Jaunieguvumu apskats: Tehnoloģiju & dabaszinātņu izdevumi svešvalodās





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Priekšvārds

Raksturojot šī gada noslēdzošā numura e-izdevuma *Jaunieguvumu apskats: Tehnoloģiju un dabaszinātņu izdevumi svešvalodās (JA)* ietverto izdevumu tēmu loku, jāsecina, ka tas ir visai plašs. Sākot no botānikas dabaszinātnēs, klīniskās medicīnas medicīnā līdz treniņiem un slodzei sportā. No radiosakariem un aviācijas inženierzinātnēs līdz puķkopībai un dārzkopībai lauksaimniecībā. No galda klāšanas un viesu apkalpošanas kultūras restorānos, un augu izcelsmes pārtikas produktu ražošanas pārtikas zinātnēs līdz skaistuma pasaulei – apģērba un modes vēsturei. Iepriekš uzskaitītais ļauj gūt tikai nelielu ieskatu izdevumu saturā, taču pārlūkojot apskatu, ikviens tā lasītājs atklās sev ko noderīgu. *JA* iekļautas gan Latvijas Nacionālās bibliotēkas (LNB) Tehnoloģiju un dabaszinātņu lasītavā lasāmo grāmatu anotācijas, gan e-grāmatas, kas pieejamas bibliotēkas tiešsaistes abonētajās datubāzēs.*

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LNB informācijas speciālisti





Weber, L.M. (2023). Understanding Nature: Ecology for a New Generation. CRC Press. ISBN 9781032222608

Understanding Nature is a new kind of ecology textbook: a straightforward resource that teaches natural history and ecological content, and a way to instruct students that will nurture both Earth and self. While meeting the textbook guidelines set forth by the Ecological Society of America, Understanding Nature has a unique ecotherapy theme, using a historical framework to teach ecological theory to undergraduates.

This textbook presents all the core information without being unnecessarily wordy or lengthy, using simple, relatable language and discussing ecology in ways that any student can apply in real life. Uniquely, it is also a manual on how to improve one's relationship with the Earth. This is accomplished through coverage of natural history, ecology, and applications, together with suggested field activities that start each chapter and thinking questions that end each chapter. The book includes traditional ecological knowledge as well as the history of scientific ecological knowledge.

Understanding Nature teaches theory and applications that will heal the Earth. It also teaches long-term sustainability practices for one's psyche. Professor Louise Weber is both an ecologist and a certified ecopsychologist, challenging ecology instructors to rethink what and

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how they teach about nature. Her book bridges the gap between students taking ecology to become ecologists and those taking ecology as a requirement, who will use the knowledge to become informed citizens.

TD574/We035

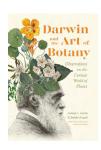


Knapp, S. (2022).
In the Name of Plants:
From Attenborough to
Washington, the People
behind Plant Names. The
University of Chicago
Press.
ISBN 9780226824307

Shakespeare famously asserted that "a rose by any other name would smell as sweet," and that's as true for common garden roses as it is for *Megacorax*, a genus of evening primroses. Though it may not sound like it, *Megacorax* was actually christened in honor of famed American botanist Peter Raven, its name a play on the Latin words for "great raven."

In this lush and lively book, celebrated botanist Sandra Knapp explores the people whose names have been immortalized in plant genera, presenting little-known stories about both the featured plants and their eponyms alongside photographs and botanical drawings from the collections of London's Natural History Museum. Readers will see familiar plants in a new light after learning the tales of heroism, inspiration, and notoriety that led to their naming. Take, for example, nineteenth-century American botanist Alice Eastwood, after whom the yellow aster -Eastwoodia elegans - is named. Eastwood was a pioneering plant collector who also singlehandedly saved irreplaceable specimens from the California Academy of Sciences during the 1906 San Francisco earthquake. Or more recently, the fern genus Gaga, named for the pop star and actress Lady Gaga, whose verdant heart-shaped ensemble at the 2010 Grammy Awards bore a striking resemblance to a giant fern gametophyte. Knapp's subjects range from Charles Darwin's grandfather, Erasmus Darwin (*Darwinia*), and legendary French botanist Pierre Magnol – who lends his name to the magnolia tree – to US founding figures like George Washington (*Washingtonia*) and Benjamin Franklin (*Franklinia*). Including granular details on the taxonomy and habitats of thirty plants alongside its vibrant illustrations, this book is sure to entertain and enlighten any plant fan.

TD58/Kn175



Costa, J.T., & Angell, B. (2023). Darwin and the Art of Botany: Observations on the Curious World of Plants. Timber Press. ISBN 9781643260792



Goodfellow, P. (2024). Avian Architecture: How Birds Design, Engineer, and Build. Princeton University Press. ISBN 9780691255460



Grimaldi, D.A. (Ed.). (2023). The Complete Insect: Anatomy, Physiology, Evolution, and Ecology. Princeton University Press. ISBN 9780691243108



Stainforth, D. (2023).

Predicting Our Climate

Future: What We Know,
What We Don't Know,
and What We Can't Know.
Oxford University Press.
ISBN 9780198812937

Charles Darwin is best known for his work on the evolution of animals, but a large part of his scientific study and writing was devoted to plants. This book gathers key excerpts from these lesser-known works for the first time.

Each chapter focuses on a different plant species, with Darwin's words about his methods, observations, and conclusions, alongside authoritative interpretation from evolutionary biologist and acclaimed Darwin scholar James T. Costa.

Learn how Darwin developed the key concepts that underpin modern research on the form and function of plants. Gain insights into how pollination works, how and why vines climb, the digestive processes of carnivorous plants, and the exuberant variety of flowers. Throughout, you will witness the birth of several schools of scientific inquiry that we take for granted today.

Bringing a new and colorful element to Darwin's work, illustrator Bobbi Angell, after choosing the 45 subjects, has expertly selected rare and remarkable period artworks from Oak Spring Garden Foundation, crafting a new lens for the role and value of botanical art as it existed before and during Darwin's time.

