

ACS Publications: High Quality, High Impact

<http://pubs3.acs.org/acs/journals/toc.page?incoden=jafcau&indecade=0&involume=55&inissue=21>

- [ACS](#)
- [Journals](#)
- [C&EN](#)
- [CAS](#)



*Journal of Agricultural and Food Chemistry*

All ACS Journals

- [ACS Publications Home](#)
- [About Us](#)
- [Journals A–Z](#)
- [Advanced Article Search](#)
- [E-mail Alerts & RSS Feeds](#)
- [Help Center](#)
- [Cart](#)

[Select an ACS Publication](#)

JOURNALS

- [Accounts of Chemical Research](#)
- [ACS Chemical Biology](#)
- [ACS Nano](#)
- [Analytical Chemistry](#)
- [- I&EC Analytical Edition](#)
- [Biochemistry](#)
- [Bioconjugate Chemistry](#)
- [Biomacromolecules](#)
- [Biotechnology Progress](#)
- [Chemical Research in Toxicology](#)
- [Chemical Reviews](#)
- [Chemistry of Materials](#)
- [Crystal Growth & Design](#)

- [Energy & Fuels](#)
- [Environmental Science & Technology](#)
- [Ind. & Eng. Chemistry Research](#)
- [- Journal of I&EC](#)
- [- I&EC](#)
- [- I&EC Fundamentals](#)
- [- I&EC Process Design and Development](#)
- [- I&EC Product Design and Development](#)
- [Inorganic Chemistry](#)
  
- [J. of Agricultural and Food Chemistry](#)
- [J. of the American Chemical Society](#)
- [J. of Chemical & Engineering Data](#)
- [- I&EC Chem. and Eng. Data Series](#)
- [J. of Chemical Information and Modeling](#)
- [- J. of Chemical Documentation](#)
- [- J. of Chemical Inf. and Comput. Sci.](#)
- [J. of Chemical Theory and Computation](#)
- [J. of Combinatorial Chemistry](#)
- [J. of Medicinal Chemistry](#)
- [J. of Natural Products](#)
- [J. of Organic Chemistry](#)
- [J. of Physical Chemistry A](#)
- [J. of Physical Chemistry B](#)
- [J. of Physical Chemistry C](#)
- [- J. of Physical Chemistry](#)
- [J. of Proteome Research](#)
- [Langmuir](#)
- [Macromolecules](#)
- [Molecular Pharmaceutics](#)
- [Nano Letters](#)
- [Organic Letters](#)
- [Organic Process Research & Development](#)
- [Organometallics](#)

## MAGAZINE

- [Chemical & Engineering News](#)

## COMMUNITY WEBSITES

- [ACS Chemical Biology](#)
- [ACS Nanotation](#)

## BOOKS

- [ACS Division Proceedings Online](#)
- [ACS Style Guide](#)
- [Reagent Chemicals](#)

## DIRECTORIES & DATABASES

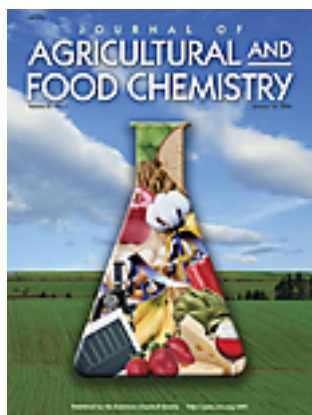
- [Chemical Abstracts Service \(CAS\)](#)
- [Directory of Graduate Research \(DGRweb\)](#)

## SUPPLEMENTS

- [ChemChronicles I: Luminaries of the Chemical Sciences](#)
- [ChemChronicles II: Enterprise of the Chemical Sciences](#)
- [Chromatography](#)
- [The Pharmaceutical Century](#)
- [Made to Measure](#)

## COMMITTEES

- [ACS Joint Board-Council Committee on Publications \(JBCCP\)](#)



# JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY

Chemistry and biochemistry of agriculture and food along with safety, composition and processing; including feeds, pesticides, veterinary drugs, plant growth regulators, fertilizers, and other agrochemicals with their metabolism, toxicology, and environmental fate and the chemical processes involved in nutrition, phytonutrients, flavors, and aromas.

**Editor:** James N. Seiber | [Associate Editors](#)

**Volume:** 56, 24 issues

## Browse Issues

Select Decade

Select Volume

Select Issue Number

[ASAP Articles](#) | [Previous Issue](#) | [Next Issue](#) |  [Printer-friendly version](#)

## Table of Contents

Vol. 55, No. 21: October 17, 2007

## Citation Management

[Learn More](#)

## REVIEWS

Select Citation |  [Feedback](#) |  [Purchase](#)

## Citrus Limonoids: Analysis, Bioactivity, and Biomedical Prospects

Gary D. Manners

pp 8285 - 8294; **(Review)** DOI: [10.1021/jf071797h](https://doi.org/10.1021/jf071797h)

[Abstract](#) Full: [HTML](#) / [PDF](#) (199K)

## ANALYTICAL METHODS

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Development of a New Method for the Complete Extraction of Carotenoids from Cereals with Special Reference to Durum Wheat (*Triticum durum* Desf.)

