

Routledge

Science and Technology Catalogue

July - December 2025

New and Forthcoming Titles

Apple Academic Press, Environment & Sustainability, Food & Nutrition, Forensics & Homeland Security, Jenny Stanford Publishing and Life Science



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Welcome to the July to December 2025 Science and Technology Catalogue.

Subjects include Apple Academic Press, Environment & Sustainability, Food & Nutrition, Forensics & Homeland Security, Jenny Stanford Publishing and Life Science.

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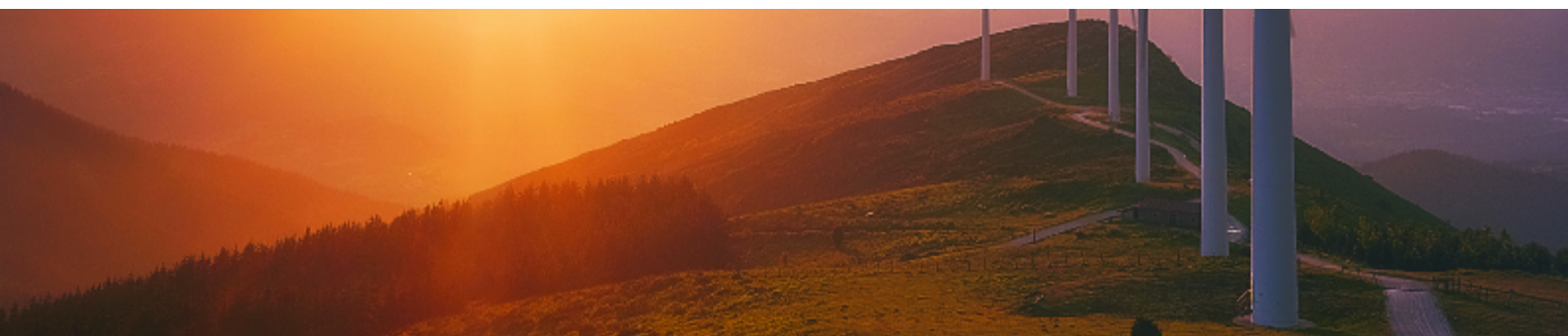


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Advanced Digital Technologies in Financial and Business Management

Unleashing the Power of Artificial Intelligence, Machine Learning, Blockchain, and the Internet of Things



Edited by **Jyoti Batra Arora , Nitish Pathak , Neelam Sharma**

Explores emerging technologies for the development of business and finance sectors and to strengthen economic growth. It discusses the amalgamation of techniques and trends in the financial and business technology to facilitate the efficiency and creation of new and innovative business and finance management applications. It covers the state-of-the-art technologies such as artificial intelligence and big data analytics in fintech and finance, blockchain technology in the insurance industry, the use of AI and data science in tax administration, the growing use of 6G in industrial automation, quantum machine learning in finance, and more.

Apple Academic Press
July 2025 : 376pp
Hb: 978-1-774-91768-8 : **£150**
eBook: 978-1-003-55827-9

* For full contents and more information, visit: www.routledge.com/9781774917688

Advanced Materials for Next-Generation Technologies

Challenges and New Prospects



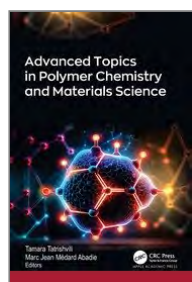
Edited by **Shrikaant Kulkarni , Vipul Srivastava , Rabah Khenata , Yarub Al-Douri**

Presents insight into the advances in materials with special reference to their structure, physical behaviors, and applications. It sheds light on the organizational and orientational order of the atoms responsible for characteristics and distinct architectures in these materials. It discusses how the materials can be maneuvered for attaining structural optimality. It explores novel materials for new technologies that make use of their properties, such as electronic band structure, band gap, half-metallicity, multiferroic behavior, piezoelectricity, thermoelectricity, optoelectronic behavior, and more.

Apple Academic Press
September 2025 : 316pp
Hb: 978-1-774-91780-0 : **£150**

* For full contents and more information, visit: www.routledge.com/9781774917800

Advanced Topics in Polymer Chemistry and Materials Science



Edited by **Tamara Tatrishvili , Marc Jean Médard Abadie**

Focuses on the creation of new polymeric materials with improved properties. It highlights new concepts, achievements, and investigations in polymer chemistry and chemical engineering and provides a survey of the important categories of polymers, including commodity thermoplastics and fibers, elastomers and thermosets, and engineering and specialty polymers. Scientists and researchers in the field of polymer functional materials will find much food for thought in this volume.

Apple Academic Press
July 2025 : 424pp
Hb: 978-1-774-91938-5 : **£210**
eBook: 978-1-003-59487-1

* For full contents and more information, visit: www.routledge.com/9781774919385

Advances in AI for Cloud, Edge, and Mobile Computing Applications



Edited by **Shrikaant Kulkarni , P. William**

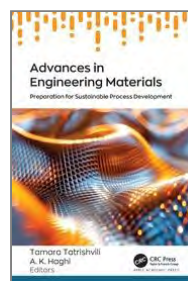
Presents advances in AI applications, highlighting advances in edge, cloud, and mobile computing and how they can be integrated with advanced AI for enhancing services, privacy, and security. It explores algorithms, architectures, reliable AI-powered IoTs, and other aspects in networking and applications in diverse frontiers. It covers topics like the use of anomaly detection in AI in a cloud-fuzzy environment, holistic resource management based on AI and sustainable cloud computing, AI for enhanced privacy and security in smart environments, AI in wireless sensor networks, and more.

Apple Academic Press
July 2025 : 392pp
Hb: 978-1-779-64373-5 : **£180**
eBook: 978-1-003-63770-7

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Advances in Engineering Materials

Preparation for Sustainable Process Development



Edited by **Tamara Tatrishvili , A. K. Haghi**

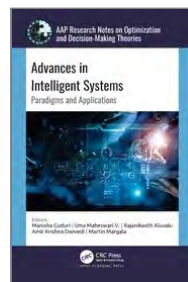
Covers recent developments in materials technology and science, providing deep insight into advanced materials in regard to structural and physical behavior and sustainable real-world applications. It reports on recent developments in the practical application of novel materials for emerging technologies, highlighting exciting mechanical and chemical behaviors and properties of new materials. It also addresses the relationship between structural identities of materials with their property profile.

Apple Academic Press
July 2025 : 300pp
Hb: 978-1-779-64372-8 : **£170**

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Advances in Intelligent Systems

Paradigms and Applications



Edited by **Manisha Guduri , Uma Maheswari V , Rajanikanth Aluvalu , Amit Krishna Dwivedi , Martin Margala**

Series: AAP Research Notes on Optimization and Decision Making Theories

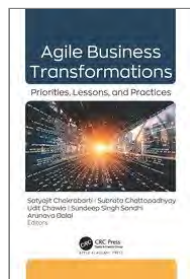
Covers a range of advances in intelligent systems that involve applications of AI and digital automation such as machine learning, deep learning, sectional convolutional neural network models, and more. It covers advances in predictive analysis, like using AI for leukemia detection and classification, an Xception model for the prediction of monkeypox disease, sectional convolutional neural network (S-CNN) model for automated covid detection, and more. A section on electronic circuits and assistive technologies looks at medical image watermarking using RDWT-SVD-DCT for secure medical data transmission in healthcare systems.

Apple Academic Press
September 2025 : 380pp
Hb: 978-1-774-91698-8 : **£150**

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Agile Business Transformations

Priorities, Lessons, and Practices



Edited by **Satyajit Chakrabarti, Subrata Chattopadhyay, Udit Chawla, Sundeeep Singh Sonshi, Arunava Dalal**

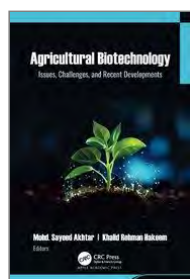
Compiles opinions, case studies, and best practices of academics, professionals, and thought leaders who have worked on the agile transformation path, emphasizing a sustainability perspective in a dynamic world. It explores the core of agile ideas, methods, and frameworks, showing how they can be modified and put into practice to suit various business domains and operational scales. It offers insight on agile approaches and their significant influence on numerous facets of contemporary businesses, such as project management, product development, human resources, customer engagement, and strategic planning.

Apple Academic Press
July 2025 : 410pp
Hb: 978-1-774-91858-6 : £150
eBook: 978-1-003-55934-4

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Agricultural Biotechnology

Issues, Challenges, and Recent Developments



Edited by **Mohd. Sayeed Akhtar, Khalid Rehman Hakeem**

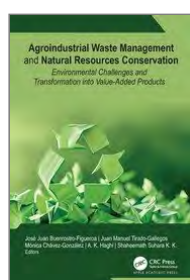
Covers the uses of novel technologies for production, formulation, and synthesis of biological substances from the living organisms. It explores the practical uses of biopharmaceuticals, demonstrating their effectiveness in the treatment of various illnesses, such as cancer, autoimmune disorders, and infectious diseases. It also delves into the difficulties and possibilities linked to the advancement of biopharmaceuticals. Volume 1 introduces and overviews pharmaceutical technology, covering the principals and science of biotechnology. Volume 2 covers specialized areas, including biotherapeutics, principals and science of vaccinology, bioprocess technology, and more.

Apple Academic Press
July 2025 : 346pp
Hb: 978-1-774-91920-0 : £170
eBook: 978-1-003-63808-7

* For full contents and more information, visit: www.routledge.com/9781774919200

Agroindustrial Waste Management and Natural Resources Conservation

Environmental Challenges and Transformation into Value-Added Products



Edited by **Jose Juan Buenrostro-Figueroa, Juan Manuel Tirado-Gallegos, Mónica L. Chávez-González, A. K. Haghi, Shaheemath Suhara K. K**

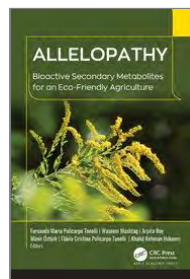
Addresses the reuse of food residue and byproduct valorization of fruits, vegetables, and seeds, providing a thorough survey of natural resource management. It also provides theoretical and experimental methods used to study different aspects of valorization techniques for agri-food wastes and byproducts management in parallel to conservation of nature. It discusses sustainability challenges related to food wastes and byproducts valorization along with emerging recovery technologies, conveying circular economy concepts by managing the "natural" environment and its resources.

Apple Academic Press
July 2025 : 292pp
Hb: 978-1-774-91868-5 : £170
eBook: 978-1-003-59530-4

* For full contents and more information, visit: www.routledge.com/9781774918685

Allelopathy

Bioactive Secondary Metabolites for an Eco-Friendly Agriculture



Edited by **Fernanda Maria Policarpo Tonelli, Waseem Mushtaq, Arpita Roy, Münir Öztürk, Flávia Cristina Policarpo Tonelli, Khalid Rehman Hakeem**

Provides a brief history of allelopathy and explores its importance in environmental health and sustainable agriculture, discussing allelopathy from a biotechnological point of view. It reviews synthetic pesticides and the environmental pollution associated with them and looks at allelochemicals as useful bioactive secondary metabolites. It discusses allelopathy induction in crops by natural selection, the main pathways involved in allelochemical production, and plant breeding in allelopathy. It details the theme of allelopathy and agricultural sustainability, covering plant-based anthelmintic as a new trend in solving various agricultural issues.

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Applied Soft Computing Techniques

Theoretical Principles and Practical Applications



Edited by **Samarjeet Borah, Ratna Raja Kumar Jambi, Sharifah Sakinah Syed Ahmad, Mahendra Prabhakar Deore**

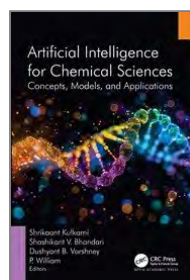
Explores use of applied soft computing techniques in biomedical applications, communication technologies, data analytics and applications, image processing, and natural language processing. It explores soft computing techniques for cancer data analysis, depression and mental health analysis, heart disease detection, etc. It discusses their use in communication systems, looking at graphs, design processes, and mapping techniques, drone technology, etc. It details how soft computing methodologies can assist in tackling the obstacles associated with signal processing, network optimization, quality of service, and beyond.

Apple Academic Press
July 2025 : 464pp
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eBook: 978-1-003-59313-3

* For full contents and more information, visit: www.routledge.com/9781774918845

Artificial Intelligence for Chemical Sciences

Concepts, Models, and Applications



Edited by **Shrikaant Kulkarni, Shashikant Bhandari, Dushyant Varshney, P. William**

Explores the use of AI and its various computer-aided applications in the design of new drugs and chemical products, for toxicity prediction and biodegradation, and for fault diagnosis in chemical processing plants. It provides mathematical and nonmathematical applications of artificial intelligence in chemical sciences. It explores various approaches in the field of chemintelligence to make predictions about the right molecules with given structures and properties as precursors or starting materials, reaction pathways, reaction conditions, improvement in the reaction efficiency and selectivity.

Apple Academic Press
May 2025 : 414pp
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eBook: 978-1-003-56928-2

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Attacks on Artificial Intelligence

The New Facets of Cyber Ecospace



Edited by **Kukatlapalli Pradeep Kumar , Boppuru Rudra Prathap , Vinay Jha Pillai , Prasenjith Chatterjee**

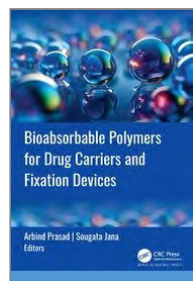
Series: AAP Research Notes on Optimization and Decision Making Theories

Takes AI security concerns into consideration and examines recent developments and issues in attacks that target artificial intelligence-based systems and AI-based cyber infrastructures while also presenting research on using AI technologies to prevent attacks. It presents challenges and new research on both offensive and defensive artificial intelligence in cyberspace and offers technical strategies to protect against such attacks. Topics discussed include AI in secure video surveillance systems, an AI-secured visitor management system, a digital forensics analysis for adversarial attacks in AI-based systems, etc.

Apple Academic Press
September 2025 : 296pp
Hb: 978-1-774-91622-3 : £150

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Bioabsorbable Polymers for Drug Carriers and Fixation Devices



Edited by **Arbind Prasad , Sougata Jana**

Deals with the latest bio-based composites, processing, and characterization for drug delivery and fixation devices. It introduces various bioresorbable polymers along with their processing and characterization. It also looks at scaffolds that are multifunctional and can be used for bone support, drug delivery, and for anti-inflammatory, anti-microbial purposes. Various materials like nanomaterials, chitosan and its derivatives, biopolymers, and ceramic-based composites along with their applications are covered. It looks at the degradation of biomaterials and propose mitigation solutions.

Apple Academic Press
May 2025 : 314pp
Hb: 978-1-774-91866-1 : £150
eBook: 978-1-003-56981-7

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Biomedical Waste Management

Recycling and Remediation Strategies



Edited by **Younis Ahmad Hajam , Javid Ahmad Malik , Anu Pandita , Deepu Pandita**

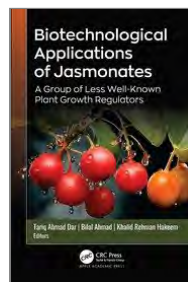
Provides latest on the management of biomedical waste, presenting an overview of the problems of such wastes as well as effective management, the consequences of mismanagement of biomedical waste, and future remediation methods. It presents a selection of chemical, biochemical, microbiological, and biotechnological approaches for effective biowaste management. It introduces types and sources of biomedical waste, including characterization, color-coding, segregation, transportation, and disposal methods. It examines strategies for the safe management of waste, use of common microorganisms for pharmaceutical biodegradation, and the management of e-waste

Apple Academic Press
July 2025 : 390pp
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eBook: 978-1-003-59543-4

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Biotechnological Applications of Jasmonates

A Group of Less Well-Known Plant Growth Regulators



Edited by **Tariq Ahmad Dar , Bilal Ahmad , Khalid Rehman Hakeem**

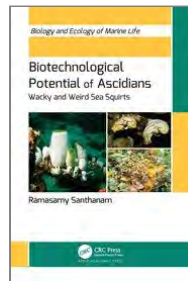
Details the practical applications of jasmonates in agriculture: their multifunctional role in stress tolerance, their role in growth and development, as well as their protective role during heavy metal stress. It provides information on jasmonate structure, biosynthesis, signaling, and practical applications of jasmonates in horticulture. It also discusses their role in plant growth and development, detailing on the cross-talk of jasmonates with secondary metabolites, antioxidants, and secondary messengers and their role in mediating the stress responses. Other topics covered include the role of jasmonates in regulation of growth and development, biosynthetic pathways, and more.

Apple Academic Press
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eBook: 978-1-003-59569-4

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Biotechnological Potential of Ascidians

Wacky and Weird Sea Squirts



Edited by **Ramasamy Santhanam**

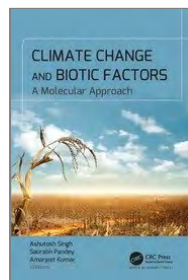
Provides latest information on the biotechnological potential of the as-yet understudied world of ascidians (sea squirts). It covers aspects of ascidians such as species diversity, ecology, and biology and then proceeds to explore their diverse uses. The book deals with their many biotechnological applications in the production and development of human food and as feed for aquatic farmed animals; for their therapeutic values from natural compounds in medicine; for their production of pure and high-quality cellulose that can be used in industrial products and by-products; for their bioremediating agents against marine pollution.

Apple Academic Press
September 2025 : 226pp
Hb: 978-1-774-91988-0 : £150

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Climate Change and Biotic Factors

A Molecular Approach



Edited by **Ashutosh Singh , Saurabh Pandey , Amarjeet Kumar**

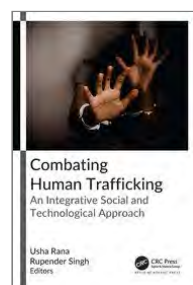
Explores how climate change influences the dynamics of pests, diseases, and other biotic stresses, and how these factors, shape the response of plants and microorganisms to the changing climate. It studies the effects of climate change on pest and disease incidence of crop plants. It introduces climate change that results in unpredictability of rainfall and temperature, two factors that drive spreading of pests and diseases. It deals with breeding and molecular approaches to tackling pest disease in changing climate. It explores the potential for utilizing molecular tools for mitigating the negative impacts of climate change on biotic factors and promoting sustainable ecosystems.

Apple Academic Press
May 2025 : 450pp
Hb: 978-1-774-91848-7 : £170
eBook: 978-1-003-56870-4

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Combating Human Trafficking

An Integrative Social and Technological Approach



Edited by **Usha Rana , Rupender Singh**

Thoroughly examines the issue of human trafficking and offers a blueprint for its eradication. It delves into the intricacies of human trafficking, dissecting the factors that sustain its existence. It critically assesses existing anti-trafficking initiatives and introduces a novel approach rooted in a sociotechnical framework that models a multidisciplinary strategy that combines both social and technological interventions. Recognizing human trafficking's multifaceted origins, this framework underscores the necessity for a holistic approach that addresses the root causes of trafficking and its associated forms of exploitation

Apple Academic Press
July 2025 : 364pp
Hb: 978-1-774-91872-2 : £140
eBook: 978-1-003-59719-3

* For full contents and more information, visit: www.routledge.com/9781774918722

Contemporary Advancements in Materials Technology

Novel Solutions to Complex Problems



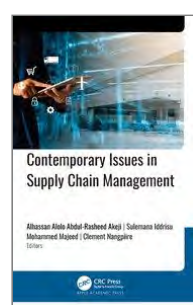
Edited by **Shrikaant Kulkarni , Vipul Srivastava , P. William**

Provides novel solutions to the problems in the field of materials technology, helping to pave the way in designing new materials for the future. The authors provide a comprehensive and theoretical understanding as well as experimental findings integrated with theory for furthering research in materials science and engineering. The book looks at advances and trends, tools and technologies, and characterization of smart materials and novel materials, highlighting the correlation between structure-property-utility in the materials. It also deliberates how materials can be fabricated for acquiring optimal performance in tandem with applications.

Apple Academic Press
September 2025 : 342pp
Hb: 978-1-774-91794-7 : £170
eBook: 978-1-003-56185-9

* For full contents and more information, visit: www.routledge.com/9781774917947

Contemporary Issues in Supply Chain Management



Edited by **Alhassan Aolo Abdul-Rasheed Akeji , Sulemana Iddrisu , Mohammed Majeed , Clement Nangpiire**

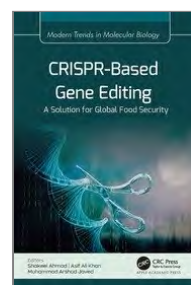
Covers a wide range of timely issues and challenges in supply chain management. Covering myriad issues and current trends in supply chain management and logistics, the volume discusses integrating advanced technology in SCM, such as artificial intelligence, blockchain, the Internet of Things, cyber security techniques, etc.; the impact of social media and consumer behavior on supply chain management, applying green supply chain management policies and methods, new smart transportation methods, and more. It looks at how the recent COVID-19 pandemic affected supply chain management globally, along with lessons learned for effective management for future such events.

Apple Academic Press
September 2025 : 364pp
Hb: 978-1-779-64360-5 : £180

* For full contents and more information, visit: www.routledge.com/9781779643605

CRISPR-Based Gene Editing

A Solution for Global Food Security



Edited by **Shakeel Ahmad , Asif Ali Khan , Muhammad Arshad Javed**

Series: Modern Trends in Molecular Biology

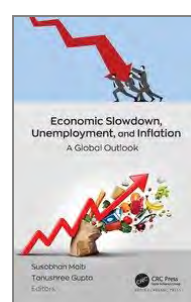
Highlights the new frontiers and applications of the cutting-edge CRISPR-based gene editing systems in plants and animals for their improvement. It gives introduction to the CRISPR-based gene editing technique, its discovery, evolution, developments, classification, and diversity. It also reviews the applications of CRISPR-Cas systems in improving plants' biotic and abiotic stress tolerance, increasing nutritional quality and yield, and more. It reviews the application of CRISPR-Cas in the development of desirable livestock and large animals to achieve global food security. In addition, the regulatory aspects and the risks associated with this technology are discussed as well.

Apple Academic Press
July 2025 : 386pp
Hb: 978-1-774-91598-1 : £170
eBook: 978-1-032-71214-7

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Economic Slowdown, Unemployment, and Inflation

A Global Outlook



Edited by **Susobhan Maiti , Tanushree Gupta**

Delves into vital economic challenges that countries face as impacted by epidemics, inflation, recessions, wars, social uprising, and myriad other economic and social issues and events. It looks at issues such as economic deceleration, unemployment, and inflation and helps to navigate this intricate landscape by providing a comprehensive understanding of the issues at hand. It also explores the impact of electricity consumption on trade volume across countries, digital technologies and their impact on unemployment and wage inequalities, industry 5.0 and society 5.0 as keys for crisis-resilient humanity-centered global development, and more.

Apple Academic Press
September 2025 : 396pp
Hb: 978-1-779-64345-2 : £150

* For full contents and more information, visit: www.routledge.com/9781779643452

Emerging Digitalization Trends in Business and Management

A Roadmap to Industry 5.0



Edited by **Mansi Babbar , Mohammed Majeed , Mustahid M. Husain , Nitu Ghosh**

Addresses the contemporary developments in Industry 5.0 and its role in business and management, discussing emerging digitalization and its significance and challenges in business, entrepreneurship, and management. It presents a diverse range of views and concepts on advancements in digitalization trends, Industry 5.0, and their applications along with their advantages and disadvantages. It highlights the importance and challenges of digitalization and trends in adopting digital technology in various business functions and sectors.

Apple Academic Press
July 2025 : 472pp
Hb: 978-1-774-91704-6 : £170
eBook: 978-1-003-50335-4

* For full contents and more information, visit: www.routledge.com/9781774917046

Environmental Health Engineering and Effective Remediation

Sustainable Technology Products and Materials



Edited by **José Juan Buenrostro-Figueroa , Mónica L. Chávez-González , Theresa Obiajulu Egbuchunam , Leonardo Sepúlveda Torre , A. K. Haghi**

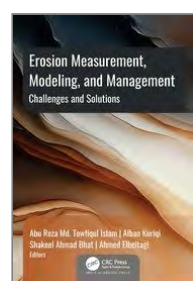
Covers concepts and innovative approaches to sustainable development with respect to environmental health, looking at issues such as climate change, pollution control, liquid waste, solid waste management, toxic chemical exposure, food and agro-industrial waste, etc. It reviews and reports on current and potential remediation techniques to tackle major environmental contamination issues, presenting novel and effective solutions by bringing the work of international experts to the forefront. It reports on practical achievements in environmental safety, environmental pollution control, and more. It explores process engineering, modeling and optimization of waste management.

Apple Academic Press
September 2025 : 280pp
Hb: 978-1-774-91910-1 : **£170**

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Erosion Measurement, Modeling, and Management

Challenges and Solutions



Edited by **Abu Reza Md. Towfiqul Islam , Alban Kuriqi , Shakeel Ahmad Bhat , Ahmed Elbeltagi**

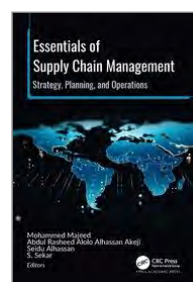
Emphasizes the various erosion concerns and solutions for dealing with them. It addresses the impact and effects of changing land use and land cover on soil erosion and various methods of assessing erosion as well as ways to control different types of erosion. The use of models such as WEPP model for estimating runoff and sediment yield, along with three models of erosion (USLE, MUSLE and RUSLE and SWAT) hazards are detailed. The book also discusses artificial neural networks and machine learning techniques (random forest), remote sensing data and GIS for mapping soil erosion. Finally, the challenges and limitations for the soil erosion models are also presented.

Apple Academic Press
September 2025 : 294pp
Hb: 978-1-774-91666-7 : **£170**

* For full contents and more information, visit: www.routledge.com/9781774916667

Essentials of Supply Chain Management

Strategy, Planning, and Operations



Edited by **Mohammed Majeed , Abdul Rasheed Alolo Alhassan Akeji , Seidu Alhassan , S. Sekar**

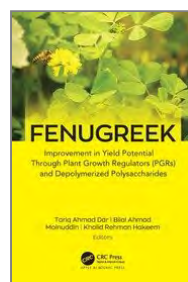
Details experience and research on effective supply chain management. It addresses logistics planning, logistics sourcing and outsourcing, inventory management, logistics functions, transportation functions, warehousing, the return of goods, on-demand planning, and customer service. It covers decision strategies on procurement using break-even analysis, the role of industry 4.0 software tools for sustainable supply chain management, how supply chain management affects the financial performance of businesses, the impact of transport system on firms, and more. It covers different sectors, including manufacturing, hospitality, and healthcare sectors.

Apple Academic Press
July 2025 : 266pp
Hb: 978-1-774-91880-7 : **£150**
eBook: 978-1-003-61984-0

* For full contents and more information, visit: www.routledge.com/9781774918807

Fenugreek

Improvement in Yield Potential through Plant Growth Regulators (PGRs) and Depolymerized Polysaccharides



Edited by **Tariq Ahmad Dar , Bilal Ahmad , Moinuddin , Khalid Rehman Hakeem**

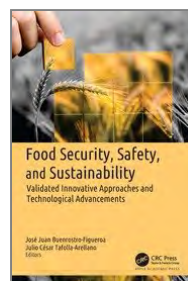
Offers review of fenugreek, highlighting its nutritional and medicinal applications while discussing methods for enhancing its yield and quality by improving the growth, physiological, and biochemical parameters of the plant. It discusses the origin and geographical distribution of fenugreek. It covers the characterization of bioactive compounds (BACs) in fenugreek and then presents effective methods to enhance the yield and quality. It examines the effect of plant growth regulators on growth and yield and looks at methods for heavy metal, biotic, and salinity stress alleviation in fenugreek.

Apple Academic Press
September 2025 : 342pp
Hb: 978-1-774-91916-3 : **£180**

* For full contents and more information, visit: www.routledge.com/9781774919163

Food Security, Safety, and Sustainability

Validated Innovative Approaches and Technological Advancements



Edited by **Jose Juan Buenrostro-Figueroa , Julio César Tafolla-Arellano**

Provides a global outlook to the problems facing the food sector. It explores integrated, context-specific approaches to food security and food safety and examines the measures that will be required to guarantee long-term sustainability of the food supply chain by reviewing the existing data to encourage action and identify knowledge gaps. It also provides a detailed account of the impacts of the food supply chain along with the basic concepts of environmental sustainability.

Apple Academic Press
June 2025 : 332pp
Hb: 978-1-774-91708-4 : **£180**
eBook: 978-1-003-51844-0

* For full contents and more information, visit: www.routledge.com/9781774917084

Functional Compounds and Foods of Plant Origin



Edited by **Krishan Dutt Sharma , Satish Kumar , Rakesh Sharma , Raj K. Keservani**

Reports on emerging and novel technologies for the development of functional foods from plants, providing a comprehensive look into plant-based functional foods, their characterization, validation, and their transformation into novel products. Discussing the nutraceutical potential of plant-based functional foods and compounds, the book considers millets, cereal, fruits, vegetables as well as the spices, herbs, and aromatic plants as potential functional incorporations in food owing to their health-promoting qualities. It provides insights into various value-added products from plants as a concentrated sources of nutritional bioactives, and health mediators.

Apple Academic Press
July 2025 : 526pp
Hb: 978-1-779-64362-9 : **£180**
eBook: 978-1-003-64004-2

* For full contents and more information, visit: www.routledge.com/9781779643629

Graft Copolymers for Biomedical and Tissue Engineering Applications



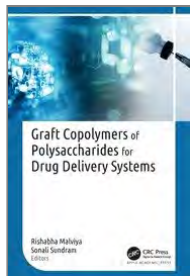
Edited by **Rishabha Malviya , Sonali Sundram**

Demonstrates possible potentials, presenting groundbreaking work on chitosan-based graft copolymers as well as cutting-edge research on graft polysaccharides as excipients for solid dosage forms. It explores green-synthesized nanobactericides and the use graft polymers to formulate nanoparticles, highlighting the ways that nanotechnology and environmental consciousness are influencing this discipline. It details on improving biodegradability, biocompatibility, and the development of smart hydrogels are included as well as research on bone marrow regeneration applications, demonstrating the significant role that graft copolymers play in enabling innovative biomedical solutions.

Apple Academic Press
September 2025 : 476pp
Hb: 978-1-774-91930-9 : **£180**

* For full contents and more information, visit: www.routledge.com/9781774919309

Graft Copolymers of Polysaccharides for Drug Delivery Systems



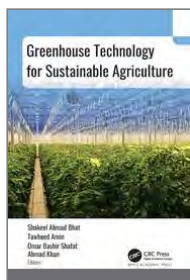
Edited by **Rishabha Malviya , Sonali Sundram**

Compiles recent findings and developments in the field of graft copolymers made from polysaccharides. Details the design and synthesis of polysaccharide graft-copolymers specifically suited for drug delivery applications. Explores the relationship between nanotechnology and biomolecules.

Apple Academic Press
July 2025 : 270pp
Hb: 978-1-774-91932-3 : **£170**
eBook: 978-1-003-59799-5

* For full contents and more information, visit: www.routledge.com/9781774919323

Greenhouse Technology for Sustainable Agriculture



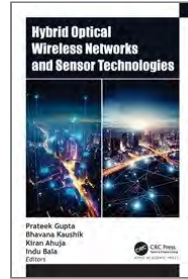
Edited by **Shakeel Ahmad Bhat , Tawheed Amin , Omar Bashir , Shafat Ahmad Khan**

Presents an integrated approach to greenhouse cultivation and climate management. It examines the most major issues sustainable greenhouse management that calls for innovative multidisciplinary scientific and technological solutions. With an emphasis on sustainable agriculture, the book discusses greenhouse design, installation, and maintenance; irrigation and fertigation techniques for greenhouses; automation and control technologies; cooling and ventilation technologies; insect and pest management; organic greenhouse practices; economic feasibility of greenhouse technology under certain conditions; and more.

Apple Academic Press
September 2025 : 286pp
Hb: 978-1-774-91523-3 : **£147**

* For full contents and more information, visit: www.routledge.com/9781774915233

Hybrid Optical Wireless Networks and Sensor Technologies



Edited by **Prateek Gupta , Bhavana Kaushik , Kiran Ahuja , Indu Bala**

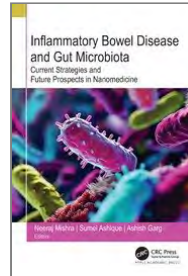
Covers the tools, techniques, and trends in hybrid optical wireless networks and sensor technologies that can be applied in various domains. Addressing recent trends and opportunities in wireless networks, it covers categorization of various hybrid optical wireless networks and sensor networks, algorithm optimization for intelligent wireless and mobile networks, optic-based wireless networks, bio-inspired algorithms and methods for wireless networks and sensor networks, and more. Topics include deep learning in mobile device sensors, optimized wireless propagation models, underwater communication through hybrid optical wireless networks, and more.

Apple Academic Press
June 2025 : 334pp
Hb: 978-1-774-91744-2 : **£170**
eBook: 978-1-003-50340-8

* For full contents and more information, visit: www.routledge.com/9781774917442

Inflammatory Bowel Disease and Gut Microbiota

Current Strategies and Future Prospects in Nanomedicine



Edited by **Neeraj Mishra , Sumel Ashique , Ashish Garg**

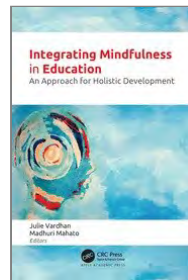
Highlights the novel methodologies and innovative approaches in the treatment of IBD in conjunction with the role of gut microbiota. It provides a comprehensive investigation of IBD, exploring the significance of gut microbiota in the advancement and progression of IBD. It investigates the fundamental role of microbial imbalances in the initiation and progression of inflammatory processes, as well as the prominent therapeutic consequences of restoring microbial homeostasis in the context of treatment techniques. The book explores nanotechnology and nanomedicine as a promising field in this regard. It also anticipates future expansions, and the obstacles that may be confronted.

Apple Academic Press
July 2025 : 612pp
Hb: 978-1-774-91936-1 : **£200**
eBook: 978-1-003-59833-6

* For full contents and more information, visit: www.routledge.com/9781774919361

Integrating Mindfulness in Education

An Approach for Holistic Development



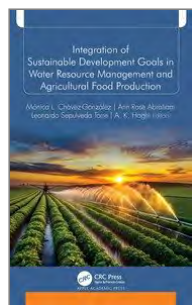
Edited by **Julie Vardhan , Madhuri Mahato**

Presents evidence-based research and practices in the education sector for the integration of mindfulness in the education system offering a holistic perspective. It explores how mindfulness education can help students achieve psychological peace. A comparison of the Indian and Finnish education system explains the disparity towards holistic development of students in the two countries. Moral and human values are explored in several chapters. It explores the teachings of Upanishads, examination reforms, holistic progress cards, integrating human values in management education, value-based learning education, mindfulness, and self-identity, and more.

Apple Academic Press
September 2025 : 246pp
Hb: 978-1-774-91904-0 : **£140**

* For full contents and more information, visit: www.routledge.com/9781774919040

Integration of Sustainable Development Goals in Water Resource Management and Agricultural Food Production



Edited by **Mónica Chávez-González , Ann Rose Abraham , Leonardo Sepulveda Torre , A. K. Haghi**

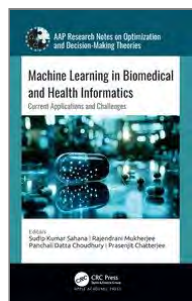
Offers a way forward towards the integration of sustainable development goals in water resource management and agricultural food production. It reviews sustainability goals as a point of convergence across several disciplines to understand common challenges and opportunities in sustainable development goals. The book looks at new research and technology for the development of sustainability in food sources and food production and sustainable practices in agriculture. Water resource management is also addressed, with innovative and eco-friendly solutions for water management, the reuse of wastewater for new products, water purification using nanomaterials, and more.

Apple Academic Press
September 2025 : 252pp
Hb: 978-1-779-64368-1 : **£150**

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Machine Learning in Biomedical and Health Informatics

Current Applications and Challenges



Edited by **Sudip Kumar Sahana , Rajendrani Mukherjee , Panchali Datta Choudhury , Prasenjit Chatterjee**

Series: AAP Research Notes on Optimization and Decision Making Theories

Discusses topics that include predictive health analytics, pandemic management, AI ethics, application and integration of IoT and ML for effective healthcare, and more. It covers a range of bioinformatics tools and methods and their relation to drug designing and drug screening using ML. It covers clustering techniques and other methods for analysing human heart-related disorders. It explores use of ML in creating adaptive therapies and for tracking diseases like Parkinson's speech, Covid-19, etc. It also discusses medical images analysis and using different AI techniques for solving problem areas in medical images by considering X-rays, MRI, PET.

Apple Academic Press
September 2025 : 290pp
Hb: 978-1-774-91954-5 : **£150**

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Machine Learning in Healthcare

Advances and Future Prospects



Edited by **Rishabha Malviya , Niranjan Kaushik , Tamanna Rai , M. P. Saraswathy , Rajendra Awasthi**

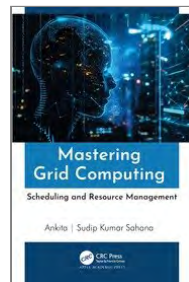
Explores the complex relationship between data science and medical science, highlighting the significant impact of machine learning algorithms in multiple areas of healthcare. The convergence of traditional and deep learning paradigms provides a look into a future in which predictive analytics and decision support systems will revolutionize healthcare delivery, demonstrating machine learning's promise in the medical industry. The exploration extends beyond conventional domains discussing topics such as wearable devices and mental health management through the use of machine learning technology.

Apple Academic Press
September 2025 : 166pp
Hb: 978-1-779-64000-0 : **£150**

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Mastering Grid Computing

Scheduling and Resource Management



Edited by **Ankita , Sudip Kumar Sahana**

Highlights the salient features of grid computing, introduces grid and its architecture, and also discusses advances to the complex hybridized model of grid computing, grid scheduling, and grid resource management. It addresses problems causing grid bottlenecks, the formulation of solution strategies, implementation of grid scheduling, along with case studies of grid computing. It introduces several scheduling algorithms, such as FCFS, SJF, a few hybrid algorithms etc. It evaluates the efficiency of these algorithms while also discussing notable grid simulators. It presents information on nearly all the major grid applications in different domains and their prospects.

Apple Academic Press
May 2025 : 222pp
Hb: 978-1-774-91875-3 : **£120**
eBook: 978-1-003-59840-4

* For full contents and more information, visit: www.routledge.com/9781774918753

Micro- and Nanoscale Technologies in Drug Delivery

A Contemporary Chemical Approach



Edited by **Ana Cristina Faria Ribeiro , Ann Rose Abraham , A. K. Haghi**

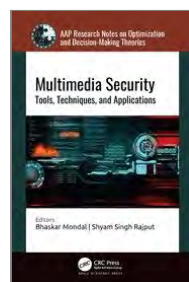
Covers advancements in the development of controlled drug delivery systems, offering novel perspectives, therapeutics, and strategies for the development of drug delivery. It discusses current theoretical and practical aspects of drug delivery for the discovery and development of novel therapeutics for health problems. Explaining the necessary features essential for pharmacological activity, it takes an interdisciplinary approach by including a unique combination of pharmacy, chemistry, and medicine along with clinical aspects. It includes the functionalized peptide-based nanoformulations, drug-delivery systems, protein-based nanocarriers, and more.

