

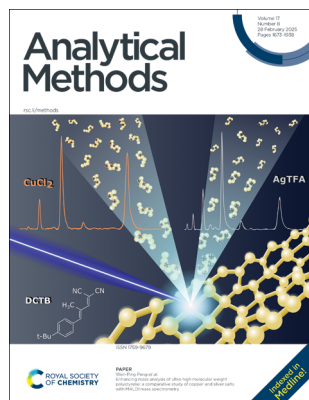
Analytical Methods

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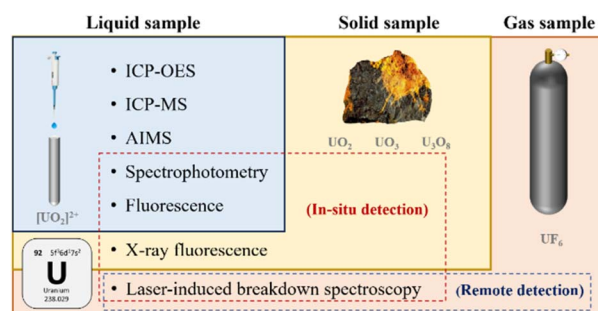
See Wen-Ping Peng *et al.*, pp. 1754–1764. Image reproduced by permission of Wen-Ping Peng from *Anal. Methods*, 2025, 17, 1754.

CRITICAL REVIEWS

1683

A review of uranium (U) elemental detection methods

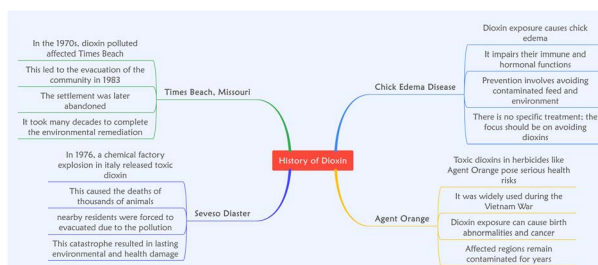
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Nikhila Mathew, Arvinth Somanathan, Abha Tirpude, Anupama M. Pillai, Pabitra Mondal and Tanvir Arfin*



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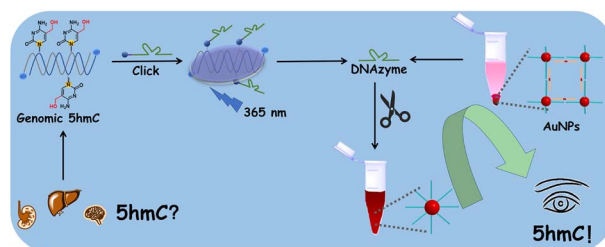
**Fundamental questions
Elemental answers**

COMMUNICATION

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A photo-elutable 8–17 DNAzyme labeling and PCR-free colorimetric quantification strategy for 5-hydroxymethylcytosine in mammalian genomic DNA

Mingfeng Lai, Shitao Lu, Bao Huang, Yanfeng Nie, Xu Wang, Jiaying Xiong and Zhenning Yu*

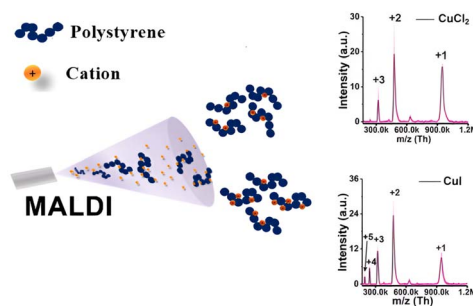


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Enhancing mass analysis of ultra-high molecular weight polystyrene: a comparative study of copper and silver salts with MALDI mass spectrometry