Susanne Burkhardt and Volker Böhm

pp 8295 - 8301; **(Article)** DOI: [10.1021/jf0712853](https://doi.org/10.1021/jf0712853)

[Abstract](#) Full: [HTML](#) / [PDF](#) (276K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Comparison of Diffuse Reflectance Fourier Transform Mid-Infrared and Near-Infrared Spectroscopy with Grating-Based Near-Infrared for the Determination of Fatty Acids in Forages

Francisco J. Calderon, James B. Reeves, III, Joyce G. Foster, William M. Clapham, James M. Fedders, Merle F. Vigil, and William Brien Henry

pp 8302 - 8309; **(Article)** DOI: [10.1021/jf0712907](https://doi.org/10.1021/jf0712907)

[Abstract](#) Full: [HTML](#) / [PDF](#) (122K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Proteomic Analysis of Shade-Avoidance Response in Tomato Leaves

Emily Hattrup, Karlie A. Neilson, Linda Brecci, and Paul A. Haynes

pp 8310 - 8318; **(Article)** DOI: [10.1021/jf0713049](https://doi.org/10.1021/jf0713049)

[Abstract](#) Full: [HTML](#) / [PDF](#) (259K) [Supporting Info](#)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Single-Drop and Nanogram Level Determination of Sulfite ( $\text{SO}_3^{2-}$ ) in Alcoholic and Nonalcoholic Beverage Samples Based on Diffuse Reflectance Fourier Transform Infrared Spectroscopic (DRS-FTIR) Analysis on KBr Matrix

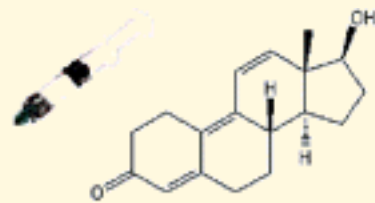
Santosh K. Verma and Manas K. Deb

pp 8319 - 8324; **(Article)** DOI: [10.1021/jf071344c](https://doi.org/10.1021/jf071344c)

[Abstract](#) Full: [HTML](#) / [PDF](#) (228K)

## Determination of Anabolic Steroids in Muscle Tissue by Liquid Chromatography–Tandem Mass Spectrometry

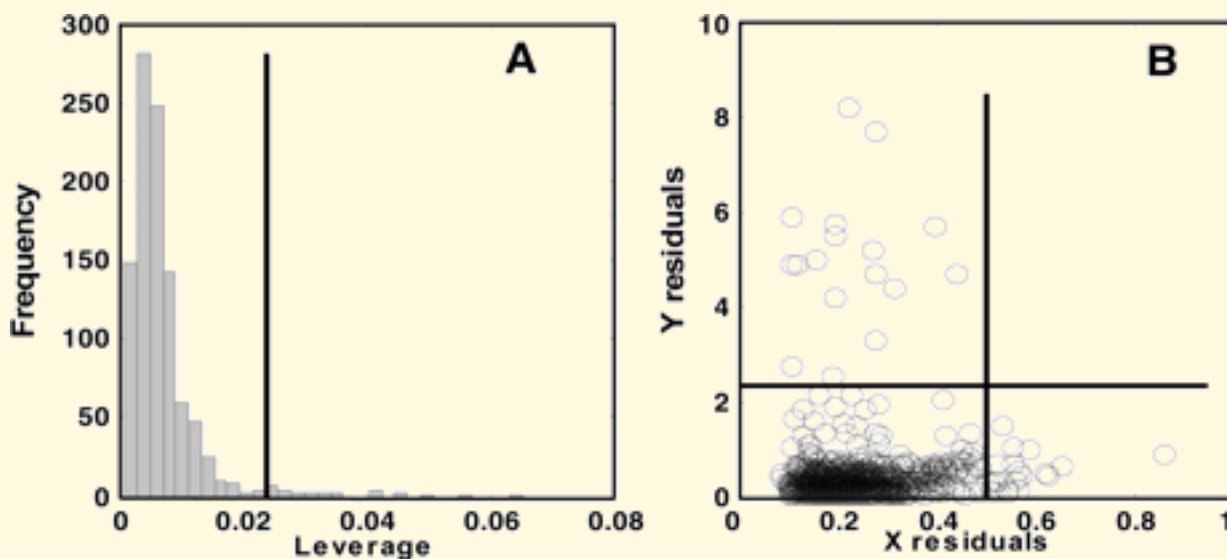
George Kaklamanos, Georgios Theodoridis, Ioannis N. Papadoyannis, and Themistoklis Dabalís  
pp 8325 - 8330; (Article) DOI: [10.1021/jf0713455](https://doi.org/10.1021/jf0713455)



[Abstract](#) Full: [HTML](#) / [PDF](#) (133K)

## Variable Selection, Outlier Detection, and Figures of Merit Estimation in a Partial Least-Squares Regression Multivariate Calibration Model. A Case Study for the Determination of Quality Parameters in the Alcohol Industry by Near-Infrared Spectroscopy

Patrícia Valderrama, Jez Willian B. Braga, and Ronei Jesus Poppi  
pp 8331 - 8338; (Article) DOI: [10.1021/jf071538s](https://doi.org/10.1021/jf071538s)



[Abstract](#) Full: [HTML](#) / [PDF](#) (419K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Quantification of Six Phytoestrogens at the Nanogram per Liter Level in Aqueous Environmental Samples Using  $^{13}\text{C}_3$ -Labeled Internal Standards

Marianne Erbs, Corinne C. Hoerger, Niccolo Hartmann, and Thomas D. Bucheli  
pp 8339 - 8345; (**Article**) DOI: [10.1021/jf071661j](https://doi.org/10.1021/jf071661j)

[Abstract](#) Full: [HTML](#) / [PDF](#) (152K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Application of Gas Chromatography Coupled to Triple Quadrupole Mass Spectrometry for the Multiresidue Analysis of Pesticides in Olive Oil

Antonia Garrido Frenich, José Luis Fernández Moreno, José Luis Martínez Vidal, and Francisco Javier Arrebola Liébanas  
pp 8346 - 8352; (**Article**) DOI: [10.1021/jf071615j](https://doi.org/10.1021/jf071615j)

[Abstract](#) Full: [HTML](#) / [PDF](#) (131K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Stable Isotope Dilution Analysis of the *Fusarium* Mycotoxin Zearalenone

Benedikt Cramer, Michael Bretz, and Hans-Ulrich Humpf  
pp 8353 - 8358; (**Article**) DOI: [10.1021/jf0717283](https://doi.org/10.1021/jf0717283)

[Abstract](#) Full: [HTML](#) / [PDF](#) (149K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Validation of the Tetrasensor Honey Test Kit for the Screening of Tetracyclines in Honey

Wim Reybroeck, Sigrid Ooghe, Hubert De Brabander, and Els Daeseleire  
pp 8359 - 8366; (**Article**) DOI: [10.1021/jf071922p](https://doi.org/10.1021/jf071922p)

