

# Analytical Methods

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### Cover

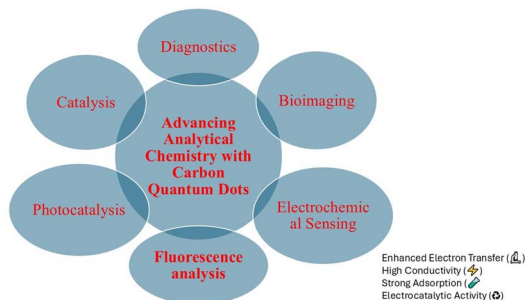
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## MINIREVIEW

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### Advancing analytical chemistry with carbon quantum dots: a comprehensive review

Ilyos Eliboiev,\* Alisher Ishankulov, Elyor Berdimurodov, Komiljan Chulpanov, Maksud Nazarov, Berdiyev Jamshid, Bekzod Toshpulotov, Rano Tukhtaeva, Muslum Demir, Kamila Rashidova, Fazliddin Jalilov and Khudaybergan Polvonov

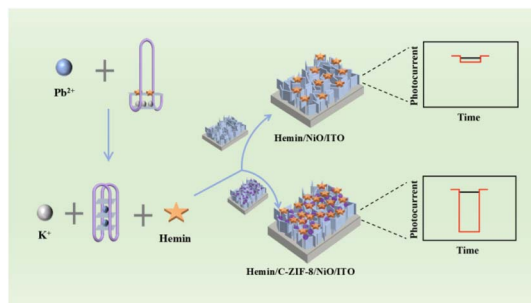


## PAPERS

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### C-ZIF-8 modified NiO photocathode and enhanced photosensitizer signal amplification for ultra-sensitive photoelectrochemical detection of lead ions

Zhaona Zhang, Juan Wang, Siru Guo and Xinxing Wang\*





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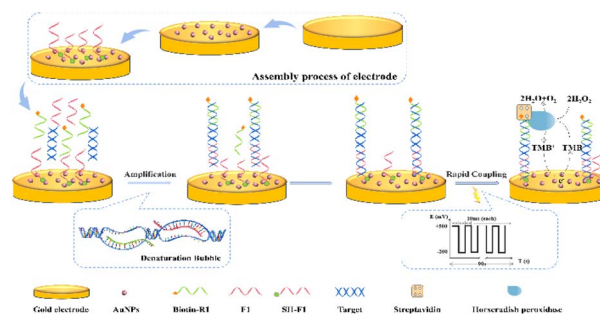
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### An electrochemical DNA biosensor based on denatured vesicle-mediated chain exchange amplification combined with electric field-assistance for nucleic acid detection

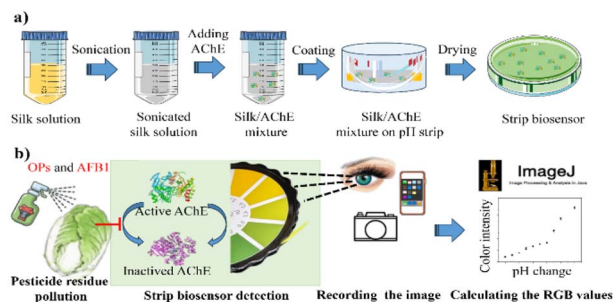
Jinling Cui, Ritong Sun, Yu Liao, Yanling Wang, Chao Jiang, Lei Wang, Chao Shi and Cuiping Ma\*



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### Development of stable and sensitive strip biosensors for the rapid detection of organophosphates and aflatoxin B1 in agricultural samples

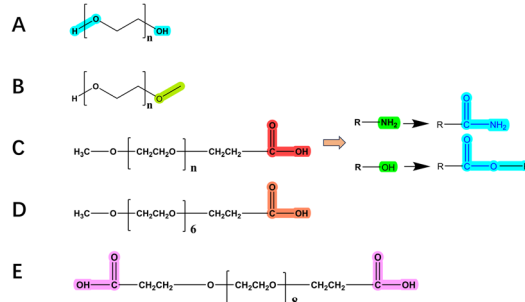
Xiaoshan Luo, Liudi Liu, Xuanbo Wang, Disi Lu, Yuexi Liang, Osmani Chacón Chacón, Gang Li, Xiaoqin Wang\* and Zhaozhu Zheng\*



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### Development of a UPLC-MS/MS assay for determination of PA-PEG<sub>8</sub>-PA polymers in rat plasma coupled with [M - H]<sup>-</sup> to enhance sensitivity

Jiye Tian, Chunpeng Feng, Hongyu Xue, Jiansong You, Meiyun Shi\* and Lei Yin\*



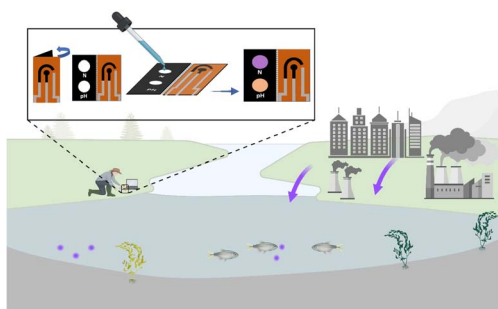
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### Chemometric-assisted electrochemical sensor for simultaneous determination of neonicotinoids imidacloprid and thiamethoxam in honey samples

