

Search

Advanced Search

Citation

DOI

Anal. Chem.

All Publications/Website

Browse the Journal

Digital Object Identifier (DOI)

Articles ASAP

Current Issue

Online News

Multimedia

Submission &amp; Review

Subscriptions










About

October 1, 2009

In this issue:

Volume 81, Issue 19


Pages 7859-8263

-  Editorial
-  Research Profile
-  In My Shoes
-  Features
-  Accelerated Articles
-  Perspectives
-  Articles
-  Technical Notes
-  Correspondence

**About the Cover:**

Recent technological advances in hydrogen exchange MS have led to improvements in the technique's ability to analyze the shape and movements of proteins. John Engen of Northeastern University gives a much needed update on the field. The cover, created by Engen, shows proteins "swimming" in an H<sub>2</sub>O/D<sub>2</sub>O solution with a sample mass spectrum in the background.

Structures were created from PDB 1fmk (Xu W.; et al. *Nature* 1997, 385, 595-602.), 1tph (Zhang Z.; et al. *Biochemistry* 1994, 33, 2830-2837), and 2act (Baker, E. N.; Dodson, E. J. *Acta Crystallogr. A* 1980, 36: 559). [View the article.](#)

 ACS AuthorChoice indicates the article is freely available through sponsorship by the author or related funding agency. [More about this program.](#)

Advertisements

## Light Scattering for the masses



Info for Advertisers




## DID YOU KNOW?

Editorial

### Letters to *Analytical Chemistry*




Royce W. Murray


p 7859

Publication Date (Web): September 15, 2009 (Editorial)

DOI: 10.1021/ac901999k

Abstract

-  Full Text HTML
-  Hi-Res PDF[31K]
-  PDF w/ Links[45K]

 Sponsored Access

Did you know you can view multiple ACS abstracts simultaneously?  
Read More...

Stay Current

Get your research ASAP.

e-Alerts | RSS Feeds 

### Research Profile

#### Molecular analysis of nanoscale objects with MS




Steven C. Powell


p 7860

Publication Date (Web): September 1, 2009 (Research Profile)

DOI: 10.1021/ac901869q

Abstract

-  Full Text HTML
-  Hi-Res PDF[289K]
-  PDF w/ Links[76K]

 Sponsored Access

Show Thumbnails 

#### Sorting out mtDNA with MS



Erika Gebel


p 7861

Publication Date (Web): September 2, 2009 (Research Profile)

DOI: 10.1021/ac901883w

Abstract

-  Full Text HTML
-  Hi-Res PDF[290K]
-  PDF w/ Links[74K]

 Sponsored Access

Show Thumbnails 

#### Species in a snap: Raman analysis of blood

Erika Gebel

p 7862

Publication Date (Web): September 1, 2009 (Research Profile)

Abstract


-  Full Text HTML
-  Hi-Res PDF[607K]

Advertisements



DOI: 10.1021/ac901827u

 PDF w/ Links[86K]

 Sponsored Access

[Show Thumbnails](#)


[Info for Advertisers](#)

## In My Shoes

**Science meets art—and dharma**

Elizabeth Zubritsky

pp 7863-7865

Publication Date (Web): September 15, 2009 (In My Shoes)

DOI: 10.1021/ac901963q

Abstract

-  Full Text HTML
-  Hi-Res PDF[3385K]
-  PDF w/ Links[280K]

 Sponsored Access

[Show Thumbnails](#)


## Features

**Is the Nobel Prize in Chemistry Still Relevant?**


Rajendrani Mukhopadhyay


pp 7866-7869

Publication Date (Web): September 9, 2009 (Feature)

DOI: 10.1021/ac9018457

Abstract

-  Full Text HTML
-  Hi-Res PDF[2630K]
-  PDF w/ Links[118K]

 Sponsored Access

[Show Thumbnails](#)

**Analysis of Protein Conformation and Dynamics by Hydrogen/Deuterium Exchange MS**

John R. Engen

pp 7870-7875

Publication Date (Web): August 7, 2009 (Feature)

Abstract

-  Full Text HTML
-  Hi-Res PDF[4197K]

•  PDF w/ Links[316K]