[Abstract](#) Full: [HTML](#) / [PDF](#) (125K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Simultaneous Determination of Angiotensin I-Converting Enzyme Inhibitory Peptides in Tryptic Casein Hydrolysate by High-Performance Liquid Chromatography Combined with a Replicate Heart-Cut Column-Switching Technique

Xiao-Lin Zhu, Toshiro Matsui, Keisuke Watanabe, Koso Shiraishi, Tatsuro Ueki, and Kiyoshi Matsumoto

pp 8367 - 8371; (**Article**) DOI: [10.1021/jf0720584](https://doi.org/10.1021/jf0720584)

[Abstract](#) Full: [HTML](#) / [PDF](#) (594K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Permeability Profile Estimation of Flavonoids and other Phenolic Compounds by Biopartitioning Micellar Capillary Chromatography

Andréa Diniz, Laura Escuder-Gilabert, Norberto P. Lopes, Leonardo Gobbo-Neto, Rosa María Villanueva-Camañas, Salvador Sagrado, and María José Medina-Hernández

pp 8372 - 8379; (**Article**) DOI: [10.1021/jf070730r](https://doi.org/10.1021/jf070730r)

[Abstract](#) Full: [HTML](#) / [PDF](#) (188K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Event-Specific Qualitative and Quantitative PCR Detection Methods for Transgenic Rapeseed Hybrids MS1×RF1 and MS1×RF2

Yuhua Wu, Gang Wu, Ling Xiao, and Changming Lu

pp 8380 - 8389; (Article) DOI: [10.1021/jf0717337](https://doi.org/10.1021/jf0717337)

[Abstract](#) Full: [HTML](#) / [PDF](#) (1148K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Ginger and Its Bioactive Component Inhibit Enterotoxigenic *Escherichia coli* Heat-Labile Enterotoxin-Induced Diarrhea in Mice

Jaw-Chyun Chen, Li-Jiau Huang, Shih-Lu Wu, Sheng-Chu Kuo, Tin-Yun Ho, and Chien-Yun Hsiang

pp 8390 - 8397; (Article) DOI: [10.1021/jf071460f](https://doi.org/10.1021/jf071460f)

[Abstract](#) Full: [HTML](#) / [PDF](#) (1200K) [Supporting Info](#)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Antihypertensive Effect of Angiotensin I Converting Enzyme-Inhibitory Peptide from Hydrolysates of Bigeye Tuna Dark Muscle, *Thunnus obesus*

Zhong-Ji Qian, Jae-Young Je, and Se-Kwon Kim

pp 8398 - 8403; (Article) DOI: [10.1021/jf0710635](https://doi.org/10.1021/jf0710635)

[Abstract](#) Full: [HTML](#) / [PDF](#) (302K)

Select Citation |  [Feedback](#)

Effects of Flavonoids and Phenolic Acids on the Inhibition of Adipogenesis in 3T3-L1 Adipocytes

Chin-Lin Hsu and Gow-Chin Yen

pp 8404 - 8410; (Article) DOI: [10.1021/jf071695r](https://doi.org/10.1021/jf071695r)

[Abstract](#) Full: [HTML](#) / [PDF](#) (851K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Proteomic Analysis of Royal Jelly from Three Strains of Western Honeybees (*Apis mellifera*)

Jianke Li, Ting Wang, Zhaohui Zhang, and Yinghong Pan

pp 8411 - 8422; (Article) DOI: [10.1021/jf0717440](https://doi.org/10.1021/jf0717440)

[Abstract](#) Full: [HTML](#) / [PDF](#) (662K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Bioaccessibility and Antioxidant Activity Stability of Phenolic Compounds from Extra-Virgin Olive Oils during *in Vitro* Digestion

Caterina Dinnella, Patrizia Minichino, Anna Maria D'Andrea, and Erminio Monteleone

pp 8423 - 8429; (Article) DOI: [10.1021/jf072244+](https://doi.org/10.1021/jf072244+)

[Abstract](#) Full: [HTML](#) / [PDF](#) (345K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Chemical Composition and Antifungal Activity of *Arnica longifolia*, *Aster hesperius*, and *Chrysothamnus nauseosus* Essential Oils

Nurhayat Tabanca, Betül Demirci, Sara L. Crockett, Kemal Hüsnü Can Başer, and David E. Wedge

pp 8430 - 8435; (Article) DOI: [10.1021/jf071379c](https://doi.org/10.1021/jf071379c)

[Abstract](#) Full: [HTML](#) / [PDF](#) (116K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Antioxidant Activity and Phenolic Composition of Lavandin (*Lavandula x intermedia* Emeric ex Loiseleur) Waste

Laura Torras-Claveria, Olga Jauregui, Jaume Bastida, Carles Codina, and Francesc Viladomat

pp 8436 - 8443; (Article) DOI: [10.1021/jf070236n](https://doi.org/10.1021/jf070236n)

[Abstract](#) Full: [HTML](#) / [PDF](#) (166K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Ascorbic Acid, Carotenoids, and Visual Quality of Baby Spinach as Affected by Shade Netting and Postharvest Storage

Sara Å. M. Bergquist, Ulla E. Gertsson, Lotta Y. G. Nordmark, and Marie E. Olsson

pp 8444 - 8451; (Article) DOI: [10.1021/jf070396z](https://doi.org/10.1021/jf070396z)

[Abstract](#) Full: [HTML](#) / [PDF](#) (377K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Glucosinolate Concentration in Turnip (*Brassica rapa* ssp. *rapifera* L.) Roots as Affected by Nitrogen and Sulfur Supply

Shumin Li, Ilona Schonhof, Angelika Krumbein, Long Li, Hartmut Stützel, and Monika Schreiner

pp 8452 - 8457; (Article) DOI: [10.1021/jf070816k](https://doi.org/10.1021/jf070816k)

[Abstract](#) Full: [HTML](#) / [PDF](#) (122K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Antioxidative Activity of Amino Acids on Tissue Oxidative Stress in Human Intestinal Epithelial Cell Model

