ACS Publications: High Quality, High Impact
http://pubs3.acs.org/acs/journals/toc.page?incoden=ancham

American Chemical Society

Analytical Chemistry

Analytical Chemistry is a peer-reviewed research journal that explores the latest concepts in analytical measurements and the best new ways to increase accuracy, selectivity, sensitivity, and reproducibility.

Browse Issues

Select Decade
2000-Current
Select Volume
2007/Vol 79
Select Issue Number
Iss. 14/(5117-549
Go

ASAP Articles | Previous Issue | Next Issue | Printer-friendly version

Table of Contents

Vol. 79, No. 14: July 15, 2007

Citation Management

Learn More

ACCELERATED ARTICLES

Select Citation | Feedback | $ Purchase

Free Flow Acoustophoresis: Microfluidic-Based Mode of Particle and Cell Separation
Filip Petersson, Lena Åberg, Ann-Margret Swärd-Nilsson, and Thomas Laurell
pp 5117 - 5123; **(Accelerated Article)** DOI: 10.1021/ac070444e

Abstract Full: HTML / PDF (592K)

Select Citation | Feedback | $ Purchase

Multicolor Surface Plasmon Resonance Imaging of Ink Jet-Printed Protein Microarrays
Bipin K. Singh and Andrew C. Hillier
pp 5124 - 5132; **(Accelerated Article)** DOI: 10.1021/ac070755p

Abstract Full: HTML / PDF (402K) Supporting Info

Select Citation | Feedback | $ Purchase

Red Blood Cell Stimulation of Platelet Nitric Oxide Production Indicated by Quantitative Monitoring of the Communication between Cells in the Bloodstream
Jamie S. Carroll, Chia-Jui Ku, Welivitiya Karunarathne, and Dana M. Spence
pp 5133 - 5138; **(Accelerated Article)** DOI: 10.1021/ac0706271

Abstract Full: HTML / PDF (214K)

Select Citation | Feedback | $ Purchase

Metabolic Cytometry. Glycosphingolipid Metabolism in Single Cells
Colin D. Whitmore, Ole Hindsgaul, Monica M. Palcic, Ronald L Schnaar, and Norman J. Dovichi
pp 5139 - 5142; **(Accelerated Article)** DOI: 10.1021/ac070716d

Abstract Full: HTML / PDF (177K) Supporting Info

ARTICLES

Select Citation | Feedback | $ Purchase

Relative Quantification of Carboxylic Acid Metabolites by Liquid Chromatography-Mass Spectrometry Using Isotopic Variants of Cholamine
Shane M. Lamos, Michael R. Shortreed, Brian L. Frey, Peter J. Belshaw, and Lloyd M. Smith
pp 5143 - 5149; **(Article)** DOI: 10.1021/ac062416m

Abstract Full: HTML / PDF (243K)

Select Citation | Feedback | $ Purchase

Enhancement of the LC/MS Analysis of Fatty Acids through Derivatization and Stable Isotope Coding
Wen-Chu Yang, Jiri Adamec, and Fred E. Regnier
pp 5150 - 5157; **(Article)** DOI: 10.1021/ac070311t

Abstract Full: HTML / PDF (606K)

Select Citation | Feedback | $ Purchase

Aptamer-Based Biosensors for Label-Free Voltammetric Detection of Lysozyme
Alan K. H. Cheng, Bixia Ge, and Hua-Zhong Yu
pp 5158 - 5164; **(Article)** DOI: 10.1021/ac062214q

Abstract Full: HTML / PDF (151K)

Select Citation | Feedback | $ Purchase

Absolute Quantitation of β-Lactoglobulin by Protein Liquid Chromatography-Mass Spectrometry and Its Application to Different Milk Products
Christoph Czerwenka, Irene Maier, Natascha Potocnik, Fritz Pittner, and Wolfgang Lindner
pp 5165 - 5172; **(Article)** DOI: 10.1021/ac062367d

Abstract Full: HTML / PDF (320K)

Select Citation | Feedback | $ Purchase

Macroporous Monolithic Layers as Efficient 3-D Microarrays for Quantitative Detection of Virus-like Particles
Irina Kalashnikova, Natalia Ivanova, and Tatiana Tennikova
pp 5173 - 5180; **(Article)** DOI: 10.1021/ac0700629

Abstract Full: HTML / PDF (246K)