The book is an exciting new marriage of art and science, providing a fresh look at one of history's most influential thinkers.

TD58/Co771

Birds are the most consistently inventive builders, and their nests set the bar for functional design in nature. *Avian Architecture* describes how birds design, engineer, and build their nests, deconstructing all types of nests found around the world using architectural blueprints and detailed descriptions of the construction processes and engineering techniques birds use.

This spectacularly illustrated book features more than 300 full-color images and more than 40 case studies that profile key species worldwide. Each chapter covers a different type of nest, from tunnel nests and mound nests to floating nests, hanging nests, woven nests, and even multiple-nest avian cities. Other kinds of avian construction – such as bowers and food stores – are also featured.

Now with more case studies and an updated foreword, this revised and expanded edition includes intricate step-by-step sequences, visual spreads on nest-building materials and methods, and insightful commentary by a leading expert.

TD598.2/Go507

4

With an astounding 3.5 million species occupying virtually every habitat on Earth, insects are one of the most diverse groups of animals on the planet, from the humble bee to the agile praying mantis. Taking you inside the extraordinary world of insects, the book explores all aspects of the natural history of these remarkable creatures, providing a close-up look at their fascinating anatomy, physiology, evolution, ecology, behavior, and more. It features hundreds of stunning color photographs and illustrations and draws on a broad range of examples, from familiar ants to iridescent jewel beetles. A celebration of the rich complexity of insect life, The Complete *Insect* is a must-have book for insect enthusiasts and armchair naturalists.

- An absorbing, wide-ranging, and beautiful exploration of the fascinating natural history of incosts:
- Features a wealth of stunning full-color photographs from the field;
- Includes photomicrographs and electron micrographs that offer a rare view of normally invisible structures;
- Examines the complex relationship between humans and insects;
- Integrates physiological adaptations with ecology and behavior.

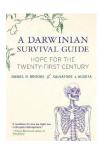
TD595.7/Co385

Climate change raises new, foundational challenges in science. It requires us to question what we know and how we know it. The subject is important for society, but the science is young and history tells us that scientists can get things wrong before they get them right. How, then, can we judge what information is reliable and what is open to question?

This book goes to the heart of the climate change problem to answer this question. It describes the fundamental characteristics of climate change and shows how they undermine the application of traditional research methods, demanding new approaches to both scientific and societal questions.

Ultimately, the book argues for a rethinking of how we go about the study of climate change in the physical sciences, the social sciences, economics, and policy. The subject requires nothing less than a restructuring of academic research to enable the integration of expertise across these diverse disciplines and perspectives.

TD551.588/St075



Brooks, D.R., & Agosta, S.J. (2024). A Darwinian Survival Guide: Hope for the Twenty-First Century. The MIT Press. ISBN 9780262048682

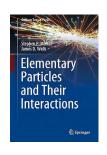
Despite efforts to sustain civilization. humanity faces existential threats from overpopulation, globalized trade and travel, urbanization, and global climate change. In A Darwinian Survival Guide, Daniel Brooks and Salvatore Agosta offer a novel – and hopeful – perspective on how to meet these tremendous challenges by changing the discourse from sustainability to survival. Darwinian evolution, the world's only theory of survival, is the means by which the biosphere has persisted and renewed itself following past environmental perturbations, and it has never failed, they explain. Even in the aftermath of mass extinctions, enough survivors remain with the potential to produce a new diversified biosphere.

Drawing on their expertise as field biologists, Brooks and Agosta trace the evolutionary path from the early days of humans through the Late Pleistocene and the beginning of the Anthropocene all the way to the Great Acceleration of technological humanity around 1950, demonstrating how our creative capacities have allowed humanity to survive. However, constant conflict without resolution has made the Anthropocene not only unsustainable, but unsurvivable. Guided by the four laws of biotics, the authors explain how humanity should interact with the rest of the biosphere and

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with each other in accordance with Darwinian principles. They reveal a middle ground between apocalypse and utopia, with two options: alter our behavior now at great expense and extend civilization or fail to act and rebuild in accordance with those same principles. If we take the latter, then our immediate goal ought to focus on preserving as many of humanity's positive achievements – from high technology to high art – as possible to shorten the time needed to rebuild.

TD504.03/Br730



Martin, S.P., & Wells, J.D. (2022). Elementary Particles and Their Interactions. Springer. ISBN 9783031143700

The Standard Model of elementary particle physics was tentatively outlined in the early 1970s. The concepts of quarks, leptons, neutrinos, gauge symmetries, chiral interactions, Higgs boson, strong force, weak force, and electromagnetism were all put together to form a unifying theory of elementary particles. Furthermore, the model was developed within the context of relativistic quantum field theory, making it compatible with all of the laws of Einstein's Special Relativity. The successes of the Standard Model over the years have been tremendous and enduring, leading up to the recent discovery and continuing study of the Higgs boson. This book is a comprehensive and technical introduction to Standard Model physics. Martin and Wells provide readers who have no prior knowledge of quantum field theory or particle physics a firm foundation into the fundamentals of both. The emphasis is on obtaining practical knowledge of how to calculate cross-sections and decay rates. There is no better way to understand the necessary abstract knowledge and solidify its meaning than to learn how to apply it to the computation of observables that can be measured in a laboratory.

Beginning graduate students, both experimental and theoretical, and advanced undergraduate students interested in particle

physics, will find this to be an ideal one-semester textbook to begin their technical learning of elementary particle physics.

TD539.1/Ma711



McCormick, E.L. (Ed.). (2024). Inside OUT: Human Health and the Air-Conditioning Era. Routledge. ISBN 9781032495897

Inside OUT: Human Health and the Air-Conditioning Era focuses on the enclosed environment of fully conditioned buildings, revealing a unique ecosystem with broad implications for human life and a rapidly expanding global footprint. Emphasizing the interconnections between buildings and human health, equity, and environmental sustainability, it presents an interdisciplinary, holistic analysis of the social, behavioral, and technological issues of indoor space.