Shigeru Katayama and Yoshinori Mine

pp 8458 - 8464; (Article) DOI: [10.1021/jf070866p](https://doi.org/10.1021/jf070866p)

[Abstract](#) Full: [HTML](#) / [PDF](#) (1164K)

Select Citation |  [Feedback](#)

Bioactive Components of Caper (*Capparis spinosa* L.) from Sicily and Antioxidant Effects in a Red Meat Simulated Gastric Digestion

L. Tesoriere, D. Butera, C. Gentile, and M. A. Livrea

pp 8465 - 8471; (Article) DOI: [10.1021/jf0714113](https://doi.org/10.1021/jf0714113)

[Abstract](#) Full: [HTML](#) / [PDF](#) (146K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Antioxidant Capacity and Phenolic Content of Grapes, Sun-Dried Raisins, and Golden Raisins and Their Effect on ex Vivo Serum Antioxidant Capacity

Tory L. Parker, Xiao-Hong Wang, Jorge Pazmiño, and Nicki J. Engeseth

pp 8472 - 8477; (Article) DOI: [10.1021/jf071468p](https://doi.org/10.1021/jf071468p)

[Abstract](#) Full: [HTML](#) / [PDF](#) (616K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Phenolic, Flavonoid, and Lutein Ester Content and Antioxidant Activity of 11 Cultivars of Chinese Marigold

Wei Li, Yanxiang Gao, Jian Zhao, and Qi Wang

pp 8478 - 8484; (Article) DOI: [10.1021/jf071696j](https://doi.org/10.1021/jf071696j)

[Abstract](#) Full: [HTML](#) / [PDF](#) (150K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Flavonoids in Horse Chestnut (*Aesculus hippocastanum*) Seeds and Powdered Waste Water Byproducts

Ireneusz Kapusta, Bogdan Janda, Barbara Szajwaj, Anna Stochmal, Sonia Piacente, Cosimo Pizza, Federico Franceschi, Chlodwig Franz, and Wieslaw Oleszek

pp 8485 - 8490; (Article) DOI: [10.1021/jf071709t](https://doi.org/10.1021/jf071709t)

[Abstract](#) Full: [HTML](#) / [PDF](#) (125K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Protective Effect of Heat-Processed American Ginseng against Diabetic Renal Damage in Rats  
Hyun Young Kim, Ki Sung Kang, Noriko Yamabe, Ryoji Nagai, and Takako Yokozawa  
pp 8491 - 8497; (Article) DOI: [10.1021/jf071770y](https://doi.org/10.1021/jf071770y)

[Abstract](#) Full: [HTML](#) / [PDF](#) (513K)

Select Citation | [Feedback](#) | [Purchase](#)

Almond (*Prunus dulcis* (Mill.) D.A. Webb) Skins as a Potential Source of Bioactive Polyphenols  
Maria Monagas, Ignacio Garrido, Rosa Lebrón-Aguilar, Begoña Bartolome, and Carmen Gómez-Cordovés  
pp 8498 - 8507; (Article) DOI: [10.1021/jf071780z](https://doi.org/10.1021/jf071780z)

[Abstract](#) Full: [HTML](#) / [PDF](#) (181K)

Select Citation | [Feedback](#) | [Purchase](#)

Development of an Enzyme-Linked Immunosorbent Assay To Detect an Immunomodulatory  $\alpha$ -D-Glucan-Protein Complex, MPG-1, in Basidiomycete *Tricholoma matsutake* and Related Processed Foods  
Hirotaka Hoshi, Yoko Yagi, Kenichi Matsunaga, Yoko Ishihara, and Tadashi Yasuhara  
pp 8508 - 8515; (Article) DOI: [10.1021/jf071809z](https://doi.org/10.1021/jf071809z)

[Abstract](#) Full: [HTML](#) / [PDF](#) (140K)

Select Citation | [Feedback](#) | [Purchase](#)

Radical Scavenging and Singlet Oxygen Quenching Activity of Marine Carotenoid Fucoxanthin and Its Metabolites  
Nakkarike M. Sachindra, Emiko Sato, Hayato Maeda, Masashi Hosokawa, Yoshimi Niwano, Masahiro Kohno, and Kazuo Miyashita  
pp 8516 - 8522; (Article) DOI: [10.1021/jf071848a](https://doi.org/10.1021/jf071848a)

[Abstract](#) Full: [HTML](#) / [PDF](#) (1412K)

Select Citation | [Feedback](#) | [Purchase](#)

Molecular Action Mechanism against Apoptosis by Aqueous Extract from Guava Budding Leaves Elucidated with Human Umbilical Vein Endothelial Cell (HUVEC) Model  
Chiu-Lan Hsieh, Chien-Ning Huang, Yuh-Charn Lin, and Robert Y. Peng  
pp 8523 - 8533; (Article) DOI: [10.1021/jf071858b](https://doi.org/10.1021/jf071858b)

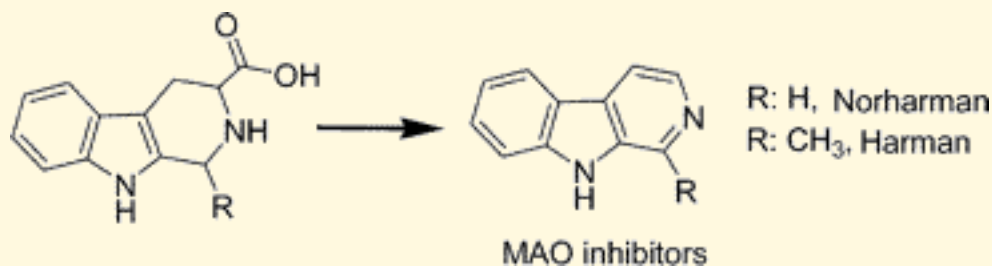
[Abstract](#) Full: [HTML](#) / [PDF](#) (1529K)

Select Citation | [Feedback](#) | [Purchase](#)

