Jaunieguvumu apskats: Tehnoloģiju & dabaszinātņu izdevumi svešvalodās





Saturs

Priekšvārds | 2

Dabaszinātnes | 3 Medicīna. Sports | 7 Inženierzinātnes | 10 Lauksaimniecība | 14 Pārtikas zinātnes | 17 Skaistuma industrija | 20

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Priekšvārds

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Izdevums pieejams bez maksas.

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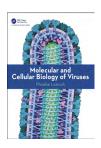
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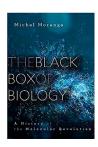
ISSN 2592-9097

Iznāk kopš 2022.g. februāra.

^{*} Pieeja e-grāmatām ar LNB piekļuves datiem ir iespējama attiecīgās tiešsaistes datubāzes abonēšanas periodā.



Lostroh, P. (2019). Molecular and Cellular Biology of Viruses. Taylor & Francis. ISBN 9780815345237



Morange, M. (2020). The Black Box of Biology: A History of the Molecular Revolution. Harvard University Press.
ISBN 9780674281363

Viruses interact with host cells in ways that uniquely reveal a great deal about general aspects of molecular and cellular structure and function. Molecular and Cellular Biology of Viruses leads students on an exploration of viruses by supporting engaging and interactive learning. All the major classes of viruses are covered. with separate chapters for their replication and expression strategies, and chapters for mechanisms such as attachment that are independent of the virus genome type. Specific cases drawn from primary literature foster student engagement. End-of-chapter questions focus on analysis and interpretation with answers being given at the back of the book. Examples come from the most-studied and medically important viruses such as HIV, influenza, and poliovirus. Plant viruses and bacteriophages are also included. There are chapters on the overall effect of viral infection on the host cell. Coverage of the immune system is focused on the interplay between host defenses and viruses, with a separate chapter on medical applications such as anti-viral drugs and vaccine development. The final chapter is on virus diversity and evolution, incorporating contemporary insights from metagenomic research.

3

TD578/Lo650

In this masterful account, a historian of science surveys the molecular biology revolution, its origin and continuing impact.

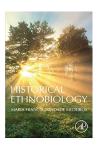
Since the 1930s, a molecular vision has been transforming biology. Michel Morange provides an incisive and overarching history of this transformation, from the early attempts to explain organisms by the structure of their chemical components, to the birth and consolidation of genetics, to the latest technologies and discoveries enabled by the new science of life. Morange revisits A History of Molecular Biology and offers new insights from the past twenty years into his analysis.

The Black Box of Biology shows that what led to the incredible transformation of biology was not a simple accumulation of new results, but the molecularization of a large part of biology. In fact, Morange argues, the greatest biological achievements of the past few decades should still be understood within the molecular paradigm. What has happened is not the displacement of molecular biology by other techniques and avenues of research, but rather the fusion of molecular principles and concepts with those of other disciplines, including genetics, physics, structural chemistry, and computational biology. This has produced decisive changes, including the discoveries of regulatory RNAs, the devel-

opment of massive scientific programs such as human genome sequencing, and the emergence of synthetic biology, systems biology, and epigenetics.

Original, persuasive, and breathtaking in its scope, *The Black Box of Biology* sets a new standard for the history of the ongoing molecular revolution.

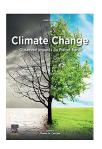
TD577/Mo494



Medeiros, M.F.T. (2021). *Historical Ethnobiology*. Elsevier. ISBN 9780128162453

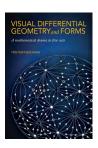
Historical Ethnobiology presents a unique approach to analyzing human-nature interactions, using theoretical and methodological aspects to examine historical scientific knowledge. This book disseminates the notion that past local narratives of biodiversity influence the determination of both historical and modern scientific decisions. Beginning with a brief history of ethnobiology's development, this book delves into conceptual models, historical knowledge areas, and the theoretical matrix of ethnobiology. This book also focuses on the importance of memory including topics of memory production by human in different epochs and how individual memory records contribute to social history and the understanding of the past effects of human interaction with nature. Looking ahead, it discusses the importance of records such as these for determining future mankind's relationships with nature to preserve biodiversity and ensure conservation. Historical Ethnobiology is the first book to focus on past human-nature interactions and their interpretations in today's scientific culture. This book is an excellent resource for students and researchers in biology, ethnobiology, and anthropology.

TD57/Me073



Letcher, T.M. (Ed.). (2021). Climate Change: Observed Impacts on Planet Earth (3rd ed.). Elsevier. ISBN 9780128215753

4



Needham, T. (2021). Visual Differential Geometry and Forms: A Mathematical Drama in Five Acts. Princeton University Press. ISBN 9780691203706

Climate Change: Observed Impacts on Planet Earth, Third Edition, brings together top global researchers across many disciplines to provide a comprehensive review on the complex issue of climate change and weather patterns. The third edition continues its tradition of focusing on the science and evidence on this highly politicized topic. Every chapter is updated, with this new edition featuring new chapters on topics such as glacier melt, the impacts of rising temperatures, extreme weather, modeling techniques, biodiversity, and more. This book is essential for researchers, environmental managers, engineers, and those whose work is impacted by, or tied to, climate change and global warming.

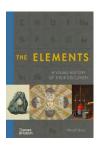
TD551.588/Le785

Visual Differential Geometry and Forms fulfills two principal goals. In the first four acts, Tristan Needham puts the geometry back into differential geometry. Using 235 hand-drawn diagrams, Needham deploys Newton's geometrical methods to provide geometrical explanations of the classical results. In the fifth act, he offers the first undergraduate introduction to differential forms that treats advanced topics in an intuitive and geometrical manner.

Unique features of the first four acts include: four distinct geometrical proofs of the fundamentally important Global Gauss-Bonnet theorem, providing a stunning link between local geometry and global topology; a simple, geometrical proof of Gauss's famous Theorema Egregium; a complete geometrical treatment of the Riemann curvature tensor of an n-manifold; and a detailed geometrical treatment of Einstein's field equation, describing gravity as curved spacetime (General Relativity), together with its implications for gravitational waves, black holes, and cosmology. The final act elucidates such topics as the unification of all the integral theorems of vector calculus; the elegant reformulation of Maxwell's equations of electromagnetism in terms of 2-forms; de Rham cohomology; differential geometry via Cartan's method of moving frames; and the calculation of the Riemann tensor using curvature 2-forms. Six of the seven chapters of Act V can be read completely independently from the rest of the book.

Requiring only basic calculus and geometry, *Visual Differential Geometry and Forms* provocatively rethinks the way this important area of mathematics should be considered and taught.

TD514/Ne110



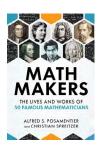
Ball, P. (2021). The Elements: A Visual History of Their Discovery. Thames & Hudson. ISBN 9780500024539

This book offers a largely chronological illustrated guide to how the chemical elements were discovered over the past three millennia. It provides a view not just of how we came to understand what everything is made of but also of how chemistry developed from a trial-and-error craft of making and transforming substances into a rational modern science that provides us with new materials, drugs, and much else.

While other books have described the properties of the chemical elements and often delved into their histories, none has done so in this highly visual manner. The pictorial material for this subject is very rich, including some gorgeous alchemical documents as well as portraits, colour charts, woodcuts of mining, artefacts such as John Dalton's wooden balls, advertisements (for example, for radium 'cures') and postage stamps.

The book contains separate short sections for each element or groups of related elements, which are gathered into several sections to order the sequence into several chronological eras of element discovery. Included are short 'interludes' (or 'feature spreads') presenting important intellectual milestones in how we think about elements.

