

# Jauniegvumu apskats: Tehnoloģiju & dabaszinātņu izdevumi svešvalodās



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Nr. 4 / 2023  
Novembris



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[tehnologijas@lnb.lv](mailto:tehnologijas@lnb.lv)

ISSN 2592-9097  
Izdevums iznāk kopš 2022. gada februāra četras  
reizes gadā - februārī, maijā, septembrī, novembrī

## Priekšvārds

Klāt *Jauniegvumu apskata: Tehnoloģiju un dabaszinātņu izdevumi svešvalodās (JA)* novembra numurs! Lūk, neliels ieskats *JA* atspoguļoto grāmatu saturā. *Inženierzinātņu un tehnoloģiju nodaļā* vairākas no iekļautajām grāmatām būs vērtīgs informācijas ieguves avots būvniekiem. Savukārt *Lauksaimniecības nodaļas* izdevumi veltīti vienai nozarei – veterinārmedicinai. Gan nozares speciālistiem, gan citiem interesentiem tie ļaus papildināt zināšanas par dzīvniekiem, dzīvnieku uzvedību un aprūpi. *Skaistuma industrijas nodaļā*, tāpat kā iepriekš, atspoguļoti ar modi saistīti izdevumi, kā arī vairākas grāmatas stāsta par kosmētikas ražošanu un mārketingu. Ar šo un citu *JA* iekļauto nozaru izdevumu anotācijām aicinām iepazīties elektroniski, bet grāmatu pilnus tekstus skatīt Latvijas Nacionālās bibliotēkas (LNB) Tehnoloģiju un dabaszinātņu lasītavā. Jāatzīmē, ka līdz 2024. gada 6. februārim lasītavā skatāma krājuma izlase "Modes lappuses", kas sniedz iespēju iepazīt modes pasauli no dažādiem skatpunktiem. Krājuma izlasē iekļauti vairāki izdevumi, ar kuru anotācijām iepazīstinājām *JA* iepriekšējos numuros. Tie pieejami *LNB Digitālajā bibliotēkā*.

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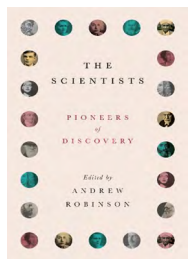
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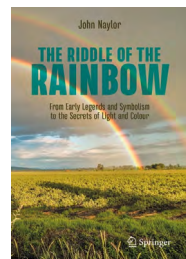


Robinson, A. (Ed.). (2023). *The Scientists : Pioneers of Discovery*. Thames and Hudson. ISBN 9780500297063

Who made us see the atom, our minds, our planet and the universe afresh? How did we uncover the mysteries of life on earth? What next?

The theories, discoveries and inventions of scientists have revolutionized our consciousness. Think of gravity, evolution, relativity, radioactivity and the Big Bang; electric motors, vaccines, nuclear power and computers. Behind these breakthroughs lie the personal stories of men and women with vision and determination: singular thinkers who defied adversity in their quest for answers. This book tells the remarkable lives of the pioneers – from Galileo, Faraday and Darwin, through Pasteur and Marie Curie, to Einstein, Freud and Turing. Written by an international team of distinguished scientists, historians and science writers, it will intrigue budding scientists; those fascinated by the lives of great individuals; and anyone curious to know how over the centuries we came to understand the exterior world and the pulse of life within.

**TD5(092)/Sc937**



Naylor, J. (2023). *The Riddle of the Rainbow : From Early Legends and Symbolism to the Secrets of Light and Colour*. Springer. ISBN 9783031239076

Rainbows have been a source of fascination since time immemorial. They have been the subject of myth and superstition, an inspiration to poets, a challenge to painters, the object of intense scientific interest and a touchstone for ideas about the nature of light and colour. Above all, the rainbow has been the embodiment of wonder from the earliest times to the present day.

Beginning with the circumstances in which you are likely to see a rainbow and descriptions of its salient features, this book recounts and explains the myths and superstitions about rainbows, and describes how poets, painters and, above all, leading scientists in every age have sought to discover and understand the rainbow's secrets.

Readers with a love of nature and art and an interest in the history of science will enjoy this attractive and informative book.

**TD551.5/Na970**



Kagan, S. (2022). *How to Count Animals, More or Less*. Oxford University Press. ISBN 9780192862761

According to a prominent position in contemporary philosophical discussions, animals and people have the very same moral status, so in our moral deliberations the otherwise similar interests of people and animals should be given the same weight and consideration. In *How to Count Animals, More or Less*, Shelly Kagan rejects this view. In its place, Kagan sets out and defends a hierarchical approach, one in which people count more than animals do and some animals count more than others.

Unfortunately, most moral theories have not been developed in such a way as to take into account these differences in moral status. By arguing for a hierarchical account of morality – and exploring what appropriate, status sensitive principles might look like – Kagan reveals just how much work needs to be done to arrive at an adequate view of our duties toward animals, and of morality more generally.

**TD59/Ka090**

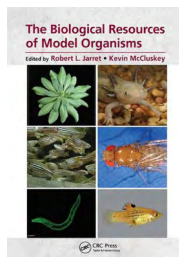


Richardson, M. (2023). *Threatened and Recently Extinct Vertebrates of the World : A Biogeographic Approach*. Cambridge University Press. ISBN 9781108495868

Habitat loss and degradation are currently the main anthropogenic drivers of species extinctions. The main driver of this worldwide is agriculture, with urban sprawl, logging, mining, and some fishing practices close behind. The physical loss of habitat, such as deforestation for land development and the burning of fossil fuels, are examples of this. The root cause is human overpopulation.

This unique volume provides, for the very first time, a comprehensive overview of all threatened and recently extinct mammals, birds, reptiles, amphibians, and fishes within the context of their locations and habitats. The approach takes a systematic examination of each biogeographic realm and region of the world, both terrestrial and marine, but with a particular emphasis on geographic features such as mountains, islands, and coral reefs. It reveals patterns useful in biodiversity conservation, helps to put it all into perspective, and ultimately serves as both a baseline from which to compare subsequent developments as well as a standardization of the way threatened species are studied.

**TD574.9/Ri081**



Jarret, R.L., & McCluskey, K. (Eds.). (2021). *The Biological Resources of Model Organisms*. CRC Press. ISBN 9781032090955

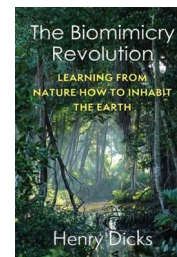
This book discusses the collections of 14 model organisms that are used by thousands of researchers, teachers, and students each year in laboratories and classrooms around the globe. Though acknowledged in innumerable scientific journal articles, little is generally known about the origin of these collections, how the organisms contained within them have been acquired, and how they are maintained and distributed. While some collections, such as *Drosophila*, have long histories, others, such as the collection of *Brachionus*, are relatively new. These collections vary greatly in size. Yet, all have contributed and are continuing to contribute to global efforts in many areas of scientific research as diverse as tissue regeneration, skin cancer, evolution, water purity, gene function, and hundreds of others. In addition to providing the raw materials for national and international research programs, these collections also provide educational tools used by colleges and high schools.

The chapters in this book attempt to provide a brief look at the individual organisms, how they came to be accepted as model organisms, the history of the individual collections, examples of how the organisms have been and are being used in scientific research, and a description of the facilities and procedures used to maintain them.

Key features:

- Provides an in-depth look at the collections of 14 model organisms that have enabled innumerable scientific breakthroughs over decades, and that continue to do so;
- Includes detailed descriptions of the facilities and procedures used for the maintenance of each model organism collection;
- Discusses the holdings of the collections of model organisms and their relevance to past, current, and future scientific research;
- Written by leaders in the field of the management of model organisms.

**TD575/Bi664**



Dicks, H. (2023). *The Biomimicry Revolution: Learning from Nature How to Inhabit the Earth*. Columbia University Press. ISBN 9780231208819

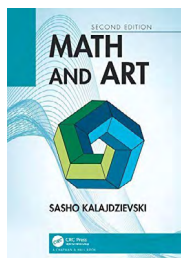
Modernity is founded on the belief that the world we build is a human invention, not a part of nature. The ecological consequences of this idea have been catastrophic. We have laid waste to natural ecosystems, replacing them with fundamentally unsustainable human designs. With time running out to address the environmental crises we have caused, our best path forward is to turn to nature for guidance.