Over the 20th century, advances in mechanical conditioning technologies led to the dispersion and international dominance of the sealed building envelope, which casually and progressively disconnected buildings and their occupants from local climatic, biological, and cultural environments. At the same time, humans were increasingly pushed indoors by less tangible, socially constructed forces that associated climate control with cleanliness, health, social status, and modernization.

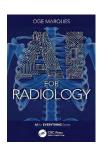
In this volume, a multi-disciplinary group of experts on the indoor microbiome from the fields of biology, anthropology, and architecture come together to thoughtfully reflect on the history, properties, and meaning of indoor air quality in buildings, and to discuss the future of human habitation – with a dominant focus on human

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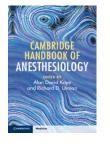
health in a post-pandemic world. Taking a human-first approach to health and sustainability, the authors weave together a compelling analysis of social and technological drivers of conditioned space with arguments for future interventions in the built environment.

Amid growing awareness of air quality and climate concerns, *Inside OUT* provides a timely discussion of the relationship between building design and human health, of relevance to professional and academic readers from across the spectrum of the building industry, as well as fields including public health and environmental studies.

TD614.7/In646



Marques, O. (2024). *Al for Radiology*. CRC Press. ISBN 9780367627256



Urman, R.D., & Kaye, A.D. (Eds.). (2023). Cambridge Handbook of Anesthesiology. Cambridge University Press. ISBN 9781108947657

Artificial intelligence (AI) has revolutionized many areas of medicine and is increasingly being embraced. This book focuses on the integral role of AI in radiology, shedding light on how this technology can enhance patient care and streamline professional workflows.

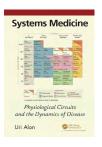
This book reviews, explains, and contextualizes some of the most current, practical, and relevant developments in AI and deep learning in radiology and medical image analysis. AI for Radiology presents a balanced viewpoint of the impact of AI in these fields, underscoring that AI technologies are not intended to replace radiologists but rather to augment their capabilities, freeing professionals to focus on more complex cases. This book guides readers from the basic principles of AI to their practical applications in radiology, moving from the role of data in AI to the ethical and regulatory considerations of using AI in radiology and concluding with a selection of resources for further exploration.

This book has been crafted with a diverse readership in mind. It is a valuable asset for medical professionals eager to stay up to date with AI developments, computer scientists curious about AI's clinical applications, and anyone interested in the intersection of healthcare and technology.

TD616-7/Ma672

This practical book provides a modern, clinically focused guide for any clinical question related to anesthesia care, presenting comprehensive, yet succinct knowledge from experts in the field. It describes the best practice in a concise yet easily digestible format and features numerous tables and figures, a bulleted points/ outline format, and algorithms allowing for rapid assimilation of key information. New techniques and common procedures are also covered in detail. This up-to-date pocketbook is perfect for quick reference in the operating room, providing rapid access to evidence-based clinical content covering the full breadth of the field, including pediatric, obstetric, cardiac, and regional anesthesia sections. In addition to daily clinical practice, the book serves also as a convenient companion for board review and recertification exam preparation.

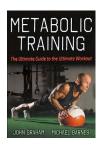
TD616/Ca287



Alon, U. (2024). Systems Medicine: Physiological Circuits and the Dynamics of Disease. CRC Press. ISBN 9781032411859



Harper, R.G. (2024). Literacy Practices in Sports and Coaching: Developing Literacy Competencies in Interdisciplinary Environments. Routledge. ISBN 9781032499055



Graham, J., & Barnes, M. (2024). Metabolic Training: The Ultimate Guide to the Ultimate Workout. Human Kinetics. ISBN 9781718212466



Toigo, M. (2023). Muscle Revolution: Concepts and Recipes for Building Muscle Mass and Force. Springer. ISBN 9783662680476

Why do we get certain diseases, whereas other diseases do not exist?

In this book, Alon, one of the founders of systems biology, builds a foundation for systems medicine.

Starting from basic laws, the book derives why physiological circuits are built the way they are. The circuits have fragilities that explain specific diseases and offer new strategies to treat them.

By the end, the reader will be able to use simple and powerful mathematical models to describe physiological circuits. The book explores, in three parts, hormone circuits, immune circuits, and aging and age-related disease. It culminates in a periodic table of diseases.

Alon writes in a style accessible to a broad range of readers – undergraduates, graduates, or researchers from computational or biological backgrounds. The level of math is friendly and the math can even be bypassed altogether. For instructors and readers who want to go deeper, the book includes dozens of exercises that have been rigorously tested in the classroom.

TD616/AI712

This book addresses the ways in which literacy skills, including both reading and writing instruction, are introduced, reinforced, reviewed, and refined in a sports or physical education setting. While there has been significant research that highlights the academic benefits of sports participation and the use of sports programming and units for literacy instruction in the classroom, there is limited research regarding the literacy practices that occur as a direct part of sports participation. This book addresses this crucial gap in the scholarship. The argument presented in this manuscript contends that a number of literacy skills and competencies are taught in and through a number of sports programs and explores how they are effectively and naturally integrated into structured athletics/sports programming. Addressing engagement with literacy skills and competencies in a unique setting, it provides a new lens from which readers can view reading and writing.

This book will be of critical interest to scholars and researchers with interests in literacy education and sports education, as well as instructional coaches, sports coaches, literacy educators, health and physical education teachers, middle and secondary educators, and administrators.

TD796/Ha584

7

Catapult your training efficiency and get measurable results with metabolic training! In this landmark work, John Graham and Michael Barnes explain the science, strategies, and secrets of successful metabolic training.

Metabolic Training establishes guidelines for metabolic training and identifies the scientific framework behind it. It features more than 100 exercises:

- 13 warm-up exercises;
- 18 total-body exercises;
- 18 lower-body exercises;
- 30 upper-body exercises;
- 14 core exercises;
- 10 functional training exercises.

The exercises use tools such as battle ropes, sandbags, weighted sleds, suspension trainers, exercise bands, and medicine balls, as well as more traditional equipment like dumbbells and kettlebells. The book also features 60 workouts, which are the basis for five training programs: endurance, fat loss, lean muscle mass, strength and power, and athletic performance.

