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Autore	Miggelbrink Judith
Titolo	Staatliche Grenzen / / Judith Miggelbrink
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ISBN	3-11-064169-0 3-11-064552-1
Descrizione fisica	1 online resource (56 pages)
Collana	Dialektik des Globalen. Kernbegriffe ; ; 4
Disciplina	320.12
Soggetti	Political geography Electronic books.
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
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Nota di contenuto	Frontmatter -- Inhalt -- 1. Einleitung -- 2. Border und bordering, borderscape und Grenzregime: Eine begriffliche Vorbemerkung -- 3. Staatliche Grenzen im Kontext räumlicher Strukturierungen des Sozialen -- 4. Souveränität und Grenzsicherung -- 5. Identität und Identifikation -- 6. Versicherheitlichung und preparedness -- 7. "Smart Borders": Ausdifferenzierung von Grenzfunktionen -- 8. Der Ort der Grenze: Verortung und Entortung von Kontroll- und Überwachungspraktiken -- 9. Grenzland: Grenze und (lokale) Alltagspraktiken -- 10. Zusammenfassung
Sommario/riassunto	Staatliche Grenzen sind in Europa ein zentraler Topos politischer Auseinandersetzungen, in denen liberale, national-konservative, populistische und offen rassistische Positionen artikuliert werden. Welche Funktionen haben sie? Welche Effekte und Widersprüche im Hinblick auf die Kontrolle welcher Mobilitäten werden durch Grenzen produziert? Diesen Fragen geht dieser Band nach.

2.	Record Nr.	UNIORUON00294015
	Autore	KONRAD : von Würzburg
	Titolo	Die Legenden / Konrad von Würzburg ; herausgegeben von Paul Gereke
	Pubbl/distr/stampa	Halle ((Saale), : Niemeyer, 1925-1927
	Descrizione fisica	3 v. ; 20 cm.
	Disciplina	831.2
	Lingua di pubblicazione	Tedesco
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
3.	Record Nr.	UNICAMPANIAVAN00286325
	Autore	Strachan, Tom
	Titolo	Genetica & genomica : nelle scienze mediche / Tom Strachan, Anneke Lucassen
	Pubbl/distr/stampa	Bologna, : Zanichelli, 2024
	ISBN	978-88-08-29954-3
	Edizione	[2. ed.]
	Descrizione fisica	XVI, 512 p. : ill. ; 27 cm
	Altri autori (Persone)	Lucassen, Anneke
	Disciplina	576.5
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia

4. Record Nr.	UNINA9911046728703321
Autore	Lu Xiaonan
Titolo	Smart Food Safety
Pubbl/distr/stampa	San Diego : , : Elsevier Science & Technology, , 2024 ©2025
ISBN	9780443313578
Edizione	[1st ed.]
Descrizione fisica	1 online resource (372 pages)
Collana	Issn Series
Disciplina	664.00289
Soggetti	Smart materials Machine learning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Front Cover -- Series Page -- Advances in Food and Nutrition Research -- Copyright -- Contents -- Contributors -- Preface -- Reference -- Chapter One: Smart food packaging: Recent advancement and trends -- 1 Introduction -- 2 Active packaging -- 2.1 Oxygen scavengers -- 2.2 CO2 emitters -- 2.3 Ethylene scavengers -- 2.4 Antimicrobial and antifungal materials -- 2.4.1 Essential oils -- 2.4.2 Metallic nanomaterials -- 2.5 Smart active packaging -- 3 Intelligent packaging -- 3.1 Indicators -- 3.1.1 Integrity indicators -- 3.1.2 Time temperature indicator (TTI) -- 3.1.3 Freshness indicators -- 3.2 Sensors -- 3.2.1 Gas sensors -- 3.2.2 Biosensors -- 3.3 Data carrier -- 3.3.1 Barcodes -- 3.3.2 Radio frequency identification (RFID) -- 3.4 Smart intelligent packaging -- 4 Dual-function smart packaging -- 5 Challenges and opportunities -- References -- Chapter Two: Frontiers of machine learning in smart food safety -- 1 Introduction -- 1.1 Definition of smart food safety -- 1.2 The role of ML in advancing food safety -- 1.2.1 Pre-harvest stage -- 1.2.2 Post-harvest stage -- 1.3 Current state of smart food safety -- 2 Application of ML techniques in food safety -- 2.1 Food quality inspection and detection -- 2.2 Recognition of food fraud and adulteration -- 2.3 Advanced food processing and packaging monitoring -- 2.4 Raw material traceability and supply chain verification -- 2.5 Early warning system of foodborne illness outbreaks -- 3 Case studies of cutting-edge ML applications --

3.1 Predicting and improving complex beer flavor through machine learning -- 3.2 Exploring deep learning's role in ensuring food safety: an exploration of natural language processing and time-series forecasting in food safety -- 3.3 Utilizing crowdsourcing and ML to identify potential foodborne outbreaks through social media data analysis.