## Identification and Occurrence of $\beta$ -Carboline Alkaloids in Raisins and Inhibition of Monoamine Oxidase (MAO)

Tomás Herraiz

pp 8534 - 8540; (Article) DOI: [10.1021/jf0719151](https://doi.org/10.1021/jf0719151)



[Abstract](#) Full: [HTML](#) / [PDF](#) (149K)

Select Citation | [Feedback](#) | [Purchase](#)

## Phytochemical Profile of Main Antioxidants in Different Fractions of Purple and Blue Wheat, and Black Barley

Susanne Siebenhandl, Heinrich Grausgruber, Nicoletta Pellegrini, Daniele Del Rio, Vincenzo Fogliano, Rita Pernice, and Emmerich Berghofer

pp 8541 - 8547; (Article) DOI: [10.1021/jf072021j](https://doi.org/10.1021/jf072021j)

[Abstract](#) Full: [HTML](#) / [PDF](#) (122K)

Select Citation | [Feedback](#) | [Purchase](#)

## Fractionation of Flax Shives by Water and Aqueous Ammonia Treatment in a Pressurized Low-Polarity Water Extractor

Anvar U. Buranov and G. Mazza

pp 8548 - 8555; (Article) DOI: [10.1021/jf0714564](https://doi.org/10.1021/jf0714564)

[Abstract](#) Full: [HTML](#) / [PDF](#) (155K)

Select Citation | [Feedback](#) | [Purchase](#)

## Metabolic Characterization of Newly Isolated *Pseudomonas nitroreducens* Jin1 Growing on Eugenol and Isoeugenol

Tatsuya Unno, Soo-Jin Kim, Robert A. Kanaly, Joong-Hoon Ahn, Su-Il Kang, and Hor-Gil Hur

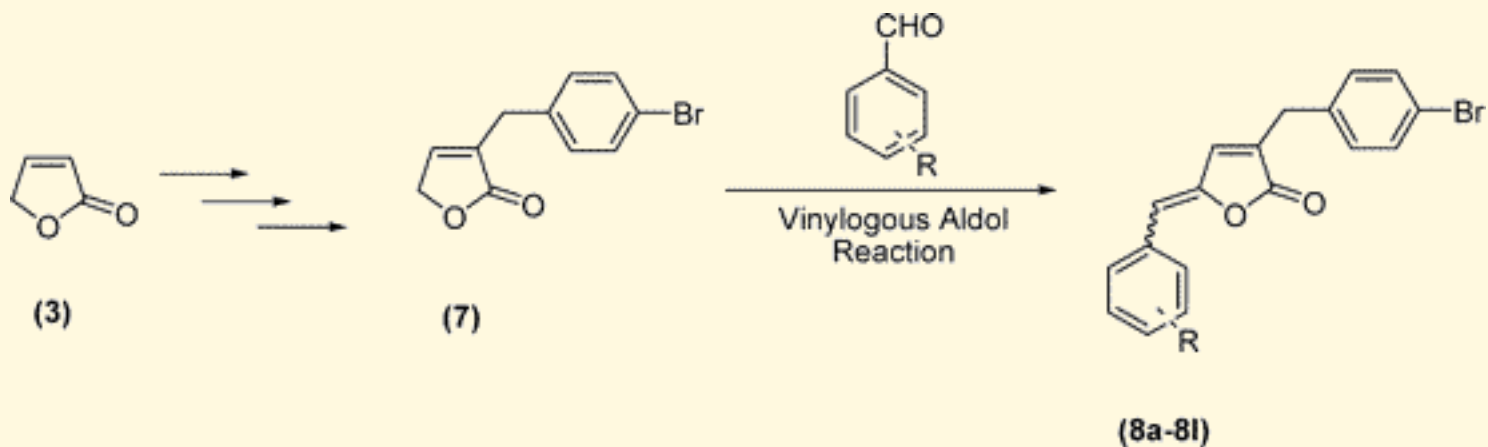
pp 8556 - 8561; (Article) DOI: [10.1021/jf0715929](https://doi.org/10.1021/jf0715929)

[Abstract](#) Full: [HTML](#) / [PDF](#) (182K)

Select Citation | [Feedback](#) | [Purchase](#)

## Synthesis of 3-(4-Bromobenzyl)-5-(aryl methylene)-5H-furan-2-ones and Their Activity as Inhibitors of the Photosynthetic Electron Transport Chain

Luiz C. A. Barbosa, Marcelo E. Rocha, Róbson R. Teixeira, Célia R.A. Maltha, and Giuseppe Forlani  
pp 8562 - 8569; (Article) DOI: [10.1021/jf072120x](https://doi.org/10.1021/jf072120x)



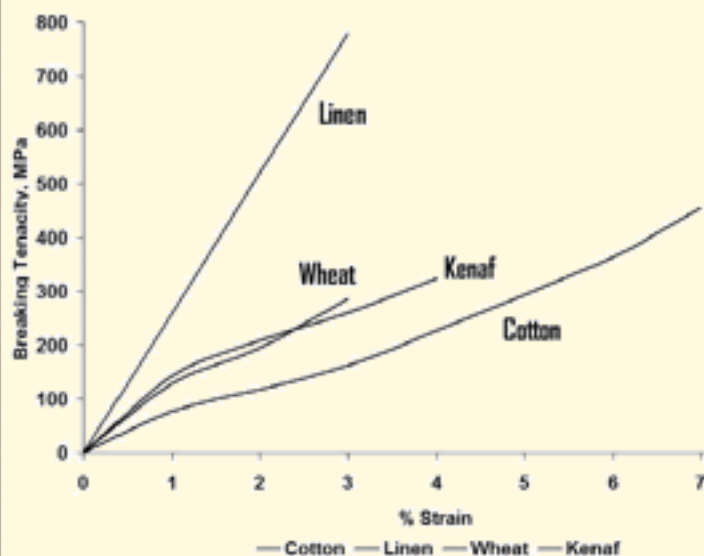
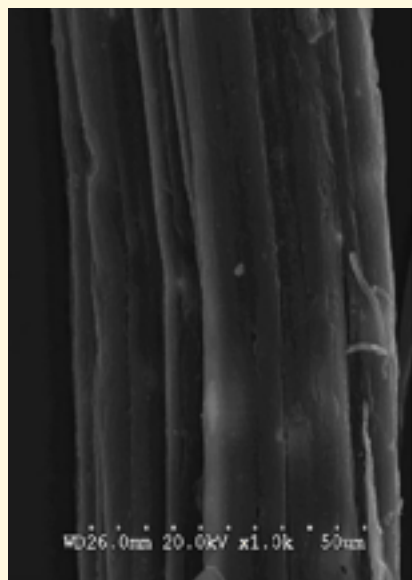
[Abstract](#) Full: [HTML](#) / [PDF](#) (280K)