Select Citation | Feedback | $ Purchase

Enhanced Separation of Membranes during Free Flow Zonal Electrophoresis in Plants
Bronwyn J. Barkla, Rosario Vera-Estrella, and Omar Pantoja
pp 5181 - 5187; **(Article)** DOI: 10.1021/ac070159v

Abstract Full: HTML / PDF (353K)

Select Citation | Feedback | $ Purchase

Sol-Gel-Derived Composite Antimony-Doped, Tin Oxide-Coated Clay-Silicate Semitransparent and Conductive Electrodes
A. Sadeh, S. Sladkevich, F. Gelman, P. Prikhodchenko, I. Baumberg, O. Berezin, and, and O. Lev
pp 5188 - 5195; **(Article)** DOI: 10.1021/ac070165r

Abstract Full: HTML / PDF (470K)

Select Citation | Feedback | $ Purchase

Nanostructured Biosensor for Measuring Neuropathy Target Esterase Activity
Neeraj Kohli, Devesh Srivastava, Jun Sun, Rudy J. Richardson, Ilsoon Lee, and Robert M. Worden
pp 5196 - 5203; **(Article)** DOI: 10.1021/ac0701684

Abstract Full: HTML / PDF (459K)

Select Citation | Feedback | $ Purchase

Experimental and Analytical Variation in Human Urine in ^{1}H NMR Spectroscopy-Based Metabolic Phenotyping Studies
Anthony D. Maher, Séverine F. M. Zirah, Elaine Holmes, and Jeremy K. Nicholson
pp 5204 - 5211; **(Article)** DOI: 10.1021/ac070212f

Abstract Full: HTML / PDF (423K)

Select Citation | Feedback | $ Purchase

Determination of DNA Melting Temperatures in Diffusion-Generated Chemical Gradients
Tim Liedl and Friedrich C. Simmel
pp 5212 - 5216; **(Article)** DOI: 10.1021/ac070242i

Abstract Full: HTML / PDF (200K)

Select Citation | Feedback | $ Purchase

Hybrid Amperometric and Conductometric Chemical Sensor Based on Conducting Polymer Nanojunctions
Erica S. Forzani, Xiulan Li, and Nongjian Tao
pp 5217 - 5224; **(Article)** DOI: 10.1021/ac0703202

Abstract Full: HTML / PDF (513K)

Select Citation | Feedback | $ Purchase

Scanning Electrochemical Microscopy. 58. Application of a Micropipet-Supported ITIES Tip To Detect Ag^{+} and Study Its Effect on Fibroblast Cells
Dongping Zhan, Xiao Li, Wei Zhan, Fu-Ren F. Fan, and Allen J. Bard
pp 5225 - 5231; **(Article)** DOI: 10.1021/ac070318a

Abstract Full: HTML / PDF (244K)

Select Citation | Feedback | $ Purchase

Double-Codified Gold Nanolabels for Enhanced Immunoanalysis
Adriano Ambrosi, Maria Teresa Castañeda, Anthony J. Killard, Malcolm R. Smyth, Salvador Alegret, and Arben Merkoçi
pp 5232 - 5240; **(Article)** DOI: 10.1021/ac070357m

Abstract Full: HTML / PDF (406K) Supporting Info

Select Citation | Feedback | $ Purchase

Zirconia Hollow Fiber: Preparation, Characterization, and Microextraction Application
Li Xu and Hian Kee Lee
pp 5241 - 5248; **(Article)** DOI: 10.1021/ac070449b

Abstract Full: HTML / PDF (587K)

Select Citation | Feedback | $ Purchase

Detection of Cardiac Biomarkers Using Micellar Electrokinetic Chromatography and a Cleavable Tag Immunoassay
Meghan M. Caulum, Brian M. Murphy, Lauren M. Ramsay, and Charles S. Henry
pp 5249 - 5256; **(Article)** DOI: 10.1021/ac070452v

Abstract Full: HTML / PDF (177K) Supporting Info

Select Citation | Feedback | $ Purchase

Suspension Array with Shape-Coded Silica Nanotubes for Multiplexed Immunoassays
Bo He, Sang Jun Son, and Sang Bok Lee
pp 5257 - 5263; **(Article)** DOI: 10.1021/ac0704964

Abstract Full: HTML / PDF (428K) Supporting Info

Select Citation | Feedback | $ Purchase

Detection of Separated Analytes in Subnanoliter Volumes Using Coaxial Thermal Lensing
Fuping Li, Alexander A. Kachanov, and Richard N. Zare
pp 5264 - 5271; **(Article)** DOI: 10.1021/ac0705925

