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Nota di contenuto	1. Introduction: A Brief Guide to Targets and Strategies of Functional Nucleic Acids Detection in Food Safety -- 2. Adaptable Methods to Extract Nucleic Acid Targets and Evaluate Quality -- 3. Basic Rules in Nucleic Acid-Mediated Amplification and Hybridization Methods in Food Safety Detection: A Review -- 4. Modified nucleic acids -- 5. Reference Materials: A Golden Criterion in Nucleic Acid Identification -- 6. Functional Nucleic Acid Enzyme -- 7. Reference Gene: In-Species Universality Versus Between-Species Uniquity -- 8. Super PCR -- 9. PCR-Based Technologies for Identifying Unknown Gene Sequences -- 10. Triplex Nucleic Acids -- 11. A Developed Accurate Digital PCR Detection Technology in Food Safety -- 12. Development of Accurate Nucleic Acid Detection Technology for Target Quantification -- 13. Recent Progress in High-Throughput Detection Technology for Food Safety -- 14. Detecting Targets Without Thermal Cycling in Food: Isothermal Amplification and Hybridization -- 15. Cell System-Based Biosensors for Food Safety -- 16. Aptamers and Their Application -- 17. Lateral Flow Nucleic Acid Biosensors -- 18. Nucleic Acid Biosensors for Food Safety -- 19. PCR Methods for Detecting GM Crops and Food

	in Agriculture and the Food Chain: A Review -- 20. The Identification and Detection Technology of Research in Microorganisms Including Living or Dead Bacteria -- 21. Characterization of Microbial Diversity in Food Chain: A Molecular Review -- 22. Identification and Assessment of Heavy Metal Pollution Using Nucleic Acid-Mediated Technologies -- 23. Genotoxicity Detection at the Molecular Level in Food Safety Assessment: Conventional Methods and Developments -- 24. A Molecular Review of the Detection of Specific Nucleic Acids by Amplification and Hybridization Characterization of Microbial Diversity in the Food Chain: A Molecular Review.
Sommario/riassunto	This book focuses on the development of functional nucleic acids and their applications of molecular detection methods in the context of food safety. The book has been expanded to 24 chapters based on the first edition including five newly-added chapters, of which involving the systematic introduction of currently-fashionable functional nucleic acid elements, the basic mechanism of diverse amplification technologies, and the novel design strategies of detection methods from the latest research findings for food safety. Offering a comprehensive overview of nucleic acids detection method in food safety for professionals and members of the public interested in this area.