Select Citation | [Feedback](#) | [Purchase](#)

## Preparation and Characterization of Long Natural Cellulose Fibers from Wheat Straw

Narendra Reddy and Yiqi Yang

pp 8570 - 8575; (Article) DOI: [10.1021/jf071470g](https://doi.org/10.1021/jf071470g)



[Abstract](#) Full: [HTML](#) / [PDF](#) (1182K)

## CHEMICAL AND PHYSICAL CHANGES INDUCED BY PROCESSING/STORAGE

Select Citation | [Feedback](#) | [Purchase](#)

Sisal Fibers: Surface Chemical Modification Using Reagent Obtained from a Renewable Source; Characterization of Hemicellulose and Lignin as Model Study

Jackson D. Megiatto, Jr., William Hoareau, Christian Gardrat, Elisabete Frollini, and Alain Castellan  
pp 8576 - 8584; **(Article)** DOI: [10.1021/jf071682d](https://doi.org/10.1021/jf071682d)

[Abstract](#) Full: [HTML](#) / [PDF](#) (611K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Slow Recrystallization of Tripalmitoylglycerol from MCT Oil Observed by <sup>2</sup>H NMR

Kevin W. Smith, Paul R. Smith, István Furó, Erik Thyboll Pettersson, Fred W. Cain, Loek Favre, and Geoff Talbot

pp 8585 - 8588; **(Article)** DOI: [10.1021/jf071040q](https://doi.org/10.1021/jf071040q)

[Abstract](#) Full: [HTML](#) / [PDF](#) (109K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Fungal-Stressed Germination of Black Soybeans Leads to Generation of Oxooctadecadienoic Acids in Addition to Glyceollins

Shengbao Feng, Chin Lee Saw, Yuan Kun Lee, and Dejian Huang

pp 8589 - 8595; **(Article)** DOI: [10.1021/jf0716735](https://doi.org/10.1021/jf0716735)

[Abstract](#) Full: [HTML](#) / [PDF](#) (236K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Evolution of Antioxidant Capacity during Storage of Selected Fruits and Vegetables

Claire Kevers, Michael Falkowski, Jessica Tabart, Jean-Olivier Defraigne, Jacques Dommes, and Joël Pincemail

pp 8596 - 8603; **(Article)** DOI: [10.1021/jf071736j](https://doi.org/10.1021/jf071736j)

[Abstract](#) Full: [HTML](#) / [PDF](#) (171K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Free Hydroxycinnamic Acids, Lycopene, and Color Parameters in Tomato Cultivars

Marcos Hernández, Elena Rodríguez, and Carlos Díaz

pp 8604 - 8615; **(Article)** DOI: [10.1021/jf071069u](https://doi.org/10.1021/jf071069u)

[Abstract](#) Full: [HTML](#) / [PDF](#) (164K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## COMPOSITION OF FOODS/FEEDS

Analysis of Phenolic Compounds in Two Blackberry Species (*Rubus glaucus* and *Rubus adenotrichus*) by High-Performance Liquid Chromatography with Diode Array Detection and Electrospray Ion Trap Mass Spectrometry

Christian Mertz, Veronique Cheynier, Ziya Günata, and Pierre Brat

pp 8616 - 8624; (Article) DOI: [10.1021/jf071475d](https://doi.org/10.1021/jf071475d)

[Abstract](#) Full: [HTML](#) / [PDF](#) (183K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Effects of Growing Conditions on Purple Corn cob (*Zea mays* L.) Anthocyanins

Pu Jing, Victor Noriega, Steven J. Schwartz, and M. Mónica Giusti

pp 8625 - 8629; (Article) DOI: [10.1021/jf070755q](https://doi.org/10.1021/jf070755q)

[Abstract](#) Full: [HTML](#) / [PDF](#) (102K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## ENVIRONMENTAL CHEMISTRY

Processes Affecting the Dissipation of the Herbicide Isoxaflutole and Its Diketonitrile Metabolite in Agricultural Soils under Field Conditions

Sharon K. Papiernik, Scott R. Yates, William C. Koskinen, and Brian Barber

pp 8630 - 8639; (Article) DOI: [10.1021/jf071256s](https://doi.org/10.1021/jf071256s)

[Abstract](#) Full: [HTML](#) / [PDF](#) (788K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Relationship between Lead Uptake by Lettuce and Water-Soluble Low-Molecular-Weight Organic Acids in Rhizosphere As Influenced by Transpiration

Yuan Chung Liao, Shui-Wen Chang Chien, Min-Chao Wang, Yuan Shen, and Kalluru Sessaiah

pp 8640 - 8649; (Article) DOI: [10.1021/jf071491a](https://doi.org/10.1021/jf071491a)

[Abstract](#) Full: [HTML](#) / [PDF](#) (398K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Atrazine Photodegradation in Aqueous Solution Induced by Interaction of Humic Acids and Iron: Photoformation of Iron(II) and Hydrogen Peroxide

Xiaoxia Ou, Xie Quan, Shuo Chen, Huimin Zhao, and Yaobin Zhang

pp 8650 - 8656; (Article) DOI: [10.1021/jf0719050](https://doi.org/10.1021/jf0719050)

[Abstract](#) Full: [HTML](#) / [PDF](#) (201K)

## FERTILIZER CHEMISTRY

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Use of Human Urine Fertilizer in Cultivation of Cabbage (*Brassica oleracea*)—**Impacts on Chemical, Microbial, and Flavor Quality**

