

Most-Accessed Articles

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Chemistry

Listed below are the ten most-accessed articles during 2008. Go to the *Analytical Chemistry* homepage at pubs.acs.org/ac to view full lists of most-read and most-cited articles from the journal.

Editor: Royce Murray, University of North Carolina at Chapel Hill

When Machine Tastes Coffee: Instrumental Approach To Predict the Sensory Profile of Espresso Coffee
Christian Udinge, David Labbe, Philippe Poilien, Andreas Rytz, Marcel A. Jullerat, Chahan Yeztjian, and Imre Blank
[Article], 2008, 80 (5), 1574-1581
DOI: 10.1021/ac702195z

Visualization of a Lost Painting by Vincent van Gogh Using Synchrotron Radiation Based X-ray Fluorescence Elemental Mapping
Joris Dik, Koen Janssens, Geert Van Der Snickt, Luuk van der Loeff, Karen Kickers, and Marlene Cotte
[Article], 2008, 80 (16), 6436-6442
DOI: 10.1021/ac800965g

Water Analysis: Emerging Contaminants and Current Issues
Susan D. Richardson
[Review], 2007, 79 (12), 4295-4324
DOI: 10.1021/ac070719q

Electrochemical Sensors
Benjamin J. Prilvett, Joe Ho Shin, and Mark H. Schoenfish
[Review], 2008, 80 (12), 4499-4517
DOI: 10.1021/ac8007219

Rapid Prototyping of Microfluidic Systems in Polydimethylsiloxane
David C. Duffy, J. Cooper McDonald, Olivier J. A. Schueller, and George M. Whitesides
[Article], 1998, 70 (23), 4974-4984
DOI: 10.1021/ac980656z

Micro Total Analysis Systems: Latest Achievements
Jonathan West, Marco Becker, Sven Tombrini, and Andreas Manz
[Review], 2008, 80 (12), 4409-4419
DOI: 10.1021/ac800680j

Cancer Cell Targeting Using Multiple Aptamers Conjugated on Nanorods
Yu-Fen Huang, Huan-fung Chang, and Weihong Tan
[Accelerated Article], 2008, 80 (3), 567-572
DOI: 10.1021/ac702322j

Colorimetric Method for Determination of Sugars and Related Substances
Michel DuBois, K. A. Gilles, J. K. Hamilton, P. A. Rebers, and Fred. Smith
[Article], 1956, 28 (3), 350-356
DOI: 10.1021/ac60111a017

Gold Nanoparticle-Based Colorimetric Assay for the Direct Detection of Cancerous Cells
Colin D. Medley, Joshua E. Smith, Zhiwen Tang, Yanzong Wu, Suwansa Bamrungsap, and Weihong Tan
[Article], 2008, 80 (4), 1067-1072
DOI: 10.1021/ac702037y

Fiber-Optic Chemical Sensors and Biosensors
Otto S. Wolfbeis
[Review], 2008, 80 (12), 4269-4283
DOI: 10.1021/ac800473b



ANALYTICAL METHODS

- 11449 **Application of Near-Infrared Spectroscopy as an Alternative to Chemical and Color Analysis To Discriminate the Production Chains of Asiago d'Allevio Cheese**
Giulio Cozzi, Jacopo Perito, Gabriella Pasini, Barbara Contiero, and Flaviana Gottardo*

MOLECULAR NUTRITION

- 11455 **Functional Modulation of Mitochondria by Eicosapentaenoic Acid Provides Protection against Ceramide Toxicity to C6 Glioma Cells**
*Juan-Yeh Jeng, Wei-Hwa Lee, Ya-Hui Tsai, Chia-Yu Chen, Szu-Yi Chao, and Rong-Hong Hsieh**

BIOACTIVE CONSTITUENTS

- 11463 **Comparative Evaluation of Quercetin, Isoquercetin and Rutin as Inhibitors of α -Glucosidase**
Yan Qin Li, Feng Chao Zhou, Fei Gao, Jun Sheng Bian, and Fang Shan*
- 11469 **Chemical and Spectroscopic Characteristics of the Wood of *Vitis vinifera* Cv. Sangiovese Affected by Esca Disease**
Diana Agrelli, Carmine Amalfitano, Pellegrino Conte, and Laura Mugnai*

CHEMICAL ASPECTS OF BIOTECHNOLOGY/MOLECULAR BIOLOGY

- 11476 **Physicochemical and Genetic Analysis of an Endemic Rice Variety, Njavara (*Oryza sativa* L.), in Comparison to Two Popular South Indian Cultivars, Jyothi (PTB 39) and IR 64**
*G. Deepa, L. Venkatachalam, N. Bhagyalakshmi, H. E. Shashidhar, Vasudeva Singh, and K. Akhilender Naidu**

