

Analytical Methods

rsc.li/methods

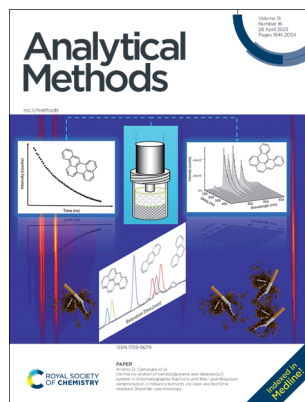
The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1759-9679 CODEN AMNECT 15(16) 1941–2054 (2023)



Cover
See Wenliang Sun *et al.*,
pp. 1953–1958. Image
reproduced by permission of
Wenliang Sun from *Anal.
Methods*, 2023, 15, 1953.



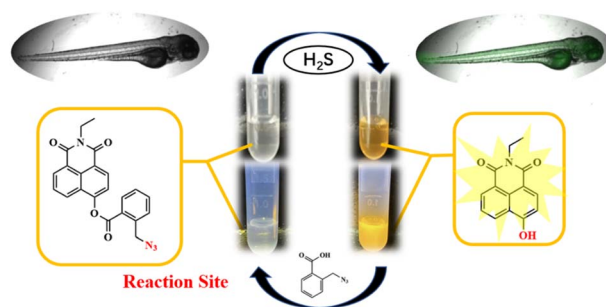
Inside cover
See Andres D. Campiglia *et al.*,
pp. 1959–1968. Image
reproduced by permission of
Andres D. Campiglia from
Anal. Methods, 2023, 15, 1959.

COMMUNICATION

1948

Development of a two-photon fluorescent probe for imaging hydrogen sulfide (H₂S) in living cells and zebrafish

Chen Xu, Yukun Zhang, Hui Sun, Jindong Ai
and Mingguang Ren*

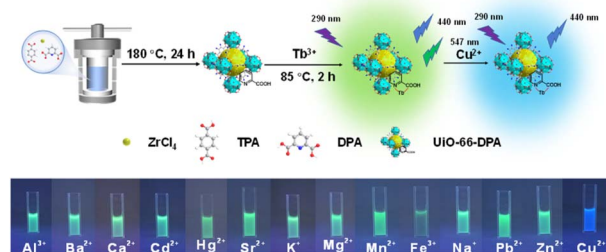


PAPERS

1953

Ratiometric detection of Cu²⁺ in water and drinks using Tb(III)-functionalized UiO-66-type metal–organic frameworks

Piaotong Liu, Rusi Hao, Wenliang Sun* and Junhui Li



Editorial Staff

Executive Editor

Philippa Ross

Deputy Editor

Alice Smallwood

Editorial Production Manager

Jason Woolford

Development Editor

Celeste Brady

Publishing Editors

Gabriel Clarke, Derya Kara-Fisher, Ziva Whitelock

Publishing Assistant

Natalie Ford

Editorial Assistant

Leo Curtis

Publisher

Jeanne Andres

For queries about submitted articles please contact Jason Woolford, Editorial production manager, in the first instance. E-mail methods@rsc.org

For pre-submission queries please contact

Philippa Ross, Executive editor.

E-mail methods-rsc@rsc.org

Analytical Methods (electronic: ISSN 1759-9679) is published 48 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 0WF.

All orders, with cheques made payable to the Royal Society of Chemistry, should be sent to the Royal Society of Chemistry Order Department, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF, UK

Tel +44 (0)1223 432398; E-mail orders@rsc.org

2023 Annual (electronic) subscription price: £2416; US\$4255.

Customers in Canada will be subject to a surcharge to cover GST. Customers in the EU subscribing to the electronic version only will be charged VAT.

If you take an institutional subscription to any Royal Society of Chemistry journal you are entitled to free, site-wide web access to that journal. You can arrange access via Internet Protocol (IP) address at www.rsc.org/ip

Customers should make payments by cheque in sterling payable on a UK clearing bank or in US dollars payable on a US clearing bank.

Whilst this material has been produced with all due care, the Royal Society of Chemistry cannot be held responsible or liable for its accuracy and completeness, nor for any consequences arising from any errors or the use of the information contained in this publication. The publication of advertisements does not constitute any endorsement by the Royal Society of Chemistry or Authors of any products advertised. The views and opinions advanced by contributors do not necessarily reflect those of the Royal Society of Chemistry which shall not be liable for any resulting loss or damage arising as a result of reliance upon this material. The Royal Society of Chemistry is a charity, registered in England and Wales, Number 207890, and a company incorporated in England by Royal Charter (Registered No. RC000524), registered office: Burlington House, Piccadilly, London W1J 0BA, UK, Telephone: +44 (0) 207 4378 6556.