Henry Dicks explores the philosophical significance of a revolutionary approach to sustainable innovation: biomimicry. The term describes the application and adaptation of strategies found in nature to the development of artificial products and systems, such as passive cooling techniques modeled on termite mounds or solar cells modeled on leaves. Dicks argues that biomimicry, typically seen as just a design strategy, can also serve as the basis for a new environmental philosophy that radically alters how we understand and relate to the natural world. By showing how we can imitate, emulate, and learn from nature, biomimicry points us toward a genuinely sustainable way of inhabiting the earth.

Rooted in philosophy, *The Biomimicry Revolution* has profound implications spanning the natural sciences, design, architecture, sustainability studies, science and technology

studies, and the environmental humanities. It presents a sweeping reconception of what philosophy can be and offers a powerful new vision of terrestrial existence.

**TD573.6/Di127**



Kalajdzievski, S. (2022). *Math and Art: An Introduction to Visual Mathematics* (2nd ed.). CRC Press. ISBN 9780367076115

*Math and Art: An Introduction to Visual Mathematics* explore the potential of mathematics to generate visually appealing objects and reveals some of the beauty of mathematics. It includes numerous illustrations, computer-generated graphics, photographs, and art reproductions to demonstrate how mathematics can inspire or generate art.

Focusing on accessible, visually interesting, and mathematically relevant topics, the text unifies mathematics subjects through their visual and conceptual beauty. Sequentially organized according to mathematical maturity level, each chapter covers a cross section of mathematics, from fundamental Euclidean geometry, tilings, and fractals to hyperbolic geometry, platonic solids, and topology. For art students, the book stresses an understanding of the mathematical background of relatively complicated yet intriguing visual objects. For science students, it presents various elegant mathematical theories and notions.

Features:

- Provides an accessible introduction to mathematics in art;
- Supports the narrative with a self-contained mathematical theory, with complete proofs of the main results (including the classification theorem for similarities);

- Presents hundreds of figures, illustrations, computer-generated graphics, designs, photographs, and art reproductions, mainly presented in full color;

- Includes 21 projects and approximately 280 exercises, about half of which are fully solved;

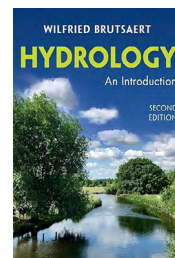
- Covers Euclidean geometry, golden section, Fibonacci numbers, symmetries, tilings, similarities, fractals, cellular automata, inversion, hyperbolic geometry, perspective drawing, Platonic and Archimedean solids, and topology.

New to the second edition:

- New exercises, projects and artworks;
- Revised, reorganized and expanded chapters;

- More use of color throughout.

**TD51/Ka790**



Brutsaert, W. (2023). *Hydrology: An Introduction* (2nd ed.). Cambridge University Press. ISBN 9781107135277

Wilfried Brutsaert (2022 Stockholm Water Prize Laureate) has revised and updated his classic textbook to include recent developments, while retaining the rigor and structure of the previous edition to introduce the fundamental principles of hydrology. New topics include the response of the global water cycle to climate change, the land surface energy budget closure, snow melt, groundwater trends, and statistical surface variability with disturbed atmospheric boundary layers. Hydrologic phenomena are dealt with at the spatial and temporal scales at which they occur in nature. The physics and mathematics necessary to describe these phenomena are introduced and developed: readers will require a working knowledge of calculus and basic fluid mechanics. This classroom-tested textbook – based on the author’s long-running course at Cornell – is invaluable for entry-level courses in hydrology directed at advanced undergraduate and graduate students in physical science and engineering. In addition, it is also a great reference text for practising scientists and engineers.

- Emphasises the fundamental principles of hydrology, building the basis for students to go on to further research;

- Clarifies the underlying physical processes so that students can develop a thorough under-

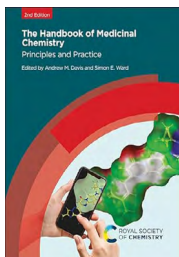
standing of hydrological concepts;

- Second edition has been brought up-to-date to reflect key changes from the last two decades;

- Applies fluid mechanics to the natural environment, providing students with a solid understanding of hydrological principles within the context of real-world situations;

- Online instructor resources – including a solutions manual and digital copies of all figures – offer additional support for the classroom.

**TD556/Br943**



Ward, S.E., & Davis, A.M. (Eds.). (2023). *The Handbook of Medicinal Chemistry: Principles and Practice* (2nd ed.). Royal Society of Chemistry. ISBN 9781788018982

Completely revised and updated, the 2nd edition of *The Handbook of Medicinal Chemistry* draws together contributions from authoritative practitioners to provide a comprehensive overview of the field as well as insight into the latest trends and research. An ideal companion for students in medicinal chemistry, drug discovery and drug development, while also communicating core principles, the book places the discipline within the context of the burgeoning platform of new modalities now available to drug discovery. The book also highlights the role chemistry has to play in wider target validation and translational technologies. This is a carefully curated compilation of writing from global experts using their broad experience of medicinal chemistry, project leadership and drug discovery and development from an industry, academic and charity perspective to provide unparalleled insight into the field.

TD615/Ha373



Douglas, K. (2021). *Bioprinting: To Make Ourselves Anew*. Oxford University Press. ISBN 9780190943547

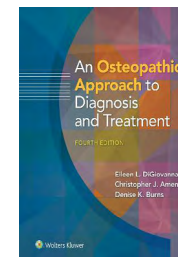
As the 21st century dawned, a handful of inspired scientists tried to use 3D printing to create living human tissue. Their vision was to restore the health of people with intractable injuries, such as worn out cartilage, severed nerves, ailing kidneys, failing hearts – the gamut of human frailties. Their modest success energized others to join the quest. Now, after two decades of ingenious effort and hard work, they have carved out a vibrant new discipline: bioprinting.

In *Bioprinting: To Make Ourselves Anew*, physicist Kenneth Douglas casts an eye over the achievements and future of bioprinting. He explains the science with rigor but with a minimum of technical baggage. This is the first book on the subject written expressly for the lay audience: accessible and even entertaining. Douglas interviewed two dozen bioprinting researchers from around the world, and he enriches the narrative by sharing stories from the scientists behind the science. These contemporary vignettes are complemented by historical accounts of the women and men whose prescient contributions were foundational to the development of bioprinting.

The book describes the challenges and accomplishments in the bioprinting of blood vessels, cartilage, skin, bone, skeletal muscle, neuromuscular junctions, liver, heart, lung, kidney, and so-called organs-on-a-chip, as well

as the difficult problems of providing a blood supply and nerves to bioprinted tissues. This is a compelling tale of a work in progress: to imitate nature and help heal people with debilitating afflictions.

TD616-7/Du886

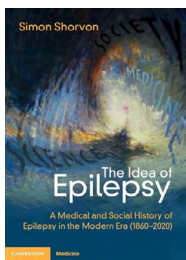


DiGiovanna, E.L., Amen, C.J., & Burns, D.K. (2021). *An Osteopathic Approach to Diagnosis and Treatment* (4th ed.). Wolters Kluwer. ISBN 9781975171575

Successful practice of osteopathic manual medicine starts with a thorough introduction to the full spectrum of OMM models. This practical compendium reflects the most current, clinically relevant osteopathic concepts and guides you through common osteopathic techniques with step-by-step detail, accompanied by realistic cases and full-color illustrations that reinforce your understanding and prepare you for the challenges of practice.

- New full-color photographs and illustrations reinforce osteopathic procedures and underlying anatomy in vibrant detail and clarity;
- Inclusive approach familiarizes students with the wide array of OMM models available;
- Step-by-step coverage guides students through techniques to build clinical confidence and ensure accuracy in practice;
- Realistic cases equip students for patient scenarios they are likely to encounter in practice;
- New chapters covering Obstetric and Gynecologic Considerations, Osteopathic Considerations in Diabetes Mellitus, The Hospitalized Patient, and Osteopathic Approaches to Thyroid Disease provide a thorough understanding of these common scenarios.

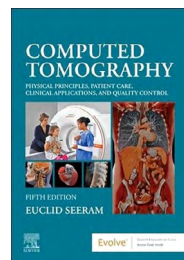
TD615.82/Di414



Shorvon, S.D. (2023). *The Idea of Epilepsy: A Medical and Social History of Epilepsy in the Modern Era (1860-2020)*. Cambridge University Press. ISBN 9781108842617

Epilepsy has a fascinating history. To the medical historian Oswei Temkin it was 'the paradigm of the suffering of both body and soul in disease'. It is justifiably considered a window on brain function. And yet its story is more than simply a medical narrative, but one influenced also by scientific, societal and personal themes. Written for a medical and non-medical readership, this book describes the major developments in epilepsy between 1860–2020, a turbulent era in which science dominated as an explanatory model, medical theories and practices steered an erratic course, and societal attitudes and approaches to epilepsy fluctuated dramatically. In the middle of this maelstrom was the person with epilepsy at the mercy of social attitudes and legislation, and at times harmed as well as helped by medicine and science. So entangled is the history that intriguingly, as an entity, epilepsy may now be thought not even to exist.