Apple Academic Press
September 2025 : 302pp
Hb: 978-1-774-91838-8 : **£150**

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Multimedia Security

Tools, Techniques, and Applications



Edited by **Bhaskar Mondal , Shyam Singh Rajput**

Series: AAP Research Notes on Optimization and Decision Making Theories

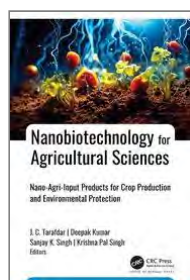
Focuses on state-of-the-art methods and tools such as data encryption, steganography, watermarking, authentication, data hiding, biometric template security, quantum-based video cryptosystems, pansharpening, and digital signatures to help in protecting the unauthorized access/alteration of multimedia over the Internet and cloud. This book also covers the application of machine learning, blockchain, and AI-based methods for multimedia security. Mathematical models used in data hiding and data evaluation techniques are discussed thoroughly to provide a good understanding of the principles of multimedia security.

Apple Academic Press
July 2025 : 370pp
Hb: 978-1-774-91502-8 : **£140**
eBook: 978-1-003-45904-0

* For full contents and more information, visit: www.routledge.com/9781774915028

Nanobiotechnology for Agricultural Sciences

Nano-Agri-Input Products for Crop Production and Environmental Protection



Edited by **J. C. Tarafdar, Deepak Kumar, Sanjay K. Singh, Krishna Pal Singh**

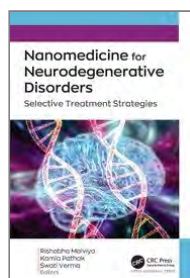
Reports latest advances in nanotechnology for agricultural applications, emphasizing the biogenic synthesis of nano-agri-input products (NAIPs) and technology's economic potential in the establishment of a sustainable agriculture. It covers major aspects of nanomaterials in the context of synthesis and their applications in crop production and environmental protection, addressing the synthesis, characterization, applications, and regulatory framework of nanomaterials in agriculture. Other topics include the green synthesis of nanomaterials and their impacts on soil fertility and biotic/abiotic stress management, biochar and nano-biochar production and applications etc.

Apple Academic Press
July 2025 : 544pp
Hb: 978-1-774-91968-2 : **£180**
eBook: 978-1-003-62027-3

* For full contents and more information, visit: www.routledge.com/9781774919682

Nanomedicine for Neurodegenerative Disorders

Selective Treatment Strategies



Edited by **Rishabha Malviya, Kamla Pathak, Swati Verma**

Provides an informative overview of the cutting-edge applications of various nanocarriers that encapsulate active compounds to effectively treat NDs. Provides a comprehensive review of neurological disorders, clinical strategies for the management of neuro disorders, and the challenges in their treatment, it reviews the types, diagnosis, and treatment strategies of neurodegenerative disorders. It then provides an overview of the blood-brain barrier (BBB) transport mechanisms. It discusses specific techniques such as the delivery of RNA/DNA to the brain using nanoscience, nanodiamonds as emerging nanotherapeutics for brain-targeted drug etc.

Apple Academic Press
May 2025 : 524pp
Hb: 978-1-774-91612-4 : **£180**
eBook: 978-1-003-48656-5

* For full contents and more information, visit: www.routledge.com/9781774916124

New Age Technology in Supply Chain Management

Digital Transformation Tools in Perspective



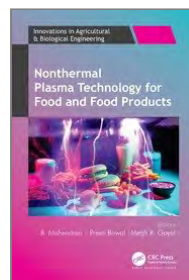
Edited by **Mohammed Majeed**

Details the effect of IT and digital transformation tools on supply chains and how they can be the keys to the success of organizations. It covers technologies like big data, robotics, artificial intelligence (AI), machine learning (ML), blockchain, and the Internet of Things (IoT). It introduces IT and SCM and explains how IT/digital transformation tools affect SCM and procurement in different types of industries and markets, covering their importance, methods, and requirements for efficient and effective implementation in workplaces and businesses. It covers topics such as AI on SCM in the hospitality sector and IoT on SCM in the hotel sector, and more.

Apple Academic Press
May 2025 : 260pp
Hb: 978-1-774-91882-1 : **£150**
eBook: 978-1-003-60525-6

* For full contents and more information, visit: www.routledge.com/9781774918821

Nonthermal Plasma Technology for Food and Food Products



Edited by **R. Mahendran, Preeti Birwal, Megh R. Goyal**

Series: *Innovations in Agricultural & Biological Engineering*

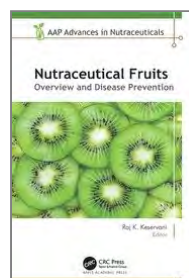
Explores the techniques and methods of processing food products without subjecting them to heat treatment, using cold plasma for food preservation. It reports on the various applications and advances in cold plasma technology in food processing. It introduces and reviews principles of cold plasma technology, also discussing the design and generation of cold plasma along with the interaction with food molecules. It covers cold plasma applications in agri-food systems such as in solid foods, liquid foods, and food packaging. It presents the effects of cold plasma on starch modification, food surface modification, and its influence on toxin reduction.

Apple Academic Press
July 2025 : 578pp
Hb: 978-1-774-91770-1 : **£180**
eBook: 978-1-003-54308-4

* For full contents and more information, visit: www.routledge.com/9781774917701

Nutraceutical Fruits

Overview and Disease Prevention



Edited by **Raj K. Keservani**

Series: *AAP Advances in Nutraceuticals*

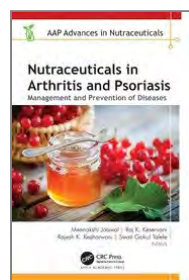
Details the use of fruits as nutraceuticals for alternative treatment as well as for disease prevention. It also details how these can be used to prevent and manage a range of diseases that include mental illness, cancer, respiratory and lung diseases, cardiovascular diseases, liver diseases, inflammatory bowel diseases, sleep disorders, etc. It also provides information regarding the safety and toxicity of nutraceutical fruits. It compiles comprehensive data on the nutritional content of various fruits in response to the management and prevention of several diseases also discussing a futuristic approach to research and wild fruits.

Apple Academic Press
July 2025 : 396pp
Hb: 978-1-774-91648-3 : **£180**
eBook: 978-1-003-49950-3

* For full contents and more information, visit: www.routledge.com/9781774916483

Nutraceuticals in Arthritis and Psoriasis

Management and Prevention of Diseases



Edited by **Meenakshi Jaiswal, Raj K. Keservani, Rajesh K. Kesharwani, Swati G. Talele**

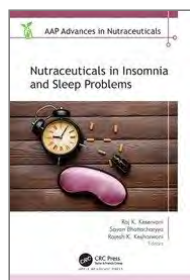
Series: *AAP Advances in Nutraceuticals*

Explores plant-derived nutraceuticals that can be used as crucial therapeutic tools in the prevention and treatment of arthritis and psoriasis. It provides detailed information on the use of plant-derived nutraceuticals, such as microalgae and other marine botanicals, omega polyunsaturated fatty acids, and others in the treatment and management of arthritis and psoriasis. It focuses on nutraceutical treatments for arthritis and then goes on to focus on the role of nutraceuticals in the prevention and treatment of psoriasis.

Apple Academic Press
May 2025 : 346pp
Hb: 978-1-774-91746-6 : **£180**
eBook: 978-1-003-54538-5

* For full contents and more information, visit: www.routledge.com/9781774917466

Nutraceuticals in Insomnia and Sleep Problems



Edited by **Raj K. Keservani , Sayan Bhattacharyya , Rajesh K. Kesharwani**

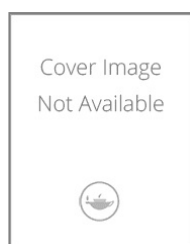
Series: AAP Advances in Nutraceuticals

Details the nutraceuticals from foods that help to promote good health and optimum sleep. It looks at nutraceutical diets for good sleep, the nutraceutical components related to sleep and insomnia, and new technologies and future directions in the use of nutraceuticals for insomnia and sleep. The authors discuss the importance of sleep, the role of diet in sleep, the role of specific vitamins and minerals, amino acids and opioids as nutraceuticals for sleep, newer technologies of nutraceuticals for treating insomnia, and more. It also details foods that cause insomnia, such as processed, chemical-rich, and refined foods.

Apple Academic Press
May 2025 : 414pp
Hb: 978-1-774-91806-7 : £170
eBook: 978-1-003-56089-0

* For full contents and more information, visit: www.routledge.com/9781774918067

Nutraceuticals in Respiratory and Pulmonary Diseases



Edited by **Deepika Saini , Rajesh K. Kesharwani , Raj K. Keservani**

Series: AAP Advances in Nutraceuticals

Explores the nutraceuticals that are effective in managing and treating respiratory diseases. It explains nutritional supplements that function as adjuvants for respiratory health and which may be useful targets for developing innovative nutraceutical-active respiratory products. It discusses the role of vitamins, minerals, and functional foods in the prevention and treatment of respiratory illnesses such as asthma, bronchitis, airway constriction, chronic obstructive pulmonary disorder (COPD), etc. It uncovers how different nutraceuticals have targeted various cellular and molecular pathways involved in the pathogenesis of COPD.

Apple Academic Press
September 2025 : 392pp
Hb: 978-1-774-91850-0 : £170

* For full contents and more information, visit: www.routledge.com/9781774918500

Ohmic Heating Technology for Processing of Foods and Food Products

Design, Food Quality, and Applications



Edited by **Preeti Birwal , Megh R. Goyal , Baldev Singh Kalsi**

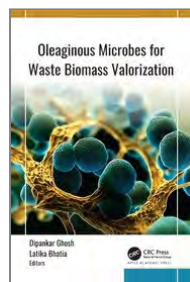
Series: Innovations in Agricultural and Biological Engineering

Provides an overview of ohmic heating as well as various applications of ohmic heating techniques. First providing an introduction to ohmic heating, the volume then presents in-depth knowledge and understanding of ohmic heating applications. Chapters cover the equipment and process design for ohmic heating systems, the effects of ohmic heating on food quality and microbial safety, and novel applications of ohmic heating in food processing. Several chapters address ohmic heating methods and issues in specific food groups, including milk and milk products, fruits and vegetables, and meats and meat products.

Apple Academic Press
September 2025 : 336pp
Hb: 978-1-779-64370-4 : £180

* For full contents and more information, visit: www.routledge.com/9781779643704

Oleaginous Microbes for Waste Biomass Valorization



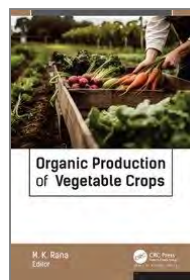
Edited by **Dipankar Ghosh , Latika Bhatia**

Explores the conversion of waste materials into valuable products, such as chemicals, materials, and fuels. It discusses the innovation, design, and impact of oleaginous microbial regimes toward the utilization of waste biomass for value-added microbial products. It details oleaginous microbial biosynthetic pathways and their bioengineering aspects for improving the generation of value-added biomolecules for sustainable biorefineries. It updates on utilization of waste-associated biomasses for the biogenesis of high value-added biomolecules using native and genetically engineered oleaginous microbial assemblages.

Apple Academic Press
September 2025 : 402pp
Hb: 978-1-774-91802-9 : £200

* For full contents and more information, visit: www.routledge.com/9781774918029

Organic Production of Vegetable Crops



Edited by **M. K. Rana, PhD**

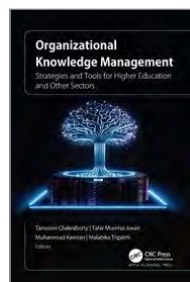
Covers various topics on successful production of organic vegetable crops. It introduces the concept, importance, and scope of organic farming, highlighting best practices and the do's and don'ts of organic farming, as well as its export opportunities and challenges. It goes on to cover crucial topics on organic vegetable production, including methods for enhancing soil fertility, green manuring, role of biofertilizers, composting methods, agricultural waste, coir composting, biodynamic vegetable farming, botanical and biocontrol agents, and much more.

Apple Academic Press
July 2025 : 764pp
Hb: 978-1-774-91800-5 : £180
eBook: 978-1-003-53904-9

* For full contents and more information, visit: www.routledge.com/9781774918005

Organizational Knowledge Management

Strategies and Tools for Higher Education and Other Sectors



Edited by **Tanusree Chakraborty , Tahir Mumtaz Awan , Muhammad Kamran , Malabika Tripathi**

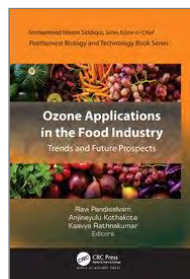
Explores the multifaceted landscape of knowledge management, with a particular emphasis on its application in higher education. It offers diverse perspectives, strategies, and tools to enable institutions to succeed. It delves into knowledge management for higher education. It discusses the interplay between technologies, techniques, and people; the strategic value of knowledge; the role of reward systems, presenting diverse global perspectives, showcasing strategies that foster better knowledge retention, and aiming to elevate the standards of higher education. It explores knowledge management's significance in various fronts and industries.

Apple Academic Press
July 2025 : 446pp
Hb: 978-1-774-91986-6 : £150
eBook: 978-1-003-60640-6

* For full contents and more information, visit: www.routledge.com/9781774919866

Ozone Applications in the Food Industry

Trends and Future Prospects



Edited by **Ravi Pandiselvam , Anjineyulu Kothakota , Kaavya Rathnakumar**

Series: Postharvest Biology and Technology

Presents various uses of ozone in the food industry, exploring and providing in-depth knowledge and understanding of the use of gaseous ozone and ozonated water treatments against bacteria, virus, fungus, and stored-product insects for ensuring food safety and quality. It looks at applications of ozone in several areas within the food sector, including horticultural produce, cereals, meat products, dairy products, and seafood. It examines the effect of ozonation on food composition, color, flavor, and sensory profile. It delves into the practical adoptability of ozone application, application of ozone in polymer modification, regulatory requirements of ozone processing and more.

Apple Academic Press
September 2025 : 442pp
Hb: 978-1-774-91924-8 : £180

* For full contents and more information, visit: www.routledge.com/9781774919248

Pharmaceutical Microemulsions for Parenteral Delivery

From Bench to Bedside



Edited by **Vivek P. Chavda , Vandana B. Patravale**

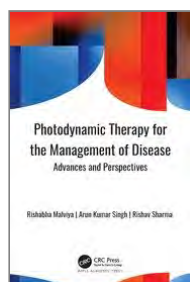
Provides systematic information regarding the preformulation of drugs, formulation using quality by design (QbD) principles, and characterization of parenteral microemulsions for drug delivery. It explores specific aspects of microemulsions such as the role of surfactants and cosurfactants in formulation, clinical aspects of parenteral microemulsion, regulatory perspectives and patents, as well as future challenges in this field. It covers the QbD paradigm for formulation optimizations as well as safety issues at various stages of the development pharmaceutical microemulsions.

Apple Academic Press
September 2025 : 302pp
Hb: 978-1-774-91660-5 : £180

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Photodynamic Therapy for the Management of Disease

Advances and Perspectives



Edited by **Rishabha Malviya , Arun Kumar Singh , Rishav Sharma**

Discusses different aspects of photodynamic therapy (PDT), providing insights into the latest innovations, methodologies, and future prospects of this field. It focuses on diffusion optical imaging and explores its application for treating patients. It provides basic explanation as well as an overview of numerous imaging techniques and diffusion optical imaging methods. It delves into the advancements of multimodal optical imaging, explores advances in liposomal nanotechnologies, and provides comprehensive analysis of imaging methods. It highlights the contribution of nanotechnology in cancer medication delivery systems and photothermal therapy for improving therapeutic outcomes.

Apple Academic Press
September 2025 : 270pp
Hb: 978-1-774-91894-4 : £170

* For full contents and more information, visit: www.routledge.com/9781774918944

Photonic Sensors for Biomedical Applications



Edited by **Preeta Sharan , Ranjith B. Gowda , Aryan Chaudhary**

Covers a range of new and innovative technologies and current applications of photonic sensors for biomedical applications. It covers areas such as biosensors, surface plasmon resonance (SPR) sensors, muscle strength monitoring, glucose sensing, AI in photonics, and many more. It covers basic elements of photonic sensors, biosensors for detecting and measuring certain biochemical substances, one-dimensional photonic crystal sensors, versatile fiber Bragg gratings sensors, and highly sensitive surface plasmon resonance sensors. It uses case studies to discuss MEMS optical sensors, use of artificial intelligence with photonics sensors to improve data analysis, and more.

Apple Academic Press
September 2025 : 304pp
Hb: 978-1-779-64349-0 : £170

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Plant Tissue Culture

Current Status and Opportunities in a Changing Environment



Edited by **Zahid Hameed Siddiqui , Khalid Rehman Hakeem**

Explores plant tissue culture in relation to climate change, showing how tissue culture techniques can be utilized to create tolerance to disease and stress, increase growth, and raise yield in plants. It discusses the use of plant tissue culture for producing superior material for planting and creating new, elite varieties of different crops in response to changing climatic conditions. It looks at issues and dangers posed by climate change for plants and offers guidance for sustainable development using tissue culture technology. It also focuses on some fundamental ideas of plant tissue culture, and offers sustainable development alternatives.

Apple Academic Press
September 2025 : 260pp
Hb: 978-1-774-91727-5 : £150

* For full contents and more information, visit: www.routledge.com/9781774917275

Plant Tissue Culture Technology

An Innovative Tool for the Propagation, Management, and Conservation of Himalayan Biodiversity



Edited by **Rajesh Kumar , Neha Salaria , Indu Kumari , Younis Ahmad Hajam**

Covers plant tissue culture for the preservation and conservation of Himalayan endangered plants important for medicinal purposes as well as for maintaining the rich biodiversity of the region. Discusses the potential of plant tissue culture techniques to overcome these challenges. The authors provide detailed descriptions of the various tissue culture techniques that can be used for plant propagation, such as in vitro conservation strategies, molecular methods for genetic diversity evaluation, and other biotechnological interventions and propagation strategies. Micropropagation, somatic embryogenesis, and organogenesis are addressed as well.

Apple Academic Press
September 2025 : 318pp
Hb: 978-1-779-64343-8 : £180

* For full contents and more information, visit: www.routledge.com/9781779643438

Polymers and Functional Materials for a Cleaner Environment and Human Health

Sustainable Technologies and New Research



Edited by **Ruby Varghese , Ann Rose Abraham , Shrikaant Kulkarni , A. K. Haghi**

This new volume offers an exploration of integrating polymers and functional materials for a cleaner environment and for human health by using state-of-the-art technologies and new research. It covers multidisciplinary sustainability topics with a focus on materials science applications in health and to help mitigate the current environmental crises. This volume links theory and practice and provides up-to-date technical information on sustainable technologies. It delves into a wide array of crucial topics to provide valuable insight into complex sustainable development methods.

Apple Academic Press
July 2025 : 280pp
Hb: 978-1-779-64365-0 : £170

* For full contents and more information, visit: www.routledge.com/9781779643650

Postharvest Physiological Disorders of Fruits



Edited by **Ghulam Khaliq , Sajid Ali**

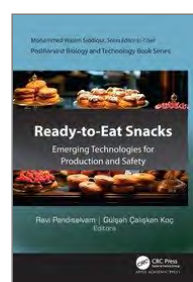
Focuses on postharvest physiological disorders of fresh fruits, describing their diverse morphological structures, compositions, and general physiology as well as the technologies for the effective handling and treatment of fresh fruits. It details the modern and sophisticated diagnostic methods, management, and technologies to confront these challenges. It gives comprehensive explanations regarding the causes for the occurrence of physiological disorder symptoms and the possible mechanisms to control these abnormalities. Organized by the type of fruits, it focuses on the physiological disorders that affect tropical and subtropical fruits along with temperate fruits.

Apple Academic Press
September 2025 : 452pp
Hb: 978-1-774-91922-4 : £180

* For full contents and more information, visit: www.routledge.com/9781774919224

Ready-to-Eat Snacks

Emerging Technologies for Production and Safety



Edited by **Ravi Pandiselvam , Gülsah Çaliskan Koç**

Overviews latest on ready-to-eat snacks, focusing on traditional production methods as well as emerging technologies of ready-to-eat snacks, along with their disadvantages. It discusses the significance of ready-to-eat snacks and the benefits and drawbacks of conventional production techniques. It covers the uses of developing technologies for the manufacture of ready-to-eat snacks as well as the difficulties and future opportunities. It investigates how the bioactive components of ready-to-eat snacks are changed during processing. Topics cover 3D printing technology; hot-extrusion technology; roasting technology; osmotic dehydration combined with drying technology and more.

Apple Academic Press
May 2025 : 504pp
Hb: 978-1-774-91864-7 : £170
eBook: 978-1-003-57012-7

* For full contents and more information, visit: www.routledge.com/9781774918647

Rhizospheric Microbiomes

The Interconnection between Plant and Soil Health



Edited by **Mohd. Sayeed Akhtar , Khalid Rehman Hakeem**

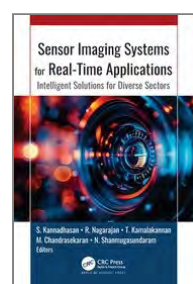
Explores how rhizospheric microbiomes in soil and environment management can enhance soil quality and stimulate the production of defense-related compounds in various pathosystems, resulting in better plant health. It presents an array of advancements in rhizosphere science that involve soil management, host-pathogen interactions, nutrient mobilization, bioremediation, mechanisms and modes of action of signaling molecules, and bioformulation strategies, among others. It consolidates comprehensive information on the advanced and applied aspects of microbial consortia and their role in promoting plant fitness.

Apple Academic Press
September 2025 : 322pp
Hb: 978-1-774-91999-6 : £150

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Sensor Imaging Systems for Real-Time Applications

Intelligent Solutions for Diverse Sectors



Edited by **S. Kannadhasan , R. Nagarajan , T. Kamalakannan , M. Chandrasekaran , N. Shanmugasundaram**

Looks at different aspects and kinds of sensors, such as wearable radio frequency devices, machine learning algorithms for sensors, intelligent monitoring systems using RFID technologies, UV-based control systems, Booth algorithm-based for improved multipliers, sensor data analysis using Arduino, piezoelectric sensor signaling, and more. Myriad examples of novel applications of sensor technology are presented in different areas, such as in disaster management, for development of smart healthcare technology, in transportation, in urban engineering/smart city management, in agriculture, and for residential and office use as well as other uses.

Apple Academic Press
September 2025 : 322pp
Hb: 978-1-774-91926-2 : £180

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Soft Robotics in Biomedical Sciences

Current Status and Advancements



Edited by **Deepak Gupta , Rishabha Malviya , Rekha Raja , Sonali Sundram**

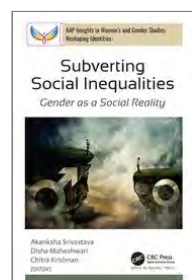
Explores the dynamic integration of soft robotics and biomedical sciences and how soft robotic technologies can alter the healthcare sector, from personalized treatment to cutting-edge medical equipment. It focuses on the various aspects of the mutually beneficial link between soft robotics and the biomedical sciences, looking at benefits that can be achieved in personalized medicine, implantable devices, interactive artificial muscles, and beyond. It discusses soft robotics in implanted devices and artificial muscles and robotics for limb design, use of innovative soft actuators and advancements in sensors for healthcare applications, and more.

Apple Academic Press
July 2025 : 298pp
Hb: 978-1-774-91914-9 : £180
eBook: 978-1-003-61038-0

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Subverting Social Inequalities

Gender as a Social Reality



Edited by **Akanksha Srivastava, Disha Maheshwari, Chitra Krishnan**

Series: *AAP Insights in Women's and Gender Studies: Reshaping Identities*

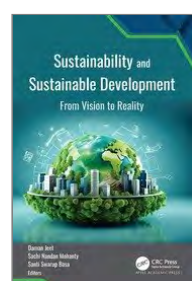
Explores gender as a social reality and its intersection with other forms of social inequality, like race, class, etc. It examines how gender is constructed and maintained through various social institutions. It looks at the challenges to gender inequalities through activism, art, and other forms of resistance. It explores the internalization of gender ideology and its construction in classroom discourse, gender disparity of boys and girls in their adoption of information and communications technology, gender-illiteracy nexus in relation to girl-child education, female entrepreneurship etc.

Apple Academic Press
May 2025 : 350pp
Hb: 978-1-774-91814-2 : £150
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Sustainability and Sustainable Development

From Vision to Reality



Edited by **Daman Jeet, Sachi Nandan Mohanty, Santi Swarup Basa**

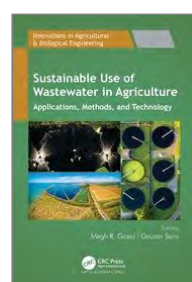
Offers insights into sustainability and sustainable development. It looks at business initiatives that aim toward corporate strategies for social responsibility, use of technology in human resource management toward sustainable efforts, adapting industrial policy to sustainable development goals, developing sustainable green banking initiatives, etc. Other chapters include studies on, the impact of information and communication technology on the elimination of poverty, the use of artificial intelligence and automation in sustainable development research, and more.

Apple Academic Press
July 2025 : 426pp
Hb: 978-1-998-51152-5 : £150
eBook: 978-1-003-63810-0

* For full contents and more information, visit: www.routledge.com/9781998511525

Sustainable Use of Wastewater in Agriculture

Applications, Methods, and Technology



Edited by **Megh R. Goyal, Gaurav Saini**

Series: *Innovations in Agricultural & Biological Engineering*

Addresses the challenges of repurposing wastewater in agriculture processes, with a special focus on low- and middle-income regions of the world. Topics include the application of wastewater for irrigation, problems in their use, innovative methods of application of the latest technology, with an emphasis on sustainable solutions to water scarcity. It looks at the uptake of heavy metals and emerging contaminants by the irrigated crops, soil, etc., from wastewater. It reviews utility of water generated from rainwater harvesting systems and the use of water quality indices for checking the suitability of a given type of water. It also details the Internet of AgriBot Things (IoAT).

Apple Academic Press
July 2025 : 380pp
Hb: 978-1-774-91908-8 : £170
eBook: 978-1-003-61069-4

* For full contents and more information, visit: www.routledge.com/9781774919088

Technological Applications for Smart Sensors

Intelligent Applications for Real-Time Strategies



Edited by **S. Kannadhasan, R. Nagarajan, Alagar Karthick, V. Kumar Chinnaiyan**

It presents a plethora of real-time applications of smart sensor technology with examples from diverse areas. It showcases a diverse selection of novel real-time applications of smart sensors, such as in wireless communication, for an automatic dual axis solar tracking systems, for wearable flexible electronic devices, for effective security systems in banking and finance, in healthcare for cancer detection and cardiac patient monitoring, for chemical safety in laboratories, for water quality monitoring systems, for agricultural irrigation control, for maintenance of industrial machines, to name a few of the many smart sensor innovations in this volume.

Apple Academic Press
September 2025 : 602pp
Hb: 978-1-774-91972-9 : £200

* For full contents and more information, visit: www.routledge.com/9781774919729

Temperate Nut Crops

Cultivation, Science, and Innovation



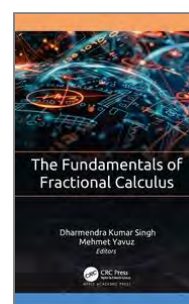
Edited by **Ab Waheed Wani, Rajni Rajan, Faheem Ahmad**

Consolidates knowledge on temperate nut crops, providing introduction, overview of the importance, history, and scope of temperate nut crops. It covers topics that include floral biology and pollination of tree nuts; plant growth regulators that play a pivotal role in the growth and development of nut-bearing trees, the phytochemical properties of tree nuts and their diverse culinary and medicinal applications; and the microbial diversity of nut crops, looking at the role of microbes in tree health, soil ecology, and nut quality.

Apple Academic Press
September 2025 : 614pp
Hb: 978-1-779-64350-6 : £180

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The Fundamentals of Fractional Calculus



Edited by **Dharmendra Kumar Singh, Mehmet Yavuz**

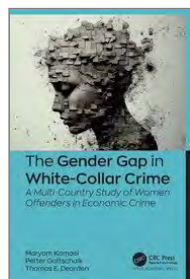
Presents technologies and practices used in fractional calculus, detailing recent developments and latest research in the field of science, engineering, etc., using fractional calculus. Chapters discuss fractional calculus via generalized functions and integral transforms of pathway type; Laplace transformation of fractional integrals and derivatives; estimating the order of derivation in a fractional differential equation; a new class of integro-differential equations with non-singular differential operators; etc. The various applications of fractional calculus are shown with examples such as for creating and/or solving epidemic models, alcoholism models, and more.

Apple Academic Press
September 2025 : 522pp
Hb: 978-1-779-64335-3 : £170

* For full contents and more information, visit: www.routledge.com/9781779643353

The Gender Gap in White-Collar Crime

A Multi-Country Study of Women Offenders in Economic Crime



Edited by **Maryam Kamaei, Petter Gottschalk, Thomas E. Dearden**

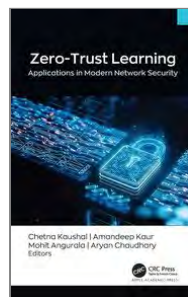
Studies white collar crimes, focusing on the disparity in such crimes between men and women. It looks at how pink-collar crime differs dramatically in different countries, with case studies from various countries to further enhance the understanding of the explained concepts. It offers a specific focus on the convenience theory, to explain general white-collar crime. Both theoretical arguments and empirical work examine the validity of the theory for explaining women white-collar crime. It focuses on crimes of convenience in cybercrime by considering the importance of gender in the history of internet crime and the relationship between cybercrime and white-collar crime.

Apple Academic Press
May 2025 : 288pp
Hb: 978-1-774-91826-5 : £120
eBook: 978-1-003-56832-2

* For full contents and more information, visit: www.routledge.com/9781774918265

Zero-Trust Learning

Applications in Modern Network Security'



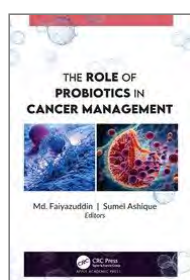
Edited by **Chetna Kaushal, Amandeep Kaur, Mohit Angurala, Aryan Chaudhary**

Offers a comprehensive overview of the zero-trust security model and its application in the field of cybersecurity, covering the principles, technologies, and best practices for implementing a zero-trust approach. It stands out by providing a holistic view of the zero-trust security model, combining practical guidance for professionals with educational insights. It goes beyond theory, offering real-world examples and case studies that bridge the gap between learning and implementation. It covers the fundamentals, importance, and advantages of zero trust security models; address the roles AI, blockchain, and machine learning play in zero trust learning and security.

Apple Academic Press
September 2025 : 490pp
Hb: 978-1-779-64356-8 : £140

* For full contents and more information, visit: www.routledge.com/9781779643568

The Role of Probiotics in Cancer Management



Edited by **Md. Faiyazuddin, Sumel Ashique**

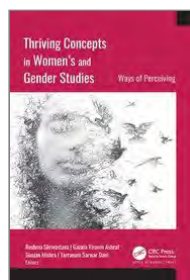
Explores the latest in probiotic research, focusing on the effectiveness of probiotics in preventing cancer and supporting the treatment of cancer. It examines the evidence that the use of probiotics can play an important role in cancer prevention and support anti-cancer therapies. It contains introduction to prebiotics, probiotics, and synbiotics, covering the anticancer properties of probiotic microorganisms, the impact of their metabolites, the potential mechanisms of probiotic chemoprevention, and the feasibility of incorporating probiotics into cancer care strategies. It studies the efficacy of probiotics in the treatment and management of cancers.

Apple Academic Press
July 2025 : 518pp
Hb: 978-1-774-91912-5 : £200
eBook: 978-1-003-61074-8

* For full contents and more information, visit: www.routledge.com/9781774919125

Thriving Concepts in Women's and Gender Studies

Ways of Perceiving



Edited by **Reshma Shrivastava, Gazala Yasmin Ashraf, Gunjan Mishra, Tarranum Sarwar Dani**

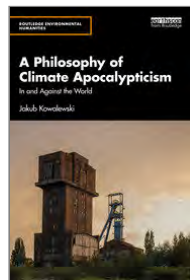
Covers concepts that contribute to understanding gender dynamics, power relations, and the pursuit of social justice. It looks at gender roles in both historical and modern society, while also look at how larger structural influences, such as nation-building globalization, economic advancements, and the legal system, shape the lives of specific women. It addresses violence against women, means of breaking barriers and the impact of social protection on gender equality. It also studies women's health and how stress can silently and negatively impact women's health. The status of women in the workplace, feminist theory and women in leadership as well as future scope are detailed.

Apple Academic Press
July 2025 : 456pp
Hb: 978-1-774-91902-6 : £140
eBook: 978-1-003-61102-8

* For full contents and more information, visit: www.routledge.com/9781774919026

A Philosophy of Climate Apocalypticism

In and Against the World



Jakub Kowalewski

Series: *Routledge Environmental Humanities*

This book offers a long-overdue analysis of the ubiquity of eco-apocalypticism in current discourses on the climate crisis. Drawing on a wide range of sources and theoretical traditions from ecological works and radical pamphlets, through political theology and continental philosophy to ancient and medieval apocalypses, the book sheds a comprehensive light on the concepts, processes, and experiences which circulate around the figure of the environmental end of the world.

Routledge
May 2025 : 174pp
Pb: 978-1-032-39126-7 : **£39.99**
Hb: 978-1-032-39129-8 : **£145**
eBook: 978-1-003-34851-1

* For full contents and more information, visit: www.routledge.com/9781032391267

2ND EDITION

Accounting for Sustainability



Edited by **Gunnar Rimmel**

This book provides a broad overview of how sustainability reporting has grown, how it is used now, and where it is heading. Accounting for Sustainability decodes terminology like CSR, corporate citizenship or environmental management systems, or ESG by offering an accessible introduction that explores sustainability reporting from both internal and external perspectives. This new edition has been fully revised and expanded with four new chapters, including coverage of the EU's CSRD, ESRS, and the global efforts of the ISSB. It also includes critical reflections on digitalisation, standard-setting, and assurance.

Routledge
September 2025 : 312pp
Pb: 978-1-032-78548-6 : **£39.99**
Hb: 978-1-032-78546-2 : **£145**

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Agricultural Land Use

Structural Transformations, Environment Challenges, Planning and Policy



Edited by **Jerzy Bański**

Series: *Earthscan Food and Agriculture*

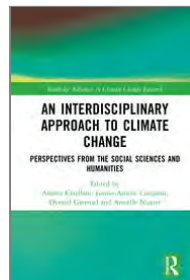
This book presents contemporary trends and challenges in agricultural land-use, drawing on an array of global case studies. Each chapter focuses on a particular issue related to agricultural land use in that country or region, including land fragmentation, reduction of crop land, agricultural intensification, desertification of soils, climate change, biodiversity loss, traditional agricultural systems, urbanization and rural development, planning challenges for agricultural land. This book will be of great interest to students and scholars of food and agriculture, land-use and land management, rural studies and sustainable development.

Routledge
June 2025 : 350pp
Hb: 978-1-032-67275-5 : **£135**
eBook: 978-1-032-67277-9

* For full contents and more information, visit: www.routledge.com/9781032672755

An Interdisciplinary Approach to Climate Change

Perspectives from the Social Sciences and Humanities



Edited by **Andrea Catellani** Université Catholique De Louvain, **Louise-Amélie Coughon**, **Øyvind Gjerstad**, **Armelle Nugier**

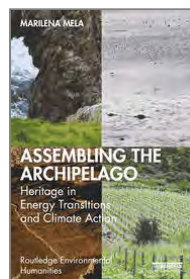
Series: *Routledge Advances in Climate Change Research*

This book offers a comprehensive overview of the ways in which research and perspectives from the social sciences and humanities can be combined for a more effective understanding of climate change and its impacts. Drawing on a wide range of interesting case studies, it highlights opportunities for collaboration between disciplines by combining methodological and theoretical components and synthesising the research results. The book will be of use to scholars, students, researchers, and practitioners interested in communication studies, psychology, linguistics, sociology, philosophy, management, educational studies, transition studies, and connected fields.

Routledge
September 2025 : 328pp
Hb: 978-1-041-05008-7 : **£145**

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Assembling the Archipelago: Heritage in Energy Transitions and Climate Action



Marilena Mela

Series: *Routledge Environmental Humanities*

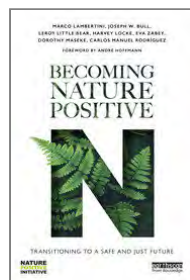
This book explores the potential of heritage to enact sustainable human-environment relationships across geographical differences. It does so by traveling to four archipelagos: the Wadden Islands in the Netherlands, the Cyclades in Greece, Shetland in Scotland, and the Aeolian Islands in Italy. This book will resonate with academics, students, policymakers and activists in heritage studies, environmental humanities, landscape studies, science and technology studies, and sustainability. Readers are invited to participate in the life and troubles of four island landscapes, and to think along on emergent, archipelagic claims towards sustainable and just futures.

Routledge
August 2025 : 234pp
Hb: 978-1-032-85439-7 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032854397

Becoming Nature Positive

Transitioning to a Safe and Just Future



Marco Lambertini, **Joseph W. Bull**, **Leroy Little Bear**, **Harvey Locke**, **Eva Zabey**, **Dorothy Maseke**, **Carlos Manuel Rodríguez**

Series: *Routledge Studies in Conservation and the Environment*

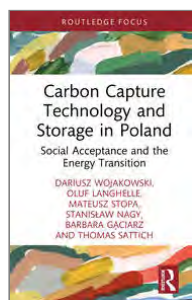
As humanity sits at an existential crossroads, this book introduces the need to build a nature-positive future to secure the functioning and stability of Earth systems essential to the survival and wellbeing of present and future human generations as well as the rest of Earth's amazing diversity of life. In this book we define what becoming Nature Positive means from a variety of perspectives, what it takes to deliver it, and why it is possible and, most importantly, necessary. This book is essential reading for those concerned with conserving nature and sustaining our planet in the face of climate breakdown, biodiversity loss and ecological collapse.