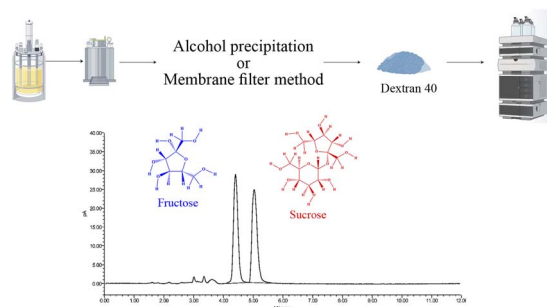
Avinash A. Patil, Thị Khánh Ly Lại, Ching-Chieh Lee, Yi-Pang Chiu, Zhe-Xuan Liu, Che-Jen Lin and Wen-Ping Peng*



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Quantitative analysis of carbohydrate residues in dextran 40 from various sources: a comparative study using high-performance liquid chromatography coupled with a charged aerosol detector

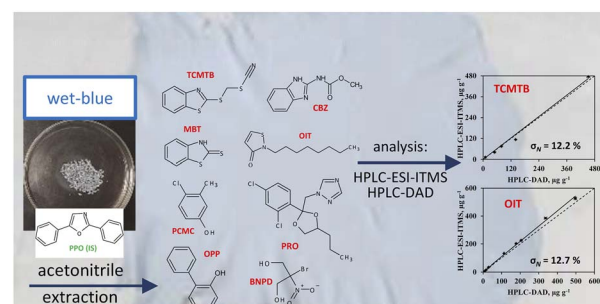
Shenggu Xie, Zhuyu Jin, Yan Huang and Qiaoqiao Huang*



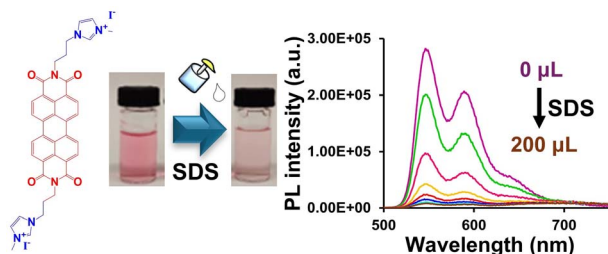
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Francisco Javier Acevedo-Aguilar, Israel Enciso Donis, Kazimierz Wrobel, Alma Rosa Corrales Escobosa, Luis Mario Magaña Maldonado and Katarzyna Wrobel*



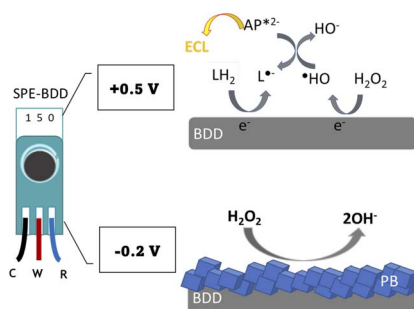
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A perylene-based fluorescent probe for highly efficient SDS detection

Amrit Kaur, Mina Bagherifard, Alissa Brooke Anderson, Neelam Tariq, Zois Syrgiannis and Ioannis Spanopoulos*

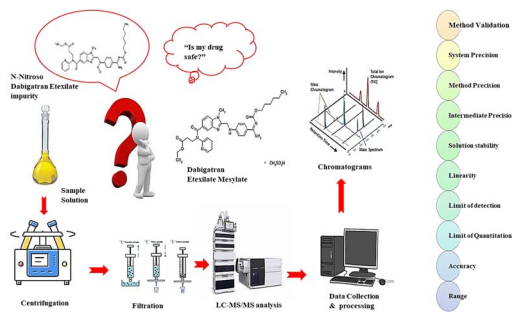
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Comparison between electrochemiluminescence of luminol and electrocatalysis by Prussian blue for the detection of hydrogen peroxide

Isnaini Rahmawati,* Andrea Fiorani, Irkham, Wulan Tri Wahyuni, Ruri Agung Wahyuono, Yasuaki Einaga and Tribidasari A. Ivandini*

