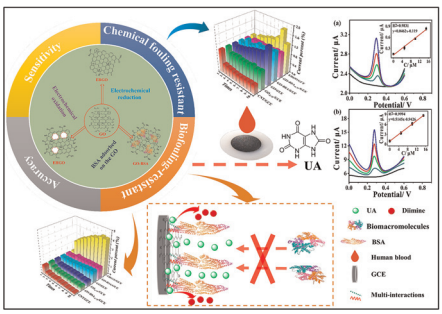

Tunable graphene oxide for the low-fouling electrochemical sensing of uric acid in human serum

Gang Li, Chunying Xu,* Hui Xu, Liju Gan, Kai Sun and Baiqing Yuan*

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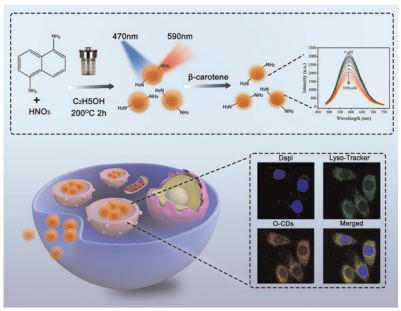

Nitrogen-doped orange emitting carbon dots for β-carotene detection and lysosomal imaging

Xinlu Li, Tongtong Zhu, Yuwei Du, Haiyang Yan, Ruhong Yan,* Wen-Fei Dong* and Li Li*

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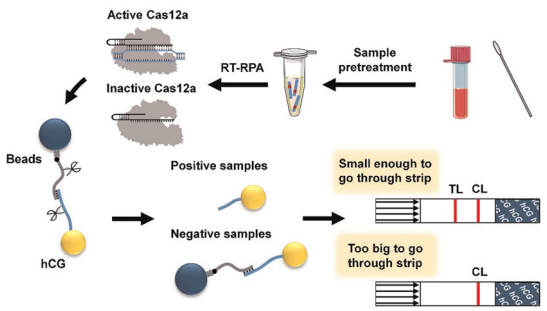

CRISPR Cas12a-enabled biosensors coupled with commercial pregnancy test strips for the visible point-of-care testing of SARS-CoV-2

Peijie Shen, Zhenjun Si, Di Huang, Zhipeng Xu,* Ziyi Wang, Mengjun Fang and Zhinan Xu*

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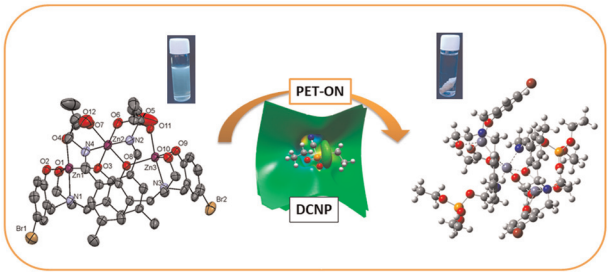
Synthesis of a trinuclear zinc(II) cluster composed of [4.4.3.0^{1,5}]tridecane cages: a rapid detection and degradation probe for the chemical warfare agent simulant diethyl cyanophosphonate in protein-rich food products

Sahil Thakur, Jyoti Rohilla, Keshav Kumar, Harender Kumar, Raghubir Singh,* Varinder Kaur,* Raman Kamboj and Ravneet Kaur



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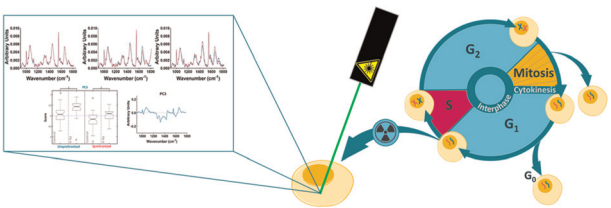
Understanding radiation response and cell cycle variation in brain tumour cells using Raman spectroscopy

Iona E. Hill, Marie Boyd, Kirsty Milligan, Cerys A. Jenkins, Annette Sorensen, Andrew Jirasek, Duncan Graham and Karen Faulds*



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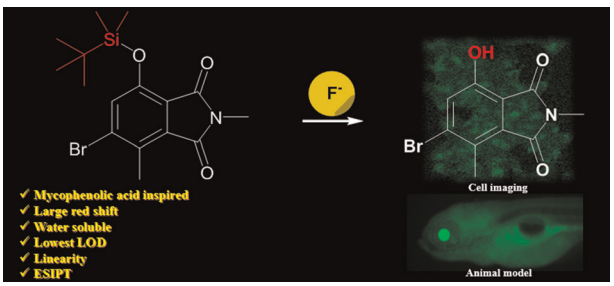
"Lighting up" fluoride: cellular imaging and zebrafish model interrogations using a simple ESIPT-based mycophenolic acid precursor-based probe

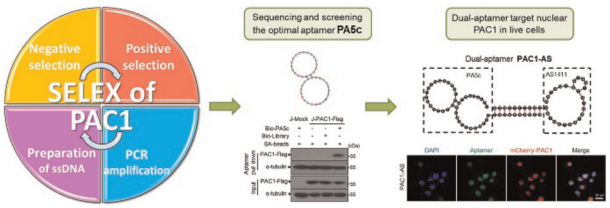
Neha Jain, Prasad M. Sonawane, Haoyan Liu, Arkaprava Roychaudhury, Youngseob Lee, Jongkeol An, Donghyeon Kim, Dongwook Kim, Yunsu Kim, Yeu-Chun Kim, Kyung-Bin Cho, Hee-Sung Park, Cheol-Hee Kim* and David G. Churchill*



2616

Development of a modularized aptamer targeting the nuclear T-cell suppressor PAC1

Zixi Hu, Zhongyu Jiang, Zeliang Yang, Liang Liu, Zhenyu Zhu, Yan Jin and Yuxin Yin*



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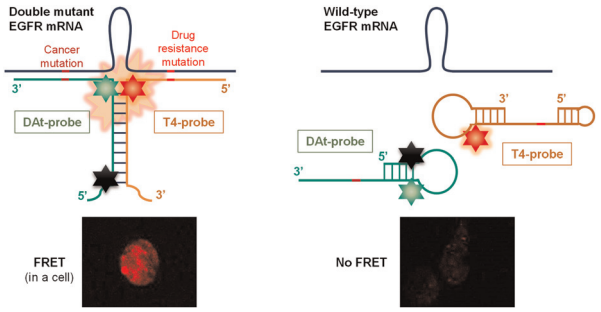

FRET probe for detecting two mutations in one *EGFR* mRNA

Myat Thu, Kouta Yanai, Hajime Shigeto, Shohei Yamamura, Kazunori Watanabe and Takashi Ohtsuki*

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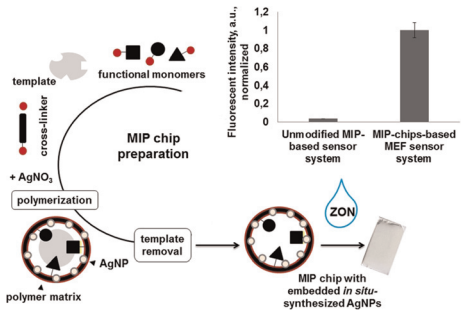

An enhanced fluorescent sensor system based on molecularly imprinted polymer chips with silver nanoparticles for highly-sensitive zearalenone analysis

Daria Yarynka,* Volodymyr Chegel, Elena Piletska, Sergey Piletsky, Larysa Dubey, Igor Dubey, Roman Nikolaiev, Oleksandr Brovko and Tetyana Sergeyeva

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