Routledge
June 2025 : 316pp
Pb: 978-1-032-75453-6 : **£31.99**
Hb: 978-1-032-75454-3 : **£145**

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Carbon Capture Technology and Storage in Poland

Social Acceptance and the Energy Transition



Dariusz Wojakowski, **Oluf Langhelle** University of Stavanger, Norway, **Mateusz Stopa**, **Stanisław Nagy**, **Barbara Gąciarz**, **Thomas Michael Sattich**

Series: Routledge Focus on Energy Studies

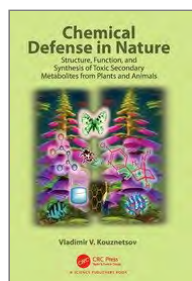
The book describes the results of AGaStor Project social research carried out in the North-Western Poland which recognize the main social opportunities and barriers to the introduction of CCUS to the society. The issue of social acceptance of CCUS should be of interest to decision-makers and practitioners who manage investment projects in the broadly understood green transformation on a daily basis, but also postgraduate students, researchers, academics and lecturers in political studies, sociology or economics, but also in engineering studies connected with energy transformation.

Routledge
June 2025 : 144pp
Hb: 978-1-003-86301-4 : £52.99

* For full contents and more information, visit: www.routledge.com/9781003863014

Chemical Defense in Nature

Structure, Function, and Synthesis of Toxic Secondary Metabolites from Plants and Animals



Vladimir V. Kouznetsov

The book examines biological processes vital for organism survival through a chemical lens. Integrating core organic chemistry concepts, such as structural analysis and synthesis, explores how plants and animals produce and utilize toxic organic molecules for growth, survival, and reproduction. The book focuses on the intricate structures, vital functions, and synthesis pathways of toxic secondary metabolites from plants and animals, illustrating toxic substances' intricate chemical relationships and biological significance.

CRC Press
May 2025 : 332pp
Hb: 978-1-032-37191-7 : £160
eBook: 978-1-003-33577-1

* For full contents and more information, visit: www.routledge.com/9781032371917

Circular Economy Solutions for Sustainable Development



Edited by Katarzyna Nowicka

Series: Routledge Studies in Sustainable Development

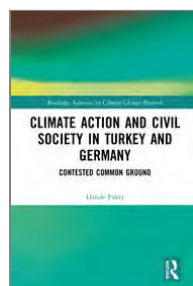
This edited collection offers fresh perspectives on sustainable development and social impact using a circular economy framework. Against the backdrop of escalating environmental challenges such as resource depletion and climate change, transitioning from a linear to a circular economy is a key step towards meeting the UN's Sustainable Development Goals. This book will be of interest to researchers, academics and students interested in enhancing their understanding of circular economy principles and practices, including those in environmental science, sustainable development, economics, and business.

Routledge
August 2025 : 220pp
Hb: 978-1-032-88399-1 : £145

* For full contents and more information, visit: www.routledge.com/9781032883991

Climate Action and Civil Society in Turkey and Germany

Contested Common Ground



Hande Paker

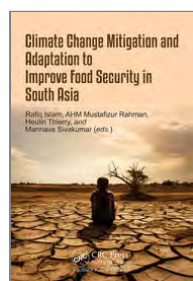
Series: Routledge Advances in Climate Change Research

This book explores the social and political dynamics that shape the impacts of climate change, drawing upon Turkey and Germany to offer a comprehensive comparative analysis. The in-depth comparison of two conventionally dissimilar cases, Turkey and Germany, demonstrates that civil society actors in different political settings can use similar strategies and frames for climate action against state actors, who, in turn, use similar depoliticization strategies and economic growth narratives to reproduce hegemony.

Routledge
September 2025 : 188pp
Hb: 978-1-032-90835-9 : £145

* For full contents and more information, visit: www.routledge.com/9781032908359

Climate Change Mitigation and Adaptation to Improve Food Security in South Asia



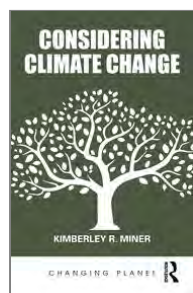
Edited by Rafiq Islam Ohio State University, Piketon, USA, **AHM Mustafizur Rahman** University of Dhaka, Bangladesh, **Heulin Thierry**, **Mannava Sivakumar**

This comprehensive book provides insights into climate challenges in agriculture, covering key topics such as climate variability, abiotic and biotic stresses, advanced farming practices, breeding and genetics, nutrient recycling, and soil and wetlands management. With a focus on climate-resilient crops and sustainable food security solutions, it provides practical strategies for researchers and producers, along with policy recommendations. A valuable resource for policymakers, researchers, and development professionals aiming to enhance resilience and sustainability in the agriculture sector, particularly in South Asia.

CRC Press
June 2025 : 384pp
Hb: 978-1-032-62849-3 : £130

* For full contents and more information, visit: www.routledge.com/9781032628493

Considering Climate Change



Kimberley R. Miner

Series: Changing Planet

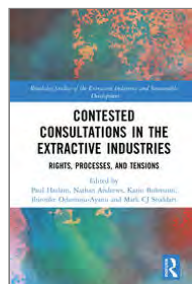
In *Considering Climate Change*, Kimberley R. Miner focuses on what will happen in the next 20, 40 and 60 years around the planet and looks at how we can take an active role in planning for a future we had hoped to avoid. *Considering Climate Change* can either be read cover to cover or with a focus on the specific chapters that will help the reader understand the challenges they are currently facing. Either way, the goal is to walk away with a better understanding of how to thrive in this changing world and not just have hope for the future—but to have a plan.

Routledge
July 2025 : 102pp
Pb: 978-1-032-45299-9 : £19.99
Hb: 978-1-032-45298-2 : £86.99

* For full contents and more information, visit: www.routledge.com/9781032452999

Contested Consultations in the Extractive Industries

Rights, Processes, and Tensions



Edited by **Paul A. Haslam, Nathan Andrews, Karin Buhmann, Ibironke T. Odumosu-Ayanu, Mark Stoddart**

Series: *Routledge Studies of the Extractive Industries and Sustainable Development*

This volume examines how communities, companies, and governments contest and contribute to the evolution of norms, rules and decision-making procedures that govern stakeholder consultation in the extractive industries. A unique contribution of this collection is the commentary from practitioners, who reflect on the same issues addressed by the academic contributors, but based on their own vast practical experience. This book will be of great interest to students and scholars researching public participation and stakeholder consultation in the extractive industries as well as natural resource governance and sustainable development more broadly.

Routledge
October 2025 : 274pp
Hb: 978-1-032-78563-9 : £145

* For full contents and more information, visit: www.routledge.com/9781032785639

Corporate Sustainability Reporting in Central and Eastern European Companies



Edited by **Marzena Remlein, Ana Rep**

Series: *Routledge Research in Sustainability and Business*

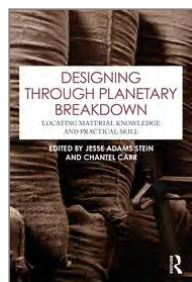
This book comprehensively analyses non-financial reporting, specifically sustainability reporting, in Central and Eastern European (CEE) countries. It identifies key trends and common practices among regional companies. The book examines the comprehensiveness and quality of sustainability reporting across fifteen countries by drawing on academic literature, regulatory reports, corporate sustainability disclosures, and scientific studies. The authors explore the benefits of sustainability reporting, including enhanced stakeholder trust, improved reputation, and stronger commitments to environmental, social, and governance practices.

Routledge
June 2025 : 288pp
Hb: 978-1-032-58869-8 : £145

* For full contents and more information, visit: www.routledge.com/9781032588698

Designing through Planetary Breakdown

Locating Material Knowledge and Practical Skill



Edited by **Jesse Adams Stein, Chantel Carr**

In an era of profound environmental and geopolitical uncertainty, *Designing through Planetary Breakdown* offers fresh perspectives on design's evolving role in the face of planetary change. *Designing through Planetary Breakdown* is ideal for scholars, students, designers and craftspeople across design studies, design anthropology, repair and discard studies, craft studies and more broadly in the humanities and social sciences. Practical and deeply social, this collection offers a call to action: a guide for all hands to shape a future not just of survival, but of regeneration and collective action.

Routledge
June 2025 : 224pp
Pb: 978-1-032-77956-0 : £39.99
Hb: 978-1-032-78155-6 : £145

* For full contents and more information, visit: www.routledge.com/9781032779560

Disruptive Innovations and the Environmental Crisis

Ethical, Practical, and Sociopolitical Concerns



Edited by **Donald S. Maier, Justin Donhauser, Michael Weber**
Bowling Green State University, USA

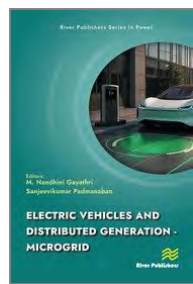
Series: *Routledge Explorations in Environmental Studies*

This book probes the ethical, practical, and sociopolitical implications of leveraging innovative and disruptive means to address the world's various environmental crises. Packed with keen observations and analyses, the volume brings together research from seasoned scholars and rising stars to cast important new light on urgent issues engendered by humankind's disruption of environments, such as climate change and biodiversity loss. This book will be of great interest to students and scholars of environmental science, environmental decision-making, ecology, climate change, environmental philosophy, and the philosophy of science.

Routledge
July 2025 : 214pp
Pb: 978-1-032-57239-0 : £39.99
Hb: 978-1-032-58256-6 : £145

* For full contents and more information, visit: www.routledge.com/9781032572390

Electric Vehicles and Distributed Generation - Microgrid



M. Nandhini Gayathri, Sanjeevikumar Padmanaban

Series: *River Publishers Series in Energy Management*

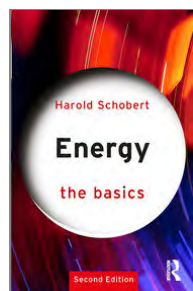
This book reviews advanced innovations and future perspectives for electric vehicle (EV) charging and distributed generation via micro grids. It includes clear points, diagrams, and technical details to aid researchers, scholars, and students in optimizing EV-grid integration. It will also help new research scholars by providing them with a complete knowledge regarding power converter topology, and power quality assessment in EV clusters.

River Publishers
May 2025 : 272pp
Hb: 978-8-770-04614-5 : £110
eBook: 978-8-770-04615-2

* For full contents and more information, visit: www.routledge.com/9788770046145

2ND EDITION

Energy: The Basics



Harold Schobert Harold Schobert is Professor Emeritus of Fuel Science in the Department of Energy and Mineral Engineering at Penn State University.

Series: *The Basics*

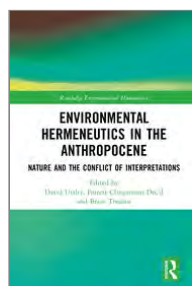
Energy: The Basics offers a concise and engaging introduction to energy, answering critical questions and providing accessible definitions of essential concepts and developments in the field.

Routledge
June 2025 : 174pp
Pb: 978-1-032-66557-3 : £19.99
Hb: 978-1-032-66554-2 : £94.99
eBook: 978-1-032-66560-3

* For full contents and more information, visit: www.routledge.com/9781032665573

Environmental Hermeneutics in the Anthropocene

Nature and the Conflict of Interpretations



Edited by **David Utsler**, **Forrest Clingerman**, **Brian Treanor**

Series: *Routledge Environmental Humanities*

Environmental Hermeneutics in the Anthropocene is a diverse collection of essays that approach contemporary environmental problems with the tools and perspectives provided by the tradition of philosophical hermeneutics, advanced by philosophers such as Martin Heidegger, Hans-Georg Gadamer, and Paul Ricoeur.

Routledge
October 2025 : 278pp
Hb: 978-1-032-86374-0 : £145

* For full contents and more information, visit: www.routledge.com/9781032863740

Environmental Lobbying at the United Nations

A Guide to Protecting Our Planet



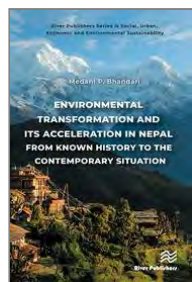
Felix Dodds University of North Carolina & Tellus Institute, USA, **Chris Spence**

This book provides a step-by-step, insiders' guide on how to lobby and engage successfully at the United Nations (UN). It reveals how the UN, which plays such a key role on issues from climate change to pollution of our air, land and sea, really works. Drawing on interviews with other experts, as well as training materials that have been produced by the authors, this book demystifies what to many outsiders can seem like an opaque and confusing world. This book is an essential resource for individuals and organisations entering the world of the UN for the first time, as well as those looking to gain a deeper understanding of how the world of international diplomacy really works.

Routledge
June 2025 : 216pp
Pb: 978-1-032-59746-1 : £35.99
Hb: 978-1-032-59748-5 : £145

* For full contents and more information, visit: www.routledge.com/9781032597461

Environmental Transformation and its Acceleration in Nepal From Known History to the Contemporary Situation



Medani P. Bhandari

Series: *River Publishers Series in Social, Urban, Economic and Environmental Sustainability*

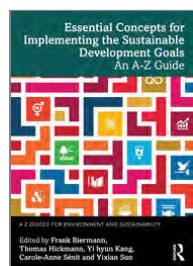
This is an in-depth exploration of Nepal's environmental journey, tracing its transformation from ancient practices to modern sustainability challenges. Drawing from over four decades of experience as an environmentalist and humanitarian, Dr. Medani Bhandari takes readers through the historical, social, and ecological shifts that have shaped Nepal's environmental landscape. This comprehensive work examines the complex interplay between traditional knowledge, policy development, and global environmental trends, offering valuable insights into the country's past, present, and future.

River Publishers
August 2025 : 428pp
Hb: 978-8-743-80101-6 : £115

* For full contents and more information, visit: www.routledge.com/9788743801016

Essential Concepts for Implementing the Sustainable Development Goals

An A-Z Guide



Edited by **Frank Biermann**, **Thomas Hickmann**
University of Potsdam, Germany, **Yi Hyun Kang**, **Carole-Anne Sénit**, **Yixian Sun**

Series: *A-Z Guides for Environment and Sustainability*

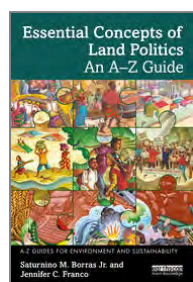
This book provides a highly accessible and easy-to-navigate overview of the essential concepts and terms related to the current global endeavour to implement the Sustainable Development Goals.

Routledge
July 2025 : 244pp
Pb: 978-1-032-84169-4 : £39.99
Hb: 978-1-032-85725-1 : £145

* For full contents and more information, visit: www.routledge.com/9781032841694

Essential Concepts of Land Politics

An A-Z Guide



Saturnino M. Borras Jr., **Jennifer C. Franco**

Series: *A-Z Guides for Environment and Sustainability*

This book compiles, discusses and explains sixty seven key concepts in land politics in an easy-to-navigate A-Z format. This book takes a broad view on land, across the rural and urban corridor, and advocates for a holistic view of the politics of land, as an aggregation of land and global social life, that is, the politics of food, climate, labour, citizenship and geopolitics. With further reading recommendations included alongside the entries, this innovative and accessible volume will be of great interest to students, scholars, policy practitioners, and political activists.

Routledge
June 2025 : 210pp
Pb: 978-1-032-65841-4 : £39.99
Hb: 978-1-032-65845-2 : £145

* For full contents and more information, visit: www.routledge.com/9781032658414

2ND EDITION

EU Environmental Governance

Current and Future Challenges



Edited by **Amandine Orsini** Université Saint-Louis - Bruxelles, Belgium, **Elena Kavvatha**

Series: *Routledge Studies in Environmental Policy*

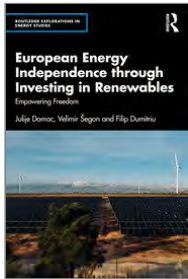
Drawing on expertise from renowned academics and practitioners from different disciplines, *EU Environmental Governance: Current and Future Challenges* helps readers to understand the main legal, political and economic issues of environmental protection since the adoption of the Paris Agreement by the European Union in 2015. This new edition presents both current insights and future challenges as they seem to be emerging in the new geopolitical era in the EU after major events such as the COVID-19 pandemic and the Russian invasion in Ukraine.

Routledge
September 2025 : 318pp
Pb: 978-1-032-76611-9 : £39.99
Hb: 978-1-032-76601-0 : £145

* For full contents and more information, visit: www.routledge.com/9781032766119

European Energy Independence through Investing in Renewables

Empowering Freedom



Edited by **Julije Domac, Velimir Segon, Filip Dumitriu**

Series: *Routledge Explorations in Energy Studies*

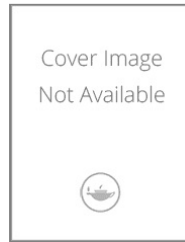
This book delves into Europe's urgent quest for energy independence as a foundation for the EU and national sovereignty, economic resilience, and climate leadership. Amid rising geopolitical tensions and accelerating climate crises, it advocates for a bold shift towards renewable energy investments as a pathway to a sustainable, energy-secure future. Offering an in-depth exploration of policy innovations, strategic imperatives, and case studies, the book highlights how decentralized energy systems and local empowerment can drive resilience and self-reliance.

Routledge
August 2025 : 214pp
Pb: 978-1-041-01948-0 : **£39.99**
Hb: 978-1-041-01947-3 : **£145**

* For full contents and more information, visit: www.routledge.com/9781041019480

Feminist Climate Policy in Industrialised States

A Gender-Just Climate Emergency Response



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Edited by **Susan Buckingham, Martin Hultman**
Linköping University, Sweden, **Gunnhildur Lily Magnúsdóttir, Karen Morrow**

Series: *Routledge Studies in Gender and Environments*

In 2021, the Intergovernmental Panel on Climate Change acknowledged that addressing the climate emergency must involve social justice and equality. The authors draw critically on case studies, research and interviews with feminist practitioners, legislators and leaders who have implemented significant changes, to signal how change might be achieved and ask what lessons can be drawn. The book posits that we need to ultimately move beyond the gender mainstreaming and gender equality issues which have been integrated into existing - and failing - structures, to more transformative feminist approaches.

Routledge
August 2025 : 348pp
Pb: 978-1-032-59029-5 : **£39.99**
Hb: 978-1-032-59033-2 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032590295

Events of Art and Education in Post-climate Times



Edited by **Carl Anders Säfström, Glenn Loughran**

Series: *Routledge Studies in Sustainability*

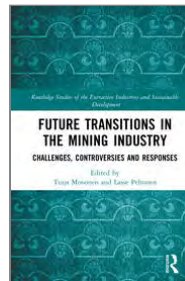
This book concerns the urgency of thinking and acting in response to climate change through art and education. By staging transcritical engagements, this book draws out common and uncommon disciplinary perspectives that can generate new ways of thinking, living, and doing in the Anthropocene. Events of Art and Education in Post-climate Times will be helpful for students studying art, education, environment and sustainability, and climate change. It will also interest researchers, practicing artists and teachers in these disciplines by being at the forefront of current discussions in both fields.

Routledge
July 2025 : 188pp
Pb: 978-1-032-58683-0 : **£39.99**
Hb: 978-1-032-59865-9 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032586830

Future Transitions in the Mining Industry

Challenges, Controversies and Responses



Edited by **Tuija Mononen, Lasse Peltonen**

Series: *Routledge Studies of the Extractive Industries and Sustainable Development*

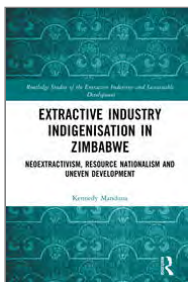
This volume focuses on mining and the challenges for this industry as it transitions and evolves as the demand for products and responsible and sustainable mining ever increases. It explores the challenges that arise when a society is reliant on the products of mining to maintain their standard of living, yet are simultaneously calling for the implementation of sustainable practices, with many communities also being resistant to mining activities taking place in their own location. It will be of interest to scholars and students of mining and the extractive industries, transitions, and sustainable development, as well as professionals working in natural resource management.

Routledge
August 2025 : 236pp
Hb: 978-1-032-32984-0 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032329840

Extractive Industry Indigenisation in Zimbabwe

Neoextractivism, Resource Nationalism and Uneven Development



Kennedy Manduna

Series: *Routledge Studies of the Extractive Industries and Sustainable Development*

This book explains how and why Zimbabwe's extractive industry indigenisation over-promised its benefits yet under-delivered upon implementation. By examining the hidden structures and infrastructures of power, capital, and minerals and placing extractive industry indigenisation in capitalism, the book makes a crucial scholarly contribution to the renewed and burgeoning debates around the resurgence of resource nationalism in general and the struggle for economic sovereignty in particular. This book will be of great interest to students and scholars of the extractive industries, natural resource management, African politics and African development.

Routledge
September 2025 : 242pp
Hb: 978-1-032-50088-1 : **£145**

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Gas Infra-red, the Green Heat

History of IR heating and Infra-red Heating Design and Economic Analysis



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George Kritzler

Series: *River Publishers Series in Energy Management*

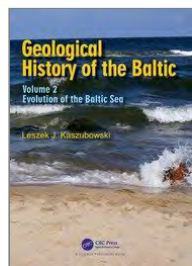
This book is a self-study guide for HVAC energy and non-HVAC energy engineers and plant managers who either lack formal training in the subjects of finance, accounting, and gas IR heating engineering economics, or simply need a means to refresh their knowledge in these subjects. This book is designed to familiarize energy engineers and other engineering professionals – in a relatively simple and easy to understand fashion – with decision making skills founded on financial calculations and case study based quantitative analysis.

River Publishers
May 2025 : 154pp
Hb: 978-8-770-04657-2 : **£99.99**

* For full contents and more information, visit: www.routledge.com/9788770046572

Geological History of the Baltic

Volume 2: Evolution of the Baltic Sea



Leszek J. Kaszubowski West Pomeranian University of Technology, Poland

The book presents the geological evolution of the Baltic Sea area since its inception, i.e., from the Late Glacial to the present day. The geological history of all evolutionary stages of the Baltic Sea is discussed in detail here, from the Baltic Ice Lake, through the Yoldia Sea, Ancylus Lake, Littorina Sea and Lymnaea Sea, to the Mya Sea as the modern stage of the Baltic Sea development. The author presents palaeoecological and palaeosedimentological analyses of various evolutionary stages of the Baltic Sea.

CRC Press

June 2025 : 432pp

Hb: 978-1-032-87651-1 : **£140**

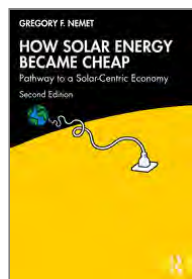
eBook: 978-1-003-54666-5

* For full contents and more information, visit: www.routledge.com/9781032876511

2ND EDITION

How Solar Energy Became Cheap

Pathway to a Solar-Centric Economy



Gregory F. Nemet

The climate problem is getting worse, but the solutions are getting better. So far, no technology has done more to improve the solutions available to address climate change than solar photovoltaics (PV). This revised edition describes an array of driving forces leading us toward a solar-centric energy system, one where solar power lies at the core rather than at the edge. Now in its second edition the book focuses on the future of solar, taking into account important changes since it was first published. It includes discussions on further growth and cost reductions, industrial policy, and grid integration of high solar.

Routledge

July 2025 : 274pp

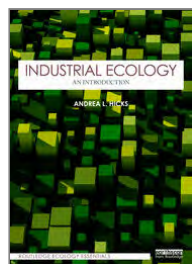
Pb: 978-1-032-59749-2 : **£39.99**

Hb: 978-1-032-59750-8 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032597492

Industrial Ecology

An Introduction



Andrea L. Hicks

Series: Routledge Ecology Essentials

This textbook presents a technical, yet accessible, introduction to the interdisciplinary field of industrial ecology. It begins with the history of industrial ecology, and progresses through common industrial ecology tools to explore and understand sustainability across the three paradigms of environment, economy, and society. Project based and community based learning are also included as an opportunity to provide experiential learning applying industrial ecology concepts and tools. It is essential reading for those studying industrial ecology and environmental and sustainable engineering.

Routledge

October 2025 : 248pp

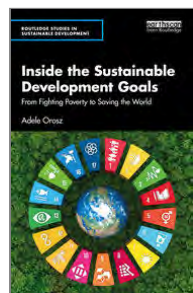
Pb: 978-1-032-59629-7 : **£39.99**

Hb: 978-1-032-59630-3 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032596297

Inside the Sustainable Development Goals

From Fighting Poverty to Saving the World



Adele Orosz

Series: Routledge Studies in Sustainable Development

This book is an indispensable and comprehensive guide to the SDGs. It is outlining where they came from, the main lessons learned so far and what to conclude for the years ahead. As the deadline of 2030 is close, and discussions about what should come after the SDGs are imminent, this book is among the first to draw conclusions for the post-2030 era, what to expect and what to demand from a potential successor agenda. This book addresses policy-makers, practitioners, researchers, and students alike, anyone interested in poverty, environment and sustainability.

Routledge

June 2025 : 178pp

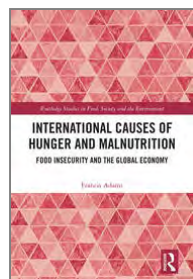
Pb: 978-1-032-70261-2 : **£35.99**

Hb: 978-1-032-70264-3 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032702612

International Causes of Hunger and Malnutrition

Food Insecurity and the Global Economy



Francis Adams

Series: Routledge Studies in Food, Society and the Environment

This book examines the international causes of hunger and malnutrition and reveals how critical elements of the global economy heighten food insecurity in the developing world. At present, over two billion people in the developing world do not have secure access to safe, sufficient and nutritious food. Focusing on agricultural trade, seed privatization, land acquisitions, industrial fishing, and climate change, it presents an alternative framework for addressing food insecurity. This book will be of particular interest to students, scholars, and practitioners in the fields of global food security, international development, and global political economy.

Routledge

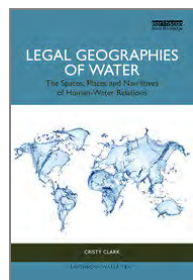
June 2025 : 198pp

Hb: 978-1-032-88771-5 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032887715

Legal Geographies of Water

The Spaces, Places and Narratives of Human-Water Relations



Cristy Clark

Series: Earthscan Water Text

This book deepens our understanding of humanity's diverse relationships with water and the law, providing a critical assessment of this relationship, as well as charting the course towards a more sustainable and just water future. By using legal geography, it pays particular attention to the place-based inter-relationships between water, people, and law, and to the ways that law both creates and is created by the relationship between people and place. It is essential reading for students and scholars interested in water law, security, and justice from across a wide range of disciplines, including environmental studies, law, geography, human rights, and political ecology.

Routledge

June 2025 : 282pp

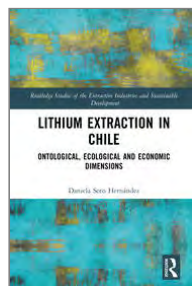
Pb: 978-1-032-22596-8 : **£39.99**

Hb: 978-1-032-22597-5 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032225968

Lithium Extraction in Chile

Ontological, Ecological and Economic Dimensions



Daniela Soto Hernández

Series: Routledge Studies of the Extractive Industries and Sustainable Development

This book explores lithium extraction in Chile as part of the global energy transition, unraveling the ontological, ecological, and economic dimensions of this type of extractivism. Engaging with Indigenous and non-Indigenous local communities, NGOs, state officials, companies, and lithium workers through a twelve-month ethnography, it offers a unique perspective on the contested narratives surrounding what is being extracted and its manifold effects. It will be of interest to academics, students, and environmental advocates studying energy transitions, critical minerals, anti-colonial and Indigenous perspectives on development, and lithium extraction.

Routledge
July 2025 : 234pp
Hb: 978-1-032-90178-7 : £145

* For full contents and more information, visit: www.routledge.com/9781032901787

Maritime Environmental Management

Principles and Practice



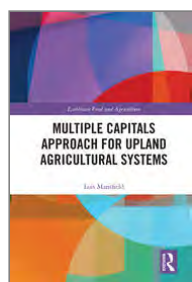
Anthony W. Gallagher Southampton Solent University, UK, **Anthony James Morris**

In this comprehensive introduction to the issues surrounding the use of the marine environment, the contribution of the maritime sector, specifically shipping and ports, to global environmental impacts is explored in depth. Using an ecosystem-based approach, the author reviews these impacts and considers their relative significance. Effective marine management and responsible use of the marine environment by the maritime sector is increasingly demanded by society. This book considers the success of current systems in place, including the questions of value and specific mechanisms of funding.

Routledge
September 2025 : 384pp
Pb: 978-0-415-85386-6 : £43.99
Hb: 978-0-415-85385-9 : £145

* For full contents and more information, visit: www.routledge.com/9780415853866

Multiple Capitals Approach for Upland Agricultural Systems



Lois Mansfield

Series: Earthscan Food and Agriculture

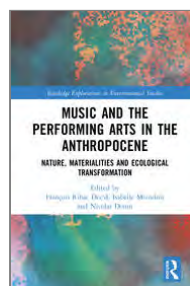
This book focuses on upland agricultural systems and applies a multiple capitals approach to explain what they can provide at a time when many are struggling to survive. Featuring case studies from the UK, Japan, and comparisons with Central and South America, it recommends tools for monitoring different forms of capital and suggests a management process driven by multiple capitals to create resilience in upland agricultural systems. It will be of interest to students and scholars of agriculture, natural resource management, ecosystem services, rural development and those interested in applying a multiple capitals approach more widely within policy and landscape management contexts.

Routledge
June 2025 : 308pp
Hb: 978-1-032-37760-5 : £145
eBook: 978-1-003-34178-9

* For full contents and more information, visit: www.routledge.com/9781032377605

Music and the Performing Arts in the Anthropocene

Nature, Materialities and Ecological Transformation



Edited by François Ribac, Isabelle Moindrot, Nicolas Donin

Series: Routledge Explorations in Environmental Studies

This book offers a series of thought-provoking essays about music and the performing arts viewed from current Anthropocene-aware perspectives. Each chapter aims at highlighting an issue that has always been here but never looked at thoroughly, due to the divides and hierarchies of the modern cosmogony. This book will be of great interest to students and scholars in the humanities and social sciences, as well as a broader readership involved in art and environment policies.

Routledge
August 2025 : 314pp
Hb: 978-1-032-28010-3 : £145

* For full contents and more information, visit: www.routledge.com/9781032280103

Operations Research

Evolving Frontiers and Diverse Applications



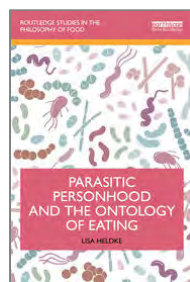
Edited by Vilda Purutcuoglu Middle East Technical University, Turkey, *Gerhard Wilhelm Weber* PUT, Poland, *Hajar Farnoudkia* Baskent University - IIBF, Turkey

This book, the second book in the series of Operational Research (OR) books, brings together the latest advances and comprehensive reviews of OR methods. It is divided in four parts - supply chain management, production planning and inventory management, signal processing and social sciences in such a way that researchers can follow up to date progress in the field while observing various applications with large datasets. The book will aid the discovery of new research avenues.

CRC Press
May 2025 : 342pp
Hb: 978-1-032-84304-9 : £140
eBook: 978-1-003-54043-4

* For full contents and more information, visit: www.routledge.com/9781032843049

Parasitic Personhood and the Ontology of Eating



Lisa Heldke

Series: Routledge Studies in the Philosophy of Food

This book explores "parasitic personhood," an alternative to atomistic individualism that acknowledges the biological individual as a network of persistent biological relationships (a "holobiont") and draws insight from the astonishing frequency and variety of parasitic feeding relationships. It will engage students and scholars of food and eating, particularly those working on the metaphysics of food, food and personhood, fermentation, and the microbiome, as well as philosophers considering the ontological significance of food and eating.

Routledge
August 2025 : 252pp
Pb: 978-1-032-71154-6 : £39.99
Hb: 978-1-032-71155-3 : £145

* For full contents and more information, visit: www.routledge.com/9781032711546

Recent Advancements and Emerging Technologies in Multi-level Inverters



Edited by **Kundan Kumar , Ambrish Devanshu , Subrata Banerjee , Lairenlakpam Robindro , Sheldon S. Williamson**

Series: *River Publishers Series in Power*

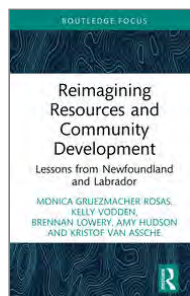
This book provides a comprehensive exploration of the latest innovations and trends in multi-level inverter technology. It delves into cutting-edge designs, control strategies, and applications of multi-level inverters in renewable energy systems, electric vehicles, and industrial automation. It combines theoretical foundations with practical insights, offering readers a holistic understanding of inverter operation and performance optimization.

River Publishers
August 2025 : 370pp
Hb: 978-8-770-04143-0 : £110

* For full contents and more information, visit: www.routledge.com/9788770041430

Reimagining Resources and Community Development

Lessons from Newfoundland and Labrador



Monica Gruezmacher Rosas , Kelly Vodden Memorial University, Canada, Brennan Lowery , Amy Hudson , Kristof Van Assche

Series: *Earthscan Studies in Natural Resource Management*

This book analyzes the experiences of communities facing major challenges relating to resource dependency and community sustainability, drawing on specific examples from the Canadian province of Newfoundland and Labrador. It offers a methodology for self-analysis to communities facing similar challenges, inspired by the ups and downs, local strategies for self-analysis and collaborative work towards new futures in this Canadian province. This book will appeal to students, scholars, and professionals interested in community development and redevelopment and offers a new understanding of the mechanics of local and regional resilience.

Routledge
July 2025 : 168pp
Hb: 978-1-041-02632-7 : £52.99

* For full contents and more information, visit: www.routledge.com/9781041026327

Routledge Handbook of Degrowth



Edited by **Anitra Nelson**

Series: *Routledge Environment and Sustainability Handbooks*

This handbook takes stock of 'degrowth', a concept and movement, gaining increasing visibility in the 2020s. Contributors explain contexts for degrowth's significance, elaborate its diverse history and detail its unique approaches, practices, challenges and potential futures. They address a range of strategic, activist, policy, and research questions in this handbook. Grounded in empirical cases they identify significant social and ecological challenges, relevant to students, researchers, activists, policy-makers and practitioners at various levels within the wide range of fields in which degrowth can be applied.

Routledge
June 2025 : 500pp
Hb: 978-1-032-64524-7 : £230

* For full contents and more information, visit: www.routledge.com/9781032645247

Routledge Handbook of Wetlands



Edited by **Alan Dixon , Ian Maddock**

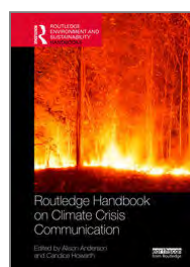
Series: *Routledge Environment and Sustainability Handbooks*

This handbook provides a comprehensive and interdisciplinary overview of the place, value and significance of wetlands, presenting perspectives from across the environmental and social sciences. It brings together a wide range of perspectives from social and environmental disciplines, and voices from different wetland stakeholders from the global north and south, to present an assessment of our current understanding of wetlands, their environmental significance, and their place in society and policy. It will be essential reading for students and scholars of wetland management, environmental science, water resource management, conservation ecology and sustainable development.

Routledge
August 2025 : 578pp
Hb: 978-1-032-11381-4 : £230

* For full contents and more information, visit: www.routledge.com/9781032113814

Routledge Handbook on Climate Crisis Communication



Edited by **Alison Anderson , Candice Howarth** University of Surrey, UK

Series: *Routledge Environment and Sustainability Handbooks*

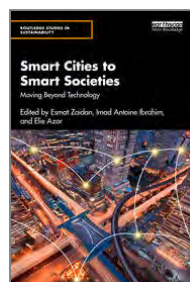
This Handbook provides a state-of-the-art review of leading research on climate change communication. As climate change has moved further up the political agenda, the challenge of how to communicate the scientific, social, and political aspects of the climate emergency is of increasing interest to researchers, NGOs, governments, and policymakers at national and international levels. The Routledge Handbook on Climate Crisis Communication provides a concise and expert summary of this growing field, explaining the theoretical, conceptual, and empirical developments that have been made in recent years and describing the origins and connections to broader topics.

Routledge
June 2025 : 438pp
Hb: 978-0-367-49054-6 : £230
eBook: 978-1-003-04425-3

* For full contents and more information, visit: www.routledge.com/9780367490546

Smart Cities to Smart Societies

Moving Beyond Technology



Edited by **Esmat Zaidan , Imad Antoine Ibrahim , Elie Azar**

Series: *Routledge Studies in Sustainability*

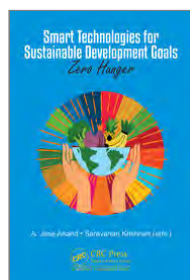
This book explores the governance of smart cities from a holistic approach, arguing that the creation of smart cities must consider the specific circumstances of each country to improve the preservation, revitalisation, liveability, and sustainability of urban areas. This book argues that a comprehensive approach is necessary to consider all relevant aspects. The book will be an important asset for students and researchers studying law, engineering, political science, international relations, geopolitics, economics and engineering.

Routledge
May 2025 : 274pp
Pb: 978-1-032-57430-1 : £39.99
Hb: 978-1-032-57429-5 : £145
eBook: 978-1-003-43932-5

* For full contents and more information, visit: www.routledge.com/9781032574301

Smart Technologies for Sustainable Development Goals

Zero Hunger



Edited by **A. Jose Anand** KCG College of Technology, India, **Saravanan Krishnan** Anna Uni. Regional Campus

This book aims to inspire policymakers, researchers, practitioners, and students to harness smart technologies for creating innovative, sustainable, and context-specific solutions to combat hunger. By presenting a wide range of perspectives and case studies from across the globe, it underscores the critical role of technological integration in shaping a future where no one goes hungry.

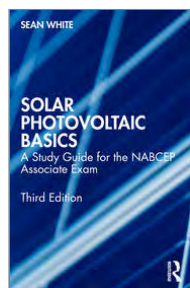
CRC Press
May 2025 : 314pp
Hb: 978-1-032-88267-3 : **£115**
eBook: 978-1-003-56966-4

* For full contents and more information, visit: www.routledge.com/9781032882673

3RD EDITION

Solar Photovoltaic Basics

A Study Guide for the NABCEP Associate Exam



Sean White Solar Energy Professor and Consultant, USA

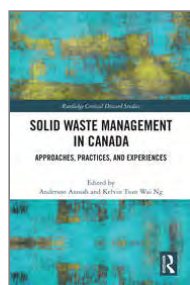
This book explains the science of photovoltaics (PV) in a way that most people can understand, using the curriculum which reflects the core modules of the NABCEP Associate Exam. Providing complete coverage of the NABCEP syllabus in easily accessible chapters, it addresses all of the core objectives required to pass the exam. You will learn the importance of surveying a site and how to carry out a survey, how to use the tools that determine shading and annual production, and the necessity of safety on site. This guide also includes technical math and equations that are understandable to those without engineering degrees, and are necessary in understanding the principles of solar PV.