Advertisement sales:

Tel +44 (0) 1223 432246; Fax +44 (0) 1223 426017;

E-mail advertising@rsc.org

For marketing opportunities relating to this journal, contact marketing@rsc.org

Analytical Methods

rsc.li/methods

Early applications of new analytical methods with clear societal impact.

Editorial Board

Editor-in-Chief

Scott Martin, St. Louis University, USA

Christopher Easley, Auburn University, USA

Juan García-Reyes, Jaén University, Spain

Tony Killard, University of the West of England, UK

Zhen Liu, Nanjing University, China

Chao Lu, Beijing University of Chemical Technology, China

Fiona Regan, Dublin City University, Ireland

Michael Roper, Florida State University, USA

Jill Venton, University of Virginia, USA

Associate Editors

Jonas Bergquist, Uppsala University, Sweden

Wendell Coltro, Federal University of Goiás, Brazil

Advisory Board

Jailson de Andrade, Federal University of

Bahia, Brazil

Lane Baker, Indiana University, USA

Craig Banks, The Manchester Metropolitan University, UK

Emanuel Carrilho, University of São Paulo, Brazil

Yi Chen, Chinese Academy of

Sciences, China

Anthony Gachanja, Jomo Kenyatta University

of Agriculture and Technology, Kenya

Amanda Hummon, Ohio State University, USA

Lauro Kubota, Instituto de Química, Brazil

Ally Lewis, University of York, UK

Juewen Liu, University of Waterloo, Canada

Susan Lunte, University of Kansas, USA

Jim Luong, Dow Chemical Canada ULC, Canada

Susheel Mittal, Thapar University, India

Antonio Molina-Díaz, University of Jaén, Spain

Koji Otsuka, Kyoto University, Japan

Brett Paull, University of Tasmania, Australia

Zachary Schultz, Ohio State University, USA

Guobao Xu, Changchun Institute of Applied Chemistry, China

Information for Authors

Full details on how to submit material for publication in Analytical Methods are given in the Instructions for Authors (available from <http://www.rsc.org/authors>). Submissions should be made via the journal's homepage: rsc.li/methods

Authors may reproduce/republish portions of their published contribution without seeking permission from the Royal Society of Chemistry, provided that any such republication is accompanied by an acknowledgement in the form: (Original Citation)–Reproduced by permission of the Royal Society of Chemistry.

This journal is © The Royal Society of Chemistry 2023.

Apart from fair dealing for the purposes of research or private study for non-commercial purposes, or criticism or review, as permitted under the Copyright, Designs and Patents Act 1988 and the Copyright and Related Rights Regulation 2003, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the Publishers or in the case of reprographic reproduction in accordance with the terms of licences issued by the Copyright Licensing Agency in the UK. US copyright law is applicable to users in the USA.

Registered charity number: 207890

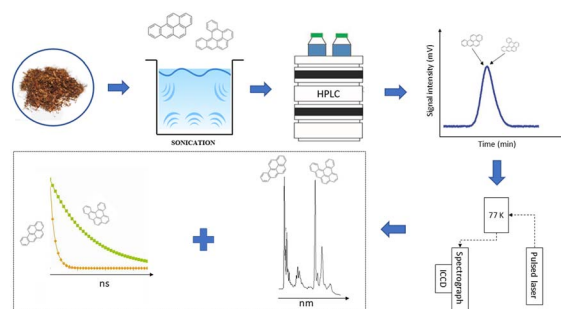


PAPERS

1959

On the co-elution of benzo[a]pyrene and dibenzo[a,l]pyrene in chromatographic fractions and their unambiguous determination in tobacco extracts via laser-excited time resolved Shpol'skii spectroscopy

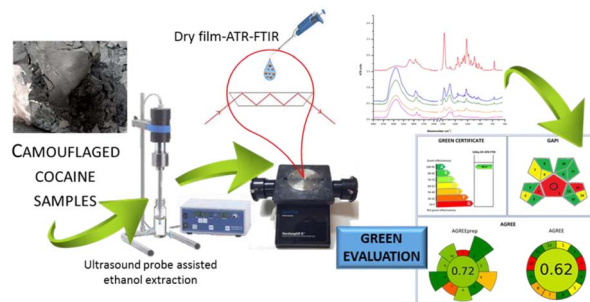
Ahmed Comas, Anthony Santana and Andres D. Campiglia*



1969

A green methodology for the determination of cocaine in camouflaged samples

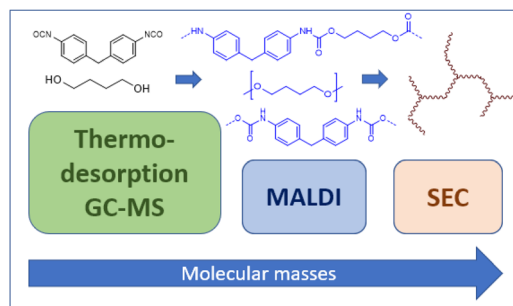
D. Gallart-Mateu,* A. Gallardo, S. Garrigues and M. de la Guardia



