

ANALYTICA CHIMICA ACTA

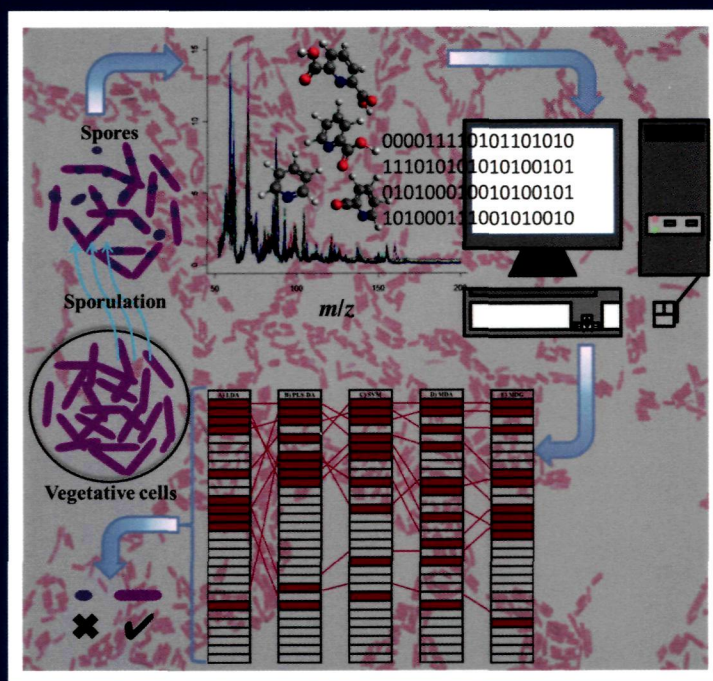
AN INTERNATIONAL JOURNAL DEVOTED TO ALL BRANCHES OF ANALYTICAL CHEMISTRY

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

A comparative investigation of modern feature selection and classification approaches for the analysis of mass spectrometry data

Piotr S. Gromski, Yun Xu, Elon Correa, David I. Ellis, Michael L. Turner and Royston Goodacre

(Published on pp. 1–8 of this issue)



ELSEVIER

available at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/aca

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

- A comparative investigation of modern feature selection and classification approaches for the analysis of mass spectrometry data
P.S. Gromski, Y. Xu, E. Correa, D.I. Ellis, M.L. Turner and R. Goodacre 1

Electrochemistry

- DNA-based hybridization chain reaction amplification for assaying the effect of environmental phenolic hormone on DNA methyltransferase activity
Z. Xu, H. Yin, Y. Han, Y. Zhou and S. Ai 9
- Prussian blue-gold nanoparticles-ionic liquid functionalized reduced graphene oxide nanocomposite as label for ultrasensitive electrochemical immunoassay of alpha-fetoprotein
Q. Gao, N. Liu and Z. Ma 15

Extraction and Sample Handling

- In situ growth of IRMOF-3 combined with ionic liquids to prepare solid-phase microextraction fibers
J. Zheng, S. Li, Y. Wang, L. Li, C. Su, H. Liu, F. Zhu, R. Jiang and G. Ouyang 22

Flow Analysis

- Liquid-liquid microextraction in a multicommuted flow system for direct spectrophotometric determination of iodine value in biodiesel
A.C. Pereira and F.R.P. Rocha 28

Mass Spectrometry

- Determination of bovine lactoferrin in dairy products by ultra-high performance liquid chromatography-tandem mass spectrometry based on tryptic signature peptides employing an isotope-labeled winged peptide as internal standard
J. Zhang, S. Lai, Z. Cai, Q. Chen, B. Huang and Y. Ren 33
- Analysis of the human urine endogenous peptides by nanoparticle extraction and mass spectrometry identification
X. Yang, L. Hu, M. Ye and H. Zou 40

Sensors and Bioselective Reagents

- Fast functionalization of silver decahedral nanoparticles with aptamers for colorimetric detection of human platelet-derived growth factor-BB
H. Li, Y. Zhu, S. Dong, W. Qiang, L. Sun and D. Xu 48
- A ratiometric fluorescent chemosensor for Al³⁺ in aqueous solution based on aggregation-induced emission and its application in live-cell imaging
L. Peng, Z. Zhou, X. Wang, R. Wei, K. Li, Y. Xiang and A. Tong 54
- Selective and sensitive homogenous assay of serum albumin with 1-anilinonaphthalene-8-sulphonate as a biosensor
J. Qin, Y. Li, C. He, X. Yang, Y. Xie, X. Hu, C. Chen, L. Wang, J. Pu and F. Liao 60

Separation Methods

- Aflatoxin B₁ and M₁ in milk
P.T. Scaglioni, T. Becker-Algeri, D. Drunkler and E. Badiale-Furlong 68
- Americium and plutonium separation by extraction chromatography for determination by accelerator mass spectrometry
Z.H. Kazi, J.R. Cornett, X. Zhao and L. Kieser 75