

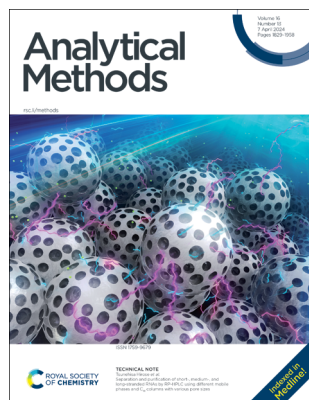
Analytical Methods

rsc.li/methods

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1759-9679 CODEN AMNECT 16(13) 1829–1958 (2024)



Cover

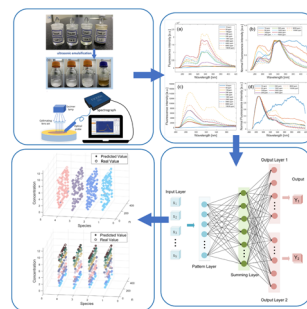
See Tsunehisa Hirose *et al.*, pp. 1948–1956. Image reproduced by permission of NACAL TESQUE, Inc., for *Anal. Methods*, 2024, 16, 1948.

PAPERS

1836

Mineral oil emulsion species and concentration prediction using multi-output neural network based on fluorescence spectra in the solar-blind UV band

Bowen Gong, Shilei Mao, Xinkai Li and Bo Chen*



1846

A ratiometric fluorescent probe with a large Stokes shift for the detection of Hg²⁺ and its applications in environmental sample and living system analysis

Jixiang Tian, Xuechun Tian, Shuai Gong, Yueyin Liang, Zhiyuan Meng, Weiqi Liu, Xu Xu, Zhonglong Wang* and Shifa Wang*



Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning
that suits you.

**Courses in the classroom,
the lab, or online**

Find something for every
stage of your professional
development. Search our
database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit rsc.li/cpd-training

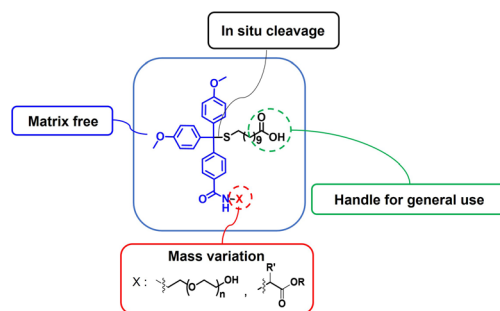
**SAVE
10%**



1856

Preparation and evaluation of *in situ* photocleavable mass tags with facile mass variation for matrix-free laser desorption ionization mass spectrometry

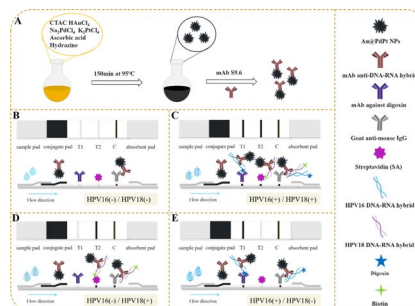
Jin-Gyu Na, Seokhwan Ji, Hyunook Kang and Woon-Seok Yeo*



1862

Rapid immunoassay for dual-mode detection of HPV16 and HPV18 DNA based on Au@PdPt nanoparticles

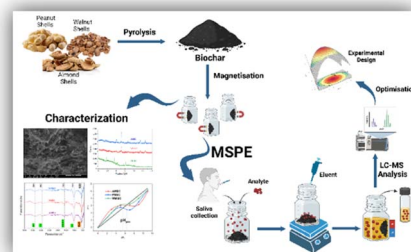
Huanxin Xiao, Weiguang Chen, Mingxia Lin, Shilin Jiang, Xiping Cui* and Suqing Zhao*



1870

The potential of lignocellulosic biomass for magnetic solid phase extraction of naproxen from saliva samples

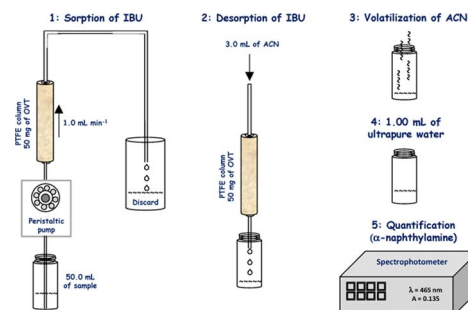
Marwa Aouled Abdallah, Rafika Ben Sghaier, Mohammed Zougagh, Latifa Latrous* and Adel Megriche



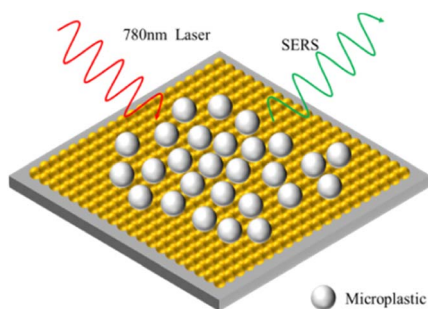
1880

Evaluation of organo-vermiculites as sorbent phases for solid-phase extraction of ibuprofen from water

Luis Fernando A. Batista, Sara Renata S. Gonçalves, Carolina D. Bressan, Marco T. Grassi and Gilberto Abate*