Abstract Full: HTML / PDF (340K)

Select Citation | Feedback | $ Purchase

Alkaline Phosphatase-Catalyzed Silver Deposition for Electrochemical Detection
Pablo Fanjul-Bolado, David Hernández-Santos, María Begoña González-García, and Agustín Costa-García
pp 5272 - 5277; **(Article)** DOI: 10.1021/ac070624o

Abstract Full: HTML / PDF (192K)

Select Citation | Feedback | $ Purchase

Plasmonic Detection of a Model Analyte in Serum by a Gold Nanorod Sensor
Stella M. Marinakos, Sihai Chen, and Ashutosh Chilkoti
pp 5278 - 5283; **(Article)** DOI: 10.1021/ac0706527

Abstract Full: HTML / PDF (286K)

Select Citation | Feedback | $ Purchase

Thermal Field-Flow Fractionation of Charged Submicrometer Particles in Aqueous Media
Luisa Pasti, Sara Agnolet, and Francesco Dondi
pp 5284 - 5296; **(Article)** DOI: 10.1021/ac070099t

Abstract Full: HTML / PDF (226K)

Select Citation | Feedback | $ Purchase

Sensitive Measurement of NH_4^+ $^{15}N/^{14}N$ ($\delta^{15}NH_4^+$) at Natural Abundance Levels in Fresh and Saltwaters

Lin Zhang, Mark A. Altabet, Taixing Wu, and Ora Hadas
pp 5297 - 5303; **(Article)** DOI: 10.1021/ac070106d

Abstract Full: HTML / PDF (151K) Supporting Info

Select Citation | Feedback | $ Purchase

Identification of Sb(V) Complexes in Biological and Food Matrixes and Their Stibine Formation Efficiency during Hydride Generation with ICPMS Detection
Helle R. Hansen and Spiros A. Pergantis
pp 5304 - 5311; **(Article)** DOI: 10.1021/ac070130r

Abstract Full: HTML / PDF (159K) Supporting Info

Select Citation | Feedback | $ Purchase

Separation and Sequencing of Isomeric Oligonucleotide Adducts Using Monolithic Columns by Ion-Pair Reversed-Phase Nano-HPLC Coupled to Ion Trap Mass Spectrometry
Wennan Xiong, James Glick, Yiqing Lin, and Paul Vouros
pp 5312 - 5321; **(Article)** DOI: 10.1021/ac0701435

Abstract Full: HTML / PDF (237K)

Select Citation | Feedback | $ Purchase

Microfluidic Based Platform for Characterization of Protein Interactions in Hydrogel Nanoenvironments
Jaisree Moorthy, Richard Burgess, Arun Yethiraj, and David Beebe
pp 5322 - 5327; **(Article)** DOI: 10.1021/ac070226l

Abstract Full: HTML / PDF (430K)

Select Citation | Feedback | $ Purchase

Electrochemical Behavior of L-Cysteine and Its Detection at Ordered Mesoporous Carbon-Modified Glassy Carbon Electrode
Ming Zhou, Jie Ding, Li-ping Guo, and Qing-kun Shang
pp 5328 - 5335; **(Article)** DOI: 10.1021/ac0703707

Abstract Full: HTML / PDF (262K)

Select Citation | Feedback | $ Purchase

Method for Quantification of Chemicals in a Pollution Plume Using a Moving Membrane-Based Sensor Exemplified by Mass Spectrometry
Christian Janfelt, Frants R. Lauritsen, Strawn K. Toler, Ryan J. Bell, and R. Timothy Short
pp 5336 - 5342; **(Article)** DOI: 10.1021/ac070408f

Abstract Full: HTML / PDF (135K)

Select Citation | Feedback | $ Purchase

Quantitative Analysis of Systematic Errors Originated from Wall Adsorption and Sample Plug Lengths in Affinity Capillary Electrophoresis Using Two-Dimensional Simulation
Ning Fang, Jiangwei Li, and Edward S. Yeung
pp 5343 - 5350; **(Article)** DOI: 10.1021/ac070412r

Abstract Full: HTML / PDF (178K) Supporting Info

Select Citation | Feedback | $ Purchase

Photon-Independent Gas-Phase-Ion Formation in Capillary Electrophoresis-Mass Spectrometry Using Atmospheric Pressure Photoionization
Paul Hommerson, Amjad M. Khan, Tony Bristow, Wilfried Niessen, Gerhardus J. de Jong, and Govert W. Somsen
pp 5351 - 5357; **(Article)** DOI: 10.1021/ac070426x