**TD616.8/Sh668**

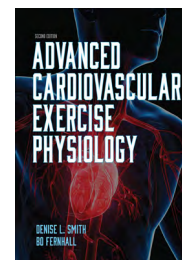


Seeram, E. (2023). *Computed Tomography: Physical Principles, Patient Care, Clinical Applications, and Quality Control (5th ed.)*. Elsevier. ISBN 9780323790635

Written to meet the varied requirements of radiography students and practitioners, this two-color text provides comprehensive coverage of the physical principles of computed tomography and its clinical applications. The clear, straightforward approach is designed to improve your understanding of sectional anatomic images as they relate to computed tomography and facilitate communication between CT technologists and other medical personnel.

- New! Three additional chapters reflect the latest industry CT standards in imaging: *Radiation Awareness and Safety Campaigns in Computed Tomography*, *Patient Care Considerations*, and *Artificial Intelligence: An Overview of Applications in Health and Medical Imaging*;
- Updated! More than 509 photos and line drawings visually clarify key concepts;
- Updated! The latest information keeps you up to date on advances in volume CT scanning; CT fluoroscopy; and multislice applications like 3D imaging, CT angiography, and virtual reality imaging (endoscopy);
- Chapter outlines and chapter review questions help you focus your study time and master content.

**TD616-07/Se141**



Smith, D.L., & Fernhall, B. (2023). *Advanced Cardiovascular Exercise Physiology (2nd ed.)*. Human Kinetics. ISBN 9781492593812

Using the latest scientific and medical research, *Advanced Cardiovascular Exercise Physiology, Second Edition*, presents an engaging discussion of the responses and adaptations of the cardiovascular system to both aerobic and resistance exercise training. The text highlights the complex interaction of the components of the cardiovascular system, both at rest and during exercise. Specific attention is paid to the beneficial effects of exercise and the mechanisms through which regular exercise promotes cardioprotection.

The second edition of the text features the following enhancements:

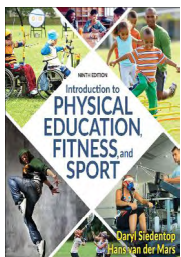
- Added information about ventricular adaptations, endothelial function, and central blood pressure and its measurement;
- Expanded coverage on the pathophysiology of arterial stiffness and relevant measurement techniques;
- Updated content on blood pressure during exercise and its clinical importance;
- A new section on the effects of prolonged acute exercise on cardiac arterial and hemostatic function;
- Case studies to help readers apply the content in professional settings.

*Advanced Cardiovascular Exercise Physiology, Second Edition*, is richly illustrated with updated

figures and graphics to depict physiological mechanisms, exercise responses, and training adaptations. The text provides a framework for understanding how the components of the cardiovascular system cooperate to support exercise and how those components adapt to and benefit from a systematic program of exercise training.

Ancillaries for adopting instructors are available online.

**TD616.1/Sm580**



**Siedentop, D., & van der Mars, H. (2023). *Introduction to Physical Education, Fitness, and Sport* (9th ed.). Human Kinetics. ISBN 9781492594536**

This book covers a broad spectrum of careers and professions, including those in physical education, health, dance, fitness, sport, recreation, athletic training, and athletic administration. The authors provide an overview of the respective professions and offer a deep dive into individual careers.

New content in this edition includes the following:

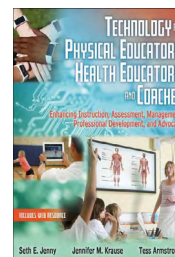
- Five new chapters cover dance education, recreational leadership, health education, contemporary physical education curriculum models, and exemplary physical education programs;
- Updated content on how economic, racial, and ethnic disparities affect physical activity and physical activity professions will help students anticipate real-life issues;
- New evidence, data, and information throughout the text will help students to understand the issues, problems, and programmatic solutions in the various fields as they prepare to meet and solve those problems;
- The expanded and updated physical education chapters reflect current trends and developments.

Through *Introduction to Physical Education, Fitness, and Sport*, new generations of students will learn about concepts, programs, and pro-

fessions in various physical activity fields. The text will help them make more informed career choices, understand the professional issues they will face, and be in a better position to develop and sustain high-quality programs and make those programs widely available.

Ancillaries for adopting instructors are available online.

**TD796.035/Si194**



**Jenny, S.E., Krause, J.M., & Armstrong, T. (2021). *Technology for Physical Educators, Health Educators, and Coaches*. Human Kinetics. ISBN 9781492589341**

*Technology for Physical Educators, Health Educators, and Coaches* will help teachers and coaches enhance their abilities by learning to use technology in the areas of instruction, assessment, management, communication, professional development, and advocacy.

This text helps readers learn how to use technology to improve all facets of teaching and coaching, providing practitioner-tested tips and examples of various technological tools. Readers will learn how to use technology effectively in accordance with national physical education, health education, and coaching standards. Effective use of technology will enhance your ability to teach and coach, assess and improve student and athlete performance, and motivate students to adopt active and healthy lifestyles. The book also offers a web resource with an array of tools that will be updated annually to keep current with changing technology.

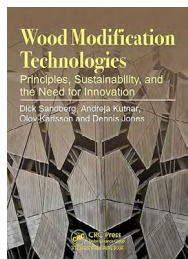
*Technology for Physical Educators, Health Educators, and Coaches* is a clearly written, engaging, and practical text that will help teachers and coaches improve in a number of areas:

- Teaching and coaching effectiveness;
- Effective use of technology to motivate;
- Management efficiency;
- Communication with stakeholders;
- Concept and skill instruction;

- Assistive technology skills for working with learners with disabilities;
  - Effectiveness in online instruction;
  - Assessment abilities;
  - Digital video recording and editing skills;
  - Advocacy skills;
  - Professional development effectiveness.
- This is a highly valuable resource for all physical educators, health instructors, and coaches who want to take full advantage of current technology to help them improve in their professions.

**TD796.015/Je568**





Sandberg, D., Kutnar, A., Karlsson, O., & Jones, D. (2021). *Wood Modification Technologies : Principles, Sustainability, and the Need for Innovation*. CRC Press. ISBN 9781138491779

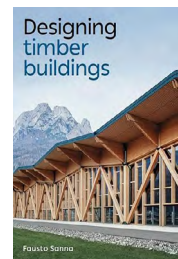
The market for durable products using modified wood has increased substantially during the last few years. This is partly because of the restriction on the use of toxic preservatives due to environmental concerns, and to lower maintenance cost and time. Furthermore, as sustainability becomes a greater concern, the environmental impact of construction and interior materials is factored in planning by considering the whole life cycle and embodied energy of the materials used.

Wood is modified to improve its intrinsic properties, enhance the range of applications of timber, and to acquire the form and functionality desired by engineers without calling the environmental friendliness into question. Wood modification processes are at various stages of development, and the challenges faced in scaling up to industrial applications differ.

The aim of this book is to put together the key elements of the changes of wood constituents and the related changes in wood properties of modified wood. Further, a selection of the principal technologies implemented in wood modification are presented. This work is intended for researchers, professionals of timber construction, as well as students studying the science of materials, civil engineering and architecture. This work is not exhaustive, but intends to deliver an

outline of the scientific disciplines necessary to apprehend the technologies of wood modification and its behavior during treatment, as well as during its use.

**TD674/Wo550**



Sanna, F. (2022). *Designing Timber Buildings*. The Crowood Press. ISBN 9780719840777

Over the last three decades, timber architecture has seen a resurgence in popularity thanks to the level of innovation, experimentation and environmental responsiveness it engenders.

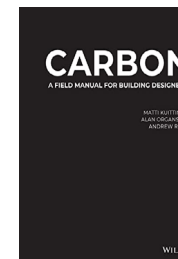
*Designing Timber Buildings* offers a comprehensive overview of timber as a construction material, in addition to practical design guidance and a series of exemplary case studies that can inform and inspire the design process.