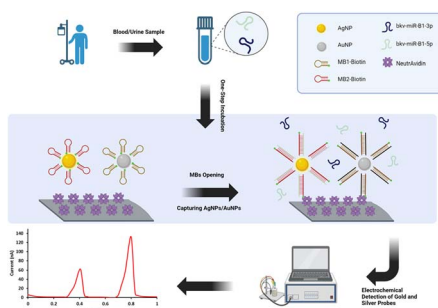
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Ultrasensitive LC-MS/MS quantitation of the N-nitroso-dabigatran etexilate impurity in dabigatran etexilate mesylate using an electrospray ionization technique

Anant D. Yadav, Ashish C. Alaspure, Sandesh R. Lodha, Amrutlal L. Prajapat and Anil H. Gore*

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Advanced multiplexed electrochemical nanobiosensors for simultaneous detection of BK polyomavirus miRNAs in renal transplants

Mohammad Shenagari, Ammar Ebrahimi, Elahe Bozorgzadeh,* Masoud Khosravi and Elham Hasan-Alizadeh

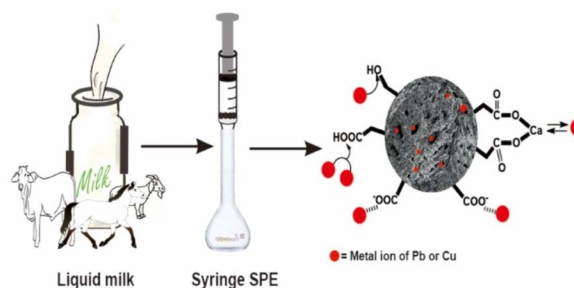


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Fast preconcentration of Pb(II) and Cu(II) in liquid milk by syringe solid-phase extraction using alginate and PVA biopolymer loaded with activated carbon

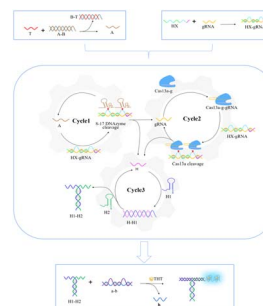
Ahmad Akhib Ainul Yaqin, Suherman Suherman, Dwi Siswanta* and Ahmad Hosseini-Bandegharai



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Multiple signal amplification strategy for ultrasensitive sensing of *Mycobacterium bovis* based on 8–17 DNAzyme and CRISPR-Cas13a

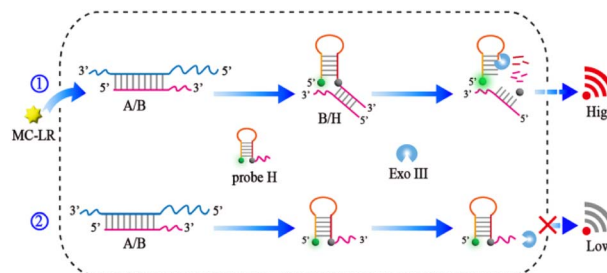
Xin Fu, Sainan Gao, He Zhang,* Wenjie Ma, Yong Chen, Jiamei Luo and Bin Ye



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A probe-mediated fluorescent biosensor for MC-LR detection using exonuclease III as a signal amplifier

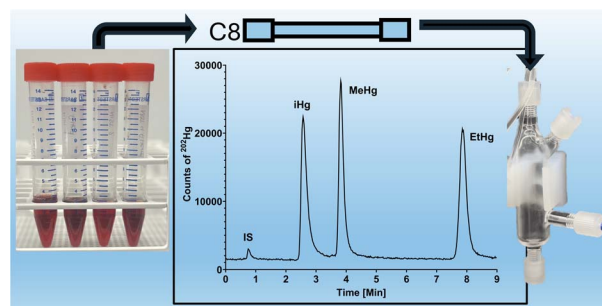
Yuyan Wang, Ying Zeng, Xiaoya Ren, Jun Qiu, Jiafeng Pan* and Fei Yang*



