

Contents

Animal food, pet food, and plant nutrient methods

- Construct-Specific Loop-Mediated Isothermal Amplification: Rapid Detection of Genetically Modified Crops with Insect Resistance or Herbicide Tolerance
Monika Singh, Deepa Pal, Payal Sood, and Gurinderjit Randhawa 1191

- Headspace Characterization and Quantification of Aromatic Organosulfur Compounds in Garlic Extracts Using Surface-Enhanced Raman Scattering with a Mirror-in-a-Cap Substrate
Yanqi Qu, Minqi Wang, Shijun Huang, Eric A. Decker, D. Julian McClements, and Lili He..... 1201

Drug formulations

- Quantitative Nuclear Magnetic Resonance Spectroscopic Analysis of Two Commonly Used Gastrointestinal Tract Drugs
Ramzia I. Elbagary, Marwa A. Fouad, and Menna I. Ezzeldin..... 1208

- Determination of Rufinamide in the Presence of 1-[(2,6-Difluorophenyl)methyl]-1H-1,2,3-Triazole-4 Carboxylic Acid Using RP-HPLC and Derivative Ratio Methods as Stability Indicating Assays to Be Applied on Dosage Form
Sonia T. Hassib, Hanaa M. A. Hashem, Marianne A. Mahrouse, and Eman A. Mostafa..... 1215

Validation of HPLC Method for Determination of Histamine in Human Immunoglobulin Formulations

- Michikazu Tanio, Toru Nakamura, Hideki Kusunoki, Kyohei Ideguchi, Kazuyuki Nakashima, and Isao Hamaguchi 1223

A Green, Economic "Switch-On" Sensor for Cefixime Analysis Based on Black Soya Bean Carbon Quantum Dots

- Yuecheng Zhang, Jingyuan Wang, Wenbo Wu, Chengjia Li, and Hongyan Ma 1230

Environmental chemical contaminants

- High Throughput Residue Analysis of Indaziflam and its Metabolites in Palm Oil Using Liquid Chromatography-Tandem Mass Spectrometry
Norizah Halim, Ainie Kuntom, Raviraj Shinde, and Kaushik Banerjee..... 1237

- Determination of Bromate Ions in Drinking Water by Derivatization with 2-Methyl-2-Butene, Dispersive Liquid-Liquid Extraction and Gas Chromatography-Electron Capture Detection
Mehdi Nabi, Sayed Mehdi Ghoreishi, and Mohsen Behpour 1243

Experimental Design of Vortex Assisted Switchable Solvent Homogeneous Liquid-Liquid Microextraction for Simultaneous Determination of Four Pesticides in Wastewater

- Büşra Tışlı, Dotse Selali Chormey, Merve Fırat Ayyıldız, and Sezgin Bakırdere 1250

Food chemical contaminants

- Extraction of Cu, Fe, Mn, and Ni from Margarine Samples Using Extraction Induced by Emulsion Breaking Procedure Prior to Graphite Furnace Atomic Absorption Spectrometry and Comparison of Results to Provisional Tolerable Daily Intake Values
Yasemin Bakircioglu Kurtulus, Dilek Bakircioglu, Alper Can Babac, Selcuk Yurtsever, and Nukte Topraksever 1256