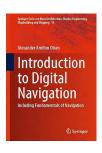
Practical, accessible, and comprehensive, Metabolic Training is the definitive resource on the topic. If you are serious about results, it is a must-have.

TD796.015/Gr093

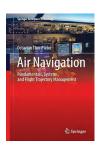
In this informative as well as practical book based on the latest integrative muscle research, Marco Toigo, PhD, describes which factors are crucial to successfully build muscle mass and muscle force through resistance training. In addition, he presents the practical and science-based consequences for your training and nutritional behavior with a focus on protein intake. This work thus offers both a practical guide and a scientific explanation of the "why" and "how" of effective and efficient resistance training.

This book is the English version of the very successful 2nd German edition of *MuskelRevolution* (ISBN 9783662547649). The translation was done with the help of artificial intelligence. A subsequent human revision was done primarily in terms of content.

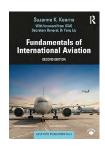
TD796.015/To180



Olsen, A.A. (2024). Introduction to Digital Navigation: Including Fundamentals of Navigation. Springer. ISBN 9783031474897



Pleter, O.T. (2024). Air Navigation: Fundamentals, Systems, and Flight Trajectory Management. Springer. ISBN 9783031529931



Kearns, S.K. (2021). Fundamentals of International Aviation (2nd ed.). Routledge. ISBN 9780367467944

This book focuses on Coastal and Ocean Navigation with an emphasis on digital navigation (using ECDIS) and would be useful to both experienced seafarers as an aide memoire, and also to cadets and trainees embarking on their maritime careers.

The text has been developed for modern day ship's navigator in the 'digital era'. It is written from the perspective that the reader's vessel will be navigated using an IMO type-approved electronic chart and display information system (ECDIS) as opposed to traditional chart-based passage planning. As such, the book focuses on the main principles associated with position and direction of the earth's surface, geodesy projects and grids, digital navigation, electronic chart and data information systems, fixing, internal aids to navigation and systems, external aids to navigation, tides and currents, ocean navigation, coastal navigation, pilotage and blind pilotage, anchoring, navigational errors, relative velocity, and bridge organisation and management.

TD629.5/01670

This book takes a new approach to air navigation, extending the classic scope of positioning and guidance to efficient and safe 4D flight trajectory management. Modern air navigation aims at flight trajectories optimisation. There is an infinite number of solutions to the classic navigation problem of flying from one airport to another, but most of them are wasteful of resources and even risky. Minimising all costs and risks incurred by the 4D flight trajectory makes air navigation both efficient and safe, which are key factors in air navigation services. Beyond minimising fuel burn and CO2, efficiency addresses non-CO2 emissions and noise. This is a visually intensive book, using examples and case studies to illustrate the concepts, the physics of navigation and the mathematical models involved. Numerical examples reflect its problem-solving nature. It is useful to aerospace students, engineers, pilots, air traffic controllers, technicians, and scientists curious about aviation.

TD629.73/PI510

8

International aviation is a massive and complex industry that is crucial to our global economy and way of life. Designed for the next generation of aviation professionals, Fundamentals of International Aviation, Second Edition, flips the traditional approach to aviation education. Instead of focusing on one career in one country, it introduces readers to the air transport sector on a global scale with a broad view of all the interconnected professional groups.

This text provides a foundation of 'how aviation works' in preparation for any career in the field (including regulators, maintenance engineers, pilots, flight attendants, airline and airport managers, dispatchers, and air traffic controllers, among many others). Each chapter introduces a different cross-section of the industry, from air law to operations, security to environmental impacts. A variety of learning tools are built into each chapter, including 24 case studies that describe an aviation accident related to each topic. This second edition adds new learning features, geographic representation from Africa, a new chapter on economics, full-color illustrations, and updated and enhanced online resources.

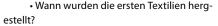
This accessible and engaging textbook provides a foundation of industry awareness that will support a range of aviation careers. It

also offers current air transport professionals an enriched understanding of the practices and challenges that make up the rich fabric of international aviation.

TD629.7/Ke025



Veit, D. (2024). Geschichte der Textilherstellung: Technologien, Erfindungen, Handel, Mode – von der Steinzeit bis heute. Carl Hanser Verlag. ISBN 9783446479531



- Wie kleideten sich die Menschen im alten Ägypten?
- Welche Rolle spielte der Tuchhandel im Mittelalter?
- Warum begann die Industrielle Revolution mit der Textilherstellung?
- Warum kleiden wir uns heute alle in Polyester?
- Wie wird die Zukunft der Textilherstellung aussehen?

Diese und viele weitere Fragen werden in dem reich bebilderten und fundiert geschriebenen Buch anschaulich beantwortet.

Neben der Vorstellung aller wichtigen Fasern, Technologien zur Garn- und Flächenherstellung und Erfindungen von der Steinzeit bis heute geht es in dem Buch auch um die gesellschaftlichen Veränderungen, die mit der Herstellung und dem Handel von Textilien einhergingen.

Besonders hervorzuheben ist der globale Ansatz: Nicht nur Europa steht im Fokus, sondern auch die Entwicklungen in Asien, Afrika und Amerika werden behandelt.

9

Sagen und Märchen mit Textilbezug, die Veränderung der Mode im Laufe der Jahrhunderte sowie gebräuchliche textile Redewendungen runden das Werk ab und stellen einen Bezug zu unserem Alltag her.

TD677/Ve250



Crawford, A. (2024).

Designer's Guide to Lab

Practice. Routledge.

ISBN 9781032426846

This book explores the growing field of bio-design through interdisciplinary creative practice. The volume illustrates a range of experimental working techniques while offering a foundational understanding of lab practice principles. The book highlights the myriad of opportunities presented by microorganisms that have reshaped the planet and made it habitable.