4 Challenges and potential solutions in implementing ML for smart food safety -- 4.1 Challenges in implementing smart food safety systems -- 4.2 Insights into potential solutions -- 5 Conclusion and future perspectives -- 5.1 Emerging trends in ML technologies -- 5.2 Key influential social and industrial factors for smart food safety -- 5.3 Regulatory and policy shifts in the era of AI-driven food safety -- Declaration of AI and AI-assisted technologies in the writing process -- References -- Chapter Three: Virtualization and digital twins of the food supply chain for enhanced food safety -- 1 Introduction -- 2 Virtual foods, processes and supply chains-definitions, classification, advantages and limitations -- 2.1 Definitions and classification -- 2.2 Advantages and limitations -- 3 Constructing virtual foods, processes and supply chains-data requirements and modeling approaches -- 3.1 Data sources and requirements -- 3.1.1 Physical properties and internal structure -- 3.1.2 Chemical composition and microbiota -- 3.1.3 Processing and distribution conditions -- 3.1.4 Workforce and consumer behavior -- 3.2 Modeling requirements -- 3.3 Applications to enhance food safety -- 3.3.1 Substituting and enhancing conventional monitoring -- 3.3.2 Evaluating safety concerns associated with new product development, ingredient substitutions, process modifications or supply chain logistics -- 3.3.3 Assess the extent and potential propagation of safety risks along the supply chain -- 3.3.4 Streamlining tracking, operationalizing practical simulations, and improving the performance of physical systems -- 3.3.5 Improve workforce safety -- 3.3.6 Assist policymakers in informing regulations -- 4 Final remarks -- Acknowledgments -- References -- Chapter Four: Modernization of digital food safety control -- 1 Introduction -- 2 Digital detection methods for food safety. 2.1 Portable spectroscopic devices and smartphones -- 2.2 Digital microfluidic chips for food safety analysis -- 2.3 Intelligent biosensors for food safety and security -- 2.4 Artificial sense-based strategies -- 3 Digital food safety control in food industry -- 3.1 Raw materials -- 3.2 Food processing -- 3.3 Food packaging and storage -- 3.4 Food supply chain and food transportation -- 4 Digital food safety control system -- 4.1 Smarter tools and approaches -- 4.2 Tech-enabled traceability platform -- 4.3 Digital information management system and risk assessment -- 4.4 Data sharing in digital food safety systems -- 5 Conclusion -- References -- Chapter Five: Ensuring food safety by artificial intelligence-enhanced nanosensor arrays -- 1 Introduction -- 2 Types of nanosensor arrays -- 2.1 Optical nanosensor arrays -- 2.1.1 Fluorescent nanosensor arrays -- 2.1.1.1 Metal nanoclusters-based fluorescent sensor arrays -- 2.1.1.2 MOF-based fluorescent sensor arrays -- 2.1.1.3 CD-based fluorescent sensor arrays -- 2.1.2 Colorimetric nanosensor arrays -- 2.1.2.1 Metal nanoparticle-based colorimetric sensor arrays -- 2.1.2.2 MOF-based colorimetric sensor arrays -- 2.1.2.3 Carbon nanomaterial-based colorimetric sensor arrays -- 2.1.3 Other types of optical nanosensor array -- 2.2 Electrochemical nanosensor arrays -- 2.2.1 Metal nanoparticle-based electrochemical sensor arrays -- 2.2.2 MOF-based electrochemical sensor arrays -- 2.2.3 Carbon nanomaterial-based electrochemical sensor arrays -- 3 Analysis of sensor array data through machine learning algorithms -- 3.1 Unsupervised learning algorithms -- 3.1.1

PCA -- 3.1.2 HCA -- 3.2 Supervised learning algorithms -- 3.2.1 LDA -- 3.2.2 PLS-DA -- 3.2.3 SVM -- 3.2.4 RF -- 3.2.5 ANN -- 3.2.6 CNN -- 4 Integration of sensor arrays with smart devices -- 5 Application of AI-powered nanosensor arrays in food safety.