Arsenic and Lead Determination in D&C Red No. 6 Lakes and D&C Red No. 7 Lakes Containing Barium Sulfate Using X-Ray Fluorescence Spectrometry Nancy Morris Hepp	1264
BL30SEC Method for Detection of Beta-Lactams in Raw Commingled Cow Milk: AOAC Performance Tested Method SM 061902 Robert J. Markovsky, David W. Douglas, Ryan Sullivan, Alan C. Tran, David R. Legg, Lindsey W. McRobbie, Janine A. Schwartz, Robert S. Salter, Nicole Klass, Sarah Knoop, Benjamin Bastin, Erin Crowley, James Agin, David Goins, and Emily Kalinowsky	1268
Determination of Heavy Metals in Wheat and Barley Grains Using ICP-MS/MS Tamer M.A.M. Thabit, Shokr Abdelsalam Shokr, Dalia I.H. Elgeddawy, and Medhat A.H. El-Naggar	1277
Determination of Some Common Heavy Metals and Radionuclides in Some Medicinal Herbs Using ICP-MS/MS Tamer M. A. M. Thabit, Dalia I. H. Elgeddawy, and Shokr Abdelsalam Shokr	1282
Human nutrient methods	
Separation of RRR- α -Tocopherol by Chiral Chromatography Brendon D. Gill and Harvey E. Indyk	1288
Comparison of LC-MS/MS and Enzymatic Methods for the Determination of Total Choline and Total Carnitine in Infant Formula and Milk Products Brendon D. Gill, Harvey E. Indyk, Tadashi Kobayashi, Iain J. McGrail, and David C. Woollard	1293
Determination of Fructans in Infant Formula and Adult/Pediatric Nutritional Formula by Anion-Exchange Chromatography with Pulsed Amperometric Detection after Enzymatic Treatment: Collaborative Study, Final Action 2016.14 Véronique Spichtig, Sean Austin, Kommer Brunt, Jeroen Van Soest, and Peter Sanders	1301
Microbiological methods	
Evaluation of the MC-Media Pad [®] Rapid Aerobic Count Device for the Enumeration of Total Aerobic Counts in a Variety of Foods: Collaborative Study, First Action Official Method SM 2019.02 Benjamin Bastin, Nicole Klass, Erin Crowley, James Agin, Charlotte Lindhardt, and Renaud Chollet	1318
Validation of a Modified Version of Actero TM Salmonella Enrichment Media for Rapid Detection of Salmonella spp. in Environmental and Food Samples: AOAC Performance Tested Method SM 041403 Afia Boumail, Alex Eyraud, Mounia Akassou, Mélanie Geffroy, Jean-Félix Sicard, Renaud Tremblay, and Sergiy Olishkevsky	1326
Evaluation of the GENE-UP [®] E. coli O157:H7 Method for the Detection of E. coli O157:H7 in Select Foods: Collaborative Study, 2019.03 Ronald Johnson, John Mills, Jean-Louis Pittet, Maryse Rannou, Patrick Bird, and Maria Nelson	1338
Microbiologique Microfilm TM EBEC – a Rapid Method for the Simultaneous Enumeration of Enterobacteriaceae and Escherichia coli Tam L. Mai, Ziwen Ming, Van Nguyen, Anna Shapovalova, and Mansour Samadpour	1348
Salmonella Contamination of Seafood in Landing Centers and Retail Markets of Mumbai, India Parmanand Prabhakar, Manjusha Lekshmi, Parvathi Ammini, Binaya Bhusan Nayak, and Sanath Kumar	1361
TRIO Method for Detection of Beta-Lactams, Sulfonamides, and Tetracyclines in Raw Commingled Cows' Milk: AOAC Performance Tested Method SM 121601 Robert S. Salter, R.J. Markovsky, D.W. Douglas, S.J. Saul, A.C. Tran, D.R. Legg, J.A. Schwartz, D.M. Conaway, L.W. McRobbie, Emily Kalinowski, and Mary Bulthaus	1366

Natural products

- Quantification and Characterization of Phenolic Compounds from Northern Indian Propolis Extracts and Dietary Supplements
Bharathi Avula, Satyanarayanaraju Sagi, Mubashir H. Masoodi, Ji-Yeong Bae, Adil F. Wali, and Ikhlas A. Khan 1378

- Development and Validation of a UPLC-DAD Method for Quantitative Analysis of Coumarin, *trans*-Cinnamic Acid, *trans*-Cinnamaldehyde, and Eugenol in Encapsulated Cinnamon Flavoring Powder
Congmei Cao, Wei Liu, Silva Babajanian, Yanjun Zhang, Peter Chang, and Gary Swanson 1394

- HPLC-Based Qualitative and Quantitative Analyses of Alkaloids in Chewable Areca Products from Different Geographic Regions
Mengru Cao, Yingkai Liu, Hanwen Yuan, Yixing Qiu, Qingling Xie, Pan Yi, Dianbo Tan, Yanmei Peng, and Wei Wang 1400

- A Simple and Sensitive Dispersive Micro-Solid-Phase Extraction Coupled with High-Performance Liquid Chromatography for Quantification of Honokiol and Magnolol in Complex Matrices
Chu Chu, Jing Li, Shan Wang, Lunan Weng, Luyi Jiang, Huan Zhang, Caijing Liu, and Jizhong Yan 1406

Statistical analysis and chemometric methods

- Impact Study of Mathematical Manipulation on the Resolution Efficiency of the Spectrophotometric Technique—An Application on Veterinary Binary Mixture with Overlapping Absorption Bands
Hayam M. Lotfy, Hany H. Monir, Adel M. Michael, Yasmin M. Fayez, and Christine K. Nessim 1412

- Beware of Bar Charts for Plotting Calibration Curves for Analytical Method Development
Ali Shayanfar 1424

- On the Statistical Testing Methods for Single Laboratory Validation of Qualitative Microbiological Assays with an Unpaired Design
Shizhen S. Wang 1426

- Bayesian Discriminant Analysis of Yogurt Products Based on Raman Spectroscopy
Zheng-Yong Zhang, An-Yang Yao, Tong-Tong Yue, Min-Qiu Niu, and Hai-Yan Wang 1435