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### Cover

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

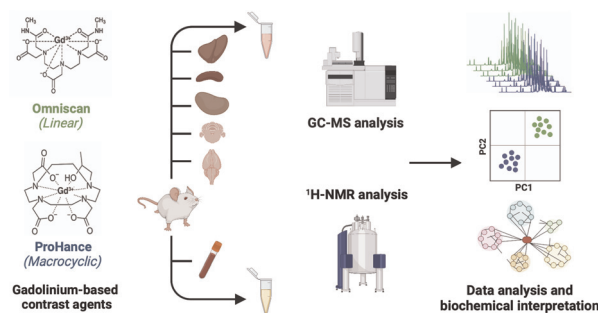
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## PAPERS

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

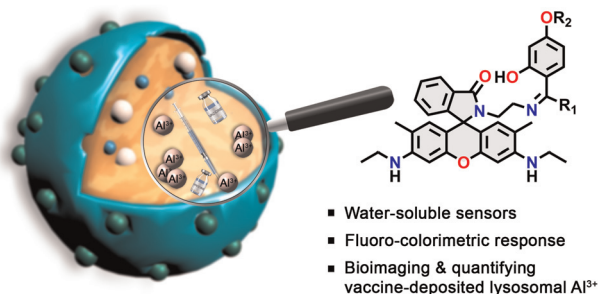
Francesca Romano, Enza Di Gregorio,  
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Antonio Randazzo, Eliana Gianolio\* and  
Nunzia Iaccarino\*



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

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



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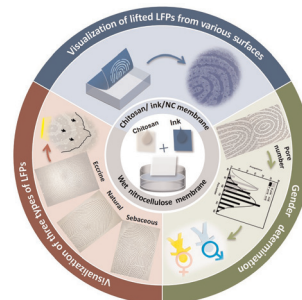


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### Wet nitrocellulose membrane for the level 3 feature visualization of various latent fingerprints and gender determination

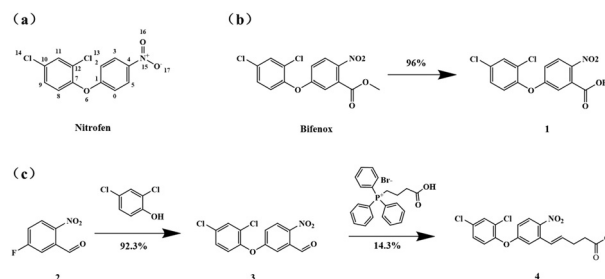
Lu Tian, Hongyu Chen, Xiangyu Sun, Lu Liu and Meiqin Zhang\*



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

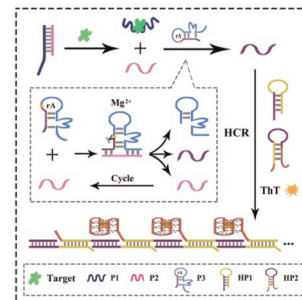
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### Self-constrained DNAzyme for aptamer-based and sensitive label-free fluorescent assay of sarafloxacin via signal amplification cascades

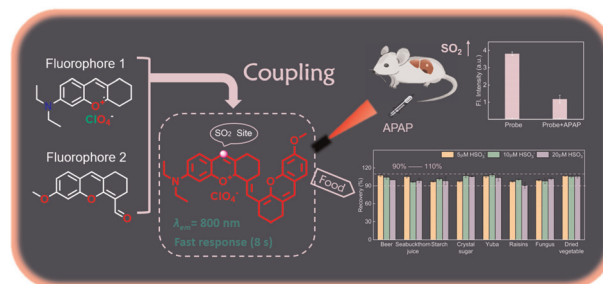
Qianying Wang, Junyi Zhang, Ruo Yuan and Yun Xiang\*