TD54(09)/Ba360



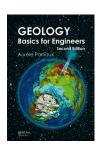
Posamentier, A.S., & Spreitzer, C. (2020). Math Makers: The Lives and Works of 50 Famous Mathematicians. Prometheus Books. ISBN 9781633885202

An entertaining history of mathematics as chronicled through fifty short biographies. Mathematics today is the fruit of centuries of brilliant insights by men and women whose personalities and life experiences were often as extraordinary as their mathematical achievements. This entertaining history of mathematics chronicles those achievements through fifty short biographies that bring these great thinkers to life while making their contributions understandable to readers with little math background. Among the fascinating characters profiled are Isaac Newton (1642 - 1727), the founder of classical physics and infinitesimal calculus - he frequently quarreled with fellow scientists and was obsessed by alchemy and arcane Bible interpretation; Sophie Germain (1776 - 1831), who studied secretly at the Ecole Polytechnique in Paris, using the name of a previously enrolled male student – she is remembered for her work on Fermat's Last Theorem and on elasticity theory; Emmy Noether (1882 - 1935), whom Albert Einstein described as the most important woman in the history of mathematics – she made important contributions to abstract algebra and in physics she clarified the connection between conservation laws and symmetry; and Srinivasa Ramanujan (1887 - 1920), who came from humble origins in India and had almost no formal

5

training, yet made substantial contributions to mathematical analysis, number theory, infinite series, and continued fractions. The unusual behavior and life circumstances of these and many other intriguing personalities make for fascinating reading and a highly enjoyable introduction to mathematics.

TD51 (092)/Po770



Parriaux, A. (2019). Geology: Basics for Engineers (2nd ed.). CRC Press/Balkema. ISBN 9781138096622

Geology: Basics for Engineers, Second Edition, presents the physical and chemical characteristics of the Earth, the nature and the properties of rocks and unconsolidated deposits/sediments, the action of water, how the Earth is transformed by various phenomena at different scales of time and space. The book shows the engineer how to take geological conditions into account in their projects, and how to exploit a wide range of natural resources in an intelligent way, reduce geological hazards, and manage subsurface pollution.

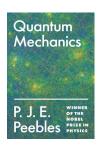
This second edition has been fully revised and updated. Through a problem-based learning approach, this instructional text imparts knowledge and practical experience to engineering students (undergraduate and graduate level), as well as to experts in the fields of civil engineering, environmental engineering, earth sciences, architecture, land and urban planning.

Free digital supplements to the book, found on the book page, contain solutions to the problems and animations that show additional facets of the living Earth.

The original French edition of the book (2007) won the prestigious Roberval Prize, an international contest organized by the University of Technology of Compiegne in collaboration with the General Council of

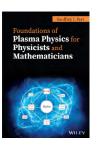
Oise, France. Geology: Basics for Engineers was selected out of a total of 110 candidates. The jury praised the book as a "very well conceived teaching textbook" and underscored its highly didactic nature, as well as the excellent quality of its illustrations.

TD551/Pa595



Peebles, P.J.E. (2020). Quantum Mechanics. Princeton University Press. ISBN 9780691209821

6



Pert, G.J. (2021).
Foundations of Plasma
Physics for Physicists and
Mathematicians (1st ed.).
Wiley.
ISBN 9781119774259

The classic textbook on quantum mechanics from Nobel Prize–winning physicist P. J. E. Peebles.

This book explains the often counterintuitive physics of quantum mechanics, unlocking this key area of physics for students by enabling them to work through detailed applications of general concepts and ideas. P. J. E. Peebles states general principles first in terms of wave mechanics and then in the standard abstract linear space formalism. He offers a detailed discussion of measurement theory - an essential feature of quantum mechanics – and emphasizes the art of numerical estimates. Along the way, Peebles provides a wealth of physical examples together with numerous problems, some easy, some challenging, but all of them selected because they are physically interesting. Quantum Mechanics is an essential resource for advanced undergraduates and beginning graduate students in physics.

TD530.145/Pe120

A comprehensive textbook on the foundational principles of plasmas, including material on advanced topics and related disciplines such as optics, fluid dynamics, and astrophysics.

Foundations of Plasma Physics for Physicists and Mathematicians covers the basic physics underlying plasmas and describes the methodology and techniques used in both plasma research and other disciplines such as optics and fluid mechanics. Designed to help readers develop physical understanding and mathematical competence in the subject, this rigorous textbook discusses the underlying theoretical foundations of plasma physics as well as a range of specific problems, focused on those principally associated with fusion.

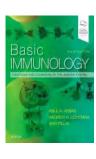
Reflective of the development of plasma physics, the text first introduces readers to the collective and collisional behaviors of plasma, the single particle model, wave propagation, the kinetic effects of gases and plasma, and other foundational concepts and principles. Subsequent chapters cover topics including the hydrodynamic limit of plasma, ideal magneto-hydrodynamics, waves in MHD plasmas, magnetically confined plasma, and waves in magnetized hot and cold plasma. Written by an acknowledged expert with more than five decades' active research experience in the field,

this authoritative text:

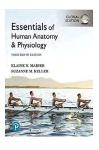
- Identifies and emphasizes the similarities and differences between plasmas and fluids;
- Describes the different types of interparticle forces that influence the collective behavior of plasma;
- Demonstrates and stresses the importance of coherent and collective effects in plasma;
- Contains an introduction to interactions between laser beams and plasma;
- Includes supplementary sections on the basic models of low temperature plasma and the theory of complex variables and Laplace transforms.

Foundations of Plasma Physics for Physicists and Mathematicians is the ideal textbook for advanced undergraduate and graduate students in plasma physics, and a valuable compendium for physicists working in plasma physics and fluid mechanics.

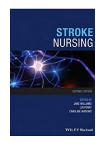
TD53/Pe660



Abbas, A.K., Lichtman A.H., & Pillai, S. (2020). Basic Immunology: Functions and Disorders of the Immune System (6th ed.). Elsevier. ISBN 9780323549431



Marieb, E.N., & Keller, S.M. (2022). Essentials of Human Anatomy & Physiology (13th ed.). Pearson Education Limited. ISBN 9781292401942



Williams, J., Perry, L., & Watkins, C. (Eds.). (2020). Stroke Nursing (2nd ed.). Wiley-Blackwell. ISBN 9781119111450

Meticulously reviewed and updated for today's medical students, *Basic Immunology*, *6th Edition*, is a concise text expertly written by the same distinguished author team as the best-selling, comprehensive text, *Cellular and Molecular Immunology*. This focused, easy-to-understand volume uses full-color illustrations and clinical images, useful tables, and practical features such as Summary Point boxes, end-of-chapter review questions, glossary terms, and clinical cases – all designed to help students master this complex topic in the most efficient, effective manner possible.

TD612/Ab210

Essentials of Human Anatomy & Physiology helps students focus on the essentials of A&P, without getting sidetracked in unnecessary details. The brief and accessible text combines short, easy-to-read chapters with easy-to-follow figures to provide a near-perfect level and depth of content that students need to succeed in the one-semester A&P course. The authors hallmark clear and friendly writing style features familiar analogies and abundant mnemonic cues to help students learn and remember concepts. The 13th Edition presents new study tools at the end of each chapter and new digital resources to help students study more efficiently.

TD611/Ma605

7

Stroke Nursing is the leading guide for optimal stroke care, facilitating the provision of evidence-based practice across the stroke journey, and covering the sixteen elements of care outlined in the UK's Stroke-Specific Education Framework (SSEF).

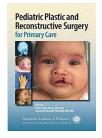
Drawing from years of clinical and research experience, the authors provide practical guidance on the essential areas of stroke nursing, including stroke classification, stabilisation, thrombolysis and thrombectomy, rehabilitation and recovery, nutrition and oral care, palliative and long-term care, physical impairment management, and more.

Now in its second edition, this indispensable guide helps practitioners expand their knowledge, skills and competence in all areas of stroke nursing services.

- Adopts a practical and evidence-based approach to stroke management, exploring UK and international perspectives;
- Authored by expert clinicians and leaders in the field of nursing practice, research and education:
- Includes updated case studies and practice examples, expanded coverage of clinical application in practice, and new discussions of the knowledge and skills required by nurses.

Stroke Nursing is essential reading for students of nursing and neuroscience, and is the definitive reference for practicing nurses and healthcare professionals caring for stroke patients.