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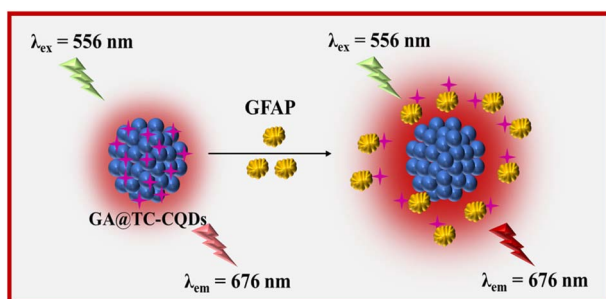
A rapid method for the determination of methylmercury and inorganic mercury species in whole blood by liquid chromatography with detection using vapor generation ICP-MS/MS

Emily J. Pacer, Christopher D. Palmer and Patrick J. Parsons*



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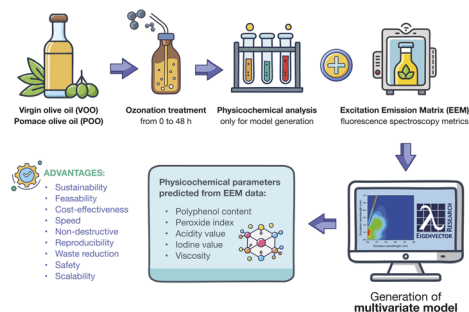
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Near infrared-emitting carbon dots for the detection of glial fibrillary acidic protein (GFAP): a non-enzymatic approach for the early identification of stroke and glioblastoma

Susan Varghese, Merin K. Abraham, Ali Ibrahim Shkhair, Geneva Indongo, Greeshma Rajeevan, Arathy B. K., Anju S. Madanan and Sony George*

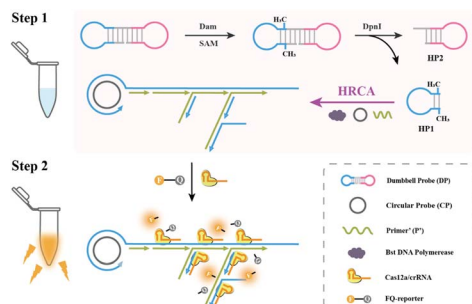
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Excitation–emission matrix spectroscopy coupled with chemometrics for monitoring ozonation of olive oil and olive pomace oil

Paula Domínguez-Lacueva, Ewa Sikorska and María J. Cantalejo-Díez*

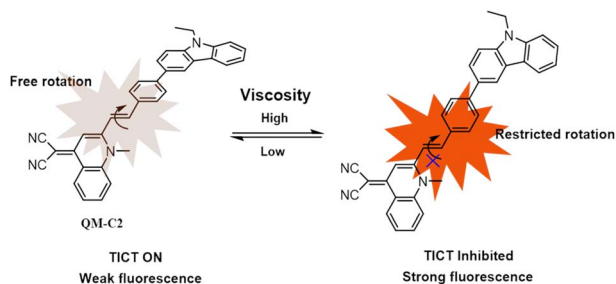
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A universal two-step strategy for multiple DNA MTase activity: enhancing sensitivity through CRISPR/Cas12a-assisted hyperbranched rolling circle amplification (CA-HRCA)

Shiying Zhou, Human Sun, Liyuan Deng, Shuyu Zhu, Jian Chen, Danqun Huo* and Changjun Hou*

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A quinoline-malononitrile-based fluorescent probe with aggregation-induced emission effect for the *in vivo* monitoring of viscosity

Wenjie Zhang, Qiuying Song, Jing He, Hongmin Jia,* Zhuye Shang,* Zhiqiang Zhang and Qingtao Meng*

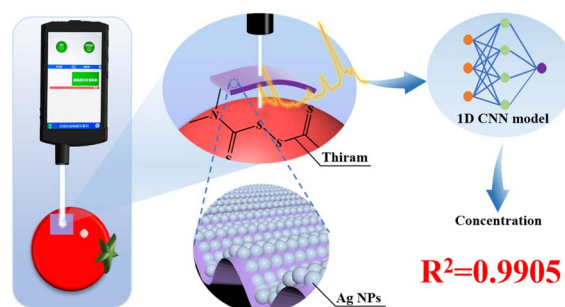


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Rapid detection and quantitative analysis of thiram in fruits using a shape-adaptable flexible SERS substrate combined with deep learning