Routledge
July 2025 : 194pp
Pb: 978-1-032-28852-9 : **£35.99**
Hb: 978-1-032-28851-2 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032288529

Solid Waste Management in Canada

Approaches, Practices, and Experiences



Edited by **Anderson Assuah**, **Kelvin Tsun Wai Ng**

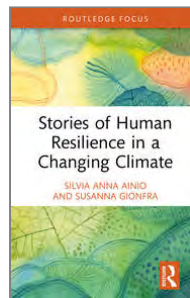
Series: *Routledge Critical Discard Studies*

This edited volume takes a comprehensive look at solid waste management across jurisdictions in Canada, including provinces, territories, municipalities and Indigenous communities. It provides the reader with an understanding of various solid waste management approaches, policies, practices, barriers, and innovations that are being pursued and developed by jurisdictions to solve their current challenges and to improve current systems in place.

Routledge
June 2025 : 286pp
Hb: 978-1-032-87209-4 : **£145**
eBook: 978-1-003-53412-9

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Stories of Human Resilience in a Changing Climate



Silvia Anna Ainio, **Susanna Gionfra**

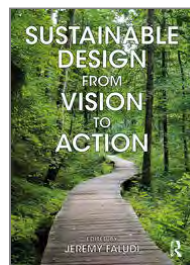
Series: *Routledge Focus on Environment and Sustainability*

Despite extreme climate-related events witnessed globally, many struggle to connect such global phenomena to their own lives in a tangible way. This book fills a critical void in the field by sharing eleven real-life experiences across five continents of the world, featuring ordinary people facing and adapting to the consequences of climate change in its different forms. By weaving scientific data with personal stories, the chapters deliver a compelling call to move beyond mere acknowledgment of the problem towards transformative action that respects the balance of ecosystems, fosters sustainable practices, and redefines our relationship with nature.

Routledge
July 2025 : 132pp
Hb: 978-1-032-79751-9 : **£52.99**

* For full contents and more information, visit: www.routledge.com/9781032797519

Sustainable Design from Vision to Action



Edited by **Jeremy Faludi**

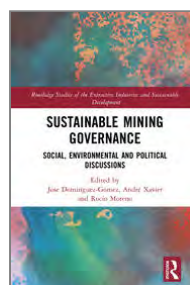
This book offers a comprehensive guide to the sustainable design of products, services, or related systems. It goes beyond concept explanations to provide you with practical instructions on how to apply the tools and methods to your own designs. This highly illustrated text will provide an excellent introduction to sustainable design in practice for industrial design and mechanical engineering students. It will also be useful for professional designers, engineers, and managers in industry.

Routledge
August 2025 : 462pp
Pb: 978-1-032-82474-1 : **£39.99**
Hb: 978-1-032-82475-8 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032824741

Sustainable Mining Governance

Social, Environmental and Political Discussions



Edited by **J. Andrés Domínguez-Gómez**, **André Xavier**, **Rocío Muñoz-Moreno**

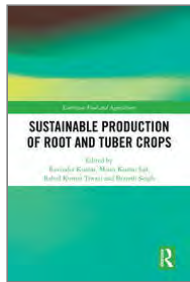
Series: *Routledge Studies of the Extractive Industries and Sustainable Development*

This volume provides a transdisciplinary analysis of the political, social and environmental aspects of governance and its implementation in the mining sector. Through a theoretical and practical journey—ranging from colonial extractivism to current models of sustainability and corporate responsibility—it provides a comprehensive look at how formal and informal power structures, community relations, social and environmental impact assessments, and regulatory frameworks shape the present and future of mining. It will be of great interest to students and scholars of the mining and extractive industries, natural resource governance, environmental governance and sustainable development.

Routledge
October 2025 : 256pp
Hb: 978-1-032-62281-1 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032622811

Sustainable Production of Root and Tuber Crops



Edited by **Ravinder Kumar** Professional University, Phagwara, **Milan Kumar Lal**, **Rahul Kumar Tiwari**, **Brajesh Singh**

Series: *Earthscan Food and Agriculture*

This book provides a comprehensive overview of the latest research and developments in the field of root and tuber crops from a sustainable production and protection perspective. With a focus on sustainable production methods, the book offers valuable insights and perspectives on how to improve the efficiency and sustainability of root and tuber crop production. This is particularly important given the increasing demand for food security and sustainable agriculture practices globally. This book will be of interest to students and scholars of sustainable agriculture, crop management and plant sciences.

Routledge
June 2025 : 346pp
Hb: 978-1-032-78280-5 : **£145**
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The Conservation of Violence

Statecraft, Forests, and Coloniality



Tafadzwa Mushonga

Series: *Routledge Studies in Environmental Justice*

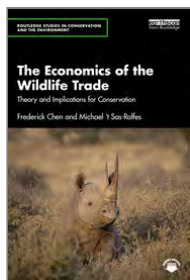
The Conserving of Violence discusses the governance of protected forests in Zimbabwe to spotlight the structural and operational ways in which violent tactics are produced, employed and sustained to promote nature conservation. The book uses contemporary cases of violence in conservation and introduces the conservation of violence as an alternative discourse for understanding the tenacity of violence in conservation areas across Africa. It will be an important addition to the literature in political ecology, geography, development, environmental justice and the broader environmental humanities.

Routledge
July 2025 : 198pp
Hb: 978-1-032-90011-7 : **£145**

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The Economics of the Wildlife Trade

Theory and Implications for Conservation



Frederick Chen, **Michael 't Sas-Rolfes**

Series: *Routledge Studies in Conservation and the Environment*

This book presents a thorough overview and assessment of the economics of the wildlife trade for scholars and conservationists, requiring only a basic understanding of economic principles. It presents a theoretical framework built on a foundation of microeconomic theory that is used to analyze the trade in wildlife goods, the potential effects of various conservation policies, and the economic forces that govern the workings of the markets for wildlife goods. It will appeal to scholars, practitioners, and policymakers in the field of wildlife conservation who are conversant in basic economics and interested in the economic principles relevant for the study of the wildlife trade.

Routledge
October 2025 : 228pp
Pb: 978-1-032-26053-2 : **£35.99**
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The Ethics of Participation in Environmental Field Research

Inclusion, Collaboration and Transformation



Edited by **Lydia Gibson**, **Julia Sauma**

Series: *Research and Teaching in Environmental Studies*

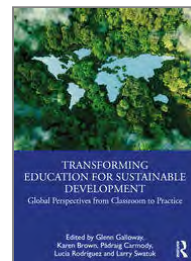
This book provokes important new discussions about ethical participation in environmental field research by bringing to the fore the fluid nature of both ethics and participation. Local participation is increasingly seen as a central and ethical part of environmental research; as such, many environmental efforts are becoming increasingly participatory. This book will be of great interest to all students and researchers across natural and social sciences whose fieldwork includes engagement with local communities and stakeholders, as well as conservation policymakers and practitioners who consult and work with local communities.

Routledge
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Hb: 978-1-032-34377-8 : **£145**

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Transforming Education for Sustainable Development

Global Perspectives from Classroom to Practice



Edited by **Glenn Galloway**, **Karen Brown**, **Pádraig Carmody** Trinity College London, Ireland, **Lucia Rodríguez**, **Larry Swatuk**

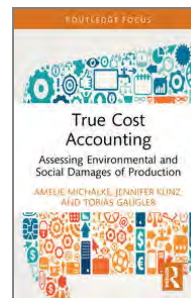
Transforming Education for Sustainable Development documents and disseminates learning around education for sustainable development and associated pedagogical approaches, techniques and experiences that have been generated across the Master of Development Practice (MDP) Global Association over the past 12 years. It integrates the participation and perspectives of a diverse group of faculty, alumni, students, and partners. This will be an insightful and important read for professionals in higher education for sustainability and sustainable development, in addition to researchers, policymakers and practitioners involved in non-profits, NGOs and international organisations.

Routledge
August 2025 : 212pp
Pb: 978-1-032-49228-5 : **£35.99**
Hb: 978-1-032-49229-2 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032492285

True Cost Accounting

Assessing Environmental and Social Damages of Production



Amelie Michalke, **Jennifer Kunz**, **Tobias Gaugler**

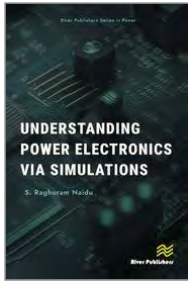
Series: *Routledge Focus on Environment and Sustainability*

This book explores the historical and theoretical classification of True Cost Accounting (TCA) and its business-oriented ways of implementation. It provides insights into TCA, which is one approach used to comprehensively assess actual (human or natural) resource consumption and implement this assessment into companies' internal controlling. This book will interest students and scholars of environmental economics, inspire practitioners in sustainable supply chain management and social accounting, and offer policymakers actionable recommendations in economic and social politics.

Routledge
May 2025 : 128pp
Hb: 978-1-032-38466-5 : **£52.99**
eBook: 978-1-003-34519-0

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Understanding Power Electronics via Simulations



S. Raghuram Naidu

Series: River Publishers Series in Power

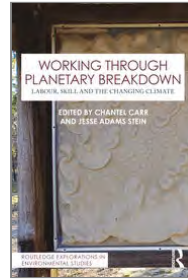
This book introduces Power Electronics by emphasizing computer simulation using the Python programming language. It is primarily a senior undergraduate text but can also be used for a post-graduate course on DC-DC switch power mode converters. It is also a reference for practicing engineers. This book encourages the reader to run the programs and perform numerical experiments. Quite a few simulations in the later chapters have been left as exercises for the reader. Many feedback control issues have been extensively discussed in the chapter on non-isolated DC-DC converters.

River Publishers
August 2025 : 572pp
Hb: 978-8-770-04677-0 : £115
eBook: 978-8-770-04678-7

* For full contents and more information, visit: www.routledge.com/9788770046770

Working Through Planetary Breakdown

Labour, Skill and the Changing Climate



Edited by Chantel Carr , Jesse Adams Stein

Series: Routledge Explorations in Environmental Studies

Working through Planetary Breakdown offers a genuinely interdisciplinary engagement with the future of paid and unpaid work in the context of the twin challenges of decarbonisation and the growing impacts of an unstable climate. This collection will resonate with scholars, students, policymakers and trade unionists interested in environmental labour studies, just transitions and the future of work. It offers vital lessons for navigating complex industrial transformations.

Routledge
August 2025 : 226pp
Pb: 978-1-032-81771-2 : £39.99
Hb: 978-1-032-84325-4 : £145

* For full contents and more information, visit: www.routledge.com/9781032817712

Vegan Witchcraft

Contemporary Magical Practice and Multispecies Social Change.



Corey Lee Wrenn

Series: Routledge Studies in Animals, Society and the Environment

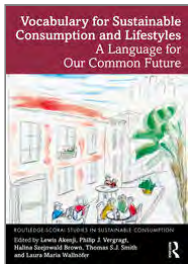
Vegan Witchcraft is the first book to blend theories of animal rights, feminism, and modern witchcraft in pursuit of total liberation. The book critically analyses popular witchcraft pathways in Britain and America to interrogate the many ways in which nonhuman animals are overlooked, objectified, or exploited, highlighting theological inconsistencies and missed opportunities that might be overcome to create a stronger practice for women and their communities. This book will be essential reading for those interested in critical animal studies, animal rights, ecofeminism, vegan religious studies, environmental philosophy and witchcraft.

Routledge
August 2025 : 260pp
Pb: 978-1-032-64971-9 : £39.99
Hb: 978-1-032-64974-0 : £145

* For full contents and more information, visit: www.routledge.com/9781032649719

Vocabulary for Sustainable Consumption and Lifestyles

A Language for Our Common Future



Edited by Lewis Akenji , Philip J. Vergragt Clark University, USA, *Halina Szejnwald Brown* Clark University, USA, *Thomas S.J. Smith* , *Laura Maria Wallnöfer*

Series: Routledge-SCORAI Studies in Sustainable Consumption

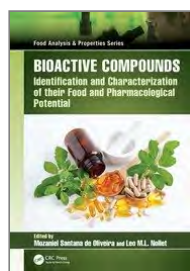
Vocabulary for Sustainable Consumption and Lifestyles: a Language for our Common Future curates a shared vocabulary of concepts that enables a society-wide conversation about sustainable consumption and lifestyles, the future of consumer society, and ways to transcend it. Overconsumption and extractive practices continue to drive ecological overshoot. Set against this backdrop, each of the eighty-seven essays in this book imparts a meaning to a concept, highlights its history, and offers different perspectives, interpretations, and applications for social change.

Routledge
October 2025 : 368pp
Pb: 978-1-032-95248-2 : £39.99
Hb: 978-1-032-95274-1 : £145

* For full contents and more information, visit: www.routledge.com/9781032952482

Bioactive Compounds

Identification and Characterization of their Food and Pharmacological Potential



Edited by **Mozaniel Santana de Oliveira** Museu Paraense Emílio Goeldi, **Leo M.L. Nollet** University College Ghent

Series: Food Analysis & Properties

The potential of bioactive compounds can be unlocked through an in-depth examination of their properties in the book titled "Bioactive Compounds: Identification and Characterization of Their Food and Pharmacological Potential". This comprehensive volume provides an in-depth examination of the complexities of bioactive compounds, offering a meticulous exploration of their identification, characterization, and multifaceted roles in food and pharmaceutical applications.

CRC Press
July 2025 : 460pp
Hb: 978-1-032-59899-4 : **£195**
eBook: 978-1-003-46280-4

* For full contents and more information, visit: www.routledge.com/9781032598994

Bioactive Compounds of Edible Fruits and Berries

Health Benefits, Nutritional Importance, and Analysis



Edited by **Leo M.L. Nollet** University College Ghent, **Javed Ahamad**

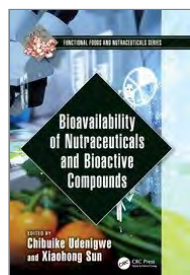
Series: Food Analysis & Properties

Plants have often been a primary source of therapeutic compounds. Bioactive Compounds of Edible Fruits and Berries: Health Benefits, Nutritional Importance, and Analysis delves deep into the remarkable world of edible fruits and berries, revealing their untapped potential in human health and pharmaceutical development.

CRC Press
November 2025 : 344pp
Hb: 978-1-032-79790-8 : **£190**

* For full contents and more information, visit: www.routledge.com/9781032797908

Bioavailability of Nutraceuticals and Bioactive Compounds



Edited by **Chibuikwe Udenigwe**, **Xiaohong Sun**

Series: Functional Foods and Nutraceuticals

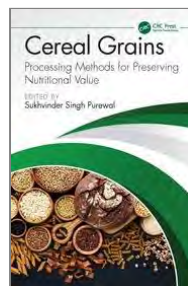
This book provides an in-depth exploration of the bioavailability of nutraceuticals and bioactive compounds. It covers the fundamental principles, assessment methods, influencing factors, and strategies to enhance bioavailability. With particular emphasis on the individual forms of nutraceuticals and bioactive compounds. By bridging the gap between fundamental science and practical applications, highlights cutting-edge research and emerging technologies in nutraceuticals and functional foods. What sets this book apart is its targeted focus on oral bioavailability, integrating perspectives from food science, biochemistry, and pharmacokinetics.

CRC Press
September 2025 : 312pp
Hb: 978-1-032-32027-4 : **£180**

* For full contents and more information, visit: www.routledge.com/9781032320274

Cereal Grains

Processing Methods for Preserving Nutritional Value



Edited by **Sukhvinder Singh Purewal** Chandigarh University

This book explores how various techniques influence nutrient content, bioavailability, and food quality. It provides a clear understanding of traditional and modern processing methods, helping professionals optimize grain-based products. This book provides updated information on innovative grain processing techniques and demonstrates how different methods affect dietary value. Helpful for the industrial sector as well as serving as a reliable source for food science and nutrition studies, this book bridges the gap between research and real-world applications, ultimately offering practical and meaningful information for improving cereal-based health benefiting food products.

CRC Press
August 2025 : 408pp
Hb: 978-1-032-63914-7 : **£190**

* For full contents and more information, visit: www.routledge.com/9781032639147

Edible Film and Coatings

Innovative Applications for Packaging and Food Preservation



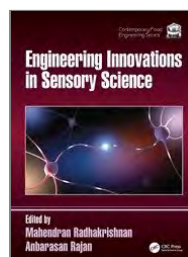
Edited by **Jian Ju**, **Fangyuan Zhao**

Edible films and coatings can be environmentally friendly alternative materials serving as both food preservative and food packaging. This book describes the effects of foodborne microorganisms and food oxidation on food storage quality and current food preservation strategies. Basic information and practical applications of various edible films and coatings for potential use in food packaging are provided, preparation methods of different types of edible films and coatings are described, and industrial applicability of these technologies are emphasized.

CRC Press
August 2025 : 464pp
Hb: 978-1-032-60689-7 : **£180**

* For full contents and more information, visit: www.routledge.com/9781032606897

Engineering Innovations in Sensory Science



Edited by **Mahendran Radhakrishnan**, **Anbarasan Rajan**

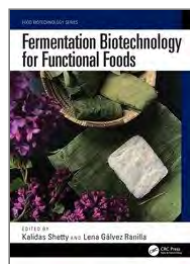
Series: Contemporary Food Engineering

Sensory analysis is significant in food product development, and its importance impacts the maintenance of sensory qualities for food products. While there are many books exploring sensory analysis and its methods, this is the first of its kind to also explore the use of engineering tools and instruments to produce measurable and reliable data. In exploring sensory analysis methods, this book also focuses on the novel computer interface technologies to retrieve human sensory perceptions directly from the human body and convert them into a measurable unit, exploring the present status in computer interface technologies and scope for interventions to overcome obstacles.

CRC Press
August 2025 : 340pp
Hb: 978-1-032-71507-0 : **£190**

* For full contents and more information, visit: www.routledge.com/9781032715070

Fermentation Biotechnology for Functional Foods



Edited by **Kalidas Shetty** North Dakota State University, USA, **Lena Gálvez Ranilla** Universidad Católica de Santa María

Series: *Food Biotechnology Series*

This book brings together diverse examples of advances from different regions in fermentation processing using diverse food substrates and how concepts of such fermentation can improve food quality for health benefits. These examples provide a range of insights on the metabolic processes of fermentation, and how they microbially transform food substrates with better quality for health benefits. It discusses the rationale and basis of food fermented foods from 26 diverse regions with examples from Americas, Asia, Europe and Africa.

CRC Press
September 2025 : 520pp
Hb: 978-1-032-99653-0 : £195

* For full contents and more information, visit: www.routledge.com/9781032996530

Food Marketing and Labelling

A Practical Guide



Debasish Biswas, **Debarun Chakraborty** Indian Institute of Management, Nagpur, India, **Atanu Manna**

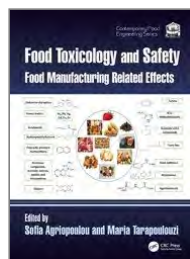
This book provides in-depth coverage of the interconnection among food marketing, labelling, and technology to enhance consumers, practitioners, and scholars understanding of the modern food market. In fourteen chapters the book discusses crucial aspects of food marketing, from consumer preferences and branding strategies to regulation in food labelling, technological advancement, and sustainable practices. It allows readers to understand the holistic view of food marketing, labelling, and technology and their interrelationship.

CRC Press
June 2025 : 380pp
Hb: 978-1-032-75300-3 : £120
eBook: 978-1-003-47330-5

* For full contents and more information, visit: www.routledge.com/9781032753003

Food Toxicology and Safety

Food Manufacturing Related Effects



Edited by **Sofia Agriopoulou**, **Maria Tarapoulouzi**

Series: *Contemporary Food Engineering*

Food toxicology deals with the existence of dangerous toxic components that food may contain, and various food-processing contaminants are formed during the production process as a direct result of traditional and emerging food-processing techniques. This book brings together food toxicology and food safety, linking them to several types of food processing. It addresses the gaps in how contaminants are formed at different stages of food processing, highlighting ongoing efforts related to food safety. In addition, it studies how processing technologies affect food products, explaining the advantages, disadvantages, process operations of these techniques.

CRC Press
August 2025 : 384pp
Hb: 978-1-032-68787-2 : £190

* For full contents and more information, visit: www.routledge.com/9781032687872

Green Chemistry in Food Analysis



Edited by **N.C. Basantia** Cavinkare Research Centre, Chennai, India, **Leo M.L. Nollet** University College Ghent

Series: *Food Analysis & Properties*

In today's world, ensuring the safety and quality of food is more critical than ever. At the same time, the need to reduce the environmental impact of laboratory practices is becoming a top priority across the scientific community. Green Analytical Chemistry in Food Analysis bridges these two essential goals, presenting a comprehensive and forward-thinking guide to apply green chemistry principles in the analytical evaluation of food.

CRC Press
November 2025 : 344pp
Hb: 978-1-032-79134-0 : £190

* For full contents and more information, visit: www.routledge.com/9781032791340

How Technological Advances Change Human Food



Edited by **Matteo Bordiga** Università del Piemonte Orientale, Novara, Italy, **Baojun Xu**

Diet is key to understanding the past, present, and future of our species. Much of human evolutionary success can be attributed to our ability to consume and preserve a wide range of foods. Technological advances changed the types of foods we eat. With this consideration, this book weaves together various themes starting from human evolution, moving on to methods of food preservation, and the evolution of cooking methods. Issues relating to sustainability are also reported such as green food processing, vertical farming, and edible insects farming.

CRC Press
September 2025 : 380pp
Hb: 978-1-032-54741-1 : £180

* For full contents and more information, visit: www.routledge.com/9781032547411

Innovative Technologies for Meat Processing



Edited by **Slim Smaoui**, **Tanmay Sarkar**

Series: *Contemporary Food Engineering*

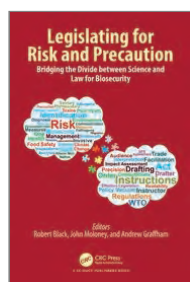
This book explores the intersection of innovation and meat processing, offering a comprehensive guide to the latest technological breakthroughs that are transforming the landscape of meat production. This book begins by providing an overview of the traditional methods in meat processing and their limitations, then navigates through emerging technologies from state-of-the-art machinery and automation to the integration of artificial intelligence and data analytics in processing meats. This book caters to a diverse audience, including professionals in the meat processing industry, researchers, policymakers, and anyone interested in the future of food technology.

CRC Press
July 2025 : 400pp
Hb: 978-1-032-86926-1 : £180

* For full contents and more information, visit: www.routledge.com/9781032869261

Legislating for Risk and Precaution

Bridging the Divide between Science and Law for Biosecurity



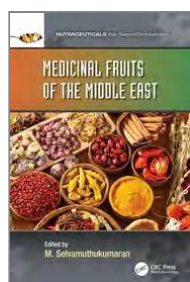
Edited by **Robert Black** Biosecurity Law and Regulation, UK, **John Moloney** Food and the Marine, Ireland, **Andrew Graffham**

The book aims to demystify the law for scientists and instructing officials by exploring the science and legal concepts of risk and precaution for national legislation to facilitate safe trade in agricultural products (in compliance with international trade rules). It is not meant to supplant the many authoritative titles on legislative drafting but provide some practical exercises on instructions and drafting for this area of law. It also includes some important factors in legal reform such as the audience for and access to legislation. It has the potential to be a valuable resource for coordinated training of instructors and drafters.

CRC Press
June 2025 : 286pp
Hb: 978-1-032-34643-4 : £150
eBook: 978-1-003-32317-4

* For full contents and more information, visit: www.routledge.com/9781032346434

Medicinal Fruits of the Middle East



Edited by **Meenakshisundaram Selvamuthukumaran**
School of Agriculture, Joy University

Series: *Nutraceuticals*

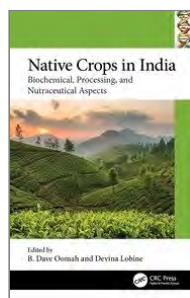
Medicinal plants, including fruits, contain bioactive components which present health benefits for humans. There are several medicinal fruits including jack fruit, pomegranate, date palm, papaya, and lemons grown commercially in countries throughout the Middle East. Medicinal Fruits of the Middle East explores this subject by featuring information on bioactive properties, extraction techniques, natural colorants, nutraceutical preparations, and traditional food preparations of these unique, medicinal fruits.

CRC Press
August 2025 : 210pp
Pb: 978-1-032-59028-8 : £48.99
Hb: 978-1-032-58942-8 : £190

* For full contents and more information, visit: www.routledge.com/9781032590288

Native Crops in India

Biochemical, Processing, and Nutraceutical Aspects



Edited by **B. Dave Oomah**, **Devina Lobine**

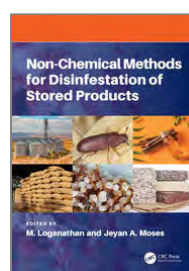
Series: *Food Biotechnology and Engineering*

With 20 agro-climatic regions, India has the second largest agricultural land mass. This book presents the latest scientific and technical information on indigenous and domesticated crops grown, consumed, and traded in India, forming part of its agro-economy. It covers the uses of the crops in Indian food products and/or future food developments, highlighting product developments through traditional and innovative processing and engineering and/or microbial technologies to produce nutraceuticals and functional foods ingredients. The benefits of these crops, many used in Ayurvedic medicine, are also covered, particularly in regard to alleviating prevalent non-communicable diseases.

CRC Press
October 2025 : 416pp
Pb: 978-1-032-40288-8 : £64.99
Hb: 978-1-032-40285-7 : £150

* For full contents and more information, visit: www.routledge.com/9781032402888

Non-chemical Methods for Disinfestation of Stored Products



Edited by **M Loganathan**, **Jeyan Moses**

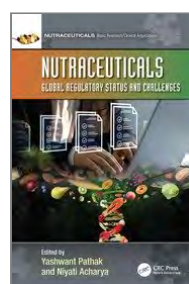
This reference book covers traditional and recent technologies in the detection and disinfestation of stored foods. Storage of durables is challenging and demands scientific management protocols. This book focuses on the use of non-chemical methods of disinfestation in durables like cereals, pulses, oilseeds, millets, and spices. It discusses important disinfestation techniques like biological control, extreme-temperature-based approaches, insect-repellent packaging, and nano-based techniques. It also covers the detection of pests and some chemical methods of disinfestation. It is an important reference for professionals, researchers, and post-graduate food science and technology students.

CRC Press
May 2025 : 352pp
Hb: 978-1-032-97631-0 : £110
eBook: 978-1-003-60983-4

* For full contents and more information, visit: www.routledge.com/9781032976310

Nutraceuticals

Global Regulatory Status and Challenges



Edited by **Yashwant Pathak** USF, USA, **Niyati Acharya**

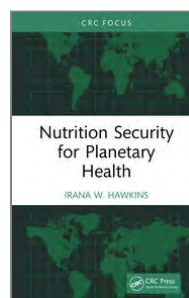
Series: *Nutraceuticals*

The global nutraceutical and health supplement market is experiencing unprecedented growth, driven by increasing consumer awareness and evolving healthcare needs. Nutraceuticals: Global Regulatory Status and Challenges provides a comprehensive overview of global regulatory frameworks, empowering professionals to understand and comply with varying standards. From ingredient approval to labeling requirements, this book offers critical insights into key markets, as well as emerging markets.

CRC Press
August 2025 : 304pp
Hb: 978-1-032-72984-8 : £190

* For full contents and more information, visit: www.routledge.com/9781032729848

Nutrition Security for Planetary Health



Irana Hawkins Public Health Program, Walden University, Minneapolis, USA

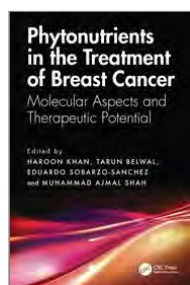
Using the lens of nutrition security and equity for the living beings and living systems of the planet, Nutrition Security for Planetary Health takes an integrated, systems approach that not only delineates the antecedents of the multifaceted environmental crises—but offers solutions including the extensive co-benefits of whole plant foods nutrition as the foundational dietary pattern for improving planetary health. Overlooked yet inseparable problems that connect food systems to the transgression of our planetary boundaries, chronic disease, and zoonotic disease are discerned.

CRC Press
July 2025 : 184pp
Hb: 978-0-367-72120-6 : £44.99

* For full contents and more information, visit: www.routledge.com/9780367721206

Phytonutrients in the Treatment of Breast Cancer

Molecular Aspects and Therapeutic Potential



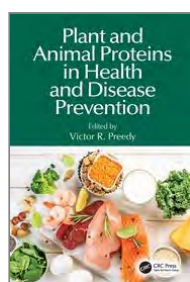
Edited by Haroon Khan, Tarun Belwal, Eduardo Sobarzo-Sanchez, Muhammad Ajmal Shah

Delves into the evolving role of phytonutrients as powerful therapeutic agents in the fight against breast cancer. This comprehensive book explores the molecular mechanisms by which bioactive compounds found in fruits, vegetables, and plant-based foods influence cancer progression.

CRC Press
August 2025 : 464pp
Hb: 978-0-367-65165-7 : £180

* For full contents and more information, visit: www.routledge.com/9780367651657

Plant and Animal Proteins in Health and Disease Prevention



Edited by Victor Preedy

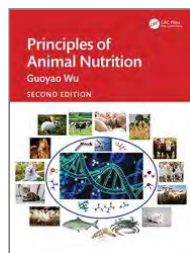
Plant and Animal Proteins in Health and Disease Prevention explores the vital role of proteins in human health through 40 in-depth chapters, organized into four comprehensive sections which include Introductory Concepts, Foods of Animal Origin, Foods of Plant Origin, and Resources. The book delves into the biochemical processes behind protein metabolism and its influence on a wide range of health conditions. Aimed at educating readers on the diverse sources and types of protein, it provides valuable insights into how both plant and animal proteins contribute to disease prevention and overall wellness.

CRC Press
August 2025 : 600pp
Hb: 978-1-032-98288-5 : £170

* For full contents and more information, visit: www.routledge.com/9781032982885

2ND EDITION

Principles of Animal Nutrition



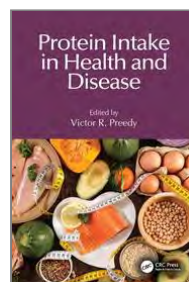
Guoyao Wu Texas A&M University, College Station, USA

The second edition of Principles of Animal Nutrition presents a comprehensive coverage of nutrition and metabolism in ruminants, nonruminant mammals (e.g., swine and horses), and poultry, as well as aquatic and companion animals. Substantially revised, expanded, and updated to reflect scientific advances, this book highlights the foundational aspects of nutrition that are essential to animal growth, development, reproduction, lactation, health, and survival.

CRC Press
October 2025 : 784pp
Hb: 978-1-032-49086-1 : £165

* For full contents and more information, visit: www.routledge.com/9781032490861

Protein Intake in Health and Disease



Edited by Victor Preedy King's College, London, UK

Proteins are fundamental to human health, serving as building blocks for cellular structures, providing essential energy and supporting tissue function. In Protein Intake in Health and Disease, the critical biomedical and nutritional roles of protein in the diet are explored in depth. Topics include protein quality, the impact of both low and high-protein diets, and the metabolic disorders and diseases linked to protein malnutrition. The book delves into protein's influence across the lifespan, from maternal health and early development to the nutritional needs of children, adolescents and the aging population.

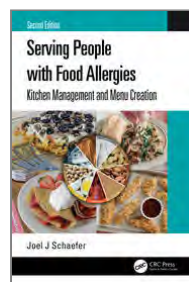
CRC Press
July 2025 : 528pp
Hb: 978-1-032-45827-4 : £170

* For full contents and more information, visit: www.routledge.com/9781032458274

2ND EDITION

Serving People with Food Allergies

Kitchen Management and Menu Creation



Joel J Schaefer

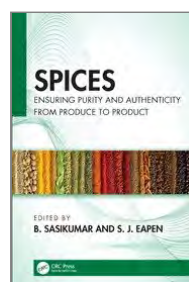
In this second edition, food allergy statistics are updated for the US and now presented worldwide. It covers the updated food allergy laws, includes the newest food allergen, sesame, and presents the new gluten-free labeling law. New recipes, free from the top 9 allergens and gluten, plus the latest plant-based recipes are now included.

CRC Press
September 2025 : 216pp
Pb: 978-1-032-32946-8 : £96.99
Hb: 978-1-032-34912-1 : £250

* For full contents and more information, visit: www.routledge.com/9781032329468

Spices Production to Products

Purity and Authenticity



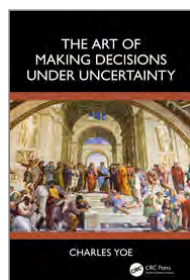
Edited by B. Sasikumar, S. J. Eapen

Ensuring the purity and authenticity of spices is more critical than ever. Addresses the challenges of spice adulteration and contamination that threaten food safety, public health, forex earnings, and the integrity of global supply chains.

CRC Press
July 2025 : 480pp
Hb: 978-1-032-73209-1 : £190

* For full contents and more information, visit: www.routledge.com/9781032732091

The Art of Making Decisions Under Uncertainty



Charles Yoe Notre Dame of Maryland University, Baltimore, USA

Every organization in the world faces the challenge of making decisions without all the data and information it would like to have. This is the essence of decision making under uncertainty and it is ubiquitous. Student tested before it was published, this textbook provides 30 chapters worth of practical guidance, methods, and tools and techniques to help individuals and organizations to make decisions under uncertainty. The book addresses the challenges posed by uncertainty in a variety of private and public sector fields, providing a structured approach to empower individuals and their organizations to develop a culture of uncertainty that will improve decision-making processes.

CRC Press

September 2025 : 376pp

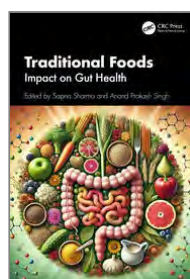
Pb: 978-1-032-99673-8 : **£68.99**

Hb: 978-1-032-99610-3 : **£175**

* For full contents and more information, visit: www.routledge.com/9781032996738

Traditional Foods

Impact on Gut Health



Edited by Sapna Sharma Shri Ramswaroop Memorial University, India, **Anand Prakash Singh** University of Michigan, USA

Series: Sustainable Industrial and Environmental Bioprocesses

Traditional Foods: Impact on Gut Health delves into the profound influence of traditional foods and dietary interventions on gut health, immune modulation, and disease prevention. This comprehensive book unites ancient culinary wisdom with contemporary scientific advancements, presenting a detailed exploration of traditional food practices, their phytochemical properties, and their profound impact on digestive and overall health.

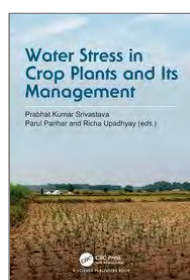
CRC Press

July 2025 : 270pp

Hb: 978-1-032-84637-8 : **£115**

* For full contents and more information, visit: www.routledge.com/9781032846378

Water Stress in Crop Plants and Its Management



Edited by Prabhat Kumar Srivastava Kamta Pra Sunder Lal Saket Post Grad Col, India, **Parul Parihar** Banasthali Vidyapith, India, **Richa Upadhyay**

This book is a thorough compilation of recent studies on the effects of water stress on the morphology and anatomy of plants, photosynthesis, transpiration and nitrogen metabolism. This book also encompasses redox biology, genomics, metabolomics, ionomics, proteomics and transcriptomics during water stress in crop plants. Different mitigation strategies like using different osmolytes, proteins, hormones and growth regulators, antioxidants, and biotechnological tools to make crop plants less water demanding have also been discussed along with the involvement of major signaling molecules in water-stressed conditions as well as the crosstalk with other minerals, phytohormones etc.

CRC Press

May 2025 : 276pp

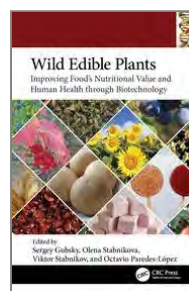
Hb: 978-1-032-56123-3 : **£140**

eBook: 978-1-003-43398-9

* For full contents and more information, visit: www.routledge.com/9781032561233

Wild Edible Plants

Improving Food's Nutritional Value and Human Health through Biotechnology



Edited by Sergey Gubsky, **Olena Stabnikova**, **Viktor Stabnikov**, **Octavio Paredes-López**

Series: Food Biotechnology and Engineering

Wild plants have been used since ancient times as a source of human nutrition. They are a source of compounds valuable for human health such as phenols, flavonoids, antioxidants, vitamins, microelements, and fibers. When these materials are used as main components of foods, or as additives, they enhance the nutritional, functional and sensory properties. The book will present new developments in applications of wild edible plants as emulsifiers, stabilizers, and thickeners of water-in-oil emulsions in food emulsion-based foods. Covered too, are biotechnological aspects of manufacturing of meat, bakery, and confectionary products and beverages incorporating wild edible plants.

CRC Press

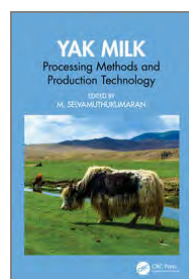
August 2025 : 464pp

Hb: 978-1-032-76520-4 : **£190**

* For full contents and more information, visit: www.routledge.com/9781032765204

Yak Milk

Processing Methods and Production Technology



Edited by Meenakshisundaram Selvamuthukumar School of Agriculture, Joy University

The domestic yak (*Bos grunniens*), a species of long-haired domestic cattle, is found in India, Nepal, China, Pakistan, Mongolia, Russia, and Serbia. The milk derived from yak possesses great nutritional potential, wherein proteins ranging from 4.8-5.9%, fat i.e. 5.6- 7.5% and total solids of 17.0-17.9% in comparison with the milk from other bovine animals. This book describes various processed products derived from yak milk, such as cream, butter, ghee, yoghurt, and milk powder.

CRC Press

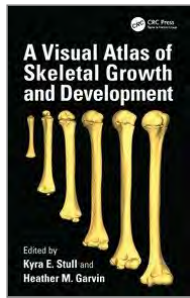
May 2025 : 160pp

Hb: 978-1-032-58470-6 : **£195**

eBook: 978-1-003-45533-2

* For full contents and more information, visit: www.routledge.com/9781032584706

A Visual Atlas of Skeletal Growth and Development



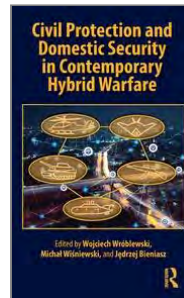
Edited by **Kyra E. Stull** University of Nevada, Reno, USA,
Heather M. Garvin Des Moines University, USA

A Visual Atlas of Skeletal Growth and Development provides professionals, practitioners, and students with a single resource that visually illustrates the skeletal growth and development of individual human bones from birth until skeletal maturity. This book will be a vital reference for professionals and students in biological anthropology, human biology, health sciences, and is a useful resource for individuals interested in learning about the growth and development of the skeleton through images and empirical data.

CRC Press
August 2025 : 250pp
Hb: 978-1-032-75485-7 : £145

* For full contents and more information, visit: www.routledge.com/9781032754857

Civil Protection and Domestic Security in Contemporary Hybrid Warfare



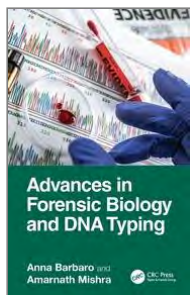
Edited by **Wojciech Wróblewski** Internal Security Institute, Fire University, Poland, **Michał Wiśniewski** Politechnika Warszawska, Poland, **Jędrzej Bieniasz** Politechnika Warszawska, Poland

Civil Protection and Domestic Security in Contemporary Hybrid Warfare presents a comprehensive approach to civil protection and domestic security in contemporary hybrid armed conflict. This book is a vital resource to government and civilian specialists responsible for population security and protection, helping them and their civilian populations to strategise and, oftentimes, to individually mitigate the risk of loss of life or health—as has been demonstrated in the Russia-Ukraine conflict.