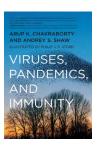
TD616.8/St812



American Academy of Pediatrics. (2020). Pediatric Plastic and Reconstructive Surgery for Primary Care (P.J. Taub, & T.W. King, Eds.). American Academy of Pediatrics. ISBN 9781610023955



Burdzik, R. (2022). Epidemic Risk Analysis and Assessment in Transport Services: COVID-19 and Other Viruses (1st ed.). CRC Press. ISBN 9781032069616



Chakraborty, A., & Shaw, A.S. (2021). Viruses, Pandemics, and Immunity. The MIT Press. ISBN 9780262542388

With contributions from the leading experts in the field, Pediatric Plastic and Reconstructive Surgery for Primary Care provides primary care pediatricians and other professionals who care for children comprehensive coverage of both common and rare congenital and acquired pediatric conditions. More than 16 chapters offer guidance on when to treat and when to wait, on the timing of corrective surgeries in pediatric patients, and on and surgical strategies and complications. Includes more than 200 full-color photos and images. Nonsurgical management and brief descriptions of how corrective procedures are performed are also discussed, which is helpful to primary care pediatricians in counseling patients and conducting long-term patient follow-up. Topics include:

- Cleft lip and palate repair;
- Burns and surgical repair;
- Vascular anomalies;
- · Bite wounds;
- Scars and scar management;
- Hypertrophic scars and keloids;
- Gynecomastia;
- Cleft hand and surgical repair;
- Facial palsy;
- Breast anomalies and more.

EBSCOhost Ebook Academic Collection

8

The effects of a pandemic on public, personal and freight transport can be sudden and massive, and yet transport is vital to the functioning of an advanced economy and society. On the other hand, transport, due to social mobility, has a decisive influence on the speed and scope of epidemic spread. This book presents a complete methodology for assessing the hazards, and probability and risks of viral transmission on transport services, using as a detailed example the SARS-CoV-2 coronavirus pandemic. It gives proposals and recommendations for estimating human deaths caused by virus infection in transport. Significantly, it considers not only passenger transport but also freight transport, such as delivery or parcel services. The tools include a matrix of hazard assessment in various transportation services, with a methodology for estimating the probability of virus transmission through both droplets and surface contact. These allow estimation of the effects of infections and consequent epidemic risk in all kinds of transport services, including freight, and provide methods for forecasting and risk management which determine transport safety.

TD616.9/Bu440

How viruses emerge to cause pandemics, how our immune system combats them, and how diagnostic tests, vaccines, and antiviral therapies work.

Throughout history, humans have contended with pandemics. History is replete with references to plagues, pestilence, and contagion, but the devastation wrought by pandemics had been largely forgotten by the twenty-first century. Now, the enormous human and economic toll of the rapidly spreading COVID-19 disease offers a vivid reminder that infectious disease pandemics are one of the greatest existential threats to humanity. This book provides an accessible explanation of how viruses emerge to cause pandemics, how our immune system combats them, and how diagnostic tests, vaccines, and antiviral therapies work – concepts that provide the foundation for our public health policies.

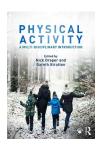
The authors, both experts in immunology, interweave explanations of scientific principles and ongoing efforts to combat COVID-19 with stories of the people behind the science. They recount the eradication of smallpox – the greatest accomplishment of vaccines and public health; discuss microbial pathogens; and describe what we know about modern pandemics, including how they spread, how they can be

contained, and how they can be treated. They do not offer prescriptions for what to do, but equip readers to be informed participants in debates about how to create a more pandemic-resilient world. We do not have to repeat the mistakes made with COVID-19.

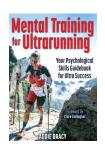
TD616.9/Ch117



Klein, B., & Loyet, M. (2020). Yoga and Anatomy: An Experiential Atlas of Movement. Thieme. ISBN 9781626238305



Draper, N., & Stratton, G. (Eds.). (2019). Physical Activity: A Multi- Disciplinary Introduction. Routledge. ISBN 9781138696617



Bracy, A.J. (2022).

Mental Training for

Ultrarunning: Your

Psychological Skills

Guidebook for Ultra

Success. Human Kinetics.

ISBN 9781718200173

Yoga and Anatomy: An Experiential Atlas of Movement describes the muscular actions responsible for the movements of the body during the practice of yoga. In the first part, asanas (postures) are grouped by distinct categories: standing poses, forward folds, backbends, spinal twists, and more. The second part provides an atlas reference that connects the underlying anatomy with the muscles used to produce these movements.

Key Features:

- A series of three to four transitions along with contraindications and modifications safely guide readers through each pose;
- Connections are delineated through the labeling of muscles used during each transition, as well as illustrated overlaid anatomy included in the final image of each *asana*;
- High-quality figures and tables reinforce each muscle's origin, insertion, action, innervation, and relationship to other anatomical structures.

This is an essential anatomical self-study resource for students of physical therapy, osteopathic, and allopathic medicine. It also provides a thorough learning and teaching tool for yoga anatomy and mindful movement workshops in medical and allied health profession programs.

TD613.71/Yo001

Physical activity and its relationship to health is one of the great issues of our age. The causes of, and solutions to, physical inactivity are complex and multi-dimensional, and therefore the subject needs to be studied and understood from a variety of perspectives. This is the first textbook to provide a truly multi-disciplinary introduction to physical activity studies.

Offering a complete foundation to the subject, it covers the basics of every core discipline from biochemistry, public health and biomechanics to physiology, sport psychology and sociology. It introduces a full range of topics across the physical activity curriculum, including behaviour change, motor skill development, nutrition, exercise prescription, public health policy, and physical education, providing a well-balanced and international perspective on each important issue. There is also a strong emphasis throughout the book on the practical, applied dimensions of physical activity, including innovative approaches to promotion and intervention tailored to every age range and environment.

Physical Activity: A Multi-disciplinary Introduction is an indispensable companion to any course or degree programme with an emphasis on physical activity and health.

TD796.035/Ph980

9

It's no secret that if you plan to run in the toughest endurance races, you need to physically prepare for the extreme demands you will be subjecting your body to. But successful runners will be quick to note that physical preparation is only part of the equation. You need to be mentally strong to withstand, and overcome, the challenges of this grueling sport. That's where Mental Training for Ultrarunning comes in.

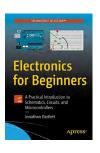
Sport psychology consultant Addie Bracy has coached and provided mental performance consulting to elite athletes in many sports, and she herself has been a competitive distance runner for more than two decades. In *Mental Training for Ultrarunning*, she combines her first-hand coaching and running experience, along with profiles of ultrarunners who've experienced the highs and lows of the sport, to explain what you need to know and practice in order to cross that finish line.

In this book, you will learn tools and techniques to help you prepare for and overcome some of the biggest mental and emotional challenges you may encounter in ultrarunning. You'll find more than 35 practical activities that will guide you in taking an introspective look at your own potential roadblocks so you can develop and strengthen the skills you need to run with confidence.

Whether you're training for your first ultra or looking to compete at a higher level, *Mental Training for Ultrarunning* will prepare you for the good, the bad, and the worst experiences you might encounter on the trail, road, or track. With expert guidance from athletes who have seen it all, you'll learn how to train your mind and anticipate all the variables that could keep you from achieving your ultimate running goals.

Audience: Ultrarunners who want to improve their performance in the sport; distance runners who are training or preparing for their first ultra; coaches and sport psychologists who support ultrarunners.

TD796.422/Br013



Bartlett, J. (2020).
Electronics for Beginners:
A Practical Introduction
to Schematics, Circuits,
and Microcontrollers.
Apress.
ISBN 9781484259788



Nisan, N., & Schocken, S. (2021). The Elements of Computing Systems (2nd ed.). The MIT Press. ISBN 9780262539807

Starting with the basics of electricity and circuits, you'll be introduced to digital electronics and microcontrollers, capacitors and inductors, and amplification circuits – all while gaining the basic tools and information you need to start working with low-power electronics.

Electronics for Beginners walks the fine line of focusing on projects-based learning, while still keeping electronics front and center. You'll learn the mathematics of circuits in an uncomplicated fashion and see how schematics map on to actual breadboards. Written for the absolute beginner, this book steers clear of being too math heavy, giving readers the key information they need to get started on their electronics journey.