The book provides an account of the creation of living materials from the point of view of an architectural design practitioner. The transition from traditional design practice to laboratory investigation is captured, highlighting strategies of creating partnerships across a range of fields. The book demonstrates laboratory methods and ways of investigating the development of living materials and celebrates the growing body of practitioners, scientists, activists and anthropologists who are reimagining new strategies for addressing contemporary environmental challenges.

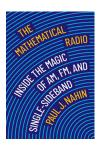
Designer's Guide to Lab Practice looks at ways in which integrating living components with needs of their own would not only help offset the environmental impact that we have on our planet but could also create a closer relationship with nature. It is a working manual as well as a guide for emerging practitioners seeking to transition into a field that is yet to be

defined and that offers the promise of a new era of human habitat making as a direct response to the looming ecological crisis.

TD691/Cr230



Rappaport, T.S. (2024). Wireless Communications: Principles and Practice (2nd ed.). Cambridge University Press. ISBN 9781009489836



Nahin, P.J. (2024). The Mathematical Radio: Inside the Magic of AM, FM, and Single-Sideband. Princeton University Press. ISBN 9780691235318



Burcham, A.S., Denney, S.J., & Treloar, R.D. (2024). *Gas Installation Technology* (3rd ed.). Wiley Blackwell. ISBN 9781119908180

Now reissued by Cambridge University Press, the updated second edition of this definitive textbook provides an unrivaled introduction to the theoretical and practical fundamentals of wireless communications.

Key features:

- Key technical concepts are developed from first principles, and demonstrated to students using over 50 carefully curated worked examples;
- Over 200 end-of-chapter problems, based on real-world industry scenarios, help cement student understanding;
- Provides thorough coverage of foundational wireless technologies, including wireless local area networks (WLAN), 3G systems, and Bluetooth;
- Includes refreshed summaries of recent cellular standards leading to 4G and 5G, insights into the new areas of mobile satellite communications and fixed wireless access, and extra homework problems.

Supported online by a solutions manual and lecture slides for instructors, this is the ideal foundation for senior undergraduate and graduate courses in wireless communications.

TD621.396/Ra624

The modern radio is a wonder, and behind that magic is mathematics. In the book, Paul Nahin explains how radios work, deploying mathematics and historical discussion, accompanied by a steady stream of intriguing puzzles for math buffs to ponder. Beginning with oscillators and circuits, then moving on to AM, FM, and single-sideband radio, Nahin focuses on the elegant mathematics underlying radio technology rather than the engineering. He explores and explains more than a century of key developments, placing them in historical and technological context. Nahin describes in fascinating detail the mathematical underpinnings of a technology we use daily. He explains and solves, for example, Maxwell's equations for the electromagnetic field. Readers need only a familarity with advanced high school-level math to follow Nahin's mathematical discussions. Writing with the nonengineer in mind, Nahin examines topics including impulses in time and frequency, spectrum shifting at the transmitter, the superheterodyne, the physics of single-sideband radio, and FM sidebands. Chapters end with "challenge problems" and an appendix offers solutions, partial answers, and hints. Readers will come away with a new appreciation for the beauty of even the most useful mathematics.

TD621.396/Na294

10

This fully revised third edition is an essential on-site resource and an indispensable training guide for both qualified gas engineers and new entrants to the industry. Comprehensively updated to align with the latest standards and developments, it provides unrivalled coverage of all aspects of gas installation work in the United Kingdom.

This new edition features a full-colour layout, additional dedicated chapters on commercial catering, commercial laundry, educational establishments, and the ACS assessment process. With all topics consolidated into one convenient volume, gas operatives have all relevant information at their fingertips.

Key highlights:

- Coverage of commercial, domestic and LPG installations along with emergency service provider and meter installation details;
- Comprehensive index and section-numbered text for easy topic identification by trainers and learners:
- Detailed discussion of UK gas installation standards, practices and procedures;
- New and updated material on net zero targets, climate change, and other aspects of the gas industry's future.

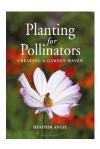
Gas Installation Technology is an invaluable training aid for students in gas installation or

plumbing courses, as well as for professional gas installers renewing their certification.

TD696/Bu420



Longstaffe-Gowan, T. (2022). English Garden Eccentrics. Paul Mellon Centre for Studies in British Art. ISBN 9781913107260



Angel, H. (2023).

Planting for Pollinators:

Creating a Garden Haven.

Bloomsbury Wildlife.

ISBN 9781399403023



Larkin, L. (2024). Flower Farming for Profit: The Complete Guide to Growing a Successful Cut Flower Business. Chelsea Green Publishing. ISBN 9781645021766



Raven, S. (2024). A Year Full of Pots: Container Flowers for All Seasons. Bloomsbury Publishing. ISBN 9781526667472

In his new book, Todd Longstaffe-Gowan looks at a series of unique gardens made by English eccentrics from the seventeenth to the early twentieth centuries. Their unusual creators – from the superstitious antiquary William Stukeley, to the pleasure-ground proprietor Jonathan Tyers, and the bird-loving Lady Reade – built miniature mountains, shaped topiary, collected animals, excavated caves and assembled architectural fragments to realise their gardens in a ways that were, and sometimes still are, thought to be excessive.

Bringing together garden and landscape history with cultural history and biography, English Garden Eccentrics examines what it is about the gardener and his or her creation that can be seen as eccentric, and analyses an area of garden history that has scarcely been previously explored: gardens seen as expressions of the singular character of their makers, and therefore, in effect, functioning as a form of autobiography.

TD635.017/Lo406

Insect pollinators not only bring joy to our gardens, they also provide an essential service for our planet. Without bees, flies, hoverflies, butterflies, moths and beetles, some of our favourite foods, flowers and plants would cease to exist.

Whether you have a large garden, an urban balcony or just a window box, planting to encourage pollinators is a fantastic and surprisingly easy first step in creating a wildlife-friendly space. *Planting for Pollinators* features a wide range of plants, with guidance on the best way to nurture lawns and verges, pollinator predation and tips on watching and photographing wildlife. Beautifully illustrated throughout with images from award-winning wildlife photographer Heather Angel, this essential guide will show you how plants communicate with insects, and why it's so important to protect our pollinators.