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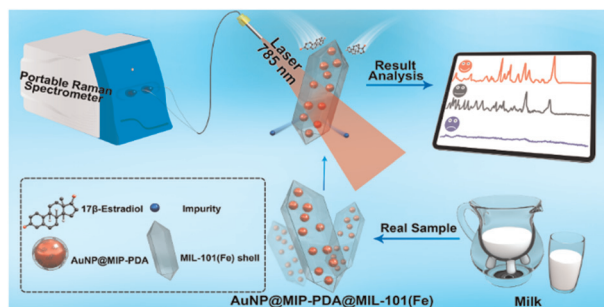
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Xingwei Li, Huming Yan, Fangjun Huo,\* Yongbin Zhang, Le Zhang, Haixian Ren and Caixia Yin\*



## PAPERS

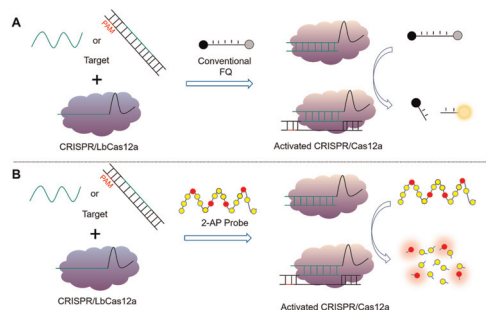
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### Fabrication of molecularly-imprinted gold nanoparticle-embedded Fe-MOFs for highly selective SERS detection of 17 $\beta$ -estradiol in milk

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

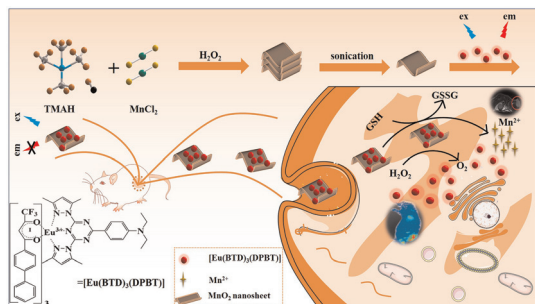
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### Sensing platform for nucleic-acid detection based on a 2-aminopurine probe sheared by trans-cleavage activity of the CRISPR/Cas12a system

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### An activatable nanoprobe based on nanocomposites of visible-light-excitable europium(III) complex-anchored MnO<sub>2</sub> nanosheets for bimodal time-gated luminescence and magnetic resonance imaging of tumor cells

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Zahra Rafiee and Seokheun Choi\*

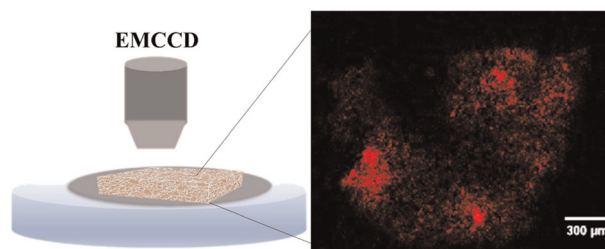


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**Electrochemiluminescence imaging of a membrane carcinoembryonic antigen at single tissue sections**

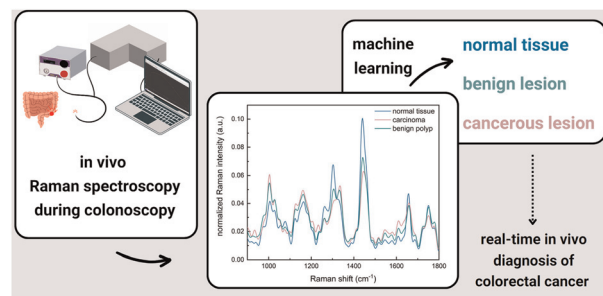
Junwei Shi, Dongni Han, Zengyu Feng, Dechen Jiang and Depeng Jiang\*