You will:

- Review the basic "patterns" of resistor usage – pull up, pull down, voltage divider, and current limiter;
- Understand the requirements for circuits and how they are put together;
- Read and differentiate what various parts of the schematics do;
- Decide what considerations to take when choosing components;
- Use all battery-powered circuits, so projects are safe.

10

TD621.38/Ba729

A new and extensively revised edition of a popular textbook used in universities, coding boot camps, hacker clubs, and online courses.

The best way to understand how computers work is to build one from scratch, and this textbook leads learners through twelve chapters and projects that gradually build the hardware platform and software hierarchy for a simple but powerful computer system. In the process, learners gain hands-on knowledge of hardware, architecture, operating systems, programming languages, compilers, software engineering, and relevant algorithms and data structures. Using this constructive approach, the book introduces readers to a significant body of computer science knowledge and synthesizes key theoretical and applied techniques into one constructive framework. The outcome is known as Nand to Tetris: a journey that starts with the most elementary logic gate, called *Nand*, and ends, twelve projects later, with a general-purpose computer system capable of running Tetris and any other program that comes to your mind. The first edition of this popular textbook inspired Nand to Tetris courses in many universities, coding boot camps, hacker clubs, and online course platforms. This second edition has been extensively revised. It has been restructured into two distinct parts - part I, Hardware, and part II, Software – with six projects in each part. All chapters and projects have been rewritten, with an emphasis on separating abstraction from implementation, and many new sections, figures, and examples have been added. Substantial new appendixes offer focused presentation on technical and theoretical topics.

TD004/Ni900

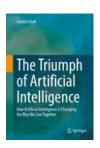


Rahman, W. (2020). *Al and Machine Learning*. Sage Publications Pvt. Ltd.

ISBN 9789353884437

Was Rahman's Al and Machine Learning achieves that rare balance of making a difficult and complex topic accessible to non-specialists, without dumbing down. He starts with an enlightening and entertaining explanation of what artificial intelligence (AI) is and how it works. This includes often-overlooked fundamentals like what we actually mean by "intelligence", artificial or otherwise. Rahman brings his explanations to life with lucid and, at times, surprising examples of Al already in use around us. He takes these back to first principles, deftly avoiding any need to understand the maths or computing involved. This allows him to demystify what the technology is really doing and show us that much of it is reassuringly mundane, despite the hype. This distinctive approach comes into its own when examining the challenges and risks of Al. It allows the author to remove the drama and fear of sensationalized headlines and doom-laden movie plots. In their place, he offers an insightful analysis of how the major issues surface, what options we have for addressing them and why some dilemmas may prove intractable. A mustread to understand the reality and implications of Al beyond the hype!

EBSCOhost Ebook Academic Collection



Cisek, G. (2021). The Triumph of Artificial Intelligence: How Artificial Intelligence is Changing the Way We Live Together. Springer. ISBN 9783658348953



Niku, S.B. (2020).
Introduction to Robotics:
Analysis, Control,
Applications (3rd ed.).
Wiley.
ISBN 9781119527626

The reader first receives a comprehensive overview of the development and complex techniques of AI in an easy-to-understand presentation. Then, with a wink, all areas of application of AI are described in detail with the most current examples - critically evaluating, so that the reader may feel AI-firm. At the end of the book the author alerts the reader with imaginative future scenarios in an amusing way, what breathtaking perspectives are connected with AI in the sense of evolution.

This book is a translation of the original German 1st edition *Machtwechsel der Intelligenzen* by Günter Cisek, published by Springer Fachmedien Wiesbaden GmbH, part of Springer Nature in 2021. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily in terms of content, so that the book will read stylistically differently from a conventional translation. Springer Nature works continuously to further the development of tools for the production of books and on the related technologies to support the authors.

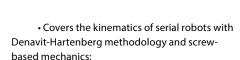
11

TD004.8/Ci750

The revised and updated third edition of *Introduction to Robotics: Analysis, Control, Applications*, offers a guide to the fundamentals of robotics, robot components and subsystems and applications. The author – a noted expert on the topic – covers the mechanics and kinematics of serial and parallel robots, both with the Denavit-Hartenberg approach as well as screwbased mechanics. In addition, the text contains information on microprocessor applications, control systems, vision systems, sensors, and actuators.

Introduction to Robotics gives engineering students and practicing engineers the information needed to design a robot, to integrate a robot in appropriate applications, or to analyze a robot. The updated third edition contains many new subjects and the content has been streamlined throughout the text. The new edition includes two completely new chapters on screw-based mechanics and parallel robots. The book is filled with many new illustrative examples and includes homework problems designed to enhance learning. This important text:

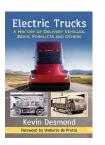
- Offers a revised and updated guide to the fundamental of robotics;
- Contains information on robot components, robot characteristics, robot languages, and robotic applications;



- Includes the fundamentals of control engineering, including analysis and design tools;
 - Discusses kinematics of parallel robots.

Written for students of engineering as well as practicing engineers, *Introduction to Robotics, Third Edition*, reviews the basics of robotics, robot components and subsystems, applications, and has been revised to include the most recent developments in the field.

TD681.5/Ni805



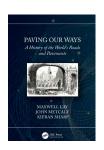
Desmond, K. (2020). Electric Trucks: A History of Delivery Vehicles, Semis, Forklifts and Others. McFarland & Company, Inc., Publishers. ISBN 9781476676159

Welcomed at end of the 19th century as the solution to the severe problem of horse manure in city streets, electric trucks soon became the norm for short-haul commercial deliveries.

Though reliable, they were gradually replaced by gasoline-powered trucks for long-haul deliveries – although a fleet of electric milk trucks survived in Great Britain into the 1960s.

Industrial electric vehicles never disappeared from factories and ports. During the past decade, with the availability of the lithium-ion battery, the electric truck is back on the road for all payloads and all distances. The fourth in a series covering the history and future of electric transport, this book chronicles the work of the innovative engineers who perfected e-trucks large and small.

TD629.3-83/De788



Lay, M.G., Metcalf, J., & Sharp, K. (2021). Paving Our Ways: A History of the World's Roads and Pavements (1st ed.). CRC Press, Taylor & Francis Group.
ISBN 9780367520786



Cowie, J., & Ison, S. (Eds.). (2020). The Routledge Handbook of Transport Economics. Routledge, Taylor & Francis Group. ISBN 9781138847491

Paving Our Ways covers the international history of road paving in an interesting, readable and technically accurate way. It provides an overview of the associated technologies in a historical context.

It examines the earliest pavements in Egypt and Mesopotamia and then moves to North Africa, Crete, Greece and Italy, before a review of pavements used by the Romans in their magnificent road system. After its empire collapsed, Roman pavements fell into ruin. The slow recovery of pavements in Europe began in France and then in England.

The work of Trésaguet, Telford and McAdam is examined. Asphalt and concrete slowly improved as paving materials in the second part of the 19th century. Major advances occurred in the 20th century with the availability of powerful machinery, pneumatic tyres and bitumen. The advances needed to bring pavements to their current development are explored, as are the tools for financing, constructing, managing and maintaining pavements.

The book should appeal to those interested in road paving, and in the history of engineering and transport. It can also serve as a text for courses in engineering history.

12

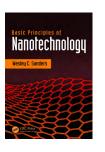
TD625/La973

The Routledge Handbook of Transport Economics offers the first state of the art overview of the discipline of transport economics as it stands today, reflective of key research and policy. Transport is an important area of study and one which is problem rich, stimulating a great deal of debate in areas which impact on everyday lives. Much of this focuses on the practicalities of the modern-day phenomenon of mass movement and all of the issues which surround it. The discipline of economics is central to this debate, and consequently the study and application of transport economics has a chief role to play in seeking to address subjects relating to major transport issues. It can be argued that at the very heart of any transport issue or problem lies the underlying economics of the situation – understand that and you alleviate the problem.

Featuring contributions from world-leading scholars and practitioners from across the globe, all of the chapters within this book are written from a practical perspective; theory is applied and developed using real-world examples. The book examines concepts, issues, ideas and practicalities of transport provision in five key topic areas: public transport; public transport reform; economic development and transport modelling; transport and the environment; freight transport.