Routledge
May 2025 : 594pp
Pb: 978-1-032-82284-6 : £57.99
Hb: 978-1-032-82285-3 : £145
eBook: 978-1-003-50385-9

* For full contents and more information, visit: www.routledge.com/9781032822846

Advances in Forensic Biology and DNA Typing



Anna Barbaro Studio Indagini Mediche E Forensi, Italy,
Amarnath Mishra Amity University, India

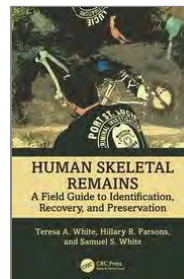
Advances in Forensic Biology and DNA Typing examines a broad range of forensic DNA applications and topics, based on internationally recognized best practices. This book is a highly illustrated guide that will serve as a useful reference for forensic laboratory professionals, investigators, and students, as well as legal professionals.

CRC Press
June 2025 : 426pp
Hb: 978-1-032-72076-0 : £64.99
eBook: 978-1-032-72089-0

* For full contents and more information, visit: www.routledge.com/9781032720760

Human Skeletal Remains

A Field Guide to Identification, Recovery, and Preservation



Teresa A. White Bone and Stone Anthrosciences, USA,
Hillary R. Parsons Odyssey Anthropology, USA, **Samuel S. White**

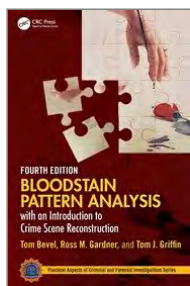
Human Skeletal Remains is a step-by-step field guide to teach proper recovery techniques when a forensic anthropologist is unavailable for immediate scene responses. This book is an illustrative tool designed to accompany you on scene. Use it to identify the bones you locate, then follow the instructions to recover them. Get it dirty!

CRC Press
August 2025 : 120pp
Pb: 978-1-032-62195-1 : £53.99
Hb: 978-1-032-62216-3 : £145

* For full contents and more information, visit: www.routledge.com/9781032621951

4TH EDITION

Bloodstain Pattern Analysis with an Introduction to Crime Scene Reconstruction



Tom Bevel, **Ross M. Gardner**, **Tom J. Griffin**

Series: Practical Aspects of Criminal and Forensic Investigations

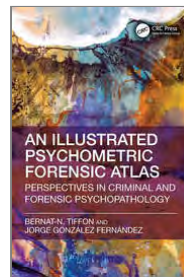
Blood Stain Pattern Analysis with an Introduction to Crime Scene Reconstruction, Fourth Edition provides criminal investigators and forensic scientists with a complete and comprehensive handbook on bloodstain pattern analysis. Offering practical advice and tips for new and experienced professionals alike, Blood Stain Pattern Analysis with an Introduction to Crime Scene Reconstruction, Fourth Edition offers readers the necessary tools to guide and focus any investigative effort.

CRC Press
June 2025 : 500pp
Hb: 978-1-032-52850-2 : £81.99
eBook: 978-1-003-40873-4

* For full contents and more information, visit: www.routledge.com/9781032528502

Illustrated Psychometric Forensic Atlas

Perspectives in Criminal and Forensic Psychopathology



Bernat-N. Tiffon, **Jorge Gonzalez Fernandez** National Institute of Toxicology and Forensic Sciences, Spain

The book provides extensive details of such cases that include the background circumstances, psychological assessments and—in some cases—official clinical diagnoses, as well as numerous photos that illustrate what police, investigators, and medical examiners discovered during crime scene and autopsy inquiry. The book provides a fascinating analysis—and sheds light on—practices that can inform these types of cases, as well as the constraints of what forensic and psychological analysis can yield.

CRC Press
June 2025 : 236pp
Pb: 978-1-032-82029-3 : £62.99
Hb: 978-1-032-82039-2 : £145
eBook: 978-1-003-50394-1

* For full contents and more information, visit: www.routledge.com/9781032820293

Law for Forensic Scientists



Victor W. Weedn George Washington University, USA,
Kenneth E. Melson George Washington University, USA

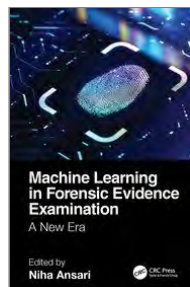
Law for Forensic Scientists fills a significant gap in legal literature by providing an accessible and comprehensive textbook for forensic science students, practitioners, and attorneys working with forensic evidence. While numerous books cover criminal law, criminal procedure, and expert testimony separately—often tailored for law students and criminal defense attorneys—this book uniquely integrates these key areas for forensic scientists. This is an accessible textbook appropriate for students on forensic science programs, along with students of law and criminal law.

CRC Press
 September 2025 : 368pp
 Hb: 978-1-498-77796-4 : £64.99

* For full contents and more information, visit: www.routledge.com/9781498777964

Machine Learning in Forensic Evidence Examination

A New Era



Edited by **Niha Ansari** National Forensic Sciences University, India

The availability of machine learning algorithms, and the immense computational power required to develop robust models with high accuracy, has driven researchers to conduct extensive studies in forensic science, particularly in the identification and examination of evidence found at crime scenes. Machine Learning in Forensic Evidence Examination discusses methodologies for the application of machine learning to the field of forensic science. This book is a valuable resource for academics, forensic scientists, legal professionals, and those working on investigations and analysis within the law enforcement agencies.

CRC Press
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 Hb: 978-1-032-58236-8 : £59.99

* For full contents and more information, visit: www.routledge.com/9781032582368

2ND EDITION

Mathematical Methods for Accident Reconstruction

A Forensic Engineering Perspective



Harold Franck Advanced Engineering Associates Inc, USA, **Darren Franck** Advanced Engineering Associates Inc, USA

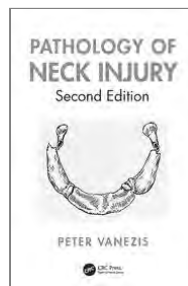
Mathematical Methods for Accident Reconstruction: A Forensic Engineering Perspective, Second Edition demonstrates the application of mathematics to modeling accident reconstructions involving a range of moving vehicles, including automobiles, small and large trucks, bicycles, motorcycles, all-terrain vehicles, and construction equipment such as hoists and cranes. Exploring a broad range of accident scenarios, the breadth and depth of the book's coverage makes Mathematical Methods for Accident Reconstruction, Second Edition a critical reference for engineers and scientists who perform vehicular accident reconstructions.

CRC Press
 September 2025 : 304pp
 Hb: 978-1-032-71472-1 : £84.99

* For full contents and more information, visit: www.routledge.com/9781032714721

2ND EDITION

Pathology of Neck Injury



Peter Vanezis Queen Mary University of London, UK

Pathology of Neck Injury, Second Edition is a practical guide and reference to all pathological aspects of neck injury. It covers a broad spectrum of trauma of the neck region, reflecting the experiences of many distinguished pathologists and those of author Peter Vanezis with more than 50 years of expertise in the field. Pathology of Neck Injury, Second Edition is an essential guide for all those involved in the relevant specialties of pathology, surgery, and forensic medicine—particularly pathologists, both qualified and in training, but also to clinical forensic practitioners, trauma specialists, ENT surgeons, and general surgeons.

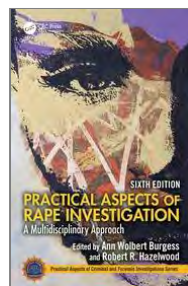
CRC Press
 October 2025 : 352pp
 Hb: 978-1-041-11144-3 : £74.99

* For full contents and more information, visit: www.routledge.com/9781041111443

6TH EDITION

Practical Aspects of Rape Investigation

A Multidisciplinary Approach,



Edited by **Ann Wolbert Burgess** Boston College, USA

Series: *Practical Aspects of Criminal and Forensic Investigations*

The latest sixth edition of Practical Aspects of Rape Investigation is a fully updated, comprehensive volume on investigative procedures and victim-oriented case management for professionals assisting victims of rape and sexual assault. This book provides the essential tools and techniques for professionals to best serve, and advocate for, victims. It continues to serve as an invaluable reference for students, legal professionals, case managers, and a blueprint for investigators and law enforcement professionals on case management best practices.

CRC Press
 June 2025 : 510pp
 Hb: 978-1-032-78194-5 : £77.99

* For full contents and more information, visit: www.routledge.com/9781032781945

4TH EDITION

Practical Bomb Scene Investigation



James T. Thurman

Series: *Practical Aspects of Criminal and Forensic Investigations*

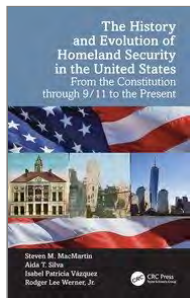
Practical Bomb Scene Investigation, Fourth Edition details the evidence collection and investigative processes undertaken—at the scene of an explosion—by improvised explosive device (IED) specialists, including bomb scene technicians and post-blast investigators. With input provided over the years from working post blast investigators from the federal, state, and municipal sectors, the Fourth Edition of Practical Bomb Scene Investigation is an invaluable resource for those professionals involved in bombing investigations.

CRC Press
 November 2025 : 608pp
 Hb: 978-1-032-86048-0 : £84.99

* For full contents and more information, visit: www.routledge.com/9781032860480

The History and Evolution of Homeland Security in the United States

From the Constitution through 9/11 to the Present



Steven M. MacMartin Hilbert College, USA, **Aida T. Silva**, **Isabel Patricia Vázquez**, **Rodger Lee Werner, Jr.**
Homeland Security Investigations, USA

This book provides a comprehensive and insightful look into the evolution of U.S. Homeland Security, from its early roots to the post-9/11 era. Drawing on their extensive experience as law enforcement professionals, the authors offer a unique perspective on the challenges and triumphs of this critical field. The History of U.S. Homeland Security provides a foundational understanding to foster critical thinking, analytical skills, and decision-making—helping the reader gain a historical perspective on the Department, its components, and policies, to inform future thought leaders.

CRC Press
June 2025 : 326pp
Hb: 978-1-032-75662-2 : **£44.99**
eBook: 978-1-003-47508-8

* For full contents and more information, visit: www.routledge.com/9781032756622

The Protective Intelligence Advantage

Mitigating the Rising Threat to Prominent People



Fred Burton, **Scott Stewart** TorchStone Global, USA

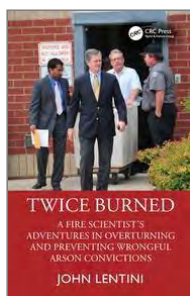
The world reacted in horror to the graphic security camera footage of United Healthcare CEO Brian Thompson being gunned down on a Manhattan sidewalk as he was on his way to attend a scheduled investor conference. Since this murder has already spawned copycat attacks, this book is especially needed at this moment in time. After a lifetime of investigating attacks on high-profile persons, heads of state, and celebrities the authors will be the first to examine the murder of Brian Thompson in detail, and use the lessons learned from that attack (and others) to illustrate how protective intelligence can be used to identify threats and prevent attacks.

CRC Press
December 2025 : 256pp
Hb: 978-1-041-08960-5 : **£34.99**

* For full contents and more information, visit: www.routledge.com/9781041089605

Twice Burned

A Fire Scientist's Adventures in Overturning and Preventing Wrongful Arson Convictions



John Lentini Scientific Fire Analysis, USA

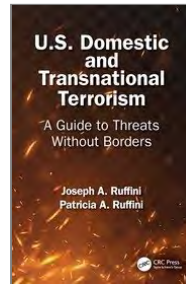
This book tells the story of renowned fire investigator John J. Lentini's 50 years as a forensic scientist. In recounting his most significant cases, Lentini highlights the critical challenges faced by forensic science, including ignorance, cognitive biases, and errors that have led to wrongful convictions. The book is a testament to the power of collaboration between scientists and lawyers in correcting injustices that occur at the intersection between science and the law. Written in an accessible style, this book is perfect for fire science professionals, litigators, and discerning true crime readers.

CRC Press
October 2025 : 320pp
Hb: 978-1-032-99386-7 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032993867

U.S. Domestic and Transnational Terrorism

A Guide to Threats Without Borders



Joseph A. Ruffini JPR & Associates, USA, **Patricia A. Ruffini** JPR & Associates, USA

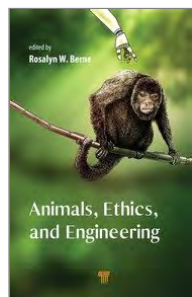
U.S. Domestic and Transnational Terrorism is an easy-to-read and comprehensive primer detailing the essential information necessary to understand the current terrorist landscape and threats. This book serves as both an essential manual and a reference book for a wide variety of readers.

CRC Press
September 2025 : 352pp
Hb: 978-1-041-04321-8 : **£42.99**

* For full contents and more information, visit: www.routledge.com/9781041043218

Animals, Ethics, and Engineering

Intersections and Implications



Rosalyn W. Berne

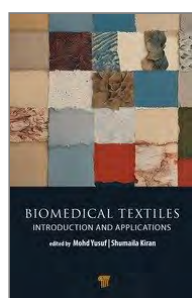
Animals, Ethics, and Engineering: Intersections and Implications is a seminal work that explores the intricate relationship between technology, ethics, and the welfare of non-human animals. Edited by Rosalyn W. Berne, this volume brings together leading scholars and practitioners to examine the ethical responsibilities inherent in technological progress and its impact on animal well-being.

Jenny Stanford Publishing
August 2025 : 528pp
Hb: 978-9-815-12956-4 : **£53.99**

* For full contents and more information, visit: www.routledge.com/9789815129564

Biomedical Textiles

Introduction and Applications



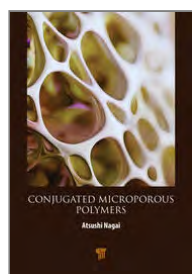
Edited by Mohd Yusuf, Shumaila Kiran

The book discusses the need for flexibility and shape-transformation capabilities in today's textiles, such as to be engineered for insertion through a small catheter or to be expanded within the vessels to allow minimally invasive delivery methods without sacrificing mechanical integrity and healthcare capabilities. It presents the recent research and developments that will benefit academicians, scientists, researchers, and post-graduate students in the field of textile science and technology. The book will prove a useful instrument in the rapid and efficient entry of new researchers in the emerging field of textile engineering and technology.

Jenny Stanford Publishing
August 2025 : 576pp
Hb: 978-9-815-12958-8 : **£193**

* For full contents and more information, visit: www.routledge.com/9789815129588

Conjugated Microporous Polymers



Atsushi Nagai

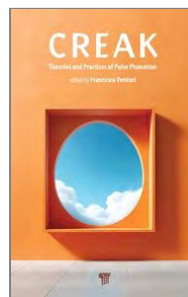
This book summarizes the progress in the synthesis and design of CMPs and their applications in clean energy technologies such as hydrogen generation and storage, carbon dioxide adsorption and conversion, rechargeable batteries, supercapacitors, and photocatalytic H₂ production. It describes the design, synthesis, and recent developments of conjugated microporous polymers with emphasis on the possible applications of these materials. The book is a useful resource for students and researchers involved in the development of porous materials.

Jenny Stanford Publishing
June 2025 : 238pp
Hb: 978-9-815-12966-3 : **£139**
eBook: 978-1-003-63652-6

* For full contents and more information, visit: www.routledge.com/9789815129663

Creak

Theories and Practices of Pulse Phonation



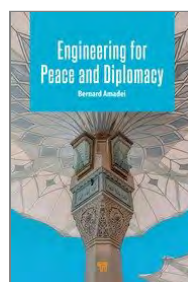
Edited by Francesco Venturi

This book explores what pulse phonation is, what it can do, and how it develops into a cultural practice. It is a multidisciplinary inquiry that merges theoretical frameworks with embodied practice to discuss the processes of producing and perceiving pulse phonation, its use and significance in contemporary discourse, and its place in a broader reflection on voice and sound production. It presents a thorough investigation of pulse phonation to jointly take into consideration its sociocultural, bioacoustic, and creative dimensions.

Jenny Stanford Publishing
August 2025 : 560pp
Hb: 978-9-815-12929-8 : **£116**

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Engineering for Peace and Diplomacy



Bernard Amadei

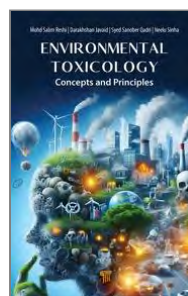
This book makes a compelling argument for the role of the engineering profession in advancing human development and security and its contribution to various peacebuilding and diplomatic efforts in the 21st-century world. The book emphasizes the importance of developing programs such as peace engineering and engineering diplomacy and training globally engaged engineers with attitudes, skills, knowledge, and life-long experience to address the challenges of the 21st century.

Jenny Stanford Publishing
August 2025 : 454pp
Pb: 978-9-815-12975-5 : **£37.99**

* For full contents and more information, visit: www.routledge.com/9789815129755

Environmental Toxicology

Concepts and Principles



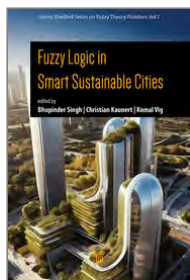
Mohd. Salim Reshi, Darakhshan Javaid, Syed Sanobar Qadri, Neelu Sinha

This book educates, informs, and empowers the readers about the impact of toxic substances on living organisms and the environment by comprehensively exploring their effects. It is a valuable resource for students, researchers, and anyone curious about the impact of chemicals on human health and the environment because it bridges the gap between scientific jargon and layman's terms.

Jenny Stanford Publishing
June 2025 : 320pp
Hb: 978-9-815-12968-7 : **£139**
eBook: 978-1-003-63707-3

* For full contents and more information, visit: www.routledge.com/9789815129687

Fuzzy Logic in Smart Sustainable Cities



Edited by **Bhupinder Singh, Christian Kaunert, Komal Vig**

Series: *Jenny Stanford Series on Fuzzy Theory Frontiers, Vol. 1*

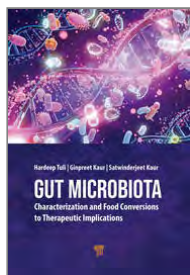
This book focuses on fuzzy logic, a paradigm-shifting approach that challenges the binary simplicity of traditional logic systems. The concept of fuzzy logics is a powerful tool capable of handling imprecise information and accommodating the vagaries of real-world scenarios. This marks the beginning of a journey that explores how fuzzy logics can bridge gaps and fills voids in our current strategies for achieving sustainable development goals relating to sustainable cities.

Jenny Stanford Publishing
June 2025 : 454pp
Hb: 978-9-815-12970-0 : **£139**
eBook: 978-1-003-63672-4

* For full contents and more information, visit: www.routledge.com/9789815129700

Gut Microbiota

Characterization and Food Conversions to Therapeutic Implications



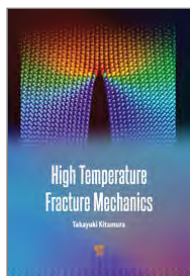
Edited by **Hardeep Singh Tuli, Ginpreet Kaur, Satwinderjeet Kaur**

This book is a comprehensive guide to understanding the role of gut microbiota in human health. It presents the latest research on gut microbiota, from the characterization of different microbial species to their functions in food conversion and cancer prevention. It sheds light on the diverse composition of gut microbiota, identified through DNA sequencing technology, and how it is influenced by various factors such as diet, genetics, and lifestyle. It is a must-read for anyone interested in understanding the complex and dynamic relationship between gut microbiota and human health.

Jenny Stanford Publishing
June 2025 : 268pp
Hb: 978-9-815-12957-1 : **£100**
eBook: 978-1-003-59684-4

* For full contents and more information, visit: www.routledge.com/9789815129571

High Temperature Fracture Mechanics



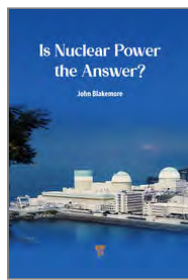
Takayuki Kitamura

This book systematically explains the mechanics of fracture phenomena, focusing on cracking under high temperature conditions. One of the defining characteristics of high temperature fracture is creep, a phenomenon where deformation progresses over time, eventually leading to failure. Additionally, the nonlinear nature further complicates the mechanics of such fracture. This book clarifies the fundamental principles of time-dependent nonlinear fracture mechanics associated with creep. Fatigue failure due to repeated stress or strain can occur at high temperatures, akin to its manifestation at room temperature.

Jenny Stanford Publishing
August 2025 : 176pp
Hb: 978-9-815-12955-7 : **£154**
eBook: 978-1-003-65328-8

* For full contents and more information, visit: www.routledge.com/9789815129557

Is Nuclear Power the Answer?



John Blakemore

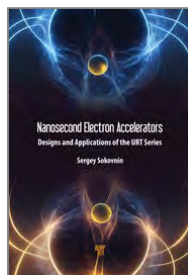
This book is designed to recalibrate the discussion on whether nuclear power is the best option for energy generation in the future. It emphasizes the significant differences in power generation between renewables, specifically photovoltaics and wind power and points out the advantages and disadvantages of both. This book is designed to recalibrate the discussion on whether nuclear power is the best option for energy generation in the future. It highlights the renewable experiment being emphasized in Australia and compares this approach with that adopted by the rest of the world.

Jenny Stanford Publishing
June 2025 : 132pp
Hb: 978-9-815-12969-4 : **£37.99**
eBook: 978-1-003-63657-1

* For full contents and more information, visit: www.routledge.com/9789815129694

Nanosecond Electron Accelerators

Designs and Applications of the URT Series



Sergey Sokovnin

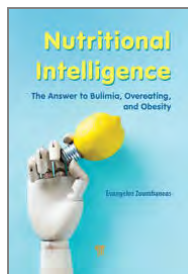
This book describes the principles and design of repetitive nanosecond electron accelerators, as well as the development technologies and specific radiation technologies based on them. It discusses the application of the created accelerators in various branches of science and technology, in particular, for radiation sterilization and disinfection of medical and food products, correction of defects in solids, and radiation-chemical technologies. The book also covers the issues encountered in measuring the parameters of electron beams, monitoring parameters, and automating the control of accelerators.

Jenny Stanford Publishing
June 2025 : 536pp
Hb: 978-9-814-96895-9 : **£270**
eBook: 978-1-003-63498-0

* For full contents and more information, visit: www.routledge.com/9789814968959

Nutritional Intelligence

The Answer to Bulimia, Overeating, and Obesity



Evangelos Zoumbaneas

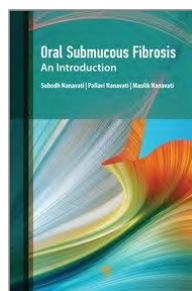
Written by Evangelos Zoumbaneas, with contributions from leading professionals in the field of eating disorder treatment, this book explores the innovative concept of nutritional intelligence, providing a structured approach to overcoming bulimia, binge eating, and obesity. The book introduces a novel approach to addressing eating disorders by combining nutrition science with behavioral psychology and presents evidence-based strategies for sustainable recovery, making it a valuable resource for both professionals and individuals struggling with disordered eating.

Jenny Stanford Publishing
August 2025 : 266pp
Pb: 978-9-815-12973-1 : **£19.99**
Hb: 978-9-815-12974-8 : **£76.99**

* For full contents and more information, visit: www.routledge.com/9789815129731

Oral Submucous Fibrosis

An Introduction



Subodh Nanavati , Pallavi Nanavati , Maulik Nanavati

This book establishes the gold standard reference text in the field of oral pre-malignant disorder—oral submucous fibrosis (OSF). In this book, the authors present the clinical studies, extensive research, and pioneering surgical treatments garnered during their work of four decades on OSF in three volumes—the fundamentals (volume 1), diagnosis and treatment (volume 2), and molecular biology (volume 3). The three groundbreaking handbooks present up-to-date and expanded content on OSF in an easily understandable manner.

Jenny Stanford Publishing
August 2025 : 1576pp
Hb: 978-9-814-96843-0 : **£308**

* For full contents and more information, visit: www.routledge.com/9789814968430

Outside Society

People Without a Country



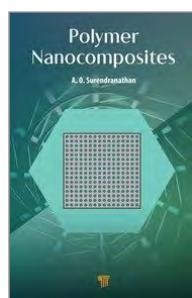
Ayuo Takahashi

This book describes Ayuo Takahashi's growing up during the socially turbulent 1960s in New York City. The first half of the book covers his autobiography up to 1990, while the second half comprises articles about music and culture written after 1990. The book will be most appreciated by individuals who are interested in Asian culture and the problems that Western-educated Asians confront when they return to their ancestral homelands.

Jenny Stanford Publishing
August 2025 : 450pp
Hb: 978-9-815-12954-0 : **£37.99**

* For full contents and more information, visit: www.routledge.com/9789815129540

Polymer Nanocomposites



A. O. Surendranathan

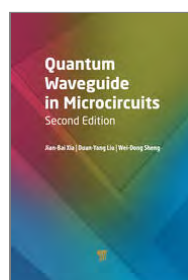
This book discusses all the aspects of polymer nanocomposites, namely, their syntheses, characterization, properties, and applications. It covers general as well as specific polymer nanocomposites, throws light on the recent research and development, and describes current and prospective applications.

Jenny Stanford Publishing
August 2025 : 418pp
Hb: 978-9-815-12953-3 : **£154**

* For full contents and more information, visit: www.routledge.com/9789815129533

2ND EDITION

Quantum Waveguide in Microcircuits (Second Edition)



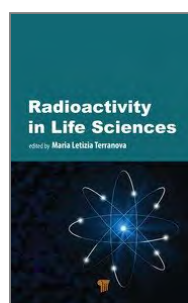
Jian-Bai Xia , Duan-Yang Liu Chinese Academy of Sciences, Beijing, PR of China, **Wei-Dong Sheng** Chinese Academy of Sciences, Beijing, PR of China

This book introduces some theories and experiments of quantum transport and consists of two parts: (1) Non-Classical and Non-Linear Transport and (2) Quantum Waveguide Theory. It provides some foundations of semiconductor micro- and nanoelectronics for the after-Moore age. The two new chapters in this edition present investigations on (1) mesoscopic transport and (2) Rashba electron's spin transport in a straight waveguide with a stub that has a smooth boundary.

Jenny Stanford Publishing
August 2025 : 432pp
Hb: 978-9-814-96830-0 : **£154**

* For full contents and more information, visit: www.routledge.com/9789814968300

Radioactivity in Life Sciences



Maria Letizia Terranova

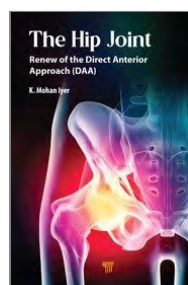
This book describes the role of radioactivity in the living world and highlights the many aspects of the impact of ionizing radiation on biological systems. It addresses several topical issues, such as the countermeasures adopted to mitigate radiation-induced health risks during deep space missions, the concept of radiation hormesis, and recent biophysical models proposed to explain the radiation-adaptive responses. It critically approaches these intensely debated subjects and provides an up-to-date look at the ongoing studies on the use of radiations in nuclear clinical practice.

Jenny Stanford Publishing
June 2025 : 248pp
Hb: 978-9-815-12967-0 : **£139**
eBook: 978-1-003-63654-0

* For full contents and more information, visit: www.routledge.com/9789815129670

The Hip Joint

Renew of the Direct Anterior Approach (DAA)



Edited by **K. Mohan Iyer**

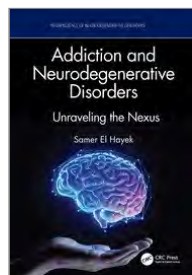
Dr Iyer developed this new approach to confer greater stability to the hip joint posteriorly and minimize the incidence of dislocation. He has used the approach in all his surgeries for over 40 years now, and it has also been highly published. This book is a useful addition to the existing literature on the direct anterior approach to the hip as it presents the rationale and technical details of the approach and is of value to surgeons who perform surgery on the hip joint.

Jenny Stanford Publishing
June 2025 : 94pp
Pb: 978-9-815-12971-7 : **£139**
eBook: 978-1-003-64072-1

* For full contents and more information, visit: www.routledge.com/9789815129717

Addiction and Neurodegenerative Disorders

Unraveling the Nexus



Edited by **Samer El Hayek**

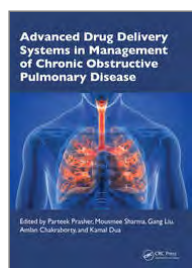
Series: *Neuroscience of Neurodegenerative Disorders*

Brain regions and neuronal processes that underlie addiction extensively overlap with those needed for cognitive functions, including learning, memory, and reasoning. Individuals living with neurodegenerative disorders can engage in behaviors, such as self-medication, due to impaired judgment and impulsivity associated with their condition. Explores the overlooked connection between neurodegenerative disorders and addiction. By examining all these factors, an international team of contributors offer a comprehensive understanding of this underexplored intersection and its profound implications on affected individuals and their families, the healthcare system, and treatment strategies.

CRC Press
July 2025 : 244pp
Hb: 978-1-032-76242-5 : £130

* For full contents and more information, visit: www.routledge.com/9781032762425

Advanced Drug Delivery Systems in Management of Chronic Obstructive Pulmonary Disease



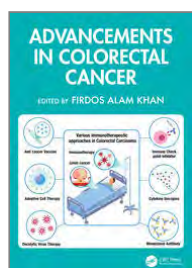
Edited by **Parteek Prasher, Mousmee Sharma, Gang Liu, Amlan Chakraborty, Kamal Dua**

This comprehensive book covers the epidemiology, etiology, and pathophysiology of Chronic Obstructive Pulmonary Disease (COPD). It addresses challenges in drug delivery methods by exploring advanced systems and detailing their mechanisms. It discusses COPD progression, established biomarkers, and current therapies, analyzing efficacy and proposing prospective solutions. It also delves into state-of-the-art drug delivery technologies, personalized therapies, and emerging approaches like nanoparticles, polymeric carriers, and vesicular delivery systems. It serves as a valuable resource for professionals, scientists, academicians, and clinicians specializing in respiratory health.

CRC Press
June 2025 : 286pp
Hb: 978-1-032-81259-5 : £125
eBook: 978-1-003-49892-6

* For full contents and more information, visit: www.routledge.com/9781032812595

Advancements in Colorectal Cancer



Edited by **Firdos Alam Khan**

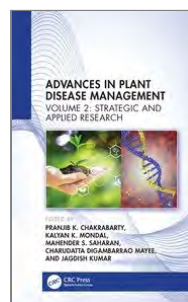
This book provides a comprehensive exploration of Colorectal Cancer (CRC), covering its development, cellular and molecular pathologies, diagnostic methods, treatment modalities, challenges, and future research directions. The introductory chapters provide foundational aspects of colorectal cancer, historical evolution, prevalent symptoms, and underlying causes. The chapters present intricate pathology of colorectal cancer, delving into microscopic analysis techniques, and covers various classifications and various stages of CRC. As such, this book is an important source for researchers, students of cancer research, and oncologists.

CRC Press
September 2025 : 240pp
Hb: 978-1-032-82277-8 : £89.99

* For full contents and more information, visit: www.routledge.com/9781032822778

Advances in Plant Disease Management Volume II

Strategic and Applied Research



Edited by **Pranjib K. Chakrabarty, Kalyan K. Mondal, Mahender S. Saharan, Charudatta Digambarrao Mayee, Jagdish Kumar**

Advances in Plant Disease Management: Volume II: Strategic and Applied Research is an invaluable compilation for researchers/ students/ stakeholders/ policymakers in agriculture. This book aims to offer the latest understanding of how fundamental and basic research can be translated towards engineering of biotic stress resilient crops through applied and strategic management of plant diseases.

CRC Press
June 2025 : 410pp
Hb: 978-1-032-87301-5 : £170

* For full contents and more information, visit: www.routledge.com/9781032873015

Aflatoxigenic Fungi

Its Impact on Plant, Animal and Human Health



Edited by **A. Sankaranarayanan, S. Gomathi, V. Ambikapathy, A. Panneerselvam**

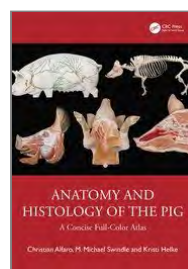
Mycotoxins are considered as an emerging bio pollutants, a significant contaminant affected the biotic organism and plant communities. The threatening point of existing mycotoxins, the emergence of new mycotoxins also a threatening source to biotic communities. The proposed book will compile the recent development and the updated overview about the Aflatoxigenic fungi and its impact on plant, animal and human health including various agricultural soil, food crops and advanced methods involved in the detection of Aflatoxigenic fungi

CRC Press
August 2025 : NApp
Hb: 978-1-032-78262-1 : £120

* For full contents and more information, visit: www.routledge.com/9781032782621

Anatomy and Histology of the Pig

A Concise Full-Color Atlas



Christian Alfaro, M. Michael Swindle Medical University of South Carolina, **Kristi Helke** South Carolina's Medical Univ.

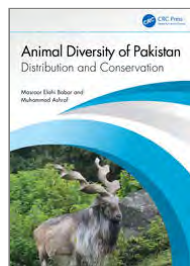
This comprehensive anatomy book is the first guide specific to the pig since 1982. The full-color illustrations are accompanied by written material specific to each anatomic section, with English labeling terms for the various anatomic structures. It will cover all the major areas of interest in swine, including cardiovascular, digestive, neurologic and thoracic structures. Differences between domestic and miniature pigs will be discussed.

CRC Press
August 2025 : 202pp
Hb: 978-0-367-26661-5 : £200

* For full contents and more information, visit: www.routledge.com/9780367266615

Animal Diversity of Pakistan

Distribution and Conservation



Masroor Elahi Babar University of Agriculture, Dera Ismail Khan, Pakistan, **Muhammad Ashraf** University of Veterinary and Animal Sciences, Lahore, Pakistan

This book presents animal biodiversity, its significance, sustainable use, and conservation. It explores biodiversity's historical evolution, assessment tools, and measurement methods. Emphasizing its crucial role for humanity, the book introduces species nomenclature and phylogenetic relations. It delves into the spatial-temporal distribution of animals and offers conservation strategies. Lastly, the book provides valuable suggestions and research directions toward safeguarding the current level of biodiversity and ensuring its prosperity.

CRC Press

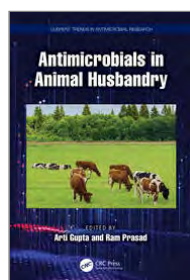
June 2025 : 236pp

Hb: 978-1-032-75009-5 : £110

eBook: 978-1-003-47200-1

* For full contents and more information, visit: www.routledge.com/9781032750095

Antimicrobials in Animal Husbandry



Edited by **Arti Gupta**, **Ram Prasad**

Series: *Current Trends in Antimicrobial Research*

Although most antibiotic use occurs in agricultural settings, relatively little attention has been paid to how antibiotic use in farm animals contributes to the overall problem of antibiotic resistance. The global spread of antimicrobial-resistant pathogenic bacteria is a continuing challenge to the health care of humans and domesticated animals. This book discusses antimicrobial resistance mechanisms relevant to food-producing animals. Readers can benefit from using Antimicrobial in Animal Husbandry as a resource that addresses microbial biotechnology, microbiology, toxicology, and all disciplines related to antimicrobial research.

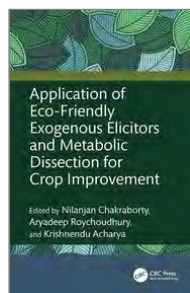
CRC Press

August 2025 : 300pp

Hb: 978-1-032-21747-5 : £110

* For full contents and more information, visit: www.routledge.com/9781032217475

Application of Eco-Friendly Exogenous Elicitors and Metabolic Dissection for Crop Improvement



Edited by **Nilanjan Chakraborty**, **Aryadeep Roychoudhury**, **Krishnendu Acharya**

The present book comprises almost wide aspects of elicitation or elicitor-mediated research undertaken so far, to provide a direction towards chemical hazard-free World without compromising the yield and market value of the plant-based products. This book aims to guide students at undergraduate and postgraduate level as well as to the researchers, academicians and other industry professionals.

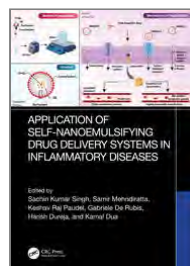
CRC Press

June 2025 : 310pp

Hb: 978-1-032-70232-2 : £115

* For full contents and more information, visit: www.routledge.com/9781032702322

Application of Self-Nanoemulsifying Drug Delivery Systems in Inflammatory Diseases



Edited by **Sachin Kumar Singh**, **Samir Mehndiratta**, **Keshav Raj Paudel**, **Gabriele De Rubis**, **Harish Dureja**, **Kamal Dua**

This book discusses the potential applications of Self-Nanoemulsifying Drug Delivery Systems (SNEDDs) in different inflammatory diseases. It introduces the principles of SNEDDs, their formulation optimization, components, and characterization techniques, providing insights into their mechanisms of drug delivery. The book also explores the potential of various combination therapies with SNEDDs, highlighting strategies, synergistic effects, and challenges. The book presents the applications of SNEDDs in specific inflammatory diseases. This book is intended for researchers, pharmacologists, pharmaceutical scientists, and clinicians involved in drug delivery and nanomedicine.

CRC Press

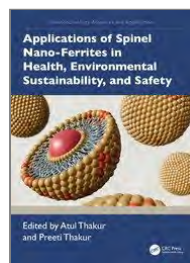
June 2025 : 250pp

Hb: 978-1-032-69745-1 : £115

eBook: 978-1-032-69747-5

* For full contents and more information, visit: www.routledge.com/9781032697451

Applications of Spinel Nano-Ferrites in Health, Environmental Sustainability, and Safety



Edited by **Atul Thakur**, **Preeti Thakur**

Series: *Nanotechnology Advances and Applications*

This book comprehensively presents the unique properties of spinel nano-ferrites, synthesis techniques, and cutting-edge applications. It explores various synthesis methods and their impact on structures and discusses the electrical and magnetic characteristics of spinel nanoferrites. The book highlights their roles in health, such as antibacterial agents, MRI, cancer detection, and drug delivery, as well as environmental applications like pollution remediation and water purification. It concludes with the development of sensors and safety devices. This book is intended for researchers, students, healthcare professionals, and environmental scientists.