 Sponsored Access

Show Thumbnails 

## Accelerated Articles

### Enhanced Electron Transfer Dissociation through Fixed Charge Derivatization of Cysteines

Lisa Vasicek and Jennifer S. Brodbelt

pp 7876-7884

Publication Date (Web): September 1, 2009 (Accelerated Article)

DOI: 10.1021/ac901482s

Abstract

-  Full Text HTML
-  Hi-Res PDF[1085K]
-  PDF w/ Links[454K]

Show Thumbnails 

### Fluorescence Polarization Combined Capillary Electrophoresis Immunoassay for the Sensitive Detection of Genomic DNA Methylation


Xiaoli Wang, Yuling Song, Maoyong Song, Zhixin Wang, Tao Li and Hailin Wang

pp 7885-7891

Publication Date (Web): September 9, 2009 (Accelerated Article)

DOI: 10.1021/ac901681k

Abstract | Supporting Info

-  Full Text HTML
-  Hi-Res PDF[1084K]
-  PDF w/ Links[245K]

Show Thumbnails 

## Perspectives

### H/D Exchange and Mass Spectrometry in the Studies of Protein Conformation and Dynamics: Is There a Need for a Top-Down Approach?

Igor A. Kaltashov, Cedric E. Bobst and Rinat R. Abzalimov

pp 7892-7899

Publication Date (Web): August 20, 2009 (Perspective)

DOI: 10.1021/ac901366n

Abstract

-  Full Text HTML
-  Hi-Res PDF[3517K]
-  PDF w/ Links[512K]

## Articles

**Surrogate H/D Detection Strategy for Protein Conformational Analysis Using MS/MS Data**

Andrew J. Percy, Gordon W. Slysz and David C. Schriemer

pp 7900-7907

Publication Date (Web): August 14, 2009 (Article)

DOI: 10.1021/ac901148u

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[879K\]](#)
-  [PDF w/ Links\[304K\]](#)

Show Thumbnails

**Effective Enhancement of Fluorescence Detection Efficiency in Protein Microarray Assays: Application of a Highly Fluorinated Organosilane as the Blocking Agent on the Background Surface by a Facile Vapor-Phase Deposition Process**

Hsin-Yi Hsieh, Pen-Cheng Wang, Chun-Lung Wu, Chi-Wen Huang, Ching-Chang Chieng and Fan-Gang Tseng

pp 7908-7916

Publication Date (Web): August 25, 2009 (Article)

DOI: 10.1021/ac900552v

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[5138K\]](#)
-  [PDF w/ Links\[586K\]](#)

Show Thumbnails

**Adsorption of Glucose Oxidase onto Single-Walled Carbon Nanotubes and Its Application in Layer-By-Layer Biosensors**

Ta-Wei Tsai, Gustavo Heckert, Luís F. Neves, Yongqiang Tan, Der-You Kao, Roger G. Harrison, Daniel E. Resasco and David W. Schmidtke

pp 7917-7925

Publication Date (Web): August 25, 2009 (Article)

DOI: 10.1021/ac900650r

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[2672K\]](#)
-  [PDF w/ Links\[382K\]](#)

Show Thumbnails

**Analysis of Quaternary Ammonium Compounds in Estuarine Sediments by LC-ToF-MS: Very High Positive Mass Defects of Alkylamine Ions as Powerful Diagnostic Tools for Identification and Structural Elucidation**[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)

Xiaolin Li and Bruce J. Brownawell

pp 7926-7935

Publication Date (Web): September 9, 2009 (Article)

DOI: 10.1021/ac900900y

•  Hi-Res PDF[441K]

•  PDF w/ Links[251K]

[Show Thumbnails](#)

### Estimating Diffusion Coefficients of Probe Molecules into Polyelectrolyte Brushes by Electrochemical Impedance Spectroscopy

M. J. Rodríguez Presa, L. M. Gassa, O. Azzaroni and C. A. Gervasi

pp 7936-7943

Publication Date (Web): August 25, 2009 (Article)

DOI: 10.1021/ac9009808

[Abstract](#)

•  Full Text HTML

•  Hi-Res PDF[671K]

•  PDF w/ Links[242K]

[Show Thumbnails](#)