Surendra K. Pradhan, Anne-Marja Nerg, Annalena Sjöblom, Jarmo K. Holopainen, and Helvi Heinonen-Tanski

pp 8657 - 8663; (Article) DOI: [10.1021/jf0717891](https://doi.org/10.1021/jf0717891)

[Abstract](#) Full: [HTML](#) / [PDF](#) (131K)

## FLAVORS AND AROMAS

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Identification of the Genotype from the Content and Composition of the Essential Oil of Lemon Verbena (*Aloysia citriodora* Palau)

Alejandra Gil, Catalina M. Van Baren, Paola M. Di Leo Lira, and Arnaldo L. Bandoni

pp 8664 - 8669; (Article) DOI: [10.1021/jf0708387](https://doi.org/10.1021/jf0708387)

[Abstract](#) Full: [HTML](#) / [PDF](#) (114K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Evaluation of the Formation and Stability of Hydroxyalkylsulfonic Acids in Wines

Luciana C. de Azevedo, Marina M. Reis, Luiz F. Motta, Gisele O. da Rocha, Luciana A. Silva, and Jailson B. de Andrade

pp 8670 - 8680; (Article) DOI: [10.1021/jf0709653](https://doi.org/10.1021/jf0709653)

[Abstract](#) Full: [HTML](#) / [PDF](#) (1235K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Diffusion of Aroma Compounds in Stirred Yogurts with Different Complex Viscosities

Isabelle De le ris, Cle mentine Lauverjat, Ioan Cristian Tre le a, and Isabelle Souchon

pp 8681 - 8687; (Article) DOI: [10.1021/jf071149y](https://doi.org/10.1021/jf071149y)

[Abstract](#) Full: [HTML](#) / [PDF](#) (436K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## Optimization of Multiple Headspace Solid-Phase Microextraction for the Quantification of Volatile Compounds in Dry Fermented Sausages

Mónica Flores and Delia Hernández

pp 8688 - 8695; **(Article)** DOI: [10.1021/jf0713758](https://doi.org/10.1021/jf0713758)

[Abstract](#) Full: [HTML](#) / [PDF](#) (147K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## Application of a Headspace Sorptive Extraction Method for the Analysis of Volatile Components in South African Wines

Berhane T. Weldegergis, Andreas G. J. Tredoux, and Andrew M. Crouch

pp 8696 - 8702; **(Article)** DOI: [10.1021/jf071554p](https://doi.org/10.1021/jf071554p)

[Abstract](#) Full: [HTML](#) / [PDF](#) (141K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## Enzymatic Hydrolysis of Brewers' Spent Grain Proteins and Technofunctional Properties of the Resulting Hydrolysates

Inge Celus, Kristof Brijs, and Jan A. Delcour

pp 8703 - 8710; **(Article)** DOI: [10.1021/jf071793c](https://doi.org/10.1021/jf071793c)

[Abstract](#) Full: [HTML](#) / [PDF](#) (792K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## Extraction and Characterization of Oil Bodies from Soy Beans: A Natural Source of Pre-Emulsified Soybean Oil

Daigo Iwanaga, David A. Gray, Ian D. Fisk, Eric Andrew Decker, Jochen Weiss, and David Julian McClements

pp 8711 - 8716; **(Article)** DOI: [10.1021/jf071008w](https://doi.org/10.1021/jf071008w)

[Abstract](#) Full: [HTML](#) / [PDF](#) (127K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## Inhibition of Lysophospholipase D Activity by Unsaturated Lysophosphatidic Acids or Seed Extracts Containing 1-Linoleoyl and 1-Oleoyl Lysophosphatidic Acid

Xi-Wen Liu, Dai-Eun Sok, Hong-Sun Yook, Cheon-Bae Sohn, Young-Jin Chung, and Mee Ree Kim

pp 8717 - 8722; **(Article)** DOI: [10.1021/jf071080u](https://doi.org/10.1021/jf071080u)

[Abstract](#) Full: [HTML](#) / [PDF](#) (183K)

### FOOD CHEMISTRY/BIOCHEMISTRY

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Flavonoid and Hydroxycinnamate Profiles of English Apple Ciders

Serena C. Marks, William Mullen, and Alan Crozier

pp 8723 - 8730; **(Article)** DOI: [10.1021/jf071155u](https://doi.org/10.1021/jf071155u)

[Abstract](#) Full: [HTML](#) / [PDF](#) (139K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Effect of Selenium- and Glutathione-Enriched Yeast Supplementation on a Combined Atherosclerosis and Diabetes Hamster Model

Gabriel A. Agbor, Joe A. Vinson, Shachi Patel, Kunal Patel, Jenyne Scarpati, Drew Shiner, Forbes Wardrop, and Thomas A. Tompkins

pp 8731 - 8736; **(Article)** DOI: [10.1021/jf0711901](https://doi.org/10.1021/jf0711901)

[Abstract](#) Full: [HTML](#) / [PDF](#) (116K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Protein Haze Formation in White Wines: Effect of *Saccharomyces cerevisiae* Cell Wall Components Prepared with Different Procedures

Giovanna Lomolino and Andrea Curioni

pp 8737 - 8744; **(Article)** DOI: [10.1021/jf0712550](https://doi.org/10.1021/jf0712550)

[Abstract](#) Full: [HTML](#) / [PDF](#) (174K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### A Circular Dichroism and Fluorescence Spectrometric Assessment of Effects of Selected Chemical Denaturants on Soybean (*Glycine max* L.) Storage Proteins Glycinin (11S) and $\beta$ -Conglycinin•(7S)

K. W. Clara Sze, Harshal H. Kshirsagar, Mahesh Venkatachalam, and Shridhar K. Sathe

pp 8745 - 8753; **(Article)** DOI: [10.1021/jf071364e](https://doi.org/10.1021/jf071364e)

[Abstract](#) Full: [HTML](#) / [PDF](#) (339K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