A real strength of the book is in linking theory to practice, and hence the 'economics' that are examined in this text are not the economics of the abstract, but rather the economics of everyday living. Practical and insightful, this volume is an essential reference for any student or researcher working in all areas of transport provision, ranging from planning, appraisal, regulation and freight; and for all practitioners looking to develop their professional knowledge and who are seeking professional accreditation.

TD629/Ro852



Sanders, W.C. (2018). Basic Principles of Nanotechnology. CRC Press. ISBN 9781138483613

The book allows the reader to have a basic understanding of the structure and properties of nanoscale materials routinely used in nanotechnology-based research and industries. To add, the book describes the operation of nanoscale transistors and the processes used to fabricate the devices. Additionally, it presents research involving the use of carbon nanotubes, graphene, and molecules to create non-silicon based electronic devices. It aims to provide an understanding of the operation of the most frequently used fabrication and characterization procedures, such as scanning electron microscopy, atomic force microscopy, etch, e-beam lithography, and photolithography.

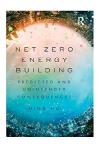
The book:

- Provides explanations of the common techniques used in nanofabrication;
- Focuses on nanomaterials that are almost exclusively used in academic research and incorporated in consumer materials, such as carbon nanotubes, graphene, metal nanoparticles, quantum dots, and conductive polymers;
- Each chapter begins with a list of key objectives describing major content covered;
- Includes end-of-chapter questions to reinforce chapter content.

TD620.3/Sa516



Costa, V. (2019). Modern Metals in Cultural Heritage: Understanding and Characterization. Getty Conservation Institute. ISBN 9781606066058



Hu, M. (2019).

Net Zero Energy

Building: Predicted

and Unintended

Consequences.

Routledge.

ISBN 9780815367796

The proliferation of new metals – such as stainless steels, aluminum alloys, and metallic coatings – in modern and contemporary art and architecture has made the need for professionals who can address their conservation more critical than ever. This volume seeks to bridge the gap between the vast technical literature on metals and the pressing needs of conservators, curators, and other heritage professionals without a metallurgy background. It offers practical information in a simple and direct way, enabling curators, conservators, and artists alike to understand and evaluate the objects under their care.

This invaluable reference reframes information formerly found only in specialized technical and industrial publications for the context of cultural heritage conservation. As the first book to address the properties, testing, and maintenance issues of the hundreds of metals and alloys available since the beginning of the twentieth century, it is destined to become an essential resource for conservators, artists, fabricators, curators, collectors, and anyone working with modern metals.

TD620.1/Co771

What do we mean by net zero energy? Zero operating energy? Zero energy costs? Zero emissions? There is no one answer: approaches to net zero building vary widely across the globe and are influenced by different environmental and cultural contexts.

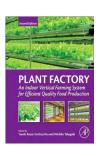
The book presents a comprehensive overview of variations in 'net zero' building practices. Drawing on examples from countries such as the United States, United Kingdom, Germany, Japan, Hong Kong, and China, Ming Hu examines diverse approaches to net zero and reveals their intended and unintended consequences.

Existing approaches often focus on operating energy: how to make buildings more efficient by reducing the energy consumed by climate control, lighting, and appliances. Hu goes beyond this by analyzing overall energy consumption and environmental impact across the entire life cycle of a building – ranging from the manufacture of building materials to transportation, renovation, and demolition. Is net zero building still achievable once we look at these factors?

With clear implications for future practice, this is key reading for professionals in building design, architecture, and construction, as well as students on sustainable and green architecture courses.

TD69:502/Hu001

13



Kozai, T., Niu, G., & Takagaki, M. (Eds.). (2020). Plant Factory: An Indoor Vertical Farming System for Efficient Quality Food Production (2nd ed.). Elsevier. ISBN 9780128166918



Verzone, C., & Woods, C. (2021). Food Urbanism: Typologies, Case Studies, Strategies (D. Alexander, Ed.). Birkhäuser. ISBN 9783035615999



Randall, N.P., & Smith, B. (2020). *The Biology of Agroecosystems* (1st ed.). Oxford University Press. ISBN 9780198737537

The book presents a comprehensive look at the implementation of plant factory (PF) practices to yield food crops for both improved food security and environmental sustainability. Edited and authored by leading experts in PF and controlled environment agriculture (CEA), the book is divided into five sections, including an Overview and the Concept of Closed Plant Production Systems (CPPS), the Basics of Physics and Physiology - Environments and Their Effects, System Design, Construction, Cultivation and Management and Plant Factories in Operation. In addition to new coverage on the rapid advancement of LED technology and its application in indoor vertical farming, other revisions to the new edition include updated information on the status of business R&D and selected commercial PFALs (plant factory with artificial lighting). Additional updates include those focused on micro and mini-PFALs for improving the quality of life in urban areas, the physics and physiology of light, the impact of PFAL on the medicinal components of plants, and the system design, construction, cultivation and management issues related to transplant production within closed systems, photoautotrophic micro-propagation and education, training and intensive business forums on PFs.

TD631.5/PI200

With an increasing interest in quality of nutrition and health, urban food production has begun to occur inside the growing cities worldwide and risks to compete with other urban needs.

The book introduces typologies, tools, evaluation methods and strategies, and shows the practical applications of the methods. Multiple projects illustrate solutions that augment quality via the insertion of food production entities into the urban realm.

- Codified typologies, urban strategies and evaluation criteria for urban food production;
- Food production is important in the evolving city and contributes to new urban quality.

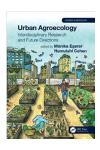
TD63:711.4/Ve784

14

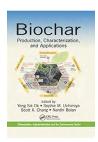
The Biology of Agroecosystems provides an introduction to the biological and ecological attributes of ecosystems and the biological impacts of agriculture on the wider environment. Global human populations are rising and diets are becoming ever more complicated, leading to requirements for increased levels of food production. Natural biotopes are becoming increasingly fragmented as agricultural activities expand around them. Agroecosystems occur from the tropics to subarctic environments and comprise systems as varied as annual crops, perennial grasslands, orchards, and agroforestry systems. They presently cover almost 40 per cent of the terrestrial land surface and significantly shape landscapes at a global scale. The book outlines the origin and development of agriculture and summarizes the characteristics of different types of agroecosystems. The conflicts between management of land for productivity and conservation of natural resources are discussed, and some of the key biological issues (loss of biodiversity, instability, susceptibility to pests, for example) are explored. Individual chapters introduce the role of functional groups such as pollinators, nutrient cycling organisms, and pest regulators; the importance of soils and soil organisms for agriculture; and the biological impacts of water use in agroecosystems. Globalization

of agriculture is explored, and includes drivers of change, such as shifting diets, and biological challenges, such as the spread of pest species. The final chapters outline different management methods for sustainable management of agroecosystems, and consider the future challenges and opportunities for agriculture and the biology of agroecosystems.

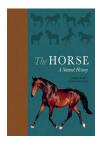
TD631/Ra522



Egerer, M., & Cohen, H. (Eds.). (2021). Urban Agroecology: Interdisciplinary Research and Future Directions (1st ed.). CRC Press. ISBN 9780367260019



Ok, Y.S., Uchimiya, S.M., Chang, S., & Bolan, N. (Eds.). (2020). Biochar: Production, Characterization, and Applications. CRC Press. ISBN 9780367658762



Busby, D.K., & Rutland, K. (2019). *The Horse:* A Natural History. Princeton University Press, Ivy Press. ISBN 9780691178776

Today, 20 percent of the global food supply relies on urban agriculture: social-ecological systems shaped by both human and non-human interactions. This book shows how urban agroecologists measure flora and fauna that underpin the ecological dynamics of these systems, and how people manage and benefit from these systems. It explains how the sociopolitical landscape in which these systems are embedded can in turn shape the social, ecological, political, and economic dynamics within them. Synthesizing interdisciplinary approaches in urban agroecology in the natural and social sciences, the book explores methodologies and new directions in research that can be adopted by scholars and practitioners alike. With contributions from researchers utilizing both social and natural science approaches, *Urban Agroecology* describes the current social-environmental understandings of the science, the movement and the practices in urban agroecology. By investigating the role of agroecology in cities, the book calls for the creation of spaces for food to be sustainably grown in urban spaces: an Urban Agriculture (UA) movement. Essential reading for graduate students, practitioners, policy makers and researchers, this book charts the course for accelerating this movement.