### Monitoring Dynamic Changes in Lymph Metabolome of Fasting and Fed Rats by Electrospray Ionization-Ion Mobility Mass Spectrometry (ESI-IMMS)

Kimberly Kaplan, Prabha Dwivedi, Sean Davidson, Qing Yang, Patrick Tso, William Siems and Herbert H. Hill, Jr.

pp 7944-7953

Publication Date (Web): August 28, 2009 (Article)

DOI: 10.1021/ac901030k

[Abstract](#) | [Supporting Info](#)

•  Full Text HTML

•  Hi-Res PDF[4271K]

•  PDF w/ Links[586K]

[Show Thumbnails](#)

### Proton Sponge: A Novel and Versatile MALDI Matrix for the Analysis of Metabolites Using Mass Spectrometry

Rohit Shroff and Aleš Svatoš

pp 7954-7959

Publication Date (Web): August 25, 2009 (Article)

DOI: 10.1021/ac901048z

[Abstract](#) | [Supporting Info](#)

•  Full Text HTML

•  Hi-Res PDF[1611K]

•  PDF w/ Links[285K]

[Show Thumbnails](#)

### Composition of Renaissance Paint Layers: Simultaneous Particle Induced X-ray Emission and Backscattering Spectrometry

[Abstract](#)

L. de Viguerie, L. Beck, J. Salomon, L. Pichon and Ph. Walter

pp 7960-7966

Publication Date (Web): September 4, 2009 (Article)

DOI: 10.1021/ac901141v

-  Full Text HTML
-  Hi-Res PDF[2478K]
-  PDF w/ Links[354K]

Show Thumbnails

### Functionalized 3D-Hydrogel Plugs Covalently Patterned Inside Hydrophilic Poly (dimethylsiloxane) Microchannels for Flow-Through Immunoassays

Wang-Chou Sung, Huang-Han Chen, Honest Makamba and Shu-Hui Chen

pp 7967-7973

Publication Date (Web): September 1, 2009 (Article)

DOI: 10.1021/ac901138w

Abstract | Supporting Info

-  Full Text HTML
-  Hi-Res PDF[1874K]
-  PDF w/ Links[307K]

Show Thumbnails

### Compensation for Systematic Cross-Contribution Improves Normalization of Mass Spectrometry Based Metabolomics Data

Henning Redestig, Atsushi Fukushima, Hans Stenlund, Thomas Moritz, Masanori Arita, Kazuki Saito and Miyako

Kusano

pp 7974-7980

Publication Date (Web): September 10, 2009 (Article)

DOI: 10.1021/ac901143w

Abstract | Supporting Info

-  Full Text HTML
-  Hi-Res PDF[1016K]
-  PDF w/ Links[301K]

Show Thumbnails

### Labeling and Purification of Cellulose-Binding Proteins for High Resolution Fluorescence Applications

Jose M. Moran-Mirabal, Stephane C. Corgie, Jacob C. Bolewski, Hanna M. Smith, Benjamin R. Cipriany, Harold G.

Craighead and Larry P. Walker

pp 7981-7987

Publication Date (Web): September 3, 2009 (Article)

DOI: 10.1021/ac901183b

Abstract | Supporting Info

-  Full Text HTML
-  Hi-Res PDF[4773K]
-  PDF w/ Links[399K]

Show Thumbnails

### Fluorescent Thermometers for Dual-Emission-Wavelength Measurements: Molecular Engineering and Application to Thermal Imaging in a Microsystem

T. Barilero, T. Le Saux, C. Gosse and L. Jullien

pp 7988-8000

Publication Date (Web): August 27, 2009 ([Article](#))

DOI: 10.1021/ac901027f

[Abstract](#) | [Supporting Info](#)

-  Full Text HTML
-  Hi-Res PDF[3151K]
-  PDF w/ Links[397K]

[Show Thumbnails](#)

### Control of the Release of Freely Diffusing Molecules in Single-Cell Electroporation

Aparna Agarwal, Manyan Wang, Jessica Olofsson, Owe Orwar and Stephen G. Weber

pp 8001-8008

Publication Date (Web): September 4, 2009 ([Article](#))

DOI: 10.1021/ac9010292

[Abstract](#) | [Supporting Info](#)