Matias Alberto Cardenas, Macarena Vignati, Gastón Darío Pierini,\* Sebastián Noel Robledo, Marcela Beatriz Moressi and Fabiana D'Eramo\*



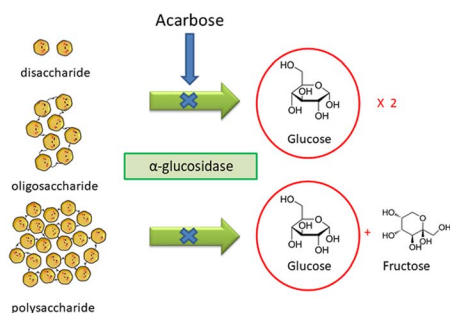
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### From colors to currents: a hybrid electrochemical and colorimetric sensor for real-time detection of emerging pollutants and pH monitoring

André L. Ferreira, Mayra V. Paschoarelli, William R. de Araujo\* and Lucas F. de Lima\*

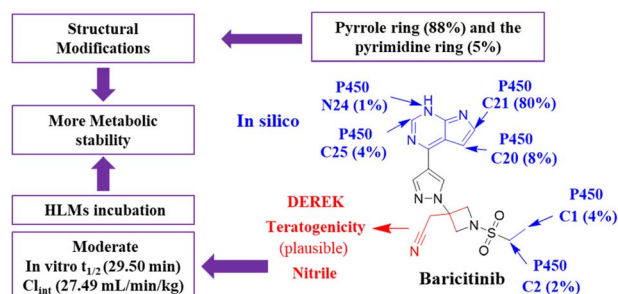
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### Quantification of glucose in the plasma of healthy Chinese volunteers and a bioequivalence study using a surrogate matrix approach combined with UHPLC-MS/MS

Xunjie Zhang, Ke Li, Ruiqing Xian, Pengfei You, Chaochao Liang, Feng Shi, Baojian Hang and Liping Gong\*

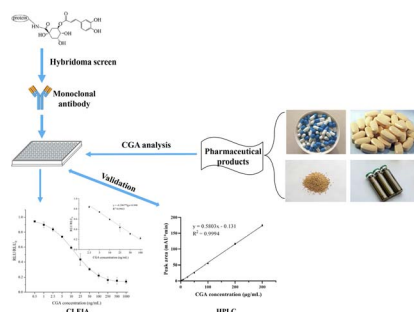
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### An ultra-fast UPLC-MS/MS approach for the quantification of baricitinib in the HLM matrix: greenness assessment with application to *in vitro* and *in silico* metabolic stability studies

Mohamed W. Attwa,\* Ali S. Abdelhameed and Adnan A. Kadi

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### Development of chemiluminescence enzyme immunoassay (CLEIA) for the determination of chlorogenic acid in pharmaceutical products

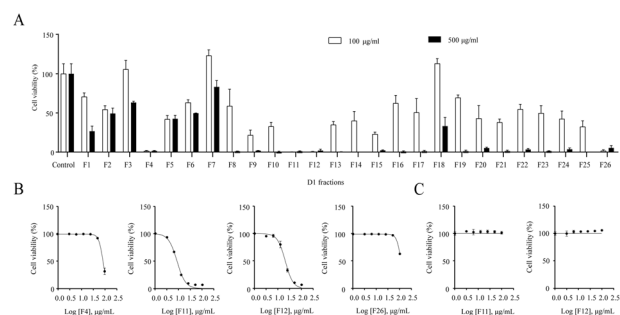
Long Xu,\* Yuzhu Xu, Jingdi Niu, Feiyue Xu, Jian Qu, Yongsheng Qiao and Wanwan Wang



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### Bioactivity-guided isolation of anti-proliferative compounds from *Curcuma zedoaria* against triple negative breast cancer cells

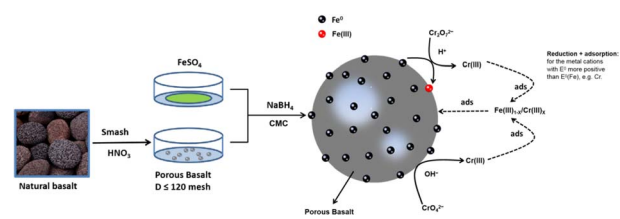
Hongming Tang, Hongjian Kang, Weijia Zhou,\* Tao Hou, Zhixin Guo, Yanfang Liu, Xingya Xue and Jixia Wang\*



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### Study on the removal of Cr(vi) from ethylene wastewater using stabilized nanoscale zero-valent iron based on porous basalt material