CRC Press

May 2025 : 240pp

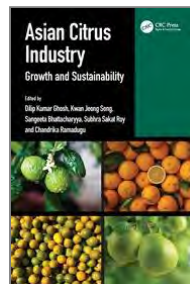
Hb: 978-1-032-90410-8 : £115

eBook: 978-1-003-56894-0

* For full contents and more information, visit: www.routledge.com/9781032904108

Asian Citrus Industry

Growth and Sustainability



Edited by **Dilip Kumar Ghosh**, **Kwan Jeong Song**, **Sangeeta Bhattacharyya**, **Subhra Saikat Roy**, **Chandrika Ramadugu**

The citrus industry plays a crucial role in the economies and agricultural landscapes of many Asian countries, contributing significantly to global citrus production and trade. Asian Citrus Industry: Growth and Sustainability provides a comprehensive analysis of the citrus sector across 14 major citrus-producing Asian nations, including China, India, Japan, Korea, Thailand, Bhutan, Nepal, Turkey, Pakistan, Bangladesh, Vietnam, Iran, Sri Lanka, and Indonesia. This book presents an in-depth exploration of the historical evolution, production trends, key challenges, and opportunities shaping the citrus industry in Asia.

CRC Press

September 2025 : 320pp

Hb: 978-1-032-89466-9 : £190

* For full contents and more information, visit: www.routledge.com/9781032894669

Asian Cobras

Venom Evolution, Composition, Pharmacology and Treatment



Ashis Kumar Mukherjee Institute of Advanced Study in Science and Technology, Assam, **Bhargab Kalita**

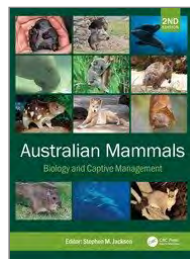
This book offers a comprehensive examination of Asian cobras, including their evolution, geographic distribution, and venom characteristics. It highlights the impact of snake envenomation in Asia, that are recognized as a neglected tropical disease and explores the cobra venom delivery system. The book also covers the natural behavior and habitats of cobras while analyzing venom composition and its variations across species and regions. It further covers the clinical consequences of envenomation and discusses treatment strategies and the role of venom variability in determining envenomation severity, making it valuable for researchers in toxinology and pharmaceutical sciences.

CRC Press
June 2025 : 180pp
Hb: 978-1-032-98331-8 : **£79.99**
eBook: 978-1-003-59812-1

* For full contents and more information, visit: www.routledge.com/9781032983318

Australian Mammals

Biology and Captive Management



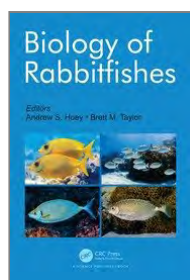
Edited by **Stephen M. Jackson** Australian Museum

Australian Mammals: Biology and Captive Management is a complete guide to the husbandry of all groups of Australian mammals. This second edition has been updated based on the latest research, bringing together current knowledge of the biology and behaviour of each species in captive situations and providing guidance for hand rearing. It covers advances from the last 20 years, including developments in assisted breeding, genetic techniques, updated taxonomy and the importance of Australian mammal welfare, both physical and mental. Australian Mammals provides practical guidance for zookeepers, veterinarians, zoologists, researchers and students.

CRC Press
June 2025 : 864pp
Hb: 978-1-041-02291-6 : **£200**

* For full contents and more information, visit: www.routledge.com/9781041022916

Biology of Rabbitfishes



Edited by **Andrew Scott Hoey** James Cook University, Townsville, Australia, **Brett McCully Taylor** Uni of Guam Marine Lab.

Rabbitfishes (family Siganidae) are an often overlooked group of fishes in coral reef and seagrass ecosystems native to the tropical and subtropical Indo-Pacific region. Known broadly as herbivores with low comparative species diversity among tropical fishes, what makes rabbitfishes distinctive and how do these traits contribute to their ecological significance? This book delves into the biology, ecology, evolution, and behaviour of rabbitfishes and explores recent invasions into new habitats, their role in fisheries and aquaculture, and highlights promising directions for future research on these essential marine species.

CRC Press
June 2025 : 248pp
Hb: 978-1-032-21649-2 : **£160**
eBook: 978-1-003-26940-3

* For full contents and more information, visit: www.routledge.com/9781032216492

Biophysical Techniques in Biosciences

From Fundamentals to Advanced Applications



Edited by **Nirmal Mazumder**, **Rajib Biswas** Tezpur University, **Guan-Yu Zhuo** Institute of New Drug Development, China Medical University, Taiwan - 40402

This book examines the latest advancements in spectroscopic and imaging techniques, underscoring their roles in both research and medical diagnostics. It delves into innovative applications like quantitative optical phase imaging, uses of synthesized carbon dots for pathogen detection, and advanced methods like expansion microscopy for viral analysis and super-resolution microscopy for detailed cellular studies. The book also highlights the integration of machine learning to improve diagnostic accuracy and the advancements in 3D printing in tissue engineering and biomedical device fabrication. It is intended for students and researchers of medical imaging and biomedical engineering.

CRC Press
May 2025 : 250pp
Hb: 978-1-032-89983-1 : **£125**
eBook: 978-1-003-54571-2

* For full contents and more information, visit: www.routledge.com/9781032899831

Biotechnological Innovation and Sustainable Developmental Goals

Fostering Good Health and Wellbeing



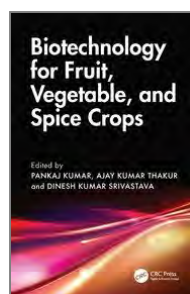
Edited by **RC Sobti**

This reference book examines the role of biotechnological innovations in achieving global health targets, addressing disease burdens, and fostering a sustainable healthcare ecosystem for promoting good health and well-being. It covers a wide range of topics, including the evolution of healthcare technologies, epidemiological approaches in predictive medicine, management of diseases across different organs, emerging technologies in drug development, vaccination strategies, technologies in regenerative medicine, and tissue engineering. This book is intended for researchers, academics, and professionals in the fields of biotechnology, healthcare, and public health.

CRC Press
August 2025 : 304pp
Hb: 978-1-032-64464-6 : **£140**

* For full contents and more information, visit: www.routledge.com/9781032644646

Biotechnology for Fruit, Vegetable, and Spice Crops



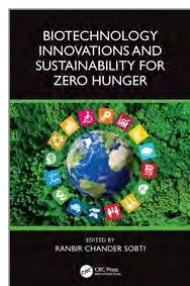
Edited by **Pankaj Kumar**, **Ajay Kumar Thakur**, **Dinesh Kumar Srivastava**

Biotechnology has revolutionized horticulture by enhancing the productivity, resilience, and nutritional quality of fruit, vegetable, and spice crops. This comprehensive volume provides an in-depth exploration of cutting-edge biotechnological advancements that are reshaping horticultural science. With contributions from leading researchers, this book serves as an essential reference for graduate students, academics, and professionals in plant biotechnology, horticulture, and food science. It provides a valuable resource for those seeking to harness the power of biotechnology to drive sustainable innovation in horticultural crop production.

CRC Press
September 2025 : 328pp
Hb: 978-1-041-03846-7 : **£110**

* For full contents and more information, visit: www.routledge.com/9781041038467

Biotechnology Innovations and Sustainability for Zero Hunger



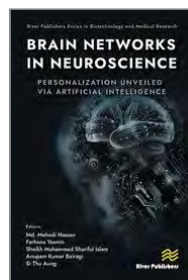
Edited by **R C Sobti** Panjab University, India

This reference book extensively examines the important role of biotechnology in tackling the global challenge of achieving zero hunger. Spanning multiple sections, the book delves into cutting-edge advancements and challenges in food biotechnology, crop improvement, genetic engineering, and the utilization of genetically modified organisms (GMOs) in sustainable agriculture. It provides a detailed examination of biotechnological interventions aimed at enhancing the nutritional content of crops, increasing agricultural productivity, and ensuring food security. This book is useful for researchers and professionals of biotechnology, agriculture, food science, and sustainability.

CRC Press
July 2025 : 390pp
Hb: 978-1-032-67810-8 : £200

* For full contents and more information, visit: www.routledge.com/9781032678108

Brain Networks in Neuroscience: Personalization Unveiled Via Artificial Intelligence



Edited by **Md. Mehedi Hassan**, Farhana Yasmin, Sheikh Mohammed Shariful Islam, Anupam Kumar Bairagi, Si Thu Aung

Series: River Publishers Series in Biotechnology and Medical Research

This book is an in-depth exploration of brain networks, providing a comprehensive understanding of their structures, functions, and implications for personalization through artificial intelligence. Readers will gain insights into the intricate workings of the brain, making this book an indispensable resource for those seeking a thorough grasp of neuroscience concepts. It offers the seamless integration of neuroscience principles with artificial intelligence applications. The book bridges these two domains, elucidating how advancements in AI draw inspiration from the complexities of the human brain.

River Publishers
July 2025 : 376pp
Hb: 978-8-770-04736-4 : £110

* For full contents and more information, visit: www.routledge.com/9788770047364

Biotics and the Gut-Brain Axis in Neurological Disorders



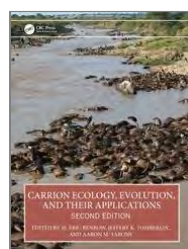
Edited by **Neeraj Mishra** Amity Institute of Pharmacy, Amity University Madhya Pradesh, **Sumel Ashique**, **Mithun Bhowmick** Bengal College of Pharmaceutical Sciences & Research, Durgapur 713212, West Bengal, India

This book examines the roles of prebiotics, probiotics, and postbiotics in modulating the gut-brain axis, highlighting their therapeutic potential in neurological health. It covers foundational concepts of prebiotics and gut-brain communication, the impact of gut dysbiosis, and their influence on autoimmune and neurodegenerative diseases like Alzheimer's, Parkinson's, ALS, and Huntington's. It also addresses the role of these biotics in mental health disorders, ischemic stroke, and inflammation-mediated neurological conditions. This book is intended for researchers and scientists in microbiology, neuroscience, and gastroenterology.

CRC Press
November 2025 : 408pp
Hb: 978-1-032-88239-0 : £180

* For full contents and more information, visit: www.routledge.com/9781032882390

Carrion Ecology, Evolution, and Their Applications



Edited by **M. Eric Benbow** Michigan State University, East Lansing, USA, **Jeffery K. Tomberlin** Texas A&M University, College Station, USA, **Aaron M. Tarone**

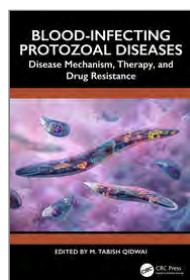
The book is now represented by 73 authors from eight countries, incorporating more diverse perspectives and engagement to this multidisciplinary and expanding science. The resulting new edition showcases a broader scope of topics, geographic areas, ecosystems and history of carrion ecology, evolution and their applications for humanity. It provides the most comprehensive resource on carrion from all ecosystems of the world.

CRC Press
July 2025 : 720pp
Hb: 978-1-032-36446-9 : £170

* For full contents and more information, visit: www.routledge.com/9781032364469

Blood-Infecting Protozoal Diseases

Disease Mechanism, Therapy, and Drug Resistance



Edited by **M. Tabish Qidwai**

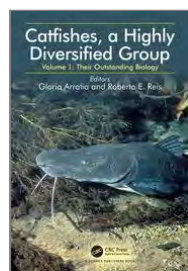
This reference book compiles the latest literature on the genetic diversity, therapeutics, and drug resistance in protozoan parasites, with a focus on malaria parasites, *Plasmodium falciparum*, and *P. vivax*. It explores the association of parasite genetic makeup with drug resistance. The book covers the mechanisms of drug resistance, drug resistance detection and spread, and factors affecting drug resistance. The book facilitates research design and development of therapeutics against malarial parasites. The book is meant for post-graduate students of microbiology, parasitology, and medicine, as well as healthcare workers, medical practitioners, public health staff, and policymakers.

CRC Press
October 2025 : 264pp
Hb: 978-1-032-52275-3 : £110

* For full contents and more information, visit: www.routledge.com/9781032522753

Catfishes, a Highly Diversified Group

Volume 1: Their Outstanding Biology



Edited by **Gloria Arratia**, **Roberto E. Reis** Pontifical Catholic University of Rio Grande do Sul, Brazil

The order of Catfishes (Siluriformes) is one of the largest in number of families, genera, and species. The group is found in most freshwaters and shallow saltwater bodies around the world. Its extraordinary evolutionary and biogeographic pathways leave many open questions on its origin and large diversification that make its study a complex subject, yet a fascinating field for research.

CRC Press
May 2025 : 352pp
Hb: 978-1-032-42135-3 : £160
eBook: 978-1-003-36133-6

* For full contents and more information, visit: www.routledge.com/9781032421353

Climate Change

Impact of Elevated CO₂ and Temperature on Crops, Weeds and Soil Microbes



Edited by **Rajeev Kumar** ICAR-Indian Inst. of Vegetable Research, Varanasi, UP, 221305, **Dasari Sreekanth** ICAR-Directorate of Weed Research, Jabalpur, MP, 504105, **P.S. Basavaraj** ICAR-NIASM, Baramati, Maharashtra – 413115

Climate Change: Impact of Elevated CO₂ and Temperature on Crops, Weeds and Soil Microbes is a comprehensive and timely volume that explores the profound effects of climate change, specifically elevated CO₂ and temperature on plant physiology, crop productivity, weed dynamics, and soil microbial interactions. The primary objective of this book is to provide a detailed and up-to-date overview of the physiological, biochemical, and molecular mechanisms governing crop responses to elevated CO₂ and temperature. It also examines the impact on weeds and soil microbial communities, highlighting potential adaptation and mitigation strategies.

CRC Press
October 2025 : 312pp
Hb: 978-1-032-77578-4 : £110

* For full contents and more information, visit: www.routledge.com/9781032775784

Climate Change and Sustainable Development



Cover Image
Not Available

Edited by **Aasawari Jadhav**, **Prakash Raut**, **Sukanta Mondal**

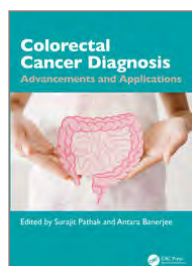
From rising sea levels and extreme weather events to food insecurity and forced migration, the climate change effects are real and accelerating. The book Climate Change and Sustainable Development offers a comprehensive compilation of contemporary research, covering both fundamental and advanced aspects of climate science. It delves into a wide range of critical topics, including the greenhouse effect, food security, social and environmental issues, threats to marine ecosystems, the role of green energy in reducing carbon emissions, life cycle assessments, cost-effective sustainable strategies, public health implications, and climate adaptation strategies.

CRC Press
October 2025 : 320pp
Hb: 978-1-032-79561-4 : £110

* For full contents and more information, visit: www.routledge.com/9781032795614

Colorectal Cancer Diagnosis

Advancements and Applications



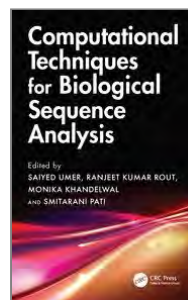
Edited by **Surajit Pathak**, **Antara Banerjee**

The book highlights the potential applications of microbots for minimally invasive diagnosis of colorectal cancers, enhancing the accuracy of colonoscopy, and improving drug delivery for more precise and effective treatments. It discusses non-invasive screening methods and state-of-the-art imaging technologies for less intrusive and more accessible diagnostics. The book reviews techniques to tailor microbots for specifically targeting cancer cells effectively and provides a comparative analysis with nanobots for their potential in cancer diagnostics and therapy. This book is for researchers, students, and academicians in the fields of oncology, nanotechnology, and medical sciences.

CRC Press
July 2025 : 216pp
Hb: 978-1-032-70695-5 : £110

* For full contents and more information, visit: www.routledge.com/9781032706955

Computational Techniques for Biological Sequence Analysis



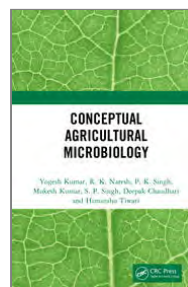
Edited by **Saiyed Umer**, **Ranjeet Kumar Rout**, **Monika Khandelwal**, **Smitarani Pati**

This book provides an overview of basic and advanced computational techniques for analysing and understanding protein, RNA, and DNA sequences. It covers effective computing techniques for DNA and protein classifications, evolutionary, and sequence information analysis. It reviews the role of machine learning techniques, artificial intelligence, ensemble learning, and sequence-based features in predicting post-translational modifications in proteins, DNA methylation, and mRNA methylation, along with their functional implications. This book is a useful reference for bioinformaticians, and computational biologists working in the field of molecular biology, genomics, and bioinformatics.

CRC Press
June 2025 : 210pp
Hb: 978-1-032-63026-7 : £81.99
eBook: 978-1-032-66071-4

* For full contents and more information, visit: www.routledge.com/9781032630267

Conceptual Agricultural Microbiology



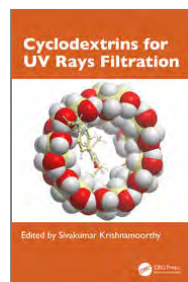
Yogesh Kumar, **R. K. Naresh**, **P. K. Singh**, **Mukesh Kumar**, **S. P. Singh**, **Deepak Chaudhari**, **Himanshu Tiwari**

This book integrates microbiology with soil science, chemistry, and ecology to analyse the functions of microorganisms in the soil environment. It covers the status and application of microbiology in modern agriculture and discusses various fundamental allied concepts. The subject matter in this book also details microorganism groups, industrial microbiology, biotechnology and genetic engineering, environmental microbiology and nutritional media. Print edition not for sale in South Asia (India, Sri Lanka, Nepal, Bangladesh, Pakistan and Bhutan)

CRC Press
June 2025 : 254pp
Hb: 978-1-032-78811-1 : £94.99
eBook: 978-1-003-48947-4

* For full contents and more information, visit: www.routledge.com/9781032788111

Cyclodextrins for UV Rays Filtration



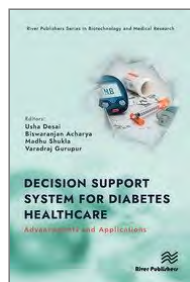
Edited by **Sivakumar Krishnamoorthy**

Traditional UVR absorbers pose environmental and health risks due to their volatility, solubility, and toxicity. High concentrations are needed for effective UV filtration, leading to environmental accumulation. Safer alternatives, like cyclodextrin complexation, can enhance UV filtration while reducing absorber concentration. Cyclodextrin complexation offers a promising solution by enhancing UV filtration efficiency while reducing the required concentration of UVR absorbers. Cyclodextrins for UV Rays Filtration addresses a critical gap in photoprotection research by offering a comprehensive exploration of how cyclodextrins enhance UVR filtration.

CRC Press
October 2025 : 280pp
Hb: 978-1-032-79566-9 : £120

* For full contents and more information, visit: www.routledge.com/9781032795669

Decision Support System for Diabetes Healthcare: Advancements and Applications



Edited by **Usha Desai , Biswaranjan Acharya , Madhu Shukla , Varadraj Gurupur**

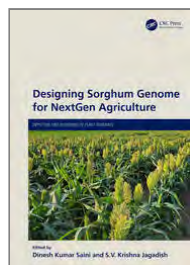
Series: *River Publishers Series in Biotechnology and Medical Research*

Decision Support System for Diabetes Healthcare: Advancements and Applications is a comprehensive guide to the cutting-edge technology transforming diabetes management. In this book, leading experts in the field explore how decision support systems (DSS) are revolutionizing healthcare practices, particularly in diabetes care. From advanced data analytics to personalized treatment recommendations, this book delves into the innovative solutions that are reshaping how healthcare providers approach diabetes management.

River Publishers
May 2025 : 294pp
Hb: 978-8-770-04166-9 : £110
eBook: 978-8-770-04688-6

* For full contents and more information, visit: www.routledge.com/9788770041669

Designing Sorghum Genome for NextGen Agriculture



Edited by **Dinesh Kumar Saini** Dept. of Plant and Soil Science, Texas Tech Univ., Lubbock, TX, **S.V. Krishna Jagadish** Dept. of Plant and Soil Science, Texas Tech Univ., Lubbock, TX

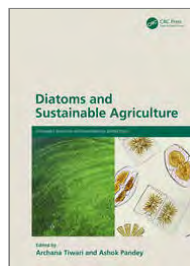
Series: *Depiction and Designing of Plant Genomes*

With increasing global food demand and changing climatic conditions, sorghum is an important crop for sustainable agriculture. Its inherent resilience to drought, heat, and poor soils makes it a promising solution for enhancing food security and climate adaptation. To further harness its potential, Designing Sorghum Genome for NextGen Agriculture, explores the latest advancements aimed at improving sorghum's resilience and productivity. This comprehensive resource provides cutting-edge insights into how modern scientific tools and methods are being leveraged to design the sorghum genome for enhanced yield, stress tolerance, and nutritional value.

CRC Press
September 2025 : 352pp
Hb: 978-1-041-03406-3 : £110

* For full contents and more information, visit: www.routledge.com/9781041034063

Diatoms and Sustainable Agriculture



Edited by **Archana Tiwari , Ashok Pandey**

Series: *Sustainable Industrial and Environmental Bioprocesses*

This book delves into the multifaceted role of diatoms in transforming agricultural practices for sustainability. It examines their contributions to a circular economy, their potential as natural plant growth promoters and indicators of ecosystem health in agricultural watersheds. Additionally, it explores their applications in agriculture wastewater bioremediation, biosensing for plant pathogens, and as environmentally friendly insect control agents. The text also discusses the future integration of artificial intelligence into diatom-based agriculture for enhanced efficiency. This book is for researchers and academicians in mycology, biotechnology, and agricultural sciences.

CRC Press
September 2025 : 248pp
Hb: 978-1-032-86546-1 : £130

* For full contents and more information, visit: www.routledge.com/9781032865461

Dietary and Medicinal Significance of Wild Edible Fruiting Plants



Devi Datt Joshi , Harendra Kharkwal

This book explores the role of wild edible fruit plants in combating malnutrition and diseases through their use in food and medicine. It offers a thorough analysis of their chemical profiles, highlighting the therapeutic benefits and providing evidence-based applications in medicine and dietary supplements. It includes pharmacological research, demonstrating herb interactions and their synergistic, and pleiotropic, effects, while emphasizing product safety. Additionally, it explores the wide-ranging industrial applications of phytochemicals and plant extracts. This book is tailored for researchers and professionals of pharmacology, ethnobotany, and natural product chemistry.

CRC Press
October 2025 : 232pp
Hb: 978-1-032-84477-0 : £110

* For full contents and more information, visit: www.routledge.com/9781032844770

Digital Technologies and Tools for Smart Agriculture



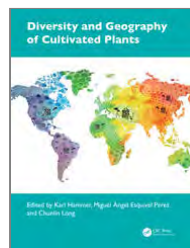
Edited by **Madhumathi Ramasamy , Karthigha Mohan , Pethuru Raj** IBM Pvt.Ltd., India, **Kai Sheng** Xidian University, China

This book will delve into the transformative power of digital technologies in agriculture, particularly in the context of smart agriculture. It will highlight how these technologies and innovative digital devices are reshaping the agricultural landscape. The book will also showcase the disruptive potential of these technologies, illustrating how they are revolutionizing traditional farming practices and processes.

CRC Press
May 2025 : 248pp
Hb: 978-1-032-78255-3 : £115
eBook: 978-1-003-48700-5

* For full contents and more information, visit: www.routledge.com/9781032782553

Diversity and Geography of Cultivated Plants



Edited by **Karl Hammer** Retired, Formerly University of Kassel, Institute of Crop Science, Germany, **Miguel Ángel Esquivel Pérez , Chunlin Long**

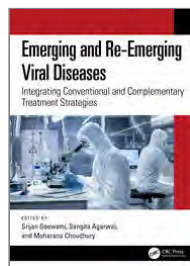
This book presents information on cultivated plants located within 12 different regions throughout the world. The content introduces cultural evolution and species richness in cultivated plants, considering domestication assessments, which make it possible to obtain a deeper insight into the diversity of these plants. The aim of this book is to bring together an actualized list of cultivated plants. It was necessary to organize, store and analyze gathered data during the exploration and collection missions, as well as those resulting from the ethnobotanical, archaeological and genomics studies.

CRC Press
May 2025 : 950pp
Hb: 978-0-367-22776-0 : £290
eBook: 978-0-429-27679-8

* For full contents and more information, visit: www.routledge.com/9780367227760

Emerging and Re-Emerging Viral Diseases

Integrating Conventional and Complementary Treatment Strategies



Edited by Srijan Goswami Delhi Paramedical and Manag. Inst, India, **Sangita Agarwal**, **Moharana Choudhury** Voice of Environment, India

This reference book offers an in-depth analysis of the fundamental aspects, causative agents, and clinical manifestations of Emerging and Re-Emerging Infectious Diseases (EID-REID). It elucidates the role of evolutionary processes in the emergence, adaptation, and dissemination of pathogens. The initial chapter explores the causative agents behind EID-REID, providing a comprehensive overview of their origins, characteristics, and modes of transmission. It explores conventional and complementary pharmacological strategies to combat these diseases. This book is intended for researchers and students of medical microbiology and infectious diseases.

CRC Press
July 2025 : 316pp
Hb: 978-1-032-72179-8 : £110

* For full contents and more information, visit: www.routledge.com/9781032721798

Enhancing Forest Resilience through Plant Functional Traits

A Practical Approach



Edited by Narendra Kumar, **Amit Kumar**, **Pramod Kumar Pandey**

The book explores the relationship between plant functional traits and the resilience of forest ecosystems. Understanding how these traits influence forest ecosystems has significant implications for conservation, forestry, and ecosystem management. This book explores the intersection of ecology, botany, and forestry, providing a comprehensive guide to using plant functional traits as a tool to advance sustainable forest development as sustainable forest management becomes more and more important in the face of global environmental challenges. The book explores the role that plant functional traits play in ecosystem dynamics and how they support forest resilience.

CRC Press
November 2025 : 344pp
Hb: 978-1-032-89906-0 : £110

* For full contents and more information, visit: www.routledge.com/9781032899060

Environmental Footprint of Bioplastic Additives



Edited by Babafemi Raphael Babaniyi, **Sesan Abiodun Aransiola** Univ. of Abuja, **Gabriel Gbenga Babaniyi**, **Naga Raju Maddela** Uni. College of Eng. Sci. and Tech, India

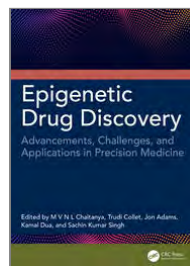
This book offers a comprehensive understanding of bioplastic compositions, degradation processes, and the environmental impact of various additives. Through detailed life cycle analyses, it assesses how bioplastic additives compare to conventional plastic additives in terms of sustainability and ecological impact. The book also addresses the challenges of managing bioplastic waste. This book is an essential resource for researchers, policymakers and industry professionals. It bridges the gap between scientific understanding and practical implementation, empowering stakeholders to make informed decisions and contribute to sustainable bioplastic waste management.

CRC Press
October 2025 : 392pp
Hb: 978-1-032-99186-3 : £160

* For full contents and more information, visit: www.routledge.com/9781032991863

Epigenetic Drug Discovery

Advancements, Challenges, and Applications in Precision Medicine



Edited by M V N L Chaitanya, **Trudi Collet**, **Jon Adams**, **Kamal Dua**, **Sachin Kumar Singh**

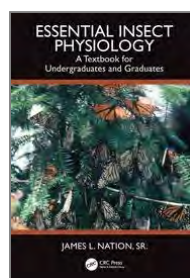
This book reviews the evolving field of epigenetics and its implications for drug discovery and precision medicine. It also focuses on the intricate mechanisms governing gene regulation and the impact of epigenetics on health and disease. The book encompasses the complexities of epigenetic mechanisms, their role in diseases such as cancer, autoimmune disorders, inflammatory conditions, and neurodegenerative diseases. With a focus on personalized medicine and recent advancements in drug delivery systems, this book is intended for researchers, clinicians, and pharmaceutical professionals seeking to explore epigenetic drug discovery and development.

CRC Press
October 2025 : 280pp
Hb: 978-1-032-70649-8 : £120

* For full contents and more information, visit: www.routledge.com/9781032706498

Essential Insect Physiology

A Textbook for Undergraduates and Graduates



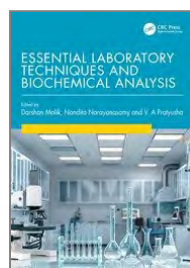
James L. Nation, Sr. University of Florida, Gainesville, USA

This textbook is the first to teach insect physiology and biology specifically to students who lack a strong background in biochemistry and molecular biology. Avoiding taxonomic language and supported with high-quality figures, chapter summaries, end-of-chapter review questions and a suite of PowerPoint slides for use in teaching, it describes the fundamental processes. These include molting and metamorphosis, digestion of food, nerve and muscle function, flight, biological rhythms, circulation and breathing, immunity, and how climate and climate change has, and is, affecting insects.

CRC Press
August 2025 : 218pp
Pb: 978-1-041-01277-1 : £74.99
Hb: 978-1-041-01281-8 : £195

* For full contents and more information, visit: www.routledge.com/9781041012771

Essential Laboratory Techniques and Biochemical Analysis



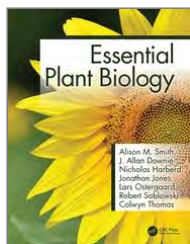
Edited by Darshan Malik, **Nandita Narayanasamy**, **V.A. Pratyusha**

This book talks about essential laboratory practices and biochemistry protocols, focusing on spectrophotometry, including the Lambert-Beer law and various assays for analyzing biomolecules. It also provides methods for staining and mounting biological samples, as well as using different types of microscopy. The protocols cover the analysis of carbohydrates, amino acids, proteins, and lipids, including their extraction and quantification. Additionally, it introduces enzyme purification techniques, activity assays, and hematology methods such as blood smear preparation and differential leucocyte counting.

CRC Press
August 2025 : 320pp
Hb: 978-1-032-88610-7 : £120

* For full contents and more information, visit: www.routledge.com/9781032886107

Essential Plant Biology



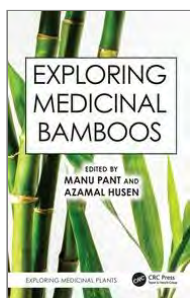
Alison M. Smith, J. Allan Downie, Nicholas Harberd, Jonathan Jones, Lars Ostergaard, Robert Sablowski, Colwyn Thomas

This exciting new textbook presents current knowledge of plant biology, highlighting important topics for future research. It addresses the dynamic nature of plant genomes, the conversion of products of photosynthesis into molecules that comprise the plant, and the nature and coordination of growth, development, and reproduction. It describes how these properties of plants are impacted by their surroundings. Finally, it outlines the history, importance and future of human interactions with plants. Designed for undergrad biology students who have a grounding in the fundamentals of molecular biology/biochemistry, it is also a valuable resource for postgrads in plant research.

CRC Press
November 2025 : 582pp
Pb: 978-1-041-08173-9 : **£59.99**
Hb: 978-1-041-08257-6 : **£160**

* For full contents and more information, visit: www.routledge.com/9781041081739

Exploring Medicinal Bamboos



Edited by Manu Pant Dep of Biotech at Graphic Era (Deemed to be Uni), India, **Azamal Husen** Wolaita Sodo University, Ethiopia

Series: Exploring Medicinal Plants

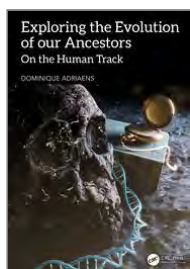
Exploring Medicinal Bamboos focuses on phytochemically active ingredients of bamboos imparting therapeutic potentials to each species. There are dedicated chapters on species such as bambusa spp., lophatherum gracile, sasa senanensis, melocanna baccifera, and phyllostachys spp., providing a deep understanding of the medicinal potential of these plants.

CRC Press
September 2025 : 208pp
Hb: 978-1-032-77162-5 : **£160**

* For full contents and more information, visit: www.routledge.com/9781032771625

Exploring the Evolution of our Ancestors

On the Human Track



Dominique Adriaens

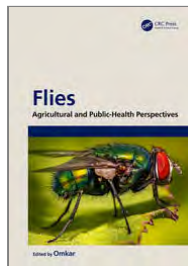
This book provides an understanding of why we look the way we do, by delving into the functional explanations for the unique characteristics of us and our ancestors and the evolutionary pathways that shaped them. Integrating changes in anatomy with functional shifts, but also with underlying genetic and environmental transformations that drove our evolution. Focusing on four fundamental themes: diet, brain, locomotion and skin. This book not only promises to enrich our understanding of human evolution but also challenges us to reconsider what it means to be human in the light of our ancient lineage and ongoing evolutionary journey.

CRC Press
August 2025 : 288pp
Pb: 978-1-032-97122-3 : **£43.99**
Hb: 978-1-032-96253-5 : **£110**

* For full contents and more information, visit: www.routledge.com/9781032971223

Flies

Agricultural and Public-Health Perspectives



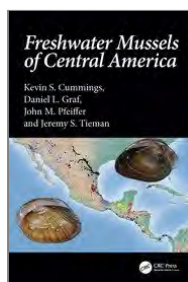
Edited by Omkar University of Lucknow, India

The term Flies apply to the insects belonging to the order Diptera. They are commonly known by the term's flies, gnats, midges, leaf minors, etc. They often possess a pair of aristate antennae, a set of sponging type of mouthparts, two functional and developed forewings, which help in the flight while the two hindwings are reduced to halteres, which work as balancing organs during the flight.

CRC Press
May 2025 : 320pp
Hb: 978-1-032-77344-5 : **£115**
eBook: 978-1-003-48258-1

* For full contents and more information, visit: www.routledge.com/9781032773445

Freshwater Mussels of Central America



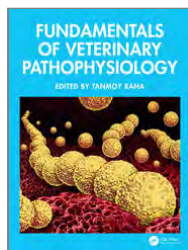
Kevin S. Cummings Drexel University, **Daniel L. Graf** University of Wisconsin, **John M. Pfeiffer** Smithsonian Institution, **Jeremy S. Tiemann** Illinois University

Freshwater Mussels of Central America describes a fauna of global conservation concern and provides a framework for researchers to begin to test hypotheses regarding the evolution of freshwater mussels in Central America. Placing the Central American fauna in context with that of North and South America, the authors fill a gap in our knowledge of this endangered and largely endemic fauna. Through photographs, distribution maps and a complete list of species described and reported from Central America, this book will inspire conservationists, aquatic biologists and those interested in natural history of temperate and tropical freshwater ecosystems.

CRC Press
July 2025 : 524pp
Hb: 978-1-032-32317-6 : **£170**

* For full contents and more information, visit: www.routledge.com/9781032323176

Fundamentals of Veterinary Pathophysiology



Edited by Tanmoy Rana

This textbook for advanced graduate and postgraduate veterinary students, provides a comprehensive overview of clinical physiology, with a focus on its application in diagnosing and managing various disorders in animals. The book is divided into two main sections. The first section introduces the general aspects of clinical physiology, covering intricate mechanisms such as temperature regulation, animal nutrition, and biological oxidation. It delves into topics like enzymatic regulation, metabolism, the physiology of membranes, body water, and ionic regulation.

CRC Press
June 2025 : 267pp
Hb: 978-1-032-73123-0 : **£94.99**
eBook: 978-1-003-42683-7

* For full contents and more information, visit: www.routledge.com/9781032731230

Fungal Biotechnology

Advancements in Drug Discovery, Healthcare, and Environmental Solutions



Edited by **Arshad Farid, Gagan Preet**

This book presents the diverse applications of fungi in medical, pharmaceutical, and environmental sciences, focusing on fungal metabolite production, bioactive compounds, and genetic engineering. It highlights their role in treating chronic diseases, drug development, and environmental sustainability. The book explores role of fungi in biopharmaceuticals, including immunotherapy, vaccine development, and precision medicine. Novel applications of fungal nanobiotechnology in drug delivery systems are discussed, alongside challenges in antifungal drug development and food safety. It is intended for researchers of microbiology, mycology, pharmaceutical sciences, environmental sciences.

CRC Press
August 2025 : 312pp
Hb: 978-1-032-97683-9 : **£140**

* For full contents and more information, visit: www.routledge.com/9781032976839

Fungal Omics

Methods and Applications



Edited by **Imran Ul Haq** University of Agriculture Faisalabad, Pakistan, **Siddra Ijaz, Hayssam Ali**

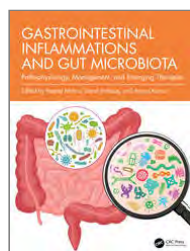
Fungal Omics: Methods and Applications provides a comprehensive account of trends and developments of fungal "omics" approaches. It presents literature on various "omics" applications and includes information on plant taxonomy; genetics, epigenetics, biotechnological and industrial applications. It begins with basic concepts, extending to complex and in-depth knowledge, and finally, describes the fungal genome and all "omics" comprehensively.

CRC Press
July 2025 : 244pp
Hb: 978-1-032-58742-4 : **£160**

* For full contents and more information, visit: www.routledge.com/9781032587424

Gastrointestinal Inflammations and Gut Microbiota

Pathophysiology, Management, and Emerging Therapies



Edited by **Neeraj Mishra** Amity Institute of Pharmacy, Amity University Madhya Pradesh, **Sumel Ashique, Anoop Kumar**

This book offers a comprehensive and multi-faceted examination of gastrointestinal inflammations, discussing factors that impact gut health. The initial chapters establish a foundational understanding of gastrointestinal inflammations and the critical role of the gut microbiota. The book then delves into the complex pathophysiology and various risk factors associated with these conditions, offering insights into the latest diagnostic, screening, and prevention techniques. It explores the dynamic interactions between the gut and the brain as well as the biochemical interplays involving short-chain fatty acids, reactive oxygen species, and superoxide dismutases.

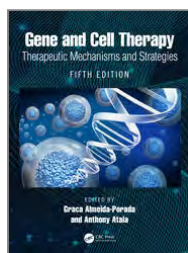
CRC Press
May 2025 : 384pp
Hb: 978-1-032-79638-3 : **£115**
eBook: 978-1-003-49314-3

* For full contents and more information, visit: www.routledge.com/9781032796383

5TH EDITION

Gene and Cell Therapy

Therapeutic Mechanisms and Strategies



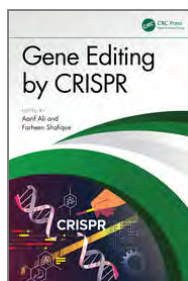
Edited by **Graca Almeida-Porada, Anthony Atala**

This book presents extensive background and basic information, state-of-the-art technologies, important achievements, and lingering challenges in the fields of gene and cell therapies. The fifth edition of this bestseller continues to provide the most comprehensive coverage of these fields in one volume. Some chapters have expanded introductions, making the book even more suitable for classroom use. This edition also offers more material on the contributors' research efforts as well as current technologies, disease targets, and clinical applications.

CRC Press
September 2025 : 1360pp
Hb: 978-0-367-77179-9 : **£240**

* For full contents and more information, visit: www.routledge.com/9780367771799

Gene Editing by CRISPR-Cas



Edited by **Aarif Ali** University of Kashmir, India, **Farheen Shafique** Uni of Azad Jammu and Kashmir, Pakistan

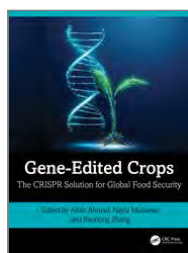
CRISPR-Cas systems have redefined the landscape of genetic engineering, offering an unprecedented level of precision, efficiency, and versatility in genome editing. This book entitled "Gene Editing by CRISPR-Cas" provides a comprehensive and well-structured approach on the historical context of genetics and gene editing techniques leading to the ground-breaking discovery of CRISPR-Cas systems.