-  Full Text HTML
-  Hi-Res PDF[356K]
-  PDF w/ Links[241K]

[Show Thumbnails](#)

### Convection-Dominated Dispersion Regime in Wide-Bore Chromatography: A Transport-Based Approach To Assess the Occurrence of Slip Flows in Microchannels

Alessandra Adrover, Stefano Cerbelli, Fabio Garofalo and Massimiliano Giona

pp 8009-8014

Publication Date (Web): September 9, 2009 ([Article](#))

DOI: 10.1021/ac901504u

[Abstract](#) | [Supporting Info](#)

-  Full Text HTML
-  Hi-Res PDF[252K]
-  PDF w/ Links[176K]

[Show Thumbnails](#)

### Workflow for Large Scale Detection and Validation of Peptide Modifications by RPLC-LTQ-Orbitrap: Application to the *Arabidopsis thaliana* Leaf Proteome and an Online Modified Peptide Library

Boris Zybailov, Qi Sun and Klaas J. van Wijk

pp 8015-8024

Publication Date (Web): September 2, 2009 ([Article](#))

DOI: 10.1021/ac9011792

[Abstract](#) | [Supporting Info](#)

-  Full Text HTML
-  Hi-Res PDF[868K]
-  PDF w/ Links[309K]

[Show Thumbnails](#)

### Superheated Water Ion-Exchange Chromatography: An Experimental Approach for Interpretation of Separation Selectivity in Ion-Exchange Processes

Masami Shibukawa, Tomomi Shimasaki, Shingo Saito and Takashi Yarita

pp 8025-8032

Publication Date (Web): September 11, 2009 (Article)

DOI: 10.1021/ac9011864

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[290K\]](#)
-  [PDF w/ Links\[195K\]](#)

[Show Thumbnails](#)

### Prefluorescent Nitroxide Probe for the Highly Sensitive Determination of Peroxyl and Other Radical Oxidants

Min Jia, Yu Tang, Yiu-Fai Lam, Sarah A. Green and Neil V. Blough

pp 8033-8040

Publication Date (Web): September 11, 2009 (Article)

DOI: 10.1021/ac901374m

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[487K\]](#)
-  [PDF w/ Links\[354K\]](#)

[Show Thumbnails](#)

### Generation and Mixing of Subfemtoliter Aqueous Droplets On Demand

Jianyong Tang, Ana M. Jofre, Rani B. Kishore, Joseph E. Reiner, Mark E. Greene, Geoffrey M. Lowman, John S.

Denker, Christina C. C. Willis, Kristian Helmersen and Lori S. Goldner

pp 8041-8047

Publication Date (Web): August 27, 2009 (Article)

DOI: 10.1021/ac9014319

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[1897K\]](#)
-  [PDF w/ Links\[246K\]](#)

[Show Thumbnails](#)

### Ultrafast Differential Ion Mobility Spectrometry at Extreme Electric Fields Coupled to Mass Spectrometry

Alexandre A. Shvartsburg, Keqi Tang, Richard D. Smith, Martin Holden, Martyn Rush, Andrew Thompson and

Danielle Toutoungi

pp 8048-8053

Publication Date (Web): August 26, 2009 (Article)

DOI: 10.1021/ac901479e

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[484K\]](#)
-  [PDF w/ Links\[276K\]](#)

[Show Thumbnails](#)

### Molecular Weight Determination of Block Copolymers by Pulsed Gradient Spin Echo NMR

Caroline Barrère, Michaël Mazarin, Rémi Giordanengo, Trang N. T. Phan, André Thévand, Stéphane Viel and Laurence Charles

pp 8054-8060

Publication Date (Web): September 10, 2009 (Article)

DOI: 10.1021/ac9018654

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[947K\]](#)
-  [PDF w/ Links\[200K\]](#)

[Show Thumbnails](#)

### Characterization and Detection of Uranyl Ion Sorption on Silver Surfaces Using Surface Enhanced Raman Spectroscopy

Deepak Bhandari, Sabrina M. Wells, Scott T. Retterer and Michael J. Sepaniak

pp 8061-8067

Publication Date (Web): September 9, 2009 (Article)