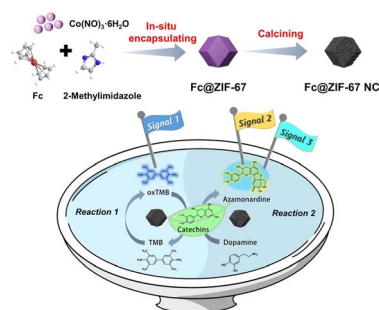
Zheng Wang, Yi Ren, Mingchang Jia, Siqi Hao, Lihong Wu, Xiangfu Meng\* and Xiaofei Zhang\*



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### An oxidase-like nanozyme-based sensor array for the specific detection and discrimination of catechins

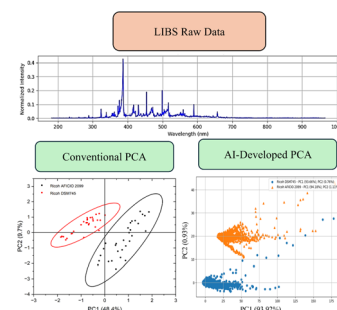
Lijun Yang, Zhiyi Zhang, Tiantian Zhou, Wei Qi and Mengfan Wang\*



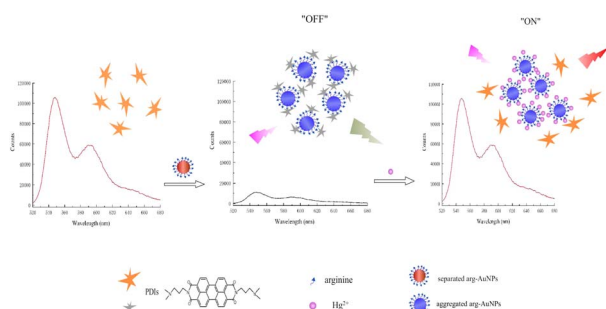
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### Conventional versus AI-based spectral data processing and classification approaches to enhance LIBS's analytical performance

Zakaria E. Ahmed, Rania M. Abdelazeem,\* Mahmoud Abdelhamid, Zienab Abdel-Salam and Mohamed Abdel-Harith



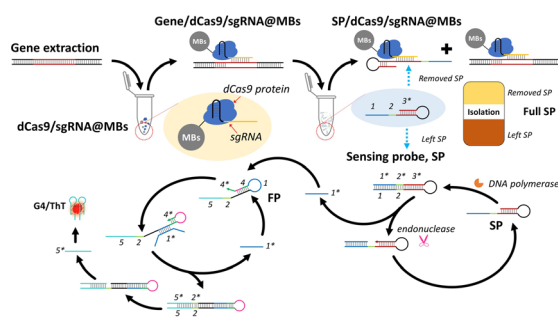
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### A novel fluorescence "off-on" sensor for the selective detection of mercury based on perylene dye and gold nanoparticles

Lijiao Liang, Qiang Wang, Yanxiang Wu, Tongde Rao,<sup>\*</sup> Xuanping Tan, Kezhong Liang and Yuwen Zhao

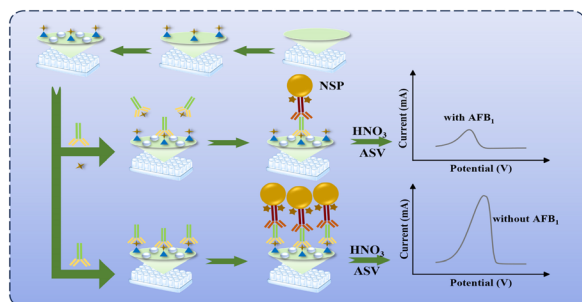
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### A dCas9/sgRNA complex-mediated competitive assay for accurate and sensitive *Pseudomonas aeruginosa* analysis

Buyi Wang, Ziyao Yu, Zhihao Zhang, Zilu Zhu and Yanhai Song<sup>\*</sup>

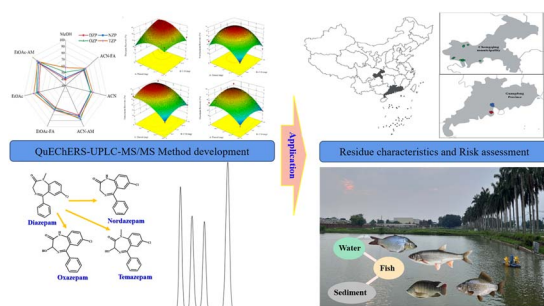
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### Nanosilver-mediated enzyme-free electrochemical immunosensor with enhanced stability for aflatoxin B1 detection in food safety

Yu Wang and Xiaoming Ma<sup>\*</sup>

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### Determination of diazepam and its active metabolites in aquatic products and aquaculture environments using modified QuEChERS-based UPLC-MS/MS

Hao Zhou, Feng Xu, Linting Wei, Jiawei Lin, Cheng Zhao, Huiqing Mei, Qi Shan, Qing Wang, Yingchun Mu and Yi Yin<sup>\*</sup>