### Occurrence of Resveratrol and Piceid in American and European Hop Cones

Vesna Jerkovic and Sonia Collin

pp 8754 - 8758; **(Article)** DOI: [10.1021/jf071792k](https://doi.org/10.1021/jf071792k)

[Abstract](#) Full: [HTML](#) / [PDF](#) (723K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Properties of Extracts from Defatted Rice Bran by Its Subcritical Water Treatment

Jintana Wiboonsirikul, Yukitaka Kimura, Megumi Kadota, Hisahiro Morita, Takuo Tsuno, and Shuji Adachi

pp 8759 - 8765; (Article) DOI: [10.1021/jf0720411](https://doi.org/10.1021/jf0720411)

[Abstract](#) Full: [HTML](#) / [PDF](#) (177K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Effect of Fruiting Body Maturity Stage on Chemical Composition and Antimicrobial Activity of *Lactarius* sp. Mushrooms

Lillian Barros, Paula Baptista, Letícia M. Estevinho, and Isabel C. F. R. Ferreira

pp 8766 - 8771; (Article) DOI: [10.1021/jf071435+](https://doi.org/10.1021/jf071435+)

[Abstract](#) Full: [HTML](#) / [PDF](#) (384K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Peanut Allergen Ara h 1 Interacts with Proanthocyanidins into Higher Molecular Weight Complexes

Evelien L. van Boxtel, Lambertus A. M. van den Broek, Stef J. Koppelman, Jean-Paul Vincken, and Harry Gruppen

pp 8772 - 8778; (Article) DOI: [10.1021/jf071585k](https://doi.org/10.1021/jf071585k)

[Abstract](#) Full: [HTML](#) / [PDF](#) (679K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Retention of Essential Amino Acids during Extrusion of Protein and Reducing Sugars

Shivendra Singh, Lara Wakeling, and Shirani Gamlath

pp 8779 - 8786; (Article) DOI: [10.1021/jf071769z](https://doi.org/10.1021/jf071769z)

[Abstract](#) Full: [HTML](#) / [PDF](#) (913K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Effect of Microbial Fermentation on Content of Statin, GABA, and Polyphenols in Pu-Erh Tea

Kee-Ching Jeng, Chin-Shuh Chen, Yu-Pun Fang, Rolis Chien-Wei Hou, and Yuh-Shuen Chen

pp 8787 - 8792; (Article) DOI: [10.1021/jf071629p](https://doi.org/10.1021/jf071629p)

[Abstract](#) Full: [HTML](#) / [PDF](#) (266K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

## MOLECULAR NUTRITION

Tissue Iron Distribution and Urinary Mineral Excretion Vary Depending on the Form of Iron (FeSO<sub>4</sub> or NaFeEDTA) and the Route of Administration (Oral or Subcutaneous) in Rats Given High Doses of Iron

Le Zhu and Dennis D. Miller

pp 8793 - 8799; (Article) DOI: [10.1021/jf0717135](https://doi.org/10.1021/jf0717135)

[Abstract](#) Full: [HTML](#) / [PDF](#) (126K)

SAFETY/TOXICOLOGY

Select Citation |  [Feedback](#) | \$ [Purchase](#)

In Vitro Bioaccessibility of Soil-Bound Polycyclic Aromatic Hydrocarbons in Successive Digestive Compartments in Cows

Stefan Jurjanz and Guido Rychen

pp 8800 - 8805; (Article) DOI: [10.1021/jf0708950](https://doi.org/10.1021/jf0708950)

[Abstract](#) Full: [HTML](#) / [PDF](#) (222K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Predicting Perchlorate Exposure in Milk from Concentrations in Dairy Feed

Clifford P. Rice, Ransom L. Baldwin VI, Linda C. Abbott, Cathleen J. Hapeman, Anthony V. Capuco, Anh Le, Krystyna Bialek-Kalinski, Douglas D. Bannerman, William R. Hare, Max J. Paape, Gregory W. McCarty, Adam C. Kauf, Ali M. Sadeghi, James L. Starr, Laura L. McConnell, and Curtis P. Van Tassell

pp 8806 - 8813; (Article) DOI: [10.1021/jf070953h](https://doi.org/10.1021/jf070953h)

[Abstract](#) Full: [HTML](#) / [PDF](#) (251K)

Select Citation |  [Feedback](#) | \$ [Purchase](#)

Development of Flexible Antimicrobial Films Using Essential Oils as Active Agents

P. López, C. Sánchez, R. Batlle, and C. Nerín

pp 8814 - 8824; (Article) DOI: [10.1021/jf071737b](https://doi.org/10.1021/jf071737b)

[Abstract](#) Full: [HTML](#) / [PDF](#) (1026K)

Citation Management

[Learn More](#)

[Return to Top](#)

## ACS Publications

[Home](#) | [ACS Journals A–Z](#) | [Chemical & Engineering News](#) | [E-mail Alerts/RSS Feeds](#)

## Customer Services

[Member Services](#) | [Librarian Resource Center](#) | [Customer Service](#) | [Technical Support](#) | [Sitemap](#)

## American Chemical Society

[Home](#) | [Membership](#) | [Technical Divisions](#) | [Meetings](#) | [Careers](#) | [Chemical Abstracts Service](#)

Copyright © 2008 American Chemical Society, 1155 Sixteenth Street N.W., Washington, DC 20036

## Journal of Agricultural and Food Chemistry

- [Home Page](#)
- [Most-Accessed Articles](#)
- [Supporting Information](#)
- [JAFCh In the News](#)
- [Sample Issue](#)
- [Author Index](#)
- [Masthead \[PDF\]](#)
- [About the Journal](#)


## Authors / Reviewers

- [ACS Paragon Plus Environment](#)
- [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](#)
- [ACS Journals A–Z](#)
- [Advanced Search](#)
- [E-mail Alerts & RSS Feeds](#) 
- [C&EN](#)
- [Chemjobs](#)
- [ACS Books](#)

## ACS Members

- [Subscription Info](#)
- [Recommend ACS Journals to Your Library \[PDF\]](#)
- [Join ACS](#)