Coverage includes:

- The physical and mechanical properties of wood;
- Preservative treatments;
- Modified timber and engineered-timber products;
- Environmental aspects of timber buildings;
- Structural systems and constructional insulated panels and cross-laminated timber;
- Ten in-depth case studies of award-winning timber buildings from around the world.

The book is richly illustrated throughout with over 250 colour images, including detail drawings and photographs documenting projects from construction to completion. It will be of interest to anyone who is planning to embark on a timber-building project: from experienced architects to university students and self-builders.

**TD694/Sa593**



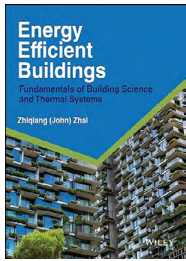
Kuittinen, M., Organschi, A., & Ruff, A. (2022). *Carbon : A Field Manual for Building Designers*. John Wiley & Sons. ISBN 9781119720768

Representing an international collaboration of researchers and architects in the United States and Europe, *Carbon: A Field Manual for Building Designers* offers professionals in the field an approach to sustainable design that embraces building science principles, life-cycle assessment and design strategies in carbon neutral construction. The book also contains background information on carbon in construction materials and in the building design process.

This book is filled with illustrative diagrams and drawings that help evaluate the potential impact of design decisions for creating carbon emissions. Written by and for designers and builders, the book includes a compelling pair of case studies that explore carbon-reducing strategies, suggests steps for assessing a building's carbon footprint, and reviews carbon storages and circulation of materials. The guidelines detailed in the book can be adopted, replicated, and deployed to reduce carbon emissions and create more sustainable buildings.

Written for practicing professionals in architecture and construction, *Carbon: A Field Manual for Building Designers* is a must-have resource for professionals who are dedicated to creating sustainable projects.

**TD69:502/Ku237**



Zhai, Z.(J.). (2023). *Energy Efficient Buildings : Fundamentals of Building Science and Thermal Systems*. Wiley. ISBN 9781119881933

In *Energy Efficient Buildings: Fundamentals of Building Science and Thermal Systems*, distinguished engineer and architect Dr. John Zhai delivers a comprehensive exploration of the design and engineering fundamentals of energy efficient buildings. The book introduces the fundamental knowledge, calculations, analyses, and principles used by designers of energy efficient buildings and addresses all essential elements of the discipline.

An essential guide for students studying civil, architectural, mechanical, and electrical engineering with a focus on energy, building systems, and building science, the book provides practical in-class materials, examples, and actual design practices, as well as end-of-chapter questions (with solutions) and sample group projects.

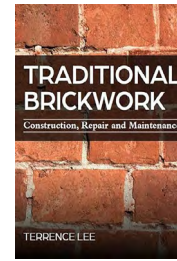
Readers will find:

- A thorough introduction to the cross-disciplinary approach to the design of energy efficient buildings;
- Comprehensive explorations of all critical elements of energy efficient building design, including standards and codes, psychometrics, microclimate, thermal comfort, indoor air quality, HVAC systems, and more;
- In-depth discussions of the foundational knowledge, calculations, analysis, and principles needed to design energy efficient buildings;

- Practical in-class examples and end-of-chapter questions with solutions for students, and design guidance and sample group projects for use in course lectures and actual design practices.

Perfect for graduate and advanced undergraduate students studying building environmental systems, building systems in construction, and mechanical and electrical systems in construction, *Energy Efficient Buildings: Fundamentals of Building Science and Thermal Systems* will also earn a place in the libraries of practicing civil, architectural, and mechanical engineers.

**TD697/Zh001**



Lee, T. (2022). *Traditional Brickwork : Construction, Repair and Maintenance*. The Crowood Press. ISBN 9780719841415

Brick was initially introduced to Britain by the Romans, and then re-introduced to Eastern and Southern England from the continent during the twelfth century. Its manufacture and use then spread rapidly, gradually replacing timber-framed buildings as the main form of construction, particularly after the Great Fire of London in 1666. This book explains the manufacture and use of brick in England, revealing its characteristics and vulnerabilities. It also examines the survival of traditional brickwork and the practical methods to assess, construct, repair and maintain it, together with the necessary tools and materials.

Key topics covered include:

- Traditional brick manufacture from the twelfth to the eighteenth century;
- Tools, equipment and materials;
- Assessment and vulnerability of brickwork;
- Construction, repair and maintenance of traditional brickwork;
- Gauged brickwork arch construction;
- Lime pointing.

Featuring over 400 images, this helpful book will be of great interest to bricklayers, instructors and all interested in the use of traditional brickwork both past, present and future.

**TD693/Le160**

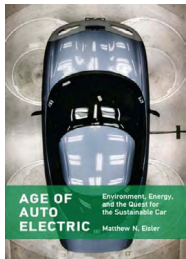


Bergreen, G. (2023). *Revolutionary Technologies : Educational Perspectives of Technology History*. Rowman & Littlefield. ISBN 9781475870640

Integrating technological innovations into our daily lives has helped to modernize and improve the way we learn, do business, communicate with one another, and – ultimately – live. But in these modern times, which some refer to as the “Electronic Gadgets and App Age,” it has become difficult to know everything about the old and new electronic devices that continue to make the wheels of industry turn. New innovations appear and just as quickly become antiquated and obsolete. Technological advances from the past blend with the present and then, like ripples in a lake, fade in this fast-paced world.

How can anyone hope to keep up with these changes? The breadth of knowledge required is daunting, but technology impacts the choices we make, for better or worse. *Revolutionary Technologies: Educational Perspectives of Technology History* covers what has been invented, who invented what, and how technology has made our lives more efficient, enjoyable, and meaningful.

**TD62(09)/Be548**

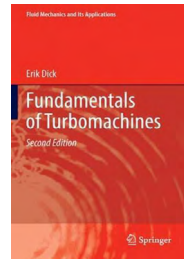


Eisler, M.N. (2022). *Age of Auto Electric: Environment, Energy, and the Quest for the Sustainable Car*. The MIT Press. ISBN 9780262544573

Electric cars were once as numerous as internal combustion engine cars before all but vanishing from American roads around World War I. Now, we are in the midst of an electric vehicle revival, and the goal of a sustainable car seems to be within reach. In *Age of Auto Electric*, Matthew N. Eisler shows that the halting development of the electric car in the intervening decades was a consequence of tensions between environmental, energy, and economic policy imperatives that informed a protracted reappraisal of the automobile system. These factors drove the electric vehicle revival, argues Eisler, hastening automaking's transformation into a science-based industry in the process.

Challenging the common assumption that the electric vehicle revival is due to the development of better batteries, *Age of Auto Electric* instead focuses on changing environmental and socioeconomic conditions, energy and environmental policies, systems of energy conversion and industrial production, and innovation practices that affected the prevalence and popularity of electric vehicles in recent decades. Eisler describes a world in transition from legacy to alternative energy-conversion systems and the promises, compromises, new problems, and unintended consequences that enterprise has entailed.

**TD629.3-83/Ei810**  
MIT Press Direct



Dick, E. (2022). *Fundamentals of Turbomachines* (2nd ed.). Springer. ISBN 9783030935801

This textbook explores the working principles of all kinds of turbomachines. The same theoretical framework is used to analyze the different machine types. The order in which the different kinds are treated is chosen by the possibility of gradually building up theoretical concepts. For each of the turbomachine kinds, a balance is sought between fundamental understanding and knowledge of practical aspects. Readers are invited through challenging exercises to consider how the theory applies to particular cases. This textbook appeals to senior undergraduate and graduate students in mechanical engineering and to professional engineers seeking to understand the operation of turbomachines. Readers will gain a fundamental understanding of turbomachines and will be able to make a reasoned choice of a turbomachine for a particular application.

**TD621/Di120**



Larsson, L., Eliasson, R.E., & Orych, M. (2022). *Principles of Yacht Design* (5th ed.). Adlard Coles. ISBN 9781472981929

*Principles of Yacht Design* has established itself as the standard book on the subject for practising designers, naval architecture students and discerning boat owners, as well as the boat-building industry as a whole. This fifth edition is wholly revised and expanded with a new chapter on foiling and an expanded section to reflect changes in ISO standards for dimensioning. It follows the design from scratch of a completely new 41-foot performance cruiser to demonstrate the practical application of yacht design theory. As such, it examines every aspect of the process of yacht and powerboat design.