5.1 Biotoxin -- 5.2 Pesticide -- 5.3 Heavy metal ion -- 6 Concluding remarks and future challenges -- References -- Chapter Six: Machine learning-enabled colorimetric sensors for foodborne pathogen detection -- 1 Introduction -- 2 Methodology of colorimetric sensing for foodborne pathogens -- 2.1 Colorimetric sensing systems -- 2.1.1 Targeted sensing with biorecognition unit -- 2.1.2 Non-targeted sensing without biorecognition units -- 2.2 Sensor substrate -- 2.2.1 Substrate materials -- 2.2.2 Advances in substrate design -- 2.3 Color change signal processing -- 2.3.1 Naked-eye signal processing -- 2.3.2 Instrumentation-based signal processing -- 3 Machine learning approaches for improved sensor application -- 3.1 Unsupervised ML -- 3.2 Supervised ML -- 3.3 Traditional supervised ML -- 3.4 Deep learning -- 4 Current hurdles to food industry applications of CFPS -- 4.1 Apparatus performance hurdles -- 4.1.1 Specificity amidst complex food matrices -- 4.1.2 Sensitivity -- 4.2 Practical hurdles -- 4.2.1 Sensor temporal changes -- 4.2.2 Sensor safety -- 5 Conclusion -- Acknowledgments -- References -- Chapter Seven: Intelligent food packaging for smart sensing of food safety -- 1 Introduction -- 2 Indicators for food quality -- 2.1 Temperature -- 2.2 Oxygen (O₂) -- 2.3 Carbon dioxide (CO₂) -- 2.4 Total volatile basic nitrogen (TVB-N) -- 2.5 Humidity -- 2.6 Spoilage causing and pathogenic microorganisms -- 3 Materials for creating intelligent packaging -- 3.1 Packaging materials -- 3.1.1 Plastics -- 3.1.2 Metals -- 3.1.3 Papers -- 3.1.4 Polysaccharide-based materials -- 3.2 Common sensing techniques -- 3.2.1 Colorimetric sensing -- 3.2.2 Time-temperature indicators (TTIs) -- 3.2.3 Wireless sensing devices -- 3.2.4 Electronic nose -- 3.2.5 Biosensors -- 4 Real-world application -- 4.1 Seafood -- 4.2 Red meat -- 4.3 Dairy.

4.4 Fruits, vegetables, and other products -- 5 Conclusion -- Acknowledgments -- Declaration of competing interest -- References -- Chapter Eight: Application of photothermal effects of nanomaterials in food safety detection -- 1 Introduction -- 2 Photothermal conversion mechanism of nanomaterials -- 2.1 Plasmonic localized heating -- 2.2 Nonradiative relaxation in semiconductors -- 2.3 Thermal vibrations of molecules -- 2.4 Calculation of photothermal conversion efficiency -- 3 Preparation of photothermal nanomaterials -- 3.1 Preparation of noble metal photothermal nanomaterials -- 3.1.1 Chemical reduction -- 3.1.2 Seed-mediated growth -- 3.1.3 Photochemical methods -- 3.2 Carbon-based photothermal nanomaterials -- 3.2.1 Chemical vapor deposition -- 3.2.2 Arc discharge -- 3.2.3 Laser ablation -- 3.3 Other photothermal nanomaterials -- 3.3.1 Solvothermal/hydrothermal synthesis -- 3.3.2 Microwave-assisted synthesis -- 3.3.3 Thermal decomposition -- 4 Application of photothermal nanomaterials in food safety -- 4.1 Application of photothermal nanomaterials in food hazard detection -- 4.1.1 Application in detection of pesticide residues and veterinary drug residues -- 4.1.2 Application in detection of heavy metals -- 4.1.3 Application in detection of food additives -- 4.1.4 Application in detection of biotoxins -- 4.1.5 Application in detection of foodborne pathogens -- 4.2 Photothermal nanomaterials-based method for rapid detection -- 4.2.1 Photothermal nanomaterials-based immunochromatographic strip -- 4.2.2 Photothermal nanomaterials-based detection chip -- 4.2.3 Photothermal nanomaterials-based detection kit -- 4.2.4 Other photothermal nanomaterial-based rapid

detection methods -- 5 Summary -- References -- Chapter Nine:
Microfluidics in smart food safety -- 1 Introduction -- 2 Fundamentals
of microfluidics.

2.1 Basic principles of microfluidics technology.

Sommario/riassunto

This volume, part of the Advances in Food and Nutrition Research series, focuses on smart food safety technologies. Edited by Xiaonan Lu, it presents recent advancements in intelligent packaging, machine learning applications, and nanosensor arrays aimed at enhancing food safety and quality. The book explores the integration of active and intelligent packaging systems that incorporate sensors and active molecules for real-time monitoring and extended shelf life of food products. It also discusses the role of digital twins and photothermal nanomaterials in improving food safety. The research targets professionals in food science and technology, offering insights into emerging trends and challenges in the field.