CRC Press
August 2025 : 384pp
Hb: 978-1-032-88312-0 : **£115**

* For full contents and more information, visit: www.routledge.com/9781032883120

Gene-Edited Crops

The CRISPR Solution for Global Food Security



Edited by **Aftab Ahmad, Nayla Munawar** United Arab Emirates University, UAE, **Baohong Zhang**

CRISPR-based genome editing has revolutionized the precise genetic improvement of agriculturally important crops, offering unprecedented precision and efficiency in crop improvement. This powerful technology holds immense potential to reshape the future of food security, enabling scientists and agriculturalists to develop resilient, high yield crops resistant to diseases, pests, and environmental stresses. Gene-edited crops: The CRISPR solution for global food security offers a comprehensive guide to the latest research, advancements, and real-world applications of CRISPR in crop genetic improvement for sustainable agriculture and food security.

CRC Press
June 2025 : 330pp
Hb: 978-1-032-81693-7 : **£160**

* For full contents and more information, visit: www.routledge.com/9781032816937

Genetic Improvement and Conservation Practices of Medicinal Plants



Edited by **Manu Pant** Dep of Biotech at Graphic Era (Deemed to be Uni), India, **Sayed Sartaj Sohrab King** Abdulaziz Uni, Saudi Arabia, **Azamal Husen** Wolaita Sodo University, Ethiopia

Series: Exploring Medicinal Plants

The proposed book gives details of most recent advances for the conservation and transformation of priority plant species. It explores biotechnological interventions and advancements in medicinal plant diversity analysis, transformation and conservation and presents compendium of topics related to conservation for sustainable utilization of important medicinal and aromatic plants, genetic engineering tools for plant transformation, and transgenics for improved traits in the medicinally active plant species. It will be helpful to researchers, academicians involved in medicinal plant conservation, sustainable plant production, molecular biology, plant biotechnology, plant pharmaceuticals.

CRC Press
June 2025 : 288pp
Hb: 978-1-032-77360-5 : £110
eBook: 978-1-003-48265-9

* For full contents and more information, visit: www.routledge.com/9781032773605

Genome Editing for Pest Management



Edited by **Habib Ali**, **Yutao Xiao**

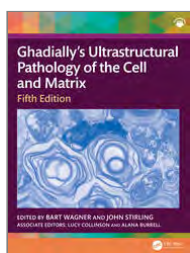
This book offers an in-depth exploration of the transformative potential of genome editing in insect pest management, starting with the significance of genome sequencing in understanding pest biology. It examines advanced tools like CRISPR-Cas9, ZFNs, and TALENs, addressing ethical, regulatory, and strategic aspects such as gene drives and the Sterile Insect Technique within integrated pest management. The book also navigates the challenges, risks, and safety considerations associated with these technologies.

CRC Press
August 2025 : 216pp
Hb: 978-1-032-76491-7 : £110

* For full contents and more information, visit: www.routledge.com/9781032764917

5TH EDITION

Ghadially's Ultrastructural Pathology of the Cell and Matrix



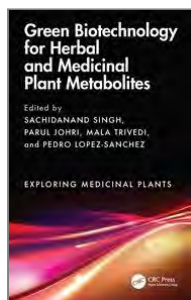
Edited by **Bart Wagner** EM section, Histopathology Department, Royal Hallamshire Hospital, Glossop Road, Sheffield, South Yorkshire S10 2JF, UK, **John Stirling**, **Lucy Collinson**, **Alana Burrell**

This established handbook is unique in illustrating and reviewing the cell and extracellular matrix, organelle by organelle (with numerous subsections) with emphasis on human pathology. Anyone studying normal or pathological tissues whether human, animal, or tissue culture, by conventional transmission electron microscopy for diagnosis or research, will use this book to understand what it is they are examining—without having to go through large volumes of previously published articles.

CRC Press
July 2025 : 900pp
Hb: 978-1-032-81189-5 : £290

* For full contents and more information, visit: www.routledge.com/9781032811895

Green Biotechnology for Herbal and Medicinal Plant Metabolites



Edited by **Sachidanand Singh**, **Parul Johri** Dr. Ambedkar Inst of Tech for Handicapped Kanpur, India, **Mala Trivedi** Amity University, Lucknow, India, **Pedro Lopez-Sanchez**

Series: Exploring Medicinal Plants

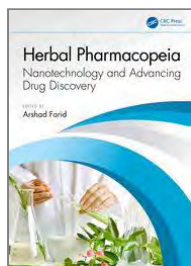
Green Biotechnology for Herbal and Medicinal Plant Metabolites presents an innovative approach that leverages plant-derived molecules for agriculture, medicine, and wellness in pursuit of sustainable health solutions. This comprehensive guide delves into the latest advancements in green biotechnology, showcasing in vitro, genetic, and biochemical strategies for enhancing the yield and potency of essential metabolites in medicinal plants.

CRC Press
July 2025 : 244pp
Hb: 978-1-032-49266-7 : £115

* For full contents and more information, visit: www.routledge.com/9781032492667

Herbal Pharmacopeia

Nanotechnology and Advancing Drug Discovery



Edited by **Arshad Farid**

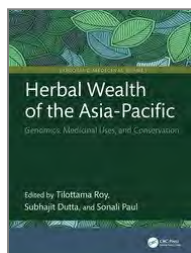
Explores the intersection between traditional herbal medicine and cutting-edge nanotechnology. Introduces modern techniques used in herbal extraction and analysis. Principles of drug discovery from plants are discussed, with focus on identification and development of bioactive compounds that have therapeutic potential.

CRC Press
May 2025 : 486pp
Hb: 978-1-032-89288-7 : £125
eBook: 978-1-003-54441-8

* For full contents and more information, visit: www.routledge.com/9781032892887

Herbal Wealth of the Asia-Pacific

Genomics, Medicinal Uses, and Conservation



Edited by **Tilottama Roy**, **Subhajit Dutta** University of Southern Denmark, **Sonali Paul** Uni of Eng and Management, India

Series: Exploring Medicinal Plants

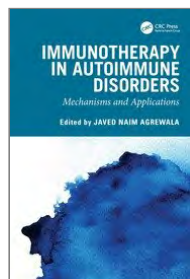
The Asia-Pacific region boasts an extraordinary variety of herbal plants, many of which are deeply rooted in medicinal practices and cultural traditions. "Herbal Wealth of the Asia-Pacific: Genomics, Medicinal Uses, and Conservation" examines the confluence of tradition, modern science, and conservation in preserving these botanical gems. By harnessing advanced genomic tools and investigating the therapeutic properties of herbal plants, this book connects ancient wisdom with modern scientific advancements.

CRC Press
August 2025 : 294pp
Hb: 978-1-032-77358-2 : £115

* For full contents and more information, visit: www.routledge.com/9781032773582

Immunotherapy in Autoimmune Disorders

Mechanisms and Applications



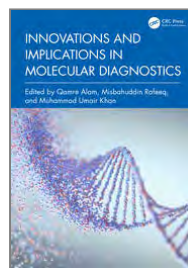
Edited by **Javed Naim Agrewala**

This book offers an insightful review into autoimmune diseases, highlighting the crucial role of immune tolerance and its failure, alongside the evolution and challenges of current treatments. It introduces role of immunotherapy in managing the autoimmune diseases, including regulatory T cells, CART therapy, and the pivotal role of the gut microbiome in immune modulation. By integrating advanced research on immunosuppression, vaccine development, and novel drug delivery systems, it presents a forward-looking perspective on personalized medicine. This book is a valuable resource for researchers and students in the fields of immunology, biomedical sciences, and pharmaceutical sciences.

CRC Press
September 2025 : 256pp
Hb: 978-1-032-85195-2 : £110

* For full contents and more information, visit: www.routledge.com/9781032851952

Innovations and Implications in Molecular Diagnostics



Edited by **Qamre Alam, Misbahuddin Rafeeq, Muhammad Umair Khan**

This book provides an overview of the field of molecular diagnostics, tracing its evolution from the earliest days of genetic research to the cutting-edge advancements. It provides historical foundations to advanced technologies like PCR, next-generation sequencing, and bioinformatics. It highlights the impact of high-throughput technologies, nanotechnology, and AI in diagnostics, along with developments in molecular imaging, RNA analysis, metabolomics, and proteomics. The book also addresses the ethical and regulatory challenges in the fields of molecular diagnostics. This book is intended for professionals and researchers in molecular diagnostics, biotechnology, and genomics.

CRC Press
September 2025 : 224pp
Hb: 978-1-032-78725-1 : £125

* For full contents and more information, visit: www.routledge.com/9781032787251

Impact of Climate Change on Medicinal and Herbal Plant micro-RNA



Edited by **Kanchanlata Tungare** School of Biotechnology and Bioinformatics, D Y Patil Deemed to be University, Navi Mumbai, Sector 15, CBD Belapur, Navi Mumbai, Maharashtra 400614, India, **Parul Johri** Department of Biotechnology, AIITH, Kanpur, Uttar Pradesh 208024, India, **Sachidanand Singh** Department of Biotechnology, Pandit Deendayal Energy University, Rayson Knowledge Corridor, Gandhinagar, Gujarat 384421, India, **Surojeet Das** PhD Student, EMBL Australia, Australian Regenerative Medicine Institute, Monash University, 15 Innovation Walk, Clayton, Melbourne, Victoria 3168, Australia

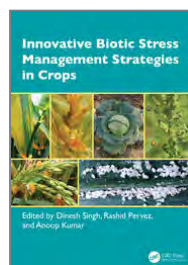
Series: *Exploring Medicinal Plants*

Climate change poses unprecedented challenges to plant growth, biodiversity, and productivity, necessitating innovative strategies for sustainability. MicroRNAs in Plants: Climate Change, Stress, and Resilience delves into the intricate relationship between climate-induced stress and the molecular mechanisms underpinning plant adaptation, with a special focus on microRNAs (miRNAs). This book provides an in-depth exploration of miRNAs as pivotal regulators in plant biology, offering insights into their biogenesis, functional roles, and applications in stress management and crop improvement.

CRC Press
October 2025 : 384pp
Hb: 978-1-032-79282-8 : £115

* For full contents and more information, visit: www.routledge.com/9781032792828

Innovative Biotic Stress Management Strategies in Crops



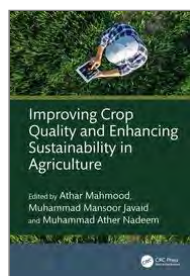
Edited by **Dinesh Singh** ICAR- Indian Agricultural Research Institute, India, **Rashid Pervez** ICAR, India, **Anoop Kumar**

In this book, 29 chapters are included covering general topic and specific crop - based strategies to management the stresses caused by insect pest and diseases of the different crops such as cereals, pulses, oilseeds, vegetables, fruits, cash crop, medicinal and aromatic plants, spices, and plantation crops by using different approaches with latest information. At the end of each chapter references are cited which may facilitate the reader for getting more authentic detail information.

CRC Press
July 2025 : 434pp
Hb: 978-1-032-63154-7 : £110

* For full contents and more information, visit: www.routledge.com/9781032631547

Improving Crop Quality and Enhancing Sustainability in Agriculture



Edited by **Athar Mahmood, Muhammad Javaid, Muhammad Nadeem**

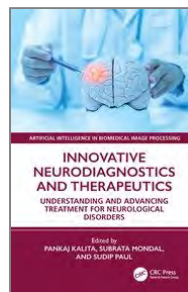
Agriculture is facing unprecedented challenges due to climate change, resource depletion, and the growing global population. Improving Crop Quality and Enhancing Sustainability in Agriculture presents cutting-edge technologies and practical solutions providing information on sustainable agricultural practices. Edited by Dr. Athar Mahmood, Dr. Muhammad Mansoor Javaid, and Dr. Muhammad Ather Nadeem, the book explores sustainable approaches to improving crop quality while preserving the environment.

CRC Press
October 2025 : 472pp
Hb: 978-1-032-79731-1 : £170

* For full contents and more information, visit: www.routledge.com/9781032797311

Innovative Neurodiagnostics and Therapeutics

Understanding and Advancing Treatment for Neurological Disorders



Edited by **Pankaj Kalita, Subrata Mondal, Sudip Paul** North-Eastern Hill University, Shillong, India

Series: *Artificial Intelligence in Biomedical Image Processing*

This book explores the latest technological advancements in neurological disorder diagnosis, emphasizing complexities, pathogenesis, and therapeutic strategies. Exploring optogenetics, nanoarchitectonics, machine learning, artificial intelligence, and metal-organic frameworks, it offers insights into cutting-edge neurodiagnostics. Robotic advancements in neurotherapeutics and the interplay of neurodiagnostics and psychodiagnosics are also covered, concluding with the potential of aquaporins as therapeutic targets. It is an invaluable source for neuroscientists, neurologists, and computational biologists.

CRC Press
August 2025 : 245pp
Hb: 978-1-032-81998-3 : £110

* For full contents and more information, visit: www.routledge.com/9781032819983

Ion Transporters

The Clue to Salt Tolerance and Adaptation in Plants



Edited by **Swarnendu Roy** University of North Bengal, India, **Khalid Rehman Hakeem**, **Piyush Mathur** Uni of North Bengal, India

As our planet faces the growing threat of climate change and soil salinization, the need for developing resilient crops has never been more urgent. *Ion Transporters: The Clue to Salt Tolerance and Adaptation in Plants* offers an honest attempt to delve into the molecular mechanisms that enable plants to survive in salty environments. The book explores how ion transporters—specialized proteins that regulate the movement of ions across plant cell membranes—are central to a plant's ability to manage salt stress and thrive in challenging conditions.

CRC Press
November 2025 : 400pp
Hb: 978-1-032-62919-3 : **£120**

* For full contents and more information, visit: www.routledge.com/9781032629193

IoT and Advanced Intelligence Computation for Smart Agriculture



Edited by **Mourade Azrou** Moulay Ismail University of Meknes, Morocco, **Jamal Mabrouki**, **Sultan Ahmad**

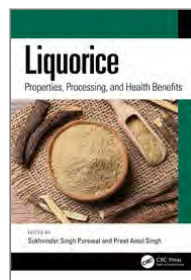
Smart agriculture is an approach to maintaining nature without compromising the basic needs of future generations, while at the same time improving the efficiency of farming. The main achievements of smart agriculture in terms of sustainable agriculture are crop rotation, controlling nutrient deficiencies in crops, pest and disease control, recycling, and water harvesting, leading to a safer environment overall. Living organisms depend on the nature of biodiversity and are exposed to pollution due to waste emissions, use of fertilizers and pesticides, degraded dead plants, etc.

CRC Press
August 2025 : 234pp
Pb: 978-1-032-86466-2 : **£48.99**
Hb: 978-1-032-85238-6 : **£140**

* For full contents and more information, visit: www.routledge.com/9781032864662

Liquorice

Properties, Processing, and Health Benefits



Edited by **Sukhvinder Singh Purewal** Chandigarh University, **Preet Amol Singh** University Institute of Pharma Sciences, Chandigarh University

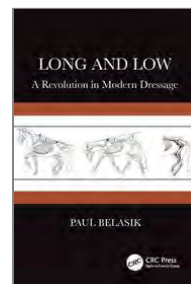
This book serves as an essential guide for understanding the full potential of this remarkable plant. Drawing from a wealth of scientific research, this book explores every aspect of liquorice, from its nutritional profile to its extensive health benefits. With clear and structured chapters, the book begins with an overview of liquorice nutrient composition, followed by insights into agrarian conditions and the best agricultural practices for cultivating high-quality crops.

CRC Press
June 2025 : 232pp
Hb: 978-1-032-67426-1 : **£110**

* For full contents and more information, visit: www.routledge.com/9781032674261

Long and Low

A Revolution in Modern Dressage



Paul Belasik Pennsylvania Riding Academy

This short book examines the history, origins and unintended consequences of the commonly used and widely accepted practice of "long and low" riding and training in dressage. International rider, trainer, writer and teacher Paul Belasik explains the little-known origins of the mysterious practice that has evolved into a major modern-day controversy. Long and low riding has negative effects on the quality of dressage at the highest levels of the sport and widespread confusion for riders of all levels. This important book seeks to educate riders on why it is taught, where it came from, and how the unintended consequences have played out for riders all over the world.

CRC Press
August 2025 : 100pp
Pb: 978-1-041-04258-7 : **£22.99**
Hb: 978-1-041-04260-0 : **£56.99**

* For full contents and more information, visit: www.routledge.com/9781041042587

Lupeol

Therapeutic Applications in Human Health and Disease



Edited by **Hifzur R Siddique**

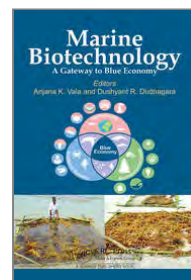
This book reviews the therapeutic potential of Lupeol against various diseases, including those affecting skin, cardiovascular, kidneys, liver, and brain. It also examines its physico-chemical properties, chemical modifications, and synthetic analogs. It highlights its antioxidant, anti-inflammatory, and chemopreventive effects, as well as its applications in nanoparticle formulations for cancer treatment. It also discusses its antimicrobial, antiparasitic, and anti-cancer properties, along with its modulation of transcription factors in disease pathways. This book is a useful resource for researchers of pharmaceutical sciences and traditional medicine.

CRC Press
October 2025 : 320pp
Hb: 978-1-032-98695-1 : **£160**

* For full contents and more information, visit: www.routledge.com/9781032986951

Marine Biotechnology

A Gateway to Blue Economy



Edited by **Anjana K. Vala** Department of Life Sciences Maharaja Krishnakumarsinhji Bhavnagar University, **Dushyant R. Dudhagara** Bhakta Kavi Narsinh Mehta University, Gujarat, India

Marine environment has always been beneficial to mankind in one or the other way since ages. With advancement in scientific knowledge and technological development, novel aspects of marine resources have been and are being revealed that can be harnessed for sustainable development of blue economy. This book is an attempt to present before the scientific community, a compilation of recent developments in the field of marine biotechnology contributed by leading scientists of international repute. It covers diverse roles of marine biotechnology including in agriculture, probiotics, health sector, novel biomolecules, biochemicals, biomedicine and pharmaceuticals.

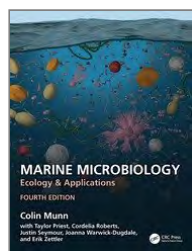
CRC Press
August 2025 : 230pp
Hb: 978-1-032-67363-9 : **£120**

* For full contents and more information, visit: www.routledge.com/9781032673639

4TH EDITION

Marine Microbiology

Ecology & Applications



Colin Munn University of Plymouth, UK, **Taylor Priest**, **Cordelia Roberts**, **Justin Seymour**, **Joanna Warwick-Dugdale**, **Erik Zettler**

The fourth edition of this bestselling text has been rigorously updated to reflect major new discoveries and concepts since 2019, revealed by further development of high-throughput sequencing, omics and single-cell technologies which have led to major advances in understanding of how the activities, interactions, and functions of marine microbes affect ecosystem processes and global biogeochemical cycles. This is the only textbook addressing such a broad range of topics in the specific area of Marine Microbiology, now a core topic within broader Marine Science degrees.

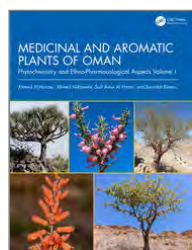
CRC Press

October 2025 : 448pp

Pb: 978-1-032-85088-7 : **£89.99**Hb: 978-1-032-85581-3 : **£160*** For full contents and more information, visit: www.routledge.com/9781032850887

Medicinal and Aromatic Plants of Oman

Phytochemistry and Ethno-Pharmacological Aspects, Volume 1



Ahmed Al-Harrasi, **Ahmed Al-Rawahi** University of Nizwa, Oman, **Saif Amur Al Hatmi**, **Saurabh Bhatia** University of Nizwa, Oman

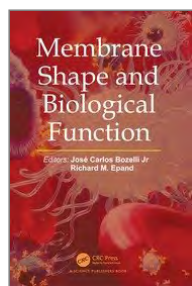
Medicinal plants have received an impetus recently due to revival of attention in natural products in form of herbal medicines demanding convincing knowledge on their phytochemistry, status, cultivation and utilization. Medicinal plants in the Sultanate of Oman have tremendous potential in terms of ethnomedicinal and food applications. However, these treasures of Oman have not been fully explored until recently.

CRC Press

September 2025 : 410pp

Hb: 978-1-032-28146-9 : **£125*** For full contents and more information, visit: www.routledge.com/9781032281469

Membrane Shape and Biological Function



Edited by **José Carlos Bozelli Jr** McMaster University, Canada, **Richard M. Epanand**

Membrane Shape and Biological Function is an important guide for anyone interested in the dynamic world of biological membranes. The book explores how membrane shape influences crucial biological processes and highlights its practical applications. It delves into the mechanics of lipid bilayers, their role in cellular processes, and computational methods for understanding membrane remodeling, including real-world applications such as the Golgi apparatus' structure and function, the role of inositol phospholipids in cellular organization, membrane fusion in cell biology, and the potential of lipid bilayers in neuromorphic computing.

CRC Press

May 2025 : 304pp

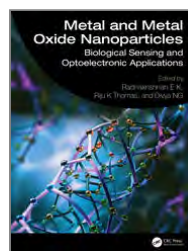
Hb: 978-1-032-26314-4 : **£150**

eBook: 978-1-003-28765-0

* For full contents and more information, visit: www.routledge.com/9781032263144

Metal and Metal Oxide Nanoparticles

Biological Sensing and Optoelectronic Applications



Edited by **Radhakrishnan E K**, **Riju K Thomas**, **Divya NG**

This book presents the synthesis, characterization, as well as biosensing and optoelectronic applications, of metal and metal oxide nanoparticles. It examines surface functionalization and modification techniques for enhancing the performance and functionality of metals and metal oxides. The book also provides an overview of the biocompatibility of surface-functionalized metal and metal oxide nanomaterials and explores the factors influencing their biocompatibility. This book is intended for researchers, scientists, academicians, students, and professionals working in the fields of nanotechnology, biosensors, materials science, biomedical engineering, and optoelectronics.

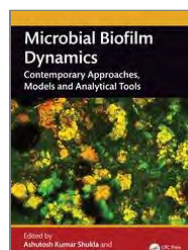
CRC Press

October 2025 : 272pp

Hb: 978-1-032-64329-8 : **£110*** For full contents and more information, visit: www.routledge.com/9781032643298

Microbial Biofilm Dynamics

Contemporary Approaches, Models and Analytical Tools



Edited by **Ashutosh Kumar Shukla** Ewing Christian College, University of Allahabad, India, **Douglas Roberto Monteiro**

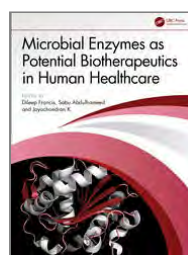
This book explores microbial biofilm dynamics, their links to oral and systemic diseases, and highlights developmental models and detection methodologies. Divided into three sections, the introductory section covers fundamental concepts, antimicrobial strategies, and novel approaches. The second section explores biofilm complexity through diverse laboratory models, providing a comprehensive understanding of experimental setups. The third section focuses on crucial analytical methods, equipping researchers with tools for in-depth biofilm studies. This book is tailored for researchers, scientists, and students of microbiology.

CRC Press

August 2025 : 248pp

Hb: 978-1-032-81993-8 : **£110*** For full contents and more information, visit: www.routledge.com/9781032819938

Microbial Enzymes as Potential Biotherapeutics in Human Healthcare



Edited by **Dileep Francis**, **Sabu Abdulhameed**, **Jayachandran K**

This comprehensive book explores the diverse potential of microbial enzymes in therapeutics, from production to biosensors. It addresses their roles in combating diseases such as inflammation, bacterial infections, and cardiovascular conditions, along with their applications in drug formulation and bioactive compound production. The book also covers the potential of microbial enzymes in thrombotic disorder treatments, cancer therapy, lipid-lowering medications, and digestive health. Additionally, it discusses regulatory aspects and serves as a valuable resource for researchers, professionals, and students in the field of microbial enzyme-based therapeutics.

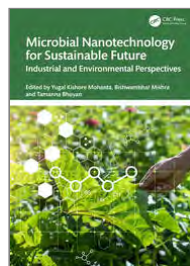
CRC Press

August 2025 : 288pp

Hb: 978-1-032-75225-9 : **£110*** For full contents and more information, visit: www.routledge.com/9781032752259

Microbial Nanotechnology for Sustainable Future

Industrial and Environmental Perspectives



Edited by **Yugal Kishore Mohanta** Uni of Sci and Tech, India, **Bishwambhar Mishra** Chaitanya Bharathi Institute of Technology, India, **Tamanna Bhuyan** USTM, India

This book covers the fundamentals and methods of biologically producing nanoparticles using microorganisms such as bacteria, fungi, and algae, along with optimization strategies for microbe-mediated nanoparticle production. It explores industrial and agricultural applications of microbial nanoparticles and their use in health and pharmaceuticals, including treatments for multidrug-resistant infections and cancer. Focusing on microbial nanotechnology, the book highlights its applications in food, pharmaceuticals, water, and environmental remediation.

CRC Press
August 2025 : 280pp
Hb: 978-1-032-78242-3 : £115

* For full contents and more information, visit: www.routledge.com/9781032782423

Mushrooms in Sustainable Development

An Industry and Environment Paradigm



Edited by **Yugal Kishore Mohanta** Uni of Sci and Tech, India, **Jibanjyoti Panda** Dept. of Applied Biology, Univ. of Sci and Tech, Meghalaya, **Pinku Chandra Nath** Dept. of Applied Biology, Univ. of Sci and Tech, Meghalaya, **Hrudayanath Thatoi** Director, Centre for Industrial Biotechnology Research, Odisha

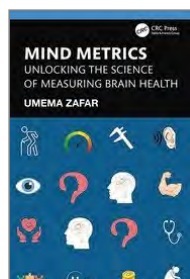
The book highlights the importance of mushrooms and their effective application in the nutraceutical sector, along with their role in promoting environmental resilience. The goal of this book is to bring attention to the gaps in the research on mushrooms as a possible source of superfoods and highly nutritious substances, with the ultimate goal of helping to reach the current sustainable development goals (SDGs). Additionally, it will explore potential applications in industrial development. This book seeks to thoroughly look at the diverse aspects of the design, application, and integration of mushrooms in the agriculture, nutraceuticals, and food sectors.

CRC Press
October 2025 : 336pp
Hb: 978-1-032-91114-4 : £110

* For full contents and more information, visit: www.routledge.com/9781032911144

Mind Metrics

Unlocking the Science of Measuring Brain Health



Umema Zafar

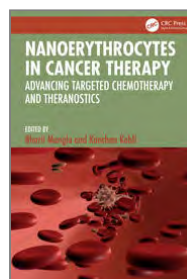
This book reviews such as fMRI, EEG and PET scan as well as measuring certain blood and CSF biomarker levels. A new noninvasive, cost effective and easily implemented tool for gauging brain health is introduced. This tool can be used in rural communities as well as in LMIC. This book will focus on development of this new tool for brain health measurement, as well as its cross validation in diseased and healthy population.

CRC Press
August 2025 : 214pp
Pb: 978-1-032-64816-3 : £79.99
Hb: 978-1-032-67658-6 : £210

* For full contents and more information, visit: www.routledge.com/9781032648163

Nanoerythrocytes in Cancer Therapy

Advancing Targeted Chemotherapy and Theranostics



Edited by **Bharti Mangla**, **Kanchan Kohli**

This book explores the theranostic potential of nanoerythrocytes for cancer treatment. It covers the challenges in developing nanoerythrocytes, including safety, scalability, and regulatory concerns. It examines the formulation strategies and technological advancements to optimize the design, engineering, and delivery of these nano-carriers. It also explores the latest advancements and future directions in the field through case studies, recent patents, and clinical trials. It discusses the immune responses triggered by nanoerythrocytes and their clinical implications in cancer therapy. It is useful for researchers of cancer biology, pharmaceutical sciences, and biomedical sciences.

CRC Press
September 2025 : 248pp
Hb: 978-1-032-98194-9 : £110

* For full contents and more information, visit: www.routledge.com/9781032981949

Mosquitoes of India

Mosquito-Borne Diseases, Diagnosis and Control



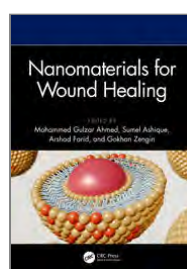
Edited by **Brij Kishore Tyagi** Visiting Professor, Department of Environment Biotechnology, Bharathidasan University, Tiruchirappalli, India

This is an up-to-date and comprehensive handbook that presents a wealth of information on the different aspects of one of the largest dipterous family, Culicidae (Mosquitoes). It presents latest advancements in mosquito control methods, including chemical, biological, herbal, and genetic approaches. This authoritative account is a crucial reference source for mosquito-borne disease control and prevention. This book is meant for researchers, university students, medical entomologists, parasitologists, and public health professionals.

CRC Press
June 2025 : 364pp
Hb: 978-1-032-35462-0 : £165
eBook: 978-1-003-32702-8

* For full contents and more information, visit: www.routledge.com/9781032354620

Nanomaterials for Wound Healing



Edited by **Mohammed Gulzar Ahmed**, **Sumel Ashique**, **Arshad Farid**, **Gokhan Zengin**

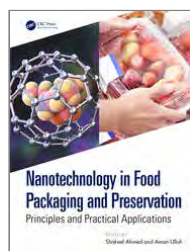
This book offers an extensive overview of wound healing, emphasizing the fundamentals, molecular aspects, and the role of nanotechnology in treatment advancements. It discusses the challenges of chronic wound healing, explores the development and application of nanomaterials like smart 3D-printed hydrogels and bioactive compounds, and delves into the potential of nanotechnology in improving diabetic wound healing, tissue engineering, and antibacterial strategies. It examines the role of the immune system in healing and the significance of toxicity studies. This book is for researchers, clinical practitioners, students of biomedical engineering, human physiology, and nanotechnology.

CRC Press
May 2025 : 262pp
Hb: 978-1-032-82514-4 : £150
eBook: 978-1-003-50494-8

* For full contents and more information, visit: www.routledge.com/9781032825144

Nanotechnology in Food Packaging and Preservation

Principles and Practical Applications



Edited by **Shakeel Ahmed** Government Degree College Mendhar, Jammu and Kashmir, India, **Aman Ullah** University of Alberta Edmonton

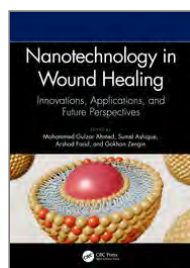
This book provides an overview of the use of nanotechnology in food preservation, food packaging, and the development of new preservation methods. The chapters focus on applications of nanotechnology in active food packaging, modified atmosphere packaging, and the development of nanocomposite films and coatings for food packaging. The book further explores the application of nanosensors and biosensors for real-time monitoring of food quality and safety. It also provides insightful case studies showcasing successful nanotechnology applications in the food industry. This book is a valuable resource for researchers, practitioners, and policymakers in the food industry.

CRC Press
September 2025 : 408pp
Hb: 978-1-032-67740-8 : £115

* For full contents and more information, visit: www.routledge.com/9781032677408

Nanotechnology in Wound Healing

Innovations, Applications, and Future Perspectives



Edited by **Mohammed Gulzar Ahmed**, **Sumel Ashique**, **Arshad Farid**, **Gokhan Zengin**

This book comprehensively reviews the role of engineered nanomaterials in wound healing. It highlights innovative approaches like smart 3D printed hydrogels and drug-loaded nanomaterials, as well as natural bioactive compounds encapsulated within nanomaterials. The book also covers advancements in nanomaterial-based drug delivery systems and the integration of artificial intelligence in wound healing. Further chapters discuss the role of the immune system and the extracellular matrix in wound healing, strategies to modulate immune responses, and recent advancements in tissue engineering. This book is for researchers and students of biomedical engineering and nanotechnology.

CRC Press
June 2025 : 296pp
Hb: 978-1-032-99773-5 : £140
eBook: 978-1-003-60596-6

* For full contents and more information, visit: www.routledge.com/9781032997735

Neglected Parasitic Zoonoses of Helminth Origin



Edited by **Debasis Bhattacharya**, **Snehil Gupta**, **Arun Kumar De**, **Perumal Ponraj**

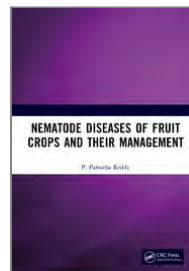
This book provides an in-depth analysis of neglected parasitic zoonoses of helminthic origin, offering a comprehensive understanding of their epidemiology, pathology, and implications for public health. With a focus on the One Health perspective, it delves into the intricate interactions between animals, humans, and the environment, emphasizing the critical role of interdisciplinary collaboration in these diseases. The book covers the life cycles, transmission dynamics, and potential control measures of neglected zoonoses of nematode, cestode, and trematode origin. This book is intended for researchers, scientists, epidemiologists, veterinarians, and healthcare professionals.

CRC Press
November 2025 : 288pp
Hb: 978-1-032-67080-5 : £120

* For full contents and more information, visit: www.routledge.com/9781032670805

Nematode Diseases of Fruit Crops and their Management

P. Parvatha Reddy



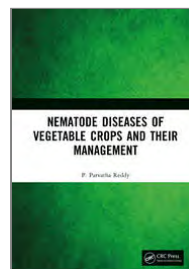
This book collates information on the various aspects of nematode diseases of fruit crops and their management. The subject matter in this book also discusses: International and Indian fruit crop scenario and techniques for enhancing productivity. Different aspects of nematode diseases in fruit crops. Nematode diseases of the different types of fruit crops. Current nematode management strategies and vision for the future. Print edition not for sale in South Asia (India, Sri Lanka, Nepal, Bangladesh, Pakistan or Bhutan)

CRC Press
June 2025 : 334pp
Hb: 978-1-041-03267-0 : £100
eBook: 978-1-003-62310-6

* For full contents and more information, visit: www.routledge.com/9781041032670

Nematode Diseases of Vegetable Crops and their Management

P. Parvatha Reddy



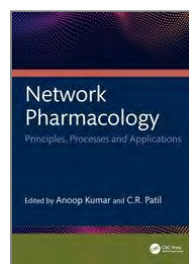
This book provides an overview of nematode diseases in vegetable crops, covering their economic importance, emerging issues, and interactions with pathogens like fungi, bacteria, and viruses. It details management methods, including regulatory, physical, cultural, chemical, biological, and integrated approaches, along with the crop diseases affecting mushrooms, root and leafy vegetables, and solanaceous, leguminous, cruciferous, cucurbitaceous, and malvaceous crops. The book also presents a future vision for Integrated Nematode Management. Print edition not for sale in South Asia (India, Sri Lanka, Nepal, Bangladesh, Pakistan or Bhutan).

CRC Press
June 2025 : 392pp
Hb: 978-1-041-03269-4 : £100
eBook: 978-1-003-62311-3

* For full contents and more information, visit: www.routledge.com/9781041032694

Network Pharmacology

Principles, Processes and Applications



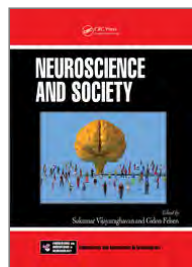
Edited by **Anoop Kumar**, **C.R. Patil**

This book provides a comprehensive overview of network pharmacology, covering principles, methodologies, and applications in drug discovery, pharmacovigilance, and precision medicine. It guides readers through step-by-step procedures for creating networks, explores the intersection with quantitative systems pharmacology, and discusses databases and software tools. The text emphasizes the role of machine learning and AI, highlights applications in drug discovery and repurposing, and addresses translatability issues for clinical practice, making it valuable for professionals, researchers, and advanced students in pharmaceutical sciences.

CRC Press
October 2025 : 240pp
Hb: 978-1-032-81700-2 : £160

* For full contents and more information, visit: www.routledge.com/9781032817002

Neuroscience and Society



Edited by **Sukumar Vijayaraghavan , Gideon Felsen**

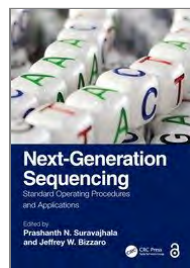
The book is intended for students of neuroscience and social sciences, as well as readers generally interested in the human condition. It is hoped that the book will stimulate cross-disciplinary thinking and inspire a new generation of thinkers who are willing to look at both social sciences and neuroscience research with a different lens. Such bridge builders will be the pioneers of the next level of interrogation at this emerging interface

CRC Press
September 2025 : 198pp
Pb: 978-1-032-71778-4 : **£68.99**
Hb: 978-1-032-70917-8 : **£99.99**

* For full contents and more information, visit: www.routledge.com/9781032717784

Next-Generation Sequencing

Standard Operating Procedures and Applications



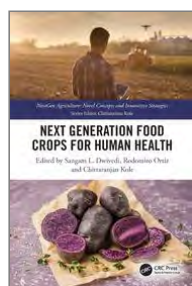
Edited by **Prashanth N Suravajhala , Jeff W Bizzaro**

This cutting-edge reference book compiles standard operating procedures, protocols, and applications of Next-Generation Sequencing (NGS). It discusses genomic testing applications through NGS. It pays special focus on the protocols for cataloging variants of uncertain significance. Over the years, NGS and advanced bioinformatics approaches have allowed the transition of genomic assays into translational practices. The book covers visualization of NGS data sets, investigation of early development impairment, and metagenome protocols. It also discusses the challenges in NGS methods.

CRC Press
May 2025 : 298pp
Hb: 978-1-032-39262-2 : **£125**
eBook: 978-1-003-35406-2

* For full contents and more information, visit: www.routledge.com/9781032392622

Next Generation Food Crops for Human Health



Edited by **Sangam L. Dwivedi , Rodomiro Ortiz** Swedish University of Agricultural Sciences, Sweden, **Chittaranjan Kole**

Series: *Nextgen Agriculture*

Next Generation Food Crops for Human Health delves into the advances in genetic and genomic research that are revolutionizing the development of productive, nutrient-dense food crops. It presents insights into tools including high-throughput phenomics, DNA sequencing, and genomic selection, which enable scientists to discover functionally characterized genes and enhance staple crops such as grains, legumes, fruits, vegetables, and oil crops. By leveraging these technologies, researchers are creating a new generation of foods that optimize essential nutrients, from complex carbohydrates and proteins to vitamins and bioactive compounds.