Beginning with the new yacht's specifications, the authors examine:

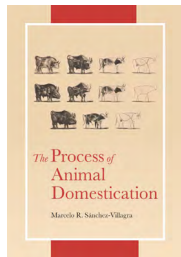
- The geometry of the hull using lines plans and CAD techniques;
- Hydrostatics and stability in calm water as well as waves;
- Design of the hull, keel and rudder;
- Design of hydrofoils;
- The aerodynamics of sails and the consequential influence on the sail plan;
- How to find the balance of the yacht;
- Selecting the correct propeller and engine;
- The special hydrodynamics of high-speed power boats;
- Loads acting on the hull and rig, and

revised ISO standards for dimensioning;

- Different fibre reinforced plastics, including sandwich laminates;
- Design evaluation using Velocity Prediction Programs, experimental techniques or computational fluid dynamics.

The authors conclude by examining practical matters such as the layout of the cockpit, deck and cabin, and provide a complete weight calculation for the boat. Illustrated with many explanatory diagrams and computer-generated graphics, the authors have succeeded in making this complex subject remarkably clear and accessible for professionals and amateurs alike.

**TD629.52/La685**



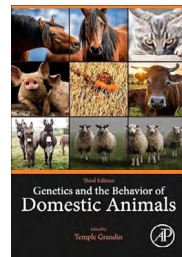
Sánchez-Villagra, M.R. (2022). *The Process of Animal Domestication*. Princeton University Press. ISBN 9780691217673

Across the globe and at different times in the past millennia, the evolutionary history of domesticated animals has been greatly affected by the myriad, complex, and diverse interactions humans have had with the animals closest to them. *The Process of Animal Domestication* presents a broad synthesis of this subject, from the rich biology behind the initial stages of domestication to how the creation of breeds reflects cultural and societal transformations that have impacted the biosphere.

The author draws from a wide range of fields, including evolutionary biology, zooarchaeology, ethnology, genetics, developmental biology, and evolutionary morphology to provide a fresh perspective to this classic topic. Relying on various conceptual and technical tools, he examines the natural history of phenotypes and their developmental origins. He presents case studies involving mammals, birds, fish, and insect species, and he highlights the importance of domestication for the comprehension of evolution, anatomy, ontogeny, and dozens of fundamental biological processes.

Bringing together the most current developments, *The Process of Animal Domestication* will interest a wide range of readers, from evolutionary biologists, developmental biologists, and geneticists to anthropologists and archaeologists.

**TD636/Sa496**



Grandin, T. (Ed.). (2022). *Genetics and the Behavior of Domestic Animals* (3rd ed.). Academic Press. ISBN 9780323857529

*Genetics and the Behavior of Domestic Animals, Third Edition* offers the latest and most valuable information on animal science and behavioral genetics, carrying on the book's legacy since its original publication in 1998. This book synthesizes research from behavioral genetics and animal and veterinary science, bridging the gap between these fields. The objective is to show that the principles of behavioral genetics have practical applications to agricultural and companion animals.

The continuing domestication of animals is a complex process, the myriad impacts of which on animal behavior are commonly under-appreciated. Genetic factors play a significant role in both species – specific behaviors and behavioral differences exhibited by individuals in the same species. Leading authorities explore the impact of increased intensities of selection on domestic animal behavior. Rodents, cattle, pigs, sheep, horses, herding and guard dogs, and poultry are all included in these discussions of genetics and behavior, making this book useful to veterinarians, livestock producers, laboratory animal researchers and technicians, animal trainers and breeders, and any researcher interested in animal behavior.

*Genetics and the Behavior of Domestic Animals, Third Edition* is the most valuable

resource for researchers and practitioners in animal and veterinary science, animal behavior, genetics, ethology, and similar fields. Advanced undergraduate and graduate students in these disciplines will also benefit from the global expertise of the multiple authors featured in this newest edition.

Key features:

- Provides full and thorough updates to all chapters, ensuring dissemination of the latest data and research;
- Synthesizes research from behavioral genetics, animal science, and veterinary literature;
- Combines the fields of behavior genetics with animal behavioral research;
- Includes practical applications of principles discovered by behavioral genetics researchers;
- Covers many species ranging from pigs, dogs, foxes, rodents, cattle, horses, and cats.

**TD636/Ge424**



Casey, R., Heath, S., & Zulch, H. (Eds.). (2022). *Companion Animal Behaviour Problems : Prevention and Management of Behaviour Problems in Veterinary Practice*. CAB International. ISBN 9781780643465

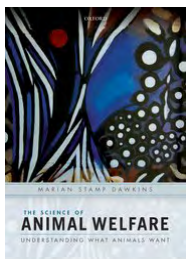
Behaviour problems are a significant cause of companion animal relinquishment and euthanasia. This book provides up-to-date information about animal behaviour as well as practical advice on how veterinary practice professionals can manage undesirable animal behaviour and give down-to-earth, appropriate and trusted advice to owners.

This book:

- Covers the important aspects of behaviour in dogs, cats, rabbits and rodents, parrots and birds, as well as how this behaviour has adapted to the domestic environment;
- Discusses the role of the veterinary practice in improving the emotional experience of animals attending the veterinary practice, including practice design, socialisation for young animals and effective communication with owners;
- Covers the clinical decision-making process in managing the signs of undesirable behaviour, appropriately handling pets in the practice to minimise distress, as well as: behavioural first aid, referral to a specialist, medical influences on behaviour and decisions about euthanasia.

This practical and accessible book gives all the essential information needed by veterinary professionals in order to advise clients on the behaviour and well-being of animals in their care.

**TD636.09/Co373**



Dawkins, M.S. (2021). *The Science of Animal Welfare: Understanding What Animals Want*. Oxford University Press. ISBN 9780198848998

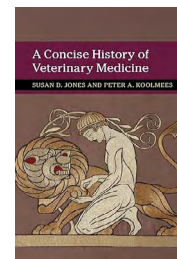
What is animal welfare? Why has it proved so difficult to find a definition that everyone can agree on? This concise and accessible guide is for anyone who is interested in animals and who has wondered how we can scientifically assess their welfare. It defines animal welfare as 'health and animals having what they want', a definition that can be easily understood by scientists and non-scientists alike, expresses in simple words what underlies many existing definitions, and shows what evidence we need to collect to improve animal welfare in practice. Above all, it puts the animal's own point of view at the heart of an assessment of its welfare.

However, can we really understand what animals want? A consistent theme running through the book is that not only is it possible to establish what animals want, but that this information is vital in helping us to make sense of the long and often confusing list of welfare measures that are now in use such as 'stress' and 'feel good hormones', expressive sounds and gestures, natural behaviour, cognitive bias, and stereotypes. Adopting the simple definition, 'health and what animals want' allows us to distinguish between measures that are simply what an animal does when it is alert, aroused, or active and those measures that genuinely allow us to distinguish between situations the animals

themselves see as positive or negative. Sentience (conscious feelings of pleasure, pain, and suffering) is for many people the essence of what is meant by welfare, but studying consciousness is notoriously difficult, particularly in non-human species. These difficulties are discussed in the context of our current and as yet incomplete knowledge of human and animal consciousness. Finally, the book highlights some key ideas in the relationship between animal welfare science and animal ethics and shows how closely the well-being of humans and animals is interlinked.

*The Science of Animal Welfare* is an ideal companion for undergraduate and graduate students taking courses in animal behaviour and welfare, as well as for professional researchers, practitioners and animal welfare consultants. At the same time, it is easily understandable to non-scientists and anyone without prior knowledge but with an interest in animals and the rapidly evolving science of animal welfare.

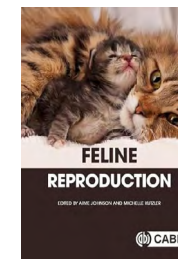
**TD636/Da965**



Jones, S.D., & Koolmees, P.A. (2022). *A Concise History of Veterinary Medicine*. Cambridge University Press. ISBN 9781108430708

From Ayurvedic texts to botanical medicines to genomics, ideas and expertise about veterinary healing have circulated between cultures through travel, trade, and conflict. In this broad-ranging and accessible study spanning 400 years of history, Susan D. Jones and Peter A. Koolmees present the first global history of veterinary medicine and animal healing. Drawing on interdisciplinary and multidisciplinary perspectives, this book addresses how attitudes toward animals, disease causation theories, wars, problems of food insecurity, and the professionalization and spread of European veterinary education have shaped new domains for animal healing, such as preventive medicine in intensive animal agriculture and the need for veterinarians specializing in zoo animals, wildlife, and pets. It concludes by considering the politicization of animal protection, changes in the global veterinary workforce, and concerns about disease and climate change. As mediators between humans and animals, veterinarians and other animal healers have both shaped and been shaped by the social, cultural, and economic roles of animals over time.