DOI: 10.1021/ac901266f

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[4364K\]](#)
-  [PDF w/ Links\[315K\]](#)

[Show Thumbnails](#)

### 170-MHz Electrodeless Quartz Crystal Microbalance Biosensor: Capability and Limitation of Higher Frequency Measurement



Hirotsugu Ogi, Hironao Naga, Yuji Fukunishi, Masahiko Hirao and Masayoshi Nishiyama

pp 8068-8073

Publication Date (Web): September 3, 2009 (Article)

DOI: 10.1021/ac901267b

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[737K\]](#)
-  [PDF w/ Links\[256K\]](#)

[Show Thumbnails](#)

### Non-Trilinear Chromatographic Time Retention-Fluorescence Emission Data Coupled to Chemometric Algorithms for the Simultaneous Determination of 10 Polycyclic Aromatic Hydrocarbons in the Presence of Interferences

Santiago A. Bortolato, Juan A. Arancibia and Graciela M. Escandar

pp 8074-8084

Publication Date (Web): September 10, 2009 (Article)

DOI: 10.1021/ac901272b

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[3328K\]](#)
-  [PDF w/ Links\[480K\]](#)

[Show Thumbnails](#)

### Quantitative Profiling Method for Oxylipin Metabolome by Liquid Chromatography Electrospray Ionization Tandem Mass Spectrometry

Jun Yang, Kara Schmelzer, Katrin Georgi and Bruce D. Hammock

pp 8085-8093

Publication Date (Web): August 28, 2009 ([Article](#))

DOI: 10.1021/ac901282n

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[694K\]](#)
-  [PDF w/ Links\[237K\]](#)

[Show Thumbnails](#)

### Hydrogen Peroxide Production in the Oxygen Reduction Reaction at Different Electrocatalysts as Quantified by Scanning Electrochemical Microscopy

Carlos M. Sánchez-Sánchez and Allen J. Bard

pp 8094-8100

Publication Date (Web): September 2, 2009 ([Article](#))

DOI: 10.1021/ac901291v

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[2584K\]](#)
-  [PDF w/ Links\[335K\]](#)

[Show Thumbnails](#)

### Localization and Quantitation of Free Sulfhydryl in Recombinant Monoclonal Antibodies by Differential Labeling with $^{12}\text{C}$ and $^{13}\text{C}$ Iodoacetic Acid and LC-MS Analysis

Tao Xiang, Chris Chumsae and Hongcheng Liu

pp 8101-8108

Publication Date (Web): September 1, 2009 ([Article](#))

DOI: 10.1021/ac901311y

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[2536K\]](#)
-  [PDF w/ Links\[470K\]](#)

[Show Thumbnails](#)

### Infrared Multiphoton Dissociation of Peptide Cations in a Dual Pressure Linear Ion Trap Mass Spectrometer

Myles W. Gardner, Suncerae I. Smith, Aaron R. Ledvina, James A. Madsen, Joshua J. Coon, Jae C. Schwartz,

George C. Stafford, Jr. and Jennifer S. Brodbelt

pp 8109-8118

Publication Date (Web): September 9, 2009 ([Article](#))

DOI: 10.1021/ac901313m

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[3927K\]](#)
-  [PDF w/ Links\[483K\]](#)

[Show Thumbnails](#)

### **$T_1$ -Diffusion-Ordered Spectroscopy: Nuclear Magnetic Resonance Mixture Analysis Using**

#### **Parallel Factor Analysis**

Mathias Nilsson, Adolfo Botana and Gareth A. Morris

pp 8119-8125

Publication Date (Web): August 28, 2009 ([Article](#))

DOI: 10.1021/ac901321w

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[466K\]](#)
-  [PDF w/ Links\[214K\]](#)

[Show Thumbnails](#)

### **Heat-Assisted Argon Electrospray Interface for Low-Flow Rate Liquid Sample Introduction in**

#### **Plasma Spectrometry**

Ryan G. Brennan, Savelas A. Rabb, Kaveh Jorabchi, William F. Rutkowski and Gregory C. Turk

pp 8126-8133

Publication Date (Web): September 4, 2009 ([Article](#))

