1. Record Nr. UNINA9910132513903321 Autore Wang Shuo <1969-> Titolo Food chemical hazard detection: development and application of new technologies / / Shuo Wang; Qiliang Deng [and fifteen others], contributors Pubbl/distr/stampa Chichester, England:,: Wiley-Blackwell,, 2014 ©2014 **ISBN** 1-5231-1016-3 1-118-48856-3 1-118-48858-X 1-118-48859-8 Descrizione fisica 1 online resource (343 p.) Altri autori (Persone) DengQiliang Disciplina 363.19/264 Soggetti Food adulteration and inspection Hazardous substances Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Cover: Title Page: Copyright: Contents: List of contributors: Preface: Section I Chromatography-tandem mass spectrometry: Chapter 1 Recent developments in gas chromatography-mass spectrometry for the detection of food chemical hazards; 1.1 The combination of gas chromatography and mass spectrometry; 1.1.1 Introduction; 1.1.2 Basic gas chromatography; 1.1.3 Typical mass analyzers and MS detectors in GC-MS: 1.1.4 New development in GC-MS and sample preparation: 1.2 Analysis of pesticide residues in foods: 1.2.1 Sample preparation 1.2.2 Development of GC-MS methods for the determination of pesticides in foods1.3 Analysis of contaminants formed during food processing; 1.3.1 Acrylamide; 1.3.2 Heterocyclic amines; 1.3.3 Furan; 1.3.4 Polycyclic aromatic hydrocarbons (PAHs); 1.3.5 Tetramine; 1.3.6 Chloropropanols; 1.4 Analysis of environmental contaminants; 1.4.1

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## Sommario/riassunto

Food chemical safety remains a serious concern to the food industry. Risks such as adulteration, the existenceof toxic and allergenic compounds in foods, and poor regulation of postharvest processing indicate that food chemical safety is not fully guaranteed. With the increasing trend of globalization in the import and export of food products, the importance of employing accurate and reliable analytical instruments to rapidly detect chemical hazards in foods has become paramount. In recent years, many new applications for using a range of analytical methods to detect food chemical haz