**TD636.09/Jo510**



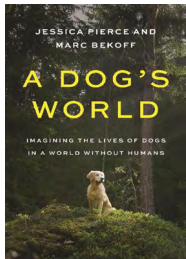
Johnson, A.K., & Kutzler, M.A. (Eds.). (2022). *Feline Reproduction*. CAB International. ISBN 9781789247084

Cats are one of the most popular pets in the world and cat owners want advanced veterinary care. There is a growing interest in purebred cats which requires the highest quality reproductive care from the veterinarians.

In *Feline Reproduction*, all aspects of reproduction in the queen and the tom are presented by a global author team. Beginning with basic anatomy and normal reproduction, this book reviews practical knowledge about feline pregnancy, neonatal care, breeding soundness exams, and semen cryopreservation. This book also provides the most current and comprehensive information about abnormal conditions affecting feline reproduction, such as infertility, spontaneous abortion and contraception.

Covering both pets and nondomestic species, this feline reproduction book will prove to be essential for the general veterinary practitioner, veterinary student, animal scientist, and experienced cat breeder.

**TD636.8/Fe460**



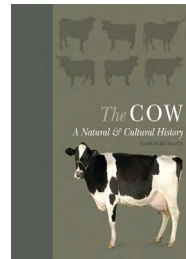
Pierce, J., & Bekoff, M. (2021). *A Dog's World: Imagining the Lives of Dogs in a World without Humans*. Princeton University Press. ISBN 9780691196183

What would happen to dogs if humans simply disappeared? Would dogs be able to survive on their own without us? *A Dog's World* imagines a posthuman future for dogs, revealing how dogs would survive – and possibly even thrive – and explaining how this new and revolutionary perspective can guide how we interact with dogs now.

Drawing on biology, ecology, and the latest findings on the lives and behavior of dogs and their wild relatives, Jessica Pierce and Marc Bekoff – two of today's most innovative thinkers about dogs – explore who dogs might become without direct human intervention into breeding, arranged playdates at the dog park, regular feedings, and veterinary care. Pierce and Bekoff show how dogs are quick learners who are highly adaptable and opportunistic, and they offer compelling evidence that dogs already do survive on their own – and could do so in a world without us.

Challenging the notion that dogs would be helpless without their human counterparts, *A Dog's World* enables us to understand these independent and remarkably intelligent animals on their own terms.

**TD636.7/Pi255**

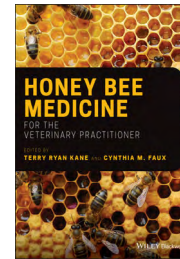


Rutland, C. (2021). *The Cow: A Natural & Cultural History*. Princeton University Press. ISBN 9780691198705

We populate the countryside with cows the world over, and their familiar presence ensures that global demands for milk and beef are met. But with more than a billion cattle on the planet, the importance of cows extends well beyond food production. Cows are venerated by some religions and shunned by others; they provide leather for shoes, clothing, and other uses; and they have been central to the agricultural way of life, working the fields, pulling carts, and providing fertilizer. *The Cow* is a comprehensive guide to help us understand these important animals, offering a wealth of information about their anatomy, their behaviors, different breed varieties, and the cow's place in culture past and present. Exploring the cow's livestock credentials and beyond, this book combines informative text, beautiful photographs, and explanatory diagrams to review the cow's fascinating biology, hard-wired behaviors, and its relationship with humankind.

- Provides an in-depth look at the evolution of the cow, its role in agriculture and the development of breeds;
- Includes chapters on Anatomy & Biology, Society & Behavior and Cattle & People;
- Features a photographic directory of forty global cattle breeds.

**TD636.2/Ru880**



Kane, T.R., & Faux, C.M. (Eds.). (2021). *Honey Bee Medicine for the Veterinary Practitioner*. Wiley-Blackwell. ISBN 9781119583370

*Honey Bee Medicine for the Veterinary Practitioner* offers an authoritative guide to honey bee health and hive management. Designed for veterinarians and other professionals, the book presents information useful for answering commonly asked questions and for facilitating hive examinations.

The book covers a wide range of topics including basic husbandry, equipment and safety, anatomy, genetics, the diagnosis and management of disease. It also includes up to date information on Varroa and other bee pests, introduces honey bee pharmacology and toxicology, and addresses native bee ecology.

This new resource:

- Offers a guide to veterinary care of honey bees;
- Provides information on basic husbandry, examination techniques, nutrition, and more;
- Discusses how to successfully handle questions and 'hive calls';
- Includes helpful photographs, line drawings, tables, and graphs.

Written for veterinary practitioners, veterinary students, veterinary technicians, scientists, and apiarists, *Honey Bee Medicine for the Veterinary Practitioner* is a comprehensive and practical book on honey bee health.

**TD638.1/Ho488**



Koch, M. (2023). *Traditionelles Arbeiten mit Pferden (5. Aufl.)*. Eugen Ulmer. ISBN 9783818614270

Pferde eignen sich unter entsprechenden Voraussetzungen für viele Arbeiten in Land – und Forstwirtschaft. In einer Zeit knapper werdender Ressourcen finden sie als alternative Zugkraft vor allem in ökologisch wirtschaftenden Betrieben immer mehr Beachtung.

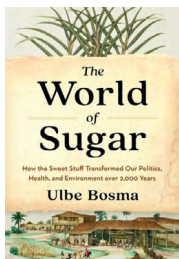
Ein Blick auf die traditionelle Arbeit mit Pferden der vergangenen Jahrhunderte macht deutlich, welcher Erfahrungsschatz hier bereits existiert. Michael Koch beschreibt detailliert die verschiedenen Arbeiten, die zusammen mit dem Pferd erledigt werden können, und auch, welche neuen Geräte diese Arbeit heute erleichtern.

- Der Bauer und sein Pferd;
- Wagen und Geräte für die Arbeit mit

Pferden;

- Beschirrung und Anspannung;
- Die Ausbildung der Zugpferde;
- Möglichkeiten des Pferdeeinsatzes heute.

**TD636.1/Ko050**



Bosma, U. (2023). *The World of Sugar : How the Sweet Stuff Transformed Our Politics, Health, and Environment over 2,000 Years.* The Belknap Press of Harvard University Press. ISBN 9780674279391

For most of history, humans did without refined sugar. After all, it serves no necessary purpose in our diets, and extracting it from plants takes hard work and ingenuity. Granulated sugar was first produced in India around the sixth century BC, yet for almost 2,500 years afterward sugar remained marginal in the diets of most people. Then, suddenly, it was everywhere. How did sugar find its way into almost all the food we eat, fostering illness and ecological crisis along the way?

*The World of Sugar* begins with the earliest evidence of sugar production. Through the Middle Ages, traders brought small quantities of the precious white crystals to rajahs, emperors, and caliphs. But after sugar crossed the Mediterranean to Europe, where cane could not be cultivated, demand spawned a brutal quest for supply. European cravings were satisfied by enslaved labor; two-thirds of the 12.5 million Africans taken across the Atlantic were destined for sugar plantations. By the twentieth century, sugar was a major source of calories in diets across Europe and North America.

Sugar transformed life on every continent, creating and destroying whole cultures through industrialization, labor migration, and changes in diet. Sugar made fortunes, corrupted governments, and shaped the policies of technocrats.

And it provoked freedom cries that rang with world-changing consequences. In Ulbe Bosma's definitive telling, to understand sugar's past is to glimpse the origins of our own world of corn syrup and ethanol and begin to see the threat that a not-so-simple commodity poses to our bodies, our environment, and our communities.

**TD664.1/Bo798**



Garcia-Vaquero, M., Pastor, K., Orhun, G.E., McElhatton, A., & Rocha, J.M.F. (Eds.). (2023). *Traditional European Breads : An Illustrative Compendium of Ancestral Knowledge and Cultural Heritage.* Springer. ISBN 9783031233517

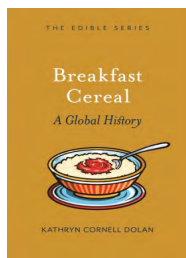
This text comprehensively covers the rituals, traditions and receipts of ancestral processes of bread making from multiple countries, including the scientific and technological character of the science of bread making and sourdough biotechnology. Individual chapters cover the scientific aspects of bread making in different cultures and traditions as well as the technological phenomena occurring during the bread making process, utilizing the full network of SOURDOMICS (COST Action 18101) – Sourdough biotechnology network towards novel, healthier and sustainable food and bio-processes.

