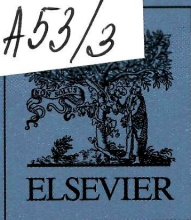


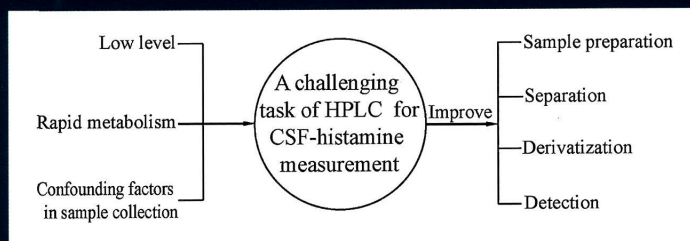
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Review Article

High-performance liquid chromatographic determination of histamine in biological samples: The cerebrospinal fluid challenge – A review

Zhaopin Wang, Juanli Wu, Shihua Wu and Aimin Bao

(Published on pp. 1–10 of this issue)

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Editorial Board

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Review articles

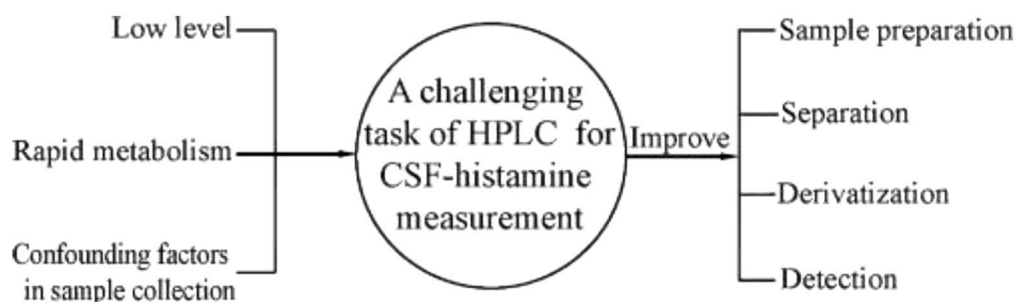
High-performance liquid chromatographic determination of histamine in biological samples: The cerebrospinal fluid challenge – A review

Review Article

Pages 1-10

Zhaopin Wang, Juanli Wu, Shihua Wu, Aimin Bao

Graphical abstract



Highlights

► Detection of histamine in the cerebrospinal fluid (CSF) is of clinical importance. ► HPLC for CSF-histamine measurement is a challenging task due to the low levels. ► There is solution for improvement of HPLC for CSF-histamine level measurement. ► It is important for simultaneous measurement of histamine and its metabolites.

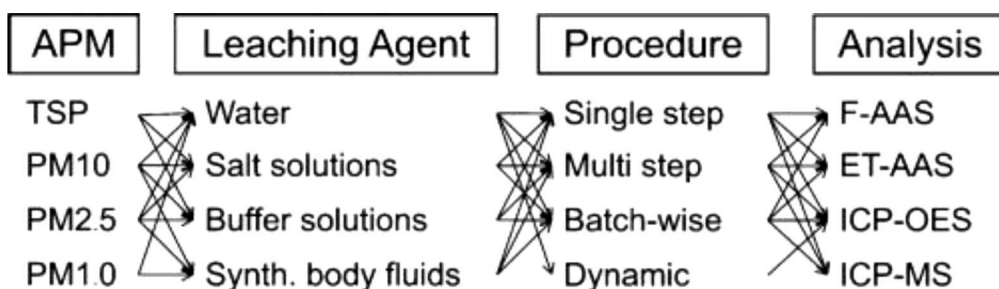
Recent developments in assessment of bio-accessible trace metal fractions in airborne particulate matter: A review

Review Article

Pages 11-25

Azam Mukhtar, Andreas Limbeck

Graphical abstract



Highlights

- ▶ Survey of leaching agents used for sample extraction.
- ▶ Multi-step fractionation schemes.
- ▶ Dynamic extraction procedures.
- ▶ Analytical approaches for element specific measurement.
- ▶ Detailed compilation of published results.