TD63:711.4/Ur140

Encompassing high priority research areas such as bioenergy production, global warming mitigation, and sustainable agriculture, biochar has received increased worldwide interest in the past decade.

Biochar: Production, Characterization, and Applications covers the fundamentals of biochar including its concept, production technology, and characterization. The book builds on this foundation by providing examples of state-of-the-art biochar application technology in agronomy and environmental sciences, along with detailed case studies.

Edited by a group of well-known biochar experts and including chapters written by a group of international experts in their field, this valuable resource can be used both as a textbook for graduate courses or as a handbook for policy makers and practitioners in the field.

TD631.4/Bi640

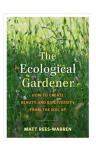
There are countless books about keeping and riding horses. *The Horse* is different: it looks not only at the natural history of the horse in the context of its use by humans, but also at its own, independent story, describing the way horses live, think, and behave both alongside people and on their own. Beautifully designed and illustrated, *The Horse* provides an engaging and accessible introduction to these beloved animals.

Beginning with evolution and development, The Horse tells how horses came into being more than fifty million years ago and were first domesticated more than five thousand years ago, eventually spreading across the globe. Chapters on Anatomy & Biology and Society & Behavior explain equine anatomy and how it has affected the lives and social structure of horses, and outline current scientific thinking on their behavior as individual and herd animals, including information on communication between horses. A chapter on Horses & People provides a thorough overview of the horse's many important roles in human history and today, from pack animal to sporting champion. Finally, the book ends with an engrossing and visually stunning photographic gallery of some fifty popular breeds of horses and ponies with essential information about each.

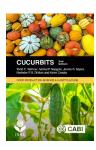
Filled with surprising facts and insights, this book will delight anyone who loves horses and wants to understand them better.

- Provides a comprehensive, richly illustrated introduction to the evolution, development, domestication, and behavior of the horse from life cycle, breeding, coats and colors, and the senses to courtship, parenting, communication, emotions, and learning;
- Tells the full story of horses, from their earliest fossil ancestors to the modern-day *Equus*;
- Offers a detailed survey of how horses and humans have interacted since horses were domesticated, including their use for work and war in the past and recreational and competitive riding today:
- Features infographics, diagrams, and more than 250 stunning color photographs;
- Includes a beautiful photographic directory to some 50 popular breeds.

TD636.1/Bu673



Rees-Warren, M.
(2021). The Ecological
Gardener: How to
Create Beauty and
Biodiversity from the
Soil up. Chelsea Green
Publishing.
ISBN 9781645020073



Wehner, T.C., Naegele, R.P., Myers, J.R., Dhillon, N.P.S., & Crosby, K. (2020). *Cucurbits* (2nd ed.). CAB International. ISBN 9781786392916



Harrison, C., & Kirkham, T. (2020). *Remarkable Trees*. Thames & Hudson. ISBN 9780500021927

Ecological garden designer Matt Rees-Warren shares inspirational design ideas and practical projects to help you create a garden that is both beautiful today and sustainable tomorrow.

The Ecological Gardener will give you the tools to create an abundant, healthy garden from the soil up – a garden that welcomes birds and bees and allows native planting and wild flowers to flourish, with minimal carbon impact or need for fresh water. This book can guide both novice and experienced gardeners alike in their journey to a more ecological approach, and is full of practical projects and information, including:

- Finding the right design for your space;
- Creating a wildflower meadow;
- Building rainwater catchments and other tips for water conservation;
- Making compost from kitchen waste, leaf mold, compost tea and more;
- Creating a space for wildlife such as hedgehogs, bees and other pollinators;
- Finding beauty in your garden during the winter.

TD631.147/Re156

Completely updated with new content and full-colour figures throughout, the second edition of this successful book continues to provide complete coverage relating to the production of cucurbits, including cucumbers, gourds, muskmelons, pumpkins, squashes and watermelons. These crops are grown worldwide and represent one of the largest and most important groups of horticultural food plants. This second edition of *Cucurbits* provides up-to-date, succinct and authoritative knowledge on this variety of crops and reflects on significant advances in the areas of production, breeding and evolution. This new edition:

- Contains new chapters on abiotic stresses and cucurbits for health;
- Includes major updates in research on the evolution, movement and distribution of species;
- Explores new genetic resources and breeding advancements:
- Delivers current information on methods of improving yield (e.g. grafting) and the management and resistance for pests and diseases;
- Has an updated list of the most recent taxonomic names.

This book represents a current and comprehensive guide to cucurbits, is highly illustrated and written in an accessible style. It is an essential resource for students, growers and researchers.

TD635/We195

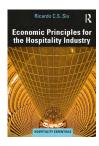
Trees are the treasures of the natural world and have long been special to us, not only for their beauty and character, but also because down the ages they have been central to human existence in numerous ways.

Every tree has its own story and here two experts from the Royal Botanic Gardens, Kew, have selected over 60 for their particular resonance and connection to us, representing most of the world's major habitats. In portraits that combine vivid cultural and historical narrative with a firm scientific grounding, the authors reveal the details of trees from around the world, some familiar and others less well known outside their local regions. We use timbers for building and creating, have discovered which tree fruits and seeds taste delicious, and which can kill or cure us, as well as which species add colour and spirituality to our lives - from the timber of mahogany to the delights of chocolate and pomegranate, from the medicinal tea tree to the deadly manchineel, and from fragrant frankincense to the highly prized dragon's blood tree.

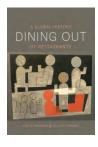
Many trees have also become revered over time, and they have inspired artists and botanists alike for centuries. A varied and beautiful range of images from the unrivalled collections at Kew illustrate the stories told here, to create this enlightening and enchanting book.

TD635.054/Ha597

Viesmīlība



Siu, R.C.S. (2020). Economic Principles for the Hospitality Industry (1st ed.). Routledge. ISBN 9781138090644



Rawson, K., & Shore, E. (2019). Dining Out: A Global History of Restaurants. Reaktion Books. ISBN 9781789140576



Susskind, A.M., &
Maynard, M. (Eds.).
(2019). The Next
Frontier of Restaurant
Management (1st ed.).
Cornell University Press.
ISBN 9781501736513

Economic Principles for the Hospitality Industry is the ideal introduction to the fundamentals of economics in this dynamic and highly competitive sector.

Applying economic theory to a range of diverse and global hospitality industry settings, this book gives the theory real-world context. Looking at critical issues around sustainable economic development in the hospitality industry such as diversification, technology, determinants of demand, and pricing, it enables students to effectively conduct business analyses, evaluate business performance and conduct effective improvements over time. Written in an engaging style, this book assumes no prior knowledge of economics and contains a range of features, including international case studies and discussion questions, to aid beginners in the subject.

This will be an essential introductory yet comprehensive resource on economics for all hospitality students.

TD640.4/Si920

A global history of restaurants beyond white tablecloths and maître d's, this book presents restaurants as both businesses and as venues for a range of human experiences. From banquets in tenth-century China to the medicinal roots of French restaurants, the origins of restaurants are not singular – nor is the history this book tells. This book highlights stories across time and place, including how Chifa restaurants emerged from the migration of Chinese workers and their marriage to Peruvian businesswomen in nineteenth century Peru; how Alexander Soyer transformed kitchen chemistry by popularizing the gas stove, predating the pyrotechnics of molecular gastronomy by a century; and how Harvey Girls dispelled the ill repute of waiting tables, making rich lives for themselves across the American West. An informed and entertaining history that takes readers from the world's first restaurants in Kaifeng to the latest high-end dining experiences.