DOI: 10.1021/ac901332s

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[1652K\]](#)
-  [PDF w/ Links\[282K\]](#)

[Show Thumbnails](#)

### **DNA Sequence Detection Using Surface-Enhanced Resonance Raman Spectroscopy in a Homogeneous Multiplexed Assay**

Alexandra MacAskill, David Crawford, Duncan Graham and Karen Faulds

pp 8134-8140

Publication Date (Web): September 10, 2009 ([Article](#))

DOI: 10.1021/ac901361b

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[1640K\]](#)
-  [PDF w/ Links\[338K\]](#)

[Show Thumbnails](#)

### **Integrated Algorithms for High-Throughput Examination of Covalently Labeled Biomolecules by Structural Mass Spectrometry**

Parminder Kaur, Janna G. Kiselar and Mark R. Chance

pp 8141-8149

Publication Date (Web): August 28, 2009 ([Article](#))

DOI: 10.1021/ac9013644

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[901K\]](#)
-  [PDF w/ Links\[246K\]](#)

[Show Thumbnails](#)**Detecting Cytokine Release from Single T-cells**

He Zhu, Gulnaz Stybayeva, Jaime Silangcruz, Jun Yan, Erlan Ramanculov, Satya Dandekar, Michael D. George and Alexander Revzin

pp 8150-8156

Publication Date (Web): September 9, 2009 ([Article](#))

DOI: 10.1021/ac901390j

[Abstract](#)

-  Full Text HTML
-  Hi-Res PDF[2011K]
-  PDF w/ Links[287K]

[Show Thumbnails](#)**Determination of Elemental Constituents in Different Matrix Materials and Flow Injection Studies by the Electrolyte Cathode Glow Discharge Technique with a New Design**




R. Shekhar, D. Karunasagar, Manjusha Ranjit and J. Arunachalam

pp 8157-8166

Publication Date (Web): August 28, 2009 ([Article](#))

DOI: 10.1021/ac901380v

[Abstract](#)

-  Full Text HTML
-  Hi-Res PDF[4558K]
-  PDF w/ Links[276K]

[Show Thumbnails](#)**Dissipation in Films of Adsorbed Nanospheres Studied by Quartz Crystal Microbalance (QCM)**

Diethelm Johannsmann, Ilya Reviakine and Ralf P. Richter

pp 8167-8176

Publication Date (Web): September 11, 2009 ([Article](#))

DOI: 10.1021/ac901381z

[Abstract](#)

-  Full Text HTML
-  Hi-Res PDF[1831K]
-  PDF w/ Links[335K]

[Show Thumbnails](#)**Microfluidic Polyacrylamide Gel Electrophoresis with in Situ Immunoblotting for Native Protein Analysis**

Mei He and Amy E. Herr

pp 8177-8184

Publication Date (Web): September 4, 2009 ([Article](#))

DOI: 10.1021/ac901392u

[Abstract](#)

-  Full Text HTML
-  Hi-Res PDF[1888K]
-  PDF w/ Links[298K]

[Show Thumbnails](#)

### Rapid Determination of Plutonium Isotopes in Environmental Samples Using Sequential Injection Extraction Chromatography and Detection by Inductively Coupled Plasma Mass Spectrometry

Jixin Qiao, Xiaolin Hou, Per Roos and Manuel Miró

pp 8185-8192

Publication Date (Web): September 1, 2009 ([Article](#))

DOI: 10.1021/ac901395e

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[776K\]](#)
-  [PDF w/ Links\[216K\]](#)

[Show Thumbnails](#)

### Improving Tissue Preparation for Matrix-Assisted Laser Desorption Ionization Mass Spectrometry Imaging. Part 1: Using Microspotting

Julien Franck, Karim Arafah, Alan Barnes, Maxence Wisztorski, Michel Salzet and Isabelle Fournier

pp 8193-8202

Publication Date (Web): September 1, 2009 ([Article](#))

DOI: 10.1021/ac901328p

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[3886K\]](#)
-  [PDF w/ Links\[436K\]](#)

[Show Thumbnails](#)

### Electrochemical Correlation Spectroscopy in Nanofluidic Cavities

Marcel A. G. Zevenbergen, Pradyumna S. Singh, Edgar D. Goluch, Bernhard L. Wolfrum and Serge G. Lemay

pp 8203-8212

Publication Date (Web): September 10, 2009 ([Article](#))