Extraction and Sample Handling

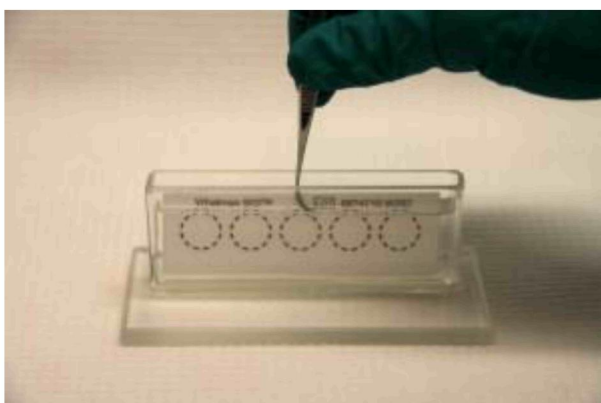
Quantitative analysis of morphine in dried blood spots by using morphine-d3 pre-impregnated dried blood spot cards

Original Research Article

Pages 26-32

John Mommers, Ynze Mengerink, Erik Ritzen, Jos Weusten, Jac van der Heijden, Sjoerd van der Wal

Graphical abstract



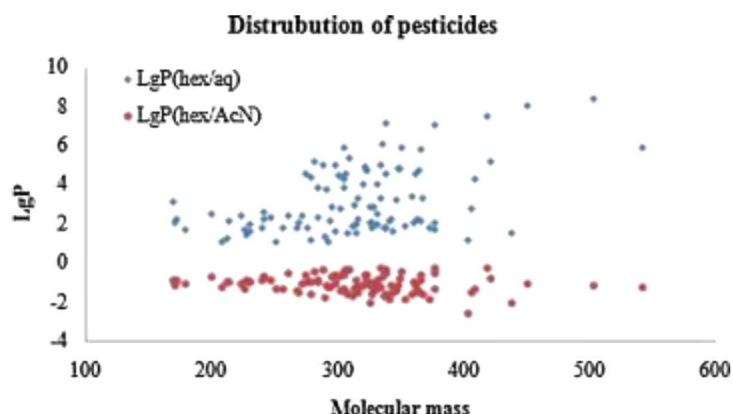
Distribution of pesticides in *n*-hexane/water and *n*-hexane/acetonitrile systems and estimation of possibilities of their extraction isolation and preconcentration from various matrices

Original Research Article

Pages 33-43

M.F. Zayats, S.M. Leschev, N.V. Petrashkevich, M.A. Zayats, L. Kadenczki, R. Sztítás, H. Szemán Dobrik, N. Keresztény

Graphical abstract



One-step synthesis of agarose coated magnetic nanoparticles and their application in the solid phase extraction of Pd(II) using a new magnetic field agitation device

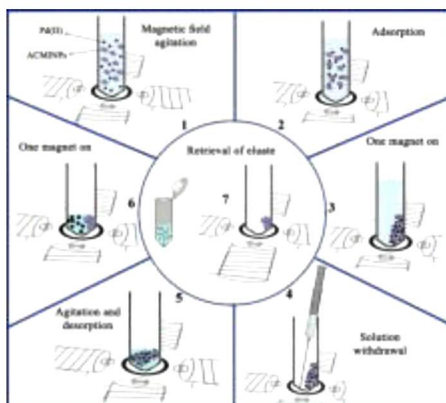
Original Research Article

Pages 44-50

Mehdi Safdarian, Payman Hashemi, Mohsen Adeli

Graphical abstract

The steps of the proposed MSPE-MFA method for the preconcentration of Pd(II).



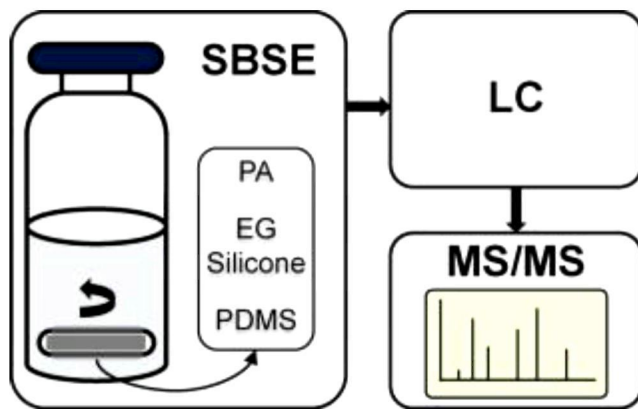
Novel coatings for stir bar sorptive extraction to determine pharmaceuticals and personal care products in environmental waters by liquid chromatography and tandem mass spectrometry