TD640.43/Ra947

17

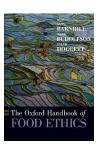
The Next Frontier of Restaurant Management brings together the latest research in hospitality studies to offer students, hospitality executives, and restaurant managers the best practices for restaurant success. Alex M. Susskind and Mark Maynard draw on their experiences as a hospitality educator and a restaurant industry leader, respectively, to guide readers through innovative articles that address specific aspects of restaurant management:

- Creating and preserving a healthy company culture;
- Developing and upholding standards of service;
- Successfully navigating guest complaints to promote loyalty;
- Creating a desirable (and profitable) ambiance;
- Harnessing technology to improve guest and employee experiences;
 - · Mentoring employees.

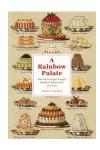
Maynard and Susskind detail the implementation of effective customer management and staff training, design elements such as seating and lighting, the innovative use of data to improve the guest experience, and both consumer-oriented and operation-based technologies. They conclude with a discussion of the human factor that is the foundation of the hospitality

industry and the importance of a healthy workplace culture. As Susskind and Maynard show, successful restaurants don't happen by accident.

TD640.43/Ne960
EBSCOhost Ebook Academic Collection



Barnhill, A., Budolfson, M., & Doggett, T. (Eds.). (2020). The Oxford Handbook of Food Ethics. Oxford University Press. ISBN 9780197508732



Cobbold, C. (2020).

A Rainbow Palate: How
Chemical Dyes Changed
the West's Relationship
with Food. University of
Chicago Press.
ISBN 9780226727059

Octopuses,
Squid &
Cuttlefish

Seatod for Today
and for the Fature

Mouritsen, O.G., & Styrbæk, K. (2021). Octopuses, Squid & Cuttlefish: Seafood for Today and for the Future. Springer. ISBN 9783030580261

Academic food ethics incorporates work from philosophy but also anthropology, economics, the environmental sciences and other natural sciences, geography, law, and sociology. Scholars from these fields have been producing work for decades on the food system, and on ethical, social, and policy issues connected to the food system. Yet in the last several years, there has been a notable increase in philosophical work on these issues-work that draws on multiple literatures within practical ethics, normative ethics and political philosophy. This handbook provides a sample of that philosophical work across multiple areas of food ethics: conventional agriculture and alternatives to it; animals; consumption; food justice; food politics; food workers; and, food and identity.

TD664/0x250

We live in a world saturated by chemicals – our food, our clothes, and even our bodies play host to hundreds of synthetic chemicals that did not exist before the nineteenth century. By the 1900s, a wave of bright coal tar dyes had begun to transform the Western world. Originally intended for textiles, the new dyes soon permeated daily life in unexpected ways, and by the time the risks and uncertainties surrounding the synthesized chemicals began to surface, they were being used in everything from clothes and home furnishings to cookware and food.

In A Rainbow Palate, Carolyn Cobbold explores how the widespread use of new chemical substances influenced perceptions and understanding of food, science, and technology, as well as trust in science and scientists. Because the new dyes were among the earliest contested chemical additives in food, the battles over their use offer striking insights and parallels into today's international struggles surrounding chemical, food, and trade regulation.

TD664/Co025

18

Humans everywhere have always been fascinated by octopuses, squid, and cuttlefish, known biologically as cephalopods. They evolved hundreds of millions of years ago and are related to molluscs such as mussels and snails. They can grow to an enormous size with eyes as big as footballs, but they still live for only a couple of years. They mate once in their lifetime and die shortly after. They have blue blood and three hearts and they can shoot out jet-black ink. They have a brain and have behaviours that could be interpreted as signs of intelligence, even though more than half of their brain is distributed in their arms. They are colour blind, but they can change the colour of their skin in a flash. They are masters of disquise and are able to alter the texture of their skin and the patterns displayed on it at lighting speed. They can also 'taste' using the suckers on their arms. They can move extremely fast thanks to a jet-propulsion system built into their body cavity.

Although they are soft-bodied and look vulnerable, cephalopods are formidable predators. Octopuses have arms that are so strong that they can exert a force equal to hundreds of times their own body weight. Squid and cuttlefish can shoot out a tentacle to capture prey at the speed of a javelin thrown by an expert athlete.

Cephalopods are, however, so much more

than just fascinating creatures with strange physical characteristics. They are a nutritious, delicious protein source that has found a place for thousands of years in many food cultures around the world. As squid, cuttlefish, and octopuses are native to virtually all parts of the ocean, they are an excellent and available alternative to meat from terrestrial animals.

This book is written to promote the overall place of cephalopods in home kitchens and to inspire the uninitiated to add them to their diet. It describes the many facets of their anatomy that play a central role in their potential use as healthy, diverse, and interesting food sources, with a particular emphasis on their taste and texture. By way of an assortment of recipes, the authors hope to dispel the myth that it is difficult to prepare delicious dishes using squid, cuttlefish, and octopuses. In addition, there are contributions to the on-going discussions about how marine resources can be exploited more responsibly in a sustainable manner.

TD637.5/Mo885



Morris, J. (2019). Coffee: A Global History. Reaktion Books. ISBN 9781789140026



Smith, A.K. (2021).
Cabbage and Caviar:
A History of Food in
Russia. Reaktion Books.
ISBN 9781789143645

Coffee is a global beverage: it is grown commercially on four continents, and consumed enthusiastically in all seven. There is even an Italian espresso machine on the International Space Station. Coffee's journey has taken it from the forests of Ethiopia to the *fincas* of Latin America, from Ottoman coffee houses to 'Third Wave' cafés, and from the simple coffee pot to the capsule machine. In *Coffee: A Global History*, Jonathan Morris explains how the world acquired a taste for coffee, yet why coffee tastes so different throughout the world.

Morris discusses who drank coffee, as well as why and where, how it was prepared and what it tasted like. He identifies the regions and ways in which coffee was grown, who worked the farms and who owned them, and how the beans were processed, traded and transported. He also analyses the businesses behind coffee – the brokers, roasters and machine manufacturers – and dissects the geopolitics linking producers to consumers. Written in an engaging style and featuring wonderful recipes, stories and facts, this book will fascinate foodies, food historians and the many people who regard the humble coffee bean as a staple of modern life.

TD663.9/Mo643

When people think of Russian food they generally think either of opulent luxury, signified above all by caviar, or of poverty and hunger – of cabbage and potatoes and porridge. Both of these visions have a basis in reality, but both of them are incomplete. The history of food and drink in Russia includes hunger and it includes plenty, it includes scarcity and, for some, at least, abundance. It includes dishes that came out of the northern, forested regions and ones that incorporate foods from the wider Russian Empire and later from the Soviet Union. Cabbage and Caviar places Russian food and drink in the context of Russian history, and shows off the incredible (and largely unknown) variety of Russian food.

TD641.568/Sm580

19



Lynge-Jorlén, A. (Ed.). (2020). Fashion Stylists: History, Meaning and Practice. Bloomsbury Visual Arts. ISBN 9781350115057



Kim, E., Fiore, A.M., Payne, A., & Kim, H. (2021). Fashion Trends: Analysis and Forecasting (2nd ed.). Bloomsbury Visual Arts. ISBN 9781350099005

Stylists have become increasingly influential in shaping fashion imagery. They have moved from the backstage, as unrecognised players, to the frontstage of fashion, becoming celebrated for their creative work as image makers for magazines, advertising and fashion designers. Featuring contributions from leading experts and stylists, this collection is the first to explore the history, meaning and practice of fashion styling through interviews and historic and present-day case studies.

Featuring in-depth contributions from prominent fashion scholars, chapters span historical periods, cultural contexts and theoretical frameworks, employing a range of methodologies in the international case studies upon which they're based. Interspersed with interviews with innovative fashion stylists working today, and drawing on examples from advertising, the catwalk and magazines, this book explores the challenges faced by stylists in a fashion system increasingly shaped by commercial pressures and by growing numbers of collections and seasons.

Fashion Stylists is an invaluable resource for students and professionals interested in image-making, the representation of style and fashion, entrepreneurship and the history of fashion professionals.

TD687/Fa733

In a fast-moving global industry, how can anyone know what the next trend will be? Fashion Trends: Analysis and Forecasting offers a clear pathway into the theory and practice of forecasting fashion, using professional case studies to demonstrate each technique and concept.