Organised by season and featuring more than 100 plant species – including bulbs, annuals, perennials, shrubs and climbers – this practical guide will help you to discover the short- and long-term benefits of having a variety of pollinators visit your garden.

TD635.92/An375

How do you create efficient systems and adequately value your own time and effort to be a successful flower farmer? When and how should you consider scaling up? How can you make doing what you love support you financially? In Flower Farming for Profit, Lennie Larkin answers these questions – and many, many more. She also explores:

- Crop planning based on local climatic conditions, market demand, and sales projections;
- The challenges of wholesale and retail sales channels, from florists and farm stands to farmers markets;
- How to streamline weddings for the farmer-florist;
 - · Efficient recordkeeping and bookkeeping;
- Steps for conducting your own cost-of-production analysis;
- Business planning, goal setting, and making financial projections.

Flower Farming for Profit is a one-of-a-kind guide to creating the type of numbers-driven business that will allow individual farms to prosper and local flower economies to thrive.

TD635.912/La660

Pots are everywhere in Sarah Raven's garden at Perch Hill. Every corner comes to life with their colour and vibrancy.

Following the seasons, A Year Full of Pots shows you how to make your own evolving tapestry of colour through long-lasting container combinations. All the flowers and planting schemes Sarah has tried and tested over the decades are in here, plus the design principles that will work for you at any scale, whether you have one pot or a garden full of them.

TD635.92/Ra920



Hall, T. (2023). *Gardening with Winter Plants*. Kew Publishing, Royal Botanic Gardens. ISBN 9781842467947



Aubry, C., Giacchè, G., Maxime, F., & Soulard, C.-T. (Dir.). (2022). Les agricultures urbaines en France: Comprendre les dynamiques, accompagner les acteurs. Éditions Quae. ISBN 9782759235643



Sjöman, H., & Anderson, A. (2023). The Essential Tree Selection Guide: For Climate Resilience, Carbon Storage, Species Diversity and Other Ecosystem Benefits. Filbert Press. ISBN 9781739903947

Winter doesn't have to be a time of year to put your garden to bed. *Gardening with Winter Plants* is a guide to the range of wonderful and striking plants that will bring colour and interest to your garden during a season that can seem dull and grey.

In this book, Kew expert Tony Hall profiles over 200 plant species and cultivars that are perfectly suited to perform in the colder months. The book has tips on planting positions and plant combinations, as well as pruning advice to ensure success in gardens of all sizes. *Gardening with Winter Plants* includes a reference guide to plant flowering by month, plant colours, fragrant plants and information on plants that will attract wildlife.

TD635.92/Ha270

Depuis plusieurs années, de nouvelles formes d'agriculture urbaine se font jour en France, questionnant la recherche et ses liens à l'action. La recherche se mobilise donc pour connaître et évaluer ce phénomène, qui interroge les relations entre urbains et leurs connexions aux espaces à la nature et à l'alimentation: fonctionnements technico-économiques de ces agricultures, spécificités des sols urbains, enjeux fonciers et services écosystémiques rendus. Le livre s'interroge sur les formes sociales des agricultures urbaines et sur leurs places dans les systèmes alimentaires des territoires. Constatant la forte appétence des collectivités, des habitants et autres acteurs de la ville pour ces agricultures, l'ouvrage présente des produits de recherches conduites avec des acteurs publics et associatifs, professionnels et opérateurs économiques: plateforme collaborative, jeu sérieux, logiciels d'aide à la décision, applis, observatoire participatif, méthodes et guides pour l'action. Un état des lieux des formations existantes en agriculture urbaine est proposé, soulignant les défis à relever et les conditions nécessaires pour développer les agricultures urbaines. Cet ouvrage est destiné aux étudiants, aux enseignants et aux chercheurs, ainsi qu'aux acteurs publics et privés de l'aménagement urbain, du développement agricole et des politiques alimentaires.

EBSCOhost Ebook Academic Collection

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There has never been a better time to plant trees. As well as playing a vital role in the health of the natural world and of us humans, these essential life-giving plants also deliver a vast array of hidden benefits such as cooling shade, rainfall interception and carbon capture – but only if we plant the right tree in the right place.

International tree expert Henrik Sjöman, along with garden designer and passionate advocate for the environment Arit Anderson, have created this visionary resource suitable for the world's temperate regions. It opens with a clear explanation of ecosystem services and how trees deliver them. Some trees excel at particular roles such as providing food for pollinators at times when it is scarce or filtering air pollution. Others have adapted in ways that allow them to cope with extreme conditions such as drought, low-nutrient soil and high winds.

At the heart of the book is a unique A-Z Tree Directory representing more than 550 trees chosen for their ecosystem benefits, resilience and a host of other criteria that will ensure their continuing contribution to our gardens and landscapes in the future. A further quick-reference Tree Selection Table provides key attributes for each species at a glance.

This important new tree selection guide marks a step change in approach that will lead

to more trees reaching their full potential and a richer environment for future generations.

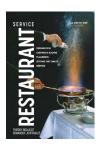
TD635.054/Si700



McClements, D.J., & Grossmann, L. (2022). Next-Generation Plant-Based Foods: Design, Production, and Properties. Springer. ISBN 9783030967666

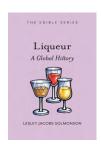


Warshawsky, D.N. (2023). Food Waste, Food Insecurity, and the Globalization of Food Banks. University of Iowa Press. ISBN 9781609389338



Boulicot, T., & Jeuffrault, D. (2022). Restaurant Service: Preparation, Carving & Slicing, Flambéing, Setting the Tables Service. Editions BPI.