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

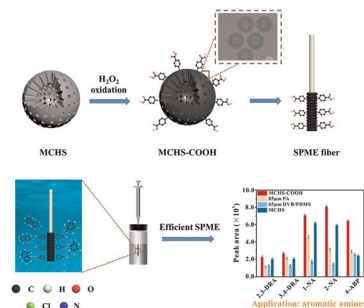
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**Carboxylated mesoporous carbon hollow spheres for the efficient solid-phase microextraction of aromatic amines**

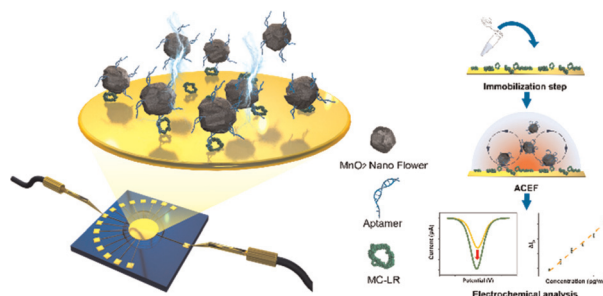
Shixiang Chen, Zejun Yu, Wenmin Zhang, Hui Chen, Qingqing Ding, Jinhua Xu, Qidong Yu and Lan Zhang\*



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

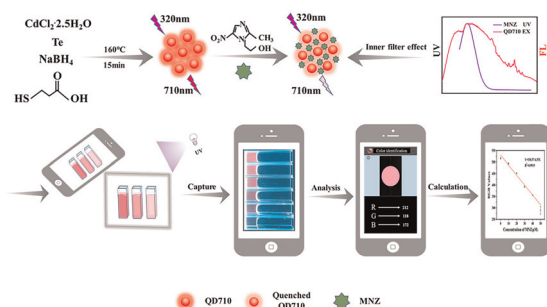
Jeong Ah Park, Yein Kwon, Xuan Ai Le, Trung Hieu Vu, Hanbin Park, Hoseok Lee, Hye Kyu Choi, Chulhwan Park, Moon Il Kim\* and Taek Lee\*





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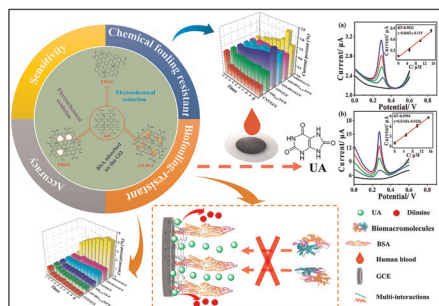
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### Inner filter effect-based near-infrared fluorescent probe for detection of metronidazole on a smartphone-integrated analytical platform

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

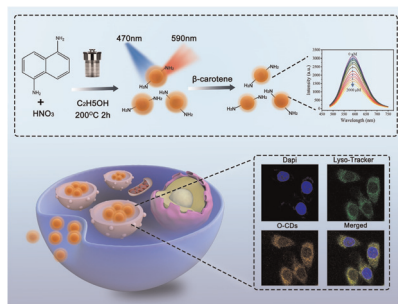
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### Tunable graphene oxide for the low-fouling electrochemical sensing of uric acid in human serum

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

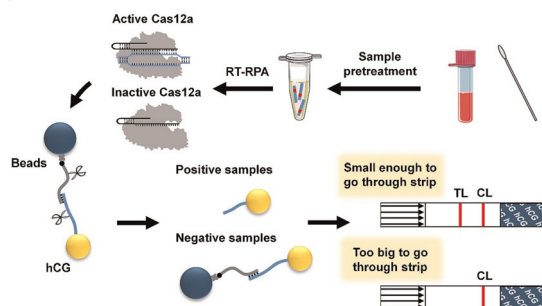
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### CRISPR Cas12a-enabled biosensors coupled with commercial pregnancy test strips for the visible point-of-care testing of SARS-CoV-2