DOI: 10.1021/ac9014885

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[2411K\]](#)
-  [PDF w/ Links\[349K\]](#)

[Show Thumbnails](#)

### Formation of a Water–Xylene Interface in a Microchannel without Sidewalls

Masashi Watanabe

pp 8213-8218

Publication Date (Web): August 28, 2009 ([Article](#))

DOI: 10.1021/ac901511p

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[2911K\]](#)
-  [PDF w/ Links\[247K\]](#)

[Show Thumbnails](#)

### Automated Cell-Based Assay for Screening of Aquaporin Inhibitors

Maria Grazia Mola, Grazia Paola Nicchia, Maria Svelto, David C. Spray and Antonio Frigeri

pp 8219-8229

Publication Date (Web): August 25, 2009 ([Article](#))

DOI: 10.1021/ac901526k

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[2069K\]](#)
-  [PDF w/ Links\[397K\]](#)

[Show Thumbnails](#)

### Integrated Microfluidic Device for Serum Biomarker Quantitation Using Either Standard Addition or a Calibration Curve

Weichun Yang, Xiuhua Sun, Hsiang-Yu Wang and Adam T. Woolley

pp 8230-8235

Publication Date (Web): September 3, 2009 ([Article](#))

DOI: 10.1021/ac901566s

[Abstract](#) | [Supporting Info](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[1750K\]](#)
-  [PDF w/ Links\[283K\]](#)

[Show Thumbnails](#)

### Simultaneous Separation of Negatively and Positively Charged Species in Dynamic Field Gradient Focusing Using a Dual Polarity Electric Field

Jeffrey M. Burke, Zheng Huang and Cornelius F. Ivory

pp 8236-8243

Publication Date (Web): September 1, 2009 ([Article](#))

DOI: 10.1021/ac901634y

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[1663K\]](#)
-  [PDF w/ Links\[294K\]](#)

[Show Thumbnails](#)

### Rapid and Sensitive Kinetic Assay for Characterization of $\omega$ -Transaminases

Sebastian Schätzle, Matthias Hühne, Erik Redestad, Karen Robins and Uwe T. Bornscheuer

pp 8244-8248

Publication Date (Web): September 9, 2009 ([Article](#))

DOI: 10.1021/ac901640q

[Abstract](#)

-  [Full Text HTML](#)
-  [Hi-Res PDF\[1355K\]](#)
-  [PDF w/ Links\[179K\]](#)

[Show Thumbnails](#)

## Technical Notes

**Fabrication of TiO<sub>2</sub> and Metal Nanoparticle–Microelectrode Arrays by Photolithography and****Site-Selective Photocatalytic Deposition**

Xiaoguang Li, Yang Tian, Peipei Xia, Yongping Luo and Qi Rui

pp 8249-8255

Publication Date (Web): September 8, 2009 (Technical Note)

DOI: 10.1021/ac9009879

[Abstract](#)

-  Full Text HTML
-  Hi-Res PDF[1880K]
-  PDF w/ Links[357K]

[Show Thumbnails](#)**Behavior of Particles in an Evaporating Disperse Colloid Droplet on a Hydrophilic Surface**

Jung-Yeul Jung, Young Won Kim and Jung Yul Yoo

pp 8256-8259

Publication Date (Web): September 9, 2009 (Technical Note)

DOI: 10.1021/ac901247c

[Abstract](#)

-  Full Text HTML
-  Hi-Res PDF[3997K]
-  PDF w/ Links[198K]

[Show Thumbnails](#)

## Correspondence

**Generalized Temperature Measurement Equations for Rhodamine B Dye Solution and Its Application to Microfluidics**

Jayna J. Shah, Michael Gaitan and Jon Geist

pp 8260-8263

Publication Date (Web): September 1, 2009 (Correspondence)

DOI: 10.1021/ac901644w

[Abstract](#)

-  Full Text HTML
-  Hi-Res PDF[721K]
-  PDF w/ Links[146K]

[Show Thumbnails](#)[Previous Issue](#) | [Next Issue](#)