ISBN 9782857087687



Solmonson, L.J. (2024). Liqueur: A Global History. Reaktion Books. ISBN 9781789148534

The creation of plant-based foods is one of the most rapidly advancing areas in the modern food industry. Many consumers are adopting more plant-based foods in their diets because of concerns about global warming and its devastating impacts on the environment and biodiversity. In addition, consumers are adopting plant-based diets for ethical and health reasons. As a result, many food companies are developing plant-based analogs of animal-based foods like dairy, egg, meat, and seafood products. This is extremely challenging because of the complex structure and composition of these animal-based foods.

Next-Generation Plant-Based Foods: Design, Production and Properties presents the science and technology behind the design, production, and utilization of plant-based foods. Readers will find a review of ingredients, processing operations, nutrition, quality attributes, and specific plant-based food categories such as milk and dairy products, egg and egg products, meat and seafood products, providing the fundamental knowledge required to create the next generation of healthier and more sustainable plant-based food alternatives.

TD664/Mc001

Food banks – warehouses that collect and systematize surplus food – have expanded into one of the largest mechanisms to redistribute food waste. From their origins in North America in the 1960s, food banks provide food to communities in approximately one hundred countries on six continents. This book analyzes the development of food banks across the world and the limits of food charity as a means to reduce food insecurity and food waste.

Daniel Warshawsky illustrates how and why food banks proliferate across the globe even though their impacts may be limited, and proffers that the mission of food banks needs to be more realistic, as food surpluses cannot reduce food insecurity on a significant scale. Food banks need to regain their institutional independence from the state and corporations, and incorporate the knowledge and experiences of the food insecure in the daily operations of the food system. These collective changes can contribute to a future where food banks play a smaller but more targeted role in food systems.

TD664/Wa740

13

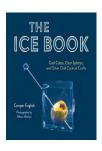
Restaurant Service is the full translation of Travaux Pratiques de Restaurant, a complete work listing all the essential techniques of table service. It includes the mise en place, the service of drinks and the different forms of service as well as the preparations, the cuttings and the flambages.

Each service technique is detailed and illustrated step by step (in photo) and each of the gestures is reproduced with precision and accuracy. Tracing all the techniques of the art of the table, this book will ensure that you master the basics of perfect table service and will accompany you throughout your professional career.

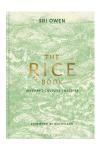
TD642/Bo912

Rooted in ancient origins, liqueurs are the original recreational spirits. From the ancient Silk Road to the present day, *Liqueur* embarks on a thrilling exploration of these delicious concoctions. It explains how a bitter, medicinal elixir distilled by early alchemists transformed into a sugar- and spice-fuelled luxury. A bibulous adventure featuring an array of cocktails, this book reveals the fascinating evolution of a modern indulgence.

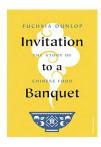
TD663.5/So390



English, C. (2023). The Ice Book: Cool Cubes, Clear Spheres, and Other Chill Cocktail Crafts. Red Lightning Books.
ISBN 9781684352050



Owen, S. (2023). The Rice Book: History, Culture, Recipes. Bloomsbury Publishing. ISBN 9781526621634



Dunlop, F. (2023).
Invitation to a Banquet:
The Story of Chinese
Food. Particular Books.
ISBN 9780241516980

In *The Ice Book*, internationally renowned cocktail icepert Camper English details how to use directional freezing to make perfectly pure ice in a home freezer, carve it up into giant diamonds and other shapes, and embed it with garnishes, including edible orchids and olives. You'll learn how to create a frozen bowl for Negroni punch, serve a Manhattan inside an ice sphere, and infuse cubes with colors and flavors to create cranberry cobblers, a color-changing Gin and Tonic, and other awesome drinks.

Featuring striking color photos throughout, this handy guide – and great gift – offers easy directions for dozens of ice projects and suggestions for further freezer fun. Both instructional and inspirational, *The Ice Book* will help you take your nonalcoholic and boozy beverages to the next level.

TD640.44/En500

Rice is the staple food for more than half the world, and the creativity with which people approach this humble grain knows no bounds. From renowned food writer Sri Owen's extensive travels and years of research comes recipes for soups, biryanis, risottos, pilafs, paellas, desserts and more from across the world.

TD633/0w210

14

Chinese was the earliest truly global cuisine. When the first Chinese labourers began to sojourn and settle abroad, restaurants appeared in their wake. Yet Chinese food has the curious distinction of being both one of the world's best-loved culinary traditions and one of the least understood. For more than a century, the overwhelming dominance of a simplified form of Cantonese cooking ensured that few foreigners experienced anything of its richness and sophistication – but today that is beginning to change.

In this book, the James Beard Awardwinning cook and writer Fuchsia Dunlop explores the history, philosophy and techniques of China's rich and ancient culinary culture. Each chapter examines a classic dish, from mapo tofu to Dongpo pork, knife-scraped noodles to braised pomelo pith, to reveal a singular aspect of Chinese gastronomy, whether it's the importance of the soybean, the lure of exotic ingredients or the history of Buddhist vegetarian cuisine. Meeting local food producers, chefs, gourmets and home cooks as she tastes her way across the country, Fuchsia invites readers to join her on an unforgettable journey into Chinese food as it is made, cooked, eaten and considered in its homeland.

Weaving together historical scholarship,

mouth-watering descriptions of food and on-theground research conducted over three decades, *Invitation to a Banquet: The Story of Chinese Food* is a lively, landmark tribute to the pleasures and mysteries of Chinese cuisine.

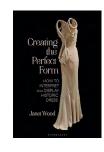
TD641.568(510)/Du624



Maynard, M. (2023). Dressed in Time: A World View. Bloomsbury Visual Arts. ISBN 9781350032781



Strasdin, K. (2024). The Dress Diary: Secrets from a Victorian Woman's Wardrobe. Pegasus Books. ISBN 9781639366910



Wood, J. (2024). Creating the Perfect Form: How to Interpret and Display Historic Dress. Bloomsbury Visual Arts. ISBN 9781350328655



Albrechtsen, N. (2023). Vintage Fashion: A Sourcebook. Thames & Hudson. ISBN 9780500297209

Through object-based case studies of garments from the ancient past through to the 21st century, Margaret Maynard reveals the countless ways the temporal is woven into our attire. From the physical effects of age on garments to their changing cultural significance, time and fashion are inextricably linked. Every garment has its own pace and narrative, and every dress practice is rich with temporal associations: 'wearing' time in the form wristwatches, marking key moments in time from marriage to death, 'defying' time with beauty products, preserving and re-imagining time through vintage, and concepts of 'timeless' and 'classic' styles.