CHEMICAL ASPECTS OF FOOD SAFETY

- 11484 **Saline Water Irrigation Effects on Antioxidant Defense System and Proline Accumulation in Leaves and Roots of Field-Grown Olive**
Chedlia Ben Ahmed, Bechir Ben Rouina, Serhat Sensoy, Mekki Boukhriss, and Ferjani Ben Abdullah*

CHEMICAL CHANGES INDUCED BY PROCESSING/STORAGE

- 11491 **Combined Effect of Storage Temperature and Water Activity on the Antglycooxidative Properties and Color of Dehydrated Apples**
*Vera Lavelli**

- 11498 **Effect of Micro-Oxygenation and Wood Type on the Phenolic Composition and Color of an Aged Red Wine**
Montserrat Sánchez-Iglesias, Ma Luisa González-Sanjosé, Silvia Pérez-Magariño,
Miriam Ortega-Heras, and Carlos González-Huerta*

- 11510 **Pressure-Temperature Phase Diagrams of Maize Starches with Different Amylose Contents**
Roman Buckow, Lena Jankowiak, Dietrich Knorr, and Cornelis Versteeg*

CHEMICAL COMPOSITION OF FOODS/FEEDS

- 11517 **Effects of Different Rearing and Feeding Systems on Lipid Oxidation and Antioxidant Capacity of Freeze-Dried Egg Yolks**
Giovanni Pignoli, Maria Teresa Rodriguez-Estrada, Mara Mandrioli,
Lorenzo Barbanti, Laura Rizzi, and Giovanni Lercker*

- 11528 **Characterization of Canadian Black Currant (*Ribes nigrum* L.) Seed Oils and Residues**
Anna M. Bakowska-Barczak, Andreas Schieber, and Paul Kolodziejczyk*

FLAVORS AND AROMAS/CHEMOSENSORY PERCEPTION

- 11537 **Characteristic Aroma-Active Compounds of Korean Perilla (*Perilla frutescens* Britton) Leaf**
*Won Ho Seo and Hyung Hee Baik**

- 11543 **Evaluation of Wine Aromatic Compounds by a Sensory Human Panel and an Electronic Nose**
Teresa Arroyo, Jesus Lozano, Juan Mariano Cabellos, Mar Gil-Diaz,
Jose Pedro Santos, and Carmen Horrillo*

FOOD CHEMISTRY/BIOCHEMISTRY

- 11550 **¹H NMR-Based Protocol for the Detection of Adulterations of Refined Olive Oil with Refined Hazelnut Oil**
Luisa Mannina, Marco D'Imperio, Donatella Capitani, Serge Rezzi, Claude Guillou,
Thomas Mavroumoustakos, Maria Dolores Molero Vilchez,
Antonio Herrera Fernández, Freddy Thomas, and Ramon Aparicio*

- 11557 **Phytochemical Profile and Anticholinesterase and Antimicrobial Activities of Supercritical versus Conventional Extracts of *Satureja montana***
*Filipa V. M. Silva, Alice Martins, Joana Salta, Nuno R. Neng, José M. F. Nogueira,
Delfina Mira, Natália Gaspar, Jorge Justino, Clara Grosso, José S. Urieta,
António M. S. Palavra, and Amélia P. Rauter**

- 11564 **Chemical Kinetics of 5-*o*-Caffeoylquinic Acid in Superheated Steam: Effect of Isomerization on Mate (*Ilex paraguariensis*) Manufacturing**
Everton Fernando Zanoelo and Cristina Benincá*

- 11570 **Facile Pretreatment of *Bacillus circulans* β -Galactosidase Increases the Yield of Galactosyl Oligosaccharides in Milk and Lactose Reaction Systems**
*Aaron Gosling, Johan Alfren, Geoff W. Stevens, Andrew R. Barber,
Sandra E. Kenish, and Sally L. Gras**

- 11575 **Selenium Bioavailability from Soy Protein Isolate and Tofu in Rats Fed a Torula Yeast-Based Diet**
Liu Yan, George L. Graef, Philip G. Reeves, and LaAnn K. Johnson*

ADDITIONS AND CORRECTIONS

- 11581 **Correction to Effects of Thermal Treatment on the Coagulation of Soy Proteins Induced by Subtilisin Carlsberg**

Kuniyo Inouye, Mikiyo Nakano, Kōhei Asaoka, and Kiyoshi Yasukawa*

- 11581 **Correction to Profile of Plasma and Urine Metabolites after the Intake of Almond [*Prunus dulcis* (Mill.) D.A. Webb] Polyphenols in Humans**

*Mireia Urpi-Sarda, Ignacio Garrido, Maña Monagas, Carmen Gómez-Cordovés,
Alexander Medina-Remón, Cristina Andres-Lacueva,* and Begona Bartolomé*

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