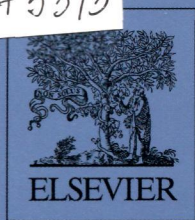


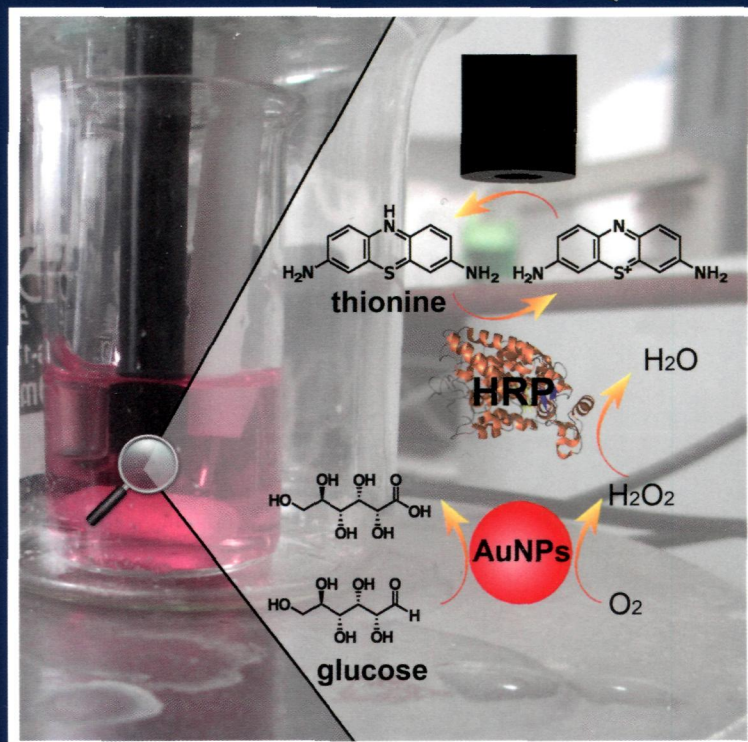
FM  
A 53/3

VOLUME 849 7 NOVEMBER 2014 ISSN 0003-2670



# ANALYTICA CHIMICA ACTA

AN INTERNATIONAL JOURNAL DEVOTED TO ALL BRANCHES OF ANALYTICAL CHEMISTRY



## EDITORS:

RICHARD P. BALDWIN  
NEIL W. BARNETT  
WOLFGANG BUCHBERGER  
LUTGARDE BUYDENS  
PURNENDU K. DASGUPTA  
ULRICH J. KRULL  
JAMES P. LANDERS  
LIANG LI  
JANUSZ PAWLISZYN  
PAUL J. WORSFOLD

## REVIEW EDITOR:

MANUEL MIRÓ

## Featured article:

Direct application of gold nanoparticles to one-pot electrochemical biosensors

Guifang Chen, Hui Tong, Tao Gao,  
Yangyang Chen, Genxi Li

*(Published in pages 1–6 of this issue)*





## CONTENTS

Abstracted/indexed in: Aluminium Abstracts; Anal. Abstr.; Biol. Abstr.; BIOSIS; Chem. Abstr.; Curr. Contents Phys. Chem. Earth Sci.; Engineered Materials Abstracts; Excerpta Medica; Index Med.; Life Sci.; Mass Spectrum. Bull.; Material Business Alerts; Metals Abstracts; Sci. Citation Index Full texts are incorporated in CJELSEVIER, a file in the Chemical Journals Online database available on STN International. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®.

### Featured article

- Direct application of gold nanoparticles to one-pot electrochemical biosensors  
G. Chen, H. Tong, T. Gao, Y. Chen and G. Li ..... 1

### Extraction and Sample Handling

- A novel approach for electromembrane extraction based on the use of silver nanometallic-decorated hollow fibers  
M. Ramos-Payán, R. Fernández-Torres, J.L. Pérez-Bernal, M. Callejón-Mochón and M.Á. Bello-López ..... 7

### Mass Spectrometry

- Monitoring of an esterification reaction by on-line direct liquid sampling mass spectrometry and in-line mid infrared spectrometry with an attenuated total reflectance probe  
Andrew W. Owen, Edith A.J. McAulay, Alison Nordon, David Littlejohn, Thomas P. Lynch, J. Steven Lancaster and Robert G. Wright. .... 12
- N-alkylpyridinium quaternization combined with liquid chromatography–electrospray ionization–tandem mass spectrometry: A highly sensitive method to quantify fatty alcohols in thyroid tissues  
Y. Cao, Q. Guan, T. Sun, H. Wang, J. Leng and Y. Guo ..... 19
- Use of a porous silicon-gold plasmonic nanostructure to enhance serum peptide signals in MALDI-TOF analysis  
X. Li, J. Tan, J. Yu, J. Feng, A. Pan, S. Zheng and J. Wu ..... 27

### Sensors and Bioselective Reagents

- A novel “Turn-On” fluorescent probe for F<sup>-</sup> detection in aqueous solution and its application in live-cell imaging  
J. Xu, S. Sun, Q. Li, Y. Yue, Y. Li and S. Shao ..... 36
- Optofluidics-based DNA structure-competitive aptasensor for rapid on-site detection of lead(II) in an aquatic environment  
F. Long, A. Zhu and H. Wang ..... 43
- Microplate based optical biosensor for L-Dopa using tyrosinase from *Amorphophallus campanulatus*  
A.S. Saini, J. Kumar and J.S. Melo ..... 50
- Live-cell imaging of biothiols via thiol/disulfide exchange to trigger the photoinduced electron transfer of gold-nanodot sensor  
C.-P. Liu, T.-H. Wu, C.-Y. Liu and S.-Y. Lin ..... 57
- A fluorescence turn-on probe for cysteine and homocysteine based on thiol-triggered benzothiazolidine ring formation  
S.-R. Liu, C.-Y. Chang and S.-P. Wu ..... 64

### Separation Methods

- Simultaneous determination of the repertoire of classical neurotransmitters released from embryonal carcinoma stem cells using online microdialysis coupled with hydrophilic interaction chromatography–tandem mass spectrometry  
Y.-B. Tang, F. Sun, L. Teng, W.-B. Li, S.-M. An, C. Zhang, X.-J. Yang, H.-Y. Lv, X.-P. Ding, L. Zhu and H.-Z. Chen ..... 70