This revised edition includes an updated model of the fashion trend analysis and forecasting process and expanded coverage of social media, digital influencers, sustainability and social responsibility. There are also first-hand visual materials relating to forecasts from leading firms.

With the rise of individualism and concern for the sustainable world, the authors also walk you through the 'end of fashion' and what comes next, including: recycled and upcycled fashion, garment rental, subscription services, the circular economy, transparency and traceability, and the role of forecasting in encouraging sustainable lifestyles.

Key topics:

- The characteristics of an innovation;
- The influence of consumer groups:
- Long- and short-term fashion forecasting;
- Sociocultural factors and their influence on trends:
 - Fashion professionals' roles in creating



Fernie, J., & Grant, D.B. (2019). Fashion Logistics: Insights into the Fashion Retail Supply Chain (2nd ed.). Kogan Page Limited. ISBN 9781789660395

and supporting trends;

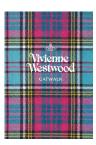
- Consumer and industry trends accelerating product innovation and diffusion;
 - Changing trend forecasting formats;
- The influence of trend forecasting on business decisions.

TD687/Ki250

Retailers are being advised to review their supply chains in a bid to accelerate their speed to market. Fashion Logistics assesses the growth and changes in the industry as well as the drivers of change in the market. Supply chain networks and operations play an integral role in distributing product across the retail industry and significant changes within those networks have altered the way in which they function. Manufacturers therefore need to rethink their supply chains to make them resilient to shock, agile enough to respond quickly to sudden change, flexible enough to customize products and efficient enough to protect margins. Fashion Logistics assesses these forces and changes and how manufacturers should adapt their working practices accordingly.

This second edition of Fashion Logistics includes revised CSR and reshoring sections, updated case studies and new content on how manufacturers can adapt their working practices and the further demise of the department store sector.

TD687/Fe755



Fury, A. (2021). Vivienne Westwood: The Complete Collections. Yale University Press. ISBN 9780300258912



Stutesman, D. (2019). Hat: Origins, Language, Style. Reaktion Books. ISBN 9781789141368



Turner, T. (2019). The Sports Shoe: A History from Field to Fashion. Bloomsbury Visual Arts. ISBN 9781474281799



Lo, D.C. (2021).

Pattern Cutting (2nd ed.). Laurence King
Publishing.
ISBN 9781786276049

Forty years of catwalk photography featuring seventy groundbreaking collections from the inimitable Vivienne Westwood – over 1,000 looks as they originally appeared in Westwood's iconic shows.

"The only reason I'm in fashion is to destroy the word 'conformity,'" Vivienne Westwood declared early in her career. With her provocative synthesis of historic British fashion, classic painting aesthetics, and punk culture, the British designer has continuously revolutionized the fashion industry since her first catwalk collection, "Pirate," debuted in 1981. Opening with a concise history of the house and brief biographical profiles of Westwood and her longtime collaborator Andreas Kronthaler, this spectacular volume - the seventh in the celebrated Catwalk series documents all of Westwood's catwalk collections from 1981 to today. Short texts illuminating each collection's highlights and influences are accompanied by carefully curated catwalk photographs showcasing hundreds of clothing ensembles, accessories, beauty looks, and set designs, along with the top fashion models who walked the runway. With an extensive reference section, this lavishly illustrated volume provides unrivalled insight into one of the most thought-provoking and influential fashion designers in the world.

TD687(092)/We884

The hat is one of our most beloved pieces of clothing, appearing in virtually every society. Through the centuries, hats have represented the most important structures of culture – governance (the crown), religion (the turban), traditions (the bonnet) and much more. Yet hats have also always allowed for the very personal expression of style and feeling.

In this beautifully illustrated celebration of the hat, Drake Stutesman uncovers the influence on our lives of this versatile headgear. Beginning in the Ice Age, the story of the hat is traced through its links with the origins of abstract thinking, through the complex evolution of the professions of millinery and hatting in the Middle Ages, through the rise of the superstar milliner in the 20th century, and, finally, through the work of the ingenious hat makers of today who continue to dazzle us with their creations. For all those interested in the history of fashion and the history of culture, *Hat* offers new perspectives on this stylish, practical and important accessory.

TD687.4/St963

The story of the sneaker's rise from the first Victorian tennis shoes to the Nike Air Max and beyond.

Moving from the athletic field to the shopping mall, Thomas Turner tells a fresh story of the evolution of the sports shoe against the changing landscape of society, sport, fashion, industry, and technology. *The Sports Shoe* takes us on a journey from the first Victorian tennis shoes to the sneaker of today, to the adidas Superstar and the innovative technologies of Nike Air Max. Featuring newly uncovered archival material and historic images showcasing key personalities, vintage marketing and common perceptions of this hugely desirable product, this book is a must-have for any sneaker collector, historian of popular culture, or anyone interested in the place of athletic footwear in our lives today.

TD685.3/Tu717

Pattern Cutting, Second Edition, is a practical guide that explains how to take accurate measurements, introduces key tools and takes the reader from simple pattern-cutting ideas to more advanced creative methods. Step-by-step illustrations show how to create and then fit basic bodice, sleeve, skirt, dress, and trouser blocks, and how to adapt these to create patterns for original designs. New material includes advice on fitting toiles and working with stretch fabrics. There is also a fully updated chapter dedicated to digital technology.

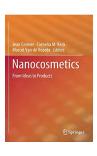
TD687.023/Lo001



Nimkulrat, N., Kane, F., & Walton, K. (Eds.). (2020). Crafting Textiles in the Digital Age. Bloomsbury Visual Arts.



Barton, S., Eastham, A., Isom, A., McLaverty, D., & Soong, Y.L. (Eds.). (2021). *Discovering Cosmetic Science*. Royal Society of Chemistry. ISBN 9781782624721



Cornier, J., Keck, C.M., & Van de Voorde, M. (Eds.). (2019). Nanocosmetics: From Ideas to Products. Springer. ISBN 9783030165727

In an era of increasingly available digital resources, many textile designers and makers find themselves at an interesting juncture between traditional craft processes and newer digital technologies. Highly specialized craft/design practitioners may now elect to make use of digital processes in their work, but often choose not to abandon craft skills fundamental to their practice, and aim to balance the complex connection between craft and digital processes. The essays collected here consider this transition from the viewpoint of aesthetic opportunity arising in the textile designer's hands-on experimentation with material and digital technologies available in the present.

Craft provides the foundations for thinking within the design and production of textiles, and as such may provide some clues in the transition to creative and thoughtful use of current and future digital technologies. Within the framework of current challenges relating to sustainable development, globalization, and economic constraints it is important to interrogate and question how we might go about using established and emerging technologies in textiles in a positive manner.

TD677/Cr060

Welcome to this "novice's guide". At last a book that explains the real science behind the cosmetics we use. Taking a gentle approach and a guided journey through the different product types, we discover that they are not as superficial as often thought and learn that there is some amazing science behind them. We shall uncover some of the truths behind the myths and point out some interesting facts on our way.

Did you know? Vitamin E is the world's most used cosmetic active ingredient. At just 1mm thick, your amazing skin keeps out just about everything it's exposed to – including your products! A 'chemical soup' of amino acids, urea, mineral salts and organic acids act as 'water magnets' in the skin keeping it naturally moisturised. Discovered centuries ago, iron oxides (yes, the same chemicals as rust) are still commonly used inorganic pigments in foundations. A lipstick is a fine balance of waxes, oils and colourants to keep the stick stable and leave an even gloss on your lips.

TD665.5/Di785

This book addresses the application of nanotechnology to cosmetics. Edited by three respected experts in the field, the book begins with a general overview of the science behind cosmetics and skin care today, and of the status quo of nanotechnology in cosmetics. Subsequent chapters provide detailed information on the different nanoparticles currently used in cosmetics; the production and characterization of nanoparticles and nanocosmetics; and regulatory, safety and commercialization aspects. Given its scope, the book offers an indispensable guide for scientists in academia and industry, technicians and students, as well as a useful resource for decision-makers in the field and consumer organizations.

TD665.5/Na447