Abstract Full: HTML / PDF (178K)

Select Citation | Feedback | $ Purchase

Carbon-13 Labeling for Quantitative Analysis of Molecular Movement in Heterogeneous Organic Materials Using Secondary Ion Mass Spectrometry
Shane E. Harton, Zhengmao Zhu, Frederick A. Stevie, Yoko Aoyama, and Harald Ade
pp 5358 - 5363; **(Article)** DOI: 10.1021/ac070437q

Abstract Full: HTML / PDF (121K)

Select Citation | Feedback | $ Purchase

Advanced Liquid Chromatography-Mass Spectrometry Interface Based on Electron Ionization
A. Cappiello, G. Famiglini, E. Pierini, P. Palma, and H. Trufelli
pp 5364 - 5372; **(Article)** DOI: 10.1021/ac070468l

Abstract Full: HTML / PDF (235K)

Real-Time Monitoring of Single Bacterium Lysis and Leakage Events by Chemiluminescence Microscopy
Yun Zhang, Gregory J. Phillips, and Edward S. Yeung
pp 5373 - 5381; **(Article)** DOI: 10.1021/ac070477u

Abstract Full: HTML / PDF (1081K) Supporting Info

Investigation of Anion Retention and Cation Exclusion Effects for Several C18 Stationary Phases
Eric Loeser and Patrick Drumm
pp 5382 - 5391; **(Article)** DOI: 10.1021/ac0704816

Abstract Full: HTML / PDF (200K)

Flow Injection Amperometric Detection of 2'-Deoxyguanosine at a Ruthenium Oxide Hexacyanoferrate Modified Electrode
Thiago R. L. C. Paixão, Camila C. M. Garcia, Marisa H. G. Medeiros, and Mauro Bertotti
pp 5392 - 5398; **(Article)** DOI: 10.1021/ac070490e

Abstract Full: HTML / PDF (291K)

Detection of Plasmid Insertion in *Escherichia coli* by MALDI-TOF Mass Spectrometry
Scott C. Russell, Nathan Edwards,and, and Catherine Fenselau
pp 5399 - 5406; **(Article)** DOI: 10.1021/ac0705061

Abstract Full: HTML / PDF (221K)

On-Line Dynamic Titration: Determination of Dissociation Constants for Noncovalent Complexes Using Gaussian Concentration Profiles by Electrospray Ionization Mass Spectrometry
Petr Fryčák and Kevin A. Schug
pp 5407 - 5413; **(Article)** DOI: 10.1021/ac070519e

Abstract Full: HTML / PDF (165K)

TECHNICAL NOTES

Automated Ligand Fishing Using Human Serum Albumin-Coated Magnetic Beads
R. Moaddel, M. P. Marszall, F. Bighi, Q. Yang, X. Duan, and I. W. Wainer
pp 5414 - 5417; **(Technical Note)** DOI: 10.1021/ac070268+

Abstract Full: HTML / PDF (233K)

Select Citation | Feedback | $ Purchase

Real-Time and Full-Field Detection of Near-Wall Salinity Using Surface Plasmon Resonance Reflectance
Il Tai Kim and Kenneth D. Kihm
pp 5418 - 5423; **(Technical Note)** DOI: 10.1021/ac070301s

Abstract Full: HTML / PDF (396K)

Select Citation | Feedback | $ Purchase

Augmenting Spectroscopic Imaging for Analyses of Samples with Complex Surface Topographies
Michael K. Gilbert and Frank Vogt
pp 5424 - 5428; **(Technical Note)** DOI: 10.1021/ac070518m

Abstract Full: HTML / PDF (635K)

Select Citation | Feedback | $ Purchase

Tailored Quartz Pins for High-Density Microsensor Array Fabrication
Elizabeth C. Tehan, Daniel J. Higbee, Troy D. Wood, and Frank V. Bright
pp 5429 - 5434; **(Technical Note)** DOI: 10.1021/ac070533r

Abstract Full: HTML / PDF (591K)

Select Citation | Feedback | $ Purchase

Frequency Dependence of the Electrochemical Activity Contrast in AC-Scanning Electrochemical Microscopy and Atomic Force Microscopy-AC-Scanning Electrochemical Microscopy Imaging
Kathrin Eckhard, Christine Kranz, Heungjoo Shin, Boris Mizaikoff, and Wolfgang Schuhmann
pp 5435 - 5438; **(Technical Note)** DOI: 10.1021/ac070605e