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

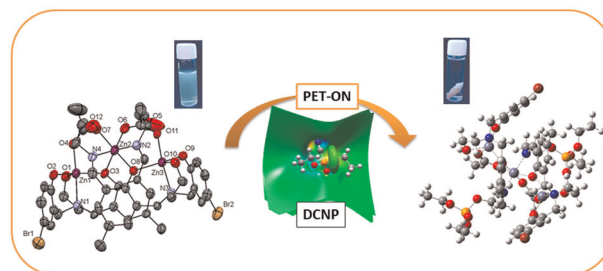


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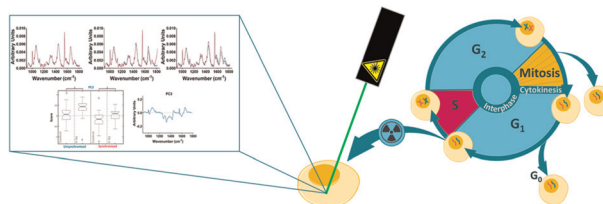
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### Understanding radiation response and cell cycle variation in brain tumour cells using Raman spectroscopy

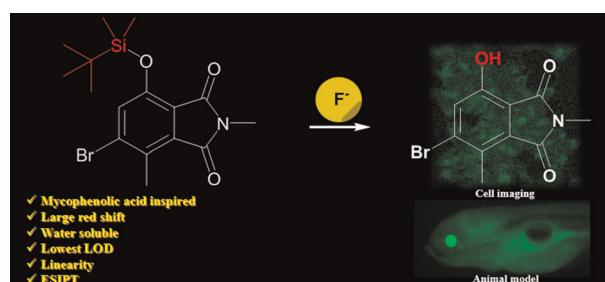
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### “Lighting up” fluoride: cellular imaging and zebrafish model interrogations using a simple ESIPt-based mycophenolic acid precursor-based probe

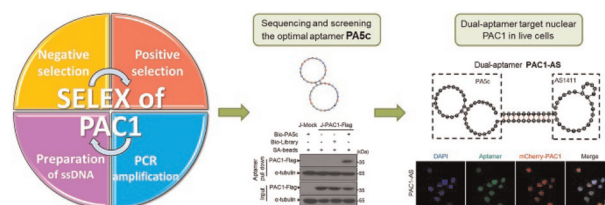
Neha Jain, Prasad M. Sonawane, Haoyan Liu, Arkaprava Roychaudhury, Youngseob Lee, Jongkeol An, Donghyeon Kim, Dongwook Kim, Yunsu Kim, Yeu-Chun Kim, Kyung-Bin Cho, Hee-Sung Park, Cheol-Hee Kim\* and David G. Churchill\*



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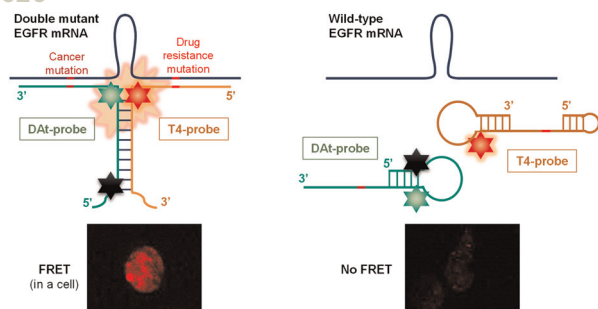
### Development of a modularized aptamer targeting the nuclear T-cell suppressor PAC1

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



## PAPERS

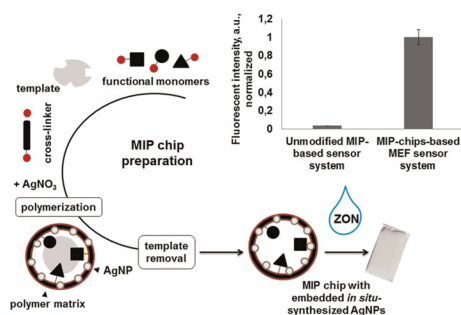
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### FRET probe for detecting two mutations in one EGFR mRNA

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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

