

1. Record Nr.	UNINA9910807099003321
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Titolo	RFID & sensor network automation in the food industry : ensuring quality and safety through supply chain visibility // Selwyn Piramuthu, Wei Zhou
Pubbl/distr/stampa	Chichester, West Sussex, England : , : Wiley-Blackwell, , 2016 ©2016
ISBN	1-118-96743-7 1-118-96741-0
Descrizione fisica	1 online resource (305 p.)
Collana	THEi Wiley ebooks
Disciplina	363.19/26
Soggetti	Food industry and trade - Inventory control Food industry and trade - Safety measures Food industry and trade - Automation Radio frequency identification systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
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	Title Page; Copyright; Table of Contents; Preface; Acknowledgments; Part I: Introduction; Chapter 1: Book overview; 1.1 General trends; 1.2 Challenges faced by the food industry; 1.3 Traceability in the food industry; 1.4 Structure of this book; References; Chapter 2: RFID, sensor networks; Summary; 2.1 History of RFID and relevant technologies; 2.2 Technology overview of RFID; 2.3 RFID and sensor networks integration in the food industry; 2.4 RFID implementation challenges; References; Part II: RFID in food production, the supply chain, retailing, and sustainability Chapter 3: RFID in agriculture Summary; 3.1 Agricultural production systems; 3.2 RFID-enabled sensor network automation in agriculture; 3.3 Standards, challenges, and limitations; References; Chapter 4: RFID and sensor network in food processing; Summary; 4.1 Automated food-processing technologies; 4.2 RFID and sensor network automation in food processing; 4.3 Case study; References; Chapter 5: RFID in food supply-chain management; 5.1 RFID and the food supply

chain; 5.2 Food supply chain traceability; 5.3 Global food supply chain e-collaboration; 5.4 Cold-chain logistics with RFID  
5.5 Third-party certification (TPC)5.6 Case studies; References; Chapter 6: RFID in food retailing; Summary; 6.1 Internationalized food marketing and retailing; 6.2 Dynamic food retailing management with RFID; 6.3 Multiple-channel retailing of food products; 6.4 Food retail inventory management; 6.5 Loyalty program and customer-relationship management with RFID; References; Chapter 7: Sustainability and green food supply chain; Summary; 7.1 CF and LCA; 7.2 Challenges associated with CF for food items; 7.3 Local food and the food miles concept; 7.4 CO2e labels  
7.5 Practicality of carbon footprint measurement and credit assignments 7.6 RFID use in carbon label information generation; 7.7 Reducing emissions through supply-chain efficiency; References; Chapter 8: Perishable food and cold-chain management; Summary; 8.1 Cold-chain management; 8.2 Traceability in cold chains; 8.3 Contamination, ePedigree, supply-chain visibility; 8.4 Food safety and traceability; 8.5 RFID for traceability in cold chains; 8.6 Case studies; References; Part III: Food quality, safety, policy, and future; Chapter 9: REID for food quality, safety, and security; Summary  
9.1 Food quality and safety 9.2 Biosensors for food borne pathogens; 9.3 Food spoilage and food borne illness; 9.4 Prevention and retardation of food spoilage; 9.5 Microbial detection, GIS, sensor networks; 9.6 Case study: RFID helps ensure safety in meat processing; References; Chapter 10: Big data in the food industry; Summary; 10.1 What are big data?; 10.2 Data analytics; 10.3 Big data in the food industry; 10.4 Big data and the food supply chain; References; Chapter 11: Food policy and regulations with information technology; Summary  
11.1 The role of RFID and sensor networks in food-safety certification

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