1979

Thermal desorption gas chromatography-mass spectrometry for investigating the thermal degradation of polyurethanes

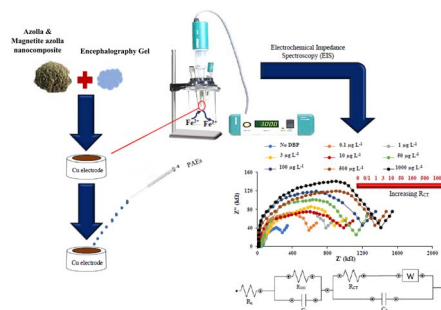
Roland Becker,* Philipp Scholz, Christian Jung and Steffen Weidner



1985

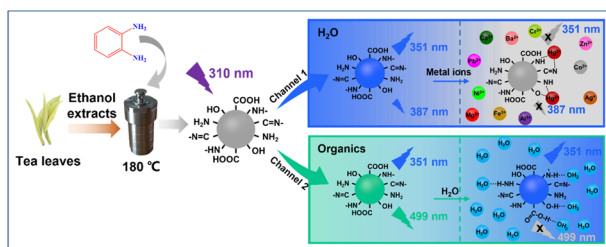
Magnetite azolla impedimetric nanobiosensor for phthalic acid esters quantification

Maryam Darvishi, Shahab Shariati,* Fariba Safa and Akbar Islamnezhad



PAPERS

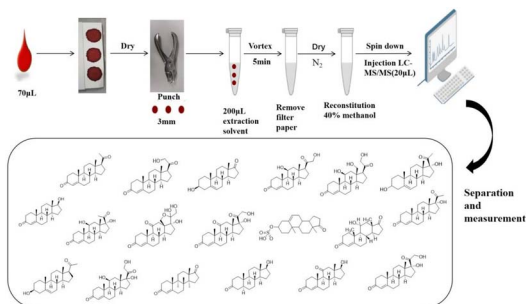
1998



Tea-derived carbon dots with two ratiometric fluorescence channels for the independent detection of Hg^{2+} and H_2O

Chuanlu Ding, Hao Xing, Xuhong Guo, Huihui Yuan, Cuihua Li,* Xiulan Zhang* and Xin Jia*

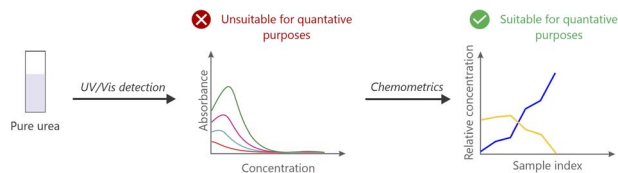
2006



Simultaneous measurement of 19 steroid hormones in dried blood spots using ultra-performance liquid chromatography-tandem mass spectrometry

Jie Wu, Zenghe Li* and Baorong Chen*

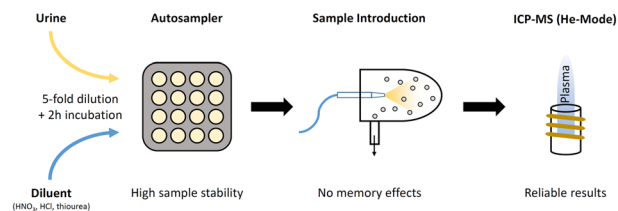
2016



A conventional and chemometric analytical approach to solving urea determination with accuracy and precision

Michelly Cristina Galdioli Pellá,* Andressa Renatta Simão, Patrícia Valderrama* and Adley Forti Rubira

2030



A method for reliable quantification of mercury in occupational and environmental medical urine samples by inductively coupled plasma mass spectrometry

Martin Winter,* Frederik Lessmann and Volker Harth

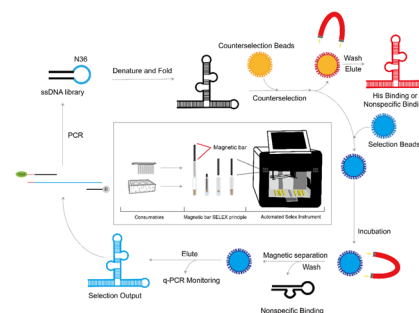


PAPERS

2039

Semi-automated and efficient parallel SELEX of aptamers for multiple targets

Meng Jiang, Xiaona Fang, Han Diao, Shaokang Lv, Zheng Zhang, Xiang Zhang, Zhiwei Chen* and Zhaofeng Luo*



2044

Study of anti-tumorigenic actions of essential fatty acids in a murine mammary gland adenocarcinoma by micro-XRF

C. Benchariski, Elio A. Soria, Gisele E. Falchini, María E. Pasqualini and Roberto Daniel Perez*