Abstract Full: HTML / PDF (328K)

Select Citation | Feedback | $ Purchase

Electrochemiluminescence Sensor Based on Partial Sulfonation of Polystyrene with Carbon Nanotubes
Jing Li, Yuanhong Xu, Hui Wei, Ting Huo, and Erkang Wang
pp 5439 - 5443; **(Technical Note)** DOI: 10.1021/ac0706224

Abstract Full: HTML / PDF (149K)

Localization and Quantification of Carbon-Centered Radicals on Any Amino Acid of a Protein
G. Mousseau, O. P. Thomas, S. Oppilliart, A. Coirier, A. Salcedo-Serna, R. Thai,, F. Beau, J.-P. Renault, S. Pin, J.-C. Cintrat, and B. Rousseau
pp 5444 - 5448; **(Technical Note)** DOI: 10.1021/ac070751k

In Situ Enrichment of Phosphopeptides on MALDI Plates Functionalized by Reactive Landing of Zirconium(IV)-*n*-Propoxide Ions
Grady R. Blacken, Michael Volný, Tomáš Vaisar, Martin Sadílek, and František Tureček
pp 5449 - 5456; **(Technical Note)** DOI: 10.1021/ac070790w

Surface-Imprinted Core-Shell Nanoparticles for Sorbent Assays
Chun-Hua Lu, Wen-Hui Zhou, Bing Han, Huang-Hao Yang, Xi Chen, and Xiao-Ru Wang
pp 5457 - 5461; **(Technical Note)** DOI: 10.1021/ac070282m

Open Tubular Anion Exchange Chromatography. Controlled Layered Architecture of Stationary Phase by Successive Condensation Polymerization
Petr Kubáň, Purnendu K. Dasgupta, and Christopher A. Pohl
pp 5462 - 5467; **(Technical Note)** DOI: 10.1021/ac070690q

Dynamic Collision-Induced Dissociation of Peptides in a Quadrupole Ion Trap Mass Spectrometer
Olivier L. Collin, Matthias Beier, and Glen P. Jackson
pp 5468 - 5473; **(Technical Note)** DOI: 10.1021/ac0707683

Simultaneous Laser-Induced Fluorescence and Scattering Detection of Individual Particles Separated by Capillary Electrophoresis
Dmitry Andreyev and Edgar A. Arriaga
pp 5474 - 5478; **(Technical Note)** DOI: 10.1021/ac070770u

CORRESPONDENCE

Analysis of Self-Assembled Monolayers on Gold Surfaces Using Direct Analysis in Real Time Mass Spectrometry
Kafui Kpegba, Tycho Spadaro, Robert B. Cody, Nasri Nesnas, and Joel A. Olson
pp 5479 - 5483; **(Small Correspondence)** DOI: 10.1021/ac062276g

Abstract Full: HTML / PDF (289K) Supporting Info

Generation of Highly Charged Peptide and Protein Ions by Atmospheric Pressure Matrix-Assisted Infrared Laser Desorption/Ionization Ion Trap Mass Spectrometry
Simone König, Oliver Kollas, and Klaus Dreisewerd
pp 5484 - 5488; **(Small Correspondence)** DOI: 10.1021/ac070628t

Abstract Full: HTML / PDF (104K)

Identification of Bacteria from Two-Dimensional Resonant-Raman Spectra
Jacob Grun, Charles K. Manka, Sergei Nikitin, Daniel Zabetakis, Gelu Comanescu, David Gillis, and Jeffrey Bowles
pp 5489 - 5493; **(Small Correspondence)** DOI: 10.1021/ac070681h

Abstract Full: HTML / PDF (384K)

ACS Publications

Customer Services

American Chemical Society

- Analytical Chemistry
- Articles ASAP
- Current Issue
- Author Index
- Supporting Information
- Sample Issue
- Reviews, Perspectives, and Features
- Where are the A-Pages?
- About AC

- Authors/Reviewers
- ACS Paragon System
- Ethical Guidelines
- Info for Authors
- Submit a Manuscript
- Info for Reviewers
- Submit a Review
- Copyright/Permissions

- Institutions
- Subscription Info
- Librarian Resource Center
- LiveWire Newsletter
- ACS Legacy Archives

- ACS Publications
- Home Page