Pictures and illustrations are used to explain the science behind bread making processes and the cultural, historical and traditional elements associated with bread making in multiple countries. Authored by bread making experts from the breadth of Europe, the process of bread fermentation in each country and region is covered in detail. The traditions surrounding bread making are simply the empirical know-how passed between generations, and this book's main purpose is to perpetuate these traditions and know-how.

- Provides a description of the culture of European peoples with respect to the technology of bread making and sourdough biotechnology;

- Explains the process of bread fermentation using simple language combined with scientific rigor;
- High quality pictures and illustrations enrich the scientific and cultural elements mentioned in each chapter.

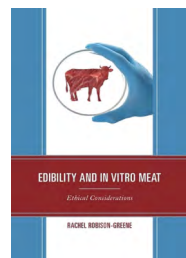
**TD664.6/Tr054**



Dolan, K.C. (2023). *Breakfast Cereal: A Global History*. Reaktion Books. ISBN 9781789146950

Simple, healthy and comforting, breakfast cereals are a perennially popular way to start the day. They have a long, distinguished and surprising history – around 10,000 years ago, with the advent of agriculture, people began breaking their fast with porridges made from wheat, rice, corn and other grains. It was only in the second half of the nineteenth century, in the United States, that a series of entrepreneurs and food reformers created the convenient breakfast cereals we recognize today. Entertaining and well-illustrated, *Breakfast Cereal* explores the story of this food, from the origins of cereal cultivation to the marketing ingenuity of today's favourite brands.

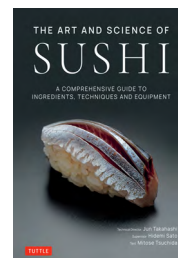
**TD664.7/Do281**



Robison-Greene, R. (2023). *Edibility and In Vitro Meat: Ethical Considerations*. Lexington Books. ISBN 9781793614667

Consumers and policy-makers have unprecedented choices to make in the years to come about how and what we eat. If we continue down our current path of food production, we risk ever-increasing levels of animal exploitation, environmental destruction, biodiversity loss, and challenges to human health. In vitro meat production, or the process of growing meat in a lab, has the potential to reduce the severity of these problems. This proposal would change our food systems dramatically. *Edibility and In Vitro Meat: Ethical Considerations* explores the ethical questions that are important to ask at every stage of this process. Rachel Robison-Greene considers arguments for and against the production of in vitro meat, as well as challenges for implementation. She argues that in vitro meat should be implemented and that we should re-think how we use the term “edible.”

**TD637.5/Ro058**



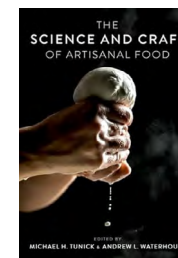
Takahashi, J. (2022). *The Art and Science of Sushi: A Comprehensive Guide to Ingredients, Techniques and Equipment*. Tuttle Publishing. ISBN 9784805317136

Sushi has taken the world by storm and in this book brilliant young Tokyo sushi chef Jun Takahashi provides a unique look at how traditional Tokyo-style sushi is made, including:

- The history and culture of Japanese sushi;
- The types of seafood used, where they are caught, and how to prepare them;
- High-quality Japanese sushi knives – how to use them;
- The methods used by professional sushi chefs to form traditional nigiri sushi and sushi rolls;
- Step-by-step instructions for making sushi rice, tamagoyaki, marinated ginger and more;
- Diagrams and charts showing everything from the scientific composition of sushi ingredients to the cooking methods and implements used.

Whether you're a professional chef, a lover of Japanese cuisine, or an avid sushi fanatic, this beautiful book will provide fascinating insights into the world of Japan's iconic national dish.

**TD641.568(520)/Ta141**



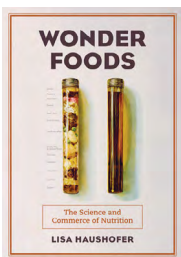
Tunick, M.H., & Waterhouse, A.L. (Eds.). (2023). *The Science and Craft of Artisanal Food*. Oxford University Press. ISBN 9780190936587

You are what you eat, and today's consumers care about the origins of their food. Is it made with concern for quality, the environment, and the larger community? Artisanal food embodies those concerns, and it delivers when the producer is a true artisan. Artisans define the desired qualities and then pursue those qualities with a passion. They create or source the raw ingredients from suppliers who themselves are small scale producers, creating curated batches that reflect their location and history.

This book describes the science behind the small-scale production of food. Chapters are written by both scientists and artisans, and cover beer, wine, chocolate, coffee, cheese, honey, olive oil, and fruits and vegetables. All chapters describe how artisanal foods are made and what makes them different in composition, flavor, and texture from mass-produced products. Recent research into these areas is also covered. Some of the artisan authors also address the philosophy behind their approach, while the book's introduction delves into the marketing concept of artisanal. *The Science and Craft of Artisanal Foods* reveals the factors that make a difference in each product.

**TD664/Sc936**

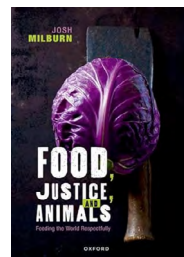




Haushofer, L. (2023). *Wonder Foods : The Science and Commerce of Nutrition*. University of California Press. ISBN 9780520390393

Between 1850 and 1950, experts and entrepreneurs in Britain and the United States forged new connections between the nutrition sciences and the commercial realm through their enthusiasm for new edible consumables. The resulting food products promised wondrous solutions for what seemed to be individual and social ills. By examining creations such as Gail Borden's meat biscuit, Benger's Food, Kellogg's health foods, and Fleischmann's yeast, *Wonder Foods* shows how new products dazzled with visions of modernity, efficiency, and scientific progress even as they perpetuated exclusionary views about who deserved to eat, thrive, and live. Drawing on extensive archival research, historian Lisa Haushofer reveals that the story of modern food and nutrition was not about innocuous technological advances or superior scientific insights, but rather about the powerful logic of exploitation and economization that undergirded colonial and industrial food projects. In the process, these wonder foods shaped both modern food regimes and how we think about food.

**TD664/Ha843**



Milburn, J. (2023). *Food, Justice, and Animals : Feeding the World Respectfully*. Oxford University Press. ISBN 9780192867469

How would we eat if animals had rights? A standard assumption is that our food systems would be plant-based. But maybe we should reject this assumption. Indeed, this book argues that a future non-vegan food system would be permissible on an animal rights view. It might even be desirable.

In *Food, Justice, and Animals: Feeding the World Respectfully*, Josh Milburn questions if the vegan food system risks cutting off many people's pursuit of the 'good life', risks exacerbating food injustices, and risks negative outcomes for animals. If so, then maybe non-vegan food systems would be preferable to vegan food systems, if they could respect animal rights.

Could they? The author provides a rigorous analysis of the ethics of farming invertebrates, producing plant-based meats, developing cultivated animal products, and co-working with animals on genuinely humane farms, arguing that these possibilities offer the chance for a food system that is non-vegan, but nonetheless respects animals' rights. He argues that there is a way for us to have our cake, and eat it too, because we can have our cow, and eat her too.

**TD664/Mi377**



Chua, C.K., Yeong, W.Y., Tan, H.W., & et al. (2023). *Digital Gastronomy : From 3D Food Printing to Personalized Nutrition*. World Scientific. ISBN 9789811257407

The food industry has seen many changes over the last several decades – new technologies have been introduced into the way we cook, manufacture, and present food products to consumers. Digital gastronomy, which combines new computational abilities such as three-dimensional (3D) printing with traditional food preparation, has allowed consumers to design and manufacture food with personalized shapes, colors, textures, and even nutrition. In addition to the personalization of food, 3D printing of food has other advantages such as promoting automation in food preparation and food sustainability through 3D-printed cell-based meats and alternative proteins. Entire meals can be constructed just by 3D food printing alone.

In this textbook, the background, principles, commercial food printers, materials, regulations, business development, as well as the emerging technologies and future outlook of 3D food printing are explored. In terms of 3D-printed materials, four main classes are reviewed: namely, desserts/ snacks (comprising dairy products, chocolate, sugars, and dough), fruits/ vegetables, meats/ alternative proteins, and pharmaceuticals/ nutraceuticals.