CRC Press
September 2025 : 320pp
Hb: 978-1-032-73908-3 : **£170**

* For full contents and more information, visit: www.routledge.com/9781032739083

Non-Pharmacological Interventions for Dementia

A Comprehensive Approach



Edited by **Abraham Olufemi Asuku , Ebele Joan Ajagun , Gbonjubola Oyinlola Ogungbangbe**

Series: *Neuroscience of Neurodegenerative Disorders*

As our global population ages, dementia emerges as one of healthcare's most pressing challenges. But what if the most powerful solutions lie beyond traditional medication? Non-pharmacological Interventions for Dementia: A Comprehensive Approach opens new doors in dementia care, revealing evidence-based strategies that can transform lives.

CRC Press
November 2025 : 256pp
Hb: 978-1-032-84668-2 : **£145**

* For full contents and more information, visit: www.routledge.com/9781032846682

Next Generation Probiotics

From Novel Drugs to Future Therapeutics



Edited by **Shakira Ghazanfar , Charles Oluwaseun Adetunji** Edo University, Iyamho, Nigeria, **Alessandro Di Cerbo , Ghulam Muhammad Ali , Wajya Ajmal , Muhammad Naeem Riaz**

Series: *Current Developments in Agricultural Biotechnology and Food Security*

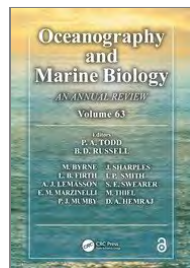
Next Generation Probiotics: From Novel Drugs to Future Therapeutics provides a comprehensive and cutting-edge exploration of probiotics as powerful therapeutic agents. With the rapid advancements in the field, this book offers a deep dive into how probiotics are evolving beyond traditional uses, addressing complex health conditions and diseases in modern medicine. By combining the latest scientific research with practical applications, this book equips researchers, clinicians, and healthcare professionals with the knowledge needed to incorporate probiotics into clinical practice and future therapeutic strategies.

CRC Press
September 2025 : 328pp
Hb: 978-1-032-51638-7 : **£105**

* For full contents and more information, visit: www.routledge.com/9781032516387

Oceanography and Marine Biology

An Annual Review



Edited by **B.D. Russell** Univ. of Hong Kong, **P. A. Todd** NUS, Singapore

Series: *Oceanography and Marine Biology - An Annual Review*

The ever-increasing interest in work in oceanography and marine biology and its relevance to global environmental issues, especially global climate change and its impacts, creates a demand for authoritative refereed reviews summarising and synthesising the results of both historical and recent research. Oceanography and Marine Biology: An Annual Review continues to answer that need after six decades of publication. An international Editorial Board ensures global relevance and expert peer review. Three of the seven peer-reviewed contributions in Volume 63 are available to read Open Access via the webpage and on OAPEN.

CRC Press
July 2025 : 384pp
Hb: 978-1-032-96476-8 : **£195**

* For full contents and more information, visit: www.routledge.com/9781032964768

Optimizing Plant Health under Abiotic-Stress Environments

Ensuring Food and Nutritional Security



Edited by **M. Iqbal R. Khan** Department of Botany, Jamia Hamdard, India, **Faroza Nazir**, **Kadambot H.M. Siddique** The Uni of Western Australia

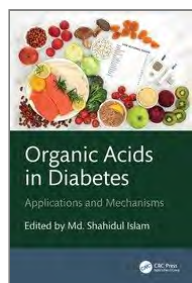
Abiotic stresses negatively affect crop yields, crop health is essential to ensuring global food security. There exists an urgent need to develop more abiotic stress resistant and tolerant crop varieties to ensure food and nutritional security. *Optimizing Plant Health under Abiotic-Stress Environments: Ensuring Food and Nutritional Security* presents a comprehensive review of important mineral nutrients in plants and effective management strategies under abiotic stress environments. The optimization of significant traits for abiotic stress tolerance creates effective breeding programs contributing to the development of next-generation crop varieties.

CRC Press
August 2025 : 312pp
Hb: 978-1-032-61955-2 : £120

* For full contents and more information, visit: www.routledge.com/9781032619552

Organic Acids in Diabetes

Applications and Mechanisms



Edited by **Md. Shahidul Islam**

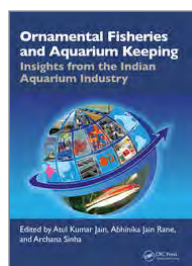
This book examines the roles and mechanisms of organic acids in managing type 2 diabetes and its complications. The introductory chapters provide a foundational understanding of diabetes, encompassing its pathogenesis, classification, and conventional therapeutic approaches. The book discusses the sources, chemistry, digestion, absorption, metabolism, and health benefits of phenolic acid, emphasizing their roles in managing diabetes. Additionally, the book examines non-phenolic organic acids and their potential in managing insulin resistance and type 2 diabetes. This book is a valuable source for researchers and healthcare professionals focusing on diabetes management.

CRC Press
October 2025 : 328pp
Hb: 978-1-032-80165-0 : £89.99

* For full contents and more information, visit: www.routledge.com/9781032801650

Ornamental Fisheries and Aquarium Keeping

Insights from the Indian Aquarium Industry



Edited by **Atul Kumar Jain**, **Abhinika Jain Rane**, **Archana Sinha**

This valuable reference book provides an overview of the global aquarium industry, with insights from the Indian aquarium industry. It covers the different aspects of the aquarium industry including the culture of freshwater and marine ornamental fishes, invertebrates, farming of ornamental aquatic plants, manufacturing of aquarium accessories, export-import of ornamental fishes, capacity building, and human resource development, institutional support, and policy framework. The book is meant for professionals in the fisheries industry and academicians in fisheries science.

CRC Press
May 2025 : 362pp
Hb: 978-1-032-32657-3 : £145
eBook: 978-1-003-31884-2

* For full contents and more information, visit: www.routledge.com/9781032326573

Peanut Genomics and Biotechnology

Status and Prospects for Sustainability



Cover Image
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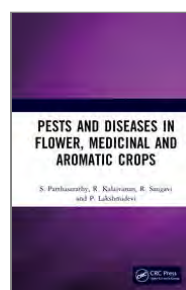
Edited by **Weijian Zhuang**, **Rajeev K. Varshney**, **Xingjun Wang**, **Xinyou Zhang**

In a world where food security and sustainable agriculture face unprecedented challenges, the cultivated peanut emerges as an important food crop. Representing an essential quality oil and food legume crop grown across over 100 countries, peanuts provide vital nutrition and economic stability. *Peanut Genomics and Biotechnology: Status and Prospects for Sustainability* delves into the fascinating journey of peanuts, from their evolutionary origins as a natural tetraploid hybrid to their critical roles in addressing global food and oil demands amidst changing climates.

CRC Press
October 2025 : 368pp
Hb: 978-1-032-42049-3 : £180

* For full contents and more information, visit: www.routledge.com/9781032420493

Pests and Diseases in Flower, Medicinal and Aromatic Crops



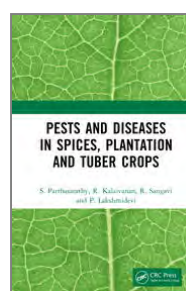
S. Parthasarathy, **R. Kalaivanan**, **R. Sangavi**, **P. Lakshmidhevi**

Effective management of pests and diseases is crucial for the successful and profitable cultivation of crops. To address this need, this book compiles essential information and offers a simple approach to pest, disease, and nematode diagnosis, making it easier for students and non-specialists to tackle the challenges they face in this field. The subject matter details pest management in flower, medicinal and aromatic crops, using different methods and integrated pest management. Print edition not for sale in South Asia (India, Sri Lanka, Nepal, Bangladesh, Pakistan or Bhutan)

CRC Press
June 2025 : 238pp
Hb: 978-1-041-03431-5 : £105
eBook: 978-1-003-62379-3

* For full contents and more information, visit: www.routledge.com/9781041034315

Pests and Diseases in Spices, Plantation and Tuber Crops



S. Parthasarathy, **R. Kalaivanan**, **R. Sangavi**, **P. Lakshmidhevi**

This book compiles essential information and offers a simple approach to pest, disease, and nematode diagnosis, making it easier for students and non-specialists to tackle the challenges they face in this field. The subject matter details pest management in plantation, spice, and tuber crops, using methods like regulatory, physical, cultural, chemical, biological, and integrated pest management. Print edition not for sale in South Asia (India, Sri Lanka, Nepal, Bangladesh, Pakistan or Bhutan)

CRC Press
June 2025 : 268pp
Hb: 978-1-041-03427-8 : £105
eBook: 978-1-003-62377-9

* For full contents and more information, visit: www.routledge.com/9781041034278

Pharmaceutical Biotechnology

Integrating Genomics and Emerging Technologies in Modern Drug Development



Edited by **Arshad Farid , Kifayat Ullah Shah , Midrar Ullah , Gagan Preet**

This book examines the role of pharmaceutical biotechnology in modern drug development, focusing on advancements in genomics, biopharmaceuticals, and personalized medicine. It explores key molecular and genomic technologies like next-generation sequencing, CRISPR, gene editing, and synthetic biology in drug design. The book highlights pharmacogenomics as a bridge between genomics and drug response, along with the role of bioinformatics in target identification and biomarker discovery. It discusses the design and therapeutic applications of monoclonal antibodies and breakthroughs in cell and gene therapies. It is intended for researchers and students of pharmaceutical sciences.

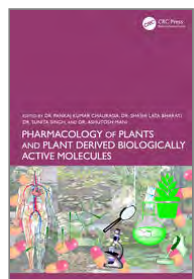
CRC Press

November 2025 : 248pp

Hb: 978-1-041-06142-7 : £120

* For full contents and more information, visit: www.routledge.com/9781041061427

Pharmacology of Plants and Plant Derived Biologically Active Molecules



Edited by **Pankaj Kumar Chaurasia** Department of Chemistry, LS College, Muzzaffarpur, **Shashi Lata Bharati , Sunita Singh** Department of Chemistry Navyug Kanya Mahavidyalaya Lucknow Uttar Pradesh, **Ashutosh Mani** Motilal Nehru National Institute of Technology, India

This book delves into the interesting world of phytochemicals and their therapeutic applications. It explores the journey from traditional medicine practices such as Ayurveda to modern scientific understanding, providing a comprehensive analyses of the chemistry, pharmacology, and therapeutic potential of plant-derived compounds. The detailed discussions on recent advancements and future directions in the field of Pharmacology of Plants including novel extraction techniques, structure-activity relationship studies, and cutting-edge applications in various disease is the USP of this book setting apart from the available books.

CRC Press

October 2025 : 484pp

Hb: 978-1-032-90804-5 : £140

* For full contents and more information, visit: www.routledge.com/9781032908045

Phytohormones

Important Player in Combating Plant Abiotic Stress



Edited by **Kapil Gupta , Keshawanand Tripathi , Amit Joshi , Dinesh Yadav**

Phytohormones: Important player in combating plant abiotic stress provides an updated understanding of plant hormone biology, signaling, cross-talk among different plant hormones under multiple environmental stresses along with latest biotechnological approaches, functional genomics and gene editing examples of phytohormonal signaling to obtain stress tolerance in plants. Aimed at a diverse readership, including plant and algal biotechnology researchers, stress biologists, scientists, educators, and students, the book serves as a valuable resource for those interested in plant physiology, molecular biology, and biotechnology.

CRC Press

November 2025 : 360pp

Hb: 978-1-032-47868-5 : £110

* For full contents and more information, visit: www.routledge.com/9781032478685

Plant Biotechnology

The Medicinal and Phytopharmaceutical Aspects



Edited by **Deependra Singh** Pt. Ravishankar Shukla University, India, **Durgesh Nandini Chauhan** Ishita Research Organisation, Raipur, **Nagendra Singh Chauhan , Manju Singh** Pt. Ravishankar Shukla University, India

Present book aims to explore the knowledge of Biotechnology and its application in the improvement of quality of medicinal plants. After reading the book students shall be able to know the basic aspects of biotechnology to implementation using processes like genetic engineering in medicinal plants for higher yield of Phytopharmaceuticals and biotechnological techniques for assessing and improving the quality of natural products/medicinal plants. Contributions come from leading scientists from across the globe. Readerships include Natural product chemists, biotechnologist, pharmacognosists, pharmacologists as well as academic and industry researchers.

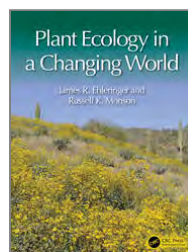
CRC Press

September 2025 : 376pp

Hb: 978-1-032-35446-0 : £125

* For full contents and more information, visit: www.routledge.com/9781032354460

Plant Ecology in a Changing World



James R. Ehleringer University of Utah, Salt Lake City, USA, **Russell K. Monson**

Today global changes and human activities affect plants within each of the world's ecosystems. Plant Ecology in a Changing World provides a foundation for understanding how the changes underway impact structure and function in the world's major biomes, while also describing how evolution has resulted in the biochemical, physiological, structural, and life history features that shaped plants and their capacities to persist across widely contrasting environments. This textbook is designed for undergraduate students and as well to serve as a resource for climate change scientists seeking a foundation on the principles of plant ecology and the basis of plant adaptations.

CRC Press

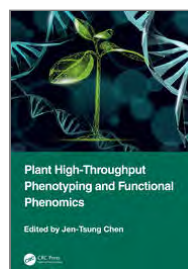
July 2025 : 536pp

Pb: 978-1-482-21793-3 : £130

Hb: 978-1-032-99643-1 : £325

* For full contents and more information, visit: www.routledge.com/9781482217933

Plant High-Throughput Phenotyping and Functional Phenomics



Edited by **Jen-Tsung Chen**

This book demonstrates a comprehensive understanding of plant high-throughput phenotyping and functional phenomics; emphasizing the significance of automated machinery, robotics, remote sensing, and computational tools, including artificial intelligence and machine learning. The content is tailored to readers seeking a comprehensive overview of high-throughput techniques and their applications in the context of crop improvement and sustainable agriculture.

CRC Press

June 2025 : 410pp

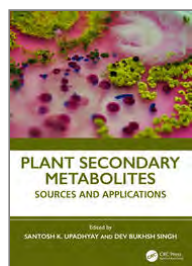
Hb: 978-1-032-82181-8 : £180

eBook: 978-1-003-50563-1

* For full contents and more information, visit: www.routledge.com/9781032821818

Plants Secondary Metabolites

Sources and Applications



Edited by **Santosh Kumar Upadhyay**, **Dev Bukhsh Singh**

This book explores the pharmacological potential of plant secondary metabolites, covering their chemical diversity, biosynthesis pathways, and ecological functions. It examines specific classes such as phenolic compounds, terpenes, and anthocyanins, emphasizing their applications across various industries. Furthermore, it addresses emerging areas like plant metabolites as nutraceuticals and innovative techniques for enhancing metabolite production. The book also highlights the importance of fungal endosymbionts and algal sources in shaping plant metabolite compositions. This book is useful for researchers of ethnopharmacology, pharmaceutical sciences, and biomedical sciences.

CRC Press
September 2025 : 424pp
Hb: 978-1-032-85476-2 : £140

* For full contents and more information, visit: www.routledge.com/9781032854762

Polysaccharides in Cancer Therapy



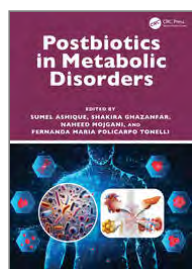
Edited by **Shakeel Ahmed** Government Degree College Mendhar, Jammu and Kashmir, India, **Meghraj Vivekanand Suryawanshi**

This book provides a thorough overview of recent scientific discoveries and clinical applications of polysaccharides in cancer therapy. It covers various aspects, from the molecular structures and immunomodulatory properties of polysaccharides to their potential as potent anticancer agents. It delves into pharmacokinetics and pharmacodynamics properties, highlighting their impact on cancer cells and their ability to enhance traditional therapies. It discusses emerging fields like nanotechnology for drug delivery and theranostics, showcasing practical applications through case studies. This book is intended for researchers in the field of cancer, biomedical sciences and pharmacology.

CRC Press
November 2025 : 304pp
Hb: 978-1-032-80509-2 : £160

* For full contents and more information, visit: www.routledge.com/9781032805092

Postbiotics in Metabolic Disorders



Edited by **Sumel Ashique**, **Shakira Ghazanfar**, **Naheed Mojgani**, **Fernanda Maria Policarpo Tonelli**

This book explores the role of postbiotics in human health, extending beyond traditional prebiotics and probiotics. It details their beneficial effects on various conditions like cardiovascular disorders, cancer, and diabetes. The text covers postbiotics' impact on immune system modulation, inflammation-mediated metabolic disorders, and their interaction with gut microbiota. It also offers future perspectives on managing insulin resistance, glucose metabolism, metabolic endotoxemia, and inflammation in type 2 diabetes, along with their effects on NAFLD, lipid profiles, and hypertension. This book is a useful resource for researchers and students of pharmacology and biotechnology.

CRC Press
September 2025 : 202pp
Hb: 978-1-041-00008-2 : £110

* For full contents and more information, visit: www.routledge.com/9781041000082

2ND EDITION

Practical Bioinformatics



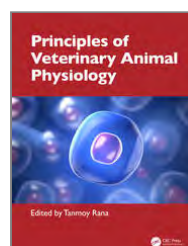
Michael Agostino Merrimack College, USA and Pfizer Inc., USA

Practical Bioinformatics is designed as an introduction to bioinformatics sequence analysis. There is heavy emphasis on the steps required to perform bioinformatics analysis to answer biological questions. The book contains many exercises such as database searches, protein analysis, and data interpretation to complement the straightforward and practical topics. The chapters are focused on DNA, RNA, and protein sequence analysis—frequently performed subsets of the field of bioinformatics—taking the reader through the commonly asked question “what can I learn about this sequence?”

Garland Science
November 2025 : 316pp
Pb: 978-1-032-61062-7 : £49.99
Hb: 978-1-032-61887-6 : £125

* For full contents and more information, visit: www.routledge.com/9781032610627

Principles of Veterinary Animal Physiology



Edited by **Tanmoy Rana**

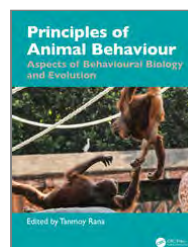
This textbook for advanced graduate and postgraduate veterinary students introduces principles and concepts of physiological functions relevant to the practice of veterinary medicine. It covers a wide range of topics, starting with a foundational understanding of cellular structures and functions. The subsequent chapters explore the intricate processes of organ systems, including the cardiovascular, immune, muscular, and nervous systems, providing a holistic perspective on animal physiology. It also examines how animals respond and adapt to diverse environmental surroundings and reviews the physiological changes that occur with aging.

CRC Press
September 2025 : 256pp
Hb: 978-1-032-73127-8 : £130

* For full contents and more information, visit: www.routledge.com/9781032731278

Principles of Animal Behaviour

Aspects of Behavioural Biology and Evolution



Edited by **Tanmoy Rana**

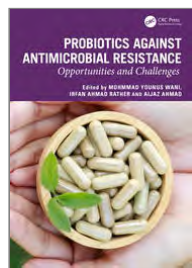
This textbook for advanced graduate and postgraduate veterinary students introduces animal behavior, covering origins, cognition, communication, environmental influences, biological mechanisms, complex behaviors, adaptation, and practical applications. Beginning with fundamental principles like evolution, genetics, and ecology, the subsequent chapters explore natural selection, habitat selection, pheromones, conflicts, and predator-prey dynamics, including domestication's impact. The book also discusses habitat selection, foraging, defense mechanisms, altruism, social hierarchies, neuroendocrinology, biological clocks, and genetics.

CRC Press
July 2025 : 216pp
Hb: 978-1-032-73125-4 : £110

* For full contents and more information, visit: www.routledge.com/9781032731254

Probiotics against Antimicrobial Resistance

Opportunities and Challenges



Edited by **Mohammad Younus Wani, Irfan Ahmad Rather, Aijaz Ahmed**

This book provides an overview of antimicrobial resistance (AMR), including its underlying causes, mechanisms, global ramifications, and the potential of probiotics as a viable approach to combating AMR. It explores the potential of probiotics to counteract resistance by competing with pathogenic bacteria, modulating the immune system, and producing antimicrobial substances. This book is primarily intended for healthcare professionals, researchers, and individuals working in the fields of microbiology, infectious diseases, and public health.

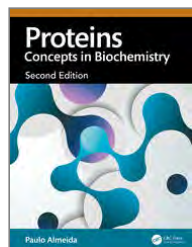
CRC Press
August 2025 : 328pp
Hb: 978-1-032-67692-0 : £115

* For full contents and more information, visit: www.routledge.com/9781032676920

2ND EDITION

Proteins

Concepts in Biochemistry



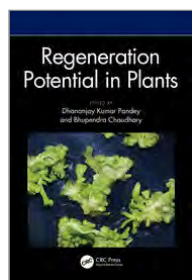
Paulo Almeida

Proteins: Concepts in Biochemistry teaches the biochemical concepts underlying protein structure, evolution, stability, folding, and enzyme kinetics, and explains how interactions in macromolecular structures determine protein function. Intended for a one-semester course in biochemistry or biophysical chemistry with a focus on proteins, this textbook emphasizes the logic underlying biophysical chemical principles.

Garland Science
November 2025 : 416pp
Pb: 978-1-032-51840-4 : £69.99
Hb: 978-1-032-51842-8 : £185

* For full contents and more information, visit: www.routledge.com/9781032518404

Regeneration Potential in Plants



Edited by **Dhananjay Kumar Pandey** Amity University, India, **Bhupendra Chaudhary** Jawaharlal Nehru University, India

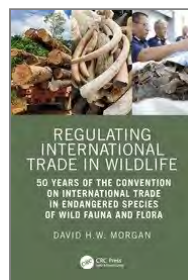
Regeneration Potential in Plants delves into the intricate world of plant regeneration, exploring the biological and molecular mechanisms that enable plants to regenerate under different conditions. This book offers an authoritative perspective on one of the most fascinating and vital processes in plant biology, setting a benchmark for future research and applications. Unlike other volumes that focus solely on theoretical aspects, this comprehensive work bridges the gap between foundational knowledge and practical implications, showcasing its importance in fields ranging from genetic engineering to crop improvement.

CRC Press
May 2025 : 192pp
Hb: 978-1-032-70240-7 : £115
eBook: 978-1-032-70239-1

* For full contents and more information, visit: www.routledge.com/9781032702407

Regulating International Trade in Wildlife

50 Years of the Convention on International Trade in Endangered Species of Wild Fauna and Flora



David Morgan

Regulating International Trade in Wildlife: 50 Years of the Convention on International Trade in Endangered Species of Wild Fauna and Flora represents the first published history of the Convention to coincide with the 50th anniversary of its entry into force. It examines the context under which the Convention was created, and charts the development of its internal organization, including its governing and intersessional bodies and its secretariat, and the personalities that built them.

CRC Press
October 2025 : 192pp
Pb: 978-1-032-86638-3 : £44.99
Hb: 978-1-032-89336-5 : £180

* For full contents and more information, visit: www.routledge.com/9781032866383

Seeking Societal Symbiosis for the Sustainable Use of Materials



Mark Everard UWE Bristol

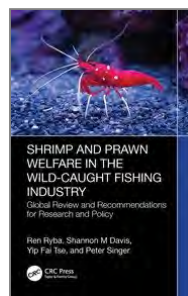
This book considers the societal use of materials, historically, in the less-than-optimal present and aspirationally as a central thread in addressing wider sustainable development challenges. It accounts for linked chemical, physical and socio-economic consequences right through value chains, from raw material extraction through manufacture and use and onwards to post-use. Author Mark Everard proposes that the four principal societal sectors – business, government, civil society organisations and knowledge-providers – can optimally work symbiotically around co-created and consensual long-term sustainability goals to accelerate necessary progress.

CRC Press
August 2025 : 224pp
Pb: 978-1-041-06922-5 : £44.99
Hb: 978-1-041-06923-2 : £115

* For full contents and more information, visit: www.routledge.com/9781041069225

Shrimp and Prawn Welfare in the Wild-Caught Fishing Industry

A Global Review and Recommendations for Research and Policy



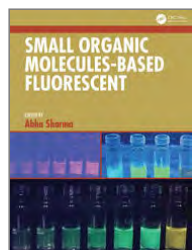
Ren Ryba AnimalAsk, **Shannon M Davis** Shrimp Welfare Project, **Yip Fai Tse** Independent Researcher, **Peter Singer** Emeritus Prof., Princeton Univ.

This book delves into the ethical implications of the probability that shrimp and prawns are capable of feeling pain. The authors provide a new dataset of the estimated numbers of individual shrimp caught by country and species, using this to describe the shrimp fishing industry in the world's top 30 countries by estimated catch. The book suggests ways that policymakers could improve wild-caught shrimp welfare, from installing electrical stunning equipment in large-scale trawl fisheries to improving supply chain practices in small-scale fisheries. It provides a roadmap for future research and policy to address this urgent, emerging challenge.

CRC Press
September 2025 : 150pp
Pb: 978-1-032-90145-9 : £29.99
Hb: 978-1-032-90722-2 : £140

* For full contents and more information, visit: www.routledge.com/9781032901459

Small Organic Molecules-Based Fluorescent Biosensors and their Applications



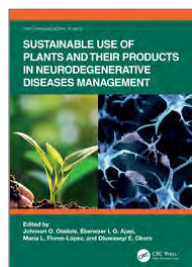
Edited by **Abha Sharma**

This book provides an overview of organic molecule-based fluorescent compounds and their role in biosensing. It elaborates on the synthesis of diverse scaffolds like Xanthene, BODIPY, Julolidine, Polymethine dyes, Quinoline, Phenanthridine, Benzothiazole, Coumarin, Perylene, and Carbazole. The book also explores the applications of fluorescent probes in analysis of proteins, DNA, ions, lipid, carbohydrate, and cellular components, including real-time tracking and receptor interactions, and for environmental monitoring. This book is useful for researchers, students, and professionals of pharmaceutical science and chemical biology.

CRC Press
August 2025 : 220pp
Hb: 978-1-032-70616-0 : £110

* For full contents and more information, visit: www.routledge.com/9781032706160

Sustainable Use of Plants and Their Products in Neurodegenerative Diseases Management



Edited by **Johnson O. Oladele, Ebenezer I. O. Ajayi, María L. Flores-López, Oluwaseyi E. Okoro**

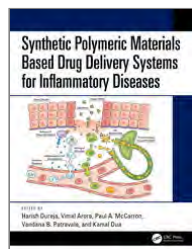
Series: *Exploring Medicinal Plants*

Neurodegenerative illnesses have negative impacts on the central and peripheral nervous system, which in turn affect the brain health. Sustainable Use of Plants and their Products in Neurodegenerative Diseases Management addresses the prevalence and pathogenesis of neurodegenerative diseases, and the roles of phytoconstituents in mitigating the progression of neurodegenerative diseases. It provides a molecular understanding of the pathophysiology underpinning neurodegenerative diseases, the role of herbal/plant products and their phytoconstituents in the treatment of these diseases, and practical strategies to prevent these pathological conditions.

CRC Press
July 2025 : 312pp
Hb: 978-1-032-62707-6 : £195

* For full contents and more information, visit: www.routledge.com/9781032627076

Synthetic Polymeric Materials Based Drug Delivery Systems for Inflammatory Diseases



Edited by **Harish Dureja, Vimal Arora, Paul A. McCarron, Vandana B. Patravale** Institute of Chemical Technology, Mumbai, India, **Kamal Dua**

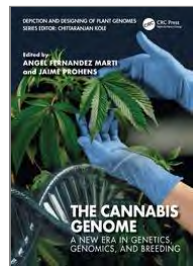
This comprehensive book explores synthetic polymers and their role in designing drug delivery systems for managing various inflammatory diseases, including lung, bowel, and skin conditions, as well as cancer, neurodegenerative disorders, rheumatoid arthritis, and eye-related issues. It also delves into the modulation of immune responses using synthetic polymers and analyzes 3D printing technologies for drug delivery systems. The book addresses challenges and prospects for effective management of inflammatory diseases. This book is intended for researchers and professionals in the fields of pharmaceutical sciences, nanotechnology, and drug delivery systems.

CRC Press
September 2025 : 264pp
Hb: 978-1-032-76175-6 : £110

* For full contents and more information, visit: www.routledge.com/9781032761756

The Cannabis Genome

A New Era in Genetics, Genomics, and Breeding



Edited by **Angel Fernandez i Martí** UC Berkeley, USA, **Jaime Prohens** Universitat Politècnica de València, Spain

Series: *Depiction and Designing of Plant Genomes*

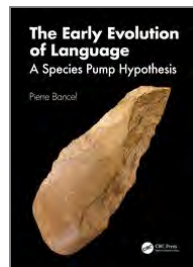
This book provides comprehensive information on Cannabis genetics, genomics and breeding approaches. It fills a gap in the current literature on Cannabis and represents the state of the art in terms of biotechnology and gene editing for the cannabis industry. Salient Features: 1. Discusses the state of the art in terms of biotechnology and gene editing for the cannabis 2. Cannabis is a plant species that needs constant varietal renovation to reach the high demand of the consumers and the industry 3. Provides information on Cannabis genetics, genomics, and breeding 4. Discusses advances on omics and gene editing in Cannabis 5. Details taxonomic, economic, legal and cultivation aspects

CRC Press
June 2025 : 210pp
Hb: 978-1-032-47897-5 : £160
eBook: 978-1-003-38643-8

* For full contents and more information, visit: www.routledge.com/9781032478975

The Early Evolution of Language

A Species Pump Hypothesis



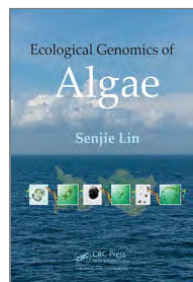
Pierre Bancel

The huge gap between human articulate language and all the communication systems of other living beings has prevented a satisfactory answer to this question up until today. Here, the problem is subdivided into a series of necessarily successive steps. From the climatic oscillations which pumped humans' ape ancestors out of the African rainforest, to the humming stage which still punctuates our conversations today, to the encounter of baby Celeste and his grandpa with a singing cuckoo hiding in the woods, to the emergence and inheritance of kinship terms, then personal pronouns, you are invited to follow this pathfinding quest over 10 million years.

CRC Press
September 2025 : 264pp
Hb: 978-1-041-09180-6 : £150

* For full contents and more information, visit: www.routledge.com/9781041091806

Ecological Genomics of Algae



Senjie Lin University of Connecticut, USA

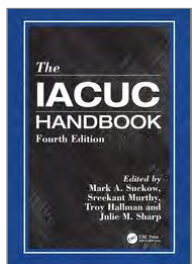
Discover the captivating world of algae through the lens of genomics in Ecological Genomics of Algae. This comprehensive resource explores the evolutionary, ecological, and molecular foundations of algal biology. Spanning 21 chapters, it delves into genome evolution, environmental adaptation, energy acquisition, nutrient uptake, environmental sensing and signal transduction, stress responses, defense, and algae-microbe interactions. From unicellular forms to complex seaweeds, this book illuminates how algae navigate their environments and adapt to climate change.

CRC Press
August 2025 : 464pp
Hb: 978-1-032-38225-8 : £160

* For full contents and more information, visit: www.routledge.com/9781032382258

4TH EDITION

The IACUC Handbook



Edited by **Mark A. Suckow** University of Kentucky,
Sreekant Murthy, **Troy Hallman**, **Julie M. Sharp**

The IACUC Handbook has become "the Bible" for individuals serving on their institution's IACUC. It provides a foundation for implementing the many and varied responsibilities of this committee. This Fourth Edition comprehensively addresses the significant changes in the pertinent regulatory environment and interpretation of federal laws, regulations, and policies. It includes modifications to regulations and new chapters on basic IACUC operations; animals used in agricultural research and teaching; invertebrates; disaster planning; the Pacific Rim ethical review framework; operational communications and workflow; reduction of regulatory burden; and research reproducibility.

CRC Press
October 2025 : 640pp
Hb: 978-1-032-22497-8 : **£99.99**

* For full contents and more information, visit: www.routledge.com/9781032224978

The New Taxonomy

A Science Reimagined



Edited by **David M. Williams**, **Quentin D. Wheeler**

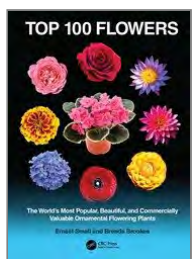
Today molecular data is part of many biological studies, including taxonomic works. Such data is embraced by taxonomists for good reasons. When combined with comparative morphology, palaeontology, and embryology it creates a rich, integrated overview of the history of life. This book is intended as a clear articulation of the mission, goals, and needs of fundamental taxonomists and a planetary-scale inventory of species by revisiting the idea of taxonomy as a fusion of the traditional questions asked by taxonomists and the latest technologies. It is a clear roadmap to a taxonomic renaissance and world species inventory.

CRC Press
June 2025 : 262pp
Hb: 978-1-032-24920-9 : **£160**
eBook: 978-1-003-28074-3

* For full contents and more information, visit: www.routledge.com/9781032249209

Top 100 Flowers

The World's Most Popular, Beautiful, and Commercially Valuable Ornamental Flowering Plants



Ernest Small, **Brenda Brookes**

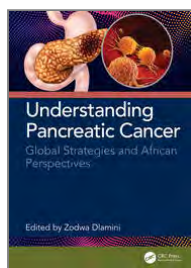
Flowers are universally admired. Flowers are the leading gift expressing love and respect, they prominently decorate our homes and cities, and they accompany all of the major events in human affairs from birth through marriage and bereavement. Flowers are also of tremendous economic importance, representing billion-dollar industries in numerous countries. Top 100 Flowers: The World's Most Popular, Beautiful, and Commercially Valuable Ornamental Flowering Plants presents key information and illustrations of the world's most popular, beautiful, and commercially valuable ornamental flowering plants.

CRC Press
June 2025 : 720pp
Hb: 978-1-032-90227-2 : **£260**

* For full contents and more information, visit: www.routledge.com/9781032902272

Understanding Pancreatic Cancer

Global Strategies and African Perspectives



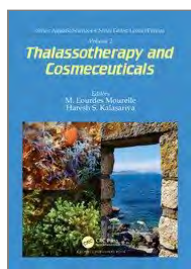
Edited by **Zodwa Dlamini** SAMRC Precision Oncology Research Unit (PORU), DSI/NRF SARCHI Chair in Precision Oncology and Cancer Prevention (POCP), Pan African Cancer Research Institute (PACRI), University of Pretoria, SA.

This book provides an in-depth overview of the complexities of pancreatic cancer, with a specific focus on the African continent. It outlines the global and regional prevalence and the unique epidemiological challenges within Africa. The book details the genetic and molecular bases of the disease, advocating for the use of precision medicine and cutting-edge diagnostic technologies like artificial intelligence for early detection and tailored treatment strategies. It discusses both traditional and innovative treatment options, including surgery, chemotherapy, immunotherapy, and targeted therapies. This book is aimed at researchers and clinicians of oncology and public health

CRC Press
August 2025 : 304pp
Hb: 978-1-032-89747-9 : **£89.99**

* For full contents and more information, visit: www.routledge.com/9781032897479

Volume 2: Thalassotherapy and Cosmeceuticals



Edited by **M. Lourdes Mourelle** University of Vigo, Spain,
Haresh S. Kalasariya Liverpool John Moores University, UK

Series: *Aquatic Sciences*

This comprehensive text offers an in-depth exploration of the research and issues related to the use of seawater and marine environment for therapies, as well as the composition of cosmeceuticals derived from seaweed.

CRC Press
May 2025 : 316pp
Hb: 978-1-032-50613-5 : **£140**
eBook: 978-1-003-39928-5

* For full contents and more information, visit: www.routledge.com/9781032506135

Weathering the Storm

Farmer Resilience and Adaptive Strategies to Crop Losses



A. Amarendra Reddy ICAR-National Institute of Biotic Stress Management, India

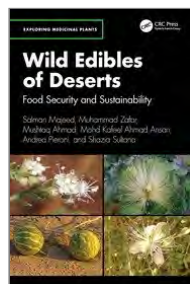
Small-holder farmers face relentless challenges from pests, diseases, and the severe impacts of climate change across developing countries. Each year, they endure droughts and floods, thrusting them into a vicious cycle of poverty and distress. Weathering the Storm: Farmer Resilience and Strategies for Crop Losses provides a vital exploration of these issues, offering insights into the struggles and resilience of farmers in the wake of devastating crop losses.

CRC Press
June 2025 : 198pp
Hb: 978-1-032-94748-8 : **£115**
eBook: 978-1-003-58287-8

* For full contents and more information, visit: www.routledge.com/9781032947488

Wild Edibles of Deserts

Food Security and Sustainability



Salman Majeed , Muhammad Zafar , Mushtaq Ahmad , Mohd Kafeel Ahmad Ansari Faculty of Natural Sciences, Uni of Guyana, South America., **Andrea Pieroni , Shazia Sultana**

Series: Exploring Medicinal Plants

Global Wild Edibles of Deserts: Food Security and Sustainability provides coverage of topics in food and health in desert rangelands, using an interdisciplinary approach that considers health not only in a functional and human sense, but also in terms of external factors including aridity.

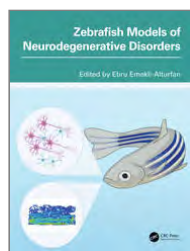
CRC Press

August 2025 : 232pp

Hb: 978-1-032-86511-9 : £190

* For full contents and more information, visit: www.routledge.com/9781032865119

Zebrafish Models of Neurodegenerative Disorders



Edited by Ebru Emekli-Alturfan

This book offers an examination of zebrafish as a translational model for studying the molecular and cellular mechanisms of diseases such as Alzheimer's, Parkinson's, and Huntington's diseases. The first section discussing basic molecular mechanisms of neurodegenerative disorders, biomarkers and therapeutic approaches, detailed exploration of zebrafish physiology, genetics, & behavioural phenotypes as they pertain to neurodegenerative pathologies, insight into cutting-edge technologies, including CRISPR/Cas9 genome editing, and in-depth analysis of zebrafish models.

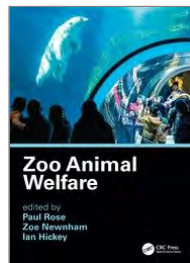
CRC Press

August 2025 : 220pp

Hb: 978-1-032-66046-2 : £140

* For full contents and more information, visit: www.routledge.com/9781032660462

Zoo Animal Welfare



Edited by Paul Rose Exeter Univ., **Zoe Newnham** Marwell Wildlife, **Ian Hickey** Chester Zoo

This book unpicks the different concepts of welfare in the zoo and aquarium, considering how enclosure design, nutrition, conservation activities, visitor engagement and daily husbandry all need to have a welfare-focus to be relevant to the species being housed. The book provides the practical application of evidence-based welfare theory, centred on the concept of "welfare-focussed husbandry", which enables zoo animals to experience positive welfare. Zoo Animal Welfare will empower readers to go "beyond the norm" when considering what zoo animals really need, applying their new knowledge for the benefit of both animals and zoos.

CRC Press

November 2025 : 408pp

Pb: 978-1-032-54736-7 : £49.99

Hb: 978-1-032-55176-0 : £150

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