Original Research Article

Pages 51-60

Núria Gilart, Núria Miralles, Rosa Maria Marcé, Francesc Borrull, Núria Fontanals

Graphical abstract



Mass Spectrometry

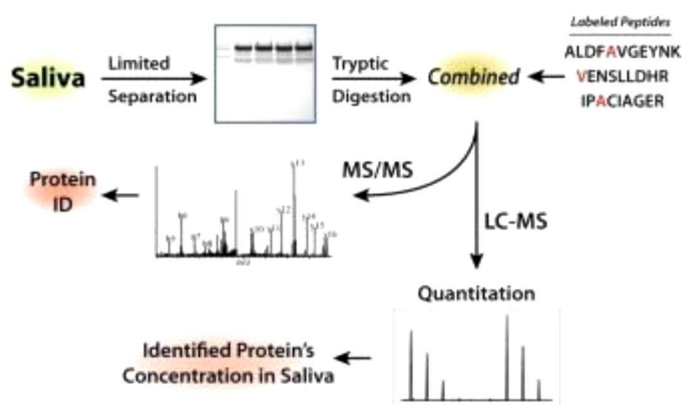
Quantitative analysis of differentially expressed saliva proteins in human immunodeficiency virus type 1 (HIV-1) infected individuals

Original Research Article

Pages 61-66

Nawei Zhang, Zhenyu Zhang, Shan Feng, Qingtao Wang, Daniel Malamud, Haiteng Deng

Graphical abstract



Highlights

- ▶ A high-throughput method for profiling and quantification of the differentially expressed proteins in saliva samples was developed.
- ▶ Identified that DMBT1, S100A7, S100A8, S100A9 and alpha defensin were up-regulated in saliva from HIV-1 seropositive patients.
- ▶ Established analytical strategies are translatable to the clinical setting.

Sensors and Bioselective Reagents

Fibrinolysis and thrombolysis of fibrinogen-modified gold nanoparticles for

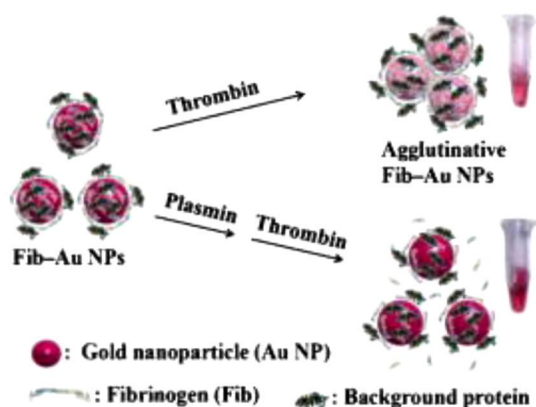
detection of fibrinolytic-related proteins

Original Research Article

Pages 67-72

Jyun-Wei Jian, Wei-Chane Chiu, Huan-Tsung Chang, Pang-Hung Hsu, Chih-Ching Huang

Graphical abstract



Highlights

- ▶ We developed two simple assays for plasmin, plasminogen, urokinase, and α_2 -plasmin. ▶ The sensors used fibrinogen-modified gold nanoparticles. ▶ Plasmin activity was determined in a biological medium mimic solution. ▶ Plasmin and plasminogen were determined in serum using a thrombin-modified sensor.