This textbook has been written to offer readers keen to learn more about 3D food printing in terms of concepts, processes, applications,

and developments of 3D food printing. No prior knowledge is required. At the end of each chapter, a set of problems offers undergraduate and postgraduate students practice on the main ideas discussed within the chapter. For tertiary-level lecturers and university professors, the topic on 3D food printing can be associated to other subjects in food and nutrition, pharmaceutical and nutraceutical sciences, and food engineering.

**TD664/Ch932**



Minney, S. (2022). *Regenerative Fashion : A Nature-Based Approach to Fibres, Livelihoods and Leadership*. Laurence King. ISBN 9781529419924

Fashion has been inspired by nature for centuries, yet its impacts are now devastating people and planet. As our climate, ecological and social crises converge, urgent action is needed to maximize our chances of survival. A new commercial approach is possible but it requires a systemic shift, with companies learning to operate as part of a wider 'ecosystem', allowing fashion to restore what it has taken.

*Regenerative Fashion* presents a roadmap for new ways of doing fashion. To keep our planet safe, we must cut production and end our dependency on fossil fuels. We must also create dignified livelihoods for the millions of people working in the industry. By using natural resources, paying factory workers and farmers a living wage, and scaling up craft production, we can not only rebuild soils, ecosystems and biodiversity, but also support decarbonization, regenerate communities and ensure a just transition for all.

Part guide and part manifesto, this book shares stories of our interconnectedness with the natural world and each other. Fully illustrated throughout, it features interviews from best-practice designers and businesses around the world, as well as thought pieces from leading campaigners within the industry.

**TD687/Mi673**



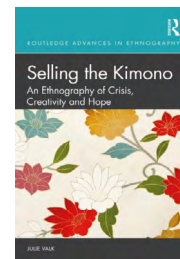
Purnell, C. (2023). *Blue Jeans*. Bloomsbury Academic. ISBN 9781501383748

Few clothing items are as ubiquitous or casual as blue jeans. Yet, their simplicity is deceptive. Blue jeans are nothing if not an exercise in opposites.

Americans have accepted jeans as a symbol of their culture, but today jeans are a global consumer product category. Levi Strauss made blue jeans in the 1870s to withstand the hard work of mining, but denim has since become the epitome of leisure. In the 1950s, celebrities like Marlon Brando transformed the utilitarian clothing of industrial labor into a glamorous statement of youthful rebellion, and now, you can find jeans on chic fashion runways. For some, indigo blue might be the color of freedom, but for workers who have produced the dye, it has often been a color of oppression and tyranny.

*Blue Jeans* considers the versatility of this iconic garment and investigates what makes denim a universal signifier, ready to fit any context, meaning, and body.

**TD687(09)/Pu600**



Valk, J. (2021). *Selling the Kimono : An Ethnography of Crisis, Creativity and Hope*. Routledge. ISBN 9780367494988

Based on twelve months of in-depth ethnographic research in Japan with retailers, customers, wholesalers, writers and craftspeople, *Selling the Kimono* is a journey behind the scenes of a struggle to adapt to difficult economic conditions and declining demand for the kimono.

The kimono is an iconic piece of clothing, instantly recognised as a symbol of traditional Japanese culture. Yet, little is known about the industry that makes and sells the kimono, in particular the crisis this industry is currently facing. Since the 1970s, kimono sales have dropped dramatically, craftspeople are struggling to find apprentices, and some retailers have closed up shop.

Illuminating recent academic investigations into the lived experience of economic crisis, this volume presents a story of an industry in crisis, and the narratives of hope, creativity and resilience that have emerged in response. The ethnographic depth and theoretical contribution to understanding the effects of economic crisis and the transformation of traditional culture will be of broad interest to students, academics and the general public.

**TD687(09)/Va340**



Rayen, S., & Racovita, T. (2023). *Micro Tattoos : The World's Top Fine Line Tattoo Artists*. Lannoo. ISBN 9789401488594

Micro tattoos have gained popularity in the past decade and made the art of tattooing more accessible for many people. This book showcases the work of a new generation of fine line tattoo artists worldwide. It contains a handy alphabetical overview of the artists, a selection of their finest work and interviews with (amongst others) Eva Karabudak from Atelier Eva, Soltattoo and Edit Paints.

With work by Jake Nowicz, Mr. K, Daniel Berdiel, Bombayfoor, and many others.

**TD687.55/Ra953**

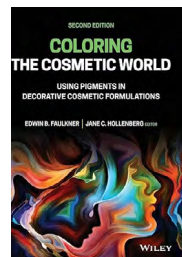


Gilchrist, A.J. (2023). *Making Quality Cosmetics : Good Manufacturing Practice and ISO 22716:2007*. Royal Society of Chemistry. ISBN 9781839165146

Cosmetics manufacture is a dynamic and vibrant industry with companies varying from the very small scale, working in their own home, to much larger enterprises. With such variable companies there is the risk of equally variable quality in manufacturing. The International Organization for Standards (ISO) provides guidelines on good manufacturing processes for the cosmetics industry. However, not everyone working in cosmetics has a scientific or engineering backgrounds and understanding and meeting the ISO requirements can be daunting.

Whether you are a small business just starting out or an established company looking to expand, *Making Quality Cosmetics* will guide you through the requirements of the ISO standard. Calling on more than 35 years of experience in the cosmetics sector the author covers every aspect of the manufacturing set up and process, as well as discussing other regulations that may need to be considered, especially in larger facilities. With technical advice ranging from choosing equipment and raw materials, to assessing and auditing contractors this book will help you make sure your products are of the highest quality.

**TD665.5/Gi357**



Faulkner, E.B., & Hollenberg, J.C. (Ed.). (2021). *Coloring the Cosmetic World : Using Pigments in Decorative Cosmetic Formulations* (2nd ed.). Wiley. ISBN 9781119558101

*Coloring the Cosmetic World* is a highly practical guide to colorant selection for product formulations in the modern cosmetics and toiletries industry. Providing the essential knowledge required to successfully incorporate pigments into cosmetic formulations, this unique resource covers all essential aspects of color selection – including regulations, economics, color esthetics, and stability – as well as processing, color measurement, pigment testing, natural colorants, and more. This new edition contains carefully revised content and includes updated coverage of economic and regulatory criteria.

Drawing upon their decades of experience in the color industry, the author and editor focus on the specific color additives that are approved for use in cosmetics formulations. The book's twelve in-depth chapters include full masstone representations of numerous pigments to help readers appreciate subtleties and differences in absorption pigments, effect pigments, specialty pigments, and others. Appendices contain various pigment test methods, a glossary, and an up-to-date listing of treated pigment patents. Covering the chemistry, regulations, evaluation, processing, and properties of worldwide cosmetic pigments, this one-of-a-kind book:

- Covers the common pigments used in lipsticks, face makeup, eye shadow, mascara, nail

lacquer, and other color cosmetics;

- Provides detailed information on a variety of specific pigments, including their chemical properties, esthetic quality, and application in a wide range of products;
- Discusses regulatory considerations and the economics of selecting colors for use in different decorative cosmetics;
- Highlights practical concerns such as colorants' stability, interactions with other chemicals, manufacturing conditions, and packaging;
- Explains how the effects of heat, light, pH, humidity, and other environmental factors inform pigment selection for different product types and use cases.

*Coloring the Cosmetic World* is an indispensable guide for cosmetic chemists, a useful reference for purchasing agents, supply coordinators, and marketers working in the cosmetics industry, and a valuable supplementary text for undergraduate and graduate university programs in the field.

**TD665.5/Fa845**



Karchin, L., & Horvath, D. (2023). *Cosmetics Marketing : Strategy and Innovation in the Beauty Industry*. Bloomsbury Visual Arts. ISBN 9781350299436

Discover the tools required to pursue your career in cosmetics marketing. Through an in-depth analysis of this fast-growing and complex industry, *Cosmetics Marketing: Strategy and Innovation in the Beauty Industry* provides thought-provoking, industry-led exercises and case studies to demonstrate the role of aesthetics, authentic communication, emerging technologies, cultural trends, and the measurement of marketing efforts. There are also practical, beautifully illustrated resources for entering the field, exercises for boosting creativity, preparations for interviews, as well as an overview of the beauty products and theory used by makeup artists and product developers.

With a focus on the evolution of the industry and its social responsibilities in terms of inclusivity and sustainability, this is a core text for cosmetics courses in marketing and business at the undergraduate and graduate levels. *Cosmetics Marketing: Strategy and Innovation in the Beauty Industry* is the ultimate guide to this powerful, multi-billion dollar global industry and will influence and support the next generation of leaders in beauty.

**TD665.5/Ka533**