This ground-breaking book presents a complete rethinking of the study of global fashion history, revealing the complex nature of changing fashion when viewed through the lens of time and challenging Eurocentric approaches such as the periodization of style and the arbitrary division of 'western' and 'non-western' fashion. Dressed in Time is essential reading for students and scholars of fashion and dress history, material culture studies, cultural anthropology, archaeology and related fields.

The Berg Fashion Library

In 1838, a young woman was given a diary on her wedding day. Collecting snippets of fabric from a range of garments – some her own, others donated by family and friends – she carefully annotated each one, creating a unique record of their lives. Her name was Mrs. Anne Sykes.

Nearly two hundred years later, the diary fell into the hands of Kate Strasdin, a fashion historian and museum curator. Using her expertise, Strasdin spent the next six years unraveling the secrets contained within the album's pages, and the lives of the people within. Her findings are remarkable. Piece by piece, she charts Anne's journey from the mills of Lancashire to the port of Singapore before tracing her return to England in later years. Fragments of cloth become windows into Victorian life: pirates in Borneo, the complicated etiquette of mourning, poisonous dyes, the British Empire in full swing, rioting over working conditions, and the terrible human cost of Britain's cotton industry.

Through the evidence of waistcoats, ball gowns, and mourning outfits, Strasdin lays bare the whole of human experience in the most intimate of mediums: the clothes we choose to wear.

TD687(09)/St660

How can the cut of a 19th century dress control its shape? Can you re-create a historic profile from a contemporary mannequin? How can paintings help you analyse historic silhouettes and the corsets and petticoats worn underneath?

Conservation and historic dress display specialist Janet Wood will help you answer all these questions. With *Creating the Perfect Form*, you'll learn how historic garments can be safely handled and shown to best effect, with insight into the characteristic features of each piece and how to translate them from the garment to a display support.

Concentrating on Western women's wear from 1750 to 1950, and with over 250 illustrations, drawings and charts, this beautiful and informative guide details everything you need to know about how to interpret an individual garment's display needs and create safe, appropriate display forms.

TD687(09)/Wo550

Explores every aspect of a woman's vintage wardrobe in over 1,000 stand-out examples, drawn from fashions from the 1920s to the 1980s.

World-famous names feature alongside lesser-known brands beloved of collectors, such as Lilli Ann and Horrockses Fashions.

Surveys how fashion past continues to inspire fashion present – as seen on the street, on the catwalk, and on devotees such as Kate Moss and Sienna Miller.

Unique handmade pieces sit beside icons of vintage fashion, from Marilyn Monroe's bra to the Ossie Clark dress that famously features in David Hockney's painting.

Includes invaluable practical tips on how to build a collection, and how to date, clean and care for vintage clothing.

TD687"19"/Al162



Myers-McDevitt, P.J. (2023). Complete Guide to Size Specification and Technical Design (4th ed.). Fairchild Books. ISBN 9781501384356



Kawamura, Y. (2023). Fashion-ology: Fashion Studies in the Postmodern Digital Era (3rd ed.). Bloomsbury Visual Arts.

Complete Guide to Size Specification and Technical Design, 4th Edition, equips students with everything they need to know about measuring sample garments, creating fully graded spec sheets for grading patterns, fitting garments, and offering pattern alterations. Over 500 technical flats are clearly labeled with measurement points and instructions for taking measurements. The book includes spec sheets for different types of garments and industry forms within the context of the production process. Several sections are devoted to instruction on measuring the human body, PLM/PDM software, correct fitting issues (with suggestions for pattern alterations), and grade rules for both number and letter sizing. It also includes over 60 basic fashion flats and instructions on metric conversions in the Appendices.

New to this edition:

- Coverage of current topics like diversity and diverse body sizes, industry changes due to the pandemic, and sustainability;
- Inclusion of tech packs and a variety of flats and croquis;
- "Tricks of the Trade" boxes addressing key industry examples and how to deal with common challenges.

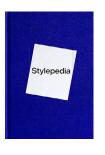
TD687.023/My220

This new edition of a classic work offers a concise introduction to the sociology of fashion, and demystifies the workings of the fashion system. From the origins of fashion studies and the difference between clothing and fashion, through to an examination of 21st century subcultures, and the impact of the digital age on designers, *Fashion-ology* explores fashion as a global, institutionalized system. With accessible overviews of key debates, issues and perspectives, Yuniya Kawamura provides a complete exploration of the field.

Two new chapters have been added for this third edition, covering 'The Diversification and Changing Landscapes of Fashion Systems' and 'Ecological and Social Sustainability in Fashion' respectively.

There's also more on:

- The metaverse as the latest fashion system;
 - The de-Westernization of fashion:
- Postmodern discourse on fashion's relationship to race, gender and class;
- Social media as consumption, production, evaluation, and marketing;
- Fashion weeks, including Modest
 Fashion Week, Black Fashion Week, the Global
 Sustainability Fashion Week, and Queer Fashion
 Week.



Tung, R. (Ed.). (2023). Stylepedia: A Visual Directory of Fashion Styles. Fashionary International. ISBN 9789881354792

There's also a guide to sociological research in fashion, making this essential reading for anyone studying fashion, sociology, anthropology, or cultural studies.

The Berg Fashion Library

Stylepedia is a comprehensive chronicle that traces fashion trends, styles, and subcultures from the 1920s to the social media era. Unveiling global styles, it delves into their origins, distinctive attributes, and the cultural and historical influences that shaped them. From historical fashion to the latest social media buzz, this essential guide offers knowledge and inspiration to grasp the essence of diverse styles, spanning eras and cultures.

TD687"19"/St983