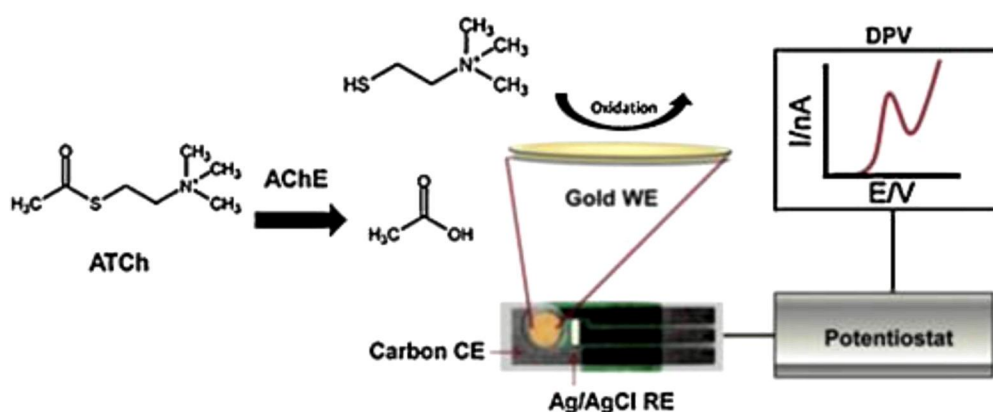
Miniaturized electrochemical system for cholinesterase inhibitor detection

Original Research Article

Pages 73-78

Anthony J. Veloso, Paul M. Nagy, Biao Zhang, Devjani Dhar, Anqi Liang, Tarek Ibrahim, Svetlana Mikhaylichenko, Isabelle Aubert, Kagan Kerman

Graphical abstract



Highlights

- ▶ Acetylcholinesterase inhibitor activity was measured on label-free electrodes. ▶
- Electrochemical detection was validated against Ellman's colorimetric assay. ▶ FDA approved acetylcholinesterase inhibitor was implemented as a positive control. ▶ The IC_{50} values determined for Donepezil were comparable between assays. ▶ IC_{50} were determined using cholinesterases extracted homogenates of C57BL/6J mice.

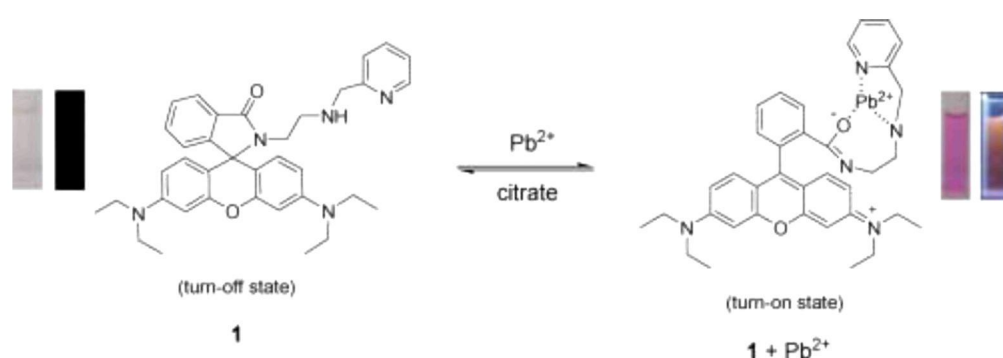
Colorimetric and fluorescent chemosensor for citrate based on a rhodamine and Pb^{2+} complex in aqueous solution

Original Research Article

Pages 79-84

Chun-Yan Li, Yu Zhou, Yong-Fei Li, Xue-Fei Kong, Chun-Xiang Zou, Chao Weng

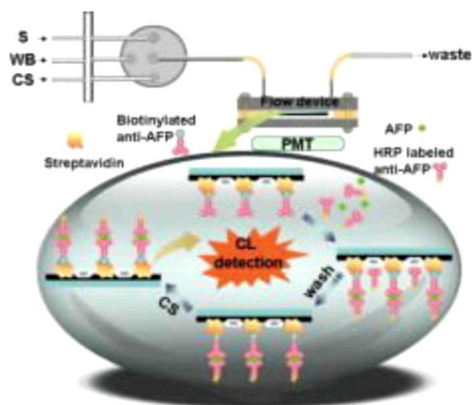
Graphical abstract



An ultrasensitive streptavidin-functionalized carbon nanotubes platform for chemiluminescent immunoassay

Original Research Article

Graphical abstract



Separation Methods

A visual detection of protein content based on titration of moving reaction boundary electrophoresis

Original Research Article

Pages 92-99

Hou-Yu Wang, Cheng-Ye Guo, Chen-Gang Guo, Liu-Yin Fan, Lei Zhang, Cheng-Xi Cao

Graphical abstract