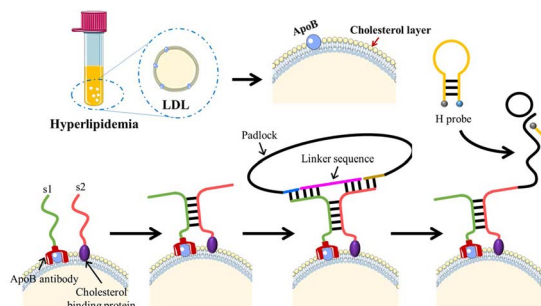
1887



Quantitative analysis of microplastics in seawater based on SERS internal standard method

Zhigang Di, Jianxin Gao, Jinxin Li, Hao Zhou and Chunrong Jia*

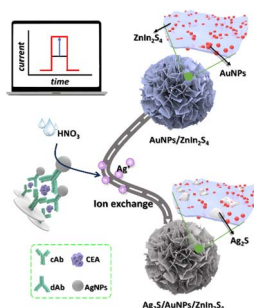
1894



Accurate and sensitive low-density lipoprotein (LDL) detection based on the proximity ligation assisted rolling circle amplification (RCA)

Xingyu Zhang, Jie Li, Mei Yang, Hong Huang, Hao Wang and Hongmin Zhang*

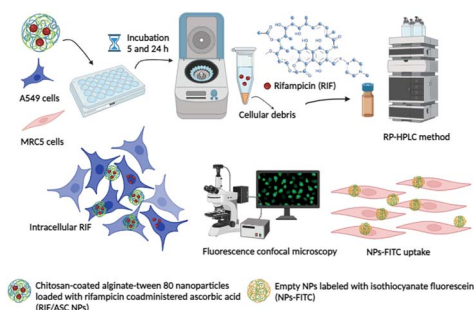
1901



Split-type photoelectrochemical immunoassay for sensitive quantification of carcinoembryonic antigen based on target-induced *in situ* formation of Z-type heterojunction

Jianhui Zhang, Meirong Tan, Qian Chen, Kangyao Zhang,* Qian Zhou,* Wenqiang Lai and Dianping Tang

1908



Quantification of rifampicin loaded into inhaled polymeric nanoparticles by reversed phase high-performance liquid chromatography in pulmonary nonphagocytic cellular uptake

Ivana Romina Scolari, Benjamín De La Cruz-Thea, Melina Mara Musri and Gladys Ester Granero*

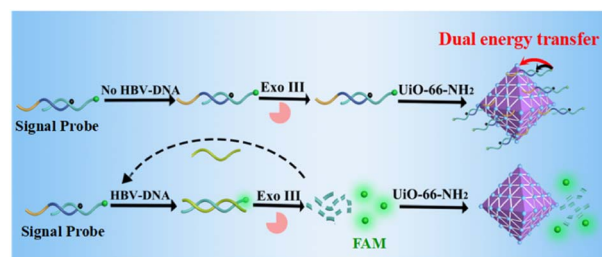


PAPERS

1916

MOF-mediated dual energy transfer nanoprobe integrated with exonuclease III amplification strategy for highly sensitive detection of DNA

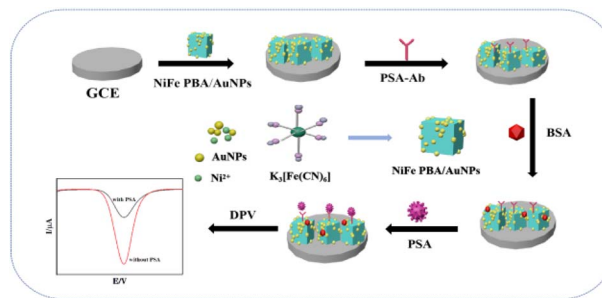
Xiaojing Xing,^{*} Mengying Gao, Minglin Lei, Kunqi Cheng, Yifan Zhao, Xianchao Du, Luyi Zong, Dongfang Qiu^{*} and Xueguo Liu^{*}



1923

A NiFe PBA/AuNPs nanocomposite sensitive immunosensor for electrochemical detection of PSA

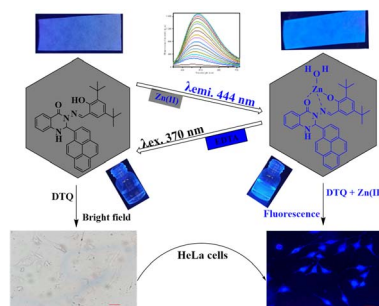
Xin Hua, Tongxiao Zhao, Xueqin Gui and Baokang Jin^{*}



1934

A pyrene-induced PET-based chemosensor for biologically important Zn(II) ions: application in test strips and live cell imaging studies

Chethanakumar, Mahantesh B. Budri, Kalagouda B. Gudasi,^{*} Ramesh S. Vadavi,^{*} Mallikarjun K. Patil, Vijay M. Kumbar and Sanjeev R. Inamdar



TECHNICAL NOTE

1948

Separation and purification of short-, medium-, and long-stranded RNAs by RP-HPLC using different mobile phases and C₁₈ columns with various pore sizes

Makoto Ozaki, Tomomi Kuwayama, Motoshi Shimotsuma and Tsunehisa Hirose^{*}