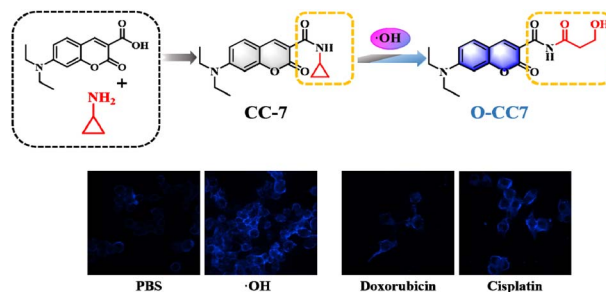
Hongjun Wang, Ziyang Bian, Yue Wang, Huijuan Niu, Zhenshan Yang and Hefu Li*



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Radical-triggered ring-opening of aminocyclopropane for detection of hydroxyl radicals in living cells

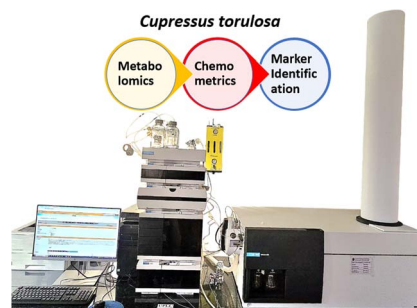
Shiqi Jin, Wang Qian, Ruiyang Suo, Yi Li, Huan Ling, Shuqi Li, Kai Deng, Yongchang Wei,* Bo Wu* and Huaixia Chen*



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UPLC-QTOF-MS-based metabolomics and chemometrics studies of geographically diverse *C. torulosa* needles

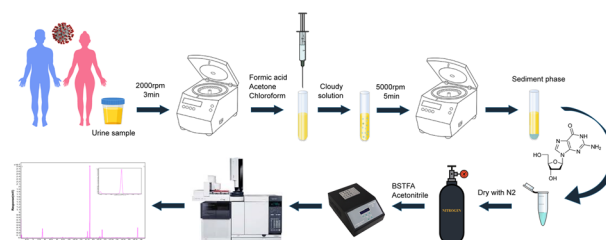
Radhika Khanna,* Khushaboo Bhadoriya, Gaurav Pandey and V. K. Varshney*



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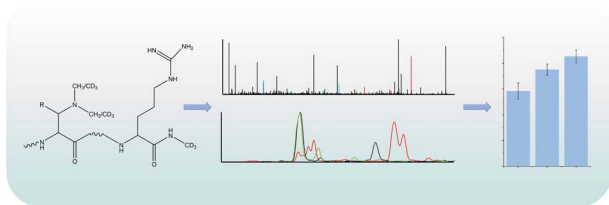
Dispersive liquid-liquid microextraction for the determination of urinary 8-hydroxy 2'-deoxyguanosine in COVID-19 patients by gas chromatography-mass spectrometry

Sanaz Zare, Zohreh Zahraei,* Mohammad Khodadadi,* Maryam Zarean and Azam Salehi



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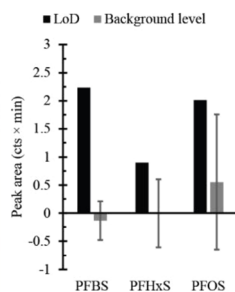


Analysis of phosphorylation site occupancy of peptides based on a chemical derivatization method

Xingdan Wang, Zhenghu Min, Xiaoqiu Yang, Qiwei Zhang* and Qi Zheng

TECHNICAL NOTE

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Homebuilt cost-effective nitrogen blowdown evaporator

Eamonn Clarke